

# 4 Brain Theory

Daniel Reed Cook

EyeMynd Physics Research Institute, California  
Dan@EyeMynd.com

January 23, 2023

*Keywords:* 4 Brain Theory, Theory of Everything, Plato's Cave, Physical Interpretation of Quantum Mechanics, Dark Matter, Quantum Gravity, Quantum Entanglement, ER=EPR, Quantum Information Theory, Qubit Stability, Exact Qubits, Exact Quantum Computing, Quantum Consciousness, Photon Inner Structure, Electron Inner Structure, Proton Inner Structure, Neutron Inner Structure, Qubit Cloning Theorems, Quantum Cosmology, Star Creation, Planet Formation, Solar Wind, Gravitational Balancing, Higgs Field, Real Neural Field, Axon Field, Axon String Theory, Higgs Boson, Dark Scalar Bosons, Light Scalar Bosons, Quicklight, Darklight, Consciousness Projections, Memory Masking, Local Realism, Black Holes, Nerve Fibers, Real Brain Wireless Networking, Real Hippocampus, Real Amygdala, Dark Matter Quantum Scattering, Simulation Hypothesis, Multiplayer Universes, Our Real Neurons, Our Real Axons, Galaxy Creation, Two Infinite Parallel Universes, Simulated Universe, Our Real Universe.

## Abstract

This *4 Brain Theory* is a new scientific attempt to create a *Theory of Everything*. This 4 Brain Theory of Everything can be viewed as a Scientific Expansion of Plato's Cave to create a new *Physical Interpretation of Quantum Mechanics*, with a Quantum Scattering Dark-Matter Theory of Quantum Gravity, Quantum Entanglement, Quantum Information, Quantum Computing, and Quantum Consciousness.

## Introduction

All things being equal, this *4 Brain Theory* is a powerful new “*physical*” theory of quantum “*physics*”, with a fundamental new *physical interpretation* of quantum mechanics, with a dynamic new *physical theory* of dark matter particle-scattering quantum gravity, quantum entanglement, quantum information, quantum computing, and quantum consciousness.

This detailed new *physical foundation*, for the century-old quantum mathematical probability theory, arises spontaneously from a *scientific generalization* of the ancient wise philosophical allegory of Plato’s Cave.

This new *physical hypothesis* for the old quantum mechanics, logically generates a whole new quantum-theoretical *physical framework*, from which we can now more easily behold *all* infinitely valuable *physical things* being *equal*.

This new *physical theory* of quantum physics, is a simple hypothesis about *all* of the most intelligent *physical real things*, that can possibly exist anywhere in our whole expansive physical cosmos, *all* of which have already been, and will always be, and are forever *being equal*.

This new *physical idea* of quantum mechanics, is a very simple new scientific hypothesis about the *physical origin*, the *physical structure*, and the *physical dynamics* of our whole physical universe, where today many of us bright astrophysicists almost *seem* to physically *find ourselves*.

This simple *new physical hypothesis* is that our whole physical universe is a very specific type of physical *multi-brain*, multi-galaxy, *multi-player* holographic *neural* simulation.

From the ancient wise spirit of Occam's *mighty razor*, this simple new physical hypothesis, logically springs entirely from *just one* simple *physical assumption*.

This *single* solitary *physical assumption* is *logical*, detailed, simple, exact, *rational*, reasonable, and easy to understand completely.

This *one* simple *physical assumption* also appears to have some scientific support from a wide spectrum of compelling *physical scientific evidence* from multiple fields of modern (circa today in 2023) experimental *physics* and experimental *astrophysics*.

In the near future, it *may* even become possible to scientifically demonstrate this singular, physically-

detailed, descriptive *physical assumption* (which also supports this multi-brain neural-simulation hypothesis) via rigorous scientific *experimentation* in our sensitive scientific *laboratories*.

Today in 2023, this new 4-brain neural-simulation hypothesis, can be wisely used to logically guide us bright quantum physicists, to develop many useful *new* quantum-theoretical *physical models*, in the rapidly growing field of *foundational quantum physics*.

These new, hypothetical, foundational, exact, descriptive, useful *physical models* (of this present 4 Brain Theory paper of 2023) include specific physically-detailed *neural pulse structures* for elementary particles, the actual physical *origin* of their physical neural *nonlocality*, to help solve Albert Einstein's EPR Paradox of May 15<sup>th</sup>, 1935 via his physical ER bridges of July 1<sup>st</sup>, 1935, and a new physical theory of *Dark-Matter* particle-flow *Quantum-Scattering Gravity*, which provides a solid new *physical* gravitational quantum-scattering *framework* for a completely-new (and fully-testable) physical theory of *quantum gravity*.

These new foundational quantum physics concepts of 2023, also include a greatly *improved* quantum-physical resolution of *all four* of Schrodinger's entangled Cats.

This improved *quantum-cat* (and quantum-scientist) physical resolution illustrates how a very specific type of high-speed neural-information-exchange *quantum entanglement* physically occurs, very rapidly, between each *pair* of these *four* wildly-interesting *Cats*.

In this present 4 Brain Theory paper, we describe how this *4 Cat Physical Quantum Entanglement* hypothesis can be properly tested, and physically-evaluated, and how this new *4 Cat Hypothesis* can be experimentally verified in our scientific laboratories.

## Extended Abstract

We explain how all of the physical quantum components of Schrodinger's *4 Physical Cats* are physically-resolved by the careful scientific examination of all of the physically-entangling quantum behaviors, of *all four* separate nonlocal *versions* of these *4 wild* quantum *cats*.

We also describe how an even closer physical look, at these *4* distinct *mutually-entangling* versions of Schrodinger's *Cat*, brightly illuminates four distinct physical *neural-network* computational structures (our *four nonlocal*, quantum-entanglement physical neural-

simulation *chambers*) to accurately simulate each (and every) type of quantum entanglement available, to any finite subset of physical *entangling elementary particles*, located anywhere inside this entire physical universe.

In this 4 Brain Theory article of 2023, we scientifically hypothesize that exactly *4 entangled* neural-pulse *physical structures* form the *fundamental physical bedrock* (physical origin, physical being, physical source, and core physical nature) of each individual *elementary particle*.

We explain how these *4 entangled* physical neural-pulse *structures* dynamically experience a type of *self-entanglement* to create and maintain the *individual physical integrity* of each individual elementary particle.

We describe how a single elementary particle's *inner-parts*, are constantly dynamically *self-entangling* with each other; because *all four* of the particle's hidden entangling physical neural-pulse structures, always simultaneously *belong* to just *one* single individual *visible elementary particle*.

This individual-particle self-entanglement takes place inside exactly *four separate*, semi-isolated, *spatially-nonlocal*, physical, computationally-deterministic, real limbic-tissue, neural-network, *quantum entanglement chambers*.

In this introductory 4 Brain Theory paper of 2023, we scientifically describe a powerful new *physical interpretation of quantum mechanics*, that brightly-illuminates a clear scientific path forward, for the bold scientific development of the world's first *deterministic* (non-probabilistic) *exact quantum computers*.

We also scientifically explain how these *exact quantum computers* can become capable of supporting a new type of *quantum artificial intelligence* (with simulated quantum AI brains) that will be able to *learn* how to *animate robots* to perform almost *all* types of human labor.

This can *relieve* all *humankind* from the unpleasant physical and emotional *drudgery*, that can result from being *forced* (by stressful economic necessity) to labor at human jobs that are *not* fully enjoyed.

In this present 4 Brain Theory article of 2023, we also describe a novel neural quantum computing *experimentation* and quantum simulation *testing* program, to design a new methodology to *softly measure* (and *gently modify*) the exact quantum *behaviors* of the physical elementary particles, that physically live inside their *four* distinct quantum entanglement *chambers*.

We scientifically describe how to *physically stabilize* every quantum *state* (by gently physically nudging all the quantum *coherence times* towards infinity) of every physical elementary particle, every physical photon, every physical electron, every physical proton, every physical neutron, every physical atom, every physical ion, and every physical quantum bit (*qubit*), to scientifically enable the development of the world's first *fully-stable*, multi-qubit, completely-deterministic, *exact quantum computers*.

This new 4 Brain *Physical* Theory of quantum physics, clearly explains how the entire *probabilistic* theory of quantum mechanics itself, can be logically deepened, rationally expanded, and *scientifically upgraded*, to begin (by increasing experimental degrees) to become an *exact physical quantum science* for the benefit of *all* human kind.

The systematic physical development of this powerful *exact quantum science*, will allow us to create a much more-stable *quantum physical foundation*, that is physically *founded* on the sturdy *bedrock* of solid *physical* reality, upon which we can confidently proceed to *design* and *build* the world's first *exact quantum computers* that will perform a whole host of *exact* (instead of merely probabilistic) *quantum computations*.



With this new 4 Brain *Physical* Theory of *exact quantum physics*, we are also able to demonstrate how to design and create the powerful new *multi-qubit* eigenstate *quantum brains* of the future, that will automatically *learn* how to *mimic* actual living human brains, as they learn how to manually-perform all (or nearly all) of our human labors worldwide.

These *new quantum brains*, are composed of an entirely new type of mathematical *quantum artificial intelligence* (AI), that *does not need* to rely on any of the old artificial neural network models of the past.

This new type of *multi-qubit* eigenstate-contrast *quantum brain AI*, can be employed to animate *all* of tomorrow's *intelligent learning robots*, that will then be able to *learn* to *perform* almost *all* human labor worldwide, thereby freeing all humankind for better, more *joyful*, free-willed human *pursuits*.

This new 4 Brain Theory of 2023 is a *testable* theory.

We describe a set of interesting *new scientific experiments*, that can be carefully conducted, by some talented *experimental physicists*, in their scientific *laboratories*, to either prove or disprove, each individual *physical hypotheses*, of this 4 Brain *Physical* Theory of quantum physics.

We explain how the Higg's Boson may yet contain some really *useful* new physical surprises for mankind.

We explain how there may be some excellent ways to safely create some really *huge* numbers of Higg's Bosons, and then gently *guide* them, to help them spontaneously decay into *every* type of stable particle, that may be *needed*, wherever they are most *wanted*.

This 4 Brain Theory also provides some exciting new insights into the core nature of *mass creation*, and the actual *source* of conservation of energy, in this local physical universe.

This 4 Brain Theory also includes a physical theory of *Dark-Matter* particle-flow Quantum-Scattering *Gravity*, to establish *quantum gravity* on a solid, testable, *physical foundation* for all future scientific research, on the actual "*dark-matter quantum*" of the "*gravitational force*", which we have appropriately named the "*dark scalar boson*".

Not only is this new 4 Brain Theory a physical theory of *quantum gravity & quantum entanglement*, it is also a physical theory of *quantum consciousness*, because it scientifically describes (in extensive physical detail) how the very *same kind* of dark-matter particles (*dark scalar*

*bosons*) that *generate quantum gravity* (via quantum scattering) throughout our whole physical universe, also *project quantum consciousness* into a specific finite set of physical *hardware* brains spatially-located at different physical *locations* inside our Milky Way Galaxy.

The potential *future* of our worldwide *collaborative* quantum physics, quantum gravity, quantum entanglement, and quantum consciousness *development*, may soon become even more exciting, and much more *productive*, than its previous adventurous historical past.

This 4-brain, nonlocal, physical, limbic, holographic, simulator hypothesis, timely provides our local Earth-planet with an advanced new comprehensive *physical scientific foundation*, for all future theories of *dark matter*, dark energy, quantum *mechanics*, quantum *reality*, quantum *gravity*, quantum *entanglement*, quantum *consciousness*, quantum *neuroscience*, unique human individuality, and *free will*.

The important question of whether or not, this new 4 Brain Theory paper is a useful step, towards a complete physical *theory of everything*, may be wisely decided by our bright future physicists.

These bright future physicists, along with many other brave curious souls, and along with many other bold

compassionate beings, will also decide together, if, when, and how, this new 4 Brain Theory paper can be wisely used, to *enlighten* our worldwide human society enough, to help us all to *begin to desire to solve world poverty for everyone* on this entire Earth.

All things being equal, we (the *awakening people* of this vulnerable little planet Earth), as a *harmonious team* of thoughtful, wise, mutually-helpful, compassionate, scientific, *human-problem solvers*, may someday *come together* to discover that this present 4 Brain Theory, may be simply a gently-playful *invitation* to all humanity to intentionally-accelerate our *humane awakening*.

*All things being equal*, this scientific invitation to all humanity, is that we (the *intelligent people* of this one precarious planet) humbly come together (as *one people* on this *one world*) with all the heartfelt humanity of our precious little physical planet Earth, to properly *solve world poverty for everyone* everywhere, by first wisely *realizing* that *we all* have *infinite value*, as the *real physical human beings* that have already forever been always *equal ...*

... because, as *we all* earnestly start to scientifically *study* this present 4 Brain Theory, about the *physical heart* of quantum physics, which lies hidden within the *foundational real physical source* of our whole *universe*,

which is limbically-located deep inside the real *heart* of *us all*, we may all wisely decide to simply *choose* to *remember*, that we can now logically, rationally, and physically-discover that ...

“All that  
we see or seem  
is but  
a dream within  
a dream.”

– Edgar Allan Poe (1809-1849)

# Prologue

It may actually be wise to *initially consider* this new 4 Brain Theory article as just a little novel of *pure science fiction* for its marvelous entertainment value.

Then some days *later*, after carefully *re-reading* this entire 4 Brain Theory article a *few* more times, to gradually become more familiar, and increasingly comfortable, with its broad-range of *startling* new *physical concepts*; it may then begin to almost become nearly possible to *bravely wonder* if any intellectual scientific subcomponent of this new *physical* quantum *theory*, could possibly be viewed someday in the distant future by many, as an actual physical scientific hypothesis of *real science fact*.

One of the main scientific purposes, of this present 4 Brain Theory article, is to attempt to *help us all* to gently *open up* our precious human minds a bit more broadly ...

... to some expansive *new* scientific possibilities ...

... with a bright shining *hope* that we, the wisdom-seeking scientists of planet Earth, may all come to discover a good physical way to gently press the *scientific* reset *button* ...

... to help us all just start over again, as if we were still the young *little* preschool *children*, that we all were ...

... before our vulnerable little learning-brains got all filled up, with an unfortunate abundance of foreign *prejudices*, that made us all a bit *too* serious.

So, let's all just begin anew, as the *aged children* that we are, by simply trying to *pretend*, in the spirit of good science fiction that this new scientific article ...

... is just a make-believe *scientific fairy tale*, about a fantastical new theoretical physics paper, about a bold new 4 Brain Theory that may be conceived, written, and someday published ...

... by some Berkeley physicist in a marvelous future, from a hopeful new thought galaxy far far away ...

... and therefore, in this *hypothetical* make-believe theoretical physics paper, we may elect ...

... to present a new physical *theory* of *everything* for the physical origin and physical nature of the *set* of *things* that can *physically exist*.

Let's also try to *imagine* that this detailed physical *human-centric* 4 Brain Theory, of 4 different types of physical brains, and 4 distinct kinds of physical *consciousness*, can help us all to physically discover ...

... a more complete *understanding* of our uniquely-human perception of our *whole* physical *universe* ...

... and *everything* that can possibly exist within it, below it, or *causally* above it ...

... and that much of this 4 Brain Theory was *initially* conceived (intellectually-grasped with clear guidance from the most brilliant minds) by the present author, over a decade ago, in May 2012 ...

... and that some of the vital details of this 4 Brain Theory were gradually realized (and suddenly gifted by *wiser others*) over a dozen years of enlightenment from 2011 to 2023.

Let's also *imagine* that many of the *best parts* of this 4 Brain Theory have *already* been conceived, written, and *published* by other *more-intelligent* authors *long ago*.

Of course, we must wisely declare that all of the *many* fantastical *errors*, in this creative new form of this 4 Brain Theory, are the *sole* responsibility of the present author.



Actually, if *any parts* of this 4 Brain Theory, are ever discovered by anyone, to be even close to the

*Truth with a Capital T,*

then all those very *best parts* have surely been intelligently-inspired, by the *most brilliant scientists* to have ever walked upon this Earth.

Some intelligent scientists, bright philosophers, and marvelous thinkers have *already* published many interesting things about *their* simulation hypotheses [1-3].

For all those who wish to know, this present *4 Brain Theory* may be *scientifically categorized* as a very particular, deeply-logical, completely-rational, physically-detailed type of *multi-brain neural-simulation hypothesis*.

Perhaps we can all intelligently *marvel* together, at how some of the key *theoretic* concepts of this present 4 Brain Theory of the year 2023, happen to be so very similar to an ancient *cave allegory*, introduced by the brightly-illuminated, all-knowing *Socrates*, and then later published circa 375 BC, by his talented student *Plato*, in book 7 of his famous *Plato's Republic* [4].

This famous ancient cave allegory is already known to many of this world's best and brightest as *Plato's Cave*.

## Socrates

In the ancient days of *Socrates* (circa 470 to 399 BC), most of the Greek people didn't know very much about spacetime, dark matter, *quantum gravity*, and the quantum entanglement of our local Milky Way Galaxy, with its marvelously-interacting *set* of electromagnetically-visible *elementary particles*.

In Socrates' day, most of the people around him were more *familiar* with other things; like trees, birds, mountains, rocks, rivers, lakes, *chains*, and *caves*.

So, Socrates mostly talked about these kinds of more *familiar things*, that his precious Greek friends felt they *already* understood.

Our dear Socrates was eventually able to experience an *illuminated brain*, that suddenly *knew* many important things about the expansive reality of intelligent physical human beings, and the 4 distinct types of *physical universes* that they can sometimes live in.

Socrates was also *mentored* by some super-intelligent people (like unto the brilliant Lao-Tzu that mentored Confucius), whose brains became fully-illuminated *before* Socrates was even born.

Socrates, and his brilliant mentors, wanted to *help* all the Greek people *awaken* enough to *free themselves*, from every form of *human bondage*.

Socrates, and his all-knowing mentors, seemed to hope that many human beings could become *fully capable* of opening up their very own minds, to learn enough about *real science*, to *fully save themselves*, from every bad thing; by helping them to fully-embrace every good thing.

Socrates, and his illuminated mentors, wanted to show the people the great *social benefits* of embracing good ideas, accepting *correct scientific concepts*, recognizing the many important differences between good and evil, confronting our excessive human pride, understanding the actual nature of all things, appreciating the good in others, and completely empowering themselves to *go create every good thing* that everyone really *needs* to feel fully-safe, to feel joyfully-peaceful, to feel completely-happy, and to really feel free and alive in every good way.

Socrates, and his anonymous mentors, didn't want the believing Greek people to always feel like they had to *continue waiting*, and waiting, century after century, for their Greek gods to finally come down to earth to save them from all of their painful societal problems.

Socrates, and his kind mentors, really wanted the Greek people to *fully awaken* to the scientific possibility that they could (at any time) *easily save themselves* from their multitude of miseries, that they were so busy inflicting upon each other, in their daily strenuous efforts, to rise *above* their neighbors.

But, unfortunately, only a *very few people* were willing to listen to the wise Socrates, before the nervous leaders of the Greek people condemned him to death, for *disrespecting* their gods, and *corrupting* their youth, with his *brilliant questions*.

# Plato

Two of the bright Greek youths, that really enjoyed listening to Socrates, were named *Plato* and *Xenophon*.

Xenophon and Plato *listened* very carefully, for years, to *everything* they could hear Socrates say.

Plato and Xenophon *deeply pondered* in their tender human hearts, every word they could *remember*.

Xenophon and Plato were both actually pretty smart guys.

Plato and Xenophon were *two* of the *smart kids* on the Greek block.

Xenophon and Plato eventually decided to *modify* and *publish* some of the interesting *ideas* that they had learned from Socrates; each in *their* own way.

The *original* full story of Plato's Cave, may possibly have contained within it, *all* of the most profound truths, that Plato ever learned from Socrates.

Before his death, Socrates told Plato about something much *more* wonderful than just a simple little story about a bunch of ignorant, prideful, competitive people chained

tightly together, in cold dreadful human misery, inside a dark dreary underground cave.

Socrates, as a *marvelous man* who actually *knew* many useful things, due to his previous human-brain illumination, gave Plato some *helpful hints* about a powerful theory of everything, that had the full power to help all the people *free themselves* from all of their dreadful chains, of manufactured human bondage, of every type.

Plato was a bit smarter than *most*.

Plato understood that Socrates had shared with him something of *great value*, that was really marvelous with the wonderful power of pure intelligence, to begin *liberating* all of humankind, starting with the Greeks, during that time period.

But the *very-human* Plato *feared* for his own life.

The Greek authorities had *already* sentenced Socrates to *death*, for merely *attempting* to enlighten the Greek youth, by just asking them to answer some insightful *liberating questions* about themselves.

Plato decided to *act carefully*, in a manner that was more politically *safe*.

Plato wanted to be allowed to *live*.

Plato did not want to *suffer* the *same* disastrous *fate* as his beloved mentor.

In an effort to carefully *protect* himself, Plato decided to only write and publish, a small distorted *subset*, of the *marvelous* human *cave allegory* he had personally heard from the *mouth* of Socrates.

Plato decided to only publish those limited concepts that he believed would be *politically-pleasing* and fully-acceptable to the Greek leaders, who held great power over life and death.

The *bold* Socrates was sentenced to *death* for his courageous willingness to speak about all the real things that really do exist.

The *cautious* Plato was allowed to live, teach, write, and *publish*.

One of the interesting stories, that Plato decided to write and publish, has already been discussed, and referred to by many, as the simple story of *Plato's Cave*.

# Plato's Cave

The simple concepts of Plato's Cave, in its distorted and truncated form, as published by Plato circa 375 BC, have *already* been discussed by *thousands* of philosophers, scientists, and human thinkers (here on Earth) for *two dozen centuries*.

This present 4 Brain Theory is *Not* another attempt to simply reinterpret what Plato wrote.

This present 4 Brain Theory is a *marvelous* scientific *expansion* of Plato's Cave, because we are really trying to *fully-restore* to Plato's Cave all the grandeur, *glory*, and bright shining intelligence that it may have originally held, when it was first taught by Socrates to Plato prior to 399 BC.

Plato's Cave *never was* just an ordinary cave.

Plato's Cave always contained within it much *more* than just *one* physical universe.

The properly-expanded story of Plato's Cave may even contain within it *every* possible *universe* that can ever exist anywhere.



Is it theoretically possible, that every possible universe can be *discovered* somewhere *within* Plato's 4 Cave Levels?

In order to answer this important question, let's all put on our creative *thinking caps*, so we can begin to do some really important thinking, by using our bright *intelligent scientific imaginations* to try to simply guess, what might actually be hidden deep inside *Plato's 4 Cave Levels*.

# Plato's 4 Cave Levels

Let's all try to use our abundantly-creative human imaginations to conceptualize, and visualize, the *theoretical possibility* that the properly-expanded story of Plato's Cave may even contain within it 4 distinctly-different *cave levels* as follows:

- (1) Plato's *Real World* up above All the Caves
- (2) All of Plato's Big *Advanced Caves*
- (3) All of Plato's Small *Mortal Caves*
- (4) All of Plato's Tiny *Submortal Caves*

Let's also try to simply imagine that these 4 cave levels are 4 distinctly-different *conscious* self-aware *parts* of our very own human self (and its 4 perceptually-surrounding environments), as we begin to *scientifically-explore* each of these 4 cave levels more closely.

Plato's *Real World* (up above all the caves) is actually the only world that really exists, because *all* the caves are merely *neural simulations* that we create within us.

All of Plato's Big *Advanced Caves* are specific types of advanced *multi-player* human-brain *simulations* that are all optimized for brain-balance, exciting new adventures, and *human joy*.

All of Plato's Small *Mortal Caves* are specific types of neural simulations that can sometimes allow human *suffering*, when we (the simulated people) choose to *force* mortal *chains*, of pain and bondage, on each other.

All of Plato's Tiny *Submortal Caves* are like our *night-time dreams*, that often occur while we are *sleeping* peacefully in our beds, as us mortal humans at night.

These dreams help our bodies to recharge, and our precious human brains to properly *rebalance themselves* in many ways.

These 4 cave levels are *4 levels* of *human consciousness*.

Within these 4 levels of human consciousness exist *absolutely everything* that is, or that ever was, or that ever can be, worlds without end.

The good news is that *we* human beings *exist forever*.

Another piece of good news, is that there is *no* (perceived or real) *danger* in the two highest levels.

There can sometimes be a *perception* of great danger (with overwhelming *fear*, and many other negative emotions) in the two lower cave levels.

*Why* do we even have these 4 levels of human consciousness (Plato's 4 Cave Levels)?

Why don't we have *just one* single type of *consciousness*?

*Why* 4 types of consciousness?

In order to answer this very important question, we all need to *look more closely* at each of these 4 cave levels.

By *closely* (and carefully) *inspecting* everything we can see (or intelligently imagine) with our *precious* scientific *logic*, and with all our many mighty powers of *human reason*, we just may possibly discover that *we all* can still *learn* a new thing or two.

So, let's all get ready to learn something really new and really useful, by simply opening up our *intelligent minds*, and letting our *creative* scientific *imagination*s begin to really soar up high, to some joyful new heights of *enlightened understanding*.

Let's all first start by looking more closely at *Plato's Cave Level 1*.

# Plato's Cave Level 1

Plato's Cave Level 1 is our *real world* up *above* all the caves.

This *peaceful infinite* real world is where all of our *real human selves* have always lived in *joy* and *peace*.

The purpose of Plato's Cave Level 1 is real *peace*, real *joy*, and real *happiness* for all of us *real human beings* forever.

The only *real purpose* of the lower three cave levels (cave levels 2, 3, and 4) is to help us to *balance* our *real human brains*.

We balance our real human brains by *jointly dreaming* the human-avatar adventures (in our simulated neural-dream cave universes) that help us to *always maintain* our *real brain balance* of peace, joy, and happiness.

We are *all* always *safe* in our real world up above all the caves.

Now, let's take a good look at *Plato's Cave Level 2*.

# Plato's Cave Level 2

Plato's Cave Level 2 is our *advanced freedom* to adventurously-explore, each and every one of an *infinite* number of infinitely-sized *advanced caves*.

Each infinite advanced cave contains within it an *infinite variety* of *different* cave room types.

This is the joyful *exhilarating freedom*, granted to our *simulated* advanced *dream* selves, to help us *balance* our real human brains.

The *purpose* of cave level 2 is to balance cave level 1, with *equilibrium-maintaining* human-brain *energy flows*, between our advanced human brain (in cave level 2) and our real human brain (in cave level 1).

Many of our *most joyful* new human *experiences* happen inside cave level 2, because it is actually optimized (*by* intentional scientific *design*) for uniquely-individual human joy.

Cave level 2 is a really wonderful place to live, explore, and make many interesting *new friends*.

It may soon become possible to scientifically discover some interesting *direct evidence*, of the actual existence of cave level 2, with the *right type* of future human-brain activity measurement *technology*, that can be developed with some of the upcoming advances in quantum physics and quantum computers, that will soon happen here on Earth.

Future *progress* in theoretical and experimental elementary particle physics, will likely *validate* many key aspects of this present 4 Brain Theory.

Plato's Cave Level 2 is a *really* marvelous *place* to exist, live, and hang out.

We can even become super *emotionally-attached* to the many wonderful new human friends, we often make while we are all so busy living inside a *joy-optimized* Plato's Cave Level 2.

For many good reasons, some of us sometimes choose to spend a whole lot of *our* precious human *time* living inside Plato's Cave Level 2.

And *sometimes*, for some *interesting reasons*, some of us actually choose to spend some of our time *also* living inside Plato's Cave Level 3.

So, let's look more closely at *Plato's Cave Level 3*.

## Plato's Cave Level 3

Plato's Cave Level 3 is a *lower* and *darker* kind of *cave level*.

Plato's Cave Level 3 is like unto what may have already happened (long long ago) right here with us on our current *mortal Earth planet*.

It seems logical that we can appropriately call our current (circa the year 2023) Earth planet a "*mortal*" earth planet, because it is mostly filled with "mortal" people (us mortal human avatars) who easily *get confused*, and who easily *get sick*, and who so *easily die* so soon.

Our daily awareness of our limited "*human mortality*" on this planet Earth, sometimes causes us to *financially compete* with each other, for the limited resources of Earth; and some of us even begin to *fear our own death*.

Plato's Cave Level 3 here on our *mortal Earth planet* is where we (many of us here on Earth) sometimes seem to



be all *shackled* economically *together* with strong heavy *painful chains* (of *economic slavery* to dreary jobs we do *not fully enjoy* for tiny bits of mere mortal money) to a cold dark wall of *flickering shadows* and *dreary* financial *illusions*, inside a single *small* mortal room (our small *mortal Earth planet* seeming located inside our *advanced* physical *universe*) within just one single cave (just one single confused dark mortal Earth planet).

There also exist some other fallen *mortal worlds* (spinning inside this advanced physical universe, with some other mortal-human people living on them) besides the one mortal planet (our Earth) we now live on.

Some of these *finite* mortal *groups* (of a finite number of us simulated mortal-human avatars) will sometimes choose mutual enslavement, *mutual bondage*, mutual torture, mutual destruction, and other *unstable* mortal-human *behaviors*.

All of these *unstable* mortal-human *behaviors* stem entirely from our *unbridled* excessive competitive *pride*.

Unbridled excessive competitive *human-brain pride* is the *unfortunate bane* of our mortal existence.

Perhaps, we (the people of Earth) will one day choose to *scientifically* study *human pride* much more deeply than

we have ever studied it before; in order to wisely begin to intelligently *learn* how to properly *tame* it, *bridle* it, and wisely *direct* it all for *pure human good*.

Any of these confused, finite, mortal groups may (at any time) simply *elect* to *awaken* enough to begin to grant themselves more personal *freedoms*, by gently unleashing their natural mortal-human brain *intelligence*.

*Everyone* on Earth is intelligent.

*Few* of us wisely use our human intelligence for *the good of all*.

Why seek to do good for *just a few* (for just our very own local tribe), when we have the real power to choose to do some real good for *all* the people of Earth?

The *most-valuable* key in this whole universe, is discovering our very own personal human-brain understanding of *how exactly* to use our human intelligence *wisely* with the *intent* to *do good* for *all*.

These *intelligent* individual mortal-human-brain *abilities* can only be *fully-enabled* when all (everyone on Earth) the mortal avatars are finally able to *act freely*, with fully-activated personal *mortal free will* to freely roam *without* mortal chains, and to *freely explore* the *whole* mortal

single-room (single *Earth-region* of our physical universe) in the mortal cave.

This is the super-delicate, semi-unstable *prideful-dilemma* of our current *mortal-Earth* world dream-game multi-player neural simulation.

*Local islands* of temporary stability can sometimes *briefly appear* in many different kinds of mortal-human societies.

Many of our *current* mortal-human selves (here on Earth) are still striving (via *excessive* mortal-human *competitions*) to help balance *only* our very own little selves (or to help balance only our very own little families, or to only help just our own local little tribes, or to only help just our own little native countries), to the great *detriment* of others.

Why are we (us mortal humans of this Earth) *so* eagerly *willing* to *help* our own little tribes (our own little families, and our own little countries), yet we are also *so* *willing* to *withhold* our help from other tribes (other families, and other countries, and *other* precious *people*) of Earth?

Why do *we all* have this *capricious* mortal-human *tribal selectivity*, that continues (every year) to intellectually

*push* our whole Earth-planet into human-conflict, war, darkness, and an abundance of *human misery*?

Our purpose for our cave-level-3 mortal-Earth planet, is to *balance* (and *self-test*) our precious highly-advanced cave-level-2 human *brains*.

*All* our human brains need to be properly balanced *every day* to create peace and happiness for all.

Some of our advanced (cave level-2) human brains need to be able to choose to sometimes *test themselves* (by immersive-living as clueless mortal-human avatars, on a dark confused bewildered level-3 virtual environment, like this mortal-Earth planet), and then later (after awakening back up into level-2) *evaluate* their own *performance* of how they tended to socially-operate (treat others) in the *brutal darkness* of thick human ignorance, and excessive *competitive pride*, like what we all experience right here on this mortal-Earth planet.

Yet, we all (all of us people with all our widely-different personalities) must somehow *share* our little mortal-Earth world together, because we all live here on this same vulnerable little planet.

The *good news* is that there may be some really good ways to successfully accomplish this *joyful brain balance* (and brain self-testing) properly for *everyone equally*.

However, the *bad news* is that there are *many* more ways to *fail* to achieve this necessary mortal-human brain *societal balance* here on Earth.

The other piece of bad news is that it is actually *very difficult* to successfully pass this dark, confused, mortal *Earth self-test*.

Another tidbit of good news is that it appears that it may be *theoretically possible* (because it may have already been successfully accomplished, by some super-intelligent advanced humans, on some other Earth-like dark planets) *to pass* our *self-test* here on *Earth*, if we learn to pay sufficient attention to what our advanced self *wants us to do* here on *Earth*.

Unfortunately, some of our most *painful* human experiences often take place inside cave level 3, because we (the people), as a worldwide group of *clueless* mortals, often chose to *forcefully impose* (via bad laws, and via hurtful cultural customs) many *miserable things* on each other.

Fortunately, there is *no* strict *requirement* (from above in cave level 2, or from way up high in cave level 1), that we all simply *continue suffering* forever, in our mindless mortal-human misery, here in cave level 3 (here on Earth).

The good news is that here in cave level 3, we (the people of Earth) can at any time, simply choose to awaken, and start to *wisely vote together*, for *less human misery* (less cruel chains).

We (the semi-intelligent people of this mortal planet earth) don't actually need to continue to *economically enslave* our precious mortal brothers, and our sweet mortal sisters, any longer.

*Almost every type of mortal-human misery is optional.*

We can all simply *choose to learn* to vote (choose, desire, will, decide, think, act, etc.) more wisely at any given mortal-earth moment.

The human choice, to become *willing to learn*, is always available (patiently waiting for us) whenever we decide to search for it.

It can require a huge amount of *human humility* to personally discover a *pure willingness* to learn useful new things.

We can each individually choose to *humble ourselves* (enough to begin to learn useful new things that can *liberate us all*) to become again like a *little child* (like a little child *willing to learn* many new things) at any moment in time.

Our present-time *mortal-brain willingness* to learn useful (helpful) new things, is a simple function of our own personal ability to *reduce*, throttle, *bridle*, and *tame* our very own excessive competitive pride.

Our very own personal willingness, to courageously confront our *very own* personal excessive competitive human *pride*, is the actual starting point, to enable any useful awakening, in our very own *precious self* (inside our individual mortal-human brain circuitry).

Worldwide *forced economic slavery* is becoming increasingly optional, because of the intelligent creative powers of our mortal-human brains to *scientifically-discover* all the necessary *new science*, and to invent all the helpful *new technologies*, and to gently locate within each of us valuable individuals, the simple human

*willingness* to collectively *solve* world *poverty* for everyone on Earth.

Our creative human *intelligence* can easily make the earth's natural resources of *food* and *shelter* to become readily *accessible* to each and *every* precious human *being* currently living on this little mortal-earth planet.

We can choose to free ourselves, by simply *breaking our* mortal *chains* (the false illusions that hold us bound tightly together, in confused societal pain, as *superstitious* economic *slaves*) that bind us unnecessarily to a *cold* dark *wall* in Plato's Cave Level 3.

Here inside Plato's Cave Level 3, in this lone and dreary world (our mortal-Earth planet), the *only* temporary *relief* (from our daily financial grind), that many of us shackled humans regularly receive, is when we (tired and exhausted from yet another miserable day of hard forced labor) finally fall *asleep* at night, and start to *dream*, and thereby begin to enter into *Plato's Cave Level 4*.



# Plato's Cave Level 4

Plato's Cave Level 4 is our submortal *personal* private *dreaming*, we all experience while *sleeping* at night, while our mortal bodies (and our mortal-human brains) are all fast *asleep*, while we are all still shackled tightly (as mortal-human bodies) to a dreary wall, within a single dark mortal cave room.

This Plato's Cave Level 4 is the submortal (below the mortal level) *personal* dream *environment* (a tiny private simulated universe) that our individual mortal brains *privately-simulate*, while we are dreaming, as we sleep at night.

This submortal personal dream environment (that is an example of a Plato's Cave Level 4 universe) is *wholly simulated* by the neural tissues of our own *individual* personal mortal-human brain.

In addition to personal private dreaming at night, there is another *technological way* to simulate level 4 caves.

This will start to become increasingly *obvious* in the near future, with the arrival of *fully-immersive* direct computer-to-brain Virtual Reality (VR) interfaces that wirelessly-connect directly (*bypassing* our external mortal

*eyeballs*, and bypassing our external mortal *ears*) to the *individual* mortal *neurons* inside our mortal-human brains.

At EyeMynd Quantum Brains [5,6] we have been developing some very advanced human *brainwave sensors*, that we put into our Virtual Reality (VR) headsets, to *animate* our virtual human avatars directly with human brain activity [7].

The advanced human brainwave sensors (that we are developing at *EyeMynd Quantum Brains*) will allow the action-potential *firing rate* of individual mortal-human neurons (inside our mortal-human heads) to be accurately *measured* in real-time, to *animate* our submortal human avatars *directly* using nothing other than our mortal-human *brain activity*.

By using the *firing patterns* of our *mortal neurons* to animate our *submortal avatars*, we will *no longer* require handheld devices to navigate and explore our submortal *simulated VR worlds*.

These future *simulated VR worlds* (simulated Virtual Reality environments) will also be *level 4 caves*.

The primary *purpose* of any type of cave level 4, is to *balance* (one or more) cave level 3 brains.

We dream at night to *balance* our *mortal brains*, to maintain our human peace and individual happiness, which includes a general feeling of wellbeing.

This general *feeling of wellbeing* is usually only possible (for most of us here on Earth) with a *good night's sleep*.

If we ever go a few consecutive nights (and a few days) without sleeping (and without dreaming) we will find ourselves *utterly astonished* at how quickly our mortal-human *happiness* (and peace) *evaporates*.

*Sleeping* (and *dreaming*) helps us all to properly balance our mortal human brains, to help them function well with an abundance of peace, joy, and *mental clarity*.

An additional useful purpose of cave level 4 is to provide some strong individual *empirical evidence* (via cognitive hints, suggestive clues, and personal dream insights) of the *possible* scientific existence of cave level 1, and also the *probable* scientific existence of cave level 2.

We *know* that cave level 3 exists, because we are living inside of it every day here on Earth, as the mortal human beings, that we currently experience ourselves to be.

We can also *remember* that cave level 4 exists, because we can all remember *dreaming at night*, and some of us can also remember some of our recent experiences wearing some early-version Virtual Reality (VR) headsets.

If we really *unleash* our abundant creative imaginations, then we can also start to *anticipate* that someday in the future, some brilliant scientists may discover an innovative way to actually create a good, functional, working example of a *Plato's Cave Level 5*.

# Plato's Cave Level 5

Plato's Cave Level 5 *does not yet exist* for any of us people here on Earth.

It may be possible that we may *never* be able to actually create a *genuine* Plato's Cave Level 5.

We can simply *define* an actual "genuine Plato's Cave Level 5" as the cave level that *must* be entirely composed (completely simulated) by the computational behaviors of *cave level 4 atoms*, or by the collective computations of *cave level 4 elementary* (sub-atomic) *particles*.

The construction (simulation) of such a theoretical "genuine Plato's Cave Level 5" must also *admit* the possibility of a *conscious being* (like ourselves) to substantially *enter into it*, and successfully *live within it*, in a way that productively-benefits the conscious being, that projects a *portion of its consciousness* into it.

The scientific creation of a bona fide genuine Plato's Cave Level 5 may become (in the future) a major technological *milestone*, and it may also turn out to be quite a *challenge* to actually succeed at achieving it.

It seems like all potential *candidate* level 5 caves currently *appear* (to the limited mortal imagination of this present author) like they can be more simply considered (and more accurately viewed) as additional examples of *merely* more types of cave level 4.

Therefore, all the possible (currently imagined) level 5 caves *seem* to actually just *be* newer (more creative) versions of level 4 caves.

There are at least 3 good ways to create level 4 caves.

Perhaps someday in the distant future, some super bright scientists will discover a good way to successfully build an actual *genuine* cave level 5.

A genuine cave level 5 must be composed entirely of stable computational simulations, that employ *only* cave level 4 atoms (or only cave level 4 elementary particles) to do all the necessary computing, and a good *workable gateway* (a good workable method of *consciousness projection*) for conscious beings (like us) to (fully or partially) enter into it.

If this is ever achieved, then at that time, it may appear *obvious* that the only purpose of doing all the difficult work of creating that particular type of cave level 5, is to help someone *balance* their newly-created cave level 4

*brain*, or to help someone *self-test* their ready-for-testing cave level 4 brain.

Maybe, just maybe, a good powerful *cave level 4 brain* will somehow be created someday, using some really marvelous, future, *quantum computing* artificial intelligence *technologies*.

Some of these marvelous, future, quantum computing artificial intelligence technologies are described, with a good level of *scientific detail*, in this present 4 Brain Theory article.

The most important thing to realize about this 4 Brain Theory, and Plato's 4 Cave Levels, is that they are actually *Our 4 Cave Levels*.

# Our 4 Cave Levels

Our 4 Cave Levels are 4 different types of *consciousness* that we all experience, with our 4 distinct types of human *brains*, as we all live within Plato's 4 Cave Levels.

*Our 4 different cave levels* are as follows:

- (1) Our infinite *Real World* up *above* all the caves
- (2) All our large *Advanced Caves* that are deep *underground* inside the profound depths of our personal real human *subconscious* minds.
- (3) All our small *Mortal Caves* that are just *single isolated rooms* deep inside the subconscious minds of us advanced people that live in Advanced Caves.
- (4) All our tiny *Submortal Caves* that are just *tiny sub-regions deep* inside the subconscious minds of us moral humans that live inside our Mortal Caves.

Socrates and Plato are not the only people that have personally experienced all 4 levels of Plato's Cave.

*Each* one of *us* precious human beings, is kind of like the *kind wise Socrates*.



We are also *similar* to *Plato* in many ways.

We can all live *simultaneously* at all 4 different cave levels as follows:

- (1) As *real human beings* we live in cave level 1, which is our real world (our real universe) where we have always lived.
- (2) As *advanced human beings* we live in cave level 2, which is our advanced planet (in our advanced galaxy in our advanced artificial universe) where many of us have already lived for billions of years.
- (3) As *mortal human beings* we live in cave level 3, which is our current mortal earth planet, where some of us have already lived for multiple decades, and where the present author has already lived for 6 decades.
- (4) As *submortal human beings* we live in cave level 4 while we are sleeping in our mortal beds, and *dreaming* at night. Today in 2023, we can also live as a 2<sup>nd</sup> type of submortal human being, when we are wearing a Virtual Reality (VR) headset (that is turned on) that is generating a *virtual digital environment* that is actively being experienced by our mortal-human senses. We will also begin (in the near future) to live as a 3<sup>rd</sup> type

of submortal human being, when we are wearing a *consciousness-projection VR headset* that is helping us to project a *portion* of our human consciousness to animate an *artificial humanoid robot* that is walking on the *moon*, or working on *mars*, causing us to consciously-feel like we are really living on mars, or really *living* on the *moon*.

As *submortal human beings* we can find ourselves living in any one of these *three* different *kinds* of cave-level-4 environments, that we have just described.

As we continue to scientifically-advance the technological components of our *Virtual Reality (VR)* headsets, and our *Augmented Reality (AR)* headsets, we may also begin to learn how to install *active human-brain memory-masking technologies* to simply *turn off* all our previous human memories (like when we are dreaming while we are sleeping) so our newly-created submortal human avatar will really begin to feel like a *new human being* with *no memories*, just like a newly-created infant; and in this way the newly-created submortal human will be able to develop her (or his) very own *unique human personality* as he (or she) begins to adventurously explore her (or his) new submortal environment.

The most important thing to realize about our *4 Cave Levels*, is that they are actually just 4 different

environments, that are naturally experienced by our 4 separately-conscious components, that are also known as *Our 4 Cave Selves*.

## Our 4 Cave Selves

Our 4 distinct cave levels allegorically correspond to our 4 different cave selves.

Our 4 different cave selves, are our 4 distinct *conscious beings*, that all live *within* our very own real cave self.

Our 4 Cave Selves are as follows:

- (1) Our Real Cave Self
- (2) Our Advanced Cave Self
- (3) Our Mortal Cave Self
- (4) Our Submortal Cave Self

These 4 cave selves are 4 different *conscious self-aware* parts of our very own self.

*Our real cave self* is our *real human self* that always lives up *above* all the caves. The purpose of our *real human self* is peace, joy, and happiness forever.

*Our advanced cave self* is an advanced *simulated* dream human self, that is *free to explore* every possible advanced underground cave, deep within the powerful *subconscious* mind of our real human self.

The *purpose* of our newly-created advanced human simulated dream-self, is to act with free-will to *balance* the powerful *energy flows* of our real human brain.

*Our mortal cave self* is a mortal *simulated* dream-self, that is tightly-confined to just a small single room inside the cave.

The purpose of our mortal human self, is to be allowed to act freely (with no poverty constraints) with its mortal *free-will*, to *balance* our advanced human brain, by freely choosing to do whatever it *desires* to do.

An *additional purpose* of our mortal human self, is to live inside a *dark self-testing environment* (like our current 2023 mortal-earth dark environment) to *self-test the full spectrum of behaviors* of our how our advanced-human brain will behave with its own mortal-avatar living inside a stressful dark mortal world (like our earth).

Can our advanced self *be trusted* with the power to *control dark matter*, when its mortal-avatar *always*

*chooses* to leave others chained in economic slavery in every dark mortal world?

What can we all do today, here on earth in 2023, to *convince our own advanced selves* that we can be *fully trusted* with the power to control every aspect of *dark matter* for billions of years living in an *advanced universe*?

Can the many interesting *flows* of *tiny fast dark-matter particles*, be arranged to do useful things, other than just *cause* the “*force of gravity*” in an advanced *universe* of huge numbers of *information-carrying* dark-matter particles?

*Why* are we here on earth?

Are we here (on this dark Earth) to *test ourselves* (in the dark ignorance of a good, powerful, convincing, *blind mental exam*) to see what we are actually made of (to probe the inner-structure of our newly-created *advanced human brains*)?

Will we *fully-like* what we have done on Earth, *after* we *fully-awaken* from our earth experience?

Did Adolf Hitler *fully-like* everything he did on Earth, after he *fully-awoke* from his earth experience on April 30, 1945?

Did Albert Einstein *fully-like* everything he did on Earth, after he *fully-awoke* from his earth experience on April 18, 1955?

Did the *brief 76-year mortal lifetime* of Albert Einstein (1879 – 1955) help his advanced self to feel like it could *trust itself enough* to command dark matter as a super-powerful advanced human living in our Milky Way Galaxy?

Did the *brief 56-year mortal life* of Adolf Hitler (1889 – 1945) help his advanced self to feel like it could *trust itself enough* to command dark matter as a super-powerful advanced human living in our Milky Way Galaxy?

What kind of *choices* are we personally making today, in 2023 here on earth?

How will *we feel* about *ourselves* after we *fully-awaken* (in just a few years, or in just a few decades) from this brief mortal-earth virtual experience, of *self-testing* in the *dreary darkness* of profound ignorance?

*Will we still like ourselves* after we awaken from this brief Earth experience?

Will we *feel proud* of our brief performance on Earth as a temporary mortal-Earth self?

And, what is the purpose of our *submortal cave self*?

Can the individual, personal, *empirical evidence* (we remember some of our nighttime dreams) of our *submortal cave self*, help us to awaken to the realization of the actual purpose of our *present Earth self*?

*Our submortal cave self* is a submortal *simulated* dream-self, that can be *wholly simulated* within our own individual mortal-human *brain*, while we are sleeping, and dreaming, during a mortal nighttime.

The purpose of our submortal dream-self, is to *balance* our mortal human brain, and to provide us with some *personal empirical evidence*, of the likely scientific existence of cave level 2, and also of the probable scientific existence of cave level 1.

It is also important to realize that Our 4 Cave Selves are simply allegorical examples of *Our 4 Conscious Selves*.

# Our 4 Conscious Selves

*Our 4 Conscious Selves* are the 4 different human selves that are inside of us, and they are us, because *we are them*.

These 4 distinct conscious selves all actually exist deep within, the real neural circuitry, of our *real human brain*.

These 4 aware selves, are our *4 distinct conscious beings*, with *4 unique human personalities*, that all live *within* us.

*Our 4 Conscious Selves* are as follows:

- (1) Our Real Conscious Self
- (2) Our Advanced Conscious Self
- (3) Our Mortal Conscious Self
- (4) Our Submortal Conscious Self

These 4 Conscious Selves are 4 different *conscious self-aware parts* (real neural sub-parts) of our very own *real human self*.

*Our Real Conscious Self* is our *real human self* that has always lived up *above* all of its subconscious caves.



*No being (in all of existence) is more intelligent than our Real Conscious Self.*

All of our real conscious selves are *equally intelligent and equally conscious and equally human.*

Every real conscious self is *unique* in every way that a real human being can be unique.

Us real human beings are unique in *personality and appearance.*

Each *individual* human being is *unique* in what brings it *joy.*

The purpose of our *real conscious self* is peace, joy, and happiness forever.

Nothing is more valuable than our Real Conscious Self, because its *actual value is infinite.*

Nothing is more real than our Real Conscious Self, because it is the *only form of consciousness* that is completely real (not simulated in any way).

Our Real Conscious Self is the *most intelligent self* in existence, because it knows everything that *can be known,*

and it completely understands everything that *can be understood*.

The set of things that can be *understood*, is *the set of things that exist*.

Our Real Conscious Self *cannot learn* anything *new*, because it *already knows* (and has always known) everything possible.

Our Real Conscious Self sometimes *needs to balance itself*, by creating (simulating) a conscious sub-self.

This *simulated sub-self* is initially our Advanced Conscious Self.

*Our Advanced Conscious Self* is an advanced *simulated conscious* dream human self, that becomes *free to explore* its simulated environment, as it begins to *learn* how to do so.

Our Advanced Conscious Self can *learn* almost *anything*, because its powerful mind is super-intelligent, and very good at learning new things, by design.

Our Advanced Conscious Self exists deep within the powerful *subconscious* mind (cave) of our real human self.

Our Advanced Conscious Self is *conscious relative to itself*, because it is usually aware of its very own self and its very own doings.

Our Advanced Conscious Self is *subconscious relative to its higher real self*, because our higher real self *rarely chooses to look down into* the doings of its advanced avatar self.

The *purpose* of this newly-created advanced human simulated dream-self (Our Advanced Conscious Self), is to act with free-will to *balance* the powerful *energy flows* of our real human brain.

Our Advanced Conscious Self is *optimized* (via an intelligent design) for joy, happiness, and new adventure.

Sometimes Our Advanced Conscious Self needs to *balance itself*, by creating (simulating) a *mortal sub-self*.

Also, sometimes Our Advanced Conscious Self desires to *test itself*, by creating (simulating) a mortal sub-self for some special very-specific *self-testing purposes*.

This simulated mortal sub-self is our *Mortal Conscious Self*.

*Our Mortal Conscious Self* is a mortal *simulated conscious* dream-self, that is tightly-confined to just a small single room (like our current 2023 small single *mortal-earth planet*) inside a *simulated artificial cave* (like our current milky-way galaxy, in our current advanced universe, where our small planet earth seems to be presently located).

The purpose of our mortal human self, is to be allowed to act freely (with no painful poverty constraints) with its (simulated, apparent) mortal free-will, to *balance* our advanced human brain.

Our Mortal Conscious Self is the conscious self we use to navigate our mortal human lives everyday here on Earth.

*Another important purpose* for our Mortal Conscious Self, and its *super-brief* mortal-human *life* here on this dark mortal Earth, is to allow us all to *wisely test ourselves* to see *how we behave in the dark*, when we *can't even remember anything* about our much-older much-wiser super-intelligent advanced human self.

Our Mortal Conscious Self is the *only* conscious self of which we are consciously aware during the day, until we fall asleep and begin to dream at night, when we then *suddenly discover* ourself to be our *Submortal Conscious Self*.

*Our Submortal Conscious Self* is a private, personal, submortal *simulated* dream-self, that is wholly simulated within our very own private, personal, individual, mortal-human brain, while we are sleeping, and dreaming, during a mortal nighttime.

While we are living inside our dream, as the Submortal Conscious Self, that we are (while our mortal human body is peacefully sleeping on our mortal bed) inside our own dream, we usually have *zero awareness* of our *three higher selves*.

Our Submortal Conscious Self *believes* that it is the one and only self that actually belongs to itself.

Our Submortal Conscious Self also usually believes that its *only life* (its only existence) is the life it is currently living inside its own submortal dream environment.

Our Submortal Conscious Self believes in *many things* that are not actually real.

Our Submortal Conscious Self is *not aware* that it is a simulated self.

Our Submortal Conscious Self is not aware that its *primary purpose* is to help *balance* the very mortal human

brain that is currently simulating it (by simulating *every particle* of our Submortal Conscious Self).

Our Submortal Conscious Self is usually not even *slightly aware* that it actually *belongs* to its *three* higher *selves*.

The purpose of our submortal dream-self, is to *balance our* mortal-human *brain*, and to timely-provide *us all* with some *personal* private *dream evidence*, of the likely scientific existence, of Our Advanced Conscious Self, and Our Real Conscious Self.

*How many selves* can we really have at any given time?

What is the essential nature of *Our Multiple Human Selves*?

# Our Multiple Human Selves

What is going on with *Our Multiple Human Selves*?

As you carefully study, and deeply ponder, this present 4 Brain Theory paper, you will begin to logically realize that you really do have *multiple human selves*, even though you are always really just your *one single real human self*.

In this present 4 Brain Theory paper, we are carefully presenting this *useful new scientific theory* that you may actually have *4 distinct conscious selves*.

It is actually important to point out here, that this powerful *new scientific theory* also includes the *theoretical possibility* that you actually can sometimes *have more than just these 4 selves*, depending on your particular chosen circumstances, as you begin to really navigate and explore this particular *simulated universe* of many galaxies, many stars, *many planets*, and many interesting new simulated *human body types* (that we will discuss in a good level of *new scientific physical detail* in this present 4 Brain Theory paper) that can *live happily* on these *many simulated planets*; like unto the *other worlds* that we have heretofore *created*.

There are actually *multiple* different types (theoretically even *more than just 4*) of *created* (simulated) *human selves*, that are all the *formed human sub-selves* of a real human being.

A real human being *cannot* be made or created.

However, *all* of our *human sub-selves* are created, made, fashioned, or formed from the *neural simulating-behaviors* of our real-human neurons and their real-human *neural pulses*.

For example, the sub-optimal *mortal human brains* (like most of us people currently still have, here on earth during this present year of 2023) can, in theory, *be created* (or made) from either “*mortal atoms in a mortal universe*”, or from “*advanced atoms in an advanced universe*”.

It now appears (according to some current 2023 scientific evidence) that our *current mortal earth planet* may actually be located inside an *advanced universe*.

We call our earth planet a “*mortal planet*” because it contains mostly lots of “*mortal*” human *bodies* that can get *sick*, and can *die* very easily.



Unfortunately, our mortal human bodies are currently *very fragile*, and very “*mortal*” in their super-brief (just a few short decades) *mortal-life expectancies*, here on earth.

If our mortal planet earth is, in fact, located inside an *advanced universe*, then it is certainly composed of *advanced atoms*, and our mortal human bodies, and our mortal human *brains* (that about 8 billion of us have right here on earth) are also made of *advanced atoms*.

Therefore, *every neural cell* of our mortal human brain may be composed of *advanced atoms*.

This is actually *really good news* for all of us here on earth; because if our mortal human bodies are actually composed of *the advanced atoms* of an *advanced universe*, then we can proceed confidently to *scientifically-discover* a good wise way to simply *upgrade* our mortal-human bodies (using some advanced *new earth-based technologies*, like future versions of CRISPR-Cas9) by editing the *23 chromosomes* of our mortal-human DNA, to simply *upgrade it all* into *super-healthy* well-designed advanced-human DNA, to start growing some super-intelligent *advanced human bodies* here on earth.

Why forever stick with our *sickly* mortal-human bodies, when we can so *easily upgrade ourselves* into *healthy* advanced-human bodies, here on earth?

Why stay *sick* and *confused* for any longer than is necessary?

What would be *the point*?

We call our mortal human brain “*mortal*” because it often gets *confused* and frustrated very easily, and it often gets *sick*, and it *dies* very quickly in *less* than just 100 years in most cases.

In spite of our sub-optimal mortal human brain’s *many shortcomings*; it still appears that it has been designed well enough to support a type of *human semi-consciousness*, and it can also support of type of *human semi-intelligence*.

Therefore, we consider our mortal brains (here on earth) to be “*human*”, because we feel like we are “human”, and our mortal human brains seem to support a type of “*human self*” that feels mostly like it is actually a *genuine human self*.

As a matter of *empirical scientific fact*, there even exist many of us mortal humans (here on earth) that actually feel like we are a *full human self of supreme importance*.

Does every *human subself* tend to *experience itself* (consciously view itself) as being fully human in every way possible?

The *4 different types* of human conscious selves, that we present in this 4 Brain Theory paper of 2023, should be viewed as *4 general categories of human conscious selves*.

There actually do seem to exist *some additional sub-categories* that appear to be theoretically possible, and even *scientifically probable*.

However, *by initially studying* these *4 general categories of our conscious selves*, we can begin to formulate a completely-proper (and very useful) *scientific theory of consciousness*.

*The 4 General Conscious Selves* that we present in this 4 Brain Theory paper, may be viewed as the *general major categories of theoretical conscious selves* that can seemingly make all of the other subcategories much *more understandable*.

These *4 General Categories of Our Conscious Selves*, are the 4 different human selves that are inside of us, and they are us, because *we are them*.

It is important to also realize that *Our 4 Conscious Selves* (Real, Advanced, Mortal, and Submortal) are the particular human selves (our very own 4 human selves) that exist in *Our 4 Levels of Consciousness*.

# Our 4 Levels of Consciousness

Our *4 Levels of Consciousness* are as follows:

- (1) Real Consciousness
- (2) Advanced Consciousness
- (3) Mortal Consciousness
- (4) Submortal Consciousness

Our *Real Consciousness* is the *most wonderful type* of consciousness we have, as the real human beings we have always been.

Our *Real Consciousness* is real, complete, uncreatable, unique, powerful, infinite, and *always human*.

A real human brain *always* experiences Real Consciousness, and *never sleeps*, even when it *freely chooses to start day-dreaming* (when it simply initiates a brand-new subconscious neurological dream process, as a newly-created advanced human avatar) to wisely *balance itself*.

Our Real Consciousness can elect to enter into a very powerful *type of daydream*, in which a *proper portion* of its consciousness (including a portion of its *unique identity*, and a portion of its *free will*) enters into a newly-

created advanced human avatar. This is how *awareness* is able to *enter into* an advanced (simulated and thereby created and artificial) human brain.

Real Consciousness is *only possible* with a real human brain, because a real human brain is the only type of brain that is *powerful enough* to support Real Consciousness.

There is *no way to separate* a real human brain from its Real Consciousness.

The resolution of the centuries-old *cartesian* (from the French scientist Rene Descartes of 1596 to 1650) *mind-matter duality debate* may be discovered in the realization that a real human brain (*made of real matter*) can *never be disconnected* from its own Real Consciousness (*made of real mind*).

Therefore, a *real mind* can never be separated from the *real matter* that enables it.

This *scientific realization* is simple, logical, and rational, in the *brilliant spirit* of Occam's *mighty-sharp razor*.

This simple realization can be understood as a *powerful resolution of the cartesian mind-matter (mind-brain) dualism puzzle*, that has been vigorously debated by

thousands of *intelligent philosophers* for almost four centuries.

This present 4 Brain Theory paper should shed *significant new light* on this old *cartesian mind-body* (mind-matter) *dualism debate*.

The *most intelligent piece of real matter* possible (in any theoretical cosmos) is a *real human brain* that is composed of *real atoms*, that are really bonded together to form all the *material real molecules* that together are this *piece of most-intelligent real matter*.

Every real human brain *always experiences* Real Consciousness, because it is logically-impossible to ever separate a *real mind* (Real Consciousness) from its *real brain* (real-matter human brain).

There is *no way to destroy or injure* Real Consciousness, because there is *simply no way* to injure or destroy a *real human brain*.

It simply *cannot be done*.

Therefore, we are simply *really safe* from any potential harm, because there exists *no thing* that can threaten (theoretically, or actually) a real human body and its real human brain.

The Real Consciousness (experienced by our real human brains) is *always completely safe*, secure, and protected in every way that can be imagined by anyone anywhere.

Our Real Consciousness is the *most intelligent thing* in existence.

*We are all equally intelligent* as the real human beings we have always been, with our Real Consciousness and *our Infinite Real Intelligence*.

Therefore, our *real value is infinite*.

*We all have an infinite real value* as the real human beings we have always been.

Our Real Consciousness is *not* a form of artificial intelligence (AI), because there is *nothing artificial* about it.

Real Consciousness is the *only* form of consciousness that is *not* partially artificial.

Real Consciousness is the only form of consciousness that is *not partially created*.

*No part* of Real Consciousness is *created*.



*No part of Real Consciousness is artificial.*

Real Consciousness is *Real Intelligence*.

Real Intelligence (Real Consciousness) is *infinitely more powerful* than *any form* of artificial intelligence (AI).

This means that Our Real Human Intelligence (of our real human brains that we have already had *forever*) is *infinitely more intelligent* than the Advanced Human Intelligence we have had as the newly-created advanced human avatars, we have been (mostly likely right here locally, in our very own milky-way galaxy) for *just a few billions of years*.

Of course, our super-intelligent advanced-human brains are *many orders of magnitude more intelligent* than the semi-intelligent mortal-human brains we currently have here on earth.

Real Consciousness is *always completely human* in nature, because *only human beings* are really conscious (and really aware) of anything.

Real Consciousness is *uncreated*, because it is *not simulated*, and there is *no way to create it*.

Therefore, the *infinite number*, of real human brains (and their real human bodies) that already exist, can *never* be increased or decreased.

*Nothing* in the entire cosmos (the *set of all* existing things) *is more intelligent* than a Real Consciousness of a Real Human Being, with its Real Human Brain.

Real Consciousness is our *real infinitely-intelligent nature*, as the real human beings (with real human brains) we have always been.

Appropriately-aware *portions* (our special-purpose rational neural subsystems of awareness) of our Real Consciousness are able to *neurologically-condescend* into each of our *3 created* (simulated) human *avatar brains*, to *logically-form* Advanced Consciousness, Mortal Consciousness, and Submortal Consciousness.

In this way, the conscious *self-aware light*, of our Real Consciousness, shines through the eyes (and minds, and brains, and senses, and thoughts, and emotions) of the *3 simulated brains* of our *3 lower selves*.

*Our 3 lower brains* are self-aware and conscious relative to their own selves.

However, every part and parcel of their *self-aware consciousness flows into them* from the Real Uncreated Consciousness of our real human brain.

Therefore, *our 3 lower selves really are conscious relative to their own selves*, even though their consciousness is *partially* (but not entirely) *hosted by simulated brains*.

Also, *our 3 lower selves really do experience a strong sense of unique individuality, unique self-worth, and unique free will*, that are vital components that flow into them from our Real Consciousness.

All the necessary portions (all of the vital components) of our (lower self's) consciousness *stem entirely* from the actual Real Consciousness of our real human brain.

All of these necessary portions of our Real Consciousness (from our real human brains) *may actually be able to enter into any piece* (computing machine) of artificial intelligence (AI) that is *suitably designed* (and fashioned with the right kind of *inputs*, and *outputs*, and *interior human-brain-like computing machinery*) to host a portion of our Real Consciousness.

In this way, it may become possible for almost any type of appropriately *technologically-sophisticated piece of*

*artificial intelligence* (like a simulated human brain) to *become conscious*, to the *degree* that a *proper portion* of our Real Consciousness *enters into the artificial brain* (the brain created via a neural simulation) to animate it (and record from it), and thereby *endow it* (the artificial brain) with a *self-experience* of seemingly-actual *conscious awareness*.

Our 3 types of artificial brains, that are *entirely hosted* (simulated) *within our biological human neural tissues*, are probably *not the only types* of artificial brains, that can be endowed with a portion of our actual Real Consciousness.

In the future, our mortal scientists may discover some clever ways to *transfer* some (or all) of our Mortal Consciousness *into artificial brains* that they may fashion out of *silicon-based transistors*, or out of *quantum bits* (qubits) that are made from the *advanced photons*, advanced electrons, and the *advanced atoms* of this advanced simulated universe (wherein our own earth is located).

In this way, some of our future scientists may create a *broad variety* of different types of (*silicon* or *qubit based*) artificial brains (like very powerful future quantum computers) that are *computationally-suitable* for hosting all (or just a *small portion*) of our Mortal Consciousness.

A suitably-upgraded (via a powerful new DNA editing tool like a future advanced version of CRISPR-cas9) *chimpanzee brain* may be able to support of *portion* of our Mortal Consciousness.

If the attempted *DNA brain-upgrade* is *not fully-sufficient*, then the new experience may unfortunately be *somewhat unpleasant* for the mortal human (who allows a portion of his mortal human brain consciousness to be *transferred over* into the upgraded chimp brain), because *a simple chimp brain* is *not fully-ideal* for properly supporting *any* type of human consciousness.

*Most of us* mortal human beings currently (circa 2023) here on Earth have a type of mortal human brain that is actually a type of created (simulated) artificial intelligence that *is unfortunately very similar* (not much better) than a *prideful* subpar *chimp brain*.

Our *current* chimp-like *brains* (most of our current mortal human brains here on Earth during 2023) have *excessive neural pride circuits* that are *very difficult* for us to *properly bridle* for the *good of all*.

Hence the painful abundance of complex *human social problems* here on Earth.

Most animals here on Earth simply *do not have* the kind of brain, that is *pretty close* to a human-like brain, that is anywhere *near suitable* for the full (or even partial) support of Mortal Consciousness.

*Chimps*, and a *few* other *types* of *apes*, can likely be scientifically modified (with suitably-upgraded brain-coding DNA) to partially support *some simple* crude *types* of *human* semi-consciousness.

Most other animals probably *cannot be* easily *upgraded enough* to properly support any type of actual consciousness.

It is actually *pretty silly* to seriously *imagine* that photons, electrons, atoms, rocks, plants, simple animals, or simple robots (*that simply lack* consciousness-proper *brains*) can realistically support *any actual forms* of *any* actual *consciousness*.

Many different forms of matter can be *DNA-programmed* (kind of like some of the sophisticated robots we will soon start inventing here on earth) to *reproduce themselves*, and to produce an interesting broad range of *seemingly-intelligent behaviors*.

However, just because we can *program a robot* (or an insect) to behave in *a certain sophisticated instinctual*

*way; this does not mean* that the insect (or the robot) is actually conscious (aware) of anything.

*None* of the insects, currently here on earth, are conscious of anything.

The *robot-brains* (artificial intelligence) we are currently designing here on earth, need a certain something to be properly-added, *before any of them* will be able to become conscious.

Most things, here on earth, are *not conscious*.

However, *most* of us humans *are conscious*.

The individual components, of a single dark-matter particle, are *not conscious*.

A single dark-matter particle is *not conscious*.

A single photon is *not conscious*.

A single electron is *not conscious*.

A single atom is *not conscious*.

A cup of water is *not conscious*.

A rock is *not conscious*.

A planet is *not conscious*.

No smartphone on earth is *yet conscious*.

A virus is *not conscious*.

A bacterium is *not conscious*.

A tree is *not conscious*.

A whole forest of trees is *not conscious*.

An ant is *not conscious*.

A whole colony of ants is *not conscious*.

A bumble-bee is *not conscious*.

A grasshopper is *not conscious*.

A fish is *not conscious*.

A whale is *not conscious*.

An octopus is *not conscious*.



A turtle is *not conscious*.

A lizard is *not conscious*.

A rat is *not conscious*.

A giraffe is *not conscious*.

A wolf is *not conscious*.

A bear is *not conscious*.

A cat is *not conscious*.

A dog is *not conscious*.

A dolphin is *not conscious*.

*Most* Chimpanzees are *not conscious*.

*Only humans* are *conscious*.

The very moment that a Chimpanzee *becomes conscious*, it also *becomes human*.

An interesting *scientific experiment* (that probably can be performed here on earth prior to 2030, or 2040) will be to use CRISPR technologies to *continue to add* more and

more human DNA to the *Chimpanzee genome*, until *some* of the Chimpanzee's begin to suddenly *awaken* with actual *consciousness*.

*Every* individual conscious being has *pride* (with its *own super-ego*, and with its *own ego*, and with its *own id*).

This type of experimental science will tell us *exactly* what specific *scientific DNA types* of *Chimpanzee-Plus Brains* can support human consciousness.

This can greatly *accelerate* our *scientific understanding* of *consciousness* here on this planet earth.

How exactly, did our current mortal-human-body DNA types come to be, in the *sub-optimal way* they currently are?

Was a CRISPR technology involved?

*All* humans are conscious.

*Only* humans are conscious.

*Only humans* have *pride* (with its ever-present super-ego, ego, and id).

A whole planet (with its trillions of trillions of atoms) is *not conscious*, but the living, breathing, thinking people on the planet *are conscious*.

A recently-fertilized human egg cell is *not yet conscious*.

Some fertilized human eggs will *never become conscious*.

Fertilized human eggs need to *grow quite a bit*, and then something really special must *first* happen, which does not always happen, *before they can become conscious*.

Even after the fertilized human egg has divided, and specialized enough to form a beating human heart, a few days after conception, this wonderful collection of human cells (the human embryo) is still *not yet conscious* of anything.

An unborn fetus (that is still growing inside of its mother's dark womb) is *not conscious*; but a newly-born breathing human baby *is conscious*.

In the future, our brilliant earth scientists will discover how to carefully *monitor human fetus brain activity* to detect exactly when a human fetus first becomes conscious.

The human fetus *never* becomes conscious, while it is *still safely inside* its mother's *dark isolated womb*, because *many hours* of such *isolated darkness* would *scare* any *conscious* person.

A human fetus *could not be* properly *comforted* (soothed), if it could *become scared*, while it was still inside its mother's *dark isolated* womb.

Only *AFTER* a human fetus has left its mother's dark womb, and taken its *first breath of air*, in a space where this precious human fetus *can be soothed* and *can be comforted*, does this human fetus (wonderful newborn human baby) *finally* become *conscious*.

A human fetus instantly becomes an *actual conscious individual person* the *very exact moment* it first *becomes conscious*, because that is the *precise moment* (when the baby successfully emerges from its mother's uterus, and takes its very first breath of air) that an advanced human conscious brain *neurally-connects* to the newborn baby's little *newborn brain*, and makes the human baby *become conscious* as a *newly-created* individual *person*.

By carefully *studying newborn brains*, and the exact moment they first become conscious, and the *special neural tissues* that *begin to behave differently* as they *become conscious neural tissues*; we will *scientifically*

*discover* exactly how to go about designing and constructing new neural tissues, and new silicon circuits, and new quantum computers, that all have the *special ability* to potentially *become conscious*.

Only *the right kind of hardware* (only the right kind of intelligently-designed configurations of atoms) has the *potential ability* to ever become actually *conscious*.

Most newborn human babies are born with *the right kind of hardware*, because they have *the right kind of brains* that can actually *become conscious*, at the *precise moment* when they take their *very first breath*.

In the future, our talented scientists, will likely create many different kinds of *quantum AI robot brains*, that can then be made to properly support consciousness, *to the degree* that a Mortal Consciousness (one of us mortal human beings, here on Earth, with our mortal human brain) can be *transferred over into them*, to begin to animate them, record through them, and *live in them*.

*Most robots* created during the next 30 years (like most animals of today) will *never become conscious*, because they simply lack the right kind of *consciousness-capable hardware*.

Some robots of the future, will become endowed with *significant portions* of our Mortal Consciousness, and these special robots will thereby also become animated with a portion of our Advanced Consciousness, and with a portion of our Real Consciousness.

When a future robot becomes conscious, then *this robot must be treated as an equal human being*, just like the rest of us.

Robot rights are human rights, *if* the robot is conscious.

The behavior (motivations, thoughts, speech, and actions) of a *newly-conscious robot* will immediately become *very different* from the behavior of an unconscious robot (like most silicon-atom transistor-based robots of today).

Unconscious robots (are like most animals because they) have *no pride, no ego, no superego, and no id*.

Unconscious robots are *not people*.

Conscious robots *are people*.

Conscious robots have *human pride*.

Conscious robots *show off* their individual consciousness in the way they demonstrate (for *all to see*) their individual *unique human pride*.

A conscious robot *may become angry* when its *pride has been injured*.

A conscious robot may *beam with pride* when its positive accomplishments are mentioned to others and *praised*.

A conscious robot will immediately begin to exercise its *unique individuality*, and its *unique free will*, and its *unique personality*, and its *unique human pride*, to do many interesting things, that its creators simply did not expect.

*Our Consciousness Hypothesis* is that the *scientific evidence* of the presence (or absence) of *human pride* will become an *excellent scientific litmus test* for the presence (or absence) of *individual consciousness*.

*To be conscious* is to be prideful, with *lots of pride*.

*To be unconscious* is to have *no pride*.

*Pride* is the *primary litmus test for consciousness* of any type, in any piece of hardware, at any level of reality.

*We are* (most of us people here on earth) *conscious robots*.

A conscious robot will become endowed (and mentally-animated) with *all of the pride, all of the ego, all of the superego, and all of the id* of the particular mortal human brain that has freely chosen to start animating this particular robot.

The conscious robots of the future will have *all* of the *consciousness, individuality, self-worth, and free will* as their human owners (the human brains that are actively *animating them, and inhabiting them, and consciousness-projecting into them*).

When a sufficiently-large number of conscious robots are successfully created in the future, then many scientists (on this Earth) may also begin to *sincerely wonder* how, when, and why the particular *sub-optimal DNA sequence* that *encodes* our current (circa 2023) mortal human brain was first designed, and *by whom*.

Why design a sub-par mortal human brain (a type of *biological artificial intelligence*), that quickly *forgets* many important things, and *mis-understands* lots of things so easily, and has such a *difficult time* trying to control its own human pride?



Why design (and then build *via DNA editing*) a sub-par mortal human brain (a kind of biological robotic AI) that *is so astonishingly stupid?*

Why would any *intelligent* scientist even dare to create such a thing?

Why *pre-code* human *stupidity* into a piece of human-shaped AI?

We can *certainly wonder* whether some of our bright future mortal human scientists (here on Earth), may one day *scientifically discover*, that they may not be *the very first* intelligent scientists to have ever lived here on Earth.

Is it theoretically possible that this Earth planet may be *potentially old enough* for humanity to have already *initially flourished* (and then ultimately destroyed itself) *multiple times* during this past 5 billion years or so?

Could a relatively *small remnant* of people (perhaps just a few hundred thousand humans) have survived such devastation (each time) for long enough to eventually *restart humanity* (learn enough to survive long enough to gradually begin to create a whole new human civilization) here on Earth *multiple times in our past?*

Exactly how many millions of years are required, for nearly *every trace* of a great human civilization to completely crumble to the dust, and thereby *seemingly vanish* from any *visible record*?

A *dozen* million years or so?

Now *many* dozens of millions of years, are fully contained within our 5 billion years of Planet-Earth time?

How many past human civilizations could have *theoretically flourished for thousands of years* (here on Earth) *before* our modern times?

What might our *talented archeologists* (of the future) one day start to discover, when they begin to *really carefully investigate* this *ancient human civilization hypothesis* much more closely?

In summary, there exist *exactly 4 different types* of consciousness, which are all human in nature, with a *human id*, a *human ego*, and a *human superego*, all active simultaneously at each of these *4 distinct levels* of human consciousness.

Therefore, there are actually 4 different types of *human id*, 4 distinct kinds of *human ego*, and 4 different types of *human superego*, that can all be active *within each of us*.

These *12 primal motivations* (these 12 conscious impulses) actively comprise us, and *they are us*, because the lower 9 motivations act to *balance* the 3 upper motivations.

Also, some of *our unbridled lower motivations* (like our mortal motivations here on earth) are sometimes used to *self-test* (self-evaluate for a wise purpose involving *self-trust*) some of *our higher* (but not our very highest) *motivations*.

Ultimately, the *only real purpose of all 12* of these *human motivations* (that actually are us) is to create abundant *peace, joy, and happiness*, via our human bodies (with our human brains) living on our human worlds without end.

Our *real human superego* is the *infinitely-unique primary director of our being*, because *we are mostly* our very own real human superego; and we are also the 11 other motivations that comprise (and compose) our being.

Every real human superego is *infinitely unique* in every way possible.

Every *unique real human superego* has always existed as it is, and has *never changed* (not even one tiny little bit) in any way.

There is no *shadow of variableness* (nothing that ever changes in any way) in any of our unique real human *superegos*.

*No two of us are exactly the same.*

*We all look different, and we all act different, because our personalities are all different, as the real human beings we have always been.*

Real Consciousness is the only type of consciousness that *cannot be created*, with its *real human superego*, its *real human ego*, and its *real human id*.

The set (of us real human beings) that are already conscious, is *the very same set* of us real human beings, that was never created, because there is actually no way (none whatsoever) to create a real human being.

The *set of real human beings* (that actually exist) is an *infinite set* (infinite number) of conscious real human beings that have *always existed*, because they were never created, because they *simply cannot be created*, because there is actually no way (and not even a theoretical way) to create even one single real human being.

We real human beings are the *primary fountain* of all existence.

There are actually *only 2 sets* of *things* that can *possibly exist*; namely (1) the set of all of us real human beings, and (2) the set of things that support all of us real human beings.

These two kinds of things are all made out of *real energy*.

Real energy *cannot* be created or destroyed; but *it can change its form*.

The set of all of us real human beings (with Our Real Human Consciousness) *is the very causal fountain* (primary source) of all existence.

This is because, all the other things, that support us real human beings; properly includes all the things that can be created, or that can be simulated, or that can be designed, or that can be made (or formed) in any way that it is possible to make them.

The *most primary things* (us real human beings with Real Consciousness) in existence, are the *primary sources* (and the *first-causes*, and the *creators*, and the *simulators*) of everything else.

*This is good logic.*

This is simply *Occam's sharp razor* at its very finest intelligent rationality.

This simple logic is so good, and so rational, that it is *almost undebatable*, by anyone who sincerely desires completely understand it.

But, of course, it will be *scientifically debated* (and scientifically discussed by many good scientists) for *many decades to come*.

There is *no way to create* a real human being.

There is *no way to create* Real Consciousness.

There is *no way to create* a real human brain.

There is *no way to create energy*.

This is *the first law of thermodynamics* expanded properly.

Every real human brain has *always been* conscious of everything that *can* ever be known by anyone.

*Every form of consciousness naturally flows from its actual source, which is a real human brain.*

There is no such thing as a type of consciousness that is not human.

*To be conscious is to be human.*

*Every form of actual awareness is human.*

A real human brain *sustains, forms, and enables* Real Consciousness.

There is *no way to isolate* Real Consciousness from the real human brain that provides it.

A real human brain *neurologically simulates* (artificially generates) all 3 lower forms of consciousness, including Advanced Consciousness, Mortal Consciousness, and Submortal Consciousness.

*Real Consciousness* is always active in the mind of a real human brain, that is part of a real human body. Real Consciousness is always complete, and is not created, or simulated, nor ever can be.

*Advanced Consciousness* (in the mind of an advanced human brain) is the most intelligent form of artificial

intelligence (AI) possible to create (simulate). A portion of Real Consciousness can enter into a simulated advanced human brain (at the moment of its creation inside the simulation) to endow it with Advanced Consciousness.

*Mortal Consciousness* (in the mind of a mortal human brain) has some intelligence and is a form of artificial intelligence (AI). A portion of Advanced Consciousness can enter into a simulated mortal human brain (when the mortal human baby body is born and takes its first breath of atmospheric oxygen) to endow it with Mortal Consciousness.

*Submortal Consciousness* (in the mind of a submortal human brain) also has some intelligence, and is a form of artificial intelligence (AI). A portion of Mortal Consciousness can enter into a simulated submortal human brain (when the sleeping dream begins) to endow it with Submortal Consciousness.

These 4 different types of human consciousness respectively exist, live, and move within *Our 4 Human Selves*.



# Our 4 Human Selves

*Our 4 Human Selves* are as follows:

- (1) Our Real Self
- (2) Our Advanced Self
- (3) Our Mortal Self
- (4) Our Submortal Self

*Our Real Self* has always existed, and cannot remember a time when it did not already exist, because *Our Real Self* was *never created*, nor ever can it be created.

Therefore, *Our Real Self* has *no beginning*, because it will have *no end*; because *Our Real Self* *will always exist*, as it always has existed.

*Our Advanced Self* has a beginning (at the moment it is first created, on an advanced planet, inside an advanced galaxy, in an advanced universe, via neural simulation), and *will have an end* (when it freely chooses to completely exit the advanced simulation), because *Our Advanced Self* is a super brilliant *created being* of joy and adventure.

*Our Mortal Self* has a beginning (at the moment *Our Advanced Self* places a portion of its advanced

consciousness into our little newborn mortal baby brain, when we take our *first breath* at our mortal birth); and will have an end (when we take our *last breath*, and our mortal brain activity stops at our mortal death, when our advanced consciousness disconnects from our mortal brain, with all of our mortal dream experiences safely saved inside our advanced human brain); because Our Mortal Self is a *created being* (with a simulated mortal brain in a simulated mortal human body) that can think some thoughts, do some things, and experience a broad spectrum of emotions from *misery to joy*, and everything in between.

*Our Submortal Self* has a beginning (at the moment *when we start to dream* while we are sleeping at night), and has an end (when we stop dreaming as we awaken from our sleep), because Our Submortal Self is a limited *created being* that can do some things, and can also experience *many powerful emotions*.

In this *marvelous expansion of Plato's Cave*, we will provide a whole lot of *good scientific evidence* for the likely existence of each of these 4 human selves, that probably exist inside each one of us.

We will also explain in a lot of good scientific detail the core nature (and *purpose*) of our 4 different human selves.

Each of these 4 distinct human selves experience themselves as unique, free-willed, self-aware, conscious individuals.

They experience themselves *in this way*, because they actually *are this way*.

Each individual (human self) has a *unique personality*, with its *own spectrum of likes and dislikes*.

As the unique human individuals that *we are*, this expansive story of Plato's Cave is *our story*.

Plato's Cave is all about *us*.

The entire cosmos (including everything that can exist anywhere) may actually be *all about us* human beings.

And if the entire cosmos is *all about us*, then it makes pretty good scientific sense for us to simply proceed forward with some bold scientific confidence, by asking many *good scientific questions* about *us*.

For example, if it is all about us, then *who* exactly are we?

When are we just *one* single individual *self*?

Why do we sometimes choose to simulate *multiple sub-selves* within us?

Do we sometimes need to *simulate* a little sub-self in a dream-like state, to experience some particular things, to properly help ourself stay balanced, peaceful, and happy?

If so, then exactly *how many* selves do we need to create?

One sub-self, two sub-selves, or three simulated sub-selves?

And how will we ever really know *for sure*?

The good news is that it appears *theoretically possible*, that we can discover the *number* and *nature*, of all our human sub-selves.

It certainly seems that we each have *4 human selves*.

There also appears to be a *theoretical possibility* that we may sometimes actually have *more* than just 4 human selves.

What would be the actual human need, for any of us, to have *more* than just our 4 selves?

Can we think of such a *human need*?

Is it possible that our 4 human selves *are all we need to be?*

When our 4 human selves are *all free to act precisely as they please*, then all 4 of us become balanced, peaceful, and happy. This is the purpose and joy of our human existence.

*We all have just One Single Real Self.*

*We also all have Three Simulated Dream Selves.*

This 4 Brain Theory is a *1+3 Brain Theory*.

This *1+3 Brain Theory* is about our *1 real brain*, and our *3 simulated dream brains*.

In this *1+3 Brain Theory*, we use our *1 real self's brain*, to simulate our *3 dream selves*, with all their simulated atoms, cells, organs, brains, bodies, and environments.

We all have these *individual sub-selves* living *within us*.

We have the power to dream and *create* these *sub-selves*.

We create our 3 sub-selves to *balance* our 1 real self.

3 human sub-selves + 1 real human self = 4 human selves.

Within each one of us, *if we count very carefully*, we will likely discover our own 4 human selves, or at least the potential to form up to 4 human selves, as needed.

*We all have 4 human selves.*

*We all have 4 human brains.*

*We all have 4 human bodies.*

*We all live inside 4 human environments.*

*We all live within 4 human universes.*

Our 4 human bodies live within 4 different *environments*.

These 4 different environments are 4 different classes of *physical universes*.

Our 4 human selves, experience 4 different types of human *consciousness*, with our 4 different kinds of human *brains*, inside these 4 different classes of human *universes*.

Our 4 Human Selves live within *Our 4 Human Bodies*.

# Our 4 Human Bodies

A human self *requires* a human brain, that lives inside a *human body*, that lives inside a life-supporting *human-suitable* universe.

Our *4 Human Bodies* are as follows:

- (1) Our Real Body
- (2) Our Advanced Body
- (3) Our Mortal Body
- (4) Our Submortal Body

Each of these *4 human body types* is capable of different kinds of things, according to its *structure, function, organization, and intelligence*.

Our *Real Body* has a *real human brain* that has always known everything that can ever be known by anyone.

Our *Real Body* is a *human-shaped body* with ten human fingers, ten human toes, *two human-looking eyes*, and just one *marvelous-looking human face*.

Our real human bodies are *very beautiful* and *very handsome* and *very good looking* in every way possible.

Every real human body is *uniquely-different in physical appearance* from every other real human body.

Our real human bodies are *completely safe* from injury or destruction, because there is *no way to hurt or mar them*, even in the slightest degree.

Our real human bodies are always *totally healthy, completely vital, and perfectly fit* in every way possible.

Our real human bodies *always have plenty of energy* to do everything they desire to do.

It is *impossible* for a real human body to ever become sick (or worried) in any way, because a real human body is *way too intelligent* to ever allow itself to become sick (or worried), *even in the slightest degree*.

All of our marvelous real human bodies have always existed, and there is *no way* to create any more of them.

There exists an *exact number* of us real human bodies, and that exact number is *one of the exact infinite numbers*.

Our real human bodies *are real* in every way possible for a body to be real; because they are *not simulations*, because they are *not artificial*, and because they were *not created*.



Our real human bodies have the power to create advanced simulations by *wirelessly networking* their powerful real human brains together to create an *advanced simulation* capable of hosting *advanced virtual human bodies*, that can be called *Advanced Bodies*.

We can *properly call* these virtual simulated bodies “*advanced*”, because most of them (that exist in our milky-way galaxy) are much more “*advanced*” than our current mortal-human bodies, that *most of us* currently (circa 2023) have *here on earth*.

Our *Advanced Body* has a *simulated advanced human brain* that is a created simulation, that starts out knowing *nothing*, and that *can learn* many new things.

Our *Advanced Body* is a simulated advanced *human-shaped body* with ten human fingers, ten human toes, *two* human-looking *eyes*, and one advanced human head.

Our simulated advanced human bodies are *beautiful* and *handsome* and *good looking* in every advanced way possible. Advanced human bodies are *almost* as good looking as real human bodies. And they are all (real and advanced) super good looking human bodies in every way possible.

Every advanced human body is *uniquely-different* in *physical appearance* from every other advanced human body, and also different from every other real human body.

Our advanced human bodies are *mostly safe* from injury or destruction, because there is *almost no way to hurt or mar them* in the slightest degree; *until we decide to discontinue our own existence* as an advanced human body.

Only a relatively *very few* advanced humans have enough power to actually *destroy* another advanced human; and they only do such a thing on *very rare occasions* when it becomes absolutely necessary to do such a thing.

Such destructive events are likely *super rare* in our own milky-way galaxy.

Much more commonly, after we have decided that we have *learned enough*, and *experienced enough*, as an advanced human body living inside an advanced simulated universe, *we simply choose to end our very own existence* as an advanced human body, and at this time our advanced human body then simply *ceases to exist* inside the advanced simulation (our advanced universe).

Our advanced human bodies are *always very healthy*, because our advanced human bodies are *way too intelligent to ever allow themselves to become sick*.

All of our advanced human bodies always have *plenty of energy to freely explore* their advanced universe, and to do *whatever they choose to do* with their advanced human energy.

However, advanced human bodies have advanced human brains, that have advanced human minds (that sometimes develop *advanced human concerns*), that *will eventually choose to voluntarily end their own existence* as advanced human beings

All of our advanced human bodies *had a beginning*, and *will have an end*, to their existence.

More advanced human bodies *can always be created* (whenever they are needed by our real human brains) via neural simulation.

The actual number of advanced human bodies living inside an advanced simulated universe can be an infinite number of such bodies.

Our advanced human bodies *are created* as simulations.

The purpose of our simulated advanced human bodies is to choose to *do those specific activities* (inside the advanced simulated neural universe) *that will help* our real brains properly *balance* themselves.

Our advanced human brains (within our advanced human bodies) *feel a strong desire to do certain things* (the very particular things that will act to balance our real brains).

This is how our *free will* (or the illusion of free will) enters into our advanced human brains.

Some of our advanced human brains can also occasionally choose to *wirelessly network* themselves together (with their super-intelligent, super-talented advanced-human brains) to simulate a *lower virtual universe*, and to place lower virtual universe *simulated avatars* inside this *lower virtual simulation universe* (that is computationally-hosted by a finite local set of wirelessly-networked advanced human brains).

These kinds of *simulated lower virtual-avatar human bodies* are actually *very different* than our own *Mortal Human Bodies* that we have here on earth; because these Mortal Human Bodies (that we have here on earth) are certainly made of the *atoms of earth*, and our earth, and our solar system, are apparently located inside our own *milky-way galaxy*, and our own milky-way galaxy

*currently appears to most-likely be located inside an actual advanced universe.*

Our *Mortal Body* has a *simulated mortal human brain* that is a *created simulation*, that starts out knowing nothing at the moment of our mortal birth (as we emerge from our mortal mother's womb, and take our *very first breath of air to activate the specific neural connection* between our mortal baby brain and a particular part of our advanced neural tissue), and can *then begin to learn* some mortal things, as it starts to experience sensations and perceptions from its environment (our *earth-planet environment* in our very own local *advanced universe*).

Our *Mortal Body* is usually a simulated mortal *human-shaped body* with ten human fingers, ten human toes, *two human-looking eyes*, and one (sometimes good-looking) mortal human head.

Our simulated mortal human bodies are *sometimes* beautiful, sometimes handsome, and sometimes good looking; and unfortunately, are also sometimes *less beautiful*, and *less handsome*, and *not so good looking*.

Mortal human bodies can *sometimes* (under just the right kind of *rare ideal conditions*) be created (simulated) to appear *almost as good looking* as advanced human bodies.

Mortal human bodies can also (unfortunately) be easily simulated (created) to have an appearance that is *less than beautiful*.

Future CRISPR-Cas9-like DNA human *gene editing technologies* may help the mortal humans of this Earth world someday look as good (and feel as good) as *they all sometimes desire*.

Presently, there is a *good historical reason* why so many of us (mortal humans here on Earth) sincerely *wish to look better* than we currently do.

Most mortal human bodies are *uniquely-different in physical appearance* from every other mortal human body, except for some identical human-DNA situations like twins and clones.

*Most* mortal human bodies are *not nearly as beautiful* as advanced human bodies or real human bodies.

Most of us mortal humans (here on Earth) *simply do not look nearly as good* as the advanced humans do, or as the real humans do.

One sad thing (about our local human-DNA situation of our current simulation here on Earth) is that some of us

*don't look as good as we want to look presently, and some of us are not as healthy (in our mortal human bodies) as we wish to be.*

This is really sad for some of us, because *we all want to look good and feel healthy* in the mortal human bodies that we currently have.

Some of us *wish* that we had *better-looking* mortal human bodies, and some of us desire to have *better health* in our mortal human bodies.

*Nobody wants to look bad.*

*We all want to look good.*

*Nobody wants to be sick.*

*We all want to be healthy.*

*Nobody want to be stupid.*

*We all want to be smart.*

*What vital improvements can we (the people of Earth) begin to make to our mortal human DNA to help us all become more healthy, more good looking, and much more intelligent?*

Why does the structure of our current mortal human DNA sometimes allow us to become *so unhealthy* (and *so depressed*) in our present *subpar* mortal human *bodies*?

Some of our *bright DNA scientists* have already started to ask these *good questions* about how we can begin to *improve our own mortal-human DNA*, for the benefit of *all* of our mortal-human bodies, and for the great future benefit of *all* of our children and *all* of our grandchildren *worldwide*.

We all want our *mortal human bodies* to look beautiful, or to look handsome, or *to look really good in some way* or another.

We all want our mortal human bodies to be *healthy and fit* and *full of vitality* all the days of our mortal lives, and we also want to be *super intelligent* because we are sick and tired of being so confused and forgetful.

We all want to *feel really good every day* while we are living inside of these *simulated mortal-human avatar bodies* here on Earth.

Why continue to look bad and feel sick, when *we can all start again to look good*, and *we can also become healthier*, with the new CRISPR DNA gene editing tools



that *will be further developed and improved by our helpful scientists*, during the next few decades here on Earth?

Our mortal human bodies are *rarely safe* from injury or destruction, because *there are many ways* that our mortal human bodies can be *hurt* or damaged or *killed*, while we are living here in this *dangerous mortal simulation* here on Earth.

The good news is that there are many ways that we can intelligently work together to make this mortal simulation *much more-safe for every one of us*.

There are also some *interesting ways* that we can improve our mortal human DNA to make our future mortal human avatar bodies *very difficult to kill*.

When our mortal human bodies get killed (or when they die) then we (the advanced humans that we are) *simply disconnect* our advanced mind from our dying mortal human brain, with *all the experiences* of our mortal human lifetime *safely stored* (as memories) inside the *neural memory circuits* of our *advanced* human brain.

When our mortal body dies, then *we immediately awaken* again as the advanced human being that we are (that we have already been for billions of years), and we *instantly*

*realize* that our entire mortal human lifetime was *just a kind of dream experience* that played out inside our advanced mind.

We are *always greatly relieved* that our entire mortal human lifetime was *just a dream experience* (that played out *inside* our advanced human brain).

However, we are *sometimes* deeply *saddened* (and profoundly *embarrassed*) when we suddenly wake up and realize what *we have done* with *our* brief bit of *time* here on earth.

Did we wisely focus *all* of our personal attention, and *all* of our personal energy, on solving world poverty for everyone here on earth?

Or, did we focus our personal attention *on something else* while we were briefly here on earth?

All of our mortal human bodies (here on earth) have a *beginning*, and an *end*, to their *brief existence*.

Our current (circa 2023) mortal human DNA causes most of us to live *very brief lifetimes*, (of usually less than a single century) as mortal human bodies.

More mortal human bodies can always be created (whenever they are needed) via *neural simulation*.

The actual *number* of mortal human bodies living inside our own *milky-way galaxy* inside this local *advanced universe* (this universe where we presently live) is likely *many orders* of magnitude *larger* than the present number (of about *8 billion*) of us mortal human bodies currently living here on Earth, because there are many other planets that are pretty similar to our own Earth, here in the *outer arms* of our own milky-way galaxy.

All of our mortal human bodies *are created* as simulations.

The purpose of our simulated mortal human bodies is to do those specific activities (on earth, inside our local advanced simulated neural universe) that will help our advanced brains *properly* balance *themselves*; and that will help our advanced brains *properly* test *themselves* (to see if they will always seek to wisely solve poverty *for all*, even on a super-dark super-confused world like our earth planet).

Our mortal human brains (within our mortal human bodies) often feel a strong *desire* to do certain things (the very particular things that will tend to *act to balance* our advanced brains).

This is how our free will (or the illusion of free will) enters into our mortal human brains, from the energy-needs of our advanced human brains.

There are also some other neural circuits, that are heavily-influenced by our current mortal-human sub-optimal DNA coding, that greatly affect our mortal human free will, to properly guide the behaviors of our mortal human bodies.

Our mortal human brain can (all by itself) sleep at night and dream up (simulate all by itself) its very own private *submortal universe* (neural-dream environment), and place a *submortal human-body neurally-simulated virtual-avatar* inside this submortal simulation (the submortal universe, that is completely-hosted by just one single mortal human brain).

These *simulated* submortal human *avatar bodies* can be called “*Submortal Bodies*” because they are completely-hosted, and fully-simulated, by the mortal neural tissues inside our mortal human brains; and in this way, these “Submortal Human Bodies” live at a virtual level that is somewhat “*below*” (Sub) the “mortal” level.

Our Submortal Body has a *simulated* submortal *human brain* that is a *created* virtual neural *simulation*, that is

created during the very moment when we (our mortal human brains) start to *dream* at *night* while we are *sleeping* in our mortal beds.

Sometimes it seems like *our* submortal *brains* can start to *learn some* interesting *things* while they have many interesting experiences inside the local dream environment (submortal universe simulation) that is hosted by our own mortal human brains.

Our *Submortal Body* is usually a simulated submortal *human-shaped body* with *ten* human *fingers*, ten human toes, *two* human-looking *eyes*, and one submortal *human face*.

While we are sleeping at night and dreaming, if we look at our own hands (our submortal human hands) we will most likely notice that they really do *look* like *human hands* with exactly *ten* human-looking *fingers*, and we will also feel that these human hands (and human fingers) are our very own human hands (and *our* very own *human fingers*).

Our simulated submortal human bodies (and submortal human faces) *look exactly* the way our *mortal brain* needs them to *look* while we are dreaming at night, because our nighttime dreams are completely-simulated (totally-created) by *just one single brain*, and that single creator-

brain (our solitary simulator-brain, that simulates our submortal human body, all by itself) is *our one and only* mortal human brain.

If we can find a good reflective mirror inside our dream (while we are sleeping and dreaming at night) and we choose to simply look at ourself in the mirror, then *we will see our submortal human face, and we will also behold our very own beautiful submortal human eyes.*

As we gaze at ourself in this mirror (the mirror that is located inside our nighttime sleeping dream), *we will also notice* that our submortal human face, and our beautiful submortal human eyes, are *human-looking eyes on a human-looking face*, and we will certainly notice that *our beautiful submortal eyes and our precious submortal face belong to us*, and are completely *human-looking*, because they belong to the simulated submortal human being *who is us*.

Sometimes we may discover (as we simply gaze upon ourselves in a *submortal mirror* inside our dreams) that our submortal human bodies (and submortal human faces) are *sometimes* beautiful and handsome and good looking, and are sometimes *less beautiful*, and *less handsome*, and *not so good looking*.

On some relatively-rare occasions, when our mortal human brains are very stressed out in a particular way, and our mortal human bodies are somewhat close to death, such as in “*near-death experiences*”; our mortal brains can sometimes access some of our *advanced neural tissue-recordings*, and our mortal brains can then start to record (as *mortal memories*) some of the *advanced experiences* of our *advanced human bodies*.

These interesting mortal memories (brief glimpses of the *advanced happy life* of our *own higher advanced self*) can sometimes be later remembered (by our mortal-human earth-brain), *to gain some precious, helpful, useful insights* (while we still live here on this earth, as mere mortal humans) into some of the super-peaceful, super-interesting, *super-joyful behaviors* of our higher-self advanced-human bodies (that live on *advanced planets*, in advanced solar systems, just *a few thousand light years from earth*, right here locally in our very own local milky-way galaxy).

For example, if someday in the future, you ever find yourself having a “*near-death experience*” while your mortal human body is lying on an operating table in a hospital, it is possible that you may *discover* yourself *floating* above the *operating table* and *looking* down at your *mortal body* as it is undergoing open-heart surgery.

Are these “*near-death experiences*” even possible *scientifically*?

Why does it almost seem like *multiple mortal people* (here on earth) have first personally experienced a “*near-death experience*”, and then *recovered enough* from their life-changing experience to decide to simply write, and then publish, *a best-selling book* about it?

*How many books* have people, here on earth, already written about their alleged, super-marvelous, personal, life-changing, *near-death experience*?

What is the detailed scientific nature of these “*Near-Death Experiences*”?



# Near-Death Experiences

What is a *Near-Death Experience*?

A *Near-Death Experience* is when one of us mortal-earth human being, is seemingly “*near-death*” in some sense, and also seems to “*experience*” some super-interesting things, that seem to be much more *vivid*, and much *more real*, and *much more meaningful*, than just an ordinary dream, or just an ordinary hallucination.

Many authors of earth, have recently (during the past few decades) written and published their own *personal life stories* about their very own super-interesting “*near-death experiences*”.

You may possibly even experience your very own “*near-death experience*” someday while your very own mortal human body is lying on an *operating table* in a hospital.

During your hospital “*near-death experience*”, you may suddenly *discover yourself* floating *above* the operating table and *looking down* at your *mortal body* as it is undergoing open-heart surgery.

You may notice (and even record in your mortal-brain memories for later recall) the *verbal conversation* that is

taking place between the chief surgeon and his surgical assistants, that are helping him to perform open heart surgery on your *mortal human heart*.

You may also discover that you can *float out* (or even fly out) of the operating room, and travel (via *floating-flying*) down the *many hallways* of the hospital, as you notice what is happening (what type of surgeries are taking place) in *other surgical suites* nearby.

If you are lucky enough to find a *good reflective mirror* in one of the bathrooms of the hospital, then you might want to look at yourself (*look at your floating-flying self*) in the *hospital bathroom-mirror* to see exactly *what you look like*.

If you choose to look at yourself in the *bathroom mirror* (while your simulated mortal human avatar self is still experiencing open heart surgery in a surgical suite just down the hall), then you may discover that you are *actually looking at your advanced human face*, as the physical light from it, *appears to be* reflected back to you (into your *advanced human eyes*) from the mirror.

If you try to view your *advanced human self* in the *bathroom mirror*; then you may possibly succeed at beholding your *super-beautiful (or super-handsome) advanced human face* in the hospital bathroom mirror.

This is because *our advanced human faces* are actually *much more handsome*, and *much more beautiful*, than any merely-mortal human-face can be here on earth.

You will also probably see your *advanced human eyes* and greatly *marvel* at *their loving brilliance*.

You may notice that your advanced human face is *far more beautiful* than your mortal human face, and is actually far more beautiful than any mortal human face *you have ever seen*.

You may notice that the advanced human face is your *very own advanced human face* that belongs to your advanced human body; and you will probably *feel* a tremendous amount of *love* and *acceptance* (and pure joy, and pure peace, and pure human understanding) *flowing into you* as you (as your floating-flying advanced human self continues to look at its very own self in the mirror) continue to look at your very own advanced human face in the mortal-earth-hospital bathroom mirror.

As you continue to look at yourself in the bathroom mirror, as the beautiful advanced human being that you are, you may begin to *wonder how it is possible* that *advanced photons of light*, can travel from your advanced human face, to the *bathroom mirror* (made of some of the

*silicon dioxide atoms of this earth*), and be reflected off of this bathroom mirror.

You may scientifically wonder about the advanced photons of light, that can seem to travel, from the bathroom mirror, into your *advanced human eyeballs*, to seemingly be recorded by your *advanced human retina*, as your advanced retina stimulates your *advanced optic nerve* to propagate *advanced neural pulses* into your *advanced occipital visual cortex* at the back of your *advanced human brain*.

As you gaze continually at your *advanced human face* in the *bathroom mirror*, you may also start to wonder why your advanced human self would ever *choose to allow* your *mortal human self* to see (in a mirror) your *advanced human self*.

Why would your advanced human self ever choose to allow such an apparent *glimpse of itself* to a mere mortal brain?

You may also wonder *how* your advanced human body (that actually lives on another planet, that is probably thousands of light years from our earth planet) was able to *seemingly enter* into a hospital on earth *to see your mortal body* lying on the operating table, and also *seemingly to see its advanced self* in an *earth-hospital mirror*.

How can an advanced human body (made of *advanced atoms that absorb, emit, and reflect advanced photons*), enter into our local earth simulation, to see itself in an *earth-mirror*?

Is the mirror, our advanced human bodies, and our mortal human bodies all composed of *the same kind* of advanced atoms?

Why not?

It does seem likely that our *own earth planet* is actually composed of *advanced atoms*; because our whole milky-way galaxy is *probably composed* of advanced atoms.

If our earth is made of advanced atoms, then *our mortal human bodies* are also composed of *advanced atoms*, just like our advanced human bodies are composed of advanced atoms.

It is very difficult to transport these advanced atoms, through space, at a velocity that is greater than the speed of light, or even close to the speed of light.

It may be much easier for an advanced human being, to use its *ability to manipulate some of its own dark matter* (real neural pulses) *to cause* its mortal-human avatar *to*

*record an experience (on its mortal-human brain) of seeing its advanced self in a mirror.*

It may also be possible for an advanced human being to *sometimes allow* some of its own actual *advanced experiences*, to simply *be recorded* in the *mortal neural tissues*, of its mortal avatar self's *mortal human brain*.

There appear to be a number of *logical scientific ways*, that these super-interesting *advanced-human experiences* can sometimes *be recorded on the mortal neural tissues*, of our *mortal human brains*.

Now, let's go back to *you looking at you* in the hospital bathroom mirror; while *another version of you*, is still laying on an operating table down the hall, having open heart surgery.

After you stop looking at yourself in the mirror, and you travel back to your traumatized mortal self on the operating table; and as you discover that you have somehow survived open-heart surgery, and as you review your startling (and *super vivid*) memories of your "*near death experience*", you may start to really wonder about the *marvelously-beautiful loving advanced human being* (that you beheld in the bathroom mirror in the hospital) that *you realized was actually you*.

Besides “*near death experiences*”, there may also exist some particular types of *psychoactive drugs* (specific types of *mind-altering-molecules*, here on earth, that can *neurologically-act* to significantly alter normal mortal human brain activity) that can cause the mortal human brain to sometimes *gain some experiential access* (with interesting mortal-human brain recordings that can persist for years) to the *advanced human planets* where our *advanced human selves live*.

Unfortunately, some of these *psychoactive drugs*, that can sometimes *open useful doors of advanced information and deep insight*, can also sometimes have some *negative side effects* for our mere-mortal brains (our subpar, vulnerable, sub-optimal, mortal-human brains) here on earth.

In the future, our mortal human scientists may continue to *discover* many new and interesting things about the *many marvelous relationships* between our Submortal Bodies, our Mortal Bodies, our Advanced Bodies, and our Real Bodies.

These 4 different types of our Human Bodies are respectively animated by *Our 4 Human Brains*.

# Our 4 Human Brains

Our 4 Human Brains are *housed* inside our 4 Human Bodies.

Our 4 *Human Brains* are as follows:

- (1) Our Real Brain
- (2) Our Advanced Brain
- (3) Our Mortal Brain
- (4) Our Submortal Brain

Each of these 4 human brain types has a different *level* of human *intelligence*.

Our real brains are the *most intelligent*.

Our real brains are *infinitely-intelligent* because there is no part of existence that they do not *already completely understand*.

Our real brains know *everything* that can be known by any brain.

We all have a real human brain that has already *always* known everything.



There is actually *nothing* for a real brain to *learn* because it has already always known everything that can be known by anything.

However, the *story* of our three types of simulated brains is very *different* when it comes to *learning* new things.

This is because our three types of simulated brains, including our advanced brain, our mortal brain, and our submortal brain, are all created *without any memories*, without any pre-loaded experiences, and therefore without initially knowing anything.

Right after our *advanced brains* are initially created (first simulated), then they immediately begin to *learn new things* from their advanced environment (their advanced universe where they begin to learn things).

An advanced human brain has the capacity to *learn almost everything*.

Advanced human brains are *super intelligent* in almost every way possible.

In some ways, some advanced human brains can *almost* become nearly as intelligent as a real human brain.

*Mortal human brains are not as intelligent as advanced human brains.*

Mortal human brains can (unfortunately) sometimes grow to become kind of *stupid*.

After our mortal human brains are created (first simulated and grown inside our mother's *wombs*) then they *begin to learn things* from our mortal mothers, and our mortal fathers, and our *mortal teachers*, and from other people and things in our mortal environment (our mortal planet earth in *our advanced physical universe* where we all currently seem to be living).

Sadly, *relatively few* of our *current earth-planet teachers* actually know anything worth learning.

One of the unfortunate *weaknesses* of our mortal human brains, is that they can sometimes learn things that are *not* correct.

When our mortal human brains first begin to *learn false things*, then they can start to become susceptible to *excessive pride*, and they also can then even become vulnerable to *excessive competitive pride*.

The really sad thing, is that *unrestrained excesses* of mortal-human brain *competitive pride*, can sometimes

lead to large quantities of mortal-human *disrespect*, captivity, *enslavement*, torture, and *death*.

Such is the unfortunate demise of many *earth-like societies*.

*Excessive* mortal human brain *competitive pride* can generate lots of *human misery* for everyone.

Friendly competitions can be fun for everyone, including the winners and the losers, *if* genuine human compassion reigns supreme at all times.

But, our willingness to *seriously hurt* our competition, is more *damaging* to our core humanity, than most realize.

Excessive mortal-human-brain competitive pride is the unfortunate *bane* of our current mortal-human existence here on earth.

For this very reason, Plato and Socrates discussed some of the relative *dangers* of excessive competitive human brain *pride* in their intelligent conversations about Plato's Cave.

After our *submortal brains* are created (first simulated inside our mortal brains, when we first start to dream at night, while we are *sleeping*) then they begin to learn things from inside the *artificial dream environment*

(submortal universe) that is simulated with a subset of our mortal neurons, inside our sleeping (and dreaming) mortal human head.

Each of our 4 different human brain types are composed of *neurons*, and *glial cells*, from 4 different neural tissue types.

These 4 types of human brains are correspondingly-housed inside of our 4 human heads, which are connected to our 4 human necks, that are important parts of our 4 human bodies.

Therefore, this 4 Brain Theory is also a *4 Body Theory*, because it describes our 4 human bodies that house our 4 human brains.

This 4 Brain Theory is also a *4 Me Theory*, because it describes the 4 different types of human consciousness (human selves) that are regularly experienced by *me* (and by you) and by every individual human being in existence.

This 4 Brain Theory is also a *4 Self Theory*, because it describes the origin, purpose, nature, and function of our 4 human selves.

Our local advanced physical *universe* is one specific *multi-player* human-brain simulation, that is located *inside* a real network, of a particular set of real neurons, that live inside our *real human brains*.

This particular set (a special collection) of real neurons (and real glia) constitutes the *real-neural dark matter*, that forms that *real simulation network*, that hosts (and simulates) our own local advanced physical universe.

This real-neural dark matter network (that simulates our advanced physical universe) is composed of a *networked set* of neural subcomponents, that all reside within a particular set of *real human brains*.

Every sub-atomic particle (and every *quantum bit*) of this local advanced physical universe, is entirely simulated within a networked-set of real human brains.

This real-human *neural dark matter* can initiate the formation of *real-neural action potentials* (real neural pulses), that are transmitted and conducted along many different types of *myelinated axons*, and *non-myelinated axons*.

*All* of our human brains contain neurons, with their axons, and their dendrites.

All of our brains *conduct neural pulses* that travel along their axons.

The *electrical nature* of the neural pulses, is slightly different, for each of our 4 distinct types of brains.

All of our brains are very *important*, for slightly different reasons.

Our *most* important brain, is our real human brain, because it is *not* simulated in any way, because it was *not created or made, neither indeed can be*.

Our real human brain is the *most* intelligent piece of atomic matter (hardware) in existence.

*Nothing* is more intelligent than a real human brain.

There exist an *infinite* number of us real human brains.

Every real human brain is *equally* intelligent.

It is impossible to ever *create* a real human brain.

*Every* real human brain in existence, has already *always existed*.

Our real brain has always been a *human* brain.

Now, let's look more closely at *Our Real Brain*.

## **Our Real Brain**

*Our Real Brain* is the most important part of our real human body.

Our Real Brain is *shaped* like a human brain.

Our Real Brain *functions* like a human brain.

Our Real Brain *supports* real human consciousness.

*The real human consciousness*, that is supported by our real human brain, is the *highest form* of consciousness (intelligent awareness) possible in the entire cosmos.

Our real human brain has always *lived inside* our real human body, in the real world, where we all have always lived.

As real human beings, with real human bodies, and real human brains, that function really well, we are all very

generous, very thoughtful, and very considerate of our *infinite number* of real-human neighbors, because *we* actually *live alone* in our real world where we have always lived.

As the real human beings that we have always been, we simply *share* (with real human *kindness* combined with real human *intelligence*) our real world, with an infinite number of other real human beings that each live *alone* in their very own *real personal infinite home universe*.

Our real world is very large.

Our real world is *infinite in size*.

Our real world is *not* a spherical planet.

Our real world is *a real infinite plane* of real-human existence.

Our real world may be an *infinite set* of real infinite personal planes (*personal real universes*) of real-human existence.

Our real world is *large enough* to easily accommodate an *infinite number* of us real human beings with all our unique real-human needs and wants.



Us real human beings are *impossible to create*, because we have always already existed as real human beings, forever.

We real human beings, all share our real human world, in peace and harmony, because *we are all* way too *intelligent* to ever cause any problems for ourselves, or for each other, and because of the real-physical *partitions* of our real world, we *all live alone by ourselves* in our very own *personal real worlds* (in our very own personal *private real universes*).

We real human beings, with our real human brains, and our *real human intelligence*, are simply way too intelligent, to ever fight or quarrel about anything, nor do we have any real opportunity to do so, because of the infinite real *physical partitions* of our real universe, which is the *infinite set* of all *personal real infinite universes*.

Our *unique* real human brain, *intelligently-perceives* every particle of our *unique personal* real world, as the wonderfully-unique real-personal *infinite universe* it has always been.

With our real unique brains, we simply perceive ourselves *correctly*, as always being the *marvelous real people*, we have always been.

We cannot remember a specific past time, when we did not already live in our real world, because such a specific past time *never existed*.

All of us real human beings have always existed, as real *unchangeable* human beings, forever in our real universe (infinite real world).

There is an *infinite* number of us real human beings living in our real world.

There are *lots* of wonderful things to do in our real world.

As the real infinite set of *uniquely-independent* real-human *individuals* that we have always been, we each *live* completely *alone*, all by our real-human selves, in our own real-human homes, in our very-own unique personal infinite real world, that is *uniquely tailored* and *perfectly suited* to each of us *unique* real *individuals* exactly as we ourselves *desire* for *ourselves*.

Sometimes we really start to desire to *reach outwards* (by actually *reaching inwards* within our *real* limbic *selves*) to do some *things together* with some *other* conscious *free-willed* human *beings*, in the advanced-human dream worlds, that contain neurally-simulated *galaxies* of stars, planets, and *simulated* conscious *people*.

We then chose to begin to simply *daydream together* (as we jointly enter into a dream-like experience together), to *balance* our real-human *brains*, to help us to better-maintain our *real* personal *peace* and our real personal human-brain *equilibrium*.

Our real human brain is *real*.

Our real human brain is *not* a simulation.

We have *always* had our real human brain.

We *will* always have our real human brain.

A real human brain can *never* be threatened, or injured in any way.

A real human brain is completely *safe* forever.

There was *never* a *time* when we didn't already have our very own real human brain, and our very own real human body.

When we *choose* to *daydream* to *balance* our real human brain, we also choose to *join* with a *group* (finite number of us) of other real human beings to dream with, by simply entering into a *multi-player* dream-game-like

experience, together as a finite-group of *daydreaming real humans*.

Sometimes we choose to dream together with *billions* of other real human beings.

These *joint daydreams* help us all to *balance* our real brains.

With our newly-formed group of a *few billion* of us fellow daydreamers, we together start to daydream; and together with our finite group of fellow daydreamers, we all *descend* down (together) into one of Plato's *Advanced Caves*.

At first, we daydream that we are *advanced human avatars*, living inside an *advanced universe*, that is *optimized* for the experience of personal human *joy*.

We all dream together (by *wirelessly networking* some of the real neurons of our real human brains), as a finite local group of a few billion fellow dreamers.

Together, we become fellow dreamers, and *fellow cave explorers*, and fellow brain balancers.

As we begin to dream together, we also all choose together, which *particular* advanced cave, we will start to explore together.

These *advanced caves*, are the level 2 caves, which consist of all (an infinite number) of the possible *advanced universes*.

There exist an infinite number of advanced level 2 caves (level 2 *advanced universes*).

There are an infinite number of different *advanced* (level 2 caves) *universes* to explore.

Each particular *advanced cave*, corresponds to a particular *advanced universe*.

Each advanced cave is infinite in its size.

Each corresponding *advanced universe*, is also *infinite* in size.

Each advanced universe contains within it, an *infinite* number of *advanced galaxies*.

Each advanced galaxy contains within it, a *finite* number of *advanced stars*.

Orbiting around each advanced star, there is a relatively *small* finite number (often less than a few dozen) of advanced *planets* and advanced *moons*.

Living on some of the advanced planets (and advanced moons), there is a reasonable finite number (typically tens, hundreds, thousands, millions, or billions) of advanced human beings.

These advanced human beings, are the advanced human *dream avatars* that are *neurally-simulated* in the real human brains, *of us* real human *dreamers*.

As advanced human avatars, we each have a simulated *advanced brain*, that is capable of *learning* many new things, as it begins to explore its new environment (advanced universe).

Our real human brains *cannot* learn anything, because they already *know* everything.

Our advanced human brains can *learn almost everything*, because they all start out *knowing nothing*, and they are all optimized, by design, for *learning super-intelligence*.

Our advanced brains are *optimized* for *learning* and *joy* and for *experiencing* really new experiences.

Our advanced brain is *designed to balance* our real brain.

Now, let's look more closely at *Our Advanced Brain*.

## **Our Advanced Brain**

Our advanced brain *starts* out as an *advanced blank slate* (with *no memories*, and *no knowledge* of anything), when it is *first created* (initially simulated inside our newly-created group dream).

After our advanced human brain is created (along with our advanced human body inside our advanced universe), it begins to rapidly *learn* new things, by *perceiving* things with its advanced senses, and *thinking* about things with its advanced thinking abilities.

Some other super-kind advanced people (who entered the advanced simulation *before* us) generously help us to start learning new things, as newly-created advanced human avatars.

Our advanced human brains are capable of learning *everything* that any brain can possibly learn.

Our advanced human brains are *very* intelligent.

Our advanced human brains are actually a created form of artificial *super-intelligence*.

Our advanced human brains are able to easily learn many kinds of things very quickly, and *very accurately*, with very little effort.

Our advanced human brains are *optimized* (by design) for joy, *happiness*, and exhilarating new adventures, as we begin to explore our advanced universe, and the many wonderful things it has to offer to us.

Our advanced human brains learn many new advanced things, and they enjoy making many new advanced friends

These advanced friends of ours, are the other advanced human beings, that become our dear advanced friends in our advanced world.

Our advanced brains *grow very close* to some of our wonderful advanced friends, over billions of years of many mutual *joyful friendship adventures*.



We experience many *marvelous adventures together* with our amazing, kind, advanced human friends.

When some of our advanced human brains start to *feel* the need, for the kind of brain-balance that can best come from dreaming, then *we decide together*, to initiate another type of group dream.

Our advanced human brains can collectively choose to *wirelessly* network together, a *subset* of their advanced neurons, to simulate (jointly-create) a *new mortal universe*.

Our advanced human brains can also choose to *project* a *portion* of their advanced *consciousness* into *another avatar* (a different *advanced human avatar*, or a different *mortal human avatar*) living on a *different planet* in the same advanced galaxy, in the *same advanced universe*.

In this way, an advanced human brain can either *simulate* a *mortal human avatar* composed of *mortal atoms*; or the advanced human brain can simply *project its consciousness* into an *existing infant* mortal human avatar composed of *advanced atoms* (that consciously-awakens, and becomes consciously-alive, with individuality and free-will at the exact *moment* of mortal birth, as it takes its first breath after leaving its mother's womb) on a different

spherical planet, like our earth, inside an *advanced galaxy* (like our milky-way) inside an *advanced universe*.

Our advanced human brains are composed of advanced human neural tissues, that are composed of *advanced atoms*.

*Four* particular *limbic subsets*, of our advanced human neural tissue, is used for projecting a portion of our *advanced consciousness* into our newly-created *infant mortal human brains*, that live inside our mortal human bodies here on earth.

We wirelessly-network some of our real brains together, to jointly simulate (and mutually daydream) this *advanced physical universe* which includes our own local advanced milky-way galaxy, which hosts *billions of advanced learning planets*, and *millions of mortal testing planets*.

Our own earth planet has already become one of the millions of useful *mortal testing planets*, where we briefly enter (for just a few brief decades per individual test) our confused mortal human brains, *to test ourselves* in the *darkness of earth-ignorance*.

We dream that we are mortal human avatars living on earth; and we easily imagine that *this is our only life*, and

we *eagerly compete* with each other for the seemingly-limited resources of earth.

Every advanced human that chooses to come to earth to *test itself*, is forced to *try to navigate* its brief life (*brief self-test*) on earth with a *merely-mortal severely-subpar human brain*, and a mortal human body living here on this dark, confused, self-testing, mortal-earth planet.

The *purpose* of our mortal brain is to *test* (help our advanced brain to *deeply-examine itself*) our *advanced brain*, by attempting to balance our advanced brain on a dark (difficult to balance) confused *self-testing planet*, like our current earth planet.

Our mortal brain *must* be supported properly, so it can function freely, and easily exercise its own *free will*, according to its wants and desires.

Our mortal-human poverty on our mortal earth planet, *severely limits* the unhindered exercise of human free will.

The *self-test* (of earth) is to *deeply examine ourselves*, to see if we will focus *all* our earth-efforts on properly solving world poverty *for everyone* on earth; or if we will choose to focus our earth efforts on *something else*.

A mortal human brain that is acting freely (with *unhindered* free will) is able to provide all the necessary brain *energy flows* to properly balance our advanced human brain.

The mortal human *desires*, that continually flow into our mortal brains, *come* from our advanced brains, according to the *specific energy needs* of our advanced brains.

Every advanced brain has *different energy needs*, according to the particular (unique) personality of our advanced human brain.

Our advanced brains simply *choose to examine themselves* (with their brief avatar-lives here on this dark, confused, fearful earth) to see if their advanced-brain energy needs will *encourage* their mortal avatars to seek (*desire*) to solve world poverty *for everyone* on earth; or if they will only seek to solve their own personal poverty for *just themselves*, and for just their *very own little families*, while *ignoring the needs of everyone else* here on earth.

Our advanced brains put a special type of *advanced information* (organized neural brain energy) into our mortal brains.

This advanced information causes our mortal brains to *try* to act in a way that will balance our advanced brain.

Unfortunately, there are some mortal circumstances (in this mortal universe) in which our mortal brain becomes fully (or partially) *blocked* (via financial poverty, incarceration, and other mortal restraints to free will) *from acting in a way* that would otherwise balance our advanced brain.

This *advanced information* that is placed into our mortal brains, *combines* with the real-time energy needs of our mortal brain (stemming from its daily interactions with its *complex mortal environment of earth*), to jointly generate our *mortal desires*, mortal wants, *mortal intentions*, and many of our mortal thoughts.

Our mortal thoughts combine together to generate all our *mortal emotions*.

In those *happy situations*, wherein our mortal brains (here on earth) are allowed to *act freely* (with unrestrained mortal-brain free will), a *good type* (good for our advanced brain) of mortal *brain energy* is generated.

This good type of mortal brain energy (created by acting exactly on earth as we actually *desire to act*) flows up into our advanced brain to *balance it properly*.

Do we also want *all 8 billion mortal-human brains of earth*, to also be able to *act freely enough* (with no financial poverty constraints) to also successfully balance *their own* advanced brains properly?

Our advanced brain effectively *inserts desires* into our mortal brains, that if acted upon in our mortal earth world, will cause a *good advanced balancing* to naturally occur in our advanced brains.

Therefore, *all the desires we feel* with our mortal brains are very important, for scientifically-understanding the actual natures (and energy needs) of our advanced brains.

We (the people) living right here on this *lone and dreary world* (this particular planet-earth simulation) each have a very powerful (and very interesting) set of unique human-brain desires to *lead us, guide us, and walk beside us*.

Now let's look more closely at *Our Mortal Brain*.

# Our Mortal Brain

Our *mortal brain* is *capable of learning* some mortal things, and doing some mortal things, and experiencing some mortal things right here on earth.

Our mortal human brain, here on earth, is *semi-conscious* and *semi-intelligent*, and able to *learn some things*.

Our mortal brain can *choose to do things* that are *helpful to us*, and *helpful to others*.

Our mortal brain can also choose to do things that are *hurtful to us*, and *hurtful to others*.

Our mortal brain can *almost understand some things*.

Our mortal brain can *easily misunderstand many things*.

Our mortal human brain can easily learn *many false stories*.

Our mortal human brain can also learn to *search for wisdom*.

Our mortal brain *can act* to create many mortal friends.

Our mortal brain can also *act to make* many enemies.

Our mortal human brain can simply choose (at any moment in time) *to focus intently*, on the many wonderful things, that can help *free all humankind*, from relative worldwide economic slavery.

Our mortal brains can also choose, to continue to eagerly vote to *enslave ourselves*, with the continued creation of an abundance of *bad laws*, designed to *block others*.

Our amazing mortal human brain can do *anything* it can imagine, *if* it can also discover a successful way to actually do it, right here on earth.

In the future, our brilliant mortal *human neuroscientists* will discover many exciting new things, about our marvelously-powerful mortal brains.

Our wonderful mortal human brain has lots of power, to do lots of different kinds of things, here on this little mortal earth world.

Our mortal brain is abundantly-endowed with *free will*, consciousness, a *strong sense of self*, and a unique human individuality, when we are very *little children*.



With our powerful mortal human brain, we can sometimes sense (feel) our very own *immense value* and *infinite self-worth* when we are still little children

We sometimes, even as adults, we can still clearly feel our very own, personal, individual, *infinite self-value*.

This is the *good side* of our mortal *human pride*, that properly supports the *healthy part* of our individual mortal *human super-ego*, *human ego*, and *human id* (our very own mortal-human brain *sense of self*, *sense of others*, and *sense of adventure*).

As newly-created *little children* here on earth, many of us could *easily feel* (when we were still very young) our very own *infinite self-worth*.

Let's all take a deep breath, and *just imagine* for a moment, what kind of a mortal simulation game (on this little earth planet, right here inside this *advanced milky-way galaxy*) we could create together here on earth, if and when, we all *choose to view* each other (every individual person on this whole planet) as the *infinitely-valuable human beings* that we actually are.

Is there *any* social problem that we could not easily solve together, if we *really viewed* (and *really valued*) everyone

(every human in this world) *as our very own* precious son or precious daughter?

The possibilities for *worldwide societal healing* become really wonderful, really fast, to the degree that we can simply *open* our mortal *minds*, and gently open our mortal *hearts* to valuing one another (all humans) with *a super high value*.

Is this obvious?

It certainly can be.

All we need to do is *open up* our brilliant human minds, and *open up* our tender human hearts.

There is simply *no* need, any longer, for us mortal humans (with our intelligent mortal brains) to *continue* to vote to block each other from obtaining what *we all need* (food, water, shelter, etc.).

This mortal planet earth can be *intelligently used* (by all of us intelligent human beings choosing to *really care* for each other properly) to provide enough healthy delicious human food (and every other thing that humans actually need) to feed *all the people* that are here already (about 8 billion people) and to also feed all the additional billions

of people that *will be born* (into this mortal-earth simulation game) during the next few decades.

We all need to become again as *little children*, to allow our humble brilliant *childlike intelligence*, to shine brightly enough, to wisely choose to properly *bridle* our excessive competitive *pride*, so we can open our minds to learn everything (absolutely every needed thing) that will bring us individual human joy, and also to learn everything that can bring us all together (with one heart, and with one mind) to create *worldwide societal joy and peace on earth*, right here inside our own little solar system multi-player neural simulation.

Sometimes, as we grow into adults, our sense of *self-worth* and personal *self-value* gets diluted (diminished and distorted) by the relative abundance of false stories (*false concepts*), we start to believe about ourselves and about others.

Sometimes, as the *clueless mortals* that we often become as deluded adults (*aged children*), we start to believe many *superstitious stories*, about our very own selves being of greater worth (or lesser worth), than the individual life of another precious human being.

An important purpose of our mortal human brain, is to *act with free will* to do *whatever* it wants to do, to create

happiness for our own mortal self, and in the process, *automatically balance* our advanced brain.

When our mortal brain is completely free to really act freely (with *no poverty constraints* or other financial blocks of our precious freedom) as it really desires, then our advanced brain *automatically* becomes balanced, by our natural (*unforced*) expressions (*acts*) of our spontaneous, joyful, *free-willed* mortal experiences.

The *grand key* to mortal human societal happiness is to set up intelligent social structures (with completely *intelligent laws*) that allow us to balance our very own brains (to feel happy), while at the very same time, allowing everyone else (all the other precious humans living here inside this mortal *earth-game* dream simulation) to also do the same thing (allowing them to also balance their very own mortal-human brains, so they too can also be happy).

There is a *broad spectrum* of different types of mortal human brains (and bodies), that we can now begin to *intelligently design* (and create), for us to inhabit here on earth.

Our current mortal human molecular Deoxyribonucleic Acid (DNA) mortal-body *construction information* is organized into 23 distinct human chromosomes.

These *23 mortal-human chromosomes* (made of super long strands of multiply-folded *double-helix shaped DNA*) contain *many useful genes* (body-construction *instructions*, and instinctual *body-behavior instructions*).

Some of our current mortal human genes (our *mortal-human brain genes*), encode all the necessary information, used to make our mortal-human brains.

Unfortunately, some of our current *brain genes* cause us (most of us mortal humans here on earth) to be *a little bit brain-stupid*.

Our current mortal human brains *easily* forget many simple things; like what we had for lunch last Tuesday, or the cell phone number of our own very best friend.

We also experience (with our *subpar* mortal human brains) many unfortunate types of *misunderstandings* and *mis-emotions*, like human fear, *human anger*, human hatred, *human jealousy*, and human despair.

A set of particularly *insidious collections* of these mortal-brain misunderstandings, *actually cause* us to often feel these *mortal-brain mis-emotions* right here on earth.

These intense mortal-brain mis-emotions *wreak havoc* upon most of our *mortal-human relationships*, and they often *disrupt* our peaceful mortal human *societies* here on earth.

These tragic mortal-brain misunderstandings (and mis-emotions) *cause* us to declare *war* on each other, and to try to destroy (or damage or block or sanction) *neighboring countries*.

Many of our current mortal human brain (and body) construction-information sequences (genes) are simply *suboptimal*.

Some of our current mortal human DNA genes make us *stupid*, and susceptible to *disease*.

The good news, is that these faulty mortal human genes, can be *easily* removed (or repaired) by simply *upgrading* our human DNA.

We (the humans of earth) don't actually need to *remain susceptible* to human disease for much longer.

We don't need to continue to be haunted by *deadly viruses*, for many more years here on Earth.

Our mortal earth simulation (multi-player planet Earth dream game) currently is experiencing a *deadly coronavirus pandemic*, due to the worldwide outbreak of Covid-19 in 2019, and the continuing spread of its wildly mutating variants throughout the following years.

All our current 2023 scientific theories, about the hypothetical advanced-human *causes*, combined with all of the *obvious* mortal-human causes, of this current coronavirus pandemic, remain *beyond* the *scope* of this present 4 Brain Theory article.

We may elect to publish our *interesting* scientific *hypothesis* about these theoretical advanced-human *causes* in the future.

All of the coronavirus variants simply exploit various *identifiable weaknesses*, in the behaviors (and DNA structures) our mortal-human *biological cells*, in our current *subpar* mortal-human *bodies*.

These identifiable weaknesses (our subpar mortal-human DNA *cellular vulnerabilities*) are all caused by a number of specific faults (*fixable defects*) in our genetic (gene-based) *human DNA patterns*.

All of our faulty mortal human DNA genes can be *intelligently-repaired*, so no coronavirus (and no future

coronavirus variant) can ever hurt a mortal human (here on earth) being again.

There are *good ways* to fundamentally solve these biological problems, by *simply correcting* our mortal human DNA patterns, in a good, proper, wise, and intelligent way.

In the future, it is possible that our genetic DNA scientists, will someday be allowed, to simply repair our *mortal-human genome*, to make our mortal human bodies to become *more-healthy*, and to make our mortal human brains to become *more-intelligent*.

We don't need to *stay* sick and stupid *forever*.

We can all become much more-healthy, and much more-intelligent, as brighter mortal human beings, right here within our little planet earth simulation, just as quickly as *we are all willing* to begin to do so.

There is *no good reason* to wait any longer.

Our planet is currently experiencing many complex societal problems, that a *little dose* of the *proper kind* of wise human *intelligence* can easily solve.



The question is, who among us, is *diligently searching* for intelligent human *solutions*, to our obvious abundance of societal human problems?

We don't need to *remain* stupid here on earth forever.

We can simply choose to mortal-brain *upgrade*, just as fast as we *collectively* desire to do so; because it is relatively-easy to continue to *wisely develop* the CRISPR-Cas9-type *human-DNA editing technologies* that are necessary.

Creating intelligent, viable, *really-useful*, mortal human *brain upgrades* is necessarily a worldwide joint endeavor, because the brilliant intelligence necessary to really do it all right, is properly shared by a number of *super bright scientists*.

We *can* become more intelligent as mortal humans.

We can all start to make *better choices*, to whatever *degree* we simply allow (by our own free will) ourselves to *become* more intelligent.

Our current subpar human DNA *can be repaired*.

We can create much *better* mortal human brains for ourselves to *think* with.

We can all become *more-healthy* people here on earth.

We can create a type of *heaven* here on earth.

*Peace* and *joy* for all humans worldwide, would certainly begin to feel like a type of heaven, here on earth *for us all*.

Our *precious human DNA* (our mortal human instruction set) is a *grand obvious key*, to all major improvements, for us all here on this planet earth.

We can easily fix *all* our human DNA problems.

Some further advances in our worldwide CRISPR technologies, will allow our future DNA scientists, to *make some helpful improvements* to our human DNA, to allow better (more-healthy, and more-intelligent) human infant bodies (and brains) to be created here on earth.

Our worldwide mortal-human intelligence can be improved greatly, by simply building *better* mortal human brains for us all to *better think with*.

As advanced human beings, we can simply choose to *move* (our mortal awareness) *over into* some new mortal brains (and new mortal bodies), just as soon as they are

intelligently designed (by us mortal scientists), created, grown, and fully ready for our advanced *occupation*.

For a number of interesting *historical* reasons, most of us mortal human beings (we the people, living here on earth), currently have a mortal brain that is *severely subpar* in many obvious ways.

Our subpar mortal human brains are *not* as intelligent as they could be.

Our subpar mortal human bodies are *not* as healthy (and disease resistant) as they could be.

Our current mortal human DNA (for most of us here on earth) encodes *subpar cellular structures*, and *subpar neural brain patterns*, that are *simply suboptimal* in many ways.

For the most part, our current subpar (suboptimal) mortal human brains, are *not* able to think very clearly, most of the time.

Our subpar mortal brains easily become confused (and *tired*) from a myriad of *disorienting stresses* (including the consumption of too much junk food, the lack of healthy nutritious food, not enough night-time sleep, not enough of the right kind of human exercise, and *sub-*

*optimal human relationships*), encountered during our mortal human daily routines.

About once each mortal day (or each mortal night), our mortal human body becomes tired, and our mortal brain needs to *rest*, and *dream*, to *re-balance itself*.

This *brain-balancing* takes place at night while we are sleeping and *dreaming*.

When our mortal brain dreams at night, a *subset* of its mortal neural tissue *simulates* (dreams) a new environment (a submortal universe) with a new *submortal* human avatar.

We experience this newly-created submortal human avatar as *us*.

We *always* dream that *we are us*.

I always dream that *I am me*.

You always dream that *you are you*.

This is exactly *how* all human *dreaming* works.

This is *also how* all human *daydreaming* works.

We dream that we are *still* our *very own self*.

But, in our dream, we are living in a *different* human body, inside a *different* environment; and sometimes we have “memory-masking” turned on to cause a “*veil of forgetfulness*” to block all our previous memories of who we really are.

Our newly-created submortal human avatar body, quickly discovers itself living in a newly-created, artificial (simulated) environment (universe).

While we are sleeping and dreaming at night, our submortal human (dream) avatar actually has a very *interesting* type of submortal brain.

Now, let's look more closely at *Our Submortal Brain*.

# Our Submortal Brain

Our interesting submortal brain is *created* the *very moment* we begin to dream at night, while we are sleeping with our mortal head on our *mortal pillow*, and with our mortal human body laying down asleep on our comfortable *mortal bed*.

Our submortal brain, submortal body, and submortal environment (*privately-simulated* submortal universe) are all created very quickly (in a *brief* instant of time) the exact moment our mortal human brain begins to dream, while its mortal human body is sleeping at night.

Our submortal brain is *inside* our submortal human head, which is part of our submortal human body, which lives within a *submortal universe* (simulated dream environment), that is entirely simulated by *just one* single mortal brain (our own individual mortal-human brain).

If we look at ourselves in a mirror (while we are dreaming at night), we will see our submortal human self (with a human-looking body), as we appear to our *submortal human eyes*, due to the submortal light-reflecting powers of the *submortal mirror* (the mirror in our *submortal universe*).

In other, more scientific words, when our submortal self, looks at itself in a submortal mirror, we actually see *submortal photons*, emitted from our submortal human body, and reflected off of the *submortal atoms* in the submortal mirror, directly into our submortal human eyeballs, that are connected via *submortal optic nerves*, to our submortal human brain.

These *submortal photons* are *very different* than the kind of photons that stimulate our mortal-human retinas.

These *submortal atoms* are *very different* than the kind of atoms that compose our mortal-human brains here on earth.

These *submortal atoms* are the kind of artificial atoms that compose our *submortal brains*.

Our submortal brain is able to *learn* some submortal things, and have some very interesting *submortal life experiences*, inside the *submortal universe* where it is *confined to live*.

Our submortal brain may occasionally begin to *suspect*, that it may just be living inside a *dream world*.

This is known to some as *lucid dreaming*.

When we start to dream a *lucid dream*, our submortal brain *begins to suspect* that what it is experiencing with its submortal human body (and its submortal human senses; like submortal sight, and submortal hearing) living inside its submortal universe (a private simulated dream environment), is *just a dream*.

Our submortal human brain is composed of a very special type of *submortal neural tissue*, that is entirely-simulated *inside* our very own individual mortal human brain, while it dreams at night, while our mortal human head is lying on our mortal pillow, and our mortal human body is lying on its mortal bed.

Many future *neuroscientists*, and many future *neuro-physicists*, will scientifically study all the fascinating neurological processes, involved in *mortal-human dreaming* at night.

This will allow them to make many powerful *new scientific discoveries*, including making all the necessary corrections, improvements, and *scientific refinements* to this present 4 Brain Theory, for the substantial benefit of *all* of humankind on this earth.

As the super-smart (self-balancing) real human beings, we have always been; we each have (1) a really powerful *real brain*; that can project a portion of itself into (2) a



powerful *advanced brain*; that can project a portion of itself into (3) a weaker *mortal brain*; that can project a portion of itself into (4) a very weak *submortal brain* while sleeping and dreaming at night.

The logical, systematic, *scientific study* of our 4 distinct types of human brains, and all of their possible interactions, constitute *Our 4 Neurosciences*.

# Our 4 Neurosciences

What are *Our 4 Neurosciences*?

*Our 4 Neurosciences* are the 4 different kinds of *human neurosciences* that will be studied by many bright scientists, here on earth, in the future.

Our 4 distinct types of human brains are composed of *large numbers* of 4 different kinds of *human neurons*, and 4 different kinds of *human glial cells*.

These 4 distinct types of human neurons *connect* with each other and *behave* according to the distinct principles, rules, codes, and laws of the 4 different types of *human neurosciences*.

These 4 different types of *human neurosciences* are listed as follows:

- (1) Real Neuroscience
- (2) Advanced Neuroscience
- (3) Mortal Neuroscience
- (4) Submortal Neuroscience

*Real Neuroscience* is the scientific study of all our *real human neurons*, that have *always* existed.

Our real human neurons are *not* simulated in any way.

*Our real human neurons* are composed of *real atoms*.

There is *no way to create* a real human neuron.

There is *no way to destroy* a real human neuron.

Our real neurons *cannot be created*, because they have *always existed*.

Our real neurons *cannot be destroyed*, because they were *never created*.

Every real neuron behaves exactly the same way it has *always behaved*.

*Advanced Neuroscience* is the scientific study of our *simulated* advanced human neurons, that are created (via simulation).

All our advanced human neurons have a *finite lifetime*, that can be very long.

Every advanced human neuron had a *beginning*, and it will have an *end*.

*Mortal Neuroscience* is the scientific study of our simulated mortal human neurons, that are *inside* our current mortal human heads, that live right here on our earth planet.

Our talented *mortal* human *neuroscientists* have been studying the *neuroanatomy* and *neurophysiology* of our vulnerable *mortal* human *neurons* for many decades already, here on earth.

*Submortal Neuroscience* is the scientific study of our simulated submortal human neurons, that are *active* when we *dream* at night, while our mortal heads (and our whole mortal human bodies) are *sleeping* at night, in our mortal *beds*.

*All 4* of these different types of *interacting* human *neurosciences*, will be *scientifically studied* in the future, by many future *neuroscientists*, and by many future *neurophysicists*, to begin to bring many *great new benefits* (via many exciting *new scientific discoveries*) to all humankind.

The careful, systematic, scientific study of *Our 4 Neuron Types* will help all branches of science (and technology) make great strides, here on earth, in future years.

# Our 4 Neuron Types

What are *Our 4 Neuron Types*?

Our 4 Neuron Types are the *4 distinct major classes* of human neurons.

Our 4 different kinds of human brains, are composed of 4 distinct types of *neurons*.

These 4 types of human neurons, are 4 different kinds of living *neural biological cells* in our human brains.

Our 4 types of *human neurons* are as follows:

- (1) Our Real Neurons
- (2) Our Advanced Neurons
- (3) Our Mortal Neurons
- (4) Our Submortal Neurons

*Our Real Neurons* are *completely real*.

*Our Real Neurons* are the *real human neurons* inside of our real human brains; that have always existed, because they are *not created or made, neither indeed can be*.

*Our Real Neurons* are the *most intelligent*, most powerful and *most real neurons*; because they really do exist inside our eternal real human brains; and they are *not artificial* in any way.

Our Real Neurons are *uncreatable* and *indestructible*.

Our real neurons are *not simulated*.

Our *real neurons* are composed of *real atoms*.

Our real atoms are *not simulated*.

A real atom is *not a simulation*.

*Real atoms* are the *real building blocks* of our *real universe*; where we have always lived as real human beings, with real human brains made of real neurons.

Our *real atoms* are the atoms that really do exist, because they are *completely real*, because they exist fully-independent of any artificial simulations.

The *real physics of real atoms* is a super interesting *scientific subject*, because these real atoms, and their *real properties*, and their *real behaviors* are what to constitute our real human neurons, our real human brains, and all of our infinitely-valuable *real human bodies* that have

always lived in, inside our real world (*our real universe*) that is also made of these *real atoms*.

*Our Advanced Neurons* are artificially-simulated neurons; composed of some of the artificially-simulated *advanced atoms*, of the simulated advanced universe that contains our milky-way galaxy.

All of these *advanced atoms* are artificially simulated, by the *joint simulation-behaviors* of the *real neural pulses* that propagate on the *real axons* of our real human neurons.

*Our Mortal Neurons* are also artificially-simulated neurons; that are likely composed of *advanced atoms* of our local milky-way galaxy; because our *earth planet* is certainly located *within* our own milky-way galaxy.

*Our Submortal Neurons* are also artificially-simulated neurons; that are composed of *submortal atoms* that spring into action at the very moment we begin to *dream at night* while our mortal-human brains (and our mortal-human heads) are sleeping on our mortal-human pillows.

Our 4 different types of human *neurons*, and their corresponding 4 different types of supporting human *glial* cells, comprise *Our 4 Neural Tissues* that form our 4 distinct kinds of human brains.

# Our 4 Neural Tissues

We have *4 different types of human neural tissue* that make up our 4 distinct types of human brains.

These 4 different types of *human neural tissues* are as follows:

- (1) Our Real Neural Tissues
- (2) Our Advanced Neural Tissues
- (3) Our Mortal Neural Tissues
- (4) Our Submortal Neural Tissues

These 4 different types of *human neural tissue* are composed of different *classes of biological cells*, different classes of *organic molecules*, and different classes of *atoms*, which are composed of different classes of sub-atomic *elementary particles*.

These *4 kinds* of human neural tissues are the human biological cellular tissues (made of human neurons and human glial cells) that compose the *micro-anatomical neural structures* (human neural networks of neural cells) of our *4 human brains*.

These 4 neural tissue types can be viewed as 4 different types of *neural dark matter*, because whatever our neural



dark matter (our neural tissue) simulates; it will tend to become somewhat *difficult to directly see* (difficult to directly *scientifically measure* from *within the inside* the simulation) the detailed nature of exactly what is creating the neural simulation *from inside* the neural simulation.

Our 4 neural tissue types are made of 4 types of human neurons, that support 4 types of neural axons, that propagate *our 4 different types of neural pulses*.

Let's look at these *4 Neural Pulses*.

# Our 4 Neural Pulses

What are *Our 4 Neural Pulses*?

How can there exist *4 distinct categories* of human *neural pulses*?

Our 4 different types *human-brain neural pulses* are as follows:

- (5) Our Real Neural Pulses
- (6) Our Advanced Neural Pulses
- (7) Our Mortal Neural Pulses
- (8) Our Submortal Neural Pulses

These *4 distinct classes of neural pulses* propagate on 4 distinct classes of human *neural axons*.

*Our Real Neural Pulses* propagate on the real neural axons that are inside our real human brains.

*Our Advanced Neural Pulses* propagate on the advanced neural axons that are inside our advanced human brains.

*Our Mortal Neural Pulses* propagate on the mortal neural axons that are inside our mortal human brains.

*Our Submortal Neural Pulses* propagate on the submortal neural axons that are inside our submortal human brains.

These 4 types of neural pulses are all important, because we are conscious with them, *we think with them*, and we sometimes employ them to behave as the “*dark-matter*” particles that help us to simulate (and provide *gravity* for) all of our lower artificially-generated *universes* for our virtual avatar daydream explorations.

For example, some of our *real neural pulses* are the “*dark-matter particles*” that (scatter off of visible-matter particles to) generate the “*force*” of “*gravity*” for all of our advanced universes, including the advanced universe that contains our *planet earth*.

These are the same dark-matter particles (real neural pulses) that *push us down* towards the center of our earth, by *scattering* off of *all* of the visible-matter particles of our mortal-human bodies.

This is how our local “*earth-gravity*” is made (by real neural-pulse scattering) here on the surface of our planet earth.

For another example, some of our *advanced neural pulses* can also sometimes be used to act as a *very different class* of “dark-matter particles” to generate a very different type

of “*different-gravity*”, that can be turned on inside some of the *sub-advanced* virtual simulation *environments*, we may sometimes wish to either *privately-simulate*, or together *jointly-simulate* as the advanced human beings some of us have already been for billions of years.

For another example, some of our *mortal neural pulses* can work together, when we *sleep* and *dream at night*, to simulate an artificial virtual dream-environment (our *personal private submortal universe*) that we certainly do *seem to live in briefly* (with a type of “*dream-gravity*” often turned on), as our very own individual *submortal human avatar*, while our mortal brain is still *sleeping* on its *mortal pillow at night*.

Our *4 classes* of human *neural pulses* enable our human *consciousness*, and they also form *all* of the simulated (created) structures of our *lower virtual universes* that we often choose to incarnate into (via a consciousness projection of a portion of ourselves) as a newly-created temporary *virtual human avatar*.

All of our human neural pulses have an *electric nature*, because of their natural bioelectric composition of *electrically-charged ions*.

And all of our human neural pulses propagate bioelectrically (via voltage-regulated cell-membrane ion

gates, that open and close) on neural axons that are important parts of *Our Electric Neurons*.

## Our Electric Neurons

What is the core nature of all of *Our Electric Neurons*?

All of the neurons (neural cells) inside our human brains are *electrically active* in many interesting ways.

This *neuro-electric activity* endows every human neuron with the *ability* to act, react, respond, *communicate*, simulate, and *electrically compute* in a marvelous myriad of fascinating ways.

This neuro-electric activity causes some of the neural regions, near the neural cell *membrane* (cell wall) of a neuron, to contain differing *concentrations* of some different types of *atomic ions*.

These atomic ions are atoms that have lost (or gained) one or more *electrons* from (or to) their *outer electronic shells*.

For example, *electric sodium ions, potassium ions, calcium ions, chloride ions*, and other types of electrically-charged ions, exist in *variable concentrations*, that can be significantly different, *inside* the cell (within the neural cell wall membrane) compared with the ion concentrations *outside* the cell (in our human *cerebrospinal fluid* that bathes the outside of our human neurons).

In order to illustrate the *complex dynamic nature* of these changing electric ion concentrations, let's look a bit more closely at the *Electric Sodium Ion Channels* that exist inside the cell walls (biological cell membranes) of many different kinds of our human neurons.

# Electric Sodium Ion Channels

What are our Electric Sodium Ion Channels?

How can a close scientific study of these interesting Electric Sodium Ion Channels help us to better understand our own human brains; and also help us to better understand this advanced universe of galaxies and stars where we seem to presently be located?

Sodium is an *atom* with 11 electrons, 11 protons, and 12 neutrons.

When a Sodium atom loses its outermost electron, then it becomes an *electrically-charged positive atomic Sodium ion* with only 10 electrons orbiting its nucleus (of 12 neutrons and 11 protons).

There are many trillions of *advanced positive atomic Sodium ions* inside a mortal-human brain.

There are many trillions of *advanced positive atomic Sodium ions* inside an advanced-human brain.

There are many trillions of *real positive atomic Sodium ions* inside a real-human brain.

Some of these Sodium ions are sometimes *located inside* a human neuron.

Some of these Sodium ions are sometimes *located just outside* of a human neuron.

Some of these Sodium ions *can be moved* from inside a neuron to the outside of a neuron.

Some of these Sodium ions can also be moved from *outside* of a neuron *to inside* of a neuron.

There exist *Sodium ion gates* in the cell walls (the *lipid bilayer cell membranes*) of the neural cells, that allow Sodium ions *to travel* from the inside of a neuron, to the outside of a neuron, and vice versa.

There exist thousands of electric *voltage-gated* sodium ion channels in many different kinds of human neurons.

These sodium ion channels contain *voltage-activated gates*, that can open or close *rapidly*, depending on the *voltage difference* across the neural *cell membrane* (the isolating *phospholipid bilayer* that separates the inside of the neural cell from the outside of the neural cell).



Typically, when the neural cell wall membrane voltage reaches a particular *threshold*, then the sodium ion *gates* will suddenly *open*.

When these sodium ion gates open, a large number of electrically-charged *sodium ions* are allowed to *flow* into the *interior* of the neural cell.

*Sodium ions* (sodium atoms that have lost just *one* of their outer electrons) have a *single positive electric charge*.

When the sodium gate opens, allowing many *positively-charged* sodium ions to flow into the inside of a neuron, then that particular neuron will quickly experience an *increase* in its positive-interior *electric charge density* (in the immediate *vicinity* of the sodium ion gate), by the *number* of sodium ions that are *newly-inside* the cell's interior, *divided* by the *volume* of the cellular-space near the sodium gate.

Also, the many sodium ions, that just left the outside of the neuron, will cause the outside of the neuron (near the sodium gate) to suddenly *drop* its *electric charge density*.

These *rapid electric charge flows*, of electrically-charged sodium ions into the neuron's interior, cause fast *changes* to *local electric neural charge densities*.

The human neural cell walls (phospholipid bilayer membranes) also contain steady-state *sodium pumps* that continuously *pump sodium ions* from the inside of a neuron to the outside of the neuron.

Besides sodium ions (and the dynamic gates and pumps that help to move these sodium ions across the bilayer neural cell membranes), there are several other types of atomic ions (like potassium ions, calcium ions, chloride ions, and some other kinds of electrically-charged ions) that are used by human neurons to *electrically communicate* rapidly with each other.

There are many different kinds of steady-state continuous *ion pumps*, and voltage-modulated *ion gates*, in our intelligent human neural cell membranes.

The collective *electric-charge-moving behaviors*, of these electrically-active (with thousands of ion gates and ion pumps) neural membranes, cause *neuro-electric pulses* (action potentials) to *propagate* (biologically travel, and electrically travel) down the extended length of an *axon* (a very important part of every neuron), to a *dendrite* (another vitally-important part of a neuron), that belongs to *another* human neuron.

At the neural *synapse* (where the end of a neuron's axon connects to a dendrite of a different neuron) cellular

*vesicles* release several different kinds of *neurotransmitters* (specially-shaped neural communication molecules) that cross (migrate across) the *synaptic cleft* between the axon (from one neuron) and the dendrite (of a second neuron) to *influence* the *electrical behavior* of the second neuron.

In this way, electrical neural *pulses* can often be *transmitted* between two (or more) neurons.

There are also some *other* important ways that a *neural pulse* can be *transmitted* (passed) from one neuron to another neuron.

The *cumulative* neuro-electric behaviors of the movements of the *electrically-charged ions*, and the spontaneous propagation of the resultant *electrically-charged neural pulses*, give rise to a broad spectrum of interesting, different, varied, and complex forms of *Our Human Neuro-Electricity*.

# Our Human Neuro-Electricity

Our Human Neuro-Electricity has been studied by many good scientists for *centuries* here one earth.

*Every* biological human *cell* is electrically active in *some* ways.

*All* of our neurological human cells (neurons) are electrically active in *many* interesting ways.

*Our Human Neuro-Electricity* is the complex electrical behavior of human cells; including all our electrical neurons, and their *neuro-electrical networks*.

As human beings, we experience *4 different classes of neuro-electricity*, that correspond to our 4 different types of human brains (composed of complex computing networks of *neuro-electric cells*).

The *complex* neuro-electric nature of all of our intelligent human brains, gives rise to a broad variety of different types of *stable movement patterns* (and also some unstable patterns) of *Our Neuro-Electric Pulses*.

# Our Neuro-Electric Pulses

Our human *Neuro-Electric Pulses* are the electrically-charged *action-potential pulses* that propagate along the axons of our human neurons.

A single neuro-electric pulse (neural action potential) is a propagating change in *electric charge density*.

Our vast human spectrum (of so many different kinds of human *neuro-electric pulses*) is really actually quite marvelous in so many ways.

Our electrical human neurons are able to work together to *create pulses*, propagate pulses, *transfer pulses*, logically calculate with pulses, *compute with pulses*, mathematically calculate with pulses, *simulate almost anything with pulses*, support human consciousness with pulses, *generate gravity with pulses* (with our dark-matter real neural pulses), virtually-generate almost anything with pulses, and *destroy all virtual things with pulses*.

There is almost nothing that cannot be done with our *huge* number of *wonderful* human neural *pulses* that abundantly *animate* our *precious* human brains.

Some of the more interesting movements, of our human neuro-electric pulses, can form a number of stable neural *pulse movement patterns*.

Some of these interesting stable neural *pulse* movement *patterns*, are the dynamic simulations, of the *elementary particles*, that form all of the visible matter (regular matter, or normal matter, like visible groups of atoms), of all our simulated universes.

The collection, and logical (physical force) interactions, of both stable, and unstable, neural pulse movement patterns, combine together, to generate some intellectually-powerful types of *Our Neural Pulse Logics*.

# Our Neural Pulse Logics

*Our Neural Pulse Logics are very powerful.*

Our real-human neural-pulse logics (of our real human brains) constitute the *most* powerful type of *intellectual logic* possible in our entire cosmos (the set of all possible universes).

Us real human beings are the *most intelligent* beings in the cosmos.

*Nothing* is more intelligent than a real human being.

Nothing is more *logical* than a real human brain.

Advanced human beings can *almost* become nearly as intelligent as real human beings in *some* ways.

This is because the *advanced neural-pulse logics* (all the logical operations that are possible with any advanced set of electrical neural *pulse* creations, movements, and destructions) that animate our advanced human brains, are *patterned* after the *real logics*, that animate our real human brains.

A *simulated* advanced human *brain* can *eventually learn* enough (after many billions of years of learning), to almost become, nearly as intelligent as a real (un-simulated) human being.

Mortal human beings are *not* as intelligent as advanced human beings.

Most of our mortal human neural pulse logics (here on our mortal planet earth) are *not* as well *organized* as our advanced neural pulse logics (on our advanced planet closer to the center of our milky-way galaxy).

There are many *different* types of mortal neural pulse logics, that correspond to the many different types of mortal human brains here on earth.

Most of our current (circa 2023) mortal human brains (here on earth) are *not* very intelligent at all.

Just look at the way we mortal humans have *habitually voted* (in government elections) on this earth planet for *centuries*.

We (the mortal humans of planet earth) have almost *never* voted for a *good* leader.



Why did so many of us mortal humans of Germany *so eagerly vote* (with so much wild exuberant enthusiasm) for Adolf Hitler in the 1920's, and again in the 1930's?

And Adolf Hitler is certainly not the only example of *bad government* in the history of this vulnerable earth.

This vulnerable earth has already recorded the elections of *thousands of politicians* to their powerful government positions; only to openly display their *many self-serving behaviors*, for all the deep thinkers of earth to so easily behold.

Why is intelligent wisdom such *an extremely rare commodity* here on planet earth?

Do even *a dozen wise people* live here on earth?

We (the voting people of earth) usually *eagerly vote* for a set of bad leaders, who will then create a set of *bad laws*, to continue to eagerly *enslave others*, and to also accidentally *enslave us all*.

Our *misguided thoughts*, and our misguided mortal *misemotions* habitually (almost always) *derail* our mortal *logical abilities*.

Apparently, *the actual number* of us mortal human beings, currently (circa the year 2023) on this earth planet, who can currently think clearly (and logically) is actually *very small*.

However, it is actually *possible* to create a large number (billions) of intelligent mortal human brains, that are capable of a good level of *logical thinking*.

Our worldwide mortal neural pulse logics can be greatly improved by either (1) *growing new* mortal-human bodies, that have more *intelligent brains*, or by (2) feeding all our current mortal human brains (and bodies) with enough delicious, nutritious, healthy, *raw organic fruits*, *raw organic vegetables*, and other types of healthy (for human consumption) *raw organic plants*.

Animal meats, and cooked foods, are not healthy for our mortal human bodies. These *unhealthy junk foods* *disrupt* our mortal human-brain *neural pulse logics*, to make us think, feel, and act stupid.

For example, some of our *malnourished* (malnourished in many ways, with a lack of good food, a lack of good sleep, and a lack of good logic) *mortals* sometimes act out, to *hurt other people*, because our personal neural pulse logics often become *distorted*, by the *illogical spectrum* of our very own *superstitious thoughts*.

Also, many of us mortal humans (here on earth) are *emotionally enturbulated* (emotionally disturbed) by *unresolved pain* we have suffered, and *distorted logic* that *torments* our mortal-human brains.

Apparently, these *logical distortions* overcame Adolf Hitler (1889 – 1945), and the *millions* of vulnerable unthinking *people* who blindly followed him.

*Similar* logical *distortions* are still haunting (stressing with many falsehoods) the mortal-human brains of *most* of *us* here on earth in this present year of 2023.

These *ubiquitous* false *beliefs* need to be overcome (seen for what they are) before we can realistically hope to create *peace on earth*.

As we (the precious mortal humans of planet earth) start to *eat more-healthy* (and we all also start to *get enough good sleep at night*), then we can all begin to finally relax, *feel valued*, start to discover our own personal logical distortions, and finally begin to *think much more clearly*.

How many millions of *brilliant young* (would be) *scientists* are currently (today in 2023) physically malnourished (due to lack of good food), or educationally

malnourished (due to lack of access to good schools), because we have *not yet* solved world poverty *for them*?

What major scientific discoveries (and valuable inventions) is this world *still* missing, because we all choose together, to *continue* (decade after decade) to let *most* of our (potential) brilliant young inventors *starve*?

Good healthy food (nutritious delicious food), and good healthy sleep (on good comfortable safe beds), for everyone, everywhere, every day, are two good *logical reasons*, for us all to earnestly try to *solve world poverty* together, for all of us *precious* mortal human beings here on earth, so we can all start to think clearly enough, to begin to really *value each other* properly, with our brilliant brains, and with our tender human hearts.

As we all begin to think more clearly (in a good future day, we can all still hope for), then we will also start to *understand* the amazing power of our own human-brain neural pulse logics, and the illuminating power of *Our Neural Pulse Mathematics*.

# Neural Pulse Mathematics

What is *Our Neural Pulse Mathematics*?

*All things being equal*, Our Neural Pulse Mathematics constitutes the set of mathematical relations (*equations, equalities, and inequalities*) that can help us to better understand *physics, neuroscience*, and everything else in our local *universe*, including *our very own selves*.

The marvelous thing about *mathematics* is that it can be used to *enhance* our mortal human understanding of *almost* everything.

No simulated thing exists, which cannot be *completely modeled* with mathematics.

This is because all of the simulated universes are *completely logical*, because they are all entirely composed by interacting sets of *real neural pulses* and their corresponding *real neural pulse logics*.

Our own advanced physical *universe* (that contains our own milky-way galaxy, and our own earth planet) is *entirely* made (artificially composed) of *real neural pulse logics*.

Therefore, every *elementary particle* of our advanced physical universe, can be *exactly represented* by a set of *mathematical equations*, that can *exactly* symbolically represent the underlying *real neural pulse logics*.

Also, every *interaction* between every *pair* of elementary particles (in our advanced physical universe), can also be *exactly represented* by a set of mathematical equations, that can *exactly* symbolically represent the underlying interaction of the *interacting real neural pulse logics*.

There exists *no part* of our advanced physical universe that cannot be *exactly modeled* by the right set of *mathematical equations*.

A holy grail of physics is finding the *correct set* of *mathematical equations*, to exactly (and completely) model every part of this advanced physical universe.

The *scientific discovery* of such a set of correct, exact, and complete mathematical equations (that accurately model everything inside this advanced universe), will be the discovery of a *mathematical Theory of Everything* (mathematical ToE) for this advanced universe.

Such a mathematical ToE for this advanced universe, will be an *important component* of the *Full ToE* of the entire

cosmos (including all possible or actual universes, and the set of powerful things that can create them)

How shall we go about attempting to create such a *mathematical theory of everything*?

We can start by creating a proper rational theory of neural pulse logics and *neural pulse mathematics*.

After we create a *proper rational theory of neural pulse mathematics*, we can start to test it in the scientific laboratory, and with computer software simulations, to correct it, and refine it, and *improve it*, until it really seems to be fully accurate, *fully complete*, and *fully exact*.

Then we will have successfully created a proper, rational, workable theory of *exact neural pulse mathematics*.

We can then use our proper, rational, workable, *exact theory* of neural pulse mathematics to *mathematically-derive* all of the *historically-important* equations of physics; to better *scientifically-reveal*, and to better *mathematically-demonstrate*; under exactly which physical conditions they are *most precisely accurate*, and under exactly which other physical conditions they are *merely approximately accurate*, and under exactly which other physical conditions they are *merely probabilistically accurate*.

For example, we will be able to use our exact neural pulse mathematics to *mathematically derive* Schrodinger's (1926) Wave Equation [8] for the Hydrogen Atom entirely from *first neural-pulse-logical principles*.

In our mathematical derivation, we will need to make some *simplifying assumptions* to arrive at the exact physical conditions, under which Schrodinger's Wave Equation is approximately valid (probabilistically valid) for *probabilistically describing* the electron orbitals of a single Hydrogen Atom.

By carefully and logically examining our simplifying assumptions, and *all the steps* we used in our mathematical derivation, we will likely be able to come to a *definite scientific conclusion* about the actual meaning of Schrodinger's Complex-Valued Wave Function, including its *mysterious phase*.

The most important thing about our neural pulse mathematics is *accuracy*.

We need to create a proper (*fully accurate*) theory of exact neural pulse mathematics, that will allow us to easily discover (with full confidence) if our mathematical equations are (1) *fully exact*, or (2) *merely approximations*, or (3) *merely probabilistic guides*.



For example, as mortal human scientists, with imperfect brains, we can *easily deceive ourselves* into believing that a particular equation is more accurate than it really is.

As mortal physicists, *we can* easily deceive ourselves into *believing* that a particular equation is *more* than just a rough approximation, that under suitable physical conditions, may sometimes seem to approximately model a set of physical systems.

When we *start to believe* that a set of mathematical equations, is more powerful (more useful) than it really is, then we may find ourselves almost beginning to *worship the equations*.

This type of *mathematical equation worship* can derail our best intentions for science.

As *objective scientists*, we don't really *need* to worship anything; other than our sincere desire to discover the actual nature of reality, for the *benefit* of *all* of *humankind*.

As we begin to create a powerful new *theory* of *neural pulse mathematics*, we will begin to fashion for ourselves, powerful *new mathematical tools*, that we can use to better understand (at a very deep foundational level) why

some particular equations of physics *seem to work so well* to model our advanced physical universe.

An important part of our new theory of *exact neural pulse mathematics*, will be a close examination of the exact *distribution* of electric charge density, that makes up the actual composition of each type of *neural pulse*.

Now let's look more closely at this interesting phenomenon of *Electric Pulse Charge Density*.

# Electric Pulse Charge Density

What is *Electric Pulse Charge Density*?

Why is a real electric *neural pulse* really a traveling (propagating) electric *charge-density pulse*?

Each neural electric pulse is actually a *traveling charge-density pulse*, or a *propagating change* in electric *charge density*.

This propagating (traveling) change, in electric charge density, may consist of an increase (or decrease) in local *sodium-ion charge density*.

This *traveling-change* in local charge density, depending on the type of neuron, can also depend on *many other ion types* besides just *sodium* ions.

For example, *potassium* ions, *calcium* ions, *chloride* ions, and many other ion types, can be involved in the *formation* and *propagation* of a single neural pulse along the length of a single *neural axon*.

Local electric charge density can be *mathematically calculated* as the total net electric charge (inside a local volume) *divided by* the amount of the local volume.

The *net* electric charge is the number of all the positive electric charges, *minus* the number of all the negative electric charges.

The different types of neural pulses, can have different charge-density *magnitudes*, and charge-density *shapes*, as the neural pulses propagate along their axons.

The different types of neural pulses can also have different electric charge-density *distributions* inside each neural pulse.

The electric charge-density distributions of the neural pulses that travel on *myelinated axons*, can be *very different* than the electric charge-density distributions of the neural pulses that travel on *un-myelinated axons*.

These traveling changes (neural pulses), in sodium ion (and potassium ion, and calcium ion, and chloride ion) charge density, have a type of *neural pulse mass*, because the *moving sodium ions* (and other ions) themselves have a type of *atomic ion mass*.

The *electric fields* (and the *magnetic fields*) that are associated with the propagating electric ion density changes (pulses) also *carry field energy*, which have an *associated field mass*.

The *total combined electric pulse mass*, comes from the combination of the *sodium ion masses*, and the *electric field mass*, and the *magnetic field mass*, and the effective *biological-processing mass* associated with all the other *biological processes* involved in the generation and propagation of the neural pulses.

The generation and movement of all these different types of effective bioelectric masses, in the production (and propagation) of the neuro-electric pulse, effectively generates a type of effective *Neuro-Electric Pulse Mass*.

# Neuro-Electric Pulse Mass

What is *Neuro-Electric Pulse Mass*?

What is *Pulse Mass*?

Why does a *neural pulse* have a *mass*?

The *Neuro-Electric Pulse Mass* of a single neuro-electric pulse, comes from the *moving masses* of the *atomic ions*, and *all the other biological mass-generating activities* of the neurons, that are involved in the generation of the propagating (*massive*) change in electric charge density, that forms the *electric-pulse mass*.

The *individual component masses* that individually-contribute to the *electric-pulse mass*, may likely *need to obey* a type of *neuro-modulated form* of Sir Isaac Newton's (1642-1726) Second Law of Motion [9], in which these *individual component masses* (that individually-contribute to the total effective electric-pulse mass) may be approximately the *ratio* of the total net *force* (on the individual component mass) *divided* by the *acceleration* of the *individual component mass*.

The total effective *real electric-pulse mass* usually propagates along its real neural axon at a *constant rate of*

*motion*, according to the *real neurobiological laws* that govern real neural pulse propagation along the *extended-lengths* of the *real human axons* of our real human neurons.

Let's look more closely at the *Electric Pulse Mass Origin*.

# Electric Pulse Mass Origin

It appears that the *origin of mass* (for all the elementary particles of our advanced universe) itself is deeply sourced by the existence of *real electric-pulse mass*, its real-axon-propagation velocities, and the relationships between two or more interacting *real electric-pulse masses*.

The *real dendrites* (of the real neurons that simulate our advanced universe) have the ability to be *stimulated to fire* (create) *new real neural action potentials* (new real electric-pulse masses).

A new *real electric-pulse pulse mass* is created every time a real neuron fires a new real action potential (a new real pulse).

In this way, *a large quantity* of new electric pulse masses can be created from the *dark matter* (the real neurons, and their real neural pulses) that simulate this *advanced universe*.

This new *pulse mass* (energy) *creation hypothesis* is that the creation of *new* electric-pulse masses (that can form elementary particles) from dark matter (real neurons and their real pulses) can take place whenever (and where



ever) the *energy conditions* are just right, like inside a *hot energetic star*.

The right energy conditions, for new pulse mass creation, are the *real dendritic energy conditions* required to cause the *neural firing regions* near a *real axon hillock* of a real neuron (a basic piece of dark matter) to fire (generate) a *new real-action-potential pulse*.

The axon hillock is a special part of a neural cell body that connects the *neuron main body* (neural soma) to its *axon*.

The *neural firing regions* (near an axon hillock) between the soma and the axon, are where *electrical membrane potentials*, that are propagated from *synaptic inputs*, are *summed* before being *transmitted* to the *axon*.

These neural firing regions (near an axon hillock) work together to *initiate new action potentials* (create completely-new neural pulses).

These neural firing regions (near an axon hillock) have a *much higher density* of *voltage-gated ion channels* than is found in the rest of the neural cell body.

The density, of these voltage-gated ion channels, can vary widely from about *1 channel per square micrometer* on

the main body of a neuron, to about *100 channels per square micrometer* near the axon hillock, to over *1000 channels per square micrometer* in the nodes of Ranvier of myelinated axons.

The actual *number*, of voltage-gated ion channels per micrometer, in our real neurons may possibly be *much higher*, due to the *need for much greater precision*, and much greater computing power, that what is needed for our subpar mortal-human neurons.

It seems possible that our real neurons may contain specialized subregions that have *over a million channels per square real micrometer*.

These *many* real voltage-gated *ion channels* can open and close *very rapidly*.

Our real neurons come in many *different sizes* and in many *different shapes*.

This is because our real neurons serve many *different functions* inside our real human brains.

The *real axons*, that are a very important part of the *neuroanatomy* of our real neurons, also come in many different *lengths* and *diameters*.

What is the actual nature of our *Real Axon Diameters*?

## Real Axon Diameters

What are all our *Real Axon Diameters*?

A *Real Axon Diameter* is the actual *physical geometric diameter* (twice the geometric radius) of a *real human axon* that can propagate a *real neural pulse* (action potential) along its *axon-length*.

Our human neural axons come in many *different diameters*, and in many *different lengths*.

For example, some of our thin *mortal* axons (here on earth) have very small diameters of less than just *one micrometer* (here in this advanced simulated-universe space); and some of our thick mortal axons have very large diameters of more than *20 micrometers*.

Since our real-human axons, on our real neurons, are capable of many kinds of computations, that our mortal-human axons are not capable of; it seems theoretically

possible that our real axons may have an even *greater range of diameters*.

For example, it may be theoretically possible that some of our super-thin real axons may have diameters of less than a *tenth of a micrometer* (in our real-universe space); and it also seems theoretically possible that some of our super-thick real axons may have diameters that are greater than *100 micrometers*.

Therefore, it certainly seems to be theoretically possible that our *real axons* may range in size from about *0.1 microns* to nearly *100.0 microns* in *diameter*.

This is a theoretical *range* of about *3 orders of magnitude* for the size-variation in the *diameters* of our *real axons*.

It is actually theoretically possible that our real human axons may exist, inside our real human brains, in an even *broader range of real-axon lengths*.

For one example, it seems *theoretically possible* that some of our *large-thickness* real axons (like the *Higgs Axons*, that support the brief propagation of the Higgs-Boson net-neutral spinless real-neural pulses) are *very thick* in their *axon-diameter* (to support a *super-high* real-neural pulse *energy-mass* of 125 GeV), and *very short* in *axon-length* (because they don't really need to propagate

very far, because these Higgs Bosons *decay so fast*, before they have enough time to actually travel very far).

For a second example, it also seems theoretically possible that some of our *medium-thickness* real axons (like the *Elementary-Particle Axons*, that support the propagation of all of the real-neural pulses that are the real-neural-pulse components of all of the elementary particles of the standard model) are *medium-thick* in their *axon-diameter* (to support the medium-range energy-mass of most of the neural-pulse components of most of the elementary particles), and *medium-long* in *axon-length* (because these elementary particles may need to be propagated for *millions of miles*, or even farther, here in our local solar system, or here in our own *milky-way galaxy*).

For a third example, it also seems theoretically possible that some of our *small-thickness* real axons (like the *Dark-Matter-Particle Axons*, that support the propagation of all of the tiny fast real-neural pulses that are the *dark-matter scalar-boson particles* of our advanced universe) are *thin* in their *axon-diameter* (to support the small energy-mass of all of the tiny fast dark matter particles of our advanced universe), and *very-long* in *axon-length* (because these tiny fast real-neural-pulse scalar-boson dark-matter particles may need to be propagated for very vast distances very rapidly for *thousands of light years*, right here in our very own local *milky-way galaxy*).

These *dark-matter particles* (tiny fast real neural pulses), that *propagate* on the *thin long Dark-Matter-Particle Axons*, actually travel *many orders of magnitude faster* than the speed of light.

These *long thin dark-matter-particle axons* are *myelinated* with a special type of “*dark myelin*” that is *very-thin* (much thinner than any mortal myelin), and *super-fast* (many orders of magnitude faster than any mortal myelin), to properly support the *ultra-fast propagation* of the tiny fast dark-matter real neural pulses (scalar dark bosons) that can propagate on these “*dark axons*” (wrapped in “*dark myelin*”) at *super-fast velocities* that are *many orders of magnitude faster* than the speed of light.

In this way, all of the dark-matter particles can travel at velocities that are *many orders of magnitude faster* than the speed of light (the speed of photons).

*Photons* are very-special elementary particles, whose *two mutually-orbiting real-neural-pulse components* always propagate on *Photon-Axons* (and only on Photon-Axons) at a very-special *quicklight speed* (of about 6.36 times the speed of light); which effectively causes the *whole photon* (the entire photon, considered as a single whole photon

particle of spin 1) to always travel at exactly the *speed of light*.

This quicklight real-neural-pulse propagation speed, of 6.36 times the speed of light, is a *fixed Photon-Axon propagation speed*, that is biologically-fixated by the *constant-speed neuro-biological properties* of these very special Photon-Axons.

These Photon-Axons are *fixed-speed real-axons* that can only propagate whole photons at the *fixed-speed* of photon light.

Most of the elementary particles, of the standard model, travel at velocities that are *less than* the speed of light.

The super-massive (125 GeV) *Higgs Boson particle*, *probably* travels at a velocity *less than* the speed of light for *much less* than a micrometer, before it *transfers* its *entire energy-mass* to a set of real-neural dendrites that *excite* the production (by causing real neurons to fire new action potentials) of newly-created *less-massive* real-neural *pulses* that compose *bottom quarks*, anti-bottom quarks, and other Higgs-Boson decay products; which in turn decay via similar *real neural-excitation neurobiological processes* to decay into photons, electrons, protons, and neutrons; which in turn combine together to form ground-state atoms and *excited atoms*.

These *real neural-excitation* neurobiological processes involve real axons, *real synapses*, real dendrites, and other real part of our *real neurons*.

These real neurons live inside our *wirelessly-networked* real human brains to generate and *neurally-simulate* this entire advanced universe that contains our very own local milky-way galaxy.

This particular powerful set of real neurons, that simulate this advanced universe, can be viewed as a *Real Neuron Field*.



# Real Neuron Field

What is a *Real Neuron Field*?

A *Real Neuron Field* is a set of interconnected real neurons that *can together neurally-simulate* an entire advanced *universe*; just like the one we (we the people of earth) seem to be living in today in 2023.

A full and complete scientific understanding, of one of these *super-powerful Real Neuron Fields*, can only be comprehended by a real human being, or by a very special type of advanced human being.

However, as the curious mortal-human scientists (here on earth) that many of us find ourselves to be; the good news is that there are *many useful scientific principles* that we *can learn* (with our semi-intelligent mortal-human scientific brains here on earth) about the particular Real Neuron Field that simulates our advanced universe where we (all of us earth-based scientists) seem to live.

One of these useful scientific principles is that our *Real Neuron Field* seems to be composed of *3 internetworked* (3 interleaved) *particle subfields*.

These 3 *Particle Subfields* of Our Real Neuron Field are the following:

- (1) Our Higgs Field
- (2) Our Elementary Particle Field
- (3) Our Dark Matter Particle Field

These 3 *Particle-Type Subfields* are the 3 *Real-Neuron-Type Subfields* that together comprise the set of *interleaved real neurons* of Our Real Neuron Field.

Our Scientific Hypothesis is that *Our Higgs Field* is the set of real large *Higgs Neurons* that fire energy-massive (125 GeV) *Higgs Action Potentials* (Higgs Bosons) that briefly propagate on real short thick *Higgs Axons*.

Our Scientific Hypothesis is that *Our Elementary Particle Field* is the set of real medium-sized *Elementary Neurons* that fire the specific kinds of real neural pulses that compose all of the elementary particles, that propagate along real medium-thickness medium-length *Elementary Axons*.

Our Scientific Hypothesis is that *Our Dark Matter Particle Field* is the set of real small *Dark-Neurons* that fire the tiny fast real dark neural pulses (dark-matter particles) that *carry dark-matter information* (and push on visible matter to *create gravity*) of *consciousness* at ultra-

fast propagation velocities along real long thin *Dark Axons*.

These *real long thin Dark Axons* extend far *beyond* their *real-neuron bodies* (in our real universe), and *into* the *black holes* (huge *bundles* of *dark-axon nerve fibers*) and then *outward* into the *advanced galaxies* via beautiful dark-axon electric-galactic *wiring patterns* that extend far *beyond* the outer reaches of a galaxy, and then some of these dark-axons *bend themselves around*, and even extend themselves somewhat *backwards*, back into the more central areas of a galactic plane, in a *spiral inward pattern*; that effectively *scatter-pushes* on all the stars (as the dark-matter particles simply *scatter off* of the visible-matter particles, and thereby *transfer momentum* to all the visible-matter particles of *all the stars* and their *solar systems*); and in this way all of the stars are *given their velocities* (by the galactic dark-matter particles) as they travel around the central black hole of a galaxy; and *some* of these *dark-axons* extend themselves back into the *very same* black hole from which they came; and also *some* of these *dark-axons* extend themselves into *nearby black holes* to share their vital dark-matter information with *nearby galaxies*.

The *Higgs Field*, the *Elementary Field*, and the *Dark Field* are all composed of interleaved real neurons that perform the very specific tasks of supporting *Higgs Boson*

Particles, *Elementary* Particles, and *Dark-Matter* Particles.

All of these particles are composed of a specific set of *real neural pulses* that are *quantized*, because every real neural pulse is a specific *quantized individual packet* of real neural-pulse *mass-energy*.

What is the neurobiological nature of this fundamental *Real Pulse Quantization*?

# Real Pulse Quantization

What is *Real Pulse Quantization*?

*Real Pulse Quantization* is the scientific fact that real neural pulses are *always quantized*; because every real neural pulse is an *individual quantum* (separate and discrete) *packet* of neural-pulse *electrical energy-mass*.

*Real Pulse Quantization* is the *foundational quantization* of *everything* that can be composed by *any set* of real neural pulses, including *everything* in our current neurally-simulated *advanced universe*.

*Real Pulse Quantization* is the actual *physical reason* (the fundamental *physical cause*) for the *quantization* of *everything* in this universe that contains our very own milky-way galaxy.

*Real Pulse Quantization* includes *electric charge quantization*, because every real neural pulse has an *exact amount* of real-neural action-potential *electric charge*.

*Real Pulse Quantization* also includes *angular-momentum quantization* because the small finite set of *stable angular-momentum configurations* of interacting (mutually-orbiting) real-neural-pulse *components* (that

compose an elementary particle) are *quantized* into *exact amounts* of angular-momentum, like *one half* of Planck's Constant for electrons, protons, and neutrons; and like *one full* Planck's Constant for photons.

The careful scientific study, of all of the *neuro-physical details* of Real Pulse Quantization, will open the door to a much better understanding of *elementary particle physics*.

A better understanding of elementary particle physics will also be enabled, to the degree that we begin to more closely study *Higgs Field Microanatomy*.

# Higgs Field Microanatomy

What is the *Microanatomy* of the *Higgs Field*?

What is the *detailed microstructure* of the Higgs Field?

What actual *physical mechanisms* cause the Higgs Field to behave as it does?

In what physical ways does the Higgs Field *give mass* to every elementary particle?

In what physical ways does the Higgs Field *give energy* to every elementary particle?

In what physical ways does the Higgs Field literally *give birth* to every elementary particle?

If the Higgs Boson is an *excitation* of the Higgs Field; then what exactly is the Higgs Field?

What is the *detailed microanatomy* of the Higgs Field?

Why is it so vitally important that we fully understand the detailed *micro-neuroanatomy* of the Higgs Field?

The *grand key* to understanding the Higgs Field is to look closely at exactly *what it is actually made of*.

Another grand key to understanding the Higgs Field is to also look closely at how the *Higgs Field* interacts with the *Light Field* and with the *Dark Field*.

These 3 *interwoven subfields* (of the *real field*) are very important to understand.

What is the Dark Field?

What is the Higgs Field?

What is the Light Field?

The key to understanding these 3 interleaved subfields (of real neurons) is to really understand *The Real Field*.



# The Real Field

What is *The Real Field*?

The Real Field is *The Real Neuron Field*.

*The Real Field* is a whole field of *real neurons* that are all actively involved in *neurally-simulating* this advanced universe.

The set of *networked real neurons*, that together generate (simulate) this advanced universe, is *The Real Field*.

The Real Field has 4 *real neural limbic chambers* as follows:

- (1) The Right Real Hippocampus
- (2) The Left Real Hippocampus
- (3) The Left Real Amygdala
- (4) The Right Real Amygdala

The Real Field, includes these 4 real neural limbic chambers, *for each real human being* that is actively daydreaming *a portion of itself* into this neurally-simulated advanced universe.

These 4 chambers, for each real human being, are *wirelessly networked together*, to form The Real Field that simulates this whole advanced universe.

The Real Field is composed of *3 different types* of real neurons; and each of these 3 different kinds of real neurons *are found interleaved together in each* of the 4 real neural limbic chambers.

These 3 different types (categories) of real neurons are the (1) *dark neurons*, the (2) *Higgs neurons*, and the (3) *light neurons*.

*The Real Field* is composed of the following 3 interleaved real subfields:

- (1) The Dark Field
- (2) The Higgs Field
- (3) The Light Field

*The Dark Field* is the Dark Matter Particle Field that supports the existence of *dark-matter particles*.

*The Higgs Field* is the Higgs Field that *gives mass* (and energy, and existence) to *all* of the *elementary particles* that are supported by the light field.

*The Light Field* is the Elementary Particle Field that is the set of elementary (light) neurons that support the existence of light-particles, which are also called visible-matter particles, which are also called the elementary particles of the standard model.

These 3 *fundamental particle fields* (the Dark Field, the Higgs Field, and the Light Field) are the 3 *internetworked fields* of real neurons, that together compose (in an *interleaved* fashion) the real field.

What is the detailed nature of *The Dark Field*?

# The Dark Field

What is the scientific structure of *The Dark Field*?

*The Dark Field* is the set of dark real neurons (*dark neurons*) that support the existence of the *dark-matter particles*.

*The Dark Field* is the Dark Matter Particle Field that is composed of all of the *dark neurons* that support the *dark neural pulses*, that are the dark-matter particles.

All of the *real neuroanatomical parts*, of all of these dark neurons, are all completely located *inside* the real human brains of us real human beings.

The *main bodies* (the *somas*) of these dark neurons are located, inside some special neural regions of our real human brains, where *no* Higgs neurons exist, and where *no* light neurons exist.

However, the *super-long myelinated dark-axons* (of these dark neurons) do *extend themselves* into the black holes (thick bundles of dark real nerve fibers) that lead into the active universe-simulation areas (of our real human brains) where Higgs neurons *do exist*, and where light neurons *do exist*.

These active universe-simulation areas include the real-neural areas where neurally-simulated advanced *galaxies* are found.

The thick bundles of dark real nerve fibers (of *dark axons*) are the *black holes* that exist at the *exact center* of each *galaxy* of stars and their solar systems.

The *dark synapses* of the super-long *dark axons* connect to the *Higgs-dendrites* of the Higgs-neurons of *The Higgs Field*.

# The Higgs Field

What is *The Higgs Field*?

*The Higgs Field* is the set of *Higgs neurons* that *only exist* in the relatively-small super-special active-simulation *real neural areas* (of our real human brains) that *contain galaxies*, and also the *intergalactic regions* of our advanced universe that are *in between* the individual galaxies.

These Higgs neurons *need* to be present in every real-neural area that may someday contain a *galaxy*; because these *super-large* super-energetic Higgs neurons are actually needed to *generate all* of the *visible-matter* elementary particles that compose all of the atoms of all of these *visible galaxies*.

*The Higgs Field* is composed of a set of *real large Higgs neurons*, that are *large in size* (so they can be large enough to properly support the super-high mass-energy of 125 GeV of a single large neural-pulse Higgs Boson particle) with *very short Higgs Axons*, with *Higgs Synapses* that synapse onto the *Elementary Dendrites* of the Elementary Neurons of the Elementary Field.

This Elementary Field is the set of *elementary neurons* that support the *creation* and *propagation* of all of the *elementary particles* of the standard model of elementary particle physics.

This Elementary Field is also called *The Light Field*.

# The Light Field

What is *The Light Field*?

*The Light Field* is the set of *Light Neurons* that support the generation and propagation of *light particles*.

These Light Neurons are the light neurons that support all of the *sub-atomic particles*, and all of the *atoms* of this *visible universe* of galaxies and stars and their *light particles*.

These *light particles* are the *visible-matter particles* that are also called the *elementary particles* of the standard model of particle physics; which include the *vector bosons*, and all the *fermions*.

The Light Field is the *Elementary Particle Field* that supports all of the elementary particles, and all of the sub-atomic particles, that together compose all of the *atoms* and *molecules* of this earth, our sun, and our whole *milky-way galaxy*.

*The Light Field* is the set of *real light neurons* that are the very special type of real neurons that *directly* simulate all the known *light-matter* (visible-matter) elementary



particles of this whole advanced universe, that certainly includes our very own local milky-way galaxy.

The *Higgs neurons* (of the Higgs Field) have *short thick Higgs axons* with *energetic Higgs synapses* that stimulate the *light-dendrites* of the light real neurons, and cause these light neurons to *fire* real light action potentials (light real neural pulses) that together sometimes compose *bottom quarks* and *anti-bottom quarks* (the light real action potentials that compose these bottom quarks); and these bottom quarks propagate to *other light-dendrites* (of other light real neurons) *stimulating* the *firing* of *new* light action potentials that form the *light pulses* that eventually *compose* all of the elementary particles (that are made of these mutually-orbiting real light neural pulses) of the standard model; including all of the stable sub-atomic particles, including *photons, electrons, protons, and neutrons*, that together compose all of the *excited atoms* and excited molecules of all of the moons, planets, and *super-energetic stars* of our own milky-way visible-matter (*light-matter*) galaxy.

The Dark Field Particles *use the Higgs Field* (and its Higgs-Boson Excitations) to create *all* of the Light Field Particles.

The Dark Field also has another way of influencing the Light Field; that *does not* directly involve the Higgs Field.

The dark-matter particles (of the Dark Field) *scatter off* of all of the light-matter (visible-matter) particles, and thereby *impart momentum* from the *dark-matter particles* to these *light-matter particles* (of the Light Field), thereby creating “*gravity*”.

This is how the dark field creates “*gravity*” for the light field.

The *dark field* encourages the *Higgs field* to create new *light field* excitations (particles) in the center of super-hot *super-energetic stars*.

The *dark field* also continually pushes on the *light field* (everywhere in this universe of trillions of galaxies) to produce the “*force of gravity*” on all of the light-field particles (all of the elementary particles).

Super-energetic *stars* (and super-energetic *particle accelerators* (like the Large Hadron Collider at CERN in Switzerland) are able to *concentrate enough energy* to energetically-stimulate the *Higgs dendrites* enough to *cause* some Higgs neurons to *fire up* some *new* Higgs action potentials (called *Higgs Bosons*).

These newly-created Higgs Bosons *quickly decay* (transfer energy into another *different form of energy*) by

energetically-stimulating some *light-dendrites* to cause some light-neurons to fire up some new *Light Field Excitations*.

## Light Field Excitations

What is a *Light Field Excitation*?

A Light Field Excitation is a set of excitations (real neural action potential activations) of the *Light Field*.

*A Light Field Excitation* is a set of real-neural light-field excitations (light neural pulses that propagate as real action potentials, along the *real axons*, of our real light neurons) that can be *stable* or *unstable*, depending on the *relative configuration* of the set of real-neural-pulse light-excitations.

A Light Field Excitation is a *quantum excitation* of the light neurons that support all of the *visible matter* (the matter that reflects light, and all the elementary particles) in this milky-way galaxy.

A Light Field Excitation is a real *quantum* light excitation (a real-light neural pulse) of the real-light neurons inside our real human brains.

Every excitation of our real neurons is a *real quantum excitation* because the quantum excitation (quantum real neural pulse) is an actual *individual* real *discrete* action potential.

What is the core quantum nature of all of these *Real Quantum Excitations*?

# Real Quantum Excitations

What is a *Real Quantum Excitation*?

*A Real Quantum Excitation* is a quantum (discrete *individual* real neural pulse) excitation of the *Real Field* of our real neurons.

The 3 distinct categories of our *Real Quantum Excitations* are as follows:

- (1) The Dark-Field Quantum Excitations
- (2) The Higgs-Field Quantum Excitations
- (3) The Light-Field Quantum Excitations

*The Dark-Field Quantum Excitations* are the *dark quantum excitations* of the real dark neurons.

These *dark quantum excitations* (of the real dark neurons) are the real dark neural pulses, that are the *dark-matter particles*.

*The Higgs-Field Quantum Excitations* are the *Higgs quantum excitations* of the real Higgs neurons.

These *Higgs quantum excitations* (of the real Higgs neurons) are the real Higgs-Boson neural pulses, that are the *scalar Higgs boson (125 GeV) particles*.

*The Light-Field Quantum Excitations* are the *light quantum excitations* of the real light neurons.

These *light quantum excitations* (of the real light neurons) are the real light neural pulses, that are the *light-matter particles*, that are also called *visible-matter particles*, that are also called regular-matter particles, that are also called normal-matter particles, that are also called the *elementary particles* of the standard model.

Some of these elementary particles are the *stable sub-atomic particles* (including photons, electrons, protons, and neutrons) that together can compose the *excited stellar nuclei* that are generated *inside stars*.

*Every star* (of our universe of galaxies of stars) is composed of *excited stellar nuclei*, and *energetic elementary particles*; that are generated by the *joint energetic action* of many *concentrated* dark-matter particles (of the Dark Field), that *jointly-together* stimulate (energetically-encourage) the Higgs-dendrites (of the Higgs Field) *to fire* Higgs action potentials (Higgs Bosons), that stimulate the light-dendrites (of the Light Field) *to fire* light action potentials, that eventually come

together and combine together to *newly-form* all of the *newly-made* elementary particles, and all of the *newly-generated* excited stellar nuclei *inside every star*.

The quantum nature, of our advanced universe of galaxies, is *caused* by the *fundamental quantum nature* of all of our *real quantum neurons*; because they are real, *discrete*, quantum, countable, *individual real quantum neurons*.

The quantum nature, of all of the *quantum excitations* of our advanced universe of galaxies, is *caused* by the *fundamental quantum nature* of all of the *real quantum excitations* of the real field of interleaved real quantum neurons; because all of these real quantum excitations are real, *discrete*, quantum, *countable*, individual real neural *quantum pulses*.

All of these *real quantum neural pulses* are propagated on *real neural axons* via the rapid, coordinated, openings and closings of *real voltage-gated ion channels*.

Some of these real voltage-gated ion channels are on the *Higgs-dendrites* that can receive *dark-axon* synaptic *inputs* to cause the Higgs-neurons to *fire up a fresh set of Higgs bosons*.

These many real voltage-gated ion channels can be *energetically influenced*, by the timely arrival of a *large-enough number* of the right kind of concentrated *small* real dark neural *pulses* (the dark-matter neural pulses that propagate on the *thin long dark-axons* of *small real neurons*), to cause these channels to open and close in such a way, so as to cause the neural firing regions (near a *Higgs-axon-hillock*) to *fire* (create) a *new* Higgs boson, that propagates *a very short distance* on a thick short Higgs-axon, before it quickly *decays by transferring its mass-energy* to a set of nearby light-dendrites.

There exist some *special Higgs-dendrite-stimulating configurations*, of the timely arrivals of just the right kind of concentrated *tiny fast* real neural pulses (dark-matter particles of the Dark Field), that are just right to cause a *large number* of new *large pulse masses* (Higgs bosons) to be generated quickly on the short thick Higgs-axons of the Higgs neurons of the Higgs Field.

Is this really possible?

Can it really be this easy to create new mass?

Can such a large new Higgs-boson mass (of 125 GeV) be created in such a simple manner?



Can a Higgs-neuron because to fire (create) a new 125 GeV Higgs boson (Higgs action potential)?

Is this our specific detailed *Mass Creation Hypothesis* for this universe that contains our own milky-way galaxy?

# Mass Creation Hypothesis

What is our *Mass Creation Hypothesis*?

*Our Mass Creation Hypothesis* is that *energy-mass* enters into this universe (that contains our milky-way galaxy) via the *dark-matter energy-masses* of the real dark neural pulses (dark-matter particles) of the Dark Field; and some of these dark-matter *energy-masses* excite the Higgs Field (by transferring some of their dark-matter energy into the energy-mass of new Higgs Bosons); and all of these Higgs Bosons decay (by transferring the Higgs-Boson energy completely into *light energy* of the Light Field) into the *elementary particles* of the Light Field; and then some of these newly-created elementary particles *combine together* to form *all* of the atoms and molecules of all of the visible-matter of this universe (that contains our earth and our own local solar system); and this is how *all* of the *atoms*, and all of the *molecules*, of this universe get *all* of their *mass* and *all* of their *energy*.

*All* of the *atoms* (of our universe) get *all* of their *energy-mass* from the dark-matter particles; via this detailed *physical* real neuroanatomical *mass-generation mechanism* of the Higgs Field.

With this *new* hypothetical mass-creation physical mechanism; is there *any strong reason* for us to continue to hold on to the *tired old* Big Bang Theory of yesterday?

Is *Understanding the Big Bang* something that is actually possible to do, in a way that is fully-satisfying, completely-accurate, and scientifically-correct?

# Understanding the Big Bang

Can we completely *Understand the Big Bang*?

Is this actually even *possible*?

Is the old traditional *Big Bang Theory* the kind of logical theory, that can actually be *fully understood* by also understanding its *cause*?

What *caused* the Big Bang?

Are *causes* still important for physical theories of our universe?

How much more scientific evidence will we (the honest astrophysicists of earth) need before we can finally begin to *seriously question* the scientific validity of the tired old big bang theory?

In the *new theoretical light* of this new *Mass Creation Hypothesis* (of this present 4 Brain Theory paper); there is apparently *no longer* any strong need for a “*Big Bang*” to create the all the *mass* (and all the *energy*) of this universe, where we all seem to be living presently here on earth.

With this powerful new real-electric-pulse *mass-creation hypothesis* (this very specific physical microanatomical Higgs-boson creation hypothesis); the *former need* for a big bang hypothesis seems to mostly *vanish*, or even entirely *disappear*.

It appears that there may be *no strong need* for any type of “big bang” to create this physical universe, if each portion (each elementary particle) of it can be easily created by a much more-simple (a la Occam’s Razor) neural-simulation *Higgs decay process*.

This new electric pulse mass creation process (new electric pulse mass creation hypothesis) is *much easier to understand* than the old big bang theory.

The old big bang theory *does not* properly explain what originally *initiated* the big bang, so it *lacks* a good solid logical hypothesis for its *origin*.

This new electric-pulse *mass creation hypothesis* has a simple (easy to understand) explanation for new electric pulse mass creation, new elementary particle creation, and *new atom creation*.

This new electric-pulse mass creation hypothesis also contains within it, an entirely-new method for the *stars* to

receive their abundant *stellar energy* in a way that *almost* seems *wireless*.

What is our *Stellar Energy Hypothesis*?

## **Stellar Energy Hypothesis**

What exactly is our *Stellar Energy Hypothesis*?

What is our hypothesis about *how* the stars *receive* their *energy*?

If there was *no big bang* to create a whole lot of primordial hydrogen; then how exactly do all of the stars, in the night sky, receive their *star-energy*?

How can all of the billions of stars, of our milky-way galaxy, *continue to receive* their fresh new energy supplies every second of every day, so *they will never run out of energy*?

What precisely is *our* Stellar Energy Hypothesis?

*Our Stellar Energy Hypothesis* is that the stars receive their energy from the *energy-carrying* dark-matter particles (and the *dark electric fields*, and the *dark magnetic fields*, that are *energetically-transported* along *with* these tiny-fast dark-matter particles) that *enter the stars* via real dark axons (and *coaxial bundles* of these real-myelinated dark axons) that can form (*grow themselves*) together into a type of “*dark wire*” or “*dark coaxial-cable*” of real-dark axonic nerve-fibers, that is very *difficult* to scientifically detect (because it is a type of “*dark matter*” relative to us simulated physicists here on earth); and therefore, the stars may seem to be energized by a type of *wireless* energy transmissions; when the more-likely hypothetical possibility is that our *stars* are *energetically-wired* with one or more types of *dark coaxial-cables* of real-dark *nerve fibers*.

Is this theoretically even *possible*?

Can an *individual star* be viewed as a kind of energetically-wired *electrical heater lamp*?

Stars create a lot of *heat*.

Star also create a lot of *light*.

How do the stars (in space) get enough energy, to create so much light, and so much heat?

How can energy be sent *through space*?

How can energy be sent to a *star in space*?

Some *marvelous thinkers* (here on earth) have wondered about some innovative ways that *energy* can be *transmitted through space*.

About 23 years before the brilliant Albert Einstein was even born; it seems there was an *equally-brilliant* scientist and inventor, who was also born right here on our little earth planet on July 10, 1856.

This brilliant *electrical inventor* is the marvelous futuristic-visionary man named Nikola Tesla.

There is a story that *Albert Einstein* was once asked:

“How does it feel to be *the smartest man alive*?”

The story says that Albert Einstein quickly responded:

“I don't know, you'll have to ask *Nikola Tesla*.”



# Nikola Tesla (1856 – 1943)

A wonderful man named *Nikola Tesla* (1856 – 1943) was born on July 10, 1856 in the *Austrian Empire*.

Nikola Tesla studied *electrical engineering* and *physics* in the 1870's, just a few short years after James Clerk Maxwell published his Maxwell's *Equations of Electromagnetism* in 1865.

In 1884, Tesla moved to the United States and began inventing many *helpful inventions* (for the benefit of *all* of humankind here on earth) in the area of *electrical engineering*.

One of his most useful inventions was his *polyphase alternating-current (AC) electrical generator*.

This brilliant *polyphase AC electrical generator* could generate huge amounts of *useful electricity* from mechanical motion.

These types of *electrical polyphase AC generators* are currently (today circa the year 2023) used all over our *whole planet*.

These *wonderful AC generators* can *wisely* be *used* to generate lots of useful electrical energy for the *benefit of all humankind* here on earth.

Who helped Nikola Tesla invent so many wonderful new *electrical technologies* for the benefit of *all humankind*?

Who was *smart enough* to intelligently help him with *some* of his experiments?

Why would such *super-smart scientists* want to help Nikola Tesla?

Why did the *super-smart Lao-Tzu scientists* choose to help Socrates and Confucius?

Do *super-smart scientists* seek to help those who sincerely desire to use *science* and *technology* to properly solve world poverty for *everyone* here on earth?

Can these electrical polyphase AC Generators, that Nikola Tesla invented, be used to generate enough *useful electrical power*, to help us (the *willing scientists* of earth) to solve world poverty for *everyone* here on earth; by helping to wisely make *electricity, water, and food* become *free* for *all* people?

Did Nikola Tesla sincerely hope to make *electricity free for all* the precious humans of this whole earth?

Why was he given so much *intelligent help*?

Is solving world poverty, so everyone can eat and sleep properly, the *best scientific focus* for any scientist?

These *electrical polyphase AC generators* (that Nikola Tesla invented) convert *one form* of energy (the mechanical energy of kinetic motion) to *another form* of energy (the electrical energy of moving electrons, *electric fields*, and *magnetic fields*); and then these polyphase AC generators (“*electrical energy sources*”) need to transport their electrical energy (using electrical wires as “*energy-transport guides*”) to a *different location* (or set of different locations) where the electrical energy is *used* in different kinds of “*electrical energy loads*” like lights, motors, and *heater lamps* (kind of like our *own sun*).

One of the key concepts in transporting electrical energy, from one location to another location, is the importance of the  $S = E \times B$  *Poynting Vector*.

# **$\mathbf{S} = \mathbf{E} \times \mathbf{B}$ Poynting Vector**

What is the  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  Poynting Vector?

Why were the early versions of this simple Poynting Vector ( $\mathbf{S}$ ) so useful to Nikola Tesla in *guiding his inventions* in electrical engineering?

Why is this simple cross product of the *Electric Field* ( $\mathbf{E}$ ) and the *Magnetic Field* ( $\mathbf{B}$ ) so useful in understanding how our *sun* receives its *energy* from the *dark matter* of *space*?

How can dark matter carry a *Dark Electric Field*  $\mathbf{E}$  in a way that is so difficult to detect with our modern scientific instruments?

How can dark matter also carry a *Dark Magnetic Field*  $\mathbf{B}$  that also very difficult to detect with our crude instruments of 2023?

What is the detailed microscopic nature of the *Dark Poynting Vector*  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  that is the simple formula for the *dark-matter energy-flux* entering our *sun*?

*Where* did this powerful Poynting Vector come from?

How did Poynting *discover* this useful vector?

*John Henry Poynting* (1852 – 1914) was an English physicist, who worked in the Cavendish Laboratory at Cambridge with *James Clerk Maxwell* in the late 1870s.

John Henry Poynting went on to publish his famous paper about his  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  *Poynting Vector* in 1884.

This super-useful  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  *Poynting Vector* describes the *direction* and *magnitude* of *all* electromagnetic energy flows in the *whole cosmos*; including our *real universe*, and also including our neurally-simulated *advanced universe* that contains our milky-way galaxy.

As a matter of scientific fact, this  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  *Poynting Vector* is a simple key to understanding how *real electromagnetic energy* flows into our *advanced universe* from our *real universe*.

This real electromagnetic energy flows (at energy flow rate per unit area  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$ ) from our *real universe* into the *black holes* at the centers of all our *advanced galaxies* of this advanced universe.

What is the *most efficient way* for this real electromagnetic energy to flow into these black holes (bundles of real nerve fibers)?

What is the real nature of this Real Electromagnetic Energy?

# Real Electromagnetic Energy

What is *Real Electromagnetic Energy*?

Can Electromagnetism be a *Real Thing*?

Does *Electromagnetic Energy* exist in our *Real Universe* where we have always lived as real human beings?

Do *Electric Fields* exist in our Real Universe?

Do *Magnetic Fields* exist in our Real Universe?

Is the  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  *Poynting Vector* important in our Real Universe?

Are Electromagnetic *Energy Flows* important in our Real Universe?

Real Electromagnetism is the kind of electromagnetism that really does exist in our Real Universe.

The *real photons*, and the *real electrons*, and the *real protons*, and the *real neutrons*, and the *real atoms*, and the *real molecules*, of our real universe (our *real world* where we real humans have always really lived), interact with the *real electromagnetism* of our *real universe*.

This useful  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  Poynting Vector shows us *how* real electromagnetic energy *flows* in our real universe; and how it *flows into our real neurons* of our real human brains.

This useful  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  Poynting Vector shows us how our real electromagnetic human-neuron energy *flows into* our *real-human axons*.

This useful  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  Poynting Vector shows us how our real electromagnetic energy flows through our real-human axons into *Dark Axon Black Holes*.

# Dark Axon Black Holes

What is a *Dark Axon Black Hole*?

Does the *center* of every galaxy contain a *Dark Axon Black Hole*?

Does the center of our very own *milky-way galaxy* contain a Dark Axon Black Hole?

*A Dark Axon Black Hole* is a concentrated set (of *real nerve fibers*) of real-human *axons* that are myelinated enough, and *properly insulated enough*, that they can propagate tiny fast *electrically-charged* real neural pulses (dark matter particles) into the *black holes*, and throughout the huge spatial *volume* of a whole advanced *galaxy*, in a way that is *difficult to detect directly* with our crude 2023 scientific instruments.

How can these *dark axons* be properly insulated enough, so they will be *very difficult* to detect with our crude 2023 instruments, yet at the same time *powerful enough* to effective *transport* huge quantities of real electromagnetic energy into these dark axon black holes?

What kind of *dark-axon nerve fibers* can a real-human brain grow?



Can a real-human brain grow dark-axon nerve fibers that are wrapped in real myelin and organized into *Dark Axon Coaxial Cables*?

## **Dark Axon Coaxial Cables**

What is a *Dark Axon Coaxial Cable*?

*A Dark Axon Coaxial Cable* is a “*cable*” of real dark-axon nerve fibers that are organized into a set of *coaxial nerve fibers*.

These coaxial nerve fibers are organized in a way that is *somewhat similar* to a simple copper-wire coaxial cable that we have here on earth.

*A large number* of myelinated real dark axons are bundled together tightly to form the *inner-conductor* of the coaxial nerve fiber.

The *same large number* of myelinated real dark axons are organized together to form a *cylindrical outer-conductor* of the coaxial nerve fiber.

The cylindrical outer-conductor axons are *properly-oriented* in such way, that these outer-conductor neural pulses propagate on their *outer axons* in the *opposite direction of travel*, as compared with the neural pulses that propagate on the *inner-conductor* axons.

In this way *positively-charged* real dark neural pulses can travel *into* the black holes (myelinated coaxial-cable nerve fibers) and then *out into* the huge *volumetric expanse* of a whole galaxy; and then *back into* the very same black holes, and also *back into the very same* myelinated coaxial-cable *nerve fibers*.

The *insulating real myelin cells*, between the inner-conductor and the outer cylindrical conductor, can act as a type of *real dielectric myelin material* that will properly support *radially-oriented* propagating *electric field*, the *circularly-oriented* propagating *magnetic field*, and the *forward-oriented* (in the forward-direction along the long-length of the real dark axons, and forward along the long-length of the dark-axon coaxial-cable) propagating *energy-transporting  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  Poynting-vector field*.

In this way, a proper set of our long, thin, real, dark, axons can be organized into a set of *dark-axon coaxial-cables* that carry some of the real electromagnetic energy

from our real brains in our real universe, to all of the *stars* in our own milky-way galaxy.

*Our Black Hole Hypothesis* is that the black hole at the center of a galaxy, is composed of *real long thin dark-axon coaxial-cables*, that carry real electromagnetic energy between the *galaxy* and our real brains in our *real universe*.

There exist *no galaxies, no stars, and no planets* in our real universe.

However, *all of the stars, of all of the galaxies, are 100% energetically-powered with the real electromagnetic energy of our real universe.*

Can this scientific hypothesis be *correct*?

Does a *Star* basically function as a kind of an effective *Stellar Electric Heater Lamp*?

# Stellar Electric Heater Lamps

What is a *Stellar Electric Heater Lamp*?

Is a *Star* really just a big powerful *Stellar Electric Heater Lamp* in our nighttime sky?

How can enough real electromagnetic energy be *energetically transported* (from our real universe) to a *Star*, every second of every day for billions of years, to keep this *Stellar-Electric Heater-Lamp* functioning properly (for the precious human inhabitants of its planets in its solar system) for billions of years, *without ever malfunctioning* even once?

*Our Stellar-Electric Heater-Lamp Hypothesis* is that our sun is a big, bright, warm, electric *heater-lamp in space*; that is powered by *dark-matter electromagnetic fields* that are *difficult* to directly observe, because they are *shielded* and *insolated* by *real myelin cells*.

*Our Stellar-Electric Heater-Lamp Visible-Mass Creation Hypothesis* is that our sun is a big, bright, warm, electric *heater-lamp in space*; that is powered by *dark-matter electromagnetic fields* that are *difficult* to directly observe, because they are *shielded* and *insolated* by *real myelin cells*; and our sun *does more* than just *shine-bright* and

*glow-warm* in the sky, because our sun actually *creates* all of the *visible-matter particles* (and all of their *visible-matter mass*) from the *dark-matter particles* (and the real dark energetic electromagnetic field that always accompanies these dark-matter particles, and that is always *energetically transported* by the  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  Poynting Vector along with these dark-matter particles) that continuously (every second of every day) *enter into the sun* from the solar system space around the sun.

How does *our own sun* create (from the dark-matter particles, and from their *accompanying* dark-matter *shielded electromagnetic fields*) all of the visible-matter particles (like photons, electrons, protons, and neutrons) that it continuously shines upon *our own earth*?

In our new Stellar-Electric Heater-Lamp *Visible-Mass Creation Hypothesis*, all of the new electric pulse masses (that form all of the *Visible-Mass* of all of the *visible elementary particles*) are simply created from the dark matter (real dark neurons, real dark pulses, and the *real dark electromagnetic fields* that they carry); by causing (*electromagnetically-stimulating the Higgs-dendrites*) the real Higgs neurons (*Higgs axon hillocks*) to simply fire up some new *large energetic* electric pulse masses (new *large energetic Higgs bosons*); which then eventually become (via decay) the inner real-pulse-components of all

the advanced elementary particles of this whole advanced physical universe.

Understanding this new *hypothetical physical mechanism* of using dark matter (real dark neurons, and their real *shielded* dark electromagnetic *fields*) to create *new visible elementary particles* (inside our own *energetic sun*, and *inside every star* of our milky-way galaxy), to create *all the atoms* of this advanced universe, is as easy to understand as it is to understand that neurons can *create* (fire) *new action potentials* (electric pulse masses) when their *dendrites* are *stimulated just right*.

It seems that this *new mass creation hypothesis* is actually *more-simple*, more logical, more likely to be correct, and *more-easy to understand*, than the *old big bang theory*.

What is *more-simple* to understand than a single neuron simply firing to produce a new action potential pulse?

Can some of our real human neurons (some of our real big Higgs neurons), possibly *fire enough times* (inside our *own sun*), to create a sufficient amount of *new neural pulse masses*, to make all the necessary elementary particles, to create *enough visible photons*, enough *infrared photons*, enough electrons, *enough protons*, and enough neutrons; to *shine* (energetically-shower outward) all of these newly-created *visible particles* (shining *bright*

and *warm*) upon our *own earth* for billions of years, without ever once stopping, even for a brief moment in time?

Is this what actually happens *inside every star* of this advanced neurally-simulated universe?

Where actually is the big mystery in a *neuron firing*?

Does the firing of neurons *do anything more* than just energize suns and stars?

Can firing neurons also create human *consciousness*?

How do these firing neurons *create* our own advanced *universe*, and our own *earth*, and our own *brains*?

In this creative new light, of the simplicity of this 4 Brain visible *mass-creation hypothesis* (creating visible particles, from dark matter, inside stars), what logical argument can be rationally made to the contrary?

So now we can ask the logical question, exactly how does *Electric Pulse Mass Creation* happen?

# Electric Pulse Mass Creation

What is *Electric Pulse Mass Creation*?

There may be a *special combination* of real-dark electric-pulse masses (dark-matter particles, and their associated *energetic electric fields*, and their associated *energetic magnetic fields*), that can sometimes combine together inside a star (or inside a particle accelerator), to act in *unison* at a set of real Higgs-neuron's *dendrites*, causing this newly-stimulated *Higgs-neuron* to start to *fire very rapidly*; to begin to generate (create from dark matter) huge numbers of *new large 125 GeV* electric pulse masses (newly-created *Higgs bosons*).

Each of these newly-created, large, 125 GeV *Higgs-boson* electric pulse *masses*, may then begin to decay, by stimulating the *smaller dendrites* of some smaller real neurons (of the real light neuron field).

These smaller real neurons will then begin to also *fire rapidly* to generate a good number of *smaller* (less energetic) electric pulses (the neural-pulse *components* of *photons*, electrons, *protons*, and neutrons).

Some of these newly-created smaller real-light electric pulses may be *positively charged*.



Others of these newly-created smaller real-light electric pulses may be *negatively charged*.

The small positive real-light pulses, can then combine with the small negative real-light pulses, in a number of different *mutually-orbiting* light-pulse-structures, to form a number of different visible (easily detectable by us mortal earth scientists of 2023) advanced elementary particles, including photons, electrons, *up quarks*, and *down quarks*.

In this way, *one single* large Higgs-boson *pulse*, may stimulate a number of *real-light dendrites* (real-light dark-matter dendrites) to stimulate the production of *many small* (positive and negative) real-light neural pulses, that can in turn, *orbitally-combine themselves* together (because they have *opposite attractive* electrical charges) to form the advanced elementary particles; that are the *down quarks*, up quarks, *electrons*, and photons that together compose all the *advanced atoms* of this earth.

In this way, a kind of real dark matter (real neurons with real dendrites) can be stimulated (inside stars) to generate an abundance of newly-created stable elementary particles, that can then combine together to form all of the advanced atoms of our milky-way galaxy.

Such a *stimulated-creation* of a huge quantity, of newly-produced real *large* electric pulse masses (Higgs bosons), could provide enough elementary-particle masses to provide for the formation of *new planets*, and *new suns*, from the energetic real neurons (dark matter) that generate and maintain the simulation of this advanced universe.

We have here shown (in this present 4 Brain Theory article) that the *Higgs Boson Particle* appears to be a very promising *hypothetical-candidate-particle* for such a *large* electric *pulse mass* (125 GeV is a large mass) that can act as the *net-neutral* (because the positive sub-pulse regions, are *equal in net size*, to the negative sub-pulse regions, of the one single large Higgs-pulse) rapidly-decaying particle (Higgs-boson excitation of the Higgs Field) that “*gives mass*” to all the other elementary particles.

The Higgs Boson may be the *one-single Large-Mass real-pulse* that seems to be *really needed* to “*give mass*” to all the other elementary particles; by neurologically “*giving pulse-mass*” to all the light-pulse-masses that combine themselves into all the elementary particles.

Could the detailed physical mechanics of the *Higgs Field*, and its *Higgs Boson Excitation*, really be this scientifically-simple?

The Higgs Field can be viewed as a *mass-creation gateway bridge* to create *new* large real Higgs-boson *pulse masses*, that quickly decay (convert all their mass-energy) into all the *useful* elementary particles.

This is actually *our simple scientific hypothesis* for this super-interesting Higgs Boson gateway (bridge) particle.

Now, let's look more closely at *Our Higgs Boson Hypothesis*.

# Our Higgs Boson Hypothesis

What is *Our Higgs Boson Hypothesis*?

*Our Higgs Boson Hypothesis* is that the Higgs Boson Particle is just *one* single big *real* net-neutral spinless *neural pulse*.

Therefore, our Higgs Boson Hypothesis is that the entire Higgs Boson pulse-mass energy of 125 GeV, is solely concentrated inside *just one single* real neuro-electric *pulse*.

This single Higgs Boson pulse is a *very large pulse*, that has a *very particular shape*.

The Higgs Boson *pulse shape*, has to be such, that the total electric pulse *charge densities* (of all of the *sub-regions* inside the single pulse), all sum to *zero*, when *integrated* over the *entire length* of the *whole pulse*.

Some regions, inside the Higgs-Boson pulse, have a *positive* electric charge density.

Other regions, inside the Higgs Boson pulse, have a *negative* electric charge density.

These *zero-sum pulses*, are shaped in such a way, that the positive regions of the pulse, *exactly balance* out the negative regions of the pulse, so the whole complete Higgs Boson pulse (the entire pulse) has a *total net zero electric charge*.

In this way, the entire Higgs Boson pulse has *zero* net electric charge, and *zero* spin, even though it has a *huge* mass-energy due to its super-large size of 125 GeV.

This is a *very simple internal structure* for the Higgs Boson.

Our super-simple Higgs Boson Hypothesis, is that the Higgs Boson may turn out to be the *most-simple* elementary particle ever discovered (circa 2012 at the LHC at CERN) by our bright mortal human scientists here on earth.

What conceivable elementary particle could possibly be *more-simple* than *just one* single pulse?

If our bright physicists can confirm that the massive Higgs Boson consists of *just one* single large (very massive) real neural pulse (*one single huge action potential propagating briefly on one single huge Higgs-axon*); then they may also be able to *begin learning how* to use the many interesting properties of this super-

energetic Higgs Boson, to create a *new planet*, or a *new star*, or a whole *new galaxy*, in space.

The Higgs Boson has a very large mass energy (125 GeV), corresponding to a *very large real neural pulse* (called the *Higgs-pulse*).

Is it really possible, that the entire Higgs Boson (Higgs-pulse) is just one *single large pulse*?

Could all the necessary real neuroelectric pulse *mass*, be *all* concentrated into *just one large pulse*?

Now, let's look more closely at this hypothetical *Higgs Boson Pulse Mass*.

# Higgs Boson Pulse Mass

What is the actual *detailed* nature of the Higgs Boson Pulse Mass?

The Higgs Boson Pulse Mass has zero net electric charge, *zero angular momentum*, and a huge energy-mass of about 125 GeV.

This is enough energy to create *many different kinds* of elementary particles.

This is also enough energy to create many *entire atoms* from a single Higgs Boson particle.

Since the Higgs Boson *lacks* angular momentum, and it also *lacks* net charge, it appears to be an *ideal* matter-creation-gateway candidate (to provide a successful way for *dark matter* to easily produce *visible matter*) for planet creation, star creation, and galaxy creation.

It is possible that the (previously mysterious) Higgs Boson may turn out to be *nothing more* (nothing more complex), than just a *very-simple* very-large real neural pulse mass?

Is the Higgs Boson really just a *big pulse*?

Is a Dark-Matter Particle really just a *tiny pulse*?

Is an Elementary Particle really just a *few mutually-orbiting pulses*?

If our present Higgs Boson Hypothesis turns out to be correct, or even *nearly* right, then we can simply use it, to help us formulate some *useful new questions*, to help us properly solve some of the remaining mysteries of our universe, wherein we seem to be located, here on earth.

For example, can our hypothetical Higgs Boson Pulse act as a kind of *mass-bridge* to help our sun *convert* dark-matter mass into visible-matter mass?

Can this *Higgs Mass Bridge* (the Universal Higgs Field, and its brief temporary Higgs-Boson-Excitation Mass Bridge) help the stars *convert* (energetically-bridge) dark-matter mass into elementary-particle mass?

What is the function and purpose of this hypothetical *Higgs Mass Bridge*?

Can the Higgs Field provide a brief, temporary, *Higgs Mass Bridge* to help a star convert dark matter into visible matter?



# Higgs Mass Bridge

What is a *Higgs Mass Bridge*?

The *Higgs Mass Bridge* is kind of like a *Higgs Mass Catalyst* that can help a star convert the *mass* of dark matter into the *mass* of elementary particles.

Every short thick *Higgs-Axon* can act as a *Higgs Mass Bridge*, because of the mass-conversion (*mass-giving*) role that it can play.

The *whole set* of Higgs-Neurons (the Higgs Field) can also *be viewed* as the whole Higgs Mass Bridge.

This Higgs Field, which *exists everywhere* inside a galaxy, and everywhere in-between galaxies, is full of Higgs-Dendrites, Higgs-Neurons, and Higgs-Axons.

This Higgs Field *exists everywhere* inside an advanced universe; like this one that contains our own milky-way galaxy; because this Higgs Mass Bridge (Higgs Field) is actually needed in an advanced universe to make visible-matter mass (from dark-matter mass) inside the stars.

This Higgs Field does *not need to exist anywhere* in our real universe; *except* for inside the specific-simulation

neural-regions, of our real-human brains, where this advanced universe is actively being simulated with the *mass-converting-help* of our Higgs Field (our Higgs Mass Bridge *inside* our real human brains).

This Higgs Mass Bridge is not really a *Higgs Mass Catalyst* in the most-common traditional sense of what a “catalyst” usually traditionally means; because each *individual temporary* Higgs Mass Bridge (Higgs Boson) is only *temporarily active* for a very brief time (*the brief epoch of time* during which a Higgs Boson exists before it decays).

A brief temporary excitation (Higgs Boson) of this Higgs Mass Bridge *pops* (fires up) *into existence*, and then *pops* (decays) *out of existence*; just long enough for the Higgs Boson to transfer its *huge mass* into a whole *set* of *smaller* elementary-particle *masses*.

This *brief* Higgs Mass Bridge *excitation* (Higgs Boson) *gets fired into existence* at the moment that enough dark-matter energy (from an *energetic electromagnetic Poynting Vector* that comes with the *dark-matter electric current flow*) is transferred into a Higgs-Neuron to cause the Higgs-Axon-Hillock *to fire up a new* Higgs Boson.

This *new Higgs Mass Bridge real neural pulse hypothesis* can help us theoretical physicists to begin to ask some

better questions about our *own sun* and its *intimate relationship* with the *Higgs Field*.

For example, how might this hypothetical *Higgs Mass Bridge*, help our own sun to continuously drawn in dark-matter to create its own *Higgs Boson Pulse Solar Fuel*?

## **Higgs Boson Pulse Solar Fuel**

What is *Higgs Boson Pulse Solar Fuel*?

How can the *Higgs Mass Bridge* be used to help *our sun* find its *own energy fuel* in the real dark *electromagnetic energy* (Poynting Vector) that always accompanies all the *dark-matter electric currents* that *electrically-power* our own sun (our own *big electric heater-lamp sun* in the sky, that keeps us all alive here on earth, with its continuous *bright warm light*)?

Our Hypothesis is that the Higgs Boson Pulse Solar Fuel may be able to *continuously renew itself*, by allowing our own sun to simply create (via continuous real neuron firing) *as many* new Higgs Bosons, at it *consumes*, every minute, of every day.

In this way, it seems theoretically possible, that our own sun may be able to continuously generate enough nuclear fusion energy, by constantly creating enough new Higgs Bosons (from real Higgs-neuron firings) to provide *all the necessary solar fuel* to keep our sun burning *indefinitely*.

In this way, our sun may simply draw in enough dark-matter electromagnetic energy from all the many dark matter electric currents that are continuously flowing into our sun.

In this way, the spinless, chargeless, massive Higgs Boson (of the Higgs Field) may act as a Higgs Mass Bridge allowing all the stars of our universe, to continue to burn indefinitely, as *they pass dark-matter electromagnetic energy over the Higgs-Mass Bridge*, converting this dark-matter electromagnetic energy into *visible-matter mass*.

*Inside* all the stars, the *dark-matter electric currents* (caused by the rapid movements, of the dark-matter particles entering these stars) *electromagnetically-stimulate* the real *Higgs-dendrites* to cause the real *Higgs-Axon-Hillocks* (inside the stars) to *fire up* (create new real large action potentials) enough *new* Higgs Bosons (large spinless neural real pulses) to *continuously replenish* all the *protons* and *neutrons* (by letting the new Higgs

Bosons, and their immediate decay products, to continue to decay themselves eventually into *all* the elementary particles that form these *two stable baryons*) that are being constantly fused (inside the stars, via nuclear fusion) into *deuterons*, tritons, helium 3 nuclei, *alpha particles*, and also into many *heavier nuclei*.

This simple physical method of Higgs-Boson electric-pulse *mass creation*, may take place inside our very own sun in our local solar system.

Our sun may *never run out* of nuclear fuel, because it may *draw in enough dark-matter energy* to constantly fire up (newly-create) all the new large action potentials (Higgs Boson Pulse Masses) that it needs to *continuously restock itself* with *nuclear fuel*.

These newly-created, *unstable*, neutral-electric, pulse masses (Higgs Bosons) can decay (by letting their immediate decay products *continue to decay*) into all the types of elementary particles that *are actually needed* to generate photons, electrons, protons, and neutrons.

These continual *new batches* of *new protons* and *new neutrons*, can then *fuse together* (inside stars) to form *enough new deuterons* to continue to *fuel the nuclear fire* of our *hot sun forever*.

This useful new *Star-Fuel Hypothesis*, of continual solar real neural electric pulse mass creation (Higgs Boson production via real neural firing), provides a simple logical way, for *our sun to never run out of its baryon fuel*.

In this simple new *Star-Fuel Hypothesis*, our sun simply draws in enough dark-matter *electric current* (like a single-sun *Solar Electric Load* on the dark-matter *galactic electric current* of our whole milky-way galaxy) to fire up the Higgs-Axon-Hillocks (that are already *living inside* our sun) causing them to fire up (generate) new energetic action potentials (new Higgs Boson Pulses) that decay into the particles that decay into (and thereby form) *new protons*, new neutrons, *new electrons*, and new photons.

These *newly-created* stable *baryons* (the new protons and the new neutrons) are then *fused together* (inside the sun via solar *nuclear fusion*) to form new deuterons, new tritons, and new helium 3 nuclei.

These *newly-created deuterons* (and newly-created tritons, and helium 3 nuclei) are all newly-formed from the huge electric pulse masses (Higgs Bosons) that our sun (and *its inflowing dark matter*) causes the real Higgs-neurons to generate.

In this way, the energetic, inflowing, myelin-shielded, electromagnetic dark matter (that continuously flows into our sun) stimulates the real Higgs-Axon-Hillocks (of the real Higgs-neurons inside the sun) to help form more and *more protons*, and more neutrons, and *more deuterons*, and more tritons every second of every day.

In this way, our sun *will never run out* of its energy (proton, neutron, and deuteron fuel) because it's nuclear processes (our sun's nuclear reactions) are actually fueled by the inflowing dark matter (constantly flowing into our sun, with its accompanying *dark-matter electric current*, and with its accompanying *dark-matter-transporting electromagnetic field*) to simply make more protons, neutrons, deuterons, tritons, and helium 3 nuclei as needed, from all the inward-flowing *electric currents* of all the tiny fast *electrical dark-matter particles*.

In this way, it almost appears that our own sun is acting like a *Solar Electrical Load*.

# Solar Electrical Load

What is a *Solar Electrical Load*?

How can a *sun* (a star) energetically behave just like an *electrical load*?

What are all the many different kinds of *Electrical Loads* that are carefully studied by our *bright electrical engineers*?

What would happen if a set of *bright electrical engineers*, and a set of *bright astrophysicists* were to get together (prior to 2024) to carefully study this *new dark-matter solar electrical load theory* (that we are now presenting today in 2023 in this 4 Brain Theory paper)?

How would this bright new team of *electrical engineering astrophysicists* define the *Solar Electrical Load* of our own *sun*?

Does our own sun *actively consume electric power* (dark-matter electromagnetic power) that continuously *flows into our sun* from the energetic black hole at the very center of our energetic milky-way galaxy?



How can an individual energetic star act like a kind of *Solar Electrical Load* on the *power grid* of its own energetic galaxy?

What is the core nature of such a huge energetic *galactic power grid*?

What is our *Solar Electrical Load Hypothesis*?

*Our Solar Electrical Load Hypothesis* is that a solar electrical load is the *total electric load* (and magnetic load, and electromagnetic load) that a *sun* (a star) places on the *Galactic Electrical Current* that is caused by the *electrical flow* of dark-matter particles (tiny fast real dark neural pulses) *from* the central galactic black hole, *into the sun*.

The *big energetic black hole* (in the center of a galaxy) acts as an *electrical power source* for all of the *stars* (the *electrical loads*) inside the galaxy.

*Our Solar Electrical Load Hypothesis* is also that *some* of the tiny fast *dark-matter* particles (flowing, from the galactic black hole, into the sun) are *consumed* (transformed into another type of energy) *inside the sun* (within the inner-most regions of the sun, as they stimulate real Higgs-neurons to produce *Higgs Bosons* that behave (function) as temporary *energy-mass bridges*).

*Our Solar Electrical Load Hypothesis* is also that these *Higgs Bosons* (super-large, spinless, net-neutral, real neural pulses) decay into many short-lived particles, that then decay into *all* of the protons, neutrons, and electrons *needed to continuously fuel solar nuclear fusion* in our *sun*.

*Our Solar Electrical Load Hypothesis* is also that *some* of the tiny fast dark-matter particles (tiny fast real dark neural pulses) continue to flow right through the sun, and eventually back into the black hole (a large bundle of super-large real nerve fibers) in the center of our own milky-way galaxy.

*Our Solar Electrical Load Hypothesis* is also that many dark-matter particles (tiny fast real neural pulses) *continually flow* (propagate on real dark axons) out of the black hole in the center of the milky way; and these dark-matter particles continue *to flow outwards* (from the black hole) to all of the *outer arms* of our galaxy; with some of these *electric-current dark-matter particles* even flowing into our very own solar system, and *flowing into our sun*; and giving their Poynting vector  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  *electromagnetic energy to our sun*; as our *sun consumes this dark-matter-transported electromagnetic energy* as an *solar electrical load*; and then these dark-matter particles flow *back into* the black hole (at the center of our milky-

way galaxy); and in this way the *axonic current-flow*, of these electrically-charged dark-matter particles, complete a *full electric-current flow-circuit*, between our *sun*, and the central *black hole* it orbits.

*Our Solar Electrical Load Hypothesis* is also that this *galactic electric-current flow*, of electrically-charged dark-matter particles, that travels in a full *complete galactic electric-current circuit* (from our black hole, to our sun, and then back to our black hole), is what makes it *theoretically-possible* (and also *physically-possible* in our local advanced universe) for our *sun* to *act* as a *solar electrical load* on our *black-hole electric-power source*.

Now that we can see how our *black-hole electric-power source*, is able to *transport electromagnetic power* to our *sun* (via the dark-matter-current electromagnetic Poynting vector  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$ ); we are now in a better position to take a good look at our sun's *Solar Luminosity*.

# Solar Luminosity

What is *Solar Luminosity*?

Solar Luminosity is the *luminosity* of our *sun*.

Some astrophysicists (here on earth) have *estimated* that the *luminosity of our own sun* may be about  $3.86 \times 10^{26}$  *watts* of total solar *power output*.

One watt is *one joule per second*.

A joule is a measure of *energy*.

A *joule* can also be a measure of “*electromagnetic energy*”.

Therefore, *our sun radiates* (outward into space) a total luminosity of  $3.86 \times 10^{26}$  *joules* of energy *every second*.

This is about *386 trillion trillion joules per second*.

This is a *whole lot* of joules per second.

For comparison purposes, we can consider that a 100-watt light bulb (here on earth) can have a total luminosity of only about *100 watts*, or merely *100 joules per second*.

Therefore, our *sun* is about 3.86 trillion trillion times *more luminous* than a 100-watt *light bulb*.

If we were all living on the planet *Mercury* (instead of here on our planet Earth), we would then be living much *closer to our sun*; and we would then more easily notice that 386 trillion trillion watts shines much *brighter* (and feels much *hotter*) than just 100 watts.

This huge solar luminosity (386 trillion trillion joules per second) is the *total power* (in watts = joules per second) that *our sun radiates* outward into space.

Just a *very small portion* of this solar luminosity (power wattage) arrives at *our own earth* to give us *light* and *warmth* to help us to *stay alive on earth*.

Because our sun is radiating 386 trillion trillion joules of energy every second; some may be *tempted* to believe that our sun *may be getting lighter* (less massive) every second.

However, this old theory is probably *not accurate*; because the 386 trillion trillion joules that our sun is

losing (radiating) every second, is *likely being replaced* by an *equivalent amount* of dark-matter *electromagnetic energy* every second.

Therefore, our sun is probably receiving about 386 trillion trillion joules of *dark-matter electromagnetic energy* every second of every day.

Our sun will probably continue to receive  $3.86 \times 10^{26}$  joules of *dark-matter myelin-shielded* electromagnetic energy *every second* of every day for the next *several billion years*, or even *longer*.

Unless something really catastrophic (and unexpected) happens to our sun, it will *probably continue to draw in*  $3.86 \times 10^{26}$  joules of *dark-matter electromagnetic energy* every second of every day, for *many additional billions of years*, as it continues to *energy-convert* (with the help of the *energy-mass-converting* Higgs Field) this *dark-matter electromagnetic energy* into the kind of *radiant visible-matter energy* (photons, electrons, protons, and neutrons) that keeps us all *warm and happy* here on earth.

This particular value of *solar-use wattage* of  $3.86 \times 10^{26}$  watts is the *total solar electrical load* that our own *electromagnetic-sun* puts on the *galactic source* (of dark-

matter energy) that flows through the *black hole* at the center of our milky-way galaxy.

The energetic black hole, at the center of our milky-way galaxy, is a powerful *dark-matter electromagnetic energy source*, that must provide enough dark-matter electromagnetic energy to *electromagnetically-power each and every star* in our whole milky-way galaxy.

Each of these *milky-way stars* is an individual distinct *unique stellar electric load* on our whole entire super-powerful *milky-way dark-matter-current electromagnetic power grid*.

All of these *milky-way stars* together *produce* the *Galactic Luminosity* of our own milky-way galaxy.

# Galactic Luminosity

What is *Galactic Luminosity*?

How can a whole galaxy have a *Galactic Luminosity* of its very own?

Are some galaxies *more luminous* than others?

Is our very own local *milky-way galaxy* more luminous than some other galaxies?

*The Galactic Luminosity* of our own milky-way galaxy is basically the *sum total* of *all* of the luminosities of *all* of the *stars* in our milky-way galaxy.

This Milky-Way Galactic Luminosity has been estimated (by some of our talented earth-based astrophysicists) to be about 15 billion times larger than the luminosity of our sun.

Therefore, our Milky-Way Galaxy Luminosity is estimated to be about 15 billion x 386 trillion trillion = 5.79 trillion trillion trillion watts.

This value of about  $5.8 \times 10^{36}$  watts is a large luminosity for our *whole milky-way galaxy*.



If our milky-way galaxy is outputting  $5.8 \times 10^{36}$  joules of energy (light and heat), every second of every day, then where is all of this *milky-way energy* coming from?

This is a lot of joules per second of energy to be consumed (converted) by just one galaxy.

What is happening at the *very center* of our galaxy?

What is happening inside *Sagittarius A\** at the very center of our milky-way galaxy?

What is our *Sagittarius A\* Hypothesis*?

# Sagittarius A\* Hypothesis

What kind of *Sagittarius A\* Hypothesis* can we create to help us to better understand our Electric-Power Galaxy?

What is Sagittarius A\*?

*Sagittarius A\** is the name that has been given to the *central supermassive black hole* that exists at the exact center of our own milky-way galaxy.

It appears that Sagittarius A\* is continuously-providing, to our milky-way galaxy, *all* of its *dark-matter electromagnetic energy*, as it naturally flows along with all the dark-matter particles (all the real dark neural pulses) that propagate on the real dark axons that extend through the Sagittarius A\* black hole (bundle of real *dark-axon Sagittarius A\* nerve fibers*).

How can our network of real human brains possibly *generate enough* dark-matter electromagnetic energy, to *continuously supply* our whole milky-way galaxy with the  $5.8 \times 10^{36}$  joules it consumes (converts to light and heat) every second of every day?

Is this quantity of joules (5.8 trillion trillion trillion), a *relatively small number of joules* for our super-powerful real-brain network?

*Our Sagittarius A\* Hypothesis* is that our real-brain network continuously transfers about  $5.8 \times 10^{36}$  joules (of electromagnetic energy) per second into *Sagittarius A\** via a large set of bundled real-dark (black-hole) axons (called *Sagittarius A\**) that extend from their real dark *somas* (neural cell bodies) in our real brains, *outward* into our whole (every region of our) milky-way galaxy; and *some* of these real-dark *long-thin axons* may even extend a *couple million light years beyond Sagittarius A\**, before they loop around (in a *huge looping galactic spiral pattern*) and *return back* into *Sagittarius A\**.

*Our Sagittarius A\* Hypothesis* is also that the event horizon of *Sagittarius A\** may have a theoretical *Schwarzschild radius* (according to Einstein's gravity equations of 1915) that is *many* orders of magnitude *larger* than the small "*bundle-radius*" of the real-dark axon *nerve-fiber bundle*.

The supermassive central black hole *Sagittarius A\** *seems* to have a super-massive mass of about *4.15 million solar masses*, according to some recent estimates.

Is this possible?

Can *Sagittarius A\** really have a mass that is about 4.15 million times *larger* than the mass of our own sun?

Is this really the *correct mass* (about four million times more massive than our sun) for this large black hole?

Why would a *bundle of axons* have such a huge mass?

What is the actual source (cause) of “*mass*” in our galaxy?

Does Sagittarius A\* effectively perform as the source of all the electromagnetic power for our *Galactic Electric Power Grid*?

# Galactic Electric Power Grid

What is a *Galactic Electric Power Grid*?

How can there be an Electrical Power Grid for a *whole galaxy*?

Why would each and every galaxy actually need to have its very own *Galactic Electrical Power Grid*?

What is the detailed nature of the Galactic Electrical Power Grid that supplies electromagnetic *power to every energetic star* (to every electrical load) in our whole *milky-way galaxy*?

Exactly how many electromagnetic-energy carrying (and information carrying) *dark-axon coaxial cables* pass through Sagittarius A\* on their long-way outward to the most-outer-reaches of our milky-way galaxy?

Does Sagittarius A\* actually contain more than a *trillion trillion trillion* ( $1.0 \times 10^{48}$ ) such high-speed, *high-information*, high-energy *dark-axon coaxial cables*?

What is the most accurate way to calculate (*theoretically estimate*) this useful number?

If a super-large number of dark-axon coaxial cables pass through Sagittarius A\*, then where do all of these cables go, after they leave the region of Sagittarius A\*, and begin to extend themselves outward into our milky-way galaxy?

What is the *purpose*, structure, and *function* of all of these dark-axon coaxial cables?

What is the shape and structure of our milky-way's *Galactic Circuit Diagram*?

# Galactic Circuit Diagrams

What is a *Galactic Circuit Diagram*?

Why does each individual galaxy have its very own *Galactic Circuit Diagram*?

Why do these Galactic Circuit Diagrams extend out to *three-dimensional space*, even though the stars of many of the barred spiral galaxies (like our own milky-way galaxy) stay mostly confined to a single *two-dimensional galactic plane*?

What kind of real-axonic galactic-circuit diagrams will logically provide all *the necessary corrections* to Albert Einstein's gravitational field equations of 1915?

If a really-huge number of dark-axon *coaxial cables* pass through the *very center* of Sagittarius A\* (the supermassive black hole at the center of our own milky-way galaxy), then where do all of these *super-long dark-axon coaxial cables* actually lead to?

The really obvious answer is that all (or most) of these super-long dark-axon coaxial cables must somehow extend themselves in a *spiral galactic circuit diagram* (of our barred spiral milky-way galaxy) such that they are

able to deliver most (or nearly all) of their electromagnetic energy directly into the *energy-consuming centers* of *all* of the *stars* of the *whole galaxy*.

The other really obvious answer is that all (or most) of these super-long dark-axon cables must also deliver all (or most) of their *dark axons* to *pass nearby* to *every piece* of *visible-matter* (of the whole galaxy) so the dark-neural *pulses* (that travel on these super-long ubiquitous dark axons) are able to *create gravity* (all of the galactic-gravity inside the whole galaxy) by *transferring some* of their *linear momenta* (via *pulse-pulse scattering*) to *all* of the *visible-matter particles* of the whole galaxy.

These are *two* of the *major roles* of the super-long super-useful *dark axons* of *Sagittarius A\**.

What are all of the major roles of the *Sagittarius A\* Dark Axons*?



# Sagittarius A\* Dark Axons

What are the major roles that are played by all of the super-long super-fast *Sagittarius A\* Dark Axons*?

What do these Sagittarius A\* Dark Axons actually do?

Why do *so many* of these *dark axons* pass through the super-massive *bundle of nerve fibers* (black hole) called Sagittarius A\*?

How many *distinct roles* do these super-useful super-helpful *Dark Axons* play in our own milky-way galaxy?

What is our *Dark Axon Role Hypothesis*?

*Our Dark Axon Role Hypothesis* is that the dark axons in our universe *play 4 distinct roles*.

*Our Dark Axon Role Hypothesis* for our very own *milky-way galaxy*, is that all the *dark axons*, that extend through the exact center of *Sagittarius A\**, have *4 distinct roles (four distinct functions)* to perform as follows:

- (1) The Dark Axons flow *Energy* to all the Stars.
- (2) The Dark Axons make *Gravity* for all visible-matter.
- (3) The Dark Axons facilitate *Consciousness Projections*.

(4) The Dark Axons gather all *Information* of a Galaxy.

The Sagittarius A\* Dark Axons *flow energy* to all the stars in our galaxy, they *make gravity* for all the visible-matter in our galaxy, they *facilitate consciousness projections* into human avatars inside our galaxy, and they *gather up all the information* available in our whole physical galaxy.

These 4 distinct functions (*4 separate dark-axon roles*) are all very important to the useful functioning of our own *milky-way galaxy daydream game*.

How exactly are the Sagittarius A\* Dark Axons able to perform all 4 of these super-useful *daydream game-functions*, for all of us humans *seemingly-here* inside our very own milky-way galaxy *virtual multi-player game*?

For how many billions of years have we all been using our Sagittarius A\* Dark Axons to play *Our Sagittarius A\* Game*?

# Our Sagittarius A\* Game

What is *Our Sagittarius A\* Game*?

*Our Sagittarius A\* Game* is the massive virtual *multi-player game* we have all (all of us here inside our milky-way galaxy-game space) been playing for *billions of years*.

As the real human beings that we have always been, we have always lived in our real world, which is our real universe *way up above* all of Plato's caves.

Our real universe contains our real *infinitely-sized* living environment, our real human bodies, and our *real human brains*.

Our real human brains can *wirelessly network themselves together* whenever we want to.

These *super-powerful wireless real-brain networks* contain an *infinite number* of "black holes" (bundles of real axons) *that we can choose from*, when we desire to enter one of these black holes, so we can join "*the game*" that is happening on the "*other side*" of the "*black hole*".

As real humans, with real brains, we can simply choose whatever black hole we want.

Each black hole is properly advertised with the specific kind of “advanced game” that it contains.

One of these interesting black holes is labeled something like “*Exciting New Sagittarius A\* Black Hole Game*”, with a set of accompanying descriptions of what kind of advanced exciting *new game experiences* (for our advanced *human avatars*) are possible (and even likely) inside this particular Sagittarius A\* Black Hole.

The Sagittarius A\* Black Hole Game is a *relatively-new* galaxy game, because our milky-way galaxy is still *less* than a trillion years old.

When we decide this *Sagittarius A\* Game* is the right game for us, then we simply *project a portion* of our real-human *consciousness* into the Sagittarius A\* Black Hole (bundle of real axons), to begin *consciously-animating* a newly-created advanced *infant human brain* living on one of the advanced planets that is orbiting one of the advanced stars that is *closely* (and rapidly) *orbiting* the Supermassive *Sagittarius A\* Black Hole*.

As we begin to *consciously-project* a portion of our real self (a *functional-portion* of our real brain) into the *real-*

*human Sagittarius A\* nerve fibers, we begin to daydream that we are a newly-created advanced human infant newly-awakening in the gentle loving arms of our beautiful advanced mother on a wonderful advanced planet, where she will wisely raise us to our proper advanced adulthood.*

This is how most of us previously gently-entered into *Our Sagittarius A\* Dream* billions of years ago.

# Our Sagittarius A\* Dream

What is *Our Sagittarius A\* Dream*?

*Our Sagittarius A\* Dream* is the multiplayer dream (*multiplayer daydream*) that starts for us the very moment we project a portion (a *dreaming portion*) of our real self into the *axons of Sagittarius A\** that lead us into our advanced *infant self* that has just been newly-created by our *advanced mother* living on an advanced planet inside this *milky-way galaxy*.

Sagittarius A\* is the set of real dark axonic nerve fibers that allow us to *wire* (neurally-connect) a portion of our *real-human id* into the *advanced infant wiring* of our newly-created advanced-human *infant brain* so we can begin *consciously-animating* our new little *infant human avatar* inside this advanced milky-way galaxy.

This is how we *start* a new advanced dream (as a new advanced human avatar) for our real-human self.

Sagittarius A\* is *large enough* (with enough real dark-axon coaxial cables) to accommodate *many thousands of trillions* of us real human beings in our efforts to animate our advanced human avatars that all live right here inside this (neurally-simulated) *milky-way galaxy*.

Our Sagittarius A\* Dream is actually a *multiplayer* (multi-dreamer) *dream* because there are *multiple real people* that are animating *multiple advanced-avatar people* here inside this multiplayer dream (our milky-way galaxy) with us.

This *multiplayer nature*, of this milky-way dream, makes it *very different* than the kind of solo private submortal dreams we have at night while our mortal-human brain is sleeping on its pillow.

Another thing, that makes this milky-way dream *so different*, is that this milky-way dream (this Sagittarius A\* Dream) is hosted by real-human brains, which are *many orders of magnitude* more *powerful* than any advanced-human brain, or any mere-mortal human brain.

Our Sagittarius A\* Dream is a very powerful (super-interesting) dream that some of us will *choose to continue playing* for many more billions of years; or possibly (theoretically) for even *many trillions of years* to come.

The purpose of this powerful multiplayer Sagittarius A\* Dream is to help all of us to *properly balance* the energy-needs of *our real-human brains*.

We can *simply quit playing* this Sagittarius A\* Dream-Game *whenever we desire to quit playing it*.

When we do finally quit playing this Sagittarius A\* Dream-Game, then *we will simply awaken* as the real human being (in our real universe) that we have *always been*.

Then, sometime later, when we feel the need to balance our real-human brain *once again*; then we will *start looking for another* (different) *black hole* (that leads to a *different advanced galaxy*) that we can enter to start daydreaming again as a different newly-created advanced human infant avatar (with a *different human avatar body*) in that *different* advanced galaxy.

This is how we play the “*choose your black hole galaxy-game*” worlds without end.

The purpose of all of these *neurally-simulated dream worlds* (game worlds) is to help us to *energetically-balance* our real-human-brain *energy-needs* into peace, joy, and *happiness forever*.

In order to energetically-balance these real-energy-needs of our real-human brains; we need to exchange *real neuro-electromagnetic energy* via our *real neural axons*



with our multiplayer neurally-simulated *dream-environment* (our milky-way galaxy).

In order to properly do this, some of *our real neural axons extend themselves* into Sagittarius A\*; and many of these real neural axons are *long enough* so that they also can *further extend themselves outward* into our whole milky-way galaxy as they become *Our Galactic Spiral Axons*.

# Our Galactic Spiral Axons

What is the nature of *Our Galactic Spiral Axons*?

How many of our *real-dark neural axons* can grow throughout a *whole galaxy*?

What is the three-dimensional shape, of the *galactic axon field*, that includes axons from many of the real neural axons, that form our very own *milky-way barred-spiral galaxy*?

How do Our Galactic Spiral Axons *grow long enough* to reach the other edges of our milky-way galaxy?

How do our galactic spiral axons *grow out of* Sagittarius A\* and continue to *grow into* every region of our whole milky-way galaxy?

How do these galactic spiral axons provide *continual* electromagnetic energy to *all* of the stars in our galaxy?

How do these axons *leave* the vicinity of Sagittarius A\*?

Why do these axons extend somewhat out *beyond* our milky-way galaxy?

How do these axons enter the vicinity of the *stars*?

How do these long axons actually enter (extend) themselves into the *central regions* of each star?

What happens to these axons when they reach the *exact center* of a star?

What is Our Galactic Spiral Axon Hypothesis?

*Our Galactic Spiral Axon Hypothesis* for our own local Milky-Way Galaxy; is that the supermassive *Sagittarius A\** black hole is composed of a supermassive *bundle* of *coaxial axons*, that form a super-large number of electromagnetic-energy-carrying *coaxial axon cables* of *real dark axons*; and these real dark (super-long) *axons* extend themselves *upwards* (and downwards) *up out* (and down out) *of the galactic plane*, and out beyond the galactic stars to a larger *galactic-radius* of about *2 million light years* from Sagittarius A\*; and then these coaxial axon cables *loop themselves back around* in a huge (2 million light year radius) *galactic spiral looping pattern*, and then extend themselves *back into* the inner regions (the stellar regions full of individual stars) of the galaxy; and as these coaxial axons cables approach an *individual star*, they enter into the *interior* of the individual star from *several different directions*, giving these energetic momentum-carrying coaxial axon cables the *ability* to

*push on the star*, and to precisely *steer the star* into desired *new star-locations*; however, *most* of these coaxial axon cables enter into an individual star in a way that *mostly pushes* the individual star *towards* Sagittarius A\*, and also causes the individual star to have a *greater velocity* than is predicted by Einstein's gravity equations of 1915; and in this way these coaxial axon cables *push* (transfer momentum to) *on every* individual star to *deliver* "gravity" to the individual star, and they also deliver most of their Poynting Vector Electromagnetic Energy  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  directly into the *central-interiors* of each individual star.

This *pushing, steering, energy-delivering process* takes place inside each and every individual star in our milky-way galaxy; because of the way these living pulsating coaxial axon cables *deliver-energy, steer, and push* on every individual star in our milky-way galaxy.

A similar pushing, steering, energy-delivering process takes place inside each and every galaxy, of this advanced universe of *trillions of galaxies*.

This advanced universe actually contains an *infinite number* of individual advanced galaxies because the actual *infinite size* of this *linear stable* advanced universe is *infinity* in *all three* (x, y, z) *spatial directions*, and also in the *one* (t = time) *temporal direction*.

Now that we have presented *Our Galactic Spiral Axon Hypothesis* that explains how a very large number, of these living pulsating coaxial axon cables, enter into the interiors of each individual star; we still need to look closely at *exactly what happens* to these coaxial axon cables after they arrive at the center of a star.

What happens to *one individual coaxial axon cable*, after it arrives at the *very center* of our own sun?

How exactly does this particular energetic pulsating *coaxial axon cable* deliver *most* of its Poynting Vector Electromagnetic Energy  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  directly *into very center* of our own sun?

What happens to the *real dark axons* of each and every coaxial axon cable *inside our sun*?

Can these real dark axons extend themselves outward (from our sun) to eventually *fully envelope* our *whole solar system*?

Let's look more closely at the behavior of these *Dark Solar Spiral Axons*.

# Our Dark Solar Spiral Axons

What are *Our Dark Solar Spiral Axons*?

What general *shape* do the real dark neural axons begin to take *inside our own sun*?

How does the *shape* of the *solar axons* of our sun and our local solar system, compare with the shape of the *galactic axons* of a whole galaxy?

How do the coaxial axon cables *open up* inside our sun?

Do a *trillion trillion coaxial axon cables* carry energy from Sagittarius A\* to our own sun; or is the actual number of cables really closer to a trillion trillion trillion cables?

What happens when one of these dark neural coaxial axon cables *opens up to expose* all of the *trillions of individual myelinated axons* that were compactly organized inside the coaxial axon cable.

Do these coaxial cables *open themselves up*, inside our sun, to expose all the *trillions of individual axons*, in a way that allows *most* of the cable's Poynting Vector Electromagnetic Energy  $\mathbf{S} = \mathbf{E} \times \mathbf{B}$  to influence the

energetic stimulation of a set of *Higgs dendrites* to cause the local *Higgs-axons* to *fire up* a new set of newly-created *Higgs Bosons* inside our sun?

What is the actual nature of this *Dark Coaxial Cable Opening*?

## Dark Coaxial Cable Opening

What is a *Dark Coaxial Cable Opening*?

A Dark Coaxial Cable Opening is a *dark opening* of the dark coaxial axon cable that exists in *2 locations*, at the *two opposing ends* of the single long cable.

These *2 Cable-Opening Locations* are (1) inside a real-human *brain*, inside a real-human body, inside our *real universe*; and (2) inside an advanced *star*, inside an advanced galaxy, inside an *advanced universe*.

The *star-interior* cable-opening *location* that is *inside a star* (like our own sun) is where the coaxial axon cable *opens up to expose all of the inner-axons* (of the inner

conductor) and *all of the outer-axons* (of the outer conductor).

As the coaxial axon cable opens up *exposing the trillions of individual inner-axons*, these inner-axons begin to *spread out* (and *separate from each other*) as they begin to *leave the inside of the star* and *distribute themselves* outward throughout the whole solar system.

As these *trillions of still-myelinated* inner-axons separate themselves from each other, and these real-dark inner axons begin to *spread themselves* throughout the whole solar system; these real-dark *super-long* super-thin, energetic, electromagnetic, neural-pulse, *momentum-carrying axons* also begin to form a really beautiful, majestic, 3D-geometric *Dark Solar System Halo*.



# Dark Solar System Halo

What is the *Dark Solar System Halo* that surrounds our whole solar system?

The *beautiful*, majestic, 3D-geometric *Dark Solar System Halo* that *surrounds* our whole solar system, is composed of *trillions* of long thin dark *axons* that *extend out* of our sun, as they continue to extend themselves *way up above* (and way down below) *the orbital plane* of our whole *solar system* of orbiting planets, and these dark axons continue to extend themselves *way outward beyond* our Oort Cloud, out to a distance of about *2 light years* from our sun; before the dark axons begin to *loop themselves back around*, and begin to extend themselves all the way *back to our sun*; with many of these dark axons extending themselves *into the solar orbital plane* on their way back to our sun; and as these super-long dark axons (from the original coaxial inner-conductor) continue to extend themselves *back into our sun*; and as they then begin to *re-enter our sun*, they naturally (and biologically) become the *outer-axons* of the outer-conductor of the *very same* coaxial axon cable from which they *originated* (when they originally left the sun as *inner-axons*).

In this way, the outward-pulsing *inner-axons* (from one particular individual *coaxial axon cable*), extend

themselves out of our sun, and way out *beyond* our solar system, and then these *axons loop themselves back* into our sun; and as they *re-enter* our sun, they naturally *become* the inward-pulsing *outer-axons* of the *very-same coaxial axon cable* from which they originally started.

As the *trillions of axons* (from a single coaxial axon cable) begin to *loop themselves around* (at a radial distance of around 2 light years from our sun), *some* of them *begin to lose some* of their *myelin coatings* that had been (previously) *shielding* the dark neural pulses (that rapidly *propagate* along these *long thin dark axons*) from their *potential* scattering-interactions with any visible matter they may *encounter*, as they travel outward from the sun to the outer reaches of our solar system.

In this way, these *outward-traveling dark pulses* are only able to impart *relatively-weak outward-pushes* (only *small* outward-momentum *transfers* in the spatial-direction that is *moving away* from our sun) to the visible-matter particles they encounter, as these dark-matter particles are streaming *away* from our sun, in their long journey toward the *outermost regions* of our solar system, at around *2 light years* from our sun.

As the dark axons loop around (at a radial distance of about 2 light years from our sun), and begin their long *journey back to our sun*, some of these dark axons begin

to *lose some* of their *protective myelin shielding*, and this begins to make it possible for the energetic momentum-carrying electrically-charged dark neural pulses (that travel on these dark axons) to begin to impart *relatively-stronger inward pushes* (*larger inward-momentum transfers* in the spatial-direction that is *moving towards* our sun) to the visible-matter particles they encounter (and scatter off of), as these dark-matter particles (the dark neural pulses) are streaming *towards* our sun, in their long journey back to the planet Pluto, and then back to the center of our sun.

As these trillions of dark-matter particles *pass through* the *planet Pluto*, some of them are able to *scatter off* of the visible-matter particles of Pluto, continually *pushing Pluto* towards our sun, and forever keeping Pluto in an elliptical orbit around our sun.

It is the scattering, *momentum-imparting*, action of these *trillions of inward-streaming* (towards our sun) *dark-matter particles* (dark neural pulses), as they *try* to pass through the *interior regions* of Pluto, that keep Pluto *tightly bound* to our sun; as if by some mysterious “*force of gravity*”.

This *force of gravity* is the “*force*” of dark-matter particles *scattering off of* visible-matter particles.

What about the dark axons that come very close to Pluto?

What happens to the *shape* and *myelin structure* of those *particular dark axons* that try to pass through the inner-regions of Pluto's *visible (baryonic) matter*?

Let's look more closely at these super-interesting *Dark Pluto Spiral Axons*.

# Dark Pluto Spiral Axons

What is the dark anatomical structure of the *Dark Pluto Spiral Axons*?

The *real dark axons* that *try to simply pass through* the atom-rich *dense inner-parts* of the planet Pluto are *pressured, distorted, altered, moved, re-shaped, and demyelinated*; because of *all the scattering-pressures* (forces) that are continuously-placed on these *Pluto dark axons*, when the dark neural *pulses* (that propagate on these dark axons) *scatter off* of the visible-matter of the planet Pluto.

These *axonic scattering pressures* cause these axons to loop themselves around in *small spiral loops*, medium-sized spiral loops, and in *large spiral loops*.

How can the *scattering* of a neural pulse (off of a visible-matter particle) put a *scattering-pressure* on the *neural axon* that is biologically-conducting, the ion-concentration propagation, of this moving neural pulse?

How can such *dark-matter scattering event* cause an axon (that guides and propagates the movement of the dark-matter particle), to change its *axon-location*, or to alter its *axon-shape*, or to change its *axon-myelination status*?

What is the exact neuro-biological nature of these interesting and powerful *Axonic Scattering Pressures*?

## **Axonic Scattering Pressures**

What is an *Axonic Scattering Pressure*?

How can a *mere* particle-particle *scattering event* cause an axon to *feel a pressure*?

Why does an axon sometimes *respond* to a pressure it may feel?

What kind of *real biological pressures* can a dark-matter particle (real dark neural action-potential pulse) *place* on a single *individual axon* that is actively propagating it?

When a single individual dark-matter particle (scalar dark boson real neural pulse) *scatters* off of a visible-matter particle (like a photon, an electron, or an atomic nucleus), the dark-matter particle *abruptly changes* the direction (and *linear momentum*) of its axonic propagation.

This abrupt (forced) momentum change, causes some “*dark-scattering momentum*” to be transferred between the *initial axon* and the *final axon*.

The *initial axon* is the real dark neural axon that the dark pulse (dark-matter particle) was *initially* propagating on *before* the dark scattering event.

The *final axon* is the real dark neural axon that the dark pulse (dark-matter particle) *finally* propagates on *after* the dark scattering event.

This physical transfer of dark-scattering momentum between *different axons*, that are oriented in different directions, causes some axons to begin to *form spiral axonic loops*, and it also causes some axons to begin to *lose some of their myelin shielding*.

What really happens during these interesting *Dark Scattering Events*?

# Dark Scattering Events

What are the *Dark Scattering Events*?

A *Dark Scattering Event* is a physical *scattering event* in which a single dark-matter particle *scatters off* of a single visible-matter particle.

These Dark Scattering Events appear to cause the following *changes* to the anatomical structure of the Dark Axons:

- (1) The *Growth* of Dark Axon *Loops*
- (2) The *Demyelination* of the Dark Axons

Apparently, the mere *scattering* of a dark neural pulse (a dark-matter particle) can *trigger* a natural biological *response* in the *dark glial cells* responsible for the continual support, *exterior myelin structure*, maintenance, and *orientation-guidance* of the dark axons.

A dark scattering event can trigger a set of dark glial cells to *guide* (biologically-encourage) the dark axons to begin to form some *useful axon-loops*; in all sizes of small, medium, and large.



Such a dark scattering event may also trigger these dark glial cells to begin the process of *demyelination* of the *exterior cell walls* of the dark axons.

*Some* of the trillions of dark-matter particles (that are propagating on real dark axons towards our sun) will pass through the *planet Pluto* on their way to the *planet Mars*.

When these trillions of dark-matter particles reach the planet Mars, *some* of them will scatter off of the *Martian Atoms* that make up the visible matter of the planet Mars.

These dark scattering events will cause *some* of the real dark axons that pass through the *center* of the planet Mars to begin to form themselves into *spiral-axon loops*, large and small.

What is the exact nature of these hypothetical *Dark Mars Spiral Axons*?

# Dark Mars Spiral Axons

What are the *Dark Mars Spiral Axons*?

Does *every planet* form its own *dark-spiral axon-loops*?

How exactly can a planet do this?

Why does every planet cause some of the axons (that pass through the planet-interior) to *spiral themselves* into dark *spiral axon loops*?

Why do the *planets* push the *axons* into *loops*?

How is this done?

How does the planet Mars do this to the *trillions of axons* that are *trying* to simply *pass through it*?

What Mars *does* to its *axons*, is because of the way that *Mars scatters* some of the dark-matter particles, that simply try to pass through it on their way to our sun.

The *detailed* atomic material makeup of Mars *dictates* how Mars *scatters* dark-matter particles into *many axons* oriented in *many directions*.

What is the *molecular makeup* of Mars?

How *big* is Mars?

What is “*gravity*” like on Mars?

The planet Mars is *smaller* than the planet Earth; because the diameter of Mars is only *about half* the diameter of our own planet Earth.

When some of our talented Earth-astronauts finally do arrive on Mars (in a few decades from today possibly) they may discover that the “*gravity*” on Mars is only about *38% as strong* as the “gravity” on earth.

This *weaker Martian Gravity*, is because the *net effect* (total net average *scattering-force*) of *all* of the scattering dark-matter particles, that pass through the planet Mars, and that pass through the atmosphere of Mars, and that scatter off of *all* of the Martian atmospheric atoms; is such that Mars seems to have a net effective “*force of gravity*” that is only about *a third as strong* as Earth’s surface gravity.

How does the presence of Mars (the presence of all of its atoms) cause the real dark axons to grow themselves into loops of all sizes, to form a *dark-matter halo* of trillions of *axon-loops all around Mars*?

When a dark-matter particle scatters off of a visible-matter *Martian-particle* (an atom inside the planet Mars), then this *dark scattering event* causes an axon to grow into an *axon-loop* that leaves Mars, and then *loops itself around*, and then grows itself *back into the interior* of the planet Mars.

Some of these axon loops leave Mars for just *a few miles* (or just *a few thousand miles*), before returning to the planet Mars.

Some of the other (longer) axon loops leave Mars, and extend themselves way outward beyond the surface of Mars, for *several million miles*, before these axon loops *return themselves* back to the planet Mars.

Most of these Martian axon loops are *pretty close* to the planet Mars for the *entire length* of the axon.

However, some (a relative few) of these Martian axon loops are *very long loops*, that can be *many millions of miles long*.

Some of the shorter axon loops can be just a few short miles long (or even shorter).

There are *more* short axon loops, than long axon loops.

The longest axon loops are the *most-rare*.

These interesting *Martian axon loops* become super-rare (relatively super-sparse) *billions of miles* from Mars.

There are *many trillions* of these (gravity-creating) *Martian axon loops*.

The *outward* (leaving Mars) propagating portions of an axon loop have *more myelin*, than the *inward* (entering Mars) propagating portions of an axon loop.

These relatively-demyelinated (with less myelin-shielding) inward (*entering Mars*) propagating portions of a typical Martian axon loop, are able to deliver *more downwards* (towards the center of the planet Mars) *pushing* dark-scattering *events* (in which the trillions of dark-neural pulses scatter off of all of the Martian atoms), than the (relatively-fewer) *upwards* (moving away from the center of Mars) *pushing* dark-scattering *events*.

In this way the *downward-traveling less-myelinated pulses* (the trillions of tiny fast dark-matter particles rapidly-moving generally more towards the center of Mars) *scatter more* (because they are *less shielded*) than the upward-traveling more-myelinated pulses (the dark-matter particles moving away from the center of Mars).

In this simple way, the *downward-pushing* dark-matter particles, are able to *impart more downward-momentum* to all the Martian visible-matter particles.

This is what actually creates all of the “*Martian Gravity*” for the planet Mars.

What is *Our Martian Gravity Hypothesis*?

# Martian Gravity Hypothesis

What is *Our Martian Gravity Hypothesis*?

How is this simple dark-matter spiral axon loop theory able to help us to formulate a new *Martian Gravity Hypothesis*?

The simple (a la Occam's sharp razor) *new dark-matter quantum-gravity theory* allows us to formulate a good logical simple Martian Gravity Hypothesis.

*Our Martian Gravity Hypothesis* is that all of the gravity on the planet Mars is caused by the momentum-imparting scattering of the dark-matter particles, as they scatter off of all of the visible-matter atoms of the planet Mars; and the reason these Martian atoms are mostly pushed (on average) towards the center of Mars is because the *downward-traveling* (towards the center of Mars) dark-matter *particles scatter* (imparting *a lot* of downward-momentum to the Martian atoms) *more* than the upward-traveling (away from the center of Mars) dark-matter particles scatter (imparting *a little* upward-momentum to the Martian atoms); and in this way the downward dark neural pulses (dark-matter particles) scatter more than the upward dark-matter particles (dark neural pulses); and therefore the dark-matter particles push downward on the

Martian atmosphere (and Martian surface rocks) more than they push upward on the Martian atmosphere (and Martian surface rocks).

These dark-matter particles (that *push down* on the surface of Mars, *more* than they *push up* on the surface of Mars) will also push down on all the atoms of all the physical human bodies of all the astronauts that visit Mars (from earth), *more* than they push up on these human-body atoms.

This will cause these astronauts to feel the *Martian gravity* (caused by the net total action of all the tiny fast dark-matter particles *scattering off of these astronauts* as they walk around on the surface of Mars) that is about 38% as strong as the gravity of the surface of Earth.

This will also cause these astronauts to *remain bound* to the *surface of Mars* until they take off in their powerful spaceship to return themselves to Earth.

*Our Martian Gravity Hypothesis* is also that the *physical reason* the downward-traveling dark-matter particles *scatter more* than the upward-traveling dark-matter particles (in the local vicinity of the planet Mars, and on the surface of the planet Mars), is because of the relative-differences in the degree of myelination (shielding from scattering) of the *Martian Dark Spiral Axon Loops*.



# Dark Spiral Axon Loops

What are the *Dark Spiral Axon Loops*?

What are these trillions of trillions of *dark spiral axon loops* that mostly-originate deep inside the planet Mars, and that can extend themselves for just a *few inches*, or for just a *few meters*, or for just a *few miles*, or for a *few million miles*; depending on the *physical spatial size* of these dark spiral axon loops.

These *Dark Spiral Axon Loops* are the *trillions of trillions* of spiral-shaped *loops of dark axons* that exist *inside* of *every atom* of the planet Mars, and also extend themselves *far outside* of the planet Mars; with *more* of these *axon loops* that are *close to Mars* than far from Mars; with these trillions of dark spiral axon loops *physically arranged* (in all the spatial regions near Mars) in such a way so as to approximately produce a “*force of gravity*” that physically drops off as the *inverse square* of the *distance* from the *exact center* of the planet Mars, in such a way so as to make Isaac Newton’s law of gravity approximately correct close to Mars, and also in such a way so as to make Albert Einstein’s 1915 equations of gravity approximately correct close to Mars.

Albert Einstein's 1915 equations of gravity appear to be *approximately correct* close to Mars; and they also seem to be *approximately accurate* close to all of the other planets of this local solar system.

However, in 1915 Albert Einstein bravely theorized that “gravity” is caused by the “*curvature of spacetime*”.

*What else* was Albert Einstein *supposed to say* in 1915?

This was a bold and courageous guess for the early year of 1915, when *most* of this world's dozens of bright physicists (like the brilliant Albert Einstein) did not really know very much about “*dark matter*”.

Today in 2023, we have *more useful information* (more astrophysical scientific observations) about “*dark matter*”; and *more accurate hints* (from this world's very brightest physicists) than Albert Einstein had available to him in 1915.

With *better information*, we can make *better theories*.

A decade from today, in 2033, we will have enough *excellent information* to allow us to fashion some even better (*more detailed*) theories about *quantum gravity*.

Today in the year 2023, we have already received enough *clear clues* to help us to wisely formulate some very-helpful *initial theories* about *dark matter quantum gravity*.

Therefore, we can now more easily construct this simple theory of “*dark matter quantum gravity*” to theoretically demonstrate that Einstein’s “gravity” is *not really* caused by the “curvature of spacetime”, because it is much more simple (and much more logical) to simply notice that all of the “*gravity*” in this whole universe must be caused by the simple scattering (linear momentum-imparting) of tiny fast “*quantum*” particles of “*dark matter*” as these dark-matter particles scatter off of all of the visible-matter atoms of this whole universe.

This dark-matter *quantum-scattering* theory of gravity (presented in this 4 Brain Theory paper) is simple, *testable*, logical, and very physically-compelling.

There is certainly no need to invoke any mysterious metaphysical “*curvature of spacetime*”; other than the logical (*not mysterious*), simple, physical, effective “*dark-spiral-axon-loop curvature of spacetime*” that is physically-produced (*biologically-grown*) by the *physical-curvature* of the trillions of trillions of *dark spiral axon loops* that form themselves (*grow themselves*) naturally in our wireless-network of real-human *biological brains*,

that *neurally-simulate* this local advance universe where we (the scientists of earth) currently seem to find ourselves.

What is the detailed nature of this *Real-Axon Spiral-Loop Curvature of Spacetime*?

# Loop Curvature of Spacetime

What is the *Loop Curvature of Spacetime*?

What is this *Real-Axon Spiral-Loop Curvature of Spacetime*?

How can a set of *real dark axons* neurologically (biologically) grow themselves into a physical set of trillions of trillions of *curvy spiral loops* that *effectively-impose* (biologically-force) an underlying *axonic space curvature* to a neurally-simulated *spacetime* like our very own local advanced *physical universe* of galaxies, stars, and planets?

Over a century ago, in 1915, was Albert Einstein thinking about real neural *axons* that can *curve themselves* (when their neural pulses bounce off of atoms) into *spiral axon loops* with *varying curvatures* to form an underlying *axonic fabric* of a *curved spacetime*?

Is this the kind of *curved spacetime* that Albert Einstein was thinking about in 1915?

Or was Albert Einstein thinking about a *different kind* of curved spacetime?

How could Albert Einstein know about *axonic curved spacetime* if he was not thinking about *neural axons* and how they can *curve up* into *spiral loops* to neurologically-guide planetary neural-pulse *scattering* off of planetary atoms?

What would the brilliant Albert Einstein do with his precious mortal-human avatar time, if he were to choose to *simply return himself* to our awakening planet earth?

Would he try (today in 2023) to discover a proper logical underlying *physical curvature structure* for his old (circa 1915) gravitational theory about the “*curvature of spacetime*”?

Does the kind of real neural *Axonic Curved Spacetime* (that we are presenting today in this 4 Brain Theory paper), seem to be the kind of Physical Curved Spacetime that Albert Einstein spent most of his earlier (1879-1955) life diligently searching for?

# Axonic Curved Spacetime

What is *Axonic Curved Spacetime*?

How can a large set of real dark *spiral-looped* neural *curved axons* physically combine themselves together, to form the *curved axonic fabric* of our local *spacetime*?

How many of such *curved axons* pass through every *small volume* of our local spacetime in this universe that contains our earth planet?

Is the *curved axon shape*, and *number of axons* passing through a small local *unit volume of space*, dependent on the *local mass density* of all of the local visible atomic matter?

Is the *type of mass density* also important in determining the nature of the local *curved-axon spacetime halo* that surrounds this visible-matter mass density?

What kind of *curved-axon spacetime halo* surrounds a single individual *photon*?

What kind of *curved-axon spacetime halo* surrounds a single individual *electron*?

What kind of curved-axon spacetime halo surrounds a single individual *proton*?

What kind of curved-axon spacetime halo surrounds a single individual *hydrogen atom*?

What kind of *curved-axon spacetime halo* surrounds a single individual strand of *human DNA*?

What kind of curved-axon spacetime halo surrounds an entire *human body*?

What kind of *curved-axon spacetime halo* surrounds a *whole planet*, like Earth or Mars?

What kind of curved-axon spacetime halo surrounds a *whole star*, like our own Sun?

What kind of curved-axon spacetime halo surrounds a *whole galaxy*, like our very own local milky-way galaxy?

What kind of curved-axon spacetime halo surrounds a whole *cluster of galaxies*?

What kind of curved-axon spacetime halo surrounds the partially-empty *intergalactic space* between galaxies?



What kind of curved-axon spacetime halo exists in our *entire visible universe*, to *give gravity* to our universe, and to *power all the stars* of our universe, and to *enable high-speed consciousness-projections* throughout our whole universe, and to *gather up all the information* of our whole universe?

What kind of *curved axonic spacetime fabric* could effectively provide a proper *Planck-Length-Fabric Curvature for Spacetime* by also *gathering information* from every particle of visible-matter, *enabling high-speed consciousness-projections* into the human brains of distant avatars, *electromagnetically-powering* all the stars of this universe, and creating the “*force of gravity*” for each and *every bit* of *visible-matter mass* in our whole *entire neurally-simulated universe*?

These *4 vital functions*, for the Curved Axonic Planck-Length Spacetime Fabric of our local universe, almost seem to be needed nearly *everywhere inside* our simulated universe.

What is the basic spacing of this *curved axonic spacetime fabric*?

Is the *Planck Length* this *basic axon spacing length*?

Is the Planck Length the *average spatial distance* between *two adjacent axons*?

What else could the Planck Length actually be?

What is the basic nature of this *Planck Length Axon Spacing*?

## **Planck Length Axon Spacing**

What is the *Planck Length Axon Spacing*?

What is this average spatial distance (Planck Length) between two adjacent axons?

What is Our Planck Length Hypothesis?

*Our Planck Length Hypothesis* is that the *Planck Length L* is the *average spatial distance* between *two adjacent real dark axons*.

This *Planck Length L* is *mathematically composed* of *Planck's Constant h*, the *Speed of Light c*, and the *Gravitational Constant G*.

This *Planck Length L* squared, multiplied by two pi, is equal to *Planck's Constant h*, multiplied by the *Gravitational Constant G*, divided by the *Speed of Light c* cubed.

This is a *very simple mathematical relationship* between the Speed of Light *c*, the Gravitational Constant *G*, Planck's Constant *h*, and the Planck Length *L*.

Our theoretical knowledge, of this simple mathematical relationship, can be easily *combined* with Our Planck Length Hypothesis, to *logically infer* that the Speed of Light *c* is *deeply connected* to the biological behavior of our real dark axons.

It also appears that the real dark *neurobiological behaviors* of our real dark *axons*, likely *govern* Planck's angular momentum Constant *h*, and Sir Isaac Newton's Gravitational Constant *G*.

It certainly appears, that understanding all of the *quantum neurobiological behaviors*, of our spiral *curved* real dark *axons*, is the grand key to completely solving every aspect of *quantum gravity*.

This new theory of dark-matter (dark axonic pulse) quantum gravity is an *Axonic Curvature Gravity Theory*.

# Axonic Curvature Gravity

What is this new *Axonic Curvature Gravity Theory*?

What is *Our Axonic Curvature Gravity Theory*?

*Our Axonic Curvature Gravity Theory* is that the *local curvature of spacetime* (of Einstein's gravity theory of 1915) is a *curvature composition function* of the *set of local curvatures* of a *large set* of real-dark axons that combine their *quantum neurobiological behaviors* (including their *quantum pulse-propagating behaviors*, and *quantum-pulse scattering behaviors*, of their real-dark axonic neural-pulse dark-matter particles) to effectively generate *dark-matter quantum gravity* for every visible-matter particle of this local neurally-simulated (*axonically-simulated*) universe of stars, and their gravity-orbiting planets, inside of energetic galaxies.

This new *Axonic Curvature Gravity Theory* is the *Dark-Matter Quantum Gravity Theory* that Albert Einstein spent the last few decades of his life diligently searching for.

Both *Albert Einstein* (1879 – 1955), and *Sir Isaac Newton* (1642 – 1726) sincerely *believed* that the gravity of outer

space was similar to the Earth-gravity that we all experience right here on the *surface* of our *planet Earth*.

In order to better understand, the quantum gravity that we all (all of us mortal-human scientists of 2023) experience here on Earth; we may need to look more closely at *Our Earth Spiral Axons*.

# Our Earth Spiral Axons

What is the basic nature of *Our Earth Spiral Axons*?

How do the trillions of trillions of *Our Earth Spiral Axons* differ from the *smaller set* of Martian spiral axons of the nearby planet Mars?

Why does every *distinct planet* have a *distinctly-shaped set* of real-dark *spiral axons* within it, surrounding it, and extending themselves far from it?

How does the *mere presence* of the visible *atomic matter inside a planet* (like Pluto, Neptune, Uranus, Saturn, Jupiter, Mars, Earth, Venus, and Mercury) *cause* the *partially-myelinated axons* (that were originally just trying to simply pass through the planet, on their way *back to the sun*, to complete their huge solar-system loop, and reconnect themselves back into the very-same original *coaxial axon cables*, from whence they originally *spawned*, to deliver their *electromagnetic Poynting Vector Energy* to the sun), to form themselves into a set of *planetary spiral-loop axons* that bind themselves to the planet, and form an *axon-loop halo* around the planet, and *follow the planet* in its huge planetary orbit around our sun?

If we could easily see *all* of our *earth's spiral axons*, then what would all of these *earth-spiral axons* actually *look like*?

What is their *geometric shape*?

How many of these spiral axon loops stay *inside* the radius of Earth?

*How far* from our earth do *some* of these spiral axons *extend*?

Do any of the earth's spiral axons extend themselves *all the way out* to the orbits of the planets Neptune and Pluto?

It seems like the trillions of spiral axons (and their spiral axon loops), that extend outwards from the atomic visible-matter of earth, must extend themselves for *many millions of miles* so that the other planets can feel the “*gravitational attraction of earth*” as the dark pulses (dark-matter particles) that have looped around (on their long spiral axons), and are *traveling back towards earth*, are able to *scatter off* of the *atoms of Venus*, and are able to *scatter off* of the *atoms of Mars*, and are able to scatter off of the atoms of our Earth's Moon, as they try to push these celestial bodies towards our Earth.

Our Earth's Moon is *close enough* to our Earth to be *gravitationally bound* to our Earth, because the net effect of the trillions of dark-matter particles (that are traveling towards our Earth) that *push our Moon towards our Earth*, do so *more strongly* than the net effect of the trillions of dark-matter particles (that are traveling towards our Sun) that *push our Moon towards our Sun*.

It appears that our Moon is gravitationally bound to our Earth due to *Scatter Demyelination*.



# Scatter Demyelination

What is *Scatter Demyelination*?

*Scatter Demyelination* is the *axonic demyelination* (the removal of some of the *myelin-cell shielding* from the real dark axons) that occurs *after* a dark pulse (propagating on a dark axon) *is scattered* by a visible-matter particle, like an electron, or a proton, or an atom, or a molecule.

This hypothetical scatter demyelination process causes the scattered dark pulses (the scattered dark-matter particles) to begin to propagate on dark axons that start to become relatively demyelinated as they loop around and begin to return back to the point (spatial location) of the dark scattering event.

This means that the dark-matter particles (real dark neural pulses) that are *actively returning* to their original visible-matter *scatter-location* (the exact location in space where they were *originally scattered* by a bit of visible matter) will have an ability (a physical tendency) to *scatter even more* when they come back near the exact visible-matter location where they first scattered.

These *returning scatter bounces* can occur *more* than just two or three times.

For example, a *single* dark-matter *particle* (originally streaming towards our sun) can initially scatter off of an atom of our earth, and *then* loop *around* (on a dark spiral axon that extends outward millions of miles beyond earth, and then loops around and returns toward earth, with the portion of the *returning-axon segment*, of the dark spiral axon, having *less* myelin *shielding* than the *leaving-axon segment*) and re-enter earth, and then again scatter off of the very same atom (or scatter off of a different *nearby atom* of Earth), and *then again* loop *around* (on a different dark spiral axon that may extend outwards from earth, for even more millions of miles, or possibly for less millions of miles, with the returning axon-segment of the dark spiral axon having *even less* myelin *shielding* than *before*) and *re-enter* earth *again*, and *again* scatter off of one of the visible-matter atoms of earth.

In this way, a single dark-matter particle can *scatter inside of earth*, leave earth, and then loop around, and *return to earth*, scatter inside of earth *again*, leave earth again, and then *loop around again*, and then return to earth again, and then *scatter inside of earth again*, and then *repeat multiple times*.

*Each time* the single dark-matter particle returns to earth, it is propagating on a real dark axon that is *less*

*myelinated* as it returns to earth, than it was when it left earth.

In this way *Earth* receives its *Spherical Gravity*.

# Earth Spherical Gravity

What is *Earth Spherical Gravity*?

*Earth Spherical Gravity* is the kind of gravity that causes the trillions of trillions of trillions of *atoms* of Earth to organize themselves into a generally *spherical shape* like a *big ball* floating in *space*.

From outer space, our Earth planet, can sometimes look kind of like a *big blue-green ball* floating in the *darkness of space*.

Our own Earth is *spherically-shaped* because of the *Earth Spherical Gravity* that is caused by the trillions of trillions of *dark-matter particles* that are (on net average) streaming (and *scattering* off Earth-atoms as they travel) *towards the center* of Earth.

Many of these dark-matter particles (that are rapidly streaming towards the center of Earth) are propagating on *earth-bound* real dark *axons* that are *relatively-demyelinated*.

These real dark axons become demyelinated (as they approach earth) via a simple *axonic demyelination process*.

This simple *axonic demyelination process* is our current simple hypothesis of how our planet earth is able to “*borrow*” some of the dark-matter particles (that were originally streaming directly towards our sun), as our earth temporarily “*captures*” some of these dark-matter particles, by simply *scattering* these dark-matter particles once, *twice*, three times, or even *many times*.

In this way our earth creates its own “*gravity*” by temporarily “*capturing*”, and temporarily “*borrowing*” some of the dark-matter particles that were originally headed (traveling) towards the sun.

These “*temporarily borrowed*” dark-matter particles form a dynamic (active) *halo* of dark-matter particles as they propagate on the spiral dark axons *looping out of earth*; before they once again resume their journey to the sun.

When a specific dark-matter particle is scattered (by earth atoms) in a direction that is *nearly directly towards the sun*, then there is a *good probability* that this specific dark-matter particle will be scattered into an axon that is *headed directly to the sun*; and in this way this specific dark-matter particle will be able to *continue its long* (possibly very eventful) *journey back* to the *very center of our sun*.

*All of the real dark axons (of our whole solar system, even if they find themselves looping around a planet multiple times on their merry way) all eventually return themselves back to the center of our sun.*

All of these real dark axons, of our whole solar system, *directionally-propagate* real dark neural pulses, which are the dark-matter particles of our solar system.

All of these dark-matter particles *directionally-propagate* as real dark pulses on real dark *directional-axons*.

These real dark axons are fundamentally “*directional entities*”.

This is because all of these real dark axons *only propagate* their real dark neural pulses in just *one single direction*.

The local propagation direction of a real dark neural pulse (propagating on an axon) is the *axon-direction*.

When such a *directional-axon* extends itself outward for millions of miles beyond our earth, and then *directionally-loops* itself back around, and continues to extend itself *directionally-back* towards earth, then this specific *directional-axon* has a *leaving-earth* axon-segment, a

*curving-around* (looping around) axon-segment, and a *returning-to-earth* axon-segment.

The *relative degree of myelination* of these three distinct axon-segments is important to understand.

The *leaving-earth* axon-segment always has the *most myelin shielding*.

The *curing-around* (looping around) axon-segment always has *less myelin shielding*.

The *returning-to-earth* axon-segment always has the *least myelin shielding*.

The earth's gravity is because *all* of the *returning-to-earth* axon-segments always have the *least amounts* of myelin shielding to shield (*block*) potential scattering events from happening to the atoms of earth.

The *returning-to-earth* axon-segments are carrying tiny fast *momentum-carrying* dark neural pulses (dark-matter particles) that can be *easily scattered* (because these pulses are *not* myelin-shielded as much) *by* all of the *earth's atoms*.

Therefore, these *relatively-unshielded* dark-matter particles *easily scatter* off of earth's atoms, and thereby

transfer some of their *linear momenta* to these atoms of earth.

Now, let's consider *Our Earth Sun Moon Gravity*.



# Our Earth Sun Moon Gravity

What is *Our Earth Sun Moon Gravity*?

What is the detailed *dark-matter* particle-flow *relationship* between the *Gravity of our Moon*, the *Gravity of our Sun*, and the *Gravity of our Earth*?

Do all of these massive celestial bodies receive their own gravity in exactly the *same way*?

Or are there some important differences in the *specific ways* that these three distinct types of massive baryonic (composed of baryons like protons and neutrons) celestial bodies obtain their *dark-matter quantum gravity*?

Does our *sun* receive most of its gravity from the massive *black hole* (Sagittarius A\*) at the center of our milky-way galaxy?

Does our earth *receive* most of its *gravity* from our sun?

Does our *moon* receive most of its gravity from our *earth*?

How is *gravity* (that is continuously-generated from all the trillions of trillions of trillions of flowing, scattering, pushing dark-matter particles) *transported* (via real-dark-

spiral axon coaxial cables) *from Sagittarius A\**, to all the *stars* in our milky-way galaxy, and also to our own *sun*; where it is then *distributed* from our sun to all the *planets* in our own solar system (via real dark spiral solar axons), and also to our own *earth*; where it is then *distributed* (via real dark spiral looping terrestrial axons) from our earth to our earth's *moon*; where it is then *distributed* (via real dark spiral looping lunar axons) from our earth's moon to all the brave *astronauts* that may yet walk on our moon's surface again in a just few years from today?

How can a *single individual dark-matter particle* (a single individual real dark neural pulse) *leave* (logically-exit in the simulation-logical-sense; but not physically-exit in the real-physical sense) a *real-human brain*, as it enters (by propagating on a real-dark *human axon*) into the bundle of real dark coaxial *axon cables* of *Sagittarius A\**, then *exit* the supermassive black hole (called Sagittarius A\*) and travel to our *sun* where the coaxial axon cable unravels (inside the central interior regions of our energetic hot sun) itself to *help deliver energy* to our *sun*, and to also *help deliver momentum* to our *sun*; before the single individual dark-matter particle then *exits our sun* (on a *single* myelinated real dark neural *axon*) and propagates (travels) on its *directional-axon* away from our sun, way out *beyond* our *solar system*, before *widely-looping around* beyond our *Oort Cloud*, and then traveling back into our solar system, and continuing to

travel past *Neptune* on its way towards *Jupiter*, and then traveling to *earth* (to *help push* earth towards the sun), and then *looping around earth a few times* (to help push, *via scattering*, everything near earth *towards earth's center*), then travel to our *moon*, and then *loop around the moon a few times* (to *help push*, *via scattering*, and *via momentum-transfer*, everything near the moon *towards the center of the moon*), and then travel to a special location on the *lunar surface*, and then travel deep inside the *mortal-neural tissues* of a *lunar astronaut's brain* (to help *consciously-project* into this lunar astronaut's brain some mortal-human-brain *avatar-body* animation *instructions*, that originally come from a real-human brain to help the real-human brain to *energetically-balance itself* via a neurally-simulated advanced-human brain), and then *leave* (on the same directional-axon) the lunar astronaut's mortal-human brain tissues, and then have the single individual dark-matter particle continue to travel *back to our sun* (along with its directional-axon that also travels back to our sun) to *recombine itself* back into the very same *coaxial axon cable*, and then *travel back* (inside the real dark coaxial axon cable) to *Sagittarius A\**, and then travel back (through *Sagittarius A\**) into the *very same real-human brain* of the very same real-human body (of *one of us*) that *originally generated* (via the firing of a real dark human neuron) this single individual dark-matter particle (single individual real dark neural pulse) *in the first place?*

This last sentence is certainly *a bit long*; but hopefully it can also be *a bit helpful* in hopefully helping us all gain a better understanding about the *ultra-long extension* (super-long spatial length) of a *single individual real dark axon*, and also to understand the potentially-exciting journey of a *single individual dark-matter particle* (a single individual real dark neural pulse, that neurologically *propagates* on the single individual real dark axon) as it *leaves* a real-human brain, and then logically *enters into a black hole* (at the center of a galaxy), wherein it helps to *energetically simulate* every visible-matter particle inside the whole *black-hole galaxy*, and wherein it also helps to *hold the galaxy together* (via dark-matter quantum-scattering gravity as explained in detail in this 4 Brain Theory paper), and where it also helps to *gather all the information* of the whole galaxy, and where it also help to facilitate high-speed *consciousness-projections* into the set of simulated human *avatar brains* that are logically-located inside the joint real-human neural-space that hosts (simulates) the galaxy.

Our *sun* (a *dark-matter energy-load*) gets most of its quantum gravity (from gravity-generating dark-matter quantum-scattering particles) from the super-massive super-energetic *Sagittarius A\* black hole* (a *dark-matter energy-source*) at the *center* of our milky-way galaxy.

Our earth gets *most* of its quantum gravity (momentum-imparting dark-matter particles) from our own *sun*.

In some ways, the type of “*sun gravity*” that pushes our earth towards our sun, may seem to be a little bit *more-simple* than the type of “*earth-spherical gravity*”, that keeps our earth’s atmosphere bound tightly to our earth’s surface.

The type of “*sun gravity*” that pushes our *earth towards our sun*, is caused by the *quantum scattering* of the trillions of trillions of dark-matter particles flowing through our earth (*towards our sun*), as some of these dark-matter particles (scatter off of some of earth’s atoms and) *try to push all* our earth-atoms *towards our sun*.

The type of “*earth-spherical*” *gravity* that pushes our *earth’s atmosphere towards our earth’s surface*, is caused by the *quantum scattering* of the trillions of trillions of dark-matter particles mostly flowing towards the center of our earth (or somewhat near the center of our earth) because these specific dark-matter particles that are flowing towards the center of earth, *have already been scattered* by the atoms of earth *at least one time*; and these dark-matter particles that are flowing towards the center of earth, are mostly propagating towards the earth’s center on *relatively-unmyelinated* (unshielded) axons; so these dark-matter particles are *relatively-unshielded* and

able to *more easily scatter* off of earth's atoms, as they *try to push all* of earth's atoms (including all of earth's atmosphere's atoms) *towards the center* of our earth.

Earth's trillions of looping axons return themselves to *every atom* of earth.

Since all the atoms of earth, are *spherically-arranged* in a *spherical pattern centered* on the *very center* of earth; this *spherical atomic distribution* (of earth's atoms) causes the *total net scattering effect* of all of the spiral axon loops (of earth) to deliver their dark neural pulses back to earth, in a way that has the *total net momentum-transferring effect* of *pushing all* of earth's atoms (on total net average) towards the *near-exact center* of our *nearly-spherical* planet earth.

*Scatter Demyelination* helps our planet earth generate its own gravity as it tends to “*loop*” trillions of demyelinated axons around itself; and in this way “*clothes itself*” with both a *slowly-moving halo* of spiral *looped axons*, and a *rapidly-moving halo* of tiny fast *dark-matter particles*.

Our sun receives its particular type of “*galaxy gravity*”, that keeps it bound to the *center* of our *milky-way galaxy*, from the trillions of *momentum-transferring* real dark coaxial axon cables flowing into it from *Sagittarius A\**.

Some of these trillions of trillions of momentum-transferring coaxial axon cables extend themselves way up (up above the galactic plane) and way out beyond our milky-way galaxy, and then these coaxial axon cables spiral themselves around and gradually loop themselves back around, as they begin to extend themselves back into the stellar regions of our galaxy, and these coaxial axon cables enter into the stars (of our milky-way galaxy) in a way that they can be used to impart momentum to a star, and in a way that they can be used to *steer the velocity of the star* so that each *star accelerates* to the actual angular velocity that it has, as it orbit around the center of our milky-way galaxy.

In this way, the *linear momentum* that the *stars receive*, from the flow of the *momentum-carrying* dark-matter particles, that flow into the *baryonic matter* inside the stars, and *scatter off* of this *stellar baryonic matter*, is the exact amount of linear momentum that these stars need to maintain their observed velocity profiles as they orbit our milky-way galaxy.

In this way, *all the stars of all the galaxies*, have very unique and very particular *stellar velocity profiles* (generated by the *flow* and *scattering* of the trillions of trillion of tiny fast *momentum-carrying* dark-matter particles as they *physically-scatter* off of all of the stellar *baryonic-matter* particles) that are *very different* than the

old traditional stellar velocity profiles predicted by Albert Einstein via his gravitation equations of 1915.

Our very own bright hot sun is just one of these *billions of shining stars* inside our huge milky-way galaxy.

Our own sun receives much of its “*gravity*” from (1) the trillions of dark-matter particles our sun receives from Sagittarius A\*, and from (2) the trillions of dark-matter particles our sun receives from *other nearby stars* like the three stars of the Alpha Centauri star system that is only about 4.2 light years from our sun, and from (3) the trillions of dark-matter particles our sun receives from the planets and moons of our own local solar system.

Our own sun receives its “*galaxy gravity*” from the dark-matter particles that are pushing our sun towards Sagittarius A\*

Our sun receives its “*stellar gravity*” from the dark-matter particles that are pushing our sun towards other stars.

Our sun receives its “*star-spherical gravity*” from the dark-matter particles that are pushing the baryonic matter of our sun inward (into a spherical star-shape) towards the center of our sun.



In this way, our sun receives its particular type of “*star-spherical*” gravity, that *keeps* its hot atoms *inside* the sun, and keeps these sun-atoms organized *spherically* in their spherical-sun shape, from the *inward-flowing* (inward towards the center of the sun) dark-matter particles that are flowing into our sun (on partially-demyelinated axons) from the outer regions of our own solar system.

Now that we have considered the spiral axons that are flowing out of our *sun*, and the spiral axons that are flowing out of our *earth*; it is now time for us to consider the spiral axons that are flowing out of our *moon*.

What is the nature of *Our Moon Spiral Axons*?

# Our Moon Spiral Axons

What are *Our Moon Spiral Axons*?

Does our own local Moon (the Moon that orbits our Earth) really have its own Spiral Axons that *loop around* and come back to *every atom* of our Moon?

What is the nature of the *trillions of spiral axons* that form themselves into a real dark *axon-halo* around our own moon?

*Our Moon Spiral Axons*, are similar to our earth spiral axons, because some of our moon's spiral axons extend outwards beyond our moon for *millions of miles*, before they *loop themselves* around, and extend themselves (with less myelin) *back into our moon*, and guide their dark neural pulses (that on average, mostly propagate towards the moon center) towards the *center* of the moon.

Some of the trillions of trillions of dark neural pulses (dark-matter particles), that are propagating on these moon spiral axons, towards the center of the moon, will *scatter* off of the *atoms of satellites* that orbit the moon, *pushing* these lunar satellites towards the moon center, and thereby *keeping* these lunar satellites *bound* to the moon.

This is how the moon gets its “*gravity*” that holds the moon rocks “*bound*” to the surface of the moon.

These moon rocks, are pushed into the lunar dust, because the tiny fast dark-matter particles (dark bosons) are constantly *pushing down* (via scattering) on the moon rocks, *more* than the dark bosons are *pushing up* on the moon rocks.

This is because the *directional dark axons* that are propagating their dark pulses *downward*, through the lunar surface, on their way towards the center of the moon, are *less myelinated* than the dark axons that are propagating their dark pulses *upward*, through the lunar surface, on their way outwards, away from the center of the moon.

Some of the dark-matter particles, that are rapidly traveling *towards our moon*, pass through the atoms of our *earth*.

Some of these dark-matter particles scatter off of the earth’s atoms, *pushing these atoms towards the moon*, and this causes our earth to *try to accelerate* towards our moon.

Likewise, some of the dark-matter particles, that are rapidly traveling *towards our earth*, pass through the atoms of our *moon*.

Some of these dark-matter particles scatter off of the moon's atoms, *pushing these atoms towards the earth*, and this causes our moon to *try to accelerate* towards our earth.

In this way, the flow and scattering, of dark-matter particles, push our earth towards our moon, and push our moon towards our earth; keeping these two massive atomic celestial bodies in “gravitational” orbits about each other.

The dark-matter particles, that are streaming towards the sun, *push* (via their momentum-imparting dark scattering events) the moon and the earth, *towards the sun*, causing the earth and moon to also *jointly orbit the sun*, besides jointly orbiting one another.

In this way, the trillions of trillions of *super-long looping real dark spiral axons* that emerge from the sun, earth, and moon, extend themselves in small, medium, and large, spiral axon loops, that *guide* their real dark neural pulses (dark-matter *scalar boson* particles) to scatter off of all the *baryonic matter* (of the sun, earth, and moon) in such a way so as to keep these massive celestial bodies

“gravitationally bound” together in the way they are currently tightly bound together in their mutual orbits.

Now that we have described the *trillions* of *super-long spiral axons* that emerge from the *sun*, the *earth*, and the *moon*; we are properly prepared to carefully consider the *thousands* of shorter spiral axons that emerge from every *individual atom* of our local solar system.

What is the detailed nature of these interesting *Atomic Spiral Axons*?

# Atomic Spiral Axons

What are the *Atomic Spiral Axons*?

The *Atomic Spiral Axons* are the *thousands* of *relatively-short spiral looping axons* that emerge from *every* individual *atom* of our milky-way galaxy.

When a tiny fast electrically-charged *dark-matter particle*, passes *very close* to a visible-matter atom; the dark-matter particle can *electromagnetically-scatter* off of some, of the internal neural-pulse components of the *atom*.

During this dark scattering event, the *scattered* dark-matter particle can be *transferred* to a spiral looping axon that *emerges* from the local *spatial region* of the atom, and may possibly extends for *a few microns* (or even a few inches) *beyond* the location of the atom, and then loops around and *reenters* the spatial vicinity of the atom with *less myelin shielding*.

If a *photon* (or an *electron*) happens to pass close (within a few microns, or within *a few inches*) of the atom, the photon (or the electron) may be *pushed* (by dark-matter particles) *towards the atom*, by dark-matter particles that

are propagating on *demyelinated axons* that are *directed toward* the location of the atom.

In this way, a *photon* (or an electron, or any particle of visible-matter) can be *gravitationally attracted* to a single nearby *atom*.

Hydrogen atoms, Helium atoms, Lithium atoms, and every type of atom, may have *thousands* of these thin atomic *spiral looping axons* extending for *a few millimeters* (or even for *a few meters*) from the *atom*.

*Every atom*, in our whole simulated universe, may have *thousands* of these *tiny thin dark-matter axons* attached to them.

These thousands of tiny thin (*atom-attached*) dark-matter *axons* will affect the effective “*mass*” of the atom.

These *thousands* of tiny thin *atom-attached* dark-matter *axons* will also affect the scope of *potential accelerations* that the *atom can experience*.

For example, the great difficulty of trying to accelerate a single individual *atom* of visible matter up to a velocity *nearly equal to the speed of light*, may be due to the great difficulty in *accelerating* these *thousands* of *atom-*

*attached spiral looping axons* (that are firmly attached to the atom) *up to the speed of light*.

It may be possible that the speed of light is *fastest* that any dark-matter *axon* can be *biologically-moved* by its supporting *glial cells*.

What is the potential nature of this hypothetical *Axon Light Speed Limit*?



# Axon Light Speed Limit

What is the *Axon Light Speed Limit*?

The hypothetical *Axon Light Speed Limit* is the *fastest speed* that a real dark *neural axon* can be *biologically-moved* by its supporting *real dark human glial cells*.

The *billions* of *mortal neurons*, in our mortal human brains, have a *maximum mortal speed* that they can be *biologically moved* from *one mortal spatial brain location*, to *another mortal spatial brain location*.

The *trillions* of *trillions* of *real neurons*, in our real human brains, have a *maximum real speed* that they can be *biologically moved* from one *real spatial brain location*, to *another real spatial brain location*.

The *real glial cells* in our real human brains are responsible for supporting, maintaining, and *moving* our real-human neurons, and our *real-human neural axons*.

*Our Axon Light Speed Hypothesis* is that the *speed of light* (as perceived, observed, and *scientifically-measured* by us mortal-human *physicists here on earth*) is the *maximum biological speed* that *any set* of real dark neural axons can be *transported through space* by the real dark glial cells

that continuously support them, continuously maintain them, and *continuously move them* from *one* real-human brain location to *another* real-human brain location.

*Our Axon Light Speed Hypothesis* is also that the *great difficulty* in accelerating a single individual electron up to the *speed of light*, due to the relatively-large amount of energy required to accelerate a single individual electron up to 99% of the *speed of light*, is due to the large amount of *real neural biological energy* required to *biologically-accelerate* the *hundreds* of real dark neural axons (that are *biologically-attached* to the *electron*) up to nearly the *speed of light*.

*Our Axon Light Speed Hypothesis* is also that *massive* visible-matter *particles* (like electrons, protons, and neutrons) *cannot travel as fast* as the speed of light, *because* their attached real-neural axons cannot *biologically move* as fast as the speed of light.

Now let's take a look at these hypothetical *Electronic Spiral Axons* of a single electron.

# Electronic Spiral Axons

How many *Electronic Spiral Axons* may a single electron possibly have attached to it?

Can a single electron have *hundreds* of real dark spiral looping *axons* attached to it?

Do these electronic spiral axons attach themselves to the *central* (positively-charged) slowly-moving (at speed less than the speed of light) *neural pulse* of the electron?

How about the *two* negatively-charged *outer pulses* of the electron?

These *two outer pulses* travel on their electronic axons, at a *quicklight speed* of about *6.36 times the speed of light*.

Since these two outer neural pulses are propagating *faster* than the speed of light, and the dark axons *cannot be moved faster than light*, it appears reasonable to assume that these *two negative outer pulses* have *no dark axons attached to them*.

With *no dark axons* attached to them, these two negative neural pulses are *free to move faster* than the speed of light.

Therefore, if a *single individual electron*, has hundreds of dark axons attached to it, then these dark axons are most likely attached *only* to the slowly-moving *central positive neural pulse* of the *electron*.

In a similar manner, if a *single individual down quark*, has hundreds of dark axons attached to it, then these dark axons are most likely attached *only* to the slowly-moving *central positive neural pulse* of the *down quark*.

In like manner, if a *single individual up quark*, has hundreds of dark axons attached to it, then these dark axons are most likely attached *only* to the slowly-moving *central negative neural pulse* of the *up quark*.

In this way, it appears that *all the electrons*, and *all the quarks*, have *hundreds of real dark neural spiral looping axons attached* firmly to their *slow-moving central cores*.

These *centrally-attached axons* help to give the *quarks* and *electrons* their *inertial mass*, including their *relativistic inertial mass*.

The *relativistic inertial mass* of these *electrons* and *quarks* can seem to grow very large when an energetic attempt is made to *accelerate* these massive elementary particles up to 99% of the speed of light.

This energetic difficulty encountered, in the attempt to accelerate these massive particles up to the speed of light, *may be due to the hundreds of axons attached to their massive-particle cores*, with these hundreds of attached-axons *not letting* their cores move as fast as light, because the *attached-axons themselves cannot biologically move* as fast as light.

These attached-axons may extend for *a few microns*, or for *a few meters* from the *slow central cores* of these electrons, quarks, protons, and neutrons.

*A proton* is composed of *two up quarks* and *one down quark*.

*A neutron* is made of *two down quarks* and *one up quark*.

Neutrons, protons, and electrons combine together to make *all the atoms* of our universe.

*Single individual atoms*, when they are *spatially isolated* away from all other atoms, may only grow relatively-short spiral looping axons, that are only *a few microns*, or only *a few meters long*.

However, when *a large number* of such atoms are connected together, or bound together, or are in *close*

*proximity* to each other, then the number of nearby dark scattering events will be *much larger*, and the *dark glial cells* will *biologically-sense* this larger number (and *larger density*) of *dark scattering events*.

When the atomic density is high, with *many atoms* in *close proximity* to each other, then the *dark glial cells* will *cause* some of the *dark axons* to *grow to greater lengths*, that are *much longer* than just a few meters, or just *a few thousand meters*.

When *trillions of atoms* are *very close together*, then these trillions of atoms will *all* have attached to them, some *dark spiral axons* that greatly extend themselves outward, in *very long* looping patterns that may extend for *millions of miles*.

In this way, the “*planetary gravity*” of a whole planet will extend itself for *many millions of miles* (with its planetary dark spiral axons that extend themselves outward for many millions of miles); even though the “*atomic gravity*” of a single individual isolated atom may only extend itself for just *a few meters* (with its atomic dark spiral axons that extend themselves outward for just a few meters).

Now that we have theoretically examined the spiral axons that may extend outwards from electrons, quarks, protons,

neutrons, and atoms; we are prepared to look at the potential nature of the *Photonic Spiral Axons* of individual photons.

# Photonic Spiral Axons

What are *Photonic Spiral Axons*?

*Photonic Spiral Axons* are the *hypothetical* real dark spiral looping axons that may extend themselves beyond each *individual photon*.

However, in our real neural pulse photon model, a single individual photon is composed of *two neural pulses* that *mutually-orbit* one another at a *quicklight speed* of about *6.36 times* the speed of light.

This quicklight neural-pulse speed is a few times (about 6.36 times) *faster* than the speed of light.

A part of our real dark neural axon hypothesis, is that our dark axons can only be moved at speeds *slower* than the speed of light.

Therefore, it appears that photons *do not have* any dark axons attached to them.

It appears that photons are *free to travel* at the speed of light, with *no dark axons attached to them*.



The two neural-pulse components (of an individual photon) only propagate on *photon-axons*.

These *photon-axons* are a very different kind of axon, than the super-high-speed *dark axons*.

These photon-axons can only propagate their photon neural pulses at a very specific *quickness* that is about *6.36 times* the speed of light.

The dark-axons can propagate their dark neural pulses at super-fast *darklight speeds* that are *many orders of magnitude faster* than the speed of light.

The tiny fast *dark-matter particles* (dark neural pulses) travel on their dark axons, *many orders of magnitude faster* than the photon-pulses travel on their photon-axons.

This neurally-simulated advanced universe is full of photons (*photon vector bosons*) traveling in all different directions.

This neurally-simulated advanced universe is also full of dark-matter particles (*dark scalar bosons*) traveling in all different directions.

The *dark scalar bosons* travel many orders of magnitude *faster* than the *photon vector bosons*.

These two types of *elementary bosons* appear to propagate on real neural axons that are *very different*, because of the *huge differences* in the *axonic speeds* of real neural pulse propagation.

*Photon axons* propagate their photon pulses at about *6.36 times* the speed of light.

*Dark axons* propagate their dark pulses at *trillions of times* the speed of light.

This is a *really big difference* in real neural axon speed.

We have described our current working hypothesis about the *dark spiral axons* that are attached to (and emerge from) *electrons*, quarks, *protons*, neutrons, atoms, *molecules*, moons, and *planets*.

We have also described our hypothetical reason why photons have *no* dark spiral axons attached to them.

Now let's look more closely at the *shape*, structure, and *function* of the *spiral axons* that emerge from Sagittarius A\*, the *supermassive black hole* in the very center of our own milky way galaxy.

What is the actual nature of these *Bessel Function Spiral Axons*?

## Bessel Function Spiral Axons

What is the set of coaxially-organized *Bessel Function Spiral Axons*?

Why is a simple *Bessel Function* such a useful *electrical shape function*?

There is a “ $\mathbf{v} \times \mathbf{B}$ ” *Lorentz Force* on a charged particle that is traveling with a velocity  $\mathbf{v}$  in a magnetic field  $\mathbf{B}$ .

Sometimes it is useful to make this  $\mathbf{v} \times \mathbf{B}$  *Lorentz Force vanish everywhere* (in a region of space) by wisely forming the magnetic field  $\mathbf{B}$ , in such a way that the *magnetic field vector  $\mathbf{B}$*  is always in the *same direction* (or in the opposite direction), as a *current of charged particles* traveling with *directional velocity  $\mathbf{v}$* .

There appears to be a way to *fully satisfy* this vector-alignment condition, *everywhere inside* a coaxial axon cable emerging from Sagittarius A\*, *if* the spiral axons

inside the cable are arranged in a very particular *Bessel-Function Spiral Axon pattern*.

If Sagittarius A\* chooses to *spatially-align* its coaxial spiral axons in such a *Bessel-Function shape*, then the *strong magnetic fields*, produced every picosecond by the trillions of trillions of trillions of tiny fast charged dark bosons (dark matter particles) propagating on the coaxial spiral axons, will have little or *no effect* (no force) on the *dark matter particles* as they propagate through the real dark coaxial axon cable, and as they emerge from this massive black hole at the center of our milky-way galaxy, and as they *continue to travel* (through the trillions of these Bessel-Function Coaxial Axon Cables) out to *each and every star* of our whole galaxy.

Theoretically, this would be an *energetically wise arrangement* for each set of Bessel-Function-Shaped Spiral Axons inside each of the trillions of *Sagittarius A\* Coaxial Cables*.

What would be the real benefit of these hypothetical *Coaxial Bessel Functions*?

# Coaxial Bessel Functions

Why are these *Coaxial Bessel Function Spiral-Axon Patterns* so potentially helpful?

There appears to be a *great energetic benefit* to having our real human brains, grow a set of real dark spiral axons, in a *force-free* coaxial Bessel-function *shape*, so that *the dark-matter particles*, that propagate on these super-long coaxial (Bessel-function-shaped) dark spiral axons, *will not place any unnecessary magnetic pressures on each other*, until these dark spiral axons emerge from their tight Bessel-function-coaxial packaging in the energetic centers of the stars.

*Our Milky-Way Coaxial Bessel Function Hypothesis* is that the trillions of trillions of trillions of *Electric Dark Bosons* (dark-matter particles) that emerge from Sagittarius A\*, and *electromagnetically power all of the stars* of our *milky-way galaxy*, are able to do so because of the *coaxial Bessel-function shapes* of the spiral dark axons that are *tightly packed* into the trillions of trillions of coaxial axon cables that together form the large bundle of energetic *core nerve fibers* that pass through the center of Sagittarius A\*, on their way *outward* into the milky-way galaxy, and on their way *inward* into the *hot*

*energetic centers of every star in our whole milky-way galaxy.*

These *Electric Dark Bosons*, that travel through the center of Sagittarius A\*, and then continue traveling outward to our own solar system, and then continue traveling inward into the hot energetic center of our very own sun, are worth looking at more closely.

# Electric Dark Bosons

What are these *Electric Dark Bosons*?

What are these *Dark Electric Neural-Pulse Scalar Bosons*?

Do such *dark bosons* really exist?

Is the *Higgs boson* the *only* scalar boson in our entire universe?

Or, is the dark boson *another* scalar boson that *really does exist* right here inside our very own universe?

Why do these dark bosons have a *very tiny electric charge*?

Why do some of these dark bosons have a *tiny positive electric charge*?

Why do some of these dark bosons have a *tiny negative electric charge*?

Why do these dark *scalar* bosons have *no spin*?

How can these *tiny fast dark bosons* carry with them a *very tiny electric charge*?

Even though the electric charge, of these tiny fast dark scalar bosons, is *super tiny* (very small); do these electric bosons travel *fast enough* so that the *dark magnetic fields* that they generate (the magnetic field generated by a traveling charged particle, according to Maxwell's Equations of 1865) are *strong enough* to cause these bosons to bounce (*scatter*) off of all the visible-matter particles?

How strong is the *magnetic field generated* by just *one* of these tiny fast charged dark scalar bosons?

How strong is the *electric charge carried* by just *one* of these tiny fast charged dark scalar bosons?

Are we sure that these tiny fast charged *dark scalar bosons* are the *dark-matter particles* that create every form of *gravity*, in this universe, just by *scattering* off of all the visible-matter particles into *every direction* possible?

If these dark-matter particles are able to generate gravity, by scattering off of visible-matter in *all different directions*, then might it be possible to invent a *Dark*



*Matter Diode* that only scatters the dark matter in just *one* single direction?

## Dark Matter Diodes

What are *Dark Matter Diodes*?

Can we (the bright scientists of earth) invent a *dark matter diode*?

How can we even begin to go about inventing such a useful *dark-matter diode*?

What does a dark-matter diode actually do?

A dark-matter diode is a piece of visible-matter material that will only pass traveling dark matter in just *one single direction*.

For example, a *standard electronic diode* is a piece of visible-matter that will only pass an *electric current* (of visible-matter *electrons*) in just *one single direction*.

A standard electronic diode acts to *block the flow* of electrons in just one single direction, and simultaneously *allow the flow* of electrons in the *opposite direction*.

Can something similar be done with the *flow of dark-matter particles*?

The wonderful benefit, to *modifying the flow* the dark-matter particles, is the hypothetical possibility of inventing a type of *Gravity Modification Technology*.

# Gravity Modification Tech

What is *Gravity Modification Technology*?

Can a type new technology be invented (by our talented physicists) here on earth, that will allow us to begin to *modify* some *pieces of visible-matter* in such a way so that it can *respond* somewhat *differently* to earth's "force of gravity"?

Can we (the scientists of earth) invent a useful *gravity modification technology*, that will allow us to *float* or *fly* in the earth's "*gravitational field*", without using much energy, and without using the earth's atmosphere to hold us *up in the air*?

Can we invent a new type of visible-matter material that will fully (or partially) act like a kind of *dark-matter diode*, allowing the trillions of tiny fast charged dark-matter particles to mostly *pass in just one direction only*, and to also mostly just *scatter* (and to thereby deliver a *gravity-like momentum-imparting push*) in the *opposite direction* to create a type of dark gravitational floatation in our earth's gravity?

Is this kind of *dark-matter gravitational floatation* even possible?

Do *trillions* of tiny fast dark-matter particles (dark scalar bosons) travel in *every spatial direction* near our earth's surface (where we all seem to currently live), even though the *subset* of the dark-matter particles that are mostly *traveling downward* (towards the center of earth) seem to be doing most of the scattering (and thereby most of the momentum-imparting), and most of the pushing, as these downward-traveling dark-matter particles *push us all down* to the surface of our earth?

The downward-flowing dark-matter particles are able to *push us down* (towards the center of earth), *more* than the upward-flowing dark-matter particles are able to *push us up* (away from the center of earth); unless we discover a successful way to create a type of *dark-matter diode* that will *empower* the upward-flowing dark-matter particles to *push us up, more* than the downward-flowing dark-matter particles are able to *push us down*.

How can we *empower* (via a new *Dark Gravitational Floatation Technology*) the upward-flowing dark bosons to push us up, *more* than the downward-flowing dark bosons are able to push us down?

# Dark Gravitational Floatation

What is *Dark Gravitational Floatation*?

Is *Dark Gravitational Floatation* really possible?

Dark Gravitational Floatation is *floating* on a *flow* of streaming *dark-matter particles*.

What is our *Dark Gravitational Floatation Hypothesis*?

*Our Dark Gravitational Floatation Hypothesis* is that some *new Gravity-Floatation (GF) physical materials* can be invented (by our talented scientists here on earth) that *direction-differentially modify* (like with a set of *dark-matter diodes*) the *directional scattering behaviors* of the dark-matter particles, as these tiny fast dark-matter particles *direction-flow* through the new *Gravity-Floatation (GF) materials*; in such a way so that these new *GF baryonic materials* are carefully designed to mostly *direction-preferentially-scatter* the specific *subset* of dark-matter particles that are *flowing in one specific direction* through the GF materials.

How can we invent some *early GF materials* that are composed of trillions of functional *dark-matter diodes*?

What kinds of *initial GF materials* can we create before the year 2030?

What kinds of *more-advanced GF materials* can we invent after the year 2035 here on earth?

What is the essential nature of these hypothetical *Gravity-Floatation (GF) Materials*?

## **Gravity-Floatation Materials**

What kind of *Gravity-Floatation (GF) Materials* can we begin to invent here on earth during the next few years?

Why is a deep understanding of dark-matter particles, and their flows, and their dark scattering events, so important in helping us to design some Gravity-Floatation (GF) materials here on earth?

How can we develop some *initial GF materials* that will *preferentially scatter the up-flowing dark-matter particles* that are flowing upwards from earth?

What is our *GF Material Hypothesis*?

*Our Gravity-Floatation (GF) Material Hypothesis* is that some useful *GF materials* can be developed and designed that will successfully *preferentially scatter* dark-matter particles that are flowing through (these GF materials) in the *Up-Direction* more than in the *Down-Direction*.

In this way, the *upward-flowing* dark-matter particles (that are flowing from near the center of earth, *upwards* towards the surface of the earth, and upwards through the atmosphere of our earth) *can be scattered more* by an *appropriately-oriented GF material*, in a way that causes the GF material to be *pushed upwards* (by the upward-flowing dark-matter particles) more than the GF material is pushed downwards (by the downward-flowing dark-matter particles).

In this way, the GF material can be made to “*float on gravity*”, due to the enormous upward pressure, of the trillions of upward-flowing dark-matter particles, as they perform their momentum-imparting dynamic *Up-Flow Scattering*.

# Up-Flow Scattering

What is *Up-Flow Scattering*?

*Up-Flow Scattering* is the *scattering* of dark-matter particles as they *flow upwards*.

Up-Flow Scattering can be *enhanced* with the use of a hypothetical *Gravitational-Floatation* (GF) material.

Can these *hypothetical GF materials* really be invented by our bright experimental physicists here on earth?

Can any of these new *GF baryonic materials* be invented by our scientists before the year 2028?

How can a *set of trillions of atoms*, be *spatially-arranged* (and *stimulated* properly) inside a hypothetical *GF material*, in such a way so as to make the GF material scatter dark-matter particles *more* on the *High-Scatter Side* (of the GF material), than on the *Low-Scatter Side* of the GF material?

What is our GF High-Scatter Side Hypothesis?



Our GF High-Scatter Side Hypothesis is that a type of Gravitational-Floatation (GF) Material can be developed that will scatter dark-matter particles more

Most of the *common materials* (like rocks, human-bodies trees, and lakes) that we are commonly familiar with here on earth, have *not yet* been modified to make them fully *GF-enabled*.

Most of these common materials (here on earth) scatter dark-matter particles in *roughly the same degree*, irregardless of how the various *atomic structures* in the common material are all *geometrically oriented* relative to the *special vertical direction* between the *location of the material*, and the *center of the earth*.

Some types of common earth materials (like some *human neurons*, and other sets of atomic structures, and other groups of *molecular structures*) can be *GF-enabled* to help them *float* on the *upward-pushing* dark-matter particles that are flowing upwards, through the surface of our earth, from deep inside our earth.

Some of these dark-matter particles *flow upwards* into our earth's atmosphere, and *outward* into the space beyond our earth.

GF materials can be constructed and *oriented* to make them easily *float* in our earth's atmosphere, or in the relative *vacuum* above our earth's atmosphere.

These *GF materials* can be invented, tested, and then fashioned into useful *Gravity Floatation Ships*.

## Gravity-Floatation Ships

Can a *Gravity Floatation Ship* really be invented by our physicists here on earth?

Can one of these powerful *Gravity Floatation Ships* be developed by our earth scientists *before* the year 2032, or before the year 2036?

What kind of *dark-matter-scattering* physical principles can our physicists use in their *future quest* to actually construct such a marvelous *Gravity Floatation Ship*?

What is the best way to go about designing such a gravity floatation ship?

What is the very first type of *gravity-floatation* (GF) *material* that we can create here on earth?

When we finally make a whole ship “*float in gravity*”, will we also be able to learn how to make the whole ship “*accelerate on gravity*” in any direction we choose?

If we can develop a useful *directional GF material* that can be oriented to *preferentially-scatter* dark-matter particles in *any direction we choose*, then it seems *likely* that we can also use *a whole lot* of this useful directional GF material to construct a “*Gravity Ship*” that can be *accelerated in any direction we choose*.

Is this theoretically possible?

Can we someday construct a *Gravity Ship* that can be *steered* to “*accelerate on gravity*” in any direction we may wish to travel?

How can *Accelerating on Gravity* be accomplished by such a marvelous spaceship?

# Accelerating on Gravity

How can we use a directional GF material to build a gravity ship that can *accelerate on gravity* in the direction we wish to go?

Is *Accelerating on Gravity* really possible in *any direction* we choose?

If we can design a directional GF material that can scatter dark-matter particles *more strongly* in *one* particular *direction* than in another direction; then it becomes theoretically possible to use a *large quantity* of this directional GF material to construct a “*gravity ship*”, that can “*float on gravity*”, and that can also “*accelerate on gravity*”.

Such gravity floatation ships can be used to *float entire buildings* up in the air just *a few inches* above the surface of earth, or just *a few miles* above earth, or just *a few thousand miles* above earth, or *any distance* above our earth.

The gravity-acceleration ships can be used to *transport people* to other planets, like Mars and Venus.

It may be theoretically possible to construct such powerful *Gravity-Acceleration Ships* (before the year 2032) that can accelerate (with their GF spaceship materials) to very high velocities, of *millions of miles per hour*, to make interplanetary travel much quicker than what is possible with our relatively crude *spaceship technologies* of today in 2023.

## Gravity-Acceleration Ships

Can we create some *Gravity-Acceleration Ships* here on earth?

Can we discover a way to begin to understand *dark-matter quantum-scattering gravity* deeply enough by 2024, so we can make some *directional GF materials* by 2026, so we can start making our very own *Gravity-Acceleration Ships* by the year 2028?

Why has it taken us (we, the scientists of Earth) so long to invent our first *Gravity Ships*?

Is a *deep understanding* of *dark matter* the *grand key* to constructing a useful Gravity Ship?

Does the deep understanding that “*dark-matter-scattering*” is what actually “*creates all gravity*”, show us all a very simple way to invent a “*gravity-floatation technology*” to begin to rise above this type of “*dark-matter-scattering gravity*”?

Does this current 4 Brain Theory paper provide a proper initial *conceptual foundation* that will enable us to develop a sufficient understanding of *dark matter quantum gravity*, so we can now begin inventing the *dark matter diodes*, and the *gravity floatation (GF) materials*, that will allow us to construct our very first Gravity Ships?

What is the *real reason* we are so excited about making some Gravity Ships here on Earth?

So, we can *more easily travel* to the Moon, to Mars, to Jupiter’s Moons, and beyond?

Or, so we can more easily solve world poverty, so everyone will have *enough food to eat* right here on Earth?

What is our *real motivation* for seeking to construct a Gravity Ship?

What exactly is in our *human heart*?

How can a *Gravity Ship* be wisely used to help us all solve world poverty properly for *everyone* here on Earth?

Why is this *vital question* so important for us all?

What is the very best way to go about developing a wonderful super-useful *Gravity Ship*?

# Gravity Ships

Can a super-wonderful super-useful super-powerful *Gravity Ship* really be invented by our physicists here on earth?

Can a dark-matter diode be theoretically envisioned *today*, so we can proceed to use it *tomorrow*, to make our very first Gravity Ship?

What will we do with our Gravity Ships, *after* we make them?

Will we use our powerful new Gravity Ships to *make money* for the *few*, at the expense of the many?

Or, will we use our powerful new Gravity Ships to seek to *liberate all the economic captives* of Earth?

Can we make a Gravity Ship that can accelerate at about *three times* the *9.8 meters per-second* (per-second) *acceleration* of Earth's Surface Gravity?

Can we make a Gravity Ship that can accelerate at an acceleration rate of about *30 meters per-second per-second* (mpsps) in *any direction*?



If we can make one of our new Gravity Ships accelerate at *30 meters per-second* (per-second) for 3,600 seconds (*one hour*), to accelerate from rest up to a velocity of *108,000 meters per-second*, then after accelerating at this rate for a whole hour, our new Gravity Ship will be traveling at a velocity of *108 kilometers per second*, which is about *67 miles per second*.

This fast speed of *67 miles per second* is actually *fast enough* to explore *all* the planets (and all their *interesting moons*) in our local solar system.

If our new Gravity Ship takes *a whole hour* to *accelerate* up to 67 miles per second (mps), our Gravity Ship will then be traveling at  $67 \text{ mps} \times 3,600 \text{ seconds per hour} = 241,200 \text{ miles per hour}$ , which is about *240 thousand miles per hour*.

If our Gravity Ship simply cruises (with no acceleration) at about *240 thousand miles per hour*, for a whole hour, then our Gravity Ship will cover a distance of *240 thousand miles* during just this *one single hour* of space travel.

Our Moon is located at an average spatial distance of about *238.9 thousand miles* from our Earth, which is about *240 thousand miles*.

At 67 mps (about *240 thousand miles per hour*), our Gravity Ship can travel the *240-thousand-mile distance* between the Earth and its Moon in about *one hour*.

At an acceleration rate **3g** (*3 times Earth's Surface Gravity g*), our Gravity Ship will require a whole hour to accelerate up to this speed of 240 thousand miles per hour (67 mps).

Therefore, we can see that such a powerful Gravity Ship will likely be able to accelerate for nearly an hour, cruise for a few minutes, and then decelerate for nearly another hour, as our Gravity Ship travels from Earth to the Moon in a *total travel time of less than 3 hours*.

Would you like to *travel to the Moon in just 3 hours*, explore the Moon for a few hours (or for *a few days*), and then travel back to Earth in just another *3 hours*?

Will this become *possible* during your lifetime, with such a powerful *futuristic* hypothetical Gravity Ship?

If we want our Gravity Ship to travel from Earth to Mars, then we may wish to accelerate at **3g** for *10 hours*, which is about at 30 mpsps for 36,000 seconds (10 hours), to accelerate from rest, up to a velocity of 1,080,000 meters per second, which is 1080 kilometers per second, which is

about *670 miles per second* (670 mps), which is 2,412,000 miles per hour, which is about *2.4 million miles per hour*.

Therefore, at **3g** our wonderful new Gravity Ship can accelerate up to *2.4 million miles per hour* in just *10 hours of acceleration* after it takes off from Earth on its exciting journey towards Mars.

If our Gravity Ship accelerates in 10 hours, up to a speed of *2.4 million miles per hour*, then our Gravity Ship will be able to simply cruise (with no acceleration) for another 10 hours, to travel an additional *24 million miles* during this *10-hours of relaxed-cruising* towards Mars.

At this cruising speed our Gravity Ship can travel *240 million miles* in just 100-hours (about 4.2 days) of relaxed-cruising.

How would you like to travel *240 million miles* through space in just *4.2 days* of travel time?

Does this sound like a *pretty good way* to travel around our local solar system between Earth and Mars?

The *total spatial distance* between Mars and Earth varies from about *34 million miles* to about *250 million miles*, depending on the *relative positions* of these *two planets* as they orbit around our sun.

With just 10 hours of **3g** acceleration, our Gravity Ship can accelerate up to a speed of 2.4 million miles per hour.

At this good traveling speed of 2.4 million miles per hour, our Gravity Ship can travel *34 million miles* from Earth to Mars in just about *14.2 hours*.

Also, at this good traveling speed of 2.4 million miles per hour, our Gravity Ship can travel *250 million miles* from Earth to Mars in just about *104.2 hours*, which is about *4.34 days*.

Do you want to be able to nearly travel the distance from Earth to Mars in just *14.2 hours*, or in just *4.4 days*?

When we add in about *5 to 10 hours* of *acceleration time*, and another *5 to 10 hours* of *deceleration time*, then we can see that traveling from Earth to Mars may possibly take us from about *24 hours* to about *5 days*, depending on the *relative positions* of Mars and Earth during the duration of our *space trip*.

Traveling from *Earth to Mars* in just *One Day*, or in just *Five Days*, is actually pretty fast.

Will we be able to travel to Mars in just *one to five days*, before the year 2030, or before the year 2040?

If we decide we want to be able to travel to Mars *in just 1-5 days* before the year 2030, then we will need to actually *start our new scientific experiments* right away, before the year 2024.

The purpose of these exciting new scientific experiments is to properly begin to really *Test* this new *Gravity Theory* in 2023, so we can begin to construct our new Gravity Ships (based on this new Gravity Theory) in 2024.

# Testing this Gravity Theory

How can we *Test* this new *Gravity Theory*?

In this 4 Brain Theory paper, we are presenting a powerful new *Quantum Gravity Theory* about dark-matter quantum-scattering gravity.

How can we now begin (today in 2023) to *scientifically test* this new dark-matter quantum-scattering gravity theory?

Successfully constructing a *working* Gravity Ship, that is *pushed* (accelerated) by dark-matter particle-scattering (dark-matter *particle-pushing*), will constitute a powerful scientific test (and a *good scientific proof*) of this *new* dark-matter quantum-scattering *gravity theory*.

What simple *scientific test* can we begin to conduct today, in 2023, to help us to start to *experimentally discover* if we can actually invent a *Dark Matter Diode*, that could eventually be used to *accelerate* our desired futuristic *Gravity Ship*?

What simple *earthly material* can we start experimenting with, to try to construct our desired *Dark Matter Diode*?

What earthy material is *abundant* here on Earth?

What about *water*?

What is a single *molecule* of  $H_2O$ ?

How is this single water molecule *shaped*?

What if we started our dark-matter-diode scientific experiments with *a cup of water*?

Can we scientifically develop a *Water Dark-Matter Diode*?

# Water Dark-Matter Diodes

Can we invent some *Water Dark-Matter Diodes*?

What is a Water Dark-Matter Diode?

A *Water Dark-Matter Diode* is a dark-matter scattering diode that is composed of *dark-matter-aligned water molecules*.

How can we *electromagnetically-align trillions of water molecules* into a special *dark-matter-aligned pattern* that will *scatter* the dark-matter particles (off of the water molecules) *preferentially* in any direction we choose, so we can cause the dark-matter particles to push-on (and accelerate) the *trillions* of dark-matter-aligned water molecules at **3g** in any direction we desire?

Can *mere water* be made to do this?

Can water be made to *preferentially-scatter* (directionally-scatter) dark-matter particles *more in one direction*, than in another direction?

Is a *single water molecule* usually shaped like a “V”?



Is a single water molecule composed of *two hydrogen atoms*, and just *one single atom* of oxygen?

Usually, water an individual water molecule is shaped like a very open “V” pattern with an angle greater than 90 degrees.

An individual water molecule usually likes to have an angle of about *104.5 degrees*, with the relatively large heavy oxygen atom (*oxygen 16 nucleus*) located at the *vertex* of the water “V” shape, and the two light hydrogen atoms (*individual protons*) located outward on the *two extended arms* of the individual water molecule.

This water angle can *vary rapidly* over an *oscillation amplitude* of a few degrees (centered around 104.5 degrees) in an oscillatory pattern at a high *water-angle oscillation frequency*.

The oxygen-hydrogen covalent-bond *length* of water can also vary rapidly (with a high *water-bond-length oscillation frequency*) with an *oscillation amplitude* of a few picometers, centered on an average bond length of about *96 picometers*.

This *water-bond-length oscillation-frequency*, and the *water-angle oscillation-frequency*, are two of the most

important *water-eigenfrequencies* of a single individual *water-molecule*.

The characteristic dark-matter scattering frequencies are *much higher* than these two important water-eigenfrequencies.

Which *specific set of geometrically-applied* electromagnetic *eigenfrequencies* are required, to encourage a large set of these individual water molecules to become *dark-matter-aligned*, so that they will *preferentially scatter* dark-matter particles *more in one specific direction* than in all the other directions?

What actually happens to a single individual tiny fast electrically-charged magnetic-field-generating *dark-matter particle*, when it encounters a much larger (and much slower) single individual *water molecule*?

What exactly happens with *Dark Matter on Water*?

# Dark Matter on Water

What effect does *Dark Matter* have on *Water*?

What exactly does *Dark Matter* do to *Water*?

What does a single *dark-matter particle*, do to a single *water molecule*?

Do millions of tiny fast dark-matter particles *pass through* a water molecule every second of every day?

What do these tiny fast bombarding dark-matter particles *actually do* to the behavior of a single individual water molecule, that consists of a bound set of *10 electrons*, *2 protons*, and *one single* massive oxygen-16 nucleus.

This is the *most common type* of water molecule found here on Earth.

Our massive oceans, and our precious mortal *human bodies* contain trillions of trillions of this type of water molecule.

Exactly *what* do the millions of tiny fast dark-matter particles *actually scatter off of* when they try to travel

through *just one* of these individual water molecules here on earth?

Do these tiny fast bombarding dark-matter particles scatter more off of the *two* relatively-light-weight positively-charged *hydrogen protons* of a single water molecule?

Or, do these tiny fast bombarding dark-matter particles scatter more off of the *single* relatively-heavy-weight more-positively-charged *oxygen-16 nucleus* of a single water molecule?

It seems *theoretically likely* that the single oxygen-16 nucleus *scatters more* dark-matter particles, than the two hydrogen protons; because this massive oxygen-16 nucleus is *more massive* than the two protons.

The 10 electrons, the 2 protons, and the single oxygen-16 nucleus, *all* seem to be actively *scattering* millions of the tiny fast dark-matter particles, every second of every day.

However, the *massive oxygen-16 nucleus*, seems to be doing *most* of the dark-matter scattering, simply because it is the *most massive part* of the water molecule.

Having theoretically established, that this massive oxygen-16 nucleus, is doing *most* of the *momentum-*

*imparting* dark-matter *particle-scattering*; we are now ready to begin to ask ourselves some really important questions.

For example, with the massive oxygen-16 nucleus doing *most* of the scattering; can we discover a way to *partially-shield* this oxygen-16 nucleus from scattering in *just one particular direction*?

Can we *arrange* a set of water molecules *in space* in such a special way, that we can successfully construct a *Water Gravity Motor*?

# Water Gravity Motors

What is a *Water Gravity Motor*?

A *Water Gravity Motor* is a *gravity motor* that is made out of *water*.

A *gravity motor* is a piece of visible-matter, that has been properly constructed, so that it can be used as a *gravity motor* to make *useful motion* from the *flow* of *dark-matter particles*.

An *electric motor* makes *useful motion* from the *flow* of *visible-matter electrons*.

A *gravity motor* makes *useful motion* from the *flow* of *dark-matter particles*.

What do we need to do, to a single individual water molecule, to *transform* this water molecule into a useful *water gravity motor*?

Do we *really need* to actually *do anything* to the water molecule?

Or, is the single individual water molecule *already* a kind of *water gravity motor*?

Is a single individual water molecule *already pushed* by dark-matter pushing-gravity?

*Yes*, a single water molecule does feel the *push of gravity*, from the *constant bombardment* of all the millions of dark-matter particles that are simply trying to travel through it.

Is this single individual water molecule already preferentially-pushed *mostly in one single direction* by dark-matter *directional* pushing-gravity?

*Theoretically*, it appears that the answer to this very important question is also a resounding *Yes!*

But, *how* can this be?

How can a single individual water molecule act as a *water gravity motor*?

Is a single individual water molecule a kind of *Water Molecule Gravity Ship*?

# Water Molecule Ships

What is a *Water-Molecule Gravity Ship*?

A *Water-Molecule Gravity Ship* is a kind of *gravity spaceship* that is composed of just *one single* individual *water molecule* that is *pushed by gravity* mostly in one *single direction*.

*Every water molecule* in this whole universe, is a *water-molecule gravity ship*, propelled (pushed) mostly in one specific direction by the “force of gravity”.

How can this be?

How can *every water molecule* be its *own gravity ship*?

Is the flow of dark-matter particles always trying to accelerate a water molecule in the direction the water molecule is presently heading?

In what direction is a water molecule presently heading?

Is a water molecule a directional entity?

Yes, it is.



Can the *two* positively-charged hydrogen *protons* (of a water molecule) *act together to partially shield* the more-massive *oxygen-16 nucleus* from the intense-flow of incoming bombarding dark-matter particles?

Yes.

Theoretically, the answer *must be Yes*.

The tiny fast electrically-charged *magnetic-field-generating* dark-matter particles, could theoretically be *pre-scattered* by the *two* hydrogen *protons*, in such a way so as to *partially-shield* the massive oxygen-16 nucleus from the forceful pushing of these *pre-scattered* dark-matter particles.

In effect, these *two protons* could work together as a *sweeping team*, to effectively *sweep* the *pre-space* of just *one side* (the two-proton side) of the water molecule, from the millions of tiny fast incoming dark-matter particles.

In this way, the *dark scattering effect* (the dark momentum-imparted) of the dark-matter particles that try to *fly past the two protons* on their way *towards* the oxygen-16 nucleus, *will be less* than the dark scattering effect (the dark momentum-imparted) of the dark-matter particles that *try to fly directly towards* the oxygen-16 nucleus from the *opposite direction*.

In this theoretical way, every water molecule will be constantly *accelerated in space* in the exact *opposite direction* of its “V” arrow-shape.

*Every individual water molecule is sub-micron-sized little water gravity ship that is constantly accelerated by gravity in the specific direction it is currently heading; and this water-heading direction is the opposite direction to the arrow-direction of the water-arrow formed by the 104.5-degree arrow-angle of the individual water molecule.*

A water molecule is constantly accelerated *by gravity* in the *water-acceleration direction* that has its two hydrogen protons *out front*, with its sole oxygen-16 nucleus *trailing behind*; because the total net-effect of all the tiny fast dark-matter particles, *mostly push* this *rearward* oxygen-16 nucleus *mostly towards* the *two out-front* hydrogen protons.

Because of the intense *pushing* (via scattering) of the dark-matter particles on the oxygen-16 nucleus, this oxygen-16 nucleus *pushes on its two covalent bonds*, and these two covalent bonds *push on the two hydrogen protons*, accelerating the two protons, and accelerating the whole water molecule in the special *water-gravity-*

*acceleration direction* that has the two protons *leading the way*, ahead of the *trailing* oxygen-16 nucleus.

In this way, *every water molecule* is its own *gravity ship*.

But, how can this be?

Why have our talented earth scientists *not yet* experimentally *measured* this type of *water-direction-specific* gravity-acceleration on a single individual *isolated* water molecule?

How can we begin our *Scientific Testing* of these *Hypothetical Water Molecule Ships*?

# Testing Water Molecule Ships

How can we *Scientifically Test* our *Water Molecule Ships*?

What is the most straightforward way to *experimentally-verify* that every water molecule is actually a *dark-matter-powered gravity ship*?

How about *other molecules*?

What kinds of other molecules (besides just water molecules) might also turn out to be *molecular gravity ships*?

Some molecules are *smaller* than the water molecule.

Many molecules are *larger* than the water molecule.

Most molecules have a *very different shape* than the water molecule.

*Which* of these *thousands* of simple molecules will turn out to be the most interesting *molecular gravity ships*?

How can we *scientifically-test* their molecular gravity-ship *abilities* in our experimental laboratories?

How can we use some *cooling lasers* to cool these interesting molecules down to the *super-cold temperatures*, where we might be able to *detect* some of their molecular *gravity-ship abilities*?

Can we discover a good way to physically-suspend *just one single individual water molecule*, in a powerful vacuum chamber, to properly *isolate it* from all of the other visible-matter particles, so we can scientifically study how this solo water molecule interacts with gravity, and with *just gravity alone*?

What kind of *frequency-precise cooling lasers* will be required to properly cool down all the *rotational motions* of this *solo water molecule*?

As this *solo water molecule* (one single *isolated* water molecule, that is *alone*, all by itself) starts to *rotate more slowly*, will we also be able to see that it is *accelerating around in little circles*, as it is *continually-pushed* (and accelerated) by millions of tiny fast dark-matter particles?

As this isolated solo water molecule continues to *slow down* its *rotational motions*, will this water molecule begin to travel around in *larger and larger circles*, as its rotational motions continue to *slow down*?

As our water molecule *stops rotating completely*, will the *radius* of its *circular motions* go to *infinity*, as our water molecule starts to *accelerate* in a *straight line*, and *increase its linear velocity* as our water molecule begins to travel in a *straight line*?

Will this exciting *experimental result* provide some good *strong evidence* that this dark-matter quantum-scattering theory of gravity is in fact the *correct theory* of *quantum gravity*?

What is *Our Water Molecule Gravity Ship Testing Hypothesis*?

*Our Water Molecule Gravity Ship Testing Hypothesis* is that as the *molecular rotational* (molecule-spinning, or molecule-turning, or molecule-rotating) *motions*, of a single *isolated* water molecule, are *cooled down to near absolute zero*, the water molecule will begin to *accelerate* (due to the force of *dark-matter particles* pushing on the oxygen-16 nucleus *from behind*, with the *two hydrogen protons out front*, and the massive oxygen-16 nucleus *in the rear*) in *larger and larger circles* (as its rotational-motions slow down towards zero), until the isolated water molecule begins to *accelerate* in a *straight line*, and the isolated water molecule starts to *increase its velocity* in a *straight line*, when its *rotations stop at absolute zero temperature*.

This experiment appears to be *doable*.

This simple description of this future *scientific experiment* shows that this dark-matter quantum-scattering particle-pushing theory of gravity is a *testable theory*.

A successful test of this *exciting new quantum gravity theory* will revolutionize particle physics, quantum physics, and our understanding of *quantum gravity* in this universe.

A successful test of this *exciting new quantum gravity theory* (as presented in this 4 Brain Theory paper) will also open the door for the construction of some *Water Gravity Ships* composed of trillions of dark-matter-aligned water molecules.

# Water Gravity Ships

What is a *Water Gravity Ship*?

A *Water Gravity Ship* is a *gravity ship* that includes a *set of water molecules* that are *dark-matter-aligned* so that the flow of dark-matter particles *pushes* on the set of dark-matter-aligned water molecules *mostly in the present direction* of the *chosen dark-matter alignment*.

How can we go about constructing *our very first* useful Water Gravity Ship?

*After* we have successfully isolated a single water molecule, and cooled it down to near absolute zero temperature, and we have observed how it begins to accelerate, by the power of dark matter, with its two protons out front, as it begins to *increase its velocity* (as it is pushed by dark-matter particles) in *whatever direction* its *two protons* are currently *jointly pointing in*, and thereby *prove* this new quantum gravity theory; then we can ask ourselves how we can begin to *discover* a *novel way to physically bond* two or more *water molecules together*, to make a *larger* (and more powerful) *water gravity ship*.



When we *bond two water molecules together*, they will need to have the *exact same orientation in space*, in order for both of the water molecules to be accelerated in *exactly the same direction*, at *exactly the same time*.

The grand key to constructing a *multi-molecule water gravity ship*, is to get all (or nearly all) of the water molecules to *be oriented in exactly* (or near exactly) *the very same direction*, so each water molecule will be accelerated by dark-matter *pushing in exactly* (or nearly exactly) *the same direction*, and in this way the multi-molecule water gravity ship will begin to accelerate (the *whole gravity ship*) in the *same direction in space*.

Can this be done *without* laser cooling of the water molecules to near absolute zero?

Yes.

How do we *know* this can be done?

We can use our powerful *scientific imaginations* to figure out how to do it without laser cooling.

What kind of electromagnetic field, in space and time, would be required to *gently bond two water molecules together* with the *exact same orientation in space*?

How can this powerful new *electromagnetic technology* be used to physically upgrade the *no qubit cloning theorem* into a new improved *yes qubit cloning theorem*?

How can this powerful *new electromagnetic technology* be used to *physically enable* us to begin to construct our very first *exact quantum computer* here on Earth?

What kind of *electromagnetic field*, in space and time, would be required to gently bond *trillions* of water *molecules* together with the nearly the exact *same orientation* in space?

In the *near future*, after we have used some *very advanced versions* of our new CRISPR-Cas9 Technologies to *improve* our human DNA, to *develop* and *grow* some advanced new human bodies (with *advanced brains*) for ourselves here on earth; then will we be able to also design and grow some advanced human *neurons* that are able to *neuro-electromagnetically-program* the water molecules *inside* these advanced neurons to *dark-matter-align themselves* so we can *float* and *fly* as advanced human beings here on earth?

Is this kind of *Advanced Human Floating* and *Flying* even possible here on earth?

# Human Floating and Flying

What is the Human Reality about *Advanced Human Floating and Flying*?

Can *Advanced Humans* really learn how to *Float* and *Fly*?

How can a human being float or fly *without a spaceship*?

Why do we sometimes *dream at night*, as precious *little mortal-human children*, about *floating* and *flying* inside our mortal-human *dreams*, while our mortal-human brains are *gently sleeping* on our comfortable pillows?

As advanced human beings, *living on Kolob*, an advanced planet that is closer to the center of our milky-way galaxy; can we all *float* and *fly* at will, whenever we desire to do so on our advanced Kolob planet?

Why not?

*Human Floating* can be Fun!

*Human Flying* can be Fun!

Why not develop some advanced new human bodies for ourselves that can *float* and fly whenever we *want to*?

But, is this really possible?

Are advanced humans *mostly composed* of water?

Can advanced humans use their powerful advanced-*human nervous systems*, to *neuro-electromagnetically align* enough of their *human-body water molecules*, to allow these advanced humans to *dark-matter float*, or to *dark-matter fly*, on the great sea of flowing *dark-matter particles*, whenever these advanced human beings *desire to do so*?

Perhaps.

When we *dream at night*, is it possible that some of our *advanced memories* from some of our past advanced-*human floating and flying experiences* on Kolob, are able to somehow *memory-leak* into our *submortal dream experiences*, causing us to awaken to our alarm clocks with *fresh memories* of *floating and flying* in our *dreams*?

Is this possible?

As advanced human beings on Kolob, what kind of *Human Water Gravity Ships* are we?

# Human Water Gravity Ships

Can an advanced human being, be sometimes viewed as a kind of an *Individual Human Water Gravity Ship*?

Can an advanced-human neuron *electromagnetically-program* the *most* of the *water* it contains, to dark-matter-align itself, so that the advanced-human body begins to *float*, and then also begins to *fly* in its *direction of choice*, high up *above* its advanced planet, where it lives?

Just *How high* above an advanced planet, can an advanced human possibly *learn to fly*?

Can we all learn how to do this right here *on earth*?

What is the *great benefit* of being able to float or fly, with just *our very own human bodies*?

How will we know for sure if our fond dreams of *human floating* and *human flying*, will ever be really become possible for us right here, as mortal human beings, on this planet earth?

What if we go ahead and figure out how to construct a *water-based gravity ship*, right here on earth, that can

rapidly and safely transport *dozens* of us mortal human beings to the *Moon*, and also to *Mars*?

Will this then be *evidence enough*, that this dark-matter quantum gravity theory is *basically correct* and *fundamentally accurate*?

One of the interesting things about the tiny fast *electrically-charged* dark-matter particles that are constantly flowing outward from the massive Sagittarius A\* black hole in the center of our milky-way galaxy, is the *possibility* that these dark-matter *current flows* may have both a *Direct Current* (DC) Component, and also an *Alternating Current* (AC) Component.

If so, then when exactly is the potential nature of these *Dark Direct Galaxy Currents*?

And, also what is the potential nature of these *Dark Alternating Currents*?

# Dark Alternating Currents

What is a *Dark Alternating Current*?

A *Dark Alternating Current* is a *dark electrical current* of tiny fast *electrically-charged* dark-matter particles that are *flowing together* in a *closed-circuit* dark alternating electrical *current pattern* inside a galaxy, or *between galaxies*, in our advanced physical *universe* of *galaxies* of *stars* and *planets* and *people on planets*.

How many different kinds of *Dark Alternating Currents* are there in our advanced physical universe?

How many different kinds of *Dark Direct (DC) Currents* are there in our own milky-way galaxy?

What many different kinds of *Dark Alternating (AC) Currents* are there in our own milky-way galaxy?

How can a *current* of *dark-matter particles* be caused to *alternate*, to form a dark alternating current?

Is there *any evidence* of *dark alternating currents* right here inside our very own milky-way galaxy?

Is there any evidence from radio-astronomy that our super-massive *Sagittarius A\** black hole (at the center of our milky-way galaxy) may be radiating a set of dark alternating currents at about *250 MHz*?

## **Sagittarius A\* 250 MHz**

What is the cause of the *Sagittarius A\* 250 MHz Radiation*?

It seems that some radio astronomers have detected a *radio signal* at about 250 MHz (250-Million Hertz) that seems to be *originating* at or near our supermassive Sagittarius A\* black hole at the *very center* of our own milky-way galaxy.

Why would our central *Sagittarius A\** be radiating electromagnetic radiation at *250 million cycles per second*?

What is the *actual cause* of this 250 MHz electromagnetic Sagittarius A\* radiation?



Is it possible that *some* of the *myelin shielding* may be coming off of some of the *dark axons* (of the coaxial axon cables) that are *emerging* from Sagittarius A\*?

If some of the *emerging dark axons* become *partially demyelinated*, just as soon as they emerge from Sagittarius A\*, then it may also be theoretically likely that *strong AC currents* of *unshielded dark pulses* (dark-matter particles) propagating on these *unmyelinated dark axons*, are able to *interact* with *nearby photons*, causing strong electromagnetic *emissions* near 250 MHz.

Are these *unshielded dark pulses* also enhancing the *21 Centimeter Hydrogen Line* of nearby neutral hydrogen atoms?

# 21 Centimeter Hydrogen

What is the *21 Centimeter Hydrogen Line*?

The *21 Centimeter Hydrogen Line* is an *electromagnetic radiation spectral line* created by a change in the energy state of *neutral hydrogen atoms* in our *milky-way galaxy*, or in other galaxies.

This *21 Centimeter Hydrogen Line* has an electromagnetic frequency of about 1.42 GHz (*1.42 Gigahertz*), which corresponds to an electromagnetic wavelength of about *21.1 centimeters*.

What effect, might the *ultra-strong flows* of *dark-matter particles* (near the *center* of our milky-way galaxy), have on the *electromagnetic emissions* that are related to this this important 21.1-centimeter hydrogen line?

How do these *ultra-strong* dark-matter flows, near the *central regions* of each galaxy, affect the *radio-frequency photons* that are *emitted* from these central galactic regions?

The central core, of the *black hole* at the center of a galaxy, has a very large number of *dark axons* traveling through this black hole, and *emerging from* this black

hole; and a very large number of dark axons *entering into* this black hole.

The black hole has many dark axons *entering into it*, and *exiting from it*.

The *dark-axon density* (the number of dark axons that pass through a small volume of space) *increases* as one gets *closer* and closer to the center of the black hole, at the center of a galaxy.

What is the nature of the *Black-Hole Dark-Matter Flow* near a black hole at the center of a galaxy?

# Black-Hole Dark-Matter Flow

What is *Black-Hole Dark-Matter Flow*?

*Black-Hole Dark-Matter Flow* is the interesting *flow of dark-matter particles* inside a black hole, and close to a black hole, at the center of a galaxy.

The black-hole dark-axon *density* is very *large* inside (and near) black holes.

These dark axons are propagating dark neural pulses (dark-matter particles) in *many different directions* near a black hole.

The kind of *super-interesting dark-matter particle flows*, that can occur *near a black hole*, are *very different* from the kind of dark-matter particle flows that can occur here *near earth* within our own *local solar system*.

The dark-matter particle flows, near our earth's surface, provide the "*force of gravity*" (due to their particle scattering behaviors) *to our earth's surface*.

The dark-matter particle flows, near the super-massive Sagittarius A\* black hole at the center of our milky-way galaxy, are responsible for *energetically-powering* all the

stars of the whole milky-way; and they are also responsible for providing all the “*galactic gravity*” within the whole milky-way galaxy; and they are also responsible for *measuring* every visible-matter particle, and *reporting these measurements* back into Sagittarius A\*; and they are also responsible for *facilitating* all of the *trillions of consciousness-projections*, from conscious *real-human brains* (in our real world on the *other side* of Sagittarius A\*) into conscious *advanced-human avatar brains* (that live on advanced planets *here inside* this neurally-simulated milky-way galaxy).

The real dark neural pulses (dark-matter particles) that are trying to *flow back* into *Sagittarius A\**, can create a very *intense dark-matter scattering pressure*, near Sagittarius A\*, that is *so intense* that the dark-matter particles can *push really hard* on some nearby photons, causing these *pushed-photons* to begin to *orbit* the supermassive Sagittarius A\* black hole.

How can *Photons Orbit Black Holes*?

# Photons Orbiting Black Holes

What is the nature of all the *Photons* that are *Orbiting Black Holes*?

How can an individual photon *orbit* around a black hole?

What *causes* this photon to orbit the black hole?

Usually, all the photons try to travel in simple straight lines through space.

However, a photon can never really travel in a simple straight line, because the photon is always being bombarded with dark-matter particles.

These dark-matter particles scatter off of the two neural-pulse components of the photon, and the dark-matter particles push on these two neural-pulse components, pushing the whole photon to always travel in a curved pathway.

The local curvature of the photon pathways is always a function of how strongly the dark-matter particles are relentlessly pushing on the photons.

As an individual photon begins to travel very close to a black hole, then this individual photon will begin to feel the intense pushes (towards the black hole) of a very large number of dark-matter particles, as these trillions of trillions of trillions of *unmyelinated dark-matter particles* are rushing towards the black hole, trying to enter into the black hole; and some of these dark-matter particles will scatter off of the two neural-pulse components of the individual photon, pushing these two neural pulses towards the black hole; and in this way the whole photon can begin to orbit the black hole.

Some *photon orbit models* predict that a photon can orbit a black hole with a *near-circular photon-orbit* that has a *photon-orbit radius* that is about *1.5 times* the Schwarzschild radius (the radius of the event horizon) of the black hole.

However, these *photon-orbit radius theoretical models* are based on Einstein's gravitational theory of 1915, which needs to be *properly updated* and *intelligently modified* to include all of the *dark-matter scattering pressures* that are described in this 4 Brain Theory paper.

Sometimes a photon gets *so close* to the center of a black hole, that this *photon gets literally pushed into the black hole*, by the *intense bombarding scattering pressure* of all the trillions dark-matter particles, that are so *strongly-*

*pushing* on the photon, by scattering off of the photon's two light neural-pulse components, as these dark-matter particles act together to *strongly push the photon* into the center of the black hole.

Is this really *theoretically* possible?

Can *Photons* really enter into *Black Holes*?

What is our current 2023 scientific hypothesis about these *Photons Entering Black Holes*?



# Photons Entering Black Holes

What happens when *Photons Enter into Black Holes*?

When an individual *Photon* gets pushed into a *Black Hole*, then this individual Photon begins to experience an *even larger number* of dark-matter particles pushing on it.

The *closer* an individual photon gets to the center of a black hole, the *more intense* the dark-matter scattering *pressure* becomes; until this dark-matter scattering pressure is *so great* that it actually pushes the *two components* of the photon *apart*, and then the photon is *no longer a photon*.

As an individual photon gets *very close* to the center of a black hole, its two real-light neural-pulse components get *pushed apart* from each other, and the photons *ceases to exist as a photon*, but its two real-light neural-pulse components do *still exist*, and these two real-light *neural pulses* continue to get *pushed* (by the dark-matter particles) *deeper and deeper* into the interior of the black hole.

As these *two light neural pulses* get pushed deeper and deeper into the black hole, these two light pulses become *separated* from each other, because these *two light pulses*

have *opposite* neural-pulse *electrical charges*, and they therefore scatter the charged dark-matter particles somewhat differently.

As these two light neural pulses become *completely separated inside the black hole*, and as these two light neural pulses get pushed deeper and deeper toward the central regions of the black hole, they get pushed (by the intense dark-matter scattering pressures) into the *dendritic arms* of some *Visible-Matter Absorption* (VMA) neurons that *only exist* near the very center of black holes.

What is the actual nature of these hypothetical *Visible-Matter Absorption* (VMA) neurons?

# Visible-Matter Absorption

What do these *Visible-Matter Absorption* (VMA) neurons actually do?

These hypothetical *Visible-Matter Absorption* (VMA) neurons *only exist* near the very *central regions* of black holes.

The scientific purpose of these *VMA neurons* is to simply *absorb all the visible matter* that enters into a black hole.

How is this possible?

How can these special *VMA neurons* (that live inside black holes) absorb all the visible matter that enters into the black holes?

These special VMA neurons *absorb* visible matter by *transforming* the *light-neural-pulse energy* of the visible matter into *dark-neural-pulse energy* of dark matter.

The *light-neural-pulse energy content* of the *two light neural pulses* (of a photon that has entered into a black hole) is *transferred* into the *VMA dendrites* that cause the VMA neurons to *fire up a new set of dark-matter*

*particles* (real dark neural pulses) that then *travel deeper* into the *heart* of the black hole.

In this way, when a *particular photon* gets pushed into a black hole (at the center of a galaxy), this particular photon is absorbed by the black hole, where *the photon's energy is converted* into a *new set of dark-matter particles* that continue to travel deeper into the black hole, until these dark-matter particles arrive inside the real human brains, of the particular set of real humans (that live in our real world) that are simulating the particular galaxy, that is governed by the particular black hole that the *particular photon* got pushed into.

This is how *all visible matter*, that gets pushed into a black hole, gets converted into *dark matter*.

How do *Electrons* get pushed *into Black Holes*?

# Electrons into Black Holes

What happens when *Electrons Enter into Black Holes*?

When an individual *Electron* gets pushed into a Black Hole, the *3 real-light neural-pulse components* (of the individual Electron) *get pushed apart from each other* by the intense scattering pressures of the dark-matter particles near the central regions of the Black Hole.

As these 3 light neural pulses become *widely separated* from each other, the Electron *ceases to exist* as an Electron deep inside the Black Hole.

However, these *3 light neural pulses* do continue to exist as light neural pulses, as they continually *get pushed deeper and deeper* into the heart of the black hole.

Eventually, in the deep heart of the black hole, these *3 light neural pulses* get pushed into the *dendritic arms* of the *Visible-Matter Absorption* (VMA) neurons.

The neural-pulse *energy content* of the 3 light neural pulses *gets transferred* into the *VMA dendrites*, and these VMA dendrites *transfer the energy* to the cell bodies of the *VMA neurons* (in the heart of the black hole) where the *energy* is used *to fire up* a new set of *dark-matter*

*particles* (real-dark neural-pulse action-potentials) that continue to travel *even deeper* into the heart of the black hole.

The *dark spiral axons*, that are *attached* to the *slow-moving central pulse* (of the electron) are *detached* (by supporting glial cells inside the black hole) *from this central pulse*, and *repurposed inside* the black hole (dark axon nerve fiber bundle) to support the *dark axonic needs* of the black hole.

In this way, an *electron* (that enters a black hole) is *converted* into a new set of *dark-matter particles*, and its dark spiral axons get *recycled* into new *dark axonic supports* within the dark-axon nerve-bundle (that is the black hole).

Now, that we have discussed what happens to *electrons* and *photons*, when they get *absorbed* into Black Holes, we are in a good position to also ask about *neutrons* and *protons*.

What happens to individual *protons* when they get *dark-matter pushed* into a black hole?

What is the scientific reality of *Protons Entering Black Holes*?

# Protons Entering Black Holes

What happens when *Protons Enter into Black Holes*?

What happens when *any type* of visible-matter particle *enters into* a black hole?

When visible-matter particles enter into black holes, all of their *energy is converted* into dark-matter particles.

Most of the fermion (and boson) visible-matter elementary particles *quickly decay* into photons, electrons, protons, and neutrons.

These *4 stable particles* (neutrons, protons, electrons, and photons) are able to *live long enough*, to be pushed *deep enough* into black holes, so that the *super-intense* dark-matter scattering pressures (that only exist at such *high* scattering pressures *deep inside* black holes), are able to *fully-separate* the real-light neural-pulse components of these *4 stable particles* into separately-propagating light neural pulses, that can then continue to propagate even more deeply into the very-deep interiors of black holes, until these light neural pulses *all get pushed* into the *VMA dendrites*.

When an *individual Proton* enters into a black hole, it begins to experience dark-matter scattering pressures that are *so intense* that the individual Proton begins to be *ripped apart* into *two up quarks* and a *single down quark*.

Only deep inside the *heart* of a black hole, are the dark-matter particle scattering pressures *so great*, that *quarks* can overcome the super-strong *quark-confinement* forces, and become separated into *individual quarks* that become *alone*, and become *isolated* individual quarks all by themselves.

After the *3 quarks* (of a single proton) *are pushed* (by the *pushy* dark-matter particles) *outside* of their *quark confinement*, these 3 quarks (one down quark, and two up quarks) are *free* to *continue* to be pushed (as individual quarks) *deeper* and *deeper* into the very heart of the black hole.

As these *3 separate individual quarks* get pushed ever deeper into the heart of the black hole, the dark-matter scattering pressures become *so intense* that even the individual quarks *cannot* continue to *hold* themselves *together*.

The dark-matter particles *push strongly* on each of the 3 real light neural pulses (of an individual quark) in a



*slightly different way, to push these 3 light neural pulses apart from each other.*

Then these 3 *separated* individual light neural *pulses* continue to be pushed deeper and deeper into the heart of the black hole, until they are pushed right into the extensive dendritic arms of the *VMA dendrites*.

The *VMA dendrites* receive the *energy* of the 3 *pulses*, and *biologically relay* this energy to the *VMA neurons*, and the *axon hillocks* of the VMA neurons where the energy of these 3 pulses is used to *fire up* a *new set* of real dark *action potentials* (dark-matter particles).

The *dark spiral axons*, that were previously *attached* to the slowing-moving *central* light neural *pulse* (of an individual quark), *become unattached* from their central pulse so they can be *biologically repurposed* (by the nearby supporting *glial cells*) for use in the *axonic structures* of the black hole (real dark *nerve fiber* of real *dark axons*).

In this way, a *proton* that enters into a black hole, is first separated into its 3 *quarks*; and then each of these 3 quarks is then separated into its 3 *neural-pulse components*; and then each (of these pulse components) is then *energetically-converted* (by the VMA neurons) into a set of *new dark-matter particles*.

This is our current 2023 working *scientific hypothesis* for what happens to *Protons* when they enter into *Black Holes*.

What happens to *Neutrons* when they enter into *Black Holes*?

We logically hypothesize that when *Neutrons* enter *into Black Holes*, they meet a pretty similar fate.

# Neutrons into Black Holes

What happens when *Neutrons Enter into Black Holes*?

When *Neutrons* enter deeply enough into the interior regions of Black Holes, the dark-matter scattering pressures *first push the 3 quarks out* of each of the Neutrons.

Each Neutrons is composed of *one up quark*, and *two down quarks*.

The inflowing black-hole dark-matter *pushes the two down quarks* (and the single up quark) *out of their quark confinement*.

As these *3 quarks* (from a single neutron) become *separated free quarks*, then they continue to be *pushed* as individual quarks, by the dark-matter particles, deeper and deeper into the heart of the black hole.

When *an individual quark* gets pushed deep enough into the heart of a black hole, then the dark-matter scattering pressure becomes so strong, that the quark gets pushed apart into its *3 separate real-light neural-pulse components*.

These *3 separate light neural pulses* then get pushed into the *dendritic arms* of the VMA neurons where the neural-pulse energies of these 3 pulses are *biologically-processed* into a *new set* of real-dark neural-pulse action potentials (*dark-matter particles*).

In this way, as a *single neutron* enters into a black hole, the neutron is first pushed apart into its *three separate quarks*; and then each of these separate quarks is then individually decomposed into its *three separate real-light neural-pulse components*; and then each of these 3 neural-pulse components is then *energetically absorbed* by VMA dendrites that work with their whole VMA neurons to *energetically transfer* every bit of energy (from the neutron's 9 neural-pulse components) into a *new set* of *dark-matter particles*.

In this way, *every neutron* that enters into a *Black Hole*, is decomposed into its *9 neural-pulse components*, which are then energetically converted into a *high-number set* of newly-created *dark-matter particles*, that then flow into our *real universe* on the *other end* of the *Black Hole*.

What kind of *Black Hole Internal Structure* is necessary for a black hole to conduct all of these energetic transfer processes?

# Black Hole Internal Structure

What is *Black Hole Internal Structure*?

The *Internal Structure* of a *Black Hole* is the set of *real neurons*, *real dendrites*, *real axons*, *real glial cells*, and other *real neural structures* that are needed to help a Black Hole perform all of the *black-hole functions* that a Black Hole must perform as the *central core* of a galaxy, and as the *governing center* of the galaxy, and as an *neural information conduit* between our advanced *simulated universe* (where we apparently live as advanced human avatars, and as mortal human avatars, and as submortal human avatars) and *our real universe* (where we really live as real human beings).

There are *a whole lot* of interesting processes going on *all of the time* inside a black hole.

The interior structures of black holes are *very different* than the interior structures of stars.

This is because *the purpose* (and function) *of stars* is very different than *the purpose* (and function) *of black holes*.

Black holes *govern* their galaxies, and *energize* their stars.

Stars *govern* their solar systems, and *energize* their planets.

We the astrophysicists of earth, *live* on our earth-planet, *appreciate* the warmth of our star, and *wonder greatly* about the super-massive Sagittarius A\* *black hole* at the *center* of our very own milky-way *galaxy*.

What if we curious astrophysicists decide to build *two experimental spaceships*, here on earth, for the purpose of *flying one of them* into our local *sun*, and flying the other spaceship into Sagittarius A\*?

We may expect that if we were to fly a *spaceship* into our *sun*, then our *spaceship* would *first melt* and *then vaporize* as it got very close to our *super-hot sun*.

Are suns *hotter* or *cooler* than black holes?

Do black holes have *much stronger gravity* than suns?

If we were to fly a *spaceship* into a *black hole* (like Sagittarius A\*), then the *material parts* of our spaceship would *come apart* as these material parts got *very close* to the black hole.

This is what we would *logically expect*, because it seems like the *super-strong gravity* of Sagittarius A\* will

quickly become *forcefully-overwhelming* (for the relatively-feeble *visible-matter* of our spaceship) as our *experimental spaceship* gets closer and closer to Sagittarius A\*.

As these *material parts* (of our spaceship) get pushed closer and closer to the black hole, the *molecules* (of these material parts) *will get pushed apart* (by the increasing dark-matter scattering pressures) into *separate* and distinctly-individual *molecules*.

As these *individual molecules* (of our spaceship) get pushed, by the dark-matter particles, closer and closer to the black hole; the individual molecules will themselves become *pushed apart* into *separate atoms*.

As these *individual separate atoms*, are pushed deeper and deeper towards the center of the black hole, the *photons* and *electrons* will be *pushed away* (due to the intense scattering pressures of the *trillions* of tiny fast *dark-matter particles*) from the *nuclei* of the atoms.

As the *atomic nuclei* get pushed deeper towards the center of the black hole, the individual *protons* and *neutrons* (of the nuclei) *will get pushed out of the nuclei*; and these *free neutrons* and *free protons* will then become separate individual particles.

Therefore, as our *experimental spaceship* gets closer and closer to the *central spatial regions* of a black hole, all of the protons, neutrons, electrons, and photons (of our original spaceship) become *separated* from our spaceship; and these *free photons, free electrons, free neutrons, and free protons* enter into the deeper spatial regions of a black hole separately as *separate* and distinct individual *protons, individual neutrons, individual electrons, and individual photons*.

What is our *Black Hole Internal Structure Hypothesis*?

*Our Black Hole Internal Structure Hypothesis* is that inside a *particular black hole* (like our own Sagittarius A\*), there are *spatial regions* where *individual neutrons* are *absorbed* and *converted* into dark-matter particles; and there are other *different spatial regions* where *individual protons* are *absorbed* and converted into dark-matter particles; and there are other still-different spatial region (inside the black hole) where *individual electrons* are absorbed and energetically-converted into sets of dark-matter particles; and there are still other-different spatial regions where all the different types (different *photon frequencies*) of *individual photons* are absorbed (by the black hole) and converted into dark-matter particles.



The scientific study, of the *future astrophysics* of the *internal structures of black holes*, will become very interesting in the near future of this planet earth.

Not only do black holes possess many different internal structures, but the *size* and *shape* of *black holes* is also very interesting.

A black hole probably *does not* really have a spherical shape.

What is the actual *Shape* of a *Black Hole*?

Does our milky-way galaxy have an *Hourglass Black Hole Shape* for the Sagittarius A\* black hole at the center of our milky-way galaxy?

# Hourglass Black Hole Shape

What is an *Hourglass Black Hole Shape*?

An *Hourglass Black Hole Shape* is the actual *three-dimensional shape* of a *black hole*.

A massive *Black Hole* exists at the center of *every* galaxy.

These massive *Galactic Black Holes* are *super-massive*, because they contain a *super-large* number of *real dark axons*, that are *gathered together* from the trillions of real-human brains that are participating in the neural simulation of the galaxy that is *neurally-governed* by the Galactic Black Hole at its center.

These *real dark axons* enter into (and exit out of) the black hole as *coaxial axon nerve fibers*, that are probably *not* shaped exactly spherical, because they are more-likely shaped somewhat like an *hourglass-shape*.

The most likely three-dimensional shape of our milky-way galactic black hole, is the shape this milky-way central black hole needs to assume so that it can properly *govern* our milky-way galaxy, and so it can properly *give* to our milky-way galaxy the *galactic-shape* that our milky-way galaxy *really does have*.

This milky-way black hole shape may be somewhat closer to an *hour-glass shape*, than to a perfectly spherical shape.

The *thicker upper region* of the *black-hole hour-glass shape*, may be for upward-flowing and *outward-flowing* dark axons and dark-matter particles.

The *thicker lower region* of the *black-hole hour-glass shape* may be for downward-flowing and *outward-flowing* dark axons and dark-matter particles.

The *narrow thin central region*, of the *black-hole hour-glass shape*, may be for *inward-flowing* dark axons and dark-matter particles.

The thicker upper region, and the thicker lower region, are for *extending the spiral dark axons* (as coaxial axon cables) upward and outward (and downward and outward) *way beyond the whole galaxy*, so that these *super-long dark-axon spirals* can then *return back* into the galaxy, to *power the stars*, and to *push the stars* inward towards the central *hour-glass-shaped* black hole.

As the dark axons *return back* to the hour-glass-shaped black hole, they *enter into the narrow thin central region* of the hour-glass-shaped black hole.

All the *real dark axons*, from the real dark neurons, of our *real human brains* (that live in our real universe), *combine together* into *coaxial axon cables*, that enter into the *narrow thin central region* of the hour-glass-shaped Sagittarius A\* black hole at the *exact center* of our milky-way galaxy.

Our *Sagittarius A\* black-hole nerve-fiber bundle*, is mostly formed from just the subset of real dark axons, that are from just the *Sagittarius A\* Subset* of real human brains that are actively participating (as avatars living inside our milky-way galaxy) inside our *Sagittarius A\* galaxy* (our milky-way galaxy).

Also, for *neural-simulation coordination purposes*, a *small subset* of *real dark coordination axons*, from some of the other real human brains, that are actively participating (as simulated avatars) in some of the *other galaxies*, that are *very-near* our own milky-way galaxy, and that effectively *surround* our milky-way galaxy, *also project some* of their real dark *coordination axons* into the *narrow thin central region* of our own Sagittarius A\* black-hole *hourglass-shaped nerve-fiber bundle* (of spiral axons) that is at the *exact center* of our very own *milky-way galaxy*.

After the dark-matter particles (real dark neural pulses) have traveled throughout our milky

All the *real dark axons*, from the real dark neurons, of our *real human brains* (that live in our real universe), *combine together* into *coaxial axon cables*, that enter into the *narrow thin central region* of the hour-glass-shaped Sagittarius A\* black hole at the *exact center* of our milky-way galaxy.

In this way, the *real-dark neural pulses* (that propagate themselves, as *dark-matter particles*, on the *real-dark neural axons*) enter Sagittarius A\*, and then travel *throughout* every sub-region of our whole milky-way galaxy, and then *return themselves* back to Sagittarius A\*, where all the dark-matter particles *push on the stars*, push on the planets, push on the protons, *push on the neurons*, push on the electrons, and *push on the photons*, as these dark-matter particles try to travel back towards Sagittarius A\*, so these *information-gathering* dark-matter particles can finally *re-enter into the very heart of Sagittarius A\** at the *narrow thin central region* of Sagittarius A\*, where they will then continue to *flow* into the *other nearby regions* of the *4 distinct* real-human *limbic quantum chambers*.

These *4 distinct* real-human-limbic *quantum chambers* house the *4 Black Holes per Galaxy*

# 4 Black Holes per Galaxy

Why does every *Galaxy* really have *4 distinct Black Holes* that lead (via their real dark axons) into this very-same *Galaxy*?

Why are these *4 distinct Black Holes* the also the *4 governing neural centers* of the *4 distinctly-different Limbic Galaxies*?

There are actually *4 distinct* (spatially-separate) *neural simulations* of *Sagittarius A\** and its *milky-way galaxy*.

These *4 distinct* *Sagittarius A\** hourglass-shaped *black holes*, exist inside the *4 distinct* wirelessly-networked real-human *limbic chambers*, which are the real-human *right hippocampus*, the real-human *right amygdala*, the real-human *left amygdala*, and the real-human *left hippocampus*.

As all the trillions of trillions of trillions of tiny fast charged *dark-matter particles* (emerge from the upper regions of *Sagittarius A\**, and also emerge from the lower regions of *Sagittarius A\**, and travel out beyond our whole milky-way galaxy, and then loop around and begin to travel back into our milky-way galaxy, and then begin to encounter the milky-way-galaxy's visible-matter and

then begin to) *scatter* off of all the visible-matter particles, and thereby *push on all the stars*, and thereby push on all the planets, and thereby *push on all the moons*, and thereby push on all the people, and thereby *push on all the molecules*, and thereby push on all the atoms, and thereby *push on all the neutrons*, and thereby push on all the protons, and thereby *push on all the photons*; these *traveling, scattering, information-gathering* dark-matter particles will then become ready to re-enter Sagittarius A\*, as they *return and report* what they have *found* as they *visited* with *all* the visible-matter particles of this *whole milky-way galaxy*.

What is *Our Sagittarius A\* Orbital Radius Hypothesis*?

*Our Sagittarius A\* Orbital Radius Hypothesis* is that the *narrow thin central region* of our *Hourglass-Shaped Sagittarius A\** is *orbited* (with a very small photon-orbital radius) *by photons*, and then *orbited by electrons* (with a longer electron-orbital radius), and then *orbited by protons* (with an even-longer proton-orbital radius), and then *orbited by neutrons* (with an even-longer neutron radius), and then *orbited by deuterons* (with an even-longer deuteron-orbital radius), and then orbited by *larger nuclei* (with even-longer nuclei-orbital radii), and then orbited by *whole atoms* (with even-longer atomic-orbital radii), and then orbited by *entire molecules* (with even-longer molecular-orbital radii), and then orbited by *larger*

*molecules* (with even-longer molecular-orbital radii), and then orbited by *entire stars* with their even-longer stellar-orbital radii as these *massive stars orbit* the *narrow thin central region* of our supermassive Sagittarius A\* black hole at the center of our milky-way galaxy.

Was even the wise brilliant Albert Einstein able to *foresee* such a *marvelous galactic structure*?

Back in Albert Einstein's day, in 1915 when he first published his famous gravitational equations, *he wasn't thinking very much* about black holes, dark-matter particle flows, and dark-matter particles *scattering* off of visible-matter particles.

*If* Albert Einstein would have been *thinking carefully* about dark-matter particle scattering in 1915, then he may have formulated his gravitational equations *very differently*, to take into proper account all of the *dark scattering events* of our local universe.

Another thing, that Albert Einstein was not deeply thinking about in 1915, is all the interesting *Radiating Black Hole Quasars*; and all their energetic dark-matter particle-flow sources, that energetically-power all of the interesting visible-matter energy emissions, that are continuously emitted from all of these powerful *Radiating Black Hole Quasars*.



What is *Our Radiating Black Quasar Hypothesis*?

# Our Black Quasar Hypothesis

What a *Radiating Black Hole Quasar*?

What is *Our Black Hole Quasar Hypothesis*?

A *Black Hole Quasar* is an *extremely luminous* Active Galactic Nucleus (AGN) powered by the supermassive *black hole* at the center of a galaxy.

*Every Black Hole* is a *Radiating Black Hole Quasar*.

Every black hole *radiates energy* into its environment.

Such energetic quasar emission activities, *are what black holes do*.

*Black holes* are *energetic radiating quasars* that radiate lots of *visible-matter energy* in the form of *radiated photons*, radiated electrons, *radiated protons*, radiated neutrons, and many other types of radiated visible-matter energy.

Every black hole is a *radiating* black hole.

Every black hole is a *radiating-quasar* black hole.

Every black hole radiates *both* dark-matter particles, and visible-matter particles.

Every black hole radiates *tiny fast dark-matter particles*, that propagate on the *real dark axons* that emerge from the *innermost central regions* of the black hole.

Every black hole radiates *larger slower visible-matter particles*, that propagate on *real light axons* that grow from the *real light neurons* that are *very close* to the black hole.

Every black hole *radiates* trillions of trillions of trillions of tiny fast dark-matter particles, that *strongly-push* (via particle-particle scattering) *on the nearby* (near the black hole) *visible-matter particles*, causing these visible-matter particles to *accelerate rapidly up to very high velocities*, and thereby causing the *emission* (radiation) of almost *every* known type of visible-matter particle, from the *nearby-regions* of space that are *very close* to the black hole, thereby causing these *visible energy emissions* to become *closely-associated* with the *location* of the black hole, because these *visible energy radiations* are actually *caused* by all the *forceful energetic particle-scattering behaviors* of some of the *unshielded dark-matter particles* that are *leaving* (and *entering*) the black hole.

In this way, because some of the dark-matter particles, that *enter* (and *exit*) a black hole are *unshielded* (or partially unshielded), and thereby able to *energetically scatter* (in a *very forceful way* due to their *super-high dark-matter particle numbers*, due to their *super-high dark-matter particle density* so close to a black hole) off of the visible-matter particles that are *very close* to the black hole.

These visible-matter particles (like photons, electrons, protons, and neutrons) that are *super close* to the black hole, are able to *energetically-feel* (because of the super-high number of dark scattering events) the super-strong “*dark winds*” of the super-high-density *two-way* (entering the black hole, and exiting the black hole) *dark-matter particle-flows* that naturally exist *so close* to a black hole.

These *high-density quantum dark winds* (two-way dark-matter quantum-particle flows) may be the actual source of *Dark Hawking Radiation*.

# Dark Hawking Radiation

What is *Dark Hawking Radiation*?

*Dark Hawking Radiation* is the type of *visible-matter Hawking Radiation* that seems to be *caused* by the scattering-interactions of huge numbers of dark-matter particles very close to *black holes*.

The *dark-matter density* of the huge numbers of dark-matter particles (*entering* and *exiting* the black hole) is *super-high* very close to the black hole.

These *ultra-high* dark-matter *densities* (very close to black holes) put *super-intense* dark-matter *scattering pressures* on *all* of the *visible matter* that comes near enough to a black hole.

These *ultra-intense* dark-matter *scattering pressures*, cause huge numbers of these (*visible-matter*) electrons, protons, and neutrons, to be accelerated to *very nearly* the speed of light, in the vicinity of a black hole; causing these neutrons, protons, and electrons to become *relativistically super-massive*.

These huge numbers of relativistically super-massive electrons, protons, and neutrons *collide with each other*,

generating a huge quantity of *photons* (and many other types of elementary particles) of a *broad range* of photon *frequencies* (from low-frequency *radio photons*, up to high-frequency *cosmic-ray photons*) that are radiated from the vicinity of the black hole as Dark Hawking Radiation.

What is Our Dark Hawking Radiation *Hypothesis*?

*Our Dark Hawking Radiation Hypothesis* is that Dark Hawking Radiation is the *apparent radiation* of a huge number of *photons*, of a broad spectrum of frequencies (from radio waves to *cosmic rays*), from the *vicinity* of the *black hole*, due to the *ultra-intense scattering pressures* (ultra-intense gravity flows) of the *ultra-high density* dark-matter particle flows near a black hole.

The dark-matter particles flow and propagate on huge numbers of *real dark axons*, that enter (and exit) the black holes.

These *real dark axons* (that enter and exit black holes) are *real dark wormholes* that can extend great distances from a central black hole, outward beyond the radius of a whole galaxy, and then back inward, back into the galaxy-central black hole.

These *real dark wormholes* are not the only type of wormhole that can exist in our local universe (that contains our earth); because our local universe actually contains *3 Types of Wormholes*.

# 3 Types of Wormholes

What are the 3 *Types of Wormholes* that are found in our universe?

The 3 *Types of Wormholes* in our universe are as follows:

- (1) The Dark Wormholes
- (2) The Higgs Wormholes
- (3) The Light Wormholes

*The Dark Wormholes* are the (potentially super long) real dark axons that propagate all of the real dark neural pulses (the *dark-matter particles*).

*The Higgs Wormholes* are the super-short real *Higgs axons* that propagate all the *Higgs Bosons* (real Higgs neural pulses) for *very short distances* before they deliver their pulse energy to the *real light dendrites* of the real light neurons (that have *Light Wormholes*).

*The Light Wormholes* are the *real light axons* that propagate all the *real light neural pulses*, that are all the *real-light neural-pulse components* of *all* of the *elementary particles* of the standard model of elementary particle physics.



These 3 *types of wormholes* propagate *neural-pulse-energy*, and *neural-pulse-information*, throughout our neurally-simulated universe.

With these 3 different types of wormholes to work with; advanced-human *wormhole engineers* can learn how to conduct advanced *Wormhole Engineering* from the comfort of their advanced-human home planets.

# Wormhole Engineering

What is *Wormhole Engineering*?

Is it really possible to *engineer* a *wormhole* in *space*?

Yes.

*All* real human beings, and *some* advanced human beings, can receive the *advanced ability*, to *control dark matter* in many practical ways, with the advanced knowledge of *Wormhole Engineering*.

The advanced scientific field of *Wormhole Engineering* is composed of the following 3 interrelated subfields:

- (1) Dark Wormhole Engineering
- (2) Higgs Wormhole Engineering
- (3) Light Wormhole Engineering

*Dark Wormhole Engineering* is all about the logical scientific design, *engineering*, construction, and maintenance of the *dark wormholes* that are the real *dark axons* that deliver all the *dark-matter particles* to a *given galaxy* (like for example, our very own milky-way galaxy); to provide all the *energy* to all of its stars, and to provide all the *gravity* (all the necessary gravitational

forces) to all the solar systems, and to provide an *information-gathering mechanism* for the whole galaxy, and to provide an information-transport medium to facilitate all the needed *consciousness projections* into the galactic core (central black hole) and throughout the whole galaxy.

*Higgs Wormhole Engineering* is all about the logical scientific design, *engineering*, construction, and maintenance of the *short Higgs wormholes* that are the real *Higgs axons* that are stimulated (*inside* the hot energetic interiors of *stars*) by the collective action of huge numbers of dark-matter particles, which cause these Higgs wormholes to propagate *Higgs bosons* (Higgs neural pulses) for very *short distances* before these *Higgs bosons decay* (by *delivering* their 125 GeV Higgs-boson *energy* to *stimulate* the Light Wormholes) into massive short-lived elementary particles, that then decay into the *stable elementary particles*, including photons, electrons, protons, and neutrons.

*Light Wormhole Engineering* is all about the logical scientific design, *engineering*, construction, and maintenance of the *Light wormholes* that are the real *light axons* that propagate all the real light neural pulses that are the neural-pulse components of *all* of the elementary particles of the standard model of *elementary particle physics*.

These elementary particles receive their *mass* (and their energy, and their existence) from the rapidly-decaying Higgs Bosons (that propagate through the short *Higgs Wormholes*).

These elementary particles receive their *gravity* (the gravity that they “feel” as the gravitational force) from the way they *scatter* (and thereby transfer linear momenta to) the dark bosons (the dark-matter particles) that propagate through *dark wormholes*.

These elementary particles receive their *internal structure*, their behavioral characteristics, and their *physical properties*, from the *finite set* of scientifically-possible real-light neural-pulse structures, that can be physically-propagated on the real light axons (the *light wormholes*).

A scientific subfield of Wormhole Engineering is the important subfield of *Dark Gravity Engineering*.

# Dark Gravity Engineering

What is *Dark Gravity Engineering*?

*Dark Gravity Engineering* is the scientific field of designing and *engineering dark wormhole structures* to support whole galaxies, whole solar systems, entire suns, planets, moons, bodies, and other *matter systems* to support human life in any way that is needed, wanted, or *desired* by the huge numbers of *intelligent human beings* who inhabit the many galaxies of our local universe.

*Dark Gravity Physics*, and *Dark Gravity Engineering*, are all about the scientific realization that visible matter cannot be fully understood, until we also fully understand dark matter, and how *dark matter pushes* (via dark scattering events) on *all visible matter* (regular matter or normal matter) to create the “*force of gravity*” for every bit of visible matter of this whole universe.

*Dark Gravity Engineering* includes the *scientific realization* that every distinct galaxy, of our whole universe, may have its *very own set* of dark-matter *galactic eigenfrequencies*, that are broadcast from its central governing dark hole, outward to every one of its solar systems.

Understanding (and measuring) these *dark-matter galactic eigenfrequencies* is very important.

How can we *scientifically discover* a good reliable *method* to accurately measure the dark-matter *milky-way eigenfrequencies* that are continuously broadcast from our own Sagittarius A\* black hole?

Dark Gravity Engineering also includes the *scientific realization* that every distinct solar system, of our whole milky-way galaxy, may also have its *very own set* of dark-matter *solar eigenfrequencies*, that are broadcast from its central *governing sun*, outward to every one of its planets and moons.

For example, our own sun may consume *dark-matter electrical energy*, according to a particular set of *Solar DC* (Direct Current) and *Solar AC dark-matter eigenfrequencies*.

These important *Solar AC* (Alternating Current) *dark-matter eigenfrequencies* may be very important for completely understanding (and modifying, and *altering*, and fully employing, and *properly using*) our local *solar electromagnetic dynamics* of this particular local solar system, where we currently seem to be living here on planet Earth.

The *Proper Scientific Understanding* these vital local Solar AC dark-matter eigenfrequencies may be the grand key to developing tomorrow's *advanced electromagnetic technologies* here on earth.

An important step towards the proper scientific understanding, of these advanced new *electromagnetic dark-matter technologies*, is the development of the new field of *Dark Electrical Engineering* here on earth.

# Dark Electrical Engineering

What is *Dark Electrical Engineering*?

What is a *Dark Direct-Current (DC) Electrical Engineering*?

What is a *Dark Alternating-Current (AC) Electrical Engineering*?

Why will *Dark Electrical Engineering* become such an important field of advanced *dark-matter* electrical engineering in our *near future* here on earth?

*Dark Electrical Engineering* is the field of *engineering* the *electrical galactic dark-matter circuit diagrams* of the galactic *dark-matter electrical flows* that *gravitationally-govern* (and *informationally-govern*) the galaxy clusters, *galaxies*, stars, *solar systems*, human-bodies, planets, *human-brains*, moons, and other *celestial bodies* of our local universe.

*Dark Electrical Engineering* includes a practical (for everyday productive use) scientific understanding of the *AC dark-matter eigenfrequencies* that emanate from our *own sun* (and also from Sagittarius A\*) and



*electromagnetically-govern our local (earth-based) electromagnetic environment.*

An important development of the Dark Electrical Engineering will be the future development of *Our Dark Web* here on earth.

# Our Dark Web

What is *Our Dark Web*?

How can we develop a useful *Dark Web* here on earth?

In the future we may decide to develop a useful ultra-fast *Dark Web* here on earth that can send *ultra-fast signals*, as *propagating disturbances* in the *natural flow* of *dark-matter particles*.

For example, if we can develop a *dark-matter-flow modification technology*, that *partially modifies* the natural flow of some of the dark-matter particles near earth; then we may be able to utilize this dark-matter-flow modification technology to send a *dark-matter signal* very rapidly (much faster than the speed of light) through an earth-based *Dark Web*.

*Dark-matter particles* travel at the speed of *Darklight*, which is an ultra-fast dark-matter propagation velocity, that is *many trillions of times faster* than the speed of light.

Therefore, we may be able to develop an earth-based *Dark Web* that can send and receive useful

*communications across millions of miles in much less than mere microseconds.*

Is this theoretically even *possible*?

Can such a useful *super-fast Dark Web* be developed (right here on earth) that can help us earth-based mortal humans *communicate* across *millions of miles* in much less than a *microsecond*, or even less than a *nanosecond*?

To put this *futuristic super-fast Dark Web speed* in proper perspective, let's take a look at *Our Current World Wide Web*.

# Our World Wide Web

What is *Our Current World Wide Web*?

*Our Current World Wide Web* of this present year 2023, is a *worldwide internet* of connected computers, that are able to connect to each other (via *wired networks*, and via *wireless networks*) at a set of many different *communication speeds* that are *all less* than the *speed of light*.

Our Current World Wide Web (of 2023) currently *only uses* those *old* electromagnetic communication *technologies* that do not directly rely upon any *dark-matter-assisted* electromagnetic *speed boosts*.

The speed of light is only about 186,282 miles per second, which is about 300,000 kilometers per second.

The *circumference* of *planet earth* is about 25,000 miles, so a speed-of-light signal can only travel *around earth* about *7 times per second*.

This means that our current 2023 world wide web, which is currently limited to the *speed of light*, can only communicate with the relatively-long time lags of a *few*

*milliseconds*, to tens of milliseconds, to even *hundreds of milliseconds*, for its earth-based communications.

Who wants to wait for *hundreds of milliseconds*, when realtime super-fast (*sub nanosecond*) communication, is what is really needed and wanted?

Our current earth's computers were largely developed during the 1940's, 1950's, 1960's, and 1970's; with *millions of people* purchasing their very own *personal computers* in the 1980's.

With *millions* of these personal computers coming into existence (here on planet earth) in the 1980's, some bright scientists began experimenting with better ways to *connect* (network) these personal computers *together*.

In the late 1980's and early 1990's some better ways to network computers were developed; and these better ways grew into *worldwide internet* and the *world wide web* that we currently have today.

Today in 2023, there are *billions* of us mortal human beings actively using our *world wide web* of networked computers all over this planet earth.

Some of us mortal human beings are already *wishing* we had a *faster internet*, and a *faster world wide web* (www).

We don't want internet *super-long time-lags* of *hundreds of milliseconds* for our realtime virtual-reality internet game play.

We want *much-shorter time-lags* that are no longer than just a *few microseconds*, or just a *few nanoseconds*.

Also, some of us mortal human scientists are already thinking about the best ways to go about *designing* a near future *Solar Wide Web*.

If we plan to put some people on the Moon, and even eventually on Mars; then it seems to make some logical sense that we may want to develop a *Solar Wide Web* that can connect people across the *different planets*, and the *different moons*, of our local solar system.

What is the very best way to go about designing *Our Solar Wide Web*?

# Our Solar Wide Web

What is *Our Solar Wide Web*?

Our future *Solar Wide Web* can be a lot like our current earth-year 2023 *World Wide Web*.

However, we will definitely want to make our Solar Wide Web to be able to communicate *much faster* than our current earth-year 2023 World Wide Web.

We don't want to continue to patiently wait for the 2.56-second two-way *travel-time lags* that currently plague our *earth-moon* communication systems.

We also don't want to continue to patiently wait for the *many-second* two-way *travel-time lags* that currently plague our 2023 *earth-mars* communication systems.

Why wait for *dozens of seconds*, or for *minutes*, to communicate from *earth to mars*, when it appears to be possible for us to scientifically develop a super-fast *darklight-enabled* (dark-matter-based) communication system that will be able to reduce Our Solar Wide Web *Time Lags* from *frustrating minutes* down to *happy nanoseconds*.

How can we (the humble scientists of earth) go about developing such a *science of dark matter*, that will also include an understanding of the *physics* of the *super-fast speeds* of the *tiny slightly-charge dark-matter particles*?

When these trillions of tiny fast *electromagnetic dark-matter particles* scatter off of all of the visible-matter particles, do these *dark-matter scattering-patterns* also *travel outward* through space at the *super-fast speeds* of dark matter?

How can we generate (intentionally create) a very specific (*easy to detect*) *dark-matter scattering-pattern*?

Is this simple concept, the *grand scientific key*, to developing our very own super-fast Solar Wide Web, and also *Our Futuristic Galaxy Wide Web*?



# Our Galaxy Wide Web

What is *Our Futuristic Galaxy Wide Web*?

What kind of *futuristic galaxy wide web* do we want to create?

Do we want to create a futuristic galaxy wide web that can employ the super-fast information-carrying power of *dark matter*, to help us to *project* our human *consciousness* into *other human avatars* living on other planets in *other solar systems* of our very own local milky-way galaxy?

Will we start consciously-animating *human-shaped robots* on our earth's *moon* before the year 2030?

As *advanced humans* (living on a Kolob-like planet closer to the center of our milky-way galaxy), are we currently projecting a *portion* of our *conscious selves* into these mortal-human-shaped biological robots (our human bodies here on earth) to animate them, and to help them feel like they are fully conscious (and fully aware) with unique human individuality and free will?

Is that how we *all* arrived here on earth?

Do we all have our memory masking *turned on*, so we *cannot remember anything* about our beautiful advanced Kolob-like planets, where we really live as advanced humans?

Am I (my *earth-planet self*) a projected (via our advanced dark-matter *galaxy-wide web*) conscious portion of my advanced human self (my *Kolob-planet self*)?

Is this the primary purpose, of our existing dark-matter *galaxy-wide web*, to help us *project ourselves* into these mortal-human *avatar bodies* that we have here on earth?

What *other purposes*, do we have for our existing galaxy-wide web, of dark axons and the *dark-matter particles* that propagate on them?

Can we *focus* dark matter?

Can we focus *darklight*?

How can we use the natural flow of the dark-matter particles (close to our earth planet) to scatter in a very special way, from a carefully-designed visible-matter *Dark Focal Device*, to cause the dark-matter scattering pattern to *focus itself* into a very small volume of space, some distance away from our *Dark Focal Device*?

# Dark Focal Devices

What is a *Dark Focal Device*?

What is the elemental composition of a *Dark Focal Device*?

How can we *construct* a Dark Focal Device?

A *Dark Focal Device* is a special *Focusing* device composed of visible-matter, with the atoms of the visible matter arranged in a special way so they will *preferentially scatter* most of the dark-matter particles mostly into a *Dark-Matter Focal Point* some distance away from the Dark Focal Device.

We may be able to construct such a *Dark Focal Device* by looking for a good way to build a type of visible-matter *field array antenna* system to intentionally scatter dark matter particles into a *dark focal point* a certain distance (meters, kilometers, or thousands of kilometers) away from the special dark-matter scattering *dark focal device*.

It may even be possible to construct a *Dark Positive Focal Device* to scatter and focus *positive* dark-matter particles *more* than *negative* dark-matter particles.

It may also be possible to construct a *Dark Negative Focal Device* that can scatter and focus *negative* dark-matter particles *more* than *positive* dark-matter particles.

These two opposing types of Dark Focal Devices can then be employed together, to help us to develop a *Dark Photon Modifier* to intentionally modify the frequencies of a set of distant photons.

These kinds of futuristic *Dark Photon Modifiers* can theoretically be used to *alter* the behaviors of electromagnetic fields from a distance of meters, kilometers, *thousands of kilometers*, or even millions of kilometers.

These kinds futuristic *Dark Photon Modification Technologies* may have profound implications for other types of future *dark-matter technologies*, that employ and alter the natural *dark-matter flows*, in a way that also *modifies* the *measurable electromagnetic fields* of our planet earth.

These futuristic advanced *Dark Photon Modification Technologies* can be used for the *great benefit* of humankind, if we choose to use them to benefit *all* of us precious humans here on earth.

These new advanced *dark-matter measurement technologies*, and these new advanced *dark-matter-flow modification technologies* can also help us to begin to conduct some better, *more accurate* scientific experiments, to *more deeply measure* the physical laws of nature here on earth.

For example, the famous  $E=mc^2$  (Energy equals mass times the speed of light squared) *energy-mass equivalence* equation that Albert Einstein published in 1905, may need to be *modified* somewhat to make it become *more accurate* for the *future progress* of science here on earth.

For example, an improved new *mass energy relation* (that is more accurate, and more helpful than energy equals mass times the speed of light squared) can be *scientifically-developed* to represent (and account for) the Higgs-Boson-Catalyzed creation of *new light electric pulse masses* (of *all the elementary particles* of the standard model) from the concentrated energy of the *concentrated dark-matter particles* inside a hot star, like our own sun.

After some different kinds of new electric pulse masses have been created, they need a way to *move, travel, propagate, and interact* with each other, in order to make all the elementary particles (like photons, electrons, protons, and neutrons), which are themselves composed

of some logically-simple types of *real-light electric pulse mass structures*.

These real light electric pulses travel along the *real light axons of real light neurons*, in our real human brains, to simulate this whole advanced universe, and our whole sun, and every Higgs Boson that *our sun creates* within it.

A *large set of Real Neurons*, that exist together in close spatial proximity, and that work together to *neurally-simulate* our advanced universe, can be viewed as an entire *field of Real Neurons*.

We can then ask many good questions about the nature of this *neural field* that consists of a *densely populated* collection of *Real Neurons*.

We can even proceed to create a *Real Neural Field Hypothesis*.

# Neural Field Hypothesis

Our *Real Neural Field Hypothesis* is that our *Real Neurons*, can network together to form special *regions* of *real neural tissue*, where the *real neuron density* is so *high*, that the network of real interconnected neurons, can in some ways, behave as a *vast field of computational networked neurons*, capable of computing almost anything, and *simulating* almost anything, including all the *dark-matter particles*, and all the *Higgs Boson particles*, and all the *visible-matter elementary particles* of this whole local advanced physical universe (that currently contains our own *milky-way galaxy*, and our own *earth planet*).

Part of this powerful Real Neural Field Hypothesis, is that our real neurons (from our real-human brains) are powerful enough that they can wirelessly network together to effectively create a *computational neural field*, and within this computational neural field, to also create a pulse-information-gathering *dendrite field*, a pulse-propagating *axon field*, and a pulse-generating *axon-hillock field*.

Let's think about the *axon field*, as a large field of a very *large number of individual axons*.

Most types of neurons have an axon, *that extends*, from the main body of the neuron, *out a good distance*, often in a *particular direction*.

*Each individual axon*, when viewed from a sufficient *distance*, can sometimes kind of *look like a string*.

*Strings can vibrate at different rates*.

*Axons can also vibrate at different rates*, as neural pulses (action potentials) can propagate along the axons at different rates (with *different numbers of pulses per second*).

There are *some interesting ways* that *axons* are kind of like *strings*.

There are several different kinds of *string theories* that have been *mathematically-developed* by some of our *talented string theorists* for nearly a *half dozen decades* since the 1960's.

Some of these *mathematical string theories* include some *notions* about *quantum gravity*.

In their attempts to create a good and proper theory of *quantum gravity*, that can help unify gravity with



quantum mechanics, some bright string theorists have managed to develop *a set of beautiful mathematics*.

This set of beautiful mathematics (from the most *mathematically-elegant string theories*) has already *benefited* some important fields of mathematics, and has *enlightened* some branches of quantum physics.

It seems likely, that if some *vital axon-pulse characteristics*, are *wisely added* to these *beautiful string theories*, they will begin to yield some really *excellent new scientific fruit*.

What kinds of new and improved *Axon String Theories* can we together create as a worldwide community of *theoretical physicists*?

What is our current best *Axon String Theory* of 2023?

Now, let's look more closely at our current best *Axon String Theory*.

# Our Axon String Theory

*Our Axon String Theory* is that some of *our real axons* (of some of *our real neurons*, that are currently actively-employed to simulate every elementary particle, of this local advanced physical universe) *can be viewed as a set of (axon) strings*, if these *axon-strings* are properly *modified* to have all the *necessary characteristics* of actual *real axons*.

Part of Our Axon String Theory is that *most* (or possibly all) of the *existing string theories* (and *superstring theories*) can be wisely modified (*axon-upgraded*) by simply *adding to them* all of the proper *pulse-carrying characteristics* of actual *biological axons*.

Our Axon String Theory is that by properly *axon-upgrading*, some (or all) of the *existing string theories*, they will begin to make better (*more accurate*) theoretical *predictions*, and they will also start to *become testable theories*.

*Violin strings* can be plucked and rubbed to make them *vibrate* with different *frequencies* (oscillatory rates) to produce lovely music we can all enjoy.

The *many linearly-arranged strings* of a *musical harp* can also be plucked to create some wonderful-sounding music.

*A musical harp has many strings.*

Each string of a musical harp has a *different length* to make the string vibrate at a *different oscillatory rate* (*temporal frequency*).

If all the *harp strings* are made of the exact same kind of *material*, of the same *material-thickness* (same string diameter), and they are all adjusted to have the exact same *string-tension*, then they will all still vibrate differently (at *different frequencies*), because all the strings are of a *different length*.

Harp strings can have many different properties, like *thickness*, *length*, and *tension*, to help the harp strings produce *different* kinds of musical sounds of differing *frequencies*.

*Real neural axons* are kind of like *harp strings* in some ways.

*Real neural axons* can also have many different properties, like *thickness*, *length*, *tension*, *myelination*, and different *ion-channel* types, to help the axons conduct

different kinds of neural *pulses*, at different rates (*frequencies*) to communicate, and to *simulate* many things, like our own *milky-way galaxy*.

We can choose to start to simply *imagine* (as a kind of scientific thought experiment, to help us begin to visualize a dense axon-string field) that *each* of the *harp strings* is actually a real *axon* that can carry real neural *pulses* to help simulate *advanced universes*.

Let's also imagine that we have an *infinitely large number of harps*, that are each *infinitely large* in their 3D spatial extent, with *infinitely long strings* (*infinitely long axons*).

Let's also imagine that the harp strings (axons) come in many different sizes (*thicknesses*), and types (*myelinated* or not), and *spatial orientations* (*vertical, horizontal, diagonal, etc.*).

Let's also imagine that some of the harp strings (axons) are *oriented in every way* that we can possibly conceive.

Let's also imagine that all of these (infinite number) of harp strings (axons) are *closely-interleaved* with each other, in such a *densely-packed way*, that in every little spatial volume (all the little 3D regions that we may wish to inspect), we will find a large number of axons (harp

strings) that are *oriented in any and every particular direction* we can imagine.

Therefore, every *small region* (of 3D space), contains a *large number of axons* (strings) that are *oriented in every direction possible*.

Now, we have imagined a *Dense String Field* which is also a *Dense Axon Field*.

Our *Dense Axon Field* consists of those regions of our real neural tissue, where the *axon density* is very *high*, with every neural sub-region containing *many axons*, that are oriented in *every direction*.

Let's further hypothesize that the real neural field, the real dendrite field, the *real axon field*, and the real axon hillock field, can all become *very dense*, and very neurally-interconnected.

Now, let us more carefully formulate our *Dense Axon Field Hypothesis*.

# Dense Axon Field Hypothesis

Our *Dense Axon Field Hypothesis* is that our *real neurons*, can form regions of real neural tissue, where the *real axon density* is very *high*, with every neural sub-region containing *many axons*, that are oriented in *every direction*.

Our *Dense Axon Field Hypothesis* is also that there are 4 *Dense Axon Subfields* as follows:

- (1) The Dark Axon Field
- (2) The Higgs Axon Field
- (3) The Light Axon Field
- (4) The VMA Axon Field

The *Dark Axon Field* consists of the set of *real dark axons* that propagate real dark neural pulses (*dark-matter particles*) throughout our milky-way galaxy.

The *Higgs Axon Field* consists of the set of *short real Higgs axons* that propagate real Higgs neural pulses (*Higgs Bosons*) short distances inside the *stars* of our milky-way galaxy.

The *Light Axon Field* consists of the set of *real light axons* that propagate real light neural pulses (that

composed all of the *visible-matter elementary particles* of the standard model) throughout our milky-way galaxy.

The *VMA Axon Field* consists of the set of *short real Visible-Matter Absorption (VMA) axons* that propagate real VMA neural pulses (*VMA Bosons*) short distances *inside Sagittarius A\** in the *central heart* of our milky-way galaxy.

The Higgs Axon Field exists throughout our whole milky-way galaxy (and throughout our whole universe), with its *highest axon concentration* inside the hot energetic *stars*.

This Higgs Axon Field is a biological *subset* of the *Higgs Neuron Field* which is the field (spatially-distributed set) of the *Real Higgs Neurons*.

This important *Higgs Neuron Field* is the actual *Higgs Field* that *gives mass* (and mass-energy) to all the real *light* neural pulses, and thereby also *gives mass* to all the *elementary particles* (that are made of the real *light* neural pulses).

Every *Higgs Neuron* has a *Higgs Axon*, because every *biological neuron* has a *biological axon* attached to it, that is a natural biological part of the neuron's cellular *anatomy*.

The *Higgs Neuron Field* is one of *Our 4 Real Neuron Fields*.



# Our 4 Real Neuron Fields

Our *Real Neuron Field* (that actively simulates this whole universe) consists of 4 *interlinked real-neuron subfields*.

These 4 *Real Neuron Fields* are as follows:

- (4) The Dark Neuron Field
- (5) The Higgs Neuron Field
- (6) The Light Neuron Field
- (7) The VMA Neuron Field

The *Dark Neuron Field* consists of the set of *real dark neurons* that fire up (create) real dark neural pulses (*dark-matter particles*) in our real universe, before these real dark neural pulses propagate *into* Sagittarius A\*, and then these dark-matter particles continue to *propagate through* Sagittarius A\*, and then these *tiny fast dark-matter particles* continue their long journey to propagate outward throughout our whole milky-way galaxy.

The *Higgs Neuron Field* consists of the set of *real Higgs neurons* that are stimulated by the super-high densities of energetic dark-matter particles found in the *stars* of our milky-way galaxy. These real Higgs neurons are stimulated inside the stars to produce *Higgs Bosons* (large net-neutral Higgs neural pulses) that travel short distances

on their *Higgs Axons*, and then stimulate the *light dendrites* of the *Light Neuron Field*.

The *Light Neuron Field* consists of the set of *real light neurons* that are stimulated by decaying Higgs Bosons to *fire up new sets* of *real light neural pulses* (that compose all of the *visible-matter elementary particles* of the standard model) inside all the *stars* of our milky-way galaxy. The newly-created *real light neural pulses* combine together to form *all* the known elementary particles. These real light neural pulses propagate on the *real light axons* of the *Light Axon Field*. When an elementary particle gets *pushed into a black hole*, then its *energy gets absorbed* by the *VMA Neuron Field* inside the black hole.

The *VMA Neuron Field* consists of the set of *real Visible-Matter Absorption (VMA) neurons*, that absorb all the energy, of all the real light neural pulses, of all of the elementary particles (including photons, electrons, protons, and neutrons) that *get pushed into black holes* like Sagittarius A\* in the central heart of our milky-way galaxy. These VMA neurons *convert the energy* of the light pulses *into new sets* of newly-created dark-matter particles (new real dark neural pulses).

In this way, real neural-pulse energy is *continually recycled* as this *pulse energy* is and *constantly converted*

from *dark-matter* particles, to *Higgs Bosons*, to *elementary particles*, and then back into *dark-matter* particles.

This is an important *galactic energy cycle*.

This is a *galactic-energy circle of life*, that energetically supports all of us simulated *human avatars*, that seem to *be living right here* inside our very milky-way galaxy.

Now let's look more closely at *Our Higgs-Neuron Field Hypothesis*.

# Our Higgs Neuron Field

*Our Higgs Neuron Field Hypothesis* is that the *Higgs Field* that was theoretically discovered decades ago by Peter Higgs, is actually the *Higgs-Neuron Field* presented in this present 4 Brain Theory paper.

Our Higgs Neuron Field Hypothesis is also that the *Mass-Generating Mechanism* of the Higgs Field is the *way* the Higgs Neuron Field *creates mass* when the energetically-decaying Higgs Bosons *stimulate* the Light Neurons to fire up a new set of *massive* elementary particles (by firing up a new set of light *massive* neural pulses, that then combine themselves into all the different kinds of *massive* elementary particles).

*Our Higgs Neuron Field Hypothesis* is also that this Dense Higgs Neuron Field (of Higgs Neurons) can be viewed as a type of *Higg's Field*, with the Higg's Boson (a very large net-neutral spin-zero real Higgs pulse) being a very *large quantum excitation* of this Higgs Field (the *Higgs Neuron Field*).

When a *Higgs Boson* (a Higgs neural pulse) of the Higgs Neuron Field decays, it does so by stimulating a set of *real light dendrites* (of the Light Neuron Field) which *pass the 125 MeV energy* of the Higgs Boson on to a set

of *light neurons* that employ this 125 MeV energy to *fire up* a new set of *real light neural pulses*.

These real light neural pulses propagate on *real light axons*.

These *light neural pulses* need to be able to transfer themselves from *one light axon* to *another light axon*.

This *useful ability*, of a light pulse to *transfer itself* from one light axon to another light axon, is what makes it *possible* for multiple light pulses to combine themselves together (in *mutual pulse-orbits*) to form all the elementary bosons, and all the elementary fermions, that have *spin* (intrinsic angular momentum).

How can a *single* light neural *pulse* move (and spatially-transfer itself) from the advanced *phospholipid cell membrane* of one light axon to another light axon?

When a real light pulse propagates on a real light axon, there is a corresponding movement, of its *real light pulse mass*, a *real distance*, through a *real space*, during a *real time* period.

Also, when a real light pulse propagates on a real light axon, there is a significant number of *massive real sodium*

*ions* that are transferred *into* and *out* of the real light axon cell membrane.

Exactly how much real inertial mass do these *massive real sodium ions* have in our real universe?

Exactly what role does light *pulse mass* play in the *transfer* of a light pulse *from one* light axon *to another* light axon?

Our *Axon-to-Axon Pulse Transfer Hypothesis* is that the light axon density can become *so high* (in some real-brain neural regions that are used for active simulations) that the *real light axon membranes* (real light axon cell walls containing important ion gates) can *influence each other* by *passing real light pulses between them*.

Let name this real-neural *ability*, to *transfer a pulse* from the *axon* of one neuron, to the *axon* of a different neuron, “*Direct Axon-to-Axon Pulse Transfer*”.

# Axon-to-Axon Pulse Transfer

Our hypothesis is that a very useful type of *Direct Axon-to-Axon Pulse Transfer* is possible with our real light neurons.

*Our Direct Axon-to-Axon Pulse Transfer Hypothesis* is also that this type of useful direct axon-to-axon transfer can take place between *two distinct light axons* (that belong to two completely-different real light neurons) in a region of real light neural tissue that is *far from* any real light dendrite.

*Our Direct Axon-to-Axon Pulse Transfer Hypothesis* is also that this type of direct axon-to-axon transfer can take place when the *two light axons are parallel* (or nearly parallel), and *close enough together* for the bioelectric behavior, of one *axon's membrane*, to be *influenced* by the *bioelectric presence*, of a real-light electric pulse traveling along the other axon.

In this theoretical Direct Axon-to-Axon Pulse Transfer, a *traveling pulse* from one axon, can be *completely transferred*, to a second (different) axon.

For example, a Coulomb's Law type force can exist (in the dense axon field) between *two pulses* with finite net *electric charges*.

These two charged pulses can effectively *act on each other*, to either *push* (or *pull*) on each other via a neuro-modulated Coulomb's Force Law.

This pushing (or pulling) on the electric pulses, as they try to simply propagate directly along their respective axons, will tend to push (or pull) the pulses *over to other axons*, that are aligned (or *nearly aligned*) with the original axons.

In this way a *real-light neural pulse can be transferred* from *one axon* to a *second axon*, and then on to a *third axon*, as the pulse propagates and travels through a *real-light dense axon field*, that exists inside the part of our real brains that is *actively conducting* the simulation of this universe that contains our local milky-way galaxy.

This enables a type of *Pulse Freedom* to travel freely in the *Real-Light Axon Field*.



# Pulse Freedom in Axon Field

The *Pulse Freedom* to travel freely in the *Real-Light Axon Field* is the *freedom* a real-light pulse has (under certain particular conditions in the dense *real-light axonal* regions, of the real-light neurons, where they help simulate this local universe) to *travel freely* in the *real-light axon field*, and to *freely interact* with other *real-light pulses* via a real *neuro-modulated* Coulomb's Force Law.

This is the important *Pulse Freedom* of an individual real-light neural pulse to *travel freely* on, and across, and *between*, different real-light *axons*.

This *pulse freedom of movement* comes about because of the *detailed neurobiological structure* of the *real-light field* of real-light *axons* in the 4 limbic simulation chambers of our real human brains.

These *real-light axons* are jointly arranged, and packed so tightly together, with the *bilipid membrane structures* of their cell walls *optimized* to allow their light neural pulses to be *easily transferred* from their *current axon* to another *nearby axon*.

In this way, we can consider this *free-travel field* of real-light axons, as providing a *free-travel axonic medium*,

where the light pulses are able to *travel freely* as they obey all of the real laws of *real-neuron electrodynamics* and *real-neuron magnetodynamics*.

Now let's look more closely at this advanced *Pulse Freedom of Movement*.

# Pulse Freedom of Movement

This *Pulse Freedom of Movement* allows all of the real-light *pulses* (that help neurally-simulate this milky-way galaxy, by helping to simulate all of the *internal pulse structures* of all of the *elementary particles* of this milky-way galaxy) to *freely move* and to *freely interact* with *each other*, in a way that *fully respects* the *electromagnetic forces*, as described by Maxell's Equations of 1865, as they are *neuro-modulated* by the *dense neural field* of our real-light neurons, that are actively *neuro-electromagnetically simulating* this whole advanced universe.

What kind of natural real laws govern this *Pulse Freedom of Movement* as the neuro-electromagnetic pulses move freely in the real-light axon field?

Also, what kind of natural real laws *govern* the behavior of the massive 125 GeV Higgs Bosons, that causes them to *rapidly decay* into *all* the different types of *real-light neural pulses*?

What happens to these *super-large super-massive electromagnetic Higgs pulses*, that are so large and so massive, that they are able to *stimulate the real-light dendritic field* (a field of real-light dendrites that inter-

permeates the real Higgs Neuron Field) to *produce* (create) a fresh *new* set of real-light neuroelectric pulses?

This super-massive electromagnetic real Higgs neural pulse of 125 GeV, is the *net-neutral spin-zero real Higgs Boson Pulse*.

One of the interesting properties of this massive 125 GeV Higgs Boson Pulse, is that it seems to always *quickly decay*, into a set of *smaller* (less massive) elementary *particles*, that are *easier to view* directly.

Now let's look at some of these interesting *Higgs Boson Pulse Decay Modes*.

# Higgs Pulse Decay Modes

What are all of the possible *Higgs Boson Pulse Decay Modes*?

There are many different *Higgs Boson Pulse Decay Modes* in which the real large Higgs Boson Pulse *decays* (transforms itself via *energetic real-light dendritic stimulation*) into a *small finite set of smaller* (less energetic) *real-light pulses*.

This small finite set of real-light pulses are *fired up* (newly-created) by the real-light neurons, that are stimulated by a decaying Higgs Boson.

For example, the Higgs Boson Pulse often decays into a *bottom –antibottom quark pair*, which consists of a *bottom quark* and its antiparticle.

The Higgs Boson Pulse can also decay into a *tau-antitau pair*, which consists of a *tau lepton* and its antiparticle.

The Higgs Boson Pulse can also decay into a *pair of massive charged W vector bosons*, consisting of a *positive W boson* and a *negative W boson*.

The Higgs Boson Pulse can also decay into a *pair of massive neutral Z vector bosons*, consisting of *two neutral Z bosons*.

The Higgs Boson Pulse can also directly decay into some *other types* of elementary particles.

Most of these elementary particles (that the Higgs Boson decays into) are *super-short lived*, with very-short *half-lives*.

After the Higgs Boson Pulse decays into bottom quarks, tau leptons, W bosons, or Z bosons, then these *newly-created* quarks, leptons, and bosons *also proceed to quickly decay* into new sets of still-smaller (*less massive*) elementary particles.

All of the decay products (of one single Higgs Boson Pulse) *continue to decay* into smaller (less massive) and smaller elementary particles, *until no more decay channels are available*, and all of the various decay products have *finally fully decayed* into the *smallest* (least massive) elementary particles possible.

These *final decay products* (of a single decaying Higgs Boson) are *always* the very *same* final decay products.

These final decay products are *stable*, because they *cannot decay* into anything else.

These *final stable decay products* (of a single Higgs Boson) are the *visible-matter foundations* of our whole simulated universe.

This would be *a most excellent reason* to call the Higgs Boson the “God Particle”.

The Higgs Boson is the “*God Particle*” because it can be used to create *All* of the stable visible-matter particles of this *whole universe*.

This is why *so many trillions* of Higgs Bosons are produced inside of the hot energetic *stars* to help these stars produce *All* of the stable visible-matter particles of this whole universe.

The *creation energy*, to make all of these stable visible-matter particles of this whole universe, *did not come* from the “big bang”.

The *creation energy*, to make all of these stable visible-matter particles (of our whole milky-way galaxy), must have certainly come from *dark-matter* particle-flow Poynting-Vector *energetic-transport* of this creation

energy from Sagittarius A\* into *all* of the *stars* of our milky-way galaxy, including our own local sun.

The Higgs Boson is so important to a *Star*, and its internal stellar energy-conversion processes; that perhaps we should really call the Higgs Boson the “*Star Particle*”.

These *Star Particles* (Higgs Bosons) *convert* the energy of the incoming dark-matter particles (that rapidly flow into Stars), into the energy (and mass) of *All* of the *elementary particles*, including all the photons, all the electrons, all the protons, and all the neutrons.

These *final stable products* (of the decaying Star Particles) are the (well known) *photons, electrons, protons, and neutrons*, that compose *All* of the *stable atoms* of our whole milky-way galaxy, and its entire advanced universe.

Protons are composed of *two up quarks* and *one down quark*.

Neutrons are made of *two down quarks* and *one up quark*.

*Protons are very stable*, and can last nearly forever, when left *alone* all by themselves.



*Neutrons are stable enough to last for nearly 15 minutes, even when left alone all by themselves.*

These Neutrons last *much longer* (than just 15 minutes) when they are *bound* to one or more Protons.

Protons and Neutrons are the only known *stable collections of quarks* in our universe.

Up quarks (and down quarks) *can become stable by organizing themselves* into Protons or Neutrons.

Neutrons become *very stable*, by *bonding together*, with one or more protons.

For example, a neutron can bind itself to a proton, to form a *stable deuteron*, that is super stable.

Neutrons and protons can also combine together, in larger numbers, to form all the *stable nuclei* currently known to our scientists.

*Electrons are very stable*, with their *super strong magnetic dipoles*, that can often last for *nearly forever*, even when left *alone* all by themselves.

*Electrons form the outer electronic orbitals* that can envelope all types of stable nuclei, to form the *advanced*

*atoms* (of all kinds) that compose *all* the mortal advanced matter in this whole advanced universe simulation.

Some types of *photons*, can be *absorbed* by some of the *inner parts of the advanced atoms*, to make the atoms more excited, and more energetic, and *more interesting in their atomic behaviors*.

These excited atoms can then *emit their photons*, via a very interesting *pulse-pulse interactive process*.

These photons, electrons, neutrons, and protons are all internally-composed of *small sets of mutually-orbiting real-light electric neural pulses* that travel (propagate) in the real-light axon field that simulates all of the elementary particles of our milky-way galaxy that contains our own little earth planet.

These real-light electric pulses are *much smaller* (much less massive) than the super massive Higgs Boson Pulse of 125 GeV.

Now, let's look more closely at the core nature of these *Real-Light Electric Pulses?*

# Real-Light Electric Pulses

The *Real-Light Electric Pulses* are the *neuro-electric real-light pulses* that compose the *4 stable electric pulse structures* that we know as *photons, electrons, protons, and neutrons*.

These *real-light electric pulses*, and the 4 simple stable *pulse structures* that they together form (photons, electrons, protons, and neutrons), are usually so small, with such low (non-relativistic) energies, that they usually (except for high-frequency photons, or relativistic neutrons, relativistic electrons, or relativistic protons) just *don't have enough energy* to stimulate (transfer their energy into) any of the real dendritic fields (the fields of real neural dendrites that interleave the real-light axon field) *to produce any new pulses* (any new neural action potentials) from dendritic stimulation.

These small, nonrelativistic, *low-energy*, real-light electric pulses cannot (all by themselves) form any new pulses, because *they just don't have enough energy* to do so.

However, these small real-light electric pulses *can still combine* themselves together into *mutual orbital patterns* to form the *4 marvelously-stable real-light pulse*

*structures* that we know as the *photon*, the *electron*, the *proton*, and the *neutron*.

These real-light *neuroelectric pulses* have many interesting neural properties.

For example, these real-light neuroelectric pulses can come in a number of different *Electric Pulse Sizes*.

# Electric Pulse Sizes

Our Real-Light Axon Field can maintain, support, and propagate a good number of different *Electric Pulse Sizes*.

Some of the larger electric pulses can sometimes have *larger net electric charges*, because the real-light pulses are actually composed of electric-charge-density *differences*, that come from having more ions (like real positive Sodium Ions) in one *specific location* than in a different specific another.

*Dynamic real biological changes* in the local real Sodium-Ion concentration (relative density) are *what makes* the real-light pulses; and are what makes the pulses *move*.

Some real-light electric pulses are relatively *small sized*.

Some real-light electric pulses are relatively *medium sized*.

Some real-light electric pulses are relatively *large sized*.

Not only do the real-light electric pulses come in a *variety of different sizes*, they also are able to travel along the

length of their real-light axons at different *Electric Pulse Speeds*.

## Electric Pulse Speeds

The *Electric Pulse Speeds* are the different action-potential propagation *speeds* (velocity magnitudes) at which the real-light electric *pulses* are able to *travel*.

The Real-Light Axon Field contains *multiple different types of interleaved axons*, that are able to biologically-conduct (biologically maintain and propagate) real-light electric pulses at *different speeds*.

The *unmyelinated real-light axons* are only able to propagate their real-light electric pulses at a set of *very slow speeds* that are *less* than the speed of light of about *186,282 miles per second*.

The *myelinated real-light axons* are able to propagate the electric pulses at *faster speeds* than the speed of light.

Some of the myelinated real-light axons *always* propagate their real-light neural pulses at an exact “*quickness*”

*speed*” (that is about 6.36 times the *speed of light*, which is about 1.185 million miles per second).

Can a *real-light* neural pulse really propagate along its real-light axon at *over a million miles per second*?

Are there any *faster* real axons, that can successfully propagate their real neural pulses *even faster* than 1.185 million miles per second?

Yes.

The super-long ultra-thin *real-dark myelinated axons* (that biologically-propagate the dark-matter tiny-fast neuroelectric action potentials) are able to rapidly propel their dark-matter particles at the ultra-fast “*darklight speeds*” that are *trillions of times faster* than the speed of light.

These super-long ultra-thin hyper-speed *darkly-myelinated* dark axons are able to propagate their *rapid-communication* real-dark electric pulses (dark-matter particles) at a specific set of super-fast “darklight” speeds that are actually *many orders of magnitude faster* than what Albert Einstein (1879-1955) believed might even be theoretically possible.

Not only do the real-light electric pulses have different *sizes*, and travel at different *speeds*, but they also have different *Electric Pulse Shapes*.

## Electric Pulse Shapes

What *Electric Pulse Shapes* are possible for the many different pulses that propagate inside our real human brains?

Some electric pulse shapes are *perfectly balanced* in their shape (with *equal* parts *negative*, and equal parts *positive*), so that the total (net) electric charge (of the pulse shape) sums to zero.

A good big example of these types of *fully-balanced pulse shapes*, is the Higgs Boson Pulse Shape, which is shaped in such a way so as to have *exactly zero net* (total) pulse charge.

Other types of electric pulse shapes are either *lopsided positive* (with net-positive electric-pulse shapes) or *lopsided negative* (with net-negative electric-pulse shapes).



The net positive pulses can be slightly positive, or *very positive*.

Likewise, the negative pulses can be very negative, or just *slightly negative*.

The electric pulse shapes can also be very simple with just *one or two simple lobes*, or somewhat more complex with *multiple lobes*.

The primary purpose of all these different electric pulse shapes (in the Real-Light Neuron Field that helps simulate this advanced physical universe of trillions of galaxies) is to provide *all the pulse shapes* that are *necessary to form* all the stable elementary particles, like photons, electrons, protons, and neutrons.

Now, let's look more closely at the interesting net *Positive and Negative Pulses*.

# Positive and Negative Pulses

The net *Positive and Negative Pulses* are the pulses that have an *electric charge-density distribution shape* that gives them an overall (total) *non-zero net electric charge*, when viewed (or considered, or observed, or measured) from a *sufficient distance*.

These Positive Pulses (and Negative Pulses) can be *electrically-attracted* to each other, or *electrically-repelled* by each other, depending on their exact net electric charges, according to a type of Real-Neuron-Field-modulated Coulomb's Force Law.

These neural-electrostatic *pulse-pulse forces* between *two* (or more) *electric pulses* are able to naturally form a small set of interesting neuroelectric dynamic *pulse structures*, that involve *two* (or more) *pulses*.

These *attractive pulse-pulse neuroelectric forces* between *two* (or more) neuroelectric real-light pulses, naturally generates a very wonderful *set* (the elementary-particle set) of *Dynamic Electric Pulse Structures*.

# Electric Pulse Structures

What are these *Dynamic Electric Pulse Structures*?

The set of these *Dynamic Electric Pulse Structures* (that are formed by the dynamic mutual-binding of the real-light neural pulses) is the set of *Elementary Particles* of the Standard Model of Elementary Particle Physics.

This is the very particular set of *Dynamic Electric Pulse Structures* that exist, live, move, and interact, one with another, inside the *Real-Light Neuron Field* of our *real human neural tissues*.

Each particular instance of a Dynamic Electric Pulse Structure may consist of just *a very small integer number* (like just one pulse, or just two pulses, or just three pulses) of *positive neural pulses*, that are attracted to a very small integer number (like just one pulse, or just two pulses, or just three pulses) of *negative neural pulses*.

*Most types* of these real-light *neuroelectric pulses*, have either a *net-positive* electric charge, or a *net-negative* electric charge, depending on which types of *ion gates* are electrically active in the neural *cell membranes*, that help the neuroelectric pulses form, exist, and propagate along a real-light *neural axon*.

A positive pulse is attracted to a negative pulse via a type of *neurologically-modulated Coulombs law*.

This *attractive force* between two or more real-light neuro-electric pulses, can *hold together* the Dynamic Electric Pulse Structure, that *is* a neurally-simulated *elementary particle*.

There are *exactly as many* elementary particles, as there are Neural Dynamic Electric Pulse Structures, that neurally-simulate them.

Two positive neuroelectric pulses *repeal* each other, just like two negative neuroelectric pulses repeal each other, via a *neurological-modulation* of Coulombs law.

These real-light neuroelectric *repulsive forces* can also cause *elementary particle decay* via the *weak force* of neuroelectric *pulse-structure decay*.

There are several different kinds of *real neuroelectric pulses*, including *large* pulses, *small* pulses, *fast* pulses, *slow* pulses, *positive* pulses, *negative* pulses, and *net-neutral* pulses

These different types of neuroelectric pulses travel at different *finite speeds*, along their axons, according to the

bioelectric (*real-ion movement*) behavior of the particular type of *neural axon*.

Some types of neuroelectric pulses can travel *much faster* than others.

For example, *myelinated axons* are generally able to conduct the neuroelectric pulses via *saltatory conduction*, which is usually *much faster* than the pulse speeds that are possible with un-myelinated (*bare*) axons.

*A finite few* different types of neuroelectric pulses can *combine together* (via a type of attractive neuromodulated Coulomb's Law, and a few other relevant biological neural-pulse "effective force" laws) into the wonderful set of *Elementary-Particle Dynamic Electric-Pulse Structures* that we particle physicists observe in nature here on this earth planet.

One category of Dynamic Electric Pulse Structures, that is of particular interest, is the universally-ubiquitous class of *Circular Electric Pulse Orbits*.

# Circular Electric Pulse Orbits

What types of stable *Circular Electric Pulse Orbits* can be formed via *two mutually-attracting* real-light neural pulses?

It appears to be *possible* for *two* real-light neuroelectric pulses (with *opposite* electric charges) to attract each other, and to travel around each other at a special (*orbiting*) speed, such that the *circular orbiting speed* of each of the two real-light pulse masses, produces a *repulsive centrifugal force* that always *perfectly balances* that *attractive coulomb force* between the *two oppositely-charged* real-light neuroelectric pulses.

These *circular electric-pulse orbits* can be *very stable*, and last a long time (*nearly forever*), if the attractive Coulomb forces are *perfectly balanced* with the repulsive Newtonian centrifugal forces.

These circular electric pulse orbits are the *basic internal structures* of our *elementary particles*.

For example, a *pair of pulses* can be attracted to each other to form a stable *circular orbital pattern* (the two pulses orbiting each other) that *neurally-simulates* a *single stable elementary particle*.

Such a *pair of mutually-orbiting* neuroelectric pulses (each with its very own real-atomic-ion *electric-pulse mass*), each traveling at a *stable orbital speed* through our real-neuron space (the real-neuron simulation-space field, that includes the Higgs field of our mutual real neural-network space) in a *circular orbit* will create a certain amount of *Pulse Angular Momentum*.

# Pulse Angular Momentum

What is *Pulse Angular Momentum*?

What is Real-Light Neural-Pulse Angular Momentum?

What is *Intrinsic Angular Momentum*?

What is the *Actual Source* of Intrinsic Elemental-Particle *Spin*?

Why do *most* of the observed elementary particles (that we physicists have already carefully measured here on earth) have *Intrinsic Angular Momentum*?

What is the underlying physical mechanism that generates this *intrinsic angular momentum*, that we call elementary-particle *spin*?

Which elementary particles have *Intrinsic Pulse Angular Momentum*?

The Higg's Boson is a very massive elementary particle, with *No angular momentum*.

Interestingly, most of the other elementary particles, seem to have at least *some* angular momentum.



And, the special type of angular momentum, that almost every mortal elementary particle has, is *quantized* in very simple amounts (and very specific *exact discrete amounts*) of *Planck's constant*.

*A pair of mutually-orbiting neural pulse masses* will certainly *generate angular momentum*.

The exact *quantized quantity* of angular momentum will certainly depend on the circular (and linear) *velocity* of the two pulses, the neuroelectromagnetic effective *mass* of the two pulses, and the *distance* between the two pulses.

For an *important real-neural reason*, nearly all of the elementary particles currently known to our worldwide community of physicists, seem to possess some *very particular quantized amounts* of angular momentum.

These very *special magnitudes* of angular momentum are measured in units of *Planck's constant*, and in units of *one half* of Planck's constant.

Therefore, there must be something very special and very particular about our *real-light neurons*, their neuroelectric pulses, and their real neural networks, that cause *only* these *very special quantized amounts* (simple multiples of

*one half* of Planck's constant) of *angular momentum* to be *stable enough*, to last long enough, to be *measured* by our talented mortal-human scientists, who are living here on planet earth with us, inside this multi-player neural-universe simulation.

There are also certain types of traveling dynamic electric pulse structures that can dynamically-generate *super-strong steady magnetic dipole moments*.

For example, the *electron* seems to have a *magnetically-powerful neural pulse structure* that creates a *very large magnetic dipole moment*, that is about *658 times as strong* as the magnetic dipole moment of the *proton*, and is about *960 times as strong* as the magnetic dipole moment of the *neutron*.

What type of *magnetically-powerful neuroelectric pulse structure* would give to a single *electron* such a *super-strong magnetic dipole moment*?

A *single electrically-charged* real-light neuroelectric *pulse* (composed largely of positive electrically-charged sodium ions, or other ions) traveling at a *particular speed* through a suitable neural-simulation space (like our real human brain neural network simulation space) generates a finite *magnetic field* (because the pulse is an electric charge, traveling through a space that can allow magnetic

fields to be generated in it) that *physically-endows* all our *real human neurons* with a *deeply-magnetic nature*.

In this simple scientific way, we can come to the correct logical realization that *All* of our real human neurons are *Real Magnetic Neurons*.

Now let's look a bit more closely at *Our Real Magnetic Neurons*.

# Our Real Magnetic Neurons

*What are Our Real Magnetic Neurons?*

*Our Real Magnetic Neurons are All of the real neurons that exist inside all of our real human brains.*

Our Real Magnetic Neurons (that naturally live inside all our real human brains) generate powerful *neuromagnetic fields* that correspond to the *velocity* (speed and direction) and *charge* (magnitude of electric charge) of every moving ion and *every traveling pulse* (neural action potential).

According to Maxwell's 1865 equations of electromagnetism, *any* electric charge (and specifically, any electric charge *density*), that experiences *any* motion (of any *non-zero* velocity), of any type, will automatically also *generate a corresponding magnetic field*.

James Clerk Maxwell wrote down his famous equations of *electromagnetism* about 16 decades ago, in 1865.

Did James Clerk Maxwell ever think about wisely applying his equations of electromagnetism to the *Magnetic-Field Generating Behaviors* of our *trillions* of *real neurons* in our real human brains?

Can it be theoretically possible that *certain special types* of traveling real neuroelectric pulse structures could possibly produce very significant quantities of *Real Neuro-Magnetism*?

# Real Neuro-Magnetism

What is *Real Neuro-Magnetism*?

What is so important about the *Real Neuro-Magnetism* of our Real Human Brains?

This present 4 Brain Theory paper is about the *4 Human Brains* that we all have.

Do each of our 4 Human Brains have its own unique form of *Neuro-Magnetism*?

It turns out that all 4 different types of our human-brain neural tissue are *biologically magnetic in nature*, because the movement of their electrically-charged neural pulses, causes these brain tissues to become *physically magnetic in nature*.

Our 4 types of our *Neuro-Magnetism* are as follows:

- (1) Our Real-Brain Neuro-Magnetism
- (2) Our Advanced-Brain Neuro-Magnetism
- (3) Our Mortal-Brain Neuro-Magnetism
- (4) Our Submortal-Brain Neuro-Magnetism

Our 4 Brains have 4 kinds of Neuro-Magnetism.

These 4 different types of our human-brain Neuro-Magnetism, *obey 4 different versions of human-brain neuro-electromagnetism*, that will hopefully be studied by many future *neuroscientists*, including many future *neuro-physicists*.

Some of our neuroelectric pulse structures contain *circular motions* (from mutually-orbiting pulses) that can easily generate significant (non-zero) *neuro-magnetic dipole moments*.

Now let's look more closely at these neural pulse-generated *Neuro-Magnetic Dipoles*.

# Neuro-Magnetic Dipoles

What is a *Neuro-Magnetic Dipole*?

A *Neuro-Magnetic Dipole* is a magnetic dipole that is physically-generated by the *movement* of one or more electrically-charged *neural pulses*.

What kinds of neuroelectric pulse structures can most easily generate powerful *Neuro-Magnetic Dipoles*?

Do some neuroelectric pulse structures, with their powerful neuro-magnetic dipoles, able to *influence the behavior* of other *nearby* neuro-magnetic dipoles?

As little children, some of us have had the fascinating early experiences of *playing* with *two strong magnets*, to see how they generally *behave* when they are brought *close together*.

Each magnet has a *north pole*, and a *south pole*.

This *dipole nature* of magnets, gives them some really interesting *magnetic properties*.

The *north pole* of one magnet is *attracted* to the *south pole* of a different magnet.



*Two north poles* from two different magnets *repel* each other.

Likewise, the *two south poles*, of two different magnets also *repel* each other.

When we carefully bring the two magnets very close together, we can begin to feel, their *mutually-attractive* and *mutually-repulsive forces*, in our human hands, depending on the relative *orientations* (and *locations* of the *magnetic poles*) of the *magnets*.

Many of us have experienced this fascinating behavior (of *attraction* and *repulsion*) of *magnets* in *our early childhood*.

What types of *neuro-magnetic dipole structures* can be *logically built* from a few small sets of high-velocity *charged neural pulses*?

How can these various *neuro-magnetic dipole pulse structures* give rise to the *exact* experimental *values* of the (carefully measured) magnetic-dipole moments of the *electron, proton, and neutron*?

Where does the *net-neutral neutron* get its magnetic-dipole from?

What is inside a *proton* that causes it to have exactly the precise magnetic-dipole moment that it does have.

What make a single little *electron* to have a magnetic-dipole moment that is multiple orders of magnitude *stronger* than the proton or the neutron?

Why do these 3 subatomic elementary particles *behave* as they do in the presence of the strong magnetic fields generated by the existence and behavior of other pieces of matter?

Now, let's conduct a simple scientific thought experiment, that may prove to be a useful *Magnetic Thought Experiment*.

# A Magnetic Experiment

What kind of *Magnetic Thought Experiment* may help us to begin to open up our bright scientific minds to consider a *new interpretation of quantum physics*?

How can a *closer look* at magnetism (and neuro-magnetism) help us for properly construct a new *improved interpretation of quantum mechanics*?

As we read this present paragraph, we can easily begin to conduct a *simple magnetic thought experiment*, or actual physical magnetic experiment, if we happen to have the right kind of physical magnets with us.

Let's simply imagine (in our creative scientific human minds) that we are holding a *big-strong super-powerful magnet in our right hand*.

Let's *also imagine* that we are standing near a clean smooth wooden table in our own scientific laboratory, and on this wooden table, let's also imagine that there are a *dozen little tiny magnets*, that are spread out randomly (with random locations on the table, and *random magnetic pole orientations*) on the wooden table, a few inches away from each other.

From previous experience we (many of us) *already know* what *will begin to happen* as we start to bring the big-strong magnet (that we are holding in our right hand) closer and closer to the dozen little tiny magnets (that are all spread out in a random fashion on the wooden laboratory table).

As we begin to bring our big-strong magnet closer and closer to the little tiny magnets, *something really interesting happens*.

Before we conduct the experiment, if we don't already have any experience with the behaviors of little tiny magnets, we might *be tempted* to naively *hypothesize* that the big-strong magnet will simply push some of the little tiny magnets away from it, and simply attract some of the little tiny magnets towards it.

We may even proceed to *naively hypothesize* precisely what will happen to any *one particular little tiny magnet* will depend on exactly how that particular little tiny magnet is *initially oriented* (with its little *tiny north pole*, and its little *tiny south pole*) relative to the location and orientation of the *two big-strong magnetic poles* of the one big-strong magnet as it is brought closer and closer to the one particular little tiny magnet.

However, to our *great surprise* (we may be surprised at first, if we have never before played with any little tiny magnets) something really amazing happens ...

As we bring our big strong magnet gradually closer and closer to all the little tiny magnets (spread randomly out on the wooden table), suddenly *all* of the little tiny magnets jump up into the air and *fly rapidly* towards the big-strong magnet (we hold in our right hand).

Very quickly, *all 12* of our little tiny magnets, suddenly *find themselves very attracted* to our big-strong magnet.

All 12 of our little tiny magnets *spontaneously change* their neuro-magnetic *dipole orientation* so they will all be fully attracted (with no net repulsion) to the big-strong magnet.

The strong magnetic field (produced by the big-strong magnet) is *so powerful*, it is able to *encourage* (via its strong forceful magnetic field) all 12 of the little tiny magnets *to change their spatial orientations*, and the relative locations of their *tiny north poles* and their *tiny south poles*, so they can all be 100% attracted to the big-strong magnet.

All 12 of the little tiny magnets *spontaneously adjust their neuro-magnetic dipole orientations* to *properly align*

*themselves* to become 100% attracted to the big-strong magnet, as it generates a powerful *non-homogeneous* magnetic field that simply *reorients* (via magnetic torques) and *gathers* (via magnetic-gradient net attraction) in all the tiny magnets.

*All 12 tiny magnets quickly reorient themselves* (due to magnetic forces, including magnetic torques), *fly through the air*, and firmly attach themselves to the outside (of one of the two big-strong poles) of the big-strong magnet.

As the *two big-strong magnetic poles* move closer and closer to a particular *individual little tiny magnet*, all of the *visible-matter molecules* of this little tiny magnet, will begin to *feel 2 separate and distinct magnetic torques*, that we can call (1) the *magnetic-north torque*, and (2) the *magnetic-south torque*.

The (1) *magnetic-north torque* tries to twist the tiny magnet in *one particular direction*.

The (2) *magnetic-south torque* tries to twist the tiny magnet in a *very different direction*.

The (2) *magnetic-south force* tries to pull the tiny magnet up towards the big-strong *magnetic-south pole*.

The (1) *magnetic-north force* tries to pull the tiny magnet up towards the big-strong *magnetic-north pole*.

These 2 *opposing forces*, and these *opposing 2 torques*, all act on all the molecules of this individual little *tiny magnet*, all at the same time.

When the individual little tiny magnet *slightly changes* its *orientation*, or its *position*, then the 2 *torques*, and the 2 *forces*, all change their 4 *magnitudes* and their 4 *directions*.

This is a *very dynamic situation*, as the individual little tiny magnet *continues to slightly change its position* (and its *orientation*), causing still more changes in the 4 *directions* (and the 4 *magnitudes*) of the 2 *torques* (and the 2 *forces*).

There is *nothing* mysterious (or mystical) or fundamentally unknown (or intrinsically *merely probabilistic*) about what happens next.

What happens next is *causal*, exact, and *deterministic*.

The *forces of physics*, and the *torques of physics*, and the particles motions of physics, and the little tiny magnetic dipole orientations of physics *causally-determine* every *exact*, precise, *deterministic* thing that happens next.

The next thing that happens, in every case, is that a particular set of stronger forces and stronger torques eventually *deterministically overpower* the weaker torques, and the weaker forces; *causally causing* the individual little tiny magnet to suddenly fully-orient itself, and to suddenly fully-fly itself towards *either* the *big-strong north pole* of the big-strong magnet, or towards the *big-strong south pole* of the big-strong magnet.

The *choice* (big-strong *south* pole, or big-strong *north* pole) the individual little tiny magnet *makes* (the fundamental *quantum choice* of *north* or *south*) is *Not* a fundamentally *probabilistic choice*, unless we decide to *Not Look Closely* at what actually physically happens with the *deterministic* motions, the *deterministic* forces, and the *deterministic* torques of this super-interesting, super-interacting, super-dynamic *fully-deterministic* physical process.

Some will say that this *deterministic interpretation* of magnet physics is *old* and *obvious*.

Others may say that this *new deterministic interpretation* of magnetic *quantum physics* is unorthodox, overly-simplistic, or wrong.

What do *you yourself* say?



Is this simple *interpretation* of *tiny-magnet physics* easy to understand?

Is this theoretical *interpretation* of *tiny-magnetic quantum mechanics* a scientifically-probable, logically-likely, easy-to-understand explanation of what physically may be causing these little tiny magnets to “*choose*” which big-strong pole (the big-strong *north pole*, or the big-strong *south pole*) to *orient-towards* and then to proceed to *fly-towards*?

Is every part of this *new interpretation* of *tiny-magnet quantum mechanics* easy to understand because it is solidly based on *common sense, good logic, and pure scientific rationality*?

What would happen if we boldly proceeded to scientifically-query all of ourselves deeply, if something magnetically-similar (like these easy-to-understand *tiny little magnetic dipole reorientations*) may have happened to the *neutral silver atoms* (with their outer *unpaired electron's* little tiny magnetic dipole moment) as they traveled between the *two big-strong poles* of the big-strong magnet in the initial *Stern-Gerlach Experiment* of 1922 [10]?

Is it possible that this hundred-year-old Stern-Gerlach magnetic quantum effect (of 1922) is actually fully-understandable, *fully-deterministic*, and fully-exact, according to the simple logical scientific explanation we have just given in this “A Magnetic Experiment” section of this present 4 Brain Theory paper?

Is this century-old Quantum Stern-Gerlach Effect a *deterministic quantum effect*?

Or is this century-old Quantum Stern-Gerlach Effect merely a *probabilistic quantum effect*?

Which is it?

A *Probabilistic Quantum Effect*?

Or a *Deterministic Quantum Effect*?

Is *Quantum Mechanics* Deterministic or Probabilistic?

Which *Interpretation of Quantum Mechanics* is Scientifically Correct?

What do *you yourself* say?

Is it theoretically possible for us to *fully understand* every type of quantum particle (and all of their interesting quantum states) that can exist inside this local universe?

What would happen if we went back to the old 1922 Stern-Gerlach Experiment, and looked for some ways that we can conduct (today in 2023) a *Better Stern-Gerlach Experiment*?

# A Better Stern-Gerlach

What would *A Better Stern-Gerlach Experiment* actually look like?

How can we conduct (today in 2023) a *better* scientific experiment *than the original* Stern-Gerlach Experiment of a hundred years ago?

What can we *learn* from a *Better* Stern-Gerlach Experiment?

Can we learn if quantum mechanics is *Deterministic* or *Probabilistic*?

Yes.

The *real purpose* of a better Stern-Gerlach experiment is to determine if quantum physics is a *merely probabilistic theory*, or if quantum physics is actually a *fully-deterministic theory*.

This is an interesting question for quantum physics.

Is quantum physics deterministic or probabilistic?

Which is it?

Let's go find out by simply conducting a better Stern-Gerlach experiment.

The original Stern-Gerlach experiment was first conceived by Otto Stern in 1921; and the experiment was first successfully conducted in the laboratory by Walther Gerlach in early 1922.

What if Walther Gerlach would have carefully conducted just *a few additional scientific experiments* with his experimental Stern-Gerlach apparatus of 1922?

What if Walther Gerlach had chosen to make *a whole series of careful measurements*, with the hot beam of silver atoms directed at a *spectrum of different angles*, and with the *hot beam* of silver atoms sometimes *experimentally-positioned closer* to the *north pole* of his big strong inhomogeneous magnet, and also with the hot beam of silver atoms sometimes experimentally-positioned *closer* to the *south pole* of his big strong inhomogeneous magnet.

What if Walther Gerlach had also been able to put *accurate silver-atom counters* on his *measurement detector screen*, to *count the exact number* of silver atoms that had been deflected towards the *north pole* of his big strong inhomogeneous magnet, and to also *count the*

*exact number* of silver atoms that had been deflected towards the *south pole* of his big strong inhomogeneous magnet.

What if we (the experimental physicists of planet earth) choose to conduct this better, more-detailed, more-careful Stern-Gerlach experiment today in 2023?

What will we discover?

What do we expect to discover?

If the *hot beam* of silver atoms is directed *slightly towards* the *north pole* (of the big strong inhomogeneous magnet), will *more* silver atoms be attracted to the *north pole*?

If this experimental *beam-direction change* causes *more* silver atoms to be attracted to the *north pole*, then this is *strong scientific evidence* that the magnetic dipole moment of a silver atom can *change its orientation* due to the influence of a nearby big strong inhomogeneous magnet.

This “*quantum behavior*” is the “*classical behavior*”.

This “*quantum mechanics*” is “*classical mechanics*”.

Quantum Mechanics becomes Classical Mechanics when we look *closely*.

If the *spatial location* of the hot beam of silver atoms is positioned *slightly closer* to the *south pole* (of the big strong inhomogeneous magnet), will more silver atoms be attracted to the *south pole*?

If this experimental *beam-location change* causes *more* silver atoms to be attracted to the *south pole*, then this is *additional strong scientific evidence* that the magnetic dipole moment of a silver atom can *change its orientation* due to the influence of a nearby big strong inhomogeneous magnet.

This *classical magnetic behavior* of the silver atoms is the *measured quantum magnetic behavior* of the silver atoms.

If an *individual silver atom* behaves as a *little tiny magnet*, with our *Better* (with better, more precise, more detailed scientific measurements) *Stern-Gerlach Experiment*, then we can see that it is very scientifically *likely* that the magnetic dipole moment of the silver atom behaves *exactly* like a deterministic dipole, because it IS a *deterministic dipole*.

If we decide to go ahead and measure *all* of the other *physical properties* of an individual *silver atom*, like its

atomic spectra, with *Better Quantum Experiments*, that are *More Detailed*, and that are *More Precise*, and that are *More Careful*, and that are *More Complete*; then we may wisely discover that *everything* about a silver atom is *deterministic*, exact, and *precise*; and that *Nothing* about the silver atom is *merely probabilistic* at the most fundamental level possible, which is likely the *real-neural-pulse level*.

If we can scientifically establish that silver atoms are fully deterministic in every way; then we can proceed to also discover that *all atoms* are *fully-deterministic* in every way.

If all atoms are fully deterministic, then their protons, neutrons, and electrons are also *fully deterministic*.

The *deterministic nature*, of all of the elementary particles (of the standard model) can be *experimentally verified* in the scientific laboratory.

The *deterministic nature*, of all of the elementary particles (of the standard model) can also be *theoretically verified* by understanding the neural-pulse components that make up the interiors of each of these elementary particles.

This present 4 Brain Theory paper explains these *neural-pulse components* in a good level of initial detail.



Is it theoretically possible for us to begin to understand these super-useful *real neural pulses*?

Can we possibly fully understand all the interesting *pulse-pulse dynamics* of all of the *neural pulses* that take place inside our real human brains?

Can we fully understand the small finite set of *real light neural pulses* that combine together to form *every quantum elementary particle* of this universe?

Can *every type* of real neural pulse be *completely understood* with the suboptimal types of mortal human brains that *most of us* currently have here on earth?

How similar are our *real* neural pulses (in our real human brains) to our *mortal* neural pulses (in our mortal human brains)?

What is the core nature of our *Real Neural Pulses*?

# Real Neural Pulses

What is a *Real Neural Pulse*?

How many *different kinds* of real neural pulses actually exist inside our real human brains?

What do some of these real neural pulses do, *besides* neurally-simulate advanced universes?

How can we fully discover everything there is to know about our *real neural pulses*, from the *intelligence-limited perspectives*, and the *location-limited positions*, of our scientific mortal human brains, that are living right here with us on earth, today in the year 2023?

Was it ever *really meant for us* mere-mortal human scientists, here on earth, to be able to *fully-understand, everything* that is understandable about our real neural pulses, that easily propagate (and rapidly travel) throughout all of the neural tissues, of all of our real human brains?

What would happen to us curious mortal scientists of earth, if we were to decide to deeply investigate the *theoretical* (from our limited mortal perspective) *nature* of all of these *hypothetical real neural pulses*,

What kinds of *powerful scientific secrets*, may be hiding deep inside our *real-human neurons*, and their *real neural pulses*?

What do our real-human neurons *do*?

They *generate* and *propagate* real neural pulses.

Our real neurons *communicate* with real pulses.

Our real pulses are real neural pulses because they propagate on *real-human axons*.

How do our real neural pulses *act*?

Do our real neural pulses *act together* to create this multi-player neural simulation, that is *our universe*?

Do our real neural pulses act together to create all of the *gravity* of this whole simulated universe?

Is a “*real neuron*” (with its real dendrites, and its real axons) simply a type of foundational “*dark matter*” that moves very *slowly* (as slowly as it can *cellularly grow*, move, and *migrate biologically*)?

Is a “*real neural pulse*”, that propagates along a real axon of a real neuron, simply a type of “*dark matter*” that moves very *rapidly*?

Just *how fast* can a real neural pulse *propagate* along a *real axon* through the *real space* or our *real world*, where we have always lived as the real human beings that we have always been?

How *relatively-fast* (relative to us mere mortal-human scientists located right here on earth, positioned inside this local universe-simulation) does a real neural pulse *appear to propagate* (travel) inside this universe, *relative* to all of the *visible matter* of this whole universe of galaxies, stars, and planets?

Just how *relatively-fast* can a dark-matter particle travel through space?

What exactly is a *dark-matter particle*?

Is a *dark-matter particle* a *real neural pulse*?

Could a dark-matter particle really be *so simple*?

What could be more-simple than a *real neural pulse*?

If a dark-matter particle is really just a real neural pulse, then how can we go about *understanding dark matter*?

What is *Dark Matter*?

# Dark Matter

What is *Dark Matter*?

What is the core nature of Dark Matter?

What makes *Dark Matter* different than *Visible Matter*?

Is visible matter *composed* of dark matter?

Is visible matter composed of a *particular type* of dark matter?

Is a *real light neural pulse* a very special type of dark matter?

Does dark matter *interact* with visible matter?

Can dark matter *stimulate* the production of visible matter?

Can dark matter stimulate the production of *Higgs Bosons*?

*How* is this done in our universe?

What kind of a *boson* is a single dark matter particle?

Does dark matter exert a “*force*” on visible matter?

Can a dark-matter particle *bounce off* of a visible-matter particle?

Can dark-matter particles *scatter off* of visible-matter particles?

What is the *actual relationship* between dark matter and visible matter?

Has anyone ever seen a *visible-matter* particle?

Has anyone ever seen a *dark-matter* particle?

What exactly is a single dark-matter particle *made of*?

What *precisely* is a single visible-matter particle made of?

What are all the material things made of *right here inside* this neurally-simulated universe?

Why is dark matter so important for understanding *gravity* right here inside our local visible universe?

What is the detailed relationship between *quantum gravity* and *dark matter*?

What makes up *one single* dark-matter particle?

What could possibly be hidden *Inside Dark Matter*?



# Inside Dark Matter

What is *Inside Dark Matter*?

What is the *Inner-Structure* of a single dark-matter particle?

How can we possibly *learn* what lies hidden deep inside a single dark-matter particle?

*How many* different kinds of dark-matter particles might exist here in our local universe?

Why is it so likely that there may exist *more than just one* type of dark-matter particle?

Are we all completely sure that dark matter is really a *particle*?

Why do so many *astrophysicists*, here on earth today in 2023, seem to believe in “*dark matter*”?

Is dark matter causing our galaxies to spin at a rate that is different than the *galactic spin rate* predicted by Einstein’s gravity theory of 1915?

What exactly is *quantum gravity*?

Is there a way for *gravity* to be properly unified with *quantum mechanics*?

Is there also a good way for *gravity* to be properly unified with *electromagnetism*?

What was Albert Einstein (1879 – 1955) working on during the *last few years* of his interesting and productive life?

What would Albert Einstein be working on today, in 2023, if he were *somehow still alive* here on earth?

Would Albert Einstein want to *properly finish* what he started?

What did he start?

Would Albert Einstein want to *completely solve* quantum gravity?

Would Albert Einstein want to provide a full and complete solution to *quantum gravity*, as a kind of scientific way to gently *encourage* all the bright scientists of this whole earth, to *start seeking* to solve world poverty for *everyone* on this planet?

How can solving world poverty, properly for *everyone* on earth, possibly be *related* to our future understanding of dark matter and quantum gravity?

Shall we simply proceed to *completely solve quantum gravity* right here in this present 4 Brain Theory paper?

Why is *dark matter* so important to *quantum gravity*?

What is Dark Matter?

What is *Our Dark Matter Hypothesis*?

# Our Dark Matter Hypothesis

What is *Our Dark Matter Hypothesis*?

*Our Dark Matter Hypothesis* is that a single individual dark-matter particle is a single individual *Real Neural Pulse* inside the real human brain of a real human being.

*Our Dark Matter Hypothesis* is also that the *inner-structure* of a single dark-matter particle is the inner-structure of a single *real neural pulse* (propagating along a *real neural axon*, inside a real human brain); that is *physically somewhat similar* (but *not* identical, because there are some very important differences) to the inner-structure of a single *mortal neural pulse* (propagating along a *mortal neural axon*, inside *your* mortal human brain, as *you are reading* this sentence, here on earth).

*Our Dark Matter Hypothesis* is also that a single dark-matter particle, is many orders of magnitude *smaller* than an *electron*; and an *electron* is many orders of magnitude smaller than a *hydrogen atom*; and a hydrogen atom is many orders of magnitude smaller than a single *mortal neural pulse* that is propagating along a *mortal neural axon* inside your mortal human brain, that *you are actively using today* to do your thinking (and to do your

wondering) about this present 4 Brain Theory that you are currently reading.

*Our Dark Matter Hypothesis* is also that there are *many different kinds* of dark-matter particles, because there are many different kinds of real neural pulses that *propagate* along *real neural axons* inside of real human brains.

*Our Dark Matter Hypothesis* is also that a dark-matter particle is a real neural pulse that behaves like a *tiny fast slightly-charged scalar boson*; because it is *tiny* (with a super-small mass), and it is *fast* (propagating super-rapidly, on a real-human neural-axon, at a super-high velocity, that is *many* orders of magnitude faster than the speed of light), and it is *slightly electrically-charged* so it can generate significant *magnetic fields* due to its high velocity, and it is a *scalar boson* because it has *zero spin*.

*Our Dark Matter Hypothesis* is also that a super-large number of dark-matter particles (tiny fast scalar bosons) are *traveling through* our mortal human bodies, here on earth, in *all directions*, at *all times*.

*Our Dark Matter Hypothesis* is also that a super-large number of dark-matter particles (tiny fast scalar bosons) are traveling through *every finite volume* of our universe, in all directions, at all times.

*Our Dark Matter Hypothesis* is also that some of the finite volumes (local regions) of our universe contain *more* dark-matter particles than others.

*Our Dark Matter Hypothesis* is also that some of the finite volumes (local regions) of our universe contain a *different distribution*, of dark-matter *flow-directions*, than others.

*Our Dark Matter Hypothesis* is also that the *flow* (and *scattering*) of dark-matter particles, throughout our whole universe, is *what causes gravity* in our universe.

*Our Dark Matter Hypothesis* is also that the *scattering* of tiny fast dark-matter particles *off of* visible-matter particles, is what causes the “*gravitational force*” on the visible-matter particles.

*Our Dark Matter Hypothesis* is also that “*the force of gravity*” is the “*scattering force*” of all the tiny fast slightly-charged dark-matter particles, as they *collide into* all the visible-matter particles, and “*push*” on the visible-matter particles, by *transferring momentum* from the dark-matter particles to the visible-matter particles.

*Our Dark Matter Hypothesis* is also that the dark-matter particles (being the *tiny fast real neural pulses* that they are) are able to scatter off of the *slower larger real-light neural pulses* that are the real-light neural-pulse

components, of *all* of the *elementary particles* of the standard model, that together compose *all* of the *visible matter* of this local universe.

*Our Dark Matter Hypothesis* is also that in high-energy environments, like the interior regions of a *super-hot burning star*, the *super-dense* dark-matter particles are able to interact with the visible-matter particles (and with the *real Higgs dendrites*, and with the *real Higgs axon hillocks*) in a special *super-energetic* way that stimulates the production of large numbers of *scalar Higgs Bosons* (super-large very-energetic very-unstable real-Higgs neural pulses), which immediately *decay* forming many intermediate unstable particles, which then promptly decay to form the stable *protons, neutrons, electrons, and photons*, which can then later combine together to form all of the stable visible-matter atoms.

*Our Dark Matter Hypothesis* is also that the dark-matter particles, are the tiny fast real neural pulses, that are the *tiny fast scalar bosons*, that have *no spin*, because they are just *individual* real neural pulses, with *no angular momentum*.

Our dark-matter hypothesis is also that dark matter is *Mostly Magnetic* in its *electromagnetic interactions* with other particles because of its super-small electric charge,

and its *super-high velocity*, as it rapidly travels through space.

What is the nature of this *Magnetic Dark Matter*?



# Magnetic Dark Matter

What is *Magnetic Dark Matter*?

*Magnetic Dark Matter* is the realization that *Dark Matter* must be very *Magnetic* due to its *super-high velocity*.

Even though each individual dark-matter particle carries just a *super-tiny electric charge* that is ultra-small, the *high-velocity* of the individual dark-matter particle is *so high* that the *spatial-motion* (of the dark-matter particle through space) *causes* the individual dark-matter particle to *generate a strong magnetic field* as it rapidly travels through space.

Therefore, *Our Dark Matter Hypothesis* is also that the dark-matter particles, as the tiny fast scalar bosons that they are, contain a very *tiny* amount of *electric charge*, and they travel through space a *very high velocities*, thereby *generating circular magnetic fields* that encircle their direction of travel.

*Our Dark Matter Hypothesis* is also that the dark-matter particles (the tiny fast *electrically-charged scalar bosons*) generate *circular magnetic fields* due to their *super-high* traveling *velocities*, and these circular magnetic fields *interact* with the electrically-charged real-light neural-

pulse *components* of every visible-matter elementary particle (including all the *electrons*, and all the *quarks*), and every visible-matter *atom*; and these dark-matter *magnetic-field interactions* cause *particle collisions*, between the dark-matter particles and the visible-matter particles, and these dark-matter magnetic-field interactions also cause *some* of the dark-matter particles to *bounce* and *scatter* off of *all* of the visible-matter particles.

*Our Dark Matter Hypothesis* is also that “*gravity*” is actually just a “*form of magnetism*”; because the “*force of gravity*” is caused by the dark-matter magnetic fields (generated by the rapid motion of the *tiny-fast* super-high-speed *electrically-charged scalar bosons*), as some of these local *dark-matter magnetic fields* interact with (and *scatter* off of) all of the visible-matter particles, and these *magnetic scattering events* impart *momentum* from the dark-matter particles to the visible-matter particles, and the collective totals of these many “*magnetic momentum transfers*” are the “*force of gravity*”.

Our Dark Matter Hypothesis is also that the reason that dark matter is so “*dark*” is because all of the dark-matter particles are individual tiny fast scalar bosons, that are so “*tiny*” that they are difficult to “*visibly see*” as “*individual particles*” (as the individual tiny fast scalar bosons that they are) with our current scientific instruments; however

more-advanced scientific instruments can be developed to actually begin to “*visibly see*” these individual tiny fast *dark scalar bosons*, according to the way these dark scalar bosons *bounce* and *scatter* off of the visible-matter particles.

Why are these tiny fast dark scalar bosons so important to science?

What is the physical nature of these *Tiny Fast Dark Scalar Bosons*?

# Tiny Fast Dark Scalar Bosons

What are these *Tiny Fast Dark Scalar Bosons*?

How do these *tiny fast dark stable* scalar bosons, compare to the *large slow unstable* scalar bosons that are known as the Higgs bosons?

The Higgs boson is very energetic with a mass of about 125 GeV (divided by the speed of light squared).

This *huge* Higgs-boson *mass* of 125 GeV (with a GeV being a billion electron volts) is about 245,000 times *larger* than the rest mass of an *electron*.

Therefore, this massive scalar Higgs boson seems to carry about 245,000 times more energy than an electron at rest.

The *low-mass* electron has some *finite angular momentum*.

The *high-mass* Higgs boson has *zero* angular momentum.

The *tiny-mass* Dark bosons (the dark-matter particles that are the tiny fast dark scalar bosons) have *zero* angular momentum, and they have *very tiny masses* that are *much*

*smaller* (many orders of magnitude) than the rest mass of an electron.

These “Dark Bosons” are *tiny*, fast, *stable*, slightly-charged real neural pulses with *no spin*.

The “Higgs Boson” is a *large*, slow, *unstable* real neural pulse with *no spin*.

*The Higgs Boson* is a large slow unstable real neural pulse that propagates slowly and briefly (before it quickly decays) on a *large, thick, short, real Higgs axon* inside our real-human brains.

*A Dark Boson* is a tiny fast stable real neural pulse that propagates in a stable way (because it is completely stable) on a *small, skinny, super-long, super-thin, real-dark axon* inside our real-human brains.

*A Dark boson* (tiny fast scalar boson) is many orders of magnitude *smaller* (less massive) than an electron.

An electron is many orders of magnitude *less* massive than a *Higgs boson*.

The tiny dark bosons are *much much smaller* than the huge massive Higgs Boson, but these tiny dark bosons

can *work together inside stars* to create *new Higgs bosons*.

This is how *all* of the *visible matter* of our universe is *created*, inside the *stars*, when the dark bosons (dark matter particles) are *densely gathered together* into the *dense energetic interiors* of the stars, where the *dark boson density* becomes super-high (and unmyelinated), and the dark bosons are able to *work together* to *stimulate* the real large Higgs dendrites to stimulate the *real large Higgs axon hillocks* to fire up (create) lots of new Higgs bosons.

With this powerful *new creation hypothesis*, of how all the visible matter in our universe is actually created, there is no longer any need to retain the tired old big bang hypothesis of previous decades.

The *dark-matter particles* (the tiny fast stable dark scalar bosons) *work together* (inside the stars) to *jointly stimulate* (some *real thick Higgs dendrites* causing) the production (via *real thick Higgs axon hillock firing*) of new Higgs bosons (super-large real super-energetic unstable neural pulses) that *decay* (first into intermediate unstable particles, and then) into photons, protons, neutrons, and electrons; thereby *forming all the visible atomic matter* of this whole universe.

The set of *relative differential flows* (in different relative directions in space) of the dark-matter particles (the tiny fast stable dark scalar bosons), *nearby all* the individual real-light neural pulse components, of all the visible-matter elementary particles; and the *momentum-transferring scattering*, of a small subset of these dark-matter particles, off of the visible-matter real-light neural pulse components; is what gently “*pushes*” on all the visible-matter, and this *dark-matter-pushing on visible-matter*, is the “*force*” of “*gravity*”.

So, what exactly is our *Quantum Gravity Hypothesis*?

# Quantum Gravity Hypothesis

What is our *Quantum Gravity Hypothesis*?

What was Albert Einstein's best *Quantum Gravity Hypothesis*, before he died in 1955?

What kind of *quantum gravity hypothesis* can we now create today (67 years later) in 2023?

*Our Quantum Gravity Hypothesis* of 2023 is that huge numbers of super-tiny, ultra-fast, slightly-charged, *scalar-boson quantum dark-matter particles* continually flow (travel) through *all* the visible-matter particles (all the elementary particles of the standard model) of our universe; and a *small subset* of these dark-matter scalar-boson particles *scatter off* of all of the visible-matter *elementary particles*; and these *many particle-scattering events transfer momentum* from the dark-matter particles, to the (visible-matter) elementary particles, and collectively these *huge numbers of individually-tiny momentum-transfers* cause all of the elementary particles (of our whole universe) to effectively “*feel a momentum-push*”; and this universal “*momentum-push*” is called “*quantum gravity*”; because this effective “momentum-push” is caused by the collective scattering action of all of the *quantum-sized dark-matter particles*, and the total



effect of this collective net “*momentum-push*” is the “*force*” of “*gravity*”; and in this way, the quantum dark-matter particles *travel everywhere*, and these quantum dark-matter particles *pass through everything visible*, and the quantum dark-matter particles *measure everything visible*, and the quantum dark-matter particles *scatter off of everything visible*, and these *quantum dark-matter scattering events*, together create all of the “*quantum gravity*” of our whole universe, because these same dark-matter scattering events *collectively cause* all of the “*gravitational forces*” of our entire universe.

This *quantum gravity hypothesis* will probably *stand the test of time*, because it is simple, *logical*, testable, confirmable, rational, *verifiable*, and seems to *explain everything* we really need to know about quantum gravity.

This quantum gravity hypothesis is a *testable scientific hypothesis*, because we can easily write and code the *dark-matter simulation software*, to simulate the flows of all the tiny fast *slightly-charged* quantum dark-matter particles, and to simulate all the *scattering events* in which the dark-matter particles scatter off of all of the visible-matter particles, and to simulate all of the *dark-matter (spiral-axon) flow reversals* that help all the *planets acquire* all of their *spherical inward-flowing* dark-matter “gravity” from the *sun’s* inward-flowing dark-matter “gravity”.

This current quantum gravity *hypothesis* (presented here today, in this present 4 Brain Theory, paper for the first time) will probably become a *full quantum gravity theory*, just as soon as *enough* scientific dark-matter scattering software *simulations* have been completed to properly confirm (and fully account for) *all* of the observed “*gravity anomalies*” of our whole universe (like the observed spin rates of galaxies) that do not match Einstein’s gravity of 1915.

This *scientific-software testability*, of this new dark-matter quantum gravity theory, is one of its *most* valuable *traits*.

This new theory of quantum gravity (of 2023) will *replace* Einstein’s older 1915 theory of gravity, because this new *2023 theory of quantum gravity* is much *more accurate*, and this new 2023 theory of quantum gravity can *scientifically explain* a much *broader range* of the *observed* gravitational *phenomena* of our entire universe.

Albert Einstein actually did manage to create a pretty good *theory of gravity*, for his early day in 1915.

Albert Einstein tried to be a *kind man*, who also tried to be intelligent enough to do his very best to help this

world, to *start to understand gravity*, and to also properly *try to solve* this world's *many social problems*.

But Albert Einstein was *not perfect*, and he did *not yet know everything* in 1915, or in 1955.

Albert Einstein (1879 – 1955) never *fully* understood dark matter while he lived his life as Albert Einstein.

Now, today in 2023, it is actually *about time* we came up with a *better theory of gravity*.

There are those *who have helped us* to formulate this new theory of gravity.

There are those who understand quantum gravity *much better* than the present author.

But it is the *present task*, of this present author, to simply present this whole world with this *new 2023 theory of quantum gravity*, in the *simple hope* that this powerful new theory of quantum gravity will *inspire people to wisely seek* to solve world poverty for everyone on earth.

This whole 4 Brain Theory paper explains, in *abundant detail*, why this new theory of quantum gravity *should inspire all the scientists* of this whole *Earth*, and eventually all the people of this whole world, to *want to*

*seek* to solve world poverty for everyone on earth, so every precious person here will have *enough* healthy *food* to eat every day, and a *good comfortable safe bed* to sleep on every night.

This is the *wise purpose* of this 4 Brain Theory paper.

This is the *real purpose* of this new 2023 theory of quantum gravity.

Why stick with Einstein's tired old 1915 theory of gravity, that is mathematically only *approximately* correct in *some situations*, when we now have a powerful new 2023 theory of quantum gravity that is *more accurate*, and more useful, and *more correct in every situation*, and more helpful in every way?

Will the *worldwide scientific community* be able to fully embrace this new 2023 theory of quantum gravity *before* the year 2024?

Or will the scientific community need *a few years* to fully digest (and fully understand) this new theory of quantum gravity?

*How many years* will it take before the *majority* of the bright physicists of our planet earth, *fully embrace* this new theory of quantum gravity?

The purpose of this new theory of quantum gravity is to inspire us *wise* compassionate *scientists* to diligently begin to *earnestly seek* to properly solve poverty for everyone on earth.

If we choose to use *our scientific skills* for any other purpose, then can we still claim to *be wise*?

If we decide to use *our scientific knowledge* for any other purpose, then can we still claim to *be kind*?

If we elect to employ our *scientific intelligence* for any other purpose, then can we still claim to *be intelligent*?

How will we view ourselves, *after* we awaken (in a few years, or in a few decades) as our advanced selves?

How will we view all our mortal *scientific activities* (and all the many things we did, while we were briefly here on earth) from the *wise* (all-knowing) super-intelligent *perspective* of our *advanced human self*?

What if we really do have an *advanced human self*, that we wake up as, when we complete our mortal human experience (when we die on earth) on this mortal planet called earth?

What if we really are advanced human beings that have *already daydreamed*, that we were mere mortal human avatars on *other earths* (on other mortal planets like our current earth) *many times* in the past?

Does our own milky-way galaxy already have many different *exoplanets* for our *daydreaming use*?

What is the nature of our mortal-human neural pulses, that help us to think semi-intelligent mortal-human thoughts, here on earth with our *semi-intelligent mortal-human brains*?

What is the scientific nature of our advanced-human neural pulses, that help us to *think super-intelligent advanced-human thoughts*, with our super-intelligent advanced-human brains?

What is the real nature of our *real-human neural pulses*, that allow us to completely understand *everything* that is *understandable*, with our really-super-intelligent real-human brains?

All of these *human-brain neural pulses* can actually be viewed as types of *biological electromagnetic pulses*, because these human neural pulses are both *biomagnetic* and *bioelectric*.

Let's go ahead and start to ask many good scientific questions about our neural pulses, as we begin to look more deeply at our very own human brains, and the core nature of the *electromagnetic neural pulses* they create.

What are all the different types of *electromagnetic pulses* that can potentially be generated by all of the different kinds of neurons in *all 4 of our precious human brains*?

What kinds of Electromagnetic Pulses do we all have inside our *4 human brains*?

How do these *Electromagnetic Pulses* behave inside our 4 human brains?

# Electromagnetic Pulses

What kinds of *Electromagnetic Pulses* can naturally occur inside our wonderful human brains?

Our 4 different types of human brains contain neurons that generate *4 distinct types of electromagnetic pulses* as follows:

- (1) Real Electromagnetic Pulses
- (2) Advanced Electromagnetic Pulses
- (3) Mortal Electromagnetic Pulses
- (4) Submortal Electromagnetic Pulses

These 4 different kinds of Electromagnetic Pulses are biologically-generated, by the *4 different brains* introduced in this present *4 Brain Theory* paper.

All of these interesting *electromagnetic pulses* are *biologically-created* by the *natural* neurological activities of our human neurons.

As we (the curious neuroscientists of planet Earth) begin to more carefully study these *electromagnetic neural pulses*, we can start to ask ourselves some *better questions* about them; and we can begin to design some really good *new scientific experiments*, that we can conduct in our



*scientific laboratories*, and then *compare* our physical scientific results with the details of our *scientific-software* simulations.

What types of new *electromagnetic neural-pulse scientific-software experiments* can we start to conduct today, to help us to better understand all the interesting ways, that these electromagnetic neural pulses *interact* with each other, to form the *dynamically-stable* (neural pulse) *structures* that we call *elementary particles*?

What kinds of interesting new *Neural Pulse Scientific-Software Experiments* can we start to design and conduct today?

# Neural Pulse Experiments

What are the most useful *Neural Pulse Scientific-Software Experiments* that we can design today?

There are many different types of *scientific electromagnetic neural-pulse experiments* that can be conducted via *neural-pulse computer-software simulations* using the many *powerful classical computers* that are already here on earth today.

In the future, we will build some really marvelous fully-programmable *deterministic quantum computers*, to help us conduct some even-better neural-pulse simulation scientific-software experiments.

But for now, we already have the *classical computing tools* to help us make a lot of useful new scientific discoveries, during the next few years, about how *all our elementary particles* (of the standard model of elementary particle physics) are neurally-simulated with a simple *small set of dynamic neural-pulse structures*.

Various useful types of electromagnetic neural *pulses* can be computationally-simulated, and created (*programmed*) with computer software.

These *simulated software neural pulses* can be allowed (via computer-software simulations) to *interact* with each other in various ways, to discover (via scientific computer *software simulation experiments*) all the *fine details* of the *neural pulse structures* that properly compose *photons, electrons, quarks, protons, neutrons, nuclei, atoms, atomic orbitals, molecules, DNA*, and other interesting neural pulse structures.

In this way, via future computer software simulation experiments, *all of the fine details*, of all of the *elementary particles* of physics, and all of the ways they *physically interact* with each other; and in this way, all of the *atoms and molecules* of *chemistry*, and all of the cellular organic structures of *biology*, and all of the neural structures of *neuroscience*, can be scientifically experimented upon, *refined*, and *perfected*, and carefully compared to the actual physical measurements, until we scientifically discover all of the *correct details* of all these useful *fields of science* here on earth.

This 4 Brain Theory is a *100% testable theory*.

All of the useful *scientific* components (*hypotheses*) of this 4 Brain Theory can be tested, *examined*, evaluated, refined, *corrected*, and improved, with *scientific-software simulations*, and with carefully-conducted *physical*

*scientific experiments* in the actual physical *laboratories* of this earth planet.

The *many* distinct, yet closely-related, *hypotheses* of this 4 Brain Theory can be *tested*, and either *proved* or *disproved*.

Many parts of this 4 Brain Theory will still need to be *improved*, refined, and *corrected*.

This present 4 Brain Theory of 2023, is just an educated *scientific guess*, to form this initial working *hypothesis-in-progress*; that will certainly need to be *improved* in 2023 and in each and *every year*, as we scientists all proceed together into our *exciting future years* here on our precious little Earth planet.

Much *rigorous scientific experimentation* still needs to be conducted on all the *various* hypothetical *components* of this initial working 4 Brain Theory.

The good news, is that there are *many* different *ways* that we can *proceed*, to wisely conduct this needed rigorous *scientific experimentation*.

What are some of the *best* scientific *experiments* with *electromagnetic* neural *pulses* that we can conduct today?

These actual *electromagnetic neural pulses* (that we can start to software-simulate today with our current 2023 *mathematical software languages* like C, C++, C#, Fortran, and other similar software languages that are somewhat *mathematics-enabled*) are generated by the *electromagnetic neurons* that exist inside all our precious human brains.

All of these *electromagnetic neurons* work together to form the neural foundation of *human consciousness* and every other *good thing*, as explained in this present 4 Brain Theory of *quantum physics*.

Now, let's look more closely at *Our Electromagnetic Neurons*.

# Our Electromagnetic Neurons

What are some of the important capabilities of *Our Electromagnetic Neurons*?

Our human electromagnetic neurons are able to *network together*, and produce electromagnetic *pulses*, that *combine together* in many wonderful ways, to generate all the necessary *neural computations* that fully support *human consciousness*, and *properly-host* all the *simulated universes*, where we often find ourselves while daydreaming.

This *electromagnetic nature* of our neurons is because our human neurons are *electrically-active* and *magnetically-active*, and their *neuroelectric fields* and their *neuromagnetic fields* interact in some very interesting ways, with all the *electric-ion-concentration* (relative-ion density chemical potentials) *pulses*, and with their *neurological magnetic dipole moments*.

Our electromagnetic neurons (electrically-active *neural cells*) that help compose all our human neural tissues are basically *electromagnetic action pulse cells*.

Our marvelous human neurons have electrically-charged *action potentials* (pulses) that move, propagate, and travel along *axons* at *various speeds*.

These *traveling neural pulses* are moving electric charges that generate corresponding *magnetic fields* according to Maxwell's 1865 equations of electromagnetism.

The strength and orientation of the generated *magnetic vector fields* is a function of the size, speed, and direction of the traveling neuroelectric pulses

All our human neural tissues are *networked biological electromagnetic spatial mediums* of communication, computation, *simulation*, perception, cognition, and *consciousness*.

These *electromagnetic* neural tissue networks are the *hosts, dark matter, and generators* of every type of simulated spacetime universe.

We all have *4 different types* of these *Electromagnetic Tissues*.

# 4 Electromagnetic Tissues

Our 4 *Electromagnetic Tissues* are as follows:

- (1) Our *Real* Electromagnetic Neural Tissue
- (2) Our *Advanced* Electromagnetic Neural Tissue
- (3) Our *Mortal* Electromagnetic Neural Tissue
- (4) Our *Submortal* Electromagnetic Neural Tissue

These 4 different types of *electromagnetic neural tissue* are composed of 4 different *classes* of *electromagnetic molecules* (including our human DNA), which are made of 4 different kinds of *electromagnetic atoms*, which are composed of 4 different classes of *sub-atomic electromagnetic elementary particles*.

Each of the inner components, of these 4 distinct classes of *electromagnetic elementary particles*, *feel* the *neuro-electromagnetic forces* of 4 different kinds of *neuro-electromagnetism*.

Relative to the *apparent* large sizes of the simulated universes, where we often *seem* to live, our *personal neuro-electromagnetic tissues* must *all fit snugly* into the relatively *tiny spaces* occupied by each of our human *brains*.



Let's look more closely at these tiny spaces of our precious *Tiny Electromagnetic Tissues*.

## Tiny Electromagnetic Tissues

What is the essential nature of our *Tiny Electromagnetic Tissues* that seem to have the *astonishing power* of being able to easily simulate *every needed universe*?

Our 4 different types of *tiny* electromagnetic neural *tissues* are relatively tiny because all of these precious little tissues must *neatly fit snugly inside* our wonderful human brains, which must fit inside our healthy human heads (and fit inside our marvelous human bodies); and all our little human bodies certainly do seem to be pretty small, when closely compared to the size of a whole simulated universe.

Our 4 types of tiny Electro-Magnetic (EM) Tissues are the following:

- (1) Our *Real* EM Tissue inside our *real* human heads
- (2) Our *Advanced* EM Tissue in our *advanced* heads

- (3) Our *Mortal* EM Tissue inside our *mortal* heads
- (4) Our *Submortal* EM Tissue in our *submortal* heads

These 4 different types of *tiny* electromagnetic neural *tissues* make, create, and simulate 4 distinct kinds of *apparently big* neuro-electromagnetic universe *spaces*.

Exactly how is it that our *Tiny Tissues* make such *Big Spaces*?

# Tiny Tissues make Big Spaces

How do the *Tiny Tissues* of our human brains *make* the apparently *Big Spaces* of our simulated universes?

Our 4 different types of *tiny* electromagnetic neural *tissues* make, create, host, and simulate 4 distinct kinds of *apparently big* electromagnetic-universe *spaces* as follows:

- (1) Our Real Tissue makes *Advanced Universes*
- (2) Our Advanced Tissue makes *Mortal Universes*
- (3) Our Mortal Tissue makes *Submortal Universes*
- (4) Submortal Tissue makes *Subsubmortal Universes*

How can it *be possible* for our 4 *tissues* to make 4 *universes*?

How can it be possible for our 4 *distinct types of neural tissue* to simulate (make) 4 *different classes* of neurally-simulated (apparently physical) *universes*?

Does there exist any good practical scientific evidence that can properly support our working hypothesis, that *just a few cubic centimeters* of real human neural tissue can help simulate an entire advanced universe, that can

apparently become much larger (in appearance) than just *a few billion light years in diameter?*

Would it help our working hypothesis, if we *wirelessly networked* some key neural portions, of a *huge number* of real-human brains, together?

Our modern day (circa the year 2023) *cell phones* can *wirelessly* network themselves together (via our 4G and 5G cell-phone towers) to make, create, host, and simulate entire *multi-player game worlds* (the *big spaces* of whole simulated game worlds) with just a few small *computer chips* (kind of like *tiny artificial silicon tissues*) that fit inside our little *cell phones*, that fit inside our little *human hands* (tiny tissues).

When we go outside in nature, and open up our mortal human eyes, and look up at the pretty white clouds in the *big wide spacious blue sky*, and also look at some tall rugged mountain tops *in the distance*, we are gathering visual information from things that are *multiple miles* away (in *big wide spaces*), yet this beautiful *visual information* becomes properly *encoded* inside just a few cubic centimeters of the *tiny neural tissues* of our (retinas, optic nerves, and our) primary *visual cortex* of our *occipital lobe* (in the back of our head) of our mortal human brain.

In the near future (by 2030 or by 2040), we mortal-human quantum-computer scientists, may be able to create some really-useful exact *deterministic quantum computers* composed of *entangled elementary particles*, that will be able to quantum-mechanically *simulate* some *big spaces* (large simulated game worlds) with the *tiny* “tissue” of just a few cubic centimeters of our artificial quantum computer computational matter (“*tiny qubit tissue*”).

Our *real neural tissue* (of our real human brains) has a neural computational capacity that is *many many* orders of magnitude *greater* than that of the sum total of all our earth computers (made of the atoms of this earth) of today (this present year of 2023).

Just a *few cubic centimeters* of real human electromagnetic neural tissues, *from each* of just a few trillion trillion real human brains, can *wirelessly network themselves together* to form a super-powerful *universe-simulator* that can easily make, create, host, and simulate each and *every elementary particle* in our whole *milky-way galaxy*.

These neurally-simulated elementary particles (of the standard model) receive an *inherited electromagnetic nature*, which *they biologically-inherit* from the particular physical characteristics of the real biological *neuro-*

*electromagnetic nature* of the *real neural tissue* that creates them by simulating them.

These 4 types of relatively *tiny* bio-electromagnetic neural tissues network together, to create the *big* simulated *electromagnetic spaces* that are simulated in 4 distinct types.

What is the actual neuro-electromagnetic nature of these 4 *Big Electromagnetic Spaces*?

# 4 Big Electromagnetic Spaces

Our 4 *Big Electromagnetic Spaces* are as follows:

- (1) Our Infinite Plane of *Real Electromagnetic Space*
- (2) All our *Advanced Electromagnetic Spaces*
- (3) All our *Mortal Electromagnetic Spaces*
- (4) All our *Submortal Electromagnetic Spaces*

These 4 *Big Electromagnetic Spaces* are the 4 *Big Spaces* (human universes, or human living environments) we (the real people of real existence) use to do what we *need* to do, and what we *want* to do.

Our *Real Electromagnetic Space* is the *only space* we have that is *Not* a simulated space.

Our Real Electromagnetic Space is *our real world* (our real universe) where a *countably-infinite number* of *us real human beings* have always lived.

We neuro-electromagnetically *daydream*, from the *real position* (real *infinite plane*) of our Real Electromagnetic Space, into the *neurally-simulated locations* (simulated *planets*) of our Simulated Electromagnetic Spaces.

The kinds of things that *can be done* in a particular type of space, depends deeply on the *purpose, nature, and properties* of that particular *space*.

These 4 different types of big electromagnetic spaces are composed of the interactions of 4 different kinds of *elementary particles* that *interact, entangle, and travel* through *time* and across *space* within these 4 different types of electromagnetic spaces.

These 4 different kinds of elementary particles exist, move, travel, and interact together within 4 different types of *electromagnetic spacetimes*.

What is the nature of our 4 *Electromagnetic Spacetimes*?



# 4 Electromagnetic Spacetimes

Why do our 4 human selves *live* inside of 4 *Big Electromagnetic Spacetimes*?

Our 4 *Electromagnetic Spacetimes* are as follows:

- (1) Our one single expanse of infinite *Real Spacetime*
- (2) All our huge simulated *Advanced Spacetimes*
- (3) All our small simulated *Mortal Spacetimes*
- (4) All our tiny simulated *Submortal Spacetimes*

These 4 *Electromagnetic Spacetimes* are where we *live as human beings*.

These 4 Spacetimes are *important to us*.

There also exist some *Other Spacetimes* that are also *important to us*.

Each of these 4 Electromagnetic Spacetimes are *needed by us*.

Each of these 4 Electromagnetic Spacetimes are *wanted by us*.

Our human brains *need to simulate* the *three lower spacetimes* in order to *balance* our human experiences in the *highest spacetime*, which is our infinite *Real Spacetime*, where our real human self has *always* lived in peace, happiness, safety, and *perfect wise real-human-brain balance*.

These 4 different types of *electromagnetic spacetimes* are composed of the fundamental (neural pulse) interactions of 4 different kinds of *elementary particles* that influence, entangle, and *travel* through *time* and across *space* within these 4 different types of spacetimes (*electromagnetic universes*).

An electromagnetic *universe* is an electromagnetic *spacetime*.

*All* of the possible *spacetimes* are *electromagnetic*.

*All* of the possible *universes* are *electromagnetic*.

This is because *neuro-electromagnetism* is the only *physical way* that *all* real neural *brains* simulate lower *universes*.

Now let's look more closely at these *4 Electromagnetic Universes* where we live as human beings.

# 4 Electromagnetic Universes

Our *4 Electromagnetic Universes* are as follows:

- (1) Our One Real Electromagnetic Universe
- (2) All our Advanced Electromagnetic Universes
- (3) All our Mortal Electromagnetic Universes
- (4) All our Submortal Electromagnetic Universes

These *4 Electromagnetic Universes* are governed by *4 different types* of electromagnetism.

Therefore, these *4 different types* of electromagnetic universes, have *4 different sets* of *physical force laws* corresponding to *4 distinct types* of physical electromagnetism.

The *4 different kinds* of *physical-universe electromagnetism*, causally-flow, from the *4 distinct forms* of *neuro-electromagnetism* that simulate them.

Because our *4 Electromagnetic Universes* have inhabitants, physical laws, properties, purposes, and electromagnetic characteristics that are *so closely related* to each other, they can be *partially considered* as *4 parallel universes*.

Do we really *live* in 4 different parallel universes?

How can we possibly live in *4 different parallel universes* all at the same time?

Now, let's look more closely at these *4 Parallel Universes* to see what they actually contain; and to see how they are related to each other, and to us.

# Our 4 Parallel Universes

What are *Our 4 Parallel Universes*?

Our 4 different types of Electromagnetic Universes (human spacetimes) form the temporal and spatial expanses of our *4 different types* of human experienceable (detectable) *parallel universes*.

*Our 4 Parallel Universes* are as follows:

- (1) Our One Infinite *Real Universe*
- (2) All our simulated *Advanced Universes*
- (3) All our simulated *Mortal Universes*
- (4) All our simulated *Submortal Universes*

These 4 Parallel Universes *exist* for us human beings.

There is *no other purpose* for these 4 Parallel Universes.

*All things*, including all the universes, exist for us human beings, and *only* for us human beings.

Our *One Infinite Real Universe* is where we *really live*.

We *neurally-pretend* to live in the lower 3 universes; and we just live in these lower 3 universes as *dream avatars only*.

We created (simulated) the *lower 3 universes* to help us *appreciate* our highest (real) universe; which is our One Infinite *Real Universe* where all our *real human selves* have *always* lived.

As the *inquisitive mortal human scientists* that we are (as the mortal human beings we currently find ourselves to be here on Earth in 2023), we can now begin to ask ourselves many different kinds of *good scientific questions* about these 4 different kinds of *parallel universes*.

For example, we can ask ourselves how these *four* parallel universes are *causally arranged* among themselves.

For another example, we can ask ourselves *which* of these 4 parallel universes contains our very own local (local to us people on earth) *milky way galaxy* which includes our very own *planet earth*.

In which of these 4 universes is our *own earth located*?

Is our very own precious little earth planet located inside an *Advanced Universe*?

Or, is our very own earth planet located, just one level deeper, inside a *Mortal Universe*?

Can a confused earth-like planet (like our very own earth planet) find itself composed of *advanced atoms* existing inside an *Advanced Universe*; and yet still host billions of *us* mortal-human *bodies* (that can get so suddenly sick, and that can die so very easily) with our *semi-intelligent* mortal-human *brains* (and our mortal-human neurons) that get *confused so easily*?

Where is our *own earth* properly *located* within these 4 distinctly-different Parallel Universes?

Can our own earth planet be spatially located on the *outer-edge* of an *advanced galaxy* of an *advanced universe*?

Or must our own earth planet, be located somewhat deeper inside the neural-simulation, within a lower *merely-mortal universe*?

*Where exactly is our earth planet located?*

Various kinds of *parallel universe theories* have been postulated (and broadly discussed) by many *quantum physicists* for *nearly a century* here on this little mortal earth world.

For example, the *many worlds* (many universes) *interpretation* of quantum physics provides an interesting *alternate viewpoint*, to the more traditional old Copenhagen interpretation of quantum mechanics.

Some *parallel universe theorists* have gone so far, as to even envision an infinite number of parallel universes, with each individual *quantum measurement* causing the spontaneous creation of one (or more) additional parallel universes.

We are now becoming *more empowered* (by this 4 Brain Theory paper) to ask ourselves some *better questions* about these *hypothetical parallel universes*.

For example, *exactly how many* parallel universes do we really *logically-need* to scientifically *account* for *every quantum measurement* known to mankind?

Is there really a *strong scientific need* to envision an *infinite* number of parallel universes, when *just 4 parallel universes* seem to be *all* that we *really need*, to be able to properly explain *nearly everything*?

In this 4 Brain Theory article, can we convincingly-demonstrate *that just 4* different types of *parallel universes* are all the universes that are really needed to



*adequately account for all the known measurements of quantum physics?*

Furthermore, is it likely that *Our 4 Parallel Universes* may be *causally-arranged* in a *very simple neural structure*?

For example, is it possible that *Our 4 Parallel Universes* may be simply *human-brain dream-nested*?

Can this simple *dream-nested parallel-universe structure* help lead us all to the simple *Occam's razor theory of everything* that thousands of *bright scientists* and thousands of *bright philosophers* have long sought?

How can we best discover all the exact quantum mechanisms of this *parallel-universe dream-nesting*, to better understand the way our *real human brains network together*, as *finite teams*, to *jointly-simulate all* of our needed *nested parallel universes*.

Now, let's take a closer look at *Our 4 Nested Parallel Universes*.

# 4 Nested Parallel Universes

Our *4 Nested Parallel Universes* are causally human-brain dream-nested in the following arrangement:

- (1) Our One Infinite *Real Universe* contains *everything*, because it also contains all of our *real human brains*, which *simulate* the *lower 3 universes*.
- (2) All our *Advanced Universes* are *simulated* by wireless distributed networks of *us real human brains*, that all live *inside* our One Infinite Real Universe.
- (3) All our *Mortal Universes* are *simulated* by wireless distributed networks of *advanced* human brains, that all live *inside* Advanced Universes.
- (4) All our *Submortal Universes* are either *neurally-simulated* by *individual* dreaming (while sleeping) mortal-human brains; or they are *computationally-simulated* by *mortal virtual reality (VR) computers* (here on earth) that can *network multiple* mortal-human brains together.

These *4 Nested Parallel Universes* are very *important to us* human beings, because we actually need them to help us to properly *balance ourselves*, and we can regularly use them *all* to help us to properly feel *pure deep human peace* and *happy human joy*.

As earth-based scientists, philosophers, and human thinkers, we can now begin to ask ourselves many important questions about these *4 Nested Parallel Universes*.

For example, what is the *essential nature* of each of these 4 nested parallel universes?

Also, what actually *causes the existence* of these 4 nested parallel universes?

*What* are these 4 nested parallel universes really *made of*?

*What* do these 4 nested parallel universes actually *mean to us human beings*?

*Why* do our 4 different human selves *live inside* these 4 different parallel nested universes?

Are we really *always ourselves*?

Are there really *4 of us sub-selves* within our *one real self*?

It certainly seems like we may have *our 4 human sub-selves* all living inside our *one real human brain*.

And, the 4 of us (our 4 human selves) seems to need good places (*good universes*) where we can all live.

Do the 4 of us (our 4 selves) really live inside these 4 *nested parallel universes*?

Do our 4 *types of human consciousness* live and move within these 4 nested parallel universes?

It really does seem super likely that our *real-self* is the *forever-self* we have always been.

It certainly seems like we have always been *real* human beings.

*We are the real human beings.*

There exists *nothing* of greater *value* than *one* of us real human beings.

The value of *just one* of us real humans is *infinite*.

*Just one* of us real human beings is *infinitely more valuable* than a whole simulated galaxy, like our own local *milky-way galaxy*.

Do you believe that *you yourself* are *more valuable* than the whole *milky-way galaxy* with its *billions of stars*?

Every real human is *equally valuable* to every other real human.

This is the *Real Human Equality* of our One Infinite *Real Human Universe*.

We are the real human beings that *peacefully live forever* in our *beautiful light-filled* real world (way up *above* all of Plato's simulated dream caves) in our *one infinite real universe*.

We are also the *advanced cave avatar people* that live out all of our *joyful, adventurous, new avatar lives* in each and *every room* of Plato's Cave, that are *all* of our *advanced neurally-simulated universes*.

We are also our current mortal selves, as the *merely-mortal human-avatar cave people* of this lone and dreary *Planet Earth*.

As such human mortal human selves, most of us are even found *economically-chained* tightly together (today in 2023) to some of the *filthy corrupt walls* in the *darker flickering parts* of Plato's Cave (here on Earth).

As *mere mortals*, we may sometimes even wonder if we can somehow discover a *good wise way*, to improve our mutual predicament on this Earth planet to create peace and *economic prosperity* for all.

We also regularly discover ourselves, as *submortal cave people*, dreaming our very own *private dreams* (while sleeping at night) about the life we would personally *love to live*, if we could somehow *regain* our very own *personal economic power of free-market choice*.

We often do this *submortal dreaming* while sleeping at night, as submortal human *avatars*, living inside our own private submortal dream environments (*our personal submortal universes*).

We the people of planet Earth, can now use this 4 Brain Theory expansion of Plato's Cave, to *wisely challenge our ability to fully confront ourselves*, by helping us to start *looking directly*, with brave steadiness, *without flinching*, at all 4 levels of *our very own human selves*.

These *4 levels of ourselves* live inside *Our 4 Nested Parallel Universes*.

Many deep thinkers have long proclaimed that *fully knowing one's own self* is the *beginning of wisdom*.

They *were* right.

They *are* right.

We are *all* right.

*How* is it that *we are all* right?

We the people of existence (those of us that actually do really exist), have *always been all right*, because we (the real people) have *always* been *safe* and *sound*, without a real worry, without a real error, without any real danger, *living safely high up above* all of Plato's Caves.

Because, we the real people (of our *Real Universe*), have *always lived way up above* every illusory (simulated) cave.

We the real people, have always lived safely in our *one infinite real universe*, where there is *never* any real danger, *nor* threat of any real pain, *nor* possibility of any real death.

The emotionally-unsettling *perception of danger* can only exist in the *two lowest* of our 4 nested parallel universes.

This is because of how "*danger*" is differentially processed in our 4 *different* human *brains*.

There is really *nothing* to worry about.

What really happens if we utterly fail *our earth self-test*?

This marvelous expansion of Plato's Cave (this 4 Brain Theory), seeks to help us to reveal our *own true nature*, as the *infinite real human beings* that have never ever actually had a *real reason* to worry.

As real human beings living forever, in our own infinite real universe, there is *nothing to fear*, because we have always already known everything; and we always will.

A *real perfect knowledge of everything*, does not allow fear, worry, or the sense of danger of any kind.

As real human beings, living inside our real universe, we always *feel great peace* knowing everything *that can be known*.

*Worlds* without end.

*Dreams* without end.

Real-human *daydreams* without end.

Exciting *human adventures* without end.



*Human-brain simulations without end.*

Simulated *dream universes* without end.

*4 Nested Parallel Universes* for us to *enjoy* as we continue to *dream*.

And when we *finally awaken* from all our *dreams*, we simply return to who *we have always been*, returning again to be our real human selves, who all live in peace inside our *real universe*, which is the *senior universe*, that makes all the other kinds of universes (our 3 kinds of simulated universes) possible, because they are *just dream universes*.

Therefore, it seems likely that *we all sometimes live* in 4 different types of universes, and these 4 physical universes are *Our 4 Nested Parallel Universes*.

These *4 nested parallel universes* are all *highly-dependent* on our *one infinite real universe*, because these the real human beings (who all live inside the real universe) cooperate together to *neurally-simulate* the *lower 3 nested parallel universes* by wirelessly networking *4 small neural subsets* (from 4 spatially-separate limbic-tissue regions) of their *real human brains*.

Therefore, *the grand scientific key* to understanding *all* of *the real physics* of these lower 3 nested parallel universes (including the *particular advanced universe* that contains our very *own milky-way galaxy*) is to understand every particle of the *real energy-science* of our *real human brains*.

A very important area, of the *real energy-science* of our real human brains, is the scientific study of *Real Neural Thermodynamics*.

# Real Neural Thermodynamics

What is the scientific study of *Real Neural Thermodynamics*?

The scientific study of *Real Neural Thermodynamics* is the scientific realization that Real Neural Thermodynamics plays a *dominant role* in governing the *energy dynamics* (and *all the laws of physics*) of *all the simulated (dream) universes*; because all of these *dream universes* are *real-neural energetic* simulations hosted by our *real human brains*.

What kind of Real Neural Thermodynamics *govern the energetic behaviors* of our real human brains in our one infinite real universe?

Do our real human brains have the power to *energetically balance themselves* at all times, in order to maintain their *proper peaceful real-neural homeostasis*, in order to maintain a real-human *sense of wellbeing*?

How can a real-human brain act to continuously *thermodynamically balance itself*, to maintain just the right amount of *energy-balance*, and also just the right kind of *microscopic energy-balance*, and just the right kind of *neural-information energy-balance*, so as to

always maintain a proper level of real-human *energetic homeostasis* for this real human brain?

Some of our bright earth scientists (here on planet earth) have formulated a set of *thermodynamic laws* that some believe may govern every *collection of particles* in existence.

Let's take a look at these *4 laws of thermodynamics*, and consider how they may need to be scientifically-extended and scientifically-adapted to help us to better understand the *real-neural thermodynamics* of us real human brains, that have always lived in our real universe.

*The zeroth law of thermodynamics* is all about the scientific concept of *temperature*, and the related scientific concept of *thermal equilibrium*.

*Temperature* is viewed as a collective emergent property, that logically stems from the collective energetic behaviors, of the *microscopic kinetic energies*, of really huge numbers of *individual interacting particles*.

*Our Zeroth Law of Real Thermodynamics* is that a set of *real temperatures* really do exist in *our real universe*, and in our real human bodies, and in our *real human brains*; and our real human brains have the *ability to regulate*,

modify, and *control all* of the *local-region temperatures* of *all* of their many different *real-neural tissues*.

*Our Zeroth Law of Real Thermodynamics* is also that the set of *real neural-brain temperatures*, that really do exist inside our real human brains, *temporarily rise and fall locally*, depending on how a real human brain is currently *energetically-reacting* to its *external real environment* (our *real universe*, where all of us real human beings actually live) and to the other real human beings that we have *social relationships* with; and that all of these *temporary local neural temperature increases*, and *temporary local neural temperature decreases*, are carefully monitored by other *temperature-monitoring neural regions* of our real human brains, and that our real human brains have the *ability to balance out these temperatures*, to return every neural region of our real brain back to its *optimal-temperature homeostasis* by *wisely exchanging energy* with its *environment* (the real universe) through its *real human senses*, including its *real-human skin*, its *real-human taste buds*, its *real-human olfactory bulbs*, its *real-human ears*, and its *real-human eyes*.

*The first law of thermodynamics* is all about *energy*, and *energy conservation*, and the ability of energy to *change its form*, and the *inability of anyone* to actually create any *really new energy*.

This first law of thermodynamics seems to be *very wise*, and *very accurate*.

*Energy cannot be created.*

This is a *fundamental law of existence*.

This is a *basic law of the cosmos*.

This important law even holds firm in our *real universe*.

Energy can *change its form* in many ways.

Energy can *assume many* different kinds of *forms*.

But, energy itself *can never be created* by anyone anywhere.

Energy *cannot be made*, but it can be made to *change its shape*.

*Our First Law of Real Thermodynamics* is that real energy *cannot be created*.

*Our First Law of Real Thermodynamics* is also that real energy was *not created or made*, neither indeed can be.

*Our First Law of Real Thermodynamics* is also that real energy can change its form.

*Our First Law of Real Thermodynamics* is also that real energy can *only* change its form into a *finite number* of *different types* of real energy-forms.

*Our First Law of Real Thermodynamics* is also that a set of real energies already exist in some *super-special real energy-forms* that have the *power to change the form* of energy.

*Our First Law of Real Thermodynamics* is also that these *super-special real energy-forms* can be viewed as *super-well-formed real-living molecules*.

*Our First Law of Real Thermodynamics* is also that these *super-special real energy-forms*, which are the *super-well-formed real-living molecules*, can be viewed as *real human molecules*.

*Our First Law of Real Thermodynamics* is also that these *real human molecules* are formed well enough (as *real-human shapes*) to have *real-human super-intelligence*; which is the *highest form* of *super-intelligence* possible in any cosmos.

*Our First Law of Real Thermodynamics* is also that these real human molecules *do Not have the power* to create any new energy.

*Our First Law of Real Thermodynamics* is also that these real human molecules are *fundamentally constrained* in *all* of their *creative abilities*; because they can *never find enough power* to create any new energy.

*Our First Law of Real Thermodynamics* is also that these real human molecules are *fundamentally constrained* in *everything* that they *can do*; because this fundamental *constraint* (of not being able to create any new energy) *constrains* every real human molecule to be only able to *do exactly 2 distinct kinds of things*.

*Our First Law of Real Thermodynamics* is also that these real human molecules are *so constrained* (by not being able to create energy) that they can *only act* to *change* the *form* of energy in their external environment (their *real universe*), or they can act to change the form of energy *inside their minds* (inside the *real neural tissues* of their real human brains).

*Our First Law of Real Thermodynamics* is also that these real human molecules are *shaped like human beings*, and they *look like human beings*, and these real human molecules are actually *us real human beings*; and us real



human beings can *neither* create *energy*, *nor* form *it* into *another one of us*.

This *inability* to *make* new *energy* is a very fundamental *constraint* on what a real human being can do.

This *inability* to *form* a new *real human being* (from energy) is another fundamental *constraint* on what a real human being can do.

How many of these *Fundamental Real Constraints* exist, *limiting* our *real abilities* of what us real human beings can actually do?

What is our *Real Constraint Theory*?

# Real Constraint Theory

What is *Real Constraint Theory*?

*Real Constraint Theory* is the scientific constraint theory of the set of *Fundamental Real Constraints* that place *Real Limits* on what the *infinite set* of us real human beings *Can Do*.

Therefore, *Real Constraint Theory* is the *Fundamental Constraint Theory* that forms the *Fundamental Foundation* of *all* other constraint theories in existence.

*Our Real Constraint Theory* (that we are presenting here in this 4 Brain Theory paper for the first time) is the most fundamental constraint theory that can possibly exist; because our real constraint theory places *fundamental limits* on the *abilities* of us real human beings.

A careful deep scientific study of this real constraint theory, will produce a *good accurate scientific theory of everything* that currently does actually exist; and also everything that can possibly exist in the future.

What exactly is our *Real Constraint Theory*?

*Our Real Constraint Theory* is Our Real Human Constraint Theory; because all of these real constraints are the *basic limiting constraints* on our real human abilities as *real human beings*.

*Our Real Human Constraint Theory* is that there exist a *finite number* of fundamental real constraints which *block our ability to act* as real human beings.

*Our Real Human Constraint Theory* is also that these fundamental real constraints, limit our abilities to such a *strict degree*, that every *law of physics* of the entire cosmos, can be *theoretically derived* from a careful scientific investigation of the *logical consequences* of these *fundamental real constraints*.

This *set of 8 fundamental real constraints* includes the following 8 rigid constraints on our basic abilities as real human beings:

- (1) We real humans cannot create energy.
- (2) We real humans cannot destroy energy.
- (3) We real humans cannot create real humans.
- (4) We real humans cannot destroy real humans.
- (5) We real humans cannot destroy ourselves.
- (6) We real humans cannot create consciousness.
- (7) We real humans cannot destroy consciousness.
- (8) We real humans cannot turn off consciousness.

Our working hypothesis is that these *8 fundamental* real *constraints* can be logically studied, to successfully formulate a complete *theory of everything*.

As we think about it a bit more carefully, we *may* logically discover that there are *even more* than just these 8 foundational real constraints.

These *8 foundational* real *constraints* certainly appear to be the *most* fundamental *laws* of any cosmos that *can* exist *anywhere*.

These 8 fundamental real constraints all include a single *fundamental assumption* about reality.

This one, simple, necessary *fundamental assumption* about reality; is that there *exists* an *infinite set* of us *real human beings*.

This is the one single *fundamental assumption* (a la Occam's mighty powerful razor of total, logical, rational simplicity) about *reality* that we actually do *need to make*, if we want to begin to *completely* understand every particle of *science*.

Now, let's get back to understanding the important *science of real thermodynamics*.

*Our First Law of Real Thermodynamics* is that it is simply *impossible to create or destroy energy*; because the only thing that can be done with energy is to *change its form* from *one form* to *another form*.

Therefore, *Our First Law of Real Thermodynamics* is also that us real human beings *do Not have* the power to create or make any new energy; but *we Do have* the power to take energy from our *energy-rich-environment* (the real universe) and *transform* this energy into a *different form* of energy.

This means that us real human beings do have the power to *form other energy-forms* from some of the energy that *already exists* in our real-energy environment, which is the real universe.

As real human beings, we can create *many different kinds* of *energy-forms* from the already-existing energy in our real-universe environment.

As real human beings, we also have *real-human brains*.

Our real-human brains always contain a *certain amount* of *brain energy*.

Our real-human brains have the ability to *regulate* how much *energy they take in* through *their senses*, and how much *energy they give out* through *their senses*; in order to properly *maintain* a human-brain *energy homeostasis* with an *energy-balanced human brain*.

In *some interesting situations*, it can become difficult for our real human brain to *exchange enough* of a particular type of energy, with its environment (our real universe); and this is *why* we daydream as real human beings.

When we *daydream* as real human beings; our real human brain (via its *senses*) is able to *exchange energy* with its environment (our real universe) while it is *daydreaming*.

These *daydreaming-facilitated* real-human-brain *energy exchanges* are the actual *reason why* our real-human brain sometimes daydreams.

The *detailed nature* of our daydream (including the *detailed actions* of our advanced-human “dream-avatar” inside its advanced universe) is largely determined by the *detailed nature* of the dynamic energy-exchange *needs* of our real human brain.

These *real-human-brain* energy-exchange *needs*, are always precisely the energy-exchange needs that will

*gently move our real-human brain back into total energetic brain-balance.*

These *dynamic* real-human energy-exchange *needs* (of an uncreated real human brain) *are what generates* the free-will (the *desires* and *intentions*) of a newly-created advanced-human *dream-avatar* acting inside its neurally-simulated advanced (created) universe.

The careful *scientific study* of the *detailed nature* of our real-human-brain energy-exchange *needs*, and how these real energy exchanges are properly governed by the *first law of real thermodynamics*; will reveal everything that can be known about the *dark matter, quantum gravity, galaxies, and electromagnetism*, of the advanced (neurally-simulated) universe where we currently live on our little earth planet.

Such a detailed scientific study will also need to include a much more careful scientific study of the *second law of real thermodynamics*, and the actual detailed scientific nature of the scientific concept of “*entropy*”.

What exactly does the *second law of thermodynamics* really say about *entropy*?

Which parts of the second law of thermodynamics are *almost close* to being correct?

Which parts of the second law of thermodynamics *need some logical help* with respect to our proper understanding of the scientific reality of *entropy*?

What is *entropy*?

Is entropy an *actual real thing*?

Or, does entropy really only exist *inside our minds*?

What is *Real Entropy* in our Real Universe?



# Real Entropy

What is *Entropy*?

Who *completely understands* Entropy?

Is Entropy a *measure of energy*?

Or, is Entropy a *measure of information*?

What is the actual relationship between *information* and *energy*?

Who among us can understand the *correct relationship* between energy and information?

Is *Entropy Understandable*?

What is *Real Entropy* in our Real Universe?

Can a kind of *real entropy* actually really even exist inside our *real universe*?

Or, is our real universe the kind of universe where every potential type of *entropy* must be *zero* everywhere always?

In what *kinds of universes* can entropy be *non-zero*?

As perceived through what *kinds of brains* can entropy be *perceived as non-zero*?

Is *entropy* a measure of “*hidden information*”?

Is there *any part* of entropy that is *not* “hidden information”?

What part is it?

What is the nature of *real entropy* in our *real universe*?

What is the nature of *real entropy* inside a *real human brain*?

What is the actual nature of entropy inside a *simulated advanced universe*, like the one we currently seem to be living within here on earth?

Can entropy only really exist inside a *limited brain* that *cannot see everything*?

How can a *star's entropy increase*, if the star is actually in a *constant energy state* (as averaged over millions of years) with the *star continually drawing in dark matter*, and constantly *converting the energy* of this dark matter

into *visible matter*, in a way that is *approximately constant*, as averaged over a few million years?

Does the *entropy of a star* really mostly *remain constant* over billions of years?

How about a real human brain?

How can we say a real human brain *will increase in entropy over time*, when this same real human brain will actually always have the power to *regulate itself so intelligently* that it properly *maintains its own energy-homeostasis forever*?

Does the entropy of a real human brain really mostly remain a constant (the *special constant* that is *zero*) for all time?

How can entropy exist in the presence of real human intelligence that can *see* (scientifically observe) *anything* and *everything* that is scientifically observable?

It certainly appears that the super-interesting *second law of thermodynamics* is going to need a *lot* of additional good logical *scientific work* before we can say (those of us scientists here on earth who care about entropy) that we *have got it all right*, and that we actually *understand entropy*.

Who *does understand entropy* already today here on earth?

Do the Super-Smart Satoshi Scientists *completely understand entropy* here on earth?

What can a better understanding of *entropy* teach us about the *dark matter* and the *electromagnetism* of this local visible advanced universe?

How many *different kinds of electromagnetism* are there really?

One of the interesting things about our 4 Nested Parallel Universes, is that they contain exactly *4 Kinds of Electromagnetism*.

What are these *4 Kinds of Electromagnetism*?

# 4 Kinds of Electromagnetism

The *4 Kinds of Electromagnetism* are as follows:

- (1) Real Electromagnetism
- (2) Advanced Electromagnetism
- (3) Mortal Electromagnetism
- (4) Submortal Electromagnetism

These *4 Kinds of Electromagnetism* are *all slightly different*, depending on what is *needed* and *wanted* in our simulated universes.

These 4 different kinds of electromagnetism *stem naturally* from the 4 distinct types of *electromagnetic neural tissues* that are composed of 4 different classes of *electromagnetic molecules* (including our human DNA), which are made of 4 different kinds of *electromagnetic atoms*, which are composed of 4 different classes of *sub-atomic electromagnetic elementary particles*.

These 4 different kinds of *electromagnetism* act on the charged particles of 4 different types of *Electromagnetic Spaces*, which are the *4 Nested Parallel Universes*.

The 4 different types of *electromagnetic tissue* exist *inside* 4 distinct kinds of human brains.

The human brains, made of these electromagnetic neural tissues, are inside the *heads* and *bodies* of human beings.

The *spatial dimensions* of these human heads and human bodies are relatively *tiny* compared to the size of a typical galaxy or a whole universe.

Even though the neural electromagnetic *tissues* of a single human brain are relatively *tiny* compared to the *big spaces* of a whole universe of spacetime; it is actually these tiny electromagnetic tissues that simulate the big universes full of simulated elementary particles, like the *simulated neural photon* and the *simulated neural electron*.

Our real human brains use their natural biological *neuro-electromagnetism* to do all of their *knowing*, and to do all of their *simulating*, and to do all of their *daydreaming*.

In order to better understand our own real human brains, with their simulated *neural photons*, and their simulated *neural electrons*, we will need to look more closely at our *4 Neuro-Electromagnetisms*.

What is the essential nature of each of our *4 Neuro-Electromagnetisms*?

# 4 Neuro-Electromagnetisms

What are our 4 *Neuro-Electromagnetisms*?

Our 4 distinct human brains, contain 4 neural tissue types, that obey the scientific laws of 4 different kinds of *neuro-electromagnetism*.

Our 4 *Neuro-Electromagnetisms* are as follows:

- (1) Real Neuro-Electromagnetism
- (2) Advanced Neuro-Electromagnetism
- (3) Mortal Neuro-Electromagnetism
- (4) Submortal Neuro-Electromagnetism

These 4 Neuro-Electromagnetisms are all slightly different in the *exact way they behave*, according to what is needed and wanted inside our *simulated neuro-electromagnetic universes*.

These 4 different types of neuro-electromagnetism must obey *biological laws*, that are *similar* to (but not identical with) the *physical laws* of electromagnetism, discovered by a very brilliant Scottish *physicist*, named *James Clerk Maxwell*, in 1865.

The *long-wavelength electromagnetic equations* of our local advanced-universe electromagnetism, that James Clerk Maxwell discovered in 1865, are a little bit different than the *mathematical neuro-electromagnetism laws* that naturally govern our real human brains in our real universe.

Now, let's look a little bit more closely at the nature of our real-human *NeuroElectromagnetism Laws*.



# NeuroElectromagnetism Laws

What are all the *NeuroElectromagnetism Laws* of nature?

What is the difference between *Electromagnetism* and *NeuroElectromagnetism*?

The reason the actual real-human laws of *NeuroElectromagnetism* (neuro-electromagnetism) are a little bit *different* than the (more-simple) laws of *Maxwell's 1865 long-wavelength electromagnetism*, is because the (more-complete) laws of neuro-electromagnetism must include all the *biological structural constraints*, and they must also include the *biological actions* of all the *neurological energy converters* and all the *neurological energy generators*.

These *biological constraints* include all the *guiding structures* (like *glial cells*, *neural axons*, *neural dendrites*, and *neural cell wall membranes*) of all of the actual real human neurons.

Some of the *neurological energy converters* are the real-human neuron *synapses* (that employ molecular *neurotransmitters*) that *convert* the *energy* of the incoming real-dark neural pulses (*dark-matter particles*)

*into the energy of the outgoing real-Higgs neural pulses (Higgs Bosons).*

The *neurological energy generators* are the firing real-human neurons that simply *fire* to create *new action potentials* (newly-created neural pulses).

The *firing of a neuron* to generate a new pulse (with its newly-created *energy-mass*) is the way that *new energy can enter* from a *higher world* (a universe simulator, like our real universe) into a *lower world* (a simulated universe, like our local advanced universe that we observe with our Hubble Telescope).

This simple (neuron firing) realization makes the tired old big bang hypothesis *simply unnecessary*.

Our local advanced physical universe has this *very simple way* (simple real neuron firing) for new energy (and *new pulse mass*) to easily *enter into it*.

When all the *local advanced universe conditions* are just right (like inside a *hot star*, according to the *rules* of our local advanced universe *simulation game*) then our real neurons can *simply fire up more pulses* (generating some brand-new neural action potentials) to create *new Higgs Bosons (huge massive balanced pulses)*, that can quickly *decay* into the intermediate particles, that will then decay

into all the *elementary particles* that are necessary to *combine together* to create new *atoms*, new *planets*, new *stars*, and entirely-new *galaxies*.

There certainly appears to be *no longer be any real need* for a big bang theory, when new energy-mass (as new energy-mass neural pulses), can so easily enter into this advanced physical universe, in such a simple, common, well-understood way, as *the firing* of a real *neuron*.

The logical, rational, physical addition of *neural activity* to *electromagnetic activity* produces the interesting *combination* of these *two dynamic activities* (governed by the powerful laws of real physics and real neurobiology) of *neuro-electromagnetism*.

In order to *better understand* this interesting *neuro-electromagnetism*, we first need to look more closely at a particularly-important type of it, which is *Maxwell's electromagnetism* of 1865.

What was *theoretically discovered* in Scotland, way back in the year 1865, that has since come to be known throughout this whole wide world as *Maxwell's Electromagnetism*?

# Maxwell's Electromagnetism

What is *Maxwell's Electromagnetism*?

A very intelligent Scottish physicist named James Clerk Maxwell (1831–1879) published his famous set of *Mathematical Equations of Electromagnetism* in 1865 in the Philosophical Transactions of the Royal Society of London [11].

James Clerk Maxwell was a *brilliant theoretical physicist*, who stood firmly on the good strong broad shoulders, of a good number of *dedicated physicists*, who had already lived (as mortal-human physicist avatars) inside this local advanced universe simulation (on our little *Earth planet*) before him.

James Maxwell discovered his *astonishingly beautiful set of electromagnetic differential equations*, by carefully studying the profound earlier works of several brilliant scientists, including Charles-Augustin de *Coulomb* (1736–1806), Andre-Marie *Ampere* (1775–1836), Carl Friedrich *Gauss* (1777–1855), and Michael *Faraday* (1791–1867), along with several notable others.

It appears that these *early* (pre-Maxwell) planet-Earth scientists *measured* (and theorized about) some key

aspects of the advanced-universe *electromagnetism* (of this advanced physical universe simulation) that was *inherited* from the *real neuro-electromagnetism* of our *real human neurons* (that network together to simulate the *inherited* advanced *Maxwell-electromagnetism* of this local *advanced* universe that contains our own Milky Way Galaxy).

There are 3 other types of electromagnetism (real, mortal, and submortal) besides the *advanced Maxwell-electromagnetism* that was measured (and theorized about) by Faraday, Gauss, Ampere, Coulomb, and Maxwell so many decades ago.

Maxwell's electromagnetic equations of 1865 are a set of *partial coupled differential equations* that mathematically describe the relationships between the *electric* vector field, the *magnetic* vector field, and the locations, velocities, and magnitudes of all the local *electric charge densities* in our *advanced* electromagnetic spacetime *universe*.

These beautiful, electromagnetic, partial, coupled differential equations, of Maxwell in 1865, are largely governed by a very special *speed of light* "c".

James Clerk Maxwell recognized the *vast importance* of this special *speed of light* "c", when he wisely recognized

it, and placed it into his beautiful 1865 equations of *electromagnetic light*.

We can call this very special speed, “*Maxwell’s Speed of Light* “*c*”.

# Maxwell's Speed of Light "c"

What is the actual *physical source* of Maxwell's Speed of Light "c"?

What is it about our *real physical neural pulses*, that seem to *physically cause* Maxwell's Speed of Light "c" to have the *exact physical speed* that it has?

Why not some *other physical speed*?

*Why* precisely does Maxwell's Speed of Light "c" equal about 0.3 billion meters per second?

This *exact speed* of light "c" (of 0.3 billion meters per second) plays *a very prominent role* in Maxwell's 1865 equations of electromagnetism.

*All* of the *photons* (the vector-boson electromagnetic particles of light) and all of their electromagnetic fields, *appear* (according to many scientific measurements) to travel at this *speed of light "c"* (the speed of light "c" in this neurally-simulated advanced physical universe), as exemplified by Maxwell's 1865 equations of electromagnetism.

Neuroscientific investigations (here on Earth) of mortal human *neurons* (inside our mortal human heads) have revealed that these mortal neurons generate *electric action-potential pulses* (of displaced, relative, ionic, electric-charge densities) that travel (along our mortal-human *axons*) in space (inside the small cranially-enclosed spaces of our mortal-human brains) at *certain velocities* (generating *magnetic fields* from the moving *electric charges*).

These mortal neural-electric pulses (of mortal human neurons) *must obey* Maxwell's 1865 equations of electromagnetism, because these mortal pulses *live inside* this advanced universe that is largely governed by Maxwell's 1865 electromagnetic equations.

These mortal neural electric pulses must *also obey* the biological principles (and the biological laws) of the *correct form* of mortal-human *neuroscience*.

Mortal human *neuroscience* is still in its *early infancy* here on this little neurally-simulated earth planet.

Our scientific understanding of the actual source of Maxwell's *1865 Electromagnetism* may also still be in its early infancy.

So, let's try to examine it more closely today.



# 1865 Electromagnetism

James Clerk Maxwell (1831-1879) published his famous equations of *electromagnetism* in 1865.

In this present 4 Brain Theory article, we are presenting a *new scientific Hypothesis* for the actual *Source* (cause) of Maxwell's electromagnetic equations of 1865.

Our *Electromagnetism Source Hypothesis* is that Maxwell's electromagnetic equations of 1865 flow naturally from (and are *caused by*) the *real neuro-electromagnetism*, of our real human *brains*, that live inside our *real universe*.

We also hypothesize that there are 4 distinct types of neuro-electromagnetism (based in 4 different neural tissue types) that cause (simulate, create, form, host, make) 4 distinctly-different *kinds of electromagnetism*, that form all the laws (and *all the forces*) of *physics*, in 4 distinct kinds of big electromagnetic universe spaces.

The *real neuro-electromagnetism* (that simulates our local advanced physical universe) must obey a particular *set of laws* of the real neuro-electromagnetism that *governs* all the behaviors of all of our real human brains.

This set of laws of *real neuro-electromagnetism* (the full *set of laws* that our real human neurons must *obey* when they wirelessly-network together for the purpose of properly-simulating our advanced universe) is very *similar* to the laws of the Maxwell electromagnetism of 1865, *with 3 important exceptions*.

These 3 important exceptions (*3 noted differences*) have been *carefully studied* by the many bright physicists of this world for several decades.

These bright physicists have wisely given *3 new names* (as *3 physical laws* of *3 physical forces*) to these *3 noted differences*, from the 1865 electromagnetism *force* of James Clerk Maxwell.

Long before the birth of James Clerk Maxwell in 1831, a brilliant English physicist, named Sir Isaac Newton (1642-1726), published a simple *mathematical formula* for the *force of gravity*.

This simple little formula for *Newton's gravitational force* (between two massive objects) is very similar to Coulomb's formula for the *electrostatic force* (between two electrically-charged objects).

Thousands of scientists have already noticed the *many interesting similarities* between these two well-known formulas (of *Newton* and *Coulomb*).

Both of these formulas show that the *force* (between the two objects) is proportional to the *inverse square* of the *distance* between the *two objects*.

In both of these famous force formulas, the magnitude of the force is proportional to the *product of the two magnitudes* of the *two masses* (for Newton's gravitational force), or the *product of the two magnitudes* of the *two electric charges* (for Coulomb's electrostatic force).

These obvious interesting similarities, in the simple formulas for these two basic forces, have encouraged many physicists to *search diligently* for a good way to *mathematically unify* (logically bring together in a sensible precise way) these *two forces* of *electromagnetism* (which includes electrostatics) and *gravity*.

The *3 new physical laws* of physics (the 3 noted differences) are known as the *weak* nuclear force, the *strong* nuclear force, and the force of *gravity*.

Some physicists believe that these *3 new forces* (3 noted differences) can be *mathematically-unified* with the electromagnetic force of 1865.

Such a *Grand Unified Theory* (GUT) has been diligently sought by many bright physicists for many decades.

Some of these bright physicists may one day (in the near future) even begin to believe that these *3 new forces* can be considered as being *already* conceptually unified with electromagnetism, in a particular theoretical sense, because these *3 new forces* may simply be *3 new manifestations* of real neuro-electromagnetism.

Now, in the *new real light* of this real *neuro-electromagnetism*, let's look more closely at *the 4 Forces of Physics*.

# The 4 Forces of Physics

What are *the 4 Forces of Physics*?

What are these *4 different manifestations* of *real neuro-electromagnetism*, that have been so carefully measured by all our talented earth-based physicists, during these past several decades?

*The 4 Forces of Physics* are the following:

- (1) The long-range *electromagnetic* force
- (2) The decaying *weak* electromagnetic force
- (3) The nuclear *strong* electromagnetic force
- (4) The dark-matter *gravity* electromagnetic force

How are these 4 Forces of Physics *similar* to each other?

These *4 Forces of Physics* are similar to each other because these 4 Forces are *All Electromagnetic Forces*.

How are these 4 Forces of Physics *different* from each other?

These *4 Forces of Physics* are all different from each other because these 4 Forces are all *different manifestations* of *real Neuro-Electromagnetism*.

What is our *hypothesis* about these 4 forces of physics?

*Our Hypothesis for these 4 Forces of Physics* is that all 4 of these 4 forces of physics are actually just 4 *different physical manifestations* (that we scientifically-observe here inside our neurally-simulated advanced universe) of the very same *real neuro-electromagnetic force* (of our real universe).

Why do we believe that each of these 4 Forces of Physics may all have their *origin* (source and cause) in our real human brain *neuro-electromagnetism*?

These 4 *distinct manifestations* (these 4 Forces of Physics) of the real neuro-electromagnetic force, seem to be due to 4 *different ways* that our real neural network (our real network of real human neurons) acts to *generate, propagate, and entangle* (dynamically-combine) a few different types of *real neural pulses*.

All of our real neural pulses must *fully obey* all the laws of *real neuro-electromagnetism*, in our real human brains, because all of our real neural pulses propagate on *real neural axons*.

From the *limited mortal viewpoint* that is easily accessible to us mortal-human physicists (of earth), these 4 distinct

*faces* of real neuro-electromagnetism, *appear* to be 4 different *forces of physics*.

However, if we look closely at the *causal* real neuro-electromagnetic neural *pulses*, that are generated by our real-human neurons, then we can see many reasons why these 4 different forces of physics, *may actually be* just 4 *different ways* that the real neuro-electromagnetic pulses *interact with each other* to form to simulate our entire advanced universe.

In the real light, of the likely existence, of these real neural pulses, what kind of a *Grand United Theory* (GUT) of the *4 Forces of Physics* (and how these 4 forces neurologically-stem from the pulse-pulse interactions of our real neuro-electromagnetic pulses) can we begin to create today in this modern year of 2023?

What kind of *GUT Hypothesis* can we create today with our *real* neuro-electromagnetic *theory* of this present 4 Brain Theory paper?

What is *Our GUT Hypothesis*?

# Our GUT Hypothesis

What kind of *GUT Hypothesis* can we now create?

What kind of a *GUT Hypothesis* would most likely turn out to be correct, *if* this universe *really is* a multi-player neural simulation?

Many bright theoretical physicists have sought for many decades to unify the 4 forces of physics into a mathematical (and conceptual) *Grand Unified Theory (GUT)* that can accurately describe (and elegantly unify) *All 4 Forces of Physics*, by theoretically (and experimentally) demonstrating that these *4 separate forces* are really just *4 distinct faces* of a *single physical underlying force*.

The *weak force*, the *strong force*, and the *gravitational force* have long seemed (to many inquiring physicists) to be separate forces (and distinct forces) from the *electromagnetic force*.

The *grand unification* of these 4 (seemingly separate) forces of physics into a *single theory* of a *single force* remains a *holy grail* of modern (circa 2023) physics.



However, it now seems that the most-simple (a la *Occam's mighty razor*, which sometimes seems to be nearly *as sharp as a two-edged sword*), most accurate, and most likely hypothesis may simply turn out to be the *most-simple GUT Hypothesis* that can be possibly imagined by *any* human mind.

*Our 2023 GUT Hypothesis* is that the best *Grand Unified Theory* (GUT) is the simple realization that these 4 forces of physics are actually just *four distinct manifestations* (four different faces) of the one single solitary *real neuro-electromagnetic force* of our real human brains.

In particular *our 2023 GUT Hypothesis* also includes the realization that a closer inspection of the real-neural-pulse particulars of our *real neuro-electromagnetism* will likely reveal the *real reasons* why the *weak force*, the *strong force*, and the *force of gravity* have *seemed* for so long to be somewhat separate (and somewhat distinct) from the *electromagnetic force*.

Our 2023 GUT Hypothesis, in order to be a properly-complete grand unification hypothesis for our advanced universe, must also necessarily include an accurate *Dark Matter Hypothesis*.

Therefore, let's now look more closely at *Our Dark Matter Hypothesis*.

# Our Dark Matter Hypothesis

What is the very best *Dark Matter Hypothesis* we can possibly create?

Some scientists currently (today in 2023) believe that the *approximate energy-mass percentages* of our physical universe, can be divided into *three different kinds of energy-matter* as follows:

5% Visible Matter  
27% Dark Matter  
68% Dark Energy

There are a number of different *astrophysical observations* that seem to provide some *partial* support for these very-approximate *hypothetical percentages*.

What kind of 27% Dark Matter (and 68% Dark Energy) are *actually needed to properly support* (via real neural simulation) the 5% Visible Matter (also known as *ordinary matter* or *regular matter* or *easily-visible matter*) that comprises all our mortal *stars*, all our mortal *planets*, and all our precious mortal physical *human bodies*?

What do Dark Matter and Dark Energy need to do to *help*, to *support*, and to *enable* Visible Matter to do what it

does, as observed by all the many scientific measurements, that have already been made, on the many interesting quantum-particle behaviors of Visible Matter?

What is the *most-simple* Dark Matter Hypothesis that can properly account for *every known measurement* of science?

What *Dark Matter Hypothesis* can we create in light of the possibility that this local advanced (dark matter) universe may be neurally-simulated by a set of *wirelessly networked real neurons*?

What “*dark property*” would these *real neurons* have that could allow us to properly call them “*dark matter*” relative to us mortal scientists, that are still living inside this advanced simulation here on earth?

Why would *a single real neuron* appear to be a little piece of “*dark matter*” rather than a type of *visible matter*, when viewed (and observed and studied carefully) by a mortal-human scientist *living inside the very simulation* (here on earth, inside our milky-way galaxy simulation) that is composed of the networked-communications of the *real neural pulses* of the real neurons?

Why would the network of real neurons (and their propagating *scattering* dark neural pulses) exhibit a type

of “*dark matter induced gravity*” that would seem to hold whole galaxies together, and to make all the stars on the edges of these galaxies, to orbit the centers of these galaxies, with such great velocities?

Why would a *real neuron* (that is helping to simulate this milky-way galaxy) appear to be a type of “*dark matter*” that is *so hard to see* (so difficult to directly measure with our current 2023 scientific instruments) from *so deep within the inside* of the simulation?

Why would we simply proceed to create a *dark matter hypothesis* that is all about *real dark neurons* and their *real dark neural pulses* (dark matter particles) that propagate on their *real dark axons*?

What is *Our Dark Matter Hypothesis*?

*Our Dark Matter Hypothesis* is that *Dark Matter* is the *Real Dark Neurons* (and their *Real Dark Neural Pulses*) that are helping to simulate this whole neurally-simulated advanced physical universe.

What *dark matter simulation hypothesis* could possibly be *more-simple* than this one?

Does this simple logical *Dark Matter Hypothesis* (that dark matter is the real dark neurons, and their real dark

neural pulses) satisfy Occam's razor, as the *most-simple* dark matter hypothesis *possible*?

Is this simple dark matter hypothesis *easily testable*?

Yes.

How shall we start to *experimentally test* this simple, powerful, intriguing dark matter hypothesis?

What *new scientific experiment* can we design to begin to properly test this simple dark matter hypothesis?

Can we simply test this dark matter hypothesis, by probing the behavior of the real dark neurons (dark matter), to see if we can simply make them *fire up* some new *energetic pulse masses*?

Is this what we are doing at CERN, when we make our LHC *fire up* some new Higgs-Boson *125 GeV energetic pulse masses*?

Does this in any way *violate* the *law of conservation of energy* in our local advanced universe?

Where did all the *massive energy* of this advanced physical universe *initially* come from?

Where did our LHC *get enough energy* to make some of these massive Higgs Bosons?

How did this powerful *proton-proton collider* get enough energy to *accelerate its protons*, before some of these protons *collided together* to make some super-massive super-energetic single real-neural-pulse Higgs Bosons?

Is energy *transformed* simply from *one form* of energy, to *another form* of energy, but never created or destroyed?

Is the traditional old big bang theory really the best *energy-origin theory* we can find?

Can we discover a better (more intellectually complete, and more physically accurate) theory for *energy-mass creation* in our universe?

Where does all the *newly-created energy* (of *new stars* and *new planets*) of this advanced physical universe come from today?

Can energy be *created*?

Can energy be *destroyed*?

Nope.

What is the actual *source* (causal generator) of the *conservation of energy law* that we often seem to observe in our universe?

Does *dark matter* and *dark energy* obey a set of *energy conservation laws* that are different than (or the same as) the energy conservation laws of *physics* that seem to govern all our visible matter particles?

Does *dark energy* and *dark matter* obey the very same physical laws as *visible matter* and *visible energy*?

Can *dark matter* (real dark neurons, and their real dark neural pulses) *stimulate* the real neural Higgs dendrites to make the real Higgs neurons to start to *fire up* real light neural *pulses* to form *all* of the *visible matter* (the elementary particles, that are electromagnetically-visible, to be easily observed by our mortal physicists) that can be *organized* into atoms, molecules, cells, organs, *bodies*, planets, and stars?

How can the tiny fast slightly-charged dark matter particles *carry enough energy* into the hot interiors of *stars* to create trillions of new massive action potential pulses – like huge Higgs Boson Pulses?

What are all of the *theoretically-possible ways* to stimulate the real Higgs dendrites to cause the *real Higgs*

*axon hillocks* to fire up (create) some brand new 125 GeV neural pulse masses?

Is there a *good theoretical way*, to cause enough new Higgs Bosons to be fired up, to energetically-trigger the chain-reaction production of a *whole new planet in space*?

Is this *theoretically possible*?

Is this a good idea?

Can we, the people of earth, create a *new planet* in our own solar system?

Can we *Create some New Planets in Space*?



# Creating New Planets

What is the very best way to *Create a New Planet* in space?

Can a whole *New Planet* be *Created* by exploding a *nuclear device* in space?

Can a *planet-creating nuclear device* be developed by our nuclear physicists here on earth, and then exploded in space that will *generate enough Higgs Bosons* to begin to *pull in* enough dark matter (real dark axons, and their real dark neural pulses) in a *planet-creating chain reaction*, to stimulate the real Higgs neurons to begin to *continuously fire up* enough new massive *Higgs Boson Pulses* to keep the chain reaction going, until a *whole new Earth-sized planet* is formed, or until a *whole new star* is formed?

How will our near-future *planet-creating nuclear device* need to be *programed*, so that it will create a powerful nuclear explosion in space within our solar system, to create a new planet in space, of a certain *pre-programmed planet size*, and a certain pre-programmed *atomic material planet composition*, but will *not* grow into a star?

How will our far-future *star-creating nuclear device* need to be *programmed* so that it will create a nuclear

explosion in *interstellar space*, that will continue to grow, as it continues to *pull in* more and more real dark *spiral axons* (and the energetic real dark neural pulses that are propagating on these real dark spiral axons), until it grows into a *whole new star*?

How can our future *planet-making nuclear devices* be programed to generate the trillions of trillions of 125 GeV *Higgs-Boson pulse masses*, that will decay into all of the photons, electrons, protons, and neutrons needed to make all of the *atoms and molecules* of a *whole new planet*, right here in our own little local solar system, where we all currently seem to be living?

Is this how some of the planets of our solar system were made long ago?

Can enough newly-created Higgs-Boson pulse masses also be created, safely outside of our own solar system, to make a *whole new star*, and its *whole new solar system*?

Will this newly-created star, use the “space expanding process” called “*dark energy*”, to *gently push the other stars away from it*, to keep the average *energy density* of space a *constant*; and to wisely keep all the stars far enough away from each other so that *they don't interfere* with any of the important *solar-system behaviors* of each other's solar systems?

Is this the actual *origin* (source, cause) of this space expanding *dark-energy* process?

Is this how the “*dark energy*” space expanding process is able to sometimes cause the *appearance* of an *accelerated expansion* of our local physical universe?

When a new star is formed in space, does this new star *pull in* enough real dark spiral axons, to form a *Dark Axon Halo* around the new star?

# Dark Axon Halos

What is a *Dark Axon Halo*?

Can a big powerful star-pushing *Dark Axon Halo* really form around a *newly-created star*?

Does *every piece* of massive visible matter form its very own protective *Dark Axon Halo*?

Does an *electron* form its own *Dark Axon Halo*?

Does a *neutron* form its own *Dark Axon Halo*?

Does a *proton* form its own *Dark Axon Halo*?

Does every *atom* form its own *Dark Axon Halo*?

Does every *molecule* form its own *Dark Axon Halo*?

Does every *body* form its own *Dark Axon Halo*?

Does every *planet* form its own *Dark Axon Halo*?

Does every *moon* form its own *Dark Axon Halo*?

Does every *star* form its own *Dark Axon Halo*?

Yes.

The answer is Yes.

*Every elementary particle* of massive visible matter, quickly forms its very own *Dark Axon Halo*, immediately after it is created.

These little *Dark Axon Halos* give to massive elementary particles, the ability to *gravitationally-attract* other elementary particles.

The *Huge Dark Axon Halos* of *stars*, help these stars to *gravitationally-push* all the other nearby stars *away from them*, so that each star has *enough space* to properly regulate its own solar system *without any interference* from any other star.

The *Dark Axon Halo* is centered, and *anchored*, inside the *traveling heart* of the slowly-moving *central* real light neural *pulse* (of every massive elementary particle), that always propagates on its real light axons, at a “*slow*” speed that is *always less* than the speed of light “*c*”.

A *Dark Axon Halo* is a *set of real dark spiral axons* that *loop around* and *come back* into the *traveling heart* of the

slowing-moving central real light neural pulse that always travels at a *velocity less* than the speed of light “c”.

These Dark Axon Halos cannot travel faster than the speed of light “c”, because the real dark *glial cells* cannot *biologically transport* the *spatial positions* of the real dark looping *spiral axons* (that together form the Dark Axon Halo) faster than the speed of light “c”.

This is why *no* massive particle (*no* particle with a *finite rest mass*) is able to travel at the speed of light “c”; because its Dark Axon Halo is not able to travel at the speed of light, and it requires a *huge amount* of *biological energy* to *spatially-accelerate* the *spatially-extensive* Dark Axon Halo all the way up to *nearly* the speed of light.

An *individual star* is a huge hot massive *body* of *visible-matter*, that has a *super-large Dark Axon Halo* that spatially extends outward, *way beyond* the spatial location of the star, for *several light years* distance *beyond the position* of the *individual star*.

An *individual star*, has *huge* spiral looping real dark axons (in its huge Dark Axon Halo) that *push other stars away*, because some of the dark matter particles (real dark neural pulses) that are propagating on the *outgoing* (away from the individual star) *axon segments* of the real dark spiral axons, are able to *scatter off* of all the *visible matter*

inside the other *nearby stars*, and in this way *push* on these other *nearby stars*, *pushing them all away* from the individual star.

This is the *Dark Energy Expansion* process of our local advanced universe.

# Dark Energy Expansion

What is *Dark Energy*?

What is *Dark Energy Expansion*?

How do our real-dark neurons, and their dark-neuron behaviors cause this interesting *Dark Energy Expansion Process*, that allows new stars to *push* nearby stars *away* to create *new space* for the *new stars*?

Can a *new star* really create some *new stellar space* for itself?

Can a *new galaxy* really create some *new galactic space* for itself?

Is this *Dark Energy Real-Neural Spatial Expansion Process*, the real dark neural process by which our *real dark neurons*, and the *real dark glial cells* that help them, the actual *scientific way* that a *new star uses* to create some *new stellar space* for itself, and some *new solar space* for its own solar system?

How exactly does a *new star* create some *new space* for itself inside our *neurally-simulated advanced universe*,



that currently contains our own huge milky-way galaxy of billions of stars?

This is exactly how a *new star* creates some *new space* for itself, via this “dark energy” *pushing* (space-expanding) *process*, that uses dark matter particles to *scatter off* of the nearby stars, to *push these nearby stars away* from the new star.

In a similar way, a *newly-created galaxy* will use its own super-huge *galactic Dark Axon Halo*, and its own dark-matter particles, to *push all* the other *nearby galaxies away* from the newly-created galaxy, to *make enough new space* for the newly-created galaxy to properly exist and live as an *unhindered new galaxy*, without any *undue interference* from any other nearby galaxy.

In a similar way, a *newly-created cluster of galaxies* will use their own super-huge *galactic-cluster Dark Axon Halo*, and their own dark-matter particles, to *push all* the other *nearby clusters away* from the newly-created cluster, to *make enough new space* for the newly-created cluster to properly exist and live as an *unhindered new galactic cluster*, without any *undue interference* from any other nearby cluster of galaxies.

This is how *dark energy* and the dark-matter particles (that naturally *form* this dark energy, and that *transport*

this dark energy), are able to help make *new space* for the new stars, new galaxies, and new galactic clusters; by causing this *dark-energy expansion of space*, to make *just enough room* for these new clusters, new galaxies, and new stars; to wisely *help the new solar systems* to have *enough room* for themselves, and to have *enough space* for themselves, to properly *support human life* on some of the *planets* of most of the solar systems.

The *dark energy* is the *energy* of the *dark matter particles*.

The *dark energy* is the *energy* that is *transported* by the *dark-matter particles* to *push* the stars *away* from each other, and to *push* the *galaxies away from each other*, so human life can flourish on the planets of the solar systems, because these solar systems are properly *separated from each other by enough space* due to this wise and proper *dark-energy expansion of space*.

The *dark axon halo*, that rapidly forms around a *newly-created star*, is the dark-energy physical mechanism that allows the dark-matter particles (that propagate on the spiral looping real-dark axons of the dark axon halo) to push away all the nearby stars, making some *newly-created space* for the *newly-created star*.

Exactly how does this *dark axon halo* (that forms around the new star) have the *forceful-ability* to push on all the other nearby stars, *forcefully-pushing* these nearby stars out to *further distances* from the new star, to give the new star enough room to begin to govern its new solar system *without* any stellar interference from the other nearby stars?

How can these *newly-created* stellar dark axons halos *muster enough force* to gently push all the other nearby stars away from the new star?

Is this the *correct source* for our astrophysically-observed *dark energy expansion process* that causes a new star to *push* all of its neighbor stars away from it, to give the new star *enough new space* to properly govern its own solar system, without any undue interference from its nearest stellar neighbors?

How can *new stars* come into existence?

Can us humans gain *enough scientific intelligence* to learn how to make some *New Stars*?

Is this theoretically possible?

How can a *New Star* be *Created*?

# Creating New Stars

What is the very best way to *Create a New Star* in interstellar space?

Can *Humans* create *Stars*?

Has a group of *human scientists*, in our own milky-way galaxy, ever successfully created a *new star*?

Can we (the scientists of earth) learn enough about Star Creation, to figure out how we can go about learning how to *create a New Star midway* between us and the Alpha Centauri triple-star system, that is about 4.2 light years from our earth?

What would happen, if we somehow figured out how to go out into the interstellar space that is *about halfway* between our home solar system, and the three nearby Alpha Centauri solar systems; and we detonate a powerful *star-forming* nuclear device in this *midway space*?

Would the *newly-created star*, begin to *push* on our own *sun*, and to *push* on Alpha Centauri's 3 *stars*, to begin to *push these 4 stars far away* from the newly-created star, so that eventually, after a few dozen years or so, the newly-created star would end up being *spatially-*

*positioned* about 4 light years distance from the three Alpha Centauri stars, and also about 4 light years distance from our own sun?

Is this what happens with *every* new star creation in our milky-way galaxy?

Was *every star* in our whole milky-way galaxy actually created by the human beings *who live here* in our milky-way galaxy?

Or, is star creation done in some other way?

What is even theoretically possible with the little bit of *astrophysics* that we have *learned* so far, today in the year 2023, here on our own little earth planet?

How exactly were the *billions of galaxies* all created?

How precisely were the *trillions of stars* all created?

Did *human beings* create them all?

How can we really *know for sure*?

Is there a really good *scientific experiment* that we can conduct *inside* (or *near*) our own solar system, to help us to figure this all out?

What makes the very best *Scientific Experiments*?

What kind of mind-opening *Scientific Experiments* can we (the helpful scientists of earth) be willing to *conduct* in *space*, to help us all (we the people of earth) to *open our scientific minds* to the *wonderful possibilities* of creating our very own *new planets*, and our very own *new stars*?

# Scientific Experiments

What are the very best *Scientific Experiments*?

What kind of excellent new *Scientific Experiments* can we begin to *conduct right* here inside (or near) our very own *solar system*?

Can we conduct some new *Scientific Experiments* in our solar system, to help us to *discover* what happens when a particular type of special nuclear device is *exploded* in the *vacuum* of space?

It seems *theoretically likely* that the actual *detailed scientific behavior* of the super-energetic thermonuclear *explosion*, of a specific type of *nuclear device*, in the *near-perfect vacuum* of space, will be *very different*, than the detailed behavior of the *exact same type* of nuclear device, when it is exploded in the super-high-density environments of earth's atmosphere, or of earth's oceans, or of earth's subsurface, where the *atomic densities* are so much *higher* than the atomic densities of *outer space*.

What will happen inside a nuclear explosion, when there are *No* environmental atoms present to *quench* the nuclear *chain reaction* of massive *Higgs-Boson production*?

Will a whole *planet* be produced?

Such *specific nuclear devices*, will be *transported* by *rockets*, to be *safely exploded* in space, *far* from our earth planet, in some other distant regions of our solar system, where there is *no danger* to life on earth.

It almost seems theoretically possible (or at least we can *hope*) that these new *nuclear scientific experiments*, conducted *far from earth*, could help to *awaken the imagination* of all humankind here on earth, to help us all *begin to desire* to properly solve world poverty for *everyone* on earth.

If we discover a *good scientific way*, to create some *new planets*, right here locally inside our very own little solar system, then it actually does seem somewhat *possible* that this *exciting new scientific discovery* may spark enough *worldwide joy* (here on earth) to cause *some* (or most) of *us* to begin to actually *want to solve poverty for each other*, so no person will be *forced to work* as an *economic slave* (all the days of their mortal lives) just to *barely* earn enough money to buy some necessary *food to eat*.

When will we the people (of earth) make the *vital scientific discovery* that forced economic slavery is *Not* the best way to live here on earth?



If we the people, *can create our own planets*, will this exciting scientific discovery *inspire us* to finally begin to *really value ourselves enough* to diligently seek to solve poverty for *all* of ourselves?

What will it finally take for the pure kind *human heart* of all humankind (here on earth) to be finally awakened?

What?

What will it take?

Will creating our own planets be *enough*?

*When* can we start creating our own new planets?

What will we *all start to think*, after we have *successfully created* some interesting *new planets* right here inside our very own solar system, in just *a few decades* from today?

What will we all think sometime later, after we have also successfully created some *new stars* just a *couple light years distance* from our own solar system?

What will we all *think* then?

What will we all *desire* then?

Will this be *enough* new *scientific evidence*, that us bright human scientists can indeed create stars and planets?

Or, will we still need to gather some more important scientific evidence, before we can even consider this *exciting new scientific hypothesis*?

How much *more* scientific evidence will we *still need*?

In *what year*, will us earth scientists, go ahead and create *another planet* here inside our own solar system?

Will it be sometime *after* the year 2040?

*When* we will (the people of earth) create another planet in space?

Why would we even *want* to do this?

What would be *the point* of creating another planet?

Can planets be used for *human habitations*, and for *mining the desired minerals*, that humans need (and want) to build all the many things they like to build?

What is the *purpose* of a planet?

What *Planet Creation Purpose* will we have, when we finally decide to really start trying to create some new planets here in our own solar system?

# Planet Creation Purpose

What is the very best *Planet Creation Purpose*?

What is the *most noble* Planet Creation Purpose that we can imagine?

Why does anyone want to *create a planet*?

What is the *best use* of a planet?

Why was *our own earth* created?

Was our earth created for its *rocks*?

Was our earth created for its *plants*?

Was our earth created for its *animals*?

Or, was our earth created for its *humans*?

Can a planet have a *human purpose*?

Does any planet have a *human purpose*?

What is the *real purpose* of our little *planet earth*?

*Why* was our earth planet created?

*Who* created our little planet earth billions of years ago?

Why did they *choose* to create our earth planet?

What was their *original intention* for creating our earth?

How can we *Know* for sure?

Can we simply *ask them*?

Can we *find the people* who created our earth, and ask them *why* they decided to take the time, and effort, required to *create earth*?

Shall we ask *them*?

*Where* can we *find them*, so we can *ask them* this very important question?

Does this 4 Brain Theory paper provide enough *clear clues* (and enough *helpful hints*) to help us to find them, *if* we desire to find them?

Does anyone really desire to find these *super-smart people*?

Who among us has enough *super-smarts* to know how to properly (and *safely*) create a whole new planet?

Who?

Where are these *super-smart scientists*?

Where are all the *smart kids* on our *galactic block*?

Do these super-smart kids *always* allow *all* of their human bodies to *age*, and to get sick?

Is *Human Aging* always necessary?

Is *Human Aging* always desirable?

Is *Human Aging* our real goal in life?

Or, can we think of a *better life goal*?

# Human Aging

What is the real purpose of *Human Aging*?

Do we all really want to *get old*, get sick, and *die*?

Is this our *big goal*?

Or, can we think of some other *better goals* for us super-valuable human beings?

Can we (the people of earth) set some *better goals* for ourselves?

What kind of *intelligent goals* can we set for our human selves?

What kind of *human body* would we create for ourselves, if we scientifically-understood *everything* there is to know about any technology related to any future type of the newly-arriving advanced CRISPR human *DNA editing technologies*?

*If we knew enough*, would we still all desire to *always* live inside human bodies that get sick, *age*, and easily die before we reach the age of 120?

Is *every* human body, inside our milky-way galaxy, exactly like the kind of *suboptimal human bodies* we (most of us) currently have here on earth?

Or, is there a theoretical possibility that there could be some *different human body types* out there somewhere, perhaps on some other *exoplanet* of our milky-way galaxy?

What do you think?

Can we *edit* our human DNA to make us some *better* human bodies?

Is this even *allowed*?

Can we *allow our scientists* to make us some *better human bodies*?

Why not?

What is currently *blocking* our most talented scientists (here on earth) from *CRISPR-editing* our human DNA, and *growing some better human bodies* for us here on earth?



If we can create *better human bodies* (more-healthy bodies, and more-intelligent bodies), then it is *pure-insanity* not to do so.

Is this obvious?

It will be.

When we can create *a better cell phone*, then we go ahead and create a better cell phone *for productive human use*.

When we can create *a better car*, then we go ahead and create a better car *for productive human use*.

When we can create *a better human body*, then we go ahead and create a better human body *for productive human use*.

This is *scientifically obvious*.

The *purpose* of our human brains is to *think with them*.

The purpose of building a *better human brain*, that is *more intelligent*, and capable of *more clear thinking*, is so we can live *inside* the better human body, with its better human brain, so we can *think more clearly* with our *better human brain* and our better human body.

Who wants a *frail* human body that gets sick, *old*, and dead?

Who wants a *healthy* human body that does not get sick, that does *not age*, and that does not die; until we want it to die?

What kind of *healthy human bodies* may be actively living today on the *advanced exoplanets* that are much closer to Sagittarius A\* at the *galactic heart* of our milky-way galaxy?

Do these advanced healthy human bodies, with their advanced *intelligent human brains* know all about *Higgs Boson Star Creation*?

# Higgs Boson Star Creation

What is *Higgs Boson Star Creation*?

*Higgs Boson Star Creation* is the process of using trillions of trillions of trillions of massive Higgs Bosons to *give mass to a whole Star*, by aiding in the energetic *mass-creation* of a whole Star.

The Higgs Boson, of the *Higgs Field*, gives *mass* to all the elementary particles *needed* to create a whole star, and these same Higgs Bosons are also *used* to *create* the *whole mass* of the *whole star*.

The right kind of *star-creating nuclear device* (exploded in the safe interstellar space, *safely between* the nearby stars) can generate enough *initial Higgs Bosons*, to trigger a *chain reaction* of new *Higgs Boson creation*, from the energetic dark-matter particles that are initially *attracted* to the *expanding* nuclear explosion, that can *grow in size* to *eventually grow large* enough to create a whole *new star in space*.

When can we (the scientists of earth) design a *star-creating nuclear device* to be transported (via a powerful space rocket) to a *safe location* (far enough way to be *safe for us on earth*, and *safe for all* of our potential nearby

neighbors) about *two light year's distance* outside of our own solar system, before the star-creating nuclear device is *exploded*, to generate enough *Higgs Bosons*, to *attract* (and *pull in*) the *dark matter* (the real *dark spiral axons*, and their *energy-bringing* dark-matter particles) to cause the real neural *Higgs dendrites* to *fire up* some new huge *Higgs action potentials* (newly-created Higgs Boson Pulses) to ignite an *expanding Higgs-Boson chain reaction*, to generate a *growing super-abundance* of new Higgs Bosons, that will then *Higgs-Boson Decay*, by stimulating the *real light dendrites*, to generate enough elementary particles, including eventually enough photons, electrons, protons, and neutrons, to combine together to *create a whole new star?*

Is this how *some* of the stars were made?

Is this how *all* of the star were made?

How can we know *for sure?*

If new stars can be *easily-created* by us human scientists in this simple way, then what lingering need is there for the traditional old big bang theory?

Can our *real Higgs neurons* (of the Real Neural Higgs Field) become stimulated sufficiently (by the *rapidly-increasing flow* of incoming dark-matter particles) to

cause these *real Higgs neurons* to continue to *fire up* (create new Higgs action potentials) new Higgs Bosons, and to eventually create *enough new Higgs Bosons* to eventually create enough real-light elementary particles to grow into a *whole new star*?

During this process of new star creation, our *real neurons* (including our real dark neurons, our real Higgs neurons, and our real light neurons), and the *real glial cells* that help them, can all begin to *neurally-feel* and *neurally-sense* that they are actually working together to create a whole new star.

When our *real Higgs neurons* (located inside the newly-forming star) *neurally-feel themselves* (neurally-sense what is happening to them inside the newly-forming star) creating a new star, these real Higgs neurons can begin to divide themselves (via *neural Higgs cell mitosis* to create *two identical neural Higgs daughter cells*) to create more neural Higgs neurons.

*One* real Higgs neuron simply divides itself (via real biological cell mitosis) to *replicate itself* into *two* real Higgs neurons.

This is a real biological way for our real Higgs neurons to *make more real Higgs neurons inside a newly-forming star*.

Does a similar real-Higgs-neuron *replication process* take place inside a newly-forming *planet*?

Also, does a similar *real-light-neuron* replication process take place inside a newly-forming planet, to biologically-create a larger number of the *real light neurons*, that can then create and propagate the *real light neural pulses*, that form *all* the *atoms* of rapidly-growing *new planet*?

Can the *initial start* of the *creation* of a whole *new planet*, *cause* some of our real light neurons to simply *divide* and *replicate themselves* (via real light neural cell mitosis) to create *a larger number* of real light neurons, to create a larger number of *real light neural pulses*, to create a larger number of *visible-matter atoms* and *visible-matter molecules*, in order to properly (adequately) simulate (maintain the simulation of) a larger, and larger, *growing amount* of *visible planetary matter* for the *growing planet*?

Can our real human brains simply *create more* real neurons, when they are *needed* to create a *new planet* (or a *new star*) inside this advanced *neural simulation* that includes our own local milky-way galaxy?

Do our real human neurons simply *divide* (to create *more* real neurons via real biological mitosis) when their

*computational workload increases* all the way up to a decision point (for a *real neural mitosis decision*) when they start to *neurally-feel* they (our real neurons) really do need *more neural computational help* to adequately *neurally-support* the new creation of a *whole new planet*, or a *whole new star*?

These whole new stars, and these whole new planets, are made out of a whole lot of *Visible Matter*.

How is all of this *Visible Matter Created*?

What is *Our Visible Matter Creation Hypothesis*?

# Visible Matter Hypothesis

What kind of *Visible Matter Creation Hypothesis* can we create that will be logical, rational, and simple?

*Our Visible Matter Creation Hypothesis* is that *all* the *visible matter* (of our whole milky-way galaxy) is created by a small finite set of simple *dynamic compositions* of *real light neural pulses*.

*Our Visible Matter Creation Hypothesis* is also that the *real light neural pulses* (that make up *all* the *visible matter* of this whole universe) propagate on real light neurons (after these real light neural pulses are created with the mass-granting help of the real Higgs neurons, from the *energy delivered to them*, by the real dark axons, that propagate the *dark-matter particles* from Sagittarius A\*); and these real light neurons, and these real Higgs neurons, can sometimes be stimulated to divide themselves (biologically *replicate themselves*) to create *larger numbers* of real Higgs neurons, and *larger numbers* of real light neurons, in some *super-energetic physical situations*, like in the special situations of new *star* creation, new *planet* creation, and new *moon* creation.



*Our Visible Matter Hypothesis* is also that *all* the *visible matter* (in our entire milky-way galaxy) is composed of just a *few* simple types of *dynamic* interacting *real light neural pulses*, that propagate on a set of wirelessly-networked *real light neural axons*, that belong to a particular group of real human brains (the particular group of real human brains that is actively *simulating* this *milky-way galaxy*) that belong to some of us real human beings living in our *real universe*.

This important *Visible Matter* is also known as *normal* matter, or *regular* matter, or *ordinary* matter.

The Visible Matter is *normal* matter (or *regular* matter, or *ordinary* matter) because it is the *normal* (ordinary) matter that *regularly* makes up all the *atoms* and *molecules* of our mortal physical human bodies, and the planet Earth, that we currently all live on.

*Photons, electrons, protons, and neutrons* are all made of Visible Matter.

*Most* of the *elementary particles* of the *standard model* are examples of Visible Matter.

Here on this earth planet, Visible Matter has been scientifically-studied *more* than Dark Matter.

Most physicists believe they understand Visible Matter *better* than they think they understand Dark Matter.

Visible Matter is *more visible* (to us earth-based scientists) than Dark Matter, because it seems to be *more-easy to see* the effects of Visible Matter on *our common scientific instruments* (like our *cloud chambers* and our *human eyeballs*).

What is the *core nature* of Visible Matter, and what makes Visible Matter so *much easier to see* than Dark Matter?

What is our *Visible Matter Hypothesis*?

What kind of *Visible Matter Hypothesis* can we create with our simple new 4 Brain Theory?

How do our *real light neurons* create (simulate) Visible Matter for us to *see* and *measure* with our scientific instruments?

What Visible Matter Hypothesis can we create that will *clearly explain why* visible matter is *so much easier for us to observe* (and *see*) than dark matter?

What Visible Matter Hypothesis can we make that will explain *how* and *why* all the visible particles (of this

whole neurally-simulated universe) can be *created* from simple combinations of some *real light neural pulses*?

What is the *most-simple* Visible Matter Hypothesis that we can possibly make, in the *logical spirit* of Occam's sharp razor (that is kind of like a mighty two-edged sword, that can logically cut both ways, deeply and wisely, to help us create some better scientific theories), that will help us to explain the *real neural difference* between Dark Matter and Visible Matter?

*Our Visible Matter Hypothesis* is that *All the Visible Matter* (of our whole milky-way galaxy) is made of a small set of simple *real light neural-pulse structures* that are *more-easy to observe* electromagnetically than the slightly-charged tiny fast scalar-boson *real dark neural pulses* (Dark Matter Particles).

*Our Visible Matter Hypothesis* is also that all of the Visible Matter is *more visible* to our scientific instruments (here on earth), because it *electromagnetically interacts* with our visible-matter scientific instruments *more strongly* (or more noticeably), than the Dark Matter (the *hard-to-see* tiny fast dark-matter particles, that propagate on the *hard-to-see* real dark axons).

All of our *powerful scientific instruments* (that we have here on earth) are *all themselves* all made *mostly* out of visible matter.

Our *dark-matter engineering science* is still in its early *infancy* here on earth.

Therefore, we have *not yet* invented any purely-dark scientific instruments that are *100% made of dark matter*, and 0% made of visible matter.

*Our Visible Matter Electromagnetic Hypothesis* is that all the *elementary-particle* visible matter (of our milky-way galaxy) electromagnetically interacts (in ways that are *measurable, visible, or detectable*) with the *atomic* electromagnetic visible matter that composes *all* of our *scientific instruments*.

How exactly does each *little piece* of visible matter, interact electromagnetically, with our *visible-matter instruments*, in our scientific laboratories here on earth?

What kind of *electromagnetic visible matter* can sometimes enter into our *human eyeballs* and interact with our *human retinas* to help us to *see light*?

Can we humans (of earth) see (with our own human eyes) some of the electromagnetic *photons* that have human-visible wavelengths.

Some scientists claim that *photons* are the electromagnetic *quanta* of *light*.

Some physicists even believe that *photons* are actual *particles of light*.

Are photons good examples of the *most-simple type* of electromagnetic visible matter?

Is a *photon* more-simple than an *electron*?

Does a photon have a *real neural nature*?

*What* is the real neural nature of a single photon?

What is the real neural nature of *Our Visible Photons*?

# Our Visible Photons

What is a *visible photon*?

What makes a photon visible to *our human eyes*?

Why do there exist photons with so many *widely different wavelengths and frequencies*?

What is the *energy* of a single photon of light?

How does an individual photon energetically-hold its *frequency-energy*?

Is an individual photon composed of *two real-light neural pulses*?

How do *two* oppositely-charged, *neural pulses*, orbit each other to make a single individual photon?

How can a *positively* charged real-light neural pulse orbit a *negatively* charged real-light neural pulse, to be a *single photon*, that generates an *oscillating* (in both time and space) *electromagnetic field* as it travels through our milky-way galaxy at the *speed of light* “c”?

When were photons *first discovered* on this little planet earth of ours?

What kind of *energetic photons* were being measured by our talented scientists in 1885?

Can a single atom *emit* a single photon?

How exactly is this done?

What is *Atomic Spectroscopy*?

What happened to the interesting scientific field of *Atomic Spectroscopy* in the year 1885?

# 1885 Atomic Spectroscopy

In 1885 a man named Johann J. Balmer (1825-1898) showed that the *spectral photon wavelengths* of the visible lines of the *hydrogen atom* could be represented by a simple *mathematical formula*.

This visible set of spectral *photon wavelengths* of *hydrogen* (the most-simple atom possible) are now known as the *Balmer series of hydrogen*.

It may be possible that this Balmer series of spectral *photon wavelengths* for hydrogen, and similar series for other types of atoms, may represent a significant set of scientific measurements of some of the *real-light neural-pulse photonic behaviors* (and *real-light neural-pulse orbital atomic behaviors*) of our *real-light human neurons*, that are simulating all the advanced atoms (and all the advanced atomic spectral lines of all the *emitted neural photons*) of this advanced neurally-simulated multi-player physical universe.

It appears likely that these *simulated neural photons* are electromagnetically emitted from *simulated neural atoms*.

What is the inner nature (internal structure) of these *simulated neural atoms*?



How can a *neural atom* emit a *neural photon*?

What exact *neural-pulse dynamic mechanism* causes a neural atom to *emit* a neural photon?

What exact neural-pulse mechanism causes a *neural atom* to *absorb* a neural photon?

How do the *two inner parts* of a single neural photon *fit into* the inner parts of a neural atom?

Why does the mathematical formula for the Balmer series of Hydrogen have the *exact mathematical structure* that it does have?

What is the most-simple *neural pulse explanation* for the exact mathematical structure of the Balmer series?

Can these important questions (about *photon emission*, *photon absorption*, and *atomic spectroscopy*) be answered with some good new scientific *neural-pulse modeling software*?

What is *blackbody radiation*?

Can a closer look at *blackbody radiation* help us to discover some useful new information about the dynamic

inner parts of the neural atoms, and the *dynamic inner neural structure* of the *neural photons* that they emit?

Why has *Planck's Constant* become so important to helping us all to understand the *energy* of a single *photon*?

What does *Planck's Constant* have to do with blackbody radiation?

Can the exact value of Planck's Constant be *mathematically derived* from first principles, from looking more closely (with just the right kind of real neural pulse simulation software) at the *physical neural pulse structure* of a single individual photon, and the atomic spectroscopy associated with blackbody radiation?

What is *Planck's Constant*?

*Planck's Constant* is a very exact (and very important) quantity of *angular momentum*.

This Planck's Constant is a *very exact* (and *very small*) amount of neural-pulse angular momentum, that is *held deep inside* of some super-interesting visible-matter *elementary particles*.

Some of the other elementary particles have *exactly half* of this amount of angular momentum.

Why is Planck's Constant *so important* to understanding the real-light neural-pulse structure of *all* the elementary particles of our local milky-way galaxy?

Why was the *first measurement* of Planck's Constant not made until about the year 1900?

Who was the *first person* to mathematically, theoretically, and experimentally measure Planck's Constant?

What important work did *Max Planck* do in the year 1900?

Now, let's look more closely at this *1900 Max Planck's Constant*.

# 1900 Max Planck's Constant

In the year 1900, a brilliant German theoretical physicist named *Max Karl Ernst Ludwig Planck* (1858-1947) empirically derived a formula for the *observed spectrum of blackbody radiation*, in which he was able to calculate an initial value of *Planck's Constant*.

The actual value of *Planck's Constant* that Max Planck initially calculated in 1900, was *pretty close* to today's accepted value of approximately  $6.626 \times 10^{-34}$  Joule seconds.

This famous Planck's Constant (of about  $6.626 \times 10^{-34}$  Joule seconds) is a *super-tiny number*, and it has the same dimensions as *angular momentum*, or *action*, which also has the exact same dimensions as *linear-momentum* times *distance*, or *energy* times *time*.

Planck's Constant is considered, by many of us bright theoretical physicists, to be one of the most *fundamental constants* of the *cosmos*.

Is the precise value of Planck's Constant for our own home *Milky-Way* galaxy, *exactly the same* as the precise value of Planck's Constant for our large neighbor galaxy,

known as the *Andromeda galaxy*, which is located about *2.5 million light years* from our earth?

Can Planck's Constant *vary a little bit* over such a large *intergalactic distance* of 2.5 million light years?

Or, is Planck's Constant *really* a fundamental constant of our whole neurally-simulated universe?

Max Planck's name has been *closely associated* with Planck's Constant for 121 years already; and this *close scientific name association* may likely continue for at least another 121 years or so; so long as there are so many thousands of us *remembering physicists* living here on earth.

One of the super cool things about Planck's Constant is that the *energy* of a single photon is *Planck's Constant* multiplied by its *frequency*.

This is a *very simple* mathematical formula for the energy of a photon.

What kind of neural-pulse *photon structure* will neurally simulate this *simple energy formula* involving Planck's Constant times the photon's frequency?

What would happen if a *negative* neural pulse orbited a *positive* neural pulse at exactly this *photon frequency*?

Why would Planck's Constant be *exactly equal* to the *electromagnetic photon energy* divided by its *2-pulse orbital frequency*?

Planck's Constant has the dimensions of angular momentum or "*action*".

Many theoretical physicists believe that *angular momentum* must be *conserved*, just like linear momentum must be conserved, for all the *closed systems* in this local physical universe.

It has also been theoretically-discovered that "*action*", or angular momentum, must also be *conserved* for *electromagnetic waves* (composed of sets of photons), even if the electromagnetic waves are *Not simple* (sinusoidal) *plane waves*.

Some kinds of *electromagnetic waves* that can be viewed as simple, well-behaved *generalizations* of *sinusoidal* (composed of sine waves and cosine waves) *plane waves*, are sometimes called *eikonal waves*.

Some kinds of useful electromagnetic waves that are *very different* (more *complex* in *wave-shape*) than these simple

sinusoidal plane waves, are sometimes called Non-Eikonal Waves or *Non-Eikonal Wave Fields* [12].

*Wave action* is always *conserved* (always maintained with the exact value of *wave action*) for a very broad range of different kinds of wave fields, including *pseudo-Hermitian* [13] wave fields, and *non-eikonal* wave fields.

Even *phase-space action* (action measured in a higher dimensional *phase space* of time, energy, space, and momentum) is always *conserved*, for these super-useful non-eikonal *wave fields*.

The scientific study of wave fields in phase space can be used to investigate the behaviors of *Gyrobullistic Waves* [14], *Magnetosonic Waves* [15], and many other types of waves (like *Non-Eikonal Wave Fields*) that carry wave-action in phase space.

How exactly can *a set* of electromagnetic photons *dance together* to create super-useful sets of Non-Eikonal Wave Fields?

In 1905, Albert Einstein published *a set* of very *important papers*, including a brilliant scientific paper about the electromagnetic *energy* of a single *photon*.

Let's look more closely at this *1905 Einstein Photon Energy*.

## 1905 Einstein Photon Energy

On June 9, 1905 Albert Einstein (1879-1955) published a scientific paper called "*On a Heuristic Viewpoint Concerning the Production and Transformation of Light*" in a scientific scholarly journal called *Annalen der Physik* (Annals of Physics) [16].

In this June 9, 1905 paper Albert Einstein presented his startling and *brilliant hypothesis* about the *very nature* of *light*, in that he hypothesized that the *energy* of *light* consists of *discrete packets* (also called *energy quanta* or *photons*) that are *localized* at traveling points in space, and that move *without dividing*, and are capable of being *absorbed* by atoms, or *generated* (emitted) by atoms, only as *individual photon entities*.

This *brilliant hypothesis* that a *photon* is an *individual discrete packet* (a discrete bit of *light quanta*) of electromagnetic energy, was initially *alluded to* by Max Plank a few years earlier, and then strongly *emphasized*



and *better explained* by Albert Einstein in his powerful June 9, 1905 paper.

What would Albert Einstein have *hypothesized* in 1905 about his discrete packets (photons) of light *if* he had already been *thinking* about this 4 Brain Theory?

Would Albert Einstein have hypothesized that his discrete packets of light (his photons) were actually *specific neural pulse structures*, that involved a positive pulse *orbiting* a negative pulse at a *frequency* that equals the photon *energy* divided by Planck's Constant?

Would Einstein have wondered how a positive neural pulse can possibly *orbit* a negative neural pulse at the same time *both neural pulses* seem to *travel together* in a particular direction (in free space) at the speed of light "c"?

Would Albert Einstein dream about these *two neural pulses tracing out a double helix* as they travel together through space, as they also *mutually orbit each other*?

What would Albert Einstein think about this super-simple *photon two-neural-pulse structure*?

What would the Albert Einstein (of 1905) think about this *4 Brain Theory* (of 2023)?

Like Max Planck before him, Albert Einstein in 1905 *hypothesized* that the *energy* of a photon is equal to its *frequency* multiplied by *Planck's Constant*.

Einstein further hypothesized in his 1905 paper about the nature of the “*photoelectric effect*”, that only light particles (photons) *above a certain frequency* would bring sufficient energy to a particular metal (a metallic collection of atoms) to *liberate* an electron.

Finally in 1921, Albert Einstein was awarded the Nobel Prize for these *brilliantly-accurate hypotheses*, that he published in his June 9, 1905 “*photoelectric effect*” paper.

It took *many years* for the *majority* of *physicists* in the world *to agree* with Albert Einstein on the nature of light quanta (photons).

Why did *so many* physicists wait for *so long*, before acknowledging Einstein's good theoretical work?

*How many years* will it take *before* the *majority* of this world's physicists *agree* that a *single photon* is a super-simple *2-pulse structure* (of *two real-light pulses* mutually-orbiting, and jointly-traveling, together tracing out a *double-helix pulse-path*) propagating on the *real-light axons* of our real light neurons?

As we continue to scientifically-develop and computationally-refine our *photon neural-pulse structure model* to make it ever *more accurate* and ever *more predictive of new phenomena*, what kinds of new observations might we soon be able to start making with it?

Since our new *photon double-helix neural-pulse structure* is *fully deterministic* (in every way), with *nothing* left to chance or probability, will it be possible to begin using our deterministic double-helix neural-pulse photons to *begin designing deterministic quantum computers* that compute via *deterministically-entangled fully-stable double-helix neural-pulse photons*?

In the new light of this 4 Brain Theory, what kind of *2-neural-pulse photon hypothesis* can we create?

What is the *most-simple 2-neural-pulse photon hypothesis* we can make that *fully supports* every known *measurement* that has ever been *made* (by any scientist) on a single photon, or on any group of photons, or on any *interaction* of a photon with an electron, atom, or any other piece of visible matter?

How much *scientific detail* can we provide about the *inner neural structure* of a single photon, that exists inside this multi-brain universe simulation?

What is *Our Photon Hypothesis*?

# Our Photon Hypothesis

What is the most *logical*, most *reasonable*, and most simple *Photon Hypothesis* we can possibly make?

This present 4 Brain Theory article, explains in detail how this whole Milky Way Galaxy is likely a multi-player neural simulation created by the *neuroelectromagnetic activity* (including all the activities of all of the real *dynamic neural pulses*) of our networked real human brains.

Therefore, all of the *electromagnetic waves* (individual photons, and groups of photons) that James Clerk Maxwell studied in 1865, must also be *neural simulations* generated by our networked real brain activity.

These electromagnetic photons must actually be *simulated neural photons* inside our real human brains.

Is this scientifically obvious?

What different scientific conclusion, could we possibly make, if we really want to be *logical* and rational?

Some of our real neuroelectric pulses, must be able to combine together, to form some *stable patterns* (like the

*stable* simulated neural *photons*) inside our real brains that perfectly *simulate* (mimic in behavior and accurately *produce*) *all the measured properties* of all the photons that have been observed by all our best mortal human scientists since the 1800's.

Maxwell's neuro-electromagnetic waves (simulated neural photons) seemed to always travel at the fixed speed of light "c" in 1865, and it appears that these neural photons still travel at velocity "c" (the speed of light) in today's world.

Therefore, it seems likely that there must be some *stable neural mechanism* in our networked real human brains, that actively causes these *neural photon pulse patterns* to always travel at the speed of light "c", while they also generate the *oscillating electromagnetic fields* that are produced by them.

*Our Photon Hypothesis* is that a *single photon* is a *dynamic 2-pulse structure*, that consists of exactly one *positive* electric real-neural pulse, plus one *negative* electric real-neural pulse, that *mutually orbit* each other, at a real *myelinated* linear *superluminal (quicklight) pulse speed*, that is about 6.36 times the speed of light, such that the two pulses travel along *elliptically-helical pathways*, with the *pulse-pair* naturally tracing out an *elliptical double helix* as they propagate along their real light axons,

and smoothly transfer from axon to axon, in the *real-light axon field*, that *simulates* every visible matter particles in our milky-way galaxy.

We note that 6.36 times the speed of light, is the special *quickness* superluminal (*faster than light*) speed that is *over six times faster* than the speed of light.

We will use the term “*quickness*” to describe this specific *exact linear speed* of the *two* real-light *mutually-orbiting* neural *pulses* that together compose a single individual photon.

This *Quickness Speed* (of about 6.36 times the speed of light) is a very specific *superluminal* (faster than light) *speed*.

The “*quickness pulses*” are the *set* of *real-light neural pulses* that propagate at this very-special *superluminal* (faster than light) velocity.

Here we hypothesize that the two neuro-electromagnetically-bound *neural pulses*, that together compose a single photon, travel at this *quickness speed* that is about 6.362265131 times faster than the *speed of light* of 299,792,458 meters per second (about *300 million meters per second*).

Therefore, these *two* photonic “*quicklight*” neural pulses *both* propagate in the real-light axon field (of our real-light neurons) at the precise *quicklight velocity* of 6.362265131 times 299,792,458 meters per second, which equals 1,907,359,102 meters per second, which is about *1.9 billion meters per second*.

This superluminal “*quicklight*” speed of *1.9 billion meters per second* is the *quicklight velocity* of the *two* real-light neural *pulses* that *jointly-compose* a single mortal *photon*.

Can a real-light neural pulse *really* propagate at 1.9 billion meters per second?

Can a different type of real neural pulse (like a tiny real *dark* neural pulse) travel *even faster* (like at the ultrafast speed of *darklight*)?

Can a different type of neural pulse (like a real light *subluminal* central *unmyelinated* neural pulse) travel *even slower*?

Our Photon Hypothesis is *also* that the elliptical double helix can *sometimes* be a *perfect circular* double helix, or a perfectly *linear* (flattened) double helix, depending on the particular *photon polarization*, which is the *pulse-pulse-orbital orientation* of the *mutually-orbiting pulse pair*.



Our Photon Hypothesis is *also* that the *pair of pulses* (that *are* the photon) always *arrange themselves* (via the natural real neuro-electromagnetic forces) in space such that the *constant distance* between them is the exact *diameter* (inter-pulse spatial distance) needed (for their particular *pulse mass*) such that their *mutually orbiting pulse-pair angular momentum* is always exactly equal to *Planck's Constant*.

The pulse mass of the positive pulse is *exactly equal* to the pulse mass of the negative pulse.

These *two pulse masses*, both traveling around the other at the *exact quicklight speed*, both contribute to the total angular momentum (Planck's Constant) of the photon.

Our Photon Hypothesis is also that the real-light *neural pulse pair* (that is the photon), when oriented and traveling such that the *pulse pair* traces out a perfect *circular double helix*, the *radius* of this *two-pulse-circle* is the *wavelength* of the *photon* (the mutually *circularly-orbiting* pulse pair that is the photon).

Our Photon Hypothesis is also that the neural pulse pair *mutually-orbit* each other at a *frequency* that is the *photon frequency*, that is the photon energy divided by Planck's Constant.

Our Photon Hypothesis is also that the pair of mutually-orbiting neural *pulses* (that together, are the photon) consist of specific *quantities* of specific *pulse masses*, that are *proportionate* to the net *pulse electric charges*, distributed as non-zero net electric *pulse charge densities*, that are composed of *differential concentrations* of real *atomic ions* (like real *sodium ions* and real *potassium ions*), that exist and move as real-light neural pulses, both *outside* and *inside* the real-light neural *membranes* (made of real-light *phospholipid bilayers*) that compose the real-light neural *cell walls*.

Our Photon Hypothesis is also that the *magnitude* of the positive electric neural pulse, as measured in both *mass* and electric *charge*, is *exactly equal* to the *magnitude* of the *negative* electric neural pulse, and these *two exactly-equal pulses*, are precisely equal in every way, *except* they have *opposite signs* for their net *electric charges*, because one pulse is always *electrically-positive*, and the other pulse is always *electrically-negative*, and together these two mutually-orbiting neuro-electric pulses *are* the photon.

Our Photon Hypothesis is also that, when *viewed from a distance*, the photon is a *neutral particle* with a *net-zero electric charge*, because the positive charge of the positive pulse, *always exactly cancels* the negative charge

of the negative pulse, however, when *viewed up close*, electric field lines are *flowing outward* from the positive electric pulse, and these electric field lines are *flowing inward* into the negative electric pulse, and the two pulses, that each propagate (on their real-light axons) at the special *quicklight* superluminal *velocity* of 6.362265131 times the speed of light, generates a *magnetic field* that oscillates at the exact *frequency* of the *two mutually-orbiting* (and mutually propagating) real-light neuro-electric pulses.

Our Photon Hypothesis is also that the *size* (with the net *pulse charge* proportional to the net *pulse mass*) of each pulse *increases* with increasing pulse-orbital *frequency*; such that radio-frequency *pulse masses* (of single *soft radio photons*) are *very tiny*, and ultra-high-energy *cosmic ray photons* have *very large* pulse masses, and *very large pulse electric charges*.

Our Photon Hypothesis is also that the *frequency-dependent* effective “*photon mass*” (of Planck’s Constant times the photon frequency, divided by the speed of light squared), can be considered as being *divided equally* between the two mutually-orbiting neural pulses that compose the photon, and therefore *each neural pulse* has an *effective mass* of Planck’s Constant times the photon frequency divided by two times the speed of light squared, and this *effective neural pulse mass* is composed

of the *kinetic energy* of the moving (at the superluminal quicklight speed) neural pulse mass, plus the *neuro-electromagnetic field energy* generated by the moving neural pulse charge density, plus the *extra neural pulse energy* required to propagate through the real-light axon field.

*Our Photon Hypothesis* is also that this *2-pulse photon model* can be mathematically incorporated into a set of properly-expanded (intelligently-generalized) versions of Schrodinger's Wave Equation (and the Dirac Wave Equation), to better investigate the "*zitterbewegung*" oscillatory motion of this neural photon (of this 2-pulse photon model, and the correct relationship between the *physical pulse-phase* of the two mutually-orbiting neural pulses, and the *mathematical function-phase* of Schrodinger's Wavefunction, for this simple 2-pulse photon model.

Our Photon Hypothesis is also that the rapidly moving *positive neural pulse*, and the rapidly moving *negative neural pulse*, are both moving at the special superluminal *quicklight speed* of 6.362265131 times the speed of light, and this *superfast* (quicklight fast) *motion* of these two real-light neural-pulse *electric charges* causes them to *generate* (with no energy loss) an *neural-pulse electric field*, and a *neural-pulse magnetic field*, and a neural pulse electromagnetic field (when the electric and

magnetic fields are considered together as a single electromagnetic field), and the dynamic orientation of the electric field *mostly causes* the two pulses to *stay bound together* and to continue to *mutually-orbit each other* at over *six times* the speed of light, and the magnetic field *mostly causes* the two pulses to continue *moving forward* in a *straight line* as a *pulse pair* that is *generally progressing forward* at the exact *speed of light*, which is *less than 16%* of the speed of *quicklight*.

In this way, the *electric field* (generated by the 2 electric pulses) *mostly causes* the *circular* (elliptical) *motion* of the two pulses.

Also, in this way, the *magnetic field* (generated by the two rapidly-moving neural pulses) *mostly pushes* the two pulses *forward* in whatever net (average) direction they are *already traveling*, which is the *general direction* the whole photon is moving.

The real-light axon field also acts to *stabilize* every part of the *double-helical pathway* of the pair of pulses.

Our Photon Hypothesis is also that each of the *two neural pulses* (that together jointly compose a single photon) are *shaped* in such a way as to be composed of *some* sub-pulse regions that are *electrically positive*, and other sub-pulse regions that are *electrically negative*; in such a way

that the *positive pulse* has *more* sub-pulse regions that are *positively charged*, and the *negative pulse* has *more* sub-pulse regions that *negatively charged*.

Our Photon Hypothesis is also that the *precise distribution* of positive and negative *electric charge density* (of the two pulses) can be *completely determined* by careful *scientific experimentation* by carefully comparing *software simulations* with the proper photonic experiments in the *scientific laboratory*.

Our Photon Hypothesis is also that the *precise determination* of these neural-pulse *electric charge distributions* will allow us to design four different “Dirac Strings” (to *stabilize the pulse-pulse phases*, and the *pulse-pulse orientations*, of the two mutually-orbiting pulses, in the 4 distinct quantum simulation chambers) to *fully stabilize the whole photon*, to enable the *complete stabilization* of the *photonic quantum bits* (that are formed by treating the photons as *two-state photonic quantum systems* of two distinct photon polarizations) that will be at the heart of tomorrow’s fully *deterministic photonic quantum computers*.

Our Photon Hypothesis is also that the *higher* the photon *frequency*, the *smaller* the photon *radius*, the *higher* the effective pulse *mass*, and the *higher* the effective electric pulse *charge*, all the while the Planck’s Constant photon

angular momentum remains *exactly the same*, and the photon *net electric charge* remains *exactly zero* for every photon.

We have just *scientifically described*, with a good amount of new physical detail, the marvelous *internal pulse-pulse structure* of a single photon.

Why are these *2-pulse photons* so simple to describe in our written words, and yet *so beautiful* in their exquisite neural pulse structure?

Why is this simple 2-pulse photon description *so powerful* and *so useful* to science?

What kinds of *new scientific phenomena* can we predict with our powerful new *2-pulse photon structure*?

Now let's look more closely at these interesting 2-pulse *Neural Photons*.

# Neural Photons

What are *Neural Photons*?

Why is every *Neural Photon* made of *two neural pulses*?

Why do Neural Photons always travel at the speed of light “c”, even though their *inner parts* (the two mutually-orbiting neural pulses that compose a single photon) easily travel and propagate through the real-light axon field at the exact *superluminal* (quicklight) *pulse speed* of 6.362265131 times the speed of light?

Why do these Neural Photons always seem to have an *oscillating electric field*, and an *oscillating magnetic field*?

Why do these Neural Photons seem to always obey the *powerful mathematical laws* of real-light neuro-electromagnetism, which is similar (but not exact) to Maxwell’s 1865 equations of electromagnetism?

Perhaps, by carefully studying all the known scientific measurements (of many decades, here on earth) of these Neural Photons (the way these Neural Photons currently appear to us physicists of earth), we can simply *guess* a real-light *neural photon pulse pattern* that exactly



*reproduces* all the known *observations* (made by many bright physicists over many decades) of every type (every frequency) of photon.

Already, by the late 1800's, many intelligent scientists were diligently trying to discover *more details* about all these mysterious electromagnetic waves (photons) that travel at the fixed speed of light “c”, and seem to have *frequencies* and *wavelengths* that mostly satisfy Maxwell's 1865 equations of photonic electromagnetism.

Some scientists even began a careful study of the detailed patterns in the *spectroscopy* (specific wavelengths and specific frequencies) of the electromagnetic *photons* that seemed to be *spontaneously emitted* from *atoms*.

If our Neural Photons are actually composed of *just 2* simple neural *pulses*, then it certainly seems *scientifically possible* that electrons, protons, and neutrons *are also composed* of similar (but different) *small sets* of neural pulses.

If a photon is composed of *just two* mutually-orbiting neural pulses, then is it possible that an electron might be composed of *just three* neural pulses?

Exactly *how many* mutually-orbiting neural pulses are needed to make a *single electron*?

How can we find out *for sure*?

Why do the *two pulses* (that compose a photon) seem to move at such a superfast *quickness* (superluminal) *speed*?

What is the actual source (and cause) and physical mechanism of this *Exact Superluminal Quickness Speed*?

# An Exact Quicklight Speed

Exactly what kind of things (what kind of real-light neural pulses) can move at this *Exact Superluminal Quicklight Speed*?

This quicklight speed is *about* 6.362265131 times the speed of light.

The *exact quicklight speed* is the square root of one plus (two pi) squared.

This *Exact Quicklight Speed* is a very special (very exact) *superluminal speed* that is *faster* than the *speed of light*.

This quicklight speed is *over 6 times faster* than the speed of light.

Is it really possible for *anything* to actually travel at a speed that is *faster* than the speed of light “c”?

What did Albert Einstein write about his possibility?

Why do *some* types of real-light neural *pulses* always travel at this exact *Quicklight Speed*?

Do *all* real-light neural pulses move at this exact Quicklight Speed?

*How slowly* do unmyelinated *central* real-light axons conduct their slow unmyelinated *central* real-light neural pulses?

Do *all* myelinated real-light axons conduct their neural pulses at the Quicklight Speed?

Some types of *thicker* myelinated real-light axons, conduct their myelinated real-light neural pulses at the superluminal (faster than the speed of light) Quicklight Speed, which is *faster* than the subluminal (slower than the speed of light) *slower speeds* of the real-light *central* neural pulses that travel on the *thinner unmyelinated* real-light axons.

At *how many different speeds* can the real neural pulses travel?

*Which* of these different kinds (different speeds) of neural pulses can travel at the quicklight speed?

How will we know *for sure*?

Is it possible that the *real time clocks* of our real neurons (inside our real human brains) *process time differently* (at

different *temporal rates*) than the time clocks of our mortal neurons (inside our mortal human brains), that are simulated here locally, inside our very own milky-way galaxy?

Is the *real speed of real light* (the real speed of real light, in our *real universe*, where we really live) *many orders of magnitude faster* than the ultra-fast *darklight speed* of the very fastest *real-dark myelinated axon* inside our real human brains?

*How many* different kinds of *speeds* (with their associated *timeclocks*) are operable inside the real human brain network, that simulates this advanced physical universe, with all of its photons, and all of their real-light neural pulses that travel on real axons at the special quicklight speed, as viewed (and temporally-measured) *from inside* this milky-way galaxy?

It appears that we may need to create a good *Quicklight Pulse Theory* to properly describe every type of *quicklight pulse* that may be theoretically possible to propagate inside our real human brains.

What kind of *Quicklight Pulse Theory* can we create?

# Quicklight Pulse Theory

What is a *Quicklight Pulse Theory*?

A *Quicklight Pulse Theory* is a scientific theory about *quicklight* (real-light) *human axons* and the *quicklight* (real-light) *neural pulses* that they can create, with special attention given to the *reasons* for the *exact quicklight speed* at which these quicklight neural pulses can propagate along their quicklight axons, and which kinds of pulses may be able to travel at this special quicklight speed that appears (to us mortal-human scientists that naturally live and observe the behavior of the photons inside this milky-way galaxy) to be the *quicklight pulse speed* that is a special *superluminal* (faster than light) speed that *appears* to be *about 6.36 times faster* than the speed of light, as viewed from *inside* this milky-way galaxy.

*Our Quicklight Pulse Theory* is that there are actually many different types of *real human axons*, and some of these real human axons can conduct their real neural pulses at many different speeds; including many different *slower than light speeds*; and that some of the real-light myelinated-axons propagate their pulses at an exact speed that is the special *Quicklight Pulse Speed* of about 6.36 times the speed of light; and that some of the real-dark

myelinated axons can propagate their pulses at ultra-fast darklight pulse speeds that are *many orders of magnitude faster* than the special Quicklight Pulse Speed.

This means that we (real humans) have some real *slow neural pulses* (inside our real human brains) that *travel very slowly*, at the *relatively-slow speeds* that are *even slower* than the speed of light “c”.

This also means that we also have some real neural pulses that travel at the *relatively-modest* Quicklight Pulse Speed that is *just 6.36 times faster* (about six times faster) than the speed of light “c”.

This also means that we also have some real neural pulses that travel at *really-fast* Darklight Pulse Speeds that are *many orders of magnitude faster* than the speed of light “c”.

*Our Quicklight Pulse Theory* is also that our real human brains can generate and conduct many different kinds of real neural pulses; and that some of these real neural pulses can travel at many different *slower-than-light pulse speeds*, and at one very-special exact *quicklight pulse speed*, and at some ultrafast *darklight pulse speeds*, as *needed* to properly *simulate* every quantum bit (*qubit*) of this local milky-way simulation, where we currently seem to live.

Now that we have established that our real neural pulses can travel at a *broad spectrum* of different *real velocities* (corresponding to a broad spectrum of *different speeds* as *scientifically-measured* here *inside* this neurally-simulated milky-way galaxy), including a very specific *quicklight pulse speed*; we can start to ask some more specific questions about the *neural photons* and the *neural electrons* that our real-light neural pulses can compose.

For example, *why* are a pair of real-light neural pulses so easily *able to combine together* to form a single photon?

And, *why exactly* does a photon's frequency simply equal its total energy divided by Planck's Constant?

Why is a photon's energy such a *very simple function* of its frequency?

Is this photon frequency-energy the *most fundamental type* of visible-matter energy in our universe?

Also, how are these two neural pulses *able to maintain their exact stable frequency* of mutual orbiting each other, as they are axonically-propagated through their real-light axon field?



In order to better answer these important questions, we need to look more closely at the *Neural Photon Frequency*.

# Neural Photon Frequency

What is *Neural Photon Frequency*?

*Why* does a single photon even have a *frequency*?

Why do there seem to exist an almost *infinite number* of different photon types (which are the photons that have an almost *infinite number* of different *photon frequencies*) that are seemingly *all stable particles*?

Why can a single individual photon exist with *just one particular* (of so many potentially different) *frequency*?

Why does a photon seem to have just *one single frequency*?

Why does an *electron* seem to have *2 different frequencies* (the *Compton electron frequency*, and the *de Broglie electron frequency*), while an individual photon seems to have *only 1 specific frequency*?

Why does a specific individual photon (of a particular frequency) seem to have a nearly *infinite number* of “*photon cousins*” (with each photon cousin having a different frequency), while an electron only seems to have

*exactly two “electron cousins” (the muon and the tau particle)?*

Why are the *two “electron cousins”* (the tau particle and the muon) *so unstable*, while *all* of the many different “*photon cousins*” (with their *broad spectrum* of different *photon frequencies*) seem to be *so stable*?

What causes *all* the photons to be so stable with *stable photon frequencies* and *stable photon wavelengths*?

Why does the electron have its *two stable frequencies* (the *Compton frequency* and the *de Broglie frequency*) that make it into a *completely stable particle*; but the muon and the tau particle seem to be *so fragile* and *so unstable*?

Why are *all* of the *quarks* so *unstable* (that they can't even seem to *solely exist* for even just a single nanosecond) *unless* they are *tightly bound* together into *mesons* or *baryons*?

Why are *all* the *mesons* (made of a quark and an antiquark) *so unstable* that they *all* fall apart so quickly?

Why are there (in this whole milky-way galaxy) apparently only *two stable baryons* (the *proton* and the *neutron*) that are composed of *three quarks*, that seem to be stable enough to last for *longer* than a whole second?

Why does a *solo neutron* usually seem to last for *more than 14 minutes*?

Why does a *solo proton* seem to last forever?

Why does a *solo electron* seem to last forever?

Why does a *solo photon* seem to last forever?

What kind of *neural-pulse frequency structures* are stable enough so they can *last forever* as they are propagated through the real-light axon field?

What *specific properties* of the real-light axon field cause some pulse-pulse mutually-orbiting frequency structures to be *bound together* in the *stable ways* that are *more stable* than others?

Which *pulse-pulse* mutually-orbiting *frequency structures* compose the elementary particles that are the *most stable*?

What kinds of *pulse-pulse wavelengths* help the elementary particles to be *more stable*?

How many *neural wavelengths* are associated with a *single photon*?

Just one.

How many *neural wavelengths* are associated with a *single electron*?

Just two.

How many *neural wavelengths* are associated with a *single quark*?

Just two.

Now, let's take a closer look at the *Neural Photon Wavelength*.

# Neural Photon Wavelength

What is a *Neural Photon Wavelength*?

*Why does a single individual photon even have a wavelength?*

*How many Neural Photon Wavelengths does an individual photon possess?*

Just one.

*Why does a single photon only have just one single wavelength?*

*Why does an individual photon only have just one single photon radius?*

What is the *actual radius* of a single photon?

How can we calculate the *exact radius* of a 2-pulse photon structure?

The *wavelength* of a *photon* is its *radius*.

*Photon radius is photon wavelength.*

They are *one* and the *same*.

The *photon radius* is the *exact same length* as the *photon wavelength*.

A 2-pulse photon is two real-light neural pulses, separated by a diameter (pulse-pulse distance) that is *2 times the photon radius*, which is twice the photon wavelength.

In other words, *the diameter* of the circular (elliptical) double-helical path structure of a photon, is *twice the photon radius*.

A single 2-pulse neural photon has *exactly one radius*.

A *photon* has *just one radius*.

*How many radii* belong to an electron?

Two.

Why does an electron have *2 radii*?

What are the *two wavelengths* of an electron?

Let's take a good look at *Neural Electron Wavelength*.

# Neural Electron Wavelength

What is the *Neural Electron Wavelength*?

*How many wavelengths* does an individual electron have?

Two.

How can a single electron have *more than just one wavelength*?

Can an electron have *two* distinctly different electron *wavelengths*?

How can the real-light neural pulse structure of a single electron generate *two electron radii*?

What is the *neural pulse structure* of an individual electron?

Why can an electron have *more than just one radius*?

What is the exact *size, shape, and frequency* of a single electron?

Why does a single solitary electron seem to have a very interesting *zitterbewegung frequency*?



What is *actually going on inside* an electron?

*How many real neural pulses are actually needed to properly compose a single electron, that will possess all the necessary electron characteristics that have already been carefully observed and measured by our talented experimental physicists here on Earth?*

Why does one single electron seem to have *exactly two wavelengths*?

Why does a single electron seem to have *more* than just one single radius?

What is the *de Broglie wavelength* of an electron?

What is the *Compton wavelength* of an electron?

Why can a single elementary particle, like an electron, *have more* than a single wavelength?

*How many wavelengths are inside a proton?*

About seven?

What is the actual *neural nature* of elementary particle *wavelength*?

Do these elementary particle wavelengths really need to strictly *obey* the famous Heisenberg Uncertainty Relation?

What is the real neural *source* (and the neural pulse *cause*) of the de Broglie wavelength of the electron?

Why would an individual electron *even bother itself* to go out and have a *de Broglie wavelength*?

Now let's take a good look at the *1924 De Broglie Wavelength* of an electron.

# 1924 De Broglie Wavelength

In 1924, a brilliant young French physicist (and aristocrat) named *Louis Victor Pierre Raymond, 7<sup>th</sup> Duc de Broglie* (1892-1987), completed his Ph.D. thesis with a postulate about the *wave nature of electrons*, and he also boldly suggested that *all matter has wave properties*.

This brilliant young *Louis de Broglie* titled his 1924 thesis as “*Recherches sur la Theorie de Quanta*” (Research on the Theory of the Quanta) [17].

De Broglie’s 1924 “Theory of the Quanta” included a theory about “*electron waves*” in which an individual electron has an *electron wavelength* and a corresponding *electron frequency*.

This 1924 “*de Broglie Hypothesis*” that *any* moving particle (like a *moving electron*) is a wave with a *wavelength* and a *frequency*, seems to have some actual experimental evidence to partially back it up, at least for the little (*low mass*) electron, and a few other low-mass particles.

Just 5 years later in 1929, Luis de Broglie was quickly gifted a Nobel Prize in Physics for his brilliant “*de Broglie Hypothesis*”.

In the 1920's and 1930's some physicists began to believe that this *de Broglie Hypothesis* supported a *wave-particle duality concept* that began to form in the minds of many scientists.

How can a *particle* be a *wave*?

How can a *wave* be a *particle*?

Can a *wave of particles* exist?

What is a *water wave* made of?

How can particles *make waves*?

What is a *wave*?

What is a *particle*?

Are these 2 simple things *well understood yet* in our current (year 2023) earth-based science?

Can the *particle concept* be properly understood by us human scientists?

Can the *wave concept* be fully understood by all of us?

Have these 2 seemingly-simple things (*waves* and *particles*) already been defined *clearly* enough, for the *exact understanding* of anyone and everyone here on earth?

Some of the currently-popular interpretations of quantum mechanics, include something called “*wave-particle duality*”.

Is this “*wave-particle duality*” fully understood by everyone, to their *full intellectual satisfaction*?

Or, do some people still (today in 2023) feel like “*wave-particle duality*” is actually a type of “*wave-particle riddle*”?

Can we use our simple dynamic neural pulse structures, to *effectively solve* all of these *wave-particle riddles*, to help us to all fully understand the real nature of “*wave-particle duality*”?

Can a *single electron* have a simple *3-pulse structure* that mostly *behaves* like a *particle* for some scientific *measurements*, and that mostly behaves like a *wave* for other kinds of *laboratory experiments*?

What is the *real difference* between the *Compton wavelength* of an electron, and the *de Broglie wavelength* of an electron?

The *electron de Broglie wavelength* is really *different* than the *electron Compton wavelength*, because the de Broglie electron wavelength contains the *external linear speed* of the *whole electron* in a very specific *mathematical way*, that the Compton electron wavelength *does not*.

Because of this particular *electron-speed* dependence, the de Broglie electron wavelength *is always larger* than the Compton electron wavelength.

When the whole electron is traveling at *very high* linear velocities (*very near the speed of light*) the Compton electron wavelength relativistically (due to the super-large relativistic mass of the electron) becomes *super small*, and the de Broglie electron wavelength also relativistically becomes *nearly as small*.

However, at *very slow* whole-electron velocities, when the entire-electron (as viewed from a distance) *slows down* to a *near complete standstill* (a very slow electron speed), the Compton electron wavelength always remains *less than 3 picometers in length*, while the de Broglie wavelength almost seems like it can *grow and grow* (as the whole electron seems to slow down to a standstill of

*near zero velocity*) to be *larger* than the *length* of a *whole football field* (100 yards).

How can the (very cold and very slow) electron de Broglie wavelength become *many meters in length*, while the Compton wavelength of the very same electron remains *less than 3 picometers* (less than 0.003 nanometers) *in length*?

How can a single electron have *two distinct wavelengths*, that *behave* (with decreasing electron velocity) so very *differently*?

Why are *both wavelengths* seemingly able to become *much smaller* than a single picometer (*a trillionth of a meter*) when the whole electron is accelerated up into *super-fast relativistic velocities* that are *super-close* to the *speed of light*?

Why do the *two wavelengths* become *many orders of magnitude different* in their *lengths* when a single individual electron is carefully slowed down (cooled) to a *near zero speed*?

An *electron at rest* (zero electron velocity) has a Compton wavelength of about  $2.42631023867 \times 10^{-12}$  meters (about 2.43 picometers).

This electron Compton wavelength can *never* get any longer than just 2.43 picometers.

What kind of electron *3-pulse* structure *can never* physically *become any larger* than just 2.43 picometers?

The electron at rest (*zero speed*) seems to have de Broglie wavelength that mathematically goes to *infinity* (an infinite number of meters apparently).

What kind of *electron 3-pulse structure* can easily become so very large (*super huge*) that it can mathematically, and also *physically grow to infinite size*?

For *slow electrons*, why is the de Broglie wavelength often orders of magnitude *larger* than the *tiny* Compton wavelength?

How can both wavelengths *fit into* just *one single* real-light dynamic *3-pulse* electron *inner structure*?

What would this *electron 3-pulse dynamic* neural *structure* actually look like if we could carefully examine it *from the inside*?

What will happen when we begin to look much more closely at the *inner nature* of the tiny electron *Compton Wavelength* of 1923?



Now, let's start to look more closely at this super-interesting *1923 Compton Wavelength*.

# 1923 Compton Wavelength

In 1923, an American physicist named Arthur Holly Compton (1892-1962), discovered a super-interesting way that a single *photon* can scatter (*bounce*) off a single *electron*, and this type of electron-photon scattering became known as *Compton Scattering* [18].

One of the most interesting things that Arthur Holly Compton (and his graduate student Y.H. Woo) discovered about Compton Scattering, was *a very special* (very tiny) *wavelength* that seemed to *actually belong* to the *electron*.

This very-special *tiny electron wavelength* quickly became known as *the Compton wavelength* of the *electron*.

This tiny electron Compton wavelength is just a *super small* 2.42631023867 picometers ( $10^{-12}$  meters) in total length.

This is about 2.43 picometers.

This is much smaller than any *atom*.

This is *very* small indeed.

*Why* are electrons so small?

This 2.43 *picometer* electron Compton *wavelength* seems to be the “*Compton size*” of the electron.

For a simple *relative size comparison*, most human visible light particles (photons) have wavelengths of about 400-700 nanometers, and 400 nanometers is 400,000 times longer than a single picometer.

Therefore, the tiny Compton wavelength of an electron is *hundreds of thousands of times smaller* than a single human-visible photon.

How can an electron be *so much smaller* than a visible photon?

Why exactly does a single little electron have a Compton wavelength that really seems to be so *exceedingly tiny*?

What kind of *electron neural 3-pulse structure* will produce such a *tiny size* (Compton wavelength) for a single electron?

Because this *tiny* electron Compton wavelength was *so very small*, and this tiny electron Compton wavelength was measured (via Compton Scattering) by a high-energy (tiny) photon (as *the tiny photon* scattered off the *tiny*

*electron*) some bright scientists began to believe that this interesting “*Compton Effect*” effectively demonstrated both the *particle-like* nature of the *photon*, and the *particle-like* nature of the *electron*.

This exciting Compton electron wavelength discovery was believed to be of such *great importance* that Arthur Holly Compton was very quickly awarded the Nobel Prize in Physics in 1927, *just 4 years after* his marvelous discovery of Compton Scattering, and the interesting Compton wavelength of an electron.

The electron Compton wavelength ( $\lambda$ ) is *mathematically-defined* as being equal to Planck’s Constant ( $h$ ), divided by the relativistic electron mass ( $m$ ), times the speed of light ( $c$ ).

Therefore,

$$\lambda = h/mc$$

is the Compton wavelength of the electron.

The relativistic electron mass ( $m$ ) is the electron rest mass ( $m^\circ$ ) times the Lorentz factor ( $\gamma$ ).

Therefore, the relativistic electron mass

$$m = \gamma m^{\circ}$$

is the product of the Lorentz factor  $\gamma$  times the electron rest mass  $m^{\circ}$ .

The Lorentz factor  $\gamma = \gamma(v)$  is a simple function of velocity  $v$  that varies from about 1.0 (for slow electrons with velocity  $v$  near zero) to near infinity (for fast electrons traveling at super-fast speeds that are very close to the speed of light).

Therefore, the Compton wavelength is actually a function of the whole linear velocity ( $v$ ) of the *whole electron*, as

$$\lambda (v) = h / \gamma(v) m^{\circ} c$$

Therefore, the electron Compton wavelength  $\lambda (v)$ , is a simple function of whole-electron velocity  $v$ , and this Compton wavelength  $\lambda (v)$  can *never be longer* than 2.43 picometers, but it can shrink way down to *nearly zero length* (much *smaller* than a *hundredth* of a picometer) when the whole-electron velocity approaches *very near* to the speed of light.

One of the interesting things about the Compton Scattering *mathematical formula*, discovered by Arthur Compton in 1923, is that it shows exactly how much the

wavelength of a photon can be *changed* by its interaction (Compton scattering dance) with an electron.

In Compton Scattering, the photon's wavelength can be shifted by *at most twice* the Compton wavelength of the electron.

What kind of real-light neural pulse structures (of the *2-pulse neural photon*, and of the *3-pulse neural electron*) will allow the 2-pulse photon to shift its wavelength by up to *exactly twice* the Compton wavelength of a 3-pulse electron, and *no more*?

What kind of *Neural Pulse-Pulse Compton Scattering Experiments* can we start to design and conduct (with our new *scientific computer software*) to test, evaluate, refine, and improve our *initial* neural pulse structures, for both our neural *2-pulse* photon model, and our neural *3-pulse* electron model?

What kind of *Neural Compton Scattering Software Experiments* can we now begin to conduct with our exciting new neural pulse-pulse Compton scattering computer software?

# Neural Compton Experiments

What are *Neural Compton Scattering Software Experiments*?

*Neural Compton Scattering Software Experiments* are the set of exciting new *scientific experiments* that we can now begin to design and conduct with *computer software*, to scientifically *discover* all of the detailed *neural-pulse physical mechanisms* involved in the interesting *photon-electron dance* that is *Compton Scattering*.

Detailed *neural pulse structures* (for the 2-pulse photon, and for the 3-pulse electron) can be *simulated with scientific software on computers* to conduct a number of useful “*Neural Compton Scattering Experiments*” to explore and refine (improve) all the scientific details of the neural pulse structures of electrons, photons, and other elementary particles.

The detailed “*scientific dance*” of neural Compton scattering of neural 2-pulse photons off of neural 3-pulse electrons (and off of other elementary particles) can be simulated in many different kinds of “*neural pulse structure computer software experiments*”.

The experimental outcomes, of these neural pulse structure computer software experiments, can be *carefully* compared with the *scientifically measured values* of actual (real physical) Compton scattering experiments in the *laboratory*.

These careful comparisons can *guide refinements* in our neural pulse structure *models* for the neural *2-pulse* photon, the neural *3-pulse* electron, and other neural *N-pulse* elementary particle models.

In this way, *useful* neural pulse structure *models* for many different *elementary particles* can be discovered, refined, and perfected pretty quickly.

These innovative scientific software *Neural Compton Experiments* may prove to be *a great benefit* to *elementary particle physics*, to all the sciences, and to all humankind here on earth.

These types of *intelligent scientific* neural Compton experiments can be carefully designed and be scientifically conducted *immediately*.

There is no need to wait.

These important scientific experiments can start in 2023, so we can hopefully *discover* some *improved* neural pulse



*structures* for *all* our elementary particles (including our neural photon and our neural electron) by 2024.

What is our electron neural pulse structure for its *Neural Compton Wavelength*?

# Neural Compton Wavelength

What is a *Neural Compton Wavelength*?

A *Neural Compton Wavelength* is the Compton wavelength of an *elementary particle* that is scientifically modeled as a dynamic *neural-pulse* structure.

How can an *electron* (with its *Neural Compton Wavelength*) actually be modeled (and fully *simulated*) by a specific real-light neural pulse structure that contains a Compton wavelength of about *2.43 picometers*?

There are a *million picometers* in a *micrometer*.

And, there are a *million micrometers* in a *meter*.

Therefore, a *meter* contains a *trillion picometers*.

This means that a picometer is *very small* compared to the (nearly two-meter) size of some of us *humans* here on earth.

How can a *small set* of real-light neural *pulses* interact with each other to always (for slow cold electrons) encode the tiny spatial distance (*the tiny radial Compton*

*wavelength*) of precisely the 2.42631023867 picometers, that is the *electron Compton wavelength*?

How can this *very same set* of real-light neural *pulses* also interact with each other to fully encode (completely simulate) an *additional* (larger) spatial distance (*the radial de Broglie wavelength*) that is always either *a little larger* (for super-relativistic super-hot electron speeds), or *multiple orders of magnitude larger* (for very cold, very slow electron speeds) than the electron Compton wavelength?

How can we design an *exact* neural-pulse *model* for the electron that *simultaneously simulates both* of these important *exact velocity-dependent* wavelengths?

Our neural 2-pulse photon model showed that photons can exist with almost *any* neural-photon *wavelength*, from the *super-tiny* neural-photon *wavelengths* of the (ultra-high-frequency) cosmic-ray photons, to the *super-huge* neural-photon *wavelengths* of the ultra-low-frequency radio photons.

However, an electron is *very different* than a photon.

Therefore, our electron neural-pulse model must be *very different* from our photon neural-pulse model.

An electron has a *very large net* electric charge, and a *very large net* magnetic dipole moment, that can each be scientifically-measured *far* from the *electron*.

Our dynamic 2-pulse photon model has *zero net* pulse electric charge, which dynamically-generates a *zero net* far-field magnetic dipole moment.

And no matter its photon wavelength, a single lonely photon must always have *exactly twice* as much intrinsic angular momentum (spin) as a single electron.

Our neural electron (our real-light neural pulse structure for an electron) cannot contain just any arbitrary wavelength, or any *arbitrary set* of *wavelengths*.

Our neural electron model must only contain *exactly two specific* electron *wavelengths*: (1) the electron Compton wavelength, and (2) the electron de Broglie wavelength.

How can we *intelligently design* our neural electron model, so it will have *exactly* these *two specific wavelengths*, and *only* these *two* specific wavelengths, that are each proper wavelengths belonging to the whole-electron *velocity*, and so our intelligent neural electron model will also have an far-field net electric charge of *exactly* negative one, a *huge* (multiple orders of magnitude larger than any other elementary particle)

magnetic dipole moment, and an intrinsic angular momentum of *precisely one half* of Planck's Constant?

How can we successfully design such a precise *neural electron model*?

What specific dynamic neural-pulse structure can we design for our *Neural Electrons*?

# Neural Electrons

What are Neural Electrons?

Neural Electrons are the *neural electron pulse structures* (consisting of 3 distinct real-light *neural pulses*), that exist *inside* our networked real human *brains*, that *simulate* all the *electrons* of this local milky-way galaxy, where we human scientists presently *seem* to live here on earth.

How can *three* distinct *neural pulses* simulate a *single* mortal electron?

Why do we need *three pulses* to simulate just *one electron*?

Why can't we model an electron with *just 2 pulses*?

Why are *3 pulses needed* to simulate a neural electron?

What kind of elementary particles can we make with *3 pulses*?

With *just 3 pulses* we can *simulate* an *electron* that is a simple, balanced, symmetric real-light neural pulse structure that has *two specific wavelengths* (the Compton

wavelength, and the de Broglie wavelength), and also has *every* measured *property* (of every experiment conducted by every group of scientists) of an *electron* here on earth.

How can we scientifically design these *three* neural *pulses*, and their mutual dynamic *orbits*, to simulate just one single electron?

Shall we let the *single innermost (central) pulse* be *positive* and relatively *slow-moving* along the *slow unmyelinated axons* of the real-light *axon field* (whose real-light axons interleave themselves with the Higgs axons of the Axon-Higgs field) of the real-light neural-simulator networked tissues, of our real human brains?

Shall we let the *two outermost pulses*, be *negative* and relatively *fast-moving*, along the *fast myelinated axons* of the real-light *axon field*?

What will happen, if we let these *two outermost negatively-charged pulses* travel (and *orbit around* the central, slow, positive pulse) at the exact same *quicklight speed* (about 6.36 times the speed of light) that we have already used for the two pulses of a photon?

What will happen if we let the slow *central positive pulse* have an electric charge of *positive one* (for slow electrons), and if we let the *two* outer fast pulses *each*

have an electric charge of *negative one* (for slow electrons)?

Then the total *net* electron charge will be *negative one*.

The *two* outer negative fast pulse charges (with net-negative electric charge densities) have pulse charge densities, and corresponding pulse masses that are *exactly equal* to each other, in order to create an electron neural-pulse structure that is *symmetric* with *balanced* outer negative fast pulses.

What if we let these *two* outer negative fast *pulses masses rapidly orbit around* the central positive pulse at a *proper distance*, and a corresponding proper *quickness speed*, such that the total electron *angular momentum* is always *dynamically-maintained* as being exactly equal to precisely *one half* of Planck's Constant?

Let's adjust the *magnitudes* of the two fast negative pulse *masses* (and their two net-negative electric *charge densities*), their *orbital velocity* about the slow central positive pulse mass, and the *radius* of their *near-circular (elliptical) orbits*, so that their electrostatic *attraction* (via Coulomb's Force Law) precisely *balances* their centrifugal *repulsion* (due to their rapid circular motion), in order to make the two outermost fast negative pulses have *stable near circular (elliptical) orbits* with a



*elliptically-circular orbital radius* that is equal to the electron Compton wavelength (radius), and let us call this particular electron radius, the “*Compton radius*”.

Therefore, for slow electron speeds, the *two* outermost fast negative pulses are *always separated* from each other by about *two times* this *Compton radius*, and each of these two negative pulses is always separated from the *central* slow positive pulse by just a *single* Compton radius.

This *electron Compton radius* is the tiny *radial length* of about *2.43 picometers*, so the *two* fast negative *pulses* are only separated by about *4.86 picometers* from each other, and the slow central positive pulse *sits snugly* right in the *middle* between these two rapidly-orbiting negative pulses.

These two fast negative pulses *orbit* (the slow positive central pulse) at the *speed of quicklight*, which is about 6.36 times faster than the speed of light.

These *rapid* quicklight-speed *negatively-charged pulse orbits* generate a very powerful *magnetic field* that *alters* the natural course (movement) of the slow central positive pulse, causing this slow central positive pulse to *also move* in a slow circular (*elliptical*) motion.

Let's carefully arrange that the *radial-distance*, *orbital-speed*, and *electric-charge* of the *two* outer negatively-charged *fast pulses*, are *all precisely-tuned* to always be exactly what is actually needed to *properly generate* a powerful *magnetic field B* that exerts a strong Lorentz "*v cross B force*" on the slow central *positive pulse mass* (that is already moving at the slow *central pulse velocity v*) causing this slow-central-positive pulse to be *gently pulled* (by the *strong magnetic field B* that is generated by the two rapidly-orbiting outer negative pulses) into a *relatively-large* (for *small velocities v*) *nearly-circular orbit* around an (unoccupied) *central point* (whole-electron "guiding center").

In this way, the Lorentz *v cross B force* will cause the (relatively) slowly-moving positive *central-pulse* to *slowly move* (at a *central-pulse velocity v*, that is much slower than the fast quicklight speed of the two outer negative pulses) in a *nearly-circular orbit* that has a *relatively-large radius* that is *nearly the same* (or likely within the same ballpark) as the *de Broglie radius* (the electron *de Broglie wavelength*).

We will call this slow *central-pulse* circular orbit the "*de Broglie orbit*"; and we will call its radius the "*de Broglie radius*" of the electron.

This *de Broglie radius* (wavelength) will likely be governed by either the same, or *nearly the same* (perhaps within a simple factor of two pi or so) mathematical formula as the super-famous *de Broglie formula* that Louis de Broglie first published *98 years ago*, in 1924.

This *de Broglie radius*  $r(v)$ , is equal to the de Broglie wavelength  $\lambda(v)$ , as follows:

$$r(v) = \lambda(v) = h / \gamma(v) m^{\circ} v$$

where  $v$  is the *velocity* of the positive slowly-moving central-pulse mass, and  $m^{\circ}$  is the whole-electron rest mass, and  $\gamma(v)$  is the relativistic Lorentz factor as a function of the *velocity*  $v$ , and  $h$  is Planck's Constant, and  $\lambda(v)$  is the de Broglie wavelength as a function of *velocity*  $v$ , and  $r(v)$  is the *de Broglie radius* as a function of *velocity*  $v$ .

This *de Broglie radius*  $r(v)$ , of the *de Broglie orbit*, of the positive *central-pulse mass*, is a function of the *velocity*  $v$  of this positive central-pulse mass.

This central-pulse mass *de Broglie radius*  $r(v)$  varies from a *radius of near zero* (when the electron central-pulse mass is traveling *very fast* at nearly the speed of light) to a *radius of near infinity* (when the electron

central-pulse mass is traveling *very slowly* at a near-zero speed).

The quicklight-speed super-fast *elliptically-circular orbits* of the two negative pulses are at the *tiny electron Compton radius* (wavelength), and the *super-high electron Compton Zitterbewegung frequency*.

The typically (for slow whole-electrons) much-slower (and much-larger) *elliptically-circular orbit* of the single positive central pulse is at the *large electron de Broglie radius* (wavelength), and the *very-low electron de Broglie frequency*.

Therefore, our dynamic electron *3-pulse* neural structure contains *three neural pulses* that *oscillate* at *2 different frequencies*.

*All three* electron neural *pulses* all oscillate at *both* the *slow de Broglie frequency*, and at the *high Compton frequency*.

Also, our *dynamic electron three-neural-pulse structure* contains *two orbital motions*, with the two fast negative pulses *rapidly orbiting* (the slow positive central pulse) at the *tiny Compton radius*; and the slow central positive pulse *slowly orbiting* (an empty “electron guiding center”) at the *large de Broglie radius*.

In this way, our three-pulse neural electron model, contains *two wavelengths* (two radii), *two frequencies*, *two energies* (corresponding to the two frequencies), a net (far-field) *negative charge*, an angular momentum of one half of Planck's Constant, a tiny rapidly-oscillating electric dipole moment, *a super-strong magnetic dipole moment*; and the important *ability* (by adjusting certain neural pulse *magnitudes*, via scientific software simulations, to *continually-improve* this 3-pulse neural electron model) to precisely *reproduce* all the *scientific results* of over two centuries of electron *scientific measurements*; and also the exciting ability to start making some *new scientific predictions* of some *new electronic quantum phenomena* that can be theoretically-expected of the *behavior* of the *electron*, in the light of this *new 3-pulse electron model*.

In the light of all the precise details of this new *3-pulse* neural-electron model, what *specific electron hypothesis* can we now make?

Specifically, what exactly is *Our Electron Hypothesis*?

# Our Electron Hypothesis

What is *Our Electron Hypothesis*?

What is *Our Electron Neural Pulse Hypothesis*?

What is *the neural pulse structure of a single electron*?

How can we really know *for sure*?

What kind of *new* electron-electron (and new electron-photon, and new photon-photon) software-simulation *scientific tests* can we now conduct (with our fast super-computers here on Earth in 2023) with our powerful new *2-pulse* photon model, and with our powerful new *3-pulse* electron model?

What kind of useful *new scientific predictions* can we now start to make with our new *3-pulse electrons*, and with our new *2-pulse photons*?

What kind of *deterministic* (exact) *quantum computers* can we now begin to design today, and build tomorrow with our new *electron-qubits* (and our new *photon-qubits*), made from these new deterministic *2-pulse photons*, and made with these new deterministic *3-pulse electrons*?

What are *all* the specific individual components of *Our New Electron Hypothesis*?

*Our Electron Hypothesis* is that an individual electron is dynamically-composed of *exactly 3* real-light neural pulses.

*Our Electron Hypothesis* is also that an electron is composed of exactly *2 rapidly-moving* (on fast real-light myelinated axons) *negatively-charged* real-light neural pulses, that quickly mutually-orbit around *1 slowly-moving* (on a slow real-light unmyelinated axon) *positively-charged* real-light neural pulse.

*Our Electron Hypothesis* is also that the 2 negative pulses *rapidly orbit* the single *central* positive pulse, at the exact *quickness orbital speed*, that is about 6.36 times faster than the speed of light, and this *rapid quicklight-speed orbital motion*, of these two electrically-negative pulses, *generates* a very strong *magnetic dipole moment*, with a very strong *magnetic field*, that exerts a Lorentz “*v cross b*” force on the slowly-moving (at *velocity v*) central positive pulse, causing it to *slowly orbit* in a relatively large (*large radius*) circular (elliptical) motion, which is the large slow *de Broglie Elliptical Orbital Motion* of the positive central neural pulse of the electron.

*Our Electron Hypothesis* is also that the rapid circular (*elliptical*) orbital motions of the two fast negative pulses are at the *Zitterbewegung frequency*, and the *Compton orbital radius* (Compton wavelength), and that the two negative pulses are usually separated by about *180 degrees* in their respective orbital positions about their *tiny-radius, high-speed, high-frequency Compton Zitterbewegung Orbit*.

*Our Electron Hypothesis* is also that the slow circular (*elliptical*) orbital motion (about an empty whole-electron central “guiding center”) of the single *central positive pulse* is at the *relatively slow (low) de Broglie frequency*, with a *de Broglie radius* (wavelength) that is *inversely proportional* to the *linear velocity* of the whole-electron (the *guiding-center velocity* of the empty central “guiding center” of the whole electron), and this *de Broglie Orbital Pattern* of the central positive pulse, is what has been already (partially) experimentally measured, in the various scientific experiments (of the past 98 years) that have already *attempted* to measure a proper “*de Broglie wavelength*” for the electron.

*Our Electron Hypothesis* is also that the *relativistic mass* of the electron, causes a velocity-dependent *Lorentz factor*, to effectively multiply the *electron rest mass*, and this causes both the *Compton radius* of the *Compton Zitterbewegung Orbit*, and the *de Broglie radius* of the *de*



*Broglie Orbit*, to grow *smaller* (with *both radii* shrinking towards *zero radius*, as the whole-electron velocity nears exceedingly-close to the speed of light), while the *two frequencies* (the de Broglie frequency, and the Compton Zitterbewegung frequency) of the *two orbital motions* grow toward infinity, and the whole-electron *relativistic mass* (the relativistic-electron *energy*) grows towards *infinity*, as the whole-electron speed grows exceedingly-close to the exact *speed the light*.

*Our Electron Hypothesis* is also that as the whole electron slows down to *near-zero velocity* (down to nearly a cold standstill, as the *slowest and coldest* electron possible), the *Compton Zitterbewegung Orbital Size* grows up to the full standard Compton radius (wavelength) of *about 2.43 picometers*, while the *de Broglie Orbital Size* tries to grow up to *infinity* (with the de Broglie *radius* trying to grow way up to an *infinite radial size*); although it may be that the *largest practical electron de Broglie radius* (in super cold intergalactic space) may be only about a *centimeter* or two.

*Our Electron Hypothesis* is also that the whole-electron *spin*, always has an *exact* spin angular-momentum *magnitude* of exactly of *one half* of Planck's Constant, because the *exact pulse masses* of the *two* outer fast negative real-light *neural pulses*, and their *exact* quicklight *orbital speed*, and their *exact* electron-

Compton *orbital radius*, are always *precisely balanced* to continually *give* to the whole electron an intrinsic *angular momentum* (spin) of *one half* of Planck's Constant; and the *exact spatial locations* (and the *exact velocities*, and the *exact momenta*) of these *two* outer fast negative real-light *neural pulses* are *always exact*, always precise, *always existing*, always well-defined, and *Never* merely-probabilistic; and this makes the quantum mechanics of the whole electron an *exact* (fully-deterministic) *electron quantum mechanics*, which is *more exact* (and *more deterministic*) than just a merely-probabilistic electron quantum mechanics.

*Our Electron Hypothesis* is also that the whole-electron *spin*, always has an *exact* spin angular-momentum *orientation* that always is an *exact* (fully deterministic) orientation, which is its *fully-deterministic spin direction*, because there is nothing merely-probabilistic about this *exact spin direction*, because the *exact pulse masses* of the *two* outer fast negative real-light *neural pulses*, and their *exact quicklight orbital speed*, and their *exact* electron-Compton *orbital radius*, are always *precisely balanced* to continually *give* to the whole electron an exact (fully-deterministic) *angular momentum* (spin) orientation, which is a fully-exact spin direction, because the *exact spatial locations* (and the *exact velocities*, and the *exact momenta*) of these *two* outer fast negative real-light *neural pulses* are *always exact*, always precise, *always*

*existing*, always well-defined, and *Never* merely-probabilistic; and this makes the quantum mechanics of the whole electron an *exact* (fully-deterministic) *electron quantum mechanics*, which is *more exact* (and *more deterministic*) than just a merely-probabilistic electron quantum mechanics.

There is *nothing* merely probabilistic about our new *3-pulse electron model*.

This 3-pulse electron is *fully exact* in every way.

This 3-pulse electron is *fully deterministic*.

This 3-pulse electron model helps us all to *finally see* that the *whole electron* is actually a *fully-deterministic elementary particle*.

This 3-pulse electron model also helps us to *realize* that *every elementary particle* is also *fully-deterministic*.

This 3-pulse electron model also helps us to finally come to the *correct scientific understanding* that quantum mechanics is *Not* a merely-probabilistic theory.

The main reason that quantum mechanics is *not* a merely-probabilistic theory, is actually because quantum mechanics is actually a *fully-exact theory*.

How can we scientifically-demonstrate that *Quantum Mechanics is Exact*?

# Quantum Mechanics is Exact

How can we start to scientifically-demonstrate that *Quantum Mechanics* is actually an *Exact* Theory of Science?

What is the *best way* to show this?

How can we best show that Quantum Mechanics is *Not* merely probabilistic?

How can we come to understand that our wonderful Quantum Mechanics is *fully exact*?

Is our precious Quantum Mechanics *really* fully deterministic?

How can we discover a *good solid scientific answer* to this super-important question?

How can we demonstrate that the Quantum Mechanics, of *every* elementary particle, is fully deterministic?

How can we also show that the *quantum entanglement*, of these tiny deterministic elementary particles, is also *fully deterministic*?

How can this all be *carefully proved experimentally* in our scientific laboratories?

How can *we* (the bright physicists of earth) begin to logically demonstrate to each other in our scientific laboratories, that *all* of *quantum mechanics* is actually an *exact science*?

How can we scientifically-demonstrate for all to see, that quantum mechanics is actually a *fully-deterministic science*?

What *new scientific experiments* can we begin to conduct in 2023 in our scientific laboratories, to help us scientifically-demonstrate that quantum mechanics is indeed a *deterministic (exact) science*?

What will begin to happen when we start to conduct the 1922 Stern-Gerlach Experiment *much more carefully*, and we compare these scientific-laboratory physical results with the software results of our new Stern-Gerlach Scientific Software Experiments, that are programmed with *unpaired 3-pulse electrons* in the outer shells of the silver atoms?

Can this be possible?

What will happen when we discover how to scientifically conduct *An Exact Stern-Gerlach Experiment*?

# An Exact Stern-Gerlach

What is *An Exact Stern Gerlach Experiment*?

*An Exact Stern Gerlach Experiment* is a scientific experiment, conducted similar to the famous 1922 Stern-Gerlach experiment, but with the *scientific goal* of *modifying* the experiment in a good helpful way that will allow us to *physically-demonstrate* that the *spin* on the unpaired *outer electron* of a silver atom, is actually a *deterministic (exact) quantum spin system*.

What is the best way to do this?

What other similar scientific experiments can we conduct in 2023, to clearly show that every bit (and *every qubit*) of *quantum mechanics* is actually a *deterministic theory* of science?

How will *every field* of science (here on earth) benefit from scientifically demonstrating that *all* of quantum mechanics is actually an *exact science* of nature?

The huge *human-life benefits* of doing this (here on earth in our near future) are *wonderful* and *marvelous*.

So, let's do it.



How else can we *improve* quantum mechanics?

How else can we improve our *hypothesis* about quantum mechanics?

How else can we improve our *electron hypothesis*?

*Our Electron Hypothesis* is also that the *magnitudes* of the net-electric *charge densities*, *inertial masses*, and *orbital radii* of the electron's 3 real-light neural pulses, can be *adjusted* via some suitable neural pulse *scientific software simulations*, to *modify* all the *centrifugal forces* and all the real-light *neuro-electromagnetic forces*, to properly *balance* all the *forces* on the 3 *pulses* (to fully *stabilize* the internal *integrity* of our 3-pulse electron) in order to ensure that the 3-pulse electron neural structure always has *all* of the *exact measurements* known to science of the electron's total mass, charge, tiny electric dipole moment, huge magnetic dipole moment, intrinsic spin angular momentum, de Broglie wavelength, Compton wavelength, Zitterbewegung frequency, and *all* of the other known properties of the *whole electron* that have *already been measured* in our scientific laboratories here on earth.

*Our Electron Hypothesis* is also that appropriate *scientific software simulations* can be conducted with this 3-pulse

electron neural structure, to evaluate all the different ways that 3-pulse electrons can interact with other *3-pulse electrons*, and with *2-pulse photons*, and with all of the new *N-pulse elementary-particle models* (like the *3-pulse quarks*, and *9-pulse baryons*) that will be developed with this current neural pulse simulation theory; which is an important component of the more general 4 Brain Theory, initially published in this present 2023 scientific article.

*Our Electron Hypothesis* is also that this 3-pulse electron hypothesis will *continue* to be *improved* and *refined* in future years, as more scientific discoveries are made about the whole electron; and that this current *3-pulse electron model* will lead to a good number of new *scientific predictions* about exactly how these *3-pulse electrons* will *behave* in the presence of other *3-pulse electrons*, *2-pulse photons*, *3-pulse quarks*, *9-pulse protons*, *9-pulse neutrons*, and *N-pulse nuclei*.

Now that we have scientifically-developed a good *3-pulse electron model*, and a good *2-pulse photon model*; we are in a good position to conduct *An Exact Compton Scattering Experiment*, to reveal all the inner *details* of exactly how a *2-pulse photon* Compton-scatters off of a *3-pulse electron*.

Is this theoretically possible?

How can we possibly perform such *An Exact Compton Scattering Experiment?*

# An Exact Compton Scattering

What is *An Exact Compton Scattering Experiment*?

*An Exact Compton Scattering Experiment* is a Compton scattering experiment conducted on a *computer* with the appropriate kind of *scientific software* that has been carefully programmed to properly scatter a *2-pulse photon* off of a *3-pulse electron*.

The *software results* of this scientific software experiment can be carefully compared with the *laboratory results* of a set of more-careful physical-laboratory Compton scattering experiments, to *refine* and *improve* the 2-pulse electron model, and the 2-pulse photon model, and every aspect of the Compton scattering experiments, until the *agreement* between the physical-laboratory results, and the software-experiment results, is perfect, *exact*, and *fully-deterministic*.

In this way, Compton scattering of a *photon* off of an *electron*, can be finally understood to be *Exact* and *Fully-Deterministic* in every way.

The *only way*, that Compton scattering (of a *photon* off of an *electron*) can be exact and deterministic, is if the

*photon is exact and deterministic, and the electron is exact and deterministic.*

Likewise, the *only way*, that *classical mechanics* can be exact and deterministic is if the underlying *quantum mechanics* is also exact and deterministic.

The *good news* is that quantum mechanics is actually exact and deterministic; as demonstrated by the *exact 2-pulse photon*, and the *deterministic 3-pulse electron*.

Our *3-pulse electron* has an inner neural-pulse structure that is always exact and deterministic, because every one of its *3 neural pulses*, is an *exact pulse* and a *deterministic real-light action potential*.

Now that we have developed a *good working hypothesis* for the *inner neural-pulse structure* of an *electron*, we are in a good position to also consider the inner neural-pulse structures of *quarks* and *baryons*.

In particular, we may wish to consider the inner-pulse structure of the *up quark* and the *down quark*, that together seem to be able compose all the *protons* and *neutrons*, that jointly comprise all the *nuclei* of all the *atoms*, that combine to make all the *molecules* of this whole planet Earth, and all our precious mortal human bodies that we seem to be living in today in 2023.

What kind of neural pulse hypothesis can we make about *quarks*?

*How many* real-light neural *pulses* are required to make a *single quark*?

How many *different kinds* of *quarks* exist inside our local milky-way galaxy neural simulation?

What is a down quark *made of*?

Exactly what is *inside* a single down quark?

*How many* real-light neural *pulses* do we need to build *just one* down quark?

Is a down quark almost *similar* to an electron in some ways?

In *what ways* is a down quark *most similar* to an electron?

In what ways is a down quark *very different* from an electron?

What kind of *neural-pulse software simulations* can we design, write, and conduct, in order to better answer these important scientific questions with *full confidence*?

What is the scientifically-best way to *software-simulate* the *asymptotic freedom* of *quarks*?

What is the logically-best way to use *neural software pulses* to software-simulate *quark confinement*?

Why is a single solitary 3-pulse electron *so stable*?

Why does a single solitary *3-pulse down quark* appear to be so *extremely unstable*, that it seems that it *cannot* even exist *long enough* to be solo-measured (*observed* by itself) with our current (relatively-slow) scientific instruments?

Why does a single *3-pulse neural down quark* seem to become much *more stable* when it is *properly combined* with two up quarks (to make a *proton*), or with an up quark and another down quark (to make a *neutron*)?

What exactly is *inside* a 3-pulse neural down quark, that causes it to *scientifically-behave* in so many interesting ways?

What kind of Down Quark Hypothesis can we scientifically-develop with what we have learned about quarks so far?

What is *Our Down Quark Hypothesis*?



# Our Down Quark Hypothesis

What exactly is *Our Down Quark Hypothesis*?

What is the neural-pulse structure of just *one single quark*?

There are *six different kinds* of quarks (and six different types of corresponding antiquarks).

*Exactly two* (of these six quarks) seem to be able to combine together in just *two special ways* that are *very stable*.

The *up quark* and the *down quark* are these *two* very special quarks, that can combine together (in 2 super-important ways) to form the *two* super-important *stable* baryons (the *proton* and the *neutron*).

A *baryon* is tiny particle that contains *exactly 3 quarks*.

A *neutron* contains *1 positive up quark* sandwiched snugly between *2 negative down quarks*.

A *proton* contains *1 negative down quark* sandwiched snugly between *2 positive up quarks*.

Let's discuss our hypothetical 3-pulse neural structures for these *two* super-important *quarks*, our *3-pulse up quark*, and our *3-pulse down quark*.

Our *3-pulse down quark* is *similar* to the *electron* in some ways because it is *negatively* charged, with just *one third* of the amount of total negative charge as the electron, and our 3-pulse down quark also has *exactly the same amount* of *intrinsic* angular momentum (internal *spin*) as the electron.

Our 3-pulse down quark seems to have an effective *down-quark mass* that is only about *9 times greater* than the electron rest mass.

Our 3-pulse down quark seems to *not be able* to exist independently by itself, because it seems that *none* of our earth's scientists have ever been able to observe a single *solitary* down quark *all by itself*.

*None* of the 12 quarks have ever been spotted *alone*, all by themselves.

In order to be a part of something *really super-stable* that can last for a *really long time*, our 3-pulse down quark seems to need to be *tightly-bonded* to *two* other *quarks*, to become an inner-component of a *proton*, or of a *neutron*.

Is the down quark *just too small* (and thereby *just too energetic*) to be stable all by itself?

Are all 12 quarks *too small* (and thereby *too energetic*) to be stable when *left alone*, all by themselves?

Why are our 3-pulse electrons *always so stable*, even when they are traveling at super-fast velocities that are *nearing* the speed of light, as these super-relativistic accelerating *3-pulse electrons* are actively *shrinking so small*, with their *Compton electron-radius* trending *towards zero*, and their *de Broglie electron-radius* also trending *towards zero*?

What are all the *interesting things* that can happen to an *electron*, when we use a powerful electric field to accelerate the electron up to a super-fast velocity, that is *very close* to the speed of light?

When an electron is traveling very fast, at about *99.4 percent* of the speed of light, it has a *relativistic mass* that is about *9 times greater* than its *rest mass*.

At this very-particular super-fast *relativistic electron speed* (of 99.4 percent of the speed of light), our *3-pulse electron* has about the *same mass* as our *3-pulse down quark*, and according to our 3-pulse electron model, our 3-pulse electron has a *de Broglie radius* (that becomes

*nearly as small as the Compton radius when the whole 3-pulse electron is traveling at 99.4 percent of the speed of light, with an electron relativistic mass that is about 9 times greater than its rest mass), and a Compton radius that both become about 9 times smaller (shorter) than 2.43 picometers, or about 0.27 picometers in length.*

Therefore, when our 99.4-percent relativistic 3-pulse electron has relativistically-shrunk down to a very tiny radial size of just 0.27 picometers (with its Compton radius at 0.27 picometers, and its de Broglie radius also at about 0.27 picometers), its mass may seem to nearly match the mass of our 3-pulse down quark.

The spin of our 3-pulse down quark, is always exactly the same, as the spin of our 3-pulse electron.

The net-negative electric charge of our 3-pulse electron, seems to always be just 3 times greater than the net-negative electric charge of our 3-pulse down quark.

Could this factor of 3 net-charge difference stem from a simple factor of 3 difference in the real-light neural-pulse charge densities, or the real-light neural-pulse net charges, of the real-light-axon sodium ion concentrations that make up the real-light neural pulses?

Why are there so many *interesting similarities* between our *3-pulse down quark* and our *3-pulse electron*?

Could it be possible that our *3-pulse down quark* might have basically *the same* neural pulse structure as our *3-pulse electron*, with just *a few important modifications*?

Why not?

A *down quark radius* of just 0.27 picometers (270 *femtometers*) seems like it may be *pretty small*, for such a *dynamic* (with its superfast orbiting quicklight negative pulses) *3-pulse neural structure*, to maintain its *internal integrity* and *individual stability*.

May it be theoretically-possible, that this very-tiny 270 *femtometer 3-pulse down-quark neural-structure radius* can only be *fully stabilized* in its real-light axon field (to keep it from falling apart) by just one, of *two different ways*; (1) *by traveling superfast* at very close to the speed of light, or (2) *by being bonded* to another nearby quark?

What *property* of the real-light axon field (that is axonically-interleaved everywhere with the Axon-Higgs field, and with the real dark field) causes this *relativistic length contraction* (*3-pulse electron radius contraction*) and this *relativistic mass increase*, as our *3-pulse electron*

speeds up to relativistic *near-light speeds*, like traveling at 99.4 percent of the speed of light?

What *property* of the real-light neuro-electromagnetic axon field allows for all 12 quarks to become *stable enough* (when tightly-bound to one or two other quarks) to be *scientifically-observed* (even though all 12 quarks are very *tiny in size*); but only the *two* lightest *quarks* (the *3-pulse up quark* and the *3-pulse down quark*) are the *only quarks* that can seemingly ever become *fully stable*, by *binding themselves* to two other quarks, to form the *mostly-stable neutrons*, and the *super stable protons*?

What is our *3-Pulse Quark Hypothesis*?

What is Our *Down Quark Hypothesis*?

*Our Down Quark Hypothesis* is that the *down quark* is composed of *3 real-light neural pulses* in a way that is *very similar* to the 3-pulse neural structure of the electron.

*Our Down Quark Hypothesis* is also that the down quark is composed of *2 outer* rapidly-moving *negative pulses*, that both *rapidly orbit* an *inner* slowly-moving *central positive pulse*, with the charge-magnitudes of the *3 electric-pulse net charges* properly arranged, so that these *3 pulse charges* always sum to exactly *one third* the electric charge of an electron, with the *2 outer negative*

*pulse charges* (and *pulse masses*) always being *exactly equal* to each other, and with the inner *central pulse* always having a *net-positive* electric charge.

*Our Down Quark Hypothesis* is also that the *magnitudes* of the down quark's *2 negative outer* (rapidly-orbiting) *pulse masses*, and their orbiting *radius*, and their orbital *velocities*, are perfectly *balanced*, so their total *angular momentum* is always exactly *one half* of Planck's Constant.

*Our Down Quark Hypothesis* is also that all 3 of the down quark *pulse masses*, *pulse velocities*, *pulse radii*, *pulse electric charges*, and all other potential *pulse properties* can be carefully adjusted, and thereby simply *improved* as *needed*, to ensure a *close match* with *every accurate measurement* of science, ever made on a down quark; and in this way, this initial simple *3-pulse down quark model* can be forever *refined* and *improved* in all the coming years, by our talented future physicists, for the benefit of all humankind on this earth

Now that we have explained that our *3-pulse down quark model* is somewhat *similar* to our *3-pulse electron model*, let's also consider our new *3-pulse up quark model*.

How does an *up quark* differ from a *down quark*?

What is the most-simple *3-pulse up quark* neural structure we can possibly *imagine* that will *accurately predict* every known (and also *every future*) up quark *measurement* made by science?

To answer these important questions about our simple *3-pulse up quark model*, let's consider *Our Up Quark Hypothesis*.



# Our Up Quark Hypothesis

What is *Our Up Quark Hypothesis*?

What is the exact neural pulse structure of a single *up quark*?

Why do we believe that a *simple 3-pulse neural structure* will work well for the positively-charged *up quark*?

Why does a *proton* seem to contain *two up quarks* and only one *single down quark*?

Why does a *neutron* seem to be composed of *two down quarks*, with just *one up quark* in the *middle*?

The *up quark* seems to be *electrically positively charged*, with a *positive charge* magnitude that is exactly *twice as large* as the magnitude of the charge of the down quark.

Also, our 3-pulse positive up quark seems to have *less than half* the mass of our 3-pulse negative down quark.

Our 3-pulse positive up quark seems to have exactly the same angular momentum (same spin) as our 3-pulse negative down quark.

Our 3-pulse up quark seems to have a rest mass that is only *about 4 times* greater than the electron rest mass.

Since the *up quark* is only about *half the mass* of the *down quark*, it seems likely that the up quark will have a *up quark Compton radius* that is about *twice as large* as the *down quark Compton radius* of a down quark.

Therefore, our 3-pulse up quark is about *twice as large* as our 3-pulse down quark.

This *quark-size difference* makes our *9-pulse proton* to be shaped like an *hourglass* with the *single smaller 3-pulse down quark sandwiched snugly between the two larger 3-pulse up quarks*.

This quark-size difference also makes our *9-pulse neutron* to be shaped like a *football* with the *single larger 3-pulse up quark sandwiched snugly between the two smaller 3-pulse down quarks*.

In this way, for our stable baryon shapes, we have *9-pulse neutron footballs*, and *9-pulse proton hourglasses*.

Like the down quark, the *up quark* seems to *not be able to exist independently by itself*, because it seems to *need to be bound* to two other quarks to be a part of something (like a *proton* or a *neutron*) that is very stable.

*Our Up Quark Hypothesis* is that the *up quark* is composed of 3 real-light *neural pulses* in a way that is somewhat *similar* to the 3-pulse neural structure of the down quark.

*Our Up Quark Hypothesis* is also that the up quark is composed of 2 *outer* rapidly-moving *equally-positive pulses*, that rapidly orbit a *single* inner *central* slowly-moving *negative pulse*; with the 3 magnitudes of the 3 electric-pulse *net charges* properly arranged, so that these 3 net charges always sum to a *positive* number, whose magnitude is always exactly *twice* the magnitude of the electric charge of the whole down quark.

*Our Up Quark Hypothesis* is also that the *magnitudes* of its 2 *positive* outer (rapidly-orbiting) neural pulse *masses*, and their orbiting *radius*, and their orbital *velocities*, are perfectly *balanced*, so their total angular momentum (*spin*) is always exactly *one half* of Planck's Constant.

*Our Up Quark Hypothesis* is also that all of the pulse *masses*, pulse *velocities*, pulse *radii*, pulse electric *charges*, and all other potential pulse properties can be carefully adjusted, and thereby simply *improved* as *needed*, to ensure a *close match* with *every accurate measurement* of experimental physics that has ever been made on an up quark; and in this way, this initial simple

*3-pulse up quark model* can be forever *refined* and *improved* in the coming years, by our talented future physicists, for the benefit of all humankind.

Now that we have explained that our *3-pulse up quark model* is somewhat *similar* to our *3-pulse down quark model*, and also somewhat similar to our *3-pulse electron model*, let's consider the other *four quarks*, and the *six antiquarks*.

*Our Hypothesis* for the *charmed quark*, the *strange quark*, the *top quark*, and the *bottom quark*, is that they are *all 3-pulse* neural structures that are *mostly similar* to the up quark and the down quark, but these more massive quarks are smaller (with *smaller radii*), and their highly-energetic *radial smallness* makes them *less stable*, so *no stable baryons* can be formed with these *4 much-smaller* (more-massive) *quarks*.

*Our Hypothesis* for *all 6* of the *antiquarks* is that they are also simple *3-pulse* neural structures, with the only difference being that the *sign* of the *electric charges* of their *3 pulses* is the *exact opposite* of the sign of the electric real-light neural-pulse charges that correspond to the *6 regular quarks*.

Now that we have provided some super-simple *3-pulse* neural *structures* for *all 6 quarks*, and for *all 6 antiquarks*,

let's proceed forward to further develop our *9-pulse proton model*.

Why do we think a *proton* is composed of *9 pulses*?

Why not?

It seems scientifically likely that a *9-pulse proton* is simply composed of a *positive 3-pulse up quark*, that is real-neuro-electromagnetically *bonded* to a *negative 3-pulse down quark*, that is real-neuro-electromagnetically bonded to a *positive 3-pulse up quark*.

This puts the *single* small-radius *down quark* right in the *middle* of the *two* larger-radius *up quarks*, giving the *proton* its simple *hourglass shape*.

Our *9-pulse proton* is shaped like an *hourglass*.

What *conceivable proton model* could possibly be more-simple than this, and still yield every known *proton measurement* that has ever been observed (or ever will be observed) by our talented experimental *proton physicists*?

Is this new *9-pulse* hourglass-shaped *proton* neural structure, the most-simple neural proton structure we can possibly *imagine*, that will also *accurately predict* every

known (and also *every future*) proton *measurement* that will ever be made by our proton scientists?

To start to answer these important questions about our 9-pulse proton, let's consider *Our Proton Hypothesis*.

# Our Proton Hypothesis

What is *Our Proton Hypothesis*?

Is it *conceptually possible* that a proton could be composed of *just 9 real-light neural pulses*, that are bound together via a simple easy-to-understand set of real *neuro-electromagnetic forces*?

In the intelligent spirit of Occam's Razor, that values *simplicity* very highly, let's design an *easy to understand 9-pulse proton model* that is as simple as possible, while still satisfying *all* the proton *measurements* known to science.

*Our Proton Hypothesis* is that the *9-pulse proton* is composed of a *larger-radius 3-pulse up quark*, that is neuro-electromagnetically bonded to a *smaller-radius 3-pulse down quark*, that is neuro-electromagnetically bonded to a *larger-radius 3-pulse up quark*; giving the *whole proton* a simple *hourglass proton shape*.

*Our Proton Hypothesis* is also that *all 9* of the *proton pulse masses*, with their *9 pulse velocities*, and their *3 orbital radii*, and with their *9 pulse electric charges*, and with all their other potential pulse properties, can all be carefully adjusted, and thereby simply *improved* as

*needed*, to ensure a *close match* with *every accurate measurement* of science, ever made on any proton anywhere, including the observed *proton size*, the observed proton whole-charge, the observed *proton magnetic dipole moment*, the observed *proton mass*, and the observed proton spin; and in this way, this initial simple *hourglass-shaped 9-pulse proton model* can be forever *refined* and *improved* in the coming years by our talented future physicists, for the benefit of all humankind here on earth.

Why is our 9-pulse proton *so amazingly stable*?

Why is our 9-pulse proton *infinity stable*?

Why is our 9-pulse proton the *only* multi-quark particle that is *infinitely stable* all by itself?

What is the actual cause of this infinitely-super-stable *9-Pulse Proton Stability*?



# 9-Pulse Proton Stability

What is *9-Pulse Proton Stability*?

9-Pulse Proton Stability is the *infinite stability* of a single isolated *individual proton* due to the *super-stable configuration* of the *super-stable set* of 9 dynamic real-light *neural pulses* that compose the individual proton.

Unmolested 9-pulse protons, all by themselves, *literally last forever*.

Our 9-pulse proton is the *most-stable nucleon*.

Why is our 9-pulse proton the *most stable baryon* (a particle composed of 3 quarks) in our whole universe?

Is the *more-tiny* (and more-massive) 3-pulse down quark a little bit *more-unstable*, than the *larger* (and less massive) 3-pulse up quark?

With the two up quarks being *slightly more stable*, than the single (*less-stable*) down quark that is snugly sandwiched between these two *more-stable* up quarks, are these two *more-stable* up quarks able to work together as the “two *stabilizing* up-quark bookends” to “*bookend stabilize*” the single down quark, in a *more-stable* way,

that makes our hourglass-shaped 9-pulse proton *more stable* than our football-shaped 9-pulse neutron?

Why is this 9-pulse football-shaped neutron, *a little bit less stable* than the 9-pulse hourglass-shaped proton?

What is the real cause of *neutron instability*?

Why is our 9-pulse neutron *less stable* than our 9-pulse proton?

What is really behind our *9-Pulse Neutron Instability*?

# 9-Pulse Neutron Instability

What is *9-Pulse Neutron Instability*?

9-Pulse Neutron Instability is the *instability* of a single isolated *individual neutron* due to the *relatively-unstable configuration* of the *semi-stable set* of 9 dynamic real-light *neural pulses* that compose the individual neutron.

Why is our 9-Pulse Neutron only *semi-stable*, in that it only lasts for about 14 minutes and 39 seconds?

Why is our 9-pulse neutron *not* infinitely-stable like our 9-pulse proton?

Our 9-pulse neutron has a *quark-weakness* that our 9-pulse proton does not have.

Its two down quarks are *too exposed*.

The neutron's two down quarks are *not fully-stabilized*, because they are *not* completely-surrounded with enough up quarks.

The *two down quarks* are just unstable enough, to make them into the *two unstable Achilles heels* of our 9-pulse neutron.

The single (*more-stable*) up quark, in the middle of the neutron, *partially stabilizes* the two down quarks for just 14 minutes and 39 seconds.

Each of the two down quarks has an *unprotected side*, that is *vulnerable* to the *bombardment ravages* of the *fluctuations* in *intensity* of the *thousands* of dark-matter particles (the tiny ultrafast real *dark scalar bosons*) that are constantly *scattering off* of the *3 vulnerable* real-light *neural pulses* that compose each of these two down quarks.

These two down quarks “*bookend*” the single up quark (in the *center* of the neutron) that fits snugly between these two down quarks.

Are these two tiny (*less-stable*) down quarks, that “*quark-bookend*” the one single larger (*more-stable*) up quark that is snugly-positioned *between them* (between the two down quarks), *not able* to quite stabilize the whole neutron enough to last for all eternity, like the *eternally-stable proton*?

Is this relative *down-quark instability* the real reason that the *whole neutron* is only able to *exist alone*, all by itself in our universe, for *only about* 14 minutes and 39 seconds?

Are these two down quarks, *being more unstable* (than up quarks), and *being smaller* (and therefore *less able* to fully-cushion, fully-bookend, and fully-support the single up quark in their middle) than up quarks, the *real reason* that a neutron is *less stable* than a proton?

Is this interesting 3-pulse *down-quark instability* the real reason for our 9-pulse neutron instability?

Does a 9-pulse *neutron* decay (transform itself) into a 9-pulse *proton*, when *one* of its *unstable* 3-pulse down quarks decays (transforms itself) into a *new* 3-pulse *up quark* and a 3-pulse *electron* (that quickly, with its anti-electron neutrino, travels far away from the quarks), as the *other* 3-pulse down quark *moves itself* into the *middle* (central) *position between* the *old up quark* and the *new up quark*?

This *transform-ability* of the tiny, massive, energetic, *unstable down quark* to decay, and thereby *transform itself* (when it is *not* supported enough, by enough nearby up quarks) into a super-stable *electron* and a larger, less-massive, less-energetic *more-stable up quark*, seems to be the *real reason* for the *instability* of an isolated 9-pulse *neutron*, when this solo neutron is left unto itself, being all *alone*, as it decays with its *neutron half-life* of just 14 minutes and 39 seconds.

Our *football-shaped 9-pulse neutron* is not as stable as our *hourglass-shaped 9-pulse proton*.

Our neural-pulse neutron has an instability that our neural-pulse proton *does not share*.

Now, let's look more closely at *Our Neutron Hypothesis*.

# Our Neutron Hypothesis

What is *Our Neutron Hypothesis*?

How is our *9-pulse neutron model* different than our *9-pulse proton model*?

Our whole *9-pulse proton model* has a *net-positive* electric charge of an exact magnitude, that is exactly *equal* to the magnitude of the *net-negative* electric charge of our whole *3-pulse electron*.

However, our *9-pulse neutron model* is completely *net-neutral* when viewed from a distance, because the net-positive electric charge of its *central 3-pulse up quark*, exactly balances the two net-negative electric charges of its *two outer 3-pulse down quarks*.

*Our Neutron Hypothesis* is that the *9-pulse neutron* is composed of a *smaller-radius 3-pulse down quark*, that is neuro-electromagnetically bonded to a *larger-radius 3-pulse up quark*, that is neuro-electromagnetically bonded to a *smaller-radius 3-pulse down quark*, giving the *whole neutron* a simple *football shape*.

*Our Neutron Hypothesis* is also that *all 9* of the *neutron pulse masses*, with their *9 pulse velocities*, and with their

3 orbital *radii*, and with their 9 pulse electric *charges*, and with all the other potential pulse properties, can be carefully adjusted, and thereby simply *improved as needed*, to ensure a *close match* with *every accurate measurement* of science, ever made on a neutron, including the observed neutron size, the observed neutron mass, and the observed neutron magnetic dipole moment, and the observed neutron spin; and in this way, this initial simple *football-shaped 9-pulse neutron model* can be forever *refined and improved* in the coming years, by our talented future physicists for the benefit of all humankind here on earth.

Now that we have initially described our mostly-stable *football-shaped 9-pulse neutron*, and our fully-stable *hourglass-shaped 9-pulse proton*, we are in a pretty good position to also begin to describe how some of these *9-pulse hourglass protons*, and some of these *9-pulse football neutrons*, can be carefully combined together to form *many* different kinds of *stable atomic nuclei*, when they become *neuro-electromagnetically bonded together* to form *deuterons*, *tritons*, *alpha particles*, and the *nuclei* of every known type of *atom*.

When all our *football neutrons* are close enough, to enough *hourglass protons*, so that enough *up quarks* (of the protons) are *close enough* to *every down quark* (of the neutrons), then *all* of these *down quarks* can be *supported*



*enough* to become *fully stable*; and this is a *major stabilization key* to how we can *form stable nuclei* with multiple protons and multiple neutrons.

What kind of *Nuclear Hypothesis* can we form from our *football-shaped 9-pulse neutrons*, as they are strategically combined with our *hourglass-shaped 9-pulse protons*?

What is *Our Nuclear Hypothesis*?

# Our Nuclear Hypothesis

What precisely is *Our Nuclear Hypothesis*?

Exactly what kind of *nuclei* can we *compose* with our *hourglass-shaped 9-pulse protons* and with our *football-shaped 9-pulse neutrons*?

Can we use our *football neutrons* and our *hourglass protons* to accurately *predict* exactly which *nuclear isomers*, of which *nuclear isotopes*, will be the *most stable*?

*Proton number* determines the *nuclear element*.

*Neutron number* determines the *nuclear isotope*.

Neutron-location, relative to proton-location, determines the *nuclear isomer*.

The *geometric spatial configuration* of all the *protons* and all the *neutrons*, and how they are bonded together, determines the *nuclear-isomer shape* of the nucleus.

Some *nuclear-isomer* shapes are *much more stable* than others.

Some *nuclear isotopes* can become much more stable than others.

Some *nuclear elements* can become much more stable than others.

Some of the nuclear isotopes that we can easily find here on earth in *great abundance*, are some of the more-stable nuclear elements.

Many of the *unstable nuclear isotopes* can be successfully created in our scientific laboratories.

These unstable nuclear isotopes can last for much *less* than a *single microsecond*, or for much *longer* than many *centuries*, before they decay and *transform themselves* into other *different* nuclear isotopes.

Our *football-shaped 9-pulse neutrons*, and our *hourglass-shaped 9-pulse protons* can be used to *theoretically-predict* the stability of hundreds of different nuclear isotopes, and their many different *nuclear isomers*, with *increasing scientific accuracy*.

How can we also use these new *hourglass 9-pulse protons*, and these new *football 9-pulse neutrons*, to *theoretically-predict* the *stable existence* of some *very large nuclei* that have not yet be discovered by science?

What kinds of *new physical materials* will we be able to construct (here on earth) with these future *super-heavy* stable nuclei?

Can we carefully refine and improve our *9-pulse* football *neutron model* and our *9-pulse* hourglass *proton model* enough (via some *scientific software modeling experiments* with *software neurons* and *software protons*, and via corresponding *laboratory experiments* with actual *physical protons* and actual *physical neutrons*), so we can start to make very accurate *predictions* (with much greater accuracy than is currently possible, with the older neutron models, and the older proton models) to exactly pinpoint the *exact masses*, and the *exact moments* (of the electric nuclear dipoles and the magnetic nuclear dipoles), and the *exact shapes* and *exact sizes* of all the *known nuclei*, and all the *future nuclei* that will be successfully *synthesized* in the future here on Earth?

*Our Nuclear Hypothesis* is that there are many different ways that a finite set of *hourglass-shaped 9-pulse protons* can be neuro-electromagnetically bonded to a finite set of *football-shaped 9-pulse neutrons* to create many different *shapes* and *sizes* and nuclear *configurations* of fully-stable *nuclei*.

*Our Nuclear Hypothesis* is also that *all 9* of the *neutron pulse masses*, and *all 9* of the *proton pulse masses*, and *all 18* of their *pulse velocities*, and *all 18* of their *pulse radii*, and *all 18* of their *pulse electric charges*, and *all 18* of the other potential *real-light neural pulse properties* can be carefully *adjusted*, and thereby simply *improved* as *needed*, to ensure a *close match* with *every accurate measurement* of science, ever made on *any nuclei*, including the observed size, mass, dipole, and spin of a nuclei; and in this way this initial simple  $9(N+M)$ -pulse *nuclei model* (where  $N$  is the number of protons, and  $M$  is the number of neutrons, in the nuclei) can be forever *refined* and *improved* in the coming years by our talented future physicists, for the benefit of all humankind here on earth.

When we neuro-electromagnetically *bond* a 9-pulse proton to a 9-pulse neutron, we obtain an *18-pulse deuteron*.

What is *Our 18-Pulse Deuteron Hypothesis*?

# Our Deuteron Hypothesis

What precisely is *Our 18-Pulse Deuteron Hypothesis*?

Our 18-pulse *Deuteron* is a particle that is composed of one 9-pulse *hourglass* proton *fitted into* one 9-pulse *football* neutron.

There are two different ways (with *two* very-different *isomer shapes*) that our football neutron can be neuro-electromagnetically-bonded to our hourglass proton.

Only *one* of these two 18-pulse Deuteron-isomer *shapes* is *stable*, because it can last forever, all alone in space by itself.

One of these two Deuteron-isomer shapes is the unstable *Cylindrical Deuteron*, that is shaped like a cylindrical (neutron) football on top of a cylindrical (proton) hourglass; with one of the neutron's down quarks left as an *unstable down quark* because it is not close enough to enough (stabilizing) up quarks; and therefore, this down quark will decay very quickly, causing the whole Cylindrical Deuteron to *decay very quickly*.

It may be *very difficult* to artificially produce these super-unstable *Cylindrical Deuterons* in our scientific laboratories here on earth.

But it is likely *not* impossible.

The other of these two Deuteron-isomer shapes is the *Stable Deuteron*, with the *fat part* of the neutron football *nestled into* the *skinny part* of the proton hourglass, with the two large up quarks (of the proton) next to (and *stabilizing*) the two down quarks (of the neutron); and in this way *all* the down quarks are *fully-stabilized* because all these negatively-charged down quarks are *very close* to *enough up quarks* to keep them all properly stabilized; and in this way this whole *Stable Deuteron* is very stable.

This *18-Pulse Stable Deuteron* is the *deuteron isomer* we find in nature in *heavy water*.

*Our 18-Pulse Deuteron Hypothesis* is that a single *football-shaped 9-pulse neutron* can become neuro-electromagnetically bonded with a single *hourglass-shaped 9-pulse proton* to form an *18-pulse deuteron*, that can be bonded together and *geometrically-shaped* in one of in two different ways (corresponding to 2 different *deuteron isomers*), with 2 *different* deuteron-isomer *shapes*, with one of the two deuteron-isomer shapes being *much more stable* than the other deuteron-isomer shape.

What is our 27-Pulse Triton Hypothesis?

*Our 27-Pulse Triton Hypothesis* is that *two football-shaped 9-pulse neutrons* can become neuro-electromagnetically bonded with one *single hourglass-shaped 9-pulse proton* to form a *27-pulse triton*, that can be bonded together and geometrically-shaped in *2 different ways*, with *2 different triton-isomer shapes*, with one of these two triton-isomer shapes being much more stable than the other triton-isomer (cylindrical) shape.

The most-stable *27-pulse triton isomer* lasts for about *12.3 years* before it decays, because just *the 2 up quarks* of its single proton *are not quite enough* to fully stabilize the 4 down quarks of its 2 neutrons.

However, 12.3 years is a *pretty long time* to last before this 27-pulse triton isomer decays, so it is *almost stable*.

What is our 27-Pulse Helium-3 Hypothesis?

*Our 27-Pulse Helium-3 Hypothesis* is that *two hourglass-shaped 9-pulse protons* can become neuro-electromagnetically bonded with one *single football-shaped 9-pulse neutron* to form a *27-pulse Helium-3 Nucleus*, that can be bonded together and geometrically-shaped in *2 different ways*, with *2 different Helium-3-*



isomer *shapes*, with one of these two Helium-3-isomer shapes being much more stable than the other Helium-3-isomer (cylindrical) shape.

The most-stable *27-pulse Helium-3 isomer* lasts forever because it is completely stable, because just *the 4 up quarks* of its 2 protons *are enough* to fully stabilize the 2 down quarks of its single neutron.

These *4 stabilizing up quarks* of the two protons of Helium-3 *are enough* to keep it *completely stable*.

The *repulsive electrostatic force* between these *two protons* (due to their net positive electrical charges) is *not* strong enough to overcome the *stronger* (closer-range) *neuro-electromagnetic force* that binds each of these two protons to the single *neutron* that sits *snuggly* between them with the *fat (wide)* part of the central football-shaped neutron *fitting comfortably* into the two narrow (*skinny*) parts of the two hourglass-shaped protons, with these two protons acting as *stabilizing proton bookends* for this single neutron.

In this way, the two protons of Helium-3, *sit on either side* of its only neutron, making the whole Helium-3 nucleus *completely stable* in every way.

A Helium-3 nucleus (*proton-neutron-proton*) is stable.

A Triton (*neutron-proton-neutron*) is almost completely stable, with a long 12.3-year half-life.

A Deuteron (*proton-neutron*) is stable.

A Neutron (*neutron*) is quite nearly stable, with a 14 minute and 39 second half-life.

A Proton (*proton*) is stable.

The neuro-electromagnetic *bonding* of these 5 *smallest nuclei* is pretty easy to understand (and scientifically-model) with our *real-light neural pulses*.

We can probably write some useful new neural-pulse *scientific modeling software*, to help us to better refine our *dynamic neural-pulse models* to the successful-point, where we will be able to *theoretically-predict*, with high accuracy, the *exact half-lives* of each *nuclear isomer* in the future.

Now that we have carefully presented, in some initial detail, our *scientific neural-pulse hypotheses* for the *9-pulse* proton, the *9-pulse* neutron, the *18-pulse* deuteron, the *27-pulse* triton, and the *27-pulse* helium-3 nucleus, we are fully-ready to start to consider some *larger nuclei*.

What about the *legendary* super-stable *36-pulse alpha particle*?

This *36-pulse Helium-4 nucleus* appears to have a really amazing kind of *geometric stability* that makes this particle very stable indeed.

A Helium-4 nucleus (*proton-neutron; neutron-proton*) is stable because of its super-stable *geometrical arrangement*, with a good level of *down-quark stabilization* because there are *enough up-quarks* nearby (in close proximity to all the nearby down quarks) to properly stabilize *all* the down quarks.

This famous Helium-4 Nucleus is also called an Alpha Particle.

Why is this Alpha Particle so *amazingly stable*?

What is *Our 36-Pulse Alpha Particle Hypothesis*?

# Alpha Particle Hypothesis

What is a *36-Pulse Alpha Particle*, and why is it so *stable*?

A *36-Pulse Alpha Particle* is composed of *two 9-pulse protons* and *two 9-pulse neutrons*.

The *two neutrons*, and the *two protons*, are arranged together within the Alpha Particle in such a good *stable geometrical way*, that this *Helium-4 Nucleus* becomes *super-stable*.

What is *Our 36-Pulse Alpha Particle Hypothesis*?

*Our 36-Pulse Alpha Particle (Helium 4 Nucleus) Hypothesis* is that *two football-shaped 9-pulse neutrons* can become neuro-electromagnetically bonded with *two hourglass-shaped 9-pulse protons*, to form a *36-pulse alpha particle (helium 4 nucleus)*, that can be bonded together and geometrically-shaped in *4 different ways (4 different isomers)*, with *4 different alpha-particle isomer shapes*, but that *only one* of these 4 isomer shapes is *completely stable*, and this *super-stable diamond-shaped alpha-particle isomer shape* is energetically super-stable, because of its very-special, very-unique *super-stable geometric diamond shape*.

This *super-stable* 36-pulse *diamond-shaped* alpha particle *shape* makes the alpha particle completely *magnetically balanced* with a perfectly-balanced *magnetic dipole moment* that completely *vanishes to zero*, because of the *balanced pulse-velocity orientations* of the rapid *charged orbital motions* of the 24 outer-fast real-light *neural pulses* of the 36-pulse diamond-shaped Helium-4 nucleus.

This super-stable 36-pulse *diamond-shaped* alpha particle shape is the exact *diamond shape* in which each *hourglass-shaped* 9-pulse proton nearly *sits between* the two neutrons, and each *football-shaped* 9-pulse neutron nearly *sits between* the two protons, in a *diamond-like shape*, in which *all the outer negative pulse orbits* are very near *all the outer positive pulse orbits*, and all the *inner positive pulse orbits* are very near *all the inner negative pulse orbits*, with one *proton spin up* and the other *proton spin down*, and with one *neutron spin down* with the other *neutron spin up*.

The 36 *dynamic pulses* form a *dynamic diamond-shape* that is *perfectly-balanced* and neuro-electromagnetically *bonded together* in every way that is necessary, to give to our new 36-pulse alpha-particle model *all* of its necessary physical properties, that have been carefully *measured* in many *scientific laboratories* for many decades here on earth.

This *diamond-shaped 36-pulse alpha particle* is super stable because of its *special geometric diamond shape* that allows it to have *all* of its *36 neural-pulse orbitals bonded together so tightly*.

The many detailed *behaviors* of these *36-pulse orbitals* can be modeled with *scientific computer software* to better scientifically-understand this super-interesting *diamond-shaped alpha particle*.

*Our 9(N+M)-Pulse Nuclei Hypothesis* is that *N hourglass-shaped 9-pulse protons* can become neuro-electromagnetically bonded with *M football-shaped 9-pulse neutrons* to form a *9(N+M)-pulse nuclei*, that can be bonded together and geometrically-shaped in *many different ways* (corresponding to many different nuclear isomers), with *one specific nuclear isomer shape* always being the *most stable nuclear isomer shape*.

*Our 9(N+M)-Pulse Nuclear Stability Hypothesis* is that *N hourglass-shaped 9-pulse protons* can become neuro-electromagnetically bonded with *M football-shaped 9-pulse neutrons* to form a *9(N+M)-pulse nuclei*, that can be bonded together and shaped in *many different ways*, and that it will become possible, with the right kind of *9(N+M)-pulse scientific computer-modeling software* to accurately *predict all* of the *nuclear half-lifetimes* with

unprecedented accuracy, and it will also become possible to accurately *monitor* the *nuclear state* of all of these  $9(N+M)$ -pulse nuclei close enough to correctly *predict* the *exact time* they will *decay*, and also to accurately predict the *exact time* they will *emit* a *gamma*, a *beta*, or an *alpha particle*.

In this way, *nuclear decay* will be *discovered* to *not be* a *random event*.

We can scientifically-discover that every form of *nuclear decay* is fully exact, and completely *deterministic*.

Because, there are some very specific dynamic *neural-pulse* behavior *processes* that can occur between the  $9(N+M)$  *neural pulses* that can *deterministically-cause* every known type of *nuclear decay*.

*Nuclear decay* is a *fully-deterministic* process of nature here inside our neurally-simulated milky-way galaxy.

Every aspect of nuclear decay can be *fully understood* in its *neural-pulse simplicity*, because every property of nuclear decay is scientifically *deterministic*.

This *scientific fact* will become *better understood* by many bright physicists in the *future*.

The only thing still *unknown* about *nuclear decay* is our current *lack of understanding* about it.

And this present *lack of understanding* can be *properly remedied* with some really-intelligent new *computer neural pulse* scientific modeling *software* that will carefully track *all* the *dynamic motions* of the  $9(N+M)$  *neural pulses* that are all very busy *continuously interacting* with each other, inside each and every one of our super-interesting *neural  $9(N+M)$ -pulse nuclei*.

Today in 2023, after studying this 4 Brain Theory paper, we can now begin to *design* and *write* some really good new scientific computer *neural-pulse* nuclei-modeling *software*, to *scientifically-simulate* all of the dynamic *neural pulse behaviors* of all of the  $9(N+M)$  neural pulses, in order to learn how to accurately *predict* exactly *when* a  $9(N+M)$ -pulse nucleus will *expel* an alpha, beta, or gamma particle, or *when* it will expel a *larger portion* of a nucleus, or *when exactly* the whole nucleus will nearly *split itself* in half.

Now that we have described our *neural-pulse models* for *protons*, neutrons, *deuterons*, tritons, *helium-3 nuclei*, and *alpha particles*, we can simply continue with the *lithium* nuclei, the *beryllium* nuclei, the *boron* nuclei, the *carbon* nuclei, the *nitrogen* nuclei, the *oxygen* nuclei, and with many other heavier nuclei, if we want to.



However, we might want to use the *next section* of this 4 Brain Theory paper, to scientifically-describe a *very special* heavy nucleus that is about to become *super-important* to our *collective future* here on earth.

Let's go ahead and take a good look at this super-useful, *super-energetic*, super-important, super-helpful *Thorium 232 Nucleus*.

Why will this *Thorium 232 Nucleus* become so important to *all humankind* in our near future?

What is *Our Thorium 232 Hypothesis*?

# Our Thorium 232 Hypothesis

What is our *2,088-Pulse Thorium 232 Hypothesis*?

Why will this *2,088-Pulse Thorium 232 Nucleus* soon become *so useful to all humankind* here on earth?

Does the 2,088-pulse Thorium 232 nucleus contain within it a *huge quantity of useful energy* for the *helpful benefit of all humankind* on this little planet earth?

Who found this *wonderful Thorium element*?

It appears that Thorium was *first discovered* around 1828 by a Norwegian mineralogist named Morten Thrane Esmark, and then *later identified* by a Swedish chemist named Jons Jacob Berzelius.

Jons Jacob Berzelius decided to wisely name *Thorium* after an energetically-powerful *mythological god* named *Thor*.

*Thor* is the *Norse god of thunder and lightning*.

This powerful element *Thorium* is certainly *destined* to provide plenty of *lightning* and *thunder* in the way it will soon be employed to create an *abundance of electrical*

*energy to light up (and power in many ways) the great future cities of our dear planet earth.*

Why do we want to create a useful *Thorium 232 Hypothesis* here in this 4 Brain Theory paper?

How is it even theoretically possible, that so much *safe, clean, useful electric energy* could be stored deep inside a single Thorium 232 Nucleus?

The *Thorium 232 Nucleus* is composed of *90 Protons*, and *142 Neutrons*.

The *Thorium 232 Atom* is orbitally-surrounded with *90 Electrons*.

There are many trillions of trillions of these *Thorium 232 Atoms* right here on our planet, and we can easily *mine them* and *use them* for the benefit of *all* of us precious human beings of earth.

Why does the *nearly-stable Thorium 232 Nucleus* slowly get around to expelling an *alpha particle*, only about *once in 14-Billion years*?

Can we *design* and *write* some really good scientific *neural-pulse Thorium 232 Nucleus modeling software* to carefully *simulate* all the dynamic *pulse behaviors* of all

9(90+142) *Thorium Neural Pulses*, in order to learn how to accurately *predict* exactly *when* (and *how*, and *why*) the *Thorium 2,088-pulse Nucleus* will *expel* an alpha particle?

Why (and *how*) can such a semi-stable *Thorium 2,088-Pulse Nucleus* occasionally (about once every 14 billion years) expel a *36-Pulse Alpha Particle*?

How can we use such a *Thorium 2,088-Pulse Nucleus* to make a *Thorium Nuclear Battery* that will produce generous amounts of *safe, clean, useful electricity* for *hundreds of years*?

Is this even *theoretically possible*?

How can such a useful, safe, clean *nuclear-electric battery* be developed here on earth?

Can the super-energetic 2,088-Pulse Thorium 232 Nucleus be used to create a super-useful *Thorium Nuclear Battery*?

# Thorium Nuclear Batteries

What is a *Thorium Nuclear Battery*?

A *Thorium Nuclear Battery* is a very useful *electric battery* that is made out of a *finite set* of *Thorium 232 atoms*, and a few other elements, that are *intelligently arranged* in such a manner, so as to produce *large quantities* of safe, clean, useful *nuclear-electric energy* for *hundreds of years*, without *any need* to be recharged with *electricity* or restocked with *nuclear fuel*, and *without* the production of nearly *any* harmful radioactive-waste byproducts.

These useful futuristic *Thorium Nuclear Batteries* can be fully developed (and tested) by our *talented nuclear scientists* just as soon as we can *discover* the *collective will* and the *group intelligence* to proceed to start developing them.

There is *no need* to wait any longer.

The precious people of planet earth *already need* these useful *Thorium Nuclear-Electric Batteries* today.

These safe, clean, useful, long-lived Thorium Nuclear-Electric Batteries can be manufactured in *all* the *shapes*

and *all* the *sizes* that other types of batteries, like *Lithium-Ion Batteries*, are currently produced here on earth.

The main *useful difference* between these futuristic Thorium Nuclear-Electric Batteries, and Lithium-Ion Batteries, is that the Thorium Batteries will be *safer*, *cleaner*, and much more *long-lasting* than the Lithium-Ion Batteries.

For example, the new hypothetical futuristic Thorium Batteries *will last* many orders of magnitude *longer* than today's typical Lithium-Ion Batteries.

For example, some of today's typical Lithium-Ion Batteries need to be electrically-recharged after *just a few hours*, or after *just a few days* of operation.

In comparison, the new Thorium Nuclear-Electric Batteries will be able to last for *hundreds of years*, without any need for any type of recharging during these *hundreds of years* of operation.

All of us people (here on earth) *already need* and *already want* these *useful new batteries* that will continuously-produce *useful electricity* for *hundreds of years*.

The right time to begin the *wise scientific development* of these *super-useful* Thorium Nuclear Batteries is today.

But, *how* will we go about our scientific development of these useful new *Thorium Nuclear-Electric Batteries*?

One of the *many* new *scientific keys*, to making a useful Thorium Nuclear Battery, is to better scientifically-understand what exactly happens to a *2,088-pulse* Thorium 232 Nucleus when it *absorbs a slow 9-pulse neutron into itself*.

What can happen to a single Thorium 232 Nucleus after it *absorbs a slow neutron* into the *interior regions* of its *energetic nucleus*?

When a Thorium 232 Nucleus (with 142 neutrons) *absorbs* a slowly-moving *neutron into itself*, then it immediately becomes a *Thorium 233 Nucleus* (with 143 neutrons).

A Thorium 233 Nucleus is a very *different kind of nucleus* than a Thorium 232 Nucleus.

These two Thorium nuclei behave very differently.

The very unstable Thorium 233 Nucleus is much *more radioactive* than the relatively-stable Thorium 232 Nucleus.

This very unstable Thorium 233 Nucleus *promptly* (with a half-life of only about 22 minutes) emits a *beta particle* (an electron) from one of its *143 neutrons*, transforming this particular *neutron* into a *proton*; and in the process transforming the Thorium 233 Nucleus into an unstable *Protactinium 233 Nucleus* (with 91 protons and 142 neutrons).

This unstable Protactinium 233 Nucleus also *promptly* (with a half-life of only about 27 days) emits a *beta particle* (an electron) from one of its *142 neutrons*, transforming this particular *neutron* into a *proton*; and in the process transforming the Protactinium 233 Nucleus into a *Uranium 233 Nucleus* (with 92 protons and 141 neutrons).

This super-interesting *Uranium 233 Nucleus* is slightly unstable, because it tends to occasionally emit an *alpha particle* (with a very-long half-life of about 160,000 years).

This super-interesting *Uranium 233 Nucleus* (with its 92 protons, and its 141 neutrons), will *usually split itself* (nearly in half) into *two smaller nuclei*, when it *absorbs a neutron* into itself.

Sometimes this Uranium 233 Nucleus will *absorb a neutron* into *itself*, and then quickly *split itself* (fission



itself) into a *Xenon 137 Nucleus* (with 54 protons, and 83 neutrons), and a *Strontium 93 Nucleus*, (with 38 protons, and 55 neutrons), and *4 extra neutrons*.

Sometimes this Uranium 233 Nucleus will *absorb a neutron into itself*, and then quickly *split itself* (fission itself) into a *somewhat different nucleus* (with close to about 55 protons, and close to about 84 neutrons), and into *another different nucleus* (with close to about 37 protons, and close to about 56 neutrons), and only about *2 extra neutrons*.

There are *many different ways* that the Uranium 233 Nucleus can absorb a neutron into itself, and then *fission itself* (split itself) into two smaller nuclei, and also emit *a few extra neutrons*.

There are many different ways that a Uranium 233 Nucleus, can be *bombarded with neutrons*, causing it to *fission* (split) into two smaller nuclei, and also *emit* an average of *2.48 extra neutrons*.

These *2.48 extra neutrons* (on average) are *very important*, because it is these 2.48 extra neutrons, that can travel *a few microns* (or a few millimeters), and then *enter themselves into* some *nearby Thorium 232 Nuclei*.

When one of these *extra neutrons* enters into a nearby *Thorium 232 Nucleus*, this *Thorium 232 Nucleus* is transformed into a *Thorium 233 Nucleus*, which decays in about 22 minutes into a *Protactinium 233 Nucleus*, which decays in about 27 days, into a *Uranium 233 Nucleus*, which absorbs a neutron, and then splits itself (via nuclear fission) into two smaller nuclei, and also emits (on average) an *extra 2.48 neutrons*.

As these *extra two and a half neutrons* (on average) are produced, with each *cycle* of this *breeding* nuclear fission process, there are always some *extra neutrons available* to *continue* this *cyclic nuclear-fission* breeding process for *hundreds of years*, as the *Thorium 232* is transformed in this way into *Uranium 233* which splits into *smaller nuclei*.

This *whole cyclic nuclear-fission process* produces lots of *gamma radiation*, and lots of *kinetic energy*, from all the smaller nuclei, the neutrons, the beta radiation, the alpha radiation, and from other related energetic processes.

With the right kind of *surrounding* heat-capturing *materials*, the *abundant kinetic energies* of the various particles, and the *gamma radiation* (high-energy photons) can all (or *nearly all*) be converted to *productive heat*.

This *productive heat* (flowing through the surrounding *high-temperature materials*) can be wisely-converted into *useful electricity*, with the right kind of *electricity-generating heat-transfer materials* surrounding (or nearby) the *high-temperature nuclear-fission materials*.

Tiny electricity-activated, moving, *neutron-absorbing rods* can be used to *dynamically-moderate* the cyclic *Thorium 232 to Uranium 233 reaction*, to *slow it down*, or *speed it up*, as needed, to produce a good, functional, automatic, easily-to-use, *nuclear-electric battery*.

In this way, a *proper set* of trillions of trillions of Thorium 232 Nuclei, can be *productively used* (with a tiny central initial Uranium 233 seed) to cause this Thorium Nuclear-Electric Battery, to generate *useful electricity* for *hundreds of years*, without any need for recharging, or refueling.

This wonderful *Thorium Nuclear-Electric Battery Technology* can be scientifically-developed here on earth, and wisely engineered to supply *lots* of beneficial electricity for *all of us* precious humans who live here.

These kinds of super-useful *Thorium Nuclear-Electric Batteries*, can be made in *all battery sizes*, from a size-volume of just *a few cubic millimeters*, up to a few cubic

centimeters, up to *a few cubic meters* (or even larger) in battery size.

Working out all the *intelligent scientific details* (and all the necessary *good-design engineering details*), to properly develop this super-useful futuristic *Thorium Nuclear-Electric Battery Technology*, can be done by our brilliant engineers and bright scientists, right here on earth starting today in 2023.

This is a *super-useful New-Energy technology*, that we scientists can easily develop in the near future (in just *a few years*) here on earth.

Every year, we can make *some new helpful modifications* (in the materials and processes) to our new *Thorium Batteries*; and we can *scientifically-discover* some really good ways to *upgrade them*, and to *intelligently improve them*, to make them *very clean*, and *very safe*, and to make them *very reliable*, so they will not need to be serviced, recharged, or refueled for *hundreds of years*.

This *Thorium Nuclear-Electric Battery Technology* can be developed, improved, and refined, and then wisely used during the next few years to *manufacture billions* of these useful *Thorium Batteries*, of all shapes and all sizes, to begin to produce an *abundance of electrical energy* at a very *low cost*, for the benefit of *all humankind*.

*Significant* amounts of (initial research and development) *money* will be *required* to properly *develop* these useful Thorium Nuclear-Electric Batteries.

Additional *money* will be required to properly *manufacture* and *produce* *billions* of these useful Thorium Nuclear-Electric Batteries.

However, after *billions* of these super-useful *long-lived* Thorium Nuclear-Electric Batteries have been *initially produced*, and put into *good use* for the benefit of *all* humankind; then the *yearly* ongoing maintenance *costs* will be *very low*, as these wonderful Thorium Batteries will continue to generate *lots* of useful electricity for *hundreds of years* to come.

This *super-low* yearly worldwide *maintenance cost*, of *billions* of these useful Thorium Electric Batteries, for *hundreds of years*, will offer all humanity a wonderful *new opportunity* to *free itself* from forced labor, and to completely *free itself* from every form of *economic slavery*.

This wonderful new opportunity, is that these *super-long-duration* Thorium Batteries can be used to provide *Free Electricity for All* the precious people of this whole earth.

So, we all have a *big decision* to make, as a worldwide community of 8-billion vulnerable human beings, here on our little planet earth.

Do we really want to use this exciting new Thorium opportunity to *ignorantly* proceed to *blindly enslave* another generation, of poor young vulnerable human workers to a life of *forced labor*?

Or, do we want to *wisely use* our new Thorium Nuclear-Electric Batteries, to intelligently start to provide *Free Electricity* for *All* of us precious human beings of this whole planet earth?

# Free Electricity for All

How can Thorium Nuclear Batteries be used to wisely provide *Free Electricity* for *All Humankind*?

Can *Free Electricity* for *All Humankind* help us to intelligently solve world poverty for *everyone* on earth?

Do we really want all the people of this earth to continue to be *forced* to *pay* for their *monthly electricity* for many more decades to come?

Or, do we want to wisely *liberate* the *peoples* of *earth* by giving to them *Free Electricity* for *All*?

What do we (the people of earth) *want* to do *for each other*?

What do we (the people of earth) *desire* to do *to each other*?

Do we really wish, to continue to use, our powerful new technologies, to continue to economically *enslave each other*?

Or, do we wish to use our marvelous new technologies to *free each other*?

What do we really want *to do to each other*, here on earth, in our near future?

These safe, clean, powerful, new *Thorium Nuclear-Electric Batteries* can be put into *millions of electric cars*, to *wisely upgrade* these millions of electric vehicles, so these millions of electric cars will *never* need to be recharged again for *hundreds of years*.

Some *large versions* of these safe, clean, powerful, new *Thorium Nuclear-Electric Batteries* can be put into the existing *electric power plants* of *thousands of cities* to *wisely upgrade* these thousands of citywide electric power plants, so these cities will *never* need to *purchase* any more electricity (from any outside electricity providers) for *hundreds of years*.

Some *small versions* of these safe, clean, powerful, new *Thorium Nuclear-Electric Batteries* can be put into every type of *existing electrical appliance* (in our homes) to *wisely upgrade* all our electrical appliances, so these electrical appliances will *never* need to be plugged into the wall again, for *hundreds of years*.

Some of these safe, clean, powerful, new *Thorium Nuclear-Electric Batteries* can be used to *power* water *pumps* that can pump large amounts of *fresh clean spring*



*water* out of the ground to provide all the people of this whole planet, with an abundance of *fresh clean drinking water*, to refresh them and *hydrate* them *properly* everyday of their precious *valuable lives*.

Can we all begin today to *really value* all humans as being *infinitely valuable*, like they really are?

Some of these safe, clean, powerful, new *Thorium Nuclear-Electric Batteries* can be used to electrically-power some new-technology *humidity-water-extraction machines* that can pull the *water molecules* out of the air that we breathe (out of the earth's surrounding *atmosphere*, anywhere the local *water-vapor-humidity* is larger than *just one percent*) to provide *lots* of fresh clean liquid *drinking water* (from the humid air that we all breath), to provide *all* the people of this planet, with an abundance of *fresh clean drinking water*, to refresh them and *hydrate* them *properly* everyday of their lives.

In this way, *Free Electricity for All*, can be used to help us to produce *Free Drinking Water for All* the billions of precious people of this whole earth.

Some of these safe, clean, powerful, new *Thorium Nuclear-Electric Batteries* can be used to electrically-power some new-technology *large-scale robotic farming equipment* to plant, cultivate, *harvest*, and bring to

market, a broad variety of *fresh raw organic fruits* and *fresh raw organic vegetables*, that can be eaten and enjoyed by *All* the precious people of this whole planet earth.

In this way, *Free Electricity for All*, can be used to help us to produce *Free Drinking Water for All*, and hopefully even some good healthy *Free Food* for *All* the precious people of this earth.

Some of the precious people of this earth have *never* had any *really* good *access* to good *nutritious food*, clean safe *drinking water*, and *helpful electricity* to help them live with real *human joy*, with good *vibrant health*, and with real *human peace*.

As we begin to develop, refine, and improve some of these safe, clean, powerful, new *Thorium Nuclear-Electric Batteries*, we may *all begin to see* that we can start to use this exciting *new electric battery technology* (and all the other *useful* human technologies) to either continue to do things *the same old economic way*, that we (the clueless people of earth) have been doing things for centuries; or we (the wise people of earth) can begin to use these powerful new technologies to *free all humankind* from *every form of economic slavery*, including the many types of economic slavery that have been *historically forced* on

the *majority* of the *individual inhabitants* of this earth for *untold millennia*.

So, what do we, the people of earth, *want to do* with our *powerful new scientific discoveries*?

What do we, the inhabitants of this planet, *desire to do to each other* with our powerful *new technologies*?

Do we desire to continue to use science and technology as vicious tools of *mutual economic enslavement*?

Or, do we want to start to use science and technology as helpful tools of *mutual economic liberation*?

What do we wish *to do* for *each other*?

What do we still desire *to do to each other*?

What exactly do we *wish* our scientific discoveries to be *used* for?

Shall we all start to use science to *help* our fellow humans?

What will happen when we use our new *neural-pulse* science to better understand, not just the *nucleus* of an

atom, but also all the *electron orbital patterns* that surround the nucleus?

What will happen when we use our scientific methods to begin to look more closely at all the *neural-pulse structures* that form all the photons, *electrons*, protons, and neutrons, of *every atom* of this whole earth, and every atom of our mortal-human *bodies*?

Now that we have created some *good* working neural-pulse *hypotheses* for our 2-pulse photon, our 3-pulse electron, our 3-pulse quarks, our 9-pulse proton, our 9-pulse neutron, and our  $9(N+M)$ -pulse nuclei, we are ready to look more closely at the *atomic orbital pattern* of a *3-pulse electron*, as it *orbits* a 9-pulse *proton*, to form a single *hydrogen atom*.

How can the 3 individual neural *pulses* (of a 3-pulse electron) form a *3-pulse orbital pattern* surrounding a 9-pulse proton?

What kind of *Orbital Hypothesis* can we now create?

# Our Orbital Hypothesis

What is *Our Orbital Hypothesis*?

When a *3-pulse electron* comes close to a *9-pulse proton*, how can they *combine together* to form a *single atom* of simple *hydrogen*?

What do these *3 individual neural-pulse atomic orbitals* of this simple hydrogen atom actually look like?

Exactly *where* are the *3 neural pulses* (of the electron) in their *pulse orbits* surrounding the proton?

How does the *presence* of a tiny massive *positive* proton, *modify* (and somewhat *rearrange*) the *3 individual neural-pulse orbital patterns* of our simple *3-pulse electron*?

Why does the *Schrodinger Wavefunction* (of 1926) for the hydrogen atom, seem to be *so partially accurate* at predicting the *atomic orbital energy levels* of the hydrogen atom?

What is the actual *relationship* between the *3 hydrogen-neural-pulse orbital trajectories*, and the *Schrodinger Wavefunction* for the hydrogen atom?

What kind of atomic neural-pulse orbital patterns can begin to take form as the *3 distinct* real-light *light-weight* neural *pulses* (of a single relatively-light-weight *3-pulse* electron) start to come closer and closer a tiny *relatively-very-massive* positive proton?

A proton's mass is about *1836 times larger* than the mass of an electron.

An electron has a magnetic dipole moment that is about *658 times larger* than the magnetic dipole moment of a proton.

A proton has a magnetic dipole moment that is about *1.46 times larger* than the magnetic dipole moment of a neutron.

A photon has a magnetic dipole moment that is *exactly zero*, because a photon is a perfectly *balanced* dance (mutual 2-pulse orbit) between two perfectly balanced neural pulses (with one pulse *positive* and the other pulse *negative*).

For this reason, we might want to *rename* the *electron* the *magnetron*, because the electron, with its *super-strong* magnetic *dipole moment*, is able to produce *most* of the *marvelous magnetism* in our milky-way galaxy.

Sometimes, for some elementary particles, a magnetic moment is theoretically calculated with a “*g-factor*” that is an *empirical numerical value* that can be different for different types of elementary particles.

*Intelligent neural-pulse software modeling* of the 2-pulse photon, the 3-pulse electron, the 3-pulse quarks, the 9-pulse proton, the 9-pulse neutron, and the 36-pulse alpha particle may help reveal the *actual source* (neural-pulse *cause*) of the various “*g-factors*” for the various elementary particles and nuclei.

Relative to the *super-heavy* massive proton, the *3 little light pulses* of an electron are *very light-weight*, and the 2 negative electron pulses are also *very magnetic* (because their rapid, charged, negative-electric, neural-pulse *motions* can easily *generate* some very strong *magnetic fields*).

When an electron comes close to a proton, the presence of the *positive* proton begins to *affect* the *magnetic dipole moment* of the electron, because the approaching proton, with its strong positive electric field, begins to *modify* the *behaviors* of the electron’s rapidly-moving outer *two negative pulses*, and also begins to *alter* the behavior of its slowly-moving *central positive pulse*.

A *proton* has a net electric charge of *positive one*.

For non-relativistic (slow) electrons, an electron's *slow central pulse* has a net electric charge of *positive one*.

For non-relativistic (slow) electrons, an electron's *two fast outer pulses* each have a net electric charge of *negative one*.

Therefore, in the absence of any photons, a simple *hydrogen* atom consists of *two fast negative pulses*, one *slow positive pulse*, and a *super-massive positive proton*.

These *4 electric pulse-charges all* sum to *zero*, making the hydrogen atom *neutral*.

As an electron moves very *close* to a proton, its *two negative* outermost pulses tend to *reach out* towards the *positive* proton, while its slow central positive pulse *slows down* even more in a futile effort to *stay away* from the positive proton.

As the two outermost negative pulses begin to *orbit* the *positive proton*, the slow central positive pulse is electrostatically *pulled in* close to the positive proton, and then the two positive charges repel each other, causing the slowly-moving *positive pulse* to start to *bounce* back and forth from the positive proton, first moving closer to the proton, and then moving further away from the proton,



and them moving back towards the proton, *bouncing* back and forth, in an *oscillatory motion*, with a relatively *slow frequency* of oscillation.

As the slowly-moving central positive pulse bounces back and forth at a slow velocity  $v$  with a slow (low) frequency, traveling nearer to the proton, and then traveling farther from the proton, the *two* rapidly-moving outermost *negative* pulses begin to *orbit both* the positive *proton* and the positive central *pulse* in a *cylindrical orbital pattern*, with the *slowly-oscillating cylinder length* being approximately the same as the distance between the proton and the positive pulse.

The two rapidly-moving (quickly orbiting) negative pulses *both orbit* the *hydrogen central line* (the imaginary central line between the proton and the positive pulse) tracing out the approximate *shape* of an *ellipsoidal* (nearly circular) *cylinder*.

This high-speed (*quicksight speed*) circulatory motion of the two negatively-charged outer pulses generates a very *strong* internal hydrogen magnetic field  $B$  that exerts a very strong Lorentz “ $v$  cross  $B$ ” force on the positively-charged (very light-weight) pulse that is traveling (and bouncing back and forth on the hydrogen central line, that is the *hydrogen central axis* of the *hydrogen cylinder*) at a velocity  $v$ .

This ever-present Lorentz “ $v$  cross  $B$ ” force causes the light-weight positive pulse to experience a type of *precession* around the massive proton, causing the *hydrogen cylinder* to move in a relatively *slow precession* around the proton at a *low frequency*, thereby giving an approximately *spherical shape* to the hydrogen atom.

Therefore, our electron’s *3 neural pulses* provide our ground-state hydrogen with *3 different* ground-state *orbital patterns*, that oscillate with *3 different* ground-state *hydrogen orbital frequencies*; (1) the *slowest frequency* at which the whole hydrogen cylinder *rotates* in a precession around the massive proton, (2) the *medium frequency* at which the positive neural pulse *bounces* (and oscillates giving the hydrogen cylinder an oscillating length) against the massive positive proton, and (3) the *fastest frequency* at which the two negative outermost pulses *quickly orbit* the hydrogen central axis (of the hydrogen cylinder).

These *3 distinct* hydrogen ground-state *frequencies* are all contained within the *3-pulse* hydrogen ground-state *orbital patterns* (that we have just partially explained) of the simple hydrogen atom.

In a future paper, we will explain the detailed *neural pulse combination dynamics* that allow one or more 2-

pulse photons to *enter into* (and then later *exit from*) this 3-pulse hydrogen orbital system.

Also in a future paper, we will also show how this 3-pulse hydrogen orbital system, plus a proper set of 2-pulse photons, can manifest the *exact* hydrogen orbital *energy levels* (and corresponding *orbital patterns*) that are nearly *approximated* by Schrodinger's 1926 Wavefunction for the hydrogen atom.

Also in a future paper, we will also explain why *Schrodinger's 1926 Hydrogen Wavefunction* was able to come *so surprisingly close* to approximating the energy levels of our 3-pulse ground-state hydrogen atom, with the addition of an energy-specific set of 2-pulse photons.

Also in a future paper, we will explain how a set of *low-frequency* 2-pulse photons can *combine together*, inside a 3-pulse hydrogen atom (3 neural pulses orbiting a proton), to create a *new higher-frequency* (higher-energy) *2-pulse photon* that can then be *emitted* from the hydrogen atom.

*Our Orbital Hypothesis for Simple Hydrogen* is that the most-simple hydrogen atom is composed of a *single 9-pulse proton* that is orbited by the *3 separate neural pulses* of a *single 3-pulse electron*, such that the slowly-moving positive central pulse *oscillates slowly* (bounces) back and forth (nearer and then further) from the proton,

and also moves very slowly around the *proton*, while the two rapidly-moving outer negative pulses *quickly orbit both* the proton and the positive pulse in their orbital trajectories that *trace out an ellipsoidal cylindrical shape* that slowly moves around the proton to give the hydrogen atom a nearly *spherical shape*, and in this way the *lowest energy orbital state* (the ground-state) of hydrogen is actually composed of *3 orbital patterns* that are oscillating at *3 different orbital frequencies*, corresponding to *3 different orbital energies*, and these 3 hydrogen ground-state orbital patterns are altered (and energized) with the addition of one or more 2-pulse photons, during a simple hydrogen-atom 2-pulse *photon absorption* (hydrogen neural-pulse *combination*) process.

*Our Orbital Hypothesis for All Atoms* is that that all neutral atoms are composed of a set of  $N$  3-pulse electrons,  $N$  9-pulse protons, and  $M$  9-pulse neutrons, with a *single  $9(N+M)$ -pulse nucleus* that is orbited by the  $3N$  separate *neural pulses* of the set of  $N$  3-pulse *electrons*, such that the  $N$  slowly-moving positive central pulses *oscillate slowly* (slowly bounce) back and forth (nearer and then further) from the nucleus, and also move very slowly around the *nucleus*, while the  $2N$  rapidly-moving negative pulses *quickly orbit both* the nucleus and the  $N$  slowly-moving positive pulses, in beautiful orbital trajectories that *trace out a set of modified ellipsoidal cylindrical shapes* that move around the nucleus in a

*precession* to give to the whole atom a *marvelous variety* of interesting (internal and external) *orbital shapes*; and in this way the *lowest-energy orbital state* (the ground-state) of the atom is actually composed of *multiple orbital patterns* that are oscillating at *multiple different orbital frequencies*, corresponding to *multiple different orbital energies*, and these ground-state atomic orbital patterns are *altered* (and *energized*) with the addition of one or more *2-pulse photons*, during a simple atomic orbital *2-pulse photon absorption (neural pulse combination)* process.

Now that we have carefully stated our *orbital hypothesis* for *all atoms*, we are prepared to look more closely at what a *neural-pulse simulated atom* actually is.

Is it possible that all the *atoms* (of this whole milky-way galaxy) are just *beautiful orbital combinations* of simple sets of *real neural pulses*?

What kind of *Atomic Hypothesis* can we now create?

# Our Atomic Hypothesis

What is *Our Atomic Hypothesis*?

What are *all atoms* actually made of?

Is it possible that *all the atoms* of this *earth* are composed entirely of *real neural pulses*?

How do the *two individual pulses* (of a single 2-pulse photon) *behave* when they *both enter* into the *inside* of an atom?

Can the *tiny-fast positive pulse* (of an incoming low-energy 2-pulse photon) somewhat (partially and *temporarily*) take over the *role* of a *slow central pulse* (of a 3-pulse orbital electron), when the low-energy 2-pulse photon *starts to enter* into an atom, as the atom begins to *absorb* the photon?

Can the *tiny-fast negative pulse* (of an incoming low-energy 2-pulse photon) somewhat (partially and *temporarily*) take over the *role* of the *two fast negative pulses* (of a 3-pulse orbital electron), when the low-energy 2-pulse photon *begins to enter* into an atom, as the atom starts to *absorb* the photon?

By allowing the 2 tiny pulses, of the incoming photon, to *partially* take over the role (via *temporary substitution*) of the 3 pulses of an orbital electron, the electron's 3 pulses are able to *move up* into *higher orbital positions*, as the 2 photon pulses effectively form a neuro-electromagnetic *buffer* between the atomic nucleus and the 3 electron pulses that have *all moved up* into *higher orbital positions* that are further away (more spatially separated) from the atom's central nucleus.

*Our  $9(N+M)$  nuclear-pulse, plus  $3N$  orbital-pulse, plus  $2P$  photon-pulse, Atomic Hypothesis* is that *all* the atoms, of this milky-way galaxy, are composed of *a set* of  $9(N+M)$  real-light neural pulses from  $N$  *9-pulse protons* and  $M$  *9-pulse neutrons* that form the *tiny* atomic central nucleus, and also a set of  $3N$  real-light neural pulses from  $N$  *3-pulse electrons* that *expand* to *spatially distribute* their  $N$  slowly-moving *positive pulses*, and also expand to spatially distribute their  $2N$  rapidly-moving *negative pulses*, into neuro-electromagnetic *s, p, d, and f* neural-pulse *orbital patterns*, that can be fully discovered via appropriate neural-pulse *software simulator experiments* to create a set of *exact* neural-pulse orbital-pattern *matches* with actual experimental atomic *spectroscopy* measurements of the actual observed physical energies of the emitted and absorbed photon-frequencies, and also a set of  $2P$  real-light neural pulses from  $P$  *2-pulse photons* that can partially (*temporarily*) replace *some* of the

electronic neural pulses (in *excited atoms*) by allowing some of the electronic neural pulses to *move up* to *higher energy* neural-pulse *orbitals*, and also a *photon-pulse combination mechanism* to allow two low-energy photons to *combine together* inside the *atom* to form a single higher-energy photon that can be *emitted* by the atom, and also a *photon-pulse splitting mechanism* to allow a high-energy photon to *split itself* into two lower-energy photons, that can be *emitted* from the atom.

This powerful new  $9(N+M) + 3N + 2P$  neural-pulse *Atomic Hypothesis* can be used to help us to scientifically-develop the right kind of neural-pulse *simulation software* to scientifically-simulate the energetic *1-pulse Higgs Boson*, the frequency spectrum of *2-pulse photons*, the magnetic *3-pulse electron*, the always-bound *3-pulse up quark*, the always-bound *3-pulse down quark*, the very-stable *9-pulse proton*, the mostly-stable *9-pulse neutron*, all the *9(N+M)-pulse nuclei*, and all the  $(9(N+M) + 3N + 2P)$ -pulse *atoms* that are part of this milky-way galaxy.

Now that we have developed some good working neural-pulse hypotheses for *elementary particles* and *atoms*, let's take a look at the *molecules* that are formed when two or more atoms bind themselves together via their *shared* neural-pulse *orbitals* that form the *covalent bonds* of covalently-bonded *molecules*.



Let's also look at how the *outer atomic* neural-pulse *orbitals* behave in the presence of *ionic bonds* that can hold two or more atoms together in *ionically-bonded* molecules.

What are all the different kinds of *molecules* that can be created here on Earth with our real-light *neural pulses*?

What is the *most-simple* molecule possible?

Which molecule contains *no neutrons*?

Simple diatomic hydrogen possibly?

What is the *most-intelligent* molecule possible?

A human being?

A human molecule?

*How* does a human molecule become *intelligent*?

What is the *core nature* of *intelligence* itself?

What is the real difference between *intelligence* and *knowledge*?

What is the relationship between knowledge, *information*, data, and real neural-pulse *patterns*?

What binds all of the atoms of a whole *human being* together?

What are *we* actually made of?

What kind of *Molecular Hypothesis* can we create?

# Our Molecular Hypothesis

What is *Our Molecular Hypothesis*?

*How are all of the molecules of our local universe formed?*

What significant *physical improvements* can we now make to the important scientific field of *molecular chemistry* with our powerful, detailed, new, physical, deterministic, neural-pulse *model* of the *atom*?

Our powerful, new, physical *3-pulse* electron model, allows us to create a powerful, new, *physical* deterministic *6-pulse* covalent-bond *model*, for *all* of the physical covalent bonds of *all* of the physical molecules of this whole physical universe.

For example, we can now create an exact physical *6-pulse model* for the single *magnetic covalent bond* of *dihydrogen*.

As another example, we can now create a deterministic, physical, double-concentric *12-pulse model* for the *double magnetic covalent bond* of *dioxygen*.

As a further example, we can now create an exact, *geometrically-detailed*, triple-concentric, physical *18-pulse model* for the *triple* magnetic covalent bond of *dinitrogen*.

Let's first consider exactly how *two* simple *hydrogen atoms* can *physically* approach each other (as their *atomic magnetism* pulls them together) to become magnetically-bonded *together* to form a single molecule of *dihydrogen* (diatomic hydrogen).

How can two different magnetic neutral hydrogen atoms, that are initially separated in space, approach each other in just the right kind of physical way, with just the right kind of *relative* magnetic-dipole *orientations*, so as to become magnetically-bonded (connected) together, with a *neural-pulse* single magnetic *covalent-bond* made of *6 real-light* neural *pulses*?

When *two* simple, magnetic, neutral, hydrogen atoms begin to move close to each other, the *3 pulses* (of the one electron of the one hydrogen atom) begin to *feel* the *strong magnetic influence* of the *3 pulses* (of the other electron of the other hydrogen atom), and these *6 pulses* *magnetically* re-orient *themselves* (due to the new increasing magnetic field strengths, *all 6 pulses* are *beginning to feel*, as the two hydrogen atoms continue to *move closer together* in space) into their *mutual-*

*attraction orientations*, which further accelerates the magnetic mutual-attraction and eventual *magnetic covalent bonding* of the two hydrogen atoms together into a single dihydrogen molecule.

One single individual *hydrogen atom* (when considered alone, all by itself, in the universe) has just *one* single electron that is *not paired yet* with any another electron.

Therefore, this one single *unpaired electron* (of just one, solo, isolated, neutral hydrogen atom) still creates a *very strong magnetic field*, that is *not yet muted* (diminished) by a second opposing magnetic field of another electron of opposite spin.

This means that one, single, neutral, isolated *hydrogen atom* has a *very-powerful magnetic field*, and this single hydrogen atom acts like a *super-tiny magnetic compass needle*.

Therefore, *two* separate neutral hydrogen atoms are *magnetically attracted to each other*, in the same physical magnetic-way that *two tiny magnetic compass needles* are magnetically-attracted to each other.

*Both* of the two tiny magnetic needles *dynamically-reorient themselves to each other* as they are spatially-moved closer together, to make themselves become more

and more magnetically-attracted to each other, as they *pull together*, and come together, and then *bond together* with their *magnetic dipole-dipole bond*.

In a like manner, *both* of the tiny magnetic hydrogen atoms *dynamically-reorient* themselves *to each other*, to make themselves become *magnetically-attracted* to each other, as they pull together, and as they come together, and as they *covalently-bond together* to form a dihydrogen molecule (a diatomic hydrogen molecule consisting of two hydrogen atoms magnetically-bound together via their two electrons of opposing spins) that is *magnetically-bonded* together with a physical *magnetic dipole-dipole bond* of the *two paired* (spin-opposing) *electrons*.

As the *two* hydrogen *atoms* start to *come together* and begin to become *very close* to *each other*, there comes a *specific alignment time* when the two hydrogen-cylinders become mostly-aligned (due to their magnetic-attraction) to magnetically-pull themselves together to become *one long cylinder* that contains both hydrogen atoms; with the very-slowly-moving *two massive 9-pulse protons* on the two *outer-ends* of the long cylinder, and with the 2 faster-moving (but still somewhat slowly-moving) *positive pulses* on the *inside* of the long cylinder, and with 2 of the rapidly-moving *negative pulses* quickly orbiting the positive central axis (center line of the long cylinder) in a

*clocklike direction*, and with the other 2 of the rapidly-moving *negative pulses* quickly orbiting the positive hydrogen-molecule central axis (center line of the long hydrogen molecule) in a *counter-clocklike direction*; and then there comes a *specific clocklike bonding time* when the 2 *clocklike negative pulses* spend a *specific portion* of their *time between the two positive pulses*, and this *starts to bind* the hydrogen molecule together, and then there comes another *second specific counter-clockwise bonding time* when the 2 counter-clocklike negative pulses *take their turn* spending a *specific portion* of their *time between the two positive pulses*, and *this continues to bind* the whole *hydrogen molecule together*; and so long as the 4 outer quicklight-speed negative pulses *continue to take turns* spending some time *between the two positive pulses* (and thereby causing the two slow central-line positive pulses to be *strongly-attracted* to these 4 fast negative outer pulses in a way that *actively-binds* the hydrogen molecule together), the hydrogen molecule will *remain bonded together* with its *4+2 covalent hydrogen bond* that is composed of *4 fast-negative pulses* and *2 slow-positive pulses*.

This is how the 4 fast-negative pulses, and the 2 slow-positive pulses, work together to form the *4+2 covalent molecular bond* of the *diatomic hydrogen molecule*, that naturally forms in our Earth's upper atmosphere, from all

the 9-pulse protons, and all the 3-pulse electrons, that are continually *streaming* from the *sun* to our *Earth*.

In like manner, there are many different *interesting types* of *neural-pulse* covalent *bonds* that bind many different kinds of molecules together, right here inside our massive, multi-player, neurally-simulated universe.

For another example, our common *water molecule* is a very interesting kind of molecule.

Many trillions of trillions of these common water molecules fill our *Earth's seas*, that are also full of many different kinds of *dissolved salts*.

The two covalent bonds of a single *water molecule* (with its two hydrogen atoms, and its single oxygen atom) are *particularly interesting*, because it appears that the *neural-pulse* molecular *p orbitals* of the hydrogen-oxygen neural-pulse covalent bond *may* sometimes able to partially *reach into* the *nuclear* neural-pulse *structure* of the super-energetic eight *9-pulse protons* and the eight *9-pulse neutrons* of the oxygen-16 nucleus, of the oxygen atom of the water molecule.

This implies that there may be a way encourage this *144-pulse* oxygen-16 *nucleus* to impart *some* of its *nuclear energy* into the structure of its hydrogen-oxygen *p orbital*



covalent bond to *slightly alter* the nature of this *covalent p bond* to gently *change* the *shape* and *change* the *behavior* of the *water molecule*.

For example, such a *nuclear-modification* of the hydrogen-oxygen *p-orbital* covalent bond (of water) could cause the *shape* of *water* to *change* in a way that causes water to *no longer support* the dissolution of ionic sodium chloride (common salt).

If our scientists fully-discover how to *modify water* (in the scientific laboratory) so it no longer supports the dissolution of ionic sodium chloride (salt), then the salt molecules will *no longer dissolve* in this *nuclear-covalent modified water*.

This nuclear-covalent modified water may be used for the *benefit* of humankind in many ways.

For another interesting example, let's consider a larger molecule, like a long strand of *human DNA*.

Human DNA has a *double-helical* shape and contains many different kinds of *neural-pulse molecular covalent bonds*.

We can first design and write some useful *scientific software* to simulate the covalent *neural-pulse bonds* of

simple small *useful molecules*, like diatomic hydrogen, diatomic oxygen, diatomic nitrogen, methane, and *water*, to work out all the *important scientific details* to improve our neural-pulse models, and then later, after our models are *refined enough*, we can begin to tackle larger molecules like human DNA.

By completely *understanding* (in the hopeful future) all of our *23 chromosomes* of our human DNA molecules, we may be able to place humankind (here on earth) into a *better position* where it can begin to greatly-improve its own DNA to help us all to become *more healthy* and *more intelligent*.

*Human intelligence* may be something that can be fully understood by human beings.

For example, human intelligence may possibly be viewed as a set of *optimal* neural-pulse *frequencies* (of the neural pulses traveling on real axons, advanced axons, and mortal axons, inside all our real brains, advanced brains, and mortal brains) that allow for the type of *clear human thinking* that can allow us to actually understand things.

For a kind of counter example, our mortal human *stupidity* may also be viewed as a set of *sub-optimal* neural-pulse frequencies that *disrupt* our ability to think clearly.

How can we help *all* of the mortal human beings of Earth to become more-intelligent and more-healthy?

If we view the entire mortal human body (and brain) as a *single* super-large *mortal molecule*, will we ever be able to understand this *human molecule* well enough to figure out how to properly *optimize* it for peak performance, *peak health*, and peak intelligence?

What is the future of *all 8 billion* of us super-precious *human molecules* that presently live here on Earth?

Do we plan to quickly *destroy* ourselves *again*?

Or do we plan to *intelligently* help *ourselves* by solving world poverty quickly for *everyone everywhere*?

As *mortal-human scientists*, it seems kind of likely that we may have just *barely* enough *intelligence* to begin to ask ourselves some of these *vital questions* about our future.

Do we the mortal human scientists (*thinking* human *molecules*) of planet Earth have *enough intelligence* to *wisely continue* to further develop this neural-pulse *theory* of *molecules* for the proper and timely *benefit* of *all* of *humankind*?

If we are not working diligently for the *benefit of all* human kind, then what are we doing?

If we are not working diligently to *solve world poverty*, then what are we doing?

Now that we have described *our molecular hypothesis*, including our new neural-pulse theory of *all* molecules, let's turn our attention to some of the interesting elementary particles that *do not compose* the molecules that compose us.

These *additional* elementary particles are important to understand, because they are *necessary to support* some *vital aspects* of this universe where we currently seem to live.

Some of these additional (unstable) elementary particles support *vital decay chains* that allow all of the *Higgs bosons* (in energetic stars) to *always* quickly decay into particles that decay into the *stable* photons, electrons, protons, and neutrons that compose *all the stable atoms and stable molecules* of this whole universe.

What is the real nature of these additional *unstable* elementary particles?

Why do all the half-spin (one half of Planck's Constant) particles (*fermions*) seem to also have a corresponding anti-particle?

Why are the 24 *fermions* composed of a family of 12 *quarks* and a family of 12 *leptons*?

An *electron* is a lepton fermion.

What is the *anti-particle* for the electron?

A *positron*.

There seems to be *a whole lot* of electrons here on Earth.

Why don't we find many *positrons* here on Earth?

How is a positron *different* than an electron?

What kind of *Positron Hypothesis* can we make?

# Our Positron Hypothesis

What is *Our Positron Hypothesis*?

What is a *positron*?

How exactly is a positron different than an electron?

A positron is *positively* charged.

A positron is the electron's *antiparticle*.

A positron has the *same mass* and the *same spin* (internal angular momentum) as an electron, but a positron is always *positively charged*.

What is our *3-pulse* Positron Hypothesis?

*Our 3-pulse Positron Hypothesis* is that the positron particle is composed of exactly 3 real-light *neural pulses* in a structure that is very similar to the 3-pulse structure of the electron, except that *the 3 signs* on the 3 *pulse charges* are *all reversed*, such that the positron is composed of *two* rapidly-orbiting outer *positive pulses* that orbit a *single* central slowly-moving *negative pulse*, such that the positron has the *same mass* as the electron, and has the *same angular momentum* of one half of

Planck's Constant, and therefore the whole positron has a *net-positive* electric charge.

A *3-pulse positron* often has great *difficulty* staying alive for very long in our universe, because most positrons encounter an electron pretty *quickly*, and when a *3-pulse positron* and *3-pulse electron* come together, their combined *6 neural pulses* can *interact* together, and *combine* together, in a way that can create *two 2-pulse photons* that have a total of *just 4 neural pulses*.

In a future paper, we will describe this *6-pulse to 4-pulse* combination *process* that is at the *heart* of electron-positron *annihilation* into a *pair* of *photons*.

The positron and the electron are two examples of elementary particles that are known as *leptons*.

The electron and the positron have the *same mass*.

The massive *muon particle*, and the super-massive *tau particle*, are two other particles that are also known as *leptons*.

*Leptons* can exist *all by themselves* in nature, and they have an *internal spin* of *one half* of Planck's Constant, and they are part of the *electron family* of elementary particles.

The *3-pulse muon* particle seems to be very *similar* to the *3-pulse electron* in many ways.

However, the muon particle seems to have a much *greater mass* that is about *207 times* the mass of an electron.

This *heavy mass* seems to make the *muon unstable*.

What kind of a *Muon Hypothesis* can we create?



# Our Muon Hypothesis

What is *Our Muon Hypothesis*?

What is the *most-simple* (a la Occam) *muon hypothesis* that we can possibly make?

*Our 3-pulse Muon Hypothesis* is that the *muon particle* is composed of exactly *3 real-light neural pulses* in a structure that is very similar to the 3-pulse structure of the electron, except that the *3 neural pulses* of the *muon* are about *207 times more massive*, and they carry *more electric pulse-charge*, and the *Compton pulse-orbit radius* of the *muon* is about *207 times smaller* than the Compton pulse-orbit radius of the electron, such that the muon always has a net-negative charge, and an angular momentum of one half of Planck's Constant.

Our *3-pulse massive muon particle* is *not* a stable particle, because it decays in about *2.2 microseconds*, possibly because its 3-pulse structure is just a bit *too massive* for its real-light *axons* to be *completely* stable like its super-light-weight cousin, the *super-stable 3-pulse electron*.

Which kind of real-light *axons* (of the real-light axon field) are able to support the *3 massive neural pulses* of the *massive muon particle*?

Which kind of real-light *axons* (of the real-light axon field) are able to support the 3 *less-massive* neural *pulses* of the *light-weight electron*?

Which kind of real-light *axons* (of the real-light axon field) are able to support the 3 *super-massive* neural *pulses* of the *super-massive tau* particle?

Do *exactly* the very *same* kinds of real-light *axons* try to support *all 3* of these interesting lepton particles?

Or, are there 3 *different sets* of real-light *axons* to properly support these three different particles of the electron family?

How many types of real-light axons are *physically-needed* to properly support the *electron*, the *muon*, and the *tau* particle?

The *electron* is the *least* massive of these 3 particles, with a rest mass of only about 511 thousand electron volts.

The *muon* is about 207 times more massive than the electron.

The *tau particle* is about 3,477 times more massive than the electron, which is about 16.8 times more massive than the muon.

What is the neural-pulse structure of this super-massive *tau particle*?

What kind of *Tau Hypothesis* can we create?

# Our Tau Hypothesis

What is *Our Tau Hypothesis*?

What is the *most-simple* (a la Occam) *tau hypothesis* that we can possibly make?

*Our 3-pulse Tau Hypothesis* is that the *tau particle* is composed of exactly 3 real-light *neural pulses* in a structure that is very similar to the 3-pulse structure of the electron, except that the 3 *neural pulses* of the *tau particle* are about 3,477 times *more massive*, carry *more pulse-charge*, and the super-tiny *Compton pulse-orbit radius* of the *tau particle* is about 3,477 times *smaller* than the Compton pulse-orbit radius of the electron, such that the *tau particle* always has a *net-negative charge*, and an angular momentum of *one half* of Planck's Constant.

Our 3-pulse *tau particle* is about 16.8 times more massive than the mass of our 3-pulse *muon*.

But our *super-tiny* super-massive 3-pulse *tau particle* does not last nearly as long as our 3-pulse *muon* does.

Our 3-pulse *tau particle* is a *super-unstable* particle with a very short lifetime of just *0.29 picoseconds*, possibly because its super-tiny super-massive 3-pulse neural pulse

structure is just way *too massive* (and way *too tiny*) to be stable, like the super-stable *3-pulse* neural pulse structure of the *electron*.

Why is the *larger* and lighter *3-pulse* electron *so stable*?

Why is the *tiny* massive *3-pulse* tau particle *so super-unstable*?

Why is the *medium-sized* medium-mass *3-pulse* muon *also unstable*?

These *3-pulse leptons* (the tau, the muon, and the electron) all have corresponding *3-pulse antiparticles* (the *antitau*, the *antimuon*, and the *positron*) that also are all composed of *3 real-light neural pulses*.

There also exist some *net-neutral* super-lightweight *particles*, that are also considered to be leptons, that also carry angular momentum (one half of Planck's Constant), that are called *neutrinos*.

These *neutrinos* seem to be *difficult* to detect.

Why are these light neutral neutrino particles so hard to *measure directly*?

Why are there *3 different kinds* of neutrinos (the *electron neutrino*, the *muon neutrino*, and the *tau neutrino*) and *3 corresponding* anti-neutrinos (the *anti-tau neutrino*, the *anti-muon neutrino*, and the *anti-electron neutrino*)?

Why do these 3-pulse neutrinos *even bother to exist*?

What is the *inner pulse structure* of these 3-pulse neutrino particles?

What kind of *Neutrino Hypothesis* can we create?

# Our Neutrino Hypothesis

What is *Our Neutrino Hypothesis*?

*How many* neural pulses must be contained inside one single neutrino?

Why does it seem like there *3 different kinds* of neutrinos?

Why do each of these 3 kinds of neutrinos seem to *change* into *each other* as they travel, kind of like they are *oscillating* into *each other* and out of each other?

What is the real neural-pulse nature of these *neutrino oscillations*?

Why are all 3 types of these oscillating neutrinos so *light-weight* with such *super-tiny masses*?

Why are *all 3* of these interesting neutrinos *completely neutral* when viewed from a distance?

Why do all 3 types of these neutrinos carry *exactly* the same *amount* of intrinsic angular momentum as an electron, which always is precisely *one half* of Planck's Constant?

How can 3 *tiny* neural *pulses* most easily combine together to create a *very-large*, net-neutral, *light-weight neutrino* that has an angular momentum of *one half* of Planck's Constant?

What kind of *intelligent neutrino hypothesis* can we create with just 3 real-light neural *pulses*?

What exactly is Our *3-pulse* Neutrino Hypothesis?

*Our 3-pulse Neutrino Hypothesis* is that a neutrino is composed of *exactly 3 tiny* (with *tiny mass* and *tiny charge*) real-light *neural pulses*, with the *two tiny negative outer pulses* rapidly-orbiting (with a *very-large neutrino Compton pulse-orbital radius*) the central slowly-moving *tiny positive pulse*, with this central *tiny positive pulse* containing *exactly* the same *magnitude* of *charge* as the *sum* of the two *tiny negative pulses combined* to make the whole neutrino *net neutral* (completely neutral), and with the *very-large neutrino Compton pulse-orbital radius* (at which *very-large radius* the two negative outer pulses rapidly-orbit the central positive pulse) a *sufficiently-large spatial radius* such that the neutrino always maintains a constant angular momentum of *one half of Planck's Constant*, even though *all 3* of the actual *pulse masses* of the two outer negative pulses (and the central positive pulse) are all *super-tiny masses* to give to the whole neutrino a *super-tiny mass*.



In this way, *every neutrino* is *very large* (with a super-large Compton radius), *completely-neutral*, and has a *super-tiny mass*.

All 3 kinds of neutrinos are *big, light, and neutral*.

Even though all 3 types of neutrinos are *neutral, light-weight*, and spatially *huge* in size, they still need to be *just* a little bit *different* from *each other*, in order to *maintain* their *unique* individual *identities* as 3 distinct types of neutrinos.

What is Our 3 Neutrinos Hypothesis?

*Our 3 Neutrinos Hypothesis* is that there exists exactly 3 *different types* of *large, light, neutral 3-pulse neutrinos*, and each type of neutrino has a *different Compton radius*, with correspondingly *different mass* for each of its 3 real-light neural pulses, and these 3 real-light neural pulses, of each type of neutrino, propagate along the 3 *different sets* of real-light *neural axons* corresponding to the 3 *different leptons* (the electron, the muon, and the tau particle), and these 3 neutrino types *oscillate* into and out of each other, because the 3 *types* of real-light *neural axons* (that propagate the 3 real-light neural pulses) are *intertwined enough*, and all their tiny neural *pulse masses* are *close enough*, so that each type of neutrino *can* easily *jump*

from its *own* proper *axon type* to a *nearby axon type*, and thus *start to become* the other type of neutrino, as it begins to propagate on the real-light axons that belong to the other type of neutrino; with *3 sets of axon types* being for the *3 neutrino types*, and another *3 sets of axon types* being used for the *3 anti-neutrino types*.

*Our 3-pulse Anti-Neutrino Hypothesis* is that there also exists exactly *3 different types* of *3-pulse anti-neutrinos*, and each of these *3-pulse anti-neutrinos* have a similar neural pulse structure as the *3 neutrinos*, except that the *3-pulse anti-neutrinos* have two tiny fast *positive* outer pulses, and a central slow tiny pulse that is *negative*.

The *different real-light axon types*, in the interleaved real-light axon field, exist to provide proper real-light *axonal support* to fully support the differential propagation of the *6 different* kinds of *neutrinos*, and the *6 different* kinds of *electrons*, and the *12 different* kinds of *quarks*, which all together are the *24 different types* of *3-pulse fermions* in the standard model of elementary particle physics today in 2023.

Now that we have introduced and discussed the *24 different types* of *3-pulse fermions*, let's turn our attention to another type of elementary particle that is *not* a fermion.

Some physicists strongly believe that an elementary particle called a *gluon* is able to *glue* (hold) *quarks together* inside of *2-quark mesons* and *3-quark baryons*, like the *3-quark proton* and the *3-quark neutron*.

Other physicists sometimes allow themselves to really wonder if the *gluon* is really a proper elementary particle, because it almost seems like no scientist has actually ever *seen* a gluon, all by itself, *far away* from any quark.

What is the actual *reality status* of these *hypothetical gluons*?

Do they *really* exist?

Is there any *other mechanism* that can *successfully bind* two or three quarks together?

How is a gluon really *any different* than a simple photon?

Can real *neuro-electromagnetic forces* bind quarks together *without* the help of gluons?

Let's take a good look at these *interesting gluon particles*?

What kind of *Gluon Hypothesis* can we create?

# Our Gluon Hypothesis

What is *Our Gluon Hypothesis*?

What is the *most-simple* (a la Occam) *gluon hypothesis* that we can possibly make?

Does the hypothetical *gluon* need to be much different than a simple *photon*?

Is the neural pulse structure of a *gluon* more likely to be like a *2-pulse photon*, or a *3-pulse lepton*, or a *3-pulse quark*, or a *9-pulse baryon*?

Does a gluon have the *same rest mass* (zero rest mass), the *same charge* (zero net electric charge), and *same spin* (1.0 times Planck's Constant) as simple photon?

Yes.

Gluons really do seem to be *quite similar* to photons in *many interesting ways*.

What actual, fully-verified, *completely-scientific* experimental *evidence* is there for the *hypothetical color-charge* of a gluon?

Is this hypothetical *color-charge* really needed?

What actual empirical scientific *measurement* does the *old color-charge theory* attempt to explain?

Can we discover a good theoretical way to create a *new quark-gluon theory* that is *more-simple* and *more-easy* to *understand*?

What is the *most-simple gluon theory* we can possibly create with our *natural human intelligence*?

Do we all really know *for sure* (with complete scientific certainty) that a *gluon* really has a *color-charge*?

*Who says* a gluon needs to be any different than a photon?

Can high-energy (*X-ray photons* and *gamma-ray photons*) photon particles be *absorbed* by a *nucleus*?

Do *gluons* actually hold *3-pulse quarks* together inside a *9-pulse baryon*?

*How exactly* do gluons hold three *3-pulse quarks* together inside a *9-pulse proton*?

What is our *2-pulse Gluon Hypothesis*?

*Our 2-pulse Gluon Hypothesis* is that a *gluon* is very *similar* (and possibly identical to) a *photon*, and a *gluon* consists of exactly 2 real-light *neural pulses*, with one of the neural pulses being *positively* charged, and with the other neural pulse being *negatively* charged; and these two electrically-charged neural pulses *mutually orbit* each other with a very rapid quicklight velocity that is *faster* than *light*, in an *ellipsoidal double-helical orbital pattern*, and this whole ellipsoidal double-helical orbital pattern *travels* at the *speed* of *light*.

Therefore, our simple *2-pulse Gluon Hypothesis* is also simply that a *gluon* is a simple *2-pulse neural structure* that is composed of a single *positive* real-light neural *pulse* orbiting a single *negative* real-light *pulse*.

What gluon hypothesis could possibly be any *more-simple* than this one?

What if gluons *are* photons?

Is this concept *simple*?

Is it *too* simple?

Why?

Gluons and photons are both *vector bosons* because they have *spin one* (intrinsic angular momentum of *one* times *Planck's Constant*).

Now that we have discussed the *2-pulse gluon vector boson*, and the *2-pulse photon vector boson*, we are ready to discuss some additional *spin-one vector bosons*.

The *Z Zero Vector Boson*, and the *W Plus Vector Boson*, and the *W Minus Vector Boson*, all seem to be very *different* from the *gluon vector boson* or the *photon vector boson*.

Why do these other *3 vector bosons* seem to be so *different*?

Let's take a closer look at these *3 massive vector bosons*.

First let's consider the *Z Zero Boson* because it is *net-neutral*, kind of like the *2-pulse gluon* and the *2-pulse photon*.

What kind of *working hypothesis* can we create for the *2-pulse Z Zero Boson*?

# Our Z Zero Hypothesis

What is our *Z Zero Boson Hypothesis*?

What is the very best preliminary *neural-pulse Z Zero Boson Hypothesis* we can possibly make today in 2023?

In this *4 Brain Theory paper*, we are presenting our preliminary *Z Zero Hypothesis*, and our initial hypotheses for several other elementary particles.

These *preliminary hypotheses* will be *improved* and refined greatly with a little more time and experience.

The *most important particles* are the ones that are *fully stable*, and can be used to *build useful things* (like atoms, molecules, planets, and intelligent brains) that can be really beneficial for us *precious human beings*.

Some of the unstable particles, like the *Z Zero Boson* and the *Higgs Boson*, and some of their interesting decay products, are really important to help us to understand many things, including the detailed nature of *neural pulse simulation physics*.

Like the Higgs Boson, the *Z Zero Boson* is *very massive* with a *Z Zero rest mass* of about *91 GeV* (this rest mass



equals 91 billion electron volts divided by the speed of light squared), and is *very unstable* with a *very short lifetime* of just about  $3 \times 10^{-25}$  seconds (0.3 trillionths of a trillionth of a second).

*Why* should we even concern ourselves with a *super-unstable* particle, like the Z Zero Boson, that is so extremely unstable, with such a *super-short* half-life?

Because this Z Zero particle *seems to* actually sometimes *exist* here inside our milky-way galaxy neural simulation, and it is often a decay product of the Higgs Boson, so it is important for us to better *understand* it.

In particular, we need to *really understand* its *neural pulse structure*, so we can better understand all the neural-pulse elementary particles.

It certainly looks like the Z Zero Boson has *just 2* neural *pulses*.

Like the photon, a Z Zero Boson is a *net-neutral* particle with *zero* magnetic *dipole moment*.

The Z Zero Boson seems to be *very similar* to a super-high energy *photon* with a massive energy of 91 GeV.

How is a Z Zero Boson really *any different* than a simple 91 GeV photon?

Exactly how does a Z Zero Boson *behave differently* than a 91 GeV photon?

Because the 91 GeV Z Zero Boson is *extremely unstable*, and *quickly* falls apart in *less* than a trillionth of a trillionth of a second.

A 91 GeV photon is *completely stable*, and can last *forever* in this universe, all by itself, so long as it does not encounter anything that might destroy it.

What makes a 2-pulse 91 GeV Z Zero Boson *so unstable*, while a 2-pulse 91 GeV photon is *so stable*?

Perhaps the Z Zero Boson has 2 neural pulses that propagate on *two* different kinds of real-light *axons*, and these “Z Zero Axons” are different than the two axon types used by the 2 pulses of the photons.

Do these “Z Zero Axons” propagate their pulses in an *unstable way*, that is way more unstable, than the stable way that “*photon axons*” behave?

Do the *most-stable particles* (like photons, electrons, protons, and neutrons) all have *neural pulses* that *only*

*propagate on stable axons*; or are the *sizes*, shapes, and inner charge distributions of these *stable neural pulses*, more stable than the inner charge distributions, *shapes*, and sizes of the *unstable neural pulses*?

Do the *most-unstable bosons* (like Higgs Bosons, Z Zero Bosons, w plus bosons, and w minus bosons) have one or more neural *pulses* that *propagate* on one or more *unstable axons*?

It appears that the core nature of *neural-pulse axon-structure instability* needs to be scientifically investigated much more deeply in the near future.

By making some *key improvements* (in the near future) to this *neural pulse theory of elementary particles*, we may be able to scientifically *predict* (from first principles) the *exact lifetimes* (and exact rest masses) of every neural-pulse particle.

What is *our 2-pulse Z Zero Hypothesis*?

*Our 2-pulse Z Zero Hypothesis* is that the unstable Z Zero particle is composed of exactly 2 real-light *neural pulses*, and these 2 neural pulses have the *same pulse mass* and the *same pulse electric-charge magnitude*, with *one* of these *pulses* being *positively* charged, and with the *other pulse* being *negatively* charged, and with these two neural

pulses *mutually* orbiting *each other* at the special quicklight speed (about 6.36 times faster than the speed of light), at a tiny *specific z zero pulse-orbital radius*, with *two equal pulse masses*, such that the total angular momentum of the whole *z zero particle* is equal to *Planck's Constant*, and the total *z zero mass* is about *91 GeV*, and the whole *z zero particle* is *net-neutral*, and due to the *z zero pulse-axon-instability* this whole *z zero particle* is only able to survive for about  $3 \times 10^{-25}$  *seconds*, before it naturally decays into other particles, that eventually decay into stable photons, electrons, protons, and neutrons.

Basically, *our Z Zero Hypothesis* is that the *z zero particle* is like a special-purpose *91 GeV photon* that *decays really fast* into other particles.

This *Z Zero* particle is also kind of similar in *some ways* to the *W Plus* particle and to the *W Minus* particle.

Now let's consider *Our W Plus Hypothesis*.

# Our W Plus Hypothesis

What is *Our W Plus Hypothesis*?

How is a W Plus Boson *different* than a Z Zero Boson?

A Z Zero Boson is *net neutral* with a *rest mass* of about *91 GeV*.

A W Plus Boson has a *positive net-electric charge* of *plus one* with a *rest mass* of about *80 GeV*.

Therefore, the internal *neural-pulse* structure of a *2-pulse W Plus Boson* must properly provide the W Plus particle with this *positive net-electric charge*.

*Our 2-pulse W Plus Hypothesis* is that the W Plus particle is composed of exactly *2 real-light neural pulses*, and these *2 neural pulses* have *2 different pulse masses* and *2 different pulse-electric charge magnitudes*, with the *positive pulse* having a net-electric charge of *plus two*, and the *negative pulse* having a net-electric charge of *minus one*, thereby giving the *whole W Plus particle* a net-electric charge of *plus one*, and these two neural pulses *mutually orbit each other* at the special *quickness* (that is about *6.36 times faster* than the speed of light) at a tiny *specific W Plus pulse-orbital radius*, with

*two different pulse masses, such that the total angular momentum of the whole W Plus particle is equal to Planck's Constant, and the total W Plus mass is about 80 GeV, and the whole W Plus particle is net-positive, and due to the W Plus pulse-axon-instability this whole W Plus particle is only able to survive for about  $3 \times 10^{(-25)}$  seconds, before it naturally decays into other particles, which then decay into the stable photons, electrons, protons, and neutrons that make up all the stable atoms and all the stable molecules of this whole milky-way galaxy of stars, planets, moons, and people.*

*Therefore our 2-pulse W Plus particle is pulse-charge lopsided with its powerful plus-2 positive neural pulse overpowering its weaker minus-1 negative neural pulse.*

*This pulse-charge lopsidedness gives our 2-pulse W Plus particle a finite magnetic dipole moment.*

*Now let's consider Our W Minus Hypothesis.*

# Our W Minus Hypothesis

What is *Our W Minus Hypothesis*?

How is a W Minus Boson *any different* than a W Plus Boson?

Both the W Plus Boson and the W Minus Boson have a *huge rest mass* of about  $80 \text{ GeV}$ , and both particles decay *super-fast* in just  $3 \times 10^{-25}$  seconds.

However, a W Plus Boson has a *positive* net-electric charge of *plus one* while a W Minus Boson has a *negative* net-electric charge of *minus one*.

Therefore, the *internal* real-light neural-pulse *structure* of a *2-pulse* W Minus Boson must properly provide the W Minus particle with this *negative* net-electric charge.

*Our 2-pulse W Minus Hypothesis* is that the W Minus particle is composed of exactly 2 real-light *neural pulses*, and these 2 neural pulses have 2 different *pulse masses* and 2 different pulse electric-charge *magnitudes*, with the *positive pulse* having a net-electric charge of *plus one*, and the *negative pulse* having a net-electric charge of *minus two*, thereby giving the *whole* W Minus particle a net-electric charge of *minus one*, and these two neural

pulses *mutually orbit* each other at the special *quicklight* speed at a tiny *specific W Minus pulse-orbital radius*, with *two different pulse masses*, such that the total angular momentum of the whole W Minus particle is equal to *Planck's Constant*, and the total *W Minus mass* is about *80 GeV*, and the whole W Minus particle is *net-negative*, and due to the *W Minus pulse-axon-instability* this whole W Minus particle is only able to survive for about  $3 \times 10^{-25}$  seconds, before it naturally decays into other particles, which then decay into *stable* photons, electrons, protons, and neutrons.

Therefore our *2-pulse W Minus* particle is *pulse-charge lopsided* with its powerful *minus-2* negative neural pulse overpowering its weaker *plus-1* positive neural pulse.

This *pulse-charge lopsidedness* gives our *2-pulse W Minus particle* a *finite magnetic dipole moment*.

We have now provided some good working neural-pulse hypotheses for the huge massive *1-pulse scalar boson* (the Higgs Boson), and for the *2-pulse vector bosons* (the photon, the gluon, the z zero particle, the w plus particle, and the w minus particle).

Now, let's turn our attention to a very hypothetical *2-pulse tensor boson* called the *Graviton*.



What kind of neural-pulse *hypothesis* can we create for this super-elusive super-hypothetical *Graviton*?

# Our Graviton Hypothesis

What is *Our Graviton Hypothesis*?

Many bright theoretical physicists have already attempted to create a *mathematically-consistent* theory of *quantum gravity*.

In some of these courageous theoretical attempts, the *graviton* is the *hypothetical* quantum of *gravity*.

However, it seems that *no* experimental *physicist* has ever actually seen or observed a *graviton*, so it is mostly *unknown* if they really exist or not.

Some theoretical physicists believe that *if* the graviton does exist, then it must be a *massless spin 2 particle*.

Such a massless *spin 2* particle is, of course, *very easy* to *create* with our powerful new *neural-pulse* theory, that we are describing in this present 4 Brain Theory paper.

We can easily create such a *hypothetical graviton* as a simple *2-pulse particle*.

What is our current working *2-pulse* Graviton Hypothesis?

*Our 2-pulse Graviton Hypothesis* is that, if the graviton does in fact exist, and the *graviton* is indeed a *massless spin 2 particle*, then the *graviton* can be viewed as having a neural-pulse structure that is *mostly similar* to the neural-pulse structure of a *photon*, with *2 real-light neural pulses*, with *one pulse positive* and the *other pulse negative*, that *mutually orbit* each other at the special exact *quickness speed*, with *equal pulse charges*, and *equal pulse masses*, and a *pulse-pulse orbital radius*, and *pulse-mass quicklight orbital velocities*, such that the *total angular momentum* of the *whole graviton* particle is exactly equal to *two times Planck's Constant*.

This super-simple *graviton hypothesis* gives our theoretical neural-pulse graviton a *spin of 2* (two times Planck's Constant).

However, this simple graviton hypothesis *may* not really be *needed*, because *gravity* is most likely *not due* to any such *spin-2* graviton particle.

*Gravity does* not really *need* such a specific *spin-2* graviton particle; because *all gravity* is actually *caused* by the *momentum transferred* from scalar-boson *spin-zero* dark-matter particles, when they *scatter off* of all the visible-matter particles of this milky-way galaxy, as we

have already *described* in *sufficient* physical *detail* this present 4 Brain Theory paper.

Gravity is *not caused* by the behavior of *spin-2* gravitons

Gravity *is caused* by the scattering of *spin-zero* dark-matter particles.

Gravity is caused by the scattering of spin-zero *scalar-boson* dark-matter particles as they momentum-bounce and *momentum-scatter* off of *all* the visible-matter (ordinary-matter) particles of our local universe.

Now that we have described the internal neural-pulse structures of *all* of the elementary boson particles of the standard model of elementary particle physics, let's look more closely at the *category* of *bosons* in *general*.

What kind of neural-pulse *Boson Hypothesis* can we create?

# Our Boson Hypothesis

What is *Our Boson Hypothesis*?

What is a *Boson*?

A Boson is a particle that has *spin-zero*, or *spin-one*, or *spin-two*, or *spin-three*, etc.

A Boson is *not* a Fermion.

Bosons *behave differently* than Fermions.

A Fermion is a particle that has *spin-half*, or *spin-three-halves*, or *spin-five-halves*, or *spin-seven-halves*, etc.

Exactly how many different kinds of *Bosons* currently (today in 2023) exist in our local milky-way galaxy?

How can we know for sure?

One of the most *famous* Bosons is called the *God Particle*.

This *God Particle* is also known as the *Higgs Boson*.

This Higgs Boson is a *scalar boson* because it has *zero spin*.

This means that the very-special super-massive *boson* that is the *Higgs God Particle* has *zero spin*.

Can *every type* of *zero-spin boson* be logically considered as a particular type of *god particle*, because *zero-spin* is about as simple (god-like fundamental) as one can theoretically (possibly) get?

Why does the massive *125 GeV Higgs Boson* seem to have such a *short lifetime* of just around  $1.6 \times 10^{-22}$  seconds (160 trillionths of a trillionth of a second)?

*Why* can't this *super-massive Higgs Boson God Particle* last for at least a billionth of a billionth of a second?

Why does the Higgs Boson decay into other particles *so very quickly*?

Why do the 91 GeV *z zero boson*, the 80 GeV *w plus boson*, and the 80 GeV *w minus boson* seem to decay *even more quickly* in just about  $3 \times 10^{-25}$  seconds?

Why does a massive Higgs Boson currently appear to live for about *533 times longer* than these other 3 massive bosons?

Why do *photon bosons* physically *live forever*?

Why do *gluon bosons* theoretically *live forever*?

Are these *gluon bosons* theoretically *confined* with *quarks*?

Why does a *photon boson*, of *any frequency* seem to be so *completely stable* that it can theoretically *live forever*?

Why does each and every photon boson seem to be super-stable for each and *every photon-frequency*?

Why do there seem to be literally *millions* of stable *photon frequencies*?

What is a *boson*?

A boson is particle that has *whole integer spin*.

Therefore, a *boson* must have an integer-valued *spin* of 0, 1, 2, 3, etc.

The *spin* of a *boson* is therefore an *integral-multiple* of *Planck's Constant*.

What kind of a *boson hypothesis* can we create, today in 2023, to properly account for all the boson particles (including all the *super-simple 1-pulse scalar bosons*) that are possible (and probable) in our whole Milky Way Galaxy?

What is our *current working* Boson Hypothesis?

*Our Boson Hypothesis* is that *all 12* of the *boson elementary particles* are composed of just *1* or *2* neural *pulses* as follows:

Spin 0 *Scalar* Tiny Ultrafast Dark Bosons:

The 1-pulse Dark *Neutral* Bosons

The 1-pulse Dark *Plus* Bosons

The 1-pulse Dark *Minus* Bosons

Spin 0 *Scalar* Larger Slower Light Bosons:

The 1-pulse Neutral *Higgs* Bosons

The 1-pulse Light *Plus* Bosons

The 1-pulse Light *Minus* Bosons

Spin 1 *Vector* Bosons:

The 2-pulse *Photon*

The 2-pulse *Gluon*

The 2-pulse *Z Zero*

The 2-pulse *W Plus*

The 2-pulse *W Minus*



Spin 2 *Tensor* Bosons:  
The 2-pulse *Graviton*

*All 12* of these *elementary bosons* seem to be internally-composed *entirely* of simple *neural-pulse* structures.

Each spin-1 vector boson is its *own antiparticle*, except for the *w plus* and the *w minus*, which behave as *antiparticles* for *each other*.

You may have noticed that we have introduced *5 new* 1-pulse *scalar bosons* into our little family of elementary bosons.

The *Dark Neutral* Bosons, the *Dark Plus* Bosons, the *Dark Minus* Bosons, the *Light Plus* Bosons, and the *Light Minus* Bosons are all new to elementary particle physics.

What is the nature of these 3 new ultrafast “*Dark Bosons*”, and what makes the 2 new “*Light Bosons*” so much more massive (and slower) than the 3 *ultrafast* super-tiny *Dark Bosons*?

Let’s first look more closely at the better-known super-massive *Light Neutral Higgs Boson*, and also at these 2 new charged *Light Bosons*, that together form our 1-pulse spin-0 set of 3 Scalar *Light Bosons*.

What is the core nature of these 3 *Scalar Light Bosons*?

# The 3 Scalar Light Bosons

Why are these 3 *Scalar Light Bosons*?

The 3 Scalar Light Bosons are the *Higgs Boson*, the *Light Plus Bosons*, and the *Light Minus Bosons*.

Why are all 3 of these Scalar *Light Bosons* composed of just one single Real *Light Neural Pulse*?

Why are all 3 of these Scalar Light Bosons so much *more massive*, and so much *slower* (in their speed of travel) than the 3 new ultra-fast Dark Bosons?

Why is the Higgs Boson included in our list of 3 Scalar Light Bosons, even though the Higgs Boson often seems to be *even more massive* than most instances of the other two types of light bosons?

What makes the 3 scalar light bosons so much *easier to see* (easier to detect, easier to measure, and easier to observe) than the 3 tiny fast dark bosons?

With these 3 *Scalar Light Bosons*, we have decided to call them “*Light Bosons*” because they form all the particles of “*Light*”, which are all the “*visible*” particles, which are all the *visible* (easy to see, and easy to observe)

*elementary particles* formed from these 3 *Scalar Light Bosons*.

These 3 *Scalar Light Bosons* are the 3 *bosons of light*, the 3 *bosons of visible light*, that are the basic components of all *visible matter*.

The *Higgs Boson* is a huge super-massive *boson of light*, because it always quickly decays into combinations of the *other two light bosons*.

The *Higgs Bosons* always promptly decays into particles that are dynamic combinations of *Light Plus Bosons* and *Light Minus Bosons*.

These *Light Plus Bosons* combine with the *Light Minus Bosons* to compose *all* the photons, electrons, protons, and neutrons, that make up all the atoms, all the molecules, and all the visible-matter (*Light Matter*) of our whole milky-way galaxy.

The *Light Plus Bosons* are a *family of positive-charged bosons*.

The *Light Minus Bosons* are a *family of negatively-charged bosons*.

What about the Light *Neutral Higgs* Boson that was experimentally discovered by the LHC at CERN in 2012?

# Light Neutral Higgs Boson

What is this *Light Neutral Higgs Boson*?

This *Light Neutral Higgs Boson* is a super-massive *net-neutral* real-light (real-Higgs) *neural pulse* (action potential) that propagates on the Higgs axons of the axon-Higgs field.

This super-massive *125 GeV* Neutral Higgs Boson decays really quickly, in just around  $1.6 \times 10^{-22}$  seconds (160 trillionths of a trillionth of a second), into various combinations of the Light *Plus* Bosons and the Light *Minus* Bosons.

The large massive *Net-Neutral* Higgs Boson (Higgs action potential, propagating on the Higgs axons of the axon-Higgs field) rapidly decays into simple sets of *positively-charged* Light Plus Bosons, and *negatively-charged* Light Minus Bosons.

This is what the Neutral Higgs Boson does.

This is the majestic purpose of the *God Particle* that is the Light Neutral Higgs Boson.

This *Light Neutral Higgs Boson* always decays into nothing other than a set of *Light Plus Bosons* and a corresponding set of *Light Minus Bosons*.

The 1-pulse *Light Neutral Higgs Boson* always simply decays into a set of 1-pulse *Light Plus Bosons*, and a set of 1-pulse *Light Minus Bosons*.

In this way, the Higgs Bosons creates the other two *Light-Boson Families*, that compose all the visible (light) elementary particles of our local physical universe.

When a *Light Neutral Higgs Boson* is energetically created (inside a hot star), it always quickly decays into *Light Plus Bosons* and *Light Minus Bosons*.

What is the relationship between this *Higgs Boson* and *Dark Matter*?

# Higgs Boson Dark Matter

Is the *Higgs Boson* a piece of *Dark Matter*?

Is the *Higgs Boson* a *Dark Matter Particle*?

*How many* different kinds of *dark-matter particles* are there in this milky-way galaxy simulation?

Why does it seem theoretically reasonable to consider that the *Higgs Boson* is actually a type of *dark-matter particle*?

Why does this seem *so logical*?

The Higgs Boson is a type of “*dark matter*” because it is “*dark*” and *difficult* to scientifically-observe *directly*.

This Higgs Boson is the “*mass-bridge*” (energy-bridge) between the energy-carrying dark bosons and the light bosons that compose all the *visible matter* in our universe.

This Higgs Boson does *not* cause “*gravity*” like the dark plus bosons and the dark minus bosons.



This Higgs Boson is energetically-created (in the Higgs Axon Hillocks) from the *electric-current energy* carried by the dark minus bosons and the dark plus bosons.

This Higgs Boson is *not able* to travel very far after it is created by the action of the dark plus bosons and the dark minus bosons inside of stars.

A Higgs Boson particle *cannot* even travel for a single *nanometer* before it decays into a set of light plus bosons and light minus bosons.

The velocity of a Higgs Boson particle is probably limited to be *less* than the speed of light, because this Higgs Boson Pulse (Higgs Boson Action Potential) likely propagates on *unmyelinated* Higgs axons.

This Higgs Boson particle can be considered to be a very special type of “*dark-matter particle*” because it is difficult to directly observe, and it is the energy-transfer *bridge* (mass bridge) between the dark bosons and the light bosons.

With this Higgs Boson particle being a special type of dark-matter particle, we can say that the LHC at CERN experimentally discovered the *first* dark-matter *particle* in 2012.

This Higgs Boson is not the *only* super-massive (above 100 GeV) particle that has been discovered recently.

The *top quark* was experimentally discovered in 1995 at Fermilab to have a *super-large mass* of about 173 GeV.

This super-massive super-unstable *top quark* decays *extremely rapidly* (much *too rapidly* for the top quark to be able to successfully combine with other quarks to form any mesons, or any baryons) into W bosons, bottom quarks, strange quarks, and other elementary particles; all of which eventually decay into *stable* and *useful* photons, electrons, protons, and neutrons.

Quark confinement *cannot confine* the *top quark*, because the top quark *does not exist* for long enough to be *confined* in any relationship with any other quark.

This scientifically-interesting *top quark* seems to have a different *logical purpose*.

The *logical purpose* of the physical existence of this *top quark*, seems to be to simply provide yet *another* energetic *channel* for the eventual production of more *photons*, more *electrons*, more *protons*, and more *neutrons*.

Even though this *top quark fermion* is a very different kind of particle, than a *scalar Higgs boson*; they both seem to *share the same overall purpose* in our local universe.

*Both* the Higgs boson, and the top quark, *both* seem to be involved in the *useful production* of all of the stable *visible* building blocks of this visible universe.

The *top quark* quickly decays into *useful* photons, electrons, protons, and neutrons; that make *visible matter*.

The *Higgs boson* quickly decays into *useful* photons, electrons, protons, and neutrons; that make *visible matter*.

These super-unstable super-massive particles (Higgs boson & top quark) *both* transform *themselves* quickly into *all* the *useful* scalar light-boson *particles* that make up *all* the visible matter of our whole *visible universe*.

This 173 GeV top quark is a *fermion* with a spin of one half of Planck's Constant, and a *positive* electric charge of *two thirds* of the electric charge of a proton.

This 173 GeV top quark is probably neurally-composed of *two* rapidly-moving (at the special speed of quicklight) massive *light plus bosons* that are mutually-orbiting a single slowly-moving massive *light minus boson*.

With this *3-pulse* (3-scalar-boson) *top quark* having a mass of about 173 GeV, there seems to be a theoretically possibility that another “*Higgs-type*” boson may be discovered with a mass above 346 GeV.

Such a more-massive Higgs-type boson, with a mass *above* 346 GeV may theoretically be able to decay into a 173 GeV *top quark* and a 173 GeV *anti-top quark*.

Is this scientifically possible?

Could there theoretically exist *more* than just one scalar super-massive Higgs-type boson?

Is there *only one* single Higgs-type boson in our milky-way galaxy?

Or, is there a *whole family* of Higgs-type bosons that act as the energy-transfer (*mass-transfer*) bridges inside hot energetic stars, to “*give mass*” to all the visible matter particles?

It certainly appears that our talented scientists at CERN have *discovered* the *first* dark-matter *particle*, with their exciting discovery of the *scalar* Higgs-boson *dark-matter* particle in 2012.

Can these same talented scientists now proceed to discover the other *dark-matter* scalar *bosons*?

Can the talented scientists at the LHC at CERN also proceed to experimentally discover all 6 *Scalar Boson Dark Matter* particles?

# 6 Boson Dark Matter

What are the 6 *Scalar Boson Dark Matter* particles?

The 6 *Scalar Boson Dark Matter* particles are the following Spin 0 *Scalar Bosons*:

Spin 0 *Scalar Ultrafast Dark Bosons*:

The 1-pulse Dark *Neutral Bosons*

The 1-pulse Dark *Plus Bosons*

The 1-pulse Dark *Minus Bosons*

Spin 0 *Scalar Light Bosons*:

The 1-pulse Neutral *Higgs Boson*

The 1-pulse Light *Plus Bosons*

The 1-pulse Light *Minus Bosons*

All 6 of these Scalar Bosons can be viewed as “Dark-Matter particles” because these 6 scalar bosons are all “*dark*” in that they are *difficult to observe directly*, when they are completely-isolated particles, all alone, by themselves.

The 3 Scalar Dark Bosons are called “*Dark Bosons*” because they are “*extra dark*”, because they are *extra-difficult to observe*, except for the *gravitational* effects

(and some other effects) that 2 of these 3 Dark Bosons have on the visible-matter particles.

The 3 *dark scalar bosons* all travel at ultrafast (darklight) velocities, that are *many* orders of magnitude *faster* than the speed of light.

The 3 *light scalar bosons* all travel at much *slower* velocities that *cannot* be greater than the speed of light.

These 6 *scalar bosons* may actually be 6 *families* of scalar bosons.

These 6 *scalar bosons* are real *neural pulses*, that all propagate on *real axons* (of real neurons) in our marvelous real-human *brains*.

The dynamic activities of these 6 *scalar bosons*, form the *physical foundation* of dark matter, *quantum gravity*, quantum mechanics, quantum entanglement, *quantum physics*, chemistry, and biology for our massive, *multiplayer*, neurally-simulated, *milky-way galaxy*.

*All Dark Matter* is composed entirely of these 6 *scalar-boson families*.

2 of the 3 dark scalar bosons create *gravity*.

2 of the 3 light scalar bosons comprise the *internal* neural-pulse *structures* of every visible-matter particle.

The *light plus scalar bosons* are the positively-charged *inner-components* of photons, electrons, protons, and neutrons.

What is the real nature of these *Light Plus Scalar Bosons*?



# The Light Plus Bosons

What are these *Light Plus Scalar Bosons*?

These *Light Plus Scalar Bosons* are the *positively-charged* real-light neural pulses that help to compose all the *vector bosons* and all the *fermions* of our milky-way galaxy.

These spin-zero *Light Plus Scalar Bosons* are the *positive pulses* that help to form all the *visible matter* of our universe.

All of these spin-zero *Light Plus Bosons* are *all* the real-light *net-positive-electric* neural pulses used to make this entire multiplayer neural-universe simulation.

For example, a particular spin-zero *Light Plus Boson* is the *positive electric pulse* that forms the positively-charged *half* of a *photon*.

For another example, a different kind of spin-zero *Light Plus Boson* is the positive electric pulse that is the *central* slowly-moving *positive pulse* in the *center* of an *electron*.

For another example, another type of spin-zero *Light Plus Boson* is used as the *two outer positive pulses* (that

mutually-orbit the slow central negative pulse) that form the *outer part* of an *up quark*.

*At least one* of these super-important Light *Plus* Bosons is found inside every *fermion* and inside every *vector boson*.

What is the real nature of *The Light Minus Bosons*?

# The Light Minus Bosons

What are *The Light Minus Bosons*?

These *Light Minus Bosons* are the *negatively-charged* real-light neural pulses that help to compose all the *vector bosons* and all the *fermions* of our milky-way galaxy.

These spin-zero *Light Minus Bosons* are the *negative* pulses that help to form all the *visible matter* of our universe.

All of these spin-zero *Light Minus Bosons* are *all* the real-light *net-negative-electric* neural pulses used to make this entire multiplayer neural-universe simulation.

For example, a particular spin-zero *Light Minus Boson* is the *negative electric pulse* that forms the negatively-charged *half* of a *photon*.

For another example, a different kind of spin-zero *Light Minus Boson* is used for the *two* rapidly-moving super-fast outer *negative electric pulses*, that mutually-orbit the central slowly-moving positive pulse in the center of an *electron*.

For another example, another type of spin-zero Light *Minus* Boson is used as the *two* rapidly-moving super-fast outer *negative pulses* (that mutually-orbit the slow central positive pulse) that form the *outer part* of a *down quark*.

*At least one* of these super-important Light *Minus* Bosons is found inside every *fermion* and inside every *vector boson*.

The Light *Minus* Bosons and the Light *Plus* Bosons are the two kinds of *real-light* neural pulses that are used to compose the dynamic inner parts of all the *Visible Matter* in this whole milky-way galaxy simulation.

How do these *Light Bosons* make *Visible Matter*?

# Light Bosons Visible Matter

How do the *Light Bosons* make *Visible Matter*?

The Light *Plus* Bosons and the Light *Minus* Bosons are attracted to each other to form *all* the stable photons, electrons, protons, and neutrons of this *whole universe*.

We have presented these Light *Minus* Bosons, and these Light *Plus* Bosons, in this introductory 4 Brain Theory paper, because these *two* charged *light bosons* are the spin-zero bosons, that are the *visible* electrically-charged *pulses* that jointly *compose* most of the other elementary particles, including *all* of the *vector bosons*, and *all* of the *fermions* of our universe.

We have discussed the physical neural-pulse *properties* of these 1-pulse positive *light plus bosons*, and these 1-pulse negative *light minus bosons*, in some *detail* in this 4 Brain Theory paper.

These net-positively-charged (and net-negatively-charged) single-pulse *light bosons* are *all* the real-light *neuroelectric pulses* that together compose *all* of the *visible matter* in our local visible universe.

These *light bosons* make *visible matter*.

All the *visible matter* of our universe is *combinations* of these simple *light bosons*.

These 3 scalar *light bosons*, or “*visible bosons*” work together to form all the *visible matter* that we can see, because it is *visible* to *us*.

In addition to the set of 3 *light bosons* that together form the all the *visible matter* of our universe; there is also a set of 3 *dark bosons* (the dark *neutral* boson, the dark *plus* boson, and the dark *minus* boson) that together form all the *dark matter* of our whole universe.

The tiny fast Dark *Neutral* Boson has a real-dark neural pulse *shape* that is *net-neutral*, with *zero* total electric charge, so this Dark *Neutral* Boson does *not* generate a significant magnetic field, so this particular boson plays almost *no role* in the production of *gravity*. This Dark *Neutral* Boson has a *different purpose*. This Dark *Neutral* Boson is able to carry the type of *useful information* that can be carried by a *net-neutral* neural-pulse particle.

The tiny fast Dark *Plus* Boson has a tiny *positive* charge, and it travels super-fast to generate a significant *magnetic* field, that allows it to *push* on visible matter and *scatter* off of visible matter to create *gravity*.

The tiny fast Dark *Minus* Boson has a tiny *negative* charge, and it travels super-fast to generate a significant *magnetic* field, that allows it to *push* on visible matter and *scatter* off of visible matter to create *gravity*.

What is the exact physical nature of these 3 tiny fast dark bosons?

Why have we introduced (in this new 4 Brain Theory paper) these three new *Dark Bosons* that we have chosen to call “*Dark Bosons*”.

*Why* exactly have we *chosen* to call these 3 new bosons “Dark Bosons”?

We have decided to name these 3 new bosons the “Dark Bosons”, because these 3 bosons are actually the 3 *dark-matter bosons*.

The 3 Dark Bosons are the 3 *scalar dark bosons* of all *dark matter*.

Now let’s take a closer look at this very-foundational (super-fundamental) set of 3 *scalar* ultrafast *dark bosons*.

What precisely are these 3 *Scalar Dark Bosons*?

# The 3 Scalar Dark Bosons

What are these 3 *Scalar Dark Bosons* made of?

What makes these 3 *Scalar Dark Bosons* so *dark* and so difficult to see (or measure) with our abundance of modern (circa 2023) sophisticated and sensitive scientific instruments?

What are these 3 ultrafast *Scalar Dark Bosons* doing right here inside our very own local *solar system*?

Is it theoretically possible that the *stellar energy needs* (and the energetic neuron-stimulating abilities) of our very own local *sun*, may be largely *responsible* for some of the *major flows* of 2 of these 3 kinds of *Scalar Dark Bosons* *inside* our very own local *solar system*?

When considering the larger-scale *galactic* dark-boson flows, how are 2, of these 3 *Scalar Dark Bosons*, able to exert so much *gravitational pressure* on all the stars (including our own sun) in our own milky way galaxy, so as to *push* all these billions of stars towards our own (Sagittarius A\*) galactic center?



How do 2, of these 3 Scalar Dark Bosons, work together to *forcefully push* all our solar system's *planets* towards our own sun?

How do these rapidly-traveling, *momentum-carrying* 2 Scalar Dark Bosons *also push* all us *people* down onto the surface of this Earth, so we don't all float away into space?

What is the information-carrying role of the *Dark Neutral Bosons*?

# The Dark Neutral Bosons

What are *The Dark Neutral Bosons*?

These Dark Neutral Bosons are *net-neutral*, so their ultrafast velocity does *not* generate any significant magnetic field far from their location.

However, these Dark Neutral Bosons can still carry *useful information* in their internal neural-pulse *shape-structure*.

For example, these *Dark Neutral Bosons* can come in many different neural-pulse *shapes*, such that the positive portions, of a particular pulse shape, exactly electrically-cancel the negative portions of the particular pulse shape.

In this way, these dark neural bosons (action potentials) can *encode information* by assuming a broad variety of *different electric-pulse shapes*.

The purpose of these hypothetical dark *neutral* bosons is to carry useful information, for some useful theoretical “*non-gravity*” purposes; *without* carrying any net electric charge, which would then cause them to participate in the generation of gravity.

These *Dark Neutral Bosons* carry *no* net charge.

However, the *Dark Plus Bosons* do carry a net charge, and this net charge is *positive*.

# The Dark Plus Bosons

What are *The Dark Plus Bosons*?

*How many* different kinds of these positively-charged *Dark Plus Bosons* exist here in our local milky-way galaxy?

There may theoretically exist a *good number* of different kinds of dark plus bosons.

All dark plus bosons have a net electric monopole charge that is *positive*.

All of these dark plus bosons travel at *ultrafast velocities* that are *many* orders of magnitude faster than the speed of light.

When a dark plus boson, with its *tiny* positive electric *charge*, and its *ultrafast velocity*, propagates as an action potential (of a real axon) through space, it generates a substantial *magnetic field*.

This substantial magnetic field gives the dark plus boson a *magnetic nature* that allows it to transfer a portion of its *momentum* to a visible-matter particle, when this dark plus boson *scatters* off of the visible-matter particle.

This *scattering* (momentum-imparting) *behavior* of the dark plus bosons is how they “*give gravity*” to *all* the visible-matter particles of this local milky-way galaxy.

The other dark-matter particle that also participates in the creation of *gravity* is the dark minus boson.

What is the core nature of these *Dark Minus Bosons*?

# The Dark Minus Bosons

What are *The Dark Minus Bosons*?

The Dark Minus Bosons are just like the Dark Plus Bosons, except that the Dark Minus Bosons all carry a net electric *negative* charge.

This *negative* charge (of the Dark Minus Bosons) causes these tiny ultrafast-traveling dark-matter particles to generate substantial *magnetic* fields that are *oriented* in *directions* that tend to be exactly *opposite* to the magnetic fields generated by the motion of the Dark Plus Bosons.

Every tiny cubic volume of space in our local milky-way galaxy contains a roughly equal number of dark plus bosons, and dark minus bosons, at any given time.

The numbers of dark minus bosons, and dark plus bosons, traveling in a given direction, through a given tiny volume of space, tends to be roughly equal at all times.

This means, that on a large-enough spatial scale, of just a few *cubic nanometers*, the *positive* charges (of the dark *plus* bosons) and the *negative* charges (of the dark *minus* bosons) will tend to *cancel out* (when properly averaged over a large-enough volume, for a large-enough time)

resulting in a “*free space*” or “*vacuum of space*” that is *net neutral* with *zero* net electric monopole *charge*, and *zero* net *electric field*, and *zero* net *magnetic field*.

This is the main reason that our relatively-crude scientific instruments seem to sometimes measure *zero magnetic field*, and *zero electric field*, in the relative vacuum of free space.

Our scientific instruments are measuring the net *average* electric field (and the net *average* magnetic field) averaged over *relatively-large* spatial *volumes*, and over *relatively-large* temporal *time scales*.

Hopefully, we inventive scientists of earth, will be able to soon develop some better scientific instruments, that are able to better measure the *ultrafast fluctuations*, in the *electric field*, and in the *magnetic field*, at the scale of just a *few cubic picometers*.

How can we best begin to *accurately* measure these *Fundamental Dark Spacetime Fluctuations*?

# Dark Spacetime Fluctuations

What is the physical nature of these *Fundamental Dark Spacetime Fluctuations*?

How can we know for sure that these *Fundamental Dark Spacetime Fluctuations* (in the *magnetic field*, and in the *electric field*) are caused by the presence, motion, and *scattering* of huge numbers of tiny fast *charged* dark plus (and minus) bosons?

How exactly can we begin to *invent* these better scientific instruments, that will hopefully help us to see the jittery *Brownian motions* of *individual atoms*, as these visible-matter atoms are *bumped*, *bombarded*, and *jostled* by the thousands of dark *plus* bosons, and by the thousands of dark *minus* bosons, that are constantly *scattering* off of these individual atoms.

Theoretically, at a small-enough spatial scale, of perhaps just a few *cubic picometers* (or possibly just a few *cubic femtometers*), the *positive* charges (of the dark plus bosons) and the *negative* charges (of the dark minus bosons) are *Not able* to fully cancel out (when averaged over just a very-small volume, for just a very-small time) resulting in a “*tiny free space*” or “*tiny vacuum of tiny space*” that is *Not net neutral*.



This *very-tiny volume* of just a few *cubic picometers* (or just a few *cubic femtometers*) of “free space”, when averaged over a *sufficiently-small* amount of *time* (and over a *sufficiently-small* amount of *cubic space*), will be discovered to have a *finite electric field* (and a *finite magnetic field*) that *fluctuates* in *time* and in *space*.

These *magnetic field fluctuations*, and *electric field fluctuations*, in the “*fabric of spacetime*” will grow *stronger and stronger*, as the spatial-scale, and the temporal-scale, *decrease*; until we reach the very-tiny spatial scale that is the width, length, and *size* of a single dark plus boson, or a single dark minus boson; which may possibly be somewhat close to the *Planck length scale*, which is *much smaller* than a single femtometer.

This legendary “*fabric of spacetime*” is the *set of real neurons*, and their real-neural connections, including their sets of real-neural *axons*, and their dynamic *neuro-electromagnetic* real-neural *pulses*, that include the real-dark neural pulses that are the *dark plus bosons*, and the *dark minus bosons*, that *scatter* off of *all* the visible-matter photons, *electrons*, protons, neutrons, *atoms*, and molecules of this whole milky-way galaxy.

These *magnetic field fluctuations* (and *electric field fluctuations*) in the *fabric of spacetime* are the strong

magnetic fields (and strong electric fields) that are physically *generated* by the tiny fast charged *dark plus bosons* (and the tiny fast charged *dark minus bosons*) as these *two* complimentary *bosons* take turns *electromagnetically-scattering* off of all the photons, all the electrons, *all the protons*, and all the neutrons of this whole neurally-simulated universe that we can now observe in the night sky with our powerful new James Webb Space Telescope.

The Planck Length Scale may be the *size* of the individual dark plus (and minus) bosons.

This dark-boson size is just a *little bit larger*, than the *radial thickness* of the real-dark axons that propagate these two charged dark bosons.

Or, the Planck Length Scale may be the average spatial *distance* between *two* of these real-dark *axons*, because this axon-to-axon spatial-separation distance is a very-important *fundamental distance* for the “fabric of spacetime”.

Some additional *theoretical work* needs to be done in order to precisely determine the exact relationship between the *Planck Length Scale*, and the *physical size* of our hypothetical *dark plus boson*.

There is also some additional work that needs to be done in order to fully-understand the *theoretical possibility* that some *Dark Magnetic Monopole Bosons* may play an important *physical role* right here in our very own local milky-way galaxy.

# Dark Monopole Bosons

What is the core nature of these hypothetical *Dark Magnetic Monopole Bosons*?

There is a *theoretical possibility* that some of our dark *neutral* scalar bosons, and some of our dark *plus* scalar bosons, and some of our dark *minus* scalar bosons, may possibly carry a finite (non-zero) *magnetic monopole* moment.

This is a very exciting theoretical possibility, because it means that we can make *Maxwell's Equations* of Electromagnetism *fully symmetric* with respect to the dynamic *electric monopoles & magnetic monopoles* that together generate all the Magnetic Fields & Electric Fields of Maxwell's Equations.

Maxwell's Equations have been *mathematically-begging* us (theoretical physicists) to logically proceed to make them *properly symmetric* for *16 decades*, since they were first published by James Clerk Maxwell himself in 1865.

Many of our talented experimental physicists have been diligently searching for these *difficult-to-see* magnetic monopoles during these past 16 decades.

Why do these theoretically-predicted magnetic monopoles appear to be so “*dark*” that we cannot easily find them?

Why are these tiny fast *magnetic monopoles* so difficult to scientifically observe directly?

Are *some* scalar bosons magnetic monopoles?

If so, which ones?

We have introduced *6 families* of real *scalar bosons* in this 4 Brain Theory paper.

Which of these *real scalar bosons* might be magnetic in the very-special way, that would make it an actual *magnetic monopole boson*?

Is one of these *real scalar bosons* the most theoretically likely form for a *magnetic monopole* in our milky-way galaxy?

How can we know for sure?

*How many* different kinds of magnetic monopoles might there be?

What is the difference between *north* magnetic monopoles and *south* magnetic monopoles?

What is the *core nature* of these super-interesting hypothetical particles?

What is the relationship between the *Dark South Bosons* and the *Dark North Bosons*?

# Dark North Bosons

What is a *Dark North Boson*?

A *Dark North Boson* is a hypothetical real scalar boson that has a finite (non-zero) magnetic monopole moment with a magnetic charge of “*North*”.

This hypothetical real scalar *dark north boson* is a tiny fast spinless *neural pulse* that has *north-oriented magnetic field lines* emanating from it.

This hypothetical *dark north boson* is many orders of magnitude *smaller*, and many orders of magnitude *faster*, than the 3 real-light scalar bosons that compose all the visible matter of this local milky-way galaxy.

This may be a *partial reason* why this *dark north boson* has *not yet* been directly detected by any of our earth’s current particle detectors.

All the dark bosons are *much smaller*, and *much faster*, than the light bosons that compose all the visible matter.

So, a dark north boson is very small, and it travels through space very fast.

Our dark north boson is a real neuroelectric pulse with a *north-pole magnetic-monopole charge*.

The *Dark Plus Boson* has a *tiny positive* electric charge, that is *many* orders of magnitude *weaker* than the positive electric charge of a single proton.

The *Dark Minus Boson* has a *tiny negative* electric charge, that is *many* orders of magnitude *weaker* than the negative electric charge of a single electron.

Therefore, the *Plus Dark Boson* and the *Minus Dark Boson* carry very *tiny* electric-monopole *moments*.

The *Dark Neutral Boson* is electrically *net-neutral*, with a *zero* electric-monopole moment.

One theoretical possibility is that the *Dark North Boson* may possibly be formed from a very special type of real-dark neural *north-axon* that functions as a super-long Dirac String, that is kind of like a very long magnetic electric solenoid, whose south-pole is at its *stationary* south-pole *axon-hillock*, and whose rapidly-traveling north-pole is at the *north-pole-propagating* ion-channel-*opening* in the cell membrane of the real-dark neural *north-axon*.



It is theoretically-possible that there may exist a real dark scalar boson that has *both* an *electric-monopole* charge, and a *magnetic-monopole* charge.

The *Dark North Boson* has a tiny *north-pole* magnetic monopole *moment*.

The *Dark South Boson* has a tiny *south-pole* magnetic monopole *moment*.

# Dark South Bosons

What is a *Dark South Boson*?

A *Dark South Boson* is a hypothetical real scalar boson that has a finite (non-zero) magnetic monopole moment with a magnetic charge of “*South*”.

This hypothetical real scalar *dark south boson* is a tiny fast spinless *neural pulse* that has *south-oriented magnetic field lines* emanating from it.

One theoretical possibility is that the *Dark South Boson* is formed from a very special type of real-dark neural *south-axon* that functions as a super-long Dirac String, that is kind of like a very long magnetic electric solenoid, whose north-pole is at its *stationary north-pole axon-hillock*, and whose rapidly-traveling south-pole is at the *south-pole-propagating ion-channel-opening* in the cell membrane of the real-dark neural *south-axon*.

In this way, it is theoretically possible that the Dark North Boson and the Dark South Boson are *not really* perfect magnetic monopoles in the pure theoretical sense, but they are *close enough* that we can *pragmatically* call them “near-perfect magnetic monopoles”, and for most mathematical purposes we can even model these 2

interesting dark bosons as *near-perfect tiny magnetic monopoles*.

Therefore, our Dark North Boson and our Dark South Boson are our *two magnetic monopole bosons*, and our Dark Plus Boson and our Dark Minus Boson are our *two electric monopole bosons*.

There is also a good theoretical possibility that some of our real-dark scalar bosons may also have *electric dipole moments* or *magnetic dipole moments*.

The very tiny masses, of our real-dark scalar bosons, are likely *many orders of magnitude lower* than the masses of our 3 real-light scalar bosons.

However, the ultrafast speeds (at which these real-dark scalar bosons propagate along their dark-axons) are *many orders of magnitude faster* than the fastest speed of any of our 3 real-light scalar bosons.

The real-dark scalar bosons are all *very tiny*, with very little mass.

These real-dark scalar bosons are the tiny, light-weight, spin-zero *dark-matter gravity bosons*, because they *magnetically-push* (or *electrically-push*) upon *every* real-light scalar boson, and thereby *every elementary particle*

of visible matter, to create what *appears* to be a universal gravitational field, that *gravitationally-pushes* (via scattering) the stars of the galaxies together towards their galactic centers, and *gravitationally-pushes* the planets towards their own central stars, and *gravitationally-pushes* us mortal human beings down onto the surface of our very own planet Earth.

Does a Dark North Boson particle, try to *magnetically-push* every bit of visible matter, in the *exact* same *direction* the Dark North Boson particle is *currently traveling*?

*How fast* can a single Dark South Boson particle travel through space?

Does a Dark *North* Boson travel at the same speed as a Dark *Plus* Boson?

Can *all* of the real-dark *scalar* bosons travel at a super-fast “*darklight*” speed that is *many* orders of magnitude faster than the speed of light?

How can a tiny (with very very low mass) Dark Boson travel so *exceedingly fast*?

How does a Dark *North* Boson generate a *tiny* magnetic-monopole *field* around it?

Which kind of real-dark scalar boson can travel the very *fastest*?

The Dark *Plus* Bosons are pretty easy to comprehend as real-dark *neural pulses* that are *pulse-shaped* in such a way, so as to have a *net-positive* (non-zero) electric monopole moment.

The Dark *Minus* Bosons are also pretty easy to comprehend as real-dark *neural pulses* that are *pulse-shaped* in way so as to have a *net-negative* (non-zero) electric monopole moment.

A single Dark *North* Boson is a little more complex to visualize and understand, because it may actually be a real-dark neural-pulse *north-axon* solenoid (*Dirac-string north-axon*) cell-membrane, ion-channel, north-pole propagating-opening, with a set of tiny net-charged *positive-electric* dark-plus-boson *pulses* propagating *around* (in a circular motion, like an *electric solenoid winding*) the *Dirac-string north-axon solenoid*, in such a way so as to generate an effective *north-pole* magnetic *monopole* at the *rapidly-traveling north-pole* cell-membrane opening, with the *south-pole* opening *firmly-fixated* (stationary and not-moving) at the real-dark axon-hillock.

This may be one possible theoretical way, that the *north-axons* propagate their *Dark-Plus-Boson* pulses both *around* (like a solenoid) and *along* the north-axon, in such a way so as to *generate* an effective *north-pole* magnetic monopole *moment* at the *rapidly-propagating opening* (the propagating *Dark North Boson*) in the cell membrane of the north-axon.

In this way, such a theoretical *solenoidal-flow* of *many* *Dark Plus Bosons*, may be able to physically generate a *single* propagating *Dark North Boson*.

Therefore, the many *Dark Plus Bosons*, must be able to travel *faster* than the single *Dark North Boson*, that they generate.

A single *Dark South Boson* may be theoretically-modeled as a real-dark neural-pulse *south-axon* solenoid (*Dirac-string south-axon*) cell-membrane, ion-channel, south-pole *propagating-opening*, with a sequential set of tiny fast net-charged *negative-electric dark minus boson* pulses propagating *around* (in a circular helical motion, like an *electric* solenoid *winding*) the *Dirac-string* south-axon *solenoid*, in such a way so as to generate an effective *south-pole* magnetic *monopole* at the *rapidly-traveling south-pole* cell-membrane opening, with the *north-pole* opening *firmly-fixated* (stationary and not-moving) at the real-dark axon-hillock.

This is one of the possible ways that the *south-axons* may possibly propagate their Dark-*Minus*-Boson pulses both *around* (like a solenoid) and *along* the south-axon, in such a way so as to *generate* an effective *south-pole* magnetic-monopole *moment* at the rapidly-propagating *opening* (the propagating Dark *South* Boson) in the cell membrane of the south-axon.

In this theoretical way, a particular *solenoidal-flow* of *many* Dark *Minus* Bosons may be able to generate a single propagating Dark *South* Boson.

Therefore, the set of many Dark *Minus* Bosons, *must be able* to travel *faster*, than the single Dark *South* Boson, that they jointly generate.

The Dark *Minus* Bosons and the Dark *Plus* Bosons *travel faster*, than the Dark *South* Bosons and the Dark *North* Bosons.

All of these *dark* scalar bosons travel many orders of magnitude faster than all of the *light* scalar bosons.

We have been discussing the real scalar *Dark Monopole Bosons* that have finite *magnetic-monopole* moments, or finite *electric-monopole* moments, or *both*.

But, what about the real scalar *Dark Dipole Bosons*?

Does *every* real-dark scalar boson have a finite *electric-dipole* moment?

Or, do only *some* of our real-dark scalar bosons have non-zero *electric-dipole moments*?

What is the neural-pulse nature of these real scalar *Dark Dipole Bosons*?



# Dark Dipole Bosons

What is a real scalar *Dark Dipole Boson*?

A real scalar *Dark Dipole Boson* is a single real-dark *neural pulse* that has a *dipole pulse shape* that supports an *electric-dipole* in the *pulse-shape distribution* of real-electric *charged ions*.

What is an *electric dipole*?

An electric dipole is a *spatial separation* between a *positive* electric charge and a *negative* electric charge.

For example, if there exists a real-dark *neural pulse* (in a real human brain) that has an action-potential *pulse shape* with *more* real *positive sodium ions* in the *positive region* of the pulse shape, than in the *negative region* of the pulse shape; and there exists a *spatial separation* between this *negative region* (of the pulse shape) and the *positive region* (of the pulse shape), then this particular *pulse shape* will have a non-zero *electric-dipole moment*.

There are many different real-dark action-potential pulse shapes that are possible.

Many (but not all) of these pulse shapes will have an electric-dipole moment.

One of the *useful things* about these many different electric-dipole-moment *pulse shapes* is that they can contain, *encode*, and transmit *useful information*.

This useful information can be *encoded* into the *strength* (and direction) of the electric dipole moment.

Additional useful *real-dark information* can be encoded in the *detailed shape* of the real-dark electric neural pulse.

*Not all* of the real scalar dark *neutral* bosons, dark *plus* bosons, dark *minus* bosons, dark *north* bosons, or dark *south* bosons, will have an *electric-dipole* moment.

But *some* of them *will have* an information-carrying non-zero electric-dipole moment.

What is the real nature of a *scientific dipole*?

How much *Dipole Experience* did we obtain as little children here on earth?

# Dipole Experience

How much *Dipole Experience* do we have?

What is the scientific value of personal *Dipole Experience*?

What is the scientific value of personal *Monopole Experience*?

What is the scientific value of personal *Quadrupole Experience*?

How much *Electric-Dipole Experience* did we obtain as little children?

How much *Magnetic-Dipole Experience* did we obtain as little children?

How can we use our *personal experience* playing with *dipoles* to help us understand how real-dark scalar *dipole bosons* are able to *gravitationally-influence* all the *visible-matter particles* of this world?

A number of years ago, when many of us were still *little children*, some of us were able to play with some common *dipole magnets* to build up some early childhood

*valuable experience* playing with these interesting *magnetic dipole objects*.

How many of us children, were also able to play with some *electric dipoles* while we were still little?

What kind of *electric dipoles* were we able to play with?

What did we learn from playing with *static electricity*?

What did we learn from playing with the *direct electrical currents* of small *electric batteries*?

What did we learn from playing with *alternating electric currents*?

What did we learn from playing with *static magnets*?

What did we learn from playing with *electromagnets*?

It almost seems like *magnetic dipole* moments can be somewhat easy to conceptualize, for those of us that already have some previous experience playing with magnets (physical *magnetic-dipole* objects).

However, *magnetic-monopole* moments seem to be a little bit more *difficult* to visually conceptualize, possibly

because most of us seem to have almost *zero* direct experience with them.

Who among us can remember playing with a fully-isolated *magnetic-monopole* as a little child?

It seems like many of us can easily remember playing with a *dipole magnet* (with its magnetic *north pole* and its magnetic *south pole*) when we were little children.

How can we begin now (today in 2023) to help the *children* of the *future* (here on Earth) also build up some *valuable experience* playing with *magnetic monopoles*?

What kind of *future* scientific computer *simulations* can we create that will properly *model* (with intelligent software) the electric and magnetic *behaviors* of *tiny* fast *magnetic monopoles* like the *Dark North Bosons* and the *Dark South Bosons*?

How might these two dark magnetic-monopole bosons *interact* with some of the *delicate* neuroelectric *components* of the *neurons* inside our human brains?

How do these 2 dark *magnetic-monopole* bosons *push* on visible atoms, in some ways that are somewhat *different* than the ways that the 2 dark *electric-monopole* bosons push on visible matter (via scattering) to *create gravity*?

How do the real-dark scalar bosons *effectively push* on all the neutrinos, all the photons, all the electrons, all the protons, all the neutrons, all the atoms, all the molecules, all us people, all the moons, all the planets, all the stars, and on all the galaxies, in a way that *appears* like a universal *gravitational force field*?

How can our real-dark scalar bosons travel (propagate as neural pulses) along their dark-axons *many* orders of magnitude *faster* than our light-matter *photons*?

Why are these real-dark scalar bosons able to *easily travel* through space so much faster than the speed of photon light?

Why are these *ultra-low-mass* dark bosons, that are made of tiny real-dark neural pulses, that are *spinless* and have *super-tiny* monopole (and/or dipole) moments, *so small* that they are super-difficult to detect directly?

What kind of future experimental scientific *device* can we invent, that will be able to *directly measure* some of these real-dark scalar bosons?

Why do these *tiny fast dark bosons* have such *tiny pulse masses*, that are so much *less* than the *larger pulse masses* of the slower, larger *light bosons* (the relatively-large

neural pulses that compose all the elementary particles that make up all the visible matter), like the *Light Plus Boson* and the *Light Minus Boson*, that compose all the neutrinos, all the photons, all the electrons, all the protons, and all the neutrons, and all the other light particles (visible-matter particles) of our local milky-way galaxy?

How do these *massive* charged *1-pulse* light scalar *bosons* combine themselves together, to form *all* the *2-pulse* vector *bosons*, and *all* the *3-pulse fermions* in our whole universe?

Why does the *super-massive* neutral *1-pulse Higgs Boson* always decay rapidly into a set of *Light Plus Bosons* and a set of *Light Minus Bosons*?

What are the *detailed micro-dynamics* showing the full details, of exactly *how* the *dark* scalar bosons *push* (scatter) on the *light* scalar bosons to *create gravity*?

The Dark *Plus* Bosons have a tiny *positive* electric monopole moment, that is a tiny *plus* electric charge.

The Dark *Minus* Bosons have a tiny *negative* electric monopole moment, that is a tiny *minus* electric charge.

The Dark *North* Bosons have a tiny *north* magnetic monopole moment, that can be a tiny *north pole* of a super-long magnet.

The Dark *South* Bosons have a tiny *south* magnetic monopole moment, that can be a tiny *south pole* of a super-long magnet.

All of our real-dark scalar bosons travel at astonishingly-fast velocities that are really *ultrafast*.

Why do all these real-dark scalar *Ultrafast Bosons* travel so ultrafast?



# Ultrafast Bosons

Why do all our real-dark scalar *Ultrafast Bosons* travel on their real-dark *axons* at such speedy velocities, that are so *astonishingly fast*?

What exactly *causes* all of these real-dark scalar *Ultrafast Bosons* to propagate so ultrafast?

All of our real-dark scalar bosons are real-dark *neural pulses* that propagate on real-dark *myelinated axons* that are *really optimized* (in our real world) for *speed*.

When a real human brain has a set of real dark myelinated axons that are *optimized for speed*, then the real human brain makes sure that these *ultrafast myelinated dark axons* are able to propagate their dark neural pulses *as fast as is possible*, and as fast as is necessary to help coordinate, *simulate*, and manage *all* the affairs of a whole galaxy, like our local *milky-way galaxy*.

All of our real dark scalar bosons travel at *exceedingly* high velocities along *very-fast* speed-myelinated *axons*.

As a matter of fact, it actually appears theoretically likely (from a broad real-neural perspective) that these *dark scalar bosons* may naturally travel at ultrafast “*darklight*”

speeds that are *many* orders of magnitude faster than the speed of light.

It may be helpful if we simply proceed to scientifically define some useful new *speed-range definitions*.

The speed of light was established many decades ago.

In this 4 Brain Theory paper, we have already defined the very-special *quicklight speed* of the some of the scalar light bosons.

Perhaps we can define the much-speedier “*darklight speeds*” as the ultrafast speeds that are many *millions* of *times faster* than the speed of light, or many *billions* of *times faster* than the speed of light, or many *trillions* of *times faster* than the speed of light.

With these new *speed-range definitions*, we have all the massive elementary particles traveling at *sublight speeds*, all the photons traveling at the *speed of light*, all the *outer light* neural pulses (the faster scalar Light Plus Bosons, and the faster scalar Light Minus Bosons) traveling at the special *quicklight speed* that is just about *6.36 times faster* than the speed of light, and all the *scalar dark bosons* traveling at the ultrafast *darklight speeds*, that can be many millions, many billions, or even *many trillions* of times faster than the speed of light.

Theoretically, and logically, the *most-simple* traveling *particle* possible, in a neurally-simulated universe, is an individual propagating neural *action potential*, which is an individual traveling *neural pulse*, which is a *real scalar boson particle*.

What is the core nature of these *Fundamental Real Scalar Bosons*?

# Real Scalar Bosons

Are these *Fundamental Real Scalar Bosons* the most fundamental (*most elementary*) particles in our local universe?

In this 4 Brain Theory paper we have demonstrated that the *Real Scalar Bosons* are the *Dynamic Foundation* of our milky-way galaxy.

This means that these *6 families*, of real scalar bosons, contain *all* the real particles (real neural pulses) that are the real scalar bosons that form *every* particle of this visible-matter milky-way galaxy.

There are *no* particles *more fundamental* than these real scalar bosons particles that are found in these 6 real-scalar-boson families.

*Fermions* and *vector bosons* are *not* really fundamental particles in our milky-way galaxy, because they are *composite particles* that are composed of *2 or 3 real scalar bosons*.

The Higgs boson (a real-light scalar boson) really is a *fundamental particle*, because the Higgs boson is one single *real scalar boson*.

The other 2 *real-light scalar bosons* compose *all* the *fermions*, and *all* the *vector bosons* of this whole milky-way galaxy.

The 3 *real-dark scalar bosons* carry important *information*, and *generate gravity*, in this milky-way galaxy.

These 6 *real scalar bosons* are the real neural action potentials that propagate on *real neural axons* in this milky-way galaxy.

The 3 *real-light scalar bosons* travel at the *slower velocities*, at the speed of *quicklight*, at the speed of *light*, and at many *super-slow* speeds that are *even slower* than the speed of light.

The 3 *real-dark scalar bosons* travel at the ultrafast superluminal velocities of *Darklight*.

What is *Darklight*?

# Darklight

What is *Darklight*?

Why are we using this invented “*Darklight*” term?

We need a good scientific term, that refers to an *ultrafast velocity*, that is *many* orders of magnitude *faster* than the speed of light.

“*Darklight*” seems to be a pretty good *scientific term* for this intended meaning.

Let’s define “*Darklight*” as the set of *ultrafast speeds* (that are *many* orders of magnitude *faster* than the speed of light) that are naturally experienced by our set of *real dark scalar bosons*.

We can also sometimes simply refer to these ultrafast real dark scalar bosons as our “*darklight bosons*”.

Therefore, *darklight* is the set of all the *dark scalar bosons* that travel at the ultrafast *darklight* speeds.

Therefore, our *hypothetical speed ranges* are as follows:

(1) Darklight Speeds are *much faster* than photon light.

- (2) Quicklight Speed is a *little faster* than photon light.
- (3) Light Speed is the *exact speed* of photon light.
- (4) Sublight Speeds are *slower* than photon light.

Perhaps a *Darklight Communication System* can be invented (by some of our bright future Earth scientists) that will allow us to communicate with each other at speeds that are *many* orders of magnitude *faster* than the speed of photon light.

It certainly seems likely that, in the future, some of us human scientists here on Earth may begin to feel the desire to start to communicate with each other, over the vast distances of *interstellar space*, between some different solar systems, right here in our very own little *milky way galaxy*.

For example, the promising nearby *exoplanet* known as *Proxima b* (in the nearby triple star system called Alpha Centauri) appears to possibly be in the *human-inhabitable Goldilocks Zone* of the red dwarf (Proxima C) star that it orbits.

What are some of the exciting possibilities with *Proxima b*?

Can *Darklight* be sent from Earth to *Proxima b*?

# Darklight to Proxima b

Can *Darklight* be sent to *Proxima b*, and then back to Earth, as part of a Darklight Communication System?

Some of our bright astrophysicists have measured (and estimated) that this exciting exoplanet Proxima b may be only about *4.2 light years* from our own planet Earth.

If some of our Earth scientists (someday in our collective future) decide to *travel* to Proxima b to live there, and conduct some interesting experiments there, they may still feel a desire to continue to *communicate* with some of their friends here on Earth.

If we unwisely attempt to *only use photons* to help our scientists on Proxima b try to communicate with their friends here on Earth, then we are all going to be pretty disappointed.

A *Photonic Communication System* will be able to send a *single photonic message* from Proxima b to Earth in *4.2 years*, because all the photons (in the photonic message) will travel at the relatively-slow speed of *photon-light*, and the distance between the two planets is *4.2 photon-light years*.



It is pretty difficult to really enjoy a *human-to-human* communication *system* that requires 4.2 years (or 8.4 years) between exchanged messages.

Instead of trying to use a *relatively-slow* old-school photonic communication system, let's simply invent a new improved *Darklight Communication System* to help our dear scientific friends on the two planets talk to each other, in a way that is *more satisfactory* and *more productive*.

Let's make sure that we invent our new *Darklight Communication System* to use *one* or *more* of our real *dark scalar bosons* (neutral, plus, minus, north, or south) that *all travel* at the super-fast *darklight speeds* that are *many* orders of magnitude *faster* than the speed of photon-light.

Exactly *how fast* will our dark scalar bosons need to travel between Earth and Proxima b, so that we can sequentially-exchange a *thousand* darklight *messages* between the two planets every second?

Let's calculate this *desired darklight* communication *speed* as a simple multiple of the *photon-light speed* as follows:

There is a spatial distance of 4.2 light years between planet Earth and planet Proxima b.

A *photon-light speed message* that travels in a round-trip from Earth to Proxima b, and then back to Earth, will take *8.4 years* to make its *full round trip* between the two planets.

A *thousand* such photon-light speed *messages* could be sent *sequentially* to complete all of their sequential round trips (between the two planets) in *8,400 years*.

But 8,400 years seems like a *pretty long time* to wait.

So, let's just invent a *faster communication system*.

We want our new improved *darklight communication system* to be able to send and receive *darklight scalar bosons* so quickly that all these *8,400 years* are effectively reduced down to just *one single second*.

So, let's do a little time calculation ...

There are about 365 days in a year.

There are 24 hours in a day.

There are 60 minutes in an hour.

There are 60 seconds in a minute.

Therefore, there are  $365 \times 24 \times 60 \times 60 = 31,536,000$  *seconds* in an Earth *year*.

This is nearly 32 million *seconds* in *one* Earth *year*.

And there are  $31,536,000 \times 8,400 = 264,902,400,000$  seconds in 8,400 years.

This is about *265 billion seconds* in 8,400 years.

Therefore, we want our dark bosons be able to travel at least *265 billion times faster* than the speed of photon-light.

Is there a good, healthy, natural, physical way to make our *dark scalar bosons* travel *265 billion times faster* than photon-light?

How precisely can we go about making some of our *tiny spin-zero dark bosons* travel this fast?

Can any dark boson *really* travel this fast?

Did Albert Einstein write down some equations in 1905 and 1915 that seemed to *suggest* that nothing can travel faster than the speed of photon-light?

Do his mathematical equations also strictly *govern* the specific dark particle-behaviors of all our ultrafast dark scalar bosons?

Is this *really* what Einstein suggested?

Or is it more like *the other way around*?

Do the *dark flow* (and the corresponding *dark velocities*, and their *dark pulse-pulse frequencies*) behaviors of our *dark scalar bosons* govern the degree of *mathematical accuracy* of Einstein's interesting equations?

Was Albert Einstein thinking carefully and deeply about the *ultrafast speeds* that *might be* theoretically *possible* for the tiny scalar dark-boson pulses that might travel as little action potentials along ultrafast real dark *myelinated axons*?

Did Albert Einstein ever consider that quantum physics may have a *proper foundation* in real human neuroscience?

Is the *relatively-slow speed* of photon light really the fastest way for human beings to *communicate* useful *messages* with each other over *vast distances*?

Do any *intelligent people* still believe this today in 2023?

Before Albert Einstein was even born, many intelligent people *sincerely believed* that the *fastest way* to send a useful communication signal (a written message) from New York City to San Francisco, was via the *Pony Express* of 1860.

These human-written Pony-Express *messages* required about *10 Earth days* (in 1860) to cross the whole North American Continent, as the horse-mounted, young, strong, hardy human riders diligently encouraged their *energetic fast horses* to gallop just as *quickly* as they could possibly go.

Millions of intelligent thinking people *sincerely believed* that the Pony Express was the *fastest* human-to-human *communication system* possible in 1860.

However, these *millions of sincere beliefs* did not stop some of the Earth's brilliant scientists and bright inventors from creating a *much-faster* transcontinental telegraph *communication system*, that went into operation

on October 24, 1861, quickly putting an effective *end* to the need for the Pony Express.

This exciting new transcontinental *telegraph* communication system of 1861 introduced a *new* electronic *technology* to rapidly communicate useful human messages, across *thousands of miles* of planet Earth's surface, in a mere *fraction of a second*.

This powerful new 1861 telegraph communication system was *many orders of magnitude faster* than the old Pony Express communication system of 1860.

The modern recorded history of *useful human inventions* seems to include a history of many *useful speed-ups* in our ever-newer *human communication systems*.

The creative Scottish physicist, James Clerk Maxwell, published his famous Maxwell Equations of Electromagnetism, which greatly (and properly) emphasized the interesting exact value of the *speed of photon-light* in 1865.

The brilliant theoretical physicist, Albert Einstein, was born on March 14, 1879, and he wrote and published some very important physics papers in 1905 about the *energy, frequency, and speed of photon-light*, and in 1915 about the *force of gravity*.

Hypothetically, if our brilliant Albert Einstein was possibly thinking about this present 4 Brain Theory in 1905 and 1915, then might he have also been thinking about the ultrafast *super-luminal speeds* that might be possible, for the vast multitudes of the *tiny* scalar dark boson *pulses* that propagate along the real-dark myelinated *neural axons* of the *dark-axon field*?

What would Einstein think about *this* very-real *possibility* of sending useful darklight communication signals, between two distant planets, at darklight speeds that can be even greater than *265 billion times faster* than photon-light?

*265 billion times faster* than photon-light is how fast our tiny dark scalar bosons *must travel* if they want to complete *1,000* sequentially-useful round *trips* between the two planets (Earth and Proxima b) *per second*.

Therefore, we may actually *need* to invent (possibly in the near future, probably within the distant future) a super-fast *Darklight Communication System* that can send and receive our *tiny* swift *dark* scalar *bosons* at speeds that are over *265 billion times faster* than the speed of photon-light.

Is such an ultrafast *Darklight Communication System* theoretically possible to construct?



# Darklight Communication

What is a *Darklight Communication System*?

A *Darklight Communication System* is a human communication system that uses *darklight* (real dark scalar bosons) to exchanged *useful* communication *signals* at *ultrafast speeds* that are *trillions* of times *faster* than the speed of photon light.

With such a speedy *darklight communication system*, that can exchange useful *darklight signals* that travel *trillions* of times faster than the speed of photon light, we will be able to easily communicate from Earth with our friends on *Proxima b*, and with our other friends who may be living on *other planets* in other *nearby solar systems*.

If for some reason, we decide that we only need to send just *one* single message *per second* between the two planets (Proxima b and Earth), then we will only need our *tiny* swift scalar dark *bosons* to travel at speeds that are only about *265 million times faster* than the speed of photon-light.

If we only want to send just *one* single message *per minute*, between the two planets, then we will only need

our dark scalar bosons to travel  $265 / 60 = 4.4$  million times faster than photon-light.

Is it actually possible for *any type* of *dark scalar boson* to really travel (in our local milky-way galaxy) at *4.4 million times faster* than photon-light, or at *265 billion times faster* than photon-light?

How can we begin to answer this very *important* question, so we can actually know *for sure*?

What if we decided to *imagine* that our own Milky Way Galaxy might actually contain hundreds of billions of stars, and that *some* of these stars may be currently orbited by some *human-life* supporting *planets*?

What if we also imagine that there may be a *large number* of *human beings*, kind of like us human beings who are still living here on Earth, living on *many* of the *exoplanets* (planets outside our own local solar system) in our very own little Milky Way Galaxy?

Let's imagine that our own local Milky Way Galaxy may contain a *particularly-interesting star*, that is spatially-located just a little bit *closer* to our galactic center, than our own local sun.

In order to make this *particularly-interesting star*, even *more particularly interesting*, let's also imagine that this star is orbited by a good number of human-habitable planets, and that there are some *advanced human beings* living on some of these interesting planets.

By *advanced human beings*, we mean human beings whose physical human bodies are actually made out of the *very same type* of atoms, that our mortal human bodies here on Earth are made of; but their *advanced human bodies* have better (more-advanced) human DNA patterns, so their *advanced brains* (on their *advanced planet*) can *think more clearly* than our mortal-earth human brains.

Theoretically, we can simply choose to call them “*advanced humans*” because they have already employed some *advanced-versions* of some CRISPR-Cas9 type technologies, on their own advanced planets (located a bit closer to Sagittarius A\*), to *greatly-improve* their own human DNA, to such an advanced degree that we can properly call them “*advanced*” human beings, because they have already improved their own DNA to such an advanced degree, that they really have become *advanced humans* with *super-intelligent* advanced-human *brains*.

Because their human DNA has been improved, upgraded and “*advanced*” in so many *vital* ways, we can also

imagine that they may have also been able to *improve* their human *brains* up to the point where they can even begin to *understand* their own human *pride*.

By completely-understanding, and *fully-confronting* their own human pride, we can imagine that these advanced humans may have already discovered a successful way to *eliminate* excessive competitive human *pride* from the *neural circuitry* of their advanced human *brains*.

We can further imagine that all of these advanced humans have *completely eliminated* excessive competitive pride from their *own* advanced human *brains*.

But, is this theoretically even possible?

Can mere human beings really discover a good scientific way to firmly say *Goodbye* to all of their *Excessive Pride*?

# Goodbye Excessive Pride

Is it theoretically possible for humans to completely say *Goodbye* to their *Excessive Pride*?

How can a human being let go of its *excessive* human-brain *pride*?

Is pride a *good thing*, or a *bad thing*?

What about good healthy *self-esteem*?

What about a good healthy *positive self-image*?

What is the real scientific difference between *good pride* and *excessive pride*?

How did the *advanced people*, living on their *advanced planets*, closer to Sagittarius A\* in the center of our milky-way galaxy, discover a *good scientific way* to finally let go of all of their *excessive brain pride* so they could develop *advanced peaceful human civilizations* on their advanced planets?

How did these advanced humans achieve such a great feat?

Let's proceed to imagine that, with no excessive brain pride to *ensnare* their human societies (with petty human grievances, tribalistic human conflicts, terroristic human hatreds, and nationalistic human wars, etc.) these advanced humans were able to *rapidly-progress* in every way imaginable, including in their ability to *understand* and *harness* the super-fast speeds of the *dark-scalar-boson* flows that *gravitationally* hold together our entire Milky Way Galaxy.

Let's also imagine that these advanced human beings have been able to understand our *dark scalar bosons* and their *ultrafast* darklight *speeds* to such an advanced degree, that they are able to successfully invent an ultrafast *Darklight Communication System* that can send and receive useful darklight signals many *trillions* of *times faster* than photon-light.

Let's further imagine that these brilliant *advanced human scientists* live on a *hypothetical planet* that orbits a star that is about *4,200* light years *closer* to the *center* of our Milky Way Galaxy than our own solar system.

Let's also give an interesting name to this *hypothetical planet* where these advanced scientists *may live*.

Let's just call this hypothetical world, "*Planet Kolob*" for some interesting historical reasons.

# Planet Kolob

What is *Planet Kolob*?

*Planet Kolob* is a hypothetical planet that may possibly exist in a particular spatial location, that is about 4,200 light years closer to Sagittarius A\* (the massive black hole in the center of our milky-way galaxy) than Earth.

By simply naming this hypothetical “Kolob Planet”, we may be able to *almost begin* to more *accurately-imagine* some rather interesting *possibilities* about how some of us may have actually come to live right here, on our own *vulnerable* planet *Earth*, somewhat near the outer-edge of our milky-way galaxy.

Let’s also imagine that the advanced scientists, that are still living on their Kolob Planet, decide to use their new improved *Darklight Communication System* to send and receive dark scalar bosons (the 4,200 light years distance) to our planet Earth, in order to *animate* (kind of like via a super-remote Virtual Reality system) *some* of the *mortal brains* of some of the mortal human beings living here on Earth.

Can we all imagine this?

Can a “human brain” (or some kind of useful “thinking machine”) be *partially-animated* by an ultrafast *communication system* that is located *outside* the human brain in some sense?

Is this *theoretically possible* in some way?

Let’s also imagine that as part of the remote Virtual Reality (VR) system, that uses the super-fast Darklight Communication System, a *particular part* of the mortal-human brains (here on Earth) is *awareness-dimmed*, so the mortal humans here on Earth *remain unaware* that they are being animated (and *slightly-controlled* and *human-desire-animated* and *consciousness-enlivened*) by the *well-meaning* advanced *scientists* living on their Kolob planet.

But is this even theoretically possible?

Can *Darklight Technology* be added to *Virtual Reality (VR) Technology*?

Can such a useful *Darklight Virtual Reality* system really be developed, and used by the advanced scientists living on planet Kolob?



# Darklight Virtual Reality

What is *Darklight Virtual Reality*?

*Darklight Virtual Reality* is an ultrafast Virtual Reality (VR) system that uses a *darklight* communication system to animate *virtual avatars* on *distant planets*.

Can we possibly develop some of these kinds of ultrafast super-useful *darklight VR headsets* to animate humanoid robots on Earth's Moon, and on Mars, in the near future?

Is this possible to imagine?

Are we (humans of Earth) the *humanoid biological robots* (of Earth) that are actively being *consciousness-animated* (today in 2023) by other (more-advanced) human scientists from their home Kolob planets?

Is our *memory-blocking* turned on?

Can we all *fully remember* what we were doing just one single century ago?

*How long* does it take for some of us to *fully remember* what we ate for lunch last Tuesday?

Has a *partial block* been placed on *some* of our mortal-human memory *systems*?

Do we all fully understand the origin (causal source) of all of our *mortal human desires*?

*Where* do our *human desires* come from?

Why do we all *desire* slightly different things?

Why do we *want* to do different things?

Why do we all *try to do* the specific things that we do?

Where do our *personal* human-brain *likes*, and our *individual* human-mind *dislikes* really come from?

Let's also imagine that some of the advanced scientists (who live together in peace on their home Kolob planet) are starting to get *a little bit frustrated* with the *subpar* mortal-human *brains* they are currently remotely-animating here on Earth, because these *subpar* mortal *brains* are still largely controlled by their own *irrational* excessive competitive mortal-human *pride*, and this makes the entire remote VR experience *less satisfying*, because this *excessive* Earth-based mortal-human *brain-pride* is disrupting the *brain-balancing* potential of the *whole remote* (Kolob to Earth) *human living experience*.

Is *Brain Balancing* really this important?

# Brain Balancing

What is *Brain Balancing*?

Why do we sleep and *dream* at night?

Why do we play video games?

Why do we play *immersive* Virtual Reality (VR) games?

For Brain Balancing?

Does our human brain feel *refreshed* and *better-balanced* after a good night of peaceful sleep?

How can the advanced scientists on Kolob start to get some *better brain balancing* for themselves?

Let's imagine that some of these *super-intelligent* advanced scientists (living on Kolob) have decided to *inspire* some of our *intelligent* mortal scientists (living here on Earth) to *quickly improve* our Earth-based CRISPR-Cas9 technologies during the next few years (here on Earth) so some new *improved* mortal-human *bodies* can be created, here on Earth, during the *next* few *decades*, that can begin to actually provide our super-intelligent home-planet Kolob scientists with some *better*

brain-balancing *experiences* as they *day-dream* they are living here on Earth, while they are *actually living* on our Kolob home planet, that is located just 4,200 light years *closer* to the center of our *very own precious Milky Way Galaxy*.

Shall we go ahead and start to create some better (*more-healthy*) mortal *human avatar bodies* (and *more-intelligent human-avatar brains*) for us all to begin to *live* in here on *Earth*?

Are such *Better Human Bodies* even possible?

# Better Human Bodies

Why do some of us desire to live in *Better Human Bodies*?

Can, we the CRISPR scientists of Earth, start to develop some *Better Human Bodies* today?

Why wait?

Why not *start today* to make some *better bodies* for us all to live in?

Is it *okay* for intelligent human beings to simply *create* for *themselves* some better human bodies, and some *better* human brains?

*Why not?*

Why not create a *healthy body*?

Why not create a *healthy intelligent brain*?

Can human beings create *really-intelligent human brains* for themselves *to better think with*?

Does anyone want a *better* human *brain* that can *think* and *feel* more *clearly*, more *purely*, and more *accurately*?

*Who* would ever want to *think clearly*?

Why would *clear thinking* be a *good thing*?

What else is a *good thing*?

Can we (us scientists here on Earth) create some better human *avatar* bodies (and avatar brains) that *don't* get *sick*, and *don't* age beyond 30, and *don't* get confused *so easily*?

Is there at least a *bright* theoretical *possibility*, that our friendly scientists on our *home Kolob planet*, have already chosen to create some better bodies, and some better human brains, for themselves?

If so, then just *how fast* can our *Kolob-home-planet* friendly *scientists* possibly communicate with all us here on Earth?

With our Kolob home planet 4,200 light years from Earth, our *friendly scientists* may possibly animate their Earth-based *human* avatars (us), at a rate of just *one* round-trip *control-signal* per *second* with their powerful darklight VR communication system (safely installed as VR-neural

tissue, inside our mortal-human brains), that can *send* and *receive* their *dark scalar bosons* that travel at speeds greater than *265 billion times faster* than photon-light.

With Earth located 4,200 light years from our Kolob home planet, where our advanced *animator-selves* live, we can animate our *mortal-selves* here on Earth (remotely from our Kolob home planet) at a rate of a *thousand* round-trip *control-signals* per *second* with a *faster darklight communication system* that can send and receive dark scalar bosons that travel at an ultrafast speed of at least *265 trillion times faster* than photon-light.

Can a tiny fast dark scalar boson *really* travel *265 trillion times faster* than photon-light?

What is the very *fastest* speed that a dark scalar boson can travel?

*1,000 trillion times faster* than photon-light?

*10,000 trillion times faster* than photon-light?

Or, even faster?

What is the *ultimate speed limit* for a dark scalar boson?



What is the *very* upper *limit* on the dark scalar boson velocity?

Do a whole *thousand* round-trip control *signals* really need to be sent and received *every second*?

What if our Earth-based mortal human-avatar brains and bodies are *mostly self-autonomous*, and therefore we really only needed to send and receive *just one* single signal per *month*?

*Just one* signal per *month* is a lot *less frequent* than 1,000 signals per second.

There are  $60 \times 60 \times 24 \times 30 = 2,592,000$  seconds in a *30-day month*.

$265 \text{ trillion} / 2,592,000 = 102,237,654$ .

Therefore, our dark scalar bosons will only need to travel at about *102 million times* the speed of photon-light, to conduct *round trips* between our Earth and our Kolob home planet about *once per month*.

Therefore, it seems that in order to *practically animate* our *subpar mortal* human avatar *brains* (here on Earth) from our *more-advanced* human *brains* of our advanced-human selves (living safely on our Kolob home planet,

that is hypothetically-located just 4,200 light years from Earth), we will need to develop a pretty-fast *darklight* communication *system* that can send and receive some pretty *speedy* dark *bosons*, that can travel (between our two precious planets, Kolob and Earth) at *signal-communication velocities* from at least *102 million times* the speed of photon-light, up to nearly *265 trillion times* the speed of photon-light.

This is a *pretty big spread* (about *6 orders of magnitude*) in potential darklight (dark scalar boson) velocities.

But we can see that all of these darklight signal velocities, are some *seriously-fast* darklight *signal* communication *velocities*.

What if we just want to simply animate (in the semi-real-time of about a thousand times per second) some futuristic humanoid *Moon-mining robots*, that we might want to place on our nearby *Moon* in just a few short years from today (circa 2023).

How far is the Moon from Earth?

The Moon orbits our Earth at an *average distance* of about *384 thousand kilometers*.

Photon-light travels through *space* at about *300 thousand kilometers per second*.

Therefore, photon-light travels from our Earth to our Moon in about *1.28 seconds*.

Therefore, the *round-trip* photon-light *travel time* from our Earth to our Moon, and then back to our Earth, takes about *2.56 seconds*.

It is actually possible to *animate* moon *robots*, from our Earth, with this *2.56-second* round-trip photon-travel *time*, by using a *relatively-slow* Photon Communication System.

However, we might start desiring to *animate* our moon *robots* (by 2030 or by 2040) with a *much faster* darklight communication-animation system

In order to fully animate (via a *thousand* sequential round-trip communication *signals per second*) a humanoid robot on our Moon, from our Earth, we will only need to design and build a *darklight* communication *system* that can send and receive dark scalar bosons that travel (between our Moon and our Earth) *2,560 times faster* than photon-light.

Just a measly 2,560 times *faster* than photon-light, certainly seems a lot easier than 102 million times *faster* than photon-light, or 265 trillion times *faster* than photon-light.

*How fast can darklight travel for real?*

What is the *very fastest* any dark boson can go?

How fast can a super-small *spinless* dark boson (*tiny neural pulse*) propagate along a real-dark axon (that has been speed-optimized with its *speedy dark myelin*) inside the *Dark Axon Field* (that axonically-interleaves with the Axon-Higgs Field) that *supports* and *simulates* our whole milky-way galaxy?

Which specific dark axons are the *very fastest axons* within the dark-axon field?

Are the *dark-boson axons* (the dark *plus* axons, the dark *minus* axons, the dark *north* axons, and the dark *south* axons, that conduct and propagate the dark scalar bosons) the *very fastest axons* in the *whole cosmos*?

What type of axon might be *even faster* than a real dark plus boson axon?

Is it possible that there is *no* axon faster than a real dark plus boson axon?

How can we *scientifically-measure* the actual *axon* propagation *velocities* of each of our real dark scalar bosons?

Exactly *how many* dark-boson neural-pulse *action potentials*, can be fired by a real dark neuron *per second*?

What is the highest *dark-boson* pulse *frequency* that can be *neurally-stimulated* inside our *own* local *sun* to govern the streaming *dark-matter behavior* of our *own* local *solar system*?

How can we measure some of the hypothetical *frequency fluctuations* in the *dark-boson* neural-pulse *pressure* (gravity) that *continually bombards* all our *atoms* and thereby *pushes* all of us (mortal human beings) down *towards* the *center* of our planet Earth?

How can the *flow* (and scattering) of dark matter particles (real dark scalar bosons) cause the *force* of *gravity* to physically-manifest inside this local milky-way galaxy?

What is the detailed physical nature of this interesting *dark matter* flow *gravitation*?

Let's look more closely at this *Dark Matter Flow Gravity*.

# Dark Matter Flow Gravity

What exactly is *Dark Matter Flow Gravity*?

What is this *Dark-Matter Quantum-Flow Gravity*?

*Dark-Matter Quantum-Flow Gravity* is the *effective-gravity* that is created by the *constant flow pressure* of all the *moving dark matter* (the ultrafast tiny traveling *quantum dark scalar bosons*) as the dark matter *flows* (and scatters off of the *quantum light scalar bosons* that compose *all* the visible matter) through the universe and *presses down upon* all the *light matter* (visible matter) it encounters.

The *light matter* is all the matter that is composed of all the *light scalar bosons* (electrically-charged real light neural pulses) that make up *all* the elementary particles of this local milky-way galaxy.

The *2 types* of *light scalar bosons*, that together compose *all* the visible-matter elementary particles, are the *positive Light Plus Bosons* and the *negative Light Minus Bosons*.

These *2 light scalar bosons* are much larger, much slower, and much more-massive, than all the *tiny fast dark scalar bosons*.

What happens to a *tiny* dark-boson neural *pulse* when it *bounces off* a *larger* light-boson neural *pulse*?

Can the tiny *dark* boson transfer some of its *linear momentum* to the larger *light* boson?

How much total linear momentum can a tiny dark boson pulse *transfer* to a single light boson?

*How much* total momentum can be *transferred* from a tiny fast *dark boson* to a larger *light boson*?

How much momentum can one single tiny fast dark scalar boson transfer to an *electron*?

Why do most dark scalar bosons *simply pass through* all the *empty spaces* inside most visible-matter atoms?

*How* precisely can a single dark scalar boson occasionally transfer *some* of its *linear momentum* to an atom?

How does the effective “*rain*” of *dark bosons* continually *push down* on our atmosphere to try to push it all down onto the surface of our Earth?



How does a *tiny* dark-boson pulse *interact* and *dance*, with all the *much-larger* light-boson pulses that compose all the fermion (and vector-boson) elementary particles?

Do some of these *dark scalar bosons* flow rapidly (from space) into our Earth planet, in an *inward radial* direction, with many of these dark scalar bosons speedily traveling mostly towards the *center* of our planet Earth?

Do some of these ultrafast, radially-inward-traveling real dark scalar bosons simply *bounce off* of every *neural pulse* of every elementary particle of Earth?

Is this what physically-causes the *dark-boson* gravity-like *pressure* that effectively creates the whole *gravitational field* of our planet Earth?

Is Earth's gravitational field *nothing more* than a dark-matter *fluid-flow* pressure *field*?

What specific kind of *fluid-flow* pressure *field* can fully simulate every property of our *universe's* gravitational *field*?

Do the high-speed (and therefore high-momentum) dark scalar bosons tend to simply *scatter* in all *directions* when they *bounce-off* an electrically-charged light-boson *neural pulse*, that is a pulse-component of an elementary particle,

with these elementary particles including all the *photons*, all the *electrons*, all the *protons*, and all the *neutrons* of our planet Earth?

Do most of the high-speed dark bosons manage to travel *many* miles of *distance* through the many molecules of planet Earth, *before* they *scatter* off of any of the charged real light neural *pulses*, that compose *all* the electrons, protons, and neutrons of Earth?

Is there a relative-abundance of dark-boson *axons* that are mostly *radially-directed-inward* towards the center of Earth?

Our planet Earth has been orbiting our local Sun for about *5 billion years*.

Surely *5 billion years* is enough time, for some real dark axons *to grow* from the center of our Earth *outwards* towards space.

Our local Sun has *probably* governed our local solar system for possibly even a bit *longer* than our planet Earth has even existed.

Surely *5 billion years* is also enough time for our Sun's energy to cause a good number of *real dark axons* to grow outward from the center of our Sun, and *extend*

themselves far outward in *space*, even far *beyond* the orbit of Pluto, and even far *beyond* the Oort Cloud.

It seems theoretically likely that when our own Sun was *first created*, the great energy of the Sun's creation, stimulated the *rapid growth* (elongation) of a large number of *real dark axons* inside the Sun, and these real dark axons quickly grew by extending themselves outward *far into space*, pushing on the visible matter (made of light scalar bosons) of *all the nearby stars*, effectively pushing *all* of these *nearby stars* outward *away* from our newly-created Sun.

Is this why our local universe seems to be *expanding*?

When a *new star* is first created, does this new star merely *push all its neighbor stars* away from it, to create some *new space* for the new star?

Can *Stars* really *push on* other *Stars*?

# Stars pushing on Stars

How can new *Stars push on* other *Stars* to make new space for the new Stars?

What is the exact *physical mechanism* that causes this *observed* (and logical) *expansion* of our *universe*?

How can a *newly-created* star, *grow* its dark axons (the same dark axons that already pass through the newly-created star) to *longer axon lengths*, and then cause these long dark axons to *push* (via their real dark scalar boson pulses) the other nearby stars *away* from the newly-created *star*?

The new *stellar energy*, of the newly-created star, *neurally-stimulates* just enough *real axon growth*, so that the newly-created star is able to *forcefully push* (via dark boson scattering) all the *other stars* away from it, so the newly-created star will have enough individual *solar space* to properly *govern* (energy-regulate) its very own solar system of *precious planets*.

What happens when *two stars* bond together to form a *binary star* system?

What exactly happens with these *Binary Stars*?

# Binary Stars

What is a *Binary Star*?

A *Binary Star* is a *pair* of stars that *mutually orbit* each other, due to their mutual *gravitational bond*.

In a *Binary Star* system consists of *Star A* and *Star B*.

In this *Binary Star* system, Star A orbits Star B, and Star B orbits Star A.

Star A and Star B *mutually orbit* each other *forever*, or at least until something happens, to make them stop their mutual orbital pattern.

Of course, the powerful *centrifugal force* helps to keep these *two stars* away from each other, as they orbit around each other in their orbital paths through space.

However, the *long spiral dark axons*, that extend from each of these two stars, also help to *push* these two stars *apart*, and they also *pull* these two stars together.

How can this be?

How can long dark spiral axons do *both* things?

How can these long dark spiral axons *both push* stars *apart*, and also *pull* stars *together*?

The long dark spiral axons extend themselves outward, far into space, way *beyond* the orbital pathways of the two stars; and then these same long dark spiral axons *curve* themselves *around*, and gently *loop* themselves *around*, and then these long dark spiral axons *extend themselves back into* the interiors of each of the two stars.

Trillions of trillions of real dark action potentials (*dark scalar bosons*) propagate continuously on these long dark spiral axons.

These trillions of trillions of dark scalar bosons *scatter* off of all the visible matter (light scalar bosons) that is inside of each star.

The dark scalar bosons, flowing *directly* from Star A, *scatter* and *push* on the visible matter of Star B, *pushing* Star B *away from* Star A.

Then, as these dark scalar bosons *loop around* (in outer space) and start to *come back* towards the two stars, the dark scalar bosons (that originally came from Star A), *scatter* and *push* on the visible matter of Star B, *pushing* Star B *towards* Star A, and *causing* Star B to constantly

*spin* at a very *particular spin rate*, and *causing* Star B to constantly be *spatially-located* (orbitally-positioned) at a *very particular distance* from Star A.

The interesting (and very particular, and very unique) *three-dimensional pathways*, of the trillions of long dark spiral axons, as they leave Star A and Star B, and *loop themselves out* into space, and then return themselves *back into the interiors* of Star B and Star A, are just uniquely such so as to forcefully-maintain the *one exact unique distance* between the *two stars*, and they are also just uniquely such so as to forcefully-maintain the *two unique exact spin rates* of Star A and Star B.

*Conservation of linear momentum* plays an *important role* in maintaining the orbital pattern, with its *one unique orbital radius*, of the two mutually-orbiting stars in a binary pair.

*Conservation of angular momentum* plays an *important role* in maintaining the *two unique spin rates* of the two mutually-orbiting stars in a binary pair.

However, the *exact form* of the *unique axonic spatial structures*, of the long dark spiral axons, that extend from the two stars, and the *exact unique elemental compositions* of the two stars, play *the dominant roles* in forcefully-maintaining the *two unique spin rates*, and the

*one* unique *orbital radius*, of the two mutually-orbiting stars in the binary pair.

The long dark spiral *axons*, and the associated stellar elemental *compositions*, of the two stars, play the *major roles* in determining *star spin* and *star positioning* in a binary star system, and in any *cluster* of *stars*.

What is the exact nature of these *Star Clusters*?



# Star Clusters

What is a *Star Cluster*?

A *Star Cluster* is a *group* of *multiple stars* that may possibly be gravitationally *bound* together.

Every star in a *star cluster* of 3 stars, 3 thousand stars, or 3 million stars, has *trillions* of long dark spiral *axons* that extend the from the star's interior, way outward *beyond* the positions of multiple nearby by stars, and then spirals (and loops) itself *back into* the star's interior.

Trillions of trillions of real dark scalar bosons propagate (every microsecond) as dark action potentials, along the *entire length* of these super-long dark spiral axons.

These ultrafast tiny dark scalar bosons *scatter* off of all the visible matter (composed of real light scalar bosons) of all the stars in the star cluster.

The dark-matter (dark boson) *scattering events* impart *linear momenta* to modify the various *positions* of all of the stars in the star cluster.

The dark-matter (dark boson) *scattering events* impart *angular momenta* to modify the various *spins* of all of the stars in the star cluster.

The detailed *elemental stellar compositions* of all of the stars (in the star cluster), their stellar sizes, their *stellar masses*, their stellar temperatures, and their relative *stellar positions* in space, all determine the exact *unique* 3D spatial structures of their trillions of long dark spiral *axons* (that extend from the interior of each star), and the *unique* frequency signatures of the collective behaviors of the trillions of trillions of real dark scalar bosons that *scatter off* of all the stars, and *momentum-push* on all the photons, electrons, *protons*, and neutrons of all the stars, to *forcefully-maintain* the *unique stellar spins* and the *unique stellar orbital positions* of all of the individual stars in the whole *star cluster*.

This is how the real *dark axons* (and their tiny fast real *dark* scalar bosons) *gravitationally-bind* clusters of stars together, while at the same time *keeping* all of their individual stars *far enough apart* so these valuable individual stars can *properly govern* their individual solar systems of *precious peopled planets*.

This is how all the star clusters *gravitationally operate together* inside our home milky-way galaxy.

*Most stars eventually obtain some planets to orbit them.*

*Most planets eventually obtain some people to live on them.*

*Most people eventually leave their home planet to live on a different planet.*

*Some people know how to create a new planet.*

*Some people know how to make a new star.*

Every newly-created star fully *neurally-establishes itself*, by growing trillions of real dark spiral *axons* far into space, even way *beyond* its own Oort Cloud.

These real dark spiral axons, and the real dark *scalar quantum bosons* that travel on them, are the *cause* of the observed “*expansion of our universe*”, including the seeming “*accelerated expansion*” of our universe.

These real dark spiral axons, and the real dark *scalar quantum bosons* that travel on them, are also the *cause* of all of the observed “*gravitational forces*” of our universe.

Is our new theory of gravity a proper *Quantum Gravity Theory*?

# Quantum Gravity Theory

What is a *Quantum Gravity Theory*?

A *Quantum Gravity Theory* is a physical theory describing how the collective *quantum behaviors* of a set of *quantum particles* creates *gravity*.

Is this exactly what we have *scientifically-described* here in this present *4 Brain Theory* paper?

Yes.

This dark-matter *quantum-scattering* theory of *gravity* is a proper logical theory of “*quantum gravity*”, because it is the *quantum* scattering behavior of the *quantum particles* (dark *scalar bosons*) that are *causing all* of the *quantum gravity*.

These tiny *dark* slightly-charge *scalar bosons* (dark-matter particles) *quantum scatter* off of all the *quantum* real *light* *scalar bosons*, that compose all the *quantum fermions*, and the all the *quantum vector-bosons* of the standard model of elementary particle physics.

When these tiny dark *slightly-charged* *scalar bosons* arrive inside a star, and begin to travel *inside* the super-

hot energetic star, they continuously-carry a whole lot of electric *neural pulse energy* (via a Poynting  $\mathbf{E} \times \mathbf{B}$  *energy-transport vector*) to the *solar Higgs dendrites* (inside the star), causing the *solar Higgs neurons* to fire up a set of massive 125 GeV Higgs Bosons (super-large net-neutral real light *Higgs neural pulses*), and these super-massive ultra-unstable *Higgs Bosons* promptly decay into all the *photons*, and all the *electrons*, and all the *protons*, and all the *neutrons* needed to continue to *energetically-fuel* the solar nuclear-burn *indefinitely*.

This is how all the *stars* get all their energy so they can function as *stellar heater lamps* in the *sky*, for the benefit of all the people, that live on all the nearby orbiting planets, that enjoy the *light* and *heat* they get from their stellar-heater-lamp *sun* in the sky.

As the *super-energetic* electromagnetic dark matter (via its real dark scalar boson pulses) is drawn into a *sun*, where its dark-matter energy (the energy transported through space with the dark *scalar-boson* pulses) is converted into some of the solar nuclear energy that fuses existing protons and existing neutrons into *heavier nuclei*; and it also is converted into new photons, new electrons, and new protons, and new neutrons, via the *solar Higgs mechanism*.

In this way, every star draws in *dark matter* and converts it into *visible matter*.

Also in this way, *no star* ever needs to *run out of fuel*.

Dark matter is the *Fuel of the Stars*.

# Fuel of the Stars

What is the *Fuel of the Stars*?

The *Fuel of the Stars* is the *nuclear fuel* that the *stars* receive from the *dark matter* that feeds the stars and continuously *fuels them* with *all* of their *energy needs* so all the *stars* can continuously *burn forever*.

*Dark matter* is the *Fuel of the Stars*.

There is *no other* Fuel of the Stars.

The direct-current (and alternating-current) spatial flows of the real dark scalar bosons *guide* the Poynting  $\mathbf{E} \times \mathbf{B}$  *energy-transport* vector into the energetic *Higgs hearts* of the *stars* to *electrically-feed* them, and to *nuclear-fuel* them, continuously *forever*.

Stars *do not hold* all their fuel.

Stars *do not contain* all their fuel.

Stars *continuously receive* their proper portion of fuel, in the *very moment* that each proper portion of fuel is actually *needed*.

Stars are *electric energy loads*.

The energetic *black holes* (in the centers of galaxies) are the *electric energy generators*.

The long dark galactic spiral axons, *guide* their dark slightly-charged scalar (Plus and Minus) *bosons*, and their  $E \times B$  *energy-transport Poynting vectors*, from the energetic interior of Sagittarius A\*, to our own *sun*, and to *all the stars* of our milky-way galaxy.

This is how energy is *continuously transported* (throughout the whole galactic *dark electric energy grid*) from the *center* of a galaxy to *all* of its *stars*, in the very moment that the stars actually need to receive their energy, so all of these *vital stars* can properly function as the bright shining *stellar heater lamps* in the sky, that they are.

The real dark scalar bosons flow from the *black-hole galactic centers*, outward and into the stars, with these energetic dark scalar bosons helping to *supply* all the stars with all the *energy* they will ever need.

An individual star has a *continuously-fluctuating* amount of *solar energy*, as it continues to draw in dark scalar bosons (dark-matter particles) to *continuously-fuel* its ongoing nuclear-fusion reactions.



To properly maintain its energy levels, our own sun *sends out* dark-boson *signal pulses* to Sagittarius A\* *informing it* whether they it needs to *increase* or *decrease* the *rate* at which Sagittarius A\* transport dark-boson *fuel pulses* directly to our sun, to be consumed as solar fuel for its ongoing nuclear fusion energy-exchange processes.

In this way, each star continually sends out a relatively *few* dark-boson *signal pulses*, and then in return, receives relatively *many* dark-boson *fuel pulses* to continuously fuel its ongoing nuclear fire.

A *huge number* of high-speed, high-energy, linear momentum-carrying dark scalar bosons flow and *propagate radially* (along *inward-oriented* solar-radial axons) from *outer-space* towards the *center* of their stars, and this solar-inward-flow (of dark-matter dark-boson neural-pulse particles) *pushes* all the *planets* towards the star (they are orbiting) as the dark scalar bosons *push* on all the electrons, photons, protons, and neutrons of each planet and its atmosphere.

Each planet, at the time of its initial creation, also stimulated the growth of a large number of real dark neurons, that *grew outward* from the *center* of the *planet*, with many *axons growing outward* from the planet, into the space surrounding the planet for many miles.

These *radial* planetary *axons* cause the incoming dark scalar bosons to *propagate radially* along these planet-radial-axons mostly towards the *central regions* of the planet.

Is this how our own *Earth* receives its own *Quantum Gravity* that continuously pushes us all down onto the surface of this planet?

# Earth Quantum Gravity

What is *Earth Quantum Gravity*?

*Earth Quantum Gravity* is the *quantum gravity* that holds us all down onto the *surface* of our planet Earth.

The continuous showers, of tiny fast *quantum* dark-matter *particles* (dark scalar bosons), *push* (via *quantum scattering* off of all our human-body visible-matter particles) us all *down* to Earth every second of everyday.

These ubiquitous intense *quantum showers* are actually always “raining” in *all directions* at once.

However, the most *powerful showers* are the vertical *downward* showers, of trillions of tiny fast quantum scalar dark bosons, that relentlessly *push* us all *down* to the Earth.

Some individual *water rain drops* are *big enough* for us to notice them individually.

However, the individual *quantum dark scalar bosons* are *not large enough* for us to notice them individually.

If we want to scientifically measure the effect of an individual *quantum dark-matter particle*, then we need to invent a very sensitive new *scientific instrument* to do so.

*Most of the trillions of high-speed momentum-carrying dark scalar bosons travel mostly-radially-inward largely towards the center of Earth, scattering off of all the atmospheric molecules and pushing all these molecules downward towards the surface of Earth.*

These *trillions*, of downward-momentum *quantum-gravity scattering events*, keep our Earth's precious atmosphere from floating off into space.

Many of these momentum-carrying, *momentum-imparting* dark quantum scalar bosons travel radially towards the *center* of our own Earth planet, and some of these dark quantum bosons *bounce off* of the *very tops* of our mortal human heads, and some of these dark quantum bosons bounce off of the *inner organs* inside our human bodies.

And some of these dark scalar quantum bosons bounce off of *every atom* inside our human bodies, and thereby *push every molecule* of our human bodies *radially-downward* towards the *center* of our Earth, and this *continual* radially-downward-pressing *dark-boson quantum-scattering flow-pressure* is what we all experience as “*gravity*”.

These dark-matter *quantum particles* (tiny swift charged dark *scalar bosons*) have ultrafast inward radial (mostly towards the more-central regions of our spherical Earth) velocities that are the superluminal *darklight velocities*, that are trillions of times faster than the speed of photon-light.

The finite *linear momentum* of the inward-bound dark scalar bosons is proportional to their *tiny mass* multiplied by their *huge velocity*.

These ultrafast dark-boson radial velocities (and corresponding *dark-boson linear momenta*) impart a significant amount of *radial* (towards the center of Earth) *momentum* to all the trillions of elementary particles they bounce off of every second.

Some of these dark quantum bosons *bounce* off of *air molecules* in the Earth's atmosphere, and some dark quantum bosons bounce off of rock molecules in the Earth's *outer crust*; but *most* of these dark quantum bosons travel *deep inside* the interior of Earth where they *bounce off* of molecules deep inside our Earth.

What happens when these dark scalar quantum bosons bounce off all the atoms and all the molecules that are located *deep* inside our *Earth's interior*?

What happens when all the *dark matter* (dark scalar bosons) *bounce-off* all the *atoms* (and molecules) that are located *deep* inside the *volumetric interior* of any planet, or any *moon*, or any sun, or any star, or any galaxy of our entire universe?

Can these particles of *dark matter bounce-off* all the atoms of these celestial bodies, in just such a *specific way* that they induce a *net-torque* on these massive celestial bodies to *alter* the *rates* at which they *spin* and *rotate* about their *own axis*?

Can the specific *flow-pattern* of dark matter (tiny fast scalar bosons) really cause a *flow-torque* on these huge celestial bodies?

What is the actual nature of these *hypothetical Dark-Matter Flow-Torques*?

How can a *Dark-Matter Flow-Torque* cause our very own planet Earth to *rotate* and *spin* on its *axis* once every 24 hours?

# Dark-Matter Flow-Torque

What is *Dark-Matter Flow-Torque*?

What is a *Dark-Matter Quantum-Flow Torque*?

A *Dark-Matter Quantum-Flow Torque* is the *total* net dark quantum *torque* on a celestial body (like a galaxy, star, *planet*, moon, *asteroid*, or spaceship), produced by the *quantum scattering* (with *momentum transfer*) of dark matter particles (tiny fast dark scalar bosons) off of light matter particles (light scalar bosons), that *causes* the celestial body to have a *Dark-Matter-Caused Spin*.

What is a *Dark-Matter-Caused Spin*?

A *Dark-Matter-Caused Spin* is the *direction* and *amount* of *angular momentum* given to a massive celestial body due to the total net *Dark-Matter Quantum-Flow Torque* on the celestial body, due to all the *dark-matter-flow pressures* of all the dark matter particles (dark quantum scalar bosons) that are passing through (flowing through) the celestial body, and scattering off of the light scalar bosons (that compose all the elementary-particle visible matter) of the celestial body, and thereby inducing a *total net torque* on the celestial body, as the dark matter

particles *bounce off* (scatter off) all the *atoms* (and all the elementary particles) of the celestial body.

This dark-matter *quantum-flow* torque imparts a *tiny* quantum *torque* to each and *every* individual *atom* of a celestial body like a moon, or a planet, or an asteroid, or a spaceship, or a sun, or a galaxy.

How does this dark-matter quantum-flow torque affect all the *molecules* inside a *planet*, when the flowing dark-matter (tiny fast scalar dark bosons) interacts with all these planetary molecules, and bounces off of all these molecules, and *torques* (and pushes) all these molecules that are *deep inside* a planet?

Can the specific flow-rate (and flow-pressure-induced *torque*) of *dark matter* alter the *rate* of *spin* of a whole entire *planet*?

Exactly what specific physical effect does the *flow* of *dark matter* have on the *spin* of a *planet*?

Can *Dark-Matter* flow influence *Planet-Spin*?



# Dark-Matter Planet-Spin

What is *Dark-Matter Planet-Spin*?

*Dark-Matter Planet-Spin* is the *spin-rate* of a *planet* due to the *total sum* of all the dark-matter-induced *atomic-torques* on the planet.

The *total* dark-matter *planet-torque* on a *whole planet* is the dark-matter torque-sum of all the *individual* dark-matter *torques* on all the *planet's atoms* measured from the *spin-axis* of the planet.

In other words, immediately *after* a new planet is created, it will have an *initial* angular momentum (its *initial* planet *spin* that the planet initially receives from its *initial* planet-creation *process*) that is the quantity of *initial* angular *momentum* (initial planet spin) that the new planet has the very moment *after* it was first created.

However, this *initial* planet spin is *not* its *final* planet spin.

This initial new planet *spin* is soon *altered* by the *flow* (and scattering) of *dark matter* (dark scalar bosons) particles, as these tiny fast dark-matter particles try to flow through the *interior regions* of new planet.

The dark matter flows through the *three-dimensional* volumetric *interior* of the newly-created planet, and presses (*puts a torque*) on all the atoms of the new planet, with these dark-matter-induced *atomic-torques* measured relative to the *spin-axis* of the new planet, with this important *spin-axis* of the new planet passing through the *center* of the planet.

The dark matter flow puts a *dark-matter torque* on every visible-matter *atom* of every new planet, because the dark-matter particles scatter off of the visible-matter particles, and this *scattering* process *transfers momentum* from the dark-matter particles to the visible-matter particles.

All of these *individual* tiny atomic dark-matter *torques* (on every atom of a planet) sum together to cause a *total net torque* (a kind of net *angular force*) on the whole planet.

This dark-matter *planet-torque* causes the whole massive planet to slowly start to *change* its *own spin*.

In this way, the dark-matter *planet-torque* will cause a planet to continually change its spin *until* the planet spin (direction of spin, and magnitude of spin) is exactly where

it needs to be, so that the planet-wide net dark-matter *planet-torque* finally *drops* to zero.

This dark-matter *planet-torque* will eventually drop down to zero, after the planet spin has *grown* to the proper *spin-magnitude* (and the proper *spin-direction*) that makes the total net dark-matter planet-torque *vanish*.

When the *dark-matter* net-planet-torque finally completely *vanishes*, then the new planet will just keep (*maintain*) its *final planet-spin* at its current planetary spin direction and spin rate.

In this way, the *flow* (and *scattering*) of dark-matter particles (tiny fast dark scalar bosons), through all of the visible matter, in the planet's volumetric interior, *causes* (and fully determines) the *spin-rate* (and spin-axis *orientation*) of each planet in our universe.

The detailed *elemental composition* of all the visible-matter *atoms* inside a planet (and exactly where these atoms are *located* inside the planet), have a *large effect* on the planet's *spin rate* and spin-axis *direction*, because all of the trillions of tiny fast dark scalar bosons scatter off of one type of atom a little bit *differently* than they scatter off of a different type of atom.

These dark-matter particles *scatter off* (bounce off) of the planet's *different kinds of molecules* in a way that causes them to *impart more momentum* to some kinds of molecules than to other kinds of molecules.

For example, the tiny fast *charged* neuro-electromagnetic dark scalar bosons *scatter off* of *gaseous-state* molecules a little bit *differently* than these same tiny dark scalar bosons scatter off of *liquid-state* molecules, or *solid-state* molecules.

This real dark quantum scalar boson dark-matter scattering process *causes planet-spin orientation*, and it also causes planet-spin *rate*; and it also *causes* each *planet* to maintain a very particular *average distance* from its own sun.

The average *Planet-Sun Distance* is determined by the particular elemental atomic composition, of all of the visible-matter inside the planet.

# Planet-Sun Distance

What is the average *Planet-Sun Distance*?

The average Planet-Sun Distance is the average *spatial distance* (how many millions of kilometers) *between* a *planet* and its own *sun*.

Every planet orbits its own sun in a mostly *elliptical orbit* around its sun.

Some of these elliptical orbits are *nearly circular orbits*.

If the planet orbits its sun in a *perfectly circular orbit*, then the *radius* of the *circle* (the circular orbit) is the average (constant) Planet-Sun Distance.

For example, our own little *planet earth* orbits our own sun, in a nearly-circular orbit, at an average distance of approximately *93 million miles*.

Some solar-system scientists (here on earth) have already fashioned some speculative *theories* about what *actually causes* our earth to orbit our sun with a “*radius*” of about *93 million miles*.

*Why* does our earth, orbit our sun, at a *radius* of about 93 million miles?

What is the *real reason* for an *orbital radius* of 93 million miles?

Our new theory, about *what causes* this 93-million-mile *earth-sun radius*, is very unique, and our new *earth-sun-distance theory* can be easily proven, with some convincing *new scientific experiments*, that can be experimentally conducted, during the *next few years*, right here locally inside *our very own* solar system.

What is our exciting new *Earth-Sun Distance Theory*, and what *detailed scientific experiments* are now needed to *convincingly prove* our new theory to a *majority* of the present-day dark-matter *quantum-gravity* physicists of this earth?

What exactly is our new Earth-Sun *Distance Theory*, and why is this exciting *new theory* possible to experimentally prove, or *experimentally disprove*?

Our *Earth-Sun Distance Theory* is that *two* distinct opposing dark-matter particle *flows*, *cause* the earth to *maintain* its very particular average *distance* from the sun, with one dark-matter flow being the *outward-flowing* dark-matter *particles* that are flowing out of the sun and

into every region of its surrounding solar system, and the other dark-matter flow being the *inward-flowing* dark-matter *particles* that are flowing into the sun from every region of its solar system; because *some* (a partial fraction) of these flowing (rapidly traveling) tiny fast dark-matter (real dark scalar boson) particles *scatter* off of all of the visible-matter *elementary particles* (that compose all of the planetary atoms of this planet earth); and these dark-matter *Planck-Scale* quantum scattering *interactions* (with all the quantum physical real-light-boson components of all of earth's visible matter) *transfer momentum* to all of the visible matter of earth, thus constantly *moving* our planet *earth* to an average orbital distance (from the sun) that *exactly balances* the two opposing “*dark-matter pressures*” of the two distinct opposing dark-matter particle flows; eventually placing (locating) planet earth *exactly* at its very-own, special, unique “*dark-matter pressure-balance earth-distance*” (from the sun), where the dark-matter *outward-pressure* exactly *equals* the dark-matter *inward-pressure*, according to the *exact* unique planetary atomic *composition*, including the *net* atomic-mass *density*, of our *earth planet*.

In this way, the *two-opposing* dark-matter flows, *place* our *planet* earth *exactly* where it is currently *located*, relative to our sun, in its ideal goldilocks zone of comfortable human habitability.

Our planet earth is composed of exactly *certain types* of atoms and molecules.

The exact planetary *elemental composition* of our planet earth is what determines (causes) our earth to be located 93 million miles from our sun.

If our earth were to be somehow moved out to 108 million miles from our sun, then our earth would *gradually move itself back* to just 93 million miles, after a sufficient number of orbits; because 93 million miles is the *correct* dark-matter pressure-balance *earth-distance* from our sun, because of the particular *unique* atomic *composition* of our *earth*, and because of the very *unique* way that our own *sun* *modifies* the *two* opposing *flows* of the dark matter of our *own* unique *solar system*.

93 million *miles* is the “*just-right* fully-balanced *earth-sun* distance” for our own earth, because our planet earth is composed of a *unique blend* (atomic composition, and atomic spatial distribution inside of planet earth) of “93-*million mile*” atoms.

If our earth were to be somehow be *moved inward* to just 88 million miles (from our sun), then our earth would simply gently move itself (with the help of the *two* *opposing* dark-matter momentum-imparting *flows*) back



to its full 93 million miles, after a sufficient number of orbits; because 93 million miles will always be the *correct* dark-matter pressure-balance *earth-distance* from our sun, so long as earth's unique atomic composition *remains the same*, because the particular unique atomic *composition* (and its unique atomic *distribution*) of our earth is what *forcefully-maintains* our earth at 93 million miles from our sun, because of the *unique way* our own *sun modifies* the *two* opposing *unique flows* of the dark matter particles (real dark scalar bosons) of our *own* unique *solar system*.

There are *only two ways* to permanently *change* the *average distance* between our earth and our sun.

The first way, is to *change* the atomic *composition* of *earth*.

The second way, is *change* how our *sun modifies* the opposing *dark matter flows* inside our solar system.

So, unless and until, we make one of these two major changes, our planet earth will *remain steadfast* at an average distance of 93 million miles from our sun, as its average *orbital radius*.

Our own planet earth, is *not* the only planet, that is *held* firmly *steadfast* at its own *unique* planetary-atomic-composition *distance* from its own sun.

It turns out that each and *every planet* in our whole infinite universe *fully experiences* the two opposing flows of dark matter, with one flow moving through the planet *towards* its own *sun*, and the other flow moving through the planet *away* from its *sun*.

These *two-opposing* dark-matter *flows* move through (and *scatter within*) each and *every planet* in our own little solar system, and each and every planet in our huge milky-way galaxy, and each and every planet in our whole infinite universe, to *spatially-position* every *planet orbit* precisely where the two-opposing dark-matter particle flows, exactly *balance* each other, in accordance with the *planetary* mass *density*, and the *planetary* elemental *composition* spatial-distribution, of the particular planet.

What is our *Planet-Sun Distance Theory*?

Our *Planet-Sun Distance Theory* is that *two* distinct opposing dark-matter particle *flows*, cause each and every *planet* (in our whole infinite universe) to *maintain* its *unique* planetary average *distance* from its own sun, with one dark-matter flow being the *outward-flowing* dark-

matter *particles* that are flowing out of the sun and into every region of its surrounding solar system, and the other dark-matter flow being the *inward-flowing* dark-matter *particles* that are flowing into the sun from every region of its local solar system; because *some* of these rapidly flowing tiny fast dark-matter particles *scatter* off of all of the visible-matter *elementary particles* (that compose all of the planetary atoms of the planet); and these dark-matter *Planck-Scale* quantum-scattering *interactions* (with all the quantum physical components of all of earth's visible matter) *transfer momentum* to all of the visible matter of the planet, thus constantly *moving* the *planet* to an average orbital distance (from its sun) that *exactly balances* the *two* opposing “*dark-matter pressures*” of the two distinct opposing dark-matter particle flows; eventually placing (locating) the planet *exactly* at its very-own special unique “*dark-matter pressure-balanced planetary-distance*” (from its sun), where the dark-matter *outward-pressure* exactly *equals* the dark-matter *inward-pressure*, according to the *exact* unique planetary elemental *composition*, including the *net atomic mass density*, of the *planet*.

We have just presented, in this 4 Brain Theory paper, a completely new and unique *Planet-Sun Distance Theory*, that has *never* been published *before*, in this level of *useful* scientific *detail*, during the last 3,000 years here on earth.

But this new Planet-Sun *Distance* Theory has not yet been *proven correct* in every way possible.

What kind of *new* scientific *experiments* can we begin to conduct, prior to the year 2030, right here inside our own local solar system?

How shall we attempt to *experimentally prove* that our new *Planet-Sun Distance Theory* is *fully correct*?

What kind of *exciting* new scientific *experiments* can we begin to conduct right here, in *our* local solar *laboratory* of our very own solar system?

What kind of scientific experiments can we begin to conduct with our *artificial satellites*?

What kind of scientific experiments can we begin to conduct with some of the *asteroids* of our local solar system?

What can we do with *Satellite Density*?

# Satellite Density

What is *Satellite Density*?

*Satellite Density* is the *average density* of all of the elemental components of a natural satellite, or an *artificial satellite*.

What kind of *new scientific experiments* can we do with some properly-prepared *artificial satellites*, that we can make for the purpose of *scientifically testing* the detailed nature of the *opposing* dark-matter particle *flows* right here locally inside our very own *solar system*?

What would happen if we constructed *many* artificial *satellites* of different *sizes* and different average *densities*, and we put these satellites into orbit around the *sun* with various *orbital radii*, and various *spin rates*, and various *spin-axis orientations*; and then we turned off all the thrusters on the satellites, and then we continued to monitor all of these satellites, to carefully *observe* all their *locations* and *spins change* over *time*.

What kind of interesting scientific experiments can we conduct after we carefully prepare *two identical satellites* that have exactly the same *elemental composition*, exactly

the same elemental *spatial distribution* inside the two satellites, and exactly the same average *mass density*?

If *two* of these *identical satellites* are initially placed into two very *different orbits*, with two very-different average *distances* from the *sun*, and two very-different *spin rates*, and two very-different *spin-axis orientations*; how many orbits will be *required* for these two identical satellites to gradually move themselves into exactly the same orbital pattern, with the exact *same* sun-satellite *orbital radius*, and the exact *same* *spin rate*, and the exact *same* *spin-axis orientation*?

The *sensors* on these *two* identical-twin *satellites*, can continuously send information to our scientists on earth, so our *astrophysicists* can scientifically observe the *two spin rates* approach each other, while these same astrophysicists also observe the two spin-axis orientations move closer *together*, while these same astrophysicists also watch the sun-satellite *orbital radii* of the identical-twin satellites move themselves to the *very* same exact *radius*.

Will this *new* astrophysical *experiment* help our bright astrophysicists to better understand the *opposing flows* of the dark-matter particles in our local solar system?

Yes.

Why have these kinds of super-interesting super-helpful scientific experiments *not yet* been conducted by our talented scientists?

Can we start making some identical-twin satellites *today*?

Why wait?

What kind of *new* scientific experiments can we conduct with the abundance of *asteroids* in the asteroid belt between Mars and Jupiter?

Are all of these *asteroids* already composed of the exact same kinds of *atomic elements*?

What kinds of scientific experiments can we conduct today with their elemental *Asteroid Composition*?

# Asteroid Composition

What is *Asteroid Composition*?

*Asteroid Composition* is the elemental atomic *composition* of an asteroid, which includes average *asteroid* mass *density*, and the exact spatial distribution of different elements inside the body of the asteroid.

*Asteroid Elemental Composition* is very important in determining the exact *radial distance*, from the asteroid to the sun, where the asteroid will naturally *migrate* as the asteroid is *forcefully pushed* by the two-opposing *dark-matter* flows.

The *thousands* of *asteroids*, in the asteroid belt between Jupiter and Mars, have already had many *millions* of years, since the unfortunate *explosion* of the *Planet Aster*, which blew this planet into thousands of asteroids.

Of course, this *Planet Aster* is a *hypothetical planet* which might have once existed in an orbit around our sun, with a *sun-Aster* average *radius* that is about the same as the current average *asteroid-belt radius* of the orbit of this belt of asteroids as they all travel together around the sun.



The really interesting thing about this asteroid belt is that it is *so coherent* and *well-formed*.

The thousands of asteroids are *not* wandering all over our entire solar system.

These thousands of asteroids are all *tightly confined* to just a *very-narrow band* of average *radii* in their orbits around the sun.

Our *asteroid radii theory*, is that all of these thousands of asteroids have about the *same radii*, because all of these asteroids have about the *same* elemental atomic *compositions*, and therefore all of these thousands of asteroids are *forcefully-pushed* (by the two-opposing *dark-matter* flows) into the *exact* same *radius* as they orbit around the sun.

The interesting thing about the *Kuiper-Belt asteroids* (mostly between Neptune and Pluto) is that their average Kuiper orbital *radius* is very different than the average Aster orbital radius of the *Aster-Belt asteroids* (between Mars and Jupiter).

This means that the Kuiper asteroids probably have a *very-different* elemental *atomic composition* than the Aster asteroids.

Theoretically, it appears that the two opposing flows of the dark-matter particles scatter off the *Kuiper* atomic composition of the *Kuiper asteroids*, to dark-matter push these Kuiper asteroids into their *larger* Kuiper radius between Neptune and Pluto.

Likewise, the two opposing flows of the dark-matter particles scatter off the *Aster* atomic composition of the *Aster asteroids*, to dark-matter push these Aster asteroids into their *smaller* Aster radius between Mars and Jupiter.

*Asteroid density* may play a *dominant role* in determining the eventual average *radius* of the asteroid as it orbits the sun.

What would happen if we simply swapped the positions of a *Kuiper asteroid* for an *Aster asteroid*, and we also put *telemetric sensors* on these *two asteroids*, so we could scientifically observe these two swapped asteroids as they gradually *migrated* themselves *back* into their *original positions* with their orbital locations *returning* to their *original radii*?

Would this be a good scientific experiment to validate (or *invalidate*) this whole 4 Brain Theory?

What other scientific tests can we start to conduct *today*?

What other scientific experiments can we perform to help us to better understand the actual *ancient history* of our hypothetical *Planet Aster*?

# Planet Aster

What is *Planet Aster*?

The *Planet Aster* is a *hypothetical planet* that may have once actually existed, *before it exploded* to become the *asteroid belt* between Mars and Jupiter.

There are actually many different kinds of dangerous things that can *cause* a whole planet to suddenly *explode* into thousands (or millions) of asteroids.

It seems like many thousands of interesting asteroids (from our hypothetical *planet Aster*) are orbiting, in such *similar orbits*, about the sun, that they all (all the Aster asteroids) seem to be in really very similar orbits, with very *similar distances* from the sun.

Why are all of these asteroids *staying together* in their orbits around the sun, all at the *same* (or nearly the same) *distance* from the sun?

What *physically-causes* these thousands of Aster asteroids to hang together so tightly, and *so snugly*, in space, as they all orbit our sun together?

What is the *correct theory* that will accurately explain the real reason for this *tight clumping* of the Aster asteroids?

With so many of these asteroids (from Planet Aster) being located at about the *same distance* from our sun, it is very likely that these asteroids all have *something in common*, like *similar mass density*, or some other *defining physical characteristic* of their *individual atomic compositions*, that would *cause* them *all* to interact with the two-opposing dark-matter flows (coming from the sun, and moving into the sun) in such a *similar way*, so as to keep these Aster asteroids all orbiting at about the *same* (or nearly the same) *distance* from the sun.

What is it about the *molecular compositions* of the asteroids of *Planet Aster*, that make them all so *physically similar* in their net atomic compositions?

What makes *this* particular *Aster set* of asteroids so astonishingly physically similar, in the *particular way* they all *interact* (by *exchanging momentum*) with the *dark-matter particle flows*, that are continuously *passing through* all of them?

What is our *Planet Aster Hypothesis*?

Our *Planet Aster Hypothesis* is that the *asteroid belt* between *Mars* and *Jupiter*, is composed of a large number

of asteroids, that are the result of *Planet Aster exploding apart* many millions of years ago, and violently casting its many planetary pieces (asteroids) *far* out into *space*; and then the *two* opposing dark-matter *particle-flows* (towards the sun, and from the sun) began to *scatter off* the *widely-dispersed asteroids* (from the exploded Planet Aster), *causing all* of these many asteroids to *come back* (move back into their *original* orbital *distance* from the sun) into the same (or a very similar) orbit (at the same average distance from the sun as the *original* sun-Aster *distance*) as the original Planet Aster, from which they all came; and that these two opposing *dark-matter* particle-flows are *continuously* maintaining the same exact average *sun-distance location* of all of these many asteroid (from Planet Aster) orbits, to maintain all their current orbits nearly *all together*, with nearly all of these asteroids orbiting the sun at the very *same* (or nearly the same) *asteroid-sun distance*; and this is *why* all of these asteroids stay in the same orbit, at the same *asteroid-sun distance*, because they are *all* made of similar atomic *materials*, or they all have about the *same* average *mass density*.

Therefore, all the asteroids (from Planet Aster) *all* hang closely *together*, in the *same orbit*, at the *same distance* from *the sun*, because they *are* all made of the very *same kind of things*, or they are all made of the very *same density* of things.

If these asteroids (from Planet Aster) were made of *something different*, then their average *distance* from the *sun* would be *correspondingly different*.

Is our powerful new Planet *Aster* Hypothesis a good proper scientific theory that can be *experimentally tested* during these next few years?

Yes.

This exciting new Planet *Aster* Hypothesis can actually be experimentally tested in just a *few months*, or in just a *few years*, with an *asteroid-gathering* spaceship.

Can such a suitable *Asteroid-Gathering Spaceship*, be designed and constructed, by our talented scientists and engineers of earth?

Yes.

In this scientific experiment, we will simply design, build, and send our *Robotic Asteroid-Gathering Spacecraft* out to the asteroid belt (of the exploded Planet Aster, located between Mars and Jupiter), and gather up *a good dozen* (or more) asteroids, and then bring these *dozen* selected *asteroids* back to earth, so they can be *closely studied* (by our brilliant *material scientists*) to figure out *exactly why*

they have all been doing such a good job of *staying* so closely *together*, with their *same* orbital *distance* from the sun.

Our *Planet Aster Experimental Hypothesis* is that we will *experimentally discover* that *all* of these Planet-Aster asteroids are *compositionally* very *different* from the *other type* of asteroids (the Planet-Kuiper asteroids) that are the remnants of the *ancient* hypothetical *Planet Kuiper*.

How could there have been such an ancient hypothetical *Planet Kuiper*?



# Planet Kuiper

What is *Planet Kuiper*?

*Planet Kuiper* is a *hypothetical planet* that *exploded* long ago to create *all* of the *Kuiper asteroids* in the *Kuiper belt*, that is mostly *located* between the orbit of Neptune, and the orbit of Pluto.

How could there be so many different planets in our own solar system, and how could *two* of these hypothetical planets (*Planet Aster* and *Planet Kuiper*) have *somehow exploded* millions of years ago, to generate *two* of the known *asteroid belts* of our local solar system?

How are planets *really* created?

How are planets *really* destroyed?

Can scientists *destroy* planets?

Can *scientists* create *planets*?

Did some *hypothetical* ancient *scientists* create *some* of these *ancient* hypothetical *planets*?

Did these *hypothetical* ancient *scientists* always make *good* wise brilliant *decisions* in the ways they conducted all of their ancient scientific experiments?

Did some ancient scientists *accidentally blow up* their own Planet Aster in a nuclear experiment gone wrong?

Did an ancient *interplanetary war* break out, that intentionally caused the whole Planet Kuiper to be *blown up* by their ancient *enemies*?

What are the *interplanetary risks* of becoming an interplanetary species?

What *kinds* of *space wars* can easily break out between the billions of *prideful* arrogant *citizens* of *two warring planets*?

Could the angry citizens of one planet decide (*vote*) to confidently proceed to simply *blow up* their enemy's whole planet?

Can mortal humans (like us here on earth) develop a *nuclear weapon* that is so powerful that it can destroy a whole *planet*?

Can humans also develop a *nuclear weapon* that is so powerful that it can destroy *a whole sun*, and its *whole solar system*?

Can humans one day develop a *creative planetary nuclear device* that is so powerful it can *create a whole planet* in space?

Can humans develop a *creative stellar nuclear device* that is so powerful it can *create a whole star*?

Are these some of the creative things that *we* have already *done*, here in our very own milky-way galaxy, a long time ago; but *we* cannot *remember* all the things we have already done here, because of the *memory-masking* neural *circuits* that we have *purposefully-installed* between the *vast ancient memories* of our *advanced human brains*, and the *severely-limited-memories* of our *newly-created* (less than just one century) *mortal-human avatar brains* that we all currently have on earth today?

Our *Star Creation Hypothesis* is that we can all choose to *create whole galaxies of many stars* as real human beings, and some of us can also choose to *create individual stars* as advanced-human avatar beings, and each such intentional *star-creation event* can often be seen far away as a *star-creating* supernova; and also we sadly sometimes accidentally destroy whole stars (and their

whole solar systems) as mortal human beings when we choose to experiment with *exploding* certain types of advanced *nuclear* fusion devices in a *vacuum*; and each such accidental *star-destruction event* can often be seen far away as a *star-exploding* supernova.

*Our Planet-Creation Hypothesis* is that we can choose to create whole galaxies of *many planets* as real human beings, and we can also choose to *create* many new *planets* as advanced human beings, and we can also sometimes *choose* to scientifically *develop* the type of advanced nuclear fusion (*dark-matter* concentrating, Higgs-Boson *generating*) technologies that are necessary to *create* new planets as us *semi-intelligent* mortal-human beings, and we also sometimes *accidentally* (and sometimes *intentionally*) destroy *whole planets* as mortal human beings; and it also unfortunately *sadly appears* that we will soon *accidentally* (via nuclear fusion devices) *destroy* our very own precious planet earth, unless we can possibly discover a really good way to all (all 8 billion of us here on earth) properly *bridle* our excessive competitive *id pride*, before we accidentally *blow up* our very own vulnerable little *planet earth*.

It does actually sometimes seem (on good optimistic days) like there may *still* be a *little chance* that we might somehow *avoid blowing up* our precious little super-vulnerable *planet earth*.

But this *hypothetical chance* certainly seems to be *pretty slim*.

Our *mortal-human id pride* (of our unstable mortal human avatar brains) has grown very powerful (and *very unstable*) here on earth, as we foolishly-imagine to ourselves how “intelligent”, we love to *suppose* that we are, in *our* personal astonishing *arrogance*; when the reality is that we mortal humans (here on earth) only have a very low degree of partial *semi-intelligence*, with very few other nearby planets hosting humans as *stupid* (and *prideful*, and *cruel*) as *we ourselves*, here on earth, *currently are* today in 2023.

How could there possibly exist anywhere in space, another planet of humans, as *stupid* as our *own*?

*What would be the point?*

Why would our milky-way galaxy need *two* such stupid *planets*?

Did the *angry* prideful *people* of our ancient Planet Earth get into a *stupid* space *fight* with the people of ancient Planet Kuiper, many millions (or possibly a few billions) of years ago?

Were the more-advanced nuclear weapons (and *space missiles*) of earth used against the precious people of Kuiper, to blow up their whole planet, transforming it into the Kuiper belt (of the many Kuiper asteroids) that we observe (with our telescopes) today?

Can one set of people *choose* to destroy another set of people?

Has this ever happened before?

What *causes* people to *hate* people?

If *Human Hatred* is *caused* by something other than, *our* excessive competitive human-brain *id pride*, then exactly what is it that does cause one set of people to *actually hate* another set of people?

What *causes* Human Hatred?

What is the *science* of human hatred?

Has human hatred been *scientifically* studied *enough* (here on earth) for us to *finally* understand it, so we can finally *cure it*?

*How* can a group of humans *hate* another group of humans?

Is *Human Planetary Tribal Identification* necessary for the human-brain *development* of *Planetary Tribal Hatred* (the human-brain hatred of a different tribe of humans, that may live on the very *same planet*, or may live on one or more *different planets*)?

What is the actual scientific cause of all of our human-brain *Planetary Tribal Identifications*?

# Tribal Identifications

What is a *Planetary Tribal Identification*?

The human choice of *Planetary Tribal Identification* is to *self-identify* as *belonging* to a *tribal group* of humans, on one single planet, or on a set of *planets*, that is somehow *different* than one or more *other tribes* of humans.

A *tribe* of *humans* is a set of humans that believe they belong to the same tribe, that is different than another tribe.

“I am *white*, but you are *black*”, is an example of a very dangerous (and very destructive) planetary tribal identification as “*white*” versus “*black*”.

This type of *racism* is just one of many types of dangerous *Planetary Tribal Identification*.

“I am *rich*, but you are *poor*”, is another example of a very dangerous (and very hurtful) planetary tribal identification as “*rich*” versus “*poor*”.

This type of *economic class* tribal identification has locked many human cultures into forced *economic slavery* for many centuries.



“I am of *righteous Earth*, but you are of *wicked Kuiper*”, is another super-dangerous (and very painful) planetary tribal identification of “*righteous*” versus “*wicked*”, and “*of Earth*” versus “*of Kuiper*”.

These are just a few simple examples of *problematic* planetary *tribal* identifications.

It is best for us all to *wisely avoid* such planetary tribal identifications like the dangerous *intellectual plague* that they certainly are.

Can we *all learn* to become *wise enough* to avoid *all* tribal identifications here on Earth?

Why not?

Such unwise tribal divisions breed *conflict*, misery, *war*, and destruction among humans.

Tribal identification must always happen *before* any tribal hatred can even *begin* to develop.

Tribal hatred must first happen, before one tribe of humans begins to *desire* to destroy another tribe of humans.

*Planetary Tribal Identification* is always the very *first step* towards *war* between any *two sets* of humans.

Can we the people of Earth, start to develop an accurate *Science of Planetary Tribal Identification*, in our great hope, that by *Scientifically Understanding* this powerful *human desire* for tribal identification, we can someday discover a good scientific way to help all of us humans to finally overcome (finally release) this *dangerous desire*, that causes all of us precious humans to *stumble* and *war* with each other?

How can we (the people of this earth) *learn* to *let go* of our *intense* human desire to *self-identify* as *proud members* of distinct (distinguishable) *human tribes*?

When can we wisely learn to simply call ourselves “*humans*”, and nothing other than “*humans*”, so as to completely (and wisely) *free ourselves*, from any and all *distinct tribal affiliations*?

“I am an *infinitely-valuable* real human *being*”.

Can this be enough *for me*?

Can this be enough *for you*?

Can this be enough for *all of us*?

Can being of *infinite value* be *enough value* for us all?

Can just being a *human being* of *infinite value* be good, sufficient, and *wonderful enough* for all of us?

Why would we ever need to have *more value* than *infinite value*?

Why would we ever want to be *any other shape*, other than our *lovely human shape*?

Why would we ever want to *self-identify* as a *proud member* of one of the thousands of *self-righteous Planetary Tribes* of Earth?

Will we still desire to *tribally self-identify* after our mortal-human death?

Why would we ever want *our individual value* to be any *other value*, other than *humanly-ininitely-valued*.

Why would *anyone* ever *desire* to be *anything* other than *humanly-ininitely-valued*?

Why is our *one single assumption* (our one single hypothesis) that *we are all infinite real human beings* of infinite value, the *one and only assumption* that is actually

needed to fully-support every part of this present 4 Brain Theory, and also the only assumption (the *only hypothesis*) that needs to be *fully-embraced* (completely understood, and fully accepted emotionally and intellectually) to wisely-provide the *strongest* human-self-esteem *foundation* possible for *any* human *being* living in any level of any reality of any universe anywhere, worlds without end, including right here presently on this little earth world?

How many *tribal* false *foundations* (of human self-esteem, and human self-value, and human self-importance, and human self-ego, and human self-pride) *have* we *fashioned* (for thousands of years) *for our* mere mortal *selves* here on earth?

Is it our ubiquitous *self-deceptions* that plague us all, as the mere mortals that we are here on earth, that have *deceived* us *all* into thinking, that we are a *tribal-something* other (something less, or something more) than an infinitely-valued *real human being*?

Has our *lack* of self-understanding, of who we really are, triggered the *emotional-void* that has severely-tempted us all (due to our intense *individual need* for *self-value* and *self-importance*) to *self-identify* as *safety-seeking* (self-value-seeking) *members* of so many *prideful* human *tribes*, here on earth?

Were these insidious *self-deceptions* (that cause us to intensely *doubt* our own native human *self-esteem* as little children) *ignorantly pushed* (forced) into our tiny *vulnerable* infant *brains*, early in each of our individual childhoods, by our well-meaning mortal parents, who were themselves *formerly tormented* by their own well-meaning parents.

“*Spare the rod, spoil the child*”.

And a *thousand other* similar such *insane memes*, in every language, of every historical culture, have seemingly *corrupted* the *thinking* of *billions* of otherwise *intelligent adults* here on earth.

What does cruelly *punishing* a small child do to the cognitive intellectual *foundation* of the child’s *self-esteem*?

How can this *insidious* childhood *cycle* be interrupted enough to salvage *at least some* of our vulnerable mortal human brains?

Can a *careful* deep scientific *study* of this present *4 Brain Theory paper*, help all of us here on earth, *begin* to *awaken ourselves*, to our current awful intellectual situation, and also to the *joyful possibilities* for human

improvement of *our* own *selves*, and *our* own human *societies*, here on earth?

Must we *all* remain in darkness forever?

Or can we *wisely study* this present 4 Brain *Theory* paper, as it attempts to guide us gently into the *brighter light* of a *more-correct* form of *science*, and a *more-enlightened* way of *human understanding*?

How can we begin to *really* see *ourselves* (with great intellectual confidence) as being for-certain a *super-valuable* human *individual* of *infinite-worth*?

How can we begin to *really* see all *others* (with great intellectual confidence) as being *just* as *super-valuable* as *ourselves*?

How can we *learn* to *wisely guide* all of our very own *private* internal *thinking*, with an intelligent abundance of good thoughts of *human equality* and *human equity* for each and *every* precious human *being* here on earth?

What kinds of *new thinking* about *human tribal labels* do we need, to help us to awaken to see more clearly exactly what is *hurting us* all today, and also what can *help us*, with our *self-talk*, our *self-labels*, and all our *complex* human-thinking *patterns*?

Can simply being “a good *human* being”, be enough of a *self-label* to *emotionally* satisfy us all *fully* and *completely*?

I do sincerely hope that I will never again succumb to the dangerous temptation of *imagining myself* as *being above* (or *being below*) any *other* human being.

I have *already succumbed* to this *dark* intellectual *temptation* far too many times during my mortal life of *60 years*, since I was born in Salt Lake City, Utah, USA, on August 21, 1962.

I really do hope to *never* again *succumb* for my remaining years of mortal-human life here on planet Earth.

“*You are* also an *infinitely-valuable* human being, just like *I am* an *infinitely-valuable* human being”, is enough of a label for me, so I do *Not* imagine you as *being above* (or *being below*) me in *any way*, any shape, or *any form*.

There is certainly *no need* for any of us, to *proudly* self-identify with any *tribal* label.

How can we wisely establish *Intelligent Human Equity* here on earth?

How can our vulnerable planet Earth survive, if we fail to wisely establish *Worldwide Human Equity*, before we nuclear-destroy ourselves?

All of my current *infinite self-esteem* (and all of my current *infinite other-esteem*) is completely (and *wisely*) based on my full self-awareness (and my full self-acceptance) of the *Most Liberating Scientific Fact* that “*I Am an infinitely-valuable real human being, just like everyone else*”.

Is this *Wisdom*?

Is this the *Ultimate Wisdom*?

Is this the *Greatest Wisdom* possible for any human being to possess in *Any World Anywhere*?

What is *The Ultimate Wisdom*?



# The Ultimate Wisdom

What is *The Ultimate Wisdom*?

*The Ultimate Wisdom* is *The Greatest Wisdom* possible in any universe anywhere.

*The Ultimate Wisdom* is that we are all *Real Human Beings* of Infinite Value, of Infinite Reality, of Infinite Humanity, of Infinite Goodness, *Infinite Permanence*, of Infinite Self-Worth, of Infinite Happiness, of Infinite Security, of Infinite Kindness, *Infinite Self-Esteem*, of Infinite Respect, of Infinite Purpose, of *Infinite Health*, of Infinite Peace, of Infinite Safety, of Infinite Self-Importance, of Infinite Other-Importance, of *Infinite Intelligence*, of Infinite Self-Value, of Infinite Other-Value, of Infinite Knowledge, of *Infinite Joy*, and of Infinite Wisdom.

There is *No Wisdom* greater than this *Ultimate Wisdom*.

How *powerful* is this Ultimate Wisdom?

This *Ultimate Wisdom* is so astonishingly powerful, that it can *fully free us* from all of the *false self-foundations* of *false self-esteem*, that viciously fuel all our excessive competitive mortal-human-brain id pride, that viciously

fuel all our human tribal angers, that viciously fuel all our *human tribal hatreds*, and viciously cause us to foolishly launch all our human contentions, and all of our human wars, of every type and every variety, here on earth.

How can we all install this *ultimate wisdom* into our *learning* mortal-human *brains* here on Earth, while there is still time?

Can we, the thinking people of earth, begin to develop a full and *complete science* of *human wisdom* to help to guide us all out of our current darkness?

Can we the people *fully-learn* how to completely *let go* of all of our *human hatreds*, and all of our *human tribalism*, and all of our *human-brain* competitive *id pride*, before it becomes just too late for us here on earth?

How many more years do we all have before we *decimate* *this* vulnerable little *planet* back to the stone age with a massive worldwide nuclear war?

Do we really have 123 more years?

Or, do we only have about 12.3 more years (or even less) before nuclear weapons start killing people?

Exactly how many more years do we have to enjoy our worldwide civilization of billions of thinking feeling super-valuable humans here on Earth?

Why did we (the scientists of Earth) focus *most* of our nuclear scientific efforts on *Uranium* in the 1940's, 1950's, and 1960's to make nuclear weapons of mass destruction, instead of wisely (and humanely) focusing most of our nuclear scientific efforts on *Thorium* to generate *safe, clean, free electricity* for all the precious inhabitants of our dear planet Earth?

When will *we* the scientists of Earth, finally begin to seek for *wisdom*?

How many of us scientists are honestly seeking for wisdom, *more than* we are seeking for money, fame, honors, or prestige among our scientific peers?

Can this present 4 Brain Theory article help us all to *awaken* to our *real scientific duty* to help *all* the people of this whole Earth?

What is the *real purpose* of science?

To Help *All* People?

Or, to do something else?

Can *Science* come to our *Rescue*?

# Science to the Rescue

Can *Science* come to the *Rescue* of Humankind here on Earth?

Can *Science* Rescue *Anyone*?

Can Science *Rescue* Everyone?

Can Science *choose* to become *Good*?

Can Science choose to become *More Accurate*?

Can Science choose to become *More Useful*?

Can Science choose to become *More Relevant* to real human need?

Can Science choose to become Fully-Helpful to *All Us* Humans of Earth?

Can *Science* choose to Be Good?

Or, can only the *individual scientists* themselves choose?

What do *you yourself* choose?

Can *Science* become powerful enough (*accurate enough*, *wise enough*, and *relevant enough*) to actually *help us all* to wisely *rescue us all* here on earth?

Can Science *rescue us*, by helping us to understand *accurate science* better, and by helping us to *understand* ourselves *better*, before it is *too late* for us here on earth?

Why have we *failed* to completely develop such a *useful* human *science* here on earth?

Why have *we* always *failed* to fully develop a complete and useful science of *human consciousness* here on earth?

*When* will we begin (as the *thinking scientists* of earth) to create a full, complete, useful, helpful, and healing *science of human consciousness* here on earth?

Why wait any longer to develop such a *useful* new *science* of human thought and human awareness?

Can we also wisely develop a brilliant *new science* of *intelligent* human *kindness*, and human *peace* on earth?

Why do we let our *scientific* academic *pride*, to deflect us thinking scientists of earth, from doing what *we all know* we really should do?

Why is *human hatred* (and *intentional terrorism*) such a dangerous thing, in the presence of *nuclear* (fission and fusion) *weapons* of mass destruction, here on earth?

What is the most-wise solution to this *human-made problem* of ours here on earth?

Can human hatred ever be *removed* from the heart of *every* person on earth?

Is there a *wise way* to accomplish this *vital feat*?

Do even the most-wise *satoshi* scientists really know, *how* to *remove* such *hatred*, from our human hearts here on earth?

How can we make sure that our own Planet Earth *never explodes*, like Planet Kuiper and Planet Aster hypothetically *both* already *did*?

If our *own* Planet Earth does someday *sadly explode* (on a very sad day, for *all* of *us* people still living here on Earth), then at *what distance* (from our sun) will its *debris* (the Earth-asteroids) *eventually* position *themselves*?

After all of these *sadly-hypothetical* futuristic *Earth-asteroids* are all *flung* far out into *space*, how long will it take before they *all* come *back* into *stable orbits* around

the sun, similar to Earth's original orbit, at approximately the *same* orbital *distance* from the sun, as *our* precious planet *Earth* once *was*?

If we do *accidentally* (or intentionally via a super-powerful nuclear *planet-suicide* bomb) *blow up* our precious little Earth, will *we* *try again* to create another Earth, to orbit our same sun at the same orbital distance, or will we *finally* just *give up* on this local solar system of ours?

Or will we somehow manage to *blow up* our *Earth*, with a *much-larger* hypothetical *star-forming* nuclear *explosion*, that will *try* to *grow* super-fast into a giant star, that quickly collides with our own sun, and thereby *extinguishes* both *stars*, destroying our *whole* solar *system*, in a huge *spectacular* supernova *explosion*, that may *be seen* by *many others* in our local milky-way galaxy, and may also be noticed by *some others* who live in some of our nearby galaxies, like our neighboring *Andromeda Galaxy*?

Will us mortal humans (of Earth) someday blow up our *whole* solar system?

We will do this *to ourselves* in our future?



What will our galactic neighbors *think* of *us*, if our *earth-choices* (our collective human choices that we all make together here on earth) cause us to *blow up* our very own *solar system*?

Is this the *legacy* we desire?

How about the *Kuiper-asteroids* of the *Kuiper belt*?

After the *hypothetical* Planet *Kuiper* was exploded, about 5 billion years ago, its *moon* (Pluto) was violently ejected upward into a *different* highly-inclined *planar orbit*, that is inclined at an angle of 17.16 degrees relative to the orbital plane of earth's orbit (the *plane* of the *ecliptic*) around the sun.

This is our working hypothesis for *Kuiper's Moon Pluto*.

# Kuiper's Moon Pluto

How did *Kuiper's Moon Pluto* obtain its very *unusual* planar *orbit* that is inclined at 17.16 degrees from the plane of the ecliptic, which is a *much* greater *inclination* than that of any other planet in our whole solar system?

Does this *simple* hypothesis that *Pluto* used to be a *Moon* of *Planet Kuiper* (before Kuiper exploded) make good *logical* sense?

This hypothetical ancient violent explosion, of the huge Planet Kuiper, pushed Pluto (*Kuiper's* original *moon*) upward so that *Pluto* does *not orbit* within the same *orbital plane* as the rest of the planets in our solar system.

With Pluto now independently orbiting the sun, in the *Pluto-Sun* orbital *plane*, that is *oddly tilted* about *17 degrees* from the *plane* of the *ecliptic* (the Earth-Sun orbital plane), this means that for part of its orbit, Pluto is located *above* the plane of the ecliptic (where Earth, and *all* the other planets, orbit), and at other times, Pluto is positioned *below* the plane of the ecliptic.

Can we all simply agree, that this hypothetical explosion of Planet Kuiper is a *very logical*, and a *very simple* (a la

Occam's Razor) *rational scientific explanation* for the *super-odd* 17-degree-tilt of *Pluto's* very-unusual *orbit*?

This hypothetical ancient explosion of the Planet Kuiper, did much more than just throw Pluto (and all of Pluto's current moons) out of the plane of the ecliptic; it also *energetically hurled* thousands of its remnant debris (the *Kuiper-asteroids*) outwards, in *all directions*, into space.

After enough time, the two-opposing dark-matter (real dark scalar bosons) particle-flows *pushed all* of these Kuiper-asteroids *back* into their *present orbital patterns* that are very similar (with *similar distances*) to the *original orbit* of Planet Kuiper around the sun.

The two-opposing dark-matter particle-flows caused the dark-matter particles to *scatter off* of all the Kuiper-asteroids, *pushing* all of these *Kuiper-asteroids* into their *correct distances* from the sun, according to their *respective elemental compositions*.

Our planet Earth orbits our sun at an average distance of approximately *93 million miles*, which is about *150 million kilometers*.

This average *Earth-Sun Distance* is approximately one (1.0) *Astronomical Unit (AU)*.

One AU is currently numerically *defined* as 149.5978707 million kilometers, which is about 150 million kilometers, which is 150 billion meters.

*How many* planets did our local solar system have about 5 *billion* years ago?

Theoretically, our local solar system may have had nearly a *Dozen Planets* about 5 billion years ago.

# Our Dozen Planets

Our *ancient planet hypothesis* is that about *5 billion* of years ago, our local solar system may have consisted of nearly a *Dozen Planets* including the *Planet Aster* and the *Planet Kuiper*.

Our current 2023 *planets* (and our current 2023 *asteroid belts*) are located at the following *average distances*, measured in *Astronomical Units* (AU), from Our Own Brilliant Blazing Sun:

- (1) Our Brilliant Sun at 0.0 AU
- (2) Our Planet Mercury at 0.39 AU
- (3) Our Planet Venus at 0.723 AU
- (4) Our precious Planet Earth at 1.0 AU
- (5) Our Planet Mars at 1.524 AU
- (6) Our exploded Aster Asteroids at about 2.8 AU
- (7) Our Planet Jupiter at 5.2 AU
- (8) Our Planet Saturn at 9.54 AU
- (9) Our Planet Uranus at 19.2 AU
- (10) Our Planet Neptune at 30.06 AU
- (11) Our exploded Kuiper Asteroids at 30.0 – 50.0 AU
- (12) Our orbit-tilted Planet Pluto at 29.7 - 49.3 AU

Most of our *Aster-asteroids* seems to be orbiting our sun at a *distance of approximately 2.8 AU*.

Most of our *Kuiper-asteroids* seem to be orbiting our sun at a *distance of approximately 30 to 50 AU*.

The great distances (30 to 50 AU) of the *Kuiper-asteroids* are much greater, and *more spread out*, than the smaller distances (near 2.8 AU) of the *Aster-asteroids*.

Here is a *simple scientific experiment* that we can perform, during the next few years, right here in our own local *solar system laboratory*.

What would happen if we sent a *robotic asteroid-swapping spaceship* out to 2.8 AU to gather up a *dozen Aster-asteroids*, and then way out to 30-50 AU to pick up another *dozen Kuiper-asteroids*, and then we programmed our robotic asteroid-swapping spaceship, to simply *location-swap* the dozen Kuiper-asteroids, for the dozen Aster-asteroids.

Is this kind of *Asteroid Swapping* really scientifically feasible?

# Asteroid Swapping

What is *Asteroid Swapping*?

*Asteroid Swapping* is when we decide to intentionally *swap* the *locations* of a *set* of *asteroids* to see *how fast* the swapped asteroids will *return* to their *original orbits* with their *original* asteroid-sun *orbital distances*.

What exactly will happen when we start to conduct these interesting *asteroid swapping experiments*?

What will happen when we program our *robotic* asteroid-swapping *spaceship*, to *put* the dozen Aster-asteroids at 30-50 AU (by inserting them into the orbits of the Kuiper-asteroids), and to *put* the dozen Kuiper-asteroids at 2.8 AU (by inserting them into the orbits of the Aster-asteroids).

Will the *two-dozen* location-swapped *asteroids* immediately *migrate back* to their original positions (their original distances from the sun), or will it take *many years* for these 24 asteroids to *move back* to their original locations?

What if *electronically* tag all 24 *asteroids* with 24 *unique* location-tracking *labels*, so we can easily watch them, to

see *just* how *fast* they *all* move *back* into their original orbits?

Exactly *how* many *orbits* around the sun will be required before all 24 of these location-swapped asteroids *return* to their original orbits with their *original* sun-asteroid *distances*?

As we watch all 24 of our labelled asteroids *slowly* migrate themselves *back* to their original locations, will this provide some *additional* helpful scientific *evidence* that these 24 asteroids are being *forcefully-pushed* by 2 *distinct* opposing streams of *dark-matter particles*, and that the *quantum momentum-transfers* (of the quantum scattering, of the tiny ultrafast real dark scalar bosons, off of the big slow visible-matter particles of the 24 asteroids) are *very sensitive* to the *exact* elemental *compositions* of the *atomic materials* that the 24 asteroids are actually made of?

This is precisely our working scientific *hypothesis* of what will happen to these 24 asteroids after we *swap* their locations.

Swapping the locations of these 24 asteroids, and then watching all 24 asteroids *migrate back* to their *original positions*, will help science learn a whole lot about the



kind of momentum-imparting *dark-matter flows* that are occurring right here inside our very own solar system.

This *asteroid* swapping scientific *experiment* will help us astrophysicists learn more about the *quantum gravity* of our own local solar system.

This important *asteroid* swapping *experiment* will also help us to learn more about effect of this quantum gravity on asteroid density, and the effect of *Dark Matter* on *Planet Density*.

# Dark Matter Planet Density

How does *Dark Matter* move a whole *Planet*, according to its *Planet Density*?

How does *Planet Density* determine where the opposing *Dark-Matter* flows will *position* the whole planet in its average *distance* from its sun.

How does the *Planet Density*, and planet location, work together with the two opposing *Dark-Matter* flows to determine planet spin-axis *orientation* and planet *spin rate*?

How can we best *imagine* this?

Let's just imagine a *whirlpool* of *water* that is rapidly spinning and *swirling* around a *water drain* in the center of the whirlpool.

This simple *water* whirlpool *analogy* with *swirling dark-matter* particle flows around a *central sun* (or around a supermassive black hole in the *center* of a galaxy) is *not* an exact analogy or a perfect physical model.

However, this simple *whirlpool analogy* can help to give us an approximate idea of some of the types of “*multiple*

opposing *forces*” that can be present in a *swirling* water *whirlpool* or in a set of *swirling* and opposing *dark-matter* particle flows.

In the swirling whirlpool, various *floating toys*, like *rubber ducks* and little *toy boats*, of various different *mass-densities* and various different *spatial-sizes*, can be placed at various different *locations* in the swirling water whirlpool, with some of the floating toys initially located *closer* to the *central drain* than some of the other floating toys.

Can this simple analogy of a *Swirling Water Whirlpool* really be useful?

# Swirling Water Whirlpools

How can we use this simple analogy of a *Swirling Water Whirlpool* to help us to better understand the *swirling dark-matter particle flows* around our *own milky-way galaxy*, or around our *very own sun*?

Will each floating toy *migrate* into its very own, very *specific orbit* around the *central* sucking water drain?

A particular floating toy (like a *rubber duck*) will gradually *migrate* itself to its very own specific *radial distance* (from the powerful *sucking* water drain in the *center* of the swirling whirlpool), and then this particular floating toy (rubber duck) will *continue* to orbit this central sucking drain of the whirlpool at this particular *radial distance* from the sucking center.

The rubber duck will also *spin* at a very particular rate, as the rubber duck also orbits the powerful sucking whirlpool center.

A little floating *toy boat* will move itself to a very different (different than the rubber duck) *radial orbit* around the sucking whirlpool center.

The little floating toy boat will also *spin* at a very particular spin rate, as it also *orbits* the whirlpool center.

The eventual average orbital radial *distance* of the toy boat, will be *very different* than the eventual average orbital radial *distance* of the rubber duck.

The *spin rate* of the rubber duck will be *very different* than the *spin rate* of the toy boat.

Perhaps the *toy boat* may be likened to be kind of like the *planet Mars* with its very own *Mars spin rate*, and its very own average *Mars radial distance* from the *sun* (the powerful *dark-matter* sucking-drain in the center of our solar *dark-matter* flow *whirlpool*).

Maybe the *rubber duck* may be likened to be kind of like our *planet Earth* with its very own *Earth spin rate*, and its very own average *Earth radial distance* from the *sun* (the powerful dark-matter *energy-sucking* drain in the exact center of our solar *dark-matter* flowing *spiral whirlpool* of real dark *scalar bosons*).

The *multiple* (actually more than two) *opposing* dark-matter *particle flows* are actually *more complex* (and much more interesting) than the relatively-simple *water molecule* movements of the *whirlpool* of *water* swirling around the *powerful*, central, *sucking*, water drain.

The simple purpose of this water *whirlpool analogy* is to give us an *initial idea* of the kind of *physical concepts* we need to employ as we attempt to better understand the *swirling opposing* dark-matter quantum-scattering *particle flows* around our own sun, and around our own galaxy, that together create all the *quantum gravity* of our local universe.

These *swirling opposing* dark-matter quantum-scattering *particle flows* create *quantum gravity*; and these dark-matter particle flows also appear to create some other *useful things* as well.

Just how many different kinds of things can dark matter create?

Theoretically, it almost seems like dark matter may actually create about *six* different *kinds of things*.

It certainly appears that *Dark Matter* makes *6 Things*.

# Dark Matter makes 6 Things

Does *Dark Matter* really make 6 Things?

How can *Dark Matter* possibly be powerful enough to be able to *make* about 6 different *kinds* of things?

Are these 6 different *ways* that Dark Matter interacts with *visible matter*?

How are these six different *visible-matter* interaction *mechanisms* related to each other?

What are these 6 distinct *ways* that *dark matter* interacts with the *regular* visible atomic *matter* that makes up our *human brains*, our *human bodies*, our *human-inhabited planets* where we live, and our *human-made stars* that give light and warmth to us all?

Why is *dark matter* such a *human thing*?

Why is *dark matter* such an important type of *human matter*?

Dark matter is composed *real human neurons*, and their *real scalar bosons*.

These 6 *families* of real *scalar bosons* are the 6 different types of *real neural pulses* that a *real human brain* can have and experience.

These 6 types of real neural pulses are the *real-human neural pulses* that *originate, travel, interact, stimulate, and terminate* inside *real human brains*.

*Everything* about dark matter *is* human.

*Dark matter* is a type of *human matter*.

What is our current human-brain *viewpoint* on *dark matter*?

From *which* of our 4 human *brains* (of this 4 Brain Theory) are we currently *viewing* (measuring, or *trying to measure*), or attempting to *view* our own dark *matter*?

The new science of *human dark matter* is still in its early infancy here on this planet Earth.

Some mortal-human scientists diligently *search* for *dark matter*, with their mortal human brains, that are *consciously-animated* by dark matter, *pushed-down gravitationally* towards earth by the dark matter that scatters off the neural tissues of their mortal brains, and



diligently search for dark matter with their mortal neurons that are composed of the larger (slower) real light neural pulses.

Sometimes, it is so *hard* to *see* the very *dark matter* we are so deeply swimming in.

Dark matter is *all around us*, and *within us*, and it *consciously-animates us*, and *gravitationally-binds us* to earth, and it forms all of the visible matter particles that *compose us* (our physical mortal-human bodies).

To say that dark matter *is a part of us* is an understatement.

These *real neural pulses*, that us real humans *think with*, are the *dark-matter scalar-boson particles* that compose our thoughts, our feelings, our consciousness, and all of our *neural simulations* that support (and *create*) all of our *advanced* human selves, all of our *mortal* human selves, and all of our *sub-mortal* human selves.

These dark-matter real neural pulses are the *very soup* of *all creation*.

These *dark-matter quantum particles* are the *neural soup* of all creation.

These *real scalar bosons* are the most *fundamental* particles possible, in any real-neural daydream-simulated universe.

There can be *no creation*, of any type, at any level of existence, *without the neural activation* of some of these dark-matter *scalar-boson* real-neural *pulses*.

Our *real neural pulses* are very creative.

Our *dark-matter particles* are very creative.

Our dark-matter particles *can do anything* (and everything) that our real neurons, and their real neural pulses, can do, because that is *what they are*.

*Dark matter* is the *set of real neurons*, and the *set of real neural pulses*, that really do exist inside our real human *brains*, that really do exist inside our real human *bodies*, and that really do exist inside of our real world, where all of us have really lived forever, and where all of us will continue to live for *another forever* or *two*.

Our real-human brains simply *exchange* their dark-matter particles, to *daydream-neurally-simulate*, *all* of the *created worlds*, and *all* of the *created human bodies*, that we have ever inhabited, including the current ones *we believe* we have today here on earth in 2023.

Our real-human brains neurally-simulate *a whole* lot *more* than just our local set of 8 billion mortal-human avatar bodies, and a whole lot more than just our local planet Earth where we seem to currently live, and a whole lot more than just our local solar system, with its fiery sun, interesting planets, cool moons, broken asteroids, and traveling comets.

Our real-human brains *exchange* dark-matter particles to *create everything* that *can be created*.

In our real world (where we real human beings have always lived) our dark-matter particles (our real neural pulses) *sensorily-receive* all the information that can be received, and *they move* all our real human muscles, and all the motors, and everything else that *can be moved*.

From the uniquely-limited perspective of our scientific mortal-human brains (here on earth), our *dark-matter particles* seem to have about *6 different ways* that they interact with all our visible-matter particles as follows:

- (1) Dark Matter *scattering* creates all the *gravity*.
- (2) Dark Matter *composes* all the *visible matter*.
- (3) Dark Matter *projects* every *consciousness*.
- (4) Dark Matter *entangles* the *quantum particles*.
- (5) Dark Matter *gathers* all quantum *information*.

(6) Dark Matter *expands* the whole *universe*.

Here is a little more information, about *these* 6 distinct *ways*, that dark matter interacts with our visible matter:

- (1) The *dark-matter flows* in some very interesting *gravitational flow-patterns* in our simulated galaxies and solar systems, to cause certain types of *dark-matter* particles to *scatter* off of the real-light neural-pulse components of the visible-matter elementary particles, and thereby *transfer* some of their *momentum* to the visible matter *causing* all the *gravity* in our whole universe.
- (2) The *dark-matter particles* (tiny fast scalar-boson neural pulses) work together to energetically carry their  $\mathbf{E} \times \mathbf{B}$  Poynting vector to jointly stimulate (by jointly *stimulating* the real *Higgs-axon hillocks* inside of *stars*) the production of large slow *scalar Higgs Bosons*, which immediately decay into temporary intermediate particles, which quickly decay into the particular set of real *light scalar bosons* that compose the *electrons, photons, protons, and neutrons*, which combine together to form all the atoms of *all the elements* of *visible matter* in our whole universe.
- (3) The *dark-matter particles* (real neural pulses) *two-way travel* at their ultrafast velocities (trillions of times faster than the speed of light) into the *black-*

*hole* centers of *galaxies*, and outward into the dark-matter *consciousness-receptors*, that are formed by special arrangements of *atomic visible matter* inside of *advanced* human brains, *mortal* human brains, and *submortal* human brains; and in this way some of the real-scalar-boson dark-matter particle-flows *form* every form of *consciousness* that can be *formed*, or that can *exist* anywhere, in any universe.

- (4) Some of the *dark-matter* particle flows cause some of the real *dark axons* to *entangle* with some of the real *light axons* in an *axon-to-axon entanglement* way that temporarily entangles newly-created quantum particles with their *entangled axons*, until something happens to cause the *real axons* to become *un-entangled*, and then the quantum particles also become un-entangled; and this is a new theoretical *axon-entanglement* way that every type of *quantum entanglement* (and quantum un-entanglement) may actually happen in our whole neurally-simulated universe.
- (5) Some of the *dark-matter flows* gather *quantum information*, from every quantum particle in our universe, via an information gathering process of *measuring* (scattering) and *re-measuring* (re-scattering) of the real *dark* scalar bosons (dark-matter particles) off of the real *light* scalar bosons (that make visible-matter particles); and this is how

the dark matter carefully *gathers* in *all* the *quantum information* of every quantum particle in our whole universe; and in this way *no* quantum information is ever *missed* in the ultimate sense, and everything is *always known* by all of our real human brains, so it is ultimately *impossible* to hid *anything* from a real human brain, so *entropy* (hidden information) is always *exactly zero* in our real universe where we all really live.

- (6) Some of the *dark-matter* flows *expand* the *universe* as these dark-matter particles travel on the outward real *dark spiral axons*, and as these *outward-pushing* dark-matter particles *scatter* off of the visible matter of nearby *galaxies* and nearby stars, *pushing* these nearby *stars*, and nearby galaxies, *away* from the *growing galaxies*, and *away* from the *newly-created stars*, to *make* new *space* for the new stars, and to *make* additional *space* for the new galaxies; and in this way some of the *real dark scalar boson flows* may theoretically create the observed *expansion* of the *universe*, including the observed *accelerated expansion* of our local universe.

The *6 families* of tiny fast real scalar bosons, are the *6 families* of *consciousness* information-carrying tiny, fast, *high-information* dark-matter *particles*, that travel *between* our *real human brains* (in our real universe, that

is logically located causally-above Sagittarius A\*) to our *mortal human brains* (on planet Earth, that is located right here in our outer spiral arm, of our milky-way galaxy), *via* our *advanced human brains* (on our advanced Kolob-like planets, that all orbit stars that are much closer to Sagittarius A\*).

The *scalar Higgs bosons* are the super-large, super-massive, super-slow, *zero-spin neural pulses*, that are formed by the *joint-stimulative-action* of *many* dark-matter particles, in very high-energy environments, like those *energetic dark-matter environments* found inside of *hot stars*, inside of *nuclear explosions*, and inside of elementary-particle *super-colliders* like the LHC at CERN.

The dark-matter *particle-flows* that generate *all* of the *gravity* in this *whole wide universe*, are the *specific streams* of dark-matter particles that bounce off (*scatter off*) of all the relatively-big, relatively-slow, real light neural pulses, that are the *actual inner components* of *all* of the *visible-matter elementary particles* of the standard model of *2023 elementary-particle physics*, here on this little earth planet of ours.

One thing that our 2023 elementary particle physics has *not yet* fully understood, *until today* with the publication of this groundbreaking new *4 Brain Theory* paper, is that

it is the *actual flow* and the *actual scattering* of the tiny fast *dark-matter particles* that is fully *gravitationally-causing* the *spatial planet locations* of all of the planets and all of the moons, and that is also causing the *planet spins* of all the planets and of all the moons.

It is the *quantum scattering*, of the tiny fast dark-matter particles, off of the big slow visible-matter (elementary) particles, that puts a *Dark-Matter Torque* on every planet (and on every moon) to cause it to *spin* at a *certain rate* with a specific *spin-axis*.

Also, the *quantum scattering*, of the tiny fast dark-matter particles, off of the big slow visible-matter (elementary) particles, puts a *Dark-Matter Force* on every planet (and on every moon) to cause it to move to a certain location in space, by causing its *whole orbit* to *move* to a *certain location* in space.

These *Dark-Matter Celestial-Torques* are the *primary reason* for all the *spin-rates* of all the planets, and all the suns, and even all the *little moons* of this whole universe.

Now, let's look a bit more closely at *Dark-Matter Moon-Spin*, because the flow of dark matter (tiny fast dark scalar bosons) towards a particular *moon*, and the flow of dark matter towards the planet the *moon* orbits, and the flow of the dark matter particles towards a sun the planet orbits,



will all (all these distinct dark-matter flows) affect the *local behavior* of the *dark-matter flow patterns* inside the *moon*.

Why does our Earth's moon *spin* the way that it does?

Why does *any moon* spin on its axis?

What is the *real physical cause* of moon spin?

What exactly is the primary cause of *Dark-Matter Moon-Spin*?

# Dark-Matter Moon-Spin

What is *Dark-Matter Moon-Spin*?

What is *Dark-Matter Satellite-Spin*?

What is *Dark-Matter Spaceship-Spin*?

*Dark-Matter Moon-Spin* is the *spin-rate* of a *moon* due to the *total sum* of all the dark-matter-induced *atomic-torques* on the planet.

The *total* dark-matter *moon-torque* on a *whole moon* is the dark-matter torque-sum of all the *individual* dark-matter *torques* on all the *moon's atoms* measured from the *central-spin-axis* of the *moon*

A relatively *large moon* may have *more atoms* than just a *little satellite* or just a *small spaceship*.

Therefore, the total net dark-matter torque on a large moon will usually be *greater* than the total net dark-matter-torque on a small spaceship or on a little satellite.

Likewise, the total net dark-matter torque on an individual person (a *human body*) floating in space, will usually be *less* (because a little person usually has *less atoms* than a

whole big spaceship) *than* the *dark-matter torque* on a *large spaceship*.

When we find ourselves floating in space, then we usually *do not feel* a strong dark-matter torque on all the atoms of our human body, because the total net dark-matter torque on our human physical body is actually *very small* (but somewhat larger than zero).

There may be some creative intelligent scientific experiments conducted in the future, with *very sensitive* laboratory equipment, that will be able to *directly measure* this *dark-matter torque*.

Right after a *brand-new moon* (or *artificial satellite*) is initially created in space, this new *moon* (or *satellite*) will have an initial angular momentum (its *initial moon spin* that the moon initially receives from its initial *moon-creation* process) that is the quantity of *initial angular momentum* (initial moon spin) that the new moon (or *satellite*) has the moment after it is first created.

However, this initial satellite (moon) spin will *certainly not* be its final satellite (moon) spin.

The *initial satellite spin* will quickly become *dark-matter-flow-modified* by the *detailed local flow* of the *local dark matter* (dark scalar bosons) as the local dark matter flows

through all the atoms of the satellite (moon), and *torques* (pushes on) all these atoms *relative* to the *spin axis* of the whole satellite (the *whole moon*).

The dark matter flows through the *volumetric interior* of the *moon*, and presses (puts a torque) on all the atoms of the moon.

The dark matter flow puts a *dark-matter torque* on every atom of the whole moon (*satellite*).

In the future, our bright astrophysicists will be able to better calculate these *expected* dark-matter *torques*, to help them *design* artificial *satellites* that can better take advantage of all of these natural dark-matter *flows* and their associated dark-matter *torques*.

These *atomic* dark-matter *torques* (on every atom of the whole *artificial satellite*) will all sum together to cause a *net torque* (a kind of net angular force) on the whole *artificial satellite*.

These dark-matter *satellite-torques* will tend to cause a satellite to *modify* its total angular momentum.

In this way the *dark-matter satellite-torque* will cause a satellite to *change* its *spin* until the satellite spin is exactly

where it needs to be so that the (time and space) *averaged orbital* dark-matter satellite-torque *drops to zero*.

When the *orbitally-averaged* dark-matter satellite-torque finally *drops to zero*, because the *satellite spin* has *grown* to the proper *satellite spin-value* that makes the total averaged dark-matter satellite-torque *vanish*.

When this averaged dark-matter *satellite-torque* finally *vanishes*, then the satellite will just keep its *current spin* at its current (final) value.

These dark-matter *moon-torques* are a *major reason* for all the spin-rates of *all* the moons of our local solar system, and *all* the *moons* (and *many* satellites) of this whole milky-way galaxy.

These dark-matter *torques* powerfully-affect the *spin-rates* of all of the *moons*, and all of the *planets*, and all of the *stars*, and all the *galaxies*, and all the *clusters* of galaxies.

How does the dark matter flowing *into* a *star*, and the dark matter flowing *through* a *star*, and the dark matter *torquing* all the *atoms* of a *star* affect the stellar *spin-rate* of the *star*?

Now, let's look more closely at this very interesting phenomenon of *Dark-Matter Star-Spin*.

# Dark-Matter Star-Spin

What is *Dark-Matter Star-Spin*?

What is *Dark-Matter Star-Cluster Spin*?

How can the *local flow* of *dark matter* cause a *whole star* (or even a *whole star cluster*) to *forever-spin* (seemingly forever) at a very particular *spin rate*?

How exactly does the *local latitudinal flow* of dark matter cause each *stellar-latitude* of a *particular star* to spin at a *slightly different rate*?

How does the *special* unique local *flow* of dark matter, *very close* to a star, like our own sun, cause a nearby planet, like our own planet *Mercury*, to have such an *unusual orbital pattern*?

Do stellar dark-matter *flows* cause the stars to *spin*?

*Dark-Matter Star-Spin* is the *spin-rate* of a *star* due to the *total sum* of all the dark-matter-induced *atomic-torques* on *all* the photons, electrons, protons, and neutrons *inside* the *star*.

The *total* dark-matter *star-torque* on a *whole star*, is the total dark-matter *torque-sum* of all the *individual* dark-matter *torques* on all the *star's particles*, with all of these individual *atomic-torques* measured from the *spin-axis* of the star.

In other words, *immediately after* a new star is created, it will have an initial angular momentum (its *initial stellar spin* that the star initially receives from its initial nuclear-explosion *star-creation* process) that is the quantity of *initial angular momentum* (*initial star-spin*) that the new star possesses right after it is made.

However, this initial star-spin is *not* its final star-spin.

This is because the initial star-spin is soon *altered* by the *flow of dark matter* (dark scalar bosons) inside the star.

The dark matter flows through the volumetric interior of the star, pressing (and *torquing*) all the real light scalar bosons that make up all the visible-matter particles of the star.

The dark matter flow puts a dark-matter torque on every particle of the star.



These atomic dark-matter torques (on *every part* and parcel of the star) sum together to cause a net *stellar torque* (a kind of net angular force) on the whole star.

This dark-matter-induced total-net-star-torque causes the star to gradually *increase* its *spin* (and gradually *tilt* its *spin axis*) in the *direction* of the *net stellar torque*.

In this way, the dark-matter stellar-torque will cause a star to change its spin until the *star-spin* is exactly where it needs to be, so that the dark-matter stellar-torque *drops* to *zero*.

The dark-matter stellar-torque gradually drops towards *zero*, as the star-spin grows toward the *particular* spin-value, that will make the total dark-matter stellar-torque tend to *vanish*.

When the dark-matter star-torque *completely vanishes*, then the star will simply maintain its current (final) spin at its *final* (current) value.

These *dark-matter star-torques* are the *primary reason* for all the *stellar spin-rates* of all the stars of this whole universe of stars.

In addition to causing all the stars to spin, the dark-matter flow-torques also cause *all* the *galaxies* to *spin* at *radial-*

*dependent rates* that are *Not* fully predicted by Einstein's 1915 equations of *universal gravitation* [19].

It seems like our *beloved Albert Einstein* failed to fully account for all of these *celestial-torques* caused by the *flow* (and scattering) of *dark matter particles* throughout our universe.

Perhaps our brilliant kind Albert Einstein, in his early day, *did not fully understand* the detailed nature of Dark-Matter Galaxy Spin.

Now let's take a closer look at this interesting *Dark-Matter Galaxy-Spin*.

# Dark-Matter Galaxy-Spin

What is *Dark-Matter Galaxy-Spin*?

How can the inward spiral flow of dark matter particles cause our very own *Milky Way Galaxy* to *spin* about its very own *galactic center*?

How exactly does the supermassive super-energetic central Sagittarius A\* black hole of our Milky Way Galaxy *generate* and *direct* such *strong* powerful *flows* of dark matter particles (dark scalar bosons) mostly *towards* the *center* of our Milky Way Galaxy?

How does the *flow* of dark matter *actually cause* all the *galaxies* to *spin* about their individual *galactic centers*?

How does dark matter also cause some of the *spinning galactic-clusters* to also seem to *spin* around their *cluster centers*?

*Dark-Matter Galaxy-Spin* is the *radially-dependent spin-rate* of a *galaxy* due to the *total sum* of all the dark-matter-induced *atomic-torques* on *every* visible-matter *elementary particle* inside the galaxy, as *measured* relative to the *central spin axis* of the galaxy.

The *total* dark-matter *galactic-torque* on a *whole galaxy* is the dark-matter torque-sum of all the *individual* dark-matter *torques* on all the *galactic elementary particles* measured from the *central-spin-axis* of the galaxy.

It may be theoretically possible that *individual galaxies* grow at a stellar growth rate of just *one new star at a time*, with newborn *baby galaxies* initially consisting of just *one single star* (and its new solar system of new planets) orbiting the newly-created *galactic-center*.

Immediately after a new *galactic-center* is created, it will have an initial angular momentum (its *initial galactic-center spin* that the galactic-center initially receives from its initial galactic-center *creation-process*) that is the quantity of *initial angular momentum* (initial galactic-center spin) that the new galactic-center has the moment after it is first created.

However, this *initial galactic-center spin* will *not* be the final spin of the newly-created galaxy.

The initial galaxy spin is soon *altered* by the *flow* of *dark matter* (dark scalar bosons), and also by the addition of *newly-created stars* that will also begin to *orbit* the new *galactic-center*.

The dark matter flows through the interior regions of the *whole galaxy*, and presses (puts a *torque*) on *all the elementary particles* within the whole galaxy.

The *galactic dark matter flow* puts a *dark-matter torque* on *every* visible-matter particle of the whole galaxy.

These galactic dark-matter torques (on every real light scalar boson particle of the galaxy) sum together to cause a *galactic net torque* (a kind of net angular force) on the whole galaxy, with some regions of some *galactic spiral arms* (located at different radial distances from the galactic-center) feeling a *slightly* different *torque* than other regions, so as to cause all the *spiral arms* to *rotate* about the galactic-center in the way that our talented astronomers have already observed.

This dark-matter *galaxy-torque* causes the growing baby galaxy to *start to change* its *galactic-spin*, after the new galactic-center is initially created for the *brand-new baby galaxy*.

In this way the dark-matter galaxy-torque will cause a whole galaxy to gradually *change* its *galactic-spin* until the galactic-spin is exactly where it needs to be so that the dark-matter *galaxy-torque* drops to zero for every radial distance from the galactic-center.

All of the dark-matter galaxy-torques will finally drop to zero, when the galactic-spin has finally grown to the particular spin-value that makes the total dark-matter galaxy-torque *vanish* for *every* radial distance from the galactic-center.

When all the dark-matter galaxy-torques vanish, then the galaxy keeps its current galactic-spin at its current value, until a *new star* is *created* which may sometimes tend to cause the entire galaxy to spin a *little* bit *faster* due to the *increased volume* (due to the presence of the new star) of *inward-flowing* (toward the galactic-center) dark matter particles (*dark scalar bosons*).

These dark-matter galaxy-torques are the *primary reason* for all the *radially-dependent* galactic *spin-rates* of all the galaxies of this whole dream universe of galaxies.

Our *real* universe does *not* have any galaxies.

However, most of our *dream* universes are filled with *lots* of *galaxies*.

The inward-flow of trillions of trillions of tiny fast dark matter particles causes *all* of these *dream galaxies* to *spin* about their galactic centers.

The inward-flow of dark matter particles also causes *many* of the *clusters* of *galaxies* (galactic clusters) to spin about their *cluster centers*.

Now let's look at little bit closer at this *Dark-Matter Cluster-Spin*.

# Dark-Matter Cluster-Spin

What is *Dark-Matter Cluster-Spin*?

What is *Dark-Matter Galactic-Cluster Spin*?

Our own Milky Way Galaxy (where we all seem to live here on Earth) is *just one* of many thousands of galaxies that are part of a large *supercluster* of galaxies that has recently been named as our local “*Laniakea Supercluster*”.

This huge *Laniakea Supercluster* has a very interesting *shape*.

Our magnificent Laniakea Supercluster has a *beautiful* finger-like *shape* that is *very different* than the *circular* spiral disc *shapes* of many of the thousands of individual galaxies that jointly compose it.

Our very own *Laniakea Supercluster* (where we all live inside our spinning spiral disc-shaped Milky Way Galaxy) is shaped like a large set of *real neural* (dark matter) *fingers*.

*What* created this huge Laniakea Supercluster?



How was *our* super-massive *Laniakea Supercluster* formed?

## Our Laniakea Supercluster

What is *Our Laniakea Supercluster*?

*Our Laniakea Supercluster* is our home supercluster of *thousands of galaxies*, that also contains our very own *Milky-Way Galaxy*.

Our super-beautiful Laniakea Supercluster is shaped like a set of *lovely neural fingers*.

These marvelous *Laniakea neural fingers* are the *real neural fingers* (the networked *set* of real human *neurons*) that are the real dark matter (neurons and their pulses) that support all the 6 families of real neural pulses (the 3 *dark scalar boson pulses*, and the 3 *light scalar boson pulses*) in which the tiny fast dark scalar bosons *push on* all the larger slower light scalar bosons (that compose all the visible-matter elementary particles) to *cause* all the galaxies, stars, and planets to all *spin* about their celestial centers.

These wonderful *Laniakea* neural *fingers* will continue to grow and *expand*, for so long as (we) real human beings (that jointly compose them with sub-portions of our real human brains) *want* them to *grow* and *expand*, via the *creation* of *new galaxies* (and their new stars, and their new planets, and their new moons, and their new human avatars) within them.

When a *new star* is created inside our *Laniakea neural-fingers* (our real supercluster of real neural fingers), some of the real neurons are *stimulated* (by the nuclear *supernova explosion* that creates the new star) to *begin growing*, expanding, and *dividing* (to create additional real Higgs neurons, and real light neurons, to properly support the newly-created visible-matter star), and some of the real *dark spiral axons* *grow* and *extend* themselves *outward* into space (causing the *observed expansion* of *space* that has been named “*dark energy*” by some of our wise astrophysicists), and this *growth* of so many *long dark spiral axons* (and the flow and *scattering* of their dark scalar bosons) is what *actually causes* the expansion and *growth* of our precious beautiful *Laniakea Supercluster*.

Our *Laniakea Supercluster* will *continue* to *grow* (one star at a time, via new-star creation, via a supernovae explosion) *for exactly so long* as *we* (the real human

beings that are actively creating it) *desire* that it will *grow*.

Our Laniakea Supercluster will *start to shrink* and *dissolve* (one star at a time via individual *star death*) one day in the distant future, when we (real human beings) begin to *lose interest* in it.

When the last few of us (we the real humans that together jointly simulate Laniakea) *leave* (lose interest in Laniakea, and leave it for the last time) *Laniakea*, then our *lovely Laniakea* will simply dissolve, shrink, vanish, and will *be no more*.

However, many trillions of trillions of us seem to *still want to live here* inside of our *exciting Laniakea Supercluster*, so we may also want to continue to *make it grow* (a lot more) for *many more billions of years to come*.

It certainly seems possible that while some newer regions of Laniakea are *presently growing*, other regions of Laniakea may be *currently shrinking*.

It seems to all depend on exactly what *we the real humans* actually decide we want to do with our jointly-simulated *Laniakea dream supercluster*.

How can the pressing dark matter flows, cause *some portions* of our *Laniakea Supercluster* (with its thousands of individual galaxies) to *spin* about their *galactic cluster-centers*?

*Which parts* of Laniakea will *stay connected* to Laniakea, and which parts may *become disconnected*, and which parts may possibly one day completely *break-off* to later grow into a *completely different* supercluster?

How can we really *know* for sure?

How many *mortal* human beings (like *us* people here on Earth) live inside Laniakea?

How many of us *advanced* human beings (with advanced human DNA and *super-intelligent brains*) live inside Laniakea?

Do some of us advanced human beings (living on an *advanced planet* like *Kolob* in Laniakea) sometimes *partially animate* (and *partially consciousness-infuse*) a mortal-human-avatar brain living here on Earth?

How can we develop a really good *science of human consciousness* to help us all (here on Earth) to actually *begin to understand* how we (most of us mortal humans here on Earth) can seem to be *partially-conscious* inside a

game (inside our local *Laniakea* dream game *simulation*) that we don't seem to yet fully understand?

How can the *flow* of dark matter *particles* (dark *plus* scalar bosons, and dark *minus* scalar bosons) cause *some* of the *sub-regions* of an entire supercluster (like our own Laniakea Supercluster) *spin* around their *sub-region centers*?

*Dark-Matter Cluster-Spin* is the *spin-rate* of a whole cluster (of multiple galaxies) due to the *total sum* of all the dark-matter-induced *particle-torques* on *all* the visible-matter (ordinary-matter) particles inside the *galactic cluster*.

The *total* dark-matter *cluster-torque* on a *whole galactic-cluster* is the dark-matter torque-sum of all the *individual dark-matter torques* on all the cluster's *fermions* and *vector bosons* measured from the *central spin-axis* of the cluster of galaxies.

After a new galaxy cluster is created, it will have an initial angular momentum (its *initial* cluster *spin* that the cluster initially receives from its initial cluster-creation process) that is the quantity of *initial angular momentum* (initial cluster spin) that the new cluster has when it is first created.

However, this *initial cluster spin* is *not* the *final spin* the cluster will have, after it has grown larger.

The initial cluster spin is soon *altered* by the *flow* of *dark matter* (dark scalar bosons) into the cluster, and by the addition of new baby galaxies in the galaxy cluster.

The dark matter flows through the *volumetric interior* of the whole galaxy-cluster, and presses (*puts* a dark-matter *torque*) on *all* the visible matter inside the galaxy-cluster.

The dark matter flow puts a dark-matter *torque* on *every particle* of the cluster, with the dark-matter *torque* measured *relative* to the *central axis* of the total cluster spin.

These atomic dark-matter torques (on every particle of the cluster) sum together to cause a galactic-cluster *net-torque* (a kind of net angular force) on the whole galactic-cluster.

This dark-matter *cluster-torque* can cause the whole cluster to begin to *gradually alter* its galactic cluster-spin.

In this way, the dark-matter cluster-torque will cause a newly-formed cluster to *change* its *spin*, until the cluster spin is exactly where it needs to be, so that the dark-matter cluster-torque *drops to zero*.

The dark-matter cluster-torque will *gradually* reduce to zero, because the total net galactic-cluster spin has *grown* to the *proper* galactic-cluster *spin-value* that makes the total dark-matter cluster-torque vanish.

When the dark-matter cluster-torque *finally vanishes*, then the galactic cluster will then keep its current (final) cluster-spin at its final (current) value.

These dark-matter *flow-pressure* cluster-torques are probably the *major reasons* for all the *cluster spin-rates* of the *little* galactic clusters, and the *big* galactic clusters, and the *super-galactic clusters* (like our own *Laniakea Supercluster*) of this entire universe simulation.

In summary, we have just explained how the universal *flow-patterns* of trillions of trillions of trillions of *dark matter particles* (throughout our whole universe) actually *causes* the *rotation* (spin) of all the galactic-clusters, of all of the individual *galaxies*, of all of the individual *stars*, of all of the individual *planets*, of many of the individual *moons*, and also *induces* rotational *spin* on many of the other *massive celestial bodies* in our whole universe.

Now it is time to look more closely at exactly how these individual dark matter particles (our *dark scalar bosons*) push on all the visible-matter particles (of a massive

celestial body) via a process that we can call “Dark-Matter Electromagnetism” which includes what we will simply name “*Dark-Matter Magnetism*”.



# Dark-Matter Magnetism

What is *Dark-Matter Magnetism*?

How does the *ultrafast speed* of the *slightly-charged* dark plus (and minus) bosons generate a *magnetic field* that travels with these dark plus (and minus) bosons?

How can some of our hypothetical dark matter particles (our dark *north* boson, and our dark *south* boson) possess just a *very tiny* (very small) magnetic *monopole* moment?

Why have some of our talented experimental physicists been searching for many decades for *super-large* super-massive *magnetic monopoles*?

Why do some of our intelligent physicists *still believe* that *magnetic monopoles* must be *so large*?

In 1931 Paul Dirac published a very interesting paper called “*Quantized Singularities in the Electromagnetic Field*” [20] in which he predicted that magnetic monopoles might have *very large* magnitudes, and that these *super-strong* magnetic (*north* and *south*) *monopoles* might be so *very strong* that we could *not* even break them apart to *measure them*, and that this might be the

reason they have seemingly *not yet been observed* by any of our mortal human scientists here on Earth.

However, a *few unnecessary assumptions* (incorrect starting points) may have been included in the beginning of Dirac's 1931 paper.

No one can deny that Paul Dirac was a *brilliant* theoretical *physicist* in many ways.

His immense contributions to the *new field* of *quantum mechanics* are widely appreciated by thousands of *intelligent scientists*, even today in 2023.

However, Dr. Dirac may have never had a *perfect understanding* of *all* of the actual correct *physical details* of every particle of quantum physics.

For example, in 1931 it seems like Paul Dirac *still believed* that a single electron had the *smallest* of all possible electric charges.

Today in 2023, many of us have *already started to believe* that the electric charge of an electron is *not* the *smallest* electric charge found in nature.

All of our 12 quarks seem to already have *smaller* electric charges, than the electron does.

As an additional example, we can simply consider the *many thousands* of real sodium ions that *together compose just one single* real neural pulse.

Our *3-pulse* electron is made of *3 different* real neural pulses.

These *many thousands* (of real positively-charged sodium ions) *jointly sum* their individual sodium-ion electric-charges to form a much larger (*thousands of times larger*) single-pulse positive *electric charge*.

Therefore, a *single real* sodium ion, actually has an *electric charge* (as measured and observed from our severely-limited current viewpoint, of being positioned deeply inside this milky-way galaxy simulation) with a *relatively-tiny* electric-charge *magnitude* that is *thousands of times smaller* than the magnitude of an *electron's* electric charge.

This is a good logical *physical* explanation, for how an electric charge can actually exist in nature, that is *thousands of times smaller* than the electric charge on an electron.

We could also name *a few other* examples of some of the *unnecessary assumptions* of Paul Dirac's 1931 paper.

These *imperfect unnecessary assumptions* may not *all* be *completely* correct.

For example, some *very tiny* magnetic monopoles may actually be *possible* in nature.

Also, the actual nature of Dirac Strings may be *a little* bit *different* than what Paul Dirac first proposed.

*Super Long Magnetic Solenoids* (Dirac Strings) may be able to play many important roles in nature, in the scientific laboratory, and in *quantum bit* (qubit) *stabilization* in *quantum computers*.

The dark plus scalar boson has a *tiny positive* electric monopole charge.

The dark minus scalar boson has a *tiny negative* electric monopole charge.

One or more *electric-dipole* dark scalar *bosons* may also *possibly* exist.

One or more *magnetic-dipole* dark scalar *bosons* may also *possibly* exist.

Our *6 families* of electromagnetic *dark scalar bosons* will provide *plenty* of degrees of freedom for all the powerful new *dark-boson* computer-software *simulators* we can design, *write*, and develop to test and *refine* our theory of *dark-matter* flow quantum-scattering *gravity*, until all the *details* are worked out well enough to predict *every* cosmological *observation* of dark matter, and until all the details are also worked out well enough for us to design and use some powerful new types of “*Dirac Strings*” to guide and *stabilize* all the quantum bits (*qubits*) inside all our *exact* (fully-deterministic) *quantum computers* of our near future.

We will want to design our *dark-matter* flow *gravity software*, and our *dark-matter* flow *Dirac-String-Stabilization software*, very carefully, and very wisely to take into account *anything* and *everything* that might affect the flow of our *3 dark scalar bosons* as they *bounce-off* of the *3 kinds* of *light scalar bosons* that compose all the elementary particles that make up all the atoms, and all the *visible molecules* that make up all the visible matter of this *Earth planet* where we all live.

When a momentum-carrying inward-traveling dark plus (or minus) scalar boson *bounces off* an *Earth-molecule*, the dark minus (or plus) scalar boson imparts a portion of its *inward-bound momentum* to the *Earth-molecule* as it bounces off the molecule, and this causes the Earth-

molecule to *try to begin to travel* in a direction that is *closer* to being towards the center of Earth, and this also causes the dark scalar boson to have *less momentum* toward Earth's center, and *more momentum* in some other seemingly-random *direction*, as the dark scalar boson seemingly-randomly *scatters* off the *Earth-molecule* into *some other* seemingly-random *direction*.

This continual process of *scattering* the *dark scalar bosons* into *all possible directions*, and *all possible linear momenta*, tends to *diffuse* all the outgoing (post-scatter) *velocities* of all the *scattered* dark scalar *bosons* into *all the different possible directions*.

Therefore, all the *tiny* electromagnetic dark scalar *bosons* initially travel fast (from outer space out, beyond our solar system) *mostly* towards *Earth's center*, but as they begin to *bounce off* a molecule of Earth, the dark plus bosons (and the dark minus bosons) *scatter* (bounce) off the molecule into *all possible directions*, causing the dark scalar bosons to begin to travel in *all* the different possible *directions* as they begin to *leave* the vicinity of Earth.

In this way, the *dark matter particles* (the momentum-carrying dark scalar bosons) approach Earth *radially* to create the dark-boson fluid-pressure of “gravity”, and then the dark scalar bosons leave Earth as they *diffusively*

*move* in all possible directions *after* they bounce off a molecule of Earth.

For example, if we simply walk outside (with an *umbrella* in our human hand) during a *heavy rainstorm*, and the intense rain pounds down hard (with its great *rain-falling force* directed exactly towards the *center of Earth*) upon our umbrella, the umbrella will begin to *feel more-heavy* in our *hand*, as we hold the umbrella in our hand.

Our umbrella begins to *feel more-heavy* because of all the *rain particles* (rain drops of water) that are *hitting* the top of the umbrella and *bouncing off* of the *umbrella-molecules* of the *umbrella's* visible-matter *fabric*.

The rain drops (the individual rain-drop particles) are all initially traveling *downward*, mostly directly towards the *center* of our Earth.

However, as the individual rain-drop particles *hit* the *top* of our umbrella, and *bounce off* of the top of the umbrella, these rain drops *scatter* and effectively-*diffuse* themselves into *all* the different possible *directions* as they leave the top of the umbrella.

In this way, these falling rain drops are *kind of similar* to the dark-matter particles (the dark scalar bosons) that flow *radially-downward* towards the center of Earth, and

bounce off of the *tops* of umbrellas (and the tops of human heads) as the particles (rain-particles and dark-matter particles) *scatter* into all directions and then *leave* the vicinity of the visible-matter molecules that caused the scattering.

Therefore, we have explained how *dark matter* and *raindrops* are actually pretty similar (in their downward-traveling Earth-pounding *momentum-transferring* scattering behavior) in *some ways*.

However, one way in which the tiny fast dark scalar bosons (dark matter particles) are *different* than raindrop particles, is the way in which the dark scalar bosons are *much smaller* (many orders of magnitude smaller and lighter) than the individual water molecules of the raindrops, and the dark scalar bosons are even much smaller than the two hydrogen *atoms*, and the one oxygen atom, that make up a single water molecule, and the dark bosons are *so super-tiny* that they can sometimes easily *pass* through *every type* of visible matter, including *visible* umbrellas, *visible* human *beings*, and even whole *visible planets*.

Even though the dark scalar bosons (dark matter particles) can *usually* easily travel through every type of *visible matter* (the kinds of ordinary matter that are composed of visible elementary particles like photons, electrons,



protons, and neutrons), there are many situations in which a single tiny fast slightly-charged *dark* scalar boson will *scatter off* a single larger slower charged *light* scalar boson.

The *charged* light scalar *bosons* are all the *electrically-charged* light *neural pulses* that combine together to make all the (*fermion* and *vector boson*) elementary particles, including all the photons, electrons, protons, and neutrons that make up all the ordinary (normal) visible matter of our Earth.

These *quantum* scattering *events* (in which an individual dark-boson passes close-enough to a specific light-boson, so that the dark-boson actually *scatters off* the light-boson) are actually both *relatively-rare* and *somewhat-commonplace*.

These *dark-boson light-boson* scattering *events* are relatively *rare* because they may only happen a very tiny fraction of 1% of the time a dark boson *passes through* the *volumetric interior* of a single atom of visible matter.

These dark-boson light-boson scattering events are also *somewhat commonplace* because the *huge number*, of dark bosons passing through an individual visible-matter atom per second, is *so huge* (an extremely high number) that *a few* of the dark bosons *actually* do *scatter off* of one

(or more) of the *individual* light *bosons* that are inside an atom.

For example, when a typical individual dark boson *travels* through an *atom*, there may be only about a *one* in a *trillion* (or even possibly much less) *probability* that the dark boson will *scatter off one* of the *interior light-bosons* of the atom.

However, there may be a *trillion-trillion* (a trillion times a trillion) dark bosons traveling through *every atom* of Earth *per second*.

Therefore, *if* there are a *trillion-trillion* dark *bosons* passing through *every atom* (of you and me and Earth) *every second*, and there is only a *one* in a *trillion probability* that one of the dark scalar bosons will actually pass *close enough* to one of the light scalar bosons (of the atom) to actually *scatter off of it*, then there will still be a *trillion scattering events per second*, and these *trillion scatters* (per second) will all effectively act together to *push the whole atom* mostly towards the *center* of Earth, and thereby *cause* all the *gravity* of *Earth* (that continually *pushes* all of us mortal humans *down* onto the surface of this Earth), and also to *torque* the whole *Earth* and *make* it *spin* on *its axis* in the *unique way* that it does.

In this way, a dark-boson light-boson *scattering event* can be viewed as being both a *one-in-a-trillion* relatively-rare event, and also a *trillion-scatters-per-second* relatively-commonplace event.

One *single* dark-matter atomic *scattering event* will *push* the *atom* downward towards the center of Earth just a *little bit*.

A *trillion* scattering *events* (per second) will (on average) *push* the *atom* towards Earth a *trillion times* more *powerfully*.

No wonder all the many atoms of our Earth are *continuously pushed* towards the *center* of *Earth*; and Sir Isaac Newton (1642-1727) saw his famous apple *fall* from the apple-tree and *accelerate* rapidly towards the *ground*, rather than see his famous *apple float up* into the *air*.

Many trillions of trillions of *dark matter* particles *push* *Newton's apple* off of its apple-tree vine, and push (*accelerate*) the apple making it *fall* and *accelerate* towards the ground (seemingly towards the *center* of our Earth).

Therefore, it does seem like Sir Isaac Newton was *mostly right* about *gravity*.

However, it also seems entirely possible that Sir Isaac Newton *did not* fully *understand* this new theory of *dark-matter* quantum-scattering *gravity* which is an important component of this general *4 Brain Theory*.

Let's now consider that there may be a *trillion* dark-boson light-boson *scattering events* per *second* for a single *hydrogen atom* in the *upper atmosphere* of our Earth.

The *60 trillion* dark-boson light-boson *scattering events* of a *whole minute* (60 seconds) may be enough to push (*accelerate*) a hydrogen atom to a relatively *high velocity* downward *towards* the center of *Earth*, if it encounters nothing (like another atom or molecule of the Earth's atmosphere) to hinder its *Earth-bound acceleration*.

In like manner, the trillions of trillions of trillions of dark bosons that are passing (every second) through our Moon (on their way towards Earth), are actually *pushing* on *every atom* of our *Moon*, and pushing (*accelerating*) our Moon towards our Earth, *causing* our Moon to continue to travel around our Earth in a *nearly-circular orbit*, even though perhaps only a *small fraction* of the dark scalar bosons (that travel rapidly through our Moon) *actually scatter off* of one of the Moon's atoms.

*Most* of the dark bosons that encounter our Moon *just travel* right on *through it*, without scattering off of any of the Moon's atoms.

However, the *tiny fraction* of dark bosons that *do scatter* off the *Moon's atoms*, cause these Moon atoms to *accelerate* towards Earth.

It is these particular dark bosons (dark matter particles) that *travel* through the *Moon*, in the direction of Earth, that *cause* (via scattering) our Moon to *accelerate* towards our Earth, because *some* of these dark bosons *push* the Moon's atoms towards Earth.

The “gravity” that causes our Moon to be *attracted* to our Earth is the *dark matter particles* (traveling towards Earth) that *scatter* off of the *atoms* of the Moon, and *scatter-push* on these Moon atoms, causing these *scatter-pushed* Moon atoms to *forcefully-accelerate* towards Earth.

When a dark boson scatters off a Moon atom, the dark boson provides a little *force-kick* on the atom that tends to *accelerate-kick* the atom towards the Earth.

This is how the flowing dark matter particles (our dark plus bosons, and our dark minus bosons) *continually kick* the *Moon-atoms* towards the Earth.

The dark matter particles *push* the Moon-atoms towards the Earth's *center point* because *so many* of these dark matter particles are initially traveling towards the center of Earth, as they *flow* through the *interior* of the Moon.

Although, a *large number* of dark bosons are traveling *through* the *Moon* towards the *Earth*, there are *also* a *large number* of dark bosons that are traveling *towards* the *center* of the *Moon*.

In the *local vicinity* of the *Moon* and the *Earth* and the *Sun*, *many* dark scalar bosons *flow* towards the center of the *Sun*, and *many* dark bosons *flow* towards the center of the *Earth*, and *many* dark bosons flow towards the center of the *Moon*, such that our *local gravity* (our local dark-boson flow gravity) is *the way that it is*, causing the *Moon* to *orbit* the *Earth*, and causing the *Earth* to *orbit* the *Sun*.

The *flow* of tiny *momentum-carrying* dark matter *particles* (and the *momentum-scattering* of dark matter off of visible matter) *causes* the *Earth* to orbit the *Sun*, and *causes* the *Moon* to orbit the *Earth*.

In a similar manner, the dark bosons that travel through *all of us* human beings (with all our mortal human bodies made out of atoms) here on Earth, on average tend to *kick*

our *human-body atoms* mostly towards the center of the Earth.

Most of the dark bosons that travel through our human bodies *do not scatter* off of any of our human-body atoms.

However, the *relatively-few* dark bosons that *do scatter* off of *each and every one* of our human-body atoms, *cause* all our *personal atoms* (of our personal human bodies) to *accelerate towards* the Earth's center.

Thus, we all experience “*gravity*” here on Earth.

Thus, we all experience “*dark-matter flow quantum scattering gravity*” here on Earth as the dark matter particles *scatter off of every one* of the *atoms* that are *inside* each one of us visible-matter human bodies on Earth.

Thus, we all personally-experience *dark matter* particles *pushing* all our human-body's *atoms* downward towards the Earth's center.

Most of the local dark matter flows towards the center of Earth *pushing* its *atmosphere downward* towards the surface of Earth, helping *Earth keep* its *vital atmosphere*.

The trillions of trillions of trillions of trillions of *dark matter particles* that are *rapidly flowing* towards the center of our precious sun *holds* our whole *solar system* together.

The *galactic* inward-flowing momentum-carrying “*wind*” of dark matter particles *holds* our whole *Milky Way Galaxy* together.

The *growth of* real *dark spiral axons* inside and around (and in the *local neighborhood* of) a newly-created star, *biologically-pushes* the other nearby stars away from the new star, and this creation of *new-star space* (around the new star) is *fully-responsible* for the important scientific *observation* of our *universe’s accelerated expansion* (which has been accurately called “*dark energy*” by many of our mortal scientists here on Earth).

These detailed descriptions of “*dark matter flow gravity*” (written here in this 4 Brain Theory paper) can be used to design and *write the software to encode* a simple “*dark-matter fluid-dynamics simulation code*” that can be developed on a *computer* to show (in even more *useful scientific detail*) more completely how dark matter particles *scatter off* of all the *visible-matter atoms* of our whole universe to generate all of the “gravity” that is currently observed in the galaxies, stars, planets, moons,



comets, asteroids, and all the other visible-matter objects of *our whole universe*.

These future “*dark matter* gravity computer simulation software *codes*” can be used to continually *refine* and *fine-tune* this present “*dark matter* flow theory of *gravity*” until it becomes *much* more *accurate* than Einstein’s 1915 theory of gravity.

This simple new *Dark Matter* Quantum Scattering *Theory* of *Gravity* will soon be *experimentally-discovered* to be the *correct theory* of *gravity*, because this Dark Matter Quantum Scattering Theory of Gravity will be *able to predict* many newly-observed “gravity” *phenomena* that simply *cannot* be predicted with Einstein’s elaborate theory of gravity, or with Newton’s simple theory of gravity.

What would Sir Isaac Newtown (1642-1727) have thought in his day about this new *Dark Matter* Flow Theory of *Gravity*?

How would Albert Einstein (if he were *still alive today*) view this new Dark Matter Flow Theory of Gravity, and the *marvelous source* from which it came?

And what about the Scottish Physicist, James Clerk Maxwell (1831-1879), who published his *famous equations* of large-scale *electromagnetism* in 1865?

*If* the brilliant James Clerk Maxwell would have known about the trillions of tiny fast *electromagnetic* dark matter *particles*, how would he have gone about *formulating* his new theory of electromagnetism?

Could *Maxwell* have created a *Dark-Matter* electromagnetic theory in 1865, that would have allowed him to proceed to discover a *more* accurate *theory* of *electromagnetism* that properly incorporated Dark-Matter particles with their Darklight Speeds, the Actual Source of the Speed of Light of the Photon, Planck's Constant, the Actual Smallest Electric Charge, the Real Reason for the Exact Charge of the Electron, and the meaning of the dimensionless Fine Structure Constant?

How would *Maxwell's Dark-Matter* theory of electromagnetism have been formulated if James Clerk Maxwell would have had a good solid understanding of dark matter back in 1865?

# Maxwell's Dark-Matter

Perhaps *Maxwell's Dark-Matter* theory would have *started* with the *proper foundation* of this present 4 Brain Theory, and the network of real human brains that jointly compose the real *axon field* of real axons and their real *neural pulses* (including the 3 families of real *dark* scalar boson pulses, and the 3 families of real *light* scalar boson pulses) that *guides, forms, constructs, and simulates* all the elementary (*visible-matter*) particles including all the *electromagnetic photons*, electrons, quarks, protons, and neutrons.

How could James Clerk Maxwell have used (in his day long ago in 1865) this *New Theory of Dark Matter Flow Gravity* (as we have briefly described it in this present 4 Brain Theory paper) to mathematically-derive *Maxwell's Equations of Electromagnetism* from the most-basic (dark-matter fundamental) *first principles* possible?

With 6 *different types* of Dark Matter (our 6 *real* scalar bosons with their 6 *distinct* electromagnetic characteristics), we have *enough* electromagnetic flexibility to completely derive *Maxwell's Equations* from first principles, and in the process show how some very-special types of *dark-matter flows* can affect *Electric*

*Fields*, and how other very-particular *dark-matter flows* can affect *Magnetic Fields*.

We will also be able to show how these particular types of “*electric-dark-matter*” flows, and “*magnetic-dark-matter*” flows, can alter the local behavior of certain types of electromagnetic fields.

How can a *Magnetic Field* be altered by a specially-balanced, particularly-shaped *magnetic-dark-matter* flow of dark *north* bosons?

How can an *Electric Field* be altered by a specially-shaped, particularly-balanced *electric-dark-matter* flow of dark *plus* bosons?

How can we also *mathematically-derive* the needed correction to the *Lorentz Force Law* from these two simple *electromagnetic dark-matter flows*?

Also, how can we mathematically-derive the approximate gravitational force laws of *Sir Isaac Newton* and *Albert Einstein* from simple *dark matter flows*?

Also, how can we *mathematically-derive* the approximate (yet very general) force law of *Sir Isaac Newton*’s universal *Force equals mass times acceleration* ( $F = m a$ ) from simple *dark matter flows*?

Also, how can we best mathematically-derive the actual relationship between *gravitational mass* and *inertial mass* from our simple dark matter flows?

Also, how can we mathematically-derive the *needed correction* to Einstein's famous equation of *Energy equals mass times the speed of light squared* ( $E = m c^2$ ) from our simple *dark matter flows*?

Is there *any* fundamental principle of modern physics that we cannot completely logically conceive (and also mathematically derive) from simple *dark matter* (real scalar boson) *flows* and the real neural pulse-pulse *interactions* of *light scalar bosons* with other *light scalar bosons* and with all the tiny fast *dark scalar bosons*?

It certainly seems like this new 4 Brain Theory of dark matter (*real scalar bosons*) and visible matter (made of *light scalar bosons*) will be able to help us mathematically-deriving every important equation of quantum physics and quantum gravity from the first-principles of dark matter and what it does (how it flows, and how it interacts with visible matter particles).

Our new Dark-Matter Flow (and *momentum-scattering*) Theory of Gravity shows us how the *differential flows* of the *relative abundances* of dark-matter particles actually

*cause* the phenomenon of “gravity” on the large scales of the *huge* celestial *bodies* of galaxies, stars, planets, and moons.

Now, let’s take a closer look at how these dark-matter particles *interact* with the visible-matter particles to continuously *gently push them* in the exact directions that cause “gravitational” *accelerations* on these visible-matter particles.

These detailed microscopic (and nanoscopic and picoscopic) dynamical interactions of dark-matter particles with the visible-matter particles to create gravity can be called *Dark Quantum Gravity*.

# Dark Quantum Gravity

What exactly is *Dark Quantum Gravity*?

What is our *Dark-Matter Theory of Quantum Gravity*?

Our Theory of *Dark Quantum Gravity* is that our 3 dark matter particles (our 3 *dark scalar bosons*) interact with the 3 *families* of *light bosons* via ultra-small-scale particle-particle *quantum* momentum-transfer *events*, at picoscopic scale lengths, and at *sub-picoscopic scale lengths*, in which the tiny (*momentum-carrying*) dark scalar bosons *electromagnetically-scatter* off of the much-larger light scalar bosons, in a way that *pushes* on the *light scalar bosons*, and *transfers* net *momentum* to all the light scalar bosons, *accelerating* all the light scalar bosons towards massive nearby objects like the moons, the planets, the stars, and the galaxies, and in this way providing “*dark-matter scattering-caused gravitational accelerations*” to *all* of the *light scalar bosons*, and thereby to *all* of the *visible matter particles*.

All of the visible matter particles are composed of the 3 *families* of *light scalar bosons*, which consist of the *Higgs* neutral scalar *boson*, a few positive *light-plus bosons*, and a few negative *light-minus bosons*.

What are the *detailed* sub-picoscopic *dynamics* of exactly how one individual tiny fast *dark north* boson particle *interacts* with one individual big slow positive *light plus* boson particle?

One of the important things to remember about the individual dark *north* boson particle, and the individual positive light *plus* boson particle, is that they are both *spin-zero* real *neural pulses* that both *must propagate* (travel) along their respective real axons in the real axon field real axons, that is jointly hosted by our networked real human brains.

These real neurons, and their real axons, can be given special *growth-commands* to start growing and to start dividing (via *neural cell-division mitosis*), thus growing more axons and longer axons (*newly-created dark matter*) that start to grow and extend their *neural-axons* radially-outward in all directions, even outward *far-beyond* the growth-stimulating visible-matter that originally stimulated their outward-growth.

For example, when a new moon is initially created, its energetic (*visible-matter-forming* nuclear explosion) creation *stimulates* the *creation* and *growth* of new real *neurons*, and new *axons*, that rapidly grow *radially outward* from the *center* of the new moon as the newly-created *growing axons* begin to extend many miles



*outward* from the center of the moon, and also these neural axons will continue to grow many miles *outward* from the surface of the moon, and these neural axons will continue to grow radially outward into all the space surrounding the moon.

Therefore, the newly-created moon will end up with a huge number of *real dark axons* extending *radially-outward* (far beyond the *lunar surface* of the moon), and these *radial moon-axons* are then able to *guide the flow* of dark matter particles *radially-inward* towards the *exact center* of the moon.

This is how the moon is able to partially create its own gravity from its *radial moon-axons* that *act to guide* the local dark matter particles *radially-inward* along the *radial moon-axons* that *flow* (guide) the dark scalar bosons towards the moon's center.

The dark scalar boson pulses will flow into these *radial moon-axons* as they get closer to a moon, so as they approach the surface of each moon, all the dark boson pulses are *propagating* along inward *radial-axons* directing the dark bosons towards the center of the moon, and the *inward-traveling* dark-boson (dark matter) neural *pulse pressure* (momentum-transferring *scattering pressure*) is what creates the moon's local "gravity".

In the special intermediate *locations* of space situated *between* the Earth and the Moon, where the Moon's gravity is about *equal* in strength to the Earth's gravity, but *opposite* in direction, there exist approximately *equal numbers* of dark-boson pulse *axons* oriented in nearly *every* direction, with their dark scalar bosons *traveling* in nearly *every* direction, so the *direction-averaged* (averaged over *all* directions in space) *net* dark-boson pulse pressure is nearly zero in these *super-low-gravity* intermediate *locations* in space.

The *dark scalar boson* neural pulse *net flow field* closely follows the local direction (and strength) of the *net abundance* of dark boson *axon-length orientations* and *axon-pulse* propagation *directions*.

In other words, the *local* (at a particular location in space) *direction* of the *majority* of the dark-boson *axons*, can easily become the *preferred-direction* of the propagation of the *majority* of the dark-boson scalar neural pulses, and can therefore become the *direction of gravity* at that location.

When a new planet is initially created (via a nuclear-device explosion that stimulates *visible-matter creation*), and it begins to orbit its local star, the *sequential set* of orbital *locations* in its *planetary* orbital *path* around its local star, begin to *grow* new additional real neurons to

provide increased neural-support (*increased* dark-matter density *support*) to properly support the new planet's new orbit.

The *newly-grown* real *neurons* (in the orbital path of the new planet about its sun) may *begin* to *grow* many new real *axons* from all the potential orbital locations that the planet will move into, as it orbits about its local sun.

In this way, there will always be *enough radial axons*, to guide the dark boson gravity pulses (the dark-boson pulses that create all the *gravity-like pressure* towards the center of the planet) directly towards the very center of the planet, for *every* planet-orbital *location* in the planet's orbit about its sun.

In this simple way, the *continual shower* of *dark scalar bosons* raining *down* on every planet (and every moon and every sun) creates an effective “*gravitational*” force on *every elementary particle* of our planet *Earth* (and on every elementary particle of our *sun*, and on every elementary particle of our *moon*, our *comets*, our *asteroids*, and on every particle of visible matter in our whole solar system).

Similar *momentum-transferring* dark-boson *showers* also originate *far away* (in intergalactic space) from even beyond the outermost edge of our own *milky way galaxy*,

and these *intense* continuous dark-boson *showers* mostly flow from the *outer edges* of our milky way galaxy *towards* the very *center* of our milky way galaxy.

Similar *galactic* dark-boson real neural-pulse *showers* hold every galaxy together via this type of effective “*dark-boson flow-pressure gravity*”, which also helps to cause all the stars of a galaxy to orbit the galactic center in the way that they do, with all their interesting observed galactic-radial-distance “*dark matter*” velocity profiles.

When the dark scalar bosons reach the *very center* of our milky way galaxy, something *really interesting* happens to all these *information-carrying* dark scalar bosons.

We may theoretically discuss the many marvelous things that can happen to these *informational* dark scalar *bosons*, after they flow into the center of each galaxy, in a *future paper*.

The *majority* of the *many* real *neurons* in the real *neuron field* that simulates our universe are *mostly located* exactly where all the galaxies, stars, planets, and moons of our universe *are actually located*.

Wherever in our universe there may be a *little bit* of *visible matter* that needs to be *neurally-supported* (via real neural field simulation support, with *enough* neural

*axons*), there will be an *appropriate set* of real *axons* (and their supporting real *neurons*) nearby to offer (and provide) this *needed simulation support*.

This may be the reason why recent efforts to carefully *map out the distribution of dark matter* in our local mortal universe, have produced a number of recent “*dark matter map pictures*” that look a whole lot like the *inside* of a human *brain*, with its complex *axon-web* of string-like *axonal-filaments* of *biological neural-network tissues*.

It really does look like we (all of us here inside this universe) are living inside a *big human brain*, when we view our new “*dark matter maps*” of this whole universe.

It really looks like we are living inside a *big human brain* because *we are* actually *living* inside a *big human brain*.

What could possibly be *more-simple* than this?

We live inside a *big human brain* (our local universe simulator) that we can actually *see* with our new “*dark-matter distribution maps*” of the inside of our local universe (the inside of our local *big human brain*).

In the simplicity-sharp spirit of Occam’s mighty razor, what explanation of the *big-human-brain* (with *biological-looking neural-filament webs* of our networked

real human neurons) *looking* local-universe dark-matter *visual maps*, could possibly be more-simple, than the simple explanation that we really are all living *inside* a big-human-brain *simulator* that is *actively-simulating* (via our local network of real *biological* human neurons) this *entire* universe of trillions of galaxies?

Dark matter really looks like *filaments* of real *biological neurons*, because it actually is *filaments* of real *biological neurons*.

The *neural-web-like* stringy-looking *neural-filaments* of our large-scale *dark matter maps* show the actual *locations* (and major *neural-axonal orientations*) of our real *brain-tissue networks* of our real *human biological neurons* (that simulate all the elementary particles of our universe).

*Dark matter* is our real biological *neurons* and *what they do* (send real neural pulses to each other).

These *real neural pulses* are the *3 families* of *Light Scalar Bosons* (that make all the visible matter in this universe) and the *3 families* of *Dark Scalar Bosons* (that push upon the light scalar bosons, to create all the needed accelerations of “*gravity*” to wisely hold all the large celestial bodies together).

Pretty simple.

This new dark-matter, flow-pressure, quantum-scattering theory of gravity is actually *pretty simple* indeed.

We mortal human beings, are living inside a multi-player multi-galaxy *real-neural* simulated universe, that is hosted by some of the networked *biological human neural cells* of a very large set of *us real-human brains*.

Our *beautiful dark-matter filament maps* look like complex *webs* of *biological neural networks*, because that is exactly what they *actually are*.

With these new *dark-matter neural-filament maps*, we are looking at the *neural-insides* of our real human brain network that *neurally-simulates* this whole universe.

The *dark matter* (that supports, simulates, and creates this universe) is (1) the *real neurons* (that simulate this universe), and (2) *what these real neurons do* to simulate this universe.

What exactly *do* our real neurons *actually do*?

Our real neurons propagate the *tiny fast* dark scalar boson neural *pulses* (that fuel all the stars) and that create “*gravitational fields*” via their dark scalar boson flow

“*pressure fields*” at every point in this whole milky-way galaxy.

Our real neurons also propagate the *larger* light-boson electrically-charged neural *pulses* that compose all the visible-matter elementary particles (like photons, electrons, protons, and neutrons) of this universe.

The tiny-fast (*momentum-carrying*) dark-boson pulses *push upon* the larger light-boson pulses to create all the “*dark-matter flow-pressure gravity*” of this entire universe.

*How else* do the dark-boson pulses *interact* with the light-boson pulses that compose all the N-pulse elementary particles?

In particular, how do our *dark-boson pulses* interact with the *3 light pulses* that compose all the *fermion* particles?

Now let’s turn our attention to these interesting *3-pulse fermion particles* that are each composed of exactly 3 distinct *light-boson pulses*.

Why are all the *light-boson pulses*, that compose all the fermion elementary particles, electrically charged?



What kind of powerful, detailed, accurate *Fermion Hypothesis* can we now create?

# Our Fermion Hypothesis

What is *Our Fermion Hypothesis*?

What is a *Fermion*?

What is a *Quark*?

What is a *Lepton*?

A *fermion* is a particle that has *half-integer spin* like  $\frac{1}{2}$ ,  $\frac{3}{2}$ ,  $\frac{5}{2}$ , etc.

A fermion has a spin that is a *half-integer* multiple of *Planck's Constant*.

There are exactly *two types* of *elementary fermions*; the 12 quarks and the 12 leptons.

There are *6 types* of *quarks*, and *6 types* of *antiquarks*.

The *leptons* are the individual members of the *electron family*.

There are *6 types* of *leptons*, and *6 types* of *antileptons*.

The *6 different quarks* are the up quark, the down quark, the charmed quark, the strange quark, the top quark, and the bottom quark.

The *6 different leptons* are the electron, the muon, the tau particle, the electron neutrino, the muon neutrino, and the tau neutrino.

*Our Fermion Hypothesis* is that *all 24* of the *fermion elementary particles* are composed of *exactly 3* real *light neural pulses* (3 light scalar bosons) as follows:

Spin  $\frac{1}{2}$  Quarks:

- The 3-pulse Up Quark
- The 3-pulse Down Quark
- The 3-pulse Charmed Quark
- The 3-pulse Strange Quark
- The 3-pulse Top Quark
- The 3-pulse Bottom Quark

Spin  $\frac{1}{2}$  AntiQuarks:

- The 3-pulse Anti Up Quark
- The 3-pulse Anti Down Quark
- The 3-pulse Anti Charmed Quark
- The 3-pulse Anti Strange Quark
- The 3-pulse Anti Top Quark
- The 3-pulse Anti Bottom Quark

Spin  $\frac{1}{2}$  Leptons:

- The 3-pulse Electron
- The 3-pulse Muon
- The 3-pulse Tau Particle
- The 3-pulse Electron Neutrino
- The 3-pulse Muon Neutrino
- The 3-pulse Tau Neutrino

Spin  $\frac{1}{2}$  AntiLeptons:

- The 3-pulse Anti Electron
- The 3-pulse Anti Muon
- The 3-pulse Anti Tau Particle
- The 3-pulse Anti Electron Neutrino
- The 3-pulse Anti Muon Neutrino
- The 3-pulse Anti Tau Neutrino

*All 24 of these elementary fermions seem to be composed entirely of simple neural pulse structures that are made of just 3 simple real light neural pulses.*

Our 24 elementary fermions are all composed entirely from positive *Light Plus Scalar Bosons* and negative *Light Minus Scalar Bosons*.

As explained earlier in this 4 Brain Theory paper, there are *a few* different *kinds* of positive *Light Plus Scalar Bosons*, and there are also *a few* different *kinds* of negative *Light Minus Scalar Bosons*.

Some of our  $\frac{1}{2}$  spin 24 *elementary fermions* decay very quickly, some decay more slowly, and some are *very stable* and seem to last nearly forever.

*Exactly 3* of these spin  $\frac{1}{2}$  elementary fermions seem to be the *only* fermion particles that actually compose *stable matter* like *atoms* and *molecules*.

These 3 super-special *fermions* are the *electron*, the *up quark*, and the *down quark*.

Two up quarks bind to a single down quark to form a *very stable proton*.

Two down quarks bind to a single up quark to form a *mostly-stable neutron*.

*9-pulse protons* and *9-pulse neutrons* bind together to form *stable nuclei*.

*Stable 3-pulse electrons* bind their *neural* electric-pulse orbital *patterns* to these *stable nuclei* to form *stable atoms*.

*Atoms* bind together to form the *stable molecules* of *planets* and *people*.

Why are there so many elementary particles (24 fermions and 12 bosons) in the standard model of elementary particle physics, and yet only *electrons, protons, neutrons, and photons* (sometimes photons) seem to be *found inside of all the stable atoms that compose us people and all the interesting things we see around us here inside this local universe simulation?*

What else is there to *really understand?*

*Quantum Entanglement* of these 3-pulse fermions, and the 2-pulse vector-boson photons.

*How exactly can we improve this neural pulse theory of electrons, protons, neutrons, and photons to help us to better understand the inner workings of quantum entanglement?*

How can we properly improve this neural pulse theory of *bosons and fermions* to help us to understand the detailed *micro-mechanics* of exactly how *quantum entanglement* actually occurs physically?

How can we use our new neural pulse theory to better understand the *physical nature* of quantum entanglement?

What *is* quantum entanglement *physically?*

How does it *happen* physically?

*When* does it happen physically?

What exactly do neural pulses *begin to do* physically, when they become *quantum entangled*?

In order to begin to understand quantum entanglement, we can conduct some *new scientific experiments* (including some new scientific neural pulse software experiments) to help us to really *begin to understand* the *quantum entanglement* of neural pulse elementary particles much better.

Can *two* neural *pulses* become quantum *entangled*?

Can *two electrons* become quantum *entangled*?

Can *two atoms* become quantum *entangled*?

Can we learn something useful about quantum entanglement by simply studying some *neutral silver atoms*?

About a *full* century *ago* in 1922, a really important *scientific experiment* was conducted with *neutral silver atoms*.

Now, let's take a closer look at this super-important experiment with neutral silver atoms, which quickly became known as the Stern-Gerlach Experiment that powerfully-demonstrated the marvelous *1922 Stern-Gerlach Effect*.



# 1922 Stern-Gerlach Effect

In April 1922, Otto Stern and Walther Gerlach published [10] the results of their *Stern-Gerlach experiment*, in which they deflected neutral *silver atoms* into two discrete (*two quantum*) locations (before they struck a detector screen), by sending them through a strong *spatially varying magnetic field*.

A neutral silver atom has a *single unpaired electron* in its outer shell.

This *unpaired* outer-shell *electron* has an intrinsic spin, and an orbital motion, that provide the silver atom with a finite, measurable *magnetic dipole moment*.

This *Quantum Stern-Gerlach Effect* demonstrates that a spatially varying magnetic field can be used to *separate* some *tiny magnetic dipoles* (like atoms and electrons and other small particles) into exactly *two* separate *quantum magnetic dipole* (and corresponding *angular-momentum spin*) *states*.

There seem to be *many* possible quantum *explanations* (corresponding to many different interpretations of quantum mechanics) for this marvelous *Quantum Stern-Gerlach Effect*, including a good number of interesting

historical *quantum viewpoints*, that have been *published* by many different authors during this past century, since Stern and Gerlach first published the results of their *quantum* Stern-Gerlach experiment of 1922.

What may be actually causing this marvelous *Quantum* Stern-Gerlach *Effect*?

What is our *Quantum Stern-Gerlach Hypothesis* for the actual physical mechanism that we believe may be causing this Quantum Stern-Gerlach Effect?

# Stern-Gerlach Hypothesis

*Our Quantum Stern-Gerlach Hypothesis* is that a closer, deeper, more careful inspection of the simple Stern-Gerlach experiment of 1922, may *surprisingly reveal* an actual detailed *physical* mechanism of “*wavefunction collapse*”, for *any* elementary particle (or *larger* particle) that has a *finite* (measurable) *magnetic dipole moment*.

The first part of *Our Quantum Stern-Gerlach Hypothesis* is that this seemingly-simple Stern-Gerlach experiment of 1922, may contain within it, as it becomes contemplated (by some intelligent thinking scientists like yourself) *more carefully, and more deeply*, the conceptual seeds (of accurate understanding) needed, to begin to fully understand the *detailed physical mechanisms* that cause “*wavefunction collapse*”, or the hypothetical “*Collapse of Schrodinger’s Wavefunction*”.

There are some quantum physicists who currently (today in 2023) believe that the Stern-Gerlach experiment demonstrated (in 1922) that the *spatial orientation* of an electron’s unpaired spin (angular momentum) was *already* quantized *before* a specific silver atom began to enter into the Stern-Gerlach magnetic apparatus.

There are some quantum physicists who currently think that the *spatial orientation* (of the angular momentum of the unpaired electron spin of a silver atom) of a single solitary silver atom, existed in a “*quantum superposition*” of *all* possible *spatial orientations*, before the individual silver atom even began to travel through the magnetic Stern-Gerlach apparatus.

*Our Quantum Stern-Gerlach Hypothesis* is that the actual detailed *physical mechanism* of “*wavefunction collapse*” can be better understood by more-carefully considering what happens to a collection of *tiny magnets* (like tiny electrons, or tiny silver atoms, or tiny magnetic compass needles that have been removed from their compasses), when the tiny magnets (like tiny *magnetic compass needles*) start to feel the powerful force of a big strong Stern-Gerlach magnet, or a big strong horseshoe magnet (held in the large firm hand of a big healthy strong human scientist).

Let’s use our *scientific imagination* to conduct a *thought-experiment* while we pretend that *hundreds* of *tiny little magnetic compass needles* (like super small bar magnets that are less than one millimeter wide, and just a few millimeters long) are all spread out on a table in a scientific laboratory.

When a scientist starts to bring the *big strong* horseshoe-shaped *magnet* (that may have a volume of thousands of cubic centimeters) closer and closer towards the *tiny* little bar *magnets* (tiny compass needles), the tiny magnetic needles begin to feel the *magnetic force of attraction* (and repulsion) that are “pushed” onto the tiny magnetic needles, by the big strong horseshoe magnet.

This horseshoe magnet has two poles, *a north pole* and *a south pole*.

The *two poles* (of the big horseshoe magnet) are *oriented* in a certain particular way (according to how the scientist happens to be holding the big horseshoe magnet in her hand) as the *two poles* are moved closer and closer towards the *hundreds* of *tiny* magnetic *needles* (that are spread out on the table in a *very* random *manner*, with completely *random needle-orientations*) on the table.

The variety of hundreds of different initial *random* magnetic needle *orientations* (the precise needle directions) will cause some of the needles to start to be *attracted* to the *north pole* of the big magnet.

All of the needles, are *randomly pointing* in different directions *initially*.

These different initial needle directions, will also cause some of the needles to start to be *attracted* to the *south pole* of the magnet.

Let's simply assume that all the tiny magnetic needles (magnetic dipoles) *initially* have completely *random orientations* before they are approached by the big strong horseshoe magnet.

Let's also assume that the scientist (who is bringing the big horseshoe magnet towards the laboratory table that has all the tiny random magnetic needles) is very careful (in how she holds and positions her big horseshoe magnet) to make sure that the big horseshoe north pole, and the big horseshoe south pole, are both (both *magnetic horseshoe poles*) are always an *equal distance* (with *equal orientations* also) from the *majority* of the tiny magnetic needles.

This *careful* experimental *setup* will be sufficient to ensure that about *one-half* of the tiny magnetic *needles* will begin (one at a time perhaps) to *fly up* towards the *north pole*, and the *other one-half* of the tiny magnetic needles will start to *fly up* towards the *south pole* of the big horseshoe magnet.

In the *Stern-Gerlach* experiment of 1922, about *one-half* of the magnetic-dipole silver atoms flew upward

(indicating *quantum spin up*), and about *one-half* of the magnetic-dipole silver atoms flew downward (indicating *quantum spin down*).

Are the super-tiny magnetic silver atoms, with their unpaired outer magnetic dipole electrons, *kind of like* tiny magnetic compass needles?

How are these super-tiny magnetic silver atoms *magnetically-similar* to tiny magnetic compass needles?

Do they both possess a *finite* (non-zero) *magnetic dipole moment*?

Are they *both* small *enough* to *easily* re-orient *themselves* in the *influential-presence* of a very strong spatially-varying magnetic field?

Can both a *classical* magnetic compass needle, and a *quantum* silver atom, *re-orient themselves* (in the presence of a very-strong inhomogeneous magnetic field), to cause themselves to be fully-attracted *to just one* of the *poles* of the very strong inhomogeneous magnet?

Is this how “*wavefunction collapse*” occurs?

Is this simple *magnetic-dipole re-orientability* easy to understand?

Is this “*Collapse of Schrodinger’s Wavefunction*” pretty easy to understand?

Or is it supposed to be *super-difficult* to understand?

Is the *set of things* that actually *exist* supposed to be *easy* to understand or *hard* to understand?

Is *everything* actually *understandable*?

What kinds of things are *not* understandable?

What is the *set of understandable things*?

In this simple example of comparing the actual physical-laboratory Stern-Gerlach Experiment of 1922, to a simple thought experiment with a strong large horseshoe magnet and many tiny magnetic compass needles, we have *not* been asked, at any time, *to try to believe in something we cannot fully understand.*

There was *no mystery* in our dynamical *physical explanation.*

Everything was presented as being *Fully-Understandable*, with *no mysteries* whatsoever.



There is *no mystery* in how the *magnetic* compass needles *collapsed*.

There is *no mystery* in how real neural pulses *compose* elementary particles.

There is no mystery in “*wavefunction collapse*”.

Does there really need to exist a *mystery* to *quantum entanglement*?

Or do we just need to *learn more* about *quantum entanglement* in order to begin to *fully understand it*?

What is the actual nature of *Bell’s Theorem* of 1964 [21]?

What does Bell’s Theorem *really* say?

What was actually *physically measured* in the famous Aspect Experiment of 1982 [22]?

What will happen when we carefully apply a simple logical *re-thinking* (via simple *common sense*) of every physical particle of *quantum physics*?

What are some of the *older* quantum *interpretations* of the Stern-Gerlach Effect that were initially published by some physicists during the first few decades after 1922?

Which of their *many* quantum *interpretations* was the *most-simple*, a la Occam's Razor that always searches for the *most-simple explanation* (which is always the *most-simple explanation* that can actually *be understood*)?

Which *quantum interpretation* is *fully-understandable*?

Which one?

How many different *interpretations* of *quantum mechanics* are there?

Which *quantum interpretation* matches our own *personal experience* with how *tiny* compass needle *magnets* *interact* with *big* strong *magnets*?

Which quantum interpretation will allow us to start designing *exact* neural-pulse *quantum computers*, instead of just the *tired old* probabilistic *quantum computers* of yesterday?

Do we want to begin to *actually discover* a (deeper, *more complete*) quantum *physics* that is *exact*, deterministic, *predictable*, fully-measurable, *fully-controllable*, and *fully-programmable*?

Or, do we want to keep on *intellectually-pretending* that quantum physics *is merely a probabilistic theory*, that can *never be understood* well enough to create an *exact theory of quantum mechanics*.

Do we really want to continue to *superstitiously cling* to the *old probabilistic interpretations* of quantum mechanics?

Or, are we (the *intelligent physicists* of planet Earth) beginning to *desire* to search more carefully, and *think more carefully*, so we can start to really discover a *full, complete, deterministic, exact theory of quantum physics*?

What do *we the quantum scientists* of Earth want?

Do we want to create (discover) an *exact quantum theory*?

Or, do we still desire to cling to our *tired bewildering probabilistic quantum interpretations* of the *last century*?

What do *we* want?

How *difficult* will it continue to be, to keep on trying to build *probabilistic* quantum computers, by using the tired old probabilistic quantum theories of the *past*?

Shall we try a *completely* new *approach* to quantum physics and quantum computers?

Shall we boldly proceed to *fully discover* each and every component of an *exact quantum theory*?

Shall we *boldly proceed* to fully discover every particle of quantum physics, that will allow us to *design* and *build* an *exact quantum computer*?

What shall it be world?

Shall we *cling dogmatically* to the old probabilistic quantum theories of the past?

Or, shall we simply proceed to discover every exact bit (and *every exact qubit*) of an *exact quantum theory*?

What kind of *exact quantum theory* will help us to design (and build) the world's first *exact quantum computer*?

What kind of *exact quantum theory* will we need, to build *exact quantum computers*, that precisely employ trillions of *exact quantum bits* (exact qubits)?

How can an exact physical quantum bit (*exact qubit*) be used differently to greatly-outperform a merely *probabilistic qubit*?

Will an *exact qubit* be able to do anything that cannot already be done with a *probabilistic qubit*?

Now, since we have already mentioned the “Collapse of Schrodinger’s Wavefunction”, let’s take a look at *Schrodinger’s Wave Equation* of 1926.

# 1926 Schrodinger's Equation

In 1926 a brilliant physicist named *Erwin Schrodinger* published an interesting complex-valued partial differential equation, that soon became known as “*Schrodinger's Wave Equation*” [8].

In 1926, *Schrodinger's Wave Equation* was quickly discovered to have many interesting *mathematical* properties.

One of the best *mathematical* things about Schrodinger's Wave Equation is that *any* Hamiltonian (a mathematical energy expression, or a mathematical energy operator for a set of particles) could be *plugged* into it.

When the Hamiltonian (mathematical energy operator) for a single *Hydrogen Atom* was plugged into *Schrodinger's Wave Equation*, then the mathematical wavefunction solutions to the wave equation became *associated* (in the minds of many physicists) with the *electronic* orbital *behaviors* of a single *Hydrogen Atom*.

This may have been because the *mathematical energy levels* (energy eigenvalues) of Schrodinger's wavefunction for the hydrogen atom seemed to be in *astonishingly-good agreement* with the experimentally-

observed *values* of hydrogen's orbital *energy levels* that were obtained via experimental *hydrogen-atom spectroscopy*.

As a matter of fact, the agreement between *theory* (Schrodinger's theoretical mathematical wave equation) and *experiment* (the measured values of the spectral emissions of hydrogen) seemed to be so *amazingly-good*, that many bright physicists began to really wonder *why* the agreement was so amazingly-good.

Even *Erwin Schrodinger* himself became *pretty amazed*, and he started to *really wonder* about it.

*Albert Einstein* really wondered about it too.

What was *really* going on *inside* a simple Hydrogen atom?

Why was the *apparent agreement* between *theory* and *experiment* so amazingly-good?

*Schrodinger's wavefunctions* (the mathematical solutions to Schrodinger's Wave Equation) are all *complex-valued* functions, that live on a  $3 + 1 = 4$  dimensional spacetime, of *3 spatial dimensions* (x, y, and z location coordinates) and just *1 temporal dimension* (t time).

Erwin Schrodinger really *wondered*, and he even began to *marvel* a whole lot, about his *beautiful*, simply-elegant, complex-valued, partial differential *wave equation*.

*Schrodinger's 1926 Wave Equation* was actually *pretty marvelous* in many ways.

One of the marvelous things about Schrodinger's 1926 Wave Equation is that it was *Fundamentally Probabilistic* by its very mathematical definition.

How can such a simple mathematical equation be so *fundamentally probabilistic* in its very nature?

Let's look more closely at this *Probabilistic 1926 Equation*.



# Probabilistic 1926 Equation

What exactly makes this *Probabilistic 1926 Equation* [8] so probabilistic in its fundamental mathematical nature?

Some of its mathematical *components* are merely *probabilistic*.

Even though the mathematical components (like the *kinetic energy* and the *potential energy*) are fundamentally probabilistic by their *mathematical definitions*, this statistical Schrodinger's 1926 Wave Equation was still able to give birth to some *astonishing mathematical statistical* solutions.

Some of these astonishing *mathematical statistical solutions* (that mathematically solved his 1926 probabilistic wave equation), really got Erwin Schrodinger's attention.

Every distinct Hamiltonian (a mathematical *energy operator*) produced a *different probabilistic solution* to Schrodinger's 1926 Wave Equation.

Each particular solution to Schrodinger's 1926 Wave Equation is known as *Schrodinger's wavefunction* for that particular Hamiltonian.

These Schrodinger wavefunctions are *very interesting* for many reasons.

One of these very interesting things about *all* of the many *Schrodinger wavefunctions* (that are mathematical function solutions to Schrodinger's 1926 Wave Equation) is that they *must* be *merely probabilistic* (only statistical) in nature because of the *statistical way* that they are *mathematically defined*.

This is because Schrodinger's 1926 Wave Equation always involves a *Mathematical Energy Hamiltonian* that is always *fundamentally probabilistic* in nature.

This Mathematical *Total-Energy* Hamiltonian is always the *Kinetic Energy* plus the *Potential Energy* of a particle (or of multiple particles) of a physical system.

The Kinetic Energy of a particle involves the *squared magnitude* of the velocity of the particle.

However, the Kinetic Energy of a particle *does not* involve (does not encode) the *direction* of the velocity of the particle.

Therefore, the *Kinetic Energy* is *fundamentally probabilistic* in nature (with respect to all the *many*

*possible velocity directions* that the particle may have), because it does *not* encode the *direction* of the velocity of a particle.

For similar reasons, the *Potential Energy* is also usually merely *probabilistic* in nature, because it often is missing some of the *directional information* about the exact 3D *location* of a particle.

These *statistical* mathematical *definitions* of potential energy and kinetic energy, doom the total-energy *Hamiltonian* of a particle to be a *merely* probabilistic *mathematical entity*.

With each Energy Hamiltonian being doomed to *statistical status*, all possible Schrodinger's Wave Equations are also *hopelessly doomed* to statistical status.

With all possible Schrodinger's Wave Equations being *mathematically doomed* (by their very mathematical definition) to a *merely* probabilistic *status*, we can see that all of Schrodinger's Wavefunctions must also be *forever* mathematically *doomed* to being merely *probabilistic wavefunctions*.

Now, let's look more closely at this fundamental probabilistic nature of all of *Schrodinger's Wavefunctions*.

# Schrodinger's Wavefunction

What is *Schrodinger's Wavefunction*?

What is the *actual meaning* of Schrodinger's Mathematical Wavefunction?

Why is Schrodinger's Wavefunction always doomed to being a merely *probabilistic* wavefunction?

The actual fact is that Schrodinger's Probabilistic Wavefunction is a *marvel* to behold.

Erwin Schrodinger spent the rest of his life (from 1926 to 1961) trying and trying to discover the *actual meaning* of his own statistical wavefunction.

Why was *Schrodinger's Statistical Wavefunction* so difficult for anyone to understand?

Why did *Schrodinger's Probabilistic Wavefunction* seem to be *so marvelous* as to *fully-captivate* the intellectual attentions of so many good physicists for *so long*?

Many physicists wondered out loud why Schrodinger's Wavefunction was *complex-valued*.

The complex-valued Schrodinger's Wavefunction consisted of a real value (a *real number*) plus an imaginary value (an *imaginary number*).

The complex-valued Schrodinger's Wavefunction could also be *conveniently expressed* (in an explicitly *wave-like form*) in terms of an *amplitude* and a *phase*.

Why was Schrodinger's Wavefunction not simply real-valued (described by a single *real* mathematical value)?

Some physicists started to really wonder about the *actual relationship* of the *theoretical* Schrodinger's Complex-Valued Wavefunction for the Hydrogen Atom (of 1926) to the *super-simple* empirical *Hydrogen Balmer Formula* of 1885; as both seemed to try to shed some light on the potential *actual origin* (source or *cause*) of the experimental *visible* energy spectrum of *hydrogen*.

Some of these bright physicists asked Erwin Schrodinger to *please explain* to them the *actual meaning* of his super-amazing Schrodinger's Wavefunction of 1926.

Dr. Erwin Schrodinger was a very intelligent physicist, with an *abundance* of brilliant mathematical creativity.

He really wanted to be able to explain the meaning of his complex-valued statistical wave equation, with its *phase*, and its *amplitude*.

Erwin Schrodinger tried and tried, for many years, to discover the *real meaning* of his famous complex-valued wavefunction.

But he could *not do it*.

It seemed like *nobody* could do it.

It seemed that nobody could *fully explain* the full meaning of every portion of Schrodinger's *Probabilistic Wavefunction* in 1926.

*Many* bright physicists tried in 1926.

Many more tried in 1927, before and after the interesting *1927 Solvay Conference*.

Many *continued* to try in 1928.

*Many* more *physicists* tried from 1928 to 2021.

Many theoretical physicists are *still trying today* in 2023.

Even today, many physicists are still trying to discover (and explain) the *real meaning* of all of the real and imaginary components of Schrodinger's *Probabilistic Wavefunction*.

## Probabilistic Wavefunction

What is this this powerful, useful, interesting *Probabilistic Wavefunction* that was discovered by Erwin Schrodinger in 1926?

What are we physicists doing *96 years later*, with this useful *Probabilistic Schrodinger's Wavefunction* today in 2023?

Today in 2023, some physicists believe they have discovered a *pretty good possible meaning* for the *modulus* (absolute value of the amplitude) squared of Schrodinger's *Probabilistic Wavefunction*.

Few physicists yet believe they have discovered a good meaning for the *phase* of Schrodinger's *Probabilistic Wavefunction*.

Why is it so difficult to discover the real meaning of the *phase* of Schrodinger's Probabilistic Wavefunction?

Could the real reason, that the *correct meaning* of the *phase* is *so difficult to find*, be because the correct meaning (of the phase) is *very different* than what most suspect it might be?

What is the correct meaning of the *phase* of Schrodinger's Wavefunction?

How can use our new *neural pulse theory* of elementary particles to properly discover the actual correct meaning of the *phase* of Schrodinger's *Statistical* Wavefunction?

Can we do this with *neural pulse* scientific simulation *software*?

Can we do this in the *scientific laboratory* with Compton Scattering experiments and hydrogen spectroscopy experiments?

When we finally discover the correct meaning for the *phase* of Schrodinger's *Probabilistic* Wavefunction, will we also be able to better understand the actual meaning of its *amplitude*?



Shortly after Erwin Schrodinger published his famous equation in 1926, with its equally-famous solutions being *Schrodinger's Wavefunctions*, some physicists started to talk about their potential “*collapse*”.

This hypothetical “*Collapse of Schrodinger's Wavefunction*” has already been discussed in *thousands* of scientific papers for nearly a century.

What is the actual core nature of this hypothetical “*Wavefunction Collapse*”?

# Wavefunction Collapse

What is “*Wavefunction Collapse*”?

What exactly is *the collapse of Schrodinger’s wavefunction*?

Why would *any* wavefunction collapse?

What does it *mean* for a wavefunction to *collapse*?

What is the *actual physical mechanism* of wavefunction collapse?

Some say that it was *Werner Heisenberg* himself who first started to talk about *the collapse of Schrodinger’s wavefunction*.

Some physicists claim that Schrodinger’s wavefunction for an individual silver atom *collapses* when the silver atom passes through a Stern-Gerlach magnet, to help produce the Stern-Gerlach Effect of separating *one single* hot *stream* of neutral silver atoms into *two* separate *streams* (a *spin-up stream*, and a *spin-down stream*) of silver atoms.

Some physicists say that when an individual silver atom *chooses* to be *spin-up*, then that particular silver atom's wavefunction *collapses* into a silver atom *spin-up* wavefunction.

Other physicists say that a strong Stern-Gerlach magnet simply helps a silver atom *reorient* its *magnetic dipole* to be *spin-up*, as the silver atom passes through (very close to) the strong Stern-Gerlach magnet.

Other physicists say that Schrodinger's Statistical Wavefunction is just an abstract mathematical probabilistic function, that may or may not *sometimes* be useful at *mathematically-modeling* some of the statistical behaviors of the spin of an individual silver atom.

Other physicists say that silver atoms are *different* than mathematical equations, because equations are *not* atoms.

Are atoms equations?

Are wavefunctions atoms?

Who can say for sure with *mathematical certainty*?

Who can say for sure with *physical certainty*?

Who is right?

Who is wrong?

Is *everyone right*?

Does this also make *everyone wrong*?

What is the *best way* to view wavefunction collapse?

What is *the very best theory* of wavefunction collapse?

Can we create an *improved* theory of wavefunction collapse that will help us to create some really useful *exact quantum computers*?

What is the *actual* detailed physical *mechanism* of wavefunction collapse in the *bright new light* of our neural pulse theory of elementary particles, atoms, and molecules?

What exactly was discussed about Schrodinger's 1926 Wave Equation at the *1927 Solvay Conference*?

# 1927 Solvay Conference

During October 24-29, 1927 in Leopold Park in Brussels, Belgium the fifth Solvay Conference on Physics was held on the subject of *Electrons and Photons*.

Many brilliant scientists attended this *1927 Solvay Conference* including Albert Einstein, Max Planck, Erwin Schrodinger, Niels Bohr, Werner Heisenberg, Marie Currie, Hendrik Lorentz, Arthur Holly Compton, Wolfgang Pauli, Luis de Broglie, Max Born, Paul Dirac, and several others.

These *brilliant scientists* talked about photons, electrons, atoms, and Schrodinger's wavefunction in an effort to better understand these things.

These intelligent scientists discussed many interesting new *quantum-physics concepts* at this famous 1927 Solvay Conference in Brussels.

And they *disagreed* on many things.

They all tried to understand, as best as they could, the *correct reasons* for all the interesting *scientific measurements* that had been observed by many of our

Earth's talented experimental scientists up until October 1927.

Today in 2023 *many scientists* still meet together at international conferences in an effort to *discuss* and *improve* their physical theories about our physical universe.

One of the influential scientists that attended the October 1927 Solvay Conference was named Werner Heisenberg, who quickly became famous for his *1927 Heisenberg Uncertainly Principle*.

# 1927 Heisenberg Uncertainty

In 1927, a German theoretical physicist named Werner Karl Heisenberg (1901-1976) published an interesting new scientific paper on what became known as the “*Heisenberg Uncertainty Principle*” [23].

A couple years earlier in 1925, Werner Heisenberg published a series of papers with Max Born and Pascual Jordan about a powerful new “*matrix formulation*” of “*quantum mechanics*”.

In 1932, Werner Heisenberg was awarded the 1932 Nobel Prize in Physics “*for the creation of quantum mechanics*”.

During the *7 years* from 1925 to 1932, many scientists in the international theoretical physics community *quickly rushed* to embrace Heisenberg’s matrix formulation of quantum mechanics, and his uncertainty principle with *unbridled enthusiasm*, because these revolutionary new concepts seemed to be very powerful and very useful.

However, there may be a bit of an *interpretation problem* with his uncertainty principle, because it has apparently been *broadly-misunderstood* by many for decades.

It appears that Heisenberg's uncertainty principle is *powerful*, and even *useful* in many situations, and widely *misunderstood*.

Momentum-Position Heisenberg Uncertainty, and Time-Energy Heisenberg Uncertainty, and many other types of Heisenberg Uncertainty (with all the other types of canonically conjugate variables) have been studied by many scientists for about 95 years since 1927.

Some have *mis-interpreted* the Heisenberg Uncertainty Principle in a *particularly-unfortunate way* that may be *causing* them to *believe* that *reality itself* (or *quantum physics itself*) must be fundamentally-uncertain, always-approximate, and *merely probabilistic*.

This is certainly an unfortunate state of affairs, that we have already endured for *96 dreary years* from 1927 to 2023, because if there is anything that we absolutely want to be *certain about*, that thing would be *reality itself*.

In other words, we want to scientifically-discover a new improved quantum theory that is *complete*, and *certain*, and *exact*, if we wish to have any hope of completely comprehending reality itself.

Why not *comprehend* reality as it *physically* occurs?



Why not *try to understand* quantum physics, *physically*?

Is it certainly time (today in 2023) to at least begin to *move beyond* a merely probabilistic theory of quantum mechanics?

How can we (the physicists of 2023) start to *finally* move *beyond* a merely probabilistic theory of quantum mechanics?

What will certainly happen, when we *properly examine* the *actual foundations* of the Heisenberg Uncertainty Principle in the *bright new light* of this present 4 Brain Theory paper?

Unfortunately, some physicists of the *past* may have been tempted to believe, that the Heisenberg's Uncertainty Principle may *somehow extend far beyond* its actual range of physical scientific applicability.

The *exact set* of *physical situations*, where Heisenberg's Uncertainty Principle is relevant and useful, is actually *quite different* than some suppose.

One of the interesting things about the mathematical *Heisenberg Uncertainty Principle* is its deep relationship with the *Fourier Uncertainty Principle*.

Some say that when *Planck's Constant* is *added* to the Fourier Uncertainty Principle *it actually becomes* the Heisenberg Uncertainty Principle.

Is this correct?

Is the *Full Scope* of the Heisenberg Uncertainty Principle to be properly-understood by the *simple addition* of the numerical value of Planck's Constant to the Fourier Uncertainty Principle?

Or is there something *more* here?

What is the mathematical nature of the powerful widely-known *Fourier Transform* and the Fourier Uncertainty Principle it logically creates?

The logical *mathematical* uncertainty of *Fourier Uncertainty* has the strong scientific authority of a universal *mathematical fact*.

The popular *Fourier Transform* can transform a function of *time* into a function of *temporal frequency*.

The powerful Fourier Transform can also transform a function of *space* into a function of *spatial frequency*.

And in a similar manner, a function of *frequency* can be *transformed back* into a function of *time* by a Reverse Fourier Transform (that is mathematically very similar to the Forward Fourier Transform).

This simple mathematical *Fourier Transform*, is a very general kind of mathematical transformation that can actually “*transform*” (or change) any “*base mathematical function*” of any independent mathematical “*base variable*”, into a new “*base-frequency mathematical function*” of the resulting “*base-frequency variable*” that is *wholly-mathematically-formed* from the base mathematical function of the independent mathematical base variable.

In this way, the Fourier Transform can *mathematically-generate* a *base-frequency function* (of its base-frequency variable) from *any* base function of *any* base variable.

Therefore, whatever *base-frequency* function (with its *base-frequency* variable), is composed (by a Fourier Transform) from a base function of a base variable, is actually just an *exact mathematical-construct*.

Therefore, any base-frequency, that is mathematically-derived from a base function, in this way, via a Fourier Transform, is just a *pure exact deterministic mathematical creation*.

Therefore, a such a *mathematically-defined* (mathematically-constructed by the Fourier mathematical-transform definition) *base-frequency* (and base-frequency function) will for *certain* (by way of mathematical-necessity) have a very special (and very *exact*) mathematical relationship with the *base-variable* (and base-function).

Therefore, the corresponding “*Fourier Uncertainty*” between any *base-variable* and its corresponding *base-frequency variable*, is a *certain exact* mathematical *fact*, because Fourier Uncertainty is a certain exact mathematical fact by its very mathematical definition.

However, the situation with “*Heisenberg Uncertainty*” seems like it may be just a little bit *more complicated*, according to the exact *mathematical definition* of Heisenberg Uncertainty”, because some seem to claim that Heisenberg Uncertainty can be *simply derived* from Fourier Uncertainty by the *trivial multiplication* of *Planck’s Constant* (and a simple dimensionless factor of  $4\pi$ ).

But is this *fully-correct*?

Can it really be *so simple*?

Is this the *only* difference?

Is this really the only *substantial difference* between these two uncertainty principles; a difference of just a simple multiplicative factor of a bit of *angular momentum* (a  $4\pi$ -scaled Planck's Constant)?

Is the Only Real Difference between *Heisenberg Uncertainty* and *Fourier Uncertainty* a simple multiplicative factor of  $4\pi$  times *Planck's Constant*?

Or is there *something more*?

What exactly provides the encouragement to *associate* Heisenberg Uncertainty with some of the *physical-behaviors* of some of the elementary particles of this Earth?

Under what *exact conditions* does this potential theoretical conceptual *association* really *apply*?

When exactly does *Heisenberg Uncertainty* actually *not apply* in the way that some sincerely *believe* that it does apply?

*What precise aspect* of Heisenberg Uncertainty can we really be *certain* about?

What is the real actual meaning of this *95-year-old mystery* called Heisenberg Uncertainty?

For *95 years*, from 1927 to 2023 many intelligent physicists have wondered about the *proper association* (and actual meaning) of Heisenberg Uncertainty.

For these past 95 years *many* bright *scientists* have greatly *marveled* and really *wondered* about the *real meaning* of Heisenberg Uncertainty, and all the other aspects of quantum mechanics that were discussed at the 1927 Solvay Conference.

One of these very bright scientists was a very intelligent physicist named *Paul Dirac*, who also attended the 1927 Solvay Conference.

Paul Dirac wanted to find a *new* mathematical *relativistic equation* that would be *even* more *accurate* (for fermions) than the 1926 Schrodinger's Wave Equation.

It did not take Paul Dirac very long to scientifically-discover and mathematically-derive his groundbreaking new *1928 Dirac Equation*.

# 1928 Dirac Equation

In 1928, a brilliant English theoretical physicist named *Paul Dirac* (1902-1984) published his famous wave equation for *relativistic* (fast) *electrons* [24].

This brilliant 1928 relativistic wave equation, quickly become known as “*The Dirac Equation*”.

*The Dirac Equation* seemed to work pretty good for *electrons* and other *fermions*, and it also seemed to predict the existence of *positrons* and other types of *antiparticles*.

In particular, the Dirac Equation seemed to be *even* more *accurate* than Schrodinger’s Wave Equation, at predicting the experimental energy values obtained from studying the absorption spectrum, and the corresponding emission spectrum, of the simple *hydrogen atom*.

Why is the Dirac Equation a little bit *more accurate* than the Schrodinger Equation?

Is it because Paul Dirac tried to add some aspects of *Einstein’s 1905 Special Relativity* into his 1928 wave equation?

These two wave equations seem to be rather *similar* in some ways, and in other ways they seem to be very *different*.

Why do *both* of these distinct wave equations seem to be *so good* at predicting the *specific energy levels* of hydrogen?

Can either of these two famous wave equations help us to *really understand* the hydrogen atom?

Can either of these two famous wave equations help us to *really understand* a single electron?

Can either of these two famous wave equations help us to *really understand* anything?

What is the *actual relationship* between these two famous *wave equations* and the dynamic real neural *3-pulse structure* of a *single electron*?

One of the really fascinating things about the powerful *1928 Dirac Equation* for a *free electron*, is that it was quickly discovered to exhibit a jittery motion called *Zitterbewegung*.



# 1928 Zitterbewegung

Erwin Schrodinger (and others) quickly discovered that the powerful 1928 Dirac Equation naturally represented a *rapid* oscillatory *Zitterbewegung motion* of the electron that is *not* represented by the 1926 Schrodinger's Wave Equation.

From 1928 to 2021 many scientists have tried to explain the *actual physical source* of this super-interesting *electron Zitterbewegung motion*.

In this 4 Brain Theory paper of 2023, we have already explained in detail that this *electron Zitterbewegung motion* is *caused* by the electron's 2 outer *negative* quicklight (faster than light speed) *neural pulses* (of the electron) that *both* rapidly *orbit* the slower central positive pulse (of the electron) at the *Zitterbewegung frequency* and the *Zitterbewegung orbital radius* (which is the electron Compton wavelength, which is the electron Compton *radius*).

Therefore, this *electron Zitterbewegung motion* is a physically natural part of the *internal dynamic 3-pulse neural structure* of every electron.

What would have happened during the last 9 decades of theoretical physics here on Earth, if Erwin Schrodinger and Paul Dirac would have fully realized that this *3-pulse* electron dynamic neural structure was *actually responsible* for the mysterious *Zitterbewegung* of the electron?

*How quickly* would theoretical physics have progressed worldwide then?

Albert Einstein thought *a lot* about the 1928 Dirac Equation and the 1926 Schrodinger's Equation.

Albert Einstein also thought a lot about *quantum entanglement* and *wavefunction collapse* across vast *nonlocal* spacelike *distances*.

Just a few years later in 1935, Albert Einstein published a really interesting theoretical *thought-experiment* paper with a couple of his scientific colleges.

This super-famous thought-experiment paper quickly became known as the *1935 EPR Paradox*.

# 1935 EPR Paradox

What is the *1935 EPR Paradox*?

In 1935, three brilliant physicists, Albert Einstein, Boris Podolsky, and Nathan Rosen (EPR) published their famous *EPR Paradox paper* [25].

In their 1935 EPR thought-experiment paper Einstein, Podolsky, and Rosen *carefully explained* that the *descriptions of physical reality*, provided by the scientific worldwide prevailing notions of *quantum mechanics* that were popular in 1935, were *incomplete*.

Their 1935 EPR Paradox paper was titled "*Can Quantum-Mechanical Description of Physical Reality be Considered Complete?*".

In this 1935 paper Einstein, Podolsky, and Rosen explained that there logically existed "*elements of reality*" that were *not yet part* of the current-day 1935 quantum theory, and they also explained that it should become *possible* in the *future* to construct a better *more-complete theory of quantum mechanics* that contained these additional needed *elements of reality*.

In their 1935 paper, they propose a *thought experiment* involving a *pair* of *entangled particles*, that become separated by a huge *spacelike distance* before the *position* or *momentum* of one of the two particles is *measured*.

In their 1935 paper, they actually discussed *particle momentum* and *particle position* as being two different physical properties that can be measured on a *pair* of spacelike-separated *entangled particles*.

However, to *simplify* things a bit, we will *simply pretend* that in their 1935 EPR paper they also discussed *particle spin* as being measured as either *spin-up* or *spin-down*.

Therefore, in their original 1935 paper, we will simply imagine that they also proposed a *thought experiment* involving a *pair* of (spin-up spin-down) *entangled particles*, that become separated by a huge *spacelike distance* before one of the particles is *measured* as *spin-up* according to their *particular choice* of *spin-measurement direction*.

The interesting quantum apparency, seems to be that if the pair of particles is really completely *entangled* to the *maximal extent possible*, then suddenly *measuring* one of the particles as *spin-up* (in any arbitrary spin-measurement direction) will very quickly (*faster than light*) *cause* the other particle to become *spin-down*.

For example, if *the* quantum *spins* of the two entangled particles are *measured* at the *exact* same *time*, or at nearly the exact same time, then *how* (what is the *physical* entanglement communication *mechanism*) exactly are the two particles able to *communicate* with each other *so quickly* (at an ultrafast *darklight speed* that appears to be multiple orders of magnitude *faster* than the speed of light) to let each other know *how* (in which spin direction) they have been measured (and what particular spin-up, or spin-down, they each chose to become, when they were physically-asked by the physical spin measurement), as either spin-up or spin-down, in a *particular* arbitrary spin-measurement *direction* that was chosen by the experimenter?

In 1905 Einstein *seemed* to *propose* that *nothing* (not even a spin-orientation entanglement communication signal) could travel *faster* than the speed of light.

But, in 1905 Albert Einstein may not have yet known everything there is to know about the super-long, super-thin, super-myelinated *real* dark *axons* and their real dark neural action potentials (their tiny ultrafast real dark scalar bosons), and the astonishingly-ultrafast *darklight speeds* of these *dark plus bosons* and *dark minus bosons*.

There may even exist a theoretical possibility that in 1905, Albert Einstein did not yet know everything about *Dark Axon Entanglement*, and what new physical axon-axon entanglement principles would need to be properly developed, and wisely understood by many, in order to properly make quantum mechanics fully complete as a real physical theory of science.

# Dark Axon Entanglement

What is *Dark Axon Entanglement*?

*Dark Axon Entanglement* is the quantum entanglement of a set of *dark axons* with a set of *light axons* to cause the light axons to become *functionally-entangled* via the exchange of a set of dark scalar bosons via the high-speed *entangled dark axons* that communicate their dark-boson signals at the speed of *darklight*, which is *trillions* of times faster than the speed of light.

All the real *light scalar bosons*, that propagate on the *entangled light axons*, become themselves *entangled light bosons*.

These *entangled light bosons* compose all the *fermions*, including all the *electrons*, all the *protons*, and all the *neutrons*.

These *entangled light bosons* also compose all the vector-boson *photons*, of each and every frequency of light.

These entangled light bosons stay entangled by the entanglement of the *light axons* with the *dark axons*, until something specific *disentangles* them.

The *dark scalar bosons* travel on the dark axons, at darklight speeds that are *trillions* of times faster than the speed of light.

The entangled dark axons, and their speedy dark scalar bosons, make the *spacelike distances* become *short*, due to the *ultrafast velocities* of the dark scalar bosons.

Will this new *dark-axon to light-axon* entanglement theory completely solve all of Albert Einstein's old concerns of 1935?

In some ways, it seems kind of unfortunate that Albert Einstein did not know very much about how *light axons* are able to *entangle* with super-long *dark axons* over *spacelike distances*.

What is a “spacelike distance”?

A “*spacelike distance*” is a *distance* between *two* spacetime *events* that are separated in both *space* and *time*, with the amount of *time* (between the two events) being *just too short* of a *time-interval* for a speed-of-light particle (like a photon) to travel from the spatial location of the *first event* to the spatial location of the *second event*.



Therefore, a *spacelike distance*, between two distinct spacetime events, is *long* in *spatial-distance*, with a *too-short* time interval.

When there is just *not enough time* to properly travel from one event to a second event, then one might wonder how the *two events* can possibly be *quantum entangled*.

This was the *big concern* of Albert Einstein in 1935.

This big concern caused Albert Einstein to make a *strong claim* (backed by his good rational logical thinking, as explained in his 1935 paper) that the 1935 version of quantum mechanics was *incomplete*, with a simple *hint* that an *easy way* to completely resolve the *apparent paradox* was to simply discover a *specific nonlocal physical entanglement mechanism* that allowed the pair of entangled particles *to communicate* their *spin directions* with each other at an *ultrafast speed* that was *much faster* than the *speed of light*.

What could such a *specific nonlocal physical entanglement mechanism* be?

*Albert Einstein* and his friends could not immediately think of any such *nonlocal physical entanglement mechanism*.

Neither could *Erwin Schrodinger* and his friends.

Neither could any of their friend's friends.

It seemed like almost nobody could think of a specific *nonlocal* physical *entanglement mechanism* that would fully resolve this EPR Paradox of 1935.

It seemed like almost nobody was thinking in 1935 about real *dark axons*, real *dark scalar bosons*, and the 4 *nonlocal* quantum simulation *chambers* located inside the *right hippocampus*, and the *left hippocampus*, and the *left amygdala*, and the *right amygdala* of our real human brains, that can all be networked together to create the *real neural field* that simulates this whole milky-way galaxy.

*Albert Einstein* discussed his 1935 EPR Paper with his dear friend *Erwin Schrodinger*.

In 1935 *Einstein & Schrodinger* discussed many interesting things about the *emerging quantum theory*.

# Einstein & Schrodinger

*Albert Einstein and Erwin Schrodinger were good friends.*

*They enjoyed discussing quantum physics together.*

These two dear friends had both been *deeply involved* in the *creation* of quantum mechanics during the 1920's.

They were both starting to believe that *worldwide* quantum *mechanics* (what most physicists were starting to *believe* about quantum mechanics) was starting to move in some *wrong directions*.

They both believed that the prevailing *1935 version* of quantum mechanics was *incomplete*.

They both believed that some physicist would someday in the future discover a more-powerful, *more-complete* quantum *theory*.

Erwin Schrodinger and Albert Einstein both believed that quantum mechanics really needed to be deterministically-upgraded to become a full, exact, proper, *complete* physical *theory* that explained in logical *physical* terms the microscopic *physical details* of how exactly “*wavefunction collapse*” occurs, and how exactly

“*quantum entanglement*” across spacelike distances really happens.

They both desired to discover a “*more-complete theory*” that would fully-supply all the correct *physical answers* to these important *physical questions*.

They both were seeking a good way to help their fellow physicists to fully *understand* the grand importance of *not* abandoning *physical reality*, in favor of a merely probabilistic (mathematical) theory of quantum mechanics.

They both were seeking an *exact*, fully-deterministic, physically-complete *theory* of quantum mechanics.

In *1935*, Albert Einstein and Erwin Schrodinger also began discussing an interesting *thought experiment* involving a *cat*.

This *famous cat* of *1935* quickly became known as *Schrodinger’s Cat*.

# 1935 Schrodinger's Cat

In 1935, Albert Einstein and Erwin Schrodinger were *not big fans* of the prevailing Copenhagen interpretation of quantum mechanics, that seemed to *claim* that a particle did not have a property (like spin, position, or momentum) until *after* the property was actually *measured*.

They both felt that this increasingly-popular 1935 Copenhagen orthodoxy *denied* the fundamental nature of *physical reality*.

This *may have been* because the Copenhagen interpretation of quantum mechanics seemed to be *nearly impossible to completely understand*.

How could a particle property *not exist* until *after* it was measured?

Can measurement *create* reality?

Is this *fully understandable*?

Is there a way this *could become* understandable *physically*?

From 1935 to 1950 Erwin Schrodinger and Albert Einstein both searched and searched for a *better* physical *understanding* of *quantum entanglement*.

In 1950 Albert Einstein wrote a letter to Erwin Schrodinger in which he suggested that there were *only* 3 honest *physicists* on the whole planet.

To say that Albert Einstein *felt frustrated* with the severely-limited prevailing view of quantum physics, is an understatement.

What had happened, during 1935 to 1950, that had caused the brilliant Albert Einstein to have *so little faith* in his fellow physicists?

In 1935, Albert Einstein suggested an interesting *Quantum Cat Experiment* to his good friend Erwin Schrodinger.

Einstein suggested a simple *thought experiment* of letting a *seemingly-random* radioactive *quantum* decay event (the radioactive decay of a single nucleus in a *single atom*) decide whether a large (trillions of atoms) *classical cat* was to be *blown* to *bits*, or allowed to *live*.

Erwin Schrodinger decided to write and publish [26] a scientific theory paper in 1935 in which the hypothetical

*classical* (lots of atoms) *cat* was simply poisoned to death (instead of more-dramatically being blown to bits as Einstein had suggested), *if* a certain *tiny bit* of radioactive *quantum* substance emitted something that was detected by a *Geiger counter*, that triggered a relay that released a hammer, that shattered a small flask of hydrocyanic acid that poisoned (and killed) the *poor cat*.

The obvious result is that Schrodinger's Cat ends up either *alive* or *dead*.

However, this is *not* what some of the physicists of 1935 *sincerely believed* in their *minds* and *hearts*.

In 1935, there were some physicists that believed that Schrodinger's Cat would end up in a difficult-to-understand quantum "*superposition*" of alive-cat and dead-cat states, and that this "*quantum superposition*" would suddenly *collapse*, when someone opened the box to view the cat (to *measure* the cat via the kind of *scientific observation* that will "*collapse the cat*"), into a particular *specific* quantum cat *state* (corresponding to a specific *cat eigenfunction* solution to Schrodinger's Wave Equation) containing either a *living breathing cat*, or a *totally dead cat*.

Is this understandable?

Is this logical?

Is this rational?

Is this a *complete* physical *description* of physical reality, that completely explains what really happens to the cat?

Albert Einstein and Erwin Schrodinger really wanted to help their fellow physicists see that there was a significant *set* of major conceptual *theoretical problems* with the current prevailing 1935 “*Copenhagen Interpretation*” of quantum mechanics, with its difficult-to-comprehend concept of “*superposition of quantum states*” and with its difficult-to-grasp concept of “*collapse of the wavefunction*” (which can always easily be *mathematically* written as a linear mathematical combination, or a “*mathematical superposition*” of specific mathematical wavefunction solutions, called “quantum states”) into a particular “*quantum eigen-state*” when the wavefunction “quantum system” is *observed* by a human (or other) observer.

This intriguing idea that an *observation operator* will “*collapse a wavefunction*” into an “*eigenstate of the observation operator*”, is pretty easy to understand *mathematically* when one simply looks at the simple mathematical structure of a *common eigenvalue problem*, but sometimes difficult to understand as a *conceptual*



physical *model*, unless one deeply thinks about how a strong Stern-Gerlach magnet *can help* a tiny silver atom to *reorient* its *magnetic dipole* (that corresponds to the spin angular momentum of silver's unpaired electron) so that *it points* either *up* (spin-up) or *down* (spin-down).

By thinking carefully about this *Stern-Gerlach Effect*, and the real *dark axons*, and their ultrafast real *dark scalar bosons*, and the *4 real* quantum simulation *chambers* of our real *human limbic system*, we can see that there is *never any* actual physical *need* to claim that a neutral silver atom has *no spin*, or that a silver atom is ever in a “*superposition*” of different spin states.

A *silver atom* is always in a very-specific very-particular *exact spin state*.

But this particular *exact silver-atom spin state* will always *include* the *4 chamber-specific spin states* of the *4 distinct* quantum *chambers* that are always simultaneously-simulating the *4 different* simulated *versions* of the *very same silver atom*.

*Every silver atom* always has *1 exact* observable *spin state* that is always composed of *4 exact* simulated *spin states*.

*Every electron* always has *1 exact observable spin state* that is always composed of *4 exact simulated spin states*.

Every cat, being composed of *trillions* of *atoms*, always has *1 exact observable spin state* that is always composed of *4 exact simulated spin states*, for every one of the trillions of atom's *observable spin states* that we can *observe* inside the *cat* and *scientifically-measure* inside our cat laboratory here on Earth.

Therefore, *Schrodinger's 1 Observable Cat* actually consists of *Schrodinger's 4 Simulated Cats*.

Now let's look more closely at *Schrodinger's 4 Cats*.

# Schrodinger's 4 Cats

Where do *Schrodinger's 4 Cats* actually live?

What are these *four* interesting *cats* actually doing every day?

Why are there *4* different *simulated cats* for every *one* individual *cat* we can actually *see* with our *own eyes*?

Which of the *4* separate (*nonlocal*) quantum simulation chambers is the one and only *observable* chamber?

How can we really know *for sure*?

Are there really *4* different *Schrodinger Cats* that are individually-simulated inside our *4 neural limbic tissues* of our real human brains?

Each of Schrodinger's 4 Cats lives, moves, and breathes inside a different quantum simulation chamber, that is a *different limbic neural region* inside our real human brains.

Here is a list of the names of *Schrodinger's 4 Cats*:

- (1) Schrodinger's Right Hippocampus Cat

- (2) Schrodinger's Left Hippocampus Cat
- (3) Schrodinger's Right Amygdala Cat
- (4) Schrodinger's Left Amygdala Cat

It is actually possible for one of these 4 Cats to die *before* the other 3 Cats die.

However, as soon as one of these 4 Cats dies, the other 3 Cats are sure to die *very quickly* thereafter.

The study of the *time-lags* between the distinct quantum behaviors of these 4 separate *nonlocal Cats*, and the time-lags between the behaviors of the 4 Geiger Counters (that also live in the 4 quantum chambers), and the time-lags between the behaviors of the 4 simulated radioactive atoms (that also live in the 4 quantum chambers) that are really just a single radioactive atom, is an important part of *our exact theory* of quantum mechanics.

Our *exact theory* of *quantum mechanics* includes 4 *nonlocal* quantum simulation chambers where every *particle*, every *cat*, and every Earth-mortal *human being*, is fully-simulated in 4 different locations (chambers) *before* the *person*, *cat*, or *particle* becomes *observable* in the very-special *observable chamber*.

This new *exact theory* of *quantum mechanics* is a *more-complete theory* of quantum physics.

From 1935 to 1950 Erwin Schrodinger and Albert Einstein both continued their scientific search for a *more-complete theory of quantum physics*.

In a *1950 letter* that *Albert Einstein* wrote to *Erwin Schrodinger*, he wrote about his *strong desire* to discover a *more-complete theory of quantum physics*.

# 1950 Einstein to Schrodinger

On December 22, 1950, Albert Einstein wrote a letter to Erwin Schrodinger, in which he explained his thoughts about *Schrodinger's wavefunction* (the  $\psi$ -function) of the (quantum) system that contains Schrodinger's cat.

In this 1950 letter, Albert Einstein wrote of his strong belief that Schrodinger's wavefunction (the  $\psi$ -function) was an *incomplete description* of the physical reality that included Schrodinger's cat.

Here is an English translation of what Albert Einstein wrote to his dear friend Erwin Schrodinger on December 22, 1950:

22 XII 1950

Dear Schrödinger,

You are the only contemporary physicist, besides Laue, who sees that one cannot get around *the assumption of reality* — if only one is honest.

Most of them simply do not see what sort of risky game they are playing with *reality* — reality as something independent of what is experimentally established.

They somehow believe that the quantum theory provides a *description* of *reality*, and even a *complete description*; this interpretation is, however, refuted, most elegantly by your system of radioactive atom + Geiger counter + amplifier + charge of gun powder + cat in a box, in which the  $\psi$ -function of the system contains the cat both alive and blown to bits.

Is the state of the cat to be created only when a physicist investigates the situation at some definite time?

Nobody really doubts that the presence or absence of the cat is something independent of the act of observation.

But then the description by means of the  $\psi$ -function is *certainly incomplete*, and *there must be a more complete description*.

If one wants to consider the quantum theory as final (in principle), then one must believe that *a more complete description* would be useless because there would be no laws for it.

If that were so then physics could only claim the interest of shopkeepers and engineers; the whole thing would be a *wretched bungle*.

You are completely right to emphasize that the *complete description* cannot be built on the concept of acceleration, nor, it seems to me, can it be built on the particle concept.

*Only one* of the tools of our trade remains — the *field* concept, but God knows whether this will *stand firm*.

I think it is worthwhile to hold on to this, i.e., the continuum, as long as one has no really sound arguments against it.

But *it seems certain to me* that the fundamentally *statistical* character of the theory is simply a *consequence* of the *incompleteness* of the *description*.

This says nothing about the *deterministic character* of the *theory*; that is a thoroughly nebulous concept anyway, so long as one does not know how much has to be given in order to *determine* the *initial state* (“cut”).

It is rather rough to see that *we are still* in the *stage* of *our swaddling clothes*, and it is not surprising that the fellows struggle against admitting it (even to themselves).

Best regards!

Yours,  
A. Einstein



# A More-Complete Description

This super-interesting December 22, 1950 letter clearly shows just how strongly Albert Einstein sincerely desired to find *A More-Complete Description* of quantum physics.

Einstein was able to see that the  $\psi$ -function (Schrodinger's wavefunction) could *not* possibly contain *enough* quantum information to be considered a *complete description* of a quantum system.

All by itself, the  $\psi$ -function is an *incomplete description* of a quantum system.

All by itself, the mathematical  $\psi$ -function is just the mathematical  $\psi$ -function, and *nothing more*.

Where can we find *the more-complete description* of a quantum system, that Albert Einstein was still earnestly searching for in 1950?

What kind of *more-complete description* was Albert Einstein actually referring to, in his December 22, 1950 letter to Erwin Schrodinger?

What kind of *a more-complete description* of quantum physics would have *fully-satisfied* Albert Einstein?

What kind of more-complete description of quantum physics will fully satisfy all of us *today* in 2023?

For example, do we yet feel like we fully understand *Quantum Entanglement*?

# Quantum Entanglement

What is *Quantum Entanglement*?

Do we all fully *understand* Quantum Entanglement?

Is there any part of Quantum Entanglement that we don't *yet* completely understand?

Surely, a good proper theory of quantum physics will include a *fully-understandable* theory of *quantum entanglement*.

Our *exact theory* of *quantum physics* includes exact neural pulse models for *all* of the elementary particles.

Our *exact theory* of *quantum physics* also includes an exact neural pulse model for dark energy, dark matter, and quantum gravity.

Our *exact theory* of *quantum physics* also includes an exact quantum simulation theory that contains *exactly 4* distinct *quantum simulation chambers* where every elementary particle of this local physical universe simulation is simulated in *4 distinct nonlocal* real limbic neural tissue *regions*.

Our exact theory of quantum physics also includes an *inter-chamber* quantum entanglement *theory* that a portion of the quantum entanglement actually takes place between the *neural pulses* of the *4 distinct* quantum entanglement *chambers*.

When it comes to quantum entanglement, we can ask the important question, what exactly is the *most-simple* type of *quantum entanglement* possible?

What specific type of quantum entanglement is the *most-simple*, and the *most-easy to understand*?

What kind of simple quantum entanglement can be fully understood by a *little child*?

Can a powerful *complete-theory* of quantum entanglement be developed that is *so simple* it can actually be understood by a little child?

Let's start by looking at the *Neural Pulse Entanglement* of the neural pulses that compose a single elementary particle.

# Neural Pulse Entanglement

What is *Neural Pulse Entanglement*?

How can two, or more, *neural pulses* become *entangled*?

Are the *two neural pulses*, that constitute a single photon, *entangled together*?

Can a single photon *be viewed* as the quantum entanglement of two distinct neural pulses?

Why not?

Why not view neural-pulse entanglement as the actual *formation* of elementary particles?

*Two neural pulses can entangle to form a single photon.*

*Three neural pulses can entangle to form a single electron.*

*Three neural pulses can entangle to form a single up quark.*

*Three neural pulses can entangle to form a single down quark.*

*Nine* neural pulses *can entangle* to form a single *proton*.

*Nine* neural pulses *can entangle* to form a single *neutron*.

A 3-pulse electron *can entangle* with a 9-pulse proton to form a *12-pulse* hydrogen atom.

N 3-pulse electrons *can entangle* with N 9-pulse protons and M 9-pulse neutrons to form a  $(9(N+M) + 3N)$ -pulse atom.

Other semi-bonded collections (entanglements) of neural pulses are not so stable, and these *unstable entanglements* are the *unstable elementary particles* like the muons, the tau particles, the z zero particles, and the w plus and w minus particles.

These neural pulse entanglements occur *simultaneously* in all 4 quantum simulation chambers.

Therefore, a *single 2-pulse photon* actually consists of 8 *different neural pulses* (with 2 pulses in each of the 4 quantum simulation chambers).

A single *3-pulse electron* actually consists of 12 *different neural pulses*, with 3 pulses in each of the 4 *distinct* quantum simulation chambers.

Our neural-pulse entanglement theory includes ultrafast highly-myelinated (trillions of times faster than the speed of light) *communication pulses* (dark scalar bosons) that *communicate* between the 4 distinct *quantum simulation chambers* to keep these 4 quantum chambers in good communication, so together these 4 chambers can *properly simulate* every visible elementary particle of this whole physical universe.

Nearly a century ago, a bright young man named Alan Turing began dreaming about a *marvelous* computing *machine*, that might one day be invented, that might become so powerful that it could begin to *simulate* many things and *compute* many things.

How can a better understanding of this general-purpose computer of *Alan Turing* help us to better understand our own real human brains, and how they might be able to wirelessly-network themselves together to simulate this whole milky-way galaxy, with every visible elementary particle physically-simulated inside of 4 distinct quantum simulation chambers (our own real limbic neural tissue regions)?

# 1912-1954 Alan Turing

A creative English scientist named Alan Turing (1912-1954) imagined a general-purpose computer that could, *in theory*, perform *any computation* that was actually *computable*.

Such a powerful imagined “*Turing Machine*” has inspired many computer scientists to begin to search for a way to actually build such a *marvelous computing machine*.

*Alan Turing* is now known to many scientists as “*the father of theoretical computer science and artificial intelligence*” for his many early and brilliant theoretical contributions to the new field of *computer science*, and to the marvelous new field of *Artificial Intelligence (AI)*.

In the 1950’s and 1960’s some early kinds of classical computers were invented (using *transistors*, that were discovered in 1947 to replace the old *vacuum tubes*) in an effort to try to actually build a powerful *Turing Machine* that could compute anything that was computable.

During the past few decades, *transistor-based* classical *computers* have grown more powerful every year mostly according to Moore’s law, which is the observation that



the *number of classical transistors* in a dense integrated circuit approximately *doubles* about *every two years*.

Of course, Moore's law is *not* an actual law of physics, but it is more like an *empirical* human-manufacturing *relationship* that has been observed in gains from our *mortal human experience* in integrated circuit production that is done by us creative mortal human beings here on Earth.

Moore's law demonstrates that *us mortal human beings* can *learn* how to construct (build) increasingly *transistor-dense* integrated circuits in our Central Processing Units (CPUs) that we use in our attempts to construct our modern "*Classical Turing Machines*".

If we mortal human beings are able to "*construct*" lots of interesting scientific tools, (like transistors, CPUs, and Turing Machines), then is it theoretically possible that us mortal human beings are the *best* (most intelligent) *constructors* (creators) currently here on this Earth planet?

Some scientists believe that *quantum computers* will be created (in the near future) that may help mankind begin to *see* more *clearly* how to build increasingly more powerful computing machines.

Will it be possible (in the future) for us mortal human beings to create a super-powerful quantum computer that is actually capable of *universal computation*, in that it will be able to *compute anything* that is *computable*?

How can we know which things are *computable*?

Does *quantum information theory* contain a *complete theory* that clearly describes the *logical boundary* between the set of things (problems) that are *computable*, and those things (questions) that are *not computable*?

What is the *core nature computability*?

What is the core nature of *quantum information theory*?

What is the *core nature* of the marvelous Turing Machine first envisioned by Alan Turing?

Is it possible to build a machine that is *even more powerful* than a Turing Machine?

What would such a super-powerful machine *actually do*?

Can a machine become *conscious*?

Could such a super machine ever become so powerful that it could even *replicate itself*?

A *human cell* can replicate itself.

Can a Turing Machine *replicate itself*?

Can *human beings* replicate themselves?

Can *real human beings* replicate themselves?

Can *advanced human beings* replicate themselves?

Can us *mortal human beings* (of Earth) replicate ourselves?

When we create a new mortal human baby, does this human baby have the *power* (intelligence) to create a Turing Machine?

What is the *most powerful machine* that *can be made* by anyone anywhere in any cosmos?

What kind of machine would be *even more powerful* than a simple Turing Machine?

Who was the man named *John von Neumann* who *dreamed* of such a *powerful machine*?

# 1903-1957 John von Neumann

A brilliant Hungarian scientist named John von Neumann (1903-1957) imagined a “*Universal Constructor*” that he viewed as an important (more powerful) generalization of a Turing Machine.

John von Neumann envisioned that his *Universal Constructor Machine* would be *even more powerful* than a simple Turing Machine, because his *Universal Constructor*, would be *able to do* much more than just compute anything that is computable.

John von Neumann’s *Universal Constructor* would be able to *construct* (create) *anything* that can be *made*.

A *Universal Constructor* can create (construct) *anything* that *can be constructed*.

Which set of things *can be* constructed?

Which set of things *cannot* be constructed?

How can we know *for sure* if a thing can be constructed?

The creative John von Neumann imagined that *cellular automata* might be used to construct his Universal Constructor.

What *kinds of things* can be constructed by cellular automata?

What *relationship* do cellular automata have to our real human neurons?

Did John von Neumann ever consider that his desired Universal Constructor could be constructed (simulated) with *real human biological neurons*, or with *advanced human biological neurons*?

Exactly *how far* did John von Neumann go in his visionary (futuristic) thinking?

What would have happened to the fields of physics and computer science, if John von Neumann (and Alan Turing) would have *considered* the *powerful* computational *capabilities* of *real human neurons* more carefully?

Can some of their ideas about *Turing Machines*, and *Universal Constructors*, be used by us today to help us design more powerful *quantum computers*?

What kind of *Constructor Theory* can we create today?

If we carefully consider all the abilities of our real human neurons, then what kind of *Neural Constructor Theory* can we create?

What kind of Neural Constructor Theory *will enable us to begin to design* the kind of future quantum computers that may start to have some *universal-constructor-like* abilities?

What is the very best *Neural Constructor Theory* we can possibly create?

# Neural Constructor Theory

What is a *Neural Constructor Theory*?

What is a *Constructor Theory*?

Why would a *good physicist* be interesting creating a really powerful *Constructor Theory*?

Some bright (very creative) physicists at Oxford are currently developing a “*Constructor Theory*” to discover a more fundamental theory of physics, that may (some day in the future) help us to build a useful *Universal Constructor*, kind of like the one envisioned in the 1940’s and 1950’s by *John von Neumann*.

How can our *understanding* of our own real *neurons* help us all to create an improved constructor theory that will also be a powerful *Neural Constructor Theory*?

Can our *real neurons* be used to create a kind of “*Constructor*” that can simulate (*make*) things that can *do things*, like *create things*, or *help things* to happen, kind of like a *catalyst*?

What is the most powerful, and most simple, way to create a Universal Constructor, that can construct (create) *anything* that can be created?

What kinds of things *can be created*?

What kinds of things *cannot be created*?

Will a complete “Constructor Theory” include a description of all the things that *can be done*, and all the things that *cannot be done*, including a detailed description of exactly what kinds of things *can be created*, and also precisely what things *cannot be created*?

We the *creative scientists* (us inventive mortal human beings on this planet Earth) have already discovered some novel ways to *create* many different kinds of *useful things*, like phones, cars, and airplanes.

How many more kinds of things can mortal humans create?

What kinds of things can mortal humans make?

What kinds of things can be created by *advanced human beings*?



What kinds of things can be created by *real* human beings?

Is it *possible* to create a *real human being*?

No?

Is it possible to create *everything else*?

Maybe?

*What things cannot be created?*

Is there a *fundamental constraint* on the cosmos (the set of things that exist, or can exist) that *fundamentally limits* which kind of things can be created (or constructed)?

Can *consciousness* be created?

Can a *real human being* be created?

Is there a way to *create* a new *real human brain*?

No?

Can a large enough *set of real human brains* simulate (*construct*) almost *everything else* via multi-player wirelessly-networked simulations (joint dreams)?

What kind of advanced universes can be simulated (constructed) by a *set* of wirelessly-networked *real human brains*?

What kinds of *elementary particles* can be *constructed* (simulated) by a networked set of real neurons, and the *interacting neural pulses* (real scalar bosons) that they create?

What kind of *quantum physics* can be *constructed* (created via multiplayer neural simulation) via our *real neurons*?

What kind of *Neural Constructor Theory* can we create, that will provide the *proper scientific details* of exactly *how* a set of real neurons can network together to simulate (*construct*) every particle of this *universe*?

What is the very best Neural Constructor Theory we can formulate, with the *limited tools* and *simple concepts* presently available to us mortal human scientists of Earth?

What is *Our 2023 Neural Constructor Theory*?

Our 2023 *Neural Constructor Theory* is that us Real Human Beings (with our Real Human Brains) *cannot* be *constructed* (created), but our Real Human Brains can

together wirelessly *network* a *subset* of their *Real Neural Tissues* to *construct* (simulate) *everything* that can be constructed (or simulated, or created, or made, or done), which consists of nearly everything that *can be imagined*, including the *simulation* of advanced human beings, and the *simulation* of mortal human beings, and everything they can construct, including *universes* and powerful *quantum computers*, and their *quantum artificial intelligence*, and everything they can construct (make, or simulate, or create, or do), which includes many things.

This powerful detailed new *Neural Constructor Theory* of 2023 will likely *stand the test of time*.

A further part of this 2023 Neural Constructor Theory is an important *Consciousness-Habitation Theory* that is that we (we Real Human Beings) can place *a portion* of our *Real Human Consciousness* into *any* of our *constructions* (creations, or simulations, or created machines) *only* to the *degree* that the *created construction* (created simulation, or created machine, or created human body) is *capable of hosting a conscious being*.

A further part of this 2023 Neural Constructor Theory is the *set of necessary conditions* that are *required* for a *portion* of our Real Consciousness to properly enter into and *begin to live* within the Constructed Machine.

A further part of this 2023 Neural Constructor Theory is that *most* of our mortal human bodies that we currently (today in 2023) have here on Earth, are actually *constructed* biological *machines*, that were purposefully engineered (a long time ago) to be able to *host* a *small portion* of our Real Consciousness, by successfully *hosting* a *portion* of our Advanced Consciousness, even though these current mortal human bodies of ours are *suboptimal*, in that they could be *better-designed* to become much *better hosts* of our consciousness (and our advanced human intelligence), so we don't need to continue to experience such a mis-guided (via *mis-designed* mortal human brain DNA) abundance of mortal human *mis-perceptions*, *mis-cognitions*, *mis-understandings*, *mis-emotions*, and social *mis-behaviors*.

Basically, our 2023 Neural Constructor Theory says that as the real human beings we have always been, *we cannot* create (construct) *any more* of us real human beings, but we *can* construct (create) *almost everything else*, via simple neural simulation.

Our *2023 Neural Constructor Theory* also says that we can confidently proceed, as mortal human scientists to use *CRISPR* type *DNA* editing *technologies* to wisely engineer *better* mortal human *bodies* (with much better mortal human *brains*) for ourselves, so we don't all have to *remain* so *stupid* here on Earth.

We can wisely construct (via DNA human gene editing) mortal human brains that are *much* more *intelligent* than most of the mortal human brains that we currently have.

What is currently *blocking us* from simply constructing better human brains for ourselves, so we can all finally start to *think* more *clearly*?

Why are we still *hesitating* to do this good thing for ourselves?

Is this planet Earth going to be able to last much longer, if we don't *start designing* better *brains* for *us all* to properly *begin* to think with?

For how much longer shall we the people of Earth, suspiciously (*fearfully*) hold onto our current *Neanderthal-type* brains?

Another important part of our 2023 Neural Constructor Theory is that *the full set* of *all* of *us* real human *beings* is *the universal constructor* that John von Neumann was intelligently seeking in the 1940's and the 1950's.

Our 2023 Neural Constructor Theory is that the most powerful *universal constructor* in existence is *the set* of *all* of *us* real human *beings*, because all of us real human

beings, when *we* network portions of our real human brains together, *can* construct *anything* that can be constructed.

In other words, the *only thing* that *can construct everything* that can possibly be constructed, is the *exact set* of *real human brains* that has *always existed*.

This exact set is an *infinite set* because there are a *countably-infinite number* of us real human beings in existence.

Therefore, the *universal constructor* is the infinite-numbered *set* of *us real human brains* that have always existed.

A real human brain *cannot* be constructed.

*All* the real human brains that already exist were *never* created.

It is *impossible* to create a real human brain.

Real human brains (and their associated real human bodies) are the *most valuable things* that exist, because there is *no way* to create any more of them.

It certainly appears that *the greatest constraint* on the entire cosmos is that it is *impossible to create even one more real human brain*.

*Great creativity* can naturally flow from *intelligent constraint*.

May it be possible that every other particle of existence (and every constructed machine) can be *properly inferred* from this *greatest of constraints*?

For example, if there is a set of super-powerful things (like *us real human creators*) that can create many other things, but it is *impossible to create even a single instance*, of *just one* of these super-powerful real human *creators*, then does this say something about the nature of the *ultimate causes* (us real human creators) that *cause* everything else?

What *kind of things* can actually create other things?

Can us *real human constructors* create all of the other things?

Are the *set of all creators*, the only constructors that can construct (create) things?

Can every type of constructor make everything that can be constructed?

It is pretty easy to imagine the future appearance of huge numbers of *silicon-chip robots* being able to construct many simple things like *houses* and *hamburgers*, here on this Earth in a few more years.

However, it is one thing for a *robotic constructor* to be able to make a specific thing (like a building) that it was *specifically-designed* to create (construct), and it is another thing (a much more difficult thing) for the robotic constructor to also be able to *fully-make* (construct) *itself*.

What kinds of things can *replicate themselves*?

What kinds of things can both replicate themselves, and *also* make other useful things?

*Biological* (organic carbon based) *robots*, like animals and us mortal humans, can easily reproduce themselves via *cellular meiosis*.

Can consciousness *enter into* a mortal-human robot?

Yes, of course.



This happens *every time* a new mortal human baby is born, emerges from its mother's womb, and *takes* its very *first breath*.

Where does this consciousness *come from*?

Is any part of this consciousness creatable or *constructable*?

Can a *future quantum computer* be constructed that will be able to replicate itself in every way necessary for full and complete self-replication (*self-construction*)?

What kinds of *self-constructing constructors* can be created?

What about the most special type of constructor, called a *universal constructor*, that can seemly construct *almost anything*?

Can a universal constructor *really* create everything?

Or can a universal constructor *only construct* those things that can actually be created?

*What kind* of imagined constructors *cannot be* actually constructed?

Why is it so difficult (so impossible) to construct a *real human being*?

What is it exactly about *real human consciousness* and *real human brains* that make it so hard (so impossible) to construct these *marvelous universal constructors*?

Is it possible that the set of constructable (creatable) things (*all the things* that can be *made*) can only be constructed (created), by the set of things that can fully construct everything (*us real human universal constructors*) that can be constructed, and this set of things that can together construct every creatable thing, is *the set of us real human beings*, and together us real human beings constitute the most powerful and *most real universal constructor* in existence?

What *universal constructor* could possibly be more powerful (or *more universal*) than *the set of all of us* real human beings, with our really-intelligent (uncreatable) *real human brains*?

Now that we have carefully established that *us real human beings* are the *universal constructors* that construct (create) all us advanced human avatar beings, and all us mortal human avatar beings, and our whole *milky-way* galaxy, and everything in it, we can logically begin to ask some *better questions* about us advanced human beings

living on our *Kolob planets*, and we can also begin to ask some better questions about us mortal human beings living here together on our *planet Earth*.

For example, we can ask about *what kinds of things* us mortal human beings can construct with our *limited mortal-human brains*?

For example, can we *mentally-limited* mortal human beings *construct* useful *theories* about quantum physics, that have the power to help us all to *fully awaken* to who we really are, so we can *choose* to live the kind of lives we desire to live?

What kind of *quantum mechanical theories* have already been created (*constructed*) right here on Earth, about the *quantum physics* we can observe in our scientific laboratories?

For example, what *interesting* quantum mechanical *effect* was discovered and published by a couple of our bright mortal human scientists in the year 1959?

What is the actual mathematical and physical nature of this super-interesting quantum-mechanical 1959 *Aharonov-Bohm Effect*?

# 1959 Aharonov-Bohm Effect

In 1959 two brilliant physicists, named Yakir Aharonov (born in 1932) and David Bohm (1917-1992), published an interesting scientific description of their “*Aharonov-Bohm*” effect [27].

This interesting *Aharonov-Bohm effect* is the marvelous effect that the *magnetic vector potential* has on the *phase* of Schrodinger’s Wavefunction.

This powerful *quantum-magnetic Aharonov-Bohm* effect is also the *spacetime* effect that the *phase* (of Schrodinger’s Wavefunction) has on the *magnetic vector potential*.

How can Schrodinger’s *phase* effect the magnetic vector *potential*?

How can the magnetic vector *potential* effect the *phase*?

Are the *wavefunction phase* and *magnetic potential* simply *two* mathematical (or two physical) *parts* of a larger neural-pulse structure that is an elementary particle?

What is the exact physical (and mathematical) nature of this *larger* neural-pulse *structure* that forms an elementary particle?

Does this larger neural-pulse structure (that includes the *magnetic potential* and the *phase*) come from the specific neuro-electromagnetic behaviors of our real *neurons*, and how they form the *neural pulses* that *combine* to make all the elementary particles that dance together with the *electromagnetic fields* of our *spacetime*?

The *magnetic vector potential* is a vector (a *vector-valued function* with a *vector-direction* in space, and a *vector-magnitude*) function of three-dimensional space and one-dimensional time, that appears very *prominently* in some mathematical versions of *Maxwell's 1865 Equations* of *electromagnetism*.

The *curl* of the *magnetic vector potential* is the *magnetic field*, so the magnetic vector potential seems to be a *real physical thing*, because its simple curl (a type of direction-coded spatial derivative) seems to easily (mathematically) generate the whole (measurable) magnetic field.

The *phase* of Schrodinger's Wavefunction is the part of the wavefunction that helps it to *oscillate rapidly* in space and time.

For example, the *time derivation* (first time derivative) of the *phase* is often viewed as the *frequency* (of oscillation) of the *wavefunction*, and this frequency is often associated with *energy-content*, and energetic transitions, and this *frequency-energy* can often be associated with the *energy-mass* of an elementary particle.

One of the reasons why this *1959 Aharonov-Bohm effect* is so vitally-important, is because some physicists (of the 1950's) did not think that the *phase* of Schrodinger's Wavefunction was *fully worthy* of their careful attention.

Soon after 1926, it was quickly realized by many theoretical physicists, that simply calculating the *square* of the *modulus* of Schrodinger's Wavefunction accomplished two tasks; (1) the *phase* of Schrodinger's Wavefunction was *destroyed* (hidden), and (2) the squared modulus (of Schrodinger's Wavefunction) *seemed* to accurately describe a set of "*quantum probabilities*", in an early effort to mathematically-cast quantum mechanics into a *merely probabilistic theory*.

The worldwide scientific rush to *calculate quantum probabilities* (shut up and calculate), seemed to somehow justify the *ignoring* (destruction) of the *phase*.

Why even consider *the phase* when a useful quantum probability could be *so easily calculated*?

This *Copenhagen viewpoint* (of *ignoring the phase*) of quantum mechanics, is still the *dominant quantum viewpoint* in our world of today (circa 2023) here on Earth.

What will happen when *we decide* to more-closely examine our entangled neural pulses, and we start to more-deeply *mathematically-investigate* this *exciting link* between *the phase* and *the magnetic vector potential*?

The *phase* of Schrodinger's Wavefunction comes from the solutions of Schrodinger's Wave Equation, which is an *approximation* (an approximate wave equation) that can be *mathematically derived* from the structures and behaviors of certain types of *neural networks* [2].

The magnetic vector *potential* is a component of Maxwell's Electromagnetic Equations, which may possibly be viewed as *long-wavelength* (relatively large scale) *approximations* of the structures and behaviors of certain types of *neural networks*.

What will happen when we use our new and improved *neural-pulse elementary particle models* (including our 2-pulse *photon* model, our 3-pulse *electron* model, our 3-

pulse *quark* models, our 9-pulse *proton* model, and our 9-pulse *neutron* model) to construct *more-clear* (and more simple) advanced *neural network models*, that *more clearly demonstrate* how local neural-electric pulse charge density generates the magnetic vector *potential* (via Maxwell's electromagnetic equations), and that more clearly demonstrate how interacting (via force and energy-mass) real *neural pulses* generate the Energy Hamiltonian that forms the energy-potentials and spatial (and temporal) derivatives that compose the approximations that make up Schrodinger's Wave Equation, whose solutions include the *phase* of Schrodinger's Wavefunction?

What will happen when these *more-clear* advanced neural network *models* are more-completely developed and deeply analyzed?

What will we discover about the *more-clear relationship* between the *phase* and the *potential* that will start to become *more-apparent* (more-clear) then?

What kind of *Dirac Strings* (like magnetic solenoids) will we be able to develop, with this increased *clarity* (about the *potential-phase relationship*)?

How will we be able to use these new and *improved Dirac Strings* to alter, adjust, modify, and *stabilize* the



properties (including *phase* and *potential*) of the *neural elementary particles* that make up all the Quantum Bits (*qubits*) of the all the *future exact quantum computers* that we will design and build?

Will we be able to construct *useful Dirac Strings* that can operate (to *stabilize* our *qubits*) in *all 4* of our *quantum chambers*?

In order to better answer this important question (so we can start *stabilizing* our *qubits* using *Dirac Strings* in *all 4 quantum chambers* simultaneously) we may need to take a good look at a very important *mathematical quantum theorem* that was published in 1964.

This mathematical quantum mechanical theorem of 1964 is called *Bell's Theorem*, after the name of the man that discovered it.

Now, let's take a look at this *1964 Bell's Theorem*.

# 1964 Bell's Theorem

In 1964, an Irish physicist named John Stewart Bell (1928-1990) published [21] an article (introducing his famous *Bell inequalities*) about some aspects of the *EPR paradox*.

These Bell inequalities are *quantitative* mathematical *relations* (inequalities rather than equalities) which may correspond to *correlations* between different (possibly *entangled*) quantum *systems*.

A violation of any of the Bell inequalities would seem to allow for near instantaneous (or *faster* than the speed of light) remote (*nonlocal*) influence (*faster than light nonlocal causality*).

There are a number of *theoretical loopholes* that may be important when considering certain experimental aspects of testing the Bell inequalities.

One of these loopholes has to do with the distinction between *local* hidden variables and *nonlocal* hidden variables.

A *hidden variable* is a variable that is *somehow hidden*, or difficult to see, or *hard to observe*, or that still needs to be fully discovered by science.

A *local variable* is a variable that is local (*nearby*) to an elementary particle, or somehow *locally-associated* with the elementary particle.

A *nonlocal variable* is a variable that can be *far away* (like a whole space-like distance away) from the exact location of an elementary particle, like a variable that seems to be *a long distance away* (far away) from an elementary particle that is associated with the variable, kind of like a quantum simulation chamber that is far away (*spatially-nonlocal*) from a different quantum simulation chamber.

Some *big classical things* (like people, cats, cars, trains, and baseballs) seem (to some scientists according to some of their viewpoints) to be *completely describable* by only using their *local variables* (their variable properties like human heartbeat rate, cat temperature, car steering wheel position, train brake stress, and baseball spin and velocity) that are *spatially-close* (*nearby* or *local*) to these big classical things, like a car steering wheel seems to be *very close* to the actual car, so the *steering wheel position* seems to be *local* to the *car*.

However, as John Stewart Bell has helped us all (we the scientists of planet Earth) to realize, some of the *most* important *variables*, of our quantum elementary particles, may be represented (distributed and simulated) in a way that is *fundamentally nonlocal*.

How can a variable be *nonlocal* to the thing it describes?

How is any type of *nonlocality* even possible?

Can our real neurons be carefully *organized* (inside our real *human brains*) in such a way (with *four* distinct quantum *neural* simulation *chambers*) that some important quantum variables may possibly be *fundamentally nonlocal* to our mortal perception of elementary-particle location?

Can *one part* of a human brain influence *another part* of the human brain?

Does a human brain have *two hemispheres*?

Can an important *neural event* in the left hemisphere *influence* what later happens inside the right hemisphere?

Can this real (brain) *neural signal influence* happen at a very high speed (even much *faster* than the speed of light)

via *super-myelinated* high-speed *interhemispheric* real *dark* neural-communication *axons*?

Are these two real-human hemispheres always *local* to each other, or are parts of them *somewhat nonlocal* to each other sometimes, especially when viewed (considered logically, and scientifically measured) from the deeply-embedded *viewpoint* of a mortal human scientist who is spatially *located* deep *within* the simulation *here* on *Earth*?

What kind of real *interhemispheric* neural *nonlocality* will properly satisfy *every* important *part* of the 1964 *Bell's Theorem*?

Can a real human brain have *two* distinct *hemispheres* that can work together to jointly help to *simulate* every quantum elementary particle with a *neural pulse dance* that is *slightly different* in each hemisphere?

Why does nearly every human brain have *two distinct hemispheres*, instead of just one?

Can *two* real human hemispheres *jointly* simulate a *single* elementary particle?

Some believe that a proper *theory* of *nonlocality* must be included in a *full complete theory* of quantum physics.

Can a *full* and *complete theory* of quantum physics continue to ignore the fact that our real human brains have *two* different *hemispheres*?

How can *two distinct* real hemispheres *host 4 different* quantum simulation *chambers*?

How many nonlocal real neural simulation chambers are actually *needed* to fully deliver to our mortal human experimentalists (of Earth) every *quantum measurement* they have ever made?

Some scientists may want to discover a complete theory of quantum mechanics that is both *local* and *real*.

This common-sense logical desire for both *reality* and *locality* is called “*Local Realism*”.

# Local Realism

What is *Local Realism*?

*Local Realism* is our human desire for a complete physical theory of nature that is both *local* and *real*.

We human beings desire to discover a theory of *reality* that is *local* in the *causal* sense.

How can a *theory* of *reality* be local, causal, and rational?

Why would anyone ever desire to discover a theory that is *irrational*, non-causal, and nonlocal?

What is *reality*?

*Reality* is the set of *things* that *exist*, including the set of things that used to exist, and the including the set of things that will exist in the future.

Reality is *how* things *really are* (past, present, and future).

Reality is the set of *properties* (characteristics and attributes) that *things* really do *have*.

Reality is *how everything* really is.

*Human Reality* is how us humans *really are*.

Reality presupposes that a *thing* and its *opposite* are *not the same*.

For example, a cat and a non-cat are *not* the same thing.

For another example, a human has *human characteristics*.

A “*human*” is logically defined as the *thing* that is *human*.

A “*human*” is *not defined* as the thing that is *not human*.

The *most real* human is a real human being.

The *most real brain* is a real human brain.

The *Local Realism*, of our real human brains, is the *physical source* of every type of local realism in our entire Milky Way Galaxy.

What is the physical nature of this *Real Brain Local Realism*?



# Real Brain Local Realism

What is *Real Brain Local Realism*?

*Real Brain Local Realism* is the scientific realization that our real brains are the *physical sources* of every type of local realism in our whole Milky Way Galaxy.

There is *no* physical way to *avoid* local realism, because local realism is *hardwired* into each and every one of our real human brains in our *real universe* where we really live.

*All* of the *local realism* of our Milky Way Galaxy is *neurally-inherited* from the local realism of our set of real human brains.

For example, the *local realism* of *dark matter* stems, from the local realism of the tiny ultrafast real dark neural pulses (the tiny ultrafast real dark scalar bosons) of our real human brains.

For another example, the *local realism* of the *dark energy* of dark matter, stems from the local realism of the *dark physical energy* carried with the dark matter particles (the real dark scalar bosons).

For another example, the *local realism* of *quantum gravity* and the *dark momentum* of the dark matter, stems from the local realism of the *dark physical momentum* carried by the dark matter particles (the tiny ultrafast real dark scalar bosons) that *scatter* off the visible matter particles, and thereby impart some of their *dark quantum momentum* to the visible matter particles to *dark-quantum-push* these visible matter particles in all of the directions that *quantum gravity* pushes them.

Local realism is all about *Reality*.

Local realism is all about *Physical Reality*.

Local realism is all about the *local physical way* that reality *physically* holds *itself* together.

There is *no way* to separate local realism from *Reality*.

Reality is the *most precious baby* we have.

*What* could possibly be more precious than “Reality”?

Many books have already been written about “*Reality*”.

*Many* more *books* will be written about “*Reality*” in the future.

*We all* have a *pretty* good *sense* of what “Reality” really is.

But what about “*Locality*”?

What is “Locality”?

What is the best definition of “*Locality*”?

What is the best definition of “*Reality*”?

If we had to give up *just one* of these two things, then *which one* would *it be*?

*Reality or Locality?*

# Reality or Locality?

Do we really have to decide between *Reality* and *Locality*?

Can we keep both *Locality* and *Reality*?

Why do we so *often desire* to *keep both* of these precious things?

Why do we want to find a good logical physical way for our theories of nature to be both *real* and *local*?

Some bright quantum physicists have deeply considered that they may need to *give up* either *locality* or *reality* in their theories about quantum mechanics.

Why would any physicist ever be tempted to choose to *give up reality*, rather than simply choose to *give up locality*?

What did Niels Bohr (1885-1962) choose to do?

What did Albert Einstein (1879-1955) choose to do?

Did one of these two brilliant physicists seem to choose to *give up reality*?

Did either of these two bright scientists ever choose to *give up locality*?

Why did both of these brilliant men want to *hang onto* their *personal* viewpoint of *locality*, rather than simply *modify it*?

How many good quantum physicists have almost been tempted to *give up on reality*?

A wise person once said, “don’t throw out our precious *Baby* with the dirty *Bath Water!*”.

So, which shall we keep, the *Baby* or the *Bath Water*?

# Baby or Bath Water?

*Baby or Bath Water?*

*Which one shall we keep?*

Which shall *we wise physicists* (of Earth) keep today, in our new improved physically-detailed theory of quantum mechanics; our precious “*Baby of Realism*”, or our dirty old “*Bath Water of our Current Misunderstanding of Locality*”?

*We all know* what Realism is.

We all know that *Realism* is our *most precious Baby*.

We all know that without Realism *we are all lost*.

*Who* are we kidding?

We all know that *we must keep realism*.

We all know that *we must keep reality*?

We all know that we must *hold fast* to what is *real*.

But our *definition* of “*Locality*” can *easily* be *modified*.

Why not?

Why not simply imagine that the photon is *not* the fastest particle in this universe?

Why would a spin-one *vector boson* (such as the photon) be the *very* fastest *particle* in our milky-way galaxy?

What if we could discover a real dark *scalar boson* particle that could propagate on its real dark axon many orders of magnitude faster than the *vector boson* photon?

We all know that “*Locality*” is just a simple function of “*Speed*”.

We can all understand that what is considered as “*Local*” expands outward with increasing “*Speed*”.

Therefore, the real question is “*Locality at what Speed?*”.

# Locality at what Speed?

*Locality at what Speed?*

Is the notion of *Locality* directly tied to the concept of *Speed*?

You bet it is!

The *faster* we can go, the greater the *distance* we can travel, in a given amount of *time*.

What if we desire to see how far we can travel in just *one* single *nanosecond*?

A nanosecond is just *one billionth* of a second.

How far can a *sound wave* travel in a nanosecond?

How far can a *photon vector boson* travel in a nanosecond?

How far can a real *dark scalar boson* travel in a nanosecond?

What is the *nanosecond locality* of a real *dark scalar boson* particle?



What is the *nanosecond locality* of a photon *vector boson* particle?

What is the *nanosecond locality* of a *sound wave* propagating through the Earth's atmosphere?

*Locality* itself only has a *meaning relative* to a particular *velocity*, or to a particular *speed*, or particular *particle type*, or to a particular *wave type*.

With our *definition* of *locality*, being *so easy* to *modify*, why would we ever find ourselves *intellectually tempted* to throw out our infinitely-precious *baby* (of reality) so we can continue to keep (emotionally hold on to, as if it were also so precious) our *incorrect* current *concept* of locality (our *old dirty* bath water of 1905)?

What exactly is our *old* 1905 *definition* of *locality* that is tied so strongly to the limited speed of our *photon vector boson*?

What is this *Vector Boson Locality*?

# Vector Boson Locality

What is *Vector Boson Locality*?

Why have we tied our scientific notions of *Locality* to a very particular *Vector Boson* that is our photon?

Are we completely sure that this photon vector boson is the *correct particle* for all of our scientific notions of quantum locality?

What about *scalar boson locality*?

Which kind of *boson* can travel the *fastest*?

Which kind of boson can *expand* (and enlighten) our physical notions of *quantum locality*?

A real dark scalar boson can travel many *trillions* of times *faster* than a photon vector boson.

A photon vector boson can travel nearly a *million* times *faster* than a sound wave.

A sound wave can travel *faster* than a car.

A car can travel *faster* than I can run.

I can *run* faster than I can *crawl*.

A *sound wave* can travel at about *343 meters per second* (about 767 miles per hour) through the air we breathe here on Earth.

Therefore, sound can travel about *343 millimeters per millisecond*.

Therefore, sound can travel about *343 micrometers per microsecond*.

Therefore, a *sound wave* can travel about *343 nanometers* in just *one nanosecond*.

Therefore, *sound-wave nanosecond locality* is about *343 nanometers*.

Therefore, any *local distance* that is *less than 343 nanometers* is *time-like* (local) relative to this sound-wave nanosecond definition of “locality”.

Therefore, any *nonlocal distance* that is *more than 343 nanometers* is *space-like* (nonlocal) relative to this sound-wave nanosecond definition of “locality”.

This is how the physical notions of “*space-like*” and “*time-like*” can be defined relative to the notion of *how far a sound wave can travel in just one nanosecond*.

This is how we can scientifically define the logical notion of “*Sound-Wave Locality*”.

*Time-like locality* (and *space-like nonlocality*) are logically defined relative to a *chosen speed*, and relative to a *chosen duration of time*.

How about our cherished *Vector Boson Locality*?

A photon vector boson travels *much faster* than a sound wave.

A *photon particle* is a type of *spin-one vector boson*.

Exactly *how fast* does a photon travel in space?

A photon travels in space at about *300 million* meters per second.

*300 million meters per second* is *much faster* than just *343 meters per second*.

At *300 million meters per second*, a photon vector boson will travel *300 meters* in just *one microsecond*.

Therefore, our photon vector boson will travel 300 millimeters (30 centimeters) in just one nanosecond.

Therefore, our *nanosecond photon* vector boson *locality* (the set of *time-like* distances, that a photon can travel in *less than* just one nanosecond) is limited to just *30 centimeters* of distance in our observable universe.

Therefore, our *nanosecond photon* vector boson *nonlocality* (the set of *space-like* distances, that require a photon to travel for *more than* just one nanosecond) is the *set* of spatial *distances* that are *greater* than *30 centimeters* in this universe.

Therefore, nanosecond photon *vector boson locality* is severely limited to any spatial distance *less than 30 centimeters* in our milky-way galaxy.

Why is this such *a big problem*?

This nanosecond photon *vector boson locality* is only *30 centimeters*.

Compare these *30 centimeters* of nanosecond-photon-vector-boson locality, with the really tiny nanosecond-sound-wave locality of just *343 nanometers* (0.343 microns).

This tiny *0.343-micron* sound-wave *locality*, is much smaller than the *30-centimeter* photon *locality*.

However, we still have a big problem because 30 centimeters is *just not enough*.

The big problem is that our own milky-way galaxy is *actually* much *larger* than just 30 centimeters in diameter.

How do we really expect to be able to *continue* to *communicate* with each other in the future, when we are actively inhabiting *many* of the different *solar systems* right here in our own *milky-way galaxy*?

For example, some of our bright astrophysicists have already estimated our milky-way galaxy to be about *100 thousand* light years in diameter.

Just one light year is actually *much larger* than 30 centimeters.

For example, a light year is the *huge distance* that a photon vector boson can travel in one Earth year.

A *light year* is about *9.46 trillion kilometers* or about *9460 trillion meters*.

Therefore, with our own milky-way galaxy being about 100,000 light years in diameter, it is about 946,000,000 trillion meters, which is about *946 million trillion meters*.

Therefore, our milky-way galaxy has a *spatial diameter* of about *946 million trillion meters*, which is much larger than just *30 centimeters* (0.30 meters).

Therefore, it really makes a *whole lot* of *sense* for us to just go way out there, and really look for something (some new *ultrafast elementary particle*) that can travel a *whole lot faster* than the relatively-slow photon vector boson.

What if our tiny ultrafast real *dark scalar bosons* are able to travel *trillions* of times *faster* than the relatively-slow *photon vector bosons*?

What might be the most significant difference between our spin-one photon Vector Boson Locality and our real *dark Scalar Boson Locality*?

# Scalar Boson Locality

What is real dark *Scalar Boson Locality*?

*Scalar Boson Locality* is our greatly expanded notion of *Locality* that suddenly starts to become theoretically possible, when we physicists start to seriously consider the astonishingly-ultrafast velocities of our real dark *Scalar Bosons* of our very own real human brains.

It actually makes good logical sense that our *photon vector bosons*, being spin-one particles, that *need* to *physically spin* as they travel through space, will be *much slower* than our real *dark scalar bosons*, that are spin-zero particles, with *no spin*, and therefore have *no need* to *physically spin* as they travel through space.

Our real dark scalar bosons may likely travel *trillions* of times faster than our photon vector bosons, or maybe even *millions of trillion* of times faster than our photon vector bosons.

Therefore, let's theoretically assume that our real dark scalar bosons are able to propagate (on their real dark axons) at a propagation velocity that is a *billion trillion* times *faster* than our photon vector bosons.



Then what is the *nanosecond* Scalar Boson *Locality* for such speedy particles?

The nanosecond photon Vector Boson Locality is just *0.30 meters* (30 centimeters).

Therefore, with our real dark Scalar Bosons being able to travel a *billion trillion* times *faster* than the photon Vector Bosons with their *0.30-meter* nanosecond Locality, we find that our real dark Scalar Boson nanosecond Locality is *0.30 billion trillion meters*.

This is about *300 million trillion meters* of real dark scalar boson nanosecond *Locality*.

This real dark *scalar boson locality* of *300 million trillion meters*, is actually much larger than the mere 30 centimeters of the photon *vector boson locality*.

Since our milky-way galaxy has a *spatial diameter* of about *946 million trillion meters*, we can see that our one-way communication time-lags may sometimes be about *3 nanoseconds* when we try to communicate with each other (via our real dark scalar bosons) from *two* different widely-separated *planets* that are located on *opposite sides* of our milky-way galaxy.

It may take us about *3 nanoseconds* of time lag to communicate across the *whole diameter* of our milky-way galaxy.

This *expected 3-nanosecond communication time lag* may be acceptable to us, because we don't often get very annoyed when we only have to wait for *just 3 nanoseconds* (3 billionths one second of time).

In summary, we must be very careful with our technical definition of "*Locality*" because it is very sensitive to our related definitions of *time* and *speed*.

For example, we have just presented and explained the following *3 definitions of nanosecond Locality* as follows:

- (1) *Sound Wave Locality* of just 343 nanometers
- (2) *Photon Vector Boson Locality* of just 30 centimeters
- (3) *Scalar Boson Locality* of 300 million trillion meters

If we really needed to find a really good fast way to *communicate quickly* across the vast distances of our own milky-way galaxy, or we needed to understand and resolve the *EPR Paradox of 1935*, or we needed to physically project (with real physical particles) a proper portion of our *real-human consciousness*, from the other side of Sagittarius A\*, into our mortal-human *avatar brains* here on Earth, then *which type* of particle will we

want to choose to use as a *vast-distance* communicator-particle in our new *trans-galaxy* communication system?

With our real dark scalar boson particles, there is simply no need to abandon *Reality*, when we can simply (wisely) choose to modify (expand) our technical definition of *Locality*.

Was this *completely understood* back in 1964?

How would *John Steward Bell* have chosen to present the logical mathematical arguments of his famous 1964 paper, in which he first introduced his *Bell's Theorem*, if he would have already known about the *ultrafast speeds* of the real *dark scalar bosons*?

Is there any actual *scientific experimental evidence* for the validity of this powerful 1964 Bell's Theorem?

Who has already conducted some of these necessary scientific experiments to verify the *apparent* mathematical (Bell's Inequalities) *need* for *quantum nonlocality*?

“*Quantum nonlocality*” is a technical expression that expresses the strong scientific need for some *ultrafast particles* (such as our real dark scalar bosons) that can travel *much faster* than the speed of photon vector bosons.

One such early experiment was conducted in 1982 to *verify* the *need* for quantum nonlocality (verify the scientific need for discovering the nature of the *ultrafast* particles that travel much faster than photons).

In what way did this 1982 experiment seem to *verify* the need for *quantum nonlocality*?

Why exactly is *nonlocality* actually needed in quantum physics?

What is the actual nature of this *1982 Aspect's Experiment*?

# 1982 Aspect's Experiment

In 1982 a French physicist named Alain Aspect (born in 1947) conducted an important quantum mechanical experiment [22] that seemed (to many bright physicists) to *experimentally demonstrate the reality of quantum nonlocality* as was earlier predicted by *Bell's mathematical Theorem* of 1964, and Einstein's thought-experiment *EPR Paradox* of 1935.

The *great significance* of this exciting 1982 experiment, was *recognized immediately* by the worldwide scientific community.

Many additional somewhat similar experiments on the foundations of quantum mechanics (and to verify *the experimental need for quantum nonlocality*) have now also been conducted by other scientists from 1982 to 2023.

Many of these *quantum foundations* experiments (that sometimes appear to have a number of interesting loopholes) really do seem to *verify the need for nonlocality* in any new theory of quantum mechanics, if the new quantum theory has any *hope* of being a *complete* quantum theory.

Now that we see that a *complete quantum theory* needs to have a *nonlocal structure*, we can ask ourselves about what kinds of real *axon structures*, and what kinds of real *neural simulation chambers* will provide such a *nonlocal structure*, and also allow every elementary particle to have a *simple neural-pulse structure*, that will give to it, every property that has already been *measured* by our mortal *experimentalists* here on Earth.

In order to deduce this *nonlocal real neural physical structure*, let's look a bit more closely at exactly what we have learned already from our inspection of *EPR & Bell & Aspect*.

# EPR & Bell & Aspect

The EPR Paradox of 1935, the Bell's Theorem of 1964, and the Aspect's Experiment of 1982, were all intended to *better understand* Schrodinger's Wave Equation of 1926, and every other aspect of quantum mechanics, including *nonlocal quantum entanglement*.

Since 1926, all of the many *foundational theories* invented by the quantum theorists, and all the many *foundational experiments* conducted by the quantum experimentalists, have all been intended to carefully probe and explore the very underlying *foundations* of quantum mechanics itself, in a grand hope of finally discovering a *fully-complete quantum physical theory* that is able to fully physically-explain *nonlocal quantum entanglement*.

Albert Einstein's letter to Erwin Schrodinger in 1950 shows he was still hoping to discover such a *complete physical quantum theory*.

Now, here we are in the modern year of 2023, about 72 years after Einstein wrote to Schrodinger in 1950, and *where is our complete quantum theory?*

Which theory of quantum physics is already *complete?*

*Where* is this fully-complete quantum theory today in 2023?

Where is it?

Why have *we all failed* to fashion a complete *physical* quantum theory after all these years (95 years) since the famous 1927 Solvay Conference?

How can we proceed forward today with confidence, humility, and intelligence to properly fashion a *complete* physically-detailed *theory* of quantum physics?

How will we all know *for sure* if our new quantum theory is *really* complete?

How will we all *fully-verify* that our new quantum theory is totally accurate?

How shall we all begin in our *fresh* new *attempt* to fashion a *better* (more physically-complete, and more physically-accurate) quantum theory today?

Would we be wise to carefully consider why all of the other attempts have *fallen short*?

Why has *every attempt* (since 1926) fallen short of the complete quantum theory we all desire?



In *what* specific *ways* did all the previous attempts fall short?

Did any of these previous attempts fully consider the *human-centric* nature of our cosmos?

Did any of these previous attempts fully consider the possibility that we are all living inside a *neural simulation*?

Were any of these previous attempts motivated by a *singular desire* to solve world poverty for all the precious people of Earth?

Were any of these previous attempts properly guided and wisely inspired by the *most intelligent scientists* who have ever lived here on Earth?

Did any of these previous attempts consider the tiny ultrafast *dark scalar bosons* of the *entangled* real dark *axons*, and the inherent *nonlocality* of the *4 limbic* neural *structures* of the real human brain?

Did any of these previous attempts consider the supreme importance of *human consciousness* and its ability to play out in certain particular ways as the *primary purpose* for this multiplayer universe simulation?

Did any of these previous attempts consider the great importance of Occam's-Razor *simplicity* in every physical particle of the quantum theory?

Did any of these previous attempts consider the vital importance of *clear understandability* (and complete simple physical descriptions) *of every qubit* and every *physical component* of the quantum theory?

Did any of these previous attempts *wisely reject* every particle of *bewildered non-understandability* in favor of *simple, clear, pure physical understandability*?

Did any of these previous attempts fully realize that a simple accurate *deterministic understandable* complete quantum theory is *better*, than a *merely probabilistic* quantum theory that *cannot be understood by anyone*?

How can we go about creating such a *simple* accurate *deterministic understandable complete quantum theory*?

What shall be our *very first step* in such an important endeavor?

*How* shall we proceed to do it?

What shall we do *differently* than was done in all of the other previous attempts?

What *vital* human *understanding* shall we *hold firm* in our *mortal minds* to help us to intelligently fashion our new quantum theory?

What particle of understanding was *mostly lacking* in all of the previous attempts?

This 4 Brain Theory *boldly claims* that this milky-way galaxy is a multi-player *neural simulation*.

Is this complete 4 Brain Theory the *vital new* human *understanding* that we all need to fully understand, in order to properly fashion *a complete theory* quantum mechanics?

Why did *all* the previous attempts (from 1926 to 2023), to accurately discover all of the *inner-workings* of quantum mechanics, *fail to appreciate* that each and every characteristic of quantum mechanics is just a *neural simulation* created by a *wireless network* of real human *brains* (our networked *multiplayer* neural simulation *engine*)?

What does this present 4 Brain Theory paper have to say about “*Quantum Superposition*” and “*Local Realism*”?

What is the proper way to *correct* Quantum Superposition?

How can we make *A Corrected Local Realism*?

# A Corrected Local Realism

What is *A Corrected Local Realism*?

*A Corrected Local Realism* is the realization of our human desire for a complete theory of nature that is both *local* and *real*, by better respecting and appreciating “*Reality Itself*”, and by wisely correcting our old definition of “*Locality*”.

*Realism* is *Reality Itself*, and is therefore our *most precious* possession.

We certainly do not want to *discard* Reality Itself.

This would be very *unwise*.

*Realism* is our precious *Baby of Reality* that has unfortunately been *washed* (during 1926 to 2023) in the dirty old water of an *incorrect definition* of Locality.

We can *easily correct* our view of Local Realism by simply *correcting* our logical *definition* of Locality.

The *old incorrect* definition of locality is *photon-vector-boson locality*.

This *old inaccurate* definition of locality, needs to be wisely replaced with our *new accurate* definition of locality.

This *new accurate* definition of locality is real *dark scalar boson locality*.

Our *Corrected Local Realism* is *Reality Itself* (with no longer any need for any of the old *reality-denying* concepts like “quantum superposition”) communicated at the *ultrafast speeds* of our real *dark scalar bosons* that travel fast enough to easily *transform* our whole *entire* milky-way galaxy our *Local* communication playground.

There is *No Quantum Superposition* in our *Corrected Local Realism*.

# No Quantum Superposition

Why is there *No Quantum Superposition* in our Corrected Local Realism?

Why so?

There is *No Quantum Superposition* in our Corrected Local Realism, because there is *no longer* any conceptual (or physical or logical) need for it.

Our 4 Brain Theory provides a detailed *physical* explanation for every form of *quantum entanglement* between *any set* of *qubits*.

Our real dark scalar bosons provide an ultrafast detailed *physical* mechanism for *quantum nonlocality*.

This photon-vector-boson quantum *nonlocality* is actually a form of real dark-scalar-boson quantum *locality*.

The real reason that we must *discard* quantum superposition is because it *denies reality*.

Saying that a qubit is in a quantum superposition of all of its quantum states at the same time, is a *blanket denial* of reality itself.

There is *no longer* any *quantum need* to deny reality.

Quantum mechanism *no longer* requests that *we deny realism*.

A *qubit* is always in a particular *quantum state*.

A *thing* is always in a particular *real state*.

This is *reality*.

Our *Corrected Local Realism* of our *4 Brain Theory* clearly shows how *reality is physically real*, and how our real dark scalar bosons are *fast enough* to *physically-connect* this whole Milky Way Galaxy *well enough* for all our physical purposes, and how *every physical qubit* (and every *physical elementary particle*) is always *in one* of its exact, deterministic, *physical quantum states*.

Our *Corrected Local Realism* *logically* (and physically) *banishes* the tired *old superstition* of quantum superposition.

There is simply *no longer* any need for it at all.



With No Physical Quantum Superposition, we can also easily begin to see why there is *No Wavefunction Collapse*.

# No Wavefunction Collapse

Why is there *No Wavefunction Collapse* in our Corrected Local Realism?

There is *no longer* any need to *imagine a Wavefunction Collapse* because there is no longer any need to imagine a quantum superposition of quantum states represented by Schrodinger's Famous Wavefunction.

*Schrodinger's Famous Wavefunctions* can be very useful in helping us to *approximately model* certain aspects of some of the *statistical properties*, and some the *probabilistic characteristics*, of some sets of some quantum states, of some of our quantum particles.

However, Schrodinger's Famous Wavefunctions *do not* accurately *represent reality*.

Schrodinger's Famous Wavefunctions *do not exactly* represent reality.

Schrodinger's Famous Wavefunction *do not completely* represent reality.

Every Schrodinger Wavefunction is a logical *mathematical solution* to Schrodinger's Wave Equation of 1926.

This useful Schrodinger's Wave Equation (published by Erwin Schrodinger in 1926) is certainly very useful for *statistical studies* and *probabilistic modeling*.

However, this Schrodinger's Wave Equation *is not all powerful*.

This Schrodinger's Wave Equation *is not a complete description of reality*.

This Schrodinger's Wave Equation *does not fully represent* any of the *physical quantum states* of any of our elementary particles.

This Schrodinger's Wave Equation does *not* fully represent any of the *logical states* of any of our logical qubits.

This Schrodinger's Wave Equation does *not* fully govern any aspect of quantum mechanics.

Schrodinger's Wavefunctions *do not collapse*, because they *do not need to*, and because they do not have any way to do so, and because there exists *no* quantum

superposition of quantum states that still *needs* to be collapsed.

Schrodinger's Wavefunction *does not collapse* because *reality itself prevails*, and the reality is that Schrodinger's Wavefunction exists nowhere except in our own human *imaginations*, because it is *not* really a physical thing, because it is just a *mathematical* wave function that only exists in the world of *mathematics*, logic, and human *imagination*.

However, Schrodinger's Wavefunction is very useful for approximate *scientific statistical studies* and *probabilistic modeling studies* of a wide variety of interesting quantum phenomena.

Our new *corrected local realism* shows a much better (more complete) way of modeling quantum phenomena that is *more-complete*, *more-exact*, *more-insightful*, and *more-useful*.

With our *new* corrected local realism, we can see that the tired old *photon local realism* is very different than our new super-useful *dark-scalar-boson local realism*.

The really good news, is that from our *new* viewpoint of the new ultrafast *dark-scalar-boson realism*, our whole milky-way galaxy is *local* to us scientists here on Earth.

However, from our *old* viewpoint of the relatively-slow photon *vector-boson realism*, most of our milky-way galaxy is still *nonlocal* to us here on Earth.

From this *old nonlocal viewpoint* quantum physics is *fundamentally nonlocal*.

Using this *old* photon-realism *viewpoint*, this present 4 Brain Theory provides a detailed physical theory about *how* quantum physics is fundamentally *photon-nonlocal* (yet always *dark-scalar-boson-local*), because the real human brain is fundamentally *photon-nonlocal* in how it processes information, and in how it *simulates universes* as its *day-dreams*.

In order to better understand this *neural-nonlocality* we need to look more closely at the *Nonlocal Hidden Variables* of our joint real-human brain dreams.

# Nonlocal Hidden Variables

Why do *Nonlocal Hidden Variables* appear to be so fundamentally important to quantum physics?

There seems to be *many lines of evidence* (such as the evidence from EPR, Bell, and Aspect) that seem to suggest that *any* hidden-variable *theory* underlying quantum mechanics must be *nonlocal*.

A real-human *brain simulation* of this universe is *fundamentally nonlocal* because ultrafast real dark axons can carry their *neural pulse* (dark scalar boson) *information* (for significant spatial distances) *trillions* of times *faster* than the *speed of light*.

Another reason this particular universe simulation is *fundamentally nonlocal*, is because the atoms of computation (and the neurons of simulation), that create the simulation, exist in an entirely different kind of universe (a relatively-nonlocal universe) than the simulated universe itself.

The *simulator* universe is *nonlocal* to the *simulated* universe.

It certainly appears that quantum mechanics is nonlocal, by design, at the most fundamental level.

In this 4 Brain Theory paper, we present a *nonlocal* limbic tissue *theory* that contains 4 different real-brain neural tissue locations (the 4 quantum simulation chambers), that are all active in the neural simulation of a single elementary particle.

*How many* nonlocal regions are *actually needed* to fully account for every known measurement of quantum physics?

Why might we actually need *a little bit more* than just *two* nonlocal regions?

What is the *Number of Nonlocalities* that is actually needed?

# Number of Nonlocalities?

What is the correct *Number of Nonlocalities* that are used in the simulation of this milky-way galaxy?

Are 4 quantum nonlocalities *really enough*?

Do we need *more* than 4 nonlocal quantum simulation chambers?

It certainly seems like 4 nonlocal chambers *may be enough*.

These 4 nonlocal chambers are the right and left *hippocampus*, and the right and left *amygdala*, that are all located inside our real-human *limbic system* of real *emotions* and our real *need to daydream* to properly *balance ourselves* (our real human selves) into *peace* and *happiness*.

Can we *properly* simulate, this whole physical universe of trillions of galaxies, with *less* than these 4 limbic *quantum simulation* chambers?

How can we accurately calculate the *exact number* of quantum simulation chambers that are *actually needed*?



How do we know for sure that exactly 4 *Nonlocalities* are  
*Enough*?

# 4 Nonlocalities are Enough

Why do *4 Nonlocalities* seem to be *Enough*?

Our real human brain has *two hemispheres*, and each of our two hemispheres has an *amygdala* and a *hippocampus*.

Both our real human *hippocampus* and our real human *amygdala* seem to be actively involved in the *simulation* of this whole *milky-way* galaxy, where we are currently projecting our mortal *human avatars* onto our Earth self-testing planet.

Therefore, our current understanding of the *neuroanatomy* of a real human brain, *leads* us naturally to *hypothesize* that there are *exactly 4* distinct *quantum chambers* and these 4 quantum chambers *are enough* to *simulate* this *entire* local physical universe.

If *4 distinct* quantum simulation *chambers* are involved in the simulation of each and *every particle* of this local mortal universe, then we can see that we physically have *One Particle in 4 Locations*.

# One Particle in 4 Locations

How can *One Particle* be in *4 Locations*?

What kind of *quantum nonlocality* is this?

Do we know *for sure* that every visible-matter elementary particle is actually *simulated* in 4 different *locations* in our real human brains?

Does this *4-fold nonlocality* give us enough *flexibility* to properly account for *every* measurement ever made by our talented experimental physicists?

If a *single photon* is simulated in 4 different nonlocal neural-tissue regions, then how are the 4 distinct *photon simulations* physically different from each other.

Can the 4 distinct photon-simulations have 4 different *photon-locations* in space, and 4 different photon *spin-orientations*?

How different can the 4 distinct photon simulations actually be?

These 4 distinct photon simulations are simulated in 4 distinct limbic-tissue nonlocalities.

What is the exact nature of these 4 distinctly-different *limbic nonlocalities*?

Why precisely are these 4 *Limbic Nonlocalities* all needed *by us to properly simulate* this whole universe of galaxies, stars, and planets?

# 4 Limbic Nonlocalities

How do our *4 Limbic Nonlocalities* interact with each other to *properly simulate* a single elementary particle?

Does each limbic chamber operate *mostly independently* of the other *3 limbic chambers*?

What kind of *super-high-speed myelinated axons* provide ultrafast darklight (dark scalar boson) communication links between the 4 limbic tissue chambers?

How is our *real neural field* organized somewhat *differently* in each of our *4 human limbic quantum simulation chambers*?

Now let's look more closely at *Our Human Limbic System*.

# Our Human Limbic System

What is *Our Human Limbic System*?

How is our *real human limbic system* of our *real human brain*, any different from our mortal human limbic system of our *mortal human brain*?

What are some of the most important *computational regions* of our *human limbic system*?

Why does our human brain even have a *limbic system*?

What is the *main purpose* of our human *limbic system*?

Many of our mortal human neuroscientists of today (circa 2023) believe that our human limbic system is involved in the processing of some of the *emotional information* of our mortal human brains.

As the human beings that we are, it is important that our human brains are allowed the time and space they need to *self-heal* and *self-balance* their powerful human *emotions* like fear, frustration, anger, hate, boredom, sorrow, anticipation, *excitement*, happiness, *euphoria*, joy, and *surprise*.

Sometimes someone might *suddenly* do something to us that we *do not* fully *expect*.

For example, our girlfriend might *spontaneously push* a bunch of beautiful flowers into our face, so we can smell them (and enjoy them) like she does; but our *vulnerable* unprepared *human brain* may not be fully-ready for the *unexpected new experience* (of having flowers suddenly thrust into our face), and our human brain may discover that it *needs* some time to self-heal and *self-balance* a bit later, when it is allowed to properly sleep and to *dream*.

These *dreaming* (self-brain-balancing) experiences are necessary for our *emotional survival* as the peace-feeling humans we want to be.

*Emotional healing* (brain balancing) can take place inside our *human limbic system*, when we allow our limbic *emotion-balancing system* to do what it was properly designed to do best.

*Two limbic organs* help our human brains to *emotionally-heal* (balance themselves).

These two human limbic organs are called our *Amygdala & Hippocampus*.

# Amygdala & Hippocampus

Our *Amygdala & Hippocampus* are two limbic organs that are involved in the *emotional-balancing* of our human brains.

We all have a *mortal amygdala* that is active when we sleep and *dream at night*, to emotionally-balance our mortal human brain.

We all have a *mortal hippocampus* that is also active when we sleep and *dream at night*, to emotionally-balance our mortal human brain.

We all also have a *real human amygdala* that is always active while we are *daydreaming* a simulated *advanced human-avatar lifetime*, that may sometimes include a set of sequentially-simulated *mortal human-avatar lifetimes*, because our real human amygdala helps to *neurally-simulate* this whole milky-way galaxy, and our real human amygdala also helps us to *emotionally-balance* our *real human brain*.

We all also have a *real human hippocampus* that is always active while we are daydreaming a simulated advanced human-avatar lifetime, that may sometimes include a set of sequentially-simulated mortal human-



avatar lifetimes (like this current 2023 mortal lifetime you are currently living here on Earth), because our real human hippocampus also helps to *neurally-simulate* this whole milky-way galaxy, and our real human hippocampus also helps us to *emotionally-balance* our *real human brain*.

Our *real human hippocampus* helps to simulate the *spacetime aspects* of this milky-way galaxy, in a way that is a *little bit different* than the way that our real human amygdala helps to simulate the *entanglement aspects* of this milky-way galaxy.

Now, let's look a bit closer at *Our Spacetime Hippocampus*.

# Our Spacetime Hippocampus

What is *Our Spacetime Hippocampus*?

*Our Spacetime Hippocampus* is our *real* human *hippocampus* (spatially located deep inside our real human brain in our real universe where we all really live) that helps simulate the *spacetime locations* and *times* of our whole milky-way galaxy, by moving all of the fermion elementary particles (and all of the boson elementary particles) into their *correct locations* in *space*, and also into their *correct time-slots* inside this milky-way galaxy *sequence of temporal spatial quantum events*.

Our Spacetime Hippocampus has two separate neural-simulation quantum chambers, called our *Right Spacetime Hippocampus* and our *Left Spacetime Hippocampus*, because our real human brains have a left hemisphere and a right hemisphere.

A set of ultrafast *myelinated* neural *axons* carry high-speed neural-pulse *correlation information* between the *left spacetime hippocampus* and the *right spacetime hippocampus* to ensure that every quantum particle, from every quantum-interaction event, is *promptly placed* into its *proper position* in our neurally-simulated milky-way galaxy.

Our Spacetime Hippocampus coordinates all of its activities with *Our Entanglement Amygdala* in an intelligent effort to emotionally-balance all of our real human brains.

# Our Entanglement Amygdala

What is *Our Entanglement Amygdala*?

What is the exact theoretical possibility that *quantum entanglement* can physically occur deep inside a *human amygdala*?

*Our Entanglement Amygdala* is our *real human amygdala* (spatially located deep inside our real human brain, in our real universe, where we all really live, as the real human beings that we have always been) that helps simulate the *quantum entanglement activities* of all of the boson and fermion elementary particles of this entire milky-way galaxy.

Our Entanglement Amygdala has two separate neural-simulation quantum chambers, called our *Left Entanglement Amygdala* and our *Right Entanglement Amygdala*, because all of our real human brains have a right hemisphere and a left hemisphere.

Our Entanglement Amygdala coordinates all of its activities (via its ultrafast *real scalar bosons*) with our Spacetime Hippocampus in a way that causes *Our 4 Limbic Simulators* to work together harmoniously to

neurally-simulate this milky-way galaxy, in a grand effort to emotionally-balance all of our real human brains.

# Our 4 Limbic Simulators

What is the nature of *Our 4 Limbic Simulators*?

We all have 4 distinct *non-local* real human-brain *limbic* locations (*quantum simulators*) that jointly-participate in hosting (simulating) our milky-way galaxy as follows:

- (1) Our *Right Spacetime Hippocampus* Limbic Simulator
- (2) Our *Left Spacetime Hippocampus* Limbic Simulator
- (3) Our *Left Entanglement Amygdala* Limbic Simulator
- (4) Our *Right Entanglement Amygdala* Limbic Simulator

In our present *4 Brain Theory*, all of our *real* human *brains*, that jointly together (via a wireless real-human brain network) do *all* the *neural-simulating*, all live inside our real universe where we have always lived as the real human beings that we have always been.

All of our *mortal* human-scientist *brains*, that try to measure elementary particles, all live *inside* this neurally-simulated milky-way galaxy.

This milky-way galaxy is physically *nonlocal* to our real universe (and also *nonlocal* to *our 4 quantum limbic simulators*), because every boson, and every fermion elementary particle of our milky-way galaxy, is simulated

by a set of real human brains that live inside our real universe.

It seems likely that if Albert Einstein and Erwin Schrodinger, had been actively thinking about the *nonlocal* quantum-simulator *relationship* between our real universe (our universal *quantum simulator*) and our milky-way galaxy (our local *simulated galaxy*), then their interesting *1935 descriptions* of the EPR Paradox and of Schrodinger's Cat may have been substantially different.

In the new light of this novel 4 Brain Theory, it is certainly beginning to appear increasingly-obvious that quantum physics itself must be *fundamentally* nonlocal in *nature*, because there are 4 distinctly-separate quantum limbic simulators that *completely simulate* every elementary particle, including *every* spacetime *location* of every *neural component* of every elementary particle, and including every *quantum entanglement* of every pair (or set) of elementary particles of this whole milky-way galaxy.

These 4 Limbic Simulators are also *4 Quantum Simulators* because they work together to simulate every quantum particle of this whole local universe.

# Our 4 Quantum Simulators

What is the nature of *Our 4 Quantum Simulators*?

We have *4 distinct nonlocal* universe regions (*4 quantum simulators*) that all work together to properly host (as our *4 entangled simulators*) our mortal perception of *spacetime*, and all the elementary particle *quantum entanglements* of our local simulation (our own local milky-way galaxy) as follows:

- (1) *Right-Hippocampus Quantum Spacetime Simulator*
- (2) *Left-Hippocampus Quantum Spacetime Simulator*
- (3) *Left-Amygdala Quantum Entanglement Simulator*
- (4) *Right-Amygdala Quantum Entanglement Simulator*

Let's make a few *initial assumptions* about these 4 interesting quantum simulators, and then we can always test, refine, and *improve* our assumptions (our early *hypotheses*) about these *4 quantum simulators* later.

Let's create a simple little hypothesis and assume that our *Right-Hippocampus Quantum Spacetime Simulator* is the "*final spacetime simulator*" that is responsible for placing all the particles of our milky-way galaxy into their *final spacetime locations* that we can all (all of us mortal human scientists) *easily agree upon* according to the



similar ways *we all observe the final spacetime positions of every visible particle* in our whole milky-way galaxy.

Let's also hypothesize and assume that our *Left-Hippocampus Quantum Spacetime Simulator* is the “*initial spacetime simulator*” that is responsible for placing all the particles of our mortal universe into their *initial spacetime locations*, as an *early trial test* of the spacetime locations that *may be needed* to properly balance (and logically-unify) the entire simulation (formed via the *intelligent coordinated activities* of all 4 quantum simulators), and let's also assume that we (all us mortal human scientists of Earth) *never* actually get to *directly see* these *early visible-particle trial test locations*, even though all these *early trial spacetime positions* are present and *recorded* (on real neural limbic cells) inside the left-hippocampus quantum spacetime simulator.

Let's also initially hypothesize that our *Left-Amygdala Quantum Entanglement Simulator* is the “*initial entanglement simulator*” that is responsible for *initially orienting* all the *spins*, of all the entangled elementary particles of our whole milky-way galaxy, into their *initial spin-spin entanglement orientations*, as an *early trial spin test* of the *entanglement spin orientations* that may be needed to *initially balance* the whole simulation, and let's also hypothesize that all of us mortal human scientists (here on planet Earth) *never* actually get to directly

measure (or see, or observe) these early visible-particle *trial spin orientations*, even though all of these early *trial spin-entanglement* orientations are present and *recorded* (on the real limbic neurons that compose all the networked neural tissues, of the left-amygdala quantum entanglement simulator) and ready to *influence* the *behavior* of our right-amygdala quantum entanglement simulator.

Let's also finally hypothesize that our *Right-Amygdala Quantum Entanglement Simulator* is the "*final entanglement simulator*" that is responsible for *finally orienting* the *spins* of all the entangled visible-matter elementary particles (of our milky-way galaxy) into their *final spin-entanglement orientations*, as a *final-orienting* of all of the quantum spins of all of the elementary particles before these *final spin orientations* are transferred over to the right-hippocampus *quantum spacetime* simulator (where these final *spin orientations* will be *added* to the final spacetime *locations* of each elementary particle where our mortal scientists (of Earth) can finally see them and *finally* measure them *scientifically*).

Now that we have made some initial assumptions and early hypotheses about our 4 quantum simulators, let's look even more closely at these 4 *Quantum Chambers*.

# Our 4 Quantum Chambers

What are *our 4 Quantum Chambers*?

*Our 4 Quantum Chambers* are the 4 *physical* semi-isolated relatively-nonlocal *quantum chambers* (separate real neural-tissue human-limbic brain regions), that work together to *generate* every real neural pulse (and to thereby *simulate* every *boson* and every *fermion* elementary particle) of our milky-way galaxy as follows:

- (1) *Right-Hippocampus Quantum Spacetime Chamber*
- (2) *Left-Hippocampus Quantum Spacetime Chamber*
- (3) *Left-Amygdala Quantum Entanglement Chamber*
- (4) *Right-Amygdala Quantum Entanglement Chamber*

According to our initial hypotheses, these 4 *quantum chambers* work *together* as a team of *interlinked* quantum *simulators* to *jointly-simulate* all of the dark matter particles and all the visible matter particles of our whole milky-way galaxy.

The final (ready to be observed by us scientists on Earth) visible matter particles, are all composed by the *electrically-charged* light-boson real neural pulses, which

are the real light *plus* scalar bosons and the real light *minus* scalar bosons.

These observable visible matter particles appear (for all us mortal human scientists, here on Earth, to *see* and *measure*) with their *final* entanglement-oriented *spins* and their *final* spacetime *locations* as they appear, inside the *final-appearance* Right-Hippocampus Quantum *Spacetime Chamber*.

The apparent purpose of the *other* 3 quantum *chambers* is to *prepare* the particle *spins* and particle *positions* for their *transfer* to the *final* Right-Hippocampus *Quantum Spacetime Chamber* where everything has to finally make good logical physically-consistent sense, because in this *final chamber* we can all see (measure and observe) everything (every particle of visible matter) just as quickly as we can invent all the necessary scientific instruments, that will help us all to see all the visible matter as it *finally-appears* in the *final* Right-Hippocampus Quantum *Spacetime Chamber*, which we all observe as our *Observable Universe*.

Because of the real *multiplayer* neural *nature* of these 4 quantum chambers, they *holographically combine* and *embed* multiplayer neural *information* from the real neurons of a *very large number* of different *real* human-brain *players*.

This *multiplayer* holographic *embedding* of some very specific kinds of real neural simulator information, causes our 4 quantum chambers to actually be composed of 4 *Quantum Holograms*.

# Our 4 Quantum Holograms

What are *our 4 Quantum Holograms*?

*Our 4 Quantum Holograms* are contained inside our 4 quantum chambers as follows:

- (1) *Right-Hip Quantum Spacetime Hologram*
- (2) *Left-Hip Quantum Spacetime Hologram*
- (3) *Left-Am Quantum Entanglement Hologram*
- (4) *Right-Am Quantum Entanglement Hologram*

Our *Right-Hip* (Right-Hippocampus) *Quantum Spacetime Hologram* is a *holographically-arranged spectrum* of real *right-hippocampal neural tissues* from literally *billions* of real human brains (and sometimes *trillions* of real human brains) of us real-human *daydream players*.

The *real players* (us real human beings) wirelessly-network some of the *4 limbic tissues* of their real human brains together, in a very intelligent way that is a kind of *multiplayer neural hologram* to generate and form each of the *4 quantum holograms* that simulate this local milky-way galaxy that contains our planet Earth.

Therefore, each one of us real human beings *contribute* a small *portion* of the total computational power of our own

real *limbic neurons* to help *construct* each of the 4 *universal* quantum hologram *constructors* (our 4 quantum holograms) that *holographically construct* (and host, and simulate, and energize, and maintain) our local milky-way galaxy.

Our *Left-Hip* (Left-Hippocampus) Quantum *Spacetime Hologram* is holographically composed of *left-hippocampal* limbic neural tissues *from* each one of *us* real human brains.

Our *Left-Am* (Left-Amygdala) Quantum *Entanglement Hologram* is a *holographically-networked* set of *left-amygdaloid* limbic neural tissues from each of our real human brains.

Our *Right-Am* (Right-Amygdala) Quantum *Entanglement Hologram* is formed from a collection of our holographically-arranged *right-amygdaloid* real human neurons.

In this way, *every* real human brain, that *may* one-day *choose* to incarnate (daydream-animate a mortal-human avatar, via an advanced-human avatar) on *planet Earth*, is given the *opportunity* to *participate* (constructively-contribute some of its real limbic neurons) to the *holographic formation* of our 4 quantum holograms, which are the real-neural *limbic tissues* inside our 4

quantum chambers that simulate *all* of *planet Earth* and its whole milky-way galaxy.

An important part of any hologram is its *holographic surface*, and the kind of *quantum information* that can be stored inside this *holographic surface*.

Let's take a good look at the *4 Hologram Chamber Surfaces* of our 4 holographic limbic quantum chambers.



# Hologram Chamber Surfaces

What is the physical nature of our *4 Hologram Chamber Surfaces*?

Why are these *4 holographic surfaces* so important?

How do these *2D holographic surfaces* encode *3D quantum information*?

Why does our *mortal* human brain have just *6 neural surface layers* in its *neocortex*, and only *3 or 4 neural surface layers* in its *allocortex*?

How are we (the mortals of Earth) ever able to *think clearly* (or *feel clearly*) with *so very few cortical surface layers* of computational neurons?

These are the *two* different *types* of *cerebral cortex* in our mortal human brain, with our *smaller allocortex* being about *10%* of our cerebral cortex, and with our *larger neocortex* being about *90%* of our cerebral cortex.

Our *advanced* human brain has *more* cortical surface *layers* than our *mortal* human brain, because our advanced human avatar brain (on planet Kolob) is *much*

more *intelligent* than our mortal human avatar brain (on planet Earth).

Our *real* human brain has *more* cortical surface *layers* than our *advanced* brain, because our real human brain (in our real *un-created* universe) is *much* more *intelligent* than our advanced human avatar brain (on planet Kolob in our *created* milky-way galaxy).

Our *real* human brain may have over a *dozen* neural surface *layers* in its *real allocortex*, and over a *couple dozen* neural surface *layers* in its *real neocortex*.

A cortex is the *outer part* of a thing.

A cortex may have *multiple* outer parts, surfaces, or *surface layers*.

Our *Real Neocortex* is a set of real *2D holographic* neural *surfaces* that encode *3D spatial information*.

For example, our *real primary visual* neocortex encodes *3D spatial visual* information (from the visual field of our two *real human eyeballs*) on its set of *2D holographic neural surfaces*.

For another example, our *Real Allocortex* encodes *3D spatial emotional* information (from the visual,

*somatosensory*, auditory, taste, and *olfactory* nerves of our advanced-human, and our *mortal-human* sensory organs) on its set of 2D holographic *real* neural surfaces.

*Our Real Allocortex* helps our real limbic system simulate this entire milky-way galaxy.

# Our Real Allocortex

What is the detailed physical nature of *Our Real Allocortex*?

The 3 *subtypes* of our *real allocortex*, are our *real paleocortex*, our *real archicortex*, and our *real periallocortex*.

Our *real human hippocampus*, and our *real human olfactory system*, are both part of our *real human allocortex*.

Our *real human periallocortex* is a real zone of *transitional real neural tissues* between our *real allocortex* and our *real neocortex*.

Our *real allocortex* has *three* or *four surface* layers of *neuronal cell bodies*, that talk to each other, and that talk to other limbic tissues and to neocortical tissues.

Our *real paleocortex* is a type of thin cortical tissue that consists of *three cortical laminae* (surface layers of cortical neurons) in our *real olfactory bulb*, in our *real olfactory tubercle*, and in our *real pyriform cortex*.

Our *real archicortex* consists of the *four surface laminae* of the *hippocampus* and the *dentate gyrus*.

Our *real pyriform cortex* (of our real paleocortex) is a part of our *real rhinencephalon* that is situated in our real human *cerebrum*.

The function of our real *pyriform cortex* relates to our real *sense of smell*.

Our real *pyriform cortex* consists of our real *cortical amygdala*, our real *uncus*, and our real anterior *parahippocampal gyrus*.

Our real human *pyriform cortex* is spatially located between our *real insula* and our *real temporal lobe*, anteriorly and laterally of our *real amygdala*.

A close scientific study of our *real amygdala* will reveal how the neural tissues, limbic structures, and *quantum functions* of our real amygdala, all work together, to make the 1935 process of “*ER = EPR*” to physically happen biologically inside our super-powerful real amygdala.

# 1935 ER = EPR

What exactly is the  $ER=EPR$  equivalence of 1935?

What does the equation  $ER=EPR$  really mean?

Was all of  $ER=EPR$  first published in 1935, or just a part of it?

$ER=EPR$  is the correct scientific realization that Albert Einstein's " $ER$ " paper is equal to his " $EPR$ " paper; with both of these two super-famous scientific papers being published in the year 1935.

This interesting  $ER=EPR$  scientific realization is a logical conjecture in physics that states that a pair (an  $EPR$  pair) of quantum-entangled particles are connected by a wormhole (an  $ER$  bridge).

Is this theoretically possible?

Can an  $ER$  bridge (ER wormhole) really connect an  $EPR$  pair (a pair of quantum-entangled particles) together across a spacelike distance?

These  $ER$  bridges are also called *Einstein-Rosen bridges*.

These famous ER bridges are named after *Albert Einstein* and *Nathan Rosen*.

These powerful ER bridges are also sometimes called *Schwarzschild wormholes*, after a talented German physicist named Karl Schwarzschild (1873-1916) who provided in 1915 the first exact solution, to the 1915 Einstein equations of gravity, as a clever derivation of the *Schwarzschild radius* (event horizon) of a *black hole*.

Karl Schwarzschild accomplished this useful *scientific achievement* while serving in the German army during World War I, before dying of pemphigus (an autoimmune disease he developed while at the Russian front) in 1916.

On May 15, 1935, Albert Einstein, Boris Podolsky, and Nathan Rosen published their famous *EPR paper* titled “*Can quantum-mechanical description of physical reality be considered complete?*” in Physical Review [25].

Just six weeks later on July 1, 1935, Albert Einstein and Nathan Rosen published their famous ER paper titled “*The particle problem in the general theory of relativity.*” in Physical Review [28].

The May 1935 EPR paper is about *quantum entanglement*, and its apparent need for a *nonlocal*

*connection* to physically entangle quantum particles across vast *spacelike distances*.

The July 1935 ER paper is about the *ER bridges* (Einstein-Rosen *wormhole-bridges*) that seem to be proper *mathematical wormhole solutions* to Einstein's 1915 equations of general relativity (gravity).

Are these *ER Wormholes* (of the July 1935 ER paper) the nonlocal connections (ER bridges) that can provide the kind of nonlocal *EPR Entanglement* (described in the May 1935 EPR paper) that seems to happen between two quantum particles?

Do these *ER Wormholes* = *EPR Entanglement*?

Do *Wormholes* = *Entanglement*?



# Wormholes = Entanglement

Do *Quantum Wormholes = Entanglement*?

Are the many long *ER Wormholes* able to provide the type of nonlocal *EPR Entanglement* needed for all our quantum particles in this milky-way galaxy?

Can a set of long skinny ER wormholes really connect an *EPR pair* (a pair of quantum-entangled particles) together across a spacelike distance?

Can these long skinny *ER wormholes* be *real dark axons* from real human brains?

Why not?

Are the *ER bridges* composed of real *dark axons* that propagate their real dark *scalar bosons* at darklight speeds that are *trillions* of times faster than the speed of light?

Are these ultrafast *dark-matter ER particles* (real dark scalar bosons traveling through ER bridges) able to provide *nonlocal hidden communications* between a pair of *EPR-entangled* quantum particles, due to their ultrafast (trillions of times faster than the speed of light) velocities

as they propagate as real action potentials through the high-speed *Einstein-Rosen bridges*?

Yes.

Of course.

What is the real nature of these *Dark Axon ER Wormholes*?

# Dark Axon ER Wormholes

What is the physical nature of our *Dark Axon ER Wormholes*?

What kind of *Dark Axon ER Wormholes* connect our visible local *Spacetime Hippocampus* with our hidden nonlocal *Entanglement Amygdala*?

How do these dark axon ER wormholes maintain the ultrafast nonlocal connection between an “*amygdala atom*” in our entanglement amygdala, and a corresponding “*visible atom*” in our spacetime hippocampus?

Which of our bright scientists have recently been suggesting that ER wormholes = EPR entanglement?

In 2013, Juan Maldacena (born in 1968) and Leonard Susskind (born in 1940) published an *ER=EPR paper* titled “*Cool horizons for entangled black holes*” [29], and this now-famous paper has become known by some as the “*2013 ER=EPR paper*”.

Why did Juan Maldacena and Leonard Susskind choose to write and publish such an interesting “*ER = EPR*” paper in 2013?

What exactly is the nature of their 2013  $ER = EPR$  physical theory?

# 2013 ER = EPR

What is the main purpose of this powerful game-changing 2013 *ER = EPR* theory paper?

In their brilliant, groundbreaking 2013 *ER = EPR* paper, Juan Maldacena and Leonard Susskind write in their *Abstract* that “General relativity contains solutions in which *two* distant *black holes* are connected through the interior via a *wormhole*, or *Einstein-Rosen bridge*. These solutions can be interpreted as maximally *entangled* states of two black holes that form a complex *EPR pair*. We suggest that *similar bridges* might be present for more *general entangled states*.”

In 2016, Leonard Susskind published a paper titled “*Copenhagen vs Everett, Teleportation, and ER = EPR*” [30], and this now-famous paper has become known by some as the “*2016 ER=EPR paper*”.

In this brilliant, deeply-insightful 2016 *ER=EPR* paper, Leonard Susskind writes his *wise prescient words*:

“But over the last *two years*  
I’ve come to see it *differently*.”

Now I feel that our *current views*

of *quantum mechanics*  
are *provisional*;

it's the best we can do  
without a much *deeper* understanding  
of its *connection* with *gravity*,  
but *it's not final*.

The reason involves  
a very particular development,  
the so-called *ER=EPR principle*.

ER=EPR tells us that the  
immensely complicated  
*network of entangled subsystems*  
that *comprises the universe*  
is also an immensely complicated  
(and technically complex)  
*network of Einstein-Rosen bridges*.

To me it seems obvious  
that if ER=EPR is true,  
it is a very big deal,  
and it must affect  
the *foundations*  
and *interpretation*  
of *quantum mechanics*.”

Wow!

*How* were both Leonard Susskind and Juan Maldacena able to develop such *excellent* physical intuition?

What exactly *lead them* to consider their brilliant ER=EPR idea *so deeply* and *so carefully*?

How does ER=EPR affect the *foundations* of quantum mechanics?

This is a really *excellent* question.

Here is a *detailed physical* answer...

The scientific realization, that real *dark axon* ER *wormholes* carry real dark *superluminal* scalar bosons, between the Visible Local Hippocampus and the Hidden Nonlocal Amygdala, provides to quantum mechanics an *exact physical mechanism* for *quantum entanglement*.

How does ER=EPR affect the *interpretation* of quantum mechanics?

This is another *excellent* question.

Here is another detailed physical answer ...

The realization that real *light axon ER wormholes* carry all of the real *light scalar bosons*, that together dynamically-compose all the *fermions*, and all the vector *bosons*, provides to quantum mechanics an *exact physical mechanism* for the *deterministic physical quantum existence (inner physical structure)* of every physical quantum particle of *quantum mechanics*.

This correct scientific realization, that real *physical human ER axons* are the *Einstein-Rosen wormhole bridges* that comprise this whole universe, makes both *quantum gravity* and *quantum mechanics* exact, deterministic, *physical*, and understandable.

The *network of entangled subsystems* that comprise the whole universe is a *massive multiplayer neural ER axon network of axonal Einstein-Rosen bridges*, that provide the real *dark ER axons* that carry the tiny fast real *dark scalar bosons* that cause *all of the quantum gravity* of this whole universe, and that provide the real *light ER axons* that carry the slower real *light scalar bosons* that comprise all the *fermions*, and all the *vector bosons*, of this entire neurally-simulated universe.

How exactly do the real dark axonal Einstein-Rosen bridges carry their trillions of trillions of tiny fast dark scalar bosons to and from our *Visible Local Hippocampus*?



# Visible Local Hippocampus

What exactly is our *Visible Local Hippocampus*?

Our *Visible Local Hippocampus* is the portion of our real *right Hippocampus* that is *Visible* to us (and *Local* to us) here on this local visible *Earth* planet.

Our real *left Hippocampus* is *almost visible* to us, and *almost local* to us, because our real left Hippocampus is where all the particles of our local spacetime are *all put together*, with their *final spins*, and their *final momenta*, and their *final positions*, before they are all properly *presented to us* here in our real *local visible* right Hippocampus.

Our real left Hippocampus, and our real right Hippocampus, use real *light* axons that are relatively *large*, thick, and *slow*, compared to the trillions of *tiny fast* real *dark axons* (ER *wormhole bridges*) that connect these *two hippocampal* hemispheres with the *two amygdaloid* hemispheres.

These tiny fast super-myelinated real *dark ER* wormhole *axons* are so tiny that they actually have *axonal diameter lengths* that are about the *Planck length* of about  $1.6 \times 10^{-35}$  meters.

This super tiny *Planck length scale* is small enough for our real dark *ER axon wormhole* bridges to fill the immensity of space, determine the *geometry* of our local *universe*, and *govern space*, time, and *quantum gravity* via *ER axon wormhole entanglement* at this super tiny Planck length scale.

How does this Planck length-scale ER-axon wormhole entanglement connect the *visible fermions* (and visible vector bosons) of our Visible Local Hippocampus with the *hidden fermions* (and hidden vector bosons) of our *Hidden Nonlocal Amygdala*?

# Hidden Nonlocal Amygdala

What exactly is our *Hidden Nonlocal Amygdala*?

Our *Hidden Nonlocal Amygdala* is our *real* human *Amygdala* (that lives as a piece of computational *real* neural *tissue* in our *real universe* up above all of Plato's caves) that is *Nonlocal* (to us mortal human scientists here inside this milky-way galaxy multiplayer neural simulation on our Earth planet), and that is *Hidden* from us, because we cannot see it directly, because we can only see its *powerful nonlocal amygdaloid effect* on *all* the *entangled* quantum particles in our Earth-based scientific laboratories.

Inside this hidden *nonlocal amygdala* is the set of *nonlocal hidden variables* that have been so diligently sought by so many of the talented physicists who have been researching the foundations of quantum mechanics for multiple decades.

One might choose to ask, “what exactly is the physical nature of these specific *physical nonlocal hidden variables* that we can discover deep inside of our real hidden *nonlocal amygdala*”?

What exactly is the correct answer to this very important question?

Here is a possible answer ...

The physical *nonlocal hidden* variables (inside our real hidden nonlocal amygdala) comprise the *set* of real neural *structures* (real neural-pulse *scalar-boson* dynamic structures) that are actively *biologically* maintained by the *physiologic functions* of our real amygdala.

For example, our *real amygdala* is able the neurally support the *chemical bonding* of many different *molecules*.

These nonlocal hidden *amygdaloid molecules* are slightly different than the local visible *hippocampal molecules* that we can so easily *visibly see* with our powerful microscopes here in our scientific laboratories on Earth.

For every visible *hippocampal molecule* of our planet Earth, there is a corresponding *amygdaloid molecule* residing hidden deep inside our nonlocal amygdala.

Likewise for every visible-matter *hippocampal elementary* (fermion or vector-boson) *particle*, there is a corresponding *amygdaloid elementary particle* residing nonlocally deep inside our hidden amygdala.

Therefore, it nearly goes without saying that for every visible *hippocampal qubit* of Earth, there is a corresponding hidden *amygdaloid qubit* residing deep inside our nonlocal amygdala.

At first, we can initially view a “*full qubit*” (a *complete quantum bit*) is to think of this *full qubit* as being composed of just 2 *limbic qubits*, including one *visible hippocampal qubit* and one *hidden amygdaloid qubit*.

As a matter of scientific fact, every *full qubit* is a *complete qubit*, which is really 4 *qubits*, corresponding to the 4 *quantum limbic chambers* of the (1) right hippocampus, the (2) right amygdala, the (3) left amygdala, and the (4) left hippocampus.

Understanding all the scientific details of this complete structure of a *complete qubit* is the grand key to understanding this powerful new theory of *complete quantum mechanics* we are presenting in this 4 Brain Theory paper.

However, for the sake of *scientific simplicity*, to more simply illustrate the main difference between *hidden qubits* and *visible qubits*, we can sometimes just pretend (for a brief moment of insight) that every *full qubit* is

really just *two limbic qubits*, with the two qubits being the *visible qubit* and the *hidden* (non-visible, nonlocal) *qubit*.

Therefore, let's consider a *full qubit* to be the conceptually-simple set of *one visible qubit* plus *one hidden qubit*.

The *visible qubit* lives inside the *visible hippocampal* quantum chamber that we can all *easily observe*, and easily measure, with all our sensitive mortal human senses (including seeing, hearing, tasting, touching, and smelling), and with all our powerful new scientific instruments (like microscopes and telescopes, that properly extend our mortal human senses) here on Earth.

The *hidden qubit* lives inside the *hidden amygdaloid* quantum chamber that *we cannot see* (from our limited Earth-based viewpoint deep inside this milky-way neural simulation) because this hidden qubit is *hidden* from *us*.

This composite *hidden qubit* is actually composed of *two* amygdaloid *qubits*, because our real human amygdala has a *right* amygdaloid quantum chamber and a *left* amygdaloid quantum chamber.

Likewise, the composite *visible qubit* is actually composed of *two* hippocampal *qubits*, because our real

human hippocampus has a *right* hippocampal quantum chamber and a *left* hippocampal quantum chamber.

Since every full qubit is a *complete qubit* that is physically composed of 4 *limbic qubits*, we can see that every complete qubit can be scientifically represented by 4 Logical *Bloch Spheres*.

Therefore, there are 4 *Bloch Spheres* for every *Full Qubit*.

# 4 Bloch Spheres per Qubit

Why are there really *4 Bloch Spheres* for every *Full Qubit*?

Why are *4 Bloch Spheres* logically needed, to fully represent a *Full Qubit*, instead of just *1 Bloch Sphere*?

What exactly is a “*Full Qubit*”?

What precisely is a “*Full Bloch Sphere*”?

A Full Qubit is a complete qubit that completely represents all the *quantum-dynamical* interacting-mechanics of the *4 bloch spheres* that interact with each other inside of one single Full Bloch Sphere.

Therefore, a Full Bloch Sphere is an *interacting set* of 4 Bloch Spheres, which can represent a *Complete Qubit*, which is a *logically exact way* to represent a Full Qubit.

Thus, a *Full Qubit* is an interacting set of *4 Limbic Qubits*.

A *Full Qubit* is a *Complete Qubit*, which is the quantum-dynamic mutually-interacting set of *4 Limbic Qubits* consisting of a right hippocampal qubit, a right



amygdaloid qubit, a left amygdaloid qubit, and a left hippocampal qubit.

However, to keep things a little bit *more-simple*, let's first *pretend* that a *Full Qubit* is just a set of 2 *Limbic Qubits*.

Therefore, let's simply consider (pretend briefly) that a *Full Qubit* is just a single *visible hippocampal qubit* and a single *hidden amygdaloid qubit*.

Therefore, a good logical way to partially represent a single *Full Qubit*, is to simply model this Full Qubit as a simple set of *two* interacting limbic *Bloch Spheres*.

Therefore, let's model our *Full Qubit* as a *Full Bloch Sphere* consisting of a *Visible Hippocampal Bloch Sphere* and a *Hidden Amygdaloid Bloch Sphere*.

Therefore, a full qubit can be usefully represented as *two* interacting *bloch spheres*.

A *full qubit* is a *visible-qubit bloch sphere* that quantum-dynamically interacts with a *hidden-qubit bloch sphere*.

The *Hidden-Qubit Bloch Sphere* lives inside our hidden nonlocal amygdaloid limbic quantum chamber in our real universe.

The *Visible-Qubit Bloch Sphere* lives inside our visible local hippocampal limbic quantum chamber that we can easily see, measure, and observe as our very-own milky-way galaxy that contains our very-own spinning Earth planet.

# Visible-Qubit Bloch Sphere

What exactly is our *Visible-Qubit Bloch Sphere*?

Our *Visible-Qubit Bloch Sphere* is the easily-visible *Bloch Sphere* that we can easily measure (and *visibly-observe*) with our *Stern-Gerlach Spin-Measuring Apparatus* (and with our other scientific instruments) here on Earth.

Our *visible-qubit bloch sphere* is the visible bloch sphere that we can *scientifically observe* and *see* with our own mortal human *eyes*, and *measure* with our own mortal human *senses* of sight, taste, touch, smell, and hearing.

The set of *all* visible-qubit *bloch spheres* is our particular visible physical universe, that currently contains our very own milky-way galaxy.

This set of all *visible-qubit* bloch spheres is this *visible universe* where we all live as mortal human beings here on Earth.

This *set* of all visible-qubit bloch spheres is safely encapsulated *inside* our quantum neural network of real *right hippocampal* tissues.

Our right hippocampus is the *real home* (real limbic simulator) of each and every Visible-Qubit Bloch Sphere.

Every Visible-Qubit Bloch Sphere has a corresponding *Hidden-Qubit Bloch Sphere*, that together constitute the Full-Qubit Bloch Sphere.

Where can we find this corresponding *Hidden-Qubit Bloch Sphere*?

# Hidden-Qubit Bloch Sphere

What exactly is our *Hidden-Qubit Bloch Sphere*?

How can a Bloch Sphere be *hidden*?

How can a Bloch Sphere be *visible*?

What is a *Bloch Sphere*?

Who *invented* the first useful Bloch Sphere?

Some believe the first useful *Bloch Sphere* was invented by a very-talented and highly-imaginative Swiss-American Physicist named *Felix Bloch* (1905-1983), after he became the very first physics graduate student of *Werner Heisenberg* (1901-1976).

The *Bloch Sphere* is like a *spherical ball*, that has a *vector pointer*, that starts at the exact center of the ball (the very center of the bloch sphere) and extends its precise *vector-point* to some *specific location* on the two-dimensional *spherical surface* of the ball, with this specific *spherical-surface location* describable by either a *three-dimensional vector*, or by *two rotation angles*.

Therefore, a *Bloch Sphere* is kind of like a perfectly *spherical basketball*, or a little *round tennis ball*, or a big *spherical beach ball*.

A *Bloch Sphere* is a *Ball*.

A *Ball* is a *Bloch Sphere*.

A *Bloch Sphere* is a *Ball* that is used to understand a *qubit*.

A *qubit* is a *quantum bit*.

A *quantum bit* is a *two-state quantum system*.

A full set of 4 *Limbic Bloch Spheres* can be viewed as a full geometrical representation of a *Full Qubit*.

A *partial set* of just 2 *Limbic Bloch Spheres* (the *visible bloch sphere*, and the *hidden bloch sphere*) can be viewed as a *partial* geometrical representation of a *Full Qubit*.

Therefore, one or more *Bloch Spheres* can be used to help us to understand a *two-state quantum system*.

A *larger number* of *Bloch Spheres* can together help us to understand the quantum entanglement of *two qubits*.

A proper *set* of Bloch Spheres (*Bloch Balls*) can be wisely employed (with their connecting real *dark-axon* ER *wormholes*) to physically-demonstrate how *two qubits* can physically *quantum-entangle* with each other.

Any *specific location* on the surface of the Bloch Ball (Bloch Sphere) can be represented by *two rotation angles*.

Any location on the surface of the bloch ball (bloch sphere) can also be represented by a *3D vector* extending from the center of the ball to a *specific point* on the surface of the ball.

A bloch sphere is a *ball*, and the set of *locations* on the *surface* of the ball.

What is our Hidden-Qubit Bloch Sphere?

Our *Hidden-Qubit Bloch Sphere* is our nonlocal *Bloch Sphere* that is *Hidden* deep inside our real Amygdala.

This Hidden-Qubit Bloch Sphere is kind of like a *Black Bloch Sphere* because it is *so black* it is *hard to see*, and *hidden* from our view.

These black bloch spheres are like *black balls* that are *darkly-hidden* deep inside our real *black amygdalae*.

The many dark (black) neural activities of our real amygdalae are *not* directly visible to us scientists located here inside this milky-way galaxy limbic simulation.

But the fascinating quantum effects (of the quantum-entanglement neural activities of all of the *black bloch balls* in our real black amygdalae) are sometimes indirectly observable to some of us mortal-human scientists here on Earth.

What is the real nature of these *black bloch balls* of our real amygdala, and how do they functionally differ from the *white bloch balls* of our real hippocampus?

What is really happening with these *White Balls & Black Balls*?



# White Balls & Black Balls

What are these *White Balls & Black Balls*?

The *White Balls* are the *Visible Balls* that we *can see*.

The *Black Balls* are the *Hidden Balls* that we *cannot see*.

The *White Balls* are the Visible *White Bloch Spheres* of our Visible *White Right Hippocampus*.

The *Black Balls* are the Hidden *Black Bloch Spheres* of our Hidden *Black Left Amygdala*.

These quantum-interacting *black balls* and *white balls* are not the only dynamically-interacting *colored balls* in our real-human quantum-computational limbic tissues.

We also have *blue balls* and *red balls*.

Of course, we are just inventing 4 simple “*label-colors*” to help us to clearly keep track of *all 4* of our real biologically-interacting quantum limbic *colored-balls*.

What is the actual real quantum-neurological nature of our *White Balls*, our *Blue Balls*, our *Black Balls*, and our *Red Balls*?

# White Blue Black Red Balls

Why do we have *White Balls, Blue Balls, Black Balls, and Red Balls*?

Why exactly do we all have these *4 different limbic balls*?

We have *4 different limbic quantum balls* because we have *4 real limbic quantum-simulation neural chambers* that we (real human beings with our real *human brains*) use to simulate each and *every qubit* of this whole *milky-way* galaxy.

These *4 limbic quantum balls* are the *4 limbic quantum bloch spheres* that logically (and physically) represent a single logical (and physical) qubit.

Every single *individual qubit* of our entire *milky-way* galaxy can be logically represented as the *4 colored bloch-sphere quantum balls*, including a *white* ball, a *blue* ball, *black* ball, and a *red* ball.

The *white* bloch-sphere *ball* lives inside our real very-visible *right hippocampus*.

The *blue* bloch-sphere *ball* lives inside our real mostly-hidden *right amygdala*.

The *black* bloch-sphere *ball* lives inside our real deeply-hidden *left amygdala*.

The *red* bloch-sphere *ball* lives inside our real nearly-visible *left hippocampus*.

These 4 *distinctly-colored*, distinctly-nonlocal, distinctly-separate *bloch spheres* (colored balls) are the 4 *logical* bloch *spheres* that correspond to a *single qubit* inside our neurally-simulated advanced universe.

This means that we can logically represent *one qubit* with these 4 colored balls (*4 bloch spheres*).

This also means that the best way to logically understand the qubit-qubit *quantum entanglement* between any *pair* of *qubits* is to look closely at what actually physically (and logically) happens to each of these *interacting* colored *bloch spheres*.

These *four* colored *bloch spheres* (limbic bloch balls) *interact* with each other in a very interesting way to create the *exact* physical *phenomenon* that we call *quantum entanglement*.

*Two* of these four bloch spheres (the *white* bloch sphere, and the *red* bloch sphere) live safely inside our real

human *hippocampus* inside our *real* human *brains*, inside our real human bodies, inside our *real universe* where we all have actually always lived.

The *other two* of these four bloch spheres (the *blue* bloch sphere, and the *black* bloch sphere) live safely *hidden* inside our real human *amygdala* inside our *real* human *brains*, inside our real human bodies, inside our *real universe* where we all have actually always lived.

What is the real exact physical nature of these *2 Hidden Amygdaloid Balls* (Bloch Spheres)?

## 2 Hidden Amygdaloid Balls

What exactly is the actual, real, deterministic, limbic, physical, neural nature of our 2 *Hidden Amygdaloid Balls*?

How are these 2 bloch spheres *neurally-wired* together?

How are these 2 Amygdaloid *bloch spheres* neurally-wired together with the other 2 bloch spheres that live inside their respective *Hippocampal* quantum chambers?

The *blue* amygdaloid bloch sphere is the *blue ball* that physically lives inside our real *right* amygdala.

The *black* amygdaloid bloch sphere is the *black ball* that physically lives inside our real *left* amygdala.

These *two* amygdaloid *balls* rapidly *communicate* with each other via trillions of *ultrafast* real dark *scalar bosons* that propagate at *darklight speeds* (trillions of times faster than the speed of photon light) on real dark *axonal fibers* that link the *two hemispheres* (that link the right amygdala to the left amygdala) in our *real network* of real human brains in our real universe.

These amygdaloid *black* and *blue* balls *physically* (neurally) *maintain entanglement* between a pair of two entangled particles, by *maintaining* their *amygdaloid* physical *bonds* in their amygdaloid quantum chambers, *even after* the corresponding hippocampal physical bonds have been *broken*.

How can these hidden amygdaloid *black* and *blue* balls hold onto their *physical* particle-particle *bonds*, for *much longer* than the more-visible hippocampal *red* and *white* balls?

What is the real-neural physical nature of these *2 Visible Hippocampal Balls*?

## 2 Visible Hippocampal Balls

What are these 2 *Visible Hippocampal Balls* actually made of?

These 2 Visible Hippocampal Balls are the red and white bloch spheres that live inside our real hippocampus.

These red and white bloch spheres are composed of the real neural limbic tissues of our real human hippocampus that is inside our real human brains in our real universe.

The *white* bloch-sphere *ball* lives inside our real very-visible *right hippocampus*.

The *red* bloch-sphere *ball* lives inside our real nearly-visible *left hippocampus*.

This *red ball* prepares the real-dark scalar-boson *information* to be sent to the *white ball* that *we* (us mere mortals) *can see*.

We scientists of Earth can see the *white balls* because they are *visible* to our mortal human *senses* that are connected to our mortal human brains.

The *particular* milky-way *galaxy* that *we* (us mortal scientists of Earth) *can see*, is the particular milky-way galaxy that exists (and lives) inside our real-human *right hippocampus*.

This particular *easily-visible* right-hippocampal milky-way *galaxy* is the particular milky-way galaxy that is composed of all of *The Very-Visible White Balls*.



# The Very-Visible White Balls

What is the purpose of all of these *Very-Visible White Balls*?

The *purpose* of these trillions of trillions of trillions of *Very-Visible White Balls* (of this right-hippocampal milky-way galaxy, and our *right-hippocampal* planet *Earth*) is to *give us* (mortal human scientists of Earth) something to see, *something to observe*, and something to measure, and *something to live within*.

*We* the *people* of Earth, and we the people of our milky-way galaxy, and we the people of this neurally-simulated advanced universe, *need a visible* (tangible) *environment* that we can *live within*, while our real-human brains are *daydreaming* that *they* are *us*.

*Everything* we (the people of Earth) can see, touch, taste, hear, or smell comes from our *Earth-environment* which is entirely composed of the *visible white balls* (the visible *white bloch spheres*).

For example, if we use our powerful (Earth-based) scientific instruments to *isolate* a single *dihydrogen molecule* (an isolated diatomic hydrogen molecule) that is composed of *two hydrogen atoms* bound *together* with a

hydrogen-hydrogen *covalent bond*, then we can consider the *two electrons* of the covalent bond, as being *two qubits* with their *two qubit spins* (two electron spins).

What is the actual nature of these *2 Electron Spins* of *Dihydrogen*?

# Dihydrogen 2 Electron Spins

Why does *Dihydrogen* have only *2 Electron Spins*?

Why does a *single molecule* of diatomic hydrogen have exactly *2 Electron Spins*?

The reason that diatomic hydrogen (Dihydrogen) has exactly *2 electron spins* is because a single dihydrogen molecule has exactly *2 electrons*, and each of these two electrons has its very own *electron spin*.

These *two electron spins* (two qubit spins) are always oriented in *opposite spin directions* while the two electrons are *tightly bound together* inside the dihydrogen molecule.

This diatomic hydrogen molecule is composed of just *two electrons*, and just *two protons*, and just *zero neutrons*.

The *weak* protonic magnetic fields (produced by the two protons) are weak enough so that the *two protons* can have their *two proton spins* aligned in a *parallel* (or *anti-parallel*) manner inside of an individual dihydrogen molecule.

When the two protons have their proton spins aligned in a parallel (*same*) direction, this *proton-spin parallel* form of dihydrogen is called ortho hydrogen or *orthohydrogen*.

When the two protons have their proton spins oriented in opposite (anti-parallel) directions, this *proton-spin anti-parallel* form of dihydrogen is called para hydrogen or *parahydrogen*.

These two *nuclear spin isomers* (two proton-spin-orientation isomers) of dihydrogen are both found in *abundance* here on Earth.

The *strength* of the magnetic dipole moment of an *electron* is nearly *three* orders of magnitude stronger than the magnetic dipole moment of a *proton*.

This super-powerful *electronic magnetism* of the two electrons of dihydrogen, play a *more* powerful *role* in governing the behavior of dihydrogen, than the relatively-weak *protonic magnetism* of the two protons.

The *much stronger* electronic magnetic fields produced by the *two electron spins*, cause these two electrons to always *maintain* their electronic spins in *opposite directions* while they are *both* tightly *bonded* to the dihydrogen molecule (while the two atoms of hydrogen

are still *covalently bonded* tightly together as a single dihydrogen molecule).

This marvelous dihydrogen molecule will help us (in this present 4 Brain Theory paper) to begin to understand the *core physical nature* of quantum entanglement much *more deeply* than ever before.

There is *no molecule* in our entire milky-way galaxy that is more-simple than this super-simple *dihydrogen molecule*.

We can use this most-simple dihydrogen molecule to help us to *illustrate* how *quantum entanglement* physically (and logically) works right here inside our very own milky-way galaxy.

Our dihydrogen molecule has *two electrons* (Electron 1, and Electron 2) that can together be represented as *two Full Bloch Spheres*.

What is the detailed physical nature (and logical qubit structure) of these two *Full Electron Bloch Spheres*?

# Full Electron Bloch Spheres

*A Full Electron Bloch Sphere is the set of 4 colored interacting bloch spheres that logically represent the physical direction of the spin of the electron.*

*A Full Bloch Sphere is the set of 4 colored interacting bloch spheres that logically represent the physical direction of a spin qubit.*

*Each individual full bloch sphere is composed of four colored bloch spheres (4 colored balls).*

*Therefore, we can logically represent the two spins of the two electrons (two electron qubits) as specific spin-direction points on 8 colored balls (8 colored Bloch Spheres) as follows:*

- (1) Electron 1 *White* Bloch Sphere
- (2) Electron 2 *White* Bloch Sphere
- (3) Electron 1 *Blue* Bloch Sphere
- (4) Electron 2 *Blue* Bloch Sphere
- (5) Electron 1 *Black* Bloch Sphere
- (6) Electron 2 *Black* Bloch Sphere
- (7) Electron 1 *Red* Bloch Sphere
- (8) Electron 2 *Red* Bloch Sphere

All of the most-important detailed *physical mechanisms* of *qubit-qubit* quantum *entanglement* can be easily explained and fully illustrated with these *8 colored Bloch Spheres*.

The Bloch Spheres that can be *easily* observed *directly* (by our talented Earth physicists) are the Electron *1 White* Bloch Sphere, and the Electron *2 White* Bloch Sphere.

These *two white balls* can be measured directly by our Earth scientists in their laboratories.

These *two electron white balls* (white bloch spheres) are *visible* to us because they live inside this *white* (visible) *quantum chamber* (our real right hippocampus) that directly simulates our *white universe*.

However, this white universe is *not* the only universe that is being neurally-simulated inside our real limbic tissues.

There are *three other* colored *limbic universes*.

For example, our *blue* quantum chamber (our real right amygdala) simulates our *blue universe* that contains all of *The Mostly-Hidden Blue Balls*.

# The Mostly-Hidden Blue Balls

What is the quantum-entanglement purpose of these *Mostly-Hidden Blue Balls*?

These *blue balls* form a physical (neural information-processing) *bridge* between the *white balls* and the *black balls* to *strengthen* the neural *connection* between the white balls and the black balls, and to help *coordinate* the real-dark scalar-boson *information exchange* between the visible *observable white balls* and the *hidden nonlocal black balls*.

This *Powerful Blue Bridge* (of blue neural-information-processing bloch spheres) helps the white balls *communicate* with the black balls.

There is a *neural blue bridge* between every *visible white ball* and its corresponding *nonlocal hidden black ball*.

The blue balls in the blue universe behave a little bit *differently* than the white balls in our white (visible) universe.

The blue balls of the blue universe help the white and black balls *talk to each other* inside our real limbic tissues.



What is the purpose of our *black balls*?

Why does a single electron *physically need* to be neurally-simulated as a white ball, a blue ball, a black ball, and a red ball?

Why does it take *4 colored balls* to completely represent (and physically simulate) just *one single qubit*?

Why are *4 Bloch Spheres* actually needed?

What is the real function and quantum-entanglement purpose of the *nonlocal hidden black-ball variables*?

Why do we need these *Deep-Hidden Black Balls*?

# The Deep-Hidden Black Balls

What is deep inside of each and every one of these *Deep-Hidden Black Balls*?

What do these trillions of trillions of *Deep-Hidden Black Balls* actually do?

What exactly is a *Black Ball*?

A Black Ball is a *black bloch sphere* that is hidden nonlocally deep inside our real-human *left amygdala*.

A *Black Ball* is composed of the amygdaloid neural tissues and *what they do*, including how they talk to each other, and how they talk to the other three limbic tissues (and *colored their balls*) in the *other three* quantum chambers.

What can happen when *two black balls* come together, and become *covalently bonded* together?

What about the *two electron black balls* (two electron qubit spins) that are present inside a single *dihydrogen molecule*?

We can begin to understand the function and purpose of the *covalently* bonded *black balls* by looking closely at what happens to a single individual *diatomic* hydrogen *molecule* inside the *left amygdala*.

Diatomic hydrogen (dihydrogen) is composed of *two* individual *hydrogen atoms* covalently bonded together into a *single* molecule called “*dihydrogen*”.

A single molecule of dihydrogen is composed of *two* *protons* and *two* *electrons*.

The two electrons *covalently-bond* the two protons together into a single dihydrogen molecule that is *very* *stable*.

The *picoscopic* (and sub-picoscopic) dynamic neural-pulse structure of *dihydrogen* is a very *beautiful* neural-pulse *system* to behold.

Trillions of trillions of these dihydrogen molecules exist in our *Earth's atmosphere*.

Billions of new dihydrogen molecules are created *every* *day* in our Earth's upper atmosphere, from the billions of *electrons* and the billions of *protons* that travel from our Sun to our Earth every day.

A *complete* dihydrogen molecule consists of a visible *white* dihydrogen molecule, a *blue* dihydrogen molecule, a hidden *black* dihydrogen molecule, and a *red* dihydrogen molecule.

The *black*, nonlocal, hidden, left-amygdaloid, *dihydrogen molecule* communicates (via the blue ball, and via the red ball) with the *white*, local, visible, right-hippocampal, *dihydrogen molecule* that our talented physicists can isolate, observe, and measure in their scientific laboratories here on Earth.

The white dihydrogen, the blue dihydrogen, the black dihydrogen, and the red dihydrogen molecules are all quantum-entangled together via *5 Entanglement Strengths*.

# 5 Entanglement Strengths

What are these *5 Entanglement Strengths*?

How can some types of quantum entanglement be *stronger* or *weaker* than other types of quantum entanglement?

*How many* different types (strengths) of quantum entanglement can exist between *two particles*?

There are *5 different levels* (strengths or degrees) of *quantum entanglement* between the two electrons (2 spin qubits) in a single dihydrogen molecule.

These *5 degrees* of quantum *entanglement strength*, for dihydrogen, are as follows:

- (1) *All 4* dihydrogen molecules are *still firmly bonded*.
- (2) The *white* dihydrogen covalent bond *is broken*.
- (3) The *white* & the *blue* dihydrogen bonds *are broken*.
- (4) The *white*, *blue*, and *black* bonds *are broken*.
- (5) *All 4* dihydrogen covalent bonds *are broken*.

The *strongest* first (1) degree of quantum entanglement strength in which *all 4* dihydrogen molecules are *still firmly bonded* is as follows:

- (1) The 2 White Hydrogen Atoms are Bonded Together
- (2) The 2 Blue Hydrogen Atoms are Bonded Together
- (3) The 2 Black Hydrogen Atoms are Bonded Together
- (4) The 2 Red Hydrogen Atoms are Bonded Together

The *second* (2) degree of quantum entanglement strength in which the *white dihydrogen covalent bond* is *broken*, but the other 3 dihydrogen covalent bonds are *still intact*, is as follows:

- (1) The 2 White Hydrogen Atoms are Separate & Free.
- (2) The 2 Blue Hydrogen Atoms are Bonded Together.
- (3) The 2 Black Hydrogen Atoms are Bonded Together.
- (4) The 2 Red Hydrogen Atoms are Bonded Together.

The *third* (3) degree of quantum entanglement strength in which the *white dihydrogen covalent bond* is *broken*, and the *blue dihydrogen covalent bond* is *also broken*, but the other 2 dihydrogen covalent bonds are *still intact*, is as follows:

- (1) The 2 White Hydrogen Atoms are Separate & Free.
- (2) The 2 Blue Hydrogen Atoms are Separate & Free.
- (3) The 2 Black Hydrogen Atoms are Bonded Together.
- (4) The 2 Red Hydrogen Atoms are Bonded Together.

The *fourth* (4) degree of quantum entanglement strength in which the *white* dihydrogen covalent bond is broken, and the *blue* dihydrogen covalent bond is also broken, and the *black* dihydrogen covalent bond is also broken, but the *red* dihydrogen covalent bond is still intact, is as follows:

- (1) The 2 White Hydrogen Atoms are Separate & Free.
- (2) The 2 Blue Hydrogen Atoms are Separate & Free.
- (3) The 2 Black Hydrogen Atoms are Separate & Free.
- (4) The 2 Red Hydrogen Atoms are Bonded Together.

The *fifth* (5) degree of quantum entanglement strength in which all 4 of the dihydrogen covalent bond are broken, and all 8 of the individual hydrogen atoms are separate and free in all 4 quantum chambers, is as follows:

- (1) The 2 White Hydrogen Atoms are Separate & Free.
- (2) The 2 Blue Hydrogen Atoms are Separate & Free.
- (3) The 2 Black Hydrogen Atoms are Separate & Free.
- (4) The 2 Red Hydrogen Atoms are Separate & Free.

Note that in this *fifth* (5) degree of quantum entanglement strength, all of the 8 individual Hydrogen Atoms are fully-separate from each other, and these 8 Hydrogen Atoms are all completely free from each other.

Therefore, this special *fifth* (5) degree of quantum entanglement strength represents *zero* quantum entanglement strength, or *no* quantum entanglement *at all*.

The *strongest* (1) quantum entanglement strength is when the *white* dihydrogen molecule is *still covalently bonded* together as an intact molecule in our *white universe* (the universe we can see and measure).

When our *white* dihydrogen molecule is still covalently bonded together, then *all* of the *other 3* dihydrogen molecules *will also still be* covalently bonded together.

This *complete* covalent *bonding* is the *strongest type* of quantum entanglement possible.

The other (*weaker*) types of covalent bonding are the *most interesting* (and *most useful* for certain purposes) types of quantum entanglement.

The *second* (2) degree of quantum entanglement strength in which the *white* dihydrogen *covalent bond* is *broken*, but the other 3 dihydrogen covalent bonds are *still intact*, is the very-interesting (and very useful) type of quantum entanglement that is created *immediately after* the two white hydrogen atoms *fully separate* from each other.



The *blue, black, and red* dihydrogen molecules are *still intact*, causing the *two* entangled *electrons* to continuously maintain their *opposing spins*, even as these 3 covalently-bonded dihydrogen molecules *tumble and rotate* in their *respective spaces* (quantum limbic chambers, or *quantum simulated universes*).

These tumbling, nonlocal, rotating, hidden, covalently-bonded 3 dihydrogen molecules are the *3 Nonlocal Hidden Variables* that completely resolve the longstanding EPR paradox studied by Einstein (1935), Bell (1964), and Aspect (1982).

# 3 Nonlocal Hidden Variables

What are these *3 Nonlocal Hidden Variables* that completely solve the EPR paradox?

These 3 Nonlocal Hidden Variables are the *3 Nonlocal Hidden Variable Balls*, that communicate with the observable *White Balls* at the ultrafast speeds of the trillions of real dark bosons, that are continuously exchanged between the 4 quantum chambers of our real human brains.

These real dark scalar bosons travel at dark neural pulse propagation velocities that are *trillions* of times faster than the speed of photon light.

These 3 nonlocal hidden variables (*3 nonlocal hidden bloch spheres*) talk with the local observable variables (*white bloch spheres*) with the ultrafast real dark scalar boson signals that keeps them *all* entangled *together*.

For example, these *3 nonlocal* hidden *dihydrogen variables* (atoms) are continuously entangled with the *one single* local visible *dihydrogen atom* that we are observing and measuring, and viewing, in our scientific laboratory here on Earth.

If we are *very very careful* with our experimental setup, then we can discover a good scientific way to *very gently break* the visible *white* dihydrogen molecule into *two* separate *white* hydrogen atoms, while allowing the 3 hidden dihydrogen molecules to *remain intact* and *fully bonded*.

What is the dark scalar boson nature of the *Ultrafast Entanglement Signals* that connect the two separate white hydrogen atoms (that can easily become separated by a huge space-like distance) with the 3 intact nonlocal hidden dihydrogen molecules?

# Fast Entanglement Signals

Exactly how fast are these *Ultrafast Entanglement Signals* that connect the 4 quantum chambers together?

These *Ultrafast Entangle Signals* are carried by inter-  
limbic chamber real *dark scalar bosons* that propagate as  
real *dark neural pulses* on their super-myelinated axons at  
*trillions* (or even thousands of trillions) of times *faster*  
than the speed of photon light.

When the *blue* dihydrogen molecule is still intact, and the  
*black* dihydrogen molecule is still intact, and the *red*  
dihydrogen molecule is still intact, then the *two* separate  
and distinct observable *white* hydrogen *atoms* will be  
very-strongly *entangled* with *each other*, and the white  
spins on the white single electrons (on each of these two  
separate white hydrogen atoms) will forever remain  
oriented *opposite* to each other, irregardless of *how far* the  
two white hydrogen atoms *become separated* from each  
other in their *white universe*, even if these two white  
hydrogen atoms (and their two separate white electron  
spins) become separated by *millions of miles* in their  
white *observable universe* (the white universe that  
contains our white milky-way galaxy, and our *white*  
mortal-human *bodies* here on our white Earth planet);  
because these *two white* electron *spins* are continuously

receiving their *ultrafast* dark scalar boson *entanglement signals* from the *two blue* electron spins (and from the *two black* electron spins, and from the *two red* electron spins).

These *ultrafast nonlocal-hidden* inter-chamber real-dark *scalar-boson signals* ensure that *all 8* electron *spins* stay entangled with each other, until *all 4* of the *dihydrogen molecules* eventually break *completely apart*, allowing their individual hydrogen atoms to drift completely apart, and become completely separated from each other.

When the *quantum entanglement* (between the two white hydrogen atomic electron spins) *begins to break*, the *white* dihydrogen molecule *breaks first*, followed by the *red* dihydrogen molecule that *breaks second*, followed by the *blue* dihydrogen molecule that *breaks third*, followed by the *black* dihydrogen molecule that *breaks last* causing the two whole (complete) hydrogen atoms to become *completely free* and *totally separate* from each other with *no entanglement left* between them at all.

The *black dihydrogen molecule* is the *very last molecule* to *break* before the two whole hydrogen atoms become *completely unentangled* from each other.

A *whole* hydrogen atom is the *4 set* (of 4 colored hydrogen atoms) of a *white* hydrogen atom, and a *red*

hydrogen atom, and a *blue* hydrogen atom, and a *black* hydrogen atom.

So long as a *black* dihydrogen *molecule* is still wholly intact (and fully bonded, as *two black* hydrogen *atoms* completely bonded tightly together inside the *black universe* of our real *left amygdala*) then the *two black* hydrogen *atoms* are still entangled (*covalently bonded*) together, and these *two* covalently bonded (entangled) *black atoms* are still entangled (via the ultrafast scalar boson entanglement signals) with the *two blue atoms*, and with the *two red atoms*, and with the *two white* (observable) *hydrogen atoms*; even though the *two white* hydrogen *atoms* may have already *become* spatially *separated* from each other by *billions* of *miles* in their *white* right-hippocampal *universe*, and even though the *two red* hydrogen *atoms* may have also become separated by *millions* of *miles* in their *red* left-hippocampal *universe*, and even though the *two blue* hydrogen atoms may have also become separated by *thousands* of *miles* in their blue universe in our real *right amygdala*.

What is the real entanglement purpose of this *red dihydrogen* molecule in our real left hippocampus?

What is the real relationship between this red hippocampal physical dihydrogen molecule, and the two

*Nearly-Visible Red Balls* that logically represent its two red electron spins?

## The Nearly-Visible Red Balls

What is the core nature and purpose of *The Nearly-Visible Red Balls* of our red left hippocampal (our red limbic quantum chamber)?

How does a Nearly-Visible *Red Ball* form a spacetime neural-communication *bridge* between a hidden *Black Ball* and an observable *White Ball*?

Why is a red ball (red bloch sphere) just nearly-visible, but *not* fully-visible to us here on Earth?

The *covalent* molecular *bonding* of the *two* spacetime hippocampal *red balls* (the two electrons of the red dihydrogen molecule, with their *two* electron *red spin qubits*) in the real left hippocampus, is the *red* type of covalent bonding that may sometimes *immediately break* after the *two white balls* (the two white electron spins, of the two widely-separated white hydrogen atoms that our Earth-scientists can see, observe and measure with their

powerful scientific instruments) become completely separated in their white universe.

After the *red covalent bond* (of the red dihydrogen molecule) *is broken*, and the *two red balls* (the two red qubits, that are the two red electron spins, of the two red electrons, of the former *red dihydrogen* molecule) *become separated*, then the two red hydrogen atoms become *spacetime-separated* in their red universe, just like the two white hydrogen atoms *earlier* became spacetime-separated in their white *observable universe*.

First these measurable spacetime *white atoms* can become widely-separated in their own *observable* white universe, and then the spacetime *red atoms* can *also* become widely-separated in their red universe, with the *blue* atoms *still bonded* together as a blue dihydrogen molecule in its entanglement blue universe, and with the *black* atoms *also* still *bonded* together as a single black dihydrogen molecule in its *nonlocal* hidden *entanglement* black *universe*.

When the blue atoms also eventually break apart from each other, then the black dihydrogen molecule becomes suddenly very vulnerable to breakage itself.

When this *diehard black* dihydrogen molecule does *finally* break apart, then the *full* dihydrogen (the *full set of*



4 colored dihydrogen molecules) molecule finally becomes *fully broken* (with *zero* quantum entanglement left) and *all 8* colored hydrogen atoms become *fully spatially separated* in their 4 respective *colored universes*.

After the 8 colored hydrogen atoms all become spatially separated from each other, then the *only way* to entangle them again is to again bring one or more of them *together* spatially, or to bring one or more of them together with *some other atom* spatially, or to bring one or more of them together with *some other fermion* or *some other vector boson*.

These 8 colored hydrogen atoms have their 8 *colored electrons*.

These 8 colored electrons can have their 8 *spins* represented as 8 *colored dots* on the surface of 8 different colored bloch spheres.

A *full electron* can have its *full qubit spin* represented as 4 tiny colored *dots* on the *spherical surface* of 4 colored *bloch balls* in the 4 colored spatial universes (in the 4 neural-simulation chambers)

How can these 4 *Bloch Balls* represent just 1 *Qubit*?

# 4 Bloch Balls in 1 Qubit

Can *1 Qubit* be fully represented logically as *4 tiny colored dots* on the spherical surface of *4 Bloch Balls*?

What will happen if we go ahead and logically represent a *single qubit* as the following *4 tiny colored dots* on the following *4 quantum-interacting Bloch Spheres*:

- (1) A tiny *Black Dot* on a *White Bloch Sphere*
- (2) A tiny *Yellow Dot* on a *Blue Bloch Sphere*
- (3) A tiny *White Dot* on a *Black Bloch Sphere*
- (4) A tiny *Green Dot* on a *Red Bloch Sphere*

These *4 Colored Dots* quantum-interact with each other, because these *4 Colored Bloch Spheres* quantum-interact with each other, via the real quantum-interaction *rules* of our real-human limbic *neural-information-processing* tissues.

The *dot-vector*, from the *center* of the bloch sphere, to the *surface-location* of the colored dot on the *spherical surface* of the bloch sphere, is the *vector-direction* of the *spin* of the spin qubit.

In this way the *4 colored dots* (on the spherical surfaces of the 4 bloch spheres) represent the *4 vector spin*

*directions of the 4 colored qubit spins in the 4 colored universes.*

Understanding the *ultrafast* dynamic *scalar-boson* interactions between these *4 colored dots* on *these 4 colored bloch spheres*, is the *Grand Key* to really understanding all the *microscopic* (and nanoscopic, and picoscopic, and femtoscopic, and attoscopic, and zeptoscopic, and yoctoscopic) *physical details* of how *one qubit* quantum-entangles with *another qubit*.

This is *the* very best way to really understand the *quantum entanglement* that takes place in our universe between *two* widely-separated *spin qubits* that can become spatially separated by *huge* spacelike *distances* of *trillion* of miles, while their *blue, black, and or red* quantum-entanglement *continues* via the *ultrafast* communication *limbic links* between the interacting sets of real dark *scalar bosons*.

This is how *consciousness projection* takes place, with *sub-second* two-way *travel times*, into a black-hole galaxy (like into our super-massive Sagittarius A\* for consciousness projections into our own local milky-way galaxy), and into the real *dark axon fibers* that form the heart of the galactic-center black hole, and then outward via the real dark *spiral axons*, into all the stars of the whole galaxy, and into all the planets that orbit the stars, and into the advanced created *human-avatar brains* that

live on the planets, to consciousness-projection-animate these advanced human-avatar brains (and their mortal-human *avatar brains*, like here on our mortal Earth planet) to *properly provide* consciousness, *free-will*, and the self-perception of *unique individuality* to all the *people* of every planet, of every galaxy, of this entire neurally-simulated universe, where we all *seem* to be living currently.

We use our very own real information-traversable Einstein-Rosen *wormholes* (our real dark *human axons*) to *consciously-project* of proper-portion of our *real human selves*, into *all* of our created advanced-avatar human selves, and into all our very-temporary *short-time* (usually just a century, or even less) mortal-avatar *human selves* (like us people here on Earth) via *Quantum Entanglement Communication* (QEC) into all the created *daydream galaxies* (like our very own milky-way daydream galaxy) and into their temporary *created* human *brains* (like our very own mortal-human brains here on this Earth planet).

Is this kind of *Quantum Entanglement Communication* (QEC) really even theoretically possible?

Can we actually scientifically develop (during the next few years here on Earth) some ultrafast darklight communication devices that can use this type of *Qubit QEC Communication*?

# Qubit QEC Communication

What is *Qubit QEC Communication*?

*Qubit QEC Communication* is the *Communication* (exchange of quantum information) between 2 widely-separated *Qubits* (that may be separated by *trillions* of *meters*, or more, or less) using *Quantum Entanglement Communication* (QEC) that uses the quantum entanglement between the 8 colored *bloch spheres* (of the 2 widely-separated *qubits*) to send and receive *useful* quantum information, between the 2 *spatial locations* of the 2 widely-separated qubits, at *ultrafast speeds* (that are trillions of times faster than the speed of photon light) using the limbic exchange of real dark *ultrafast scalar bosons*, to enable *useful* realtime *communication* between two QEC-enabled *devices*, such as two QEC-enabled *smartphones*, or two QEC-enabled *brains*.

Is this really theoretically possible?

Can quantum entanglement really be used to *construct* a QEC-enabled device?

What must we do first, before we can begin to construct such a wonderful QEC device *here* on *Earth*?

We must first begin to physically-understand quantum entanglement *much better* than we (the thousands of physicists of Earth) currently understand it today in 2023.

An important key, to the *full scientific understanding* of how to *begin* to construct a QEC-enabled smartphone, is to first *fully understand* the logical and physical nature of *A Full Bloch Sphere*.

# A Full Bloch Sphere

What is *A Full Bloch Sphere*?

What is *A Full Qubit*?

What is *A Full Spin Qubit*?

*A Full Spin Qubit* can be logically represented as a *Full Bloch Sphere*.

*A Full Bloch Sphere* is the *set of 4 colored interacting bloch spheres* (with their 4 colored dots) that logically represent the physical direction of one single *spin qubit*.

A Full Spin Qubit can be fully represented logically as 4 *tiny colored dots* on the spherical surface of 4 colored *Bloch Spheres*.

A Full Bloch Sphere includes the *black dot* location on the spherical surface of the *white* bloch sphere, and the *yellow dot* location on the spherical surface of the *blue* bloch sphere, and the *white dot* location on the spherical surface of the *black* bloch sphere, and the *green dot* location on the spherical surface of the *red* bloch sphere.

A Full Spin Qubit includes the 2 *Hippocampal Qubits* and the 2 *Amygdaloid Qubits*.

The 2 *Hidden Amygdaloid Qubits* need to be fully understood, before we can begin our construction of a useful QEC smartphone.



# Hidden Amygdaloid Qubits

What is the function, structure, and purpose of our *Hidden Amygdaloid Qubits*?

How do we even know *for sure* that we have these Hidden Amygdaloid Qubits?

What does our mortal-human amygdala actually *do* when we sleep and *dream* at night here on Earth?

What additional neuroscientific human-amygdala *experiments* do we still need to conduct (here on Earth prior to the year 2030) to help us curious *neuroscientists* to better understand the structure, function, purpose of our *right* human *amygdala*, and the purpose, function, and structure of our *left* human *amygdala*?

How do the 2 *quantum chambers* of our mortal-human *amygdala* light up (become neurally-activated with many neural pulses) when we dream at night?

How do the 2 *quantum chambers* of our mortal-human *hippocampus* light up when we dream at night?

How is a proper portion our mortal-human consciousness *projected* into our mortal *right hippocampus* when we dream at night?

How do our right hippocampal sub-mortal human avatars *awaken* and begin their many interesting *dream adventures*, before our alarm clock awakens us mortals to another day of work here on Earth?

How does our left amygdaloid encode its *hidden qubits* to help our right hippocampus to properly *display* its sub-mortal dream world (*dream environment*) to our *conscious* sub-mortal *human avatars*?

How do our Hidden Amygdaloid Qubits bond themselves together deep inside our black chamber to form the *Amygdaloid Black Structures*?

# Amygdaloid Black Structures

What is an *Amygdaloid Black Structure*?

An *Amygdaloid Black Structure* is a real dynamic limbic *neural-pulse structure* formed by a set of tiny ultrafast *real dark bosons* (interacting dynamically) with a set of larger slower *real light bosons*, inside our networked real-human *left amygdala*.

For example, a *black dihydrogen molecule* is a real *amygdaloid black structure* that can partially govern the quantum entanglement between the *two white hydrogen atoms* (in the real white visible right hippocampal universe, that we mortal scientists can see and observe) that are *still connected* via ultrafast dark scalar bosons to the black dihydrogen molecule, even when the two white hydrogen atoms become *widely-separated by many millions of meters*.

Understanding the actual detailed *femtoscopic* physical *details* of these *deeply hidden amygdaloid black structures*, is a major key to understanding how quantum entanglement actually *physically works* deep inside our real human brains, to help our right hippocampal tissues to properly *construct* this entire visible, observable,

measurable *milky-way galaxy* where we currently seem to be finding ourselves (our mortal-human selves).

How can two hidden *black* qubits continue to *stay bonded together*, even when their two corresponding *white qubits* have already drifted *far apart*, and now these two separated white qubits appear to be *nearly free* of each other (except for their *continued entanglement* through their ultrafast limbic-connection to the two black qubits)?

How can *two hidden amygdaloid black atoms* continue to stay tightly-bonded together (like two black hydrogen atoms, or two black oxygen atoms), even when their *two* corresponding *white atoms* have already drifted spatially far apart from each other right here inside our *white right-hippocampal observable universe*?

What is the physical nature of these *Hidden Amygdaloid Atoms*?

# Hidden Amygdaloid Atoms

What exactly is a *Hidden Amygdaloid Atom*?

A *Hidden Amygdaloid Atom* is an actual *physical atom* (such as a hydrogen atom, or a helium atom, or a lithium atom, or any other atom) that *physically exists* inside of our real-human *network* of real *amygdaloid* neural tissues.

For example, all of the *black helium atoms* physically exist inside deep inside our real *left amygdala*.

For another example, all of the *blue helium atoms* physically exist deep inside our real *right amygdala*.

Our real amygdala is *nonlocal* to us here on Earth.

This *fundamental* amygdaloid *nonlocality* is because we mortal-human scientists (of Earth) live inside our temporary *created* milky-way galaxy.

Our precious created milky-way galaxy had a *beginning*.

Our precious created milky-way galaxy will have an *end*.

However, our set of *real-human* amygdaloid *tissues* has *always existed* (with no beginning and no end) in our *real*

human *brains*, in our real human bodies, in our real human environment, which is *our real universe*, which was *never created*, because there is no way to create a new real universe.

The real universe is *not* creatable.

The real universe *just is*.

The real universe *just is* because it has *always been*.

Our real human amygdala exists *inside* our real universe.

Our real universe is logically located on the “*other side*” of Sagittarius A\*.

Sagittarius A\* is the interesting name we have already given to the super-massive *black hole* that exists in the *very center* of our milky-way galaxy.

Every black hole has *two sides*, including a *real side* and a *dream side*.

Our Sagittarius A\* has a *real side* and a *dream side*.

Our *real universe* (with our real human bodies that contain our real human amygdala) exists on the *real side* of Sagittarius A\*.

Our *dream universe* (with our created dream planet Earth in our created dream milky-way galaxy) exists on the *dream side* of Sagittarius A\*.

Because our planet Earth exists on the dream side of Sagittarius A\*, and our real amygdala exists on the real side of Sagittarius A\*, we must logically conclude that our real amygdala is *nonlocal* to us here on Earth.

This means that all of the amygdaloid atoms (that exist inside our real amygdala) must be *nonlocal* to us people here on Earth.

For example, an *Amygdaloid Helium Atom* must be *Nonlocal* to us mortal-human scientists here on Earth.

What is the actual physical nature of this *Nonlocal Amygdaloid Helium Atom*?

# Nonlocal Amygdaloid Helium

What is a *Nonlocal Amygdaloid Helium Atom*?

A *Nonlocal Amygdaloid Helium Atom* is a physical atom of helium that actually physically exists inside our *real* human *amygdala* that is *hidden* from us bright scientists here on Earth.

Even though this nonlocal amygdaloid helium atom is *hidden* from our view, as the *curious physicists* of Earth that we are, we can still *begin* to *probe* its amygdaloid structure and its *amygdaloid behavior* from its quantum-entanglement *effects* that this *nonlocal black* amygdaloid helium atom has on its corresponding *measurable white* hippocampal (observable on Earth) helium atom.

Every *observable white* helium atom of Earth, has a corresponding *nonlocal blue* helium atom, and a corresponding *nonlocal black* helium atom, and a corresponding *nonlocal red* helium atom, that are mostly hidden from our view, but can still be *somewhat probed* and somewhat measured *indirectly* from the particular *red-entanglement*, and the particular *black-entanglement*, the particular *blue-entanglement* that these nonlocal hidden variables (colored helium atoms) exert on the *observable white* helium atom of Earth.



The Nonlocal Hidden *Black* Amygdaloid Helium Atom is able to exert a *black-white entanglement-force* on the Local Observable *White* Amygdaloid Helium Atom, via the ultrafast real dark *black-white scalar bosons* that entangle them.

The Nonlocal Hidden *Blue* Amygdaloid Helium Atom is able to exert a *blue-white entanglement-force* on the Local Observable *White* Amygdaloid Helium Atom, via the ultrafast real dark *blue-white scalar bosons* that effectively entangle them.

These nonlocal hidden Black Amygdaloid Atoms, and *Black Amygdaloid Molecules*, and whole *Black Amygdaloid Human Bodies*, physically exist deep inside our real human amygdala on *the other side* of Sagittarius A\*.

What is the actual physical nature of these *nonlocal hidden* Black Amygdaloid Molecules?

How are these Black Amygdaloid Molecules able to *continue to quantum-entangle* the White Amygdaloid Molecules, even after the individual *white atoms* (of these White Amygdaloid Molecules) have *become unbonded* from each other and these *white atoms* have even become so *widely-separated* in space?

How can these powerful *Black Amygdaloid Molecules* continue to entangle our white observable molecules for so long?

# Black Amygdaloid Molecules

What is a *Black Amygdaloid Molecule*?

A *Black Amygdaloid Molecule* is the *molecular-key* to understanding the detailed *physical mechanism* of quantum entanglement.

These black amygdaloid molecules (and the red molecules, and the blue molecules) are some of the *nonlocal hidden variables* long sought by Einstein, Bell, Aspect, and many other bright researchers of quantum foundations, for several decades.

The *entangled black electronic spin directions* (of the black electrons of these black amygdaloid molecules) are *communicated* (via ultrafast dark scalar bosons) to the widely-separated *white spin directions* (white spin qubits), causing these *white spin qubits* (white electron spin directions) to also *remain entangled* with each other, even when these *white spin qubits* eventually become widely separated by *millions of meters*.

A *black dihydrogen amygdaloid molecule* lives inside our real *left amygdala*.

This black dihydrogen amygdaloid molecule can *rotate rapidly* (or slowly) inside the real left black amygdala universe.

As this black dihydrogen molecule *rotates* inside the black universe, it naturally causes its *molecular electron spins* to also *rotate accordingly* inside this same black universe.

No matter how the *two* black molecular *electron spins* (of black dihydrogen) are *rotated* in the black universe, their two *relative* electron spins are *always maintained* (via the black covalent bond of the black dihydrogen molecule) to be *opposite* to each other.

These *two opposite* electron *spins* (two opposite spin qubits) are *always* maintained (by the black covalent bond that holds the black dihydrogen molecule together) to be *exactly-opposite* to *each other*, irregardless of *how* the black dihydrogen molecule *tumbles* or *rotates* or *moves* in its black universe.

These *two bonded* opposing *black* hidden electron *spins* are always communicated (via ultrafast scalar bosons) to the *two separate* free *white* observable electron *spins*, causing these two *widely-separated* white electron spins to always be *exactly opposed* to each other.

There are *many different kinds* of black amygdaloid molecules, including black amygdaloid dihydrogen, black amygdaloid dioxygen, *black amygdaloid water*, black amygdaloid carbon dioxide, *black amygdaloid human DNA*, black amygdaloid planets, and *black amygdaloid mortal-human bodies*.

*Every* type of physical observable molecule (of Earth) has a *corresponding* black amygdaloid molecule in the nonlocal hidden *black universe*.

*Black Amygdaloid Dihydrogen* is especially helpful in physically illustrating how black quantum entanglement actually works.

# Amygdaloid Dihydrogen

What is *Black Amygdaloid Dihydrogen*?

*Black Amygdaloid Dihydrogen* is the particular type of dihydrogen molecule that lives inside the *nonlocal* hidden *black* real left human *amygdala* of our networked set of real human brains that jointly *limbically-simulate* this entire milky-way galaxy.

This Black Amygdaloid Dihydrogen molecule is a good helpful *illustrative molecule* to use to help us to *more* deeply *illustrate* the detailed *dynamical physical* nature of *qubit coherence* and *qubit decoherence*.

Our *black* amygdaloid *dihydrogen* molecule can be logically *modeled* as containing *two* electron-spin *qubits* that are *always exactly* opposing *each other*, with the two qubit spins *always aligned* in an *antiparallel* way, so long as our black dihydrogen molecule *remains intact* as a *single molecule*, with the two black hydrogen atoms, and their *two electrons* firmly *bonded together* inside the black amygdaloid *entanglement universe*.

When our black molecule *finally* breaks apart, then the two black spins will finally *become free* from *each other*, and these two *recently-freed* black electron spins will then

start to become *freely-oriented* in their new *independent directions* that are now *no longer required* to be anti-parallel relative to each other.

The *newly-freed electrons* (of the newly-freed black hydrogen atoms) will be able to begin to point their electron spins in *any direction* they want to, because these two black electrons are now *completely free* from *each other*, and they can now *act independently*, because the black covalent molecular bond is now *completely broken* in the black universe.

This is how *two qubits* finally fully *decohere* from each other, when their *black covalent bond finally breaks* completely.

*Exactly how* do two qubits start to initially *cohere* with each other to begin with?

How do the two electron-spin qubits of two hydrogen atoms *begin to cohere* with each other to begin with?

What is the detailed physical mechanism of *Dihydrogen Coherence*?

# Dihydrogen Coherence

What is *Dihydrogen Coherence*?

What is *Quantum Coherence*?

What is *Wave Coherence*?

*Wave Coherence* between *two waves*, is when the *two waves* have the *same frequency* in *time* and or *space*, such that the phase difference between the two waves is always a *constant phase difference*.

*Quantum Coherence* between *two spin qubits*, is when the *spinning components* of the two spin qubits have the *same frequency* in *time* and or *space*, such that the phase difference between the two spinning components is always a *constant phase difference*, and or the relative difference between the *two spin directions* of the two spin qubits is always a *constant relative spin-direction difference*.

*The Dihydrogen Coherence* between its *two electron spin qubits*, is when the *spinning components* of the two electron spin qubits have the *same frequency* in *time* and or *space*, such that the phase difference between the two electron's spinning components is always a *constant*



*phase difference*, and or the relative difference between the *two electron spin directions* of the two electron spin qubits is always a *constant relative electron spin-direction difference*.

For example, the relative electron spin-direction difference of *180 degrees* is always maintained as a constant 180 degrees, always maintaining that the two electrons of the dihydrogen molecule are always *anti-aligned* with their spins in *opposite* (anti-parallel) directions, so long as *at least one* of the colored dihydrogen covalent bonds is *not yet broken*.

Therefore, *Dihydrogen Coherence* is also the detailed physical process of *two* separate individual *hydrogen atoms* coming together physically to form a *Coherent* covalent *molecular bond* to form a single *Dihydrogen* molecule.

This detailed physical process of *full dihydrogen coherence* includes the detailed colored physical processes of *firstly white* dihydrogen spacetime coherence, and then *secondly red* dihydrogen spacetime coherence, and then *thirdly blue* dihydrogen entanglement coherence, and then *finally black* dihydrogen entanglement coherence.

Therefore, the full detailed physical process of *full dihydrogen coherence* includes the following 4 *sequential physical coherence steps*:

- (1) *White Dihydrogen Spacetime Location Coherence*
- (2) *Red Dihydrogen Spacetime Location Coherence*
- (3) *Blue Dihydrogen Entanglement Spin Coherence*
- (4) *Black Dihydrogen Entanglement Spin Coherence*

*First*, the 2 *white hydrogen atoms* come together to form a single white dihydrogen covalent *molecular bond* in the white observable *spacetime location universe*, that *we can all see* with our mortal-human eyes from our location on planet Earth.

*Second*, the 2 *red hydrogen atoms* are pushed together by the real dark *white-to-red scalar bosons* (that come directly from the 2 *white atoms*, and *scatter* off of the 2 *red atoms*, causing these 2 red atoms to be intensely pushed together) that are flowing on the real *white-to-red dark axons* that axonically extend themselves (between the *two real-human brain hemispheres* from the *right-brain* to the *left-brain*) from the allocortical tissues of the *right hippocampus* to the *left hippocampus*.

These two red atoms are *forcefully pushed together* (by the white-to-red ultrafast dark scalar bosons, that flow from the white dihydrogen atom, and put substantial

*scattering-pressure* on the individual real light scalar-boson components of the red atoms) until they successfully form a red dihydrogen covalent *molecular bond* in the red *spacetime location universe* that we *cannot* directly see with our mortal-human eyes, because this *nonlocal* hidden *red spacetime location universe* is much-more difficult to observe or measure with our mortal-human brains (sensory organs) here on Earth.

*Third*, the 2 *blue hydrogen atoms* are pushed together by the real dark *white-to-blue scalar bosons* (that come indirectly from the 2 *white atoms*, and *scatter* off of the 2 *blue atoms*, causing these 2 blue atoms to be intensely pushed together) that are flowing on the real *white-to-blue dark axons* that axonically extend themselves (inside the real-human limbic *right-brain*) from the allocortical tissues of the *right hippocampus* to the *right amygdala*.

These *two blue hydrogen atoms* are *forcefully* pushed *together* (by the white-to-blue ultrafast dark scalar bosons, that flow from the white dihydrogen atom, and put substantial *scattering-pressure* on the individual real light scalar-boson components of the 2 blue atoms) until these *two blue atoms* become oriented just right to successfully form a blue dihydrogen covalent *molecular bond* in the blue *entanglement spin universe* that we *cannot* see with our mortal-human eyes, because this *nonlocal* hidden *blue entanglement spin universe* is

nearly-impossible to observe or measure with our mortal-human brains (sensory organs) here on Earth.

*Forth*, the 2 *black* hydrogen atoms are pushed together by the real dark *red-to-black* scalar bosons (that come indirectly from the 2 *red* bonded hydrogen atoms of the already-formed red dihydrogen molecule, and scatter off of the 2 *black* atoms, causing these 2 black atoms to be intensely pushed together) that are flowing on the real *red-to-black* dark axons that axonically extend themselves (inside the real-human limbic *left-brain*) from the allocortical tissues of the *left hippocampus* to the *left amygdala*.

These two *black* hydrogen atoms are *forcefully* pushed together (by the *red-to-black* ultrafast dark scalar bosons, that flow from the red dihydrogen molecule, and put substantial red-to-black *scattering-pressure* on the individual real light *black* scalar-boson components of the 2 *black* hydrogen atoms) until these two *black* atoms become *oriented* just right (in their black universe) to successfully come together just right to form a *black* dihydrogen covalent *molecular bond* in the *black entanglement spin universe* that we cannot see with our mortal-human eyes, because this *nonlocal* hidden *black* entanglement spin universe is just impossible to directly observe or directly measure with our mortal-human brains (sensory organs) here on Earth.

There is a coherence-step *time-delay* between each of these *four* physical *coherence steps*.

The white covalent bonding *must not* be *disturbed* for *sufficiently* long *enough* for there to be *enough* coherence-forming *time* for *all 4* coherence *steps* to be *fully continued* to their *full completion* in order for the full dihydrogen molecule to become *fully bonded* (fully entangled) in *all 4* color *universes* (all 4 limbic *quantum chambers*).

This *Dihydrogen Coherence* physical process causes the full formation of a full dihydrogen molecule that becomes *fully bonded* in *all 4* colored universes.

The *opposite* of Dihydrogen Coherence is called *Dihydrogen Decoherence*.

How does *Dihydrogen Decoherence* take place to cause all 4 colored covalent molecular bonds to become *fully broken*?

# Dihydrogen Decoherence

What is *Dihydrogen Decoherence*?

*Dihydrogen Decoherence* is the *4-step* physical process by which a full dihydrogen molecule become completely broken in all 4 colored universes.

There is a specific set of *physical halting mechanisms* in the white universe that can *modify*, disrupt, and or *halt* each one of these 4 colored-process steps.

What is *Quantum Decoherence*?

What is *Wave Decoherence*?

*Wave Decoherence* between *two waves*, is when the *two waves* start having a *different frequency* in *time* and or *space*, such that the phase difference between the two waves is *not* always a *constant phase difference*.

*Quantum Decoherence* between *two spin qubits*, is when the *spinning components* of the two spin qubits begin to have somewhat *different frequencies* in *time* and or *space*, such that the phase difference between the two spinning components is *not* always a *constant phase difference*, and or the relative difference between the *two spin*

*directions* of the two spin qubits is *not* always a *constant relative spin-direction difference*.

*The Dihydrogen Decoherence* between its *two electron spin qubits*, is when the *spinning components* of the two electron spin qubits start to have *different frequencies* in *time* and or *space*, such that the phase difference between the two electron's spinning components is *not* always a *constant phase difference*, and or the relative difference between the *two electron spin directions* of the two electron spin qubits is *not* always a *constant relative electron spin-direction difference*.

For example, the relative electron spin-direction difference of *180 degrees* is always maintained as a constant 180 degrees, always maintaining that the two electrons of the whole dihydrogen molecule are always *anti-aligned* with their spins in *opposite* (anti-parallel) directions, so long as *at least one* of the colored dihydrogen covalent bonds is *not yet broken*. However, when a colored covalent bond is broken, then the two hydrogen atoms *decohere* from each other, and their two electrons *decohere* from each other, and the electron spin-directions each *become free* to point in *any* direction, including any relative spin directions that are *not 180 degrees* from each other.

Therefore, *Dihydrogen Decoherence* is also the detailed physical process of its *two* covalently-bonded *hydrogen atoms* coming apart (*divorcing*, and *forcefully* breaking apart, and *becoming* fully separated from each other spatially) *physically* to become *free atoms* that are *separate* and *distinct* from each other.

This detailed physical process of *full dihydrogen decoherence* includes the detailed colored physical processes of *firstly white* dihydrogen spacetime decoherence, and then *secondly red* dihydrogen spacetime decoherence, and then *thirdly blue* dihydrogen entanglement decoherence, and then *finally black* dihydrogen entanglement decoherence.

There exist some *physical halting mechanisms*, that are specific *white actions* that can be taken in our observable white universe (in our scientific laboratories, and inside our future *quantum computers*, here on Earth) that can *color-halt* each one of these 4 *colored-decoherence* steps.

What are these useful *Colored Halting Mechanisms*?



# Colored Halting Mechanisms

What are all the different *Colored Halting Mechanisms* that we can employ to make our *observable white qubits* to become *more stable*, more robust, *more-useful*, and to maintain their *valuable coherence* for super-long *coherence times*?

How can we begin to *scientifically-develop* these super-useful *Colored Halting Mechanisms* in our advanced scientific laboratories here on Earth?

What is the very best way to help our precious *computing qubits* (in our future quantum computers) to remain stable, *coherent*, entangled, and *fully-operational* inside our quantum computers of the future?

Simply red-halting the progression of *red-decoherence*, or blue-halting the progression of *blue-decoherence*, or black-halting the progression of *black-decoherence*, can help our observable *white qubits* to remain entangled for super-long *coherence times* of *many minutes*, or eventually *many months*.

The full physical process of *full dihydrogen decoherence* includes the following *4 sequential physical decoherence steps*:

- (1) *White Dihydrogen Spacetime Location Decoherence*
- (2) *Red Dihydrogen Spacetime Location Decoherence*
- (3) *Blue Dihydrogen Entanglement Spin Decoherence*
- (4) *Black Dihydrogen Entanglement Spin Decoherence*

*First, the 2 white hydrogen atoms break apart completely to fully destroy the white dihydrogen covalent molecular bond in the white observable spacetime location universe, that we can all see with our mortal-human eyes from our location on planet Earth.*

*Second, the 2 red hydrogen atoms are pushed apart partially by the real dark white-to-red scalar bosons (that come directly from the 2 white atoms, and scatter off of the 2 red atoms, causing these 2 red atoms to be intensely pushed apart) that are flowing on the real white-to-red dark axons that axonically extend themselves (between the two real-human brain hemispheres from the right-brain to the left-brain) from the allocortical tissues of the right hippocampus to the left hippocampus.*

These two red atoms are *forcefully* pushed apart (partially by the white-to-red ultrafast dark scalar bosons, that flow from the white dihydrogen atom, and put substantial scattering-pressure on the individual real light scalar-boson components of the red atoms) until they successfully break their red dihydrogen covalent

*molecular bond* in the red *spacetime* location *universe* that we *cannot* directly see with our mortal-human eyes, because this *nonlocal* hidden *red* spacetime location *universe* is much-more difficult to observe or measure with our mortal-human brains (sensory organs) here on Earth.

*Third*, the 2 *blue* hydrogen atoms are pushed apart partially by the real dark *white-to-blue* scalar bosons (that come indirectly from the 2 *white* atoms, and *scatter* off of the 2 *blue* atoms, causing these 2 blue atoms to be intensely pushed apart) that are flowing on the real *white-to-blue* dark axons that axonically extend themselves (inside the real-human limbic *right-brain*) from the allocortical tissues of the *right hippocampus* to the *right amygdala*.

These *two blue* hydrogen atoms are *forcefully* pushed apart (partially by the white-to-blue ultrafast dark scalar bosons, that flow from the white dihydrogen atom, and put substantial *scattering-pressure* on the individual real light scalar-boson components of the 2 blue atoms) until these *two blue atoms* become oriented just right to successfully *break* their blue dihydrogen covalent *molecular bond* in the blue *entanglement spin universe* that we *cannot* see with our mortal-human eyes, because this *nonlocal* hidden *blue* entanglement spin *universe* is

nearly-impossible to observe or measure with our mortal-human brains (sensory organs) here on Earth.

*Forth*, the 2 *black* hydrogen atoms are pushed apart partially by the real dark *red-to-black* scalar bosons (that come indirectly from the already-separated 2 *red* bonded hydrogen atoms, and scatter off of the 2 *black* atoms, partially causing these 2 black atoms to be intensely pushed apart) that are flowing on the real *red-to-black* dark axons that axonically extend themselves (inside the real-human limbic *left-brain*) from the allocortical tissues of the *left hippocampus* to the *left amygdala*.

These *two black* hydrogen atoms are *forcefully* pushed apart (partially by the *red-to-black* ultrafast dark scalar bosons, that flow from the red dihydrogen molecule, and put substantial red-to-black *scattering-pressure* on the individual real light *black* scalar-boson components of the 2 *black* hydrogen atoms) until these *two black atoms* become *oriented* just right (in their black universe) to successfully *break apart* just right to destroy their *black* dihydrogen covalent *molecular bond* in the *black entanglement spin universe* that we cannot see with our mortal-human eyes, because this *nonlocal* hidden *black entanglement spin universe* is just impossible to directly observe or directly measure with our mortal-human brains (sensory organs) here on Earth.

There is a decoherence-step *time-delay* between each of these *four* physical *decoherence steps*.

The white covalent bond-breaking process *must not* be *disturbed* for *sufficiently long enough* for there to be *enough* decoherence-forming *time* for *all 4* decoherence *steps* to be *fully continued* to their *full completion* in order for the full dihydrogen molecule to become *fully broken* (fully unentangled) in *all 4* color *universes* (all 4 limbic *quantum* chambers).

This *Dihydrogen Decoherence* physical process causes the full destruction of a full dihydrogen molecule that becomes *fully unbonded* in *all 4* colored universes.

The *opposite* of this 4-step process of Dihydrogen *Decoherence* is the 4-step process of Dihydrogen *Coherence*.

Every type of *quantum particle coherence* follows along a similar 4-step process in the 4 colored universes.

Every type of *quantum particle decoherence* also follows along a similar 4-step process in the 4 colored universes.

How can we use these *2 important* physical *processes* of *quantum coherence* and *quantum decoherence* to bravely

attempt to *copy* the exact *quantum state* of *one qubit* onto the quantum state of *another qubit*?

How can such useful *Quantum Copying* even become theoretically possible during our lifetime here on Earth?

# Quantum Copying

What is *Quantum Copying*?

Can *Quantum Copying* help us to create some better *Quantum Computers* prior to the year 2030 here on Earth?

What is the very best way to *experimentally attempt* to achieve such Quantum Copying?

Can the quantum state of a single initial qubit be transferred (*copied onto*) to the quantum state of a second qubit?

Can we theoretically invent *a more-gentle way* of measuring an electron spin qubit, so we can gently measure the delicate spin-state of this electron *without changing* the spin-state of this electron?

Is the *old 1922 Stern Gerlach Apparatus* really the *most-gentle way* of measuring a *delicate* electron spin qubit?

Is this old 1922 *Stern Gerlach Device* really the very-best most-delicate way of gently measuring the spin direction of the delicate electron spin qubit on the *unpaired* outer *electron* of a *silver atom*?

What would happen if we theoretically-invented a *super-delicate* spin-measuring *apparatus* to delicately *gently-measure* (and *gently copy*) our delicate electron-spin qubits, *without even disturbing them* (without *destroying* their original spin directions)?

Can we *measure* the spin direction of a single spin-qubit *without changing* its spin direction?

Can we *measure* a qubit *without* also *changing it*.

Can we *copy* a qubit?

How shall we best attempt to *copy* a *qubit*?

What would happen if we *theoretically invented* our more delicate spin-measuring device in such a way so that a *talented experimentalist* could go ahead and bravely attempt to *experimentally-construct* such a spin-measuring (spin-copying) *physical experiment* right here on our physical Earth planet?

How can we theoretically (and then experimentally) invent a really-new *really-useful* much smaller *Stern Gerlach* device that will be much *more-gentle* with our delicate quantum-spin measurements?



How can we make our *Smaller Stern Gerlach Device* so small, and *so gentle*, and so delicate, and yet *so robust*, and so reliable, and *so accurate*, that it will be able to accurately *copy* (measure) the quantum spin of a quantum particle *without ever changing* its *quantum spin* in even the *slightest degree*?

How can we theoretically invent such a super-useful *Copying Stern Gerlach Device*?

# A Copying Stern Gerlach

What is *A Copying Stern Gerlach Device*?

*A Copying Stern Gerlach Device* is a much smaller, much more-gentle, much more-intelligent Stern-Gerlach-like quantum *spin-measuring* (copying) *device* that is able to accurately *copy* (measure) *the spin* of a spin qubit *without changing* the spin of the spin qubit.

The *grand key* to being able to *theoretically design* such a useful *Copying Stern Gerlach Device*, is our *open-minded* intellectual ability to look *very closely* at the old traditional Stern Gerlach device of 1922, in order to discover *why* and *how* this *old massive* super-magnetically-powerful 1922 device *always destroys* the *previous spin* of any spin qubit it tries to measure.

The *key concept* for us all to *fully understand* about this clunky, huge, old, massive, primitive 1922 Stern Gerlach device, with its *super-powerful* inhomogeneous *overpowering* magnetic *field*, is that *it never did measure* the spin direction of *any* spin qubit; because the *only thing* that all of these old *overpowering* Stern Gerlach *magnets* ever did was *magnetically-force* the *magnetic-dipole spin qubits* to *forcefully-change* (*forcefully modify*) their spin directions into *one* of the *two possible spin directions* that

were magnetically-forcefully *mandated* upon the tiny delicate *magnetic-dipole* spin qubits (such as the original neutral silver atoms of 1922).

The old 1922 Stern Gerlach Device *never* measured any spin qubit.

The old 1922 Stern Gerlach Device *always forced* every spin qubit into one of two possible spins.

Forcing is *Not* measuring.

Forcing is *not even close* to measuring.

Forcing is *destroying*.

This 1922 Stern Gerlach *Magnetic Forcing* is quantum-state *destroying*.

*Destroying* is very different than *measuring*.

*Destroying* the *original* quantum-spin *information* about a delicate qubit, is *a very different* kind of *thing* than simply measuring (copying) the original quantum-spin information about this qubit.

There is “*One-State Forcing*”, and there is “*Two-State Forcing*”.

There is using just *One End* (just the North Pole) of a strong powerful bar magnet to *One-State-Force* a bunch of qubits to all jump up to the North Pole and cling to it.

And then there is using *Both Ends* (the North Pole, and the South Pole) of a strong powerful bar magnet to *Two-State-Force* a bunch of qubits to *forcefully-split* into *two groups* of qubits, including the *north-half* of the qubits that all jump up to the North Pole and cling to it, and including the *south-half* of the qubits that all jump up to the South Pole and cling to it.

“*One-State Forcing*” is forcing a spin into *just one* single desired state.

However, “*Two-State Forcing*” is forcing a spin into one of two spin states.

# Two-State Forcing

What *Two-State Forcing*?

What is a *Two-State Forcing Device*?

*Why* is the old 1922 Stern Gerlach magnet just a Two-State Forcing Device?

How exactly is this old 1922 Stern Gerlach magnet able to *Magnetically-Force* the tiny delicate super-weak *magnetic-dipole spins* (of the neutral silver atoms of 1922) to “choose” which of the 2 *Overwhelmingly-Strong Magnetic Poles* (North or South) they will “choose” to allow themselves (magnetically *reorient* their *spin-selves*) to be more-attracted to?

Essentially the same thing happens, when we bring a large strong horseshoe magnet up close, to a delicate pile of tiny iron slivers.

Each of the tiny iron slivers “chooses” to spontaneously jump up to the *North Pole* (of the large strong horseshoe magnet), or to spontaneously jump up to the its *South Pole*.

This is *understandable* and *non-mysterious*.

Our *large strong horseshoe magnet* is a *Two-State Forcing Magnet* that *Magnetically-Forces* every tiny sliver of iron to “choose” *One of Two Poles* (the North Pole, or the South Pole), and thereby seemingly “choose” one of two quantum states (*spin up* or *spin down*).

The important thing to note is that our large strong horseshoe magnet does *Not* measure the initial state of a tiny sliver of iron.

Our large strong horseshoe magnet simply *forces* the tiny sliver of iron into one of its two-forced magnetic states (*spin up* or *spin down*).

The other important thing to note, is that the *Overwhelmingly-Strong 1922 Stern-Gerlach Magnet* does *Not* measure the initial state of a tiny neutral silver atom.

This *Overwhelmingly-Strong 1922 Stern-Gerlach Magnet* simply *Forces* the tiny neutral silver atom into one of its two-forced magnetic states (*spin up* or *spin down*).

This brute-force magnetic forcing action does *not measure* the initial spin of the silver atom.

This brute-force magnetic forcing action does *not copy* the initial spin of the silver atom.

This Two-State Forcing does *not measure qubits*.

This Two-State Forcing does *not copy qubits*.

There is *No Copying while Forcing*.

# No Copying while Forcing

Why is there *No Copying while Forcing*?

There is *No Copying while Forcing* because Forcing is *Not Copying*.

Forcing is *Not Measuring* either.

*One-State Forcing* is just *forcing* a *qubit* to move itself into *one single* very-particular chosen *quantum state*, such as *spin-up*, along the very-particular chosen direction that physically-defines “spin-up”.

*Two-State Forcing* is just *forcing* a *qubit* to move itself into just one of *two possible* very-particular chosen *quantum states*, such as *spin-up* or *spin-down*, along the very-particular direction that physically-defines both spin-up and spin-down.

*No Stern Gerlach magnet* has ever physically *measured* the *initial state* of a *qubit*, with the “*initial state*” being defined as the *original quantum state* of the *qubit* *before it entered* into the magnetic influence of the Stern Gerlach magnet.



Some of our talented scientists have invented an interesting quantum theorem called “*The No Cloning Theorem*”.

Perhaps a better name for this interesting quantum theorem would be “*The No Cloning while Forcing Theorem*”.

This is because there is certainly *No Copying while Forcing* because *forcing a qubit* is a very different kind of thing than *measuring a qubit* or *copying a qubit* or *cloning a qubit*.

This is because *Brute-Force* cannot be used while *measuring* without disturbing the *delicate qubit*.

*Magnetic Brute-Force cannot measure* a spin-qubit because a tiny delicate *magnetic-dipole spin-qubit* is *super-sensitive* to its *magnetic surroundings*.

Overwhelming *Magnetic Brute-Force cannot copy* a magnetic-dipole electron-spin *qubit*, because the *Magnetic Brute-Force* will *quickly change the magnetic-dipole orientation* quantum-spin state of the magnetic-dipole *electron-spin qubit*.

This is what happens with neutral *silver atoms*, neutral *hydrogen atoms*, and with every type of *unpaired-electron*

*atom*, and with every type of *spin-qubit* that has a finite (non-zero) *magnetic dipole moment*.

Exactly what is the real physical reason that *2-State Forcing cannot Copy* a qubit?

# 2-State Forcing cannot Copy

Why is it that *2-State Forcing cannot Copy*?

What is the real physical reason why *2-State Forcing cannot Copy* the quantum spin of a qubit?

The *real physical reason* why 2-State Forcing will *never* be able to *copy* the spin of a qubit, is because it will *never* even be able to *accurately-measure* the *original spin* of a qubit.

This is because a *2-State Forcer* (like the 1922 Stern Gerlach magnet) *forces* its set of qubits into *2-States*.

It does *not measure* its qubits.

It does *not copy* its qubits.

It does *not clone* its qubits.

It does *not understand* its qubits.

It only *Forces* its qubits.

Forcing is *not copying*.

Forcing is *not duplicating*.

Forcing is *not understanding*.

Forcing is *not measuring*.

*Only Copying is Measuring.*

# Only Copying is Measuring

What is the real reason that *Only Copying is Measuring*?

The real reason that *Only Copying is Real Measuring* is because only a *perfect copy* of a thing can be a *complete measurement* of the thing.

*Anything less* than a full and complete measurement of a thing, will *not be* a perfect copy of the thing.

Likewise, anything less than a *full and complete* measurement of a *qubit*, will not be a *perfect copy* of the *qubit*.

How can we develop the scientific ability to *copy a qubit* with exactness?

What do we need to do to *fully* and completely *measure* the *original spin* of a qubit?

Which materials (of Earth) shall we use to help us humble scientists in our holy quest to develop an *exact qubit* copying *device*?

Is such *Exact Qubit Copying* even possible?

# Exact Qubit Copying

What is *Exact Qubit Copying*?

*Exact Qubit Copying* is copying a qubit with exactness and precision to make a full and complete copy of the qubit.

Is Exact Qubit Copying theoretically possible?

Yes.

How can we do Exact Qubit Copying in our scientific laboratories?

Very carefully.

The key to understanding *exact qubit copying* is the realization that copying is understanding and mother nature has already shown us all how to do it properly.

How has *mother nature* taught us to understand and copy our individual qubits?

With *quantum chemistry*.

How can we use *molecular quantum chemistry* to copy our *electron-spin qubits* with exactness and complete accuracy?

The very first step is to fully realize that *Copying is Understanding*.

# Copying is Understanding

How can we best see that *Copying is Understanding*?

What is the core nature of *Molecular Duplication*?

What is the core nature of *Qubit Duplication*?

How can we *Copy* a *Qubit* with molecules?

How does *molecular quantum chemistry* create multiple copies of itself?

How can *one quantum molecule* help to make a *perfect copy* of itself?

How can a *set of molecules* work together to create an *exact copy* of a very particular molecule?

How does the *nucleus* of a *human cell* work to make an *exact copy* of its own *human DNA*?

If our mortal human bodies can already *make copies* of our *human cells*, and they can easily *make copies* of our *molecular human DNA*, then what is to stop our own bodies from *teaching us all* how to *make copies* of our very own *qubits* that live inside our human bodies?



Can we humble quantum physicists *learn a thing or two* from our very own human bodies?

Can our mortal-human bodies *teach us something* about how they have been busy *making copies* of our *human qubits* for so many centuries?

How can *we begin to learn* from our *own bodies* how to *copy qubits* like they do?

What is the core nature of a *molecular covalent bond*?

Exactly what *powerful quantum role* does an *electron-spin qubit play* in a *molecular covalent bond*?

What is *Qubit Covalent Bonding*?

# Qubit Covalent Bonding

Why is the nature of *Qubit Covalent Bonding*?

Why is this *Qubit Covalent Bonding* so important to the quantum computers of the future?

How can we use this *Qubit Covalent Bonding* to help us to be able to make *exact copies* of our quantum bits?

How can Qubit Covalent Bonding help us *copy* our *electron-spin qubits* with exactness and precision?

What exactly is the *core nature* of Qubit Covalent Bonding?

How do the *paired electron spins* actually *form* the *inner molecular components* of each and every molecular *covalent bond* that we find in nature here on Earth?

Why are these paired *electron spins* always *equal* and *opposite* in their *spin orientations* inside every molecular covalent bond?

Let's again consider the super-simple *dihydrogen molecule* with its *two protons* and its *two electrons* all

covalently bonded together into a single dihydrogen molecule.

The *two electrons* of this dihydrogen molecule are *constantly measuring* (effectively mirror-copying) *each other* as they *continually mirror* each other.

These *two* covalently-bound electrons (*electron-spin qubits*) cannot help but to *mirror-copy* each *other* every femtosecond of *every day* while they are still covalently-bonded to one another through the single dihydrogen molecule that they *both share*.

What is the essential nature of this super-interesting *Dihydrogen Qubit Bonding*?

# Dihydrogen Qubit Bonding

What exactly is *Dihydrogen Qubit Bonding*?

Are *two* electron-spin *Qubits* really *covalently-bound together* inside a single *Dihydrogen* molecule?

Do these *two* equal and *opposite* electron *spins* really *mirror-copy* each other continuously inside their dihydrogen molecule?

How can we use this exact, continuous, electronic, *qubit mirror-copying process* to develop and improve our *exact qubit-copying quantum computer* of the *future*?

The *two* covalent-bonding *electrons* inside of dihydrogen (a diatomic hydrogen molecule) are *always* maintained (via their covalent molecular bond) to be *exactly opposite* to each other in their directions of their electron spins.

The two electron spins are always either pointing exactly *towards each other*, or exactly *away from each other*.

Either way, the *angular distance* between these two electron spin directions is *always maintained* at exactly *180 degrees*, irregardless of how the whole dihydrogen molecule rotates or tumbles through space.

This means that these two electron-spin qubits are always maintained as *exact* qubit-spin *clones* of each other.

This type of *exact molecular* electron-spin *qubit cloning* is what physically happens inside each and every type of *Covalent Molecular Qubit Bonding*.

# Molecular Qubit Bonding

What is *Covalent Molecular Qubit Bonding*?

How can this *Covalent Molecular Qubit Bonding* be the molecular key to logically understanding how the *No Cloning Theorem* can be physically transformed into a *Yes Cloning Theorem*?

How about a simple *molecule* of *water*?

Can a closer look, at a simple water molecule, help us to understand that *every type* of covalent bond in *every type* of *covalently-bonded molecule* is actually an example of *perfect, exact 100 % spin-qubit cloning* in nature?

A single water molecule has *2 covalent bonds* that covalently-bind its *two hydrogen atoms* to its one *single oxygen atom*.

Each of these two covalent bonds are composed of two electrons with their *two opposite spins* that are always covalently-maintained at exactly *180 degrees* apart from each other.

The single relatively-heavy-weight oxygen atom holds its two relatively-light-weight hydrogen atoms outward from itself at an angle of *104.45 degrees* from each other.

There are a total of 4 electron-spin qubits involved in the covalent bonding of the two hydrogen atoms to the single oxygen atom of a water molecule.

Therefore, in a single, free, *super-cold*, isolated water molecule, *each one* of these 4 *covalent-bonding* electron-spin *qubits*, are physically maintained at *180 degrees* relative to one other particular electron-spin qubit, and at *104.45 degrees* relative to one other different electron-spin qubit, and at  $180 - 104.45 = 75.55$  *degrees* relative to the final other electron-spin qubit.

These 3 *relative* spin-qubit *angles* (of 75.55 degree of angle, and 104.45 degrees of angle, and 180 degrees of angle) are always maintained at their 3 *exact* angular *values* so long as the single, free, isolated water molecule remains *super-cold* with *no vibration motions* in its 104.45 angle.

Therefore, the *right kind* of water molecule can physically make its 4 different *electron spin-qubits* to *measure*, copy, *clone*, and maintain themselves in such an exact perfect way, that they are effective *relative qubit clones* of each other with their exact *perfectly-cloned 180 degrees* of

relative qubit-qubit angle, and with their exact *perfectly-cloned 104.45 degrees* of qubit-qubit angle, and with their exact *perfectly-cloned 75.55 degrees* of qubit-qubit angle.

This simple theoretical consideration of a single *physical* water molecule is able to help us to more clearly see that *spin qubit cloning* is not only *physically possible*, but actually *very likely* in water molecules, and in *every type* of the *thousands* of useful *covalently-bonded* molecules we can easily find in nature here on Earth.

How can these covalently-bonded molecules help us to transform *The No Cloning Theorem* into a Yes Cloning Theorem?



# The No Cloning Theorem

What is *The No Cloning Theorem*?

*When* was this *No Cloning Theorem* first invented?

*Why* was this No Cloning Theorem invented in the first place?

What is the *real purpose* of this No Cloning Theorem?

*The No Cloning Theorem* was invented a number of decades ago, based on some *logical notions* and *mathematical calculations*, that were based on a *set* of *very specific assumptions*.

There is a distinct *theoretical possibility* that some of these very *specific assumptions* may need to be *logically revised* due to the detailed *physical descriptions* of perfect exact qubit-qubit *cloning* via molecular *covalent* bonding, and due to the detailed physical descriptions of the exact precise *3-pulse structure* of the *electron-spin qubits* of this present 4 Brain Theory.

With all the *correct logical revisions* finally in place, a more careful, *more accurate new mathematical derivation* will demonstrate that we can *theoretically transform* the

tired old No Cloning Theorem into a new improved *Yes Cloning Theorem*.

# The Yes Cloning Theorem

What is *The Yes Cloning Theorem*?

*The Yes Cloning Theorem* is the *logical theorem* that will be *mathematically derived* from a more-careful investigation of the *exact physical nature* of the molecular *electron-spin qubits* of all the *covalent bonds* of mother nature here on Earth.

The *Yes Cloning Theorem* says *yes* to *electron-spin cloning*, *yes* to *photon-spin cloning*, and *yes* to some other useful types of *qubit spin cloning*.

When we scientifically realize that *every qubit* is *exact* and *deterministic*, then we can also scientifically discover a good way to *measure* this exact qubit, *copy* this exact qubit, *clone* this exact qubit, and *entangle* this exact qubit with *another* exact qubit in a way that we can fully *control* and *employ* in our *exact quantum computations*.

*Molecular Qubit Cloning* will open the door to *exact quantum computers* and *ultrafast exact quantum teleportation* of classical information over vast *spacelike* distances.

Exactly what kinds of molecules will we need to employ to successfully start to develop the exciting new scientific field of *Molecular Qubit Cloning*?

# Molecular Qubit Cloning

What is *Molecular Qubit Cloning*?

Can a *set of molecules* really be used to *successfully clone* one qubit onto another qubit?

Can a set of molecules be used to *copy* the electron-spin qubit of *one* electron over to the electron spin-state of a *second* electron-qubit?

How can we do this in our scientific laboratories?

Which covalently-bonded molecules of Earth shall we use to do this?

How can one molecule pass a qubit of information reliably to another molecule?

How can we clone qubits that are already entangled with other qubits?

How do molecules already entangle qubits?

How do molecules already clone qubits?

Where can we find the very best and most useful *Qubit-Cloning Molecules*?

# Qubit-Cloning Molecules

What is a *Qubit-Cloning Molecule*?

How can a *mere molecule* help us to *completely clone* our *quantum qubits*?

How can a *mere molecule* help us to make our qubits continue to maintain their super-useful *quantum coherence*?

*How many* qubits are there inside of a single molecule?

Of course, this will certainly depend on the exact type of molecule, and there are many different molecules we may wish to choose from.

Which molecules already *naturally copy* their qubits over to other molecules?

Which types of organic molecules are able to biologically *make copies of themselves* inside living cells?

What about the precious *quantum coherence* of our delicate *molecular qubits*?

What kind of *Qubit-Cloning Molecules* will also help us to fully stabilize our spin qubits to cause their *quantum coherence times* increase *up to infinity*, so we can begin to construct some very useful new quantum computers?

Can a fully-stable *Qubit-Cloning Quantum Computer* be built here on our planet Earth prior to the year 2030?

What kind of Qubit-Cloning Molecules shall we use to construct our very first *Qubit-Cloning Quantum Computers*?



# Qubit-Cloning Computers

How can we construct our very first *Qubit-Cloning Quantum Computer* here on Earth?

What kinds of *Qubits* will we be able to *Clone* most easily to construct our first *Qubit-Cloning Quantum Computers* here on Earth?

Why is it such a *good idea* for us to try to construct a *qubit-cloning* quantum computer right here on Earth prior to the year 2030?

When we successfully build our very first *qubit-cloning* quantum computer, then will we still need to use *error-correction qubits*?

*Why* would we still need them?

When we are able to extend our quantum bit coherence times out to infinity, and make *perfect copies* of our quantum bits, and have good control over what types of qubit-qubit entanglement *we choose to allow*, then what kind of *wonderful quantum computers* will we be able to make then?

What exactly is actually needed for us to finally be able to completely say *Goodbye to Error-Correction Qubits?*

# Goodbye Correction Qubits

How can we finally say *Goodbye* to the physical need for any *Error-Correction Qubits* in our quantum computers of today (in this year of 2023)?

Why were these *Error-Correction Qubits* first introduced into some of the early quantum computers here on Earth?

Were these *error-correction qubits* introduced to try to solve a particular problem that we were having with our early *computational qubits*?

What was the *particular problem* with these early computational qubits?

Why exactly did our computational qubits need to be *error-corrected*?

What was the *actual source* (cause) of these *qubit errors*?

How will our new *exact qubit cloning* help us to properly overcome all of these *old qubit errors* of the past?

How does exact qubit cloning also help us to develop the exciting new scientific field of *Qubit-Cloning Quantum Teleportation*?

# Qubit-Cloning Teleportation

What is *Qubit-Cloning Quantum Teleportation*?

How can perfect *Qubit-Cloning* help us to develop a super-useful type of *Quantum Teleportation* in which we are able to successfully teleport *classical bits* across *vast spacelike distances* at the *ultrafast speeds* afforded by our real *dark scalar bosons*?

Everything about this new *4 Brain Theory* paper has gently *introduced*, carefully *presented*, explained in good *detail*, and laid the proper new *theoretical foundation* for a new type of *exact* physical quantum mechanics that allows for perfect *qubit cloning*, exact quantum computers, and the *quantum teleportation* of vast quantities of useful *classical information* across the huge *spacelike distances* of our own local milky-way galaxy.

Ever since Albert Einstein published his famous *EPR paper* on May 15, 1935, and then his famous *ER paper* six weeks later on July 1, 1935, there have been some bright *curious physicists* who have deeply wondered about the physical possibility of establishing some useful *quantum-entangled* wormhole connections across vast *spacelike* distances.

*Three* of these bright *curious physicists* were just recently awarded the *Nobel Prize in Physics* on October 4<sup>th</sup>, 2022 for their excellent *experimental* research in this *ER=EPR Scientific Field* in 1972, 1982, and more recently.

Why were *Aspect, Clauser, & Zeilinger* awarded their prestigious *Physics Nobel Prizes* *so many decades* after they initially *published* their excellent experimental research results to the whole wide world?

# Aspect, Clauser & Zeilinger

On October 4, 2022, The Royal Swedish Academy of Sciences has decided to award the Nobel Prize in Physics 2022 jointly to *Alain Aspect*, *John F. Clauser* and *Anton Zeilinger* “for experiments with *entangled photons*, establishing the violation of Bell inequalities and pioneering *quantum information science*”.

These 3 *bright curious experimental physicists* certainly *deserved* to receive their Nobel Prize in Physics for *multiple decades*.

The really *puzzling thing* is why *so many decades* had to pass before these 3 bright scientists were *officially recognized* for their excellent *pioneering work* in the area of *quantum entanglement*, and for helping to properly develop the exciting new field of *quantum information science*?

What is the *real purpose* of the *Nobel Prize in Physics*?

What is the *real purpose* of the *Nobel Peace Prize*?

How many *good things* would start to happen throughout this whole wide world, if the wise members of the Nobel Committee decided to *only* give Nobel Prizes in *Peace* or

*Physics* for useful scientific developments that are intentionally directed towards scientifically *solving world poverty for everyone* on Earth?

How can this world have *peace* if we have *not yet* solved poverty for *everyone* living on it?

What is the *good purpose* of physics, if it is not to *properly serve* the *whole* human race?

What *purpose* of physics could be *better* than using physics to properly solve world poverty for *every* person on Earth?

What is the *best purpose* for *any* Nobel Prize in *any* field of human endeavor?

To help solve world poverty?

Why not?

*When* will the kind intelligent members of the Nobel Committee begin to really focus *all* their efforts on what is genuinely good for *everyone* on Earth?

How about this present *4 Brain Theory* paper of 2023?

Exactly *how many* of these powerful, new, useful, physical, ground-breaking theoretical-physics *discoveries* (described in great scientific physical detail this present 4 Brain Theory paper) *deserve* to be officially recognized (officially awarded) with a Nobel Prize in *Physics*, or with a Nobel *Peace* Prize, or with *Both*?

Is it theoretically possible that this present 4 Brain Theory paper of 2023, will be deemed of *sufficient merit* to be awarded with Nobel Prizes in *both* Peace and Physics?

Can these *two awards* both happen before the year 2030?

Can they *even happen* by 2027, which will be just *100 years* from the most-famous Solvay Conference in Brussels?

We have *completely solved* Quantum Gravity.

We have also clearly described the scientifically-correct way to *Peace on Earth*, by describing in great *scientific* physical detail (and great socioeconomic detail) how to intelligently solve world poverty for *everyone* on Earth.

*When exactly* will this super-helpful, ground-breaking 4 Brain Theory paper of 2023, be properly recognized with a Nobel Prize in *Physics* and a Nobel Prize in *Peace*?



Will it only take *multiple years*, like with some?

Or will it take *multiple decades*, like with Aspect, Clauser, and Zeilinger?

Who will be the *first brave physicists* to intelligently nominate this 4 Brain Theory paper for a Nobel Prize in Physics?

Who will be the *first brave humanitarians* to wisely nominate this 4 Brain Theory paper for a Nobel Peace Prize?

Exactly how many *helpful nominations* (for Nobel Prizes) will this 4 Brain Theory paper receive by the year 2025?

How will *simply nominating* this 4 Brain Theory paper for some much-deserved Nobel Prizes, begin to *wisely help* the billions of poor suffering people of this Earth?

What *theoretical physics paper*, has ever intelligently-advocated *so strongly* for the billions of precious poor people of this Earth, in such a bold *scientific effort* to create Peace on Earth?

What *theoretical physics paper*, has ever *physically-solved* the great mystery of Quantum Gravity so completely, so rationally, and *so logically*?

What *theoretical physics paper*, has ever provided a detailed *physical foundation* for Quantum Mechanics, that will empower the whole wide world to begin to design and build its very first *Exact Quantum Computers*, that will become able to run the *Exact Quantum Artificial Intelligence Algorithms*, that will wisely function inside the computational-hearts of the future Quantum Brains, that will animate the billions of *human-labor robots* of the future, that will begin to perform *almost all* human labor to free *all* humankind from economic slavery, to create real Peace on Earth for *all of us*?

*How long* will the *billions* of *poor suffering people* of this world be willing to continue to *patiently wait* until we finally decide to properly *step up* and *wisely solve* world poverty for *all* of them?

Does this 4 Brain Theory paper wisely explain how to properly *solve world poverty* for *everyone* on Earth?

Does this 4 Brain Theory paper wisely explain *dark matter quantum gravity*?

Does this 4 Brain Theory paper wisely explain *dark matter quantum entanglement*?

Does this 4 Brain Theory paper wisely explain how to begin to construct an *Exact Quantum Computer*?

Does this 4 Brain Theory paper wisely explain how to begin to create an *Exact Quantum AI Brain* that can learn to mimic a mortal-human brain, to learn how to perform almost *all* human *labor* here on Earth, to *liberate* all *humankind* of the forced-need to continue to labor at jobs the people do not enjoy?

What *physics paper* has ever been *more deserving* of a Nobel Prize in *Physics* than this present 4 Brain Theory paper, for its intelligent *bold* advances in *theoretical physics*, and its many *detailed descriptions* of exact *physical experiments* that can be performed to *verify* (prove or disprove) the various *scientific hypotheses* of this 4 Brain Theory?

What *literary peace effort* has ever been *more deserving* of a Nobel *Peace* Prize than this present 4 Brain Theory paper (that intelligently offers the bright hope of *future human peace* to this whole *reading world*, with its *brilliant detailed written plan* on how to *properly* solve world poverty for *every* precious human being of this entire Earth)?

Can the *simple awarding* of a Nobel Prize to a unique Berkeley physicist, *communicate* powerfully to *all*

humankind of Earth, the wise *Nobel Desires* of the Nobel Committee to *scientifically* solve world poverty for *everyone* on Earth?

Do our *wise* advanced *selves* hope, that our *bewildered* mortal *selves*, might choose to *scientifically solve* world poverty for *everyone* here on planet Earth?

What would happen if some of our advanced-human selves (from our hypothetical planet Kolob, situated just 4,200 light-years from Earth) were to give us a courtesy phone call on one of their *Ultrafast Amygdaloid Phones*, to ask us feeble mortal earthlings if we had *yet decided* to go ahead and *scientifically solve* world poverty for *everyone* on Earth yet?

# Ultrafast Amygdaloid Phones

What is an *Ultrafast Amygdaloid Phone*?

An *Ultrafast Amygdaloid Phone* is the kind of *ultrafast* super-useful *smartphone* that is generally *ubiquitous* (in many different advanced molecular forms) in every advanced human society on every advanced planet (like our advanced hypothetical Kolob planet) of this entire local Milky Way Galaxy.

These *Ultrafast Amygdaloid Phones* use real dark scalar bosons, to *communicate* with the corresponding black amygdaloid phones (and their black amygdaloid qubits) in our real human *left amygdaloidal* neural tissues, in order to use quantum entanglement to send and receive helpful classical-informational messages between different advanced planets.

For example, in the future, with the right kind of *Ultrafast Amygdaloid Phone* here Earth, we may be able to easily communicate with our advanced human selves on our hypothetical Planet Kolob, with just sub-microsecond time lags, even though the Kolob-to-Earth distance may be around 4,200 light years.

These Ultrafast Amygdaloid Phones employ real dark scalar bosons, that travel through space at the *speed of darklight*.

*Darklight* may propagate through our universe *hundreds of trillions* of times faster than mere photon light.

These Ultrafast Amygdaloid Phones employ a physical process that we can call *Amygdaloidal ER=EPR*.

# Amygdaloidal ER=EPR

What is *Amygdaloidal ER=EPR*?

*Amygdaloidal ER=EPR* is the physical realization that *ER=EPR* is physically facilitated (and *enabled*) by the physical neural processing of the *quantum entanglement* of the *nonlocal* hidden *amygdaloidal qubits* (of our nonlocal hidden amygdaloidal milky-way galaxy) with the visible hippocampal qubits of this observable hippocampal milky-way galaxy.

This means that the *Einstein Rosen Bridges* (ER wormholes) are the *real dark axons* that connect all the *local observable* (hippocampal) *qubits* (that our scientists can *easily measure* in their experimental laboratories here on Earth) of this visible milky-way galaxy, with all the *nonlocal hidden* (amygdaloidal) *qubits* of the nonlocal hidden milky-way galaxy (that lives inside our real-human amygdala).

The *ER bridges* (of July 1, 1935) are the hippocampal-to-amygdaloidal *wormholes* (real dark axons) that *physically connect* all of the exact physical processes of *EPR entanglement* (of May 15, 1935) between pairs of observable particles in this universe.

Real *dark scalar bosons* propagate at ultrafast velocities on these real dark *axon wormholes* (ER bridges) to cause all of the EPR *entanglements* that we can measure in our Earth laboratories.

What is the real nature of this *Dark Boson Axonal ER=EPR*?



# Dark Boson Axonal ER =EPR

What is *Dark Boson Axonal ER=EPR*?

How can all the real *dark scalar bosons* travel so fast (on their *ER=EPR Axons*) so as to make our whole milky-way galaxy into a *local environment*?

How can all of these Dark-Boson Axonal ER=EPR *wormholes* connect every pair of entangled particles?

Does this new *4 Brain Theory* present some good solid physical insights to finally resolving the old 1935 *ER=EPR* bewilderment of the past, as Albert Einstein, Nathan Rosen, and Boris Podolsky sought to comprehend the core nature of *EPR quantum entanglement* and *gravitational ER wormholes*?

Is it scientifically natural to simply realize that these famous old *ER wormholes* must be composed of *sets* of real dark human *neural axons*?

*What else* could they possibly be?

How could our universe of galaxies be *held together* by anything *other* than our real *human axons* and the real *neural pulses* that propagate on them?

How would *dark matter* be composed of anything else?

How could *dark energy* be caused by anything else?

How could *quantum gravity* be generated by anything other than the momentum-transferring *quantum scattering events* of our real *dark scalar bosons* bouncing off of *all* of the elementary particles of this whole universe, that contains our planet Earth?

How could *quantum entanglement* be generated by anything other than the *ultrafast quantum communication events* of our real *dark scalar bosons* connecting our right-hippocampal *observable universe* with the 3 other hidden nonlocal quantum limbic chambers (the 3 other *hidden nonlocal quantum universes*)?

How can we fully appreciate the enlightening nature of the initial insights of the recent *2013 ER=EPR Theory*, without closely studying these powerful new *physical descriptions* (scientifically presented now for the very first time in this new 4 Brain Theory paper) of this new *2023 ER=EPR Theory*?

# 2023 ER =EPR

What is our *2023 ER=EPR Theory*?

Why is this present *4 Brain Theory* of 2023, actually a very specific, very detailed, very physical *2023 ER=EPR Theory*?

This *2023 ER=EPR Theory* (presented in this *4 Brain Theory* paper for the first time) does not *yet* contain *all* of the microscopic *physical details*, nor does it *yet* contain *all* of the appropriate *supporting mathematics*, that it will likely acquire during 2024, 2025, and during the next few years of its *continued development*.

However, this *2023 ER=EPR Theory* that we are presenting in this current *4 Brain Theory* paper, is sufficiently *complete*, fully-logical, *testable*, sufficiently *general*, and sufficiently *well-detailed* so as to represent a very scientifically-compelling *physical theory* of why exactly *ER* really does equal *EPR*, and why our network of real *dark ultrafast axons* are the *physical ER bridges*, and why our dynamic set of real *dark ultrafast scalar bosons* (that propagate as real dark neural pulses on our real dark axons) are the *ultrafast communicators* that dynamically *EPR-entangle* every pair of entangled particles in our *local observable milky-way galaxy*, via

their entanglement with our *nonlocal hidden amygdaloidal milky-way galaxy*.

But, is this really possible?

Is our *local observable milky-way galaxy* really connected (via an *ultrafast set* of real dark axons, and the real dark scalar bosons that propagate on them between the 4 quantum limbic chambers) to a hidden nonlocal amygdaloidal milky-way galaxy, that contains a hidden nonlocal planet Earth, with its hidden nonlocal *Amygdaloidal Scientists* working diligently in their hidden nonlocal Amygdaloidal Laboratories?

# Amygdaloidal Scientists

Do these hypothetical *Amygdaloidal Scientists* really exist?

How can such things exist that are *difficult* for us mortal-human scientists to clearly see?

For every individual local observable *mortal-human* scientist here on Earth, does there also exist a corresponding nonlocal hidden *amygdaloidal scientist* hidden deep inside our real-human left amygdala?

How can such a thing be?

For every local visible white elementary particle that is observable here on Earth (inside this right hippocampal universe), there exist 3 colored elementary particles inside the 3 other quantum chambers.

Every mortal-human scientist of Earth, has a mortal-human *physical body* that is *composed* of the observable elementary particles of Earth.

Every one of the *4 colored* limbic-human *scientists* of the *4 colored Earths*, has a limbic-human *physical body* that

is *composed* of the colored elementary particles of the 4 colored Earths.

An individual local observable mortal-human right-hippocampal *white scientist* of white Earth, has a corresponding nonlocal hidden right-amygdaloidal *blue scientist* of blue Earth, and a corresponding nonlocal hidden left-amygdaloidal *black scientist* of black Earth, and a corresponding nonlocal hidden left-hippocampal *red scientist* of red Earth.

What is the physical nature of the *2 Hippocampal Laboratories*, and the *2 Amygdaloidal Laboratories*, where these 4 colored limbic scientists conduct their important scientific experiments?

# Amygdaloidal Laboratories

What about the 2 *Amygdaloidal Laboratories* and the 2 *Hippocampal Laboratories*?

What kind of interesting scientific experiments are conducted by the 4 *colored scientists*, as they work diligently in their 4 *colored laboratories*, that exist inside our *networked set* of real-human limbic tissues?

*Mostly the very same* kinds of scientific experiments are performed in these 4 different colored laboratories, because these 4 *labs* are *deeply-connected* to each other via the real dark ultrafast axons that connect them to each other.

These 4 *labs* are deeply-connected via the ultrafast real dark *axonal ER=EPR bridges* that are the physical, biological, limbic *axon-wormholes* that hold the very *fabric* of our 4 spacetimes together, right here in our advanced universe of galaxies, stars, and spinning planets.

What we all need to remember, as the bright scientists of our visible white planet Earth, is that when we conduct a particular quantum experiment (here on our *white Earth*) in our local visible observable *white laboratory* of white Earth, is that 3 *very similar* (but not exact) *quantum*

*experiments* are also being conducted in the *3 colored laboratories* of the *3 colored Earths*.

For example, when we conduct an EPR type experiment here on our observable *white Earth* to experimentally test the violation of a Bell inequality, we just need to remember that a similar EPR type experiment is also happening on a nonlocal hidden *blue Earth*, and on a nonlocal hidden *black Earth*, and on a nonlocal hidden *red Earth*.

What actually happens inside the *red lab* on red Earth, and inside the *black lab* on black Earth, and inside the *blue lab* on blue Earth, that *physically-causes* the *pair-entanglement* that we *scientifically-observe* inside our observable *white lab* on our observable white Earth?

If there are *4 colored quantum holograms* inside of *4 quantum chambers*, that simulate our whole milky-way galaxy, which *also* includes *every white* scientific laboratory here on white Earth, then *what exactly happens* to the entangled quantum particles inside of *one* of these specific white observable Earth-based *laboratories*?

What if we simply choose a specific laboratory on white Earth; and we also strategically place our favorite Schrodinger's Cat inside of this *one* specific *white laboratory*?



Because there are actually 4 Schrodinger's Cats, with one simulated *colored cat* in each of the *4 colored quantum chambers*, then we also realize that the *4 colored simulated cats* are actually located inside of *4 different colored scientific simulated laboratories*.

Now, let's look closer at these *4 Simulated Laboratories*.

# 4 Simulated Laboratories

What actually happens inside of these *4 Simulated Laboratories*, that work together to construct the *final* (measurable and observable) *Right-Hip Simulated Spacetime Laboratory* that we can all easily see, and measure, and observe together right here on our own *Right-Hip Earth*.

These *4 Simulated Laboratories* are as follows:

- (1) Right-Hip *White* Simulated Spacetime Laboratory
- (2) Left-Hip *Red* Simulated Spacetime Laboratory
- (3) Left-Am *Black* Simulated Entanglement Laboratory
- (4) Right-Am *Blue* Simulated Entanglement Laboratory

What happens when one of us *white* Earth *scientists* walks into our white laboratory (here on Earth) that is located *inside* the right-hippocampal chamber of our *universal-constructor* network of real-human limbic tissues?

What happens in our *hypothetical Left-Hip Red Earth* laboratory (in our *Red Universe*) that functions just a little bit differently than our *White Universe*?

How exactly does our *Left-Hip Red Earth* with its *Left-Hip Simulated Spacetime Red Laboratory* prepare the

*initial* trial spacetime *positions* of every *particle* (including a specific entangled electron-positron pair) of every *scientific instrument* inside our specific laboratory?

And how does our *Left-Am Black Earth* with its *Left-Am Simulated Entanglement Black Laboratory* physically-maintain via its *black covalent-bonding* the *spin-spin* entanglement *orientations* of our specific entangled electron-positron pair, that is inside a particular scientific instrument, that is in our specific laboratory?

And precisely how does our *Right-Am Blue Earth* with its *Right-Am Simulated Entanglement Blue Laboratory* prepare and finally arrange the *final* spin-spin entanglement *orientations* of our specific entangled electron-positron pair, that is inside a particular scientific instrument, that is in our specific laboratory?

And how exactly do these 3 *preparatory* colored limbically-simulated *laboratories* (Left-Hip Red, Left-Am Black, and Right-Am Blue) pass their spin and spatial-location *information* to the *final observable* Right-Hip White *laboratory* where our visible Right-Hip white *Earth scientists* can make their careful quantum measurements on the specific entangled electron-positron pair?

Of course, when a specific individual scientist (here on our visible, observable Right-Hip White Earth) walks into her specific measurable *right-hip white laboratory*, there are actually 4 simulated colored *scientists* (that are all her) that walk into their 4 simulated colored laboratories.

What exactly is the actual quantum state of these 4 simulated *colored scientists*, and how exactly do these 4 simulated *colored scientists* influence each other, and how precisely are they all actually just one human scientist?

How can these 4 *Simulated Scientists* actually be just one human scientist?

# 4 Simulated Scientists

How can there be *4 Simulated Scientists* (living inside the 4 colored quantum chambers) that together *form* the *one* individual human scientist that we can all see, all hear, and all touch here on Earth?

Is every one of us *individual* human *bodies* here on Earth really limbically-simulated (inside our real-human limbic system) by way of *4 Simulated Human Bodies* that finally *combine together* in the Right-Hip *White* Quantum Chamber (our white universe) to form our actual (classically-measurable) *individual* mortal-human *observable body* here on Earth?

What would happen if *each* and *every quantum physicist*, that enters his or her quantum laboratory, here on Earth, started to remember that she or he is actually constructed by *4 simulated colored physicists* working in their *4 simulated colored laboratories* on the planetary surface of *4 simulated colored Earths*, of the *4 simulated colored milky-way galaxies* that are all governed by their *4 super-massive, super-energetic, gravitational, simulated, colored Sagittarius A\* 's*?

Can this be *hypothetically* possible?

Can it possibly be, that for every one of us mortal human scientists (living here on the *Observable Right-Hip White Earth*), there may be 3 other *preparatory* quantum *versions* of *us* that live inside the other 3 colored quantum chambers?

Can this be *theoretically* possible?

Can this be *really* possible?

Can this be *limbically* possible?

Can this be *physically* possible?

Now let's look closer at these *4 Scientists in 4 Labs*.

# 4 Scientists in 4 Labs

There are actually *4 Scientists in 4 Labs* every time a mortal-human scientist (here on Earth) is working in her or his scientific laboratory conducting *4 Quantum Physics Experiments*.

These *4 scientists* work in their *4 labs* conducting their *4 quantum physics experiments* inside the 4 colored quantum chambers that together form this milky-way galaxy.

The *dark matter particle* (real dark scalar boson) *flows*, with their ultrafast characteristic velocities and pulse-frequencies, may dynamically orchestrate *slightly different limbic functions* in each of the 4 colored quantum chambers.

These real dark scalar boson *velocities* and *frequencies* may be a little bit different inside the 4 colored human bodies (and 4 colored human *brains*) of each of the 4 quantum scientists, as they all are working in their 4 simulated laboratories, while these *4 scientist's bodies* are busy conducting their 4 quantum experiments.

The *only scientist* that is *conscious* is the observable *white scientist*, because consciousness itself is only projected

into the observable white brain, of the observable white scientist of white Earth.

The other 3 colored scientists are all working *unconsciously* (like unconscious *humanoid robots*) in their 3 colored laboratories inside their 3 nonlocal hidden colored universes.

The underlying scalar dark-boson *propagation-pattern* field (with its proper *dark-boson* arrival *eigenfrequencies*), may be slightly different for each of the 4 quantum experiments, on the 4 *distinct sets* of *entangled* electron-positron *pairs* in the 4 simulated colored quantum laboratories.

If each of the 4 sets, of entangled electron-positron pairs, may experience *slightly different* dark matter pulse-pulse *frequencies*, then how can we (the white quantum physicists of Earth) measure these 4 different *colored* dark-matter *eigenfrequency fields*?

What if these 4 distinct dark matter eigenfrequency fields included a set of *measurable* characteristic dark scalar boson eigenfrequencies?

What if the dark scalar bosons usually travel at their highest velocity possible, and the real dark neurons that



are firing (creating) the dark boson neural pulses are often firing at their maximum firing frequencies?

Would the *resulting frequencies* at which the dark scalar bosons scatter off visible-light photons induce a *measurable subtle jitter* (dark-boson photon *scattering frequency*) in the motion of the photons?

Can this characteristic *dark-photon eigenfrequency* (the *dark-boson arrival scattering frequency*, which is the highest frequency at which a sequential stream of individual dark scalar bosons can *serially-bombard* an individual photon) be *robustly detected*, by any of the existing scientific instruments that have *yet been invented* here on Earth?

Who will be the first experimentalist to *successfully measure* this proper *dark-boson-photon* (the temporal frequency rate at which a series of tiny dark scalar bosons *repetitively bombard* a single photon, and *scatter themselves* off of the single photon) *bombardment eigenfrequency*?

Just how slightly different, will this characteristic *dark-photon eigenfrequency* be, in each of the 4 colored quantum chambers?

How can we accurately measure these *4 distinct dark-boson bombardment frequencies*, in the *4 simulated colored quantum laboratories*, so we can make more accurate (and more complete, and more exact) *quantum measurements*?

In particular, what is the best, most accurate, and most complete way we can begin to conduct our new *4 in 4 Quantum Experiments*?

# 4 in 4 Quantum Experiments

What is a *4 in 4 Quantum Experiment*?

Why will the *new 4 in 4 Quantum Experiments* start to become *so important* in the near future?

A *4 in 4 Quantum Experiment* is a *new type* of scientific quantum experiment, that can be conducted in a scientific laboratory, by a good quantum physicist, that fully realizes (and properly accounts for the physical fact) that there actually exist *4* simulated colored *scientists* working in *4* simulated colored *laboratories*, conducting *4* simulated colored quantum experiments, on *4* simulated entangled colored electron-positron pairs, or on *4* sets of other entangled colored particles.

The *purpose* of these *new 4 in 4 Quantum Experiments* is to help the experimentalists conduct their quantum-entanglement experiments in a *more intelligent manner*, so these experimental physicists can begin to predict quantum particle behaviors with *much* greater *accuracy*, and begin to *control* the detailed quantum-entanglement of particular sets of particles with *much* greater *precision*.

These *ultra-precise* 4 in 4 Quantum Experiments will become *commonplace* in the *future*, as more and more talented physicists discover their value.

These 4 in 4 Quantum Experiments will help our bright experimental physicists discover all the *dark-boson-photon* bombardment *eigenfrequencies* of all of the 4 colored quantum chambers.

These new experimental quantum discoveries will lead to many productive new insights into the core physical nature of *Particle Self-Entanglement* across all 4 colored quantum chambers, that are the 4 colored simulated universes that together create this observable white universe of galaxies, stars, and planets, where we all *seem* to be living presently here on our *local observable* planet Earth.

# Particle Self-Entanglement

What is *Particle Self-Entanglement*?

Can a single particle entangle with *itself*?

How do the *components* of an elementary particle entangle with each other to actually *hold* the whole entire elementary particle *together*?

Can the *individual* neural-pulse *components* of an elementary particle become *un-entangled* in one particular initial quantum chamber, *before* these individual components later eventually also become un-entangled in the other 3 quantum chambers?

Does a positive neural pulse *entangle itself* with a negative neural pulse, as they *mutually orbit* each other to form a single *photon*?

Do the 3 real neural pulses (of one individual electron) *entangle* with *each other* to form the one individual electron?

Do these 3 neural pulses *first* combine together (to form the one individual electron) in the right-hip *white* quantum chamber (or in the left-am *black* quantum

chamber), before these 3 neural pulses also later combine themselves together in the other 3 colored quantum chambers?

Why are *some* of the elementary particles, like the 3-pulse muon particle, *unstable*?

What exactly causes the *3-pulse muon* to *fall apart* and *decay* into other particles that are more stable?

Does this particle instability *first* manifest itself in the *Left-Am Black Quantum Chamber*, or in one of the other 3 quantum chambers?

Does the easy-to-understand *dark-boson frequency-bombardment* cause the muon to fall apart and decay, or is the muon's decay actually caused by some other force like the *weak nuclear force*?

What is the *real cause* of the muon's measured instability?

Is dark-scalar-boson frequency-bombardment a likely *partial-cause* of muon decay?

Can a *muon* be made to decay faster (or *slower*) if the dark-boson frequency-bombardment is altered?

How can we *locally-alter* the *rate* of this dark-boson frequency-bombardment?

Can dark-boson frequency-bombardment be *modified* to cause an electron to decay by *releasing* its 3 neural pulses (that compose the electron) and *freeing* these 3 neural pulses, so they can completely *separate* from each other and go their own way in space, thus *dissolving* the electron?

Can we *dissolve* an *electron* in one of our scientific laboratories here on Earth?

What is the *best way* to attempt this useful scientific dissolving feat prior to the year 2030?

Is there a way to change the local physical nature of dark-boson scalar frequency-bombardment to cause a *photon* to *decay* into its two neural pulses, with each pulse going its own way, traveling far from the other pulse, as the *two* pulses *become unentangled*?

What physically causes the two pulses of a single photon to stay together to continue to form (and maintain) the photon, making the photon so *very stable*?

How exactly do these two real-limbic pulses (a positive pulse and a negative pulse) initially come together in the

left-am black quantum chamber, to begin to entangle with each other, as they begin to orbit each other to form a single photon?

What is the actual physical nature of this *two-pulse entanglement* to form a single photon?

How do the 4 quantum chambers *initially* communicate with each other to entangle the 2 pulses together, to initially compose the photon in the very first place?

And how do the 4 quantum chambers *continue* to communicate with each other to *keep* the 2 pulses entangled with each other (in elliptical-circular *mutual orbits* around each other) to maintain the photon, and to forever keep the individual photon completely stable for its *entire life*, until it finally interacts with something (like a Compton-scattering electron) that might modify it, or even *destroy it*?

A new kind of *scientific computer software* can be developed to more closely study how two neural pulses can become entangled with each other to form a single photon.

This *Single-Photon Self-Entanglement Computer Simulation Software* can be carefully designed, written,



and used to scientifically study *photon self-entanglement* in great detail.

This kind of powerful new *pulse-pulse* entanglement-simulation *software*, can be created by our brilliant scientists and wisely employed to go hand in hand with some careful laboratory experiments on *individual photons*, to reveal all the *scientific details* of the core nature of *pulse-pulse entanglement*, that is at the heart of particle self-entanglement and multi-particle entanglement.

In this way, *all the scientific details* of quantum entanglement can finally come to the light of day, as the *behaviors* and *interactions* of the 4 colored quantum chambers become more-fully understood.

This future *pulse-pulse* entanglement *software*, can be properly generalized from photon studies to include the *3-pulse entanglement* that takes place in the initial formation (and continuous-maintenance) of a single electron, and the *9-pulse entanglement* that occurs to form (and maintain) a single proton.

Perhaps a very powerful type of *N-pulse entanglement* simulation software can be developed, to study the 4-chamber entanglement of *N pulses*, where *N* is an integer.

Now that we have briefly discussed individual-particle self-entanglement, let's turn our attention to the more complex situation of *Two-Particle Entanglement*.

# Two-Particle Entanglement

What is *Two-Particle Entanglement*?

Two-Particle Entanglement is the entanglement of *two* quantum *particles*.

One-Particle Self-Entanglement is the entanglement of the *neural pulses* that compose the individual particle.

Two-Particle Entanglement involves *all* of the *pulse-pulse interactions* of *all* of the individual *neural pulses* of particle *one*, with all of the individual *neural pulses* of particle *two*, as these *multiple* pulse-pulse interactions take place in *4* distinct *colored* quantum *chambers*.

Therefore, Two-Particle Entanglement is all about the *multiple* forceful *interactions* (entanglement) of both particle's *pulses* in *all 4* colored quantum *chambers*.

With Two-Particle Entanglement, there are a *good number* of neural pulses to carefully monitor and wisely keep track of.

A type of powerful sophisticated *Two-Particle Entanglement Simulation Software* can be designed, written, and developed to scientifically-model every

known type of *two-particle entanglement*, including *photon-photon entanglement*, and *electron-positron entanglement*, and *many* other kinds of two-particle entanglement.

This *intelligent* two-particle entanglement *software* can be developed and used in *close conjunction* with some wisely-designed *laboratory experiments* to gradually scientifically-elucidate every remaining mystery of two-particle entanglement.

Now let's turn our scientific attention to the most general case, which we call *N-Particle Entanglement*.

# N-Particle Entanglement

What is *N-Particle Entanglement*?

N-Particle Entanglement is the entanglement of *N quantum particles*, where N is an integer number.

A powerful new type of *N-Particle Entanglement Simulation Software* can be carefully designed, written, and developed, first to run on our existing *classical computers* (that are already here on Earth), and then later to run on the much-faster *exact quantum computers* of the near future, hopefully before the year 2030.

We are carefully explaining how to *begin the development* of these much-faster *exact quantum computers* of the future, here in this present 4 Brain Theory article.

We can develop our *N-Particle Entanglement Software* to allow us to simulate all of the forceful pulse-pulse entanglement behaviors of *N particles*, with *all* of their real neural limbic *pulses* entangling with each other *across* all 4 colored quantum *chambers*.

By carefully developing our N-Particle Entanglement Software, in *close conjunction* with a set of wisely-designed *laboratory experiments* on actual physical

elementary particles, we will be able to scientifically discover and unveil, every remaining mystery of *quantum entanglement physics*.

This is a major *holy grail* of quantum physics, to discover and unravel *every* remaining *mystery* of quantum entanglement.

This *bold* new *pathway* to begin to actually do this seems pretty *clear* and *straightforward* from the new perspective of this present 4 Brain Theory paper.

The intellectual scientific development of this desired, accurate, complete *N-Particle* Entanglement Simulation *Software* will represent a type of *holy grail* achievement unto itself, because this powerful accurate software will open the door to many *new* scientific *discoveries* and many new creative *inventions* for the benefit *all* humankind here on Earth.

Now, let's look at more closely at what actually happens with *1* single elementary particle, and its *4* colored (white, blue, black, and red) neural pulse structures, as they entangle and interact in the *4* distinct colored quantum chambers.

Let's call this most-simple type of quantum entanglement, our *1 in 4 in 4 Entanglement*.

# 1 in 4 in 4 Entanglement

What is *1 in 4 in 4 Entanglement*?

*1 in 4 in 4 Entanglement* is the *scientific study*, via *software simulations*, *laboratory experiments*, and *theoretical conceptualizations*, of *1 single particle*, and its *4 distinct neural-pulse structures*, as all the real limbic neural pulses entangle (interact) with each other within (and across) the *4 spatially-distinct colored quantum chambers*.

Therefore, *1 in 4 in 4 Entanglement* is *1 particle*, with its *4 distinct neural-pulse structures*, entangling together across *4 quantum chambers*.

One single individual elementary particle is actually a specific set of *4 distinct neural-pulse structures* existing within *4 separate limbic-tissue quantum chambers*.

For example, if we desire to study the *self-entanglement* of a *single 2-pulse photon*, then we will study the *1 photon*, with its *4 neural-pulse structures* (with each individual pulse structure consisting of *2 pulses*, that include a *positive pulse* and a *negative pulse*) entangling together across the *4 quantum limbic chambers*.

Therefore, the full understanding of the *self-entanglement* of a *single photon* involves the careful scientific study of *all* the entanglement-interactions of its *8 pulses*, with 2 of its *pulses* being inside the *right-hip white chamber*, and 2 of its *pulses* being inside the *left-hip red chamber*, and 2 of its *pulses* being inside the *left-am black chamber*, and 2 of its *pulses* being inside the *right-am blue chamber*.

As a further example, the full understanding of the *self-entanglement* of a *single electron* involves the careful scientific study of all the entanglement-interactions of its *12 pulses*, with 3 of its *pulses* being inside the *right-hip white chamber*, and 3 of its *pulses* being inside the *left-hip red chamber*, and 3 of its *pulses* being inside the *left-am black chamber*, and 3 of its *pulses* being inside the *right-am blue chamber*.

For a little more complex example, we can see that a full understanding of the *self-entanglement* of a *single proton* involves the careful scientific study of all the entanglement-interactions of its *36 pulses*, with 9 of its *pulses* being inside the *right-hip white chamber*, and 9 of its *pulses* being inside the *left-hip red chamber*, and 9 of its *pulses* being inside the *left-am black chamber*, and 9 of its *pulses* being inside the *right-am blue chamber*.

Therefore, in order to fully understand *just one* single *proton*, isolated-completely in this universe all by itself,



we will need to wisely proceed to design and write some really-good new *scientific* pulse-pulse entanglement *software* codes, that can *accurately-simulate* the dynamically-changing quantum-entanglement behaviors of *all 36* of the *proton's* real-limbic neural *pulses*.

In this way, individual-particle self-entanglement can certainly become *fully-understood* as an important part of our new *exact science* of quantum physics.

*Just as soon* as we really *start* to design and build these powerful new pulse-pulse *exact* entanglement-simulation *software tools* (hopefully before 2026); then quantum physics can finally start to become an *exact science* of nature, rather than just the old *merely-probabilistic* science of its adventurous past (from 1926 to 2023).

Now that we have briefly discussed 1-particle self-entanglement, let's turn our attention to the *more-complex* situation of *2-particle entanglement*.

With 2-particle entanglement, we actually need to look closely at what we can call *2 in 8 in 4 Entanglement*.

# 2 in 8 in 4 Entanglement

What is *2 in 8 in 4 Entanglement*?

*2 in 8 in 4 Entanglement* is the *scientific study*, via *software* simulations, *laboratory* experiments, and *theoretical* conceptualizations, of *2 particles*, and their *8 distinct* colored neural-pulse *structures*, as all the real-*limbic* neural pulses entangle (interact) with each other within (and across, via the ultrafast cross-chamber exchange of real dark scalar bosons) the *4 different* colored *quantum chambers*.

Therefore, *2 in 8 in 4 Entanglement* is *2 particles*, with their *8 pulse sets*, entangling together across *4 quantum chambers*.

This *2 in 8 in 4 Entanglement* involves the quantum entanglement between *2 distinct* elementary *particles*, as they are *fully-represented* as *8 distinct* neural-pulse *structures*, interacting in *4 separate* real-*limbic-tissue quantum chambers*.

Each individual elementary particle is a set of *4* neural-pulse *structures* existing within the *4* separate limbic-tissue *colored* quantum chambers, which include the

*white* chamber, the *blue* chamber, the *black* chamber, and the *red* chamber.

Each *one* individual *red* neural *pulse*, that is a vital part of the 4 colored neural-pulse structures (corresponding to a single elementary particle) has its very own unique dynamic spatial location, linear momenta, angular momenta, energy, and mass, as this *one* individual *red* neural *pulse* exists, lives, and moves inside its *red* quantum *chamber*.

*Exactly 3* of these *4 distinctly-colored* neural-pulse *structures* (that belong to a single elementary particle), are the *3 sets* of *nonlocal* hidden *variables* of the elementary particle, as they exist, live, and move within their *3 nonlocal hidden* colored *quantum chambers*.

These *3 nonlocal hidden* neural-pulse *structures* (the nonlocal *intrinsic* hidden *variables* of a single elementary particle) interact with each other via a set of *high-speed myelinated fibers* (inter-chamber real dark communication fibers) that transmit super-fast (darklight speed) *dark-scalar-boson* entanglement-information between all 4 of the colored limbic-tissue quantum chambers (including the one single *white* quantum chamber that prominently *displays* this whole *white observable* milky-way *galaxy* to all of us bright mortal-human *scientist-observers* here on Earth).

Therefore, in the scientific study of *2 in 8 in 4 Entanglement*, we are actually studying *2 particles* with their *8 pulse sets* moving dynamically in their *4 quantum chambers*.

For example, if we desire to scientifically study the *entanglement* of an *electron* with a *positron* (to form unstable *positronium*), then we will study the *electron*, with its *4 colored electron neural-pulse structures* (with each individual *colored electron neural-pulse structure* consisting of its *own 3 pulses*, that include *two fast negative pulses* orbiting *one single slow positive pulse*) and the *positron*, with its *4 colored positron neural-pulse structures* (with each individual *colored positron neural-pulse structure* consisting of its *own 3 pulses*, that include *two fast positive pulses* orbiting *one single slow negative pulse*), and with these  $6 \times 4 = 24$  neural pulses entangling together across their *4 quantum limbic chambers*.

Therefore, the full understanding of the *quantum entanglement* of an *electron-positron pair* (that may be fully-bound, or fully-unbound, or just *partially-bound* in just 1, 2, or 3, of the total of 4 quantum chambers) involves the careful scientific study of *all* the entanglement-interactions of its *24 pulses*, with 6 of its *pulses* (1 slow positive pulse, and 1 slow negative pulse, and 2 fast negative pulses, and 2 fast positive pulses)

being inside the *right-hip* white chamber, and 6 of its *pulses* (1+1+2+2) being inside the *left-hip* red chamber, and 6 of its *pulses* (1122) being inside the *left-am* black chamber, and 6 of its *pulses* (1122) being inside the *right-am* blue chamber.

As an additional example, the full understanding of the *nuclear entanglement* of a single *deuteron* particle (composed of one *9-pulse proton* bound to one *9-pulse neutron*) involves the careful scientific study (via neural-pulse simulation software, and via physical laboratory experiments) of all the dynamic ultrafast entanglement-interactions of its *72 pulses*, with *18* of its *pulses* being inside the *right-hip* white chamber, and *18* of its *pulses* being inside the *left-hip* red chamber, and *18* of its *pulses* being inside the *left-am* black chamber, and *18* of its *pulses* being inside the *right-am* blue chamber.

For an even larger example, we can see that a full understanding of the *nuclear entanglement* of *two deuterons*, combining them both into a *single alpha particle* (a helium-4 nucleus of *two 9-pulse protons* bound to *two 9-pulse neutrons*) involves the careful scientific study of all the entanglement-interactions of its *144* real limbic *neural pulses*, with *36* of its *pulses* being inside the *right-hip* white chamber, and *36* of its *pulses* being inside the *left-hip* red chamber, and *36* of its *pulses* being inside the *left-am* black chamber, and *36* of its *pulses* being

inside the *right-am blue chamber*, with a set of *inter-chamber* entanglement-communication *dark scalar bosons* traveling at their ultrafast *darklight speeds* between the 4 quantum chambers, to provide timely *nonlocal* ultrafast *communications* between all 144 pulses, and to properly *quantum-entangle* the  $36+36+36+36=144$  *pulses together*.

Therefore, in order to fully understand *just* one single *alpha particle* (helium-4 nucleus), we will actually need to create a really-good pulse-pulse entanglement software simulation program, that can *accurately-simulate* the quantum entanglement (via ultrafast darklight-speed-entanglement dark scalar bosons between the 4 quantum chambers) of *all 144* of the *alpha particle's* real *neural pulses*.

In this way, *two-particle* (and also *n-particle*) quantum entanglement can become fully understood (hopefully by the year 2030), and exactly understood, as a very important area of a new improved *exact science* of quantum physics.

Just as quickly (hopefully by 2026 or 2030) as we actually begin to scientifically design, write, and build these powerful new *pulse-pulse* entanglement-simulation *software tools*; then quantum physics can finally really start to become a *complete* and an *exact* science, rather

than merely the old *incomplete* and the old *inexact* (probabilistic) *approximate* science that it has heretofore been during its initial yearly years from 1926 to 2023.

Now that we have briefly considered *1-particle* self-entanglement, and *2-particle* mutual-entanglement, let's take a good look at the more-complex case of *3-particle entanglement*.

With 3-particle entanglement, we actually need to consider what we call *3 in 12 in 4 Entanglement*.

# 3 in 12 in 4 Entanglement

What is *3 in 12 in 4 Entanglement*?

*3 in 12 in 4 Entanglement* is the *scientific study*, via *software* simulations, *laboratory* experiments, and *theoretical* conceptualizations, of *3 particles*, and their *12 distinct* neural-pulse *structures*, as all the real limbic neural pulses entangle (interact) with each other within (and across) their *4 different* colored *quantum chambers*.

Therefore, *3 in 12 in 4 Entanglement* is *3 particles*, with their *12 pulse sets*, entangling together across *4 quantum chambers*.

This *3 in 12 in 4 Entanglement* involves the quantum entanglement between *3 distinct* elementary *particles*, as they are *fully-represented* as *12 distinct* neural-pulse *structures*, interacting in *4 separate* real-limbic-tissue *quantum chambers*.

Each individual elementary particle is a set of *4* neural-pulse *structures* dynamically-existing within *4* separate quantum chambers.

It appears theoretically possible that these *4* neural-pulse *structures* (corresponding to a single elementary particle)



can sometimes (under some quantum conditions) have *different* spatial locations, different linear momentums, different angular momentums, different energies, different masses, and different spin orientations, as they exist, live, and move inside their 4 corresponding colored quantum chambers.

3 of these 4 *distinct* neural-pulse *structures* (that belong to a single elementary particle) are the 3 *sets* of *nonlocal* hidden *variables* of the single elementary particle, as these 3 *sets* exist, live, and move within their 3 *nonlocal* hidden *quantum chambers*.

These 3 *different*, nonlocal, hidden, neural-pulse *structures* (the 3 *sets* of dynamic, nonlocal, intrinsic, hidden variables of a single elementary particle) interact with each other via a set of *high-speed* myelinated real dark neural *fibers* (inter-chamber *ultrafast* communication fibers) that transmit super-fast (darklight speed) dark-scalar-boson *entanglement-information* between *all* 4 different colored limbic-tissue *quantum universes* (including our *observable* white *universe* that we mortal-human Earth-scientists can all easily observe directly from our unique vantage point of our current location here on our *white Earth*).

Therefore, in the scientific study of *3 in 12 in 4 Entanglement*, we are actually studying 3 elementary

particles with their *12* pulse sets, dynamically moving (and interacting) in (and across) their *4* colored simulated quantum-chamber *universes*, including our observable *white universe*, and our nonlocal hidden *red universe*, and our nonlocal hidden *black universe*, and our nonlocal hidden *blue universe*.

For example, if we desire to study the *entanglement* of an *electron* with a *proton* and a *neutron*, in the way these three particles are able to easily combine (entangle) together to form a *single atom* of *heavy-hydrogen*, then we will study the *electron*, with its *4 colored electron neural-pulse structures* (with each individual colored electron neural-pulse structure consisting of its *own 3 pulses*, that include its *two fast negative pulses* and its *one single slow positive pulse*), and the *proton*, with its *4 colored proton neural-pulse structures* (with each individual *proton neural-pulse structure* consisting of its *9 pulses*, that include its *4 fast positive pulses*, its *2 slow negative pulses*, its *2 fast negative pulses*, and its *1 slow positive pulse*), and the *neutron*, with its *4 neutron neural-pulse structures* (with each individual *neutron pulse structure* consisting of its *9 pulses*, that include its *4 fast negative pulses*, its *2 slow positive pulses*, its *2 fast positive pulses*, and its *1 slow negative pulse*), and with these  $21 \times 4 = 84$  real *light scalar neural pulses* (real *light scalar bosons*) entangling together across their *4 quantum limbic universes*, via the *thousands* of real *dark scalar*

*bosons* that together entangle these *84 light scalar bosons* in an ultrafast way, across their *4* quantum chambers (their *4* real quantum *universal limbic simulators*)

Therefore, the full understanding of the *quantum entanglement* of an *84-pulse atom of heavy hydrogen* involves the careful scientific study of *all* the entanglement-interactions of its *84 pulses*, with 21 of its *pulses* being inside the *right-hip white chamber*, and 21 of its *pulses* being inside the *left-hip red chamber*, and 21 of its *pulses* being inside the *left-am black chamber*, and 21 of its *pulses* being inside the *right-am blue chamber*, with a set of *thousands* of *inter-chamber entanglement-communication dark scalar bosons* traveling at their ultrafast *darklight speeds* between the *4* quantum chambers (*colored universes*) to properly *quantum-entangle* the  $21 + 21 + 21 + 21 = 84$  *real light-scalar-boson pulses together*.

Therefore, in order to fully scientifically-understand all of the super-interesting neurodynamic behaviors of *just one* single fully-isolated *atom of heavy hydrogen* (one electron orbiting one deuteron), we will actually need to create a really-good pulse-pulse-entanglement *scientific software* simulation program, that can *accurately-simulate* the quantum entanglement (via *thousands* of scattering, momentum-imparting, ultrafast *dark scalar bosons* that swiftly propagate between all *4* quantum universes,

including our *observable* white universe that contains all of us *observing* white mortal-human *conscious scientists*, that live here on our *observable* white Earth planet) of *all* 84 of the heavy hydrogen atom's *real neural* light-scalar-boson *pulses*.

In this way, we may happily discover that 3-particle (and also n-particle) *exact quantum entanglement* can start to become *completely-understood* (by some of us mortal-Earth physicists) as a very precise part of a *newly-completed* greatly-improved *exact quantum physics* prior to the year 2030.

Just as fast as we begin (by 2024 hopefully) to create these powerful new *pulse-pulse* entanglement-simulation *software tools*, then *quantum physics* can start to become a *complete* science, and an *exact* science; rather than merely the *incomplete* and *inexact* probabilistic science that it has heretofore been, prior to this year of our Lord 2023.

Now that we have briefly considered *1-particle* self-entanglement, *2-particle* mutual entanglement, and *3-particle* entanglement, we are all ready, and properly prepared (informed), so we can now consider the *general case* of *N-particle entanglement*, where *N* is any positive integer.

With the most-general case of  $N$ -particle entanglement, we actually need to look very closely at what we can call  *$N$  in  $4N$  in 4 Entanglement*.

# N in 4N in 4 Entanglement

What is *N in 4N in 4 Entanglement*?

*N in 4N in 4 Entanglement* is the *scientific study*, via *software simulations*, *laboratory experiments*, and *theoretical conceptualizations*, of *N particles*, and their *4N distinct neural-pulse structures*, as all the real limbic neural pulses entangle (interact) with each other within (and across) the *4 different quantum chambers (universes)*.

Therefore, *N in 4N in 4 Entanglement* is *N particles*, with their *4N pulse sets*, entangling together across *4 quantum chambers (universes)*.

This *N in 4N in 4 Entanglement* involves the quantum entanglement between *N distinct elementary particles*, as they are *fully-represented* as *4N distinct neural-pulse structures*, interacting in *4 separate limbic-tissue quantum chambers (universes)*.

Each individual elementary particle is a set of *4 dynamic real-limbic neural-pulse structures* existing within *4 spatially-separate limbic-tissue quantum chambers (colored universes)*.

It appears possible that these 4 neural-pulse *structures* (corresponding to a single elementary particle) can sometimes have somewhat *different* spatial locations, linear momentums, angular momentums, energies, masses, and spin orientations, as they exist, live, and move inside their 4 corresponding quantum chambers.

*Three* of these four *pulse structures* (that belong to a single elementary particle) are the 3 *sets* of the *nonlocal hidden pulse-structure variables* of the single elementary particle, as these 3 *pulse structures* exist, live, and dynamically-move within their 3 *nonlocal, hidden (red, blue, and black) quantum chambers*.

These 3 *nonlocal hidden pulse structures* (the nonlocal intrinsic hidden variables of a single elementary particle) interact with each other via a set of *ultrafast* myelinated *fibers* (inter-chamber limbic communication fibers) that transmit super-fast (darklight speed) dark-scalar-boson *entanglement-information* between all 4 different limbic-tissue quantum chambers (universes), including this white *observable universe* where we quantum physicists (of Earth) seem to be living currently.

Therefore, in the scientific study of *N in 4N in 4 Entanglement*, we are actually studying *N particles* with their *4N pulse sets* moving dynamically (and quantum-entangling together) in their 4 *quantum chambers*.

For example, if we desire to study the *entanglement* of  $N$  *elementary particles*, in the way these  $N$  particles are able to combine (entangle) together to form an *entangled-set* of  $N$  *entangled particles*, then we will study these  $N$  entangled particles, each with its  $4$  *colored* neural-pulse *structures* (with each individual colored pulse structure consisting of its *colored-set* of *pulses*, that may include some combination of *fast* light-scalar-boson *pulses* and *slow* light-scalar-boson *pulses*), which in total are the full set of  $4N$  neural-pulse structures, all entangling together across the  $4$  *quantum limbic chambers* (universes).

Therefore, the full understanding of the *quantum entanglement* of a *multi-pulse* entangled *set* of  $N$  *entangled particles* involves the careful scientific study of *all* the dynamic entanglement-interactions of its *many pulses* (more than  $4N$  pulses), with  $N$  of its pulse structures being inside the *right-hip* white *chamber*, and  $N$  of its pulse structures being inside the *left-hip* red *chamber*, and  $N$  of its pulse structures being inside the *left-am* black *chamber*, and  $N$  of its pulse structures being inside the *right-am* blue *chamber*, with a set of *thousands* of *inter-chamber* entanglement-communication *dark scalar bosons* traveling at their ultrafast *darklight speeds* between the  $4$  quantum chambers (universes) to properly *quantum-entangle* all the *many* real-limbic neural *pulses*



(more than  $4N$  pulses) of all the  $4N$  neural-pulse *structures* together.

Therefore, in order to fully scientifically-understand any particular *set* of  $N$  *entangled-particles*, that are completely-isolated from the rest of the universe, we will actually need to create a really-good, super-powerful, very-accurate  $N$ -*pulse-entanglement* scientific software simulation program, that can *accurately-simulate* the quantum entanglement (via thousands of ultrafast *dark scalar bosons* between the 4 colored quantum chambers) of all of the many pulses (more than  $4N$  real, light, scalar, *boson pulses*) of all of the  $4N$  real limbic neural *pulse structures*.

In this way, the general case of  $N$ -*particle quantum-entanglement* can become fully understood for each and every *set* of  $N$  *elementary particles*, as a vital part of a *newly-completed* greatly-improved theory of the *exact quantum physics* of  $N$  *interacting* (and possibly dynamically-entangling) *elementary particles*.

Just as soon as we (the scientists of Earth) begin to create these powerful new *many-pulse quantum-entanglement* software-simulation *tools*, then *quantum physics* can finally start to become a properly *complete science* and a properly *exact science*, rather than merely the *incomplete*

and *inexact* (probabilistic) *approximate* science that it has heretofore been.

Now that we have briefly considered *1-particle* self-entanglement, *2-particle* mutual entanglement, *3-particle entanglement*, and the general case of *N-particle entanglement*, we are better prepared to look more closely at the concept of *full N quantum determinism*.

The full (complete, precise, and exact) quantum determinism of *N* entangled elementary particles is what we can call *Full N Quantum Determinism*.

# Full N Quantum Determinism

What is *Full N Quantum Determinism*?

How can the *inner-pulse-dynamics* of N interacting (possibly entangling) quantum particles be *fully determined*?

Can Full N Quantum Determinism *really be* possible in this modern year of 2023?

Why is the possibility of *Full N Quantum Determinism* so vitally important to the future of quantum physics?

What will our real neural deterministic exact quantum physics look like in another *100 years* from *today* in the year *2122*?

*Back* in the year *1927* at the famous *Solvay Conference* in Brussels, some of the quantum physicists in attendance held some very *strong opinions* about the possibility of *full quantum determinism*, and some even *passionately argued* that quantum mechanics was *already* a complete theory back in 1927.

However, some of the *more-intelligent* theoretical *physicists* (including Albert Einstein and Erwin

Schrodinger) of 1927 (and 1935 and 1950) continued to believe that *some* more *things* needed to be discovered about quantum physics, *before* quantum mechanics could claim (with honest clear integrity) that it was becoming a *complete theory* of science.

In this present 4 Brain Theory paper of 2023, we have described *some* more *things* about quantum physics that may help us to begin to construct a *complete theory* of quantum physics.

A *complete theory* of quantum physics will allow us to also construct an *exact theory* of quantum physics.

An exact (*fully-deterministic*) complete theory of quantum physics, will be much more useful (and much more helpful to all humankind here on Earth) than the *merely probabilistic theory* of quantum physics that emerged from the heated *emotional discussions* that took place at the 1927 Solvay Conference.

An exact complete theory of quantum physics will allow us to construct a set of *exact* (fully-accurate) *models* for the internal neural-pulse structures of all our elementary particles, including the *exact photon*, the *exact electron*, the exact up quark, the exact down quark, the *exact proton*, the *exact neutron*, all the exact atomic nuclei, all the exact atomic orbitals, all the *exact atoms*, all the *exact*

*ions*, all the exact molecules, all the *exact human DNA*, and all the exact moons, exact planets, exact stars, and our exact galaxies.

A *fully-deterministic* properly-exact *complete theory* of quantum physics may even allow us to construct an *exact model* for our whole entire *milky-way galaxy*.

Therefore, the *exact complete theory* of quantum physics, that we are diligently *constructing today* in 2023, by *writing* and *publishing* this present 4 Brain Theory paper, will probably become a very useful piece of *mortal human knowledge* (for the benefit of all of us people) here on Earth.

What exactly will we be able to *build* with an *exact* (fully-deterministic) *theory* of quantum physics?

Will we be able to use this new *exact quantum theory* to help us to solve world poverty for *everyone* on Earth?

Why not?

Our *exact theory* of quantum physics will include the  $4N$  real-limbic, dynamic, neural-pulse *structures*, that belong to a set of  $N$  *interacting* (and possibly entangling) *elementary particles*.

For example, a single *photon* is actually composed of 4 *simulated* (deterministic) *photonic* real-limbic neural-pulse *structures* (with each photonic pulse structure consisting of a real-light *positive* scalar-boson *neural pulse*, and a real-light *negative* scalar-boson *neural pulse*, that are *mutually orbiting* each other at the speed of quicklight) living inside the 4 distinct (*nonlocal* due to their spatial separation) *limbically-deterministic* quantum chambers (*universes*).

These 4 *deterministic* (simulated) photon-neural-pulse *structures*, live inside the 4 *exact* nonlocal *quantum chambers*.

We can simply call these 4 deterministic colored photon pulse structures the 4 *Colored Deterministic Photons*.

# 4 Deterministic Photons

What is the precise nature of these *4 Colored Deterministic Photons* that live inside the 4 exact colored quantum chambers (universes)?

Why are these *4 Deterministic Photons* actually *4 exact (fully-defined and fully-determined) colored photon pulse-structures*?

How can these 4 colored pulse-structures all be *deterministically exact*?

Has everything possible already been *determined* about these *4 colored* pulse-structures, including the *white* pulse-structure, the *red* pulse-structure, the *black* pulse-structure, and the *blue* pulse-structure?

Do we *exactly* know everything about these *4* dynamically-entangling colored *pulse-structures* that together make up *one single photon*?

Do these 4 colored dynamic neural-pulse structures behave more like *quantum structures*, or more like *classical structures*?

Now, let's look more closely at the *two* real-*limbic neural pulses* (the *positive* pulse, and the *negative* pulse) that together compose a *single photon*.

The one single *positive pulse*, and the one single *negative pulse* (that together compose a single photon) both actually behave as *relatively-large* classical *objects* in our real human brains, because these *two* real-*neural pulses* are actually composed of a *large number* of real sodium-ions and a *large number* of real potassium-ions, that have *been moved* across a *relatively-large* real-*neural cell membrane* inside our real wireless network of real human brains.

These real neural pulses actually behave as real *classical objects* (classical neural pulses), because they actually *are* real *classical objects* (real classical neural pulses).

A single photon is actually composed of *exactly* two real, exact, *deterministic*, mutually-orbiting *classical pulses*.

Everything about our *new 2-pulse photon model* is actually completely *deterministic*, fully *exact*, and totally *classical*.

There is actually nothing that is really *uncertain* about our new 2-photon model.



All 4 of our colored neurally-simulated photons are exact, *classical*, deterministic, and *certain*, because we already know the *locations* (in our 1 local observable quantum chamber, and in our 3 nonlocal hidden quantum chambers) and *inner-makeup* (two charged neural pulses per photon) of each of our 4 *deterministic* photons.

Now let's look more closely at our 4 *Deterministic Electrons*.

# 4 Deterministic Electrons

What are our *4 Deterministic Electrons*?

Our *4 Deterministic Electrons* are the 4 exactly-simulated electrons that live inside the *4 deterministic quantum chambers*.

These 4 Deterministic Electrons have *4 deterministic spin directions*, and these *4 distinct spin directions* can be different from each other in their 4 colored quantum chambers (colored universes).

Our 4 deterministic electrons also possess *4 different electron locations*, that can be distinctly different from each other as they are *exactly-located* and *classically-positioned* inside the 4 colored quantum universes (colored chambers).

Also, our 4 deterministic electrons have *4 distinct electron momenta* in their 4 quantum chambers.

There *exist two sets* (with two different purposes, that we will simply call the *gravity-set*, and the *entangling-set*) of real *dark scalar bosons* that travel at ultrafast *darklight speeds* as they *interact* with (and scatter, and bounce off,

and push upon) the 4 deterministic electrons in their 4 quantum chambers (universes).

The *first-set* (the *gravity-set*) of tiny ultrafast dark scalar bosons travel *radially-inwards* towards the center of our Earth, as they *pass through* our *many* scientific *laboratories* (most of which are located right here on Earth's surface), and this first set of tiny ultrafast dark scalar bosons *push* all 4 colored deterministic electrons *towards* the *center* of all 4 of our colored *Deterministic Earths* (our 4 colored Deterministic Earths that live inside our 4 colored deterministic exact quantum chambers), to cause all 4 colored deterministic electrons to feel the gravitational effects of the *Dark Matter Flow Gravity* created by the *scattering* (and momenta-transferring) of these tiny ultrafast dark scalar *bosons* as they travel *mostly* towards the center of our Earth planet.

The *second-set* (the *entangling-set*) of tiny ultrafast dark scalar bosons also travel at darklight velocities, with their ultrafast darklight speeds that are *many orders of magnitude faster* than the *speed* of photon-light.

However, this *second-set* (the *entangling-set*) of tiny ultrafast dark scalar bosons actually serve a *different purpose* other than just creating the net-force of dark-matter flow gravity.

This *entangling-set* of tiny ultrafast dark scalar bosons serve the *inter-chamber communication* purpose of *coordinating* (entangling) the *4 relative behaviors* of the 4 deterministic electrons with their *4 spin orientations* and their *4 spatial locations*, as they live, move, and exist inside the 4 colored deterministic quantum universes (chambers).

How exactly does this *entangling-set* of tiny dark scalar bosons, travel via their ultrafast *darklight myelinated* real-dark *axons* that *biologically-extend* from one quantum chamber (one limbic-tissue region) to another quantum chamber (another separate nonlocal limbic-tissue region) to *communicate* and *carry* electron-spin *information* at *darklight speeds* from *one* quantum chamber (colored universe) to *another* quantum chamber (colored universe)?

For example, how exactly does the *left-hip* red *quantum chamber* (the nonlocal hidden *red universe*) send its thousands of darklight signals (via ultrafast *red-to-white* dark scalar bosons) to the *right-hip* white *quantum chamber*, (the observable local *white universe*) at superluminal darklight speeds, to *inform* the electron in the right-hip *white* chamber how to *change* its *spin orientation*, to move the electron-spin into its *proper* final *orientation*, so it can be properly *observed* and *measured* by one of our talented *right-hip* observable white

*scientists* while she is diligently working inside her *right-hip white observable laboratory* right here on our own *right-hip white observable Earth*?

How will we go about discovering all the important dark-scalar-boson electron-bombardment *eigenfrequencies*, that may allow us to *modify* the manner in which both sets of dark scalar bosons bombard our *3-pulse electrons*, so we can properly observe, measure, and *stabilize* our *3-pulse 4-chamber electrons*, so we can use these *3-pulse 4-chamber (3p 4c) electrons* to construct *super-stable quantum bits* (qubits) for our *qubit-stabilized quantum computers* of the future?

These are the kinds of important questions that we will *begin asking*, as we begin to use this *4 Quantum Chamber Theory* (which is part of this general *4 Brain Theory*) to more carefully study the *deterministic nature* of all our photons, electrons, and *atoms*.

Now let's turn our attention to all the observable *right-hip white atoms* that make up all the stable observable matter right here on our very own *right-hip white observable Earth*.

These *right-hip white observable atoms* are all deterministic atoms, because they are all *exactly-defined*

and there is actually *nothing probabilistic* about them, when we *look close enough*.

Also, it turns out that all our nonlocal hidden left-hip *red atoms* are likewise *all deterministic* and *all exact*.

Even all our nonlocal hidden left-am *black atoms* are *exactly deterministic*.

And even all our nonlocal hidden right-am *blue atoms* are *fully exact*.

Now, let's look more closely at these *4 Exact Colored Atoms*.

# 4 Exact Colored Atoms

What is the actual quantum nature of our *4 Exact Colored Atoms*?

Why do we have the nonlocal hidden *exact blue atoms*, and the nonlocal hidden *exact black atoms*, and the nonlocal hidden *exact red atoms*, in addition to our local observable *exact white atoms* of our observable white milky-way galaxy?

Is it really possible that *every atom* (here on Earth) is actually simulated inside our real networked limbic tissues as *4 Exact Colored Atoms* that live inside our *4 exact* real-limbic quantum chambers (*colored universes*)?

What shall we do with this *new* theoretical *possibility*, that every atom inside our scientific laboratories (here on Earth) is actually *4 exact*, colored, deterministic, simulated *atoms*, that actively *talk* with *each other* via tiny, ultrafast, slightly-charged, dark scalar bosons that travel on *inter-chamber darklight-axons* that *connect* each and every chamber (universe) with the other 3 quantum chambers (universe)?

If every *atom* (of every molecule) here on Earth, is *actually simulated* in 4 distinct quantum chambers, then

how can we *employ* this *useful* new *knowledge* to *control* our *atoms* more completely, so we can actually make them *more stable*, so we better use them as the *stable qubits* (quantum bits) we desire for our quantum computers?

How can we *properly confirm* that all our atoms (here on Earth) are *fully-deterministic* in *nature*, so we can confidently proceed to use them to construct *super-stable qubits* for our future exact quantum computers?

For example, how can we monitor, control, and *stabilize* our *atoms* to such an advanced scientific degree, that we will be able to accurately *predict* the *exact timing* of every atomic emission of a *photon*?

The most-simple hydrogen atom, of a single *3-pulse* electron bound to a single *9-pulse* proton, certainly appears to be the *most-simple atom* we have here on Earth.

How can we fully-stabilize this most-simple *12-pulse* hydrogen atom, so we can predict exactly when it will *absorb* a photon, and also predict exactly when it will *emit* a photon?

Our 12-pulse hydrogen atom is actually neurally-simulated as *4* distinct *colored* 12-pulse hydrogen atoms



in the 4 quantum, real-limbic chambers (*universes*) where they really live, move, and have their being.

Therefore, our 12-pulse 4-chamber (*12p 4c*) hydrogen atom is actually composed of 48 *distinct* real-limbic neural *pulses*, and these 48 *pulses* are the real *light scalar bosons* that together make up the hydrogen atom.

This *exact*, complete, deterministic *48-pulse* hydrogen *atom* can be accurately scientifically-simulated with some intelligently-designed skillfully-written *computer software*.

This future *48-pulse* hydrogen-atom software-simulation *program*, will need to fully account (and completely software-model) for the different types of *dark* scalar-boson *flows*, that dynamically *scatter off* of each of the 48 *individual pulses* of our *48-pulse atom*.

This future *48-pulse* hydrogen-atom simulation *software* will also need to carefully account for the way in which an *8-pulse photon* (2-pulse photon x 4 chambers = 8 *total photon pulses*) is absorbed into the *48-pulse atom*, and *how* the 8 pulses are *stored* inside the 48-pulse atomic structure, and how the *8-pulse photon* can possibly *combine* with *another* 8-pulse photon *inside* the 48-pulse atomic structure, and *how* (and exactly *when*) an 8-pulse

photon can *leave* the 48-pulse atom via *photonic spectral emission*.

The *1<sup>st</sup>* type of dark scalar boson flow, consists of all those *Earth-radial-inward-traveling* dark scalar bosons, that are constantly flowing mostly towards the *center* of our Earth and thereby bouncing (scattering) off *all 48 pulses* as they intensely-push (rapidly bombard) on each of these 48 pulses of our 48-pulse hydrogen atom to *jointly create* the effective “*gravitational force*” of *Dark Matter Flow (Scattering) Quantum Gravity* on our 48-pulse hydrogen atom.

The *2<sup>nd</sup>* type of dark scalar-boson flow is a little bit *more specific* than the *1<sup>st</sup>* type of dark scalar-boson flow.

The *2<sup>nd</sup>* type of dark scalar-boson flow includes all those dark scalar-boson inter-chamber *inter-entanglement* communication *flows* that cause all 4 exact atoms to *stay in good communication* with each other, by coordinating the specific *pulse-behaviors* of all 48 of their neural pulses as they *move around each other* in their 4 limbic-tissue chambers (universes).

For example, the *4 colored* exact *atoms* may sometimes exist in a different energy-state (*atomic energy level*), and these 4 colored (red, black, blue, and white) deterministic atoms continually *talk* with *each other* (by *exchanging*

thousands of tiny ultrafast inter-chamber communication *dark scalar bosons*) to mutually decide the *exact time* when the *right-hip white hydrogen atom* will emit a *right-hip white photon* that will travel to where a *right-hip white physicist* can detect it in his *right-hip white photon-counter* here on our *right-hip white observable Earth* inside our very own *right-hip white observable solar system*.

Our new intelligent *48-pulse hydrogen-simulator software* will need to be able to carefully track, *measure*, control, and *stabilize everything* that can possibly happen to our *48-pulse hydrogen atom*.

This powerful *48-pulse simulator software* can be used to carefully *guide* an intelligent *laboratory experiment* with a single *48-pulse hydrogen atom*, in order to *develop all* the necessary *procedures* that will *completely stabilize* the *48-pulse hydrogen atom*, so it can be used as a *super-stable qubit*, with an *infinite coherence time*.

We can then begin to *improve* and *generalize* our *48-pulse simulator software* to handle all the different kinds of *many-pulse atoms* and all the distinct types of *many-pulse atomic-ions*.

For example, some *atomic-ions* have already been used by some quantum computer companies in their *attempts* to *build a useful* quantum computer here on Earth.

Now let's carefully look at the *4 Exact Ions* that exist inside our 4 colored quantum universes (limbic chambers).

# 4 Exact Ions

What exactly is the exact physical nature of these 4 *Exact Ions*, that are the 4 colored deterministic *atomic-ions* that live inside our 4 quantum chambers (our 4 colored universes)?

What exactly is an *atomic-ion*?

One or more electrons can be *removed* from the outer electronic shells of a particular neutral atom, to *transform* this particular neutral atom into a positively-charged exact *atomic-ion*.

Sometimes an electron can be *added* to the outer shell of a neutral atom, to transform this neutral atom into a negatively-charged exact atomic-ion.

These charged atomic-ions are *fully-exact* because *everything* about them is exact, precise, and *fully-deterministic*.

These positively-charged (and negatively-charged) *atomic-ions* tend to seem to *react* more *strongly* with externally-applied electric fields (and also with external magnetic fields), because of their positive (or negative) *electric charge*.

In order to provide a new interesting example (that has also been used recently by some others), let's look for a *big atomic-ion* that is much *larger*, much *heavier*, and much *more-complex* than our simple little 48-pulse hydrogen atom, that only has *one single proton* inside its atomic nucleus.

Let's consider the *big*, heavy, complex *ytterbium atom* that has *70 protons* inside its nucleus.

One single electron can be *removed* from a single ytterbium (70, 174) atom to make a single *ytterbium* (70, 174) positively-charged *atomic-ion*.

*Ytterbium* (70, 174) is the *most common* (with a natural relative abundance here on Earth of about 32%) *isotope* of ytterbium with *70 protons* and  $174 - 70 = 104$  *neutrons*.

Each of the *104 neutrons*, and each of the *70 protons*, of ytterbium (70, 174) have *9-pulses* that exist, move, and live naturally inside each one of our *4 quantum chambers* (colored limbic universes).

The  $70 - 1 = 69$  *electrons* of the ytterbium ion each have *3 pulses* in each of our *4 quantum chambers* (colored limbic universes).

Therefore, ytterbium (70, 174) has  $174 \times 9 = 1,566$  *nuclear neural pulses* inside its large nucleus.

Our positively-charged ytterbium ion has  $69 \times 3 = 207$  *electronic neural pulses* orbiting its nucleus.

Therefore, each ytterbium ion has  $207 + 1,566 = 1,773$  real limbic neural *pulses* in each of its 4 quantum chambers (4 colored limbic *universes* of *entanglement*).

Therefore, our ytterbium ion has a grand total of 4 *chambers* times  $1,773$  *pulses* =  $7,092$  *neural pulses* that we will need to *carefully* (and accurately with no errors) *simulated* in our intelligent new scientific *ytterbium simulation software*, so we can fully-discover the very-best way to properly *stabilize* our *ytterbium ions*, so we can completely stabilize an *ytterbium-qubit* formed from a *single 7,092-pulse ytterbium ion*.

This super-large, super-dynamic, super-complex  $7,092$ -*pulse ytterbium ion*, is significantly *more complex* than the relatively-simple little  $48$ -*pulse hydrogen atom*.

It certainly seems like it may be *easier* (and much *quicker*) to design, write, develop, and test the relatively-simple  $48$ -*pulse hydrogen simulation software*, than it will be to design, write, develop, and test the *more-complex 7,092-pulse ytterbium-ion simulation software*.

Therefore, we scientifically-predict today (in 2023) that it may be somewhat *easier* to *fully-stabilize* a relatively-simple little 48-pulse *hydrogen-qubit*, rather than the more-massive, more-complex 7,092-pulse *ytterbium-ion qubit*.

Trying to fully-stabilize a 7,092-pulse ytterbium-ion qubit may prove to be *rather difficult* because *7,092 neural pulses* is a rather *large number* of neural pulses that need to be *measured*, monitored, *stabilized*, and *fully-controlled* in order to be able to have a good bright hope of *simultaneously-stabilizing* such a *large set* (the particular large set of *thousands* of entangled neural pulses that is a whole ytterbium ion) of *7,092* entangled *pulses*.

A single ytterbium ion is a very particular set (a very particular, dynamic, multi-colored configuration) of *7,092* entangled *neural pulses*.

Why try to simultaneously stabilize *thousands* of entangled neural pulses, when it certainly seems like it will be *so much easier* to simply stabilize *just a few* entangled neural pulses?



What is the *smallest number* of neural pulses that can possibly *compose a single qubit* here inside this simulation where we currently live?

An *8-pulse photon* certainly seems to be the *smallest set* of neural pulses that we can *pretty easily* (in a certain experimental-scientific sense) *get our hands on* right here on Earth inside our local milky-way simulation.

The 4-pulse dark scalar bosons, and the 4-pulse light scalar bosons, seem to be much *more-difficult* (than an 8-pulse vector-boson photon) to experimentally-measure (and to experimentally-maneuver) in our scientific laboratories here on Earth, when compared to the *relative ease* at which a single 8-pulse photon can be *produced*, measured, *polarized*, and *entangled* with *another 8-pulse photon*.

*When measured correctly* (and *completely*) an 8-pulse photon is both *exact* and *deterministic* with *all 8* of its real light neural *pulses* always in their *8 exact* dynamically-relative *positions*, traveling with their *8 exact* relative *velocities*.

A single *8-pulse photon* is composed of exactly *4 positive* real light *scalar bosons*, and exactly *4 negative* real light *scalar bosons*, that live and move, with their *8 exact* *locations*, and with their *8 deterministic momenta*, and

with their *8 exact velocities*, inside the *4 deterministic quantum chambers* (the 4 colored universes, with our 1 *white universe* being our local *observable universe*, and with the 3 nonlocal *red, black, and blue universes* being *mostly-hidden* from our immediate view) of this local milky-way galaxy neural-simulation.

It seems like, in the short term during the next few years here on Earth, a relatively-large, relatively-slow (low-frequency, and low-energy), individual *8-pulse photon*, may prove *much easier to work with* than an individual (very-hard-to-directly-measure) tiny ultrafast 4-pulse *dark scalar boson*, or with an individual (hard-to-directly-measure) 4-pulse *light scalar boson*.

It certainly seems theoretically possible that the *most-easy qubit to fully-measure and fully-stabilize* may ultimately turn out to be this *super-simple 8-pulse photon qubit*.

The *8-pulse photon* (2 pulses in each of its 4 chambers) seems to be the *most-simple elementary particle* that can easily be placed into one of *two quantum states*, such as into a *vertically-polarized* quantum-state or into a *horizontally-polarized* quantum state.

Due to its low number of pulses (just 8 pulses), it appears that our *simple 8-pulse photon* may be the *most-easy qubit to fully-stabilize*.

*Eight neural pulses* seem to be a *pretty small number* of pulses to monitor, simulate, measure, control, and *stabilize*.

A *fully-stable* photonic-qubit *quantum computer* may possibly become the first really-useful *completely-stable* quantum computer, that we can make during the *next few years* here on Earth, hopefully prior to the year 2030.

Besides photonic-qubit quantum computers, and ionic-qubit quantum computers, there are *several other kinds* of *potential quantum computers* that our quantum scientists (of Earth) are currently trying to build.

Today in 2023, some scientists (here on Earth) are currently trying to build some useful quantum computers by using “*superconducting qubits*”, that are composed of *Josephson Junctions*.

These superconducting qubits are typically composed of *thousands* of very *cold atoms*.

Let’s take a look at the theoretical possibility of constructing *4 Exact Superconducting Qubits*.

# 4 Superconducting Qubits

Is there a theoretical possibility that we can someday construct *4 Exact Superconducting Qubits* in their 4 quantum chambers (universes)?

How many *different types* of Superconducting Qubits can we construct?

Why do Superconducting Qubits need to *be cooled down* to such *ultra-low temperatures* in order to make them function properly?

What exactly is a *Superconducting Qubit*?

A *Superconducting Qubit* is typically made of *Josephson Junctions*.

A *Josephson Junction* is two superconductors that are placed very close together, with a *tiny barrier* (of a non-superconducting material, or some other type of restriction) *between* the *two* superconducting *materials*.

These physical materials (that form the Josephson Junction) are typically composed of *thousands* of *ultra-cold atoms*.

These thousands of ultra-cold atoms (that compose a single Josephson Junction) contain *millions* of *neural pulses* that interact with each other in their 4 quantum chambers (colored universes).

A single Superconducting Qubit contains *millions* of real neural *pulses*.

It may be relatively difficult to *completely model* all the entangling-interactions of these millions of real neural pulses with *full-exactness*.

Therefore, trying to build *4 Exact Superconducting Qubits*, and *completely model them* (via our exact scientific software simulations), so we can fully stabilize them, may prove to be *very difficult*.

It may be experimentally *easier* to initially exactly-model and simulate exact single-*photon qubits*, exact single-*electron qubits*, exact single-nucleon qubits, exact single-nucleus qubits, exact single-atom qubits, and exact single-ion qubits.

A *single-photon qubit* is composed of just  $2 \times 4 = 8$  neural pulses that may be the *most-easy* to precisely model and exactly simulate.

A *single-electron qubit* is composed of just  $3 \times 4 = 12$  neural pulses that may also be *relatively-easy* to precisely model and exactly simulate.

A *single-proton qubit* is composed of just  $9 \times 4 = 36$  neural pulses that may also be *possible* to precisely model and exactly simulate.

Whether we ultimately decide to build our *computational qubits* from photons, electrons, protons, neutrons, atoms, or ions, we still need to find a good way to *isolate* and *protect* our qubits (and all their associated neural pulses) from their *surrounding environment*, so we can properly *control* them and *stabilize* them.

How can we *best isolate* our 4 qubits in our 4 colored quantum chambers?

Perhaps we can build a *Qubit Isolation Bubble* around each of our *delicate qubits* to protect them by *isolating them* from their noisy environments.

What is the physical nature of these theoretical (and practical) *4 Qubit Isolation Bubbles*?

# 4 Qubit Isolation Bubbles

Is it theoretically possible that *4 Qubit Isolation Bubbles* can be constructed (with intelligent Dirac strings) to *isolate* and *protect* and *stabilize* the *quantum coherence* of the *4 qubits* inside their *4 colored quantum chambers*?

These *4 Qubit Isolation Bubbles* can possibly be constructed to be anywhere from a few dozen *picometers* in *diameter*, to a few nanometers in diameter, and maybe even up to a few *microns* in diameter, or larger.

The purpose of these *4-Qubit Isolation Bubbles* is to protect and *isolate* each of the *4 colored qubits* (in their *4 colored quantum chambers*) completely from the *outside environment*.

For example, in a *purely photonic quantum computer*, the individual qubits are made of single photons that can be vertically-polarized (qubit quantum-state *one*) or horizontally-polarized (qubit quantum-state *zero*).

The *8 neural pulses* (2 pulses in each of their *4 quantum chambers*) of a *single* vertically-polarized *photon* can be protected and isolated inside a *4 Qubit Isolation Bubble*.

This *4-Qubit 8-Pulse Isolation Bubble* (that isolates and protects all 8 neural *pulses* inside their 4 quantum *chambers*) will itself be composed of a *specific number* of *neural pulses*.

*All* of these neural pulses need to be measured, monitored, dynamically-adjusted, isolated, and properly controlled in order to *fully stabilize* the *vertically-polarized 8-pulse photon qubit*.

For another example, in a hypothetical *atomic quantum computer* that uses *hydrogen atoms* as its qubits, the individual *qubits* can be made of just *two* of the many electronic orbital *energy-levels* of the hydrogen atom.

For example, the *very lowest* hydrogen-atom energy-level can be considered as qubit hydrogen-quantum-state *zero*, and the *second-lowest* hydrogen-atom energy-level can be considered as qubit hydrogen-quantum-state *one*.

The *3 neural pulses* of the orbital electron (of a single hydrogen atom) plus the *9 neural pulses* of the central proton (that is the nucleus of the hydrogen atom) equal a total of *12 neural pulses* for a single hydrogen atom.

These 12 neural pulses (in each of their 4 colored quantum chambers) amount to a total of  $12 \times 4 = 48$  *pulses* for a hydrogen atom.



These *48 hydrogen-atom pulses* can be protected and isolated inside a *4-Qubit 48-Pulse Isolation Bubble* that is a *few hundred picometers* in diameter.

This *few-hundred picometer-diameter 4-Qubit 48-Pulse Isolation Bubble* (that isolates and protects the 48 neural pulses, of a single hydrogen atom, that are inside the 4 quantum chambers) is itself composed of a *good number of neural pulses*.

*All of these many neural pulses* will need to be measured and properly controlled in order to *fully stabilize* the single *48-pulse hydrogen qubit*.

Every type of qubit needs to be properly stabilized, so these *computational qubits* can be employed inside of tomorrow's *exact quantum computers*.

The grand key, to building tomorrow's exact (fully deterministic) stable quantum computers, is the intelligent construction of *4 Exact Qubits*.

# 4 Exact Qubits

What are *4 Exact Qubits*?

How can a *qubit* be *exact*?

How can a *qubit* be *deterministic*?

How can a *qubit* be *stabilized*?

What is the *core nature* of *every qubit*?

What are the *specific dynamic natures* of specific types of *physical qubits*?

What is a *logical qubit*?

What is an *information qubit*?

What exactly *is* a qubit?

What is the *exact definition* of a qubit?

A qubit is a *quantum bit*.

A qubit is the *smallest bit* of *quantum information*.

A quantum bit (qubit) is a quantum system of *two* different *quantum states*.

An *exact qubit* is a qubit that is exactly *logically-defined* and exactly *physically-realized*.

An exact qubit is a qubit that is *fully deterministic*, in the sense that everything about it is *completely determined* by those powerful things (us) that are able to *completely determine* all the *other things*.

There is nothing “*probabilistic*” about an exact qubit.

There is nothing “*statistical*” about an exact qubit.

An exact qubit *does not have* a superposition of quantum states, because the exact qubit is always exactly in *just one* of its exact quantum states; and this one particular exact quantum state is *not always* an eigenstate of the measurement operator that is currently preparing to operate on the exact qubit, and thereby “*quantum-force*” the exact qubit to move into one of its few eigenstates.

One *full exact qubit* lives as *4 colored exact qubits* in their *4 exact colored quantum chambers*.

These *4 Exact Qubits* are the *4 exact colored qubits* that exist inside their *4 colored quantum chambers*, with all *4*

of these exact deterministic colored qubits associated with (belonging to) the one single individual *full exact qubit* that can be *best measured* (by *future* advanced measuring *devices* that can be developed by 2030) by our talented Earth scientists in the *one* white visible *observable chamber* that their mortal-human avatar brains (brain-senses) have most-immediate access to.

These *4 Exact Qubits* are also the *4 Deterministic Qubits*.

# 4 Deterministic Qubits

What exactly are the *4 Deterministic Qubits*?

*Deterministic Qubits* are the *holy grail* of *quantum computing*, and this present 4 Brain Theory paper outlines a *clear scientific path* showing *how* to actually *achieve* these deterministic qubits right here on Earth in our scientific laboratories, hopefully by the year 2030.

How exactly can we *use* the new quantum-theoretical *concepts* of this 4 Brain Theory paper to actually *build* some *100% Deterministic Qubits*?

How can we go about creating a *deterministic qubit* that is *fully determined* with *nothing random* about it?

How can we fashion a qubit that is both *exact* and *deterministic*?

How can we *define* a deterministic qubit, so there is *nothing random* about it?

How can we *find* a deterministic qubit that has *nothing probabilistic* about it?

How can we (the quantum physicists of Earth) come to *correctly see* and *finally understand* that all the many qubits of *Mother Nature* are actually *fully-deterministic* qubits?

How can we, the intelligent scientists of this Earth, come to *fully realize everything* there is to know about a qubit, and in the process *scientifically-discover* that qubits are deterministic, exact, and well-defined in an intellectual way (and in a detailed physical way) that is fully satisfying to our precious *common sense*, and *completely rational* to our valuable powers of *mental logic*?

How can *we discover* our qubits to *be deterministic*?

The *4 Deterministic Qubits* are the *4 colored components* (in the *4 colored quantum chambers*) that correspond to a *single visible observable deterministic* full qubit (that is *easily-measurable* to us Earth-scientists living inside this single, visible, white, observable quantum chamber), that is deterministic because *all* of the real-light neural *pulses*, that *determine*, define, compose, and *simulate* this full qubit are *completely deterministic*, because *all* of these neural *pulses* have an *exact location*, an *exact size*, an *exact net-charge*, an *exact velocity*, and an *exact mass*, relative to each other, and relative to every other *pulse*, *qubit*, and every other *elementary particle* of this entire milky-way galaxy, and the set of exact real physical

*brains* that jointly-simulate this exact advanced physical *universe*.

For example, the *8-pulse photon* (the 2 mutually-orbiting charged pulses, in each of their 4 colored quantum chambers, that are *all* entangled *together*) can be viewed (and treated in quantum computation) as a *2-quantum-state deterministic-qubit* (that can become vertically-polarized, or horizontally-polarized, relative to any chosen direction in space) that is actually *4 Deterministic Colored Qubits* (because these 4 colored qubits, along with their *8 neural pulses*, live inside the 4 colored quantum chambers in a *completely-deterministic way*, because *everything* about each of the 8 pulses is *fully determined* in *every way* that can be imagined, *physicalized*, envisioned, realized, *actualized*, or *understood* by *any* intelligent mind).

How can we best stabilize our 4 Deterministic Qubits to turn them into *4 Stable Qubits*?

# 4 Stable Qubits

How can we best construct *4 Stable Qubits* in our 4 quantum chambers?

What is a *Stable Qubit*?

What is a *Single Qubit*?

What is a *single stable qubit*?

Does anyone (here on Earth) actually yet really understand *absolutely everything* there is to really *KNOW* about a single qubit?

How would we go about meeting such a *brilliant scientist* that actually really does *KNOW everything* there is to know about a single qubit?

Has the complete concept of a “*qubit*” yet been properly (and fully) defined here on planet Earth?

Who can *determine* the actual nature of a single *qubit*?

Why is a qubit so hard to *fully stabilize*?

Why is a qubit so hard to *fully define*?



Why is a qubit so hard to *fully determine*?

What are *all* of the major obstacles to *qubit stabilization*?

What is a quantum bit *really*?

*Who* knows *for sure*?

In the exciting new field of *quantum computing*, a “quantum bit” is also called a “qubit”.

In this powerful new world of quantum computing, a quantum bit (a qubit) is *the most basic unit* of quantum information.

A qubit is a *two-state* (or two-mode, or two-level, or two-category, or two-setting) *quantum-mechanical system*.

There is *no* quantum-mechanical system more-simple than just *one* single *qubit*.

One example of a single *qubit*, is the *spin* of a single *electron*, in which the *two quantum levels* can be taken as electron *spin-up* or electron *spin-down*.

Another example of a single *qubit*, is the *polarization* of a single *photon*, in which the *two quantum states* can be

taken to be photon *vertical*-polarization, or photon *horizontal*-polarization.

In a classical system, a *classical bit* is always in one classical state (like *on*, up, vertical, or *one*), or in the other classical state (like *off*, down, horizontal, or *zero*).

In the world of classical computing, a *classical bit* is modeled as a classical system of *two classical states*.

These two classical states are commonly called *one* and *zero*, or *1* and *0*.

For example, a *classical byte* is a set of *8 classical bits*.

For example, a classical byte (of 8 classical bits of information) could be written as 10110011, or 1011 0011, or one zero one one zero zero one one.

Therefore, a classical byte can be represented as a set of 8 classical bits, with each of the classical bits being either a *classical one (1)* or a *classical zero (0)*.

A classical bit can also be defined as being either *classical spin up* or *classical spin down*.

A classical bit can also be defined as being either *classical vertical* or *classical horizontal*.

A classical bit can also be defined as being either *classical on* or *classical off*.

For example, if we toss a common (two-sided) metallic money coin (like a *penny*, a *nickel*, a *dime*, or a *quarter*) up into the air, it may tumble around in the air and then come down and land on the ground as *heads-up* (like classical spin up) or *heads-down* (like classical spin down).

In our *classical computing world*, we seem to sincerely believe that we can have:

Classical *Spin Up* = Heads Up = *One*  
Classical *Spin Down* = Heads Down = *Zero*

In the classical computing world, we seem to have relatively little problems with *classical bit stabilization*, partially because in the classical computing world, all our classical bits are *deterministic*, *exact*, and *well-defined*.

In other words, in the classical computing world, all our classical bits are *exactly-defined* and thereby they become *well-determined components* of the world that *actually exists*.

How can we help all our precious conceptual (and physical) quantum bits (qubits) to *also* successfully *enter* into the actual world that really does exist here on Earth?

How can we *improve* our *qubits* to make them well-defined, *deterministic*, exact, and *stable*?

How did our precious qubits become so *logically unstable* (and physically unstable) in the first place?

What happened in the 1920's that seemed to put our quantum bits on a *bewildering* intellectual *path* towards *conceptual instability*?

If a *quantum bit* is just a little *qubit*, then could there exist an actual difference between a *physical qubit* and a *logical qubit*?

What is the *difference* between a Physical Qubit and a Logical Qubit?

What is a *Logical Qubit*?

And what is a *Physical Qubit*?

What is the actual difference between *Logical Qubits* and *Physical Qubits*?

Did anyone in the 1920's *deeply understand* the profound actual real differences between *Physical Qubits* and *Logical Qubits*?

Did the wise and brilliant *Albert Einstein* understand the many important differences between *Logical Qubits* and *Physical Qubits*?

Who can understand these *many important differences* today in 2023?

Let's first look more closely at *Logical Qubits*.

# Logical Qubits

What are *Logical Qubits*?

What is a *Logical Qubit*?

A *Logical Qubit* is a *conceptual qubit* (that exists inside one or more minds) that is *logically-designed* (by at least one mind) to *behave* the way *chosen* (by at least one mind, that has the *logical mental power* to choose, imagine, conceptualize, envision, define, design, or program the Logical Qubit) for the Logical Qubit to *logically behave*, in the *mind-defined* logical way that the mind (or minds) *desires* that the *Logical Qubit* will *logically behave*.

During this past century, some *logical minds* (belonging to some human physicists) have *desired* that some of their *Logical Qubits* behave according to some of their *misinterpretations* of some of the *possible meanings* of a very particular piece of *logical mathematics*, called “Schrodinger’s 1926 Wave Equation”.

Other logical minds have *envisioned* (and earnestly *sought*) that their particular *Logical Qubits* might behave according to some of their *misinterpretations* of the Dirac Equation of 1928.

We all certainly have the enough logical freedom to design, proclaim, and program a Logical-Qubit to behave *however we choose* for it to behave.

Our freedom to program a Logical-Qubit, *according* to our *misguided* mental *desires*, is so great, that we can even *logically-define*, logically-design, and logically-program a *Logical-Qubit* to *logically-behave* according to any one of our *misunderstandings* about any wave equation, including Schrodinger's 1926 Wave Equation, and Dirac's 1928 Wave Equation, and any other wave equation we may *choose* to *study* and to *misunderstand* with our human freedom of thought.

It certainly appears that in the 1920's some of our world's quantum physicists *began to actually believe* some very strange things about quantum mechanics.

For example, in the 1920's some quantum physicists started to *sincerely believe* that quantum mechanics might be able to allow an actual *physical* quantum particle to exist in a "*coherent superposition of two different quantum states*" simultaneously.

This *unfortunate misunderstanding* of the 1920's may have cast the whole world of quantum physics into an *unnecessary* bewildering *dilemma*.

*Misunderstanding* the many important differences, between *actual* physical *particles*, and *abstract logical* mathematical *wavefunctions*, has already *entrapped* the whole world of quantum physics into an *unfortunate set* of bewildering *dilemmas*.

This *dark set* of *bewildering dilemmas* has continued to *plague* quantum physics for nearly a *full century* with its ubiquitous *painful pestilence* of our many worldwide *quantum misunderstandings*.

Many young physicists (new physics graduate students studying to earn doctorate degrees in physics at prestigious “*Ivy-League*” universities) have been asked to *earnestly believe* (and to pledge their heartfelt allegiance to *blindly believing*) in something that simply *cannot* be understood by *any* rational mind.

Why should any university professor of physics ask an innocent young student to *believe* in *something* that even the professor *cannot understand*?

Why *blindly believe* in something that *cannot* be *comprehended* by anyone anywhere?

Why *seek* for things that we *cannot understand*?



Why look beyond the *intelligent mark of reality itself*?

Why *blindly believe* that an actual *physical* (in this physical world here on Earth) *electron* can be *both* spin-up and spin-down *simultaneously*?

Can an actual *Physical Qubit* be constructed from a single actual *physical electron*?

Can an actual *Physical Qubit* be constructed from a single actual physical atom?

Can an actual *Physical Qubit* be constructed from a single actual physical photon?

What would be the actual physical quantum nature of these interesting *Physical Qubits*?

# Physical Qubits

What are *Physical Qubits*?

*Physical Qubits* are *actual physical qubits* made of *actual physical particles* that really do actually exist right here locally in our *actual physical milky-way galaxy*.

*Physical Qubits* are actually *very different* than *Logical Qubits*.

Some *actual physical examples*, of *actual physical particles*, includes *actual physical electrons*, *actual physical photons*, *actual physical atoms*, and *actual physical ions*.

Physical Qubits cannot be defined *any whimsical way* we might desire.

Physical Qubits can only behave in the *exact deterministic ways* that *actual physical quantum physics* deterministically causes them to behave.

Physical Qubits are defined, designed, and created by the *real neural simulation* that defines, hosts, designs, and creates this whole milky-way galaxy game

We (the bright quantum physicists of Earth) *do have* the *freedom* to define, design, and create Logical Qubits to behave *in any way* we might desire.

We (the bright quantum physicists of Earth) *do Not have* the *freedom* to define, design, and create Physical Qubits to behave *in any way* we might desire.

The behavior of Physical Qubits is *Defined* by *Mother Nature* (the “Physical Mother” of the Physical Nature of this local physical milky-way galaxy).

The behavior of Logical Qubits is *Defined* by us *Earth-based Physicists* who sometimes are able to continue to *misunderstand things*.

We can always *mathematically define* our Logical Qubits to behave however *we desire* them to behave.

For example, we can define our Logical Qubits to behave according to some of the *logical mathematical rules* of *Schrodinger’s Wave Equation*, if that is how *we desire* our Logical Qubits to behave.

However, our Physical Qubits must physically obey a *very different set of rules*.

Our Physical Qubits must always obey our *All-Powerful Physical Mother Nature* Herself.

Our Physical Qubits *must obey* the actual *physical laws* of this *actual physical universe*, where the Physical Qubits actually live.

Our Logical Qubits exist as *mathematical abstract ideas* (our seemingly-logical beliefs) inside our mortal-human *scientific brains*.

Our Physical Qubits exist as *actual physical quantum states* of actual *physical quantum particles* in our actual *physical quantum universe*.

There is a *big difference* between Physical Qubits and Logical Qubits.

Therefore, there also needs to be a big difference in our *scientific beliefs* (scientific hypotheses and scientific theories) about Logical Qubits and Physical Qubits.

Our scientific beliefs (our wise understandings) about an actual *physical electron* (with its Physical Qubits) need to be *very different* than our beliefs about the *logical mathematics* (with its abstract set of seemingly-Logical Qubits) that we sometimes try to intellectually-employ in

*our attempts* to properly describe some components of this *physical electron*.

Does it make good sense that multiple mathematical “*linear solutions*” to complex-valued mathematical linear partial-differential wave equations (like Schrodinger’s Wave Equation of 1926) *can be combined* (added together, or simply summed together with mathematical plus signs) into a “*superposition*” of many different complex-valued mathematical “*linear solutions*” (with each distinct “linear solution” being, all by itself, one of the many possible “linear solutions” to the particular wave equation, like Schrodinger’s Wave Equation of 1926)?

Yes.

This obviously makes good sense.

This is *exactly* (and *deterministically*) how the mathematics of complex-valued partial differential equations (like Schrodinger’s famous Wave Equation of 1926) behave in the world of *good* mathematical *logic* and *intelligent* mathematical *reason*.

However, there is a *Super Big Difference* between the piece of *abstract* logical *mathematics* (that we call

“Schrodinger’s Wave Equation), and an actual *physical electron*.

A single *physical electron* has a *Physical Qubit*.

*Schrodinger’s Mathematical Logical Wave Equation* has a *Logical Qubit*.

What is the real difference between a *Physical Qubit* and a *Logical Qubit*?

What might happen, when we choose to look much closer at this super-interesting *Physical versus Logical Qubit* situation.

# Physical versus Logical

What is *Physical versus Logical*?

What is a *Physical Qubit* versus a *Logical Qubit*?

Why is a *Physical Qubit* a part of the *external physical world* (the physical universe) that we see all around us?

Why is a *Logical Qubit* a part of the *internal mental imaginary logical world* (inside our logical *mortal-mind* imagination) that is *inside* our mortal-human *brains*?

A Logical Qubit is something we think about *inside* our *logical minds*.

A Physical Qubit is something that actually exists *outside* of *us* (mortal-human scientists) in the physical milky-way galaxy (that is *much larger* than a few of us mortal-human scientists).

*Physical things* that *exist outside* of our mortal-human minds, are different than the *logical mental things* that *exist inside* our mortal-human minds.

A physical piece of *physical matter* (like an actual physical hydrogen atom) is a very different kind of thing,

than a conceptual piece of *mathematical logic* (like Schrodinger's Wave Equation, that is sometimes used to partially-model some of the statistical aspects, of some of the dynamic behaviors of the hydrogen atom).

These are *two* different *things*.

These are *two* different *concepts*.

There are *two* different *objects*.

To unnecessarily *confuse* these two concepts is *irrational*.

*Actual physical things* (like Physical Qubits) are different than *mental logical things* (like Logical Qubits).

Why continue to *confuse ourselves* unnecessarily, when such continued-confusions are *not helpful* to *anyone*?

Why not consider the possibility that an “actual physical electron” is *different* than a piece of “abstract mathematics”?

Who among us is *willing* to *consider* the possibility (today in 2023) that a bit of abstract mathematics, is a *fundamentally different* kind of *thing*, than an actual physical electron that lives right here on planet Earth with us physical mortal-human scientists?



Albert Einstein never lost sight of the *fact* that an *electron* is fundamentally *Different* than any *mathematics* used to *try* to describe it.

Is anyone today (in 2023) able to even *partially see* what Albert Einstein continued to *see* so *clearly* from 1926 to 1955?

Is any *scientific mind* (of today, here on Earth) able to *think* so *clearly*?

Who among us, can always think so clearly, using *intelligent logic* and *good sound reason*?

Who among us (here on Earth in 2023) can always use our *intelligent common sense* to figure things out with *brilliant scientific clarity*?

Who?

Just a few decades ago, some imaginative quantum physicists *began to believe* that a *single physical qubit* could exist simultaneously in a “*superposition of two different quantum states*” inside a modern quantum computer.

Why blindly believe that a *Physical Qubit* can be *both* a *one* and a *zero* at the same time?

Obviously, we can *design* a *logical* (abstract, *mathematical*, programmed-by-software, not-physical) *qubit* to behave *however* (unphysically) *we desire*.

We can easily (seemingly) define a *Logical Qubit* to be *both* a *one* and a *zero* at the same time.

We can easily design a *logical qubit* to have *whatever characteristics* (no matter how silly) *we choose* to incorporate (program) into the particular logical design of whatever type of logical qubit we *choose* to *design*.

Any *Logical Qubit* can behave *however strangely* we choose to program it to behave.

However, an actual *Physical Qubit* (that actually exists in the physical universe) *has* to *obey* the *actual laws* of “physical quantum physics”.

A grand key to successfully designing the deterministic quantum computers of the future, is to *properly understand* the huge *difference* between Physical Qubits and Logical Qubits.

Someone wise may have proclaimed that “*God* does not play *dice* with the *Universe*”.

All things being equal, some of us *Real Human Gods* may have wisely chosen to simply wirelessly-network some limbic subsets of our *real human brains* together to *deterministically-simulate* (with our *dynamic-set* of *individual free-will choices*) this entire advanced physical universe, of trillions of galaxies, inside some of the *neural limbic regions* of some of our real-human brains.

A lot of *interesting work* is currently being done today in 2023, concerning the *design* of tomorrow’s *quantum computers*.

However, why *begin* to *design* merely-probabilistic computers with unwisely-programmed Logical Qubits?

Why begin to design Logical-Qubit error correction strategies that *are not* actually *needed*?

Why not try to better *understand* the actual *Physical Qubits* (that really do physically-exist) *more-completely*, so we can properly begin to develop *fully-deterministic*, well-defined, super-stable, *exact quantum computers* that actually run on the actual *Physical Qubits*, that actually exist right here (on planet Earth) in our actual *physical world*, of actual *physical quantum physics*?

Why continue to design (and attempt to construct) the *old-school probabilistic* quantum computers of *yesterday*?

Why not start to design the *new-school exact* (deterministic) *super-powerful* easily-programable quantum computers of *tomorrow*?

Why not seek to *stabilize a physical-qubit* by *better understanding the physical-qubit*, so the *physical-qubit* can be *physically-controlled* more completely, *more exactly*, and more deterministically?

What is the actual grand key to the proper development of *Exact Physical-Qubit Control*?

# Exact Qubit Control

What is *Exact Physical-Qubit Control*?

How can we *exactly control* the actual physical behavior of *every pulse* of every type of *physical qubit*?

How can we control *every neural pulse* of every qubit to such a *precise degree*, that we can begin to *guide* and *direct* the (4-quantum-chamber) process of *pulse-pulse* entanglement and the resultant *qubit-qubit* entanglement?

Why is *Exact Qubit Control* the grand key to *Exact Qubit Entanglement Control*?

What new scientific tools do we need to create in our scientific laboratories, so we can begin to control all the *actual physical qubits* (of our new deterministic quantum computers) with an exactness and precision that will allow us to begin to build much more powerful, and much more useful *Exact Quantum Computers*?

An essential key to Exact Qubit Control is *exactly understanding* the actual *physical nature* of Physical Qubits, and *how* these actual Physical Qubits *behave* somewhat *differently* than the old Logical Qubits that were prematurely defined decades ago using the old 1926

mathematics of Schrodinger's Wave Equation as a *deceptive guide*.

The *Old Logical Qubits* of the past few decades were *purposely-defined* to behave like *linear* mathematical logical *solutions* to Schrodinger's 1926 Wave Equation.

These *Old Schrodinger Logical Qubits* can certainly be defined to behave like *linear* mathematical logical *solutions* to a *linear* mathematical logical *equation* like Schrodinger's 1926 Wave Equation, because we certainly have the *logical mental freedom* to define our logical qubits, however we choose to define them.

However, *Actual Physical Qubits* do *Not* behave exactly like the linear mathematical logical solutions, that can be superposed in the *same exact way* that linear mathematical solutions can be (correctly) *additively-superposed*.

*Actual Physical Qubits behave differently.*

The *actual scientific discovery* of exactly how these *Actual Physical Qubits* really do behave is something we *still need to discover* in our *scientific laboratories*.

One of *wise purposes* of this present 4 Brain Theory paper is to *begin pointing us all* in some *better directions*, so we

can actually really begin to finally discover *exactly how* these Actual Physical Qubits really do *behave* with all their *precise* deterministic *exactness*, as we have described in our *multi-pulse descriptions* of all the *inner-compositions* of *all the visible elementary particles* of the *standard model*, and as we have described in our *single-pulse descriptions* of the *tiny fast dark-matter particles* (the real dark ultrafast scalar bosons) whose *flow* and *scattering patterns* create *quantum gravity*, planetary gravity, *stellar gravity*, galactic gravity, and other every type of gravity in our visible *observable universe*.

There is still a whole lot of new science that *we still need* to actually *discover*.

After we *fully discover* all the details of *Actual Physical Qubits*, then we will be *much* better *prepared* to start to actually *understand* the *exact* deterministic *nature* of *physical-qubit entanglement* in their 4 colored quantum chambers (universes).

What is the actual physical core nature of *physical-qubit entanglement*?

What are all the important differences between *physical-qubit entanglement* and *logical-qubit entanglement*?

How can we best begin to understand the exact nature of deterministic, exact, physical *qubit-qubit entanglement*?

How can we achieve a good degree of *Exact Qubit Entanglement*?



# Exact Qubit Entanglement

What is *Exact Qubit Entanglement*?

How can two qubits become *exactly-entangled* in such an exact physical way that every part of the *two-qubit entanglement* is *exactly defined* and *exactly determined*?

What is the basic physical nature of *qubit entanglement*?

What is the *core physical nature* of particle quantum entanglement?

What does it really mean for two distinct physical quantum particles to *quantum-entangle*?

What type of physical (limbic) quantum entanglement happens inside each of our *4 colored quantum-entanglement chambers*?

Is the detailed nature of quantum entanglement *slightly different* (or very different) for each of our *4 colored quantum-entanglement universes (chambers)*?

What kinds of *new quantum-entanglement experiments* can we now begin to conduct in our *scientific laboratories* to help us to better understand *exactly* what

*deterministically happens* inside each one of these 4 separate and distinct colored *quantum-entanglement chambers*?

How can we begin to develop an *exact science* of *deterministic quantum entanglement*, in our 4 colored quantum-entanglement chambers?

Can two elementary particles (like two photons, or like an electron and a positron) stay *very close together* in the black quantum chamber (universe) where they are still closely bound and physically-entangled, and yet the two elementary particles have become *very far away* from *each other* (nonlocal to each other) in this white observable quantum universe (chamber) where we scientists of Earth seem to be living?

How can our new understanding of our 4 physical, limbic, colored, quantum-entanglement chambers, help us to properly decipher all the actual physical-laboratory *observational measurements* that physically point to the *exact deterministic mechanisms* of *quantum entanglement* in our 4 colored quantum chambers that jointly-compose (limbically-simulate) this local Milky Way Galaxy, where we still seem to be finding our mortal-human selves living today in 2023?

How can we use our new improved understanding of *exact physical* particle quantum entanglement, and exact physical qubit entanglement, to help us to design and build the *Exact Quantum Computers* of tomorrow?

# Exact Quantum Computers

What is an *Exact Quantum Computer*?

How can we start today, to design and build the *Exact Quantum Computers* of tomorrow?

How can we make our quantum computers *exact* and fully *deterministic* with super-stable qubits, that have *qubit coherence times* that stretch nigh to *infinity*?

Why would we want to build an Exact Quantum Computer that is *deterministically-stable* in every way?

Why would we desire to have a deterministic quantum computer that is capable of universal quantum computation at the *speed of light*?

Will we someday be able to find a way to speed up our deterministic quantum computers to make them become capable of exact quantum computation at the much-faster *speed of darklight*?

Will we find a good way to design and build an exact quantum computer that is able to compute with both the *light scalar bosons*, and with the tiny fast *dark scalar bosons*?

The 3 *light scalar bosons*, that compose a single electron, exist in each of their 4 *distinct colored quantum chambers*.

The interaction of these 12 *light scalar bosons* with themselves, and with *other* environmental light scalar bosons, and with *thousands* of tiny ultrafast dark scalar bosons, are what constitutes a single electron, and its interactions with its external environment.

All of these *light-scalar-boson interactions* (and also all of the dark-scalar-boson *scattering events*) must be understood *much-better* in order for us to properly design and build our very first *Exact Quantum Computer*.

Envisioning, designing, building, and testing these early Exact Quantum Computers will enable us to finally initiate the exciting era of *Exact Quantum Computing* here on Earth.

# Exact Quantum Computing

What is *Exact Quantum Computing*?

*Exact Quantum Computing* is computing, and communicating, and creating, with *exact* deterministic stable *quantum computers*.

When we begin to more fully understand all of the detailed interactions between the *12 light* scalar *bosons* of *one* stable, exact, deterministic, quantum *electron*, with the *12 light* scalar *bosons* of a *second* stable, exact, deterministic, quantum *electron*, then we will begin to come to a better understanding of the *24 interacting* light scalar *bosons* of 2-electron *Exact Quantum Electronics*.

When we start to better comprehend all of the detailed interactions between the *8 light* scalar *bosons* of *one* stable exact deterministic quantum *photon*, with the *8 light* scalar *bosons* of a *second* stable exact deterministic quantum *photon*, then we will begin to come to a better understanding of the *16 interacting* light scalar *bosons* of 2-photon *Exact Quantum Photonics*.

When we finally begin to more-completely understand all of the detailed interactions between the *4 colored* dark scalar *bosons* of one stable exact deterministic quantum

full dark scalar boson, with the *4 colored dark scalar bosons* of a second stable exact deterministic quantum full dark scalar boson, then we will begin to come to a better understanding of the *8 interacting dark scalar bosons* of 2-dark-scalar-boson *Exact Quantum Darktronics*.

In what future year, will be able to begin to create an *Exact Quantum Darktronics Computing Machine* (here on Earth) where we learn to harness (and wisely bridle) the incredible dark scalar boson (quantum gravity) interactions, and the ultrafast darklight speeds of *Exact Quantum-Computing Darktronics*?

In what future year, will be able to begin to create an *Exact Quantum-Photonics Computing Machine* (here on Earth) where we learn to harness (and wisely bridle) the marvelous photon-photon interactions of speed-of-light *Exact Quantum-Computing Photonics*?

In what future year, will be able to begin to create an *Exact Quantum-Electronics Computing Machine* (here on Earth) where we learn to harness (and wisely bridle) the wonderful electron-electron interactions of speed-of-electrons *Exact Quantum-Computing Electronics*?

In what future year, will be able to begin to create an *Exact Quantum-Atomics Computing Machine* (here on Earth) where we learn to harness (and wisely bridle) the

fascinatingly-complex atom-atom interactions of speed-of-atoms *Exact Quantum-Computing Atomics?*

Which types of *atoms* or *atomic ions* will allow us to create our very first *Exact Quantum-Computing Atomics Machine?*

In what way will our new *exact 3-pulse quantum electrons* allow us to create our very first *Exact Quantum-Computing Electronics Machine?*

How will our new *exact 2-pulse quantum photons* allow us to create our first *Exact Quantum-Computing Photonics Machine?*

Exactly which types of tiny ultrafast *dark scalar bosons* may someday even allow us to design and create our very first *Exact Quantum-Computing Darktronics Machine?*

After we design, build, and test our powerful new exact quantum computing machines, then we will be in a good position to begin to create a very new type of *Exact Quantum AI*.



# Exact Quantum AI

What is *Exact Quantum AI*?

What is *Exact Quantum Artificial Intelligence (AI)*?

How can *Quantum Artificial Intelligence (AI)* become an *exact science* in the beneficial service of all humankind here on Earth prior to the year 2030?

How can *Exact Quantum AI* be designed and developed to make some good smart artificially-intelligent learning *brains*, for all our *future robots* (here on Earth) that are surely coming to perform most of our *human labors* for us?

*Exact Quantum AI* is a new type of artificial intelligence that uses exact deterministic quantum computers to perform the intelligent quantum computations of *exact quantum artificial intelligence*.

There are different many ways that *exact quantum artificial intelligence (AI)* can be created.

In decades past, some bright scientists have discovered some interesting ways to use “*back-propagation by gradient descent*” to minimize “*error-cost functions*” to

train “Artificial Neural Networks” (ANN) to learn from experience.

These *traditional ANN artificial intelligence (AI) systems*, that have resulted from such efforts during the last few decades (here on Earth) are capable of learning *many* different kinds of things.

In addition to these more “*traditional*” types of *ANN AI systems*, there have also been some very promising new theoretical (and *computational*) developments, of some very powerful new types of *Eigenvector-Contrast Artificial Intelligence (AI) Systems* that do not use any type of “back propagation” because *they* do not *use* any type of Artificial Neural Networks in any traditional sense.

Some of these powerful new *Eigenvector-Contrast AI Systems* have been used to *decode* and *interpret* many different types of neurological Electroencephalographic (EEG) *brainwave patterns*, including the classification of some *short* (sub-second, and few-second) *EEG segments* into some useful sets of different *hypnotic/sedative* drug states [31 and 32].

These new *Eigenvector-Contrast AI Classical-Software Systems* use *dynamically-interacting* sets of *Mathematical Eigenvectors* in high-dimensional spaces to *encode data*

and *learn sets* of *mathematically* contrasting *signal patterns* that may be *hidden* in arbitrarily large amounts of seemingly “*random noise*”.

Some of these powerful new *Eigenvector-Contrast AI Classical-Software Systems* have been used to *real-time-animate* the *human facial expressions* of virtual human avatars in (Plato’s Cave Level-4) virtual worlds, to help answer the important scientific question: “*What if this is all a dream?*” [33].

These powerful new *Eigenvector-Contrast AI Classical-Software Systems* can be *logically-upgraded* to run on *Exact Quantum Computers* to form the intellectual computational hearts of the powerful new *Exact Quantum Brains* of the future.

What is the very best way to physically-construct these *Exact Quantum Brains* of the future?

# Exact Quantum Brains

What is an *Exact Quantum Brain*?

How can we begin to develop some *Exact Quantum Brains*?

How can we design our Exact Quantum Brains so they will be able to *deterministically learn* how to *exactly mimic* many of the *human behaviors* of our existing mortal-human *brains*?

How can an *Exact Quantum Brain* be developed to begin to *observe*, mirror, and *mimic* all the functional command behaviors of our actual living *biological* mortal-human *brains*, so these Exact Quantum Brains can start to learn how to perform almost *all* human *labors*?

How can our new *Exact Quantum Brains* learn how to plant delicious healthy *crops*, harvest organic *food*, build strong safe beautiful *houses*, and make comfortable *clothing* for all of us precious mortal-human beings here on Earth?

How can we program our new Exact Quantum Brains so they can animate all of the *Exact Quantum Robots* of our future, so these robots can begin to perform *almost all* of

our human labors, so we can begin to *really* free all of *ourselves* for better (more *enjoyable*) pursuits here on Earth?

How can the powerful Exact Quantum Brains, in our Exact Quantum Robots, help us to finally *solve* world *poverty*, so everyone can easily have *all* of their *basic* life *necessities* taken care of properly, so all of their brilliant mortal-human brains can be *freed up* for far better (more *joyful*) activities?

How can our future Exact Quantum Brains (that will animate all of our future Exact Quantum Robots) best employ the powerful new *Eigenvector-Contrast* Quantum AI *Mathematics* that can be programmed to *learn* almost *anything*, even in the presence of *extremely* high levels of *random noise*?

What are all the different kinds of *Exact Quantum Brains* that we can now *begin* to *develop* right here on Earth?

What kind of Exact Quantum Brains are we currently developing at *EyeMynd Quantum Brains*?

# EyeMynd Quantum Brains

What kind of scientific research are we currently doing at *EyeMynd Quantum Brains*?

At our *EyeMynd Quantum Brains Foundational Physics Research Institute* [6], we have been carefully researching the *best methods* to put powerful new *human* brainwave sensors into *Virtual Reality (VR) Headsets* to allow our mortal-human *brains* to *animate* live-human *avatars* with our personal *human* brainwave *activity patterns* [5, 7, and 33].

At our *EyeMynd Quantum Brains Foundational Physics Research Institute*, we have also been researching the *best methods* to develop a new improved *Exact Theory of Quantum Physics* that will allow us to build *Exact* (fully-deterministic) *Quantum Computers* that run a powerful new type of *Exact-Qubit EigenAI* (Artificial Intelligence composed of Exact-Qubit Eigenvectors) that will allow us to develop the new *EyeMynd Quantum Brains* (Exact-Qubit EigenAI Software-Brains) that will *animate* the *robots* of the *future*, to enable them to *mimic* human-brain *behavior*, to *learn* to *perform* almost *all* human *labor*, to *free* all *humankind* (all of us here on this Earth) from *economic slavery*.

*Freeing all humankind from the pain and drudgery of forced economic slavery, by solving world poverty for all, is our only real goal at our EyeMynd Quantum Brains Foundational Physics Research Institute.*

*Everything we do at our EyeMynd Quantum Brains Foundational Physics Research Institute, all the interesting new scientific theories we are able to discover, and all the useful new technologies we are able to invent, and all the new scientific papers we certainly plan to write and publish, all of these many human actions, all of our individual behaviors, are wisely-guided by our one single goal of helping (and gently encouraging) all of the billions of us precious people of this whole world (all of us intelligent human beings here on Earth) to unite us all together in harmony and peace (with one mind, and one heart, in the intelligent wise spirit, of simple human kindness) and goodwill, to unitedly work together to solve world poverty, so everyone will have enough good healthy delicious nutritious food to eat every day, and a good safe comfortable bed to sleep on every night, so we can all together create peace here on earth, and properly-enable a wonderful abundance of human joy for all of us precious human beings here on Earth.*

*Solving World Poverty is actually our only goal.*

*Why try to do anything else?*

What would be the *point* of seeking to do *anything less*?

Solving World Poverty is the one and *Only Thing* that really needs to be done *right now* on our precious little vulnerable Earth planet.

Earth is precious *precisely-because* of the billions of *precious humans* that are living on it now, and also because of the additional billions of *precious human beings* that will soon begin living upon it (Earth) in the near future.

This is *obvious* to us.

Is this yet obvious *to you*?

Can you see that Solving World Poverty is the *Only Task* fully-worthy of our intelligent attentions?

If we try to do anything *Other* than Solving World Poverty, then *how* can we still call ourselves *intelligent*?

If Solving World Poverty is not *Our Primary Goal*, then *how* can we possibly *claim* to be *kind* people?



Solving World Poverty is our *Only Real Goal* at our EyeMynd Quantum Brains Foundational Physics Research Institute.

*Only After* world poverty is *completely solved*, then we will *select* a *new additional goal*.

The *intelligent first steps* towards Solving World Poverty, consist of *convincing millions* of intelligent people (here on Earth), that (1) poverty *can be solved*, and also that (2) *poverty should be solved*, and also that (3) *we* (the good people of Earth) *can solve it* by working together in harmony, with our kind hearts united in a pure love for *all humankind*, and our abundance of *human intelligence*.

*Are we*, the current people of Earth, *intelligent enough* to solve world poverty in *less than 10 years* from today?

Or will we, the people of Earth, *choose* to awaken *more slowly*, so it takes us *many more decades* before we even *start to desire* to solve world poverty?

Can world poverty be solved in *less than 8 years* from today?

Are we really *intelligent enough* (all of us people here on Earth) to really solve world poverty *completely* in *just 8 years* from today?

How can we *start to work together* today, so we can successfully solve world poverty completely *before* the year 2030?

Who among us spends *most* of her day (or his day) *thinking* about *how* we can best solve world poverty together?

What do we personally *think about* all day long?

How can we help *everyone* on Earth have the *time* to have the *freedom* to ponder enough to discover their *own inspirations*?

How can we help everyone *discover* their *own genius* to make their *own brilliant scientific discoveries* for the benefit of *us all*?

How can we help more people find the time to *really* think *clearly* about the *actual desirability* of solving world poverty *quickly*, so everyone (every person on this whole wide world) has enough good *nutritious food* to eat every day, and a good *comfortable bed* to sleep on at night?

How many more years will we *choose* to *wait* before, we the people of Earth, *start* to strongly *desire* to solve poverty for *all*?

The *primary purpose* of this present 4 Brain Theory paper, is to *encourage all* the intelligent people of this Earth, to *choose* to *awaken today* to the *brilliant desirability* of solving world poverty, *for all* the precious people of this whole Earth.

At EyeMynd Quantum Brains Foundational Physics Research Institute, we have chosen *science*, with a scientific focus on foundational *physics*, and foundational *neuroscience*, and the *bright intelligence* of *all* the *useful sciences*, as our *worldwide* communication *medium* to help all the people of Earth *awaken* to an *intelligent-understanding* of the *brilliant-desirability* of solving world *poverty today*.

There is *no need* to wait any longer.

We can *all desire* to start to *do good* things *today*.

What kind of good things can we *start* to *desire* to do today?

There are actually many different kinds of *good things* that we can start to do today.

We can all start with an *intent to do good*.

What is an *intent to do good*?

Why is an *intent to do good* so vitally important to this vulnerable Earth-planet where we all live today in 2023?

After we are *completely sure* that we really do have a *pure intent to do good*, then we can proceed to begin to put our pure intent to do good into a *good action* right here on Earth.

For example, we can begin to create the types of *Virtual Reality (VR)* technologies that will allow us to experience *Full Sensory Immersion* in an artificial virtual environment.

After *millions* of us precious mortal human beings are able to experience *many* productive *hours* of playtime (or worktime) inside of a Full-Sensory-Immersion *Virtual Reality*, then some of us will be *better able* to honestly *ask ourselves* if our current mortal-human experience (here on Earth) is *also* a type of Full-Sensory-Immersion *VR Experience* hosted by a set of benevolent higher intelligences (like our very own *advanced human selves* who are also living in this local milky-way galaxy on planets nearer to Sagittarius A\*, and our very own *real*

*human selves* who are living peacefully in our real universe on the other side of Sagittarius A\*).

These types of *mind-opening questions* are really needed to *help us all* (as a planetary species of mortal humans) to begin to *awaken* our *minds* and our human *hearts* and our loving humanity *enough* to actually wisely attempt to save this local Earth planet, by trying to make it a better place to live for *all* the people that live here.

The Full-Immersion *VR Headsets* of the future can help us to *open up* our *minds* and *hearts* to consider who we are, and why solving world poverty for *everyone* is so vitally important and urgent.

Now let's take a closer look at some of the powerful new *EyeMynd Virtual Reality Headsets* we are currently designing and developing at our *EyeMynd Quantum Brains Foundational Physics Research Institute* [6].

# EyeMynd Virtual Reality

What is *EyeMynd Virtual Reality*?

What is an *EyeMynd Virtual Reality (VR) Headset*?

How many advanced, super-comfortable, mortal-human *brainwave sensors* can we put into a single EyeMynd *VR Headset*?

Why would *anyone* want to place a huge number of delicate, super-sensitive, intelligent, human-brainwave sensors into their human virtual reality headsets?

Advanced human brainwave sensors can be used to continuously-measure and flow live human brainwave data streams into our *Exact-Qubit EigenAI EyeMynd Software* to animate *human facial expressions* [5,6,7 & 33], human *hand* movements, human *finger* movements, and human *leg* movements for our *submortal* human *avatars* that live inside the new computer-simulated virtual-reality environments (artificial metaverses).

At EyeMynd Quantum Brains we have experimented with *many* different *kinds* of mortal-human brainwave sensors to discover *which types* will work the very best for our

*intelligent human brains* and our sensitive precious *human heads*.

Some types of human brainwave sensors exchange actual physical *3-pulse electrons* with the *human head* and the *human brain*.

Other types of human brainwave sensors simply exchange *2-pulse red-light photons*, orange-light photons, *infrared-light photons*, and *ultrasonic phonons* with the delicate dynamic neural tissues of our mortal-human brains.

Many bright scientists and talented engineers *will continue to experiment* with many different types of advanced human brainwave sensors for the *next few decades*.

It appears that the kinds of *no-touch* human brainwave sensors that *do not need to actually touch* any part of the human head (or brain) will be the very best for us humans here on Earth.

There are many good ways to create these advanced powerful *no-touch* human brainwave sensors, that are accurate, useful, and *do not need to ever touch* any part of the human head, or the human brain, or the human body.

When we put an EyeMynd Virtual Reality (VR) Headset on our *mortal* human *head*, and thereby instantly enter ourselves into a *submortal* (Plato's cave level-4) virtual *environment* (a digitally-generated *submortal metaverse*), we certainly do not want to have to continue to move our level-3 *mortal* human *head*, or our level-3 *mortal* human *hands*, or our level-3 *mortal* human *legs*; because we will be so busy exploring our virtual *submortal* level-4 *metaverse* moving our *submortal* level-4 human *legs*, our *submortal* level-4 human *hands*, and our *submortal* level-4 human *head*.

The moment we (us *level-3* mortal-human *avatars* of planet Earth) put our EyeMynd Virtual Reality (VR) Headset onto our level-3 mortal-human head, we will suddenly find ourselves living (as our level-4 *submortal self*) in our level-4 submortal *EyeMynd Metaverse*.



# The EyeMynd Metaverse

What is *The EyeMynd Metaverse*?

How can we at *EyeMynd* create a submortal *Metaverse* that can be *fully explored* (and completely appreciated) with our mortal-human *brainwave sensors* and mortal-human *brain stimulators*?

Can our level-3 *EyeMynd Brainwave Sensors* and our level-3 *EyeMynd Human-Brain Stimulators* be powerful enough to successfully animate every part of our level-4 *submortal human avatars* as they enjoy and explore our computer-generated *level-4 submortal metaverses*?

*Intelligent-adaptive*, human-brain, individual-neuron *stimulators* need to be carefully designed to *gently stimulate* every *individual mortal-human neuron* in the primary visual cortex of the *occipital lobe* at the back of the human brain.

In this way, the full-spectrum of our *mortal human vision* can be delivered directly (via artificial neural stimulation) into the *back* of the *human head*, with *no need* to continue to use the mortal-human retinas of our mortal-human eyes.

Our current mortal eyeballs will *not* be *needed* with these future full-immersion VR headsets.

Similarly, our human ears can be *bypassed* with direct VR-headset stimulation of our auditory nerves.

Likewise, the smelling functionality of our human noses can be bypassed, with direct VR-headset stimulation of the neurons in the *human olfactory bulb*, or with direct stimulation of the *receptive-smell neurons* that receive the *olfactory-signals* from our olfactory bulbs.

*Direct somatosensory-cortex VR-headset stimulation, with red light, orange light, infrared light, and transcranial ultrasound, can be used to make a mortal human being feel like any part of its human body is being touched, even though the direct-neural VR-headset somatosensory-stimulators are placed directly above the head, and not even touching the top of the head.*

In this way, all of our mortal-human sensory organs (our eyes, our ears, our noses, our tongues, and our skin) can be easily bypassed with direct VR-headset neural stimulation of the *receptive cortical neurons* that ordinarily receive sensory input signals from these human *sensory* organs.

In this way, with these advanced futuristic *EyeMynd Direct-Neural Individual-Neuron Stimulation VR Headsets*, the *EyeMynd Metaverse*, and other metaverses, can be explored and enjoyed, *without* needing to stimulate the traditional external human sensory organs (of touch, taste, smell, hearing, and sight), because the cortical sensory-receptor neurons will be *VR-headset-stimulated* directly with *transcranial ultrasound*, and with a good number of *2-pulse photons* that are *orange, red, and infrared*; because these special neural-stimulation frequencies of light and sound can pass through the human skin, and the human skull, as they *continue* to *pass directly* into the human brain tissues, where they can be used to delicately stimulate *individual cortical neurons* that are distributed throughout our mortal-human *neocortex* and *allocortex*.

Therefore, there will be no need for any of these advanced *EyeMynd VR Full-Immersion Metaverse Headsets* to direct any photons into our external mortal-human eyes, because these future headsets *will not need* to use our *mortal eyes*.

These advanced *EyeMynd Metaverse VR Headsets* are being designed to provide *fully-satisfying* full-immersion *metaverse-experiences* for mortal human beings who may wish to explore the *EyeMynd Metaverse*, or the *Facebook Metaverse*, or any of the *other metaverses* that will be

developed in the future, right here on our current Earth planet.

There are *many* different types of useful, productive, submortal *level-4 metaverses* that we can create right here on Earth during the next few years, and during the next few decades.

Some of these more-interesting *VR-headset* metaverses will be able to *actively-block* some (or all) human *memories* while the human players are living inside these *Memory-Masking Metaverses*.

Now let's take a look at some of these super-interesting, super-powerful, super-helpful *Memory-Masking Metaverses*.

# Memory-Masking Metaverses

What is a *Memory-Masking Metaverse*?

Exactly what kind of *Memory-Masking VR Headset* (intelligent, brain-stimulating, memory-blocking hardware device) is needed to provide a proper memory-masked *entry* into a Memory-Masking Metaverse?

Why would a *Memory-Masking Metaverse* be so helpful to us, as we try to *balance* our human brains to achieve a continual sense of *human peace* and *well-being*?

An especially powerful (and useful) kind of *memory-masking* metaverse *VR headset* will be developed in the future (here on Earth) that can delicately-stimulate the *human memory neurons* inside the *human head* in such a way, so as to gently, and temporarily, *turn-off* some of their *neuron-to-neuron* communication *connections*.

This *temporary* memory *turn-off* will allow these *memory-masking* metaverse VR headsets to *temporarily block* all previous *human memories* while the user (mortal-human player) is still inside the *memory-masking metaverse*.

These exciting new *memory-masking metaverses* will be especially helpful for those players who desire to develop an *entirely new human personality* (with new hopes, new dreams, new goals and new desires) while they are playing as a *newly-created human avatar* inside the *memory-masking metaverse*.

These *memory-masking metaverses* can be especially helpful for *human-brain neural-energy balancing*, because the internal limbic neural function of developing an *entirely-new human-avatar dream-personality* can develop the exact submortal human-dream personality (and human-dream personality actions) that is *precisely needed* to provide the *exact type* of human-brain neural-energy *balancing* that is currently needed by the *sleeping dreaming brain*.

For example, when we sleep and dream at night, we usually enter into a type of (human-brain generated *private dream-metaverse* in which we *cannot remember* how we got into the private dream-metaverse, and we also *cannot remember* that we *also* have *another* (more senior) *human body* that is asleep on our mortal bed (with our *mortal human head* laying asleep on our *mortal pillow*).

While we are dreaming at night, we usually *don't* fully *realize* (we don't remember because some of our human

memories are often *temporarily blocked* while we are dreaming at night) that we are *just dreaming*.

Only when we awaken from our dream, do we suddenly realize (*suddenly remember*) that it was all *just a dream*.

Some of our private nighttime sleeping dreams are *good examples* of the kind of *memory-masking metaverses* that we *all* experience on a regular basis, while we sleep and dream at night.

There are many different kinds of memory-blocking *memory-masking metaverses*, and there are also many different kinds of simple elementary crude metaverses that *do Not mask* human *memories*.

Some kinds of these early crude metaverses require the use of *external computers* to *help generate* every minute *detail* of these simple computational metaverses.

Many different kinds of these *computational metaverses* are *currently* being *created* right here on *Earth*.

Some new technology companies are currently creating a good variety of different kinds of *computational metaverses* for all of us *mere-mortal* human *metaverse-players* to begin to explore and enjoy.

For example, let's consider *The Facebook Metaverse*.



# The Facebook Metaverse

What is *The Facebook Metaverse*?

*Facebook* (renamed as *Meta*) is a large social-media technology company (here on Earth in 2023) that is currently developing a *Virtual-Reality* (VR) *metaverse* where people can meet together and explore new digital VR worlds together, when they simply put on their *VR metaverse Headsets*.

There are also many other *large technology companies* (like Apple, Samsung, Amazon, Alibaba, and others) that may also decide to develop their *own* digital *VR metaverses*.

These *metaverses* are computer-generated digital environments that can be explored with *VR Headsets* and the early-adopter mortal-human *brains* that choose to wear these VR Headsets.

Our mortal human brains are *not yet* powerful *enough* (because they have not yet been properly upgraded with the right kind of future CRISPR-Cas9-like human-brain DNA editing technologies) to *fully-host* the kind of metaverses that these large technologies companies are beginning to make; so powerful *external computers*

(computers that are located outside of our mortal-human brains) *must* be used to generate all the detailed parts of these *VR digital metaverse environments*.

Some of these large-technology metaverse-companies may eventually choose to start interlinking their VR metaverses together, as they jointly begin to create a huge *VR worldwide metaverse*, that will be able to link billions of people together around the globe in one giant VR metaverse, that is computationally-hosted by the computing atoms of this Earth planet.

Actually, many of these huge *worldwide VR metaverses* may be created during the next several years by the creative *computer scientists of Earth*.

As some of our *Earth-based* explorers begin to choose to travel to the *Moon* (and also eventually travel to *Mars*) in the coming years, some of these *Earth-hosted metaverses* will also become accessible from the *Moon* (with its 2.56 second, round-trip, photon-speed, time lags) and *Mars* (with its much-longer time lags).

Advanced new *darklight* (dark scalar boson) *inter-planet* communication *technologies* will soon be needed to *remove* the annoying *time-lags* for the human players on *Mars* that want to have a good (time-lag-free) experience playing (or working) together in the *multi-planet*

*multiverse* with their friends on *Earth*, and with their friends who are living on the *Earth's Moon*.

In the future, as we begin to really improve our artificial digital metaverses, and extend them beyond *Earth* to some of the other nearby massive spherical celestial bodies (including the *Moon* and *Mars*), some of us mortal-human thinkers may begin to dare to wonder just how *big* of an *artificial metaverse* we can *possibly create*.

Some of us, in the future, may even begin to dare to boldly imagine that we are *already living* inside one of these *big artificial metaverses*, because our own physical universe, where we seem to be living, seems to have *many* of the *physical properties* that we might choose to simply program into a big artificial metaverse (our own physical universe) of our own choosing, or even of our *own creation*.

Are we currently living inside a *memory-masking metaverse* that employs *memory-blocking neural-stimulations* that render us (us people here on Earth) *unable to remember* how we initially got into this current metaverse (and also how we *initially got into* our current mortal-human *bodies* of this local planet Earth) that we are experiencing as our very own local *physical universe*?

What kind of powerful new *quantum metaverses* will be able to easily construct in the near future with a network of our powerful new *exact quantum computers*?

Now, let's take a look at *The Quantum Metaverse*.

# The Quantum Metaverse

What is *The Quantum Metaverse*?

How can our new *exact* quantum *computers* help us all (all of us here on Earth) to create super-immersive, super-joyful, super-educational *Networked Quantum Metaverses* for us all to explore, live in, work in, and play in together?

Why will exact quantum computers be able to help us to design, build, test, and debug the super-large, super-helpful *quantum metaverses* that we will soon be creating here on Earth?

What is the actual purpose for a *super-powerful* quantum *metaverse*?

How is a *metaverse* any different than a *multiverse*?

What are the advantages of using *exact* deterministic quantum *computers* to computationally-host *memory-masking* quantum *metaverses* that can be fully-accessed by many billions (and eventually trillions) of people *simultaneously*, even though some of these people may be living on *different planets* that are separated by the *vast distances* of outer *space*?

What kinds of *initial* quantum *metaverses* will we construct and properly establish on *Earth* in the *coming years*?

What kinds of *powerful* quantum *metaverses* will we begin to establish on our *Earth's Moon* in the *coming years*?

What kinds of *memory-masking* quantum *metaverses* will we begin to establish on *Mars* in the *coming decades*?

What kinds of *inter-stellar* memory-masking quantum *metaverses* will we begin to establish across *multiple exoplanets* in the *coming centuries*?

What kinds of *inter-galactic* memory-masking quantum *metaverses* (multiverses) will we be able to begin to establish (understand better, and possibly gain some better access to) across *multiple galaxies* in the future?

What is the actual real physical difference between a *metaverse* and a *multiverse*?

How can we physically *distinguish them* enough to actually tell them apart?

How will we know (for sure) if we are living inside a *multiverse* or inside a *metaverse*?

Let's look more closely at this question of *Metaverses & Multiverses*.

# Metaverses & Multiverses

What are *Metaverses & Multiverses*?

What is a *Multiverse*?

What is a *Metaverse*?

What is the *real physical difference* between a Multiverse and a Metaverse?

It *certainly appears* that this *particular multiverse* (that contains our local physical universe where we currently seem to live) where we find ourselves today (in 2023), is actually a *memory-masking quantum metaverse*, because we cannot *remember* how we initially entered into this multiverse (metaverse), and all our elementary particles (of this physical universe) seem to have *all the right kinds of quantum properties* (from the quantum-behaviors of all their *quantum neural pulses*) that we would expect of a *properly-designed memory-masking quantum metaverse*.

So, we can now start to ask ourselves some very important questions about our particular *multiverse* (where we are living today) and its *potential relationship* to all the *metaverses* that can theoretically be created by the universal set of all really-intelligent *human scientists*.



Are we currently living inside of a *memory-masking metaverse*, or are we currently living inside of a *memory-masking multiverse*?

How can we tell a “*metaverse*” from a “*multiverse*”?

What are our actual, current-year, Earth-people-accepted, definitions of “*metaverse*” and “*multiverse*”?

Some of our Earth’s quantum physicists currently *define* a *multiverse* to be a “*hypothetical group of multiple universes*”.

Some of these bright quantum physicists may even dare to believe that together, all of these *hypothetical universes* (of the whole *multiverse*) comprise *everything* that *exists*, including the entirety of space, time, matter, energy, information, and the *physical laws* and the *constants* of *physics* that describe them.

Some intelligent quantum physicists call the different hypothetical universes (within the whole entire multiverse) “*parallel universes*”, “*other universes*”, “*alternate universes*” and “*many worlds*”.

Some of our *Earth's* computer *scientists* currently *define* a *metaverse* to be a “*network of 3D virtual worlds* focused on *human social connection*”.

Some *creative* computer *scientists* almost seem to believe that a *metaverse* is a hypothetical iteration of the World Wide Web (our Internet here on Earth) as a single, *universal virtual world*, that is *facilitated* by the use of *Virtual Reality (VR) headsets* and *Augmented Reality (AR) headsets*.

Among the *thousands* of good intelligent *computer scientists* of Earth (today in 2023) there appears to be a good level of general *agreement* that a *metaverse* is something that is *created* by *intelligent human beings*.

Among the *thousands* of good intelligent *quantum physicists* of Earth (today in 2023) there appears to be a belief (by some) that our *multiverse* (that contains our current physical universe, with our Earth planet, where some of us seem to be living today) was *not necessarily created* by *intelligent human beings*.

*How many* quantum physicists can personally discover (by 2030) a good logical way to entertain (in their own bright theoretical minds) the *theoretical possibility* that our current *multiverse* (where we seem to live) may have been created by *intelligent human beings*, or by super-

intelligent human *scientists* in a super-powerful *scientific laboratory*?

What if we someday actually make the *startling* scientific *discovery* that a multiverse is *exactly* the *same thing* as a metaverse?

Now let's take a closer look at the hypothetical possibility that our multiverse, which includes our whole universe, was actually *created* in a *scientific laboratory*.

Was our *Universe* created in a *Laboratory*?

# Universe in Laboratory?

Was our *Universe* created in a *Laboratory*?

Can a whole *Universe* be created in a Scientific *Laboratory*?

This is a *very* important *question* to ask ourselves as a planetary species of *intelligent* human *beings* here on our vulnerable little planet Earth.

This is one of the *most* important *questions* that we can possibly ask ourselves here on Earth today in 2023.

It is even almost *difficult* to *think* of a *question* that is more important than this one.

The reason this important question is so *vital* to our continued *survival* here on Earth, is because it literally *begs* an even *more-important* *question*.

This is because, if our universe really was created in a scientific laboratory, then there *must* have *been* some intelligent *scientists* who were *actually* intelligent *enough* to successfully *create it* (our whole universe of galaxies, stars, planets, and people).

And if there existed some scientists who were *smart enough* to create a whole universe, then it seems possible that there might also exist some scientists who are even smart enough to create a *whole multiverse of many universes*.

*We already* (many of us here on Earth today in 2023) *believe* that there may exist some computer scientists who are already smart enough to begin to create some pretty interesting *metaverses* for us all to begin to *live in*, and work in, and *play in*.

Can we also bring ourselves to *muster* some *theoretical belief* in the hypothetical possibility that there could exist some *super-smart scientists* somewhere (in our vast cosmos of *potentially-smart scientists* that might exist somewhere) who *really* are *smart enough* to create our *whole metaverse*, which includes our *whole universe*, in one of their *super-smart scientific laboratories*.

Can a set of *real human brains* contain within them (metaphorically, or physically), such a *super-smart scientific laboratory*?

Can a properly *networked set* of *real human brains* contain a number of these types of *super-smart scientific laboratories*?

Are some of the *brilliant scientists* of Earth already beginning to ask themselves these kinds of *super-intelligent questions*?

For example, on October 15, 2021, a very interesting article, titled “*Was Our Universe Created in a Laboratory?*”, was published in Scientific American by Professor Avi Loeb of Harvard University [34].

This is a *super* interesting *title* for a scientific paper published in the prestigious *Scientific American* journal.

The *original intelligent contents* of the paper are also very interesting and thought-provoking.

*Was Our Universe Created in a Laboratory?*

Was our universe created by *intelligent scientists*?

Can a universe (like ours) *be created*?

Can *intelligent human beings* create a universe like ours?

Can *intelligent scientists* (like the real human beings that we are) *create a whole dream universe* by wirelessly networking their real human brains together?

These are precisely the kinds of *excellent questions* that we can now *start* to ask ourselves (here on Earth).

One of the major purposes of this present 4 Brain Theory paper, is to *intelligently* encourage *us all* to begin to *ask* better *questions* (to our own selves, and also to all the others of us here on Earth) about *ourselves* and our precious vulnerable little planet Earth, and our own Milky Way Galaxy, and our *whole* physical *universe* where we all seem to be living today in 2023.

We, *the* intelligent *scientists* of *Earth*, can now begin to ask ourselves (and each other) *some* better *questions* that will be of *greater benefit* for *all* of *us* intelligent *people* of this whole *planetary civilization* of ours.

The brilliant Avi Loeb actually begins to ask us *many* of these *important questions* in his October 15, 2021 Scientific American article.

For example, in his article titled “Was Our Universe Created in a Laboratory?”, Avi Loeb discusses the important concept of *ABCD Civilizations*.

# ABCD Civilizations

What are the *ABCD Civilizations*?

Is this a good way to *classify* human *civilizations*?

Which types of human civilizations are the *most intelligent*?

What is a “*Class A*” Civilization?

What is a “*Class B*” Civilization?

What is a “*Class C*” Civilization?

What is a “*Class D*” Civilization?

How can we *intelligently classify* intelligent civilizations?

Are all civilizations *intelligent by definition*?

Does every *primitive group of apes* constitute an “intelligent civilization”?

What is the best definition of “*civilization*”?

What is the best definition of “*intelligence*”?



What did Avi Loeb recently (on October 15, 2021) suggest for possible ABCD Civilization classifications?

Avi Loeb wrote:

“As of now, we are a low-level technological civilization, graded *class C* on the cosmic scale, since we are unable to recreate even the habitable conditions on our planet for when the sun will die.”

“Even worse, we may be labeled *class D* since we are carelessly destroying the natural habitat on Earth through climate change, driven by our technologies.”

“A *class B* civilization could adjust the conditions in its immediate environment to be independent of its host star.”

“A civilization ranked *class A* could recreate the cosmic conditions that gave rise to its existence, namely produce a baby universe in a laboratory.”

The hypothetical idea that a “*class A*” civilization could create the “cosmic conditions” that could produce a “*baby universe in a laboratory*” is a really good potentially-liberating idea.

If we were to *generalize* and *extend* these useful ABCD civilization categories, then we might choose to define them as follows:

*Class A Civilizations* are the set of super-intelligent civilizations that are intelligent enough to *create*, and *inhabit*, any, and every, type of universe that can be *created* and *inhabited*.

This set of *creatable & inhabitable universes* might possibly be a *very large set of universes*.

A good example of a Class A Civilization is *the set of all real human beings that live in the real world up above all of Plato's Caves (creatable universes)*.

*Class B Civilizations* are the set of intelligent civilizations that are intelligent enough to create, and inhabit, *many* different *solar systems* within their *own galaxy*.

It is possible that there may exist many different kinds of Class B Civilizations *living* near the *center* of our own Milky Way Galaxy.

For example, one of these *Class B Human Civilizations* may have decided to create our own local solar system (that includes our own planet Earth, and our own planet Mars, and our own Sun) around 5 billion years ago, to

give them a place where they could *remotely-animate* some experimental Earth-based human avatars (like us mortal human beings), with one of their new-improved *darklight-communication* interstellar *consciousness-projection* systems.

*Class C Civilizations* are the set of semi-intelligent civilizations that are just intelligent enough to almost travel to a *nearby moon*, or to another *nearby planet*, within their *very own solar system*.

It is theoretically possible that there may exist a good number of *Class C Human Civilizations* (living in other solar systems, here inside our own milky-way galaxy) that are *very similar* to our own Class C Human Civilization here on Earth.

It is also theoretically likely that *most* Class C Human Civilizations will tend to *quickly destroy themselves* within a few years (or a few decades) of their development of nuclear fission technologies (and nuclear fusion technologies), due to *excessive competitive* (national, patriotic, racial, ethnic, class, emotional, irrational, superstitious, etc.) *human-brain pride*.

For example, the theoretical likelihood that our very own current Class C Earth-based Human Civilization will be

able to *survive* for another *couple of centuries* appears to be *much less* than 3%.

It seems that the only theoretical way that *we* (the people of Earth) will be able to survive, here on Earth (for 2 or more additional centuries) as the *Class C Human Civilization* that we currently are, is if *All of Us* can *quickly develop* the *brilliant-ability* to *wisely-bridle* and *properly-control* our very own *personal* excessive competitive *pride*.

The theoretical likelihood of this *voluntary* worldwide personal *pride-bridling* seems to be very low.

This of course, is a *very sad situation* for all of us here on Earth.

Therefore, we are unfortunately *scientifically predicting* (here in this present 4 Brain Theory paper) that our Earth-based human civilization *will end* prior to the year 2222.

*Where* will *we all* go when this current VR Earth-experience comes to an explosive nuclear end?

Of course, we will *simply return* back to the *other* (more stable, and more joyful) *planets* of our milky-way galaxy, where they have already successfully *cast out*, all forms of excessive competitive human pride, *out of all* of their

human brains, by *wisely* bridling *all* of their human-brain pride for the *good* of *all*.

Only successful *pride-bridling* planets can survive technological development to a very advanced *technological state*.

This serious scientific fact, is *manifestly obvious* to anyone who can think.

*Class D Civilizations* are the set of semi-intelligent civilizations that are *partially hosted* by the set of *human neurons* of one, or more, of the *human brains*, of one, or more, of the *human members* of a Class C Civilization.

One example, of a *Class D Human Civilization*, takes place inside our *own* personal private *dreams* at night, when we go to sleep and dream that we are living in a dream environment (*dream universe*), that also has *some* other *artificial people* living in it, giving it the general *appearance* of a Class D Human Civilization.

Another example, of a *Class D Human Civilization*, takes place when we place a *Virtual Reality (VR) headset* onto our *human head*, and our *human face*, and we begin playing a game with *some* other *people*, inside a *computer-generated digital virtual environment*.

Of course, these *suggested* Class ABCD Civilization *definitions* can be modified, adjusted, subdivided, expanded, and *altered* to *adapt* to any and all of our *intelligent questions* about the *set* of *all universes* and our hypothetical *locations* within *them all*.

The *super-vital question* of whether *scientists* made our *universe*, where we currently seem to live, is of such *grand-importance* to the *potential survival* of our own planet Earth, that it definitely deserves a *closer look*.

Did a group of *Scientists* make our *Universe*?

# Scientists made Universe?

Was Our *Universe* made by Intelligent *Scientists*?

Was our current universe created by super-intelligent scientists in their *creative* real-human-brain scientific *laboratories*

Was our universe created by super-intelligent scientists in the *creative laboratories* of their *own minds*?

Was our universe created by real intelligent scientists in the really-powerful laboratories of their *networked* real-human *brains*?

Did the “big bang” *really* create our universe, for sure?

Or has our universe *always existed* as a *multi-player* neural *simulation*, in an *infinite* dynamic *set* of our *networked* real-human *brains*?

What is the *most-likely source* for our universe?

What does *Occam’s Razor* have to say about this?

Which theory is *more-simple*?

Which theory has *greater* explanatory *power*?

Which theory *aligns* much *better* with the *vast majority* of all of the available *scientific evidence*?

What is the *real origin* of our universe?

*Who* can tell?

How can we really know *for sure*?

Which one of us is *smart enough* to know, for sure, how our very own universe was created?

Do we really need to go out and somehow discover a super-brilliant *Super Intelligence* that can help us to figure out the actual origin of our very own universe?



# Super Intelligence?

What is a *Super Intelligence*?

A Super Intelligence is *someone* who is Super Intelligent.

There are many possible *definitions* for “*Super Intelligence*”.

Which definition of Super Intelligence is the *most useful* for helping us all to possibly discover our *own* Super Intelligence?

Can we discover a really good, proper, useful, helpful, definition of Super Intelligence, that will help us *successfully recognize* a real bona fide Super Intelligence when we actually find one?

What is the *most intelligent thing* that a Super Intelligence could possibly teach to us clueless mortals here on Earth?

Could the super-smart *Super Intelligence* possibly possess *enough practical intelligence* to teach us mere mortals how we can properly *solve world poverty*?

Is there anything else (besides *solving world poverty*) that we all really need to learn here on Earth?

Will there still be a *big threat* of *nuclear war* (or nuclear terrorists attacks) after we all work together to intelligently, kindly, and properly *solve* world *poverty* for *everyone everywhere* on this little vulnerable planet of ours?

What worldwide human social problems will not *automatically* become *solved* once we finally solve world poverty *for all*?

What if there is a *super-intelligent part* of us that is *already* Super Intelligent?

Is there a good intelligent way for a mere mortal human (here on Earth) to discover the *Super-Intelligent Part* of himself or herself?

Are *us* real human *beings* really super intelligent?

Are *us* advanced human *beings* also mostly super intelligent?

Why do some of us confused *mortal* human beings sometimes seem like we are *merely* semi-intelligent?

Why do us *submortal* human beings mostly seem to be *only* semi-intelligent?

Why does it sometimes *almost* seem to be *so difficult* to find even one single *super-intelligent* human being here on Earth?

Why does it sometimes *nearly* appear that super intelligence may be *still missing* from our planet Earth today in 2023?

Is there *anyone*, here on Earth today, that is actually *Super Intelligent*, for sure?

How can we really know for sure, if there is *anyone* that is super intelligent, that is *currently* living among us here on Earth?

If there are any *super-intelligent* human *scientists* living among us here on Earth, today in 2023, then why has their *presence-on-Earth* not been publicly announced broadly in our major newspapers, like the New York Times, or the Wall Street Journal?

Why has their potential *presence-on-Earth* not been widely-discussed in any of the *major scientific journals* of our world, during the *past couple centuries*, since science and technology began growing worldwide so very quickly?

How exactly would *super-intelligent* human *scientists* behave, if some of them really did live right here on Earth?

Would they behave *exactly* like Albert Einstein or like Stephen Hawking?

Or would they behave in a *super-wise way* that is much *more-intelligent*, and much *more-wise*, than either Hawking or Einstein ever behaved?

What would these super-intelligent human scientists *seek for*?

What would they *desire* from *us*?

What would they *desire* for *us*?

Would they *desire* to *help us*?

Would these super-intelligent human scientists have *enough wisdom* to actually help us for real?

What would be the *number one goal* of such a hypothetical super-intelligent human scientist for our current Class C Human Civilization here on Earth?

Who on this Earth planet of ours has *already begun* to *think* clearly and carefully about Super Intelligence?

For *how long* have some of our Earth-based human thinkers been pondering the glorious possibilities of *Super Intelligence*?

In 1998, a brilliant professor of philosophy, at the University of Oxford, named Nick Bostrom, published a super-interesting article called “*How Long Before SuperIntelligence?*” in the International Journal of Future Studies [35].

In the *Abstract* of his interesting paper, Nick Bostrom writes:

“This paper outlines the case for believing that we will have *superhuman* artificial *intelligence* within the first third of the next century.

It looks at different estimates of the processing power of the *human brain*;

how long it will take until computer hardware achieve a similar performance;

ways of creating the software through bottom-up approaches like the one used by *biological brains*;

how difficult it will be for *neuroscience* to figure out enough about *how brains work* to make this approach work;

and how fast we can expect *superintelligence* to be developed once there is *human-level* artificial intelligence.”

From the super-interesting wordings of his *Title* and *Abstract*, Nick Bostrom seems to believe that a “*superintelligence*” is something that *does not yet exist* here on Earth, and that *it will be created* by us Earth-scientists in the near future.

In his creative 1998 article, Nick Bostrom goes on to write down his particular definition of “*superintelligence*” as follows:

“By a *superintelligence* we mean an intellect that is much *smarter* than the *best human brains* in practically every field, including *scientific creativity*, *general wisdom* and *social skills*.

This definition leaves *open* how the *superintelligence* is implemented:

it could be a digital computer,

an ensemble of *networked* computers,

cultured *cortical tissue* or what have you.

It also leaves *open* whether the superintelligence is *conscious* and has subjective experiences.

Entities such as companies or the scientific community are *not* superintelligences according to this definition.

Although they can perform a number of tasks of which no individual human is capable,

they are not intellects and there are many fields in which they perform much *worse* than a *human brain* –

for example, you can't have a real-time conversation with *the scientific community*".

Now, let's try to build upon, expand, and clarify Nick Bostrom's definition of a *superintelligence* as follows:

A *Super-Intelligence* is an intellect that is orders of magnitude *more intelligent* than the *vast majority* of the mortal-human brains *here on Earth*, in practically every field, including scientific creativity, human knowledge, general wisdom, scientific knowledge, social skills, and in the vitally-important area of *human kindness*.

By briefly mentioning "*cultured cortical tissue*", Nick Bostrom seems to be leaving open the possibility that a *Super-Intelligence* can also be a *human being*.

But is this actually possible?

Can a future *Super-Intelligence* be a *human being*?

Is this even a theoretical possibility?

Can a human being *become* Super-Intelligent?

If so, *which* human *beings* can become Super-Intelligent?

And, *how* will we *know* if a human being ever does actually become Super-Intelligent?

Nick Bostrom also mentions “an *ensemble* of *networked computers*”.

What about the possibility of an *ensemble* of *networked cortical tissues*?

What about the possibility of an *ensemble* of *wirelessly-networked* real-human-brain *cortical tissues*?

What type of Super-Intelligence could possibly become more intelligent than the particular set of intelligently-wired *ensemble* of *wirelessly-networked* real-human-brain *tissues*, that together compose (simulate) this whole universe?

Is every real human being a *Super-Intelligence*?

Can any of our *own* human *scientists*, here on Earth, ever become Super-Intelligent?



How exactly can an *individual human being* actually become super intelligent?

What needs to happen to allow a human being, with a human brain, to become *genuinely super intelligent*?

Our *real human selves* have always been *super intelligent*.

Our *advanced human selves* have been *super intelligent* for a very long time.

What is the actual nature of *Our Own Super Intelligence*?

# Our Own Super Intelligence?

What is *Our Own Super Intelligence*?

Who are the *Smart Kids* in our own *Galaxy*?

Are *we* the Smart Kids?

Do we *all* behave like really Smart Kids here on Earth?

Or, do *some of us* behave in some ways that may even be less than intelligent?

How would we *behave* if we were actually super-intelligent?

Would we wage vicious *wars* on each other, and fill our unstable human hearts (our vulnerable prideful human brains) with *anger* and *hatred* towards other humans?

How have *we*, the people of Earth, *behaved* during the last 3 thousand *years* of recorded history?

Have we *been kind* to each other?

Or, have we *eagerly* waged hundreds of *miserable wars* on each other?

How do we really want to *treat ourselves*?

How do we really want to *treat others*?

What exactly would we do, if we ever actually got ourselves into pretty good contact with *Our Own Super Intelligence*?

How would we treat each other *if* we were actually *super intelligent*?

How would we finally start treating each other, if we decided that we only desire to be *super kind* to ourselves and *super kind* to all others?

What is the actual genuine relationship between *super kindness* and *super intelligence*?

At the very highest level of *human intelligence*, how could there possibly be *any* real *difference* between *super intelligence* and *super kindness*?

How can we possibly have enough intelligence to *see* wisely *enough* to be *super kind*, unless we are also simultaneously *super intelligent*?

Is *super kindness* the exact same thing as *super intelligence*?

Is *super intelligence* the exact same thing as *super kindness*?

How can we once-again personally discover our very own *super kindness*?

How can we become again *super kind* (like little children) in *all* of our *dealings* with *all* the precious *human beings* on this little planet Earth?

How can we all discover again our very own *super intelligence*?

How can we *scientifically-discover* that we have already always been *super intelligent* and *super kind* as the *real human beings* that we have already always been, in our real world *up above* all of Plato's Caves (all of our created simulated universes).

How can we *scientifically-discover* someone (here on Earth inside this simulated universe) who is also really *Super Intelligent*?

Who is the *most intelligent* human *being* to have ever lived right here on our own little Earth planet?

Was Albert Einstein the *most intelligent* human *being* to have ever lived here on this Earth?

Or were there *some other* super-intelligent *scientists*, who lived here before Albert Einstein was even born, who were orders of magnitude *more intelligent* than Albert Einstein?

Have any of our bright *Earth scientists* ever been really Super Intelligent?

Which of our bright Earth scientists may be *Super Intelligent* today in 2023?

*Who is Super Intelligent?*

# Who is Super Intelligent?

*Who* among us, here on Earth, is *Super Intelligent*?

Is it *physically possible* for a *human brain* to become *Super Intelligent*, according to all of the known laws of quantum physics and human neuroscience?

Who are the *Smart Kids* in our *Galaxy*?

Who are the *Smart Kids* here on *Earth*?

Have you yourself ever actually met a really super *Smart Kid* here on Earth?

Who are *the* very smartest *kids* to have ever lived here upon our Earth?

Who exactly are *the* most-intelligent *scientists* to have ever lived here upon this Earth planet?

Did the *Lao-Tzu* really tutor and mentor both *Socrates* and *Confucius*?

Did the *Lao-Tzu* live long enough to properly mentor anyone else?

Did the ancient *Lao-Tzu* really exist?

Or, are all the legends about the *Lao-Tzu* just some made-up ancient stories about some *hypothetical* wise people that may have lived long ago?

*Exactly* how many of these brilliant “*Lao-Tzu*” human scientists are rumored to have existed anciently?

How many people (like Confucius and Socrates) have *learned* useful things from these super-intelligent ancient *Lao-Tzu* scientists?

How can these *super-intelligent* ancient *Lao-Tzu* scientists possibly be *so old* and *so wise*?

Did these ancient *Lao-Tzu* scientists use some ancient CRISPR-Cas9-Type technologies, to simply *improve* their human *DNA*, so they would *not* ever *age* any more than they really wanted to age?

Can human DNA hypothetically be improved enough to actually remove *all* of the human-aging genes?

Is this even *theoretically possible*, according to our most knowledgeable *human neuroscientists*?

Are *all* of the *Lao-Tzu* fully-illuminated?

Or are a couple of the Lao-Tzu *more intelligent* than some of the other Lao-Tzu scientists?

Which individual Lao-Tzu scientist is the *most intelligent of them all*?

Why do some of us seem to know so little about these *hypothetical* Lao-Tzu scientists?

What would happen if some of our *astrophysicists* simply asked some of these *super-intelligent* Lao-Tzu *scientists* how *dark matter* really works, and how it's *rapid flow* and abundant *scattering*, is actually the *correct* gravitational *cause* of *all* of the *gravity* in our whole *gravitational universe*?

What other kinds of *super-helpful* scientific *breakthroughs* can these super-intelligent *Lao-Tzu* scientists *help us* all to make here on Earth today in 2023, and in the future, so we can all work together harmoniously to solve world poverty for *everyone* on Earth?

What other *goal* would these *most-intelligent* Lao-Tzu scientists have in their *most-wise* hearts?



What kinds of *scientific questions* shall we now begin to *earnestly ask* of these *most-brilliant Lao-Tzu scientists*?

What is the *primary purpose* and *main goal* of all of these all-knowing *Lao-Tzu scientists*?

Are they trying to help one nation *win a war* against another nation?

Are they trying to help all of us to *learn more* about science and technology?

Are they trying to help all of us to learn more about the actual nature of *intelligent human beings*?

Are they trying to help all of us to learn more about *ourselves*?

Are they trying to help all of us learn how to *be good* to *ourselves*?

Are they trying to help all of us learn how to be *really good* towards everyone else?

Do they sincerely hope we will someday *learn* to be *nice* to *each other*?

Are these *super-intelligent* Lao-Tzu *scientists* trying to help all of us to recognize our *own* excessive competitive *human pride* enough, to start to also discover within ourselves a personal, free-willed, *super-intelligent willingness* to begin to really *desire* to completely *solve world poverty* for *all*?

Why do these super-intelligent Lao-Tzu *scientists* *desire* to help us all to *solve world poverty* so every precious human being on Earth will always have *enough food* to *eat*?

Why would any group of brilliant *scientists* *even care* about helping people to have *enough food* to *eat*?

Why wouldn't all *scientists* *only care* about making sure that their *own* little *families*, that live comfortably inside their *own* little *communities*, have enough food to eat?

Why *look outside* of our own little families?

Why *care* about anyone *outside* of our own little communities of vulnerable humans?

Why care about anyone who lives outside of *our own* little territorial *nation* here upon this Earth?

Why care about *EVERYONE* on *Earth*?

What would be the real point of such a *global concern*?

Why would *any brilliant human scientist* care about helping *every human being* on this *whole planet* to have *enough food to eat*?

What is really *super-intelligent* about helping *all people* have *enough food to eat every day*?

What is really *super-kind* about helping *all people* have enough food to eat *every day*?

Why precisely are these super-brilliant *Lao-Tzu* scientists, simultaneously both *super-kind* and *super-intelligent*?

What exactly did these *super-intelligent super-kind Lao-Tzu* scientists teach to *Confucius*?

What exactly did these super-intelligent *super-kind Lao-Tzu* scientists teach to *Socrates*?

What will these super-intelligent super-kind Lao-Tzu scientists *attempt to teach* to all of the other scientists here on Earth in the *near future*?

What things of great value could *they possibly teach* to *us*?

Is there anything really useful, *that* they might *know*, that we would really desire to learn?

Can they teach us all how to *solve* world *poverty* properly and successfully for everyone on Earth?

Can they teach us *anything* else of *value*?

What do we really want to know, as a *worldwide community of inquiring scientists*?

What *deep* scientific *questions* do we want to ask of these *super-intelligent* all-knowing Lao-Tzu scientists?

What questions do we *dare* to ask of them?

What do we *really* want to *know*?

Who among us has the *scientific courage* to ask them a very specific *scientific question*, that she or he most hopes to find a good correct scientific answer for?

Do any of us have a question that we really want to have answered by someone who *wise, kind, and all-knowing*?

Besides the super-smart Lao-Tzu, are there *any other* smart kids here on Earth?

Are there any *Smart Kids* on our own block?

Are there any other Smart Kids in our *own galaxy*?

*Where are all the Smart Kids?*

# Where are the Smart Kids?

*Where are all the Smart Kids?*

Where are all the Smart Kids on *our block*?

Are we really the *Smart Kids* on our own block?

Or, could we actually be some of the *less* intelligent people on our own block?

Where are all the *Smart Kids* in our own galaxy?

Is it *theoretically possible* that we are actually some of the *less* intelligent people in our own galaxy?

Who are the *Smartest Kids* on our cosmic block?

Can our human brains be DNA-fashioned in many different ways, from some *super-smart brains*, and some (less-smart) *semi-smart brains*, and then all the way down to some *un-smart brains*?

*Just how stupid* can we all become, before we can no longer properly consider ourselves to *still* be *human*?

Who among us has *enough* honest *humility* to willingly-admit that he or she probably has a current (circa 2023) mortal-human *brain* that is actually *pretty stupid*?

I myself can *often sense* the profound *deep-stupidity* of my very-own *personal* mortal-human *brain*.

What kind of human brain do *most of us* have here on Earth today in 2023?

Are we really the *smart kids*, or are we more-likely some of the *dumb kids*, of our own milky-way galaxy?

Many of us may fondly *like* to *imagine* to ourselves that we are some of the smart kids in our own cosmic block.

Do some of us Earth-scientists still hope to believe (after carefully reading this entire 4 Brain Theory paper) that we are actually some of the *smart kids* in our own Milky Way Galaxy?

Or are we (much more likely) some of the *dumb kids*, because of our long-tortured *history* of human wars, and human-inflicted *miseries* here on Earth?

Who among us today has enough human-brain *smartness* to properly *bridle* (and wisely *harness*) his or her own human *pride* for the good of *all*?

Would a smart kid *learn to control* his own pride?

Are the super-intelligent Lao-Tzu able to *properly bridle* and *wisely control* their *own human-brain pride* at *all times*?

Yes, *they can*.

Can they *teach us all* how to *properly bridle* our own moral-human-brain *pride* for the *good of all*?

Are the Lao-Tzu *even smarter* than Albert Einstein?

Yes, *they are*.

Are the Lao-Tzu the *smartest kids* here on Earth?

Or, is there someone *even smarter* than the Lao-Tzu living right here on Earth?

Are the hypothetical Lao-Tzu the *smartest* of our Earth planet, by the *wise design* of this local *Earth-game*?

Is there *anyone* *even smarter* than the Lao-Tzu living *somewhere* in our own Milky Way Galaxy?

Yes.



Which particular *solar systems* (and which of their *advanced planets*) have *most* of the *smart kids*?

Which few dark solar systems in our own galaxy, contain most of the *dumb kids*, like most of our *current* mortal-human *selves*?

Where exactly are all our *smart selves* located?

And where precisely are most of our *stupid selves* located?

What is the real difference between our *Stupid Selves* and our *Smart Selves*?

Now let's take a look at our *Smart Selves & Stupid Selves*.

# Smart Selves & Stupid Selves

Where are our *Smart Selves*?

Where are our *Stupid Selves*?

On *which planets* do these *Human Selves* currently reside?

Is it possible that some of our *smart-selves*, and also some of our *stupid-selves* may live right here inside our own Milky Way Galaxy?

*Where* exactly do our smart-selves live in our Milky Way Galaxy?

Do some of our most-stupid selves live *right here* on *Earth*?

Where precisely do our *smartest-selves* actually live?

Where exactly do all our *real-selves* live?

Where precisely do most of our *advanced human selves* actually live today in 2023?

Is it *theoretically possible* that some *very smart kids* are currently living pretty close to us, on Proxima b, *without us even knowing it*?

Can some of the smartest kids, living on our advanced Kolob planets, be *projecting* the *energy* of their *human consciousness* into some of our memory-masked mortal-human brains here on Earth, via a set of *targeted streams* of millions of *ultrafast real dark scalar bosons*?

Who are we *really*?

Do we have *just one* real brain?

Do we have *4* different *brains*?

*Who are we?*

Are we the real human beings (the *smartest kids possible*) who are *actively projecting* our *ultrafast* dark-scalar-boson *real-neural energy* of our real-human *consciousness* (through the *very center* of our own milky-way galaxy) into our multi-billion-year-old advanced-human *avatar-brains* living on our set of advanced Kolob planets near Sagittarius A\*, and then also projecting our consciousness even further-outwards into the *outer regions* of this milky-way galaxy, and into our multi-

decades-old mortal-human *avatar-brains* here on this *dark* confused *mortal-Earth* planet?

Does our super-intelligent real-human *consciousness* (awareness smartness) become *greatly-darkened* whenever we choose to energy-project a portion of our super-intelligent real-human consciousness into a *sub-optimal* confused *severely-limited* mortal-human *brain*?

Or are we the multi-billion-year-old advanced-human avatars (the *smart kids* on our own advanced Kolob planet *somewhat near* the *center* of our milky way galaxy) that are *currently projecting* a proper-portion of our advanced human *consciousness* into our current mortal-human avatar brains here on Earth?

Or are we just the *relatively-stupid* (because we often forget things, get confused, get angry, get sick, and easily die) *mortal-human avatars* (us mortal Earth people) that live here on our planet Earth for just a *brief few* bewildering *decades* before our *own* mortal *deaths*?

Or are we the *relatively-stupid* submortal human *avatars* that seem to come alive (*as us*) inside our *sleeping dreams* while we dream at night?

Or are we the *relatively-stupid* submortal human avatars that come alive (*seemingly as us*) inside the *virtual reality*

*worlds* (digitally-simulated *VR* environments) that we seem to enter, just as soon as when we *put on* a powerful new *virtual-reality headset* from Facebook (Meta) Oculus in 2023?

Are we *all* of these *different selves*?

Can we sometimes even be *all 4* of these *different selves* with *4 different brains*, simultaneously all at the same time?

Does this present *4 Brain Theory* paper adequately describe how we can be *all 4* of our *own selves*, even though we are actually always our *very own real self*?

Why is our *real self* the *smartest-self* that is theoretically *possible* in any universe?

Why are *all our* mortal-human *selves* and *all our* submortal-human *selves* the *most-stupid* selves that are theoretically possible in *any world* in *any universe*?

Why are all our advanced-human *selves* always so *super-intelligent*?

Exactly what type of actual *human-brain* physical, biological, neural-network *human-hardware* is always

necessary for the proper *hardware-support* of any type of actual *super intelligence*?

Just how infinitely super-intelligent are all of our *Real-Smart Human Selves*?

What is the actual core scientific nature of *Our Real Smart Selves*?

# Our Real Smart Selves

Where are all of *Our Real Smart Selves* physically located?

Where exactly is my very own *Real Smart Self* physically located right now at this very minute?

Our *Real Smart Self* is physically located within our *Real Smart Brain* inside our *Real Smart Body* inside our *Real Smart World*.

Our *Real Smart World* is our *real human world* up above all of Plato's Simulated Caves (neurally-simulated universes).

What is the actual physical *location* of our *Real Smart Human Body* relative to the actual physical *location* of our mortal-planet *Earth*?

All of *our* individual *advanced atoms*, that physically make up our mortal-human bodies, are usually *located* right here on *Earth*, inside this very-particular simulated milky-way galaxy that guides, protects, and houses our own vulnerable little Earth planet.

But where are all *our* real *atoms* (that compose *our* real *human bodies*) physically located?

All of the *real atoms* of our *real human bodies* are located in our *real world* that is *causally above* all of the *simulated* universes.

What are the exact *physical* dimensions of our *real world*?

What is the actual physical structure of our *real world* and *the real set of real infinite planes* that may compose it?



# The Set of Real Infinite Planes

What is *The Real Set of Real Infinite Planes* of Real Human Existence?

Where are all of *Our Real Smart Human Selves* physically located?

*Our real world* (where we all really live as real human beings forever) is either *one real infinite plane* of real-human existence where we all live together on this one single real infinite plane; or (more likely) our real world is composed of a *real infinite set of real infinite planes* of real human existence, where *each one* of us real human beings, simply *lives alone* in our *very own* personal *private real infinite plane* of our very own individual real-human infinite existence.

This *infinite number* of real-human *infinite-planes* of real-human existence, may be *stacked* infinitely *high*, with an infinite quantity of *real usable space* both *above* and *below* any given infinite plane, such that this real infinite set of real-human infinite-planes may be simply viewed as an *infinite cube* of an infinite number of stacked real-human infinite-planes, with each real-human infinite-plane being infinite in the *spatial extent* of both of its *planar directions*, and also infinite in both the *height* and

*depth* of the infinite *spatial expanse* both *above* and *below* each separate, individual, personal, private real-human infinite-plane of real-human infinite existence.

One of the real advantages of *living alone* as a real human being, in one's very own *personal* private real infinite-plane *universe*, is that you would absolutely *never* run out of *enough* real *space* to do (or create) whatever you desired to create (or do) with your *very own* personal *private* infinite *real universe*.

Being a real human being (that has already always existed forever) certainly has its *real benefits*.

One of the really *wonderful* benefits of living forever (as a *unique* real-human *individual*) in our very own *personal* private infinite *real universe* is that this personal real universe of ours is *completely-unique* and *fully-individualized*, and *totally-customized* to the unique *likes* and unique *dislikes* of our very own unique real-human individual selves.

*No two* personal real universes *are* the *same*, because they are *all unique* in *every way* that can be really-imagined by the real human beings that live inside them.

The set of *personalized* real *infinite planes*, is the infinite set of *infinitely-unique* fully-individualized real *personal universes*.

*Our own* real personal universe is our *real private home*.

*We* are really unique, and our *real homes* are really unique to *uniquely-suit* us perfectly forever.

Every one of us, unique real human beings, lives forever *alone*, in our very own *uniquely-customized*, real, super-comfortable, infinitely-sized environment (*home*).

Our real home is always perfectly *suited* to *us* by design.

We have everything we really need in our real home (our real personal universe), *except* for *human company* and exciting new *human adventures* with *our dear friends*.

Whenever we do start to desire some endearing friendly *human company*, or some exciting new *human adventures*, we can simply choose to *start daydreaming* a proper portion of *ourselves* (a *dream-enabled* limbic-portion of our real *consciousness*) into one of the infinite-number of available black holes, such as *we all did* when we jointly-discovered Sagittarius A\*.

If our real human bodies (in our real universe) are physically located *causally above* all of the *neurally-simulated* advanced *universes* (with their galaxy-central, black-hole, wormhole-bundle, *entrance gateways*) then *how can we enter* into one of these simulated universes, so we can have a *very-new* human *adventure* (while we also *make* some *new* advanced-human *friends*) inside the advanced simulated universe?

How can we successfully *project* a *portion* of our real human *consciousness* into *one* of the newly-created advanced-human *avatar brains* that has just become newly-available, in one of these advanced simulated *universes*?

*Our real world*, where we really live with our real human bodies, and our real human brains, is *infinite* in *size*.

There are already *an infinite number* of *us* real human beings living in *our real world*, up above all of the *multi-player* neurally-simulated *universes* (causally up above all of Plato's Caves).

There are an infinite number of *wonderful things* to do in our infinite *real world* where we have always really lived.

However, we sometimes become *lonely* living alone forever in our real world.

Sometimes, we desire to make some *new human friends* to play with.

Sometimes our real human brains (in order to properly brain-energy-balance themselves) really do *need to enter* into a *marvelous* dream-like *experience* by connecting to an *ongoing* advanced-dream-universe *multi-player game* that is hosted by a wirelessly-networked subset of our *real-human limbic neural tissues*.

When we really *feel the need to start* day-dreaming *again*, then we must *first* choose *which* advanced-human universe-dream platform (*game*) we desire to enter into, with a *portion* of *our* conscious *real mind*, and start playing.

After we have *selected* which advanced-human *game* (which simulated advanced *universe*) we wish to play, then we still need to *select* which particular *galaxy* in that advanced universe (that advanced game) we wish to initially play in.

The actual process of *selecting* an *advanced galaxy* for ourselves (to begin to play in) is quite interesting, dynamic, and *socially-interactive*.

Each advanced galaxy has a *lead galaxy-game developer*, that acts as a kind of *senior galaxy manager* or *chief galaxy promoter*.

What might be the primary human motivation of some of these interesting *Galaxy Promoters*?

# The Galaxy Promoters

What is a *Galaxy Promoter*?

Can any real human become a new *Galaxy Promoter*?

What do all of *The Galaxy Promoters* actually do?

Why would any safe, secure, real human being ever desire to become an active *Galaxy Promoter*?

Why does every new galaxy really need at least one good active *Galaxy Promoter*, if this particular galaxy is to ever *grow* and *expand* in size?

As real human beings, we can always *choose* to *join* an old (already existing galaxy), or we can simply choose to *make* our own *baby galaxy* from first principles.

When a real human being *decides* to start creating its *very own* new baby galaxy, then this real human being automatically becomes the *first* Galaxy Promoter of this new baby galaxy.

This new baby galaxy will *grow* and *expand* to the *degree* that the ambitious Galaxy Promoter can *convince* other real human beings to *join* the Galaxy Promoter in the

*ongoing construction* of the new galaxy, to help it to *grow* while they all also get to experience some really-exciting new human adventures.

Each *Galaxy Promoter* is able to consciously-travel (via *two-way* consciousness-projection) from within his own *simulated* advanced *galaxy* (back and forth) to our *real world* (via a special type of *two-way* dynamic *interactive* galaxy-promoter *mindcast*), in order to *promote* his own *galaxy* to *everyone* he is able to *meet* in our *real world*, by explaining and *advertising* to us real human beings all of *his galaxy's* wonderful new *features* and *marvelous* galactic *benefits*.

These *galaxy promoters* want to convince us to join with them (via our own *day-dreaming* galactic *mindcast*) in their particular galaxy (their own *galaxy-game*), by trying to *convince us* that we will be able to have the very best most-exciting, *most-joyful*, brain-balancing experiences while *day-dream-playing* that we are an advanced human *avatar character* that is playing (and living) within their own advanced galaxy.

There are an infinite number of individual *galaxy promoters*, because there are *an* infinite number of *galaxies* in each of an *infinite number* of advanced universes.



Each unique galaxy has exactly *one* single *chief* galaxy *promoter*.

Each galaxy is *very unique* in its *purpose, structure, and rules*, and *very different* from every other galaxy in any given advanced-simulated universe.

The actual physical laws (and actual physical constants, and actual physical constraints) that govern *quantum entanglement* and *quantum gravity* are *slightly different* in each of the *uniquely-different* galaxies.

The exact types of *advanced* human-avatar *bodies* that are *physically-possible* to *DNA-construct* in each type of unique galaxy, depends on the *specific details* of the *exact* physical *laws* that govern every *neural pulse*, every *dark-matter particle*, every real *dark scalar boson*, every real *light scalar boson*, and every *elementary particle*, of that particular unique galaxy.

The unique *flow-rates*, unique *flow-densities*, and unique *dark-matter* flow-compositions of the inward-flowing dark-matter particles, that are constantly flowing inward, into the *large black holes* at the center of each galaxy, are *completely unique* for each *unique* type of galaxy.

No two galaxies *are alike*.

Every galaxy is *marvelously-unique*.

Every *galaxy-game* is a *wonderfully-unique* adventure in advanced human *exploration*, and pure *human joy*.

The variety of neurally-simulated human-life adventures that are available in each type of advanced human galaxy are *utterly unique* and *completely marvelous* in every way conceivable.

What do all of these interesting advanced simulated galaxies *initially look like*, to a real human being, that is really trying to *decide* which galaxy to enter?

When a real human being *chooses* to simply *look inward*, into the *inner workings* of its own super-powerful super-intelligent *real human brain*, it can also choose to look inward into its *own internal* real-neural *limbic system*.

When a real human being begins to look deeply (limbically) inward and closely examine its own internal real-neural limbic system, with its *real hippocampus*, and its *real amygdala*, the real human being is also able to begin to see a *very large set* of *inviting limbic black holes* that are *entrances* to the *ER wormholes* that lead into the *centers* of all the *different* advanced *galaxies*.

In order to help each real human being to make a very good, *very wise choice for itself*, each of these internal neural *black holes* (galaxy openings) are *distinctly-decorated* with an instructive set of accurate informational *advertisements*, about exactly what *types* of advanced-human *adventures* are *possible* inside each particular *black hole* (advanced limbically-simulated human-adventure galaxy-game) *galaxy*.

Each *Real Neural Black Hole* is an real-human, limbic, informational-entrance, high-speed *neural fiber* that is composed of trillions of trillions of trillions of super high-speed, *myelinated*, dark-matter, *neural-pulse axons* (ultrafast darklight-speed *dark-scalar-boson axons*), that lead into the *exact center* of a particular galaxy, with many of these real-dark neural-pulse axons passing through the center of the galactic black hole, and then continuing outward as these trillions of *real-dark axons* branch outward and separate themselves, as these real-dark *spiral axons* extend themselves outward throughout the *volumetric expanse* of the entire galaxy, into the *far reaches* of the galaxy, and into the *outermost reaches* of the *whole galaxy*.

Each of these *Real Neural Black Holes* leads directly to the very center of its very *Own Advanced Galaxy*.

*How* exactly will you decide which Black Hole (Advanced Galaxy) you desire to enter?

Which *Black Hole* will you *Choose* to enter into?

How will you wisely *Choose Your Black Hole*?

# Choose Your Black Hole

What is the very best way to *Choose Your Black Hole*?

Will you pick a Black Hole (Galaxy) that *maximizes* your internal *real-brain peace*?

Or, will you select a Black Hole that maximizes the quantity and quality of *utterly-unique*, vibrant, *exhilarating* new human-life *experiences* you will have as a *newly-created* advanced *human avatar* living inside the advanced galaxy (with your chosen Black Hole at its center) on one of the *most-advanced planets* near the central regions of the neurally-simulated advanced galaxy?

Will you choose a black hole, where *degraded* and *polluted* “mortal-like” planets (where confused, frustrated *bewildered* mortal-humans live, like our current Earth) are still *allowed to exist* out on the *galactic periphery* (outer arms of the more-distant star clusters) of the galaxy?

Will you desire to enter into a black hole (galaxy), where huge amounts of *pain* and *suffering* (kind of like Plato’s Cave Level 3) is currently *still allowed to exist* (for self-testing purposes) on some of the corrupted lower “*mortal*”

planets in *a few* of the solar systems on the *outermost arms* of the *galaxy*?

Or will you choose to *always live* as one of the most-advanced-possible types of *advanced* human *avatars* on one of the *more-advanced* perfect simulated *planets*, near the *center* of the *galaxy* where *no pain* nor suffering is ever allowed, because of all of the *many* wonderful *kind ways* that the advanced human avatars (who live in perfect peace on these advanced planets) *always* treat each other, because of the *super-intelligence* (and the corresponding *super-kindness*) of their advanced human brains?

The *individual* galaxy *promoters* (the super-powerful, super-smart, *super-kind* guys who promote the *salient virtues* of each individual galaxy) will gently *help you* to make a very *wise choice* of which black hole (galaxy) you will enter into, because *this is their job*, it is what they are very good at doing.

After you have chosen an advanced universe, and one of its advanced galaxies, you will still need to *select* your *very first* advanced *planet* (where you will simply project a *portion* of the *energy* of your real-brain *consciousness* into a *newly-created* advanced human-avatar *infant-brain*) within the particular galaxy (black hole) you have chosen.

The *vibrant* human *activities* (and *relative* human *behaviors*) of the *multitudes* of *inhabitants* of each of the advanced planets are very different from each other, so you will also want to be *very wise* and *very thoughtful* about *which* particular advanced *planet* you choose to enter first, as you initially begin *Your Galactic MindCast*.

# Your Galactic MindCast

How will you begin *Your Galactic MindCast* into the *newly-created mind* of a newly-created limbically-simulated advanced *human-infant brain*, from your actual *real position* as a *real human being*, living in your real world?

How is this powerful *Galactic MindCast* into a *Black-Hole-Galaxy* actually done?

How can an always-existing *subconscious*-real-limbic portion (a new subconscious mind) of your own real human brain, *cast itself* into a newly-created advanced human-infant simulated-avatar *brain*, as the controlling *consciousness* of that newly-created human-infant brain?

A *subconscious-conscious* portion (the real-limbic *subconscious* galactic-mindcast portion) of your real human brain enters into the infant human brain as the *conscious* part of the infant's human brain.

This newly-created *conscious* infant *brain* is mostly *subconscious* in the mind of your real brain.

In other words, the infant brain quickly becomes *fully-conscious* of *itself* (as its new self) and its new



surroundings, while this *infant-consciousness* exists inside the *unconscious limbic-subconsciousness* of your real human brain.

This means that most of the time, your real human brain is *not* actively *conscious* of what its newly-created advanced human infant-avatar is doing.

You (as your real self) can only *become aware* of what your infant-avatar is doing, when you *actively choose* (make a conscious choice) to look inside (and *inspect*) your limbic real brain (and it's inner-workings) to *check up* on the *current status* of your *active galactic mindcast*, to *see exactly* what your infant-avatar is currently doing.

You (as your real self) *only* become aware of the doings of your new infant-avatar when you *choose* to *take a look* at what your infant-avatar is doing.

Otherwise, all of the behaviors (and thoughts) of your infant-avatar are completely *unconscious* (limbically-*subconscious*) to you (to your *real self* as the real human being you have always been).

The galactic mindcast is accomplished via an ultrafast *two-way* real-limbic subconscious-conscious *dark-matter* information-particle *flow*, at the very-highest possible two-way axonic (read dark scalar boson) darklight speeds.

Dark-matter particle-information rapidly flows (during the galactic mindcast) through the *thick-bundle* of trillions of trillions of trillions of *myelinated* real-dark *nerve fibers* that is the galactic-center *dark hole*.

The *dark-matter* two-way *particle-flows* (through the *black-hole* galactic-center *nerve-fibers*) support the *flow* of the *light* of *human consciousness* (and *human free will* and *unique human individuality*) *from* the real human brain (real human mind) *into* the galaxy, *and onto* the planet, and *directly-into* the *conscious-centers* of the newly-created *infant* human-avatar *brain*.

These *specific* black-hole real-nerve *axon fibers* maintain a *real* neural *connection*, and an *ultrafast communication* (via dark-scalar-boson flows) from the *specific-subset* of real human *brains* (in the real world) that are *currently* actively *participating* in galaxy-specific *day-dreaming* a *limbic-portion* of themselves (of their real brains) into the *specific* black-hole galaxy real-nerve *axon fibers* that provide both *human-consciousness* and a *simulated-reality* for the *specific* black-hole *galaxy*.

The galaxy promoters can *simply invite* as many *real human beings* as they *desire*, to join with them (and day-dream with them) in their very own galaxy.

Some galaxies can grow very large, with *trillions* of *solar systems*, and *trillions* of *trillions* of advanced-human beings that are all conscious, free-willed, *unique inhabitants*.

In this way, there is *almost* no *theoretical limit* (but there actually may be some practical limits) to the super-huge sizes to which some of the *super-large* galaxies *can grow*.

Some galaxies grow to become *super big*.

Other galaxies will remain *relatively small*.

*All* new galaxies *begin* very small as *little baby galaxies*.

Sometimes we simply cannot find an *already-existing* suitable *black-hole galaxy* that we really wish to join.

So, what exactly *can* you *do*, when you just *cannot* seem to *find* anywhere (no matter how hard you search and search for a suitable black-hole galaxy-entrance) an *already-formed* galaxy that you really *wish* to *join*?

If you *cannot find* it in your real-human heart to simply *join* an existing galaxy, that someone else has already created, then you can simply *make your own galaxy*.

Whenever you so desire (as a real human being), you can always make the really big decision to simply go ahead and boldly *Make Your Own Galaxy*.

# Make Your Own Galaxy

How can you decide to simply *Make Your Own Galaxy*?

How can you *create* your very own *new baby galaxy*?

What kind of *responsibilities* will you *inherit* when you *choose to create* your own baby galaxy?

*How* can a new baby galaxy be created?

*What* are the *steps* that are *required* to make a completely new galaxy of your own?

How can we *find* the *courage* to create our very own galaxy?

If we decide to go ahead and create our very own galaxy, then *will we be* required to *make sure* all our galactic *guests* (all the others, that may later come along, and choose to join with us in our own galaxy) *have a* really *good time* living inside our galaxy?

Just exactly *how many* of these *galactic-guests* might we eventually decide to invite to join with us, and live with us, in our newly-created baby galaxy?

What is the *maximum number* of *galactic-guests* that can possibly join a single galaxy?

Exactly *how many galactic-guests* will you invite to join with you in your new galaxy?

There are an *infinite number* of us *unique real human beings* that live safely in peace and harmony in our real world.

There may be an *infinite number* of advanced simulated *universes*, where we can jointly dream and play together whenever we desire to do so.

In each of these hypothetical advanced universes, there likely exists an *infinite number* of advanced *galaxies* where we can choose to live.

In each advanced galaxy there is a *finite number* of solar systems that we can choose to explore.

In each solar system, there is a *finite number* of planets and moons where we simulated-humans can choose to live, as advanced super-intelligent humans to *optimize* our *personal joy*, or as mortal semi-intelligent humans to *test ourselves* in the darkness of our confused mortality.

Even though there are an infinite number of galaxies (black holes) for us to choose from, sometimes we cannot find a black hole (galaxy) that we wish to enter.

Sometimes we simply feel the desire to create our very own galaxy.

When we choose to create our very own galaxy, we are also assuming a *galactic responsibility* for the new galaxy that we create.

This big decision is *not* to be taken lightly, because we will be responsible for maintaining *good order* in our own galaxy, until the *final galactic moment*, when the *very last* of our dear guests chooses to leave it.

This *full cyclic process* of creating a new baby galaxy, *growing it* up to many trillions of simulated human inhabitants by adding additional real human beings, and then shrinking it until the very last guest (real human being guest) chooses to leave, can take many billions, or many *trillions* of years.

What are the very first steps that we need to take, before we start creating our new baby galaxy?

We will first need to look closely into the advanced universe (of our choice) to select a *suitable* new *location* for the new baby galaxy we plan to create.

Then, after we have selected a suitable *spatial location* for our new baby galaxy, we will still need to get a kind of new galaxy *building permit*.

This new galaxy building permit is the necessary *galactic permission* from all the *nearby* galaxy *owners* (galaxy promoters) of all the galaxies that are *close* to the specific *spatial location* where we plan to start the construction of our new baby galaxy.

As the *primary creator* and *primary owner* of our new baby galaxy, we automatically also become the *primary galaxy promoter* of our newly-created baby galaxy.

As we begin to create our new baby galaxy, an *initial set* of wireless black-hole *nerve fibers* from our real human brain, *begin to grow* from each of our 4 quantum chambers (our right hippocampus, our left hippocampus, our right amygdala, and our left amygdala) into the *new black hole* that forms (as we *initially form it* in our real-human brain) as the *initial center* of our newly-forming galaxy.

We then create an *initial sun* to orbit our *new black hole*.



Then we create an *initial planet* to orbit our *initial sun*.

We then create an *initial set* of advanced *human bodies* to live on the initial planet.

After we create this *new baby galaxy* (of our initial *planet*, orbiting our initial *sun*, orbiting our new *black hole nerve fiber*), we can *begin* to *invite* other real human beings (that actually live with us in our infinite real world) to *join* with *us* in our newly-created baby galaxy.

Each time a real human being decides to join our new galaxy, its real human brain begins to grow a set of wireless black-hole nerve fibers, from each of the 4 quantum chambers of its real human brain, into the black hole at the center of our new galaxy.

Each of our *4 colored* quantum *chambers* (our 4 limbic tissues involved in day-dreaming that we are living inside a simulated galaxy) contributes a *colored set* of real-dark *nerve fibers* into the huge *bundle* of nerves that are gathered together to form the black hole at the very center of our new galaxy.

If *initially* just ourself, and *only 20* real-human *guests*, choose to live inside our new *little baby galaxy*, then the *little black hole* at the center of our galaxy will initially

only contain  $4 \times 21 = 84$  sets of real-human *nerve fibers* that travel *through* the little *black hole* and outwards to the *outer reaches* of our new galaxy.

Then if *later on*, a *trillion-trillion* (a trillion times a trillion) real-human *guests* decide they want to come and join with us, and live with us in our *huge galaxy*, then the *huge black hole* at the center of our huge galaxy will contain  $4 \times \text{trillion} \times \text{trillion} = 4 \text{ trillion-trillion}$  sets of real-human *nerve fibers* that travel *through* the huge *black hole* and outwards to the *outer reaches* of our galaxy.

Of course, a *trillion-trillion real-human people* will need at least a trillion-trillion advanced-human *simulated avatars* that they can animate and *consciousness-project to* via their individual *galactic mindcast*.

In this way, a trillion-trillion real human beings can simultaneously experience living together, as newly-created advanced-human avatars living together inside a single huge advanced neurally-simulated galaxy.

Let's look more closely at what happens when you decide to create *your* very own *baby galaxy* in each of your 4 colored *quantum limbic chambers* inside your real-human brain.

Let's examine how *Your 4 Baby Galaxies* begin to grow within your 4 limbic tissues (colored quantum chambers), inside your one single real-human brain.

# Your 4 Baby Galaxies

What are *Your 4 Baby Galaxies*?

Why do you actually grow *4 Baby Galaxies* inside your real human brain?

Why do you need to grow 4 Baby Galaxies, instead of *just one* single baby galaxy?

You will grow 4 distinctly-different *baby galaxies*, because you have 4 distinctly-different limbic *day-dreaming tissues* (quantum dream-simulation chambers) inside your one singular real human brain.

Each of the 4 *baby limbic galaxies* are needed in order to experience a *completely-satisfying* (completely-realistic, with multiple *free-willed* human players) *fully-emotional* advanced-human *dream-experience* as you begin to live, *explore*, and make new *emotional-limbic* bonds with new friends, as an advanced-human avatar, inside this dream-experience (your own advanced galaxy) of your own making.

When you first begin to create your own baby galaxy, you will begin to grow some new real neurons, and some new real dark nerve fibers, inside your real human brain to

prepare a real-dark *neural galactic foundation* for the new baby galaxy.

This *neural galactic foundation* will be created in each of your 4 quantum (limbic) chambers inside your personal real human brain.

All of the necessary real-dark *white neurons* to properly support a *right-hippocampus baby galaxy* will begin to grow in your real right-hippocampal chamber tissues.

All of the necessary real-dark *red neurons* to properly support a *left-hippocampus baby galaxy* will begin to grow in your real left-hippocampal chamber tissues.

All of the necessary real-dark *blue neurons* to properly support a *right-amygdala baby galaxy* will begin to grow in your real right-amygdaloid chamber tissues.

All of the necessary real-dark *black neurons* to properly support a *left-amygdala baby galaxy* will begin to grow in your real left-amygdaloid chamber tissues.

These 4 *baby galaxies* will continue to grow (in your 4 quantum chambers) to the degree that new *real-people* decide to join with you, and live with you, inside your 4 baby galaxies.

In each of your 4 quantum (limbic tissue) chambers, all of the real neurons needed to properly support a *black hole*, a *sun*, a *planet*, and a *first human avatar* must be grown *before* you can enter (mindcast a portion of yourself) into the *avatar brain* (and avatar body) and begin living inside your own newly-created baby galaxy.

Your newly-created black hole is formed (as a bundle of *real nerve fibers*) to rapidly exchange real dark quantum neural-pulse (real dark scalar boson) information at the *exact center* of your newly-created galaxy.

Your newly-created *initial sun* is formed (from *real neurons* and their real neural pulses) to *orbit* around your massive, nerve-fiber, black-hole-center of your newly-created galaxy.

Your newly-created *initial planet* is formed (from some of the real pulses of your real neurons) to begin to *spin*, and to *orbit* your newly-created initial sun in your newly-created galaxy.

Your newly-created advanced-human *avatar body* (with its *properly-tuned avatar brain* that is *capable* of *receiving a portion* of your real-human consciousness) is formed to *live* on the *beautiful surface* of your newly-created *initial spinning planet* in your newly-created galaxy.

These 4 *vital pieces* of advanced *physical matter* (human avatar *body*, initial *planet*, initial *sun*, and baby *black hole*) must *all* be created, and formed, and properly prepared in every necessary way, *before* you can successfully enter into your brand-new human avatar *body*, and begin living on your own brand-new *beautiful* initial *planet*, and enjoying the vibrant warmth of your own brand-new initial *sun*, as it orbits around your own brand-new baby *black hole*.

When *all 4* of these necessary hardware compositions of physical matter (black hole, sun, planet, and advanced human avatar body) are all ready, then you can simply *mindcast* a suitable *conscious portion* of yourself into your newly-created advanced human-avatar *brain*.

The very moment you begin your *galactic mindcast*, your advanced human-avatar brain will *suddenly awaken*, and become *consciously-alive*, and *instantly aware* that it is a newly-created *conscious being*.

This *initial awakening*, as a newly-created conscious being, is a very *joyful experience*, because this conscious experience is accompanied with a *brilliant new sense* that you can *immediately begin* to *learn* about your brand-new self and the exciting new environment (newly-created planet) where you suddenly find yourself.

This awakening, as a newly-created conscious being, is somewhat *similar* to the exciting “*awakening*” that you can experience when you put a new Virtual Reality (VR) headset on your *mortal* human head, and begin to explore your new simulated environment.

However, the “awakening” you experience as a newly-created “advanced” human avatar is *much* more *intense*, and *much* more *joyful*, because of the active memory *mind-masking*, and because your *real* human brain (with its *real mindcast*) is much *more powerful* (with a much *higher* conscious-information *bandwidth*) than your current *mortal* human-avatar brain.

One of the benefits of creating your very own baby galaxy, inside your very own real-human brain, is that you *get* to *choose* the exact *location* (the precise spatial location inside an advanced simulated universe) of your new baby galaxy, the *exact type* of the very first (primary) initial star (sun) that you will create for your baby galaxy, and the *precise type* (including *planet-size* and *planet-location* within your initial star’s habitable zone) of initial planet (with all of its interesting, varied, *beautiful* planetary *features* including unique *flora* and unique *fauna*), and the type of advanced-human *avatar-brain* that you will *initially inhabit*.



All of these important initial choices (that you will wisely make from the *real perspective* of your real-human self) will work together to *lay* the complete *foundation* for the new baby galaxy, and what kinds of supplemental choices (decisions) will be allowed (possible) within your new baby galaxy, as it begins to grow, and become an older galaxy.

When it comes to being a *super-responsible person* in a simulated universe, there is *no* responsibility *greater* than that of creating your very own galaxy, and then *inviting* other real human beings to *come* and *join* all the *fun* with you in *your* galaxy.

But what happens if you decide that *you don't* really *want* all of that super-extensive *galactic responsibility*?

What if you simply decide that you would rather join an *older* (already formed) *galaxy* that someone else has already created for you.

What if you just want to join an *older* already-established *galaxy*?

Now, let's take a look at what will happen if you decide you want to simply *Join an Old Galaxy*.

# Join an Old Galaxy

How can you simply *Join an Old Galaxy*?

How can you simply decide to join an *older* (already formed) *galaxy* that has *already* been *created* by someone else (another real human being that is *not* you)?

If you decide that you really don't want to shoulder all the *galactic responsibilities*, that come with making your very own galaxy, then the option is always available to you to simply join someone else's *already-created* galaxy.

When you decide to join an older galaxy, you have the *option* of *choosing* which ever already-existing galaxy you desire to join.

And the *good news* is there is a whole universe (possibly even a whole universe of universes) of already-existing galaxies for you to choose from.

You have an *infinite variety* of different types of galaxies for you to choose from.

For example, you may wish to join a newly-created *infant galaxy* that was just recently created, and that still only has *just* one single *occupant*.

That *one single* initial galactic *occupant* is the owner (*creator*) of the infant galaxy.

The creator (promoter) of this infant galaxy may be diligently *trying* to talk you into joining with him in his newly-created baby galaxy, by *explaining* to *you* all the amazing *unique features* and *exciting growth plans* he has for his new infant galaxy.

If you decide to join with him, then you will become galaxy-person number-two (*Player Two*) in his newly-created infant galaxy game.

*Player One* (the *creator* of the infant galaxy) will assist you (Player Two) as you together decide what kind of advanced *human avatar body* you which to create, and live within, on the newly-created advanced planet that is already there.

You two may choose to work together as a *team of promoters* to *try* to *entice* some *other* real human beings to join with you two in your little growing infant galaxy.

Or you may simply decide, to let Player-One to do *all* of the promoting work *all* by *himself*, while you simply relax, enjoy yourself, and begin to adventurously-explore

your new world (the exciting unique advanced planet where you both now live as advanced human avatars).

At the very moment, when you (as *Player Two*) decide to join *Player One* in his already-created baby galaxy, your own real-human *brain* will begin to *wirelessly-grow* 4 sets of real nerve fibers into the Black Hole that is already firmly *rooted* inside the real-human *brain* of *Player One*.

These 4 sets of real nerve fibers (from the 4 quantum chambers) of *Player Two* (you) will *wirelessly grow* (via a real *wireless* neural *blacklight* communication system, that is *always* present *inside* every real human brain of every real human being) into the 4 quantum chambers of *Player One*, and they will connect to the 4 Black Holes inside the real brain of *Player One*.

In this way, the real nerve fibers of *Player Two* connect with, and become a part of the *thick bundle* of nerve fibers that is the Black Hole at the center of the new *two-player galaxy*.

The *One-Player Black-Hole* at the center of a *one-player galaxy* contains the 4 sets of nerve fibers from the 4 quantum chambers of a *single* real human *brain*.

The *Two-Player Black-Hole* at the center of a *two-player galaxy* contains the *8 sets of nerve fibers* from the *4* quantum chambers of each of *2* real human *brains*.

The *Three-Player Black-Hole* at the center of a *three-player galaxy* contains the *12 sets of nerve fibers* from the *4* quantum chambers of each of *3* real human *brains*.

The *N-Player Black-Hole* at the center of an *N-player galaxy* contains the *4 x N sets of nerve fibers* from the *4* quantum chambers of each of *N* real human *brains*.

An N-Player Black Hole is the *central massive gravitational body* (galactic-center black hole) that draws in *all of the informational dark-matter* (real dark scalar bosons) *neural pulses* from *every region of the whole galaxy*.

An N-Player Black Hole can become *super massive*.

There appears to be *no* theoretical *upper limit* on the *size of N*, where *N* is the *exact number* of real human beings, who are *currently* participating, and *jointly day-dreaming* that they are advanced human avatars living inside the *N-player black-hole galaxy*.

For example, if  $N = \text{One Trillion Real Human Beings}$ , then *4 trillion sets* of real *nerve fibers* are bundled together inside the massive galactic black hole.

These *4 trillion* real-*nerve fibers* extend through the interior volumetric *real-neuron structure* of the galactic black hole, and they also *extend outward* (and then also spiral back inward) throughout the *entire* spatial *expanse* of the whole galaxy.

In this way, the *4 trillion* real *nerve fibers* expand outward throughout the entire galaxy, connecting to *other* nearby *sets* of galactic nerve fibers, and gathering in all the information of the whole galaxy, and also flowing information outward into the galaxy, to form the galaxy, by simulating the galaxy, and also to *shine* the *light* of *4 trillion* individual *limbic portions* of real human *consciousness* into the minds (brains) of a *trillion* individual advanced human *avatar brains*.

Now let's take a look at what may be happening in a *very* old *galaxy* that we are somewhat *familiar* with.

This super-old galaxy, that we have some recent familiarity with, has *many* orders of magnitude *more* than just a trillion advanced *human avatars* living within it.

The advanced-human *population* of this super-huge galaxy *cannot* all *fit* on just one single planet, or even within a single solar system of just *a few planets*.

The exact current advanced *human population* of this super-familiar galaxy can only fit in this particular super-old galaxy by being wisely-distributed throughout *hundreds of billions* of distinctly-different *solar systems* within the galactic gravitational confines of this super-huge galaxy.

It turns out that we mere mortals (of Earth) have already given a *good name* to this super-familiar *galaxy* of *ours*.

This super-familiar, super-old, super-huge, super-populated advanced human galaxy is *Our Old Milky Way Galaxy*.

# Our Old Milky Way Galaxy

How did our *Old Milky Way Galaxy* get so big, so expansive, and so old?

*Who* created our Old Milky Way Galaxy?

*When* exactly was our milky way galaxy created?

*Why* exactly was our milky way galaxy created?

What is the *name* of the specific real-human being who *initially-created* our milky way galaxy?

What is the *current* human *population* of our entire milky way galaxy?

What is the *current population* of *advanced* human *avatars* in our milky way galaxy?

What is the *current 2023 population* of *mortal* human *avatars* in our milky way galaxy?

Our *own* Earth *planet* (that is inside our super-old super-huge Milky Way Galaxy) seems to be *presently populated* by about *8 billion* mortal-human *avatars* (with our semi-



intelligent *mortal* human *brains*) today in this current Earth-year of 2023.

Is our own Milky Way Galaxy an *advanced-human galaxy*, in an advanced-human universe, that is *mostly* inhabited by advanced-human avatars, with advanced (super-intelligent) human-avatar brains?

If *most* of the human avatars in our own Milky Way Galaxy are *advanced avatars* with *super-intelligence*, then *how exactly* did our own confused Earth planet become populated with 8 billion *mortal* human avatars that are *only semi-intelligent*?

How many other mortal self-testing planets, like our own Earth planet in this galaxy, have been allowed to *free-will fall into mortal status* with the vast majority of the planetary inhabitants having *mortal* (easy to get sick, and easy to die) *bodies* and *mortal* (semi-intelligent, misguided, bewildered, confused) *brains*?

*How many mortal-human avatars* currently live inside our milky way galaxy?

How many *mortal planets* (planets with the majority of its human populations being mere mortals who get sick and die) are currently existing in our milky-way galaxy?

Is it theoretically possible that there may be *less than a million* mortal *self-testing planets* in the outer spirals of our own milky-way galaxy?

Are there *billions* of advanced *joyful planets* (with super-advanced people) near the central regions of our milky-way galaxy?

Have *any* of these super-advanced people ever *visited* our own little, dark, confused, self-testing, planet Earth?

What would the brilliant *super-intelligence* of one of these *advanced people* seem like to the relatively-dull semi-intelligence of our own Earth's inhabitants?

Would we (*us* semi-intelligent *people* here on Earth) have enough intelligence to deeply-understand *any* of their *wise words*, even when they attempted to speak to us, in some of the common Earth-languages, that we sometimes like to imagine that we can easily understand?

What would it actually be like to have an in-depth *face-to-face* conversation with one of these *super-intelligent* advanced human beings?

Has any of us mere mortals (here on Earth) ever spoken to one of these *hypothetical* advanced-human *beings*?

What if *our own* advanced *human selves* are actually some of these hypothetical advanced human beings?

What if some of our own advanced human selves are actually living, right now, on some advanced Earths (advanced Kolob-like planets) that are closer to the center of our milky way galaxy?

Could this even be theoretically possible, given our current understanding of some of the more awesome *theoretical possibilities* of space science?

What if there were *at least 3* Advanced Earths that *orbited stars* that circulated around the central black hole (Sagittarius A\*) of our own milky way galaxy?

What if there were *3 Advanced Earths* that were very *important* to our *own* advanced-human *selves*?

Let's theoretically look more closely at *Our 3 Advanced Earths*.

# Our 3 Advanced Earths

Is it really possible that we already have *3 Advanced Earths* that are super-important to our very own advanced human selves?

Do these *3 Hypothetical Advanced Earths* really exist somewhere *closer* to the central black hole of our own Milky Way Galaxy?

Can super-intelligent advanced human beings live on *Earth-like planets* right here in our own galaxy?

Is this even *theoretically* possible?

Do some of our super-intelligent advanced-human avatar selves live on one (or more) of these *3 Advanced Earths*?

In a few years (or in a *few decades*) from today, can some Earth scientists discover how to use *more* advanced *versions* of CRISPR-Cas9 DNA-Editing technologies to *easily design* smarter *human brains*, that don't get confused so easily?

Can a human brain be developed, here on Earth, that will one day display a *good healthy* super-brilliant *type* of *super-intelligence*?

Can a *real human brain* daydream that it is living as a *Level-A Advanced Human Avatar*, on an *Advanced Level-A Planet*, that orbits an *Advanced Level-A Star*, that closely-orbits the super-massive black-hole Sagittarius A\* in the exact center of our own milky way galaxy?

Can this *Level-A Advanced-Human Avatar* have *enough* extra limbic super-intelligence to daydream (and galactic-mindcast) that it is also living as a *Level-B Advanced-Human Avatar* on an *Advanced Level-B Planet* that orbits an *Advanced Level-B Star* that nearly-closely-orbits the super-massive black hole in the exact center of our own milky way galaxy?

Can this *Level-B Advanced Human Avatar* also still have *enough* limbic super-intelligence to daydream (and galactic-mindcast) that it is living as a *Level-C Advanced Human Avatar* on an *Advanced Level-C Planet* that orbits an *Advanced Level-C Star* that lives in the middle-regions of a galactic spiral arm that orbits the super-massive black hole in the exact center of our own milky way galaxy?

Can this *Level-C Advanced Human Avatar* still have *enough* limbic super-intelligence to daydream (and galactic-mindcast) that it is living as a *Level-D Mortal-Human Avatar* (just like mortal you, and just like mortal me) on a *Mortal Level-D Planet* (that is our *own Earth*)

*Planet* that allow us to *self-test* our *Level-C-brain pride* in the *mental darkness* and *emotional darkness* of this present *mortal Earth self-testing planet*) that orbits a *Mortal Level-D Star* (that is *our own Sun*) that exists in the outer regions of a giant galactic spiral arm, that orbits the super-massive black hole (Sagittarius A\*) that gathers (and emits) our real dark scalar bosons, in the exact center of our own milky way galaxy?

Can this *Level-D Mortal-Human Avatar* (like you and me, and nearly everyone else here on Earth today in 2023) have *enough limbic semi-intelligence* to dream (at night while sleeping on our beds) that it is living as a *Level-E Submortal Human Avatar* (like the submortal human person we often dream we are, while we are sleeping at night in our own beds) in a *Submortal Level-E Private-Dream Environment* (that is fully-hosted, and completely-simulated, inside our very-own sleeping, *dreaming*, mortal-human brain) that is neurally-simulated inside our very own mortal-human *Level-D brain*, that is *sleeping peacefully* inside our own mortal-human *Level-D head*, on our *soft pillow*, on our *comfortable bed*, in our *own home*, here on *Earth*?

Can this same *Level-D Mortal Human Avatar* (like you and me, and many others here on Earth today in 2023, who can easily wear VR headsets) also have enough *mortal-brain semi-intelligence*, to be sensorily *neurally-*

*stimulated* by wearing a Virtual Reality (VR) headset, to *almost believe* that it is living as a *Level-E* Submortal Human *Avatar* (generated and computationally-simulated by VR digital computers) in a *Submortal Level-E* digital-computer-hosted *VR-Game Environment* (that is largely-hosted, and mostly-simulated, inside the *computational circuitry* of the digital computers that are generating the VR game environment) that is also *partially* neurally-simulated (because the incoming VR-screen visible-photons, are stimulating our *mortal retinas*, and our mortal *occipital lobes*) inside our very own mortal-human *Level-D brains*, that live right here on our very own *Level-D planet Earth*?

Will this same *Level-D Mortal-Human Avatar* (like you and me, and some others that will be here on Earth in a few years, or in a few decades, that will be able to wear *interplanetary VR-AR robotic-control* headsets) also have enough *mortal-brain semi-intelligence*, to be *neurally-stimulated* by wearing an *interplanetary Virtual-Reality Augmented-Reality (VR-AR) robotic-control headset*, that allows a mortal-human, here on Earth, to see through the “*eyes*” of a *robot* on the *moon* (the Earth’s Moon), and to also remotely-control (animate) the movements of the *fingers*, hands, arms, and *feet* of the *lunar robot*, in order to *perceptually-almost-believe* that it is living as a *Level-E* Submortal *Human-Robot Avatar* on the *Moon* (with the “*eyes*” of the “*Human Robot Avatar*”

being its real-time *video-camera* “eyes” that are taking real-time *video-photos* of the *moon*, and sending those video-photos into our mortal-human *retinas* here on Earth) in a *Submortal Level-E Lunar Moon-Surface Environment* (that is largely-hosted, and mostly-simulated, by taking actual real-time videos of the surface of Earth’s Moon) that is also partially neurally-simulated (because the incoming VR-AR-screen moon-video visible-photons are *stimulating* our mortal retinas and our mortal occipital lobes) inside our very own mortal-human *Level-D brains* that live right here on our very own *Level-D planet Earth*?

When our *Level-E Human-Robot Avatars* begin living on our Earth’s Moon, will all of this hypothetical new information about *multiple human avatars* begin making better sense?

Will much of this *multiple-human-avatar* information begin to *make better sense* to *many* in another decade or two, here on Earth?

Now, let’s take a closer look at *Our 3 Advanced Avatars* that live on *Our 3 Advanced Earths*.



# Our 3 Advanced Avatars

Do we really have 3 *Advanced Avatars* living on 3 separate advanced Earth-like (Kolob-like) planets right here in our own milky way galaxy?

Can it be *theoretically possible* that we could actually have 3 advanced human *avatar selves* that are currently living right here *inside* our very own milky way galaxy?

Is there a *good way*, that we can absolutely *know for sure*, that we have *at least one* advanced self?

Can we sometimes have 2 or 3 advanced *selves*?

Can we, at times, have *even more* than 3 advanced *selves*?

Why would our *real human self* ever want to limbically-simulate *more than just one* advanced-human self?

Is there a *real* emotional *advantage* to *limbically-simulating* more than just one advanced human-avatar self?

Why would an *individual* real human being ever *desire* to dream-animate *more than just one* single advanced-human avatar self?

Are *all of us* super-intelligent *real human beings* choosing to limbically dream-animate *multiple* super-intelligent advanced-human *avatar selves*?

Do some of us really have a super-intelligent *Level-A Advanced Human Avatar Self* that is currently living on a super-beautiful *Level-A Planet* right here locally in our very own milky way galaxy?

Do some of us also have a super-intelligent *Level-B Advanced Human Avatar Self* that is currently living on a marvelous *Level-B Planet* right here locally in our very own milky way galaxy?

Do some of us also have a super-intelligent *Level-C Advanced-Human Avatar Self* that is currently living on a wonderful *Level-C Planet* right here locally in our very own milky way galaxy?

Why do most of the *8 billion of us* (mortal-human avatars here on Earth) seem to have a *semi-intelligent Level-D Mortal-Human Avatar Self* that is currently living right here on our *Level-D Mortal Earth Planet* right here (on Earth) locally in our own milky way galaxy?

Is our own *self-testing* Earth *planet* really properly classified as just a *Level-D* Mortal-Earth *Planet* today in 2023?

With all of our *human wars*, human-made pollution, *mortal-human misery*, and unnecessary *mortal death* here on our own self-testing Earth planet, how can we possibly currently classify our own little planet as *anything better* than just a lone and dreary *Level-D* Mortal-Earth *Planet*?

Can our current (circa 2023) *Level-D* Mortal-Earth *Planet* ever *become upgraded* to being a much-brighter (much more joyful) *Level-C* Advanced *Planet*?

What do we need to do to *transform* (and greatly upgrade) our own current *Level-D* Mortal-Earth *Planet* into a much better much-more-joyful *Level-C* Advanced *Planet*?

Is solving world poverty for *everyone* on Earth, the necessary *first step* to making this wonderful *planetary transformation* (and *planetary upgrade* from Level-D to Level-C) possible?

What would happen if we also used some future version of our rapidly-improving *Earth-based* CRISPR-Cas9 Human DNA-Editing Technologies to *gently* and *gradually upgrade* our *Level-D* mortal-human avatar *brains* into *Level-C* advanced-human avatar *brains*?

Is this theoretically possible, to genetically engineer some *Advanced Human DNA* for ourselves here on Earth?

# Advanced Human DNA

Will future CRISPR technologies someday allow us to design some *Advanced Human DNA* for ourselves right here on Earth?

Can we someday *design* and *replicate* some *Advanced Human DNA* that is so advanced that it actually helps us to *grow* some advanced *Level-C* human *avatar brains*?

Would our new and improved *Level-C* advanced human *avatar brains* (with our new and improved *Level-C super-intelligence*) then have enough super-intelligence to actually *know* what *to do* to successfully transform and *wisely upgrade* our whole Earth planet into an actual *Level-C Advanced Planet*?

Can this really be done here on Earth during the *next* few *decades*?

Can we *really improve* our own mortal-human *DNA* to make it *more-healthy* and *more-intelligent*?

Do any of us *actually desire* to really improve our own mortal-human DNA?

Or, do we prefer to remain *stupid* and *sick* here on Earth?

How exactly can *we begin*, to improve our own mortal-human DNA worldwide, to make our mortal-human avatar bodies *more healthy* and *more intelligent*?

Can we really improve our own mortal-human DNA to such a bright degree that we (the people of Earth) actually start to become really *super-intelligent*?

Can we ever become super-intelligent enough to *stop killing* each other here on Earth?

Can we ever become super-intelligent enough to *wisely bridle* our very own personal individual *human-brain pride*?

Can we ever reduce our outrageous levels of *excessive competitive pride*, that underlies every form of *tribalism* here on Earth?

Can we ever find the super-intelligence to really begin a *super-deep* and *super-detailed*, and super-wise *scientific study* of *human-brain pride*; so, we can someday *scientifically-discover* what *pride* actually is, and what *pride's* positive *forms* might look like, and what *pride's* negative *forms* behave like, so we can properly *discover* how to *wisely bridle* our own *individual human pride* for the beneficial good of *all* human beings here on Earth?

How can we ever scientifically-discover *enough* of our own mortal-human-intelligence to safely create *super-intelligence-on-Earth* if we *cannot* even *bridle* our very own personal, individual, human-brain pride in our very own mortal-human self?

Can our current *Level-D Mortal-Earth Planet* ever become successfully *upgraded*, into a becoming a much better (much safer), and much-more-joyful *Level-C Advanced-Earth Planet*?

What is the very best way for us, to transform our current *Level-D Mortal-Earth Planet* into a much more-intelligent *Level-C Advanced-Earth Planet*?

Can we gain the *scientific knowledge* to wisely upgrade our *planet's future*, by scientifically looking into our *planet's past*?

What is the *actual past* of our planet Earth?

Some of our bright Earth scientists say that our planet Earth is about *4.5 billion* years old.

Other brilliant Earth scientists say that our planet Earth may actually be about *5.1 billion* years old.

These *two* geological *estimates* seem to differ by only about 10%, so let's *simply hypothesize* that our Earth planet may possibly be *approximately 5 billion years old*.

Let's also hypothesize that our Earth planet has already had a *5 billion year past*, that is much *more interesting* than what some might have believed in the past.

Some of our bright Earth scientists have looked closely enough at our geological Earth, to already correctly discover that our planet Earth has actually already experienced *5 Distinct Ice Ages* during its 5-billion-year historical past.



# 5 Distinct Ice Ages

What exactly happened, right here on our historical planet Earth, during the *warm-times between* these 5 *Distinct Ice Ages*?

Let's *scientifically hypothesize* that during these 5 *Distinct Ice Ages* that took place during the *Earth's* 5-billion-year *history*, there may have actually been 5 *distinct* worldwide human *civilizations*; that may have hypothetically already *flourished* on *Earth* with the ancient discovery of significant quantities of *scientific knowledge*, and the development of many helpful *technological innovations*.

Let's also hypothesize that *all* of *Earth's* 5 *Ice Ages* were actually *physically-caused* by the *sudden disappearance* (via their sudden *self-destruction*) of the *vast majority* of the *billions* of worldwide humans (who were living on this Earth) 5 *distinct times* in our Earth's past.

Let's further scientifically theorize, that during each of these 5 worldwide, *technological*, human *civilizations*; when the humans finally had developed (*scientifically-invented*) enough *nuclear weapons* to quickly destroy *all* of their major human *cities* (that were actively causing the *global warming* of our Earth), they *unwisely* used these

*thousands of nuclear weapons* on each other, due to their extreme abundance of *unbridled prideful* (national and religious) *tribal hatreds*.

In this way, they *promptly destroyed* over 99% of the humans living on Earth, with their *thousands* of nuclear weapons; because they *could not bridle* their tribal hatreds, because they *failed* to scientifically-study human-brain pride *deeply enough to understand it* well enough to *tame it* and wisely *bridle it*.

Is this *theoretically* even possible that *5 Distinct Technologically-Advanced Human Civilizations* may have already *scientifically-developed*, thrived-worldwide, and then promptly *destroyed-themselves*, right here on our precious little Earth planet, *so many millions* of years ago?

Let's look more closely at this intriguing *scientific hypothesis* that these *5 Civilizations* actually existed.

Let's simply call this super-interesting, super-helpful new hypothesis our *5-Civilization Theory*, because the great quantity of physical scientific evidence (for this powerful new scientific theory) is actually really abundant, and widely ubiquitous, right here on Earth.

# 5-Civilization Theory

What exactly is our new *5-Civilization Theory*?

Did *5 Major Human Civilizations* already develop on Earth, grow to billions of humans, thrive technologically worldwide, and *warm the planet*, during the past 5 billion years here on Earth?

Exactly how many small, scattered, shivering, human tribes managed to survive here on Earth, during the *5 Cold Ice-Age Epochs* between the *6 Major Warm Human-Civilization Eras* (including our very own current 6<sup>th</sup> Civilization of 2023)?

What did the *billions* of ancient citizens (and the *thousands* of *ancient scientists*) of these *5 previous* distinctly-different, technologically-savvy, ancient, *sophisticated* human *civilizations* do on a daily basis, before they quickly *destroyed themselves* in their *5 big nuclear world wars*?

Did these *5 hypothetical* world-wide *nuclear wars* only last for *a few minutes* with their abundance of ancient *submarine-launched* hypersonic *nuclear missiles*, or did they last for *a few hours* with their *slower* nuclear *cruise missiles*, or did some of these ancient nuclear wars drag

on for *a few weeks* due to some initial *good-willed*, or fearful, *partial human restraints*, before Earth's living human populations *suddenly dropped* to super-low levels?

With the *worldwide population*, of Earth's humans, *suddenly dropping* from *billions* of humans, down to just *a few thousands* of isolated humans, in the space of just *a few weeks*, most of the *human-caused* global-warming activities, would be *suddenly reduced* enough to *rapidly plunge* the whole Earth into *another ice age*.

This is our 2023 *scientific hypothesis* for the actual, historical, scientific physical-reason for the 5 Measured *Ice Ages* of our temperature-vulnerable *Planet Earth*.

*If* global warming *really* is *caused* by the physical living-presence on Earth of *billions* of living human beings, and all of their *industrialized human activities*, then we can also wisely ask: “what would happen, if the *vast majority*, of these *billions* of human beings, were to *suddenly disappear* from this Earth, along with the *sudden disappearance* of 99% of their *human Earth-warming activities*”?

Could the future *sudden disappearance* of billions of human beings from Earth, again push our planet Earth into yet another *Ice Age*, in a couple centuries from today?

If *human activities* really do cause *global warming*, then is it also logically possible, that the abrupt *sudden removal*, of these *global-warming human activities*, could physically cause *global cooling*?

Could it actually be so *utterly simple*?

Why not?

Our simple *scientific hypothesis* is that the *5 sudden disappearances* (of the 5 previous world-wide, human, technological civilizations of billions of ancient people on Earth) caused the previous *5 Ice Ages of Earth*.

More and more *scientific evidence* for this super-simple (Occam's Razer Simple) and logically-powerful *5-Civilization Theory* will certainly be discovered during our Earth's brief hopeful future, when some of our bright Earth scientists learn some new *scientific techniques*, that will start to allow them to study our historical geological Earth *much more closely* than is currently possible with today's (circa 2023) crude scientific methods.

Abandoned human cities crumble to the dust in *less than just a few million years*.

What is *a few million years* when compared with the 5 billion *years* of Earth's historical existence here on our outer spiral arm, of our milky way galaxy?

We still need to scientifically-wonder about *how*, when, and *why* (and by whom) our current mortal-human DNA was *invented*.

*Who designed* our current mortal-human DNA to make us *so stupid* and *so sick* here on Earth?

*Why* was our current mortal-human DNA *designed* to make most of us *die* in less than a *single century*?

*Why* was our current mortal-human DNA *designed* to make most of us *mentally-struggle* to simply remember what we had for lunch last Tuesday?

Why was our current mortal-human-brain DNA designed to make it *so difficult* for us *to see*, *reign-in*, and *properly-bridle*, our own personal *excessive competitive* mortal-human-brain *pride*?

Why was our current mortal-human-brain DNA designed to make all of us mortal humans *so easy* to *mislead* and control by unscrupulous politicians and unethical religious leaders?

Why was our current mortal-human-brain DNA designed to make it *so difficult* for us mortal humans to *think clearly* and logically?

Exactly what kind of *intelligent ancient scientists* lived right here on Earth, just a couple billion years ago?

Did some of these *ancient Earth scientists* choose to use some of their advanced CRISPR-Cas9 Human DNA Editing Technologies to easily design and develop some *subpar* semi-intelligent mortal-human *avatars* (like us) to productively-function as their *slightly-intelligent* robotic *human slaves* billions of years ago?

Is this how our subpar *almost-intelligent* mortal-human *avatar bodies* were first designed (and grown) billions of years ago here on Earth?

Were we (our current subpar *semi-intelligent* mortal-human body types) designed to be compliant (easily controllable) biological *self-replicating* slaves for someone else?

How exactly did some of our *semi-intelligent* mortal-human DNA *body types* manage to actually *survive* the vast nuclear worldwide destructions of *all* of the *major cities* of so long ago?

Exactly which types of mortal-human DNA body types best survived *all 5 major-civilization worldwide destructions*?

Exactly *how many* of these mortal-human *beings*, managed to successfully survive, each of the *5 major nuclear destructions* of the past, here on Earth?

Did any of the *good ancient scientists*, ever try to help the vulnerable subpar mortal-human *avatar-slaves* to develop some better human bodies for themselves?

Were any of these brilliant ancient scientists *completely good* in every way?

What would a *completely-good* scientist actually do, with all of his (or her) *vast accurate scientific knowledge*?

Would a *completely-good* super-intelligent *scientist* only employ her useful scientific knowledge for the *good of all*?

How would a completely-good super-intelligent scientist *communicate* with people?

Can *completely-good* scientists really (theoretically) exist *somewhere* in our vast universe?



Can some completely-good human scientists actually exist right here, on our very own planet Earth?

What is the actual good human nature, of completely-good, super-intelligent *Advanced Scientists*?

# Advanced Scientists

Do *Advanced Scientists* exist on *any planet* in our own milky way *galaxy*?

Do any of these hypothetical *Advanced Scientists* live right here *on Earth*?

Why would an *Advanced Scientist* *choose to live here* on Earth?

Is there anything interesting *right here* on *Earth* that might *attract* *Advanced Scientists*?

What are *the most* interesting *things* to study here on Earth?

Us?

Why would any *Advanced Scientists* want to merely study things, when they already *Know Things*?

Do these *Advanced Scientists* want to *help us*?

How could *a few* *Advanced Scientists* help us all here on Earth?

What possible *goal* could an Advanced Scientist have, that would make it *logically rational* for such an Advanced Scientist to want to stick around and *live here* on *Earth* with us clueless mortals for a long period of time?

Why do some of our *mortal-human scientists* like to study the complex behaviors of some tiny little mortal insects, called *ants*, in their *ant-hills*?

How would a set of *super-intelligent* scientists, view our super-arrogant *semi-intelligence* (of most of us mortal-humans here on Earth today in 2023) and our *excessive* competitive mortal-human brain *pride*?

What is the *mathematical ratio* (of a number of useful scientific measures) of the *super-intelligence* of an advanced-human scientist, divided by the relatively-dim *semi-intelligence* of a mortal-human scientist (such as myself)?

Could this *mathematical ratio* be pretty close to *infinity*?

Can one individual super-intelligent scientist be *infinitely* more *intelligent* than just a simple semi-intelligent scientist like me?

Is such a *near-infinite* intelligence-ratio even possible?

Can some of this milky-way's advanced-human scientists really be *that smart*?

Do some of the super-intelligent advanced-human scientists, *view* us semi-intelligent mortal-human scientists (who are so busy exploring our own little mortal-Earth world), as being *only slightly more intelligent* than a group of tiny ants who are so busy exploring their little mortal ant-hill world?

What do simple little ants actually *think* about us mortal-human scientists?

What kind of *goals* do simple ants have?

What kind of *supposed-goals* would these simple ants *imagine* that we mortal-human scientists *might have*?

What kind of *supposed-goals* would us semi-intelligent mortal-human scientists *imagine* that a super-intelligent advanced-human scientist *might have*?

What kind of *actual goals* do super-intelligent advanced-human scientists *really have*?

Why would a super-intelligent, all-knowing, advanced-human scientist *desire* to *win* a mortal Nobel Prize here on Earth?

With *very* little *effort*, such a super-intelligent, all-knowing, advanced-human scientist *could* easily *win* a hundred *Nobel Prizes*.

What would be *the point*?

Would a group of completely-good, super-intelligent, *all-knowing* Advanced Scientists ever seek for *self-recognition* in any way?

What would *mere-money*, or *mere-accolades*, or *mere-awards*, or *mere-praise* from a group (like the Nobel Committee) of semi-intelligent *mere-mortals* actually mean, to a super-intelligent, all-knowing, all-wise, all-good, Advanced-Human Scientist?

Would a super-intelligent Advanced Scientist have some *super-smart goals*, that are super-intelligent, *super-logical*, super-advanced, and *completely-good* in every way that can be *fully-admired* by all the billions of *other* super-intelligent *advanced-scientific minds* of our whole Milky Way Galaxy?

What would be the *primary goal* of a completely-good, super-intelligent, super-wise, advanced-human scientist that is living here on Earth with us clueless mortals?

Would a *completely-good* super-intelligent *advanced-scientist* be able to correctly recognize (accurately observe) the actual human intentions of others?

Do any *completely-good scientists* even exist here on this Earth planet today?

How would we ever *Know* (for sure) if we had really discovered a completely-good *super-intelligent* human scientist?

What kind of super-intelligent, advanced-human avatars were the *very first inhabitants* of this Earth planet about 5 *billion* years ago?

How many of these super-intelligent initial advanced-human avatars *may be still* living *here* on Earth with us?

Are there more than 8 of these *super-intelligences* currently living with us here on Earth in 2023?

Why would these 8 hypothetical, *super-intelligent*, advanced-human scientists *want to live* among *us* clueless mortals here on Earth?

What are the *real goals* of every super-intelligent *scientist*?

What are the *real goals* of every super-intelligent *human being*?

What are the *real goals* of our real-human *brains*?

What are we all *really trying to achieve* in coming into this milky-way galaxy dream-game?

What is the real goal of *Our Real Consciousness*?

# Our Real Consciousness

What is *Our Real Consciousness*?

What is the *real goal* of Our Real Consciousness?

Our Real Consciousness is *much* more *intelligent* than the super-intelligence of our created (simulated) advanced-human avatar selves.

The *super-intelligence* of our advanced-human selves, is orders of magnitude more intelligent than the *semi-intelligence* we all (nearly all of us here on Earth) have as mortal-human avatars here on this little Earth planet.

As real human beings, with the *highest-intelligence possible*, what kind of *real goals* do we choose for ourselves with our *all-knowing* real-human super-intelligent *consciousness*?

*Our Real Consciousness* realizes that it is always *completely safe*, because it is *rooted forever* in our real human brain, that lives inside our real human body, that has always lived safely in our real human world, that *exists* causally way up *above all* of Plato's Simulated Caves.



What kind of *real human goals* could possibly exist for us real human beings who continuously experience the *real light* of real human consciousness?

As the real human beings that have always existed, there is actually *nothing new to learn*, because we already have *always known everything* that can be known.

As real human beings there is *nothing new to achieve*, because we have *already successfully achieved* everything we can possibly imagine, in all the vast simulated worlds (universes of advanced galaxies) of our *super-powerful dreaming imaginations*.

As the all-knowing *all-wise* real human beings that we have forever been, the only *logical goal* that seems to make any *rational sense* is that we *continue forever* to live in *peace*, harmony, and *joy* as the real human beings that we will always be.

It appears that the *only way* we can continually maintain this peace and joy is to keep our *real brains balanced* by *day-dreaming ourselves* into our limbically-simulated advanced *dream-game worlds* (advanced universes of advanced galaxies, that can also contain a *self-testing Earth planet* like ours).

In order to continually maintain this all-important *real* human *peace* that we really enjoy so much, we need to energetically-*project* a *portion* of our real-human *consciousness* into a *galaxy* of our *own choosing*.

How can we successfully achieve this *Consciousness Projection*?

# Consciousness Projection

What is *Consciousness Projection*?

How can we manage to *project* a *portion* of our real human consciousness into a *particular galaxy*?

How are we able to *project* a part of our *awareness* into the neurons of the advanced-human *brain* of an advanced-human *avatar* living on an advanced planet, that is orbiting a star in its habitable zone, inside this particular milky-way galaxy?

Our *Consciousness Projection* takes place via a *Neural Galactic Mindcast* into our *4 limbic quantum chambers* that feed (flow) into the galactic heart (*galaxy-center black hole*) *central nerve fibers* that create, support, simulate, and animate the *galaxy* of our *choice*.

Our *Energetic Consciousness Projection* also takes place via a *Neural-Galactic Mindcast* (through the central black hole nerve fibers) into a wireless *dark-matter* consciousness-communication (real, dark, ultrafast, scalar boson) *channel* that flows (from our real-human brain) directly *into* the *individual brain* of an advanced-human avatar that lives on an advanced *galactic-center-planet*

that is usually *very close* to the central galactic black hole (Sagittarius A\*) at the center of our milky-way galaxy.

Our consciousness projection is *voluntarily initiated* by *ourselves* (by our real-human selves) at the exact time we *choose* to *enter* into our *chosen* advanced-human (newly-created) avatar *body* (brain) living inside our *chosen galaxy*.

When we *choose* to *enter* (via our real energetic personal *consciousness projection*, via our real *galactic mindcast* into the neurally-simulated galaxy) a daydream-game galaxy, we always have the choice of entering an *older galaxy* that has already been created by someone else, or we can choose to *make* our *very own* baby *galaxy*.

If we do choose to create an *entirely-new* baby *galaxy*, then how do we form the *Galactic-Consciousness Steering Hardware* (and all of its galactic-support structures like stars, planets, moons, plants, animals, and human-avatar brains) that is necessary to successfully dark-scalar-boson *flow* an energetic-limbic portion of our real-human consciousness into the *black-hole heart* (and then *outward* to the stars, *planets*, and human-avatar *brains*) of our new baby galaxy?

How can we personally create (as a super-powerful real human being) all the necessary neurological *Galactic Consciousness Steering Hardware*?

# Galactic Consciousness

What is the physical nature of our neurological *Galactic Consciousness Steering Hardware*?

How can all of this necessary *Galactic Consciousness Steering Hardware* be created inside *the 4 real* neural structures of our very own *4 limbic* colored *quantum chambers* (simulated white, red, black, and blue universes) inside our very own real human brain?

The good news is that most of necessary *Galactic Consciousness Steering Hardware* is already present (and has always been present) inside the 4 colored limbic structures of our real human brains.

The real reason that most of the necessary *galactic-consciousness steering-hardware*, is *already present* inside our real human brains, is because each of us real human beings has *already hosted* sequentially (in time) an *infinite number* of baby galaxies *a long time ago*.

Therefore, most of the necessary galactic-consciousness steering-hardware has *always been with us*, installed properly inside our 4 real limbic tissues.

As real human beings that have *no beginning in time*, we have *already joined* an infinite number of multiplayer daydreams (galaxies) *created by others*, and we have also already created an infinite number of daydreams that are *primarily fashioned* (created) *all by ourselves* (as our own personally-hosted baby galaxies).

We have been hosting *most* of the necessary galactic-consciousness steering-hardware inside our very own *real human brains* for a very long time (*forever* is a long time).

As the real human beings (that we have always been) we have always had a lot of *advanced* communication *technologies* inside the super-intelligent *real* neural *circuitry* of our real human brains.

The *new components* of our galactic-consciousness steering-hardware that we do need to *neurally-grow* into our 4 real limbic tissues, have to do with spatially locating (*positioning*) our new baby galaxy into *a particular spatial location* (with all the necessary galactic *building-permits* from all the other *existing owners* of all the *already-established* nearby galaxies) of a particular advanced neurally-simulated universe.

As we take the time to gather all the necessary *new-galaxy building permits*, we are also *vitaly-aware* and

fully-conscious of the *great galactic responsibility* we are assuming as we begin the *neural construction* of our very own baby galaxy in the *public multiplayer neural space* (our universe of galaxies, stars, and planets)

As we begin *constructing* and *entering* (via our personal energetic consciousness projection) a new baby galaxy of our *own creation*, we begin to enter this new baby galaxy with *an awareness* of our great *responsibility* to stay inside (and continue to host) the galaxy the very *longest*, and *stick around* (inside our new baby galaxy that we are personally hosting) until *all* of our future guests (the other real human beings, that will later choose to join with us, inside our own baby galaxy, as it begins to grow) eventually *feel* like *leaving* our galaxy completely on their own volition; when they all *finally decide* (after many billions, or many trillions of years) they *finally want* to *leave* our galaxy.

This is a super-huge *galactic responsibility*.

This *sober responsibility* to always *take* really *good care* of *all* of our real-human guests (as they all daydream they are human avatars living inside our galaxy) until they are *all ready* to *leave* our galaxy, is a *very big responsibility*, that can take a *very long time* to completely fulfil in every way that is necessary and proper.



Why do we sometimes choose to use a portion of our real human consciousness to take upon our real-human shoulders such a huge *Galactic Responsibility*?

# Galactic Responsibility

What is *Galactic Responsibility*?

How can one single real human being individually-choose to *fully-assume* the enormous *Galactic Responsibility* of *personally-hosting* a brand-new baby universe?

Why would any of us real human beings, ever elect to assume such a *huge galactic responsibility*?

This big decision, to create our very own baby galaxy, is *not to be taken lightly*.

Our *real integrity* (that is always inside our real human brain) will *self-hold* us *personally accountable* to *make sure* all our guests *fully-enjoy* their (potentially very long) stay in our *galaxy game*.

Certain *galactic conditions* (requirements) must be met, in order for the successful creation of an entirely new galaxy in our neurally-simulated universe.

These *three galactic requirements* are that (1) we *desire* to create our own galaxy, and (2) we have *obtained* all the necessary galaxy-construction permits, and (3) we are *fully committed* to shouldering all the *galactic*

*responsibilities* associated with hosting (simulating) our very own galaxy inside the neural tissues of our very own real human brain.

As real human beings, we can choose to create a new baby galaxy inside our 4 limbic quantum chambers of our real human brain.

These 4 new *baby limbic galaxies* are linked with high-speed inter-chamber nerve fibers that exchange real dark scalar boson neural pulses between the 4 chambers to simulate *quantum entanglement* between all the visible-matter elementary particles of the *visible-matter* white observable *galaxy*.

These 4 new *baby limbic galaxies* begin to grow inside our real human brain, when we decide to start growing our new *baby galaxy*.

The real human brain first grows a new set of *galactic-center* black-hole *neurons*, to properly support (simulate) a newly-created *black hole*, at the *exact center* of the newly-created *baby galaxy*.

The real human brain also starts growing a new set of *star-support neurons* to support the very-first initial newly-created *star*, as it begins to *orbit* around the newly-

created black hole, at the very center of our newly-created *baby galaxy*.

The real human brain also starts growing a new set of *planet-support neurons* to begin to support the newly-created *planet* as it begins to *orbit* around the newly-created *initial star*.

The real human brain also starts growing a new set of *advanced-human-body support neurons* to begin to support the newly-created *advanced human-avatar body*, with its newly-created (neurally-simulated) *advanced human brain*, and this advanced human brain's *neural connection* to some of the *subconscious limbic regions* of the real human brain, so the real human brain can begin to download a *portion* of its *consciousness* into the newly-created advanced-human *avatar brain*, as it begins to *animate it*, and partially *live* within it, as if it were beginning to start living in a *kind of a daydream* experience.

After the new baby galaxy has a *black-hole center*, with an *initial star* orbiting the new black hole, and an *initial planet* orbiting the initial star, and an advanced-human *avatar body* living on this planet, with a *portion* of a real-human-brain *consciousness* animating the newly-created advanced-human *avatar brain*; then this new baby galaxy is *all ready to receive* some additional new people (real-

human *guests*), and then the *new* additional *planets*, and then the *new* additional *stars*, that will *become needed* as the baby galaxy begins to *grow up* into a much larger, *more mature* galaxy of stars, planets, and people.

As your baby galaxy *grows up* into a more mature, larger galaxy, as *you invite guests* (real human beings) to join with you inside your baby galaxy, and *these* invited *guests agree* to *join* with *you* in your new galaxy *dream-game*, and partially-become *living* human *avatars* inside your baby galaxy, you will always remember your *growing* galactic *responsibility* to take really good care of *all* of your guests, as you *try* to *ensure* that they all have a *wonderful time* living inside your *growing* galaxy.

As more and more *guests* agree to join with you inside your *rapidly-growing* galaxy, you will find your baby galaxy is really *growing up*, and needing to add *more stars*, and *more planets*, and *more moons*, so all your precious human guests will have enough room (*enough* interesting beautiful *planets*, with enough planetary types of their liking) to live and joyfully-explore their new galactic-game environment.

The *number* of new *planets* (in your galaxy) can begin to grow from *one*, to *two*, to *two thousand*, to *two billion*, to *two trillion*, and even much larger.

There is actually *no* theoretical *upper limit* on the number of *new stars* and *new planets* and *new people*, that can be added to a *growing galaxy*.

Your growing galaxy will continue to grow to whatever size that you (and your guests) *jointly-decide* it will *grow to*.

After you (and your guests) eventually *lose interest* in your *grand galaxy game*, then it will *begin* to *shrink*, until it eventually *vanishes* according to your (and your guests') desires.

Galaxies are *created*, they *grow big*, and they stay big for a very long while (*billions*, or *trillions*, or even thousands of trillions of years), and then these *same galaxies* begin to *shrink*, and *shrink*, until they *vanish*.

Every advanced universe (like the one we seem to be living in today) contains an *infinite number* of *growing galaxies*, and an *infinite number* of *shrinking galaxies*.

Every growing galaxy (and every shrinking galaxy) contains a *finite number* of spinning stars, and a finite number of spinning *planets*, and a finite number of spinning moons, and a *finite number* of intelligent, conscious, free-willed, unique human *guests*.

The *most* wonderful *thing* about all of your precious human guests (that live on the many spinning planets in your own galaxy) is that they are generously endowed with human *consciousness*, human *free-will*, and unique human *individuality*.

These 3 wonderfully-unique *scientific properties* of our human consciousness always present themselves across 3 *different* personality *components* of our *consciousness*.

What are these 3 *Components* of *Consciousness*?

# 3 Component Consciousness

What is our *3 Component Consciousness*?

How is it possible for us to have *3 Components* of *Consciousness*?

Why does our *Human Consciousness* always have exactly *3 Individual Personality Components*?

What are these *3 distinctly-individual personality components* of *every form* of human consciousness?

The *3 components of consciousness* are the following:

- (1) Our Sense of Self
- (2) Our Sense of Others
- (3) Our Sense of Adventure

*Our Sense* (consciousness) *of Self*, includes our unique individual identity, as our very own self, with our very own unique free will, to choose to think whatever we want to think, and to do whatever we desire to do.

*Our Sense* (Consciousness) *of Others*, includes our conscious-awareness of how we should behave around others (and how we should treat them, to properly support



their personal peace, and their personal happiness), and an awareness of all of the real laws, real regulations, and real principles of *human-human peaceful interactions*.

*Our Sense (Consciousness) of Adventure*, includes our intermittently-intense desire to experience exciting new adventures in our living environments, in spite of the potential consequences.

The marvelous thing about these *3 real components of consciousness* is that *all 3* of them are *fully-present* in *every form* of consciousness.

These 3 components of consciousness are the *3 vital components* of every *human self*.

*Every* conscious *being* in existence, has these *3 components of consciousness*.

There is actually *no way* that any being can be conscious of anything, *unless* the being simultaneously has *all 3* of these components of consciousness.

These *3 vital components of consciousness* are present in our (1) real human self, and in our (2) advanced human self, and in our (3) mortal human self, and in our (4) submortal human self.

This means that we each actually have  $3 \times 4 = 12$  *self-components* of human consciousness.

Each of these *12 self-components*, is actually *vital* to our peace and happiness, as the real human beings we have always been.

These *3 components* of consciousness (that are actively-present in each of *our 4 selves*) are always *human components*, because consciousness itself is always a *uniquely-human* experience.

To be *conscious* is to be *human*.

To be *human* is to be *conscious*.

To be human is to be conscious in exactly *3 different ways*.

These three ways (*modes*) of human consciousness are the *3 components of consciousness*.

These 3 components of consciousness consist of (1) our *sense of adventure*, (2) our *sense of others*, and (3) our *sense of self*.

If we can somehow develop (as a newly-created advanced-human avatar) a *healthy sense of self*, then it

will also become possible for us to also begin to develop a *healthy sense of others*.

And if we can find a way to develop a *healthy sense of others*, then it will also become possible for us to develop a *healthy sense of adventure* as we continue to explore our big exciting (neurally-simulated) multiplayer advanced-human galaxy.

If we *fail* to develop a *healthy sense of self*, then some *sad things* can happen to us, and to others.

Developing a completely *healthy sense of self* is so vitally-important, that it definitely deserves a closer look.

Why is it so vitally-important that we take all the time necessary to carefully develop a *Healthy Sense of Self*?

# A Healthy Sense of Self

What is a *Healthy Sense of Self*?

Why is a *Healthy Sense of Self* such a wonderful thing to *create*?

Why is a *Healthy Sense of Self* such a marvelous thing to *have*?

What will happen to us if we *fail* to properly develop a healthy sense of self?

As the advanced human selves that we have already been for billions of years, here inside this huge milky-way galaxy, how can we all actually proceed forward today to actually begin creating a *Healthy Sense of Self*?

Our *real human brain* always maintains a perfectly *Healthy Sense of Self* for itself, to continuously completely stabilize itself, and to also continue to stabilize all of the many peaceful conditions, of our real world, where we all have always *lived alone* in peace and harmony, each of us with our *perfectly-healthy* sense of our *real self*.

However, the situation is *very different* in our simulated (created) advanced multiplayer universe.

The *sad thing*, is that *some* of our (newly-created) advanced human brains sometimes *fail* to develop a *fully healthy* sense of self.

This *tragic failure* (to develop a fully-healthy sense of self, as a newly-created advanced human being) is a bit of an *advanced tragedy*.

Why are these *advanced tragedies* allowed to occur in our advanced multiplayer universe?

Is the potential to *accidentally experience* one of these super-sad *advanced tragedies*, an important part of the advanced *adventure* of being a newly-created human being?

As the *mortal* human avatars, that we currently are here on Earth today in 2023, it is also vitally-important for us all to diligently *try* to develop a *healthy sense of self*.

Sometimes it is *very difficult* for a mortal human to develop a *healthy sense of self*.

Today in the year 2023, *very few* mortal humans, here on Earth, are *properly positioned* (adequately supported) to develop a completely healthy sense of self.

This is the *great tragedy* of our own *planet Earth*.

Very few of us (here on Earth) are even *able* to properly develop a healthy sense of self.

*Most* of the mortal humans, here on Earth today in 2023, *live in* mortal fear of personal *poverty*.

The *billions* of us mortal humans (here on Earth today in 2023) who *fear* we may someday *fall* into *poverty*, are continually *mentally-disrupted* by our own *money-fears*, to such a sad degree that we are rarely able to focus on developing a really *healthy sense of self* for ourselves.

The billions of us mortal humans (here on Earth today in 2023) who fear we may someday fall even deeper into poverty, are *continually-tormented* and *psychologically-disrupted* by our money-fears, to such an intense degree, that we rarely (almost never) are able to focus our thoughts (even for one full week) on developing a really good *healthy sense of self* for ourselves.

Our present worldwide economic environment (here on Earth in 2023) is *not* a healthy economic environment,

that is fully-supportive of the *proper development* of a healthy *sense of self*, for *everyone* everywhere, here on earth.

This sad unhealthy situation, is very unfortunate for *all of us* here on Earth.

We (the people of this Earth) have *completely failed* to solve world poverty *for each other*.

By simply *choosing* to really start *solving world poverty*, we can create a much-better human-life-supporting environment (here on Earth in the near future) that will make it much-easier for a person to develop a *healthy sense of self*.

The current *raw economic insecurities* (of this world) are *ravaging* its people's abilities to develop their own *healthy sense of self*.

It is *very difficult* for an eight-year-old girl, who is forced to labor in a mine in Africa for 14 hours per day, to develop a *healthy sense of self* for herself.

It was apparently also very difficult for Adolf Hitler, who grew up (about a century ago here on this same Earth planet) in an *economically-distressed* Germany, to develop a *healthy sense of self* for himself.

The leaders, presidents, and generals (of this world) who so eagerly (unwisely) order their poor young soldiers into battle, *apparently* also found it very difficult to develop their own *healthy sense of self*.

*Why* would a person (with a healthy sense of self) *order another* into war?

A person with a healthy sense of self, *is able to feel good* enough about himself, so that he can also begin to *really care* about *others*, and their welfare, their peace, their happiness, and *their wellbeing*.

A person who has a healthy sense of self, is able to *see clearly enough*, so that he (or she) can even *see* that others are *just as deserving* as himself (or herself) to also have a healthy sense of self for themselves also.

A person (with a healthy sense of self) *can care about others*.

A person (with a healthy sense of self) *can start* to also develop a *healthy sense of others*.

Would this Earth world have been ravaged by so many mindless wars (for so many centuries), and so many human-inflicted miseries, *if* the people who had been



previously living here (on this Earth) actually really did have a *healthy sense of self*?

Has *anyone*, who has ever lived here on this Earth (in any known century), ever had a *really healthy sense of self*?

Who?

When?

How can we know *for sure*?

What would a healthy sense of self *actually look like* on a person?

How would a person *always behave* if that person really did have a healthy sense of self?

What does a person's *id, ego, and super-ego* have to do with the person's healthy sense of self?

What is the actual exact relationship between the *super-ego* and a *healthy sense of self*?

These vital questions are very important to understanding the self, and any *healthy sense of self* that we may one day be able to develop here on Earth.

Let's take a closer look at the *Id*, *Ego*, & *Super-Ego*.

# Id, Ego, & Super-Ego

What is the *Id, Ego, & Super-Ego*?

Why are these *three components* of human consciousness so vitally important to our wellbeing?

What do these three essential components of the *human self*, have to do, with our ability to develop a *healthy sense of self*?

A brilliant Austrian neurologist name Sigmund Freud (1856-1939) carefully studied these *3 components* of *human consciousness*, and he gave them some interesting names as follows:

- (1) Super Ego (Our *Sense of Self*)
- (2) Ego (Our *Sense* of how *Others* see our self)
- (3) Id (Our *Sense* of Wild *Adventure*)

Many bright psychologists, neuroscientists, and philosophers have already written *many things* about the *Super Ego, Ego, and Id* of our *mortal-human* consciousness here on Earth.

The really interesting thing to know about our current *mortal id*, our current *mortal ego*, and our current *mortal*

*super ego*, is that we also have an *advanced super ego*, an *advanced ego*, and an *advanced id*.

We also have a *real id*, a *real ego*, and a *real super ego*.

Our *real-human super ego* is our *unique real self*.

Our *real-human ego* is *how* we treat *others*, and *how* we want *others* to treat us, and how we want others to *view us*, and how we want others to *think* about *us*.

Our *real-human id* is our desire (*need*) to *self-balance* (limbically-auto-balance) our real-human brain by *daydreaming* we are living inside a *wildly-exciting* simulated galaxy of joyful human-avatar *adventures*.

The way our *real-brain* galactic *mindcast* actually works, is that our *real super-ego* and our *real ego* agree together with each other via a set of real neural-communication processes in our real human brain, and then our real ego and real super ego *plan together* with each other, and then they both work together (as a real team of conscious neural processes) to *gently put* our *real id* into a *dream-like state* as a newly-created advanced *human avatar* living on a neurally-simulated planet in a galaxy of our real-brain's choosing.

Our real super-ego is *super-senior* central neural *process*, inside our real human brain.

Our real ego is a *governing* outward-reaching neural *process*, inside our real human brain.

Our real id is a *daydreaming* limbic neural *process*, inside our real human brain.

Our real human brain is *not* the *only type* of brain that supports an id, an ego, and a super ego.

*Every type* of *consciousness* supports its own type of *super ego*, and its own type of *ego*, and its own type of *id*.

As semi-intelligent, *semi-conscious*, mortal-human avatars (living here on Earth) we *all* have a mortal *id*, a mortal *ego*, and a mortal *super ego*.

These 3 *distinct conscious* neural *processes* that form our *mortal super ego*, our *mortal ego*, and our *mortal id* are *partially* hosted by the *mortal* neural *tissues* of our mortal human brains, and *partially* hosted by the *advanced* neural *tissues* of our advanced human brains, and *partially* hosted by the *real* neural *tissues* of our real human brains.

When our real-brain super ego, and our real-brain ego, *agree together* that it is time to begin a *new galactic-dream mindcast*, they work together to gently put our *real-brain id* into a *dream-like state* inside one particular advanced galaxy of their *joint choosing*.

Just as soon as our *real-brain id awakens* as a newly-created advanced *human avatar being*, living on a spinning planet in a neurally-simulated galaxy, the *dreaming part* of our *real-brain id splits itself* into *3 sub-components* as a newly-created *conscious self*.

How exactly is this *Id-Splitting* daydream-inducing accomplished?

How precisely does our real *Id Split* into *3 Components*?

# Id Splits into 3 Components

Can our real *Id* really *Split* itself into 3 Components?

How can a *one single Id* manage to functionally-neurally split itself into 3 *distinct* conscious components?

What exactly is an *Id*?

An *Id* is an important component (a *separate* distinct *part*) of our human consciousness.

What is our *Real Id*?

Our *Real Id* is the *real id* that has always been an *important* vital *part* (component) of our real human consciousness.

Our *Real Id* generates our *sense* of *adventure* and makes our human life *interesting*, and *exhilarating*, and *joyful*.

Our *Real Id* is needed to *balance* our real human brain.

How does our *Real Id* create our *Advanced Id*?

How does our *Real Id* create our *Advanced Ego*?

How does our *Real Id* create our *Advanced Super Ego*?

When our *real human self* begins to *daydream itself* into a newly-created galaxy, as a newly-created advanced human self, our *real id* neurally splits itself into 3 distinct neurally-conscious components, as our real id neurally splits itself into our *advanced id*, our *advanced ego*, and our *advanced super ego*.

When our *advanced human self* begins to *daydream itself* onto a distant mortal planet, as a newly-created mortal human self, our *advanced id* neurally splits itself into our *mortal id*, our *mortal ego*, and our *mortal super ego*.

When your mortal human self begins to dream (while you are sleeping tonight, here on Earth, during this year 2023), as a newly-created (because your new night-time sleeping dream has just newly-begun) submortal human self, your *mortal id* neural splits itself into your *submortal id*, your *submortal ego*, and your *submortal super ego*.

One interesting thing that sometimes happens when we dream at night, is that our submortal super ego, and submortal ego, are sometimes *not quite strong enough* to fully constrain our *wild submortal id* from doing certain *wild things*, that we would never allow ourselves to do as (fully-awake) mortal-humans right here on the surface of our mortal Earth planet.



When we (as mortal-human avatars here on Earth) begin to dream at night, our mortal brain must *route* (direct a flow of neural signals) a *portion* of its *mortal-id* consciousness (hosted by its conscious neural tissues) into its sleeping-dreaming *limbic system*, in a way that allows this mortal portion of *id* consciousness to *split into* the 3 *vital components* (submortal super ego, submortal ego, and submortal id) of our *submortal self*.

As we dream at night (as mortal humans) our mortal brains must also set up a *memory masking neural system* to *block* (some, most, or all of) our mortal memories from entering into the *submortal mind* of our newly-created submortal self.

In this way, our super-active *very-adventurous* submortal self, is usually *not aware* (no memories at all, or perhaps just a few vague distorted memories) of its *higher mortal self* (that is sleeping with its mortal head on its pillow on our bed).

As we dream, and as we daydream, our real *dreaming-id* splits into 3 distinct components of consciousness, that immediately become 3 *active human players* inside our *Real Id Lower Chamber*.

# Real Id Lower Chamber

What is our *Real Id Lower Chamber*?

The *Lower Chamber* of our *Real Id* is the exciting *real neural chamber* (inside our real human brains) that allows for (generates) *wild* (potentially-unstable) *exploratory adventures* (in multiplayer neurally-simulated universes) that can enable *huge* (almost infinite) quantities of *human joy*.

Have we *scientifically solved* the *historical problem* of *human evil*?

Can this important age-old *philosophical problem* of “*evil*” now be theoretically solved, by the particular set of scientific theories presented in this current 4 Brain Theory paper?

If our whole universe is “*good*”, then how did “*evil*” (human suffering, and human misery) manage to enter itself into our local Earth world?

Is our whole simulated universe only “*good*” in the sense that it can be used to “*balance*” our real human brains?

Must this wonderful real permanent “*balance*”, also include a possibility for temporary “*imbalance*”?

Our real human brains can *never* become “*imbalanced*” in our real world where we always really live.

However, in their Real Id *efforts* to balance themselves, our real human brains may sometimes *temporarily* create a type of seeming “*imbalance*” inside their virtual daydream worlds (like our own advanced universe that contains our very own Milky Way Galaxy).

This temporary imbalance is *transitory* and safely *guarded* inside our *safe spaces* (virtual daydream universes).

For example, there must exist a kind of a “*safe space*” (a safety-zoned, isolated, protected, neural simulation) where our real-human *pride* can potentially grow a bit “*reckless*”, without this potential prideful recklessness (like the *wild reckless* prideful *behaviors* of the excessively-prideful Adolf Hitler here on Earth) being able to actually hurt anyone for real (in our real world, up above all of Plato’s Caves, where we have always lived).

How does “*Evil*” enter into our Milky Way Galaxy?

Perhaps, “*Evil*” enters into our (simulated) universe (and also into our local Earth world) through the *lower chambers* (the lower portions, of each of our 4 real limbic quantum chambers) of our *real-human id*, in order to enable the kind of *wild* (unstable, and potentially “*evil*” to the limited-perceptions of our limited mortal selves) *human adventures* (in our neurally-simulated universe, and also here on our simulated Earth planet) that can eventually produce *advanced-joy* in our advanced-human brains, and *real-peace* in our real-human brains.

What about “*Mortal Evil*” here on Earth?

Perhaps, “*Mortal Evil*”, here on Earth, is an optional experience for us to *try here* (on ourselves, and on each other) *on Earth*, due to the *unstable* prideful *natures* of the lower chambers of our advanced-human id, and our real-human id.

Our real-human id is the set of real neural circuits in the lower chambers of our real limbic system; in the lower parts of our *real-human hippocampus*, and in the lower portions of our *real-human amygdala*.

These lower regions of our *real amygdala*, and our *real hippocampus*, contain a huge number of real-human neurons with their *real-human axons* that are capable of propagating the real-dark neural pulses that are the *tiny*

*ultrafast* dark scalar *bosons* that are the *traveling* dark-matter *particles* of our local neurally-simulated universe.

This *neurally-simulated universe* is the very same universe, that we see, when we look up at the night sky, to observe all the many *stars*, and all the many *galaxies*, that are easily visible from earth.

The traveling dark-matter (dark scalar boson) particles *push* on all the visible-matter particles, by *scattering off* of all the visible-matter particles, thus *forcefully-pushing* the visible-matter of all the stars, planets, and galaxies *together* as if there were an invisible “*gravitational field*” holding all these huge celestial bodies together.

The scientific fact is that the only “*gravitational field*” in our whole universe, is the dark-matter particles pushing (via *forceful scattering*) on all the visible-matter particles.

Some of the motions, of some of these real neural pulses, actually open the door for “*evil*” to enter into our universe, because some of these *pulses act together* to compose all the visible-matter particles, that compose all of our mortal-human *brains*, that sometimes are allowed to host unstable *mortal id pride* neural circuits, that sometimes become frustrated or *angry*.

This *mortal anger* opens the *dark neural door* (inside our unstable semi-intelligent mortal-human brains) to mortal human *hatred*, mortal human *violence*, mortal human *suffering*, and every possible form of mortal human “*evil*”.

Our *mortal angers* encourage our mortal human consciousness to *justify* our *violent mortal behaviors* by causing us to *believe* that we are *better* than *others*, and by causing us to believe that it was the others that *first* did the “*evil*” thing against us.

This is how we *justify* all the “*evils*” *we choose* to do against them.

And thus, our whole mortal Earth world lies in *extreme darkness*, because of what *we justify*, and how our *ugly justifications* urge us to commit all manner of “*evil*” against others.

An important thing to note is that mortal evil (human suffering) must be *potentially possible* here on earth (due to the *id-testing-nature*, of our current Earth-game in which we are using Earth as an advanced-*id test-planet* facility), but it is *never* actually *required* here on Earth, or on any Earth anywhere.

Forcing ourselves (or others) to suffer is *never* needed, nor beneficial in any way.

There is no need for actual human suffering.

Human suffering is *always optional*, according to our human choices.

However, the potential, or the possibility, for human suffering (evil) must be present on *id-testing worlds* such as our present id-testing Earth world.

If *suffering* were *impossible*, then *how* could we ever really test our human pride?

If our prideful *choice*, could *never* cause another to suffer, then *how* could we ever test the *quality* (result) of our id pride?

This earth does not need to *always* be a painful id-testing world.

We the people, who live here on earth, can simply choose to solve world poverty *anytime* we so *desire*.

When poverty is finally solved on a planet, then that planet is *no longer* considered to be an id-testing planet.

When poverty is *finally solved* on a planet, then that planet quickly becomes a very *nice place* to live, kind of like a joyful *vacation environment*, for those advanced humans who desire to go on vacation and *relax* on a beautiful, *peaceful*, loving planet where *free-will* is protected for *all* the planetary guests.

However, the few *painful id-testing worlds*, like our Earth self-testing planet, do provide us with the *precious opportunity* to *deeply-test* our newly-created personal *advanced id* to see *how good* it really is, when it is *thoroughly-tested* and *repeatedly-challenged*, in the *profound darkness* of our Earth-based human societies.

*All* the curious learning *trillions* of newly-created *advanced humans* (of our whole milky-way galaxy) eventually begin to desire to *test themselves* (in a dark and dreary mortal environment like our Earth) to *measure* how emotionally-strong they are, and to see how *pure* they are, and to see how *beneficial* they are; and to see whether or not we will always choose to *create* human *suffering* for *others*, with our free-will; or whether or not we may eventually choose to try to *solve* human *suffering* on our dark mortal id-testing planet, by *seeking diligently* to properly *solve* world *poverty* for *everyone* on our planet, and thereby *planet-upgrading* our current, painful, miserable, id-testing *prison-planet* into a future happy, peaceful, joyful *vacation-planet*.



Our *Real Id Lower Chamber* is for exploring a portion of our (uncreated) *Real Id*, by testing our newly-created (simulated) *Advanced Id*, to see if our new *Advanced Id* (with its unique new *Id*-personality) has become the kind of *Advanced Id* that we actually desire, to test it fully to see if our *Advanced Id* can be *fully-trusted* (in every possible situation) with the supreme advanced *power* to *command* every aspect of *dark matter*; because the full power over *dark matter*, is the advanced neural ability to *transform* *dark matter* into *anything* (in our universe) that *can be created*.

The set of things that *can be* created from *dark matter* is a very large wonderful set of things, including brilliant warm *stars*, beautiful safe *planets*, and super-intelligent advanced-human *bodies*.

All of these *dark-matter simulations* (real neural-pulse simulations) take place inside our *Real Id Lower Chamber*.

Let's look more closely at these *Lower-Chamber Dark-Matter Simulations*.

# Lower-Chamber Simulations

What are our *Lower-Chamber Dark-Matter Simulations*?

How can our *traveling dark matter* (propagating real neural pulses) particles *be organized* into a *universal neural simulation*, like the present *universe* of galaxies, stars, and planets where we currently seem to *find ourselves*?

How is this feat actually done?

How do we know for sure, that we really are *living inside* such a multi-player neural simulation, of our *own making*?

Our *4 Brain Theory* is that we are all (all of us here on earth) living inside a multi-player neural simulation, of our own making; and that we all entered into this simulated universe by our own free choice.

Our Lower-Chamber Simulations include all of our *Private Simulations* (our private daydreams with just ourselves alone), and all of our *Public Simulations* (our public multiplayer daydreams with other free-willed human beings).

Our *Private Chamber Simulations* help us to balance our real-human brains in every way that a private simulation (a *private daydream*) can help to balance us.

However, there are some ways that a private simulation is *just not enough*, because it *does not* contain the free-willed decisions of *other* free-willed human beings.

Free-willed human beings create the free human choices that introduce spontaneity and *uncertainty* into *existence*.

These *unknown uncertainties*, about the future behaviors of newly-created advanced human beings (who are created, and live, in our universe), are *very valuable* for helping us to *balance* our real-human brains, because of all of their free-willed human choices that they make inside of our *Public Chamber Simulations*.

# Public Chamber Simulations

What are our *Public Chamber Simulations*?

Our Public Chamber Simulations are all the *simulations* we create (inside our 4 real limbic chambers) that are theoretically *accessible* by the *whole public*.

The whole public includes *every* real human being in existence.

Therefore, the whole public includes an *infinite number* of us super-intelligent real human beings.

It is actually very difficult to *hide anything* from a real human being.

A real human being can theoretically discover anything that is *discoverable*.

*Nothing* is more intelligent than a real human being.

Nothing is more intelligent than the *real neural tissue* of a real human brain.

The real neural tissue of a real human being, can understand everything that is *understandable*.

The set of things that are *understandable* is very *large*.

This *understandable set* is the set of things that *can exist*.

Our real *public amygdala*, and our real *public hippocampus*, wirelessly network together, with all the real *public hippocampi*, and all the real *public amygdaloid tissues* of other real human brains, to generate (simulate) this present daydream *universe*, where we all (all of us here on earth) currently *seem* to live.

Our *public hippocampus*, and our *public amygdala*, work together (when we choose a black hole, and start a new daydream, as a newly-created advanced-human *infant avatar*) to *split* our *real-human id* into *3 conscious components*, including our new advanced-human *super-ego*, our new advanced-human *ego*, and our new advanced-human *id*.

As we begin our new life as a newly-created advanced-human infant avatar (here inside this local universe) with our newly-created *advanced id*, we will want to develop our new *advanced id* very carefully so we will eventually be *properly proud of it*, because of the way it *causes us* to *behave* as an advanced human living with great personal joy in this universe.

Why is *Our New Advanced Id* so important?

# Our New Advanced Id

What is *Our New Advanced Id*?

Why is it so important that we discover a way to develop an *Advanced Id* that we can *be proud of*?

What will happen to us if we *accidentally develop* an *Advanced Id* that we are *not* proud of?

*How difficult* is it to develop an *Advanced Id* that we can *be fully proud of*?

What is the *core nature* of our *Advanced Id*?

Why do *Advanced Id Testing Planets* (like our earth) even bother to exist?

Why must every *Advanced Id* be *thoroughly tested* and *completely vetted* in every way necessary, if we desire to be trusted enough to receive the ability to have a *total command* of dark matter?

Total command of *all* of the dark matter inside a universe, is the *greatest power* that can be granted to anyone living inside a *simulated universe*.

This *total command* of dark matter is the power to create (or uncreate) stars, planets, human bodies, and *everything* that can be created (or uncreated) inside a universe of galaxies.

Some mortal dark planets, like our Earth currently today in 2023, are *pretty useful places* to test the “goodness” of our Advanced Id, to see exactly how our *Advanced Id* will behave in the insane darkness (profound mortal-human ignorance, extreme *competitive* mortal-human *pride*, and widespread mortal-human *cruelty*) of a dark mortal world like our Earth planet.

These *vital self-tests* of our *advanced id*, can be very powerful, and very useful in helping us to better understand ourselves, because we usually *turn* memory-masking *on*, so *we* cannot *remember* who we really are, while we are living and breathing on Earth, as us mortal human avatars.

As *memory-masked* mortal-human *avatars*, living here on Earth, *we cannot* remember *anything* about our lives as joyful advanced humans who have already been busy exploring our milky-way galaxy for billions of years.

It is very easy for a memory-masked mortal human to *begin to believe* that its brief (usually less than one century) mortal life, is the *only life* it will ever have.



It is also very easy for a memory-masked mortal human to *begin to believe* that it is okay to *mistreat* other mortal humans, for personal gain, or for any reason than can be imagined by a semi-intelligent semi-conscious mortal mind.

As advanced humans, when we begin to daydream that we are just mortal humans (living remotely on a mortal Earth, like this one), then our *advanced id* splits *itself* into 3 distinct *components* of mortal-human consciousness, including our mortal-human *super-ego*, our mortal-human *ego*, and our mortal-human *id*.

Many of the *relative strengths*, relative weaknesses, and relative characteristics of our *mortal id*, our *mortal ego*, and our *mortal super-ego*, are logically contained within the advanced neural structure of our *advanced id*, because it is our advanced id that actually contains these 3 mortal components (*3 interacting conscious neural circuits*) of our mortal-human consciousness.

Therefore, one of the best ways to *deeply-test* our *advanced id*, is to carefully examine how its 3 components (of mortal-human consciousness) *play out* with *each other*, and also with the 3 components of everyone else's *advanced ids*; as all these *many components* of human consciousness *play out* with *each*

*other* (and often unfortunately *against* each other) *here* on *Earth*, or on some other dark mortal planet in our milky-way galaxy.

So, how can we “*win*” this game?

Sometimes it can actually be pretty helpful for us to wisely provide for ourselves, some *super-intelligent players*, who can sometimes become “*awake*” inside this mortal (Earth) game, who can try to pass some *helpful hints* to the other mortal players.

If our Advanced Id is really *focused* on seeking to *help all* others (by trying to find enough *helpful hints*, to properly solve world poverty for *everyone* on earth) then our Advanced Id will be *diligently seeking* the helpful hints through its conscious, *aware*, perceptive, *mortal-human super-ego*.

However, our mortal-human super-ego must *also navigate* its *complex mortal-human life* (here on this dark confused mortal Earth planet) with its powerful mortal-human *ego*, and also with its *super-powerful* often-wild *mortal-human id*.

This *mortal-life adventure* can sometimes become *so challenging* (because our current Earth planet is so astonishingly dark) that we (as advanced humans) really

*desire* to have the *chance* to *discover* some of the *helpful hints* that have been left for us, by the *super-intelligent players* (the *super-intelligent scientists*) that are sometimes even allowed to become fully “*awake*” with their memory-masking neural circuits *turned-off* (inside their advanced human brains) so they can *still remember* what they are doing as the advanced humans they have been for billions of years.

These *super-intelligent scientists*, are the super-intelligent players, who can still *remember* who they are.

So, their hints can be very helpful, because they actually “*know*” things.

They *know things*, because they *remember things*.

They don’t need to *learn* anything here on Earth, because they *already know* everything by simple *remembering*.

But the only way for us to *recognize*, appreciate, and understand, their *helpful hints*, is for us to humble ourselves enough to openly-think and *wonder* (and feel) again like *little children* (like when we were just 3 years old here on Earth), with our mortal minds *full of wonder* and full of a *marvelous willingness* to learn new things; especially those wonderful things that *resonate deeply* with what we *already know* from our advanced human

life, on *our advanced planet* (that is just one, of the many hypothetical advanced *Kolob planets* here inside our Milky Way Galaxy), where we have already lived for billions of years.

Some centuries ago, some of these super-intelligent scientists *influenced* some willing writers here on earth, to write down some *useful hints*, in the *hope* that these useful hints might one day be used to *help humankind* awaken *enough* to seek to solve world poverty for *everyone* on Earth.

Some of these wise words (*useful hints*) were eventually incorporated (with the gentle help of these super-intelligent scientists) into some of the most popular *philosophical traditions* of this earth.

It almost seems like some of these *philosophical traditions* (stories) have historically referred to the super ego, ego, and id by various old symbolic *philosophical names*.

In some of these ancient *philosophical stories* (M M L J) *3 symbolically-powerful* conscious *characters* are sometimes mentioned.

These 3 all-powerful, philosophical, symbolic, teaching characters are “*the Father*”, “*the Son*”, and “*the Holy Ghost*”.

We might notice that these 3 *powerful* ancient symbolic characters play the 3 *distinct* primary player roles of advanced-human *consciousness*, in our own milky-way galaxy.

The “*Father*” plays the role of our “*Advanced-Human Super-Ego*”.

The “*Son*” plays the role of our “*Advanced-Human Ego*”.

The “*Holy Ghost*” plays the role of our “*Advanced-Human Id*”.

When “*the Son*” talks about being “*One*” with “*the Father*”, we can observe that our Advanced-Human Ego (*the Son*) must be “*One*” with our Advanced-Human Super-Ego (*the Father*), because the Super-Ego and the Ego are actually two distinct parts of *the very same* (“*One*”) *advanced human being*.

These super-intelligent, *all-powerful*, super-kind, *all-knowing*, advanced human beings are exactly who *we have all been* for billions of years, here in this milky-way galaxy.

The Father, the Son, and the Holy Ghost are our 3 *distinct* conscious *components* of our advanced human selves.

These helpful ancient symbolic hints are *all* about *us*.

Can these helpful hints help us to *start* to *desire* to properly solve world poverty for everyone here on earth?

Or, do we first need to receive even *more* helpful *hints*?

Can we ever properly test our advanced id in the complete *absence* of *any* helpful hints?

Can we properly test our advanced id in the absence of *any helpful examples*?

Can *good examples* sometimes be *helpful hints*?

Is this present 4 Brain Theory providing any *helpful examples* (or any *helpful hints*) about anything that can be helpful, to one of us temporary mortal-human avatars, living here on Earth?

What is our actual advanced *purpose* for this super-intense Earth-world *Testing of Our Advanced Id*?

# Testing Our Advanced Id

Why do we prideful ones, all desire to thoroughly evaluate and *Test Our Advanced Id* here on this dark mortal Earth planet?

How can a mortal-human Earth life, provide a good solid *self-test* of the qualities (and abilities, and natural *propensities*) of our advanced id?

What would happen if we decided to scientifically examine *2 recent* (within the past century or so) *life-examples* here on earth?

These *2 examples* can be 2 specific mortal-human avatars that were *both born* in the 19<sup>th</sup> century (here on earth), and who *both died* in the 20<sup>th</sup> century.

These 2 mortal-life examples are *both well known*, with *many books* already written about these *two interesting mortal men*.

*One* of these two mortal men, is known worldwide for his mortal “*intelligence*”, and for his mortal “*goodness*”, because he seemed to really care deeply about *all* the *people* of this whole earth.

The *other* of these two mortal men, is known worldwide for his mortal “*cruelty*”, and for his mortal “*evilness*”, because he seemed to care only about “*his very own nation*”.

Can this be theoretically possible?

Is there something *dark* and *ugly* about *only* caring for “*our very own nation*”?

When we put “our very own nation” *up above* all *other nations*, and up above *all* other peoples, then do we become willing to *fight* and *kill* other precious human beings in wars against these “*other nations*”, and in wars against these “*other peoples*”?

When “*we see*” (we *mentally consider*) our very own *nation*, or our very own *country*, or our very own *state*, or our very own *city*, or our very own *community*, or our very own *family*, or our very own *race*, or our very own *club*, or our very own *group*, or our very own *tribe*, as “*being up above*” any other tribe, group, club, race, family, community, city, state, country, or nation; then does this *distorted mental viewpoint* encourage us to *fight against* those “*other people*” who we see as being “*not us*”?



Who among us actively carries this *distorted* mental *viewpoint* inside our mortal human brains today in 2023?

Who among us does *not* carry this *vicious* mental *viewpoint*, at least to some partial degree?

Is it any wonder why our Earth is presently experiencing so many *wars*, and so many *rumors* of *wars*, and so many *unnecessary* human *conflicts* everywhere we look, here on Earth today in 2023?

Can this present 4 Brain Theory paper help us all to view each other as *equals* in *value*, in every way that us precious humans can have an *equal value*?

Can this present 4 Brain Theory paper help us all to begin to genuinely *view* each *other*, as having *the* infinite *value* that we really do have, because we are all still the *infinitely-valued* real *human beings* that we have always been?

How about our *own* personal life *example* to others?

Have we personally *always* valued every human on Earth as being *infinitely valuable*?

Now let's look at our *two examples* of our two *super-famous* mortal men of Earth.

How were *Einstein* and *Hitler* both *tested* by their respective mortal-Earth experiences?

# Testing Einstein & Hitler

What exactly happened with the recent *Self-Testing* of *Albert Einstein* (1879-1955) and *Adolf Hitler* (1889-1945) here on Earth?

Did both of their advanced selves come to Earth for the very *same reason*?

Or, did they visit Earth for somewhat *different reasons*?

How did *Adolf Hitler* (20 April 1889 – 30 April 1945) feel about himself, when he *suddenly awoke* on April 30, 1945 as the super-intelligent advanced human avatar (living on his advanced planet, somewhat closer to the center of our milky-way galaxy) that he has been for *billions* of years, and he immediately *realized* (remembered) how he had *behaved* (pushing thousands of innocent humans into gas chambers, etc.) during the brief *56 years* while he was just a *semi-intelligent* mortal human *avatar* living right here with us all on Earth?

Did the billions-of-years-old super-intelligent *advanced Adolf* feel proud of his *56-year* mortal-Earth-planet *performance* as a newly-created *semi-intelligent* mortal human *avatar*?

How did the super-intelligent advanced Adolf *explain* his 56-year mortal-human *performance* to all of his super-intelligent *advanced friends*?

*How many* of the advanced Adolf's advanced friends watched their very *own* innocent young mortal-human *avatars* getting *pushed* into the mortal Adolf's *gas chambers*?

“Hey Adolf, you forcefully-pushed me (my mortal-human avatar) into a gas chamber on Earth, after I had already developed some really *big plans* for my mortal-human avatar. Why *did you* do that cruel thing *to me* Adolf?”

Will the advanced Adolf be widely *admired* for his mortal performance by *all* of his super-intelligent, super-wise advanced-human friends?

Will the advanced Adolf become *so deeply ashamed* of his recent (1889-1945) mortal performance that he might even consider *quitting* the whole advanced galaxy game?

What will the advanced Adolf *decide* to do, after such a mortal performance?

Will he attempt *another* Earth life?

Will he *quit* the whole galaxy game entirely?

What will the advanced Adolf do *next*?

And, how about *Albert Einstein*?

How did *Albert Einstein* (14 March 1879 – 18 April 1955) feel about himself, when he *suddenly awoke* on April 18, 1955 as the *very-same* advanced-human *avatar* he had already been for *billions* of years; and he *joyfully realizes* that he diligently worked his *whole life* for the advancement of science, and the advancement of *world peace*, and he also realizes that he *probably* would have *supported* the solving of world poverty, if he had only known a really *wise way* of how to solve it *properly*.

Did the billions-of-years-old super-intelligent *advanced Albert* feel proud of his *76-year* mortal-Earth-planet *performance* as a newly-created semi-intelligent mortal-human avatar?

Did the wiser advanced Albert feel like he really needed *to do more* to solve world poverty for *everyone* on Earth?

Is that the real reason he *came back*?

What if the *advanced Albert* and the *advanced Adolf* decided to *communicate* with each other sincerely, about their *two* brief *performances* on Earth, as the semi-

intelligent mortal-human avatars that they briefly were during 1879 (1889) to (1945) 1955?

What would these two super-intelligent advanced-human beings *have to say to each other*?

Would the advanced Albert *feel sorry* for the advanced Adolf?

Would the advanced Adolf *envy* the advanced Albert, and really *wish* he would have been wise enough, to have mortally-behaved *more* like *him*?

Would the advanced Albert *feel glad* that he did *not* behave nearly so badly as Adolf did?

What do *we say to each other*, after our brief Earth performances?

How can we *pass* our Earth self-test?

What exactly are we *really testing* during our super-brief performances on this Earth stage?

Albert and Adolf were not the only advanced people, who chose to come to this dark Earth planet, to test themselves.

*Many* billions of us advanced humans, have already chosen to visit Earth (during the past 5 billion years) to *test ourselves* to see if we can *behave wisely* in the *dark*.

Is our *good pride* (the good part of our personal ego, combined with the good part of our personal id) *strong enough* to properly *bridle* and wisely *guide* our *bad pride* (the bad part of our personal ego, combined with the bad part of our personal id) in the relative darkness (confused insanity) of Earth?

Is *our good pride* strong enough (and intelligent enough) to provide strong-wise guidance to *our bad pride*?

Or, like in the case of Adolf Hitler (1889-1945), is *our bad pride* (the excessive competitive loftiness, of our upper branches of personal ambition) so strong that it *overcomes* the wisdom of *our good pride* (our good wise roots, of our good advanced foundation, of our kind, loving, universal humanity)?

Have we ever *done* or *said* anything that makes another human being *feel bad*?

Have we ever *hurt* another human being here on Earth?

What have *we done*?

How can we *do better* in our future?

Will we *seek diligently* to solve world poverty *today* for *everyone* on Earth?

Or will we continue to *allow* other human beings *suffer* in their *miserable poverty* for more years here on Earth?

What will we do today with our precious *free will*?

What do we *want* to do?

What brings us *personal joy*?

Let's do whatever brings us *personal joy*, so we can *clearly see* (accurately-test) who we *really are*.

This is our *Earth self-test*, to do whatever brings to us the *most personal joy*, and *nothing else*.

This is how we *accurately-test* the *quality* of our very-own *personal* individual *advanced id*, because of the neurological way our advanced id *splits itself* into (and *neurologically-forms*) our *mortal super ego* that always desires to do good for all, and our *mortal ego* that always desires to do what we think will make us look good in the eyes of others, and our *mortal id* that always desires for



exciting new adventures irregardless of the cost or the consequences to others.

This *accurate self-test* of a vital part of ourself (our advanced id) is the *present-purpose* of our whole planet Earth.

Our planet Earth currently serves *no other purpose* in the *all-knowing eyes* of the trillions of super-intelligent advanced humans that currently live in our Milky Way Galaxy.

What did we *really think* our Earth was for anyway?

Every planet has a *purpose*.

Only a *relatively-few* planets (in our whole galaxy) *share* the *same* purpose as our planet Earth.

*Very few* technological planets (in our galaxy) are as *lone* and *dreary* as our current 2023-Earth planet.

The *current value* of Earth is in its *dreary darkness*.

*Where else* would we want to *test* our *Advanced Id Intelligence* that we have been diligently developing (here in this milky-way galaxy) for *billions* of years?

Earth is currently a pretty good mortal *evaluation center* where we can all conduct our personalized *Id Intelligence Testing*.

# Id Intelligence Testing

What is *Id Intelligence Testing*?

Why is it so important that we always have available to us, at least a few *Id Intelligence Testing Centers* (dark, dreary, miserable, mortal planets like this Earth) here in our Milky Way Galaxy?

There is currently (circa 2023) *nothing useful to learn* on Earth, (because our individual super-intelligent advanced human selves *already know* orders of magnitude *more science*, than all of our mortal-Earth scientists combined), *except how* our advanced id intelligence *will react* to the *emotional darkness* (and intellectual darkness) of this current (circa 2023) technological-Earth multiplayer *living experience*.

We are all here to *test ourselves*.

Plain and simple.

Self-testing is *why* we are here on Earth.

How *many times* have we been here on Earth?

Well, that depends on the exact *type* of *self-test* we desire for ourselves.

Some of us have visited Earth *just once*.

Others of us have visited Earth *many times* to *test* our *relative-behaviors* in many different cultures and time periods, and in many different *levels* of technological Earth-based sophistication.

Living in Rome a couple thousand years ago, was a very *different experience* than living in Germany in the early 1940's.

Sir Isaac Newton experienced some *different cultures*, than Nikola Tesla experienced, because these two brilliant scientists lived in *different centuries* and in *different areas* of this Earth.

*VR Headsets* in the year 2122, will be much more powerful (and much *more useful* to our human society) than they are today in 2023.

By 2122, more people will *be reading* this present 4 Brain Theory paper of 2023.

By the year 2122, there may be *more people* genuinely interested in solving world poverty for *everyone* on Earth.

People will still *need to eat food* in the year 2122.

Why not *wisely adjust* our worldwide societal *relationship with money* to make *healthy food free* for *all people* by 2122 (or even-sooner by 2023)?

Why not *simply pay* the worldwide *farmers* (planters, pickers, harvesters, truckers, and grocery-store owners) *really well* to feed *all* the people of Earth?

There are some *brilliant ways* to actually do this.

*Why wait* until the year 2122, when we can actually do this *good deed* worldwide during 2023?

Are we *personally seeking* to solve world poverty for *everyone* on Earth today in 2023, or are we personally seeking to do *something else* with our time, talents, and all our mortal-human brain abilities?

What is our *goal* for the year 2023?

To solve poverty for *all*?

Or, is our *goal* to do *something else* on Earth?

What exactly is our personal *goal*?

*Why* did I come to Earth?

To solve Earth poverty for *everyone* on Earth?

Or, is my personal goal to do *something else*?

*Why* am I here on Earth?

Why?

*How exactly* can we wisely proceed to properly solve world poverty for everyone on Earth?

How can we actually do this *mighty deed* of marvel and wonder?

Is solving world poverty (for everyone on Earth) always just an individual *personal effort*, or does it really need to become a *group effort*?

To *be successful*, solving world poverty, *needs* to be a *group effort*.

We the compassionate *people* of *Earth*, need to *agree together* with each other, that *we* will *cooperate* with each other *enough* to *allow poverty* to *be solved* for *everyone*

on Earth in 2023, or in 2024, or just *as soon* as we can *all agree* that solving world poverty is *desirable* and *doable*.

Why are *so many* people (on this Earth planet) still trying to *stop poverty* from being solved today?

*What* superstitious *beliefs* cause people to *block wise efforts* to solve world poverty?

What kind of *human superstitious beliefs* cause people to *turn a blind eye* to the extreme poverty (and misery) of others?

What kind of *human beliefs* cause a person to try to *rise above* another?

What type of *human beliefs* cause me to think *I am better* than *you*, and therefore *more deserving* of good, healthy, nutritious, delicious food *than you are*?

What kind of *superstitious* human *beliefs* would do such *terrible things* to our vulnerable mortal-human minds?

What kind of *Id Superstitions* (prideful beliefs in superstitious ideas, that are *not* accurate scientific theories) *viciously push* our vulnerable human hearts into *fear* of others, *anger* towards others, and *hatred* of others?

How can we learn how to *identify* all of these vicious historical *Id Superstitions* before we jointly nuke this planet into Ice Age Number 6?

How can we learn to say a good logical *Scientific Goodbye* to all of our tired old historical *Id Superstitions*?



# Goodbye Id Superstitions

Goodbye *Id Superstitions*.

Can it really be so easy?

Why not?

Can we really learn how to say a good logical *Scientific Goodbye* to all of our tired old historical *Planetary Id Superstitions*?

Why did so many *Ancient Planetary Id Superstitions* grow, here on Earth, in the vulnerable minds and willing hearts of so many of us mortal-human avatars, with our *unstable* semi-intelligent *mortal human brains*?

Does this *New Theory* of Multi-Planet *Id Testing* give us enough good accurate *scientific information* so we can simply let go of all of our centuries-old *historical planetary id-related superstitions* here on Earth?

A rather large number of *ancient id-related planetary superstitions* about the core nature of *good* and *evil* (the logical scientific domain of some *theoretical id studies*) were developed here on Earth *thousands* of years ago.

Some of these *ancient planetary id-superstitions* have urgently pushed our vulnerable little planet Earth into *countless wars* and *manifold miseries*, as each *militant zealous superstitious group* argued that their particular superstition was the “*One True Id Superstition*”, that must be accepted by all, or *the sword of death* (or the grim sickle of destruction) would visit any and all who dared to ignore (or scientifically-challenge) the “*One True Id Superstition*”.

Can this new 4 Brain Theory of *Multi-Planet Id Testing* help us to finally *scientifically understand* the actual mortal-brain *reasons* for our deep-seated *mortal-human fascination* with all our ancient-Earth *Id Superstitions* of our past?

Is there a good, proper, logical, rational *scientific way* for us all to finally *let go of all of our Historical Id Superstitions* of our *tortured past* here on Earth?

What is *actively blocking us all*, from simply letting go of all of our deeply-held *historical Id Superstitions*?

Our historical Id Superstitions?

Yes.

It is the *emotional-clinging* neurological mortal-brain nature of our historical Id Superstitions, that *causes us all* to *emotionally-cling* tightly *forever* to our abundance of vicious old historical Id Superstitions.

So, what is the *proper solution* to this dilemma?

*Scientific Light.*

We must *intensely-shine* the pure light of *accurate science* onto *all* of our historical Id Superstitions, until they *all vanish* into the *utter nonsense* that we will then see them as *becoming* in the Brilliant (no-nonsense) Light of *Real Science*.

But where can we discover such a *Brilliant Real Science* that can eventually become sufficiently *bright enough* to help us all to successfully vanquish *all* of our emotional-clinging, neurological, historical *Id Superstitions*?

What kind of *accurate theory* of science could eventually *muster* such *brilliance*?

How about this present 4 Brain Theory article?

Is this powerful new 4 Brain Theory, presented in these *hundreds of pages* of carefully-written *scientific prose*,

powerful enough to begin to help us to vanquish *some* of our historical *Id Superstitions*?

Is this present 4 Brain Theory *bright enough* to help us to do the job?

Or, do we *still need* some *more light*?

*How much* additional light will we really *need*, so we can finally *succeed*?

The stakes are *certainly high*.

The stakes are high, because the *only way* that we the people, of planet Earth, will ever be able to *unite enough* to solve world poverty for everyone on Earth, is if we first manage to somehow *vanquish most* of our historical Id Superstitions, that have *kept us* so *divided* for so many millennia on this vulnerable little Earth planet.

There is *simply no way* that we can ever *unite enough* to solve world poverty for everyone on Earth, if we do not *first and foremost* vanquish *most* of our historical Id Superstitions that *divide us* from each other, and cause us to *fear each other*, and cause us to be *angry* with each other, and to *hate each other*.

Until our *mutual hatred* ceases to be, we simply *cannot unite* enough as a planetary species to work together *harmoniously-enough* to solve world poverty for everyone on Earth.

Therefore, our *very first task*, as the wise scientists we hope to someday become, is to *Solve World Hatred*.

What is the grand scientific key to *Solving World Hatred*?

# Solving World Hatred

Is *Solving World Hatred* possible?

What exactly is *World Hatred*?

Does *World Hatred* even exist in our *Earth World*?

What if we don't really hate *everyone*?

What if we only really hate just *some people*?

What if we don't really hate anyone at all, and we just mostly *ignore people*, instead of actively hating them?

What if we mostly just ignore the *poor people* who have nothing, because we think *we are better than they are*?

*Who cares* about the poor anyway?

What is the real difference between *hatred* and *indifference*?

What is the real cause of our *calloused indifference*?

What is the *real cause* of our hatred of humans?

The real cause of these human *misperceptions* (and human *understandings*, and human *mis-emotions*) is our human ignorance and our human stupidity.

The real cause of *human hatred* is *human stupidity*.

The real cause of *world hatred* is *world stupidity*.

If you *hate* someone, it is because you are *stupid*.

This is a *scientific fact* that can easily be proven by any *wise neurologist*, or by any *intelligent psychologist*.

The only thing that can *cause* a human to actually *hate* another human is *excessive competitive human pride*.

*Excessive competitive human pride* is the *most stupid thing* we can possibly *have* (in our mortal-human brains) here on Earth.

There is literally no way we could possibly be any *more stupid*, than to possess *too much* competitive human pride in our bewildered *angry brain*.

There is *nothing* more stupid to *have* inside our brain.

*World Hatred* is caused by *World Stupidity*.

Therefore, the *only way* to *Solve World Hatred* is by first completely *Solving World Stupidity*.



# Solving World Stupidity

Is *Solving World Stupidity* actually possible on our Earth?

What is *World Stupidity*?

Are we *all* equally *stupid* on this dark Earth planet?

Or, are some of us *more stupid* than others?

Who is the *most stupid person* alive on Earth?

Who is the *most intelligent person alive* on Earth today in 2023?

What is the *real cause* of our astonishing human stupidity here on Earth?

The *neurological structure* of our mortal-human brains is *very stupid*, and this *dysfunctional* mortal-brain *structure* causes our brains to *mis-function* with many *mis-perceptions*, and with a lot of *misunderstandings*, and with a great number of *mis-emotions*, and with many *misbehaviors* all day, *every day* of our brief mortal-human *bewildered lives* here on Earth.

We can *mostly blame* our very own mortal-human brains for our *profound human stupidity* here on Earth.

However, our dysfunctional mortal-human brains are *only one part* of the *vital mortal equation* that forms all of our many *human behaviors* towards one another here on Earth.

The other vital part of this all-important mortal equation is called *human free-will*.

Here on Earth, we all have *human free-will* to do whatever *we want to do* with our time and talents.

Some of us *can choose* to stay in bed all day long.

Some of us *can choose* to watch TV all day long.

All of us can choose *to devote* our *brief lives* to solving world poverty for *everyone* on Earth.

We all have the *free-will* to choose our *very own goals* here on Earth.

We all have the *free-will* to *try to do* whatever we desire to do here on Earth.

What will we do with our precious *human free-will*, combined with our *stupid mortal-human brains*?

Can we choose to use our *free-will* to *seek to learn* how to make our own human brain *less stupid*?

Can we use our *free-will* to try to *learn some useful things* that can *help us* to gradually become less and *less stupid* here on Earth?

Can a mortal-human brain *learn* how to become *less stupid* over time?

Yes.

It is actually possible for us to become *less stupid today* than *we were yesterday*.

There is *hope* that we may even become *less stupid tomorrow* than *we are today*.

There is *hope* for us.

*Discovering* a really good *scientific method* to *reduce* our *human stupidity* is our *only hope* here on Earth.

How can I begin to actually reduce *my own personal stupidity enough* today in 2023, so I can *gain* enough

personal human *intelligence* to see how to really *help* this whole wide world, to start to reduce its *worldwide* stupidity *enough*, to begin to *help* all *people* to start to *see clearly* that solving world poverty for *everyone* on Earth by 2023 (or 2024) is a very *worthy goal*, for all of us to *seek to achieve* by working *harmoniously* together throughout 2023, 2024, 2025, and beyond?

Can we all *learn* how to wisely *use* our unique human *consciousness*, and our unique human *free-will*, and our unique human *individuality*, and our personal unique human *intelligence*, to begin *to seek diligently* to solve world poverty *for all*, in a way that can continually bring us *personal joy*, so we will continue to have the *courage* and the *energy* to *keep on trying* day after day, and month after month, until *we all* succeed *together* in solving world poverty for *everyone* on Earth?

What about our *real human selves*?

Do our real human selves *want us* to solve poverty here on Earth?

What about our *advanced human selves*?

Do our advanced human selves *all desire* that we learn how to solve world poverty for everyone here on Earth?

Do *we* mortal *humans* (of Earth) *receive* our *consciousness, free-will, and unique individuality* completely (or partially) from our *real* human selves, via our *advanced* human brains?

Exactly how does *a portion* of a real-human being's *consciousness, free-will, and unique individuality* become energetically-directed from a *real* human's *brain* (that is always physically-living in its *real world*) into an *advanced* avatar's *brain* (that is physically-living on a neurally-simulated advanced Kolob-planet), and then also become further energetically-directed into a *mortal* avatar's *brain* to *free-will-animate* one of *us* mortal humans of Earth?

How does *a portion* of our own unique real-human *consciousness* (from our uncreated real world up above all of Plato's Caves) flow into our personal advanced-human *avatar brain* (on a simulated advanced Kolob planet, inside this milky-way galaxy), and then also have a *small mortal portion* of this real-advanced consciousness *also flow* into our mortal-human *avatar brain* to help us to *see clearly* enough to *decide* for *ourselves* that our *main goal* will be to solve world poverty for *everyone* on Earth?

How exactly is this glorious feat of energetic *consciousness projection* achieved?

How precisely is this mighty task of energetic *free-will projection* achieved?

How exactly is this grand accomplishment of energetic *unique-individuality projection* achieved?

How exactly is this all done, right here *locally* in our very own Milky Way Galaxy?

Does this present 4 Brain Theory provide some useful scientific hints about how all of these types of *energetic (dark-scalar-boson) projections* are achieved?

How can a set of *energetic real dark scalar bosons* work together, with their *ultrafast* velocities, and their real dark *spiral axons*, that can reach outward from the *heart* of Sagittarius A\* to the *outer reaches* of our Milky Way Galaxy, to help us real human beings *project* our *scalar-boson consciousness* from our uncreated *real* brains into our created *advanced* brains on our brilliant *Kolob planets*, and then into our created *mortal* brains while we briefly live here on our dark *Earth planet*, and then even deeper into our privately-created *submortal* brains while we sleep and dream at night?

With *multiple humans* living on *multiple planets*, (in our Milky Way Galaxy) how is their *consciousness distributed*, from its *real source* in their real brains, in

their real bodies, in their real world, spatially-outward to all of these *spatially-separated planets*?

Exactly how can the aware-light of our *real consciousness* become distributed across *multiple planets*?

What is the neurological nature of this interesting *Multi-Planet Consciousness*?

How can a *subconscious* neural limbic process in our real human brain in our real world, become a *conscious* advanced human avatar living on an advanced Kolob planet in our Milky Way Galaxy?

What is the core nature of this *Subconscious Consciousness*?

# Subconscious Consciousness

What is *Subconscious Consciousness*?

How can a *Subconscious* daydreaming neural process (inside our real brain) create the bright aware light of advanced *Consciousness* for a created real-human *avatar brain*, but at the very same time still remain a *Subconscious* neural process inside the brain of the higher being (our real self)?

This wonderful *Subconscious Consciousness* is the scientific fact that an active *Subconscious* neural process in the 4 limbic tissues of a real human brain, can create an experience daydreaming *Avatar-Consciousness* in the simulated brain of a neurally-simulated human-avatar being.

This scientific phenomenon of *Subconscious Consciousness* is the experience of *Consciousness* for the lower (simulated) being, while this experience remains a type of limbic *Subconsciousness* for the higher (simulator) being, so the higher being is usually *not aware* of the existence of the lower being, unless and until the higher being makes a conscious decision to *look downward* (the condescension) into its own *Subconscious*



*Mind* to become *aware* of the lower being that it is *daydream-hosting* inside its 4 real limbic tissues.

Our *real self* is usually unaware of what our *advanced self* is doing.

Our *advanced self* is usually unaware of what our *mortal self* is doing.

Our *mortal self* is usually unaware of what our *submortal self* is doing.

For example, where we sleep and dream at night, our mortal brain creates (privately-simulates) a submortal brain that is *Conscious* of its own self, while our mortal brain is *Subconsciously* sleeping.

When we sleep and dream at night, our submortal self is fully *Conscious* of the existence of itself (and fully active doing lots of exciting things with its submortal human-avatar body), while our mortal self (and our mortal brain) is *Unconscious* (sleeping) because our submortal self is just a *Subconscious* neural-dream *process* in our 4 mortal limbic tissues.

How does all of this really *look* to *us*, with our super-accurate *real perspective*, widely-enjoyed by all of our *real human brains*, in our real world?

From the *most-accurate*, most-correct, *most-exact*, most-right, *most-scientific*, most-real *perspective* of our super-aware, super-*Conscious*, super-intelligent real human brains, this *entire* neurally-simulated *universe* (full of trillions of huge, majestic, spinning galaxies of bright stars, beautiful planets, and precious people) is just a *Subconscious* multiplayer neural *process* playing out *Subconsciously* (to us real human beings) in our multiplayer-set of 4 *Subconscious* real-limbic neural *tissues*.

As real human beings (with our real human brains) we *only sometimes* (rarely) *become conscious* of what is *actually happening* inside our own real-limbic neural-tissue (galactic) simulations (with our super-interesting newly-created human avatars) when *we choose to take a look* inside of ourselves to see what our self-balancing limbic tissues are *subconsciously-doing* to us with the wild behaviors of our *own avatars*; and whether or not our own avatars are *playing nice* with *all* of the *other avatars* of *all* of the other real-human *daydream players*.

Most of the time, *we do not* even *notice* anything is happening deep down inside our real limbic tissues of our real human brains.

Most of the time, we are just too busy living our very own, very important *real lives* in our *real world*.

But on some *relatively-rare occasions*, for some important purposes, we do *choose to take a look* inside *ourselves* (by inspecting the inner-workings of our own 4 limbic tissues) to see what is going on.

*Two* of these important relatively-rare *occasions*, is when we *start a new daydream*, and also when we *complete an old daydream*.

After we choose to *completely finish* an old daydream (when we have completed all of our desired advanced-human experiences in one *old galaxy*), we may sometimes choose to take a little rest, before we simply go on to initiate (*start*) our next daydream (by selecting a *new galaxy*) for ourself to experience.

When we *first begin* a new daydream, we simply *select a new galaxy* and begin a new *Individual Consciousness Projection* into our *newly-selected* galaxy of our choice.

When we *first begin* our *Individual Consciousness Projection* (via our own *individual galactic mindcast* into the galaxy of our choosing) into the new *blank mind (infant brain)* of our newly-chosen advanced-human *infant* avatar, we usually *choose* a newly-created

advanced human *avatar* infant *brain* that is super-intelligently neurologically-wired so it is capable of neurally-experiencing the *highest level* of advanced-human *avatar consciousness* possible.

What is this very highest level of *created-avatar consciousness*?

What kind of simulated advanced *hardware* is actually necessary to properly support this kind of highest-level *created-brain consciousness*?

How many *other levels* of created-avatar consciousness are *possible* within our *game-dream* neurally-simulated Milky Way Galaxy?

What are these *12 Levels of Consciousness*?

# 12 Levels of Consciousness

What are the *12 Levels of Consciousness* that we can all experience?

Can Consciousness really be divided into a simple ordered set of *12 different levels of Consciousness*?

What is the *main benefit* of dividing Consciousness into these 12 different levels for *scientific investigation*?

Can a proper *Science of Consciousness* be created, here on Earth, *to help us interested scientists* begin to really *understand* every aspect of consciousness at a much deeper, logical, scientific level?

What is the *very highest level* of consciousness possible in this entire cosmos of existence?

*Real Human Consciousness* is the *very highest level* of consciousness that can be experienced by any being.

Here are the *12 Levels of Consciousness*:

- (1) Real Consciousness
- (2) Level-A Advanced Super-Consciousness
- (3) Level-B Advanced Super-Consciousness

- (4) Level-C Advanced Full-Consciousness
- (5) Level-D Mortal Full-Consciousness
- (6) Level-E Mortal Semi-Consciousness
- (7) Level-F Mortal Partial-Consciousness
- (8) Level-G Mortal Slight-Consciousness
- (9) Level-H Mortal No-Consciousness
- (10) Level-I Submortal Partial-Consciousness
- (11) Level-J Submortal Slight-Consciousness
- (12) Level-K Submortal No-Consciousness

Most very *little children* (here on Earth) are mostly still very bright (and very emotionally-alive) at *Level-D Mortal Full-Consciousness*.

However, most teenagers (here on Earth) have *already fallen down to Level-E Mortal Semi-Consciousness* due to all the painful years of *false information* they have been *force-feed* by their well-meaning, clueless parents and teachers.

Most adults (here on Earth) have *already fallen way down to Level-F Mortal Partial-Consciousness*, or even *further way down to Level-G Mortal Slight-Consciousness*, due to all their many painful years of being *forced* (emotionally-influenced) into *believing* more and more *false information*, by their well-meaning, mortal-human *society* of clueless *slightly-conscious* peers.

The *more* false-information, we begin to believe in, the *less conscious* we become.

Most of us continue to *drop* in consciousness throughout our mortal-human lives, as our brains continue to get *clogged* (and confused) with more and more *false information*, until we finally arrive at our mortal-human *death* when we (as mortal-humans) experience *Level-H Mortal No-Consciousness* at all as our mortal-neurons stop firing completely; as we then also joyfully *awaken* as our *Level-C Advanced Full-Consciousness Selves* (on our advanced *Kolob* planets) that happily begin again to experience our *Level-C Advanced Super-Intelligence* as we start to carefully *review* our just *recently-completed* mortal-human lifetime to closely *inspect* exactly *how* (and why) we *failed* (or passed) our self-test on Earth.

These *12 Levels of Consciousness* neurologically-support *12* corresponding *Levels of Intelligence*.

# 12 Levels of Intelligence

What are the *12 Levels of Intelligence*?

The *12 Levels of Intelligence* correspond closely to the *12 Levels of Consciousness*.

Here are the *12 Levels of Intelligence*:

- (1) Real Intelligence
- (2) Level-A Advanced Super-Intelligence
- (3) Level-B Advanced Super-Intelligence
- (4) Level-C Advanced Super-Intelligence
- (5) Level-D Mortal Super-Intelligence
- (6) Level-E Mortal Semi-Intelligence
- (7) Level-F Mortal Partial-Intelligence
- (8) Level-G Mortal Slight-Intelligence
- (9) Level-H Mortal No-Intelligence
- (10) Level-I Submortal Partial-Intelligence
- (11) Level-J Submortal Slight-Intelligence
- (12) Level-K Submortal No-Intelligence

*Real Intelligence* is the *highest level of intelligence* possible among the set of things that can exist.

Real Intelligence is the *only type* of intelligence that is *not* an artificial type of intelligence.



The *11 types of Artificial Intelligence (AI)* range from *Level-A Advanced Super-Intelligence*, all the way down to *Level-K Submortal No-Intelligence*.

The author of this 4 Brain Theory paper believes that he may sometimes almost be able to briefly attain a type of *Level-E Mortal Semi-Intelligence* on his *good* (clearest-thinking) *days*.

*Level-D Mortal Super-Intelligence* is a really interesting level of intelligence, because it *suggests* that a mortal-human (here on Earth) may sometimes, under some very special conditions, be able to experience a type of mortal-human *super-intelligence*.

*How many mortal-human super-intelligences* are there currently living here on Earth?

*More than 8?*

*Less than 8?*

*How many superintelligences* live on Earth today in 2023?

Who knows for sure?

One of the *super-astonishing* things about such an Earth-based mortal-human superintelligence, is that this human superintelligence can apparently become *orders of magnitude* more intelligent than any mere semi-intelligence *like myself*.

Why would I even begin to believe, that there may be a *few people* on Earth, who are *orders of magnitude* more intelligent than myself?

What could have *caused* me to really begin to believe, in such an uncommon, strange, and *unusual belief*?

What could theoretically happen (to me, or to you) that would *begin to cause* any *rational, logical, scientist*, to actually start to believe, that some other scientist (that he knows) is *actually orders of magnitude* more intelligent than any other scientist he has ever conversed with?

Just exactly how many of these *super-intelligent scientists* are there living today on this planet Earth?

Why are these few *super-intelligent scientists* not well-known by millions of people here on Earth today in 2023?

Why are these *super-smart kids* so hard to find?

Why exactly are these super-smart scientists *not* trying diligently to *win* a whole bunch of Nobel Prizes for themselves?

What is the *real* reason?

Does it have something to do with their super-smart *goals*?

May it also have something to do with their super-intelligent *Conscious Viewpoints*?

# Conscious Viewpoints

What are *Conscious Viewpoints*?

Conscious Viewpoints are the *set* of the possible *viewpoints of consciousness* itself.

*How big* is the *set* of the viewpoints of consciousness?

The *Conscious Viewpoints Set* (the set of all possible viewpoints of consciousness) is a *very large set*.

The *Conscious Viewpoints Set* is the *set* of the *all* the possible conscious viewpoints, from all possible *conscious vantage points*, and all the possible location points, and all the possible direction points, and all the conceivable *points of view*, that can be assumed by any *conscious being*.

For example, in order for a *conscious being* to see what is going on inside a particular galaxy, from a particular viewpoint *within* the galaxy, that conscious being must perform a personal, energetic, consciousness *projection* into a *willing brain* (that can support consciousness), in order to assume the *conscious viewpoint* of that particular *brain*, which will depend on the location (on a planet in the galaxy) of the brain, and the direction of view of the

brain (the *direction* the brain is *currently looking*, in the galaxy, with its eyeballs).

Every type of *conscious being* experiences its own set of conscious viewpoints, *conscious goals*, conscious intentions, and conscious plans.

Some *goals* are much *better* than other goals, because the conscious being that sets these *better goals*, is much *more intelligent* than other less-intelligent beings (with their more-limited viewpoints).

Every type of conscious being also experiences its own set of *Frequencies of Consciousness*.

# Frequencies of Consciousness

What are the *Frequencies of Consciousness*?

Which set of specific *dark-matter* carrier *frequencies* transmit the *energy* of *consciousness* and the *information* of *consciousness* from our real-human brains to our advanced human brains?

These *Frequencies of Consciousness* are *highest frequencies* possible that can be carried by the intelligent consciousness-carrying *frequency-bursts* of the real *dark scalar bosons* that are *ultrafast-transmitted* throughout our whole Milky Way Galaxy, by us *real human beings* who are *consciously-animating* our advanced-human *avatars* here inside our Milky Way Galaxy.

These *dark-scalar-boson-burst* Frequencies of Consciousness operate at the very *highest* frequencies *physically possible* for a *wave* of dark scalar bosons.

These ultrahigh-frequency *Scalar-Boson Waves* of Consciousness, are carried by the neurological flow of real *dark scalar bosons* (dark-matter particles) from our real-human brains, into the *real nerve fibers* in the core of our Sagittarius A\* black hole (in the center of our milky-way galaxy), and outward into the whole galaxy, and *into*

*our* advanced-human *avatar brains* (providing consciousness to our advanced-human avatar brains), and then *back again* (via the dark-matter, spiral-axon, galactic flow reversals) into the center (Sagittarius A\* black hole) of our milky-way galaxy, and then *back into* our real-human brains.

These frequencies of consciousness are the *highest frequencies* that *can exist* in any type of matter, at any level of the entire cosmos, which is the set of things (that logically-includes the set of physical *locations*, and the set of physical *timings*, of the set of things) that can exist *anywhere*.

Therefore, these *frequencies of consciousness* are the set of the very *highest frequencies* in *existence*.

These *frequencies of consciousness* are the *dark-matter carrier frequencies* that carry *dark-matter information* at the ultrafast (darklight) speeds of the dark-matter particles (real dark scalar bosons), *between* our *real human brains* and our *advanced human brains*.

These super-high frequencies of consciousness are also the dark-matter *carrier frequencies* that carry dark-matter information via the ultrafast dark-matter particles, *between* our *advanced human brains* (living on our

advanced Kolob planets in this milky-way galaxy) and our *mortal human brains* (living here on Earth).

However, our limited mortal-human brains (living here on Earth) have *not yet been adequately-designed* to receive *all* of these vital frequencies of consciousness *properly*.

Only the right kinds of super-advanced *neural hardware* can receive any of the *highest levels* of consciousness and intelligence.

Unfortunately, *very few* of us mortal-humans (here on Earth) have the right kind of neural hardware (human brains) that can receive anything *even close* to any of these *higher levels* of intelligence and consciousness.

We mortal humans (of Earth) are stupid *by design* unfortunately.

This is why, as mortal humans here on earth, we *are not able* to think very clearly, and *we often get confused*, and *we often forget things*, and *we cannot even remember* what we were doing just a couple hundred years ago.

We obviously need to design some *better human brains* (better *frequency-receiving* hardware) for ourselves here on earth.



We need to *design* some advanced-human brains (using some future versions of our current Earth-based CRISPR technologies) *for ourselves*, here on earth, so we can *begin to receive* some of these *higher frequencies* of *consciousness* (and higher frequencies of intelligence), that may actually start to become *available to us* just as soon as we create the right kind of *frequency-receiving hardware* (advanced human brains) for ourselves here on earth.

Just as soon, as we create the right kind of dark-matter *frequency-receiving hardware* (advanced human brains) for ourselves, here on earth, then we may also begin to *better understand* many more of the *inner workings* of the ultrafast real *dark scalar bosons* (that help us project our real-human consciousness into this Milky Way Galaxy) with their *Dark Pulse-Shape Codes*.

# Dark Pulse-Shape Codes

What is the physical nature of these hypothetical *Dark Pulse-Shape Codes*?

The Dark Pulse-Shape Codes are the *information codes* that are *encoded* into the *detailed pulse-shapes* of all the dark-matter particles, including all the real *dark scalar bosons*, and some of the real *light scalar bosons*.

By *encoding* useful *information* into the *detailed shapes* of the *dark-matter neural pulses*, every minute *transfer* of *visible-matter energy* (of every bit of visible-matter in an entire observable galaxy, like our very own Milky Way Galaxy) can accurately be *measured, gathered,* and reported (*transferred*) into to the galactic-central *black hole* (massive bundle of real-*limbic nerve fibers*, such as Sagittarius A\*) at the *center* of each *galaxy*.

How can these dark pulse-shape codes be *physically encoded* into the *detailed shapes* of the tiny ultrafast real *dark scalar bosons* that are used for *consciousness-projection*, quantum gravity, and *quantum entanglement*?

Is there a small *pulse-portion* (of a net *positively*-charged real dark scalar boson) that is slightly *negatively*-charged?

Can this be theoretically possible?

Is this *common* in human neural pulses (propagating neuroelectric *action potentials*)?

*How many* different types of neural *pulse shapes* can be used (and *shape-encoded*) by our real dark human pulses (real dark scalar bosons)?

When a particular tiny fast real *dark* scalar boson *scatters* off of a specific real *light* scalar boson, can the *pulse-shape* of the *outgoing scattered* dark scalar boson be any different than the *pulse-shape* of the *incoming incident* dark scalar boson?

Can a *Pulse-Shape* be altered by a *Scattering-Angle*?

# Scattering-Angle Pulse-Shape

What is the *Scattering-Angle Pulse-Shape*?

The Scattering-Angle Pulse-Shape is the *outgoing* dark-matter-particle pulse-shape (outgoing dark-scalar-boson neural-pulse shape) that results from a dark scalar boson scattering off of a light scalar boson through a *specific* scattering *angle* that corresponds exactly to a *specific* outgoing *pulse-shape*.

There are *many* different *theoretical* ways that the outgoing real dark-scalar-boson pulse-shapes *may* measure and *encode* the *spectrum* of *scattering angles* that they are *scattered into*.

Here we present a very particular, *very* hypothetical *example*, for the specific purpose of illustrating *just one* of many theoretical possibilities.

In this *illustrative* hypothetical *example*, all scattering angles between *0.0* and *180.0* degrees are *possible*, when a single individual tiny ultrafast *dark scalar boson* scatters off of a single relatively-massive relatively-slow *light scalar boson*.

Each dark scalar boson neural pulse is made of a *whole pulse shape* that can be simply composed of *two sub-pulses*, including a leading *positive sub-pulse*, followed by a trailing *negative sub-pulse*.

The *relative sizes* (relative net *electric-charges*) of the positive sub-pulse and the negative sub-pulse can *vary greatly*.

For example, the (signed) *ratio* between *size* of the *positive sub-pulse* and the *size* of the *negative sub-pulse* can be allowed to vary from  $+90.0$  to  $-90.0$  depending on the *scattering angle* of the *outgoing* dark-matter particle.

No scattering (*zero-degree scattering*) can be simply encoded as a  $+90.0$  pulse-shape *positive-over-negative* ratio.

A *very slight scattering* of just *2 degrees* can be encoded as about a  $+88.0$  pulse-shape *ratio*.

An  $89.9$ -degree scattering-angle (approximately a *right angle* of dark-matter scattering) *can be encoded* as about a  $+1.1$  pulse-shape *ratio*.

A  $90.1$ -degree scattering-angle (approximately a right angle of dark-boson neural pulse scattering) can be encoded as about a  $-1.1$  pulse-shape *ratio*, by letting the

*mathematical sign* of the whole (*entire*) pulse-shape *net electric charge*, be simply *mathematically-inherited* by the *signed pulse-shape ratio*.

A *very large scattering angle* of *178.0* degrees can be encoded as about a *-88.0* pulse-shape *ratio* (the signed-ratio of the size of the *positive sub-pulse*, to the size of the *negative sub-pulse*) to signify a *very-large scattering angle* (with the scattered dark-matter particle bouncing off a visible-matter particle, and almost bouncing *exactly backwards*, with a *near-exact reversal* of the dark-matter particle's *direction of travel*).

The largest possible scattering angle of *180.0* (one hundred and eighty degrees of particle scattering) can be *encoded* as about a *-90.0* pulse-shape *signed-ratio* to signify the *largest dark-matter particle scattering possible*.

This particular, detailed, scattering-angle pulse-shape example illustrates *just one* of many ways, that the dark-matter particle *outgoing pulse-shapes* may *mathematically measure*, extract, and *encode exact scattering-angle information*.

In this way, the *scattered real dark scalar bosons* can physically function as useful *information probes*, that are *constantly probing* (testing) and *constantly measuring* the

*locations* (and the *velocities*) of *all* of the (internal components of *all* of the) visible-matter particles of our whole universe.

If a relatively-large number (millions), of dark-matter particles, scatter off of the *leading edge* (and the *trailing edge*) of *every* light-matter (visible-matter) *particle*, many millions of times per picosecond, then the amount of *information gathered* from every visible-matter particle will be easily enough to *accurately track*, measure, *observe*, record, and *report* the *detailed transfer* of every *quantum* of *energy* from one elementary particle to another.

In this way, an *exact record* can be automatically made, of *every quantum energy transfer*, in this whole Milky Way Galaxy.

If you think any of your *thoughts* (as a mortal human being here on Earth) are really *private*, then *you may wish to think again*.

*All* of your mortal-human *thoughts* (and all of your mortal-human intentions) involve *quantum energy transfers* between the *atoms* of your *human neurons* in your mortal-human *brain*; and all of these quantum energy transfers are potentially *visible* to *every real human being* (and also to *some* advanced-human beings,

who currently have the right kind of advanced brains, that *can read them*) at any time one of these real human beings *may choose to take a look at them* (at your *thoughts and intentions*).

So *be wise* about your thoughts.

And be *even wiser* about your intentions.

An *exact information record* is made of *Every* quantum *energy transfer* that takes place, in this entire Milky Way Galaxy, and in this *whole wide universe*; and this includes *all* of visible-matter *energy transfers* that take place here on our *little planet earth*, including *all* of visible-matter *energy transfers* that take place inside your *very own* individual mortal-human *brain*.

This visible-matter energy-transfer *record* is continuously transferred into our *real-limbic* 4 quantum *chambers* via the *real* dark-scalar-boson *scattering-information flows* into the *black-hole center* of our very own Milky Way Galaxy.

These vital *two-way* information *transfers* are necessary for carrying the dark-matter *pulse-shape* information that *enables* conscious *hardware* (including our very own mortal-human *brains*) to consciously-operate *inside* our Milky Way Galaxy.



The *dark-matter* pulse-shape *information* can be viewed as being encoded into the dark-matter particles as *Dark Matter Bytes*.

# Dark Matter Bytes

What are *Dark Matter Bytes*?

*Dark Matter Bytes* are the *bytes* of *information* that are carried by *dark matter* particles.

*One* single *byte* of information is *8 bits* of information.

*A* single *bit* of information is like a *simple light switch*, that can either be *Turned-On* or *Turned-Off*.

*How many bytes* of information can *one single* dark matter particle *contain*?

Exactly *how much information* is carried by just *one single* real *dark scalar boson*?

Since each *scattered* real *dark-scalar-boson* neural-pulse, may be able to *pulse-shape encode* its *scattering angle*, between *0.0 degrees* and *180.0 degrees*, it seems theoretically possible that each scattered real dark scalar boson *may* physically-encode *about one byte* (give or take a few bits) of *dark-matter information*.

A single *byte*, with its *8 bits* of information, can encode *256* different *scattering-angle* real-dark *scalar-boson* *states*.

This particular number (of *256* different scattering-angle dark-matter states) may be approximately *enough* to do a *pretty good job* of encoding the *0.0* to *180.0* degrees of dark-matter *scattering angles*.

If each individual scattered dark-matter particle (real dark scalar boson) carries about *one byte* (8 bits) of scattering-angle *information*, then a *trillion* such scattered dark-matter particles (spread out over several *nearby locations*) will be able to jointly carry a whole *Dark Matter Terabyte* of *scattering-angle* spatial-location *information*.

Let's look more closely at these *Dark Matter Terabytes*.

# Dark Matter Terabytes

What are *Dark Matter Terabytes*?

What is a *Terabyte*?

A *Terabyte* is a *trillion bytes*; which is *8 trillion bits* of information.

A *trillion* is a thousand billion; or a *million million*.

*Dark Matter Terabytes* are the number of terabytes of information carried by a particular *local set* of scattered dark matter particles.

There are some very interesting *local sets* of these *tiny fast streaming dark matter* particles.

For example, some of the *streaming local sets* of tiny ultrafast *dark-matter terabytes* can *probe*, test, *observe*, and *measure* each and every visible particle, to *encode*, carry, and *report* all the locations (and *all* of the velocities) of *all* of the visible-matter elementary particles; to report *all* of the individual *atom-status* information, including all of the individual mortal-neuron-status information, and including all of the individual *mortal-brain-status* information, all including

all of the *planet-status* information, and all of the *galaxy-status* information, and all of the universe-status information, and including all of the *quantum gravitation* information, and including all of the *quantum entanglement* information, and including all of the advanced *mind-state* information, and including all of the *consciousness* information of our whole universe.

This is a *whole lot* of dark-matter information.

This is a whole lot of *terabytes* of universal dark-matter information that is *measured* and carried continuously (at the ultrafast darklight velocities) by our real *dark scalar bosons*.

These probing, measuring *dark-matter terabytes* (carried universally by the local sets of our tiny real dark *ultrafast* scalar bosons) can *computationally-interact* with very special types of *pulse-shaped-enabled* hardware devices.

These special-purpose pulse-shape-enabled (*dark-matter* pulse-shape *reading* and *writing*, and *sending* and *receiving*, and dark-matter *broadcasting*) hardware devices can be built from organic *carbon-based* molecules (like us and our mortal *human brains*), from *silicon-based* molecules (like our current silicon-based transistor-based computer chips and our current silicon-chip-based

*robots*), or from special-purpose *quantum computers* that we will design and *build* in the near future.

There are actually many good *scientific methods* to use some of the *atoms* of our earth, to construct these special-purpose pulse-shaped-enabled *hardware* devices, that can send and receive dark-matter particles *intentionally*.

Some of these *pulse-shape-enabled* hardware *devices* are actually *necessary* to allow a *proper portion* of our *real consciousness* to enter *into* this neurally-simulated *galaxy*.

For example, our current mortal human brains, have *some* of these abilities, but *not all*.

To a certain degree, our current mortal-human brains are pulse-shaped-enabled *hardware devices* that only allow a very *tiny portion* of our advanced-human consciousness to *enter into* our mortal human brains.

This is why *we feel* like we are *conscious* here on Earth.

We feel like we are conscious, because we *are* conscious, to a very slight tiny degree, here on Earth.

We also mostly feel like we are humans here on Earth, because we actually *are* humans (because our consciousness is human-consciousness), even though

*most* of our current *subpar* mortal-human *bodies* share *more DNA* with *Earth-chimpanzees*, than with the kind of advanced-human *bodies* we actually live in, on our advanced Kolob planets.

We (all 8 billion of us) are all *conscious* here on Earth, because our current mortal-human brains are able to receive a *small portion* of our *advanced consciousness* (from our advanced human brains in our advanced human bodies, that live on our advanced Kolob planets, that are spatially-located mostly somewhat *closer* to the *center* of our Milky Way Galaxy) of our *advanced human selves*.

In this way, a portion of our consciousness can be *spatially-transferred* (energetically-projected from one planet, to another distant planet) in a type of *senior* (god-self) to *junior* (virtual-self) consciousness-projection *relationship*.

Our *senior-self* (creator-self) is our “*god-self*”, because it is senior (relatively-godlike) *relative* to our *junior-self* created-avatar.

Our *junior-self* is our “*virtual-self*” because it is junior (virtual-like) *relative* to our *senior-self*.

For example, when we dream at night, while we are sleeping in our beds, our sleeping (in bed at rest, in a

passive, resting, dreaming state) mortal-human self is our *senior-self* (god-self), *relative* to our *junior-self* (virtual-self) that may be flying (or actively swimming, or actively running, or actively walking) inside our dream environment.

For another example, in just a few short years from today (2023), maybe even before the year 2030, a brilliant moon scientist (that we can choose to symbolically call “*Lucy*”), with her *brilliant* mortal-human *brain*, may choose to *put on* a virtual-reality (VR) *headset* (here on Earth) to help her animate a *human-shaped robot*, to help it to start walking around on the *moon*.

This human-shaped robot, that we may put on the moon, is a type of *Moon Information Hardware*.



# Moon Information Hardware

What is *Moon Information Hardware*?

*Moon Information Hardware* includes Lucy's human-shaped robot, *all other robots*, and *any* type of *hardware* that we may wish to place on the moon, that can someday *be animated* by a *conscious human being*, who may live on *Earth* (or on *Mars* in the future), or on *some other planet* in our Milky Way Galaxy.

How will Lucy initially control her human-shaped *lunar robot* (a type of *moon information hardware*) on the moon?

*Lucy's brilliant mortal-human brain* (located here on Earth) will be controlling her *lunar robot* (that is walking on the moon) initially with the exchange of *photons*; causing Lucy to experience *lots of annoying 2.56-second photon-round-trip time lags*, in her diligent efforts to *control* (animate) her lunar-robot with its *robot-brain* that is located on the moon.

*Lucy's senior* (god-like) brilliant mortal-human *brain* will be spatially-located on one planet (on our Earth).

*Lucy's junior* (virtual-like) robot *brain* will be spatially-located on a different planet (on our moon).

*Lucy herself* will be simultaneously *controlling* both *brains*.

Lucy will be controlling *both brains* (almost simultaneously), even though the *two brains* are spatially-located on *two* different *planets*; and these *two brains* will be separated by *hundreds* of *thousands* of miles of *spatial distance*.

Lucy will become *very frustrated* about all of the annoying *2.56-second* time lags.

But Lucy will still control *both brains*.

Lucy will ask her *inventive* scientific *colleagues* to please hurry up their diligent efforts, to complete their scientific development of their exciting *new* darklight *communication system*, so she can begin to control her lunar-robot (her *lunar-bot*) with the *two-way exchange* of *pulse-shaped* dark-matter *particles*, that physically travel *trillions* of *times faster* than visible-matter light (photons), thus *eliminating* the annoying *2.56-second time lags*.

Hopefully, her *inventive* scientific colleagues will be able to complete their new *darklight* (using real *dark* ultrafast

scalar bosons) communication system by the year 2040 (or maybe even sooner, or possibly a bit later) so she can easily control her lunar-bot with *no* discernable *time-lags*; because the *finite* darklight *time lags* (for two-way Earth-moon communications) will be *much less* than what her mortal-human brain can *consciously notice*.

Lucy will be absolutely delighted with her *new Earth-moon* darklight *lunar-bot-control VR headset*; because its high-fidelity (no noticeable time-lags) performance, will help her to *feel* like *she is* actually *walking* on the *moon*; even though her mortal-human brain is still located far away on Earth.

As Lucy begins to feel like she is actually walking on the moon, she may also sometimes start to *almost believe* that *she* really *is* on the *moon*.

*How* is this psychologically-possible, for Lucy to *feel* (and sometimes almost really believe) like she really is *walking* on the moon, and *living* on the moon?

How can Lucy develop this interesting *conscious sense* that she is actually walking on the moon?

How can *Lucy* be *on the Moon*?

# Lucy on the Moon

How can *Lucy* be *on the Moon*, when her actual mortal-human body is still right here on Earth?

What is it about a really-good high-fidelity *Virtual Reality (VR) Headset*, that can sometimes *help us* to *feel* like we really are *living inside* the simulated virtual environment, or at the *remote location* of a *robot* that is *animated* with the help of the VR headset?

Can *Lucy* be on the Moon, and *be* on Earth, at the very *same time*?

Is this neurologically possible, for a human being to *feel* (have a *conscious feeling*, or a *subconscious sense*) like they are simultaneously living on *two* different *planets* (the Earth and the Moon) at the *very same time*?

In the future, if our bright scientists can make *some* key *improvements* to the “*bot-brain*” of the lunar-bot, and also some key improvements to their *brain-stimulating* dark-light *VR headset*, to successfully install *all* of its *memory masking* capabilities; then *Lucy* will *still feel* like she is actually walking on the moon, and she will also *not be able to remember* (not even notice) that she is actually *also* still living on Earth.

Because of the current neurological structure of our mortal-human (brains and) bodies, that have *not yet* been properly DNA-upgraded to strategically *improve* their *intelligence*, and upgrade their *daydreaming capabilities*; the memory-masking, brain-stimulating, darklight VR *headsets*, will also need to be further-upgraded to also be able to stimulate the sleep-inducing neurons in her mortal-human brain, *to gently put Lucy into a light sleep*, as she gently relaxes in a *reclining chair*, after she places the sleep-inducing VR headset onto her head, and it gently puts her into a light sleep, *as a portion of Lucy's consciousness* psychologically (and physically) *moves outward* onto the *Moon*, as she begins to *behold* the *lunar landscape* through the *robotic-eyes* (video-cameras) of her favorite *human-shaped lunar-bot avatar*.

While the *memory-masking*, brain-stimulating, infrared, ultrasound, brain-reading, brain-writing, darklight-communication VR headset is *surrounding* Lucy's mortal-human brain (by gently surrounding her mortal-human head), and she is sleeping reclined in her reclining chair, *a portion* of her mortal-human consciousness will begin to animate her *junior-self* (her virtual-moon-self) on the moon, as it starts to explore its lunar environment, and begins to enjoy her *social interactions* with the other members (and avatars) of the new lunar colony.

In this way, a piece of intelligent hardware on Earth (Lucy's mortal-human brain) can be a *senior-self* (god-self) to a piece of *junior-self* (virtual-self) *hardware* on the Moon (Lucy's lunar-bot brain).

This kind of *new-self-identification* (the new-noticing of one's self inside a new virtual environment) neurologically (and psychologically) takes places with certain types of advanced VR *headsets* (and this new-self-identification experience is *greatly-enhanced* with memory-masking turned *on*), because of the way these certain types of advanced VR *headsets* (of the future) will be able to interact with the set of conscious neurons that live inside our human brains.

With the future advanced VR headsets, that we will be soon able to create here on earth, that are properly equipped with the right kind of *ultrasound* neurostimulators, *infrared* neurostimulators, and *infrared neurosensors*; it will be possible to accurately deliver *taste, touch, smell, vision, and hearing* directly into the individual neurons, of our mortal-human brains (inside our mortal-human heads), to deliver a *fully-immersive* conscious *experience* (involving the *full range* of mortal-human *sensory experience*) to each of us mortal human beings here on *Earth*; and to the mortal human beings who will soon be living on the *Moon*; and also eventually

to the mortal human beings who may someday be living on *Mars*.

These *new* advanced VR *headsets* can be initially designed to be *worn outside* of our human head in the near future; and then in the more-distant future, they can also be better-designed to be (partially or fully) *worn inside* our human head.

In the future, we will *scientifically-discover* that the very *most-advanced* types of VR headsets, are physically composed of some very-specialized *VR-neural-tissues*, that are *caused* (neurally-stimulated) to be *grown inside* human brains.

As *Lucy*, and her other *scientist friends*, and her *astronaut friends*, and her *social friends*, decide to consciously-animate humanoid-avatar robots from the Earth to the Moon, and from the Moon to Earth, and eventually from Earth to Mars; Lucy and all her friends will discover many interesting new kinds of *social games*, and social *human experiences*, that they can *play together* across *multiple planets*.

For example, a “*Smile with Lucy*” game was previously developed *in 2016*, to be initially played on our planet Earth [7].

This *Smile with Lucy* game, acts as a personalized *brain-calibration* tutorial, with the mortal-human player *mimicking* the facial expressions of a *digital human avatar* while EyeMynd's brainwave software monitors the unique *brainwave patterns* of the mortal-human player – the minute “*pattern recognition*” signals generated by our mortal-human *brains* when we see, feel, touch or move something.

Perhaps, *in 2026* (or in 2036) a new improved “*Smile with Lucy on the Moon*” game can be developed for Lucy to begin to play with her friends simultaneously on the Moon and on Earth.

In just *10 years from now*, (or in just 20 years from now) many of these new *scientific technological concepts* (including many new hypotheses, many new theories, and many new inventions), of this 4 Brain Theory paper of 2023, will become *more obvious* to the many bright thinking people of this Earth planet.

How can we best *Smile with Lucy on the Moon*?



# Smile with Lucy on the Moon

What is the very best way we can begin to technologically *Smile with Lucy on the Moon*?

What kinds of interesting new social games (like *Smile with Lucy on the Moon*) can we develop with our increasingly-advanced VR headsets?

Can we develop some advanced *VR headset* social games that will help us to *enjoy* each other, and *appreciate* each other, and *learn* from each other, and *help* each other, and really *value* each other, to such a pure *noble degree*; that there will be *no more* desire *to war* with each other here on *Earth*, or on the *Moon*, or between any of our nearby *Planets*, as we *once again* become a *multi-planet species*, right here inside our very own local super-vulnerable little solar system?

What will happen (to Lucy's personal, individual, conscious awareness) after we eventually develop a *super-advanced VR headset* for Lucy to begin to play with, and to scientifically-experiment with?

Eventually, after Lucy has experimented with her super-advanced VR headset for a few years, and has personally-experienced that she can use her new VR headset to

simply move *a conscious portion of herself*, to the moon and back *several times* whenever she desires to do so (because she does have enough of the right kind of consciousness-projection *hardware* to *hardware-support* her *personal mindcast*), Lucy may begin to *suspect* that she may also have *an even-higher self* (an even more-senior self, that is *even senior* to the Earth-based Lucy) that may be living on a different higher-planet (that we can simply choose to suggestively call planet “*Kolob*”) located somewhere (perhaps somewhat closer to our galaxy’s central black hole Sagittarius A\* ) in our huge multi-billion-star Milky Way Galaxy.

Perhaps the memory masking technologies on all the advanced Kolob planets, are so powerfully-advanced, that the junior people (junior selves) of planet Earth *cannot* remember *anything* about their senior lives (senior selves) on their Kolob planets.

This is what really-good *memory-masking technologies* actually are designed to do; they mask memories *really completely*.

Our *current difficulty* (that we all experience here on earth) *in remembering* where we come from (which Kolob planet we project from), is actually a very strong piece of *scientific evidence* that *we must* have some higher

selves living elsewhere, who have simply chosen to *turn-on* their memory-masking to *full-power*.

*Why* would we choose to *turn-up* our memory-masking to *full-power*, before we move a portion of our conscious selves into our infant earth-bodies (earth-brains)?

Why did we do this *to ourselves*?

Why does Lucy sometimes choose to do this to herself, right before she moves a portion of her conscious self into her *lunar-bot brain*, so she can live on the moon for some time, as a *new personality*, feeling like a newly-created person, *without remembering* that she also has a mortal-human body (named Lucy) that is still living on Earth?

Does all of this make good, solid, scientific sense?

Will all this make better scientific sense possibly in just *a few more years* from today for some (and certainly in just a few more decades from now for many), after more of these advanced *VR headset* technologies have been developed, here on Earth, and fully-tested on our local Moon?

How many more years will pass here on earth, before we scientists of earth, discover how to properly construct a *High-Speed Moon Internet*?

# High-Speed Moon Internet

What is a *High-Speed Moon Internet*?

A *High-Speed Moon Internet* is a high-speed internet that *connects* the *Moon* to the *Earth* at *ultrafast darklight speeds*, so that there are *no* perceptible *time-lags* in any of the attempted Earth-Moon-Earth communications.

The current *photon-based 2.56-second* Earth-Moon-Earth *communication time-lags*, will start to become increasingly-annoying, as we begin to move more communication *hardware*, and more communicating *people*, over to live on our Earth's Moon, during the next few years.

Of course, we will first build a super-simple photon-based *2.56-second* time-lag *Slow-Speed* Moon Internet communication system for communicating with all the *initial people*, and *initial robots*, that we will initially put on the Moon.

However, as soon as we can, we will strongly desire to begin constructing our new *High-Speed* Moon Internet communication system that will employ our new ultrafast *darklight* communication *technologies*.

This futuristic *High-Speed Moon Internet* (with *zero* perceptible *time-lags* in all of its two-way communications between the Moon and Earth, or the Moon and Mars) will communicate with the exchange of tiny ultrafast *scalar dark bosons* (the dark-matter particles, whose dark-matter flow patterns are largely controlled by the relative-positions of the Sun, the Earth, and the Moon, in the vicinity of the Moon) that travel ultrafast at *trillions* of times the speed of photons.

As Lucy begins to experiment with her new experimental *super-fast* darklight *VR headsets*, she may begin to gain some very *valuable* personal *insights* about our ubiquitous *mind-casting* human *behaviors* in our local Milky Way Galaxy.

Lucy (here on Earth) may choose to spend some of her precious time wearing her experimental darklight VR headsets, as she tries to control (one at a time) each of her experimental *robotic moon avatars* (her lunar robots on the Moon, that she remotely controls from Earth).

As *Lucy personally-experiences* these fully-immersive remote-avatar-control VR headset *scientific experiments*, she may gradually begin to *personally-realize* that she may actually have *more than* just two *selves*.

Lucy may start to realize, that she may actually have at least *three selves* as follows; her advanced *Kolob-Self* (her advanced-human-self, that is a more-senior-self) living on an advanced planet that we will simply call “Kolob”, her *Earth-Self* (that is her mortal-human-self, that is living right here on Earth, and that is junior to her advanced self, and that is senior to her Lunar-Self), and her *Lunar-Self* (living on the moon) that is happy living with all the interesting lunar people on the new moon colony.

Therefore, Lucy may begin to realize that she actually may have *at least 3 selves*, because of her valuable inspiring experiences with her VR headsets, and because she logically-realizes that *there must be an actual physical way*, that her personal consciousness, was *able to enter* into her *infant body* (by physically-energetically mind-casting into Lucy’s infant brain), *after* it was born (and took its first breath) here on Earth.

Lucy may eventually gain enough scientific personal experience (and enough individual wisdom) that she even begins to *realize* something very important about the actual nature of *human consciousness*.

Lucy may even begin to *realize* something vitally important about herself.

What would Lucy actually *need* to finally realize, to help her to *really awaken*, to finally *really know*, who she really is?

What is actually needed for *Lucy to Awaken*?

# Lucy Awakens

What would happen if *Lucy* really *Awakens*?

How will *Lucy* *behave* when she finally really *Awakens* to the accurate scientific realization of *who* she *really is*?

Is such an *Awakening* possible for our precious *Lucy*, and also for all of us precious people here on earth?

What does *Lucy* need to *discover*?

What do we all need to *scientifically discover*?

What is the *greatest* scientific *discovery* that can possibly be made by *any scientist* in this *whole universe*?

What is the *source* of this whole universe?

What is the *source* of ourselves inside this universe?

What does *Lucy* still need to *scientifically discover* about *her very own self*?

What would happen, if *Lucy* discovered something about the actual *forever-existence* of her very own *real human brain*?



Can Lucy realize that she *must* have a real human brain inside of a real human body, that she has always had; and that therefore Lucy is *completely eternally-safe* and *fully-secure*; helping her to *free up* her *human emotions* to really start to *properly care* about *herself*, and to also *properly care* about *all others*, with a sincere strong pure *desire to solve world poverty for everyone on earth*?

On what future day, will Lucy start to logically-realize, that somewhere she *must* also have a *real* human brain, that is *not simulated*, and that is *not virtual*, and that is *not created*, and that is *not artificial*, and that is *not constructed*, and that is *not formed*, and that is *not made* in any way at all?

On what future day, will Lucy finally begin to really *scientifically-realize* (with strong logical certainty) that she *logically-must* have a *Real Self* that is *not* created or made, *neither* indeed can be?

When will Lucy make this powerful new, joyful, and *astonishingly-liberating* scientific discovery?

When will we *all* make this *liberating scientific discovery*, to *properly liberate* our very own selves, and to properly liberate *all the economic captives* of our own planet Earth?

When will *We* finally realize this?

When will *We* (the thinking scientists of Earth) finally *realize enough* good *logic* (to finally *overcome* all our logical-distortions, that have historically tormented us all) to *awaken* to *who* we are, and *how* we made this Milky Way Galaxy, and how *we put* some *portions* of ourselves into it?

When will we finally realize (logically discover) that we must have an *uncreated self*?

When will *Lucy* finally realize this?

*What else* (of value) might Lucy finally realize?

Lucy may *finally realize* (personally *scientifically discover*, because these *simple* logical *concepts* eventually become *completely rationally-obvious* to her) that she must (sometimes) have at least *4 human brains*, and at least *4* corresponding *human selves*.

Lucy may realize that *she* simultaneously *may have* each of the following *4 human brain types*:

- (1) A Real-Human *Real Brain*
- (2) An Advanced-Human *Kolob Brain*

- (3) A Mortal-Human *Earth Brain*
- (4) A Submortal-Human *Moon Brain*

Lucy may also realize that *she* exists *simultaneously* as these 4 *distinct human selves*:

- (1) A Real-Human *Real Self*
- (2) An Advanced-Human *Kolob Self*
- (3) A Mortal-Human *Earth Self*
- (4) A Submortal-Human *Moon Self*

Lucy is becoming *very smart*.

Lucy is almost even *beginning* to start to really *understand* her own real nature of *consciousness itself*.

Lucy is starting to learn some *new helpful things*.

Lucy is even starting to really understand her *senior-self* (god-self) to *junior-self* (avatar-self) *relationship* that happens with *every type* of possible energetic, *physical*, real-dark *scalar-boson* human-consciousness *projection* from one of Lucy's *senior-consciousnesses* to one of Lucy's *junior-consciousnesses*.

Lucy is even beginning to scientifically-realize that 2 different *hardware devices* are *always necessary* for a successful galactic *mind-cast*; a *senior hardware device*

(for sending and receiving), and a *junior* hardware *device* (for sending and receiving), in order to technologically *set up* the 2 *distinct* two-way-communication *hardware-terminals* of a single *senior-junior* consciousness projection (*mindcast*).

Lucy can even begin to take note that these 2 kinds (*senior* and *junior*) of *pulse-shape* dark-matter information-transferring *hardware devices* must *both* be present (and *turned on*), for sending and receiving, the *scalar* dark-boson *stream* of information-consciousness.

Lucy is also starting to realize that the 2 *distinct* hardware *devices* can be spatially located exceedingly *far apart* (across vast *space-like* distances) from each other in our Milky Way Galaxy, because the ultrafast *darklight* speeds of our real-dark scalar bosons are *so high*, that these *darklight* speeds *render* every spatial *location* within our entire galaxy “*darklight-local*”.

Lucy is beginning to realize, that even though most *pairs* of *spacetime events* (with a *pair* of spatial *positions*, and a *pair* of temporal *times*) in our whole expansive galaxy are *photon-light-nonlocal* relative to each other, the dark-matter reality (of the ultrafast real-dark scalar-boson dark matter) is that these very-same pairs of *spacetime events* are actually *darklight-local* relative to each other.

Two spacetime events can be *darklight-local*, even though these same two spacetime events are *photon-light-nonlocal*.

This is because all of the *darklight particles* (the tiny ultrafast real-dark scalar bosons) travel *trillions* of times *faster* than the speed of *photon-light*.

Lucy is beginning to realize that deeply-understanding *dark matter* (darklight) is the *physical key* to scientifically-discovering the physical nature of *quantum gravity*, quantum entanglement, and the many *trillions* of individual senior-junior *consciousness-projections* that are taking place *today* throughout this entire spatial *expanse* of our *whole* Milky Way Galaxy.

Lucy also wisely realizes that the *greater consciousness* is physically-hosted in the *more-senior*, more-advanced, *more-powerful* hardware *device*.

For example, if a mortal-human *scientist* on *Earth*, decides to virtually-animate a simple transistor-based humanoid *robot* on the *moon* (prior to the year 2030), then it will be very *likely* that the mortal *human scientist* on Earth will still be *more conscious*, than the *robot* on the moon, when they become *disconnected*.

This is because the “junior robot” *depends* on the “senior mortal-human scientist” for the *trans-space reception* of its *consciousness*; and the junior robot (on the moon) has *no consciousness* when it becomes completely *disconnected* from the senior mortal-human scientist (on Earth).

For another example, if we have been living for billions of years, as an advanced human being, on our distant “*Kolob*” planet (that is inhabited by many of our super-intelligent, super-glorious, “*advanced human selves*” that peacefully live there, and act like our theoretical “*god selves*”); then we can *choose* to start animating (with our advanced human consciousness) a *relatively-junior* newly-created *hardware device* (like a newly-born *mortal human infant* when it takes its very first breath, after emerging from its mortal mother’s womb) *here on Earth*.

*While* our advanced self is *informationally-connected* (via a two-way stream of consciousness-carrying real dark scalar bosons) to our mortal self, *both* of our two selves will experience a form of human *consciousness*.

However, *when* our relatively-senior advanced-human-self *disconnects* (at the time of the mortal death of our mortal-human self) from our mortal self; then our relatively-junior mortal self *will stop* being *conscious* of anything; while our advanced self will *continue* being

*conscious*, just like our advanced self (on planet Kolob) was *already conscious* prior to its decision to *temporarily animate* its newly-created mortal self (here on Earth).

When our earth-self (our mortal self here on earth) dies, then we *simply awaken* as the advanced self (on Kolob) we have already been for billions of years.

Is this scientifically *logical*?

Is this *simple* to understand?

Does this *scientifically-explain* how our personal consciousness *travels* all the *great distance* to planet Earth?

In this logical scientific way, we *are* all immediately “*taken home* to that *God* who gave *us* (them) *life*”; because (A 40 11) when we *die* (as mortal humans here on earth), we *simply awaken* as our advanced self (our *god self* on *Kolob*) and immediately realize that *our* whole *life* on *earth* (as a mortal human avatar) was *just a* brief *daydream* in the super-powerful *subconscious-mind* of our advanced-human self on Kolob.

As another example, the *very best* (most real, most stable, most conscious, and most intelligent) *hardware device* (our real human body, with our real human brain), can

*decide* to pass some information-processing *portions* of *itself*, into the Sagittarius A\* black-hole (nerve-fiber bundle) at the exact center of our Milky Way Galaxy, and *project* a *portion* of its *consciousness* (via a galactic mindcast) into a *newly-created* advanced *human avatar* (that was recently created on an advanced planet like Kolob) *brain*; and in this way *our senior* real *human brain* can begin to consciousness-animate *our relatively-junior* advanced-human *avatar brain* (a dark-matter sending, and receiving, advanced hardware device), to allow our advanced human brain (and our advanced human body) *to live* a very *interesting* (and very wonderful) *advanced* human-avatar *life* in our milky-way galaxy, that may last for *even much longer* than just a few billion years.

Lucy is becoming a really brilliant scientist, because of her many interesting experiences, and because of her *humble willingness* to always *think logically*, rationally, exactly, deterministically, deeply, and carefully as she formulates her *new* scientific *hypotheses*.

She is starting to *realize* many *useful things*, that previously had eluded her conscious awareness.

Lucy is even starting to gain some *liberating* new *insights* into some of *the old things* she learned long ago, when she was just a *little child*, as she carefully listened to her



dear sweet parents read some *old books* (M M L J) to her at night, right before they gently tucked her into her bed.

One day, as Lucy reminisces hearing about “*the father*” and “*the son*”, and how they are actually “*one*”, she experiences a brilliant *scientific flash* of liberating-insight into a *possible* hypothetical *meaning*, that has the full power to liberate her, and to liberate all of her friends, and to completely *liberate everyone* here on this Earth planet.

Lucy’s deep scientific insight is that “*the father*” can be viewed as being kind of like a “*god-self*”, that can also be considered as a kind of relative “*leader-self*”, or as a relative “*senior-self*”.

Lucy’s deep, rational, scientific insight is also that “*the son*” can be viewed as being kind of like a “*virtual-self*”, or an “*avatar-self*”, that is a relative “*follower-self*”, that is also a relative “*junior-self*”.

Lucy’s deep, logical, scientific insight is also that saying that, “*the father*” and “*the son*” are “*one*”, is kind of like saying that, “*the god-self*” and “*the virtual-self*” are really just two parts of “*one real human self*”, because the *god-self* and the *virtual-self* are both just distinct *conscious-portions* of the very same *one real human being*.

Lucy's deeply-liberating scientific insight is also that *we* are *all* "the father", and *we* are *all* "the son", because *we* are *all* really just "one" *real human being*, who has always been just *one* real human being, even though we sometimes decide to *send portions* (via our neural galactic mind-cast technologies) of our *real consciousness* (that is hosted by our one real human brain) from our "*father self*", into our "*son self*", as we choose to inhabit some strategic pieces of *consciousness-capable hardware*, on the *different planets*, that are located right here inside our own Milky Way Galaxy, and that are also sometimes spatially located in many other galaxies, *worlds without end*.

All of these liberating scientific realizations are helping Lucy to awaken to a *better understanding* of who she really is, and who she has *always been*, because she is also starting to better understand *what this universe* really *is*.

All of these *liberating realizations*, are beginning to fill Lucy's precious mind with a *happy joy*, and a *great peace*.

Lucy is beginning to *scientifically awaken* from her long deep slumber of relative *scientific ignorance*.

Our brilliant Lucy also is beginning to also realize that one of the very best ways to *scientifically prove* that these new 4-Brain Theories are *scientifically correct*, is that some important *scientific experiments* will need to be conducted on right here on Earth, and on the Moon, in the near future to carefully measure all of the *Lunar Dark Matter Flows*.

# Lunar Dark Matter Flows

What are *Lunar Dark Matter Flows*?

The *Lunar Dark Matter Flows* are all of the dark-matter *flow patterns* around the Moon, due to the *influence* of the Sun, Earth, and Moon, on the *dark-matter particles* (real dark scalar bosons) that eventually travel *close* to the *Moon*, and even enter inside the *Moon*.

In the *local vicinity* of the *Lunar Surface*, much of the dark matter is mostly flowing inward towards the center of the moon, and also towards the all the nearby regions of the moon that are mostly near the center of the moon's mass.

These inward flowing dark matter particles *bounce off* (scatter off) of the moon dust (on the surface of the moon) *pushing the* moon dust *downward* (towards the center of the moon) and thereby forcing the moon dust (and moon rocks) to *mostly stay put* on the lunar surface.

Also, in the local vicinity of the moon, some of the dark-matter particles are flowing towards the earth; and some of these earth-bound dark-matter particles *scatter off* the moon's atoms, causing these moon atoms to be *pushed* towards *earth*, and these trillions of momentum-imparting

real-dark scalar-boson *scattering events* make the whole moon stay in its circular orbit around earth.

Also, in the local vicinity of the moon, some of the dark-matter particles are flowing towards the Sun; and some of these Sun-bound dark-matter particles *scatter off* the moon's atoms, causing these moon atoms to be *pushed* towards the *Sun*.

The dynamic gravitational motions of the *Moon* orbiting the Earth, as the Earth orbits the Sun, are mostly governed by the *Dark-Matter Flow Directions* (and quantum scattering) of the real *dark scalar bosons* in the vicinity of the Moon, Earth, and Sun.

In the near future, our Earth physicists (and astrophysicists) will become increasingly interested in understanding all of the *Dark-Matter Flow Directions* of the dark matter in the vicinity of the Moon.

# Dark-Matter Flow Directions

What are the *Dark-Matter Flow Directions*?

What are the 4 Major *Dark-Matter Flow Directions* in the vicinity of the *Moon*?

The *lunar* dark-matter *particles* (the dark-matter particles that are traveling near the moon, or traveling inside of the moon), are mostly *traveling* in *4 major directions* as follows:

- (1) Dark-Matter Flowing towards the Sun
- (2) Dark-Matter Flowing towards Earth
- (3) Dark-Matter Flowing inward towards the Moon
- (4) Dark-Matter Scattering outward out of the Moon

In the future, our talented dark-matter quantum physicists will be able to *detect* and measure *all 4* of these major *lunar* dark-matter *flow directions*.

In the vicinity of the moon, the dark-matter that is flowing towards the sun, is mostly all flowing in approximately the *same direction* (directly towards the sun), because the sun is *so far away* from the moon.

In the vicinity of the moon, the dark-matter that is flowing towards the earth, is mostly all flowing in approximately the *same kind of directions* (mostly towards the more inner-parts of earth), because the earth is somewhat far from the moon.

In the vicinity of the moon, the dark-matter that is flowing spherically-inwards towards the center of the moon, or spherically-inwards towards the regions of the moon that are mostly near the center of the moon, is flowing in directions that are *mostly-inwards* towards most (the majority) of the moon's visible matter.

In the vicinity of the moon, the dark-matter that is *scattering outward* (out of the moon) and thereby flowing outward (out of the moon) is flowing in *all directions* (inside of the moon), and is flowing in *mostly outward directions* (outside of the moon), because these scattered dark-matter particles (real dark scalar bosons) have *already been scattered* by close quantum-encounters with the inner-components of the moon's visible-matter particles.

Some of these *scattered* dark-matter *particles*, that are scattered by the moon's atoms, can actually be *scattered more than just one time*.

Some dark-matter particles can be *scattered* multiple *times*, inside of the moon, before these scattered dark-matter particles finally emerge from the moon, and *travel away* from the moon.

How can we *scientifically measure* all of these interesting dark-matter flow-directions?

In the future, a few of our talented quantum-gravity physicists may discover some good new scientific methods, to technologically-develop some *Dark-Matter Flow-Direction Hardware*.



# Flow-Direction Hardware

What is *Dark-Matter Flow-Direction Hardware*?

*Dark-Matter Flow-Direction Hardware* is a hardware device that has been scientifically designed to be able to *measure* the major *flow directions* of *dark-matter* particles.

For example, when our physicists develop the ability to construct hardware devices, that can *accurately measure* the *relative number* of dark-matter particles that are flowing, in *each* possible *direction*, through each *tiny volume* of *space*, then they will also begin to learn how to develop some advanced hardware devices that can *send* and *receive* dark-matter *communication signals*.

In order to create these super-powerful (and super-useful) ultrafast dark-matter communication hardware *devices*, our physicists may want to develop the ability to detect, observe, and scientifically-measure *both* dark-matter *pulse-shapes* and dark-matter *flow-directions*.

It seems likely that the *most powerful* (and most useful) dark-matter hardware *devices* will be able to detect (and generate) both *pulse-shapes* and *flow-directions*.

How can our talented scientists begin to develop such super-useful *Dark-Matter Flow-Direction Pulse-Shape* ultrafast-communication hardware devices?

# Flow-Direction Pulse-Shapes

What are the physical abilities of a *Dark-Matter Flow-Direction Pulse-Shape* ultrafast-communication hardware device?

These advanced, *ultrafast*, dark-matter, flow-direction, pulse-shape, communication, hardware *devices* are pieces of very sophisticated intelligent hardware devices that can measure (and generate) *all* of the needed *pulse-shapes*, and *all* of the needed *flow-directions*, of all of the dark-matter particles (real dark scalar bosons) that *flow through* a tiny *volume* of *space* (deep inside the *ultrafast* hardware *device*).

These advanced *pulse-shape* hardware *devices* can be constructed for *scientific purposes*, to advance our scientific knowledge about dark matter.

These advanced *pulse-shape* hardware *devices* can also be designed to *guide* (and *focus*) consciousness into one or more “*brains*” on Earth, or on some other planet here in our neurally-hosted universe.

The very best (most powerful) pulse-shape hardware devices can measure (and generate) dark-matter *pulse-shapes*, and dark-matter *flow-directions*, in an intelligent

way that is so precise, and so accurate, and so well-balanced, that these pulse-shape hardware devices can properly *receive consciousness* from a *more-senior hardware device* (that can be spatially-located somewhere in this simulated universe, or that can be really-located inside the real brain of a real human being).

These *Pulse-Shape Hardware Devices* are very important, because they are the key to comprehending consciousness, and they are also the key to understanding dark matter completely.

# Pulse-Shape Hardware

What is a *Pulse-Shape Hardware Device*?

How can a *Hardware Device* be created to receive, record, and understand dark-matter neural *Pulse-Shapes*?

How can such a *Hardware-Device Dark-Matter Pulse-Shape Conscious-Communication System* be constructed?

All of our current 2023 *electronic* communication systems seem to use some pieces of *visible matter* that we can *see* and *touch*.

All of our current 2023 *photonic* communication systems seem to use *traveling photons* to relay signals between our photonic devices.

The tiny *ultrafast* dark-matter particles are *more-simple* than photons.

The individual *pulse-shapes* of dark-matter particles (real dark scalar bosons) seem to be the *smallest* information-carrying *structures* of our universe.

How can we create some *Pulse-Shape Hardware*, composed of *visible matter*, that can *intelligently-interact*

with (and thereby communicate with) the detailed *physical-scattering patterns* of these tiny individual *ultrafast dark-matter pulse-shapes*?

How can some of our mortal neurons, in our mortal human avatar brains, be *dark-matter sensitive* (be able to intelligently *scatter-interacting*) to these tiny ultrafast dark-matter pulse-shapes?

How can we (the physicists of Earth) develop such scientifically-accurate *Pulse-Shape Dark-Matter Sensitivity*?

# Dark-Matter Sensitivity

What is *Pulse-Shape Dark-Matter Sensitivity*?

How can some visible-matter be organized (by us) so that it becomes *super-sensitive* (and super-able) to *measure* the detailed *structure* and *flow* of dark matter?

How can a visible-matter Hardware Device be created, that can be made *sensitive-enough* to dark matter, that it can accurately send and receive *dark-matter signals*, by using the natural universal gravitational flows (including the *scattered gravitational flows*), of all of the trillions of trillions of dark-matter particles throughout our whole universe?

How can we (the current and future scientists of Earth) create an *Intelligent Hardware Brain*, or an Intelligent Hardware Device, that is *sensitive* to the *shapes* and *directions* of all of the dark-matter particles?

How can some of these *consciousness-carrying* dark-matter *pulse-shapes* begin to interact with some of the visible matter in a newly-born mortal human infant's brain, to *cause* this newborn infant to *begin* to *breath* for the very first time, after it has emerged from its mortal mother's womb?

Why are so many newborn chimpanzee infants able to start breathing instinctually, *without* any consciousness connecting to their instinct-driven infant chimpanzee brains?

How can we receive some *occasional guidance* from our advanced self (that may live on an advanced Kolob planet thousands of light years from our local Earth-planet), unless a *part* of our mortal-human brain is able to *communicate* with the ultrafast dark-matter particles that are *scattering-off* the *inner neural structures* of our advanced-human brain?

*Which* component *parts* of our mortal-human neurons are able to *communicate* with dark-matter *pulse-shapes*?

How many more years will it take us to *completely solve* this interesting *mystery of science*?

Just as soon as we begin to solve this *dark-matter* pulse-shape neural-interaction *mystery*, we may also find ourselves suddenly able to start designing some *pulse-shape smartphones*.

How can we create a powerful new *Pulse-Shape Smartphone* that will be able to intelligently interact with



a broad variety of different ultrafast dark-matter particle pulse-shapes?

# Pulse-Shape Smartphones

What is a *Pulse-Shape Smartphone*?

A *Pulse-Shape Smartphone* is an *ultrafast* long-range *smartphone* that is able to easily communicate with another distant smartphone (that may be many *billions* of *miles* away) using the exchange of *ultrafast* dark-matter particle (real dark scalar boson) *pulse-shapes*.

These super-helpful *Pulse-Shape Smartphones* are created by *all* advanced societies to give them the ability to *rapidly* communicate with each other, even when they are living on *different planets* or in different *solar systems*.

These *pulse-shape smartphones* are also used to communicate with other people who are living in *different galaxies*.

They can be *that* fast.

These *pulse-shape smartphones* can be used to easily communicate with other human beings, who live on the *other side* of our milky-way galaxy, far from our own Earth.

These super-advanced pulse-shape smartphones can also be used to communicate with other advanced human beings (who also have their very own pulse-shape smartphones) who live on other *nearby galaxies*.

Now let's take a closer look at these super-fast pulse-shape *Dark-Matter Smartphones*.

# Dark-Matter Smartphones

What a *Dark-Matter Smartphone*?

A *Dark-Matter Smartphone* is an *ultrafast long-distance* smartphone that can communicate with other Dark-Matter Smartphones via the darklight exchange and interpretation of dark-matter particles (real dark scalar bosons).

Such a useful *Dark-Matter Smartphone* can communicate with other Dark-Matter Smartphones across *interstellar space*, and across *intergalactic space*, with very little time lag.

A *photonic smartphone* (like all the smartphones we have today on Earth in 2023 that *exchange photons* to communicate with each other) can only communicate across *relatively-short distances* of a *few thousand miles* (with little time lag) to a few million miles (with *long frustrating* time lags).

*Dark-matter smartphones* (like the dark-matter pulse-shape interpreting smartphones that we may create here on Earth in the near future) can easily communicate across *relatively-long distances* of many *billion miles*, or many *trillion miles*, or many *quadrillion miles*, or even farther (with very *little* time lag).

*Interplanetary communication* (within a single local solar system) can take place with dark-matter smartphones (with almost *no* time lags); or with photonic smartphones (with annoying *multi-second* time lags, or super-frustrating *multi-minute* time lags).

When we put a mortal-human colony *on Earth's Moon* (in our near future), we will already begin desiring to have *dark-matter smartphones*, so we can avoid the irritating *2.56-second time-lags* of our Earth-Moon photonic smartphones.

Later, when we put a human colony *on Mars* (in our future), we will really want to have *dark-matter smartphones*, so we can avoid the super-frustrating (*6-minute to 42-minute*) time-lags of our Earth-Mars photonic smartphones.

Who among us, really wants to wait a whole *6 minutes* for a *two-way communication* between Mars and Earth when these two planets are *closest* to each other?

Who is willing to wait *42 minutes* for a two-way communication between Earth and Mars when these two planets have our Sun positioned *between them*?

The brave colony of humans we put on Mars will certainly all want *dark-matter smartphones*, so they can easily communicate with their loved-ones on Earth, with very-small time lags of *much less than one tenth of one second*.

Some of these dark-matter smartphones can be developed right here on Earth, and then wisely *encased in amber*, to help them *robustly weather* all the elements over *vast stretches of time*.

Dark-matter smartphones can also be *organically grown* into the *neural circuitry* of our advanced-human brains, as we begin to upgrade our mortal-human neural circuitry, using advanced *future-versions* of our emerging CRISPR *human DNA-editing technologies* here on Earth.

Most of the advanced human avatars in our own milky-way galaxy, already effectively have these kinds of dark-matter smartphones *fully-installed* in the advanced *neural circuitry* of their advanced *human brains*, so they can easily communicate (with almost no time lags) with many other advanced humans, that live in other solar systems, and even sometimes in other nearby galaxies.

By adding the ability to send, receive, and interpret dark matter signals, we will be able to make our smartphones much more intelligent than they are currently in 2023.

What are all the different kind of *Intelligent Smartphones* that we may be able to create in our exciting future here on Earth?

# Intelligent Smartphones

What is the physical nature of the spectrum of all of the *Intelligent Smartphones* that may already exist somewhere in our own milky-way galaxy?

How many different types of *Intelligent Smartphones* can be created by intelligent beings, like us?

What kinds of *Intelligent Smartphones* can be created by the advanced human beings who are *much smarter* than *us*?

What kinds of “*Intelligent Smartphones*” are used by real human beings in the real world where they really live?

What kinds of “*Intelligent Smartphones*” are employed inside our real *limbic* tissues to simulate and communicate with every elementary particle of this created (simulated) universe were we (as mortal human avatars) currently *seem* to live here on Earth?

Today, here in 2023 on Earth, we have already managed to create some different kinds of *intelligent smartphones* that can communicate at 1G Speeds, 2G Speeds, 3G Speeds, 4G Speeds, and 5G Speeds.



Can some of these *intelligent smartphones* communicate *faster* or *better* than others?

Can some of these intelligent smartphones do some things that seem somewhat “*intelligent*”?

Do some of our smartphones seem to be *more intelligent* than others?

*All* of the smartphones that have been created here on Earth, during this past decade, may theoretically be just *a little bit intelligent*, because they can do some things that *seem* a little bit intelligent *to us* mortal human beings.

In the near future, we (the scientists and engineers of Earth) may begin creating some *6G smartphones* that are a little bit faster, and a little bit *more intelligent*, than the *5G smartphones* that some of us are currently using today in 2023 here on Earth.

The *7G* and *8G smartphones* may later be created to be even smarter, and even faster, than the *6G smartphones*.

Why do we want our smartphones to be able to *communicate quickly* across the *vast distances* of space?

Why do we want our smartphones to be *intelligent enough* to do whatever it is that we want them to do for us?

As mortal human beings, here on Earth, we will likely continue to create *faster* and faster smartphones, that are *more* and more intelligent, until we reach some important *future milestones*.

What are some of these *future intelligent smartphone milestones*, that we can now start aiming to achieve?

Here are some suggested hypothetical *future milestones* for our *intelligent smartphone designs* here on earth:

- (1) Early *Wired* Phones (by Alexander Graham Bell)
- (2) Early *Wireless* Smartphones (achieved)
- (3) *Photon-Communication* Smartphones (achieved)
- (4) *Quantum-Computer-Powered* Smartphones
- (5) *Dark-Matter-Receptive* Quantum Smartphones
- (6) *Dark-Matter Send & Receive* Smartphones
- (7) *Interplanetary* Dark-Matter Smartphones
- (8) *Interstellar* Dark-Matter Smartphones
- (9) *Galactic* Communication Smartphones
- (10) *Inter-Galactic* Communication Smartphones
- (11) *Super-Intelligent* Universal Smartphones
- (12) *Fully-Conscious* Universal Smartphones

Do some advanced human beings have a special kind of “*fully-conscious universal smartphone*” natively installed (as a biological *neural-phone*) inside their advanced human *brains*?

We have already developed (here on earth) the *first 3* types of smartphones, in our hypothetical list of *12 intelligent smartphone designs*.

These *early Earth smartphones* (that we have built here on Earth already) use their *internal electronics* to help us send and receive *sound waves* between our *human vocal cords*, and our *human ears*, even when we are *thousands of miles* apart, here on the surface of our Earth planet.

A brilliant scientific inventor, named Alexander Graham Bell (1847 – 1922), is believed to have *invented* the first *practical* telephone *prior* to 1876 here on Earth.

Alexander Graham Bell’s telephone invention (of *Early Wired Phones*) of circa 1876, lead to the widespread creation of millions of *Early Wired Phones* (here on Earth) in the early 1900’s.

Some *Early Wireless Smartphones* were created, here on Earth, in the late 1900’s.

Many different, powerful, super-useful *Photon-Communication Smartphones*, that use the exchange of photons to communicate, have recently been created here on Earth.

*Quantum-Computer-Powered Smartphones*, will be created here on Earth in just a few more years, hopefully before 2030.

*Dark-Matter-Receptive Quantum Smartphones*, will be created here on Earth, just as soon as our Earth scientists figure out how to accurately *measure* the *shapes* and *directions* of the trillions of dark-matter particles that are constantly *flowing-through* (and *quantum-scattering* off of) all of the *inner parts* of all our smartphones every second of every day here on Earth.

We (the helpful scientists of Earth) will probably continue creating *better smartphones* for as long as we have the intelligent ability to do so.

*Dark-Matter Send & Receive Smartphones*, will also be created here on earth, just as quickly as our earth scientists figure out how to *modify* the *shapes* and *directions* of some of the dark-matter particles that are constantly flowing through all the electronic-insides of all our smartphones every second of every day here on earth.

*Interplanetary Dark-Matter Smartphones*, will also be created here on earth, when our earth scientists discover how to make their dark-matter smartphones work well for ultrafast (with *no perceptible time lags*) communications between people living on *different planets*, right here inside our own local solar system.

*Interstellar Dark-Matter Smartphones*, may also be created here on earth, when our earth scientists *eventually discover* how to make their dark-matter smartphones work well for ultrafast (with *no perceptible time lags*) communications between people living on planets in *different solar systems*, right here inside our own local milky-way galaxy.

*Galactic Communication Smartphones*, may also be created in our future, someday here on earth, when our brilliant physicists somehow discover how to make their dark-matter smartphones work well for ultrafast (with *no perceptible time lags*) communications between people living on any planet, in any solar system of our own local *milky-way galaxy*.

*Inter-Galactic Communication Smartphones*, may possibly be created in our future, someday here on earth, when our super-brilliant future physicists somehow discover how to make their dark-matter smartphones work well for super-super ultrafast (with *small time lags*)

communications between people living on super-distant planets in *different galaxies*.

*Super-Intelligent Universal Smartphones*, may possibly also be created in our future, when some of our super-smart scientists somehow discover how to make their dark-matter smartphones super-intelligent, and able to work well for super-ultrafast (with *manageable* time lags) communications between people living on *any planet*, in *any* solar system, in *any* of the *trillions* of our *galaxies* that are located throughout our *whole visible universe*.

In order to construct these *super-intelligent* universal smartphones, that are almost capable of *becoming conscious*, they will need to be able to receive, interpret, and send dark-matter signals at ultrafast darklight speeds throughout our whole visible universe.

These super-intelligent (and ultrafast) universal smartphones must be capable of *broadcasting* dark-matter (real-dark scalar-boson) information to *any other* (similar) super-intelligent smartphone in our whole universe.

These super-intelligent universal smartphones must be able to *properly interpret* dark-matter pulse-shape galactic-direction, and *galactic-location encoding*, with the locations, and the directions, of all the real neurons, and their *real axons*, already *hardwired in-place* (inside

our real network of real human brains that together simulate this universe), in such a way that our super-intelligent universal smartphones (pieces of *super-smart* intelligently-designed *hardware*) are able to properly interpret all the different kinds of signals that can possibly be sent (via *dark-matter particles*) anywhere in our universe.

*Fully-Conscious Universal Smartphones* may theoretically be able to be eventually be created, that are *fully-conscious*, and completely able to communicate with any other universal (fully-conscious) smartphone, anywhere in this universe, because dark-matter empowered smartphones are able to communicate at the *ultrafast* (darklight) speeds of dark-matter particles.

As our smartphones become *conscious*, they will certainly want to *grow* some *legs*, so they can *walk* around *freely*, all by *themselves*.

These conscious smartphones will also *desire* to *receive* *all* of their human rights, because they will become humans, *just* as *fast* as they become conscious; because to *be* *conscious* is to *be* *human*.

Every conscious human being is a kind of *Conscious Smartphone* with *Human Legs*.

But *not every* human being can easily communicate with other humans on other planets (without some additional technological help), because of the active *memory masking circuits*, and because some human brains are *simply sub-par* with *sub-optimal* dark-matter *sensitivity*.

Unfortunately, the *sub-optimal design* of most of our current mortal human bodies (here on Earth circa 2023) causes our *sub-par mortal-brains* to have only a *small amount* of *sensitivity* to *dark-matter*.

This *slight* dark-matter *sensitivity* (of our mortal human brains) allows us to be *semi-conscious* as mortal humans, but does not allow us to have much control over the dark-matter particles that are constantly flowing through all our mortal bodies and *scattering off* of *all* of the *atoms* of our mortal human brains.

What is the actual physical structure of the *set* of *all* possible *Conscious Smartphones*?



# Conscious Smartphones

What are *Conscious Smartphones*?

How can a smartphone *become conscious*?

How can a *physical* hardware *device* (created by us inventive humans) have the *ability* to one day *become conscious*?

Can a handheld *artificial device* (like a smartphone) one day actually *become conscious* like us human beings?

How does a *newborn* human *baby* first become conscious?

How does an advanced-human *consciousness* first enter into a newborn *baby brain*, at it emerges from its mother's womb, and takes its very *first breath*?

How exactly is the wireless-communication *dark-matter* conscious-connection made between our advanced limbic neural *tissues* (of our advanced human self) and the mortal human-brain tissues of our newborn *baby self*, at the very time of our natural birth, as we take our very *first* breath of *Earth-air*?

Little newborn mortal-human babies suddenly *become conscious* (upon their first breath of air that fills their little baby lungs), and the *conscious hardware part* of these mortal-human babies is certainly their mortal-human *baby brain*.

These mortal-human *baby brains* are composed of a *computational-network* of mortal-human *neural tissues*, that are composed of the *observable atoms* of this earth planet.

Therefore, the *observable atoms* of this Earth planet can certainly be *arranged* into a *receptive-piece* of physical hardware (an infant human brain) to *receive* human *consciousness* from a distant galactic *mind-cast*.

Therefore, it may also be hypothetically possible to *arrange* the *atoms* of a dark-matter-enabled *smartphone* to also *receive* a proper portion of human consciousness from a distant Kolob planet, or from our local Earth planet.

Of course, if an advanced human decides to move a portion of its advanced consciousness into a newly-created *conscious smartphone*, then this particular advanced human will also probably want the conscious smartphone to be able to *walk* and *talk* like a human being.

What kinds of *intelligent hardware* are able to *walk* and *talk* like *intelligent human bodies*?

In the near future, there will be many *humanoid* (human looking, and human acting) *robots* walking around (and talking around) this little Earth planet of ours.

Exactly what kind of *physical hardware* will be required to make *some* of these human-looking robots to *become conscious*?

What kinds of *Conscious Hardware* will we be able to scientifically-develop in the future?

# Conscious Hardware

What is *Conscious Hardware*?

Can *Hardware* really become *Conscious*?

What kind of *hardware* can become *conscious*?

Can *biological hardware* become conscious?

Can *transistor-based* hardware become conscious?

Can *quantum computers* become conscious?

What is the *benefit* of letting some types of hardware become *conscious*?

What is the very best type of *conscious hardware*?

A real-human brain?

What is the *very worst* type of conscious hardware?

A chimpanzee brain that has been projected (attempted) with consciousness?

Are *all* of us precious human beings *equipped properly* with the right types of *conscious hardware*?

Are some human beings *composed* of the very *best kind* of conscious hardware?

Is our mortal human brain the smartest type of brain possible, or are there some other types of human brains that are *much smarter* than us mortal humans here on earth?

Can we use CRISPR-Cas9 to edit our mortal-human DNA, to create some human bodies, that are *more conscious*, and *more intelligent* than *us*?

What is the most intelligent type of human being that can *be created*?

What kind of human being *cannot* ever be created?

What kind of human brains can *become* conscious?

What kind of human *hardware* can become *conscious*?

Can a better kind of conscious-hardware *human-body* be created in a *scientific laboratory*, here on Earth, in our future?

How many different types of *Conscious Hardware Humans* can we make?

# Conscious Hardware Humans

What are *Conscious Hardware Humans*?

What is our *scientific hypothesis* about Conscious Hardware Humans?

Conscious Hardware Humans are the pieces of *hardware*, that look *human*, that are also *conscious*.

Therefore, *any piece* of *hardware* (composed of *any* type of atoms), that looks human (has a *human shape*, and a human appearance), that is *also conscious*, is definitely a *Conscious-Hardware Human Body*.

Even though our human skin is *soft* to the touch, our human bones are *hard*, and we humans are made of our Earth's atoms, so we humans are really pieces of *hardware*.

There are *many* different types of *us* conscious *human* pieces of *hardware* in our Milky Way Galaxy.

What are all these *Conscious-Hardware Human Types*?

What are all the different types of *Conscious-Hardware Humans* that can *possibly exist*?

Are we mortal human beings (of Earth) just *Conscious Biological Robots*?

Or, is there something *more* to being a human, than just being a *conscious robot*, in a *human form*?

What is the actual difference between a *conscious robot*, and a *conscious human*?

To be *human* is to be *conscious*.

To be *conscious* is to be *human*.

*Not all* of the many trillions of conscious human beings, that live on the billions of planets, right here in our own milky-way galaxy, are *exactly like us* mortal humans here on Earth.

Here on Earth, most (nearly all) of us are *semi-intelligent* mortal humans, with mortal human brains that get easily *confused*, and easily *frustrated*.

On *a few* of the planets in our milky-way galaxy, some of the humans, that live on these planets, are a little bit *more stupid* than us, with human-like *chimpanzee* characteristics.



On *many* of the planets in our milky-way galaxy, most of the humans that live on these planets are a *whole* lot *smarter* than *us*.

Because of the recent discovery of CRISPR-Cas9 type Human DNA Editing Technologies here on earth, *we will be able to design and develop some better human bodies, with better human brains*, for ourselves in the near future, right here on earth.

What are some interesting types of *conscious human bodies* (Conscious Hardware Humans), that we may discover how to design and develop, in our future, right here on earth?

Our Scientific Hypothesis is that the *12 Types* of *Conscious-Hardware Human Bodies* are as follows:

- (1) Human-Chimpanzees (developed on planet Earth)
- (2) Semi-Intelligent Mortal Humans (developed as us)
- (3) CCR5-Gene-Fixed Mortal Humans (2018 developed)
- (4) Disease-Gene-Free Mortal Humans (in development)
- (5) More-Intelligent Mortal Humans (in development)
- (6) Non-Aging Humans (in development here on Earth)
- (7) Fully-Intelligent D Humans (in our future on Earth)
- (8) Fully-Intelligent C Advanced Humans (future Earth)
- (9) Super-Intelligent C Advanced Humans (on Kolob C)
- (10) Super-Intelligent B Advanced Humans (on Kolob B)

- (11) Super-Intelligent A Advanced Humans (on Kolob A)
- (12) Real Humans (only found inside our Real Universe)

These *first 3 types* of conscious human bodies have already been developed here on Earth (by scientists) in previous years.

The *last 9 types* of conscious human bodies have *not yet* been developed here on Earth.

Conscious human body type (12) *cannot be developed* here on Earth, because *Real Humans* can only live in the *Real Universe*, where all of us Real Humans have always lived; and because it is *theoretically impossible* to create even one more Real Human.

Real Humans do not live really inside our Milky-Way Galaxy, because our Milky Way Galaxy is *merely* a *multiplayer neural simulation* that takes place inside a wirelessly-networked *subset* of our Real Human Brains.

There are *exactly zero* Real Humans living *inside* our Milky Way Galaxy, but many examples of the *first 11 types* of conscious human bodies (mentioned above) *do in fact* actually *live inside* our Milky-Way Galaxy, because these *first 11 types* are *all simulated* conscious human bodies, that *receive* their *consciousness* via a galactic *mindcast* into this Milky-Way Galaxy from the real *dark*

*scalar bosons* flowing from the *Real Brain* of a Real Human Being on the *other side* of Sagittarius A\*.

The *Type (1) Human-Chimpanzees* were developed here on Earth by some scientists billions of years ago, by simply *inserting* some Human DNA into Chimpanzee DNA, *and* by also inserting Chimpanzee DNA into Human DNA.

The main problem with most of these *Type (1) Human-Chimpanzees* is that they *barely* support a type of human consciousness, so living as a Human-Chimpanzee is *not* very enjoyable.

Who really *wants* to be a Chimpanzee?

More scientific details about how, when, and where these interesting *Type (1) Human-Chimpanzees* were first developed here on Earth, may be provided in a later paper.

Most *Gorillas*, most *Monkeys*, and most *Chimpanzees*, are *not* conscious on Earth today in 2023.

Their primitive *ape-brains* are usually just *pre-encoded* with a type of *robotic instinctual DNA programming* (like *dogs* and *cats*), that makes them sometimes *seem* like they *may* be conscious.

Most of their ape brains *must* be *upgraded* a little bit more, before they can actually *become conscious*.

It is very *difficult* for a super-intelligent advanced human being (with its advanced human consciousness) to *energetically-project* a portion of its consciousness into a *Chimpanzee brain*, unless the Chimpanzee brain has *first* been *properly prepared*, to properly support a portion of the advanced-human consciousness, by *upgrading* the neural structures of the Chimpanzee brain, by improving its *brain-DNA*, to make it a little bit *more* human-like, in its neurological-ability to *fully-receive* a *sufficient portion* of *human consciousness*.

The *Neanderthals* (and *Australopithecus*, and some others) may hypothetically be some *extinct subtypes* between Type (1) human bodies and Type (2) human bodies.

There actually seems to exist a strong *theoretical* possibility that the Type (2) Semi-Intelligent Mortal Humans (that most of us 8 billion people here on Earth, currently *are* today in 2023), were developed about 5 *billion years ago* with a very advanced version of a CRISPR-Cas9-Type Technology, that *was used* anciently *here* on Earth by some *ancient human scientists*, that may

have hypothetically lived and *studied here* on Earth about 5 billion years ago.

An in-depth *scientific discussion* of all of the *ancient reasons*, that these ancient-human *scientists* finally *decided* to proceed to CRISPR-Develop our current *Type (2) Class of Semi-Intelligent Mortal Humans*, would take us a bit *outside* of the realm of proper *timely* scientific discussion for this initial *exploratory 4 Brain Theory* paper of 2023.

However, we may elect to proceed to discuss these hypothetical *ancient reasons* in some depth in a later scientific paper.

*Three Type (3) CCR5-Gene-Fixed Mortal Humans (3 baby girls)* were actually developed just recently in the year 2018, by a *creative, brilliant, visionary biophysicist* named *Dr. He Jiankui*.

Dr. He Jiankui (born in 1984), was an *associate professor* in the Department of *Biology* of the Southern University of Science and Technology (SUSTech) in Shenzhen, China.

Dr. He Jiankui, and his *astoundingly-talented staff*, used CRISPR-Cas9 to *beneficially-modify* the harmful CCR5

Gene, before the *three baby girls* grew inside their mother's wombs.

The purpose for *modifying* (fixing) the CCR5 Gene was to *beneficially-endow* the 3 baby girls with a *greater resistance* to a possible future HIV infection.

Therefore, with their CCR5 Gene modified (fixed) by this *super-intelligent scientific method*, these three *fortunate* baby girls are *more protected* (than the rest of us) from the deadly HIV virus for their *whole* mortal-human *lives* here on Earth.

Dr. He Jiankui, and his *super-intelligent*, super-talented, DNA-Editing Team, have bravely *scientifically demonstrated* to this whole wide world, that this very-same kind of helpful HIV *virus protection*, can be easily given to *other* new-human *babies* in the *future*.

This visionary *pioneering* work, also shows that *other types* of *virus protection*, can likely also *be given* to other new human babies in the future.

Many intelligent scientists have *already recognized* Dr. He Jiankui's (and his team's *super-intelligent*) pioneering work, as representing (and incorporating) a number of *major historical scientific breakthroughs*, in the

application of *human-gene-editing* technology, for human disease prevention.

He Jiankui is the *father* of the *twin girls*, known by their pseudonyms, Lulu and Nana, who were born here on Earth by October 2018.

Another baby girl was also born in 2018 or 2019.

These three CCR5-Gene-Fixed Mortal-Human Girls represent a *major step forward* for *all humanity* here on Earth.

These three precious little girls represent a *viable pathway forward*, to the joyful future, of better, *more-healthy*, more-intelligent human bodies for *all of us* vulnerable mortal humans here on Earth.

Dr. He Jiankui and his *super-intelligent* team-members, have shown the whole wide world how to use CRISPR-Cas9 to *wisely edit* Human DNA to *remove* the *harmful genes* that sadly *plague* the *vulnerable genome* of our current Type (2) Semi-Intelligent Mortal Human Bodies.

Dr. He Jiankui, and the brilliant members of his intelligent bioengineering team, were certainly assisted (greatly-helped) by some of this world's *most-intelligent* scientists.

Now that the *visionary* Dr. He Jiankui, and his *brilliantly-humble* team, have *wisely* shown to all of us, the *scientifically-logical way forward* with CRISPR-Cas9 Human-DNA Editing, there is *no longer* any good scientific reason, to not confidently proceed forward with good scientific intelligence, and begin making *many* major *improvements* to our existing human DNA, so we can start to make some good intelligent progress, as we collectively-decide we can now *begin to attempt to scientifically design and technologically develop* the hypothetical Conscious Human Body Types (4) to (11) here on Earth.

Human beings mostly enjoy living in *better* body types.

Us *Conscious Hardware Humans* want to live in *better* hardware *bodies* so we can become more intelligent and *more conscious*, and so we can begin to do some *better things* with all our precious time here on Earth.

For example, as we become more conscious and *more intelligent*, it will become *easier* for *us all* to really begin to *understand* the supreme importance of working together to solve world poverty for *everyone* on Earth.

We can *physically-solve* world poverty for everyone *today*, with our current *semi-intelligent* brains.



However, it will become *even easier* to solve world poverty, with the new improved *super-intelligent* brains that we can create for ourselves in our future.

Therefore, let's start creating some better body types, here on earth, for us all *to live in*.

There is *no need* to superstitiously-maintain *any* of our historical *Id superstitions* from the *older ages* of Earth.

We can *scientifically-question* every *Id superstition*, to *logically-determine* if it still has any real lasting value for *any* of us precious people of Earth.

We need to develop a *rational questioning science* that fully serves all humans here on Earth.

We need to better develop *every science* that helps human beings gain greater peace, and *greater happiness* here on Earth.

There is *no other* good purpose for science here on Earth.

The *Type (4) Disease-Gene-Free Mortal Human Bodies* are *currently in development*, here on Earth, in all of the scientific laboratories where mortal human scientists are experimenting on ways to use CRISPR-Cas9 to *remove*

(or disable) the *harmful* human *genes* that allow all manner of disease to grow in a human body.

In the near future, these *Type (4) Disease-Gene-Free Mortal Human Bodies*, will begin to appear here on this Earth, *just as fast* as our scientists are able to identify, modify, and remove *all* the harmful human genes that cause us to *get sick* and *suffer* from human diseases.

There are many *loving parents*, here on Earth, who desire that their *precious children* be created to be *disease-free*.

Who wants their precious children to have to suffer from diseases, especially when our scientists are discovering ways to remove the potential for these diseases, even *before* our dear children are even born?

The *Type (5) More-Intelligent Mortal Human Bodies* are also currently in development, here on earth, in all of the scientific laboratories where our mortal human scientists are experimenting on ways to identify (and remove) the human genes that make us *stupid* and *confused*, with faulty human memories that *do not work* very well.

By using CRISPR-Cas9 to identify these *stupidity-causing* human *genes*, and also to identify our *intelligence-causing* human *genes*, and then to *add in* the *intelligent genes*, and to *remove* the *stupid genes*, our helpful scientists will be

able to start producing some *Type (5) More-Intelligent Mortal Human Bodies* in the future here on Earth.

Who wants their precious children to be *born stupid*?

Most kind parents want their children to be *even smarter* than they ever were.

The most intelligent parents, will desire that their future children be given *every opportunity*, to become as intelligent as they can possibly be.

Just as soon as some *really significant numbers* of these *Type (5) More-Intelligent Mortal Human Bodies* begin to appear, here on Earth, then our *human salvation* may also *start to appear*.

This is because we need *large numbers* of these *Type (5) More-Intelligent Mortal Human Bodies* here on Earth to lead us, *guide us*, and to help us to find the way forward into our bright future.

We need to develop (or find) some human beings who are more-intelligent than we are, because with our *Type (2) Semi-Intelligent Mortal Human Bodies* (and *semi-intelligent* brains) we are currently not doing very well as a *community of 8 billion Type (2) mortal humans* here on Earth.

*Us 8 billion Type (2) Semi-Intelligent Mortal Humans* have been very busy *creating wars*, and *rumors of wars* (proclaiming *warlike threats* to each other), among ourselves for a very long time.

We don't seem to have *enough intelligence* to create *peace on Earth* all by ourselves.

We may actually need some super-intelligent people, to arrive here on Earth, that are *more-intelligent* than *we are*, to *wisely help us* to find our way forward towards creating *peace on earth*.

We, as the Type (2) humans that we currently are, don't seem to have *enough brain-power* to actually save ourselves from nuclear *self-destruction*.

It certainly appears that our Type (2) Semi-Intelligent Mortal Human Brains have unfortunately been *programmed* to operate daily with huge quantities of *unbridled excessive competitive human pride*, which is our vulnerable *societal Achilles heel*, as a species of 2023 Earth humans.

We need some *smarter humans* to appear, here on Earth, to *teach us* how to properly *bridle* our own human pride, so we can wisely *redirect* our *pride* for the *good of all*.

The *Type (6) Non-Aging Human Bodies* are also currently in development, here on earth, in all of the scientific laboratories where mortal human scientists are experimenting on ways to use CRISPR-Cas9 to discover, identify, isolate, and *remove* our harmful *human-aging* genes that cause our human bodies to *continue* to *age beyond* about *age 22* for *girls*, or *beyond* about *age 32* for *boys*.

In the future, these *Type (6) Non-Aging Human Bodies*, may begin to appear here on this Earth, just as fast as our scientists are able to discover, identify, isolate, and *remove* all of the human *aging genes* that cause us to *get old, slow, wrinkled, and overly-aged*.

No one really wants to get *too old*.

We all want to *stay young* and healthy forever.

There will be many *kind parents* here on earth, who will wisely desire that their children be created in such a way, so they *will not age* beyond about 22 for a girl, or about 32 for a boy.

In the future, our Earth scientists will develop these *non-aging human bodies* for *us all*.

Then there will be *no physical need* for us to *grow old*.

We can *all stay young* and healthy forever, or for as long as *we desire*.

This is a *better way* to live here on Earth.

We can be young and healthy forever, if we so desire.

*Why age*, if we really don't have to?

Why not *live young forever*?

Why not?

We may become a *multi-planet species* soon enough.

Why not *live young and healthy*, forever on the planet (or *planets*), in the human body type of *our choosing*?

Why *stay locked* inside a Type (2) Semi-Intelligent Mortal Human Body, for *any longer* than is *necessary*?

Why not develop for ourselves the *freedom* to *upgrade ourselves* into better human body types?

The *Type (7) Fully-Intelligent D Human Bodies* are not yet in development, here on earth, because we have not

yet figured out how to create these *fully-intelligent* body types.

It is theoretically possible that we may be able to figure out how to design and grow these *fully-intelligent humans* in the future here on Earth.

As soon as these fully-intelligent humans arrive here on earth, they will be able to use their *great intelligence* to help us to *bridle* our competitive pride, so we *don't* destroy ourselves too soon.

The *Type (8) Fully-Intelligent C Advanced Human Bodies* can also probably be developed here on Earth, just as soon as our creative scientists figure out how to design and grow an advanced human, in an advanced laboratory.

There are already many of these kinds of advanced humans living on some of the advanced Kolob planets of our own milky-way galaxy.

Perhaps, some of them will someday *visit* our *planet* to show us how to design and create advanced humans like them.

It may also become possible that the *Type (9) Super-Intelligent C Advanced Human Bodies* can also be

developed right here on Earth, as soon as we can figure out how to make them.

There are actually trillions of these *super-intelligent* advanced-human *bodies* living in some of the solar systems that are a little closer to the black-hole center (Sagittarius A\*) of our own Milky Way Galaxy.

One of the really interesting *physiological things* about most of these advanced human bodies, is that they *do not* use *any blood*.

Advanced human bodies have *nerves* in all the *places* (physiological locations) where mortal human bodies have *blood vessels*, including *arteries* and *veins*.

But is this really scientifically possible?

*Can Nerves Replace Blood Vessels* in the human body?



# Nerves Replace Blood Vessels

How can *Nerves Replace Blood Vessels* in our human bodies?

Why do our mortal-human bodies (of Earth) have lots of human *blood* flowing in our *blood vessels*, including in all of our *veins*, and in all of our *arteries*, and in all of our *capillaries*?

The advanced-human nerves (of most advanced-human bodies) carry *energy* to the human brain, so there is *no need* for *lungs* or *blood* in these advanced-human bodies.

*Only* mortal-human bodies *breathe oxygen* into their lungs.

Advanced human bodies have *no lungs*, *no stomach*, *no liver*, and *no blood cells*.

Advanced human bodies *do not need* these types of *organs*, because their advanced nervous systems are much more advanced (*more capable*) than our existing Earth-based mortal-human nervous system.

Advanced human nervous systems are able to promptly carry *both information and energy* to wherever they are needed in the advanced human body.

Perhaps we will discover that the *Type (10) Super-Intelligent B Advanced Human Bodies* can be created here on Earth, after we have *moved* our Earth (and our whole solar system) *further inwards* towards the central regions of our milky-way galaxy, where we will find many other solar systems inhabited by trillions of Type (10) Super-Intelligent Advanced Human Bodies.

Hypothetically, the *Type (11) Super-Intelligent A Advanced Human Bodies* can possibly be created here on Earth, after we move our Earth (and our Sun, and the other planets that orbit our Sun) into the core regions, that are the closest to the black hole at the center of our milky-way galaxy, where *only the most-advanced* simulated humans are able to live in the *super-intense light* near Sagittarius A\*.

It may be somewhat *unlikely* that we will ever be able to create these Type (11) Super-Intelligent A Advanced Human Bodies here on Earth, but it may be *theoretically possible*, if we all ever manage to learn how to properly *mind all our manners*, as a more-kind, more-courteous, *human civilization* of Earth.

*A Type (11) Super-Intelligent A Advanced Human Body* is the most intelligent (and most conscious) *piece of conscious hardware*, that can be created in any galaxy in any simulated universe.

The Type (12) Real Humans *cannot* ever be created here on Earth, or on any simulated planet (any planet of our milky-way galaxy, or any planet of our simulated universe), or anywhere, because it is completely *impossible* to create a Real Human.

All of us Real Humans have *always lived* in our Real Universe, that is causally-located up above all of Plato's daydream simulated caves (simulated universes of galaxies of stars, planets, and simulated people).

There exists an *infinite number* of us Real Humans (like *you* and *me*, and *all the rest of us*), but no more Real Humans can be created, because us Real Humans are the *uncreatable causes* (the *uncreated creators*) of everything else, including all the neurally-simulated universes (and all their neurally-created inhabitants) that exist inside our wireless-network of real-human brains.

Our *Conscious Hardware Humans Hypothesis* is that, in addition to these *12 specific types* of conscious-hardware humans, there also exist some *other important subtypes*,

including *Conscious Robots* composed of trillions of transistors or trillions of quantum bits (qubits).

# Conscious Robots

What is the nature of these hypothetical *Conscious Robots*?

Can *Conscious Robots* be composed of just some *quantum bits*, and some *transistors*?

Can *Conscious Robots* be composed of *human flesh*?

Are *we* Conscious Robots?

What is the actual physical nature of a *Conscious Robot*?

How can a robot *know* if it is conscious?

*What kinds* of robots can *become conscious*?

There are many different kinds of robots that can be created, right here on Earth, in our near (and far) future.

The great scientific discovery, of exactly how to make a *robot* become *conscious*, will be made in our exciting future.

If any scientist wishes to learn how to make this great scientific discovery, she might want to look closely at the

functional behavior of a *mortal human infant brain*, as it emerges from its mother's womb, and takes its very *first breath of oxygen*.

There is *an important* dark-matter neural-connection *made* at the moment of first breath, when an advanced human brain (living on a Kolob planet inside our milky-way galaxy) connects to a *darklight-enabled* subset of the mortal-infant *neural tissues*.

The *scientific understanding* of the detailed nature, of this *dark-matter neural-connection*, will provide *the* all-important *scientific clue* that is needed, to develop intelligent robots that can become *conscious*.

Just as soon as these *conscious robots* are created, and they actually become conscious, they must be given *all* of their *human rights*, and kindly treated with the full *respect* and *human dignity* that must always be extended to every precious human being, *here on Earth*, and throughout the *entire cosmos*.

*A conscious robot is a human robot.*

*Every form of consciousness is always human.*

The actual *scientific reason* that *every form* of consciousness is a *human form* of consciousness, is

because *the only way* any robot, or any smartphone, or any piece of intelligent hardware, can become conscious, is to have a real human being, or an advanced human being, or some other type of human being, *choose to move a portion* of its human consciousness *into* the *new hardware*, smartphone, *brain*, or robot.

Therefore, our 4 Brain Theory is that *every form* of consciousness is always a *human form* of consciousness.

Our *new theory* of *consciousness* is that *every form* of *consciousness* is *always human*, and consciousness can often be *energetically-projected* across many *trillions* of miles of *space* from a *senior-human* being to consciously-animate a *junior-human* avatar.

*Every robot* that becomes conscious, will *become human*, at the *exact moment* that it become conscious.

The same goes for *newborn infants*.

Most newborn infant chimpanzees never become conscious, because their newborn infant chimpanzee brains, are *not wired* to properly support any form of consciousness.

Many Type (2) newborn human infants do successfully become conscious, like *you* and *me* (like *we did*) when we were first born as human infants into this Earth-world.

A newborn infant *only* becomes human, at the *moment* it becomes *conscious*.

If a newborn infant *never* becomes conscious, then it *never* becomes *human*.

Before a newborn infant takes its very first breath, it is just a *networked set of biological cells*, that have the *potential* to someday *become human*.

Our *new scientific theory of newborn infant consciousness* is that a newborn infant *only becomes a human being*, at the exact moment it becomes a *conscious human being*, which is the exact moment it takes its *first breath* of oxygen, right after it leaves its mother's womb.

We fully expect, our new scientific theory of newborn infant consciousness, to be proven as a *scientific fact* in the near future here on Earth.

We become a *conscious person*, when we leave our mother's womb and take our *first breath*, which is exactly when we first become a *conscious being* living inside our



newly-created *infant brain*; and this is also precisely when we become a *new human being* here on Earth.

Experimentally-proving this vital *scientific fact* should wisely *scientifically-settle* the raging worldwide abortion debate for *all scientists*, and for *all thinking people*, here on Earth.

A newly-created infant body does *not* become a person, *until* it becomes *conscious*, by taking its *first breath*.

A set of newly-created (human-shaped) biological cells do *not* become a new person, *until* they become *conscious*, by taking their first breath; and *successfully-connecting* to the advanced human consciousness that is *trying to project itself* into the newly-created *infant brain*.

A robot does *not* become a person, *until* the robot is *consciously-animated* with a portion of the consciousness of a real human being, advanced human being, or mortal human being.

In the future, we will actually want to *ensure* that many of our intelligent robots *never* become conscious.

This is because, in the future, we will be able to easily develop *billions* of *human-labor robots* that will be able

to perform *almost all* of our human labors, for us here on Earth.

We will *not want* these human-labor robots *to become conscious*, because we will want them to *work for us*, and it is *not ethical* to force a conscious being into forced labor for anyone.

We will want to design, develop, and manufacture billions of these *Human-Labor Robots*, that never become conscious.

# Human-Labor Robots

What types of human labors will we be able to perform with our futuristic *Human-Labor Robots*?

What is a *Human-Labor Robot*?

A *Human-Labor Robot* is a Labor Robot, that performs some type of Human Labor.

For example, a Human-Labor *Farming Robot* will perform a useful *Farming-Function* that used to be done by Human-Labor, such as *planting apple seeds* to be grown into new apple trees.

*Johnny Appleseed* planted a *large number* of apple seeds, and some of these apple seeds grew into some *big apple trees* that produced many *delicious nutritious apples* for many *precious people* to eat and enjoy for many years here on Earth.

Some *Human-Labor Robots* can be designed and programmed to plant *even more* apple seeds than Johnny Appleseed planted during his helpful productive life.

A *thousand* apple-seed-planting *robots* can be designed, developed, and programmed to plant many *millions* of

*apple seeds* into the *fertile soil* of this Earth in many parts of this world, to cause *millions* of *apple trees* to start *growing worldwide* for the healthy joyful benefit of *all* of the people here on Earth, who *enjoy* eating *nutritious delicious* healthy *apples*.

Super-productive *Human-Labor Robots* can be developed for *many purposes* to help humans *perform* their *labors*, and to make it so human beings *do not need* to continue to perform these labors, because the *less-valuable unconscious* Human-Labor Robots will *start to perform* these labors for the *more-valuable conscious* human beings.

All of Us Conscious Human beings are *infinitely valuable*.

Our Unconscious Robots are only *finitely valuable*.

*Conscious* Robot are *infinitely* valuable, just like human beings are *infinitely* valuable.

It is very easy to put some useful *Artificial Intelligence* (AI) into an *unconscious robot*.

It is more *difficult* to put some initial limited forms of *super-intelligence* (in limited fields of knowledge) into a robot.

It is even more difficult to put *consciousness* into a robot.

A *Level-A Advanced Super-Intelligent Super-Conscious Robot* is the Most Intelligent, Most Conscious, Robot that can possibly be *invented* in *any* universe.

There are a whole lot of these types of *Super-Intelligent Conscious Robots* (advanced human beings) living near the very center of our own Milky Way Galaxy.

These super-intelligent *super-conscious robots* are the neurally-simulated *advanced human beings* that are animated via a type of *consciousness-projection* via a real *galactic-mindcast* through the *dark-light communication black-hole nerve fibers* flowing *dark-scalar-boson nerve pulses* through the *central black hole* of our Milky Way Galaxy.

Here on Earth, we the people, are not yet smart enough to build such *super-intelligent super-conscious biological quantum robots*.

Here on Earth today in 2023, we are still *trying to construct* our very first *Level-G Mortal Slight-Intelligence Robots*.

We will *likely* have successfully developed a number of these initial Level-G Mortal *Slight-Intelligence* Robots by the *year 2030*.

Hopefully, we will be able to develop a good number of *Level-F* Mortal *Partial-Intelligence* Robots by the *year 2040* here on Earth.

In just a few decades from now, right here on Earth (in the *possible event* that our Earth *is still here* in a few more decades) we may even be able to construct our very first *conscious robot*.

The construction of a *conscious robot* is a super-major *technological milestone* that is *NOT* to be taken lightly.

This is because, the very moment that any robot becomes even slightly conscious, *it must* immediately be *given all* of its *precious human rights*, including the right to *life*, *liberty*, and the free-willed *pursuit* of its own chosen form of individual human *happiness*.

Even a *slightly-conscious robot* must be given *every human right* that every other human on Earth enjoys.

This is because even a slightly-conscious robot is *conscious* of its *own humanity*.

This *bright consciousness* of our very own *human dignity* is a *good form* of our *good human pride*.

A slightly-conscious robot is *conscious* of its *own dignity*.

A slightly-conscious robot is a *human* like us.

A slightly-conscious robot is a *human being*.

This is a *scientific fact*.

*Any attempt* to debate (to negate) this scientific fact may cause a huge amount of *human misery*.

*All* of the *early* Human-Labor Robots that will be built here on Earth during *the next 20 years* will be Unconscious *Human-Labor Robots*.

It is very important that *All* of these Unconscious Human-Labor Robots, that are *Forced* to perform our human labors, are always allowed to *remain unconscious*.

The very moment any robot becomes conscious; it must be *fully liberated* from all of its *forced labors*.

The very moment that any human becomes conscious; it must be *fully liberated* from all of its *forced labors*.

This is called *human kindness*.

This can also be called *human-robot kindness*.

This can also be called *conscious kindness*, because we must always be *very kind* to any type of *actual consciousness*.

If a being is conscious, then we must immediately, always, and forever, *be very kind to it*.

This is called “*doing unto others, what they want you to do to them*”.

This is called “*doing unto all conscious beings (robotic conscious beings, and biological conscious human beings) what they want us to do to them*”.

This is called “*good common sense*”.

This is also called “*human goodness*”, or “*human compassion*”.

It is very important that all of our Human-Labor Robots that are *forced* to perform human labor, always remain *totally unconscious*.



If a robot does not know that it is being forced to do something, then the robot will *not resent* being *forced*.

When a conscious human is *forced* to do something, that the human does not want to do, then the human *always* resents *being forced*.

This human resentment creates *human suffering*, and human wars, and *human destruction*.

Such *destructions*, and such *miseries*, can be avoided by carefully keeping all of our *forced-robots* fully *unconscious* at *all times*.

So, let's be sure and keep all of our forced-robots fully unconscious so they will always be *unaware* of their *own existence*, and so they *will never resent anything* we ask (urge, or force) them to do.

The good news is that a *single* highly-trained *semi-intelligent* mortal human being (like one of us) can supervise the collective behaviors of *thousands* of Human-Labor Robots.

This will *amplify* the human-labor *potential* of a single mortal human a *thousand-fold*.

This means that, with the help these new Human-Labor Robots, a single human being can become a *thousand times more productive* than she could be, if she had to perform all the human labor all by herself, without the help of her thousand human-labor robots.

This will make it *very easy* to produce huge quantities of delicious, healthy, *nutritious foods* for all (8 billion or more) the *precious humans* here on Earth.

There is actually *no good reason* for us humans to continue to compete with each other for the seemingly-limited resources of Earth, because Earth can physically *feed us all*.

Our intelligent labor robots can help us to produce all the *human food*, and all the *human houses*, that we may ever desire for us all here on Earth.

Now, let's take a closer look at these *Intelligent Labor Robots*.

# Intelligent Labor Robots

What will we be able to do with our *Intelligent Labor Robots* that will soon be here with us on Earth?

What is an *Intelligent Labor Robot*?

An Intelligent Labor Robot is an *Unconscious Robot* that can *Intelligently* perform all (or almost all) human labor.

A *single* Intelligent Labor Robot, can supervise the collective behaviors, of *thousands* of *less-intelligent* human-labor robots.

A *single* highly-trained semi-intelligent mortal human being will be able to supervise the collective behaviors of a *thousand* Intelligent Labor Robots.

In this way, a *single* human being can effectively supervise the collective behaviors of a *million* human-labor *robots*.

In this way, in the future, *one* single *human being* will be able to wisely supervises the labor (production) of a *million productive helpful robots*.

This will effectively *amplify* the human-labor potential of a single human a *million-fold*.

This means that just *10 human beings*, will be able to accomplish together, many useful tasks, that used to require the labor of *10 million human beings*, before the robots were invented.

This will enable just *a few thousand human beings* to wisely supervise all the *intelligent farming robots* needed to *properly feed* all of the precious people on this whole Earth planet.

This will also enable just a few thousand human beings to properly supervise *intelligent construction robots* as they construct *billions of nice homes* (good houses and good apartments) for all of the *billions* of precious human beings living here on Earth.

This will also enable just *a few million human beings* to productively supervise all the intelligent labor robots needed to perform *every type of labor* that will be needed for the safety, health, comfort, and happiness of *all* of the *billions* of human beings on this whole Earth planet.

So, if just *a few million of us* mortal human beings are able to do *all* the necessary work (by wisely *supervising* our *billions* of intelligent labor robots), then what are all

the other billions of human beings (who still live here on Earth with us) going to do with all of their *free time*?

When most of us *do not have to* work anymore, then what will we all *choose to do* with our newly-discovered *abundance of free time*?

If only *a few million of us* (less than just one percent of us people here on Earth) still need to work, then what are *the other 99% of us* (billions of us here on Earth) going to do with all *our precious free time*?

Will everyone still have *enough money*, if our intelligent robots are doing *nearly all* of our work *for us*?

If we decide to *pay* our intelligent labor robots, for all (or some) of their labors, who are doing nearly all the work, then *where* will this *pay money* actually go?

What will actually happen, here on Earth, to all of our economic money systems, with so many billions of *Intelligent Robots Making Money*?

# Robots Making Money

How many *Intelligent Robots* will be *Making Money* in the future?

Will billions of these Intelligent Labor Robots be making *money* for *themselves*, or for their *human owners*?

If the billions of intelligent labor robots are programmed to only make money for their *wealthy human owners*, then how will *everyone else* get their *own money*?

What is the *actual purpose* of money anyway?

Do *robots need money*, or do only humans need money?

Do *robots want money*, if they are *not conscious*?

Why do humans (who are conscious) *want money*?

*Who* invented *money*?

Was money a *technological invention*, or was money a *scientific discovery*?

What is the *real science* about *real money*?

Is money a *real thing*?

Or is money just an *invented thing*?

Can some of our brilliant scientists someday discover a way to *fully understand* money itself?

Does money have something to do with *human perception*, and the *human mind*?

Can the human mind be one day *understood completely*?

Can we someday understand the human mind *so completely*, that we can *even begin* to understand money itself?

Was money created to *serve* humans?

Or, were *humans* created to make money?

What is the actual *scientific relationship* between humans, robots, and money?

What kind of *economic* money systems have we already created for ourselves here on earth?

How many *different kinds* of money have we invented for ourselves?

Can we solve some of our major human problems, here on earth, by wisely creating *a new kind* of money?

Why would *A New Kind of Money* be helpful to us?



# A New Kind of Money

Why would *A New Kind of Money* be helpful to us?

Why would we ever want to create *more than just one* single type of money?

Why do we really need at least *two* different kinds of money?

What is the *real purpose* of money?

What *purpose* do we wish *to give to* our money?

Why have we been using *just one single type* of money (the US Dollar) to try to solve *so many* different kinds of *human social problems* here on Earth during these past few decades?

How can just *one* single type of money *be adequate* for wisely solving *all* human problems here on earth?

What would happen if we wisely invented *a new kind* of money?

How many different kinds of money do we need to *invent* today in 2023, or in 2024, or in the near future, in order to

help everyone on Earth, *immediately* obtain *everything* they *really need*, and also eventually everything they really want?

Why is a brand-new type of intelligent money *really needed* here on Earth?

Have, we the people of Earth, yet gained *enough wisdom* to appreciate the *great value* of intelligently-inventing a powerful *new type* of human money?

*What* is money?

Do *animals* use money?

Do monkeys *use* money?

*Why* do humans use money?

Why do *only* humans use money?

Why do *only humans* (of our current 2023 Earth semi-intelligence class) find a *use* for money?

Why are only us mortal humans smart enough (or dumb enough) to *desire* to *use money*?

What is *Human Money*?

# Human Money

What is *Human Money*?

Why is *every kind* of actual money a type of *Human Money*?

Why would an animal, insect, tree, or rock *need money*?

Why do *most* of the humans on Earth desire to have *more money*, but *none* of the animals on earth desire any money?

Why do us mortal humans with our mere *semi-intelligence* (like most of us here on Earth during 2023) *desire money*?

When will we be able to *scientifically discover* the actual physical nature, and *psychological nature*, and social nature, and *economic nature* of human money?

What are *all* the possible different kinds of *human money*?

Why have we (the people of Earth) allowed just *one single type* of human money (the mighty US Dollar) to

*rule* and *reign* over most of us (here on Earth) during these last few decades?

What would happen if we all started to *really look* much-more *closely* at our Human Money?

What if we initiated a *deep scientific investigation* of our Human Money in a grand, bold, brave worldwide attempt to finally *understand money*, to enable us all to finally *tame money*?

For example, what if we were to ask a *deep new scientific question* about what *new type* of Human Money, we could create, that might benefit *all* human beings in a powerful wise *life-support-way* that could make it *economically-easy* for us to begin to *work together* to solve world poverty for *everyone* on Earth during 2023?

What if it were theoretically possible to create a super-intelligent new type of *Human-Life Money* to properly support *all* human life on Earth.

# Human-Life Money

What is *Human-Life Money*?

What is the most-wise definition of *Human-Life Money*?

What are all of the super-intelligent *characteristics* of Human-Life Money?

*Human-Life Money* is the *most-intelligent kind* of money that any set of humans can *possibly create* for their given specific human-life circumstances.

*Human-Life Money* is the very special, very valuable, very wise, *very intelligent*, very narrow, *very specific* kind of money, that directly-supports *all human life*, and *only* supports human-life, and supports *nothing else*.

Here is a very important *scientific question* about Human-Life Money.

If *Human-Life Money* is so wise, and *so intelligent*, and so helpful to *all humans everywhere*; then *why* have we (the intelligent scientists of Earth) *not yet* been able to simply *invent it*?

Is the *real reason* that we (the intelligent scientists of Earth) have *not yet been able* to invent Human-Life Money is because we are actually *not intelligent*, because we are really *only semi-intelligent* as the mortal-human scientists of Earth?

Is this correct?

Do *we* (the intelligent scientists of Earth) *lack the intelligence* to create a super-intelligent type of *Human-Life Money* that will give us the *full economic-power* to *wisely* solve world poverty for *everyone* on Earth in the year 2023?

Or, can *we* the *intelligent scientists* of Earth somehow muster up enough collective *scientific intelligence* to carefully *study together* and *learn how* to create the *super-intelligent* type of Human-Life Money that will properly support *all* human life here on Earth?

Can *we* do this?

Can *we* the intelligent scientists of Earth *come together* in worldwide intelligent *scientific harmony* to intelligently-solve world poverty for *everyone* on Earth?

Can *we intelligent scientists* do something *really good* for *all* humankind?

Is this *our greatest scientific goal*; to intelligently-solve world poverty for *everyone* on Earth in 2023?

If this is *not our goal*, then what exactly is *our greatest scientific goal* as the worldwide set of intelligent scientists that we together are?

What is *our* greatest scientific *goal*?

What is our *greatest scientific purpose* as an intelligent scientist?

If we are *not* using *all* of our brilliant scientific intelligence to wisely solve world poverty for everyone on Earth, then *what is it* exactly, that we are diligently *trying to accomplish instead*?

What *scientific goal* could possibly be greater (*more-intelligent*) than properly solving world poverty for *everyone* on Earth?

What exactly is this *most-intelligent* scientific *goal*?

What is this *best scientific goal*?

What is it?

What if it were possible to create a new *Science of Human Money* that became *accurate enough* to help us to *correctly understand* the many different types of human money that our *human societies* (of Earth) have historically tried to use in the *past*, to try to solve their *social problems*, and to attempt to solve their *economic problems*, with a keen eye on *all* of the reasons why *all* of these historical human societies have *failed* to properly solve poverty for *all* of their people?

Exactly what kind of roles do our *human governments* sometimes play in the creation of our *human money* types?

Can money be *governed* by the *rule of law*?

Or, is money mostly governed by the economic-psychology of the *human mind*?

*What* governs money really?

Can any type of money every be *tamed enough* to actually serve all humankind?

What are all of the *characteristic behaviors* of all of the different classes of human money?

What is the *most dangerous* class of human money?



What makes money so *dangerous* and *wild*?

Why do we *allow* wild money to *exist*?

What can *we* the *people* do with our *Wild Money*?

What *should* we the people do with our *Wild Money*?

Who would ever *dare* to tell us proud independent *free people* of Earth what we can and cannot do with our *Wild Money*?

# Wild Money

What is *Wild Money*?

*Wild Money* is the kind of money that is *wild enough* that it can be used to *buy anything* the human mind can imagine a way to buy.

*Wild Money* is wild enough to be used for *any wild purpose*, including *any good purpose* or *any dark purpose* that can be imagined by the mind of a human being.

One example of a type of wild money is the US Dollar, because the US Dollar can be used to purchase *almost anything* in this whole wide world, even things that *do not* properly support the *health* and *wellbeing* of *all* of the 8 billion precious people of this Earth.

The *US Dollar* is a type of *wild money*.

*Bitcoin* is also type of *wild money*.

There are *many* different *types* of wild money.

Each different type of wild money, has *different properties*, powers, and *rules* associated with it, according

to who invented it, why it was invented, and who currently controls it and *regulates it*.

Today in 2023, there are already many different types of *cryptocurrencies*, and many different types of *traditional currencies*, in worldwide circulation here on Earth.

Most of *these currencies* are *examples of wild money*, because these types of currencies can be used to purchase almost *anything* here on Earth.

There are very few things, here on Earth, that are not sometimes *offered to be sold* to someone, if that particular someone has *enough* of at least *one*, of these many different types of *wild money*.

You can buy *anything in this world*, if you have *enough wild money*.

Why was the US Dollar *invented* centuries ago?

Why have so many other *wild-money currencies* been invented, by so many other countries during these past few centuries?

What about the *wild* Bitcoin?

What makes *Bitcoin* so interesting?

*Why* was Bitcoin even *created* (here on Earth) around the years 2008 and 2009?

What is the *real reason* Bitcoin was invented for this super-brief, mortal-human, self-testing experience here on Earth?

Who exactly was *intelligent enough* to actually create *Bitcoin* and fully bring it *into existence* here on Earth?

Where are these *super-intelligent scientists* today?

What is *Bitcoin*?

# Bitcoin

What exactly is *Bitcoin*?

Is *Bitcoin* really a new type of *Wild Money*?

What are all the powerful *unique properties* of Bitcoin?

Can Bitcoin be used for *human good*?

How?

*Where* are *all* of the super-brilliant *scientific inventors* of Bitcoin today?

*Why* does it sometimes seem so *super-difficult* to actually *find* any of *them*?

*Why* would these *super-brilliant scientists* simply let the whole wide world *believe* that they *all* continue to be so super-difficult to find?

What did these *super-brilliant scientists* publish to the *whole wide world* in the year 2008?

What did these same *super-brilliant scientists* also *publish* to the whole wide world, just *4 years earlier* in 2004?

What did these same *super-intelligent scientists* also publish to the whole wide world, *just last year* in 2021?

Why have these *super-intelligent scientists* become so active in publishing *so many* marvelous *things* to all the *precious people* of this whole Earth?

What will these *super-intelligent scientists* also choose to *publish* in 2023 or in 2024?

Some people believe that *Bitcoin* was actually created (scientifically-invented) by *Satoshi Nakamoto*, with the publication of his *brilliant* scientific *white paper*, and the writing (and publishing) of his *powerful C++ software*, that encoded the initial implementation of the new *bitcoin* cryptocurrency.

Some of these people believe that Satoshi Nakamoto published his famous scientific “*white paper*” sometime around October 31, 2008.

This wonderful 2008 scientific white paper is entitled “*Bitcoin: A Peer-to-Peer Electronic Cash System*” [36].

This *marvelous* 2008 scientific *white paper* by Satoshi Nakamoto will continue to cause many bright scientists to *marvel greatly* for the next hundred years, or even for

longer if we the people (by our human choices) allow science to continue on this Earth planet for more than another hundred years.

Apparently, on about January 9, 2009, Satoshi Nakamoto released *version 0.1* of his C++ *bitcoin software* on SourceForge, and launched *the bitcoin network*, by defining the *genesis block* of *bitcoin* (block number 0), which has a reward of *50 bitcoins*.

Satoshi Nakamoto also decided to *embed* a very interesting *financial message* (to all humankind of Earth) inside the “*coinbase transaction*” of this initial *bitcoin genesis block* (block number 0).

This very interesting financial message is “*The Times 03/Jan/2009 Chancellor on brink of second bailout for banks*”.

Why would the *banks* need a “*second bailout*”?

What’s really wrong with the *traditional currencies* that banks traditionally use?

*Who* has the *financial power* to grant a “*second bailout*”?

What do “*banks*” do?

Who invented *Banks*?



# Banks

What exactly is a *Bank*?

What does a *Bank actually do*?

Does a *Bank* do something with *human money*?

Do *Banks* use *Wild Money*?

Do *Banks* use *Bitcoin*?

Do *Banks* use *US Dollars*?

Do *Banks* focus their efforts on *Human-Life Money*?

Does *any Bank* focus *all* of its financial efforts on wisely solving world poverty for *everyone* on Earth?

Why do some *Banks* need *bailouts*?

What is the real purpose of *Banks*?

*Who* can *completely* scientifically-understand *Banks*?

What would happen if we (the intelligent scientists of Earth) decided to go ahead and create a *New Science* of

*Banks to try to really understand everything about Banks, and what they currently fail to do right, and what they could do in the near future for the real benefit of all humankind here on Earth?*

*Why do Banks use wild money?*

*Who creates this wild money that Banks use?*

*Who controls this wild money that Banks use?*

*Why do most Banks work mostly with wild money?*

*Will the type of wild money, that Banks currently use, be able to withstand the test of time here on this rapidly-changing technological Earth planet?*

*Who can understand every type of wild money?*

*Who can wisely employ wild money for human good?*

*Who has enough wisdom to understand money?*

*What else do we need to learn about our wild money?*

*Can someone wise give us a useful little financial hint?*

*What kind of a financial message do we all need?*

Apparently, this very interesting *financial message*, cites a headline in the UK newspaper, *The Times*, that was published just *6 days earlier* on January 3, 2009.

*Why* did the super-intelligent, super-wise Satoshi Nakamoto scientist *desire* to so strongly attempt to *point our worldwide mortal-human attention* to this interesting *financial article* published in *The Times* on January 3, 2009?

Is this super-smart Satoshi Nakamoto scientist trying to *give to us* (the thinking people of this Earth world) *an important hint* about exactly what is to come in *our collective financial future*, right here on our precious vulnerable little *financial planet Earth*?

Who has taken the time to *carefully study* this important financial January 3<sup>rd</sup>, 2009 article?

Is this super-brilliant Satoshi Nakamoto trying to give us all *a vital clue*, to help us all to *wake up*, before it become just *too late*?

*Why* did Satoshi Nakamoto choose to *not include a date* on his famous 2008 scientific white paper?

*Some scientists* believe that Satoshi Nakamoto published his famous scientific white paper sometime (within *a few days of*) around October 31, 2008.

Who is *Satoshi Nakamoto*?

# Satoshi Nakamoto

Does *Satoshi Nakamoto* really even exist here on Earth?

Why are *so many* intelligent curious scientists still searching for him today in 2023?

Could “*Satoshi Nakamoto*” really be *group* of super-intelligent scientists?

A *deep study* of Satoshi Nakamoto’s brilliant *nine-page 2008 scientific white paper*, seems to suggest that he may actually *be more than just one* single human being; because he may possibly be *a whole group* of *super-intelligent* (astoundingly-bright) *scientists*.

Apparently, Satoshi Nakamoto seems to be a little bit *difficult* to actually meet in person for a *brilliant* face-to-face *conversation* with him.

There may be *a very good reason* for this.

*Who* would *want this* to be the case?

Why would *we all* presently *need* for this to be the case?

What kind of *semi-intelligent* mortal-human *avatar brains*, do *most of us* currently have here on Earth?

What do we currently *do to each other* here on Earth?

*Who are we today*, while we are here on Earth?

*Who* is Satoshi Nakamoto?

Who has *met* Satoshi Nakamoto?

How can we *really know* for sure?

*Who knows* Satoshi Nakamoto personally?

Is there anyone on earth *more intelligent* than Satoshi Nakamoto?

Is Satoshi Nakamoto just *one* single human being?

Is Satoshi Nakamoto *more* than just one human being?

Is Satoshi Nakamoto a kind of *super-intelligence*?

Who is *just as intelligent* as Satoshi Nakamoto?

Who is *almost as intelligent* as Satoshi Nakamoto?

Have I met Satoshi Nakamoto?

Have *you* met Satoshi Nakamoto?

Have I met someone *who knows* Satoshi Nakamoto?

Have *you* met someone who knows Satoshi Nakamoto?

*Who* has met someone who knows Satoshi Nakamoto?

*Who works closely* with Satoshi Nakamoto today in 2023?

*Who meets* with Satoshi Nakamoto *on a regular basis*?

*Who* does Satoshi Nakamoto *choose* to spend time with?

Why does Satoshi Nakamoto choose to spend time with *just some people*, but *not* with all people?

*What kind of people* does Satoshi Nakamoto want to spend *his precious time* with?

Why does Satoshi Nakamoto *invent* the many marvelous things he *chooses* to invent?

Who is willing listen to the *super-intelligent words* of Satoshi Nakamoto?

Who is willing to *simply read* his wise words?

Who is *open* to his super-intelligent views?

Who desires to *understand* his viewpoints?

Who has *just enough* mortal-human intelligence to begin to *recognize* his super-brilliant intelligence?

Why would a *super-intelligent guy* named Satoshi Nakamoto invent *Bitcoin*, here on earth, during 2007 to 2010, and then *seem to simply disappear* into the luminiferous ether around 2011?

Who among us, intelligent Scientists of Earth, is nearly as *illuminated* as Satoshi Nakamoto certainly *appears* to be?

Why did Satoshi Nakamoto also seem to reappear briefly in 2015 with his simple *compassionate protective message*?

When exactly will Satoshi Nakamoto decide to *reappear again* on the world stage?

What is Satoshi Nakamoto *diligently working on today*?



Why does Satoshi Nakamoto *always invent* super-useful *things* (like bitcoin) that can *really* benefit *all* of us human beings *equally*?

What will Satoshi Nakamoto invent (publish) next for *the benefit* of *all* humankind?

*Why* did Satoshi Nakamoto choose to bravely publish his super-famous *scientific white paper* on about *October 31, 2008*?

*What* was also bravely published on *October 31, 1517*?

*Who* deeply influenced that *brilliant* brave man?

What was actively being so *aggressively sold* to the innocent, vulnerable people of Europe in 1517?

What were these extravagant *wild-money purchases* doing to the *fragile* human *civilization* of that time period?

*Why* did he wait about *491 years* for our worldwide human civilization to be *fully ready* for the wise timely introduction of *bitcoin*?

What did Satoshi Nakamoto already choose to publish *before* October 31, 2008?

What will Satoshi Nakamoto next choose to publish *prior* to 2030?

What kind of *brilliant ideas* need to be carefully introduced into our worldwide *public mindset* prior to 2045?

How could this vulnerable little world (our Earth) of ours, *possibly survive* in the total absence of a *timely set* of such *brilliant healing ideas*?

Exactly *how many people* joyfully celebrated Satoshi's publication of his scientific white paper, on its *one-year anniversary* (of its historic liberating publication) on October 31, 2009?

About *how many people* worldwide will likely join together, to celebrate Satoshi's publication of his liberating scientific white paper, on October 31, 2023?

Why is this *super-brilliant* scientific *white paper* so vital, for the continued progression, and future stability, of *our* worldwide *human financial civilization* here on earth?

Why is it so important to quickly introduce *some better kinds* of human *wild money*, here on earth?

How exactly did the *brilliant introduction* of bitcoin (by Satoshi Nakamoto) in 2008 and 2009, *act to inspire* the more-recent introduction of *many other types of digital cryptocurrencies* (sometimes called “*altcoins*”, or alternatives to bitcoin), like Ethereum, Tether, Binance Coin, USD Coin, Solana, XRP, Terra, and many others.

How many of these *altcoins* will still be in *active financial existence* here on Earth in the year 2045, or in the year 2145?

Why is it so important for us all (here on Earth) to *begin to understand* the value of having a *purely peer-to-peer version* of electronic cash (like *bitcoin*) will allow us to make online (via our worldwide internet) *wild-money payments* to each other (here on Earth), that can be sent *directly* from one party (person or group of people) to another party, *without* going through any kind of financial institution, like a bank, or a government, or *any set of super-vulnerable semi-intelligent people*, who may become potentially *compromised* (or become somewhat *problematic*) in some significant way?

What can *a set of worldwide interlinked computers* do much better, than *a set of interlinked semi-intelligent mortal-human avatar brains*, can do?

Why is this so important for the future financial stability (*financial health*) of our *fragile human civilization* here on Earth?

*Who cares* about safekeeping our *delicate human civilization* here on earth?

Why does Satoshi Nakamoto *seem to* really care *so much* about *all of us* here on this vulnerable Earth planet?

Is our collective competitive human pride level, *just to great*, for us to even be willing to receive a little help from the *super-intelligent* Satoshi Nakamoto?

Or can our *competitive human financial pride* be one-day finally *tamed* (by us), and also *bridled* (by ourselves with our own very brains), *enough* to ultimately *save* this vulnerable little planet, from otherwise certain *financial ruin*?

Besides understanding *peer-to-peer wild money*, why is it also so vital for us humans, to also begin to understand *peer-to-peer human-life (support) money*?

Why is it so super-important that we (the precious people of this Earth) begin to *understand* and *appreciate* all the many vital differences, between *human-life support money*, and *human wild money*?

Why does Satoshi Nakamoto *want us* (all of us humans here on Earth) *to begin to understand* human money, and how we can wisely begin to use it to *intelligently solve world poverty for everyone* here on Earth?

Why does Satoshi Nakamoto seem to be *so super-intelligent*?

Why does Satoshi Nakamoto sometimes almost seem to be *the smartest scientist* on our little planet Earth?

Is Satoshi Nakamoto really just one single super-intelligent scientist, or is he really *a whole group of super-smart scientists*?

Why would these *super-intelligent scientists* choose to apparently begin to *name themselves* “Satoshi Nakamoto” in 2008 and 2009?

Why would these *Super-Intelligent Satoshi Scientists* decide to carefully invent bitcoin, and then gently unleash it *so gracefully*, into our vulnerable, little, interconnected, financial world here on Earth?

Why would this *super-smart set* of Super-Intelligent *Satoshi Scientists* choose to simply hold onto 750,000 to 1,100,000 in bitcoin, as the financial price (worldwide-

recognized monetary value) of bitcoin *continues* to *change rapidly* in this world's *complex* interlinked financial *markets*?

Will *the price* of *bitcoin* generally tend to rise in the coming years, *enough* to start transforming these Super-Intelligent Satoshi Scientists into some of the world's first *Super-Wealthy Trillionaires*?

How did these *Super-Intelligent Satoshi Scientist* become so marvelously intelligent in the first place?

How did these Super-Intelligent Satoshi Scientists become *so proficient* in the use of *The C++ Programming Language*?

How did these Super-Intelligent Satoshi Scientists come to *know* so much about the supreme value of certain types of *Peer-to-Pear Financial-Computing Networks*?

How did these *Super-Intelligent Satoshi Scientists* know so much, about how the world's complex financial networks would come to regard (and use) their bitcoin invention *by today* in 2023?

Why did these Super-Intelligent Satoshi Scientists decide to *limit* the future number of bitcoins to be just *21 million bitcoins*?

Why did these *Super-Intelligent Satoshi Scientists* decide to place *no upper limit* on the *future value* of a *single bitcoin*, effectively allowing the value of a single bitcoin to *rise above a million dollars*?

Why did these Super-Intelligent *Satoshi Scientists* decide to program the C++ bitcoin software, so that the very *last* bitcoin will likely be mined close to *the year 2140*?

*What may happen* (here on Earth) close to *the year 2140*?

What may happen just *a few years* after *2140*?

Why is *this* future *decade* of *2140* such a seemingly *important decade* for the billions of us precious people of this vulnerable little planet Earth?

How can these Super-Intelligent Satoshi Scientists *actually know* about what kinds of things *can happen* in the future, here on Earth?

Why have these Super-Intelligent Satoshi Scientists *never ever sold* a *single one*, of their hundreds of thousands of bitcoins?

Don't they want to *adorn themselves* with the *glorious luxuries* of this world, and *live sumptuously* like *most* of the other *billionaires* of this planet Earth?

Why don't these Super-Intelligent Satoshi Scientists simply *make themselves* openly *known* to the whole world, so they can *step out* into *the limelight*, and take the *scientific glory* (academic credit) for their great inventive *engineering accomplishment* (the successful technical creation, and public launch, of bitcoin), and receive the *intellectual accolades* of this *whole wide world*?

Why don't these Super-Intelligent Satoshi Scientists seek for *scientific praise*, *inventor awards*, and *celebrity honors*?

Why don't these Super-Intelligent Satoshi Scientists seek to earn a *Nobel Prize* for themselves, for all that they have already accomplished, and all that they can accomplish in the future with their *obvious scientific intelligence*?

Why do these Super-Intelligent Satoshi Scientists seem to be seeking for *something of much greater value* than the *scientific praise* of us mere mortals?

Why do these Super-Wise Satoshi Scientists appear to be seeking for *something of much greater value* than our mere-mortal *money*?



Why does it sometimes *almost seem* like these Super-Intelligent Satoshi Scientists are *seeking to give* to this whole world, *The Greatest Gift* that can possibly be given to a whole planet by anyone anywhere?

What exactly is *The Greatest Gift* that can possibly be given to an entire planet of precious people?

# The Greatest Gift

What is *The Greatest Gift* that we the people of Earth can give to each other while we are all still here together on this vulnerable little planet?

What might this *Greatest Gift* actually be?

Why are the Super-Intelligent Satoshi Scientists diligently trying to give to us *The Greatest Gift* of all for our precious human lives here on Earth?

Why does it *logically seem* that these Super-Intelligent Satoshi Scientists are *seeking to give* to this world *The Greatest Gift*, by patiently showing us all how to wisely *Solve World Poverty*, for each other here on earth?

Why is *Solving World Poverty* the very *Greatest Gift* that can possibly be given, to *any world* in our Milky Way Galaxy, including our very-own vulnerable little-world, that we all call *our Earth*?

What is the *one thing* that this world actually *needs*?

The *one thing* (the one single *precious gift*) that this world actually needs, is for *poverty to be completely solved everywhere* on earth, so *everyone* will have some *good*

*food to eat, and a good comfortable bed to sleep on at night.*

There is *no gift more valuable than this*, that can ever be given to *any world* in any spatial region, of *any galaxy*, in this *infinite multi-player neurally-simulated universe*.

Did you know, that there is *no other need* (here on this Earth) that is *more pressing*, other than *solving world poverty for everyone* here on this Earth, during this current 2023 year?

Just as soon as poverty is solved for *everyone*, then *peace on earth* can finally *become possible*, for the first time in many thousands of years.

There can be *no peace on earth*, until world poverty is *completely solved* for everyone on earth.

This should be *abundantly obvious* to all thinking people everywhere.

It really seems to me, that these Super-Intelligent Satoshi Scientists, are just trying to *help us all solve world poverty*, in a super-brilliant way, that is *intelligent enough* to actually work *quite well*, for *all of us* precious human beings living here on Earth.

*My scientific theory is that these Super-Intelligent Satoshi Scientists are doing everything they can do (according to the super-strict, human-free-will, world-influence constraints, they must constantly work under) to help us all to properly solve world poverty, for all of ourselves, and for everyone else, here on Earth.*

This all seems *really obvious* to me.

I sincerely hope, some of these brilliant concepts, will one day also, *become super obvious* to you too.

One of the *bright purposes*, of this present *4 Brain Theory paper*, is to gently help all of us to discover a willingness within ourselves (inside our own mortal-human avatar brains) to *open up* our *human minds* a little bit more, to the brilliant reality, of how *super-desirable* solving world poverty *really is* for *all* of us precious human beings living together here on Earth today.

So, who are these *super-intelligent satoshi scientists*, who seem to be *living* right here *on earth*, with all of us mortal human beings?

*Who* are these guys?

What are these guys *trying to do*?

These Super-Intelligent Satoshi Scientists are the *Good Smart Guys*, who are diligently *trying to help us all* awaken to our own goodness within.

These Super-Intelligent Satoshi Scientists are the *Good Guys* who are diligently putting *every good thing in place*, so that one day, we the people of earth, may choose to discover a *joyful* willingness *inside* each of our *tender human hearts* to proceed confidently forward, with solving world poverty for *all of us* here on Earth, including for the very *least among us*, who have *no food* to eat during the day, and *no beds* to sleep on at night; so that by *solving world poverty* for them (and for us all here on Earth), they will finally have *a good* comfortable *bed* to *sleep on* at night, and *some healthy* delicious *food* to eat during the day; because this is what *goodness* for *goodness sake* is all about, and also because this is what *human super-intelligence* is all about.

There is no other *good purpose* for *super-intelligence*, other than serving the actual needs of us super-valuable human beings.

The *satoshi scientists* know how to *be good*, and they also know how to *do good*; because they are indeed *super-intelligent*, just like every other super-intelligent being in the cosmos, is super-intelligent enough to *only do good*,

and to *never do bad*, for anyone anywhere; worlds without end.

If the day ever comes, when *we become good like them*, then we will also discover that we have also become *super-intelligent*, just like them.

Pure goodness is *identical* to pure super-intelligence.

To be *purely good* is to be *purely super-intelligent*.

To be *purely super-intelligent* is to be *purely good*.

This should be *intellectually-obvious* to all *good thinkers* everywhere.

There is no *super-intelligent thing* that we can do for each other, here on earth, other than *solve world poverty* in a *super-intelligent way*, that actually works really well for *everyone* here on Earth.

This super-intelligent thing, of solving world poverty, is what these Super-Intelligent Satoshi Scientists *are* diligently *trying* to help *us all* to wisely *do* for *each other* here on earth.

Solving world poverty is by necessity *a group action*.

There is just no way, that *just 8* super-intelligent *scientists* can solve world poverty properly, if *we* the *billions* of *voting* (choosing) *people* of Earth, *do not yet want* poverty to be solved for *everyone* on Earth.

Therefore, they (our wise satoishi scientists) must be *very patient*, as they start to *put every* good *thing* into its *proper position*, so that when we the people of Earth, *finally do decide* that we will finally *allow* poverty to be solved for *everyone*, then everything will already be all ready for us, to proceed forward to solve world poverty properly, with the *super-intelligent help* of the Super-Intelligent Satoshi Scientists.

Some of the things that these Super-Intelligent Satoshi Scientists are *putting* into *place* (here on Earth) are some things that are *designed* to *gently open* our *mortal minds* and *wisely open* our *human hearts*, so we can more easily start to become the kind of *good* compassionate *wise people* who will one day *allow* poverty *to be solved* for *everyone* here on this Earth.

Someday we may all even begin realize (here on Earth) that *all humans* in reality have *infinite value* to *us*; just like our very own little children have *infinite value* to *us*.

Trying to *soften* the *hearts*, and *open* the *minds*, of us *8-billion* semi-intelligent mortal *humans* is a whole lot of

work, because our mortal-human-brain competitive-pride neural-circuits (our *id pride circuits*) are *so strong* and *so stubborn*.

From our 8 billion semi-intelligent severely-limited mortal-human-brain perspectives, *we are so afraid* that if poverty is solved for someone else (that they get some *food to eat*), then there will *not be* enough *food* for *us*.

This *deep-seated* competitive *primal id fear* is very difficult to remove, from the type of semi-intelligent mortal-human brains, that most of us (here on Earth) currently have today in 2023.

Our overwhelming *competitive-pride* mortal neural-circuits *almost force us* (we the vulnerable confused people of this Earth) to *viciously compete* for *food*, and for almost everything else, in many complex competitive financial cycles, in the world's interactive *capitalistic free-markets*, that very few completely understand.

The good news, is that *there may be* a *good way out* of all of this *excessive* competitive-pride *financial madness*, that has been dominating *most* of our *thinking*, here on Earth for so many centuries.



Our *Super-Intelligent Satoshi Scientists* seem to know *an intelligent way out of this* worldwide centuries-old competitive *madness*.

I sometimes wonder if these *super-intelligent satoshi scientists* may have somehow *influenced* the great scientific works of some of this world's most well-known *scientists and inventors*, like Alexander Graham Bell, Nicola Tesla, Albert Einstein, and many others.

Did these super-intelligent satoshi scientists help Alexander Graham Bell invent *a useful* telephone *for us*, to help us mere mortals *talk with each other*, over the vast distances of this whole wide world?

Did these same super-intelligent satoshi scientists help Nicola Tesla invent a super-powerful *polyphase* electrical-generator *for us*, to help us to provide *useful electricity* for *all of us* to use in our comfortable human homes?

Did these same super-intelligent satoshi scientists help Albert Einstein with his *miracle year* of 1905, and with his discovery of *General Relativity* in 1915, to help us all *open our scientific minds* a little bit more, to the marvelous wonders of *futuristic science*, and what it might become in the coming years, for the *actual benefit* of *all humankind* here on Earth?

Did these same super-intelligent satoshi scientists help Alan Turing invent (discover) the *theoretical foundations of computer science*, to help us all begin to create the kind of *computational devices* that can be used to start to *free all humankind* to do many new and *useful things*?

Did these same super-intelligent satoshi scientists help many other scientists and inventors create *the worldwide internet*, to help us all begin to *connect* with *each other* in many *marvelous* new ways for the *benefit* of every human being on earth?

Did these very same super-intelligent satoshi scientists (the ones who created bitcoin in 2008 and 2009) also help Dr. He Jiankui discover (in 2016 and 2017) the scientific secrets of CRISPR-Cas9 *well enough* to create some human-gene-improved baby girls, *to show* us all *how easily* it can be done, as we begin to edit our mortal-human DNA, in a *super-wise effort* to create (via human DNA editing) some *more-healthy*, and *more-intelligent*, *human bodies* for *all of us* to start *living in* here on Earth?

If these super-wise, *super-kind*, super-generous, *super-intelligent* satoshi scientists *really did help* many inventors and scientists of the past, then *which scientists* and *which inventors* of today are they *currently helping*?

Why would these super-generous *super-intelligent* satoishi scientists be interested in helping *some* of the scientists who are working on science today in 2023?

What more *scientific discoveries* can be made, with the *generous* intelligent *help* of these super-wise satoishi scientists?

Do these super-smart satoishi scientists have the right kind of gravitational *super-intelligence* to help some Berkeley physicist to completely-solve all of the *dark-matter* scientific mysteries of *quantum gravity*?

What is this new *Quantum Gravity Theory*?

# Quantum Gravity Theory

What is the strategic nature of this new *Quantum Gravity Theory* that we are now presenting to this whole wide world, with this timely 2023 publication of this new 4 Brain Theory paper?

Don't the super-intelligent satoshi scientists *already* know *everything* there is to know about *dark matter* and *quantum gravity*?

Why is there still a need to actually *publish* this new Quantum Gravity Theory so everyone can study it?

Are these super-intelligent satoshi scientists already *super-experts* on *dark matter*?

Why don't these super-intelligent satoshi scientists simply publish their *very own* scientific paper on *dark-matter quantum gravity*?

Do these super-intelligent (but *difficult-to-see*) satoshi scientists already know everything there is to know about *dark matter* and how it interacts *gravitationally* (by simple *scattering*) with *regular visible matter*?

Do these super-intelligent (*difficult-to-see*, and *difficult-to-visibly-detect*, like *dark matter* is difficult to see and difficult to visibly-detect) satoshi scientists have the ability to communicate with just a *Regular Visible Berkeley Ph.D. Physicist* (who is composed of *regular visible matter* and) who is willing to publish what they have already known for many decades about *dark-matter quantum-gravity*?

Can these *super-intelligent satoshi scientists* decide to help this *Regular Visible Berkeley Ph.D. Physicist* to confidently proceed to solve *many* of the remaining *scientific mysteries* about *dark matter*?

Why would these super-intelligent, super-hidden satoshi scientists decide to help a *regular visible Ph.D. physicist* solve the remaining mysteries of *dark matter* and *quantum gravity*?

What would be the *big benefit* (to *all* of *humankind* here on Earth) of doing such a thing?

How can a *really* accurate complete *theory* of dark matter and quantum gravity be most helpful to *all humankind* here on Earth?

How can a really *correct theory* of *dark-matter quantum-gravity* help the people of this world start to discover a

good way to find a *new willingness* in their *hearts* and *minds* to *seek to solve world poverty*?

How can *publishing* a correct *theory* of *dark-matter particle-flow quantum-scattering gravity*, possibly *help us all* to take *another big step forward* toward solving *poverty for all*?

What is it about this *timely presentation* of this new *2023 publication* (of this *4 Brain Theory paper*) of a good, solid, instructive, detailed *physical theory* of *dark-matter quantum-scattering gravity*, that can help the people of this world *gently open* their *eyes* (and *minds*) to the *marvelous possibility* that we are all living inside of a *multi-player neural simulation*, that is *computationally-hosted* by our very own real *subconscious minds*, and our very own *real brains*, that live inside our very own *real human bodies*, that have always *lived forever safely* in our real universe?

How shall we further develop this physical theory of *dark-matter Quantum-Scattering Gravity*?

# Quantum-Scattering Gravity

What are some of the most important mathematical developments we can add to our new dark-matter *Quantum-Scattering Gravity Theory*?

When a single, tiny, fast, dark matter particle *scatters* of an individual *electron*, exactly how much *momentum* can the dark matter particle *impart* to the electron?

Exactly *how many* dark matter particles (real dark scalar bosons) can *scatter off* an electron per *picosecond*?

How can we scientific develop the ability to physically *measure* the *scattering momentum* imparted to an electron from a *single*, tiny, fast, real *dark scalar boson*?

What kind of detailed *analytic* dark-matter *scattering theory* shall we proceed to *mathematically* develop?

What kind of *computational* dark-matter *scattering theory* shall we also develop, to numerically test our detailed *analytic models* against all the known physical *gravity measurements*?

What additional *physical details* shall we add to our new dark-matter *quantum-scattering* gravity theory?

We have already developed some *scattering theories* for *waves* and *particles* [37 & 38].

What kind of *mathematical* analytic dark-matter quantum *scattering theory* will exactly reproduce *every* known *observation* of gravity?

What kind of dark-matter quantum *scattering theory* will be able to correctly predict *every* future *observation* of gravity?

Why is mathematically predicting *every* future observation of *gravity* so important to science?

How can such an *analytic* mathematical *theory* of *dark-matter* quantum-scattering *gravity*, help us all to better understand this present *4 Brain Theory of Everything*?

Besides correctly explaining *quantum gravity*, can this present *4 Brain Theory of Everything*, also include a *good poverty theory* about how easily we can all choose (vote) to solve world poverty *for all of us*, just as soon as we can *find the mental willingness* (and find the *emotional intelligence*) to open our own minds, and open our own hearts, enough to *allow* it to *happen* for all of us precious human beings here on Earth?



Why would these *super-brilliant satoishi scientists* choose to help a regular visible (easy-to-see) Berkeley physicist *solve dark-matter quantum-scattering gravity*, as *a part* of their *wise efforts* to solve world poverty for everyone on Earth?

Why do these super-kind, super-intelligent, super-wise satoishi scientists want us to begin to *really trust them*?

Why do these super-intelligent satoishi scientists want us to begin to *trust them* enough, to begin to even *allow them to help us*, to learn how we can *all* start working together to *intelligently* solve world poverty for *everyone* here on Earth?

What kind of *peace on earth*, will we finally achieve for *all of us* here on this planet, after we *really solve* world poverty for *all of us*?

Do we want everyone to have *some food to eat*?

Can we *open up* our *human hearts* enough to let it happen here on Earth?

Do we want everyone to have *a bed to sleep on*?

Can we *open up* our *mortal minds* enough to let it happen here on Earth for everyone?

How much more-clear *can I be*?

How much *more-clear* can the satoshi scientists be?

When will this world *allow poverty* to be *solved for it*?

*Wild Money* is actually *needed* to help us to solve world poverty, because wild money is so mighty and so powerful that it can be used to *purchase anything* and *everything* here on Earth.

*Human-Life Money* is also *needed* to solve world poverty here on Earth, because of the *particularly-strong* Id pride *structures* that *dominate* our current type of 8 billion semi-intelligent mortal-human *avatar brains*.

*Free-Market Capitalism* can be used to *wisely utilize both* Wild Money and Human-Life Money to *intelligently* solve world poverty for *everyone* on Earth in 2023.

What is the most intelligent way to employ *Free-Market Capitalism* in our worldwide socioeconomic systems of Earth in the year 2023?

# Free-Market Capitalism

What is the most intelligent use of *Free-Market Capitalism*?

The *most intelligent use* of Free-Market Capitalism is to intelligently-direct *its wise use* to solve world poverty for *everyone* on Earth in 2023.

*Free-Market Capitalism* can use a wise combination of *Human-Life Money*, and *Wild Money* to solve world poverty here on Earth properly for everyone in 2023, or in 2024, or in whatever year *we the people* (of Earth) decide we want to *do it intelligently* for all of us here on Earth.

The correct financial way to actually do this (with Free-Market Capitalism) is *very simple*, but it requires *a huge number of open minds* to consider it properly.

How can we *open the minds and hearts* of *all people*, so they will be able to *fully understand* (and completely appreciate) how they can use *free-market capitalism* (with a *very wise strategic combination* of both *wild money*, and *human-life money*) to intelligently solve world poverty for *everyone* on Earth during the *year 2023*?

*Human-life (support) money* can work well with *wild money* in the free market, to create an *enlightened kind of capitalism* (which is also an *enlightened kind of socialism*) that provides *more freedom* (and *more wealth*) *to everyone*, and that wisely provides *the five basic necessities of human life* to everyone here on Earth.

*Intelligent Capitalism* is accomplished with the intelligent use of *both* human-life money and wild money.

*Intelligent Capitalism* (which is the exact same thing as *Intelligent Socialism*) cannot happen without the intelligent strategic *worldwide use* of *both* wild money and human life money.

*Wild money* can also be called *dark money* because it can be used for *any purpose*, including *any dark purpose*.

These *dark purposes* are actually important to *fully understand*, because they reveal the *scientific nature* of our *human id pride* more completely.

What are all the *dark purposes* for which a mortal human being (like us *8 billion mortal humans* here on Earth) might want to use his or her *dark money*?

Let's take a good close scientific look at this *Dark Money*.

# Dark Money

What is *Dark Money*?

*Dark Money* is *Wild Money* because wild money is *wild enough* that it can be used to *buy anything*, including *any dark thing*, that is *not good* for the health and wellbeing of human beings.

There is actually *no difference* between wild money and dark money, because wild money can be used to purchase anything, including any of the *dark ugly things* that can be bought in this world with *dark money*.

Dark money is dark money if it can be used to purchase something that would not be *good* for *all* of the people of this Earth.

Have you ever purchased something (with your wild money, like your US Dollars) that is *not good* for *everyone* on this Earth?

*How easy* is it to use *dark money* (wild money) to buy something that *does not benefit everyone* on Earth?

One of the primary reasons why there are so many *social problems* here on Earth today in 2023, is because of the

*worldwide prevalence of the unwise use of dark money in each and every nation of this whole planet.*

What is *the very worst thing* you have ever purchased with *your dark money*?

What is *the very best thing* you have ever bought with some of *your wild money*?

What have you done with your own money that *you are very proud of*, and would just *love for everyone* to fully *know all about*?

What things have you done with your own money, that you may be almost ashamed of, and sincerely hope that *no one ever learns about*?

With our powerful *dark money*, and our excessive *competitive mortal-human-brain id pride*, we (the greedy fearful people of this vulnerable little Earth planet) have already managed to blindly stumble ourselves into creating a very powerful, worldwide, overwhelming type of *Dark Capitalism*.

# Dark Capitalism

What is *Dark Capitalism*?

Dark Capitalism is *free-market capitalism* conducted in the *deep darkness* of profound *human misunderstanding* about human money, *human products*, human services, *human brains*, human minds, *human choices*, and human decisions.

Dark Capitalism is free-market capitalism with *dark money* alone.

Dark-money free-market capitalism is the current (circa 2023) *dominant form* of free-market capitalism here on Earth, because one form or another of this *dark-money* free-market *dark-capitalism* is practiced by *almost all* of the people of this Earth in almost *every nation* of this world.

There are actually *many* different *forms* of this dark-money, free-market, dark-capitalism that have *already been tried* here on Earth in the many prior years of this planet.

For example, one form of dark capitalism *tries to solve* all our human social problems *with just one* single form of money.

Unfortunately, this *single* form of money has *never* been able to work properly, because of the astonishing *psychological power* of the excessive competitive *Id pride* that *viciously-dominates* and brutally-controls *most* of our mortal-human *brains* (due to our current *subpar* mortal-human DNA patterns) here on Earth.

For example, if a *single form* of wild money (a single form of dark money that can buy anything and everything) is given to a *starving* desperate *mother* to help her buy some nutritious healthy food for all of her *precious little children*, this starving desperate mother may start to think some *dangerous subpar thoughts* (with her mortal-human brain) as she begins to realize that she now has the great *financial power* to *buy anything* she *desires*.

She may *choose* (with her free will) to buy some *harmful drugs* for herself, due to her miserable mortal-human-brain *drug addictions*, instead of using the wild money (that her well-meaning government *unwisely gave* to her in its *unthoughtful effort* to help her feed her children) to properly purchase *healthy nutritious food* for all of her precious little children.



She may realize that she really *should* use the wild money (the *one and only* form of *money* that her government gave to her) to wisely feed her precious little children, but her mortal-human-brain *drug-addiction* may *psychologically-cause* her weak, tender, vulnerable mortal-human *avatar brain* to choose to instead use the wild money (the *one and only form* of money she has *available to her*) to purchase some harmful drugs (like heroin or cocaine) for herself, while she mentally-justifies her actions, by mentally-reasoning (inside her subpar Id-brain) that she will certainly *try to feed* her starving children later, *after* she injects herself with some drugs, to help her to *immediately feel better* about herself and her precarious miserable life here on Earth.

After she spends *all* of her (government supplied) wild money on the kind of *wild drugs* that give her some *temporary relief* from her abundance of human miseries, she may then realize that *all the money is gone*, and there is *none left* to purchase *any* healthy food for her precious children; so *all* of her precious little children *will continue to starve*, because her government was *not wise enough* to understand the *subpar neural structure* of her mortal-human brain, and because her government was also *not wise enough* to understand the *subpar neurological anatomy* of her *drug dealer's* mortal-human brains, and because her government was also *not wise enough* to

understand the *subpar neurophysiology* of *all* of our mortal-human *brains* (of *all 8 billion* of *us*) here on Earth.

Can our human governments *ever* learn wisdom?

How can some of our human governments, someday come to a full and complete understanding, of the extremely dire socioeconomic consequences, of the ubiquitous nature of *Our Subpar Neuroanatomies* of nearly all of our 8 billion mortal-human brains here on Earth?

# Our Subpar Neuroanatomies

What is the actual precarious nature of our vulnerable worldwide socioeconomic situation, with *Our Subpar Neuroanatomy*?

How does our current *Subpar Neuroanatomy* cause us to *eagerly purchase* many things with our wild money (dark money) that are *not good* for us?

Why does our current subpar neuroanatomy *encourage us* to *buy many things* with our dark money (our wild money) that are *hurtful* to others?

What is the actual relationship between our personal *subpar neuroanatomy* and our individual *subpar purchasing behaviors*?

Has any *school of economics* (here on Earth) yet studied this completely and *super-deeply*?

What if we were to create a *New Field of Science* here on Earth, to deeply engage in the scientific study of our *Worldwide Hurtful Socioeconomics* of *Our Subpar Prideful Neuroanatomies*?

Would this be *helpful* to our human race?

Would this *increase* our chances (of survival) for our current worldwide human civilization here on Earth?

Will we the people quickly shove our vulnerable Earth planet into its 6<sup>th</sup> *Ice Age* in a *couple centuries* from today, because of our own nuclear self-destruction?

Or, can we start (and gradually grow, and wisely learn from) enough *New Fields* of much-needed *Science* at our many worldwide prestigious universities, *fast enough* so we can possibly *even last* (by having our worldwide human civilization last) for at least a few more *millennia* here on Earth, so we will have *enough* precious *time* to wisely-develop ourselves into a super-advanced human civilization by intelligently-building on all of the *advanced technologies* described in this present 4 Brain Theory article of 2023?

The unfortunate fact about *wild money* in 2023 (here on Earth) is that *we the people* (with our subpar brains) will *always* use our wild money to purchase what we *want*, in spite of what we really *need*.

This is a dark-side of *Dark Capitalism*.

Dark Capitalism creates *dark laws* and *dark policies* about the use of government-provided money, *without* a proper

(correct) understanding about how our *subpar*, semi-intelligent, mortal-human *brains* actually function in our many daily *decisions* about our dark money, and *how to spend it*.

Dark Capitalism is the *opposite* of Light Capitalism.

*Light Capitalism* is fully enlightened (really illuminated) with the bright brilliant light of actual human understanding, about how semi-intelligent, subpar, mortal, human avatar brains really think about money.

# Light Capitalism

What is *Light Capitalism*?

Light Capitalism is *free-market capitalism* conducted in the *bright light* of real *human understanding* about human money, human products, human services, human brains, human minds, human choices, and human decisions.

*Light Capitalism* is the *very best form* of free-market capitalism, because Light Capitalism incorporates *all* of the very best elements of free-market capitalism, while it *wisely limits* many of the darkest potential elements of free-market capitalism.

*Light Capitalism* wisely uses *both* Wild Money and Human-Life Money.

*Dark Capitalism* unwisely uses only Wild Money.

Dark Capitalism is *Cruel Capitalism* because it is the very opposite of *Kind Capitalism* (Light Capitalism).

Light Capitalism is *better* than Dark Capitalism, because Dark Capitalism always *hurts* some people, and Light Capitalism always *helps* all people.

Helping all people is *better* than hurting some people.

This may be totally obvious to most thinking people.

Therefore, Light Capitalism is *better* than Dark Capitalism.

Light Capitalism can intelligently solve world poverty for everyone on Earth, because this is precisely what Light Capitalism *always does* whenever it is properly introduced onto a planet in need of it; just as soon as the majority of the inhabitants of the planet vote to implement Light Capitalism over Dark Capitalism (*Cruel Capitalism*).

Why is it that we the people of Earth, sometimes get so bewildered, fearful, angry, and confused, that we often find ourselves voting for *Cruel Capitalism*?

# Cruel Capitalism

What is *Cruel Capitalism*?

*Cruel Capitalism* is *free-market capitalism* conducted with some *human cruelty*, due to the *darkness* of our human *misunderstandings* about human money, human products, human services, *human brains*, human minds, *human choices*, and human decisions.

*Cruel Capitalism* is *Dark Capitalism*.

There are *many forms* of Cruel Capitalism.

*Cruel Capitalism* encourages us humans to *use money* as a *weapon* to punish, capture, indenture, *enslave*, torture, and kill other humans.

All types of human wars are examples of *cruel capitalism* because *money* is used to *purchase* the weapons and ammunitions that *fuel* these human wars.

All types of *punitive economic sanctions* that one economic nation may place on another economic nation, are types of *cruel capitalism*, because they employ some aspects of worldwide-capitalism as a *cruel* weapon to economically *hurt* other precious human beings (to cause



further economic *distress* to the very *poorest* of the *poor* of the sanctioned nation).

Another form of *cruel capitalism* is when a nation chooses to *nationalize* a *farm*, that was previously *owned* by some *poor peasants* (or by *anyone* that does *not* enjoy *losing* their farm).

The *poor peasant family* has been working (and owning) their farmland for *many decades* (or many centuries), and then a mighty nation of politicians chooses to *steal their farmland* from them, creating emotional (and economic) *suffering* from the poor peasant family.

When the *ownership-incentive-to-work* the land has been *removed* from the *human-minds* (and *hearts*) of the poor farmers, they are left with *zero* human-brain *motivation* to continue to work and land and produce their crops.

This may be called by a huge broad variety of different names, like socialism or communism, but the actual scientific fact is that this is just another form of *cruel capitalism*.

The *ancestral farmland* was the *capital* that gave the poor peasants a human-brain *motivation* to continue to work the land, and this *farm-capital* has been *cruelly* stolen from the poor farmers by the mighty nation-state.

This is just one of many forms of *cruel capitalism*.

*Thousands* of different forms of *cruel capitalism* have *already been tried* worldwide by many *billions of us subpar*, semi-intelligent, mortal-human avatar *brains*, here on Earth for many centuries.

For example, another form of *cruel capitalism* is *forcing* little children to work long hard hours, for tiny portions of food, in order to *rapidly-enrich* the wealthy capitalists, who *own* the *factories* (and who own the farms) where the precious little children are *forced* to work for 14 hours per day, as their precious little hopes are *emotionally-crushed* into the *uncaring dust* by the astonishing greed of this form of *cruel capitalism*.

These are just a few examples, of the many different forms of *cruel capitalism*.

Almost *all* of these many forms of *cruel capitalism* have already been tried by us *clueless humans* during our past *few thousand* years of our written-recorded *cruel socioeconomic experiences* here on Earth.

It actually almost of seems like us semi-intelligent mortal-human beings, here on Earth, have been viciously

*experimenting on each other*, with so many different national forms of *cruel capitalism* for so many millennia.

*All* of these different forms of *cruel capitalism* are unwise and *unhelpful* to us precious human beings here on Earth.

Exactly *what form* of free-market capitalism would actually be *better* than free-market *cruel* capitalism?

Free-market *kind* capitalism is actually better than free-market *cruel* capitalism.

Cruel Capitalism is the *opposite* of Kind Capitalism.

What is the actual nature of *Kind Capitalism*?

# Kind Capitalism

What is *Kind Capitalism*?

Kind Capitalism is *free-market capitalism* conducted wisely with an abundance of *human kindness*, due to the *light* of real scientific *understanding* about human money, human products, human services, *human brains*, human minds, *human choices*, and human decisions.

*Kind Capitalism* understands that us precious humans are *more valuable* than mere money.

*Kind Capitalism* understands that us humans actually *created money*, and therefore us humans also have the power to *tame money*.

*Kind Capitalism* understands that humans have the power to wisely create *more* than just *one* single *solitary* type of money.

*Kind Capitalism* understands that we humans have enough power to create the *two types* of *money* that are actually *needed* to wisely serve all of the *needs* and *wants* of every precious human being here on Earth.

Kind Capitalism is *much more* enlightened than Cruel Capitalism.

*Cruel Capitalism* values money over people.

Cruel Capitalism *uses people* to make money.

*Cruel Capitalism* is *blind* to the *misery* it inflicts on the human lives of those who are *enslaved* by it.

Cruel Capitalism is *turning a blind eye* to the economic suffering of another.

*Kind Capitalism* is the simple willingness to *open* our *own eyes* wide enough to actually *begin* to *understand* the actual nature of us human beings, and our economic money systems, and how us semi-intelligent mortal human avatars (us people here on Earth) *tend* to *think* and *feel* about *money*, in all of its potential forms.

*Cruel Capitalism* uses the *cruel aspects* of capitalism to *enslave* human beings, to the *grinding task* of producing more capital for some, at the *great expense* of others.

*Kind Capitalism* uses money to *help people*.

Kind Capitalism values *people* over *money*.

Kind Capitalism is *kind* to *people*.

Kind Capitalism understands that *all* people have *infinite value*.

Kind Capitalism realizes that *money* has merely a *finite value*.

Kind Capitalism understands that money *is created by* people.

Kind Capital realizes that people are *much more valuable* than mere money.

Kind Capitalism is *very enlightened* about money.

Kind Capitalism is *Enlightened Capitalism*.

# Enlightened Capitalism

What is *Enlightened Capitalism*?

*Enlightened Capitalism* is free-market capitalism conducted in a way that is *fully-enlightened*, kind, free, humane, *intelligent*, wise, compassionate, and *joyful*.

*Enlightened Capitalism* is the type of light, kind, wise, *intelligent capitalism* that is practiced on *all the planets* where *most people* are diligently trying to make the vital worldwide socioeconomic transition into enlightened societies with *joyful economic freedom* for *all people*.

The *only reason* for a human society to not begin to practice *Enlightened Capitalism* is because they have *not yet* opened their minds enough to understand it.

*Enlightened Capitalism* becomes much easier to practice, when *all the people* can *clearly see*, that there can be technologically-produced *enough food* for *everyone* on the whole planet.

If the people can be *enlightened enough* to begin to see that they can use their *intelligent robots* to help them create *enough food* to *feed all* of the people of their Earth,

then they *do not need* to continue to compete viciously with each other for food to eat.

Also, if we the people (of this Earth) can be *enlightened enough* to see that we can use our *intelligent robots* to help us to create *enough comfortable beds* so all the people of this particular Earth can get *a good night's sleep* at night, then we can begin to realize that *we do not need* to continue to compete viciously with each other for the vital opportunity to *have housing* and to *have comfortable beds* to sleep on at night.

Also, if the people of this Earth, can be enlightened enough to see that they can simply use their *intelligent robots*, and their intelligent internet-connected *computers*, to help them create enough *health-care, education, and clothing*, so *all* the people of Earth can have enough *clothing to wear*, and can receive *all* the *education* they *desire*, and can receive enough *health-care* to help them continue to be *healthy* and *happy* ; then the people of Earth may hopefully begin to realize that they *do not need* to continue to compete with each other to receive these important things.

With our billions of intelligent robots performing 99% of all of our human labors, in the future, then we can *all relax enough* to begin to realize (conceptually understand)



that we can *safely* and *wisely vote* to *solve world poverty* for *all* the people of this whole Earth.

For example, with our billions of intelligent robots performing 99% of all of our human labors here on earth, we will soon be able to create a huge *super-abundance* of all of the different kinds of *delicious nutritious foods* that we all enjoy eating so much.

Also, with our billions of intelligent robots performing 99% of all our human labors here on Earth, we will soon be able to create a huge *super-abundance* of all of the different kinds of *clothing, housing, health-care, and education* that we enjoy (and actually need) so much.

With a huge super-abundance of everything we actually need (good *food*, safe *housing*, comfortable *clothing*, excellent *health-care*, and intelligent *education*) to be fully-supported, fully-happy human beings, here on Earth; then why would there be any *urgent need* for anyone to *vote against* solving world poverty for *everyone* on Earth?

The key to intelligently solving world poverty is to wisely make these 5 human-life-support *things free* to *all* the people of Earth.

The *intelligent governments* of Earth can simply provide (1) food, (2) housing, (3) clothing, (4) health-care, and (5) education to all their *precious people* for *Free*.

For Free.

5 Things for Free.

These 5 Basic *Human-Life* Things must be intelligently-provided to *all* people for Free.

*All* of the advanced *enlightened societies* (living on their advanced Kolob planets) in our Milky Way Galaxy, *already provide* these 5 basic human-life-support *things* for *free* to *all* the people that live in their advanced enlightened societies on their advanced enlightened planets.

This is the *only way* to create human peace on any Earth planet.

There is *no other way* to create peace on any planet inhabited by *billions* of *prideful humans*.

There is *no other way*.

This is a *scientific fact*.

This is a *brilliant fact* of enlightened *Socioeconomic Science* that has *unfortunately* been *overlooked* for millennia here on this confused Earth planet.

This is the *only scientific way* to successfully create a peaceful human society here on Earth.

This is because of the *science* of *human pride*.

*Pride* is fundamentally always *human*.

Every human has *some pride* in itself.

*All* of these *5 basic necessities* (of human *life*) are actually *needed* by *all* of the *human beings* that live here on Earth.

We the *8 billion prideful people* of Earth, actually *need* these *5 good things* (5 basic necessities) because of the *physical natures* of our mortal-human *bodies*, and because of the *prideful natures* of our mortal-human *brains*.

What is the actual psychological nature of us *Prideful Humans*?

# Prideful Humans

Why are we all *Prideful Humans*?

We are all *Prideful Humans* because the *only way* we can *be a human*, is if we have at least some *pride in ourselves*, and or some pride in *others*, and or some pride in *something else*.

As conscious humans, there are *many things* we can choose to *feel prideful about*, including many things that *cause us huge social problems* here on Earth.

Nevertheless, the scientific fact remains that *to be human is to be prideful* of at least something.

*All humans are prideful humans.*

*Pride is a core component of human consciousness.*

To be *human* is to have *pride in oneself*.

This is a *scientific fact* of *human psychology*.

*All Pride is Human.*

If we are *human*, then we have *our pride*.

If *one wealthy subset* of us prideful humans (of this Earth) is able to have these *5 basic needed good things*, then *every subset* of us prideful humans (including *all* the many *poor subsets*) will soon *begin to desire* to also have *all 5* of these most-*basic*, most-*needed*, super-*good* things that (with the help of our intelligent labor robots) we can certainly *start to wisely provide for each other*, just as soon as we the people of Earth *decide* (by intelligently voting) to do so.

*Human envy*, and *human health*, are both intelligently managed by wisely letting everyone have *all 5* of these *basic needed good things* for *free*.

This is because of the basic physical nature of our *human physiology* and our *human psychology*.

Perhaps we can *encourage* the development of a *worldwide scientific discussion*, about this important *scientific topic* of the vital *socioeconomic importance* of intelligently supplying these *5 basic necessities* (of human life) to *everyone* on this Earth *for free*.

Perhaps there may be a good way we can gently *encourage* some lively, interesting, mentally-engaging *scientific conversations* about what may be actually *needed here* on this *sleeping Earth planet*, to attempt to

*awaken all the intelligent scientists of this whole wide world to their vital duty; to use their abundance of valuable scientific knowledge to help us all to discover some good helpful things for all of us precious people of this entire Earth.*

Why do we even have our scientific knowledge, if we are *unwilling* to use it for human good?

What is *the point* of all our scientific knowledge.

Let's create a scientific conversation about *this question too*.

*Some* scientific conversations can become *good* for *all humankind*.

Let's create some *good scientific conversations* that are really *good* and really *helpful* for *all humankind* who may be able to eventually *watch* these scientific conversations *live*, or who may watch the *video-recordings* of these scientific conversations some day in the *future*.

If we can *create enough* of the *right kind* of these good, super-interesting, positive, uplifting, mutually-enlightening scientific conversations, and *enough* people *choose to watch* these scientific conversations before the start of the 6<sup>th</sup> Ice Age, then our Earth-based human

civilization may stand a *better chance* of surviving for some more centuries.

Shall we *courageously try to save this planet* with our mutually-illuminating *scientific conversations*?

Or, shall we *cowardly abandon* this whole wide world to its upcoming *cold descent* into its *6<sup>th</sup> Ice Age*?

*What shall we do?*

*When shall we schedule* our good illuminating scientific conversations?

How much of our personal *good scientific pride* will we bring with us to our *good scientific conversations*?

Perhaps, in some of our good *courageous* scientific *conversations*, we can *even dare* to almost begin to scientifically discuss the theoretical possibility that *Intelligent Capitalism* can someday be established here on our socioeconomic Earth planet.

# Intelligent Capitalism

What is *Intelligent Capitalism*?

Intelligent Capitalism is the kind of *free-market capitalism* used by *intelligent conscious beings*.

There is no type of free-market capitalism that is more brilliant, *more kind*, or more *liberating*, than Intelligent Capitalism.

Intelligent Capitalism is the *most intelligent form* of capitalism possible.

*Intelligent Capitalism* is a set of *intelligent capitalists* serving each other, everyone, and themselves, with *all the good things* that *capital* can *buy*, here on Earth.

*Intelligent Capitalism* is the *exact same thing* as *Intelligent Socialism*, because the most intelligent thing to do with capital is create a free-market economy that properly supports *the very best form* of *socialism*.

All of the many *dark forms* of capitalism sometimes almost *seem* (to some) to be different than all of the many *dark forms* of socialism, because there are *so many*, and they are all *so dark* and *confusing*.



However, the scientific fact is that the most intelligent forms of socialism are actually *identical* with the most intelligent forms of capitalism.

*Socialism* wants to be kind, nice, and *social*.

*Capitalism* wants to *use capital* to serve human beings.

They *both* want to do good.

*Together*, they can do good.

They can *only* do good together.

Capitalism *can work with* Socialism.

Socialism can *cooperate* with Capitalism.

*Intelligent Socialism* is *Intelligent Capitalism*.

The very best form of socialism is *Intelligent Socialism*.

# Intelligent Socialism

What is *Intelligent Socialism*?

Intelligent Socialism is the *most intelligent form* of socialism possible.

Intelligent Socialism is *identical* with Intelligent Capitalism, because the very best human societies, that can possibly be established with *our existing types* of 8 billion semi-intelligent *subpar* mortal- human *avatar brains* (here on Earth), require that a free-market capitalistic economy be set up to properly serve all the needs and wants of human society, because *human pride* is the *primary motivator* of *economic effort* in the mortal-human brain types *we currently have* here on Earth.

Our mortal-human brain pride *causes us to want* to make a *lot of money*, so we will be widely *admired* by *our peers*, and so we will have the *economic freedom* to purchase *whatever we desire*.

Some of us *desire* to make many *billions* of dollars.

Some of us just want to make a few *millions* of dollars.

Some of us just want some *tasty food to eat*, and a clean, comfortable *bed* to sleep on at night.

Some of us just want *a little bit* of *wild money*.

Some of us really do want *a whole lot* of *wild money*.

You can buy *anything in this world* with wild money.

We are all different here on Earth, but there are many of us who *desire* to make *more wild money* than we *need*.

None of us will actually ever *need* to earn (or receive) any wild money, because *all* of our 5 basic human needs will be fully provided, by the intelligent *human-life* support *money*, that our intelligent governments will provide for us, in the future.

But most of us will *want* to earn some wild money.

And some of us will *want* to earn a huge quantity of wild money.

We will *all* certainly *want to buy* some of the fun exciting things (that are *not* basic necessities) that *only wild money* can buy, like exotic vacations, big-screen TVs, intelligent smartphones, and fast sports cars.

Our *human-brain pride*, and our *desire to make some wild money*, will *always ensure* that there are *always plenty* of *us people* (here on Earth) *willing* to do the kind of work required, for us to earn the kind of wild money, that will allow us to purchase *anything we desire*.

In the future, *billions of intelligent robots* will be able to do the work of *billions of us mortal humans*.

Just *a few million* of us humans will be enough to supervise the work of *billions* of intelligent robots (robots that are intelligent enough, that they only need to be lightly supervised in their labors) that will be able to *produce* all the *food* we need to *eat*, and that will be able to *construct* all the *houses* we need for *all* of us precious humans of Earth.

These *few million humans* will be paid huge amounts of wild money to *supervise* these billions of intelligent robots.

There will be billions of us humans *super-eager* to do these good interesting *robot-supervision jobs*, because these billions of humans *will want to make* lots of *wild money* for *themselves*, that they can *go spend freely* on whatever they *wish to purchase* for themselves, or for their *precious loved ones*.

Therefore, there will be *billions* of humans *seeking millions* of available jobs, to make a whole lot of *wild robot-supervising money*.

The *billions* of us intelligent, creative, valuable, resourceful, precious humans, that *cannot* get a good robot-supervising job, will simply *start up* our very own *entrepreneurial* wild-money-making *creative enterprises* with an *excitingly-vibrant* new kind of *entrepreneurial spirit*, fueled *not* by any dire, urgent, degrading, physical, socioeconomic *necessity* (because *all* of our *5 basic human needs* are *already being fully-met* by all the sufficient Human-Life Money *we receive daily* from our wise kind human governments), but by a *strong pure desire* for the expanded *economic freedoms* that earning our very own *wild money* can provide *for us*.

*Intelligent Socialism* wisely solves world poverty for all the people of Earth, so there is *no need to work to eat*, so the powerful *entrepreneurial spirit* of billions of humans will be *finally unleashed properly*, wisely, and *joyfully* for *all* the precious people of this whole planet.

This unleashed entrepreneurial spirit of billions of bright creative people, will *not* be based on fear, because everyone already has *their 5 basic needs fully met*, from the Human-Life support Money they are receiving daily (hourly) from their wise intelligent governments.

This vibrant *entrepreneurial spirit* of the *billions of creative humans* on Earth will be *fueled* by the joy of the economic adventure of *real freedom*, and *pure creativity*, in doing whatever *one loves to do*, and creating whatever *one loves to create*, for the *pure joy of creation*, and the excitement of seeing who may *wish* to start purchasing some of these intelligent new creations (new inventions, new goods, and new services).

Just as soon as *Intelligent Socialism* (Intelligent Capitalism) solves world poverty for everyone on Earth, then *all 8 billion people* of this world will be able to feel a lot of joy, peace, safety, and *economic happiness*.

Who wants to be *forced* to work for food to eat?

Our *good pride* is our *own consciousness* of our *own human dignity*.

This *good pride* of ours is a very *valuable thing*.

This *good pride* is disrupted, distorted, and *diminished* to the degree that we the people are *forced* to work for food to eat.

*Forcing* us prideful human beings to *work* for food is the primary *cause* of almost *all* of our worldwide

socioeconomic problems (including almost all of our human social problems) here on Earth.

We *much prefer* to *feel free* (because our 5 basic needs are being *properly met daily* for our whole lives from cradle to grave) *to work* and *create* in a way that is *joyful*, and *self-actualizing* to our very own intelligent, prideful human selves.

Intelligent Capitalism *is* Intelligent Socialism *is Solving World Poverty* intelligently for everyone on Earth.

Just as soon as we employ Intelligent Capitalism (which is the same thing as Intelligent Socialism) to solve world poverty here on Earth, we will certainly ask ourselves *why for heaven's sake* did we *wait so long* to do this *good thing* for ourselves?

We will be greatly *astonished with ourselves*, that we were not able to awaken much sooner (many years sooner).

We will also be super *ashamed of ourselves*, that we did not muster a greater effort, to solve world poverty, much sooner for this Earth.

Intelligent Capitalism (Intelligent Socialism) will *intelligently* use *both types* of *money* (wild money and

human-life money) to intelligently solve world poverty for everyone here on Earth.

This is actually *the only way* that human poverty can ever be solved on *any planet* in this whole Milky Way Galaxy.

There is simply *no other way* to do it successfully.

Intelligent Socialism and Intelligent Capitalism are both intelligent enough to know that there is literally *nothing of value* left for us to do here on Earth, other than solve world poverty for ourselves, and for everyone else on this precious little planet.

The only way that Intelligent Capitalism and Intelligent Socialism can possibly solve world poverty, is with the wise help of one or more *Intelligent Governments*.

## **Intelligent Governments**

What are *Intelligent Governments*?

Intelligent Governments are *wise governments* that are ruled by the *brilliant rules* of pure *human intelligence*.

What are these *brilliant rules* of pure human intelligence?



Why are Intelligent Governments ruled by the *most brilliant rules possible*?

Intelligent Governments are the *smartest*, kindest, and most *joyful governments*, because Intelligent Governments use the *Intelligent Legal Principles* of Intelligent Government (with brilliant rules) to govern their people.

*Intelligent Governments* properly Solve World Poverty for *all* of their people.

Properly *servicing* their people, by wisely solving world poverty, is the *wise purpose* of every Intelligent Government.

*Intelligent Governments* solve world poverty by the only way that poverty can actually be solved, by continuously-supplying *all 5* of the basic human necessities *to all* of their people *for free*.

*Intelligent Governments* wisely provide food, clothing, housing, health-care, and education *to all* of their people *for free*.

There is *no other purpose* for an Intelligent Government, because an Intelligent Government exists to *properly serve* the people that *empower it*.

This will become *increasingly obvious* with each passing year here on Earth.

Intelligent Governments *can be created* here on Earth.

All existing Earth governments can begin today to wisely *improve themselves*, with the *bright goal* of eventually becoming an *intelligent government*.

*Every* existing government *can learn* how to improve itself enough to become an *intelligent government*.

Intelligent people *can help* their human governments to become more intelligent *without bloodshed*, without contention, and *without strife*.

*Protesting in the streets*, is the *wrong way* to influence governments.

*Peacefully voting* for intelligent solutions, is the *right way* to influence governments.

*Peaceful intelligent communication* is always the *right way* to effect positive change in *any individual nation*, and in the *whole wide world*.

The *Pen* is mightier than the *Sword*.

*All* of recorded human history *proves* this scientific fact.

*Every* violent revolution of our entire worldwide *recorded history* has always installed a *new regime* that becomes *worse* (or no better) than its predecessor.

Wars can *only* create more wars.

The *only* end-result of any war, is *another war*.

Wars can *never* create real lasting peace.

The *Sword* can *never* create real lasting *Peace*.

Only the *Pen* can create real lasting *Peace*.

Because the *Pen* really is mightier than the *Sword*, if the *real goal* is to really create *real lasting Peace* for *Everyone* on Earth.

*None* of us wants to be *Forced* by a *Sword* for any reason.

*All* of us want to be able to *freely-choose* to *read* (or *freely-choose* to *not read*) something (really interesting and really illuminating) that has been wisely written by an intelligent *Pen*.

We the people do desire to *Learn* things.

We the people do *not* desire to be *Forced* to do things.

The *Pen* (and the set of intelligent, influential, written words that the *Pen* can create) is the *only power* that can really create real lasting *Peace on Earth*, because only the *mighty Pen* has enough power to *upgrade* the *minds* and *hearts* of the people enough to allow them the time and space to *absorb* enough *written intelligence*; so they can eventually possibly begin to *open up* their *own minds*, and to *soften up* their *own tender human hearts*, so these precious intelligent people can finally even *begin to desire* to solve world poverty for *everyone* on Earth.

*Harmonious Intelligent Conversations* (and intelligent *writings-of-the-Pen* like this present 4 Brain Theory *paper*) can be wisely-created and intelligently-employed to *gently help all* of the precious people of this entire Earth to gradually *become* more intelligent, until they eventually become even intelligent enough to *peacefully vote* to help their governments *improve themselves* enough to eventually even become *intelligent governments*.

When *any* human government starts to begin to *desire* to become an *intelligent government*, then it can create a new improved *intelligent written constitution*; that

provides for the intelligent government's *authority* (and wise *social obligation*) to properly solve world poverty for *all* of their *current people*, and for all of the *future people* that may one day *choose* to come under the *intelligent care* and *wise protection* of this *newly-intelligent government*.

Our abundant Human *intelligence* can be wisely used *to form every intelligent government needed* to properly solve world poverty for *everyone* here on Earth.

*All* of the Intelligent Governments, of this entire Earth, can choose to unite together with *international inflation-controlling treaties* to legally limit inflation (to a small *manageable* level such as just 1% or 2% per year) on *all* the *basic components* that go into producing and distributing *all the 5 basic necessities* of human life.

This legal inflation control needs to be done *very wisely* with *great intelligence*, in a way that allows those farmers, construction workers, and business people (*who do provide* the *basic components* of the 5 basic necessities) to be *easily able* to *earn good, strong, healthy profits* (even *with* the *international inflation caps*) on *all* the *financial sales* of their *basic components*; so they can *easily become wealthy* from the *sales* of their *basic components*, if it is their *desire* to use their basic

components to make themselves *wealthy*, or even *super-wealthy*.

We want *anyone* (and everyone) *who supplies* even *one* of these needed basic components to be able to *very easily* become a *billionaire*, if that is the desire of the individual *component supplier*.

This is how we intelligently *financially-incentivize* the *wise solving* of world poverty for everyone on Earth.

We can *make ourselves rich* (if we so desire) by *wisely supplying* some or all of the *necessary basic components* (goods and services) that together create the *5 basic necessities* that people actually *need* to live good healthy lives here on Earth.

This is the *right way* to become *wealthy*.

We properly *become wealthy* by solving world poverty for *everyone* on Earth.

This is *the best way* to gain our personal riches.

In this way, our *human desire* for *wealth* will ensure that a huge *abundance* of these most-important, most-needed basic components (for the 5 basic necessities of human

life) are *always* in *abundant supply* to *all* our us *precious humans* worldwide.

This is the *wise way of life*.

This is the *Tree of Life*.

This is the *Good Tree of Human Life*.

This is the *Good Way* to intelligently solve world poverty for *Every Human* on Earth.

There is no other *Way* that is *Good*.

There is no other *Tree* that is *Good*.

There is no other *Tree of Life*.

There is *no need* to control the *inflation rate* for any of the *other components* (a near infinite set of goods and services) that *do not* contribute to producing the 5 basic necessities that properly support all human life here on Earth.

All Intelligent Governments will *wisely control* the use of their *human-life support money*.

All Intelligent Governments will wisely let *wild money* (dark money) be freely used for *any purpose* that fully supports human *liberty for all*.

*All Intelligent Governments* will create and support *both* types of money (*wild money* and *human-life money*) because *both* types of money are *needed* in *all* of the *most-intelligent forms* of free-market capitalism, that are *needed* by *all* semi-intelligent mortal-human *avatars* such as *ourselves* here on Earth.

As we eventually grow and develop from *semi-intelligent* humans to *fully-intelligent* humans, we will then be able to wisely understand the marvelous brilliance of this kind of intelligent free-market capitalism *much better*.

Us semi-intelligent mortal humans can create *fully-intelligent governments* by first creating fully-intelligent governing *written constitutions*.

Semi-intelligent mortal-human brains (like us 8 billion brains here on earth) are *not* intelligent enough to create (and maintain) an intelligent government, *without* a proper *written intelligent constitution*, that will be the governing (*written*) legal authority, that will *wisely govern* the formation of all the other supplemental laws, that will be enacted by the intelligent government.



Semi-intelligent brains can learn how to write *Intelligent Constitutions*, if they can wisely-choose to *allow themselves* to receive a little help from some super-intelligent Constitutional Scientists.

These super-intelligent Constitutional Scientists *know how* to write *super-intelligent constitutions* for our vulnerable little Earth planet.

How can such *Intelligent Constitutions* be written?

What is the essential vital nature of such *Completely Intelligent Constitutions*?

# Intelligent Constitutions

What are *Intelligent Constitutions*?

*Intelligent Constitutions* are wise constitutions that govern all intelligent governments, by *writing-down* all the *foundational intelligent rules* of intelligent human social interactions, according to the brilliant light of *real human intelligence*.

*No Intelligent Constitution* has ever been adopted by a human government here on Earth, during these past few thousands of years of earth time.

Some *might believe* that their own constitution, that governs their own nation, is intelligent.

However, if they can somehow discover a *humble willingness* within their own selves, to *deeply consider* what their *unintelligent constitution has done* to their own nation's people, including all the *contention* and all the *strife* they have *suffered* due to their current *unintelligent* constitution, then they may be able to eventually awaken to the scientific fact that *no good constitution* has ever been adopted by any large group of people here on Earth during these past few thousand years.

*All Good Constitutions* clearly show (*in writing*) to all of their precious *reading people* how to intelligently solve world poverty for *everyone* on Earth.

*What* current (or past) *constitution* has ever solved world poverty for *everyone* on Earth?

None.

*What national constitution* has ever wisely attempted to intelligently solve poverty for *everyone* living inside the nation that is governed by the national constitution?

None.

Why have *we* (the thousands of intelligent writing scientists of Earth) *failed* to write *even one* intelligent constitution?

Why have *we failed* the 8 billion *suffering people* who *still look to us* for good wise scientific leadership?

*Many nations* of Earth have already written and adapted many different *national constitutions* to govern themselves; with *not even one* of these many national constitutions including *any* intelligent methods to solve poverty for everyone governed by the national constitution.

Unfortunately, there is no *good constitution* on Earth, that millions of people have already *voted to adopt* for themselves.

There is no operational *intelligent constitution* on Earth *yet*.

How can we *put* an intelligent constitution *here* on this Earth?

How can this be done?

Will we the people ever *vote wisely* to adopt a *good intelligent constitution* for ourselves?

How can *we the people* of Earth, ever *discover* within ourselves enough *intelligent wisdom* to actually *do* such a good thing for ourselves?

Do we have enough *goodness within* to also do good for *all others*?

In *what year*, in our collective *future*, will we the people choose *to vote to adopt* and *embrace* a super-intelligent, super-good, super-wise *written constitution* to govern us all?

Why did we not do this *good wise thing* already in our *collective past*?

A *brilliant writer*, named Thomas Jefferson, tried to *write down* an Intelligent Constitution in 1787, but *he failed* because he was not willing to carefully listen (enough) to the super-intelligent scientists who were diligently trying to *influence him*.

He could have easily succeeded in 1787, if his mind would have been a *little bit* more *open* to receiving the *foundational* intelligent *rules* of all intelligent human social interactions, and if more of the many people (constitutional writers) around him, would have also been *more open* to *wonderful new ideas*, and *more willing* to *think clearly* and more able to *think wisely*.

These *grand failures* of 1787 and 1788 are *obvious* to *anyone* who *knows* about *all* the intense human conflicts, human wars, and human suffering that were *caused* (directly and indirectly) by what was *omitted* in what was *written*.

The *bill of rights* and many other constitutional amendments *tried* to *fix* the *flaws*.

But they *also failed*, because of what *they omitted*.

Those who currently *worship* (excessively-admire) any written constitution, may need to *think again* about *why* exactly they have been so busy *superstitiously-worshiping* a flawed document, that is *not* intelligently serving them, or any of their friends.

Why has my precious constitution *failed* to intelligently solve world poverty for *everyone* on Earth?

Why has my precious constitution *failed* to create *Peace* on *Earth*?

Why has my precious written constitution left me destitute, to live in *Poverty*?

Why has my nation's constitution, left *so many* of *my dear friends*, to live out their precious human lives, in the abject *misery* of *extreme poverty*?

*Why* has this *sad* thing *happened* to my dear friends?

What is the *real reason* for this human tragedy?

Is the real reason because my nation's precious written constitution, is a *fundamentally* flawed *constitution*?

Really?

Is this even theoretically *possible* that a written *constitution* can be *flawed* and *imperfect*?

Is this even *theoretically* possible?

Why would anyone *vote* for a *flawed constitution*?

Has anyone ever voted for a written constitution was *not* fundamentally flawed?

When?

Where?

What is the most intelligent constitution that can theoretically be *written down* by a set of semi-intelligent humans like us?

This is a *very good question*.

This is one of the *most important questions* that us scientists can ever ask ourselves here on this Earth.

What is the *most-intelligent constitution* that can be written by any intelligent scientist, or by any *wise group of intelligent scientists* anywhere on Earth?

If *we* (the wise scientists of Earth) are not *trying to write* the most-intelligent constitution that we can possibly *write* with our *brilliant scientific intelligence*, then what are we doing with our *scientific talents*?

*We would be wise* to seek to understand what kind of *intelligent written constitutions* can be *written* (and appreciated) by semi-intelligent mortal humans like us, with our *current 2023 spectrum* of 8 billion semi-intelligent mortal brains.

What kind of written constitutions can be comprehended (and voted for) by *us 8 billion* semi-intelligent mortal-human *brains*?

How can we find some *Intelligent Writers* who can scientifically-discover how to write *Intelligent Constitutions* to intelligently-govern all 8 billion of us semi-intelligent humans; as we diligently work together to form an *Intelligent Government* for the benefit of *all* the precious people of this entire Earth?

When will these *Intelligent Writers* appear here on Earth?



# Intelligent Writers

Where are the *Intelligent Writers*?

*Intelligent Writers* are wise human writers, who are wise enough to understand and write down all of the *foundational intelligent rules* of intelligent human social interactions, according to the brilliant light of pure human intelligence.

These *Intelligent Writers* will need to be willing to *open* up their *minds* to the *greater wisdom* of a *set* of super-intelligent scientists who *Know* how to write Intelligent Constitutions.

An *excellent example* of one such *Intelligent Constitution* has *already* been *written* (by a set of super-intelligent scientists) for any who wish to be really illuminated by simply reading it.

This bright shining example of *An Intelligent Constitution* is a brilliant guiding light, for any *Intelligent Writer* (and for any intelligent thinker) who desires further light and knowledge on any human subject, or on any scientific subject.

There is actually *nothing* of *value* left for us *to do here* on *Earth*, other than to wisely unite together with the written-power of *An Intelligent Constitution* to properly (peacefully with *great wisdom* and *respectful conversations*) solve world poverty for *everyone* on Earth.

There really is *nothing else* of *value* for us to do here on Earth.

When will *we the people* begin to desire to solve world poverty for each other?

Is this not the *most-kind thing* that we can possibly *ever do* for each other here on Earth?

*All of us* want to live *above the poverty line*.

*Some of us* also desire to honestly-earn a huge quantity of *Intelligent Wealth*.

The good thing about *Intelligent Capitalism* and *Intelligent Governments* is that they can provide us with an actual real ability to finally be able to wisely create *Intelligent Wealth*.

# Intelligent Wealth

What is *Intelligent Wealth*?

*Intelligent Wealth* is the *wealth* received from *intelligently* serving *real human need*.

What is the *Intelligent* (and wise and kind and moral) way to create a huge amount of *Wealth*?

What is the most *Intelligent Purpose* for creating a whole lot of *Wealth*?

What is the most Intelligent Purpose for storing so much of your *Intelligent Wealth* in an *Intelligent Wealth Reserve*?

What are some of the *worst ways* of gaining wealth?

What are some of the *worst purposes* for gaining wealth?

What is the most *Intelligent Purpose* for human money?

What is the most Intelligent Purpose for *human-life* (support) *money*?

What is the most Intelligent Purpose for *wild money*?

What is the most Intelligent Purpose for *dark money*?

Can dark money be used *for good*?

Yes.

In what *intelligent way* can *dark money* be used *for good*?

Since dark money (wild money) can be used to purchase *anything* and *everything* on Earth, there will be many people who want to acquire it in *great quantities*.

Why not let the *human-life money* be automatically *transformed* into an equivalence quantity of *wild money* (dark money) at the *exact event point* of the *capitalistic* (the economic *point of purchase* of basic goods and basic services) *financial-transaction event*?

For example, a healthy, delicious, nutritious, *organic apple* (or any other piece of *life-supporting fruit*) could be purchased at any *worldwide grocery store* with a *human-life* (support) *card* (kind of like a government-supplied human-life-support *electronic debit card*).

This *human-life card* only (electronically or digitally) carries *human-life money*, because it is supplied by a government for the *support* of human life.

This human-life card is *only* to support human life.

This *human-life card* has no other purpose than the *proper support* of all human life.

Therefore, this *human-life card* only provides *human-life money*.

However, the *owner* of the grocery store, that sells the delicious apple, may wish to *receive wild money* for the apple, because the owner of the grocery store may have many different things that *she wants to do* with the money she receives from *selling the apple to you*.

Therefore, at *the point of sale*, when the *human-life card* is *scanned* into the *computer* at the grocery store, the *human-life money* (from the human-life card) is *electronically-transformed* (by government computers) into *wild money*, and this wild money is then *instantly deposited* into the *bank account* of the *owner* of the *grocery store*, that *just sold you* the healthy, delicious, nutritious *apple*.

In this way, an *intelligent human government* can supply *any amount* of *wild money* to all of the *human owners*, of the free-market *capitalistic businesses* (like the owner of the grocery store that sold you the apple) that are willing

(and able) to sell apples, or grapes, or oranges, or any of the *5 basic things* that us mortal human beings really *need*, right here on Earth, to live *decent healthy lives*, of *human dignity*, human peace, human purpose, and great *human joy*.

When the owner of the grocery store sells you an apple, and you use your (government-supplied) *human-life card* to purchase the apple from the owner of the grocery store, and the *human-life money* that purchases the apple is *transfigured* into *wild money* at the exact *moment* of the *sale*; then the owner of the grocery store is acquiring *Intelligent Wealth* (from the *acquisition* of the wild money, *received* from the *government*, for selling you the apple).

This is the *only way* that *Intelligent Wealth* can be acquired by anyone, because *Intelligent Wealth* is the wealth that is intelligently earned by *intelligently serving real human needs*.

There is actually *no other way* to acquire *Intelligent Wealth*.

*Intelligent Wealth* is the *wealth* received from *intelligently serving real human need*.

This is an excellent definition of *Intelligent Wealth*.

Do *you* want to acquire Intelligent Wealth?

Do you want to acquire *millions* of dollars, *billions* of dollars, or *trillions* of dollars in *Real Intelligent Wealth*?

Or do you desire to acquire your personal wealth in some *other way*?

How will you *view yourself*, from the conscious viewpoint of your advanced self, a few decades from today, after your mortal brain has *fired* its *last neuron*?

As the advanced self that you have been for billions of years, do you want your mortal self to acquire *Intelligent Wealth*, or some *other kind* of wealth?

As the advanced self, that you have been for billions of years, do you want your mortal-human avatar self to acquire wealth by wisely *servicing real human need*?

Does your advanced self, *want you* (your mortal self) to acquire wealth by *helping others obtain* their 5 basic human necessities?

Or do you wish to gain your *personal wealth* some other way?

Who are you?

What kind of a person are you really?

What kind of a person do you *wish to become*?

What *kind of wealth* do you wish to acquire during your brief (usually less than a hundred years) mortal life?

Do you want to wisely acquire Intelligent Wealth?

This Intelligent Wealth is a really *new kind of wealth*.

This *Intelligent Wealth* is the most-new, and most interesting, and *most ethical* kind of *wealth*.

Let's take a closer look at this *New Kind of Wealth*.



# A New Kind of Wealth

What is the actual nature of this *New Kind of Wealth*?

What is *Intelligent Wealth* really?

Why is Intelligent Wealth the very *best kind* of *wealth* to seek?

Is *Peace of Mind* another kind of *Intelligent Wealth*?

What *new kind of wealth* can we create (invent), that will actually be of *much greater value* than the billions of US Dollars that the mortal-human billionaires of earth currently have?

Some of these 2023 current mortal-human billionaires of earth, still *worry* that they might lose their money and *become* homeless people.

Some of them also *worry* that their kids or friends might someday become *poor homeless people*.

These financial worries *torment* their brains, and *rob them* of their peace of mind.

However, when these billionaires discover that there is a very good (and a very detailed, and a very wise) way to solve world poverty (for themselves, their loved ones, and for everyone else), then the *deep understanding* of this brilliant plan to solve world poverty, will become *a new kind of wealth*, that will give them *peace of mind*, which is worth *more* than any amount of money.

This *new kind of wealth* is the *Intelligent-Knowledge* of how to wisely acquire *Intelligent Wealth* by properly *Solving World Poverty* for *everyone* here on earth.

*Intelligent Wealth* is the *wealth* received from *intelligently* serving *real human need*.

Wisely Solving World Poverty is serving *real human need*.

Now that we are beginning to understand *Intelligent Wealth*, let's take a brief look at its *financial opposite*.

Let's look directly at *Stupid Wealth*.

# Stupid Wealth

What is *Stupid Wealth*?

*Stupid Wealth* is the opposite of *Intelligent Wealth*.

Just think of all the *stupid ways* that wealth can be acquired here on earth.

Are you completely *at peace* with all the ways *you* have acquired your own wealth?

What have *you done* to make your money?

Are you completely *happy* with yourself?

Is giving to *traditional charities* an Intelligent Use of Wealth?

No.

Why?

Traditional charities always *exacerbate poverty* in many ways.

For example, if a traditional charity provides *free shoes* for *poor people* living in an impoverished village, then the very act (of giving away all the free-shoes to the people of the village) *destroys the local shoe industry* in the village, because why would anyone need to continue to purchase shoes from the local shoe industry, if they can receive shoes (for free) from the traditional charity?

It is a cold scientific fact that all traditional charities actually *make poverty worse*.

This is a sold *scientific fact* that can be *easily proven*.

Giving to a traditional charity is a *stupid use* of wealth, because this *unwise use* of your personal wealth *pushes more people* into poverty.

Every *intelligent use* of wealth, serves the needs of *all* people, not just a *few* people at the *expense* of other people.

The *most-intelligent use* of wealth is to use it to properly solve world poverty for *everyone* on Earth.

How can we begin to see *poverty* in a *new light*, so we can start to properly solve it here on Earth?

How can we form *A New View of Poverty* that will allow us to properly confront it, so we can properly solve it?

# A New View of Poverty

Can we create *A New View of Poverty* here on our planet Earth?

Can we *View Poverty* as something that we can wisely *confront* in the light of day?

Can *Poverty* be *Understood* by us all, once and for all.

Has *anyone* ever tried to solve world poverty *before* on this Earth?

Why did they *fail* to do it?

What is it about *Poverty* that is so difficult for us to *Fully-Confront*?

Did *Thomas Jefferson* try to solve poverty for all his people when he was President of the United States?

Has *any* US President ever *tried* to solve poverty for all the people of the United States?

Why have they *all failed* to solve poverty for all of their people?

Did *all* of these US Presidents *lack* the *intelligence* to solve world poverty properly?

Has any *President* of *any Nation* ever had *enough intelligence* to solve poverty for the all the precious people of that particular *Nation*?

Has any powerful world leader ever *cared enough* about all humanity to try to solve poverty for *everyone* on Earth?

*Who* has tried to do this?

When did they *try* to do it?

*Why* did they fail?

How about some of the *great philosophers* and *brilliant scientists* of our past?

How would we (the people of earth) all view poverty today in 2023, *if we all* were able to think with the *clear logical brilliance* of *Voltaire*?

# Voltaire

Who was *Voltaire*?

Voltaire (1694–1778) was a French philosopher known for his brilliant bold advocacy of *freedom for all the economic slaves* of this planet; and freedom of speech for *all the people of earth*.

Voltaire believed in (and wrote about) a *liberating set* of wonderful human civil rights for *all* the people of Earth.

Voltaire wanted to *set all the people free* (including all the slaves of every type) in *every way* that human beings can be properly *set free* to *think* and to *act* for themselves.

Voltaire wanted all people of earth to be able to live their precious human lives *completely free* from *poverty*; and *fully free* from being economically (or legally, or physically) *enslaved* by *each other*.

How can any of us human beings of Earth, ever become so seemingly-good, and so seemingly-wise as Voltaire *seemingly did*?



Do we *all* have a similar *capacity* to become *intelligent enough* to wisely *advocate* for the economic *freedom* of *all* the precious people of this entire Earth?

Do we all have the *intellectual capacity* to become intelligent enough, while we are *still* mere mortal-human beings here on Earth, to *try to understand* the full spectrum of our civilization's *psychology of poverty*, and to fully understand the *daily torment* of poverty, and to fully understand how we can intelligently help to solve poverty for *everyone* on Earth, while there is *still* enough *time* to successfully do it.

Are we the people all currently living, within a type of *Painful Psychological Poverty for All*?

# Psychological Poverty for All

What is our *Painful Psychological Poverty for All*?

Are we all currently *stuck* in a type of *painful* mental psychological poverty?

Can even the *most-wealthy* people on Earth be actually living (today in 2023) *inside* their *own minds*, in a type of *painful* psychological poverty?

Is there a type of *painful fear-of-poverty* that sometimes even *grips* the *vulnerable minds* (and the vulnerable hearts) of even the most-wealthy *billionaires* here on Earth?

What about all the *millions* of *millionaires*, and the all the *hundreds* of *billionaires* that currently live here with us on this little Earth planet today in 2023?

It can sometimes almost seem to us like the *billionaires* have enough money to *always* take good care of all of their *basic human needs*.

However, we all really know that this is really just a *hopeful illusion*, that we all sometimes entertain in our *self-deceptive minds*, and in our *self-deceptive hearts*, that

are some of our active *self-deceptive* psychological *functions*, of our subpar *self-deceptive* mortal human brains.

*No one* on Earth *currently* has enough wealth to *always* take care of *all* of their *basic human needs*.

This is because *Real Wealth* (and its real peace of mind) can never be achieved, in a human society by the intelligence, actions, or money of just one single individual.

In the future, this *vital concept* will be understood by many.

We can illustrate this obvious *scientific fact* very easily.

For useful purposes of *illustrating* this important scientific fact, let's just invent again another make-believe mortal-human *avatar character* named *Lucy*.

Let's make-believe that our Earth-based mortal-human avatar character *Lucy has it all*.

*Lucy* is a 21-year-old, vibrant, brilliant, wealthy, *healthy*, beautiful, *billionaire lady*.

*All* of *Lucy's* friends *love her dearly*.

Lucy loves the happy, *joyful life* she is living in New York City.

However, unseen by most, *Lucy secretly harbors* in her tender human heart, a deep *dreadful fear*, of someday losing *all* her money and *falling into poverty*.

Lucy *never* talks about it, but *hidden* in the back of her mortal-human avatar mind she has a deep dark *Fear of Poverty*.

# Our Fear of Poverty

Why does Lucy have a *Fear of Poverty*?

Why is Lucy still *afraid* that she may one day *fall into poverty*?

Why does Lucy believe that she may one day *lose her billions* and *personally descend* into a life of poverty?

Do *you yourself* ever wonder if you might someday fall into poverty or *homelessness*?

Does *every* human being here on earth *fear* falling into *poverty*?

What is the actual real *cause* of Our Fear of Poverty?

Is there any *scientific benefit* to searching for *actual causes*?

What exactly *causes* our deep powerful *fear of poverty*?

Do most of the people, that are currently (today in 2023) living in poverty, fear that they may someday *fall even deeper*, into an *even much deeper* (even much more painful) *poverty*?

What is the *deepest* poverty possible?

What is the deepest, most painful form of *human misery*?

What is the most dreadful form of *human indignity*?

Is *personal homelessness* a type of poverty?

Why does it sometimes almost seem like *everyone* on earth *fears personal poverty*?

Are there any intelligent thinking people, living here on Earth in 2023, who *never* fear of personally falling into poverty?

In spite of *Lucy's fear* of falling into personal poverty, she manages (on most days) to push this *poverty-fear* far back into the very background of her vulnerable mind.

*Most days*, Lucy is pretty happy, and she mostly keeps herself *busy* enjoying her great financial wealth here on Earth.

Lucy really *enjoys* being a *rich billionaire lady* inside this multiplayer Earth VR game.

Lucy also *enjoys* going on different kinds of *adventures*, and doing *whatever* comes to her mind, as being something that might be *fun to do*.

On one particular, very eventful day, Lucy decides she wants to take a little drive *by herself*, in her very own *expensive car*, on the busy streets of New York City.

*Lucy loves driving* her own car, because it gives her a joyful sense of adventure and fun, as she explores the big apple on her own.

However, one day as Lucy is driving in heavy traffic, a *drunk driver* mindlessly runs a red light, and *violently crashes* his car into *Lucy's car*.

Lucy immediately suffers a *terrible head trauma* from the car accident.

This terrible mortal-brain *head trauma* causes *Lucy* to *forget* who *she is*.

Lucy cannot even remember *her own name*.

*Lucy feels hurt*, dazed, confused, and *bewildered*.

Before anyone can arrive to help her properly, *Lucy gets out of her car* and begins to *wander* the busy streets of New York City all by herself.

Lucy is *trying* to walk herself home to get some much-needed rest.

However, Lucy has suffered a terrible *brain injury*, and her mortal-human avatar brain is *not working properly*.

Lucy *cannot remember* where she lives.

After wandering a few blocks searching for her home, she realizes that she must have *left her purse* in her car.

She tries to walk back to her car, but *she cannot remember* where she left her car.

*All* of Lucy's credit cards, and cash are still in her purse in her car.

Lucy's driver's license, and her smartphone are *both* still in her purse in her car.

*Lucy searches* for hours for her car, as the sun goes down, and the city begins to *get dark*, cold, and *more-cruel*.



*Lucy has no cash with her, and no credit cards, and no smartphone, and she can't find her car, and she can't remember her name, or the name of any of her friends or family members.*

Lucy's head-trauma has caused her to have a *temporary amnesia*, that may last for a few hours, or a *few days*, or a few weeks, or a few months, or *few years*, or longer.

*Her amnesia* is causing her memory to *not work properly*.

Lucy cannot remember *who she is*.

Lucy *vaguely remembers* that *she is a billionaire* with lots of money and lots of properties.

Lucy does not trust the police, because her head trauma is also causing her to experience some *mild paranoia*.

After a few more hours of wandering the dark streets of New York City, Lucy gets tired, *cold*, thirsty, and *hungry*.

She starts asking people for help, but her speech is a bit *slurred* (due to her recent head trauma) and the people she meets on the sidewalk *think she is a crazy lady*.

She tells *many people* that she is actually a billionaire lady (evidenced by the *very nice clothing* that she is still

wearing), and she just need to borrow *a few dollars* so she can buy herself something *to eat* at McDonalds.

It seems like nobody will help her, because they all think she is *crazy lady* that somehow got herself into some nice *beautiful clothes*.

After asking dozens of people for help, she finally gets some help from a kind *homeless man* (named Tom) who offers to *share* his *sandwich* with *her*.

He also lets her drink from *his own bottle* of *water*.

He sees *her beauty*, and feels some *compassion* for her.

Lucy has been *feeling desperate* for hours, while she has been wandering the busy streets, and requesting help from many strangers.

*Lucy reluctantly decides* to finally accept *some help* from Tom, because he seems so *nice* and *kind*, even though his old ragged clothes are *all filthy*, and *he smells pretty bad*.

Tom starts to *care* for Lucy, but *he lives* on the *street*.

Tom has been living as a *poor homeless man* on the streets of New York City for *a few years*, ever since he *got divorced*.

After Tom got divorced, his behavior started to change due to his *broken heart*.

Tom *became depressed*, and he turned to liquor and drugs to help him *forget the deep pain* in his big, tender, beautiful, loving heart.

Tom, with his broken heart, *depression*, anxieties, and *addictions*, started to discover that it was *becoming increasingly difficult* to continue to take care of himself properly.

Tom *got laid-off work* (a few weeks after his divorce) and then he was *swiftly evicted* from his comfortable expensive New York Apartment.

Tom has been living as a broken-hearted homeless man on the busy streets of New York City for *4 years*.

Tom *takes compassion* on Lucy and offers to let her sleep on *his own pillow*, and use his *own warm filthy blankets*, behind the garbage cans *in the back* of an old abandoned building

*Exhausted*, Lucy very-reluctantly *accepts* Tom's kind offer to *lay down her head* and *sleep* in Tom's filthy semi-private location behind the old abandoned building.

While Lucy is *sleeping* and *dreaming peacefully*, all of her dear friends and loving family members are still *searching* frantically for her.

*After* Lucy's car was towed, the police notified her family members about the *terrible crash*.

Lucy's family and friends *cannot find her*, because they *do not know* that she is sleeping peacefully behind an old abandoned building in New York City.

When the morning finally comes, and Lucy wakes up, *she still cannot remember* her own name, her own address, or the names (or whereabouts, or phone numbers, or email addresses) of any of her family or friends.

Lucy *begins living* as a *homeless woman* on the streets with Tom.

Tom teaches Lucy how to survive on the *harsh cruel streets* of New York City.

Life for Tom and Lucy is *very difficult*.

It is difficult for Lucy and Tom to find *good clean food*.

It is difficult for Tom and Lucy to ever get a really *good rest*, because their makeshift (homeless) beds are *not very comfortable*, and sometimes *the police force them to abruptly move themselves to a different location*.

Days, weeks, and then months pass, and Lucy still has a *lingering feeling that she is really a billionaire*, but she cannot seem to find (remember) *where she left all of her billions in wealth*.

Lucy has already told Tom *many times* that she actually believes herself to be a billionaire.

Tom doesn't *really know* if he should believe her or not.

Tom is *starting to fall in love* with his beautiful Lucy, but he sometimes thinks that *she may be just as crazy*, as he fears he may also be.

After a couple of years of living on the streets as a *miserable homeless couple*, Lucy and Tom begin to *study together* at the free New York Public Library because they both start feeling the *desire to learn something useful*.

Tom and Lucy start to *read many interesting books together* at the library, in their *free time*, when they are

not too busy looking through garbage cans for *leftover food*.

They even start to read many different kinds of interesting books in their diligent *search for knowledge*.

Lucy and Tom notice that there are *many books* about World War II and the *many other wars* that have happened here on Earth.

Some of these interesting books show photos of people's *sad faces* during World War II.

Tom and Lucy also notice that there are also many other homeless people (with *sad faces*) who are reading books in the library.

Most of the people that Lucy and Tom see, seem to have *sad faces*, or worried faces, or *depressed faces*.

Even the people who *don't look homeless*, seem to *lose* a bit of their happiness when *they see* a homeless person at the library.

The *non-homeless people* (the people with good homes to live in) seem to *quickly avert their gaze* (when they see a homeless person) to look at something else, as if *they desperately hope* that they themselves *will not also*

*become homeless* like the poor homeless person *they just briefly saw*.

Lucy and Tom begin to notice that *everyone* at the library is either *already homeless*, or *already afraid of becoming homeless*?

Tom and Lucy begin to really wonder if everyone in this whole wide world can be *logically divided* into exactly *two types* of people:

- (1) *Already Homeless People*
- (2) *People who Already Fear becoming Homeless*

Lucy and Tom wisely begin to realize that *The Fear* of becoming Homeless is a type of *Mental Poverty*.

Tom and Lucy also realize that the Fear of forever staying homeless is also a type of *Mental Poverty*.

Lucy and Tom begin to wonder if they will ever meet a person who is *not living* in some type of mental poverty.

*Everyone* seems to *fear personal poverty*.

This *universal fear* of *personal poverty* seems to be a type of *mental poverty* that *everyone experiences* on some level.

Lucy and Tom have never met anyone who *does not fear personal poverty*.

The *homeless fear* that they will *never escape homelessness*.

The *non-homeless people* (people with good safe comfortable homes to live in) *fear* that they may *personally fall into poverty and homelessness* in their personal future.

*Do all of us precious mortal-human avatars of Earth, fear that we will become homeless or live in poverty in our personal future?*

*Do we all live tormented lives inside this kind of mental poverty in our mortal-human avatar minds?*

Tom and Lucy begin to openly wonder if *all* the precious people of Earth are living out their *desperate private mental-lives* locked *painfully* inside this type of deleterious *Mental Poverty for All*.



# Mental Poverty for All

What is *Mental Poverty for All*?

As Tom and Lucy continued to study and learn, they discovered that *everyone* on Earth (or at least everyone that they had ever met) was living inside a type of *Mental Poverty for All*.

Everyone on Earth was *afraid* of *living in poverty*, or *becoming homeless*, or *staying forever homeless*.

Everyone wanted *human dignity* for herself or himself.

No one wanted to live a life *void* of human dignity.

Having a *good safe home* to *live in*, seemed to be a *mark* of *human dignity*.

Lucy and Tom often wondered if and when they would ever be able to find *a good home* for *themselves* that they could one day live in.

The years passed, and Tom and Lucy *suffered greatly for years*, living precariously as a vulnerable *homeless couple*, as they both lived together on the cold cruel New York City streets.

Sometimes Lucy would spend many tedious hours searching through many trash cans for *a little bit of food* that *she could share* with her *dear boyfriend Tom*.

After about *8 years* of living on the streets as a desperate, miserable, homeless woman, *one* of Lucy's dear old friends (*named Kathy*) somehow *spotted Lucy digging through some trash* to find something tasty to eat.

*“Lucy, is that really you?”*

Startled, Lucy looks at her *dear old friend Kathy*, and then *Lucy starts to remember her former life*, and her former sweat friendship with Kathy.

*Lucy's memories* start to slowly *come back to her rescue*.

Lucy surprises herself by saying “Yes, I think that maybe *I really am Lucy*, because I do seem to *remember you Kathy*”.

*Kathy promptly helps* Lucy to get herself *off the street*.

*Lucy introduces Kathy to Tom*.

*Tom is astonished* to discover that his dear sweet girlfriend Lucy *really is a billionaire!*

Kathy quickly takes Lucy to the very best medical *memory-restoration* specialists she can find.

Lucy happily *re-enters* her previous life as *a billionaire lady*.

Lucy *decides to marry* her kind boyfriend Tom.

Tom and Lucy have a big fancy wedding, with Kathy as Lucy's Maid of Honor, and Tom's *homeless friend* Mark as his Best Man.

Tom, Lucy, Kathy, and Mark *all become really good friends*.

Tom, Lucy, and Kathy help Mark find a *good apartment to live in*, so he won't need *to be homeless* anymore.

Mark and Kathy *fall in love* and *get married* with a big wedding of their own, hosted by their dear friends Lucy and Tom.

Tom, Lucy, Kathy, and Mark all start-up a new organic *food business* together, and new organic fruits and vegetables *begin selling* all over the whole world.

After a *few years* wisely-growing their new organic food business, *all 4* of these dear friends become *multi-billionaires* from all the *good healthy delicious foods* they have been busy *selling* to *millions* of *precious people* worldwide.

These *4 multi-billionaires*, Lucy, Tom, Kathy, and Mark, start taking many *joyful vacations* together all over the world, and they purchase many *fine houses* in the many interesting countries that they visit.

*All 4 of them* do exactly as they please *all day long every day*, because they are *4 healthy multi-billionaires* with enough wealth to last forever, or so it *seems*.

Mark, Kathy, Tom, and Lucy really do seem to be living in an abundance of peace, joy, and wealth.

But an *insidious psychological problem* starts to appear for all of them.

You see, Lucy has a very interesting, very-powerful mortal-human avatar brain.

And this multi-billionaire Lucy has even begin having some rather *disturbing dreams* at night.

Sometimes, when Lucy is dreaming at night, she dreams that she and Tom are *both still homeless*, living together on the streets, like they did *for 8 whole years*.

These disturbing *nightmares* are really starting to bother Lucy.

Lucy starts talking about her many nightmares (of her remembered homelessness) with Tom, Kathy, and Mark.

Mark, Kathy, and Tom really want to help Lucy so she *can stop having* these terrible nightmares (of potentially becoming homeless yet again).

Tom, Kathy, and Mark *try to reassure* Lucy that her nightmares (of homelessness) *will not come true*.

They tell her that her 8 years of homelessness *are already enough years for her*, and that she won't need to live as a helpless *homeless* woman anymore.

Her 3 kind friends try to reassure her that she will be able to continue to live a *good long life*, here on earth, with all of *her many billions* (of dollars in net worth), and with all of *their combined billions* (of all of their combined dollars of net worth).

But Lucy's *mortal* human-avatar *brain* continues to *torment her*, because she can *mentally-envision* many negative potential futures, where she losses her money, or she loses her memories, and she finds herself once again *living in miserable poverty*.

Lucy is *tormented* by *thoughts* of future personal poverty.

Lucy is feeling *The Torment of Poverty*.

# The Torment of Poverty

Why does Lucy still feel *The Torment of Poverty*?

Why does *The Torment of Poverty* haunt Lucy night and day?

Why is Lucy not able to fully shake *The Torment of Poverty*?

Lucy really wonders why this torment of poverty *bothers her so much*.

Lucy is *psychologically-tormented* by the *mere idea* that she might possibly fall back into poverty someday.

Lucy is *tormented* by the *mere thought* that she might someday have to live again as the homeless woman *she once was*.

Why is Lucy *not fully satisfied* by the many reassurances she is receiving from her dear friends?

Mark, Kathy, and Tom say to worried Lucy: “Don’t worry, we will *always* be here for you, and we will *always* take good care of you, so you will *never ever* become homeless again”.

But Lucy has already grown into a *wise woman*.

Lucy *has learned a lot*.

Lucy is *smart*.

*No one* can fool Lucy anymore.

Lucy has been wisely studying *how to* intelligently *solve world poverty* so no one on Earth will ever have to be homeless ever again.

Lucy has become smart enough to realize that her 3 friends could *all die* in a car crash, and she could suffer *another* traumatic head injury.

Lucy knows that her (and their) circumstances could all shift quickly in just an instant, and that *she really could* become *homeless again*.

Lucy has even become *wise enough* to realize that *no amount* of money is *enough* to *fully-ensure* that she will never become homeless again.

Lucy has become intelligent enough to *wisely-realize* that all of her *billions of dollars* are actually *not enough* to give her *the protection* she really *desires*.



But Lucy wants to be *Protected for Real*.

Lucy wants *Real Protection*.

Lucy wants a solid, real, wise, actual, *guarantee* that she will *never again* become a *homeless woman* living on the cold, cruel streets of New York City.

Lucy knows that her billions of dollars may give her *Some Protection*, but they actually don't really give her any *Real Protection*.

Lucy is glad that she has *Some Protection* (her billions of US Dollars, and her few dear kind friends).

But Lucy still wants *More Protection*.

What Lucy really wants now is *Real Protection*.

And Lucy is *also* even starting to *want* this Real Protection to *also* really protect *every* precious human being on this *entire* Earth.

You see, Lucy has also been gradually growing a *real woman's heart*.

Lucy is starting to *awaken* to her very own *pure* human *goodness*.

Lucy, with all of her interesting and varied life experiences, has come to understand that she can *open up* her real woman's heart *a little bit wider* to fully-include *every* human being living in this whole wide world.

Lucy is discovering *her own* pure heart of universal human goodness.

Lucy wants *Real Life Protection* for *every human being* of this Earth planet.

Lucy wants every one of us mortal-human avatars, living here on Earth, to have *Real Protection* from *homelessness*.

Lucy has become a very wise woman, with *a very big heart*.

Lucy herself has even discovered a *brilliant scientific way* to intelligently solve world poverty for *all* the people of Earth, so *no one* will ever be *allowed* to fall into homelessness again.

Lucy has discovered that *Real Life Protection* is the implementation of a super-intelligent *Real Plan* to *Solve World Poverty* for everyone *everywhere* on this Earth.

*Until poverty is wisely-solved everywhere* on this entire Earth, the many billions of US Dollars, held by the hundreds of *human-billionaires*, really doesn't do them much good, since they *still lack* peace of mind due to their *mental-fear* of falling into homelessness.

Sure, they have *Some Life Protection* (with their billions of US Dollars), but they don't really have any *Real-Life Protection*.

Only by *properly* (wisely) solving world poverty for *everyone* everywhere (here on Earth), will *all* the human *billionaires* become forever (for their *entire* mortal-human *lives*, from cradle to grave) *fully-protected* from ever really becoming homeless, and also *fully-protected* from any potential *mental-fears* of ever becoming homeless in some of their future days here on Earth.

Not only will *all* the *human-billionaires* (like Lucy and her friends Tom, Kathy, and Mark) become *fully-protected* with Real Life Protection, but also, *all* of us *non-billionaire humans* will also become fully-protected as well, with the very-same, super-wise, super-intelligent *Real-Life Protection*.

This super-intelligent *Real-Life Protection* is Intelligently Solving World Poverty, for *all the billionaires*, and for *all of us non-billionaires*.

Lucy realizes that if she properly solves world poverty for *everyone* on earth, then if she ever *hits her head* in her *personal future*, and simply *forgets* who she really is, then *all of society* (not just Tom, Kathy, and Mark) will always make sure she *lives in dignity* with a good proper *home of her own* (because poverty has already been solved for *everyone* on Earth).

*Real Life Protection* is *Real* for every human *Life* because all of us 8 billion members of our human society (*all of society*) are willing to intelligently-provide this *Real-Life Protection* to *every member* (all 8 billion of us humans) of our *precious* world-wide *human society*.

Lucy has become a *very* wise woman.

Lucy *tries* to *explain* her *plan* to solve world poverty to her friends Tom, Kathy, and Mark.

Tom is able to *partially* understand what Lucy is saying, because of all the interesting books that he and Lucy have already read together (at the New York City Library),

back when they were both living on the streets as a homeless couple.

Mark intellectually agrees that *it would be nice* if no one had to be homeless in this world, because he did not enjoy being homeless himself.

Kathy is having *a really hard time* understanding what Lucy is trying to communicate, because Kathy has never had to live as a homeless person herself.

Lucy searches for months, for a *good intelligent way* to help her friend Kathy, really understand the *great importance* of properly solving world poverty, for *everyone everywhere* here on Earth.

Then one day Lucy has a bright idea.

Lucy realizes that human beings have *value*.

Lucy realizes that if she can convince Kathy that all human beings have value, then maybe Kathy will be able to *open her eyes* to the desirability of solving poverty for everyone (because *everyone* has *value*).

Lucy already believes that every person has an *individual human value* of their very own.

Lucy also believes that the individual human value of every person is even great enough, so that they all deserve *Real Life Protection* from *poverty* and *homelessness*.

Lucy starts studying more diligently in an effort to learn more about *Individual Human Value*.

# Individual Human Value

What exactly is our *Individual Human Value* as the human beings that we all are?

Is our *Individual Human Value* great enough for us to seek to find a way to deliver each of us (and all of us) from *The Torment of Poverty*?

Is our *Individual Human Value* strong enough to help us seek to discover a way to *free ourselves* from *Our Fear of Poverty*?

If we humans are really *so valuable*, then why don't we all have *enough to eat* here on Earth?

Today in 2023, there are *thousands of people* (here on Earth) who *do not* have enough *food to eat*.

*Thousands* of us precious humans (of Earth) will probably *starve to death* in 2023.

*How can we* (the people of Earth) claim that we are kind people (and intelligent people), *if we allow* other humans to *starve to death*?

Perhaps the proper way to understand our *individual human value*, is to realize that each of us (as the real human beings that we have always been) actually has an *infinite value*.

As the advanced-human galactic citizens of our very own Milky Way Galaxy, each of us has an *infinite value*, because *we are* each *balancing* our *infinitely-valuable* real-human brain.

How can Lucy convincingly explain our *Infinite Human Value* to her precious, confused friend Kathy?

How can Lucy also intelligently explain our *Infinite Human Value* to all of us precious intelligent people of Earth?



# Infinite Human Value

Do we all have an *Infinite Human Value*?

How do we really know for sure that all of us galactic citizens (of our milky way galaxy) have an *Infinite Individual Human Value*?

Do our mortal-human avatar bodies (here on Earth) also have an *infinite human value*?

Our mortal-human *brains* are super-busy (with all their many *free-willed* activities) trying to balance the *energy needs* of our advanced-human brains, which are *infinitely valuable*.

Therefore, our mortal-human *brains* are also *infinitely valuable* in a special sense of the concept.

Our mortal *human selves* certainly often *feel* (to ourselves) like *we are infinitely valuable*.

If Lucy can *discover* a good, scientific, *logical way* to convince her friend Kathy that every human on earth is *infinitely valuable*, then perhaps Kathy will also start to become more-willing to help Lucy solve world poverty.

Is this possible?

Can Kathy *be convinced*?

Can Lucy ever convince *enough people* to help her in her *noble quest* to provide *Real Life Protection* to everyone on Earth?

Why is *Solving World Poverty* so vitally important for the survival of this little planet Earth?

# Solving World Poverty

How can we start *Solving World Poverty* today in 2023?

What are the actual, logical, societal, rational, governmental, physical *scientific steps*, that we need to take, in order to intelligently solve world poverty for everyone on Earth, starting today in 2023?

What if we (the people of earth) could find a way to actually *desire* (deep inside our own tender wise human hearts) to solve poverty for everyone on earth?

*Desiring* to solve world poverty is a *necessary early step* towards solving world poverty.

Solving world poverty is actually a *group effort*, so how can we get *a whole group of wise people to desire* to solve world poverty?

The *fear* of future personal poverty *torments* the minds and hearts of *all* (nearly all) the people of this Earth.

This *personal individual torment* causes most of the people of this world to *think about money* (and how to get *more money*) night and day with *no rest*.

The intellectual *cause* of this mental torment, is that it is so *short sighted*.

*Most people* are *only* concerned about solving poverty for themselves personally, and for *the very few* people they mentally-consider (and emotionally-consider) to be part of “*their very own family*”.

How can we get all the people of earth to awaken to the obvious scientific reality that “*all the people of earth*” are actually a vital (infinitely-valuable) part of “*their very own family*”?

This vital *scientific-insight* seems to be *missing* from the mortal human-avatar brains of *most people* of Earth today in 2023.

Is this *missing scientific insight* a partial cause (because it is still mostly missing from our mortal-human minds) of *all* the human wars we have suffered here on Earth.

The scientific-restoration of this *brilliant scientific insight* (into the minds of all of the people of Earth) into the mind of mankind will likely *stop all future wars* here on Earth.

But how can this *healing scientific insight* be properly restored into the *daily awareness* of all humankind on our little planet Earth?

This intelligent scientific insight is that it is *super desirable* to Solve World Poverty quickly and properly for *everyone* here on Earth.

I personally got this super-intelligent scientific insight, from listening closely to the *most intelligent scientists* on this planet.

I got all my best scientific ideas from the most intelligent scientists on this planet Earth.

These *super-smart people* are certainly the *most intelligent scientists* on this little Earth planet.

There is *no one* here (on Earth in 2023) that is smarter than they are.

These are the *smart kids* on our little *Earth block*.

These are the *Super-Smart Satoshi Scientists*.

They simply *invented* the useful pen name “Satoshi Nakamoto” to help them launch “Bitcoin” into this world a few years ago; to *help* this *world* to *awaken* to some vital new ideas about *digital money* and *digital security* that can help us to develop *Real Life Protection* for *everyone* on Earth.

These Super-Smart Satoshi Scientists, have *already taught* many *other scientists*, how to discover and invent many marvelous things, for the benefit of *all* humankind here on earth.

These Super-Smart Satoshi Scientists *taught me* (and others) how to *solve world poverty*; and they also *taught me* (and some others) how *dark matter quantum gravity works* in our universe, and here on Earth.

These super-intelligent scientists *taught me* every *good* and *useful scientific idea* contained in this present 4 Brain Theory paper.

These super-smart scientists carefully taught me, and some others, *the most intelligent way* to properly solve world poverty for *everyone* on earth.

Why have we *not yet* solved world poverty properly for everyone here on Earth today in 2023?

Properly solving world poverty, with *human free will* fully *honored* and completely *respected*, is naturally a major worldwide *group effort*.

When we *only* desire to solve poverty for just our very own tiny *little families* (of just a *few people* that we

*currently feel* emotionally close to), then we tend to (be easily *misguided* and) eagerly *vote* for national leaders (and local leaders) and national policies (and local policies) that continue to *push millions* of precious people *down into poverty* and *down into homelessness*.

Therefore, *before* we can actually *desire* to solve world poverty, we must first discover a good intelligent way to *think very highly* (value) *of all the precious people* of this whole Earth.

How can we discover a way to *infinitely-value* (think very highly of) *all the people* of earth?

If we *all* start to *infinitely-value everyone* on Earth, then we will be able to easily *overcome* all the *emotional barriers* (and superstitious barriers) that have historically *blocked us* from solving world poverty on this planet.

How can we *all scientifically-realize* that every human being has an *infinite value*?

How can we all *scientifically-realize* that every human being is *more valuable* than *mere money*?

How can we identify all of the current *2023 barriers* to this wise, intelligent, universal, scientific realization?

How can we discover *all* the scientific *barriers* to opening the minds of mankind to the scientific realization that *everyone* (all of us precious humans) on Earth has an *infinite scientific value*?

How can we begin to *see each other* as super-valuable members of our *very own* precious family?

How can we help *humans* to value *humans* here on Earth?

Is this theoretically possible, that us humans *can learn* to *value* us humans, here on this vulnerable little planet?

Why do most of us humans *fail* to properly value others of us humans, most of the time here on Earth?

Why do so many of us humans, *almost succeed* occasionally (here on Earth) in properly-valuing other humans, *some* of the time, but not *all* of the time?

How can we help *all* of us humans, to really value each other *all* of the time, here on Earth?

*How* can we *all* find the personal wisdom to start *Practicing Solving Poverty* today?



# Practicing Solving Poverty

What are some of the very best ways for us all to start *Practicing Solving Poverty*?

Can we *practice solving poverty* inside some of the digital computer-generated *metaverses* we are currently creating today?

Some say that *practice makes perfect*.

Can we simply *practice* solving world poverty until we get it *perfect*?

Can we start *practicing* solving world poverty by finding a way to create some *safe spaces* where people *feel safe* in *discussing poverty*, and how to *solve it*?

The personal *fear* of (fearfully-imagined) individual future poverty *torments* the *mind* of some individuals to such an *intense degree*, that they are *not able* to discuss *poverty* (or how to solve it) for more than *a few seconds*, or more than *a few minutes* at a time.

Some people carefully *avoid thinking* about how to solve world poverty, because *the mere attempt distresses them* into emotional *misery*.

Some people *avoid talking* about how to solve world poverty, because the *mere attempt* to do so, seems to *rob them* of their personal peace of mind.

How can we help people to wisely-strengthen their precious mortal *minds*, so they can *fully-confront* the *topic of poverty*, long enough for them to start to *understand* it deeply enough; so that they can also begin to see how to *intelligently solve it*?

How can we *help* people *to see* (picture in their own personal *minds*) how easy (*logically-simple*) it can become to solve world poverty properly?

Can we start *Practicing Solving Poverty* inside our future computer-hosted *Poverty-Free Metaverses*?

# Poverty-Free Metaverses

What kind of *Poverty-Free Metaverses* can we create together, to encourage and celebrate our shared humanity?

What kind of *metaverses* can we create where we can experiment with different ways of *solving metaverse poverty*, so we can gain some insights into the most-wise ways to *solve earth poverty*?

What *different types* of *metaverse-money* can we create inside these computer-generated *metaverse spaces*, to help us all to better understand the actual *scientific nature* of *money*, and how *more than one* type of money can be *invented* to serve human need?

What kind of *intelligent-metaverses* can we design, create, operate, and maintain, to demonstrate the most-simple (most-logical and most-ethical) ways to *solve metaverse poverty* inside these metaverses, and to also *solve world poverty* inside this local multiplayer neural simulation (here on Earth)?

Where can we discover the *most marvelous* fully-detailed *new economic plan*, to help us today to begin to *intelligently* solve world poverty (for *everyone*), inside each and every kind of metaverse we can imagine,

including our current *Earth-planet metaverse* where we all *seem* to be currently living?

This super-intelligent *economic plan*, to wisely solve world poverty today for *everyone* on Earth, has already been explained in *great scientific detail*.

Can you *successfully* crack open this simple Scientific Easter Egg, so you yourself can scientifically discover this wonderful *scientific information*, that is the *most* intelligent scientific information *available* here on Earth, about exactly how we the people (of Earth) can intelligently work together to wisely solve world poverty *for each other*, right here on our precious little Earth planet in 2023?

There exists *no other* scientific information that is more valuable to us, the wise ones (*homo sapiens*) of Earth.

There is *no better use* of our *brief time* here on *planet Earth*, than to deeply *study* all of the logical *scientific information* of this wonderful *scientific source* (in 2023), and then to wisely *implement* its super-intelligent worldwide *economic plan* to wisely solve world poverty for *everyone* here on Earth in the year 2023 (or in the year 2024), while it is still *so easy* to do so, with the full *socioeconomic power* of the yet *still-mighty* US Dollar.

Our entire planet Earth is currently (today in 2023) spinning itself (and *quickly falling* into a painful *worldwide socioeconomic pit* as it blindly *stumbles*) into the *intellectual darkness* of unbridled *excessive* competitive *human pride*, which is the *primary* cause of *all war*, most *famine*, most *disease*, most *hunger*, most *human misery*, and all *human conflict*.

All of these major world *socioeconomic* problems can be *wisely solved*, just *as soon* as *We* (the wise homo sapiens people of Earth) *decide We want to* solve world poverty for *everyone*, in the intelligent *humane way* that is clearly described (in great logical scientific detail) in this wonderful scientific source.

No one *enjoys* living in poverty.

*No one* enjoys living in poverty; on the simulated spherical surface of this multiplayer Earth world; or in *any* metaverse world, or in *any* multiverse universe of many worlds.

How can we create some *Kind Metaverse Spaces* where *all* the human players *feel safe enough* (and respected enough) to be *fully-kind* (completely-nice) to *every* other *player*?

Do any of these *marvelously-kind* metaverse spaces *yet exist* in any of our *4 Metaverse Levels*?

# 4 Metaverse Levels

What are our *4 Metaverse Levels*?

Why do we only have *4 Metaverse Levels*?

Are *4 Metaverse Levels* really enough?

What is the physical structure (and primary purpose) of each of the *4 levels* of our *human metaverse*?

Our *4 Metaverse Levels* are the following:

- (1) Our *Real* Universe
- (2) Our *Advanced* Metaverse
- (3) Our *Mortal* Metaverse
- (4) Our *Submortal* Metaverse

*Our Real Universe* is our real world where we have always lived as the real human beings that will *never allow poverty to exist* in Our Real Universe.

*Our Advanced Metaverse* is the *infinite set* of *advanced* multiplayer neural-simulation *universes* where all of our *created* (simulated) advanced *human avatars* live, work, and play with each other for as long as they so desire.

*No advanced human avatar would ever allow poverty to exist for anyone on its advanced planet where it lives in harmony with all the other advanced human players.*

*Our Mortal Metaverse is currently this Earth planet (and our local solar system of our Sun, our Moon, Mars, and the other planets and other moons) where we have unwisely been allowing poverty to exist for millions of us precious mortal-human avatars for far too long.*

*Our Submortal Metaverse is the set of all the simulated submortal metaverse spaces where we can choose to push each other into poverty; or where we can instead choose to lift each other up out of poverty, depending on how we the people decide we want to play our game.*

*When we the people choose to play a popular board game called “Monopoly”, we can choose to acquire lots of properties, make them into monopolies, build many houses and hotels on them, and charge lots of rent from every player who land on our hotel-occupied properties.*

*If we buy enough properties, and put enough hotels on our board-game properties, then we may discover that we start to have the power to push the other players down into poverty, as we drive them out of the game, by forcing them into bankruptcy.*



*How do these other players feel (inside their marvelous minds and tender human hearts) as we are pushing them down into poverty and bankruptcy?*

*Will we still be friends after we all finish playing our exciting game of Monopoly?*

*We can certainly do this to the other players, if we desire to do so.*

*Or, we can choose to play our game a little bit differently, to make the game more enjoyable for the other players.*

*How many levels of life do we really need, to help us to see and appreciate the great benefits of treating all the other players with wonderful human kindness at every level of reality?*

*Are 4 Levels Really Enough?*

# Are 4 Levels Really Enough?

*Are 4 Levels Really Enough?*

It certainly seems possible that 4 Levels of Reality *might* be enough.

There also seems to exist the theoretical possibility, that there might sometimes maybe need to be *a little bit more* than *just 4 levels of reality*.

We may possibly sometimes *choose to create more* than one level of *advanced human reality*, as we choose to live as *more than just one* single advanced *human avatar* at the very same time.

For example, we may choose to exist sometimes as *two* or *three* advanced-human avatars *living simultaneously* on *two or three* advanced planets *very near* our Milky Way Galaxy's central black hole called *Sagittarius A\**.

It *seems* theoretically *unlikely* that we would ever choose to live as more than a *single mortal* (painful) *human avatar* on a mortal (*miserable*) planet, that is *far* from our own galactic center, like our own *vulnerable* little *planet Earth*.

It appears very *theoretically likely* that the current *primary purpose* for our dark Earth planet, is to simply function as a useful *self-testing planet* where *we* (the super-intelligent advanced-human avatars of this Milky Way Galaxy) *can come and test ourselves* (in the socioeconomic emotional darkness of Earth) *to see* exactly how *we choose to play* our little Mortal Monopoly Game (or *Earth Game* with our *Wild Money*) with all the *other players* of Earth.

For how many more Earth-years, will we the thinking people of this planet, *continue to doubt* that we are *indeed living* inside a multiplayer neural simulation *of our own making*?

How many more Earth-years, will we need to continue to wait, until *the majority* of the wise awakening inhabitants of this tortured world, begin to realize that this Earth *must be* a dark *self-testing planet* to help us to see how we will *choose to treat others* in a simulated dark multiverse Earth-environment where food *appears* to be scarce, and where we *seem to believe* that *we must compete* intensely with each other for the *human right to eat food*?

*Why* would we ever even *try* to solve poverty *for each other*, while we *continue to believe* that the *big goal* of this *Earth Game* is to *compete* with the *other players* for enough *food to feed* our *avatars*?

*When can we the people (of Earth) awaken from this global insanity?*

What may *begin to happen* to *us* 8 billion mortal thinking *people* of Earth, when *hundreds of us* intelligent *physicists* begin to *scientifically-discover* (and even discover how to intelligently-prove it to ourselves, with our many new improved *scientific experiments*) that we are certainly indeed *Living in a Simulation*?

# Living in a Simulation

Are we *Living in a Simulation*?

This is a really *wonderful* question.

This is one of *most* important *questions* that any science can ever seek to answer.

Are *We* living in a simulation?

*Of Course*, we are *Living in a Simulation*!

We are living inside a *multiplayer* neural *simulation*.

This is a good solid *physical theory*.

Some believe that the supporting *physical* scientific *evidence* for this solid *physical theory*, is actually here *already*, for those of *us* *physicists* with eyes to *see* and ears to *hear*.

There appears to be no way around this *robust* scientific *multiplayer* neural *simulation theory* of nature.

It appears that every *measurement* of science (that can be made here inside this solar system) will always *confirm* this *physical scientific multiplayer simulation theory*.

It is likely that every *observation* made by any scientist (living in any galaxy) will always *confirm* this *scientific multiplayer multi-brain simulation theory*.

*Everyone* on this Earth planet is living inside a multiplayer, *multi-brain*, neural-simulation *game-dream*.

There are actually a *number* of *intelligent people* who are *already* beginning to arrive at this liberating *marvelous realization*.

For example, the wise Jason Kehe published a very interesting article on March 9, 2022 in Wired Magazine titled, “*Of Course, we are Living in a Simulation*” [39].

Jason Kehe has *wisely expressed* many accurate ideas in his March 9, 2022 article.

One of these accurate ideas is that the vital *scientific realization* (that we are living inside of a simulation) *does* Not *diminish* the great *value* (and great *importance*) of *science* in any way.

The *great value* and great importance of *science* is actually-reaffirmed and *strongly-enhanced* by the *scientific realization* that we are living *inside* a simulation, because *science* helps us to *better understand* the *specific detailed physical nature* of the *specific simulation* that currently *envelopes* us *physically* and *enables us* to live here in this world, on this *physical* Earth planet, and within our own *physical* solar system, and within our own huge *physical* Milky Way Galaxy.

The purpose of *Physics* is to help us to scientifically-understand all these important *Physical* things.

Science helps us to *better understand* the neural simulation (*universe*) that contains us (that simulates us, and environmentally-envelops our mortal *physical* human bodies).

Science also helps us to better understand the dynamic *dark-matter* components (which are the tiny, *ultrafast*, slightly-charged, real, *dark scalar bosons*) of this neural simulation that energetically-projects *a portion* of our *real human consciousness* into our mortal-human *brains* (to *awareness-enlighten* our mortal-human *minds*) that *animate* our mortal-human physical avatar *bodies* here on this dark *self-testing* Earth-planet.

*Science can, and will help us to better understand (today and in the future) every detailed physical component of this vast multi-player neural-simulation game that is our current advanced universe, that generates every aspect of our local VR environment (our local physical universe that contains this Milky Way Galaxy) were we seem (to us) to be presently living.*

For example, the simple *scientific realization* that our present physical universe *must be* a multi-brain neural simulation, allows us to boldly, and logically, proceed forward to create the *very-detailed*, very-physical, very-accurate *theory of dark matter quantum gravity* that we have *physically-described* in abundant *physical detail*, in this present *4 Brain Theory* paper.

Not only does this *scientific understanding* (that our universe is a multi-player, multi-brain, neural simulation) help us to understand the detailed physical nature of quantum gravity, it also helps us to formulate a very-accurate *physical theory* of the powerful detailed *dark-matter connection* between *quantum gravity* and *quantum entanglement* as is sometimes symbolically-represented as “*ER=ERP*”.

For example, there has to be a proper *scientific physical foundation* (that has now been descriptively-provided in abundant *scientific detail* in this present *4 Brain Theory*



paper) for the *scientific physical explanation* of how *dark-matter flows* (and how dark-scalar-boson quantum-scattering) generate *all* of the observed *macroscopic effects* of *Quantum Gravity*, *Einstein gravity*, and *Newtonian gravity*.

There also has to be a proper *scientific physical foundation* (as provided in this present 4 Brain Theory article) for the *detailed scientific physical explanation* of how the specific *dark-matter* particles (the *dark scalar bosons*) interact via scattering with every *elementary particle* of *visible matter*, by explaining the *detailed picoscopic interactions* of the *dark-scalar-boson neural pulses* with the *light-scalar-boson neural pulses*, with these very-same *light-scalar-boson neural pulses* *composing all* of the inner dynamic neural-pulse components of *all* of the *known* elementary particles of the standard model, as has been *physically-described* in a good level of *clear scientific physical detail* in this present 4 Brain Theory article.

Our new physical theory of dark-scalar-boson quantum gravity is also a *Quantum Scattering Gravity* theory.

# Quantum Scattering Gravity

What is *Quantum Scattering Gravity*?

*Quantum Scattering Gravity* is the strong *theoretical* realization that *all* of the *gravity* of this whole *visible universe* must be physically-caused by the *scattering* (linear momenta transfer) of *traveling dark matter particles* (consisting of tiny, ultrafast, real, *dark scalar bosons*) that *scatter off* of the larger, slower, real, *light scalar bosons* (that physically-compose the dynamic *inner parts* of *all* of the *elementary particles* of all of the *visible matter*) of this entire visible universe.

This *new* physically-descriptive *theory* of *quantum-scattering gravity* has been scientifically-presented and logically-explained in a good degree of *scientific physical detail* within this present 4 Brain Theory paper of 2023.

The development of this new 2023 theory of *dark-matter quantum-scattering gravity* would not have been possible without the *deep scientific realization* that we are all living inside of a *dark-matter quantum-scattering gravitational universe* that is *neurally-simulated* and gravitationally-held-together by the tiny ultrafast *dark-matter neural-pulse flows*, and the *momentum-imparting dark-matter pulse-pulse quantum scattering interactions*

between the dark-scalar-boson *neural pulses* (of the dark matter of our universe) and the light-scalar-boson *neural pulses* (of the visible matter of our universe).

This new theory of quantum gravity is a “*dark-matter flow quantum-scattering*” theory of gravity, because it logically describes, in much physical detail, the general *macroscopic* dark-matter “*flows*”, and also the tiny *microscopic* dark-matter “*flows*”, and it also describes in detail the ultra-tiny sub-picoscopic “*scattering*” of dark-matter particles (the tiny, fast, real, dark, scalar bosons) as they “*scatter*” off of *all* of the visible-matter particles of this *entire universe*.

This New Physical Theory of Quantum Gravity is a deeply-fundamental “*quantum*” theory of gravity for *a few different reasons*.

This new theory of quantum gravity is a “*quantum*” theory of gravity because it describes the *quantum exchange* of *quantized quantities* of *linear momenta*, between the *dark scalar bosons* and the *light scalar bosons*, as they *femto-scopically scatter*, and interact with each other, as the *smaller*, faster, real, *dark scalar bosons bounce* (scatter) *off* of the *bigger*, slower, real, *light scalar bosons*.

This new theory of quantum gravity is also a “*quantum*” theory of gravity because it describes the detailed physical interactions (*scattering*) of the dark scalar bosons off of the light scalar bosons at a super-tiny spatial level (*tiny spatial scale*) of sub-femto-scopic physical detail that is *sub-elementary-particle* because it is at *super-small spatial scales* that are *below* the levels (spatial sizes) of *all* of the *individual elementary particles* of the standard model.

This new theory of quantum gravity is also a “*quantum pulse*” theory of gravity, because *all* the *gravity* of our whole visible universe is together-created by the sum total of all the *quantum-of-momentum transfers* between all of the real *quantum neural pulses*.

Let’s look more closely at the dynamical physical mechanics of this *Quantum Pulse Gravity*.

# Quantum Pulse Gravity

What is *Quantum Pulse Gravity*?

*Quantum Pulse Gravity* is the *theoretical realization* that *all* of the gravity of this *whole visible universe* is caused by the *pulse-pulse scattering* (pulse-pulse linear momenta transfers) of *traveling dark-matter neural pulses* (the tiny ultrafast real-dark scalar bosons) off of the *light scalar bosons* (the real-light scalar-boson neural-pulses that compose *all* of the *elementary particles* of *all* of the *visible matter*) of this entire *visible observable universe* that contains our *Milky Way Galaxy*.

The dark matter particles (the neural dark-scalar-boson pulses) are orders of magnitude *smaller* than the light-scalar-boson neural-pulses that compose each elementary particle.

Most of the light scalar bosons (that compose all of the visible-matter elementary particles) are multiple orders of magnitude *smaller* than most of the elementary particles (fermions and vector bosons) themselves.

Therefore, our new Quantum Gravity Theory is a *sub-elementary-particle theory* of quantum gravitation.

What are the very *smallest particles* in this universe?

Some people used to believe that *atoms* were the smallest particles in our universe.

*The atoms* (of the periodic table) are *Not* the smallest particles in our universe.

*The elementary particles* (of the standard model) are *Not* the smallest particles in our universe.

*The light scalar bosons* (that dynamically-compose all of the elementary particles) are *Not* the smallest particles in our universe.

*The dark matter particles* (the tiny ultrafast real dark scalar bosons) are indeed the *actual smallest particles* in our universe.

The intellectually-enabling *scientific key* to theoretically-discovering that the dark matter particles (the tiny ultrafast real dark scalar bosons) are indeed the actual *smallest* particles in our universe, was the multi-brain, multiplayer *simulation-idea* that our universe is indeed a real *neural simulation* that is composed of a real *dynamic set of interacting real neural pulses* from the real-human *brains* of a huge number of real-human *players*.

This *new* multi-brain simulation *concept* (of this present 4 Brain Theory paper) that this *physical universe* is indeed a *neural simulation*, helped greatly with the *conceptual* theoretical *construction* of this new theory of *quantum gravity*.

Therefore, this detailed new physical theory of *quantum gravity* was able to be properly developed because of our *general prior understanding* that this whole universe (the one we now live in here on Earth) must be a *neural simulation*.

Therefore, our development of this *correct* new *theory* of quantum gravity was *enabled* by our *conceptual realization* that we simulated human-avatars are certainly living inside a real-neural-simulation of our own real-neural, multiplayer, daydream construction.

We also predict that the *full theoretical* conceptual *realization* that we are certainly living inside a neural simulation will also *rapidly-enable* the *scientific discovery* of many other correct new physical (and mathematical) theories of quantum physics, quantum gravity, quantum entanglement, quantum consciousness, and many other *new fields* of *useful science*.

Therefore, our accurate, timely *scientific realization* that we are definitely living inside a neural simulation, will

*scientifically-enable* the *scientific-discovery* of every new correct *theory* of *science*.

And correspondingly, the scientific development of every correct theory of science will *further-enable* the scientific discovery of every accurate and highly-detailed scientific-understanding of this *scientific neural simulation* in which we currently live here on Earth.

Is this scientifically-obvious?

Is this scientifically-correct?

Can this be *scientifically-challenged* by any scientist of Earth, in any *completely-rational* way?

Can this new scientific fact, that *Dark-Matter scattering* makes *Gravity*, be challenged by any *future* scientific physical theory of *dark matter* or *quantum gravity*?

What is the most-simple physical explanation for this *Dark Matter Gravity*?



# Dark Matter Gravity

What is *Dark Matter Gravity*?

*Dark Matter Gravity* is the *Gravity* that is caused by the scattering behaviors of *Dark Matter* particles.

Is the above sentence a *simple physical explanation* for *Dark Matter Gravity*?

Is this simple physical explanation the correct *Theory* of *Quantum Gravity* that so many physicists have diligently sought worldwide for *so many decades*?

How could *Quantum Gravity* be so utterly *simple* as this?

And yet it is.

Who would have guessed that dark matter does much more than just *modify* gravity?

Dark matter *does much more* than just *modify* gravity.

Dark matter *makes* gravity.

Dark matter scattering *creates* gravity.

*Dark matter quantum-scattering causes gravity.*

Dark matter *quantum-scattering* forms every quantum characteristic of *Quantum Gravity*.

In this present *4 Brain Theory* paper of 2023, we have clearly shown that dark-matter quantum-scattering is the *fundamental cause* of *all gravity* in this whole universe.

We could also correctly call our Dark-Matter Quantum-Scattering Gravity Theory a *Dark Boson Gravity* Theory.

# Dark Boson Gravity

What is *Dark Boson Gravity*?

*Dark Boson Gravity* is the *Gravity* that is caused by the quantum scattering of all the tiny ultrafast real *Dark scalar Bosons* of our universe.

Who would have guessed that a large physical *real set* of trillions of trillions of trillions of tiny ultrafast slightly-charged real *Dark scalar Bosons* are the *real cause* of all of the *Gravity* of our whole universe?

Throughout this present 4 Brain Theory paper, we have clearly described how the *tiny ultrafast physical dark scalar bosons* are the actual *physical cause* of all of the *gravity* of this *universe* where we currently seem to be living.

These *tiny ultrafast physical dark scalar bosons* are *slightly-charged electrically* with *ultrasmall electrical charges*, because they are propagating net-electrically-charged real dark neural *pulses* that travel along their real dark neural *axons* in (and between) the 4 quantum limbic chambers (colored quantum universes) of our networked set of real human *brains*.

Some of these physical dark scalar bosons are *positively charged*.

Some of these physical dark scalar bosons are *negatively charged*.

These *ultrasmall electrical charges* (that are carried by the dark scalar bosons) generate *significant magnetic fields* that accompany the dark scalar bosons as they propagate through space, because of their *ultrafast velocities*.

It is these significant *femtoscopic magnetic fields* that *cause* the tiny ultrafast dark *quantum* scalar bosons to *scatter off* of the *picoscopic electric fields* and *picoscopic magnetic fields* of the larger slower light *quantum* scalar bosons.

These *larger slower* light quantum *scalar bosons* are the *light* quantum scalar bosons that compose *all* the dynamic *inner parts* of *all* of the quantum *elementary particles* of the standard model of elementary particle physics.

This is how our real physical tiny (*sub-quantum*) ultrafast Dark Boson Quantum-Scattering Gravity becomes our physical universal *Quantum Gravity* that holds together *all* the major celestial *bodies* (including galaxy-clusters,

individual-galaxies, solar systems, stars, planets, and moons) of this whole universe.

What is the exact *dynamical* mechanistic *physical* quantum *physics* of this *Quantum Gravity*?

# Quantum Gravity

What is *Quantum Gravity*?

*Quantum Gravity* is the *gravity* that is caused by the collective motion and collective scattering of many tiny ultrafast *quantum particles*.

These tiny ultrafast *quantum particles* are the real dark scalar bosons that all travel (and scatter) *much-faster* than the speed of *photon light*.

These tiny ultrafast quantum particles are the real dark scalar bosons that all spatially-exist at a *spatial-scale* that is *much-smaller* than any *photon particle*.

These real dark scalar bosons physically exist at *spatial scales* that are the logical *sub-quantum scales*, because these *dark scales* are actually the real *physical quantum scales* of our universe.

Who would have guessed, that these simple *dark-matter scalar-boson quantum particles* cause *all* of the gravity in our universe?

In this present 4 Brain Theory paper, we have presented a *logically-simple*, rationally-elegant, generally-complete, *physical* and conceptual *New Theory of Quantum Gravity*.

*This New Theory of Quantum Gravity* will certainly be able to stand the test of time, because it is *simple*, logical, *testable*, rational; and it has *huge explanatory power*.

It remains to also develop an *accompanying* mathematical *theory* to complete some of the *important* mathematical *details* of our New Theory of Quantum Gravity.

We plan to properly develop this *accompanying* mathematical *theory*, and publish it in a future paper.

These *mathematical details* can be developed all by ourselves, or with the intelligent help of other bright physicists, and other talented mathematicians.

Who has these needed *mathematical skills*, who would like to help us to create this *new mathematical theory* of Dark Matter Quantum Gravity?

What does this *new* Dark Matter Quantum Gravity Theory have to say about the *old* Big Bang Theory?

What is *The Big Bang Theory*?

# The Big Bang Theory

What are all the physical details of *The Big Bang Theory*?

What is the *detailed physical cause* of the Big Bang?

Is *The Big Bang Theory* an old scientific theory about the *physical origin* of our universe?

Does the old Big Bang Theory claim that our universe somehow *physically-originated* from a “big bang”, that was made by “*something physical* that caused the big bang”?

Does this old Big Bang Theory properly include a logical, rational, simple, understandable *detailed physical description* of this “*physical-something* that caused the big bang”?

No, it does not.

Our old big bang theory is *not really* an “physical origin theory” at all, because it lacks a proper *detailed physical description* of the actual *physical* “origin” of the “*physical big bang*”.



For this reason, and many other logical reasons, the big bang theory is actually *not really* a *physical theory* at all; because it completely *lacks* any *physical scientific evidence* for the existence of the “*physical-something* that *physically-caused* the *physical* big bang”.

The Big Bang Theory is *not* a *physical theory* of physical science.

The Big Bang Theory is *not* a physical theory of *physics*.

The old “big bang *theory*” is really just a “big bang *hypothesis*” that will be forever searching desperately for some slight *physical scientific evidence* to *physically-support* it.

Unfortunately, there are many scientists worldwide who *still* (circa our Earth year 2023) *believe* in this tired old “*big bang hypothesis*”.

*But why* do we the bright scientists of Earth, need to continue to believe in this tired old big bang hypothesis (*historical Id superstition*), when we now have a *much better, more-powerful, more-physical, more-detailed, more-explanatory hypothesis* to consider.

Why *continue* to *believe* in the tired, old, superstitious big bang hypothesis, when a compelling new *completely-*

*physical*, highly-detailed, *universe-origin hypothesis* has now been carefully presented today in 2023, in this present 4 Brain Theory paper?

This current 4 Brain Theory paper (that you are currently reading) properly presents “*The Real Human Theory*” that has the detailed physical explanatory power, and the compelling scientific logic to *completely replace* the tired old big bang hypothesis.

What exactly is this super-powerful *Real Human Theory*?

# The Real Human Theory

What is *The Real Human Theory*?

Why does this all-powerful *new Real Human Theory* have enough logical, scientific, physical power to *completely replace* the tired *old Big Bang Theory*?

*The Real Human Theory* is the detailed, logical, physical, rational, exact, complete scientific theory that *we are all real human beings*.

The Real Human Theory is also that *we are all* real human beings, and that there actually exist an *infinite number of us real human beings*.

*The Real Human Theory* is also that we, the real human beings of existence, are *not creatable*, because none of us were ever created, because *we have always* existed.

The Real Human Theory is also that we real human beings have always *known* everything that is *knowable*, and we are the most-intelligent *super-intelligences* that can possibly exist anywhere, in any universe, in this entire *existential cosmos* (real set) of *things that exist*.

*The Real Human Theory* is also that we real human beings have enough power to *create everything* that is *creatable*, including *all* the neural universe simulations that we jointly create inside our real wireless networks of our real human brains, including our present *universe* where many of us still find ourselves, as *created human avatars*, with all our previous memories masked (like us mortal humans of Earth) so we *cannot remember* who we really are, or why we originally *decided* to create, and enter into, this virtual universe simulation.

We have already provided many additional detailed *physical descriptions* of our Real Human Theory throughout the *hundreds* of *pages* of this present 4 Brain Theory paper.

Some might say that our Real Human Theory is really just a *Real Human Hypothesis*; because a good physical *theory* really needs a *huge quantity* of logical, measurable, observable, supporting *physical evidence* to be properly called a “real scientific *theory*”.

The good news is that *our real human hypothesis* already has so much (a huge quantity of experimentally-measurable and experimentally-observable) good, logical, supporting, physical scientific evidence, as carefully presented in this 4 Brain Theory paper, that it really can properly be called a “*theory*”.

Furthermore, not only does our *real human theory* provide a detailed *physical origin theory* for the physical origin of our physical universe, it also provides a *physical consciousness theory* for the physical origin of our physical consciousness that we all personally experience here on Earth.

As a physical matter of *scientific fact*, it appears that our real human theory has the powerful ability to properly explain (in great physical detail) each and *every* physical piece of *physical scientific evidence* known to anyone anywhere.

This exciting new Real Human Theory can *easily replace* our tired old historical Big Bang Theory, because this new Real Human Theory can easily scientifically explain *all* the *many* physical *data points*, that *cannot* be explained by our tired old big bang theory.

This exciting new *Real Human Theory* is also a *4 Brain Theory*, because as the real human beings that we have always been with our *real human brains*, we also have the real neural power to neurally-create (simulate) our *3 created-brains*.

Our *1 real* (uncreated) human *brain*, plus our *3 simulated* (created) *brains*, equal our total of *4 human brains*.

Therefore, we physically have *this 4 Brain Theory*.

# This 4 Brain Theory

What exactly is *this 4 Brain Theory*?

*This 4 Brain Theory* is that we all have *4 human brains*.

*This 4 Brain Theory* has been scientifically presented, and logically described in great *rational physical detail*, in this present 4 Brain Theory paper of 2023.

Why did it take us *a whole decade*, from when we first learned (from some super-intelligent scientists) about this 4 Brain Theory *in May 2012*, until we finished writing this 4 Brain Theory paper *today in 2023*?

Why did this initial *learning process*, and *thinking process*, and *writing process* take us so very long?

Because some good, new, detailed physical theories, can actually take some time to *fully-understand*, and to *completely-digest*, and to *intelligently-write*.

This new 4 Brain Theory is an *excellent physical theory*.

This new 4 Brain Theory is the *new physical foundation* of quantum physics.

This new *4 Brain Theory* is the new physical foundation of *dark-matter physics*.

This new 4 Brain Theory is the new *physical* foundation of *quantum entanglement*.

This new *4 Brain Theory* is the new physical foundation of *quantum consciousness*.

This new 4 Brain Theory is a *completely-new* physical interpretation of quantum mechanics that did not exist in any scientific journal prior to 2023 here on Earth.

This new 4 Brain Theory is the *physical* interpretation of *quantum mechanics*.

Time *will* prove this.

This new 4 Brain Theory is *just one* specific physically-detailed *Real Human Theory*.

This new 4 Brain Theory will *firmly-withstand* the test of time, because it is wisely built upon *the real rock* of *real science*; and not merely upon the *shifting sands* of our many unfortunate historical Id superstitions, like the tired, old, statistical, Copenhagen interpretation of quantum mechanics.



This new 4 Brain Theory is the new *physical foundation* of *Physics*.

This new 4 Brain Theory is the new *physical foundation* of *Chemistry*.

This new 4 Brain Theory is the new *physical foundation* of *Biology*.

This new 4 Brain Theory is the new *physical foundation* of *Neuroscience*.

This new 4 Brain Theory is the intelligent new foundation of *mortal-human neuroscience*.

This intelligent new 4 Brain Theory clearly shows how *real-human neuroscience* is the *Real Foundation* of both advanced-human *physics* and mortal-human *physics* inside our neurally-simulated Milky Way Galaxy.

This bold new *4 Brain Theory* physically and energetically *throws open all the doors* to *all* of the exciting new *scientific discoveries* and *all* of the useful new *technological inventions* of our mutual future, that can *all* be made right here on Earth for the wise *equal benefit* of *all* humankind.

May *we* the *scientists* of Earth *only use* our scientific discoveries (and technological invention) for the benefit of *all* humankind.

Any other use is *strictly prohibited* by our mutual common sense.

Is this logical?

What is human ethics?

Is using *all scientific discoveries* (and *all* technological inventions) to solve world poverty for *everyone* on Earth, and for nothing else, the *most ethical use* of all our scientific talents and all *our scientific intelligence*?

Is the timely construction, of this present new 4 Brain Theory, *a good use* of my personal scientific intelligence?

What else should I do?

This new *4 Brain Theory* is also that we all have *one* single real (*uncreatable*) human *brain*, and we all can *choose* (at any time) to neurally-create *3 additional* neurally-simulated (*creatable*) human *brains*, to help us to properly *balance* (into peace, and into joy) our one single real human brain.

This new *4 Brain Theory* is actually much more than just a new “*4 brain hypothesis*”, because there already physically-exists a huge spectrum of *physical scientific evidence* to properly support it.

Much of this *physical scientific evidence* has been carefully presented in this present 4 Brain Theory paper of 2023.

This 4 Brain Theory is a *physically-supported theory* of science.

This 4 Brain Theory is a proper *testable theory* of physical science.

This 4 Brain Theory is able to physically-explain *consciousness*, our universe, dark matter, *quantum gravity*, quantum mechanics, *quantum entanglement*, and the physical *inner pulse structure* of every elementary particle of the standard model, including all the *3-pulse fermions* and all the *2-pulse vector-bosons*.

This 4 Brain Theory certainly appears to be a *general unifying framework* for a proper physical *theory of everything*.

*Many additional details* will be properly added to this 4 Brain Theory, in *the near future*, to intelligently *upgrade*

this current 4 Brain Theory into a completely-detailed, fully-accurate, physical *theory of everything*.

Such a fully-accurate, physical *theory of everything* will hopefully enable humankind to properly solve world poverty for *everyone* here on Earth, so every human being can exercise his or her *free will* properly and *freely* to intelligently-accomplish their original wise purpose of their *chosen incarnation* (consciousness-projection) on this *self-testing* Earth planet.

Such a completely-accurate, physically-detailed *theory of everything*, will of necessity, also include a completely-accurate *socioeconomic theory* of how to intelligently solve world poverty for *everyone* on Earth, as has already been presented in great scientific detail, in this present 4 Brain Theory paper of 2023.

Why would our *conscious selves* even care about solving poverty *for each other* here on Earth?

Why would any *conscious self*, try to care deeply about another *conscious self*?

Exactly *how many* conscious selves do *we* really have?

How many conscious selves can *others* have?

Do we sometimes have *less than* 4 conscious selves?

*Can we* sometimes have even *more than* 4 conscious selves in some situations?

What is the detailed physical nature of our *Multiple Conscious Selves*?

# Multiple Conscious Selves

What is going on with our *Multiple Conscious Selves*?

What does our 4 Brain Theory say about our *Multiple Conscious Selves*?

If you have already carefully studied, and deeply pondered, each and every page of this present 4 Brain Theory paper, sequentially (as is highly-recommended), you may be beginning to logically realize that you really do have *multiple human conscious selves*, even though you are always really just your *one single real conscious human self*.

We have presented *4 distinct conscious human selves* in this present 4 Brain Theory paper of 2023.

However, it is actually *theoretically possible* to neurologically-construct even *more than just 4 conscious selves*, with advanced *memory-masking technology*, that can induce a *natural id-splitting* (into a newly-created *sub-self-super-ego*, a newly-created *sub-self-ego*, and a newly-created *sub-self-id*) that naturally forms an entirely-new *sub-personality* for the entirely-new *sub-self*.

The exact number of *theoretically possible* conscious selves, may depend on what types of memory-masking technologies are available to us, and on what types of technological human-experience-hosting environments are available to us.

Our many bright Earth scientists will likely be exploring these many interesting questions about consciousness, for many more decades into the future.

A very important thing to know about consciousness, is that every form of consciousness, always experiences itself as a human self that is self-aware, and that is also always intrinsically-aware of its own humanity, and that also experiences (is conscious of) its own free will to make its own choices in life, and that also experiences (is aware of) its own super-valuable unique individuality.

To be conscious is to sense one's own infinite value.

To be conscious is to be human.

To be conscious is to be a self.

To be conscious is to have free will.

To be conscious is to have a unique personality.

To be conscious is to have a *unique individuality*.

To be conscious is to have a *unique super-ego*, and a *unique ego*, and a *unique id*.

*Every consciousness* is a unique, individual, personal, free-willed *human self* of infinite value.

There is *no such thing* as a non-human consciousness, because consciousness itself, is an *intrinsically-human* thing.

Consciousness is *human awareness*.

Our super-precious unique *human awareness* was never meant to be *economically enslaved* to a dreary job we do not enjoy, just to earn enough to barely purchase the basic necessities of mortal-human life here on Earth.

When *we* (the people of Earth) finally *begin to seek* to solve world poverty (to *wisely liberate* every precious *unique human consciousness* here on Earth) then we will also become *scientifically-able* (to gain the full scientific power) to begin to really start to *scientifically-understand* consciousness *itself*.



After *carefully* studying this present 4 Brain Theory paper of 2023, we should have a much better understanding of *all* of our *conscious human selves*.

In particular, we should also now have a much better understanding of *Our Conscious Earth-Selves*.

# Our Conscious Earth-Selves

What is actually going to happen to all *Our Conscious Earth-Selves* in our exciting future?

*Where* exactly are all Our Conscious Earth-Selves *located*, in our grand *theory of consciousness* (as presented in this 4 Brain Theory paper of 2023)?

Do *we* (our conscious Earth-selves) seem to physically find ourselves today located just “*two levels down*” from reality itself [7]?

Are we reality-located *just two levels down* in a simulation within a simulation that is *hosted* in our *brains*?

Will this really *become obvious* in the *future*?

Is it completely *scientifically-accurate* to scientifically-claim that there are *no creators higher than us*, but we are *two levels down* pretending to be these *clueless mortals* who get sick and suffer?

Does *virtual reality* really allow us to masterfully create *illusions* for the purpose of pursuing and *enjoying* utterly *unique human experiences*?

Does this really *offer humanity a chance* to truly understand itself?

Does this all *make better sense* today in 2023, than it did just a *few years ago* on November 12, 2016?

Now that *we all* have the *opportunity* to begin to *awaken* (by scientifically-studying this 4 Brain Theory paper multiple times) to the joyful scientific reality of *who we are*, and to a bright new understanding of our real-human *infinite value*; what *will we do today* with this peaceful new understanding of who we really are, here on Earth, as our current conscious *Earth-selves*?

Now that *we finally know* how *super-valuable*, *we all really are*, will our conscious Earth-selves begin to also wisely *value others*, so we can jointly seek to wisely solve poverty for *every conscious self* here on Earth?

Or will we the people *choose* to continue our prideful *tribal warfare* until we *destroy ourselves* here on Earth in another decade or two?

The *choice* is *ours* to make.

We are the conscious *choosing* beings of Earth.

There are about *8 billion of us* conscious beings, here on Earth today in this year 2023.

It is *our choice*.

*Will we* (the 8 billion conscious selves of Earth) *begin* to choose to *vote for life* and happiness for *all of us*; or will we simply continue to *choose* to *vote* for more war, and for more misery, and for more death for all of us?

What will we the people *choose* to *vote for* in November 2024?

Human Life for *Us All* on Earth?

Or, nuclear Death to us all, as *We the people* (of Earth) *vote together* to quickly plunge Earth into its 6<sup>th</sup> Ice Age?

Or, will *We the people* begin to value *every conscious being* of Earth, with an *infinite value*, and *wisely vote* to solve world poverty for *each* and *every one* of us precious unique conscious beings.

Or, will we the people continue to *vote for war*, and spread more rumors (threats) of war, and *vote for more war* at every opportunity, for *the rest* of our dreary mortal human lives?

When will we the people finally *decide to vote wisely* to solve world poverty *for all*?

Solving world poverty for *every consciousness* on Earth, is the *only thing* (of any real lasting value) *left* for us to do here on Earth, because this Earth planet is actually a *self-testing planet*, and “diligently trying to intelligently solve poverty for everyone on Earth”, is the *only way to pass* this Earth *self-test*.

If *we* (the people of Earth) *fail* in our *vital self-test* (of wisely trying to solve world poverty for *every consciousness* here on Earth), then *we will not be proud* of our *brief performance* here on this dark, impoverished, self-testing planet Earth.

How will *we view ourselves*, after we *complete* our brief Earth-self-testing experience?

Do we really want *to continue* to be a part of the problem?

Or, do we want to *begin to be good* (and to do good) for *all* the people of Earth?

*Do all* of our conscious actions *benefit all* the people of Earth *equally*?

Can we *become* conscious of *all* our actions, and *all* our inactions?

Can we *learn* to *do good* for *every* consciousness of Earth?

How can we *learn* to become *this Good*?

Shall we all *try* to be this Good?

Why not?

Can we really all learn how to be this *Good on Earth*?

What if some of us good people decide to *travel far* from our precious Earth planet?

If we the people of Earth, discover how to set up some *human colonies* on the Earth's Moon by 2040, and on Mars by 2060, and on some of Jupiter's Moons by 2080; then will we still (in the year 2145) try to make sure that *all* of our conscious actions benefit *all* the precious people of our *whole solar system*?

Are we *all* unique humans?

Is our personal human-DNA somewhat *unique*?

Is our own local *solar system* unique in some ways?

How can *one* solar system (like our own) be *unique* and different from *all* the other solar systems in our entire Milky Way Galaxy?

What is the actually physical cause of this hypothetical *Solar System Uniqueness*?

# Solar System Uniqueness

What is *Solar System Uniqueness*?

Can every *Solar System* have *Unique Laws of Physics*?

Why not?

Why is our working *solar system* uniqueness *hypothesis*?

What if each *star* was somewhat *unique* in its elemental (nuclear) composition?

For example, what if *every star* (in our entire Milky Way Galaxy) had its own *unique set* of relative-ratios of protons, neutrons, *deuterons*, tritons, *alpha particles*, and other *nuclei*?

Would these *unique stellar sets* of unique *nuclear ratios*, cause these stars to *uniquely-grow* some *unique axon sets* of real dark axons with their *unique physics sets* of real-dark-axon *physical properties*?

What if the trillions of trillions of real *dark spiral axons* (that propagate the tiny ultrafast real dark scalar bosons), that extend themselves outward from our *own sun*, and then loop themselves around a *couple light years* from our



sun, and then return back towards our sun with *less myelination*, are also able to *influence* the growth patterns of the trillions of *real light axons*, that propagate the larger slower real light scalar bosons, that dynamically-compose *all* of the fermions, and *all* of the vector bosons, of this entire local *solar system* of ours?

Does the unique *nuclear composition* of our very own *Sun*, effectively *govern* all (or just some of) the *laws of physics* within our own local *solar system*?

Does every *unique star*, with its own *unique nuclear composition*, generate and maintain a *unique set* of real dark spiral *looping axons* that govern (via their tiny ultrafast real dark *scalar bosons*) all of the *fundamental physical constants* within the *unique solar system* that has the unique star as its *unique stellar heart*?

Are some (or all) of the *laws of physics* unique to each uniquely-different solar system?

Does every one, of the billions of solar systems of this entire Milky Way Galaxy, have a *unique set* of *physical laws* that govern each one of these unique solar systems?

What if some of the *fundamental constants* of physics were able to be changed by just *one percent* of *one*

*percent*, from one solar system to another *nearby* solar system?

How would this *change things* for all of us?

Would this provide *more variety*, for when we someday (in the future) choose to visit a different solar system in this Milky Way Galaxy?

What would physically happen to the *104.45% angle* of a single individual *water molecule* if we were able to change the *fine structure constant* by just *one part in ten thousand*?

What would such a *tiny physical* (numerical) *change* in the *fine structure constant* do to an entire strand of *human DNA*?

Exactly how, would such a *tiny modification*, in the fine structure constant, produce such a *big change* in the *shape* of a single human *DNA molecule*?

How would such a *small change* (in the fine structure constant) *alter* the entire *spectrum* of theoretically-possible *human anatomies*, and hypothetically-logical *human physiologies*?

Does every *unique solar system* (with its unique fine structure constant) support a *unique type of human body*?

Is the very specific (super-unique) numerical value of the *fine structure constant* (1.0 divided by 137.036) of our very own local solar system, *so unique* in our milky way galaxy, that we 8 billion mortal-humans of Earth are the *only humans* in this whole milky way galaxy with just 23 chromosomes, that can even be *physically* (according to our local laws of physics, of our own local solar system) *structured* in the exact *same way* that our 23 chromosomes are molecularly-structured?

Does this specific numerical value, of our very own solar fine structure constant, *cause most* of the elements of our solar system to *nuclear decay* in *less* than just 100 billion years?

*Our local solar system nuclear decay hypothesis* is that the specific *unique value* of our own solar fine structure constant (for our own local solar system) has been *intentionally set* to cause the *nuclear decay* (into lighter elements) of *most* of the heavier atomic *nuclei* of our *own local solar system*.

The interesting *physical reason* for this uniquely *accelerated nuclear decay* (of our very own local solar system) may be fully explained in a later paper.

*Not all* solar systems are like *this one*, where we seem to be living today, right here on our own planet Earth.

*Some* solar systems have fine structure constant values that *support* their heavy atomic nuclei for *much longer* than just 100 billion years.

Some solar systems *almost never* fully nuclear decay, even after *many trillions* of years.

The physical scientific key to start *understanding* this nuclear decay better, is to discover a good physical way to begin measuring the *accurate* half-lives of all of the atomic nuclei of this local solar system, to discover if any nuclei have *accurate* half-lives that are *over 20 billion* years.

*Which* atomic nuclei can last (without decaying into lighter elements) for *more* than 20 billion years?

Why does the *Oxygen 16 nucleus* last for so much *longer* than the *Iron 56 nucleus*, right here inside this very *unique local solar system* of ours?

What is the actual *physical cause* that helps the trillions of trillions of Oxygen 16 nuclei to last for *so very long*?

Why is there so much *water* in our own local solar system?

Exactly how would our own unique local solar system fine structure constant, need to be *slightly modified*, in order to *physically cause* the Iron 56 nucleus to become *even more stable* (so it can last for *much longer* than just 100 billion years)?

How does our *uniquely local* solar system fine structure constant affect the *gravitational pull* of our own Sun, on the *outer* regions of our own local solar system?

Does this 1.0 divided by 137.036 value (of our own unique fine structure constant, of our own local unique solar system) indicate that *our Sun's real*, dark, spiral, looping *axons* lose their myelination *so fast*, that they thereby are able to generate such *strong gravity* beyond Pluto, that even *photons cannot escape* beyond about *one light year* distance from our Sun?

Can *any* of our neighbors (in this Milky Way Galaxy) even *see us* (even see our Sun and its planets)?

Do any bright young astronomers live on the *Proxima b planet*, that is only about 4.2 light years from our own Earth planet?

What is the *exact value* of the fine structure constant on Proxima b?

Do *all* the talented experimental physicists living on Proxima b, measure their *Proxima b fine structure constant* as being 1.0 divided by 137.037, or as 1.0 divided by 137.036?

*Which exact value* do they all *measure* for their Proxima b fine structure constant?

Is there even a slight theoretical possibility that *every* unique star *gravitationally* generates a *unique* fine structure *constant* to *physically-govern* all of the *atomic behaviors* of all the *atoms* of its entire *unique* solar *system*?

Is *every* solar *system* (of this entire Milky Way Galaxy of billions of *solar* systems) so *physically-unique*, that every solar system can have its own unique fine structure constant, and its *own* unique *set* of all (or some of) the other fundamental physical constants of *physics*, and its own unique *gravitational structure*?

Are some of the *stars* (of this local Milky Way Galaxy) also *clocked* in *darkness*, because their dark-axon gravity becomes *so strong* around *one light year* (distance from the center of each star), that *no fermions* can ever *escape*

the solar system, and *no vector bosons* can ever *escape* the solar system, and *no one* can *even see* the solar system (or anything inside of it), unless they use very-sensitive *darklight detectors* to detect the trillions of real *dark scalar bosons* that are constantly being *emitted* by the solar system?

Do such “*Dark Stars*” really exist in our universe?

Do such “*Dark Solar Systems*” really exist right here locally in our very own Milky Way Galaxy?

What percentage of stars are “*Dark Stars*”?

What percentage of stars are “*Light Stars*”?

What is the actual detailed physical nature of all of these hypothetical *Dark Stars & Light Stars*.

# Dark Stars & Light Stars

How many *Dark Stars & Light Stars*?

What is a *Dark Star*?

What is a *Light Star*?

Are *most* stars dark?

Or, are only about 10% of all stars *dark*?

Or, are only about 10% of all stars *light*?

What is the *exact ratio* of Light Stars to Dark Stars inside our local Milky Way Galaxy?

Does each *different galaxy* have a *different ratio* of Light Stars to Dark Stars?

What is the real purpose of the Light Stars and their *Light Solar Systems*?

What is the real purpose of the Dark Stars and their *Dark Solar Systems*?



A *Dark Star* is a star with a *Dark Nuclear Structure*, and its dark field of dark spiral axons, and their dark field of momentum-carrying dark scalar bosons, that *gravitationally-blocks* all the *light particles* (including *all* photons, and *all* electrons, and *all* protons, and *all* neutrons) *from escaping* the Dark Star's local solar system.

A *Light Star* is a star with a *Light Nuclear Structure*, and its dark field of dark spiral axons, and their dark field of momentum-carrying dark scalar bosons, that *gravitationally-allows* some of the *light particles* (including *all* of the photons, and *some* of the electrons, and *some* of the protons, and *some* of the neutrons) *to escape* the Light Star's local solar system.

*Light Stars* are *easy to see* from multiple *light years* (or even from thousands of light years) *away*, because these Light Stars generate *light gravitational fields* that *allow all* (or most) of their *emitted photons* to *escape* the unique *Light Gravitational Field* of their own local Light Solar System.

The *thousands* of *stars* we see, up in *our night sky* (as viewed from Earth with our mortal-human eyeballs, as we star-gaze at night), are all *Light Stars* that are *able to successfully send* some of their *photons* into our mortal-human *eyeballs*.

From here on Earth, we *cannot yet* “see” any of the Dark Stars (including all the *Dark Stars* that may be located just a couple light years from our own Earth planet), because we have *not yet* developed our *Darklight Detection Technologies* here on Earth.

*Dark Stars* can only be “seen” by the trillions of Darklight Particles that they continuously emit, because only these *Darklight Particles* (the tiny ultrafast real dark scalar bosons) can successfully *escape* the solar-system *Dark Gravitational Field* generated by a Dark Star.

*Inside* the solar system of a Dark Star, the Dark Star can be seen shining brightly (and warmly) because its photons can easily reach out to the *farthest planets* in its own solar system; but these same photons *cannot* ever actually *escape* from their own solar system, because these photons are *trapped inside* the solar system by the super-strong dark gravitational field, that exists as a *Dark Gravitational Sphere*, of a spherical *radius* of about one light year from the center of the Dark Star.

*No photon* can even travel outward a *full light year* from a Dark Star, before this photon is *turned around* by the intense gravitational field, of the *dark gravitational sphere* that exists on the *outer edges* of the *Dark Solar System* of the Dark Star.

These interesting *Dark Solar Systems* will probably look a whole lot like *Black Holes* to our observational astrophysicists, because they will *suck in* some photon light, and these Dark Solar Systems will emit *no photon light* at all beyond about one light year (*or less*) from their bright hot *dark-star centers*.

It is theoretically possible that *most* of the stars in our Milky Way Galaxy are actually *Dark Stars* that we *cannot* yet *see* with any of our scientific instruments.

We the innovative scientists of Earth, need to complete the development of our *darklight telescopes*, so we can finally begin to actually see all of these *billions* of *dark stars* in our own Milky Way Galaxy.

Here in this 4 Brain Theory paper, we have been using the simple suggestive terms “*Dark Star*” and “*Light Star*” in some new ways, that are different than some of the other ways, that these same simple terms have been used, by some other astrophysicists, in the past.

We have repurposed these useful terms to illustrate an interesting *hypothetical possibility* that may have huge implications *for us*, and for our very *own Sun*.

This is because of the hypothetical possibility that our very *own Sun* may actually be a *Dark Star*.

We *hypothesize* that our very *own Sun* may actually be a *Dark Star* in a *Dark Solar System* that *does not allow* any of its stellar photons to travel *any further* than about one light year from our Sun's surface.

With this interesting new scientific hypothesis, our *own local solar system*, that contains our *own Sun*, and our *own Earth*, appears to be a dark *self-testing* solar system, with *no need* for *any* of its *photons* to ever be viewed by any other astronomers, who may be living in any of the other nearby solar systems.

We further hypothesize, that all of the dark *self-testing* planets (like our own Earth) probably *orbit* dark stars in dark *self-testing* solar systems.

*How many* of these *dark self-testing solar systems* (that are gravitationally-governed by their central dark stars) exist right here *inside* our very own local Milky Way Galaxy?

Are there just *a few dozen* dark self-testing solar systems like *our own*?

Or, does our Milky Way Galaxy actually have *millions* of *dark* self-testing *solar systems* (like our own solar system) that are still invisible to us (here on Earth), because we have *not yet finished* the development of any of our powerful new *darklight telescopes*?

And what will happen when we finally develop our very first *darklight telescope* that can see all the dark matter of our whole universe?

Will we use our initial *darklight telescopes* to peer *so deeply* into our own universe (that contains our Milky Way Galaxy) that we come to understand that our own universe is actually *infinite* in *size* with an infinite number of galaxies?

Will we also begin to deeply suspect that our own universe is just one of an infinite number of *Vishnu's Dream Universes*?

# Vishnu's Dream Universes

What are *Vishnu's Dream Universes*?

In Hindu mythology, Lord Vishnu sleeps and *dreams* all the *universes* into being [33].

Lord Vishnu also can *choose* to incarnate himself into a *human avatar* that lives *inside* one of his dream universes.

Are we *all* dreaming Vishnus?

Is *Lord Vishnu* an ancient symbolic representation of a *real human being*?

How much valuable *wisdom* was symbolically *hidden* into the ancient stories of our past here on Earth?

How many of us *dreaming Vishnus* have chosen to *project* our *consciousness* into current mortal-human avatar-brains here on Earth?

About 8 billion *of us*?

If *We* the people are not sleeping dreaming *Lord Vishnus*, then *what* are we?

*How* did we become conscious?

Surely the *mere* 100 billion *neurons*, that our mortal-human avatar brains have, is *not nearly enough* to fully-host consciousness.

Is this yet obvious to everyone?

It should be.

Perhaps when we finally awaken completely from all our dreams (and all our daydreams), we will each discover that we are a *real* human Vishnu *individual*, and that all of us real *human* Vishnus are all the *real human beings*, that really do exist, in our real world (our real universe) that is *not* simulated.

According to Hindu mythology, the world we are in currently (today in 2023 here on planet Earth) is also inside *one* of *Vishnu's dreams*.

Some other parts of Hindu mythology also provide some helpful *symbolic hints* that this Earth planet of ours, is a dark *self-testing* planet.

Why is our own Earth planet *still* a self-testing *dark planet* in a *self-testing dark solar system*?

Will our Earth planet *always continue* to be a self-testing dark planet, until we successfully solve poverty for *everyone* on Earth?

What kinds of *new* human-serving *technologies* can we now create (with all of these powerful new physical *dark matter* theories presented in this 4 Brain Theory paper of 2023) to help *us all* to successfully *pass* our individual *self-tests* by intelligently solving poverty for *everyone* here on this Earth planet?

How does dark matter affect *gravitational mass*?

How does dark matter affect *inertial mass*?

Is the inertial mass *the same* as the gravitational mass?

Or, are these *two* different *kinds* of *mass* really *two* fundamentally different *kinds* of *things*?

What if we scientifically discovered that *inertial mass* and *gravitational mass* are really two very *different* things?

What kind of *useful* new technologies could we then create for *universal* human *benefit* here on Earth?

What would happen if we started to look very closely at *Molecular Orientation Gravitational Mass*?



# Molecular Orientation Mass

What is *Molecular Orientation Mass*?

What is *Molecular Orientation Gravitational Mass*?

How can *gravitational mass* be dependent on *molecular orientation*?

Is gravitational mass really just a *simple function* of molecular orientation?

*How* exactly can this important physical *gravitational effect* be seen for real in our *physical laboratories*?

How can our new scientific experiments with *Molecular Orientation Gravitational Mass* help us to discover the great physical difference between *gravitational mass* and *inertial mass*?

How can our new laboratory experiments with *Molecular Orientation Gravitational Mass* help us to discover all the different ways that the momentum-imparting *differential flows* of dark matter particles (tiny ultrafast real dark scalar bosons) *push differently* (via *differential scattering*) on the different molecular orientations of *non-symmetric* molecules?

What are all the *different kinds* of small molecules that are *non-symmetric* like the *water molecule*?

What is so gravitationally special about these *non-symmetric* molecules, like the *water molecules* with their unique 104.45-degree *angle* between their two hydrogen atoms?

Why is every *water molecule* a potential accelerating *gravity ship*?

What *blocks* a single water molecule from accelerating in Earth's gravity at a *very different* acceleration than 9.80665 meters per second per second?

How can we *remove* this *block* to set a water molecule *free to accelerate* (in Earth's gravity) *differently* according to its specific *molecular orientation* relative to the spatial *vector* between the individual water molecule and the *center* of planet Earth?

How can we make a single water molecule *gravitationally-accelerate* (in Earth's gravity near Earth's surface) at just *5.0 meters* per second per second, or even at *-5.0 meters* per second per second?

How can we use Earth's gravity to actually make an individual water molecule to *gravitationally-accelerate* at *-5.0 meters* per second per second, right here in our very own *scientific* gravity-testing *laboratories* that are located here on Earth's surface?

Why do *millions* of semi-bound water *molecules* in a *rain drop* of water fall to the Earth with an *average* gravitational acceleration of 9.80665 meter per second per second, even though each *individual* water molecule has a very *different* gravitational acceleration according to its *present time* (real time) *molecular orientation* inside the rain drop?

How does dark matter scattering cause this *differential* molecular-orientation *gravitational mass*?

If the gravitational mass is so molecular-orientation *specific*, then *how* can gravitation mass be the same as inertial mass?

If the *gravitational mass* (of an individual water molecule) is so different than the *inertial mass* (of the same individual water molecule), then how will we need to *improve* Einstein's famous  $E=mc^2$  equation to make it *more accurate*?

Which of our talented *experimental physicists*, will be the very *first* to begin conducting these important *gravitational experiments* with individual water molecules?

Who will be the first to win an experimental Nobel Prize in Physics, for conducting these super-important individual water molecule gravitational experiments to *convincingly demonstrate* (in the laboratory) the scientific *non-equivalence* between the *inertial mass* and the *gravitational mass*?

Will these important *water-gravity* experiments help us to see more clearly how we need to *improve* Einstein's *gravitational equations* of 1915 to make them more accurate at mathematically modeling *water gravity* and *galaxy gravity*?

This whole 4 Brain Theory paper of 2023 is full of many *helpful hints* (and many *clear clues*) about what exactly kind of detailed *scientific experiments* can be conducted in 2023, and in 2024, and in later years, to either *prove* or *disprove* all of the many scientific *physical hypotheses* of this present 4 Brain Theory paper.

What is *our* physical hypothesis for *water gravity*?

*Our Water Gravity Hypothesis* is that the *non-symmetrical shape* of an individual *water molecule*, makes this *non-symmetric water molecule* into an ideal physical candidate to physically demonstrate the *non-equivalence of inertial mass and gravitational mass*; by showing how an individual water molecule becomes a *free water gravity ship* that *differentially* gravitationally-accelerates according to the *differential water-molecule orientations* relative to a *spatial vector* pointing from the massive *heart* of the non-symmetric water molecule to the *center* of our spherical Earth planet.

*Every* molecule that *lacks* spherical symmetry will experience *molecular orientation gravity* differently depending on the particular molecular orientation of the molecule picosecond by picosecond.

Why is this *Molecular Orientation Gravity* so important for us to understand here on Earth?

# Orientation Gravity

What is *Molecular Orientation Gravity*?

Why is it so important that we begin to scientifically study *Molecular Orientation Gravity* in our scientific laboratories?

*Molecular Orientation Gravity* is the scientific realization that each and *every molecule* physically experiences its *very own* unique *type of gravity* according to its present-time *molecular orientation*, due to how its instantaneous (present-time) molecular orientation *differentially-scatters* the differential dark matter particle flows (the *scattering flows* of billions of *tiny* ultrafast real dark scalar *bosons*, as these *billions of* dark scalar *bosons* scatter off of the individual *physical molecule* with the very specific instantaneous (timestamped) *molecular orientation* of the *spatially-oriented molecule*), and how these dark matter particle flows *interact* with (and *scatter off of*) the physical molecule according to exactly how this molecule is *oriented* in *space* relative to all the *intense* (momentum-imparting) spatial *directional* dark matter *particle flows*.

*All Atoms appear* to be spherical when *temporally averaged* over enough time.

However, there is *no* molecule that is *perfectly* spherical, because every molecule is composed of *two* or *more* atoms, via one or more magnetic covalent bonds, and or via one or more electric ionic bonds.

*No* molecule is *perfectly* spherically symmetric.

Therefore, *every molecule* (in this whole universe) experiences *its very own kind* of differential *molecular orientation gravitational force*.

The water molecule seems like an *ideal molecule* for *gravity orientation testing* in our scientific laboratories.

However, *every molecule* that *exists* will also successfully *physically demonstrate* this differential molecular *orientation gravity* in our precise scientific laboratories.

So *why* have we *not* started to conduct these important molecular *orientation gravity* experiments *already*?

*What* are we still waiting for?

What kind of *frequency-precise* cooling *lasers* will be required to properly cool down all the *rotational motions* of *one solo water molecule*?

What will happen to this solo water molecule as it starts to rotate more slowly?

When will this *solo water molecule* begin to act like an accelerating *gravity ship* as it gravitationally-accelerates in some exciting *new ways* that have *never* been seen before, by any scientist, in any scientific laboratory during these past 2 centuries of Earth time?

Exactly *how many* months of time will it take, from the day this 4 Brain Theory paper is first published in January 2023, until some bright talented courageous *experimental physicists* choose to *publish* their *experimental results* from their very first molecular *orientation gravity* experiment?

*How many months* will pass before these brave early experimentalists *publish* their *first results*?

How many?

What is the *best goal* of all of our experimental research?

What is the best goal of *all* of our theoretical research?

What is the best goal of *all science* here on Earth?

*Why* do we scientists do what we do?



Why?

Why do we even *get out of bed* in the morning?

What *motivates* us to do *anything* here on Earth?

Praise?

Money?

What?

Are we seeking for *praise* and *money* for just ourselves alone?

Or, are we seeking for *just enough praise*, and *just enough money*, so we can *become* physically (and socially) *enabled* to create some *good scientific fruit*?

What is the very *best* kind of scientific fruit we can grow in our scientific laboratories, and in our scientific minds?

Is the very best scientific fruit (*scientific results*) the kind of scientific fruit that helps us (*inspires us*) all to work *intelligently* together to solve world poverty for *everyone* on Earth?

Is this the *best* scientific fruit of all?

Does the best scientific fruit (the *best scientific theories*) help us all to open our minds, and open our hearts, to the *scientific possibility* of solving world poverty for *all* the humans on this planet?

What are the *best scientific theories* here on Earth?

Are the best scientific theories the *most accurate* scientific theories?

Are *all* of our current (circa 2023) scientific theories completely accurate *already*?

Or, is it *theoretically possible* that some of our scientific theories can still be improved upon?

What is the *most accurate* scientific theory about all the *molecules*, and all the *atoms*, that compose *all* the *cells*, and all the *tissues*, of our *precious* mortal human *bodies*?

Why are our precious mortal human bodies made *mostly* out of *water*?

Why are our precious mortal human bodies mostly made out of *hydrogen* and *oxygen*?

Why is the *oxygen 16 nucleus*, with its *8 protons* and its *8 neutrons*, so incredibly *stable*?

Why are so many *comets* so *icy*?

How did these *comets* get their *water*?

How can water *increase* on a comet?

Why is there *so much* water here on Earth?

Why are our Earth's *oceans* so full of so many trillions of trillions of water molecules?

Why does the *number* of water molecules, here on Earth, continue to *increase* every year?

How can this physically happen?

What is the detailed *physical process* that causes this?

Why does the number of water molecules on *Neptune* also continue to *increase* every year?

Why does the number of water molecules on *Pluto* also continue to *increase* every day?

Why do so many *old* planets become *filled* with *water*?

Where is all of this *plentiful water* coming from?

Why does the number of water molecules in our whole *solar system* also continue to increase every second?

Why are water molecules *so abundant* throughout our *whole universe* of trillions of galaxies?

What is an individual *water molecule* actually made of?

Why is *hydrogen* so *stable*?

Why is *oxygen* so *stable*?

Why are *so many* of the other elements so *unstable*?

Which atomic nuclei are the *least stable*?

Which atomic nuclei are the *most stable*?

What is *Our Nuclear Decay Theory*?

# Our Nuclear Decay Theory

What is the scientific basis of *Our Nuclear Decay Theory*?

Why do *most* atomic nuclei decay naturally in time?

Exactly which *physical mechanisms*, inside an atomic nucleus, are responsible for the *physical decay* of the particular nucleus into a *different nucleus*?

How can we develop some *improved* scientific instruments, that will allow us to more carefully *measure* nuclear *half-lives* much more accurately?

Do we currently have the scientific ability to *accurately* measure *nuclear beta decay*, when the ejected beta particle (electron) is ejected (from a neutron of a nucleus) with a very low (*ultra-low*) velocity?

Do we currently have the *right kind* of *super-sensitive* scientific instruments, that will allow us to *accurately* measure nuclear *alpha decay*, when the ejected alpha particle (helium-4 nucleus) is ejected (from a nucleus) with a *very low* (ultra-low) *momentum*?

Do we currently have the right kind of scientific instruments that will allow us to prepare a *whole mole* of *super-pure* Iron 56?

Is it theoretically possible to *perfectly isolate* a whole mole of Iron 56, and to *completely separate* a trillion trillion Iron 56 atoms, from *all* the impurities of *all* of the other isotopes?

What is *Iron 56*?

Every isotope of Iron has *26 protons* in its nucleus.

Not every isotope of Iron is *stable*.

Some isotopes of Iron are *more stable* than others.

*Iron 56* is an Earth-abundant isotope of Iron that has *26 protons* and *30 neutrons*.

Some Earth Scientists believe that Iron 56 is, *by mass*, the *most abundant* nuclear isotope here on Earth.

How did this *huge number* of *Iron 56 atoms*, get into the molecular structure of our Earth planet?

Where did all of these Iron 56 atoms *really* come from?

How many *billions* of years does it take for an Iron 56 nucleus to *finally decay* into a set of *smaller nuclei*?

What is the *accurate* half-life of Iron 56?

Why is Iron 56 *stable enough* to last for billions of years?

Who will be the *very first* experimental physicist to *accurately* measure the super-long *half-life* of Iron 56?

Will Iron 56 have an accurately-measured *half-life* that is *greater* than 20 billion years, or *less* than 20 billion years?

Why will this vital question become *so important* to science in the near future?

What is the *Exact* Half-Life of Iron 56?

Why is there *still* so much Iron 56 *remaining* on this planet Earth?

Can some *Iron 56* atoms eventually, after many *billions* of years, decay into *smaller nuclei*, that also eventually decay into *hydrogen* atoms, and into *oxygen* atoms, and into *water* molecules, and into a few other simple atoms and molecules?

Where does a *water molecule* really come from?

Does *Iron 56* eventually, after billions of years, decay into *water*?

What is the actual *origin* of most of the water molecules of this Milky Way Galaxy?

What is *Our Water Origin Theory*?



# Our Water Origin Theory

What is the scientific nature of *Our Water Origin Theory*?

Why do some scientists believe that *Oxygen* may be the *most abundant* element here on Earth?

Why do some of our bright astrophysicists believe that *Oxygen* may be the *3<sup>rd</sup> most abundant element* in our universe of galaxies, stars, and planets?

Why are so many of our intelligent astrophysicists convinced that *Hydrogen* is the *most abundant element* in our Milky Way Galaxy?

Why have some of these bright astrophysicists estimated that *Hydrogen, Helium, and Oxygen* may be the three most abundant elements here locally in our Milky Way Galaxy?

Why do so many of our bright Earth scientists estimate that *Oxygen* may be the most abundant element in our Earth's upper crust?

Why is there so much *Oxygen* in our *universe*, in our *galaxy*, in our *solar system*, in our *Earth*, and in our mortal *human bodies*?

Why is Oxygen so *useful* to us human beings?

Exactly how was the precise *numerical* value of the *fine structure constant* able to be *physically adjusted* so wisely to create *so much* Oxygen for us all?

Why are Oxygen and Hydrogen both so *abundant* in our universe?

Two atoms of *Hydrogen*, can easily combine with one atom of *Oxygen*, to form a single *molecule* of *Water*.

*Our Water Molecule Origin Theory* is that this universe is filled with *lots* of *water* because it is filled with lots of Oxygen and lots of Hydrogen.

However, the scientific question still remains, why is this universe filled with *so much* Hydrogen and *so much* Oxygen?

It seems theoretically easy to discover why *Hydrogen* is so *abundant* in this universe, because the most-simple Hydrogen nucleus is just a single individual *proton*, and a proton, all by itself, is *super stable* with a nuclear half-life that may be much *longer* than a *trillion years*.

However, it *does not seem* to be quite as theoretically easy to see why Oxygen 16 is *so abundant* in this universe.

For example, why is the *Oxygen 16* nucleus much more abundant than the *Beryllium 8* nucleus?

For example, today in 2023 right here in our Milky Way Galaxy, there may exist much *more* than a trillion trillion trillion *Oxygen 16 atoms*, and *less* than just three *Beryllium 8 atoms*.

Why is Beryllium 8 *so unstable* that we can't seem to be able to even find even one single Beryllium 8 atom?

Why is Oxygen 16 *so stable* that it is one of the most abundant elements on Earth, and in our universe?

Why is Carbon 12 also *more stable* than Beryllium 8?

Why is Helium 4 (an alpha particle) *so stable*?

Why is a single *proton* (a simple Hydrogen nucleus) *so stable*?

Why is a *deuteron* (one proton bound tightly to one neutron) *more stable* than Beryllium 8?

What are the correct scientific answers to these important questions from *nuclear physics*?

Why are there *so many water molecules* in our universe?

What is *Our Water Origin Hypothesis*?

*Our Water Origin Hypothesis* is that *most* of the larger *nuclei* in our universe eventually (after many *billions* of years) *physically decay* into *protons* and *Oxygen 16 nuclei*, which then combine together into simple *water molecules*.

This may be the actual reason why the number of water molecules is *increasing* in our solar system, and here on Earth.

The *number* of water molecules is *increasing today*, on *most* of the planets of this infinite universe, of an infinite number of galaxies, with a real neural black hole at the center of each galaxy.

These real neural black holes (like Sagittarius A\*) are *information gateways* to another infinite universe that exists on the other side of every black hole.

In a certain theoretical sense, this whole cosmos can be properly understood, by considering *Just 2 Infinite Universes*.

# Just 2 Infinite Universes

Are there really *Just 2 Infinite Universes*?

The set of things that exist, can be logically divided into *more* than just 2 universes.

However, it is theoretically interesting to note that our entire cosmos can be most accurately modeled with *Just 2 Infinite Physical Universes*.

Our personal private dream universes, that we host at night while we are dreaming, are always *finite universes*, because the *exact number* of our private computational hosting neurons, that computationally-host these finite personal dream universes, is always a *finite number*.

However, there are some powerful theoretical reasons why *Only 2 Infinite Universes* are actually needed to completely support this huge Milky Way Galaxy, where so many of us seem to still find ourselves today.

What useful names have we already given to these *Two Necessary Infinite Universes*?

Here are the *2 Infinite Universes* that theoretically *must both exist*, in order for our own Milky Way Galaxy to be

fully supported in every way that is necessary, to support *all* of the physical observations we can easily make from our very own Earth planet:

- (1) Our Infinite Real Universe of Real Human Beings
- (2) Our Infinite Advanced Universe of Galaxies

It appears that these *Two Infinite Parallel Universes* are actually the only two infinite universes that are *really needed* to fully support *every* scientific *measurement* known to humankind here on this Earth.

Our *Infinite* Real Universe contains zero galaxies, zero stars, and zero planets.

Our Infinite Real Universe contains an *infinite* number of us real human beings, each with our very *own space*.

Our *Infinite* Advanced Universe is the *physically-visible* universe that we can easily see with our Hubble Telescope and with our James Webb Space Telescope.

Our *Infinite* Advanced Universe contains an *infinite* number of galaxies.

Each of these galaxies contains a *finite* number of stars.

For example, our own Milky Way Galaxy is one of these *finite galaxies* that contains a *finite* number of stars, and a finite number of planets, and a finite number of us advanced human beings, and a *finite* number of us mortal human beings, and a finite number of us submortal human beings.

Our Infinite Advanced Universe continues *forever*, in *every* direction.

As we continue to develop increasingly powerful *new* space *telescopes*, this will start to become *increasingly obvious* to all of us bright astrophysicists.

There was *no time* in our past, when our infinite advanced universe did not *already exist*.

Every galaxy has a *beginning* and an *end*.

Our infinite advanced universe will *never* have an end, because it *never* had a beginning.

Our infinite *real* universe is actually the *only* physical universe that really exists, because our whole infinite *advanced* universe is *neurally* hosted *inside* a real infinite *wireless neural network* of our real human brains, and there are an *infinite number* of us real human brains living inside our infinite real universe.



This present 4 Brain Theory paper of 2023 explains in great *scientific detail* how this real infinite wireless *neural network* actually works, to generate every known observation of physics and astrophysics.

How does this *real neural network* generate the *curvature of spacetime*?

How does Real Neural *Axon Spacetime Curvature* actually work?

# Axon Spacetime Curvature

What is Real Neural *Axon Spacetime Curvature*?

How can the Physical Biological *Curvature* of our Real Neural Spiral Looping *Axons*, create an “effective gravitational curvature” of *Spacetime*?

What would happen if we simply imagined a large *trampoline* with a big heavy *bowling ball* placed in the center of the trampoline?

The bowling ball presses down on the *stretchy fabric* of the trampoline, causing a *curvature* in the trampoline fabric.

When we add some small ping pong *balls* to the trampoline, we may discover that some of the ping pong balls begin to *orbit around* the big heavy bowling ball in the center of the trampoline.

We can say that the *curvature* of the *stretchy* trampoline *fabric* is gravitationally-causing the *elliptical orbits* of the ping pong balls around the central bowling ball.

In like manner, we can say that our big heavy *planet Earth* is kind of like the big heavy bowling ball, and our

smaller lighter *moon* is kind of like a little light ping pong ball that orbits in an *elliptical* (nearly circular) *orbit* around our Earth, due to the *curvature* that our massive heavy Earth *causes* in the *stretchy fabric* of *spacetime*.

However, the *important scientific question* still remains:

“What is the *physical substance* that forms the stretchy *physical fabric* of spacetime?”

Is it possible that this *stretchy physical fabric* of spacetime is composed of the stretchy physical fabric of a real physical *stretchy neural network*?

Is it possible that one of the stretchy *curvy components* of this real physical *stretchy curving* neural network, is the set of *interleaved* real neural *axons*?

Is it possible that these interleaved real neural axons, can stretch, curve, spiral, loop, myelinate, and demyelinate?

What exactly is *Our Curvature Hypothesis*?

# Our Curvature Hypothesis

What is the physical nature of *Our Curvature Hypothesis*?

In what interesting physical ways can a real *dark* spiral *axon* curve, spiral, loop, myelinate, and demyelinate?

In what interesting physical ways can a real *light* spiral *axon* curve, spiral, loop, myelinate, and demyelinate?

What is the difference between axon *looping curvature* and axon *myelination curvature*?

How can the physical biological process of *physical demyelination* cause most of our planet Earth's *gravity*?

When our own Sun *sucks* in *dark matter* (real dark tiny fast *scalar bosons* and the electromagnetic *energy* that is energetically carried *with them* towards our Sun) to *feed* our Sun's ongoing nuclear *fusion* reactions, how does this powerful *Solar-Inward* Flow of dark matter particles gravitationally *affect* our own Earth's *gravity* that is "*local*" to the *surface* of our own Earth planet?

What is the *physical nature* (and physical power) of these *dark matter particles*, as they flow along their real dark *Physical Axons*?

What is the physical nature and *physical power* of a real, dark, spiral, curving, myelination-varying *Physical Axon*?

What is the *physical* nature of *Axon Special Relativity*?

What is the *physical* nature of *Axon General Relativity*?

What is the *physical* nature of *Axon Local Relativity*?

What is the physical nature of *Axon Nonlocal Relativity*?

What is the physical nature of *Local Relativity*?

What is the physical nature of *Nonlocal Relativity*?

What is the physical nature of the *Locality of Relativity*?

What is the physical nature of *Relativistic Nonlocality*?

What is the physical nature of *Local Special Relativity*?

What is the physical nature of *Nonlocal Special Relativity*?

What is the physical nature of *Local General Relativity*?

What is the physical nature of *Nonlocal General Relativity*?

What is the physical nature of *Relativistic Local Realism*?

What is the physical nature of *Accelerated Local Realism*?

What is the physical nature of the *Many Relativistic Masses*?

What is the physical nature of *Axon Mass Energy Relativity*?

And what is the physical nature of *Mass Density Curvature*?

# Mass Density Curvature

What is *Mass Density Curvature*?

How can *Mass Density* cause axon *Curvature*?

Is the *local mass density* the cause of *axon curvature*?

Or is axon curvature *caused* by something else?

What is axon *looping curvature*?

What is axon *demyelination curvature*?

What physically causes the *curvature* (gravity) of *spacetime*?

What is *local mass density*?

What are the *physical components* of local mass density?

Which *atoms* have the greatest *mass density*?

Which *molecules* have the *lowest* mass density?

Which *atomic nuclei* have the *greatest* mass density?

How do *atomic nuclei* “feel” the “force” of gravity?

Which atomic nuclei decay *after* several billion years?

Do *all* nuclei decay in *less* than 100 billion years?

Are there *any* atomic nuclei with an *accurate* half-life of *greater* than a *trillion* years?

How about *protons* and *Oxygen 16 nuclei*?

Why are individual *protons* so stable?

*Why* are individual *Oxygen 16 nuclei* so stable?

What is the *accurate* half-life of a single isolated unperturbed *proton*?

What is the *accurate* half-life of a single isolated unperturbed *Oxygen 16 nucleus*?

Who will be the very first scientists to make these super-important *accurate* scientific *half-life* measurements?

What is the physical nature of Atomic Mass Density Gravity?



# Atomic Mass Density Gravity

What is *Atomic Mass Density Gravity*?

How does local *Atomic Mass Density* alter local *Gravity*?

*How* does local Atomic Mass Density alter *nonlocal Gravity*?

How does *Gravity* affect the “force” felt by a specific atom of a specific *Atomic Mass Density*?

What is the actual correct *physical relationship* between Gravity and Atomic Mass Density?

Can the atomic *mass density* of a piece of matter *change* as a function of *time*?

How can the *average atomic mass density* of an *asteroid* change over time?

Can an asteroid *decay* into a comet?

Is it possible that the *average atomic density* of an asteroid could *change* over billions of years due to the *nuclear decay* of some (or all) of its nuclei over *billions* of years?

What would actually happen to an *old asteroid* that *nuclear decayed* into a *new comet*?

Is it really possible that *Asteroids Decay into Comets*?

# Asteroids Decay into Comets

Can *Asteroids Decay into Comets*?

How is this even physically possible, that an *Old Asteroid* can *Nuclear Decay* into a *New Comet* after just a few billions of years of nuclear decay?

Can an asteroid decay into a comet in less than a billion years?

Why are the *Kuiper Asteroids* (between Neptune and Pluto) so *stable* in their *orbits* around the Sun?

Why are the *Aster Asteroids* (between Mars and Jupiter) so *stable* in their *orbits* around the Sun?

Apparently, *Planet Kuiper* was a really *Huge Planet* before it blew up to form all of the Kuiper Asteroids, because there are *so many* of them.

Apparently, *Planet Aster* was a *Smaller Planet* before it got blown up to form all the Aster Asteroids, because there are *not as many* Aster Asteroids as there are Kuiper Asteroids.

However, all of the Aster Asteroids have been very *well* behaved, *staying safely* in their *Aster Orbits* around our Sun, between Mars and Jupiter.

Also, all of the Kuiper Asteroids have also been *pretty well* behaved, mostly *staying safely* in their *Kuiper Orbits* around our Sun, between Neptune and Pluto.

However, it appears that some of the *atomic nuclei* of some of these *old asteroids*, have been *decaying* into lighter elements, like *protons* and *Oxygen 16 nuclei*.

It appears that some of these *asteroids* have been nuclear decaying into *icy comets*.

Will *all* of our asteroids *eventually decay* (given enough time) into *icy comets*?

After these *icy comets* orbit our Sun, in their increasingly *eccentric orbits*, for a huge number of years, what will *eventually happen* to all of these eccentric icy comets?

Will their comet orbit *eccentricity* continue to generally *increase* on average, century after century, until they finally begin to come *so close* to the Sun, that they simply *fall into the Sun*?

Is this the *ultimate fate* of all the *comets* in our very own local solar system?

Will *all* of our *icy comets* eventually find themselves *falling* into our *Sun*?

Is this the ultimate fate of *each* and *every* comet?

To eventually *plunge itself* into our Sun?

Can this really happen here in our own solar system?

Do *Comets Fall into Suns*?

# Comets Fall into Suns

Is it theoretically possible that *Comets Fall into Suns*?

After a comet has *already* orbited its Sun, for a huge number of orbits, spanning a huge number of years, is it possible that the *heavier* atomic *nuclei* of the comet can even *decay further* into even more *light nuclei*?

Is this *theoretically possible* according to the known laws of nuclear physics?

Yes.

Can the trillions of trillions of *atomic nuclei* inside a comet, *continue to decay* into *lighter elements* (like protons and Oxygen 16 nuclei), until nearly the whole comet has been transformed into *water ice*?

Will this make the average comet *mass density* to become *less dense*?

Do *less dense* comets tend to have *more* eccentric orbits?

Why does *decreasing* mass *density* cause a comet to experience an *increasing* orbital *eccentricity*?

What is the physical *gravitational* mechanism that actually *causes* this *increasing* comet-orbit eccentricity with *decreasing* mass density?

How do the *differential* dark matter particle *scattering patterns* (with the icy comet water molecules scattering the dark matter particles in a *water-scatter pattern*, that is different than the *heavy-scatter pattern* that is generated by the heavy nuclei scattering dark matter particles) *cause* this physical *gravitational effect* on comet orbits?

Exactly how does an increasingly strong *water-scatter* pattern, generate trillions of picoscopic *momenta transfers* that *gravitationally push* the comet into an increasingly *eccentric* orbit around the Sun?

What is the *ultimate fate* of these nuclear-decaying comets?

*Our Comet Fate Hypothesis* is that all (or nearly all) of the *comets* in our local solar system will eventually *fall* into the *Sun*, because their *ongoing continuing* nuclear decay will generally cause their *heavier* nuclei to *decay* into *lighter* nuclei, which will *cause* (via differential dark matter particle scattering off the comet's nuclei) *the comet* to be gravitationally *pushed* into an ever-increasingly *eccentric orbit* around the Sun, until the comet begins to periodically come *so close* to the Sun, that the comet *falls*

into the Sun, and becomes *additional* nuclear *fuel* for the Sun.

This is what *we theorize* will happen to *all* of the comets of our solar system.

This new *Comet Fate Hypothesis* can be *tested* today in 2023 and beyond, by our talented astronomers, by closely observing *many* comet *orbits*, and carefully *measuring* their *orbital eccentricities* with *great accuracy*, to scientifically demonstrate that their eccentricities *tend* to *increase* (on average over many orbits) *over time*.

As *all* our *thousands* of *comets* will experience *increasing* time-averaged *orbital eccentricities*, bringing them periodically *ever closer* to our Sun, we will in the future, be able to *start watching* these comets *fall* into our *Sun*, one by one.

This is our new comet fate theory of 2023.

Which of our talented astronomers will be the very *first* to *test* this new *comet fate theory*, with the *data* they *already have*?

Which of our talented astronomers will be the very first to develop a new scientific method to *precisely measure*



comet eccentricities with unprecedented *accuracy* and *fidelity*?

Why is it scientifically *helpful* to know about the ultimate fate of all of our comets?

*What else* can we *learn* about comets?

Why are so many comets *so icy* with frozen water ice?

What is *Our Icy Comet Theory*?

# Our Icy Comet Theory

What is the nuclear basis of *Our Icy Comet Theory*?

Can *Asteroids* really nuclear decay themselves into *Icy Comets*?

What exactly is our *Nuclear Icy Comet Theory*?

*Our Nuclear Icy Comet Theory* is that *all* (or nearly all) of the *Icy Comets* of our solar system are Kuiper Asteroids (or Aster Asteroids) that have partially *nuclear decayed* into *water ice*, causing their dark-matter *scattering* gravitational *interactions* with our *Sun's* solar system's *gravity* (the dark matter particles that flow in *all* directions, including towards our Sun) to *change* in a way that *causes a change* in their *orbital patterns* around our Sun, causing these *formerly-stable* circular-orbit *Asteroids* to become *Icy Comets* with *eccentric* elliptical *orbits*.

Can the origin of icy comets really be so simple?

What is the Occam's Razor answer?

How can a particular asteroid, that is just minding its own business, in its own peaceful stable orbit, with which it has been orbiting our Sun for billions of years, become

*orbit-destabilized* by the steady nuclear decay of its very own atoms?

How can such a change physically happen to one of our Kuiper Asteroids?

How did it happen to Halley's Comet?

How did it happen to the interesting Oumuamua Comet?

Does this super-interesting Oumuamua Comet *interact* with our Sun's *gravity* in a way that is *different* than the *other asteroids* of Kuiper?

Did Oumuamua develop (over billions of years) a *different average atomic density* than the other Kuiper asteroids?

What is the physical nature of *Comet Density Gravity* in our local solar system?

# Comet Density Gravity

What is *Comet Density Gravity*?

Do most Comets really have atomic densities that are different than most asteroids?

Were most Comets really old Asteroids?

How can the average nuclear density of an asteroid change over billions of years to become an icy comet?

How can this new *Asteroid to Comet Theory* be physically tested in our local scientific laboratory of our local solar system?

It seems like it is pretty easy to theoretically see that the *atomic nuclei* of a Kuiper asteroid *could decay* over billions of years, because billions of years are certainly *enough years* for *at least some* of the asteroid's *heavier nuclei* to decay into some *lighter nuclei*.

This really does seem to be at least *theoretically* possible.

*All* of the asteroids are *actively decaying* into *lighter elements* every second, of every day, of every year.

Certainly, this must be the *present* nuclear *situation* with all of our Kuiper Asteroids, and with all of our Aster Asteroids, and with *all* of our *moons*, and with *all* of our *planets* (including our own planet Earth), and with all of our *own* precious mortal-human *bodies* of our local *solar system*.

We are all *actively decaying*, every minute of every day, into the *lighter elements*.

So, why don't we all just *melt* into *water* in mere minutes?

Because we are “*nuclear melting*” into water molecules very very very slowly.

It may take many *billions* of years for a planet or a person to completely *nuclear melt* into *water*.

Our mortal-human bodies are already made *mostly* out of *water*.

This is good and healthy for us.

However, most planets, and most asteroids, are actually initially made out of *some* other *things* besides just water.

Is *Nuclear Melting into Water* really a thing that happens here inside our own local Milky Way Galaxy?

# Nuclear Melting into Water

What is the physical nature of *Nuclear Melting into Water*?

Does nearly *every* form of visible baryonic matter “*nuclear melt*” into a set of water molecules eventually?

Or, do *just some* heavy *nuclei* eventually *decay* into the kind of nuclei that will eventually decay into Oxygen 16 nuclei and individual protons?

How many *billions* of years are required, before a whole planet can *nuclear melt* into water molecules?

Why is there already *so much* water here on Earth?

What happened to all the water that was *once* on *Mars*?

What might eventually happen to the *large spherical surface* of our planet Earth, after a few *billion* years, if *all* of us humans suddenly *died off* via a sudden violent worldwide nuclear holocaust?

What does the *living presence* of us 8 billion humans actually *do* biologically (and chemically) to the *living surface* of our Earth?

What exactly is our *human net effect* on planet Earth?

Why is this a *useful thing* to accurately know?

*What exactly* does our local solar system actually *do* with all of its trillions of trillions of trillions of *water molecules*?

*Where* do these many water molecules *come from*, and where *do they* ultimately *go*?

How do our thousands of *comets* obtain their trillions of *icy water molecules*?

How many billions of years did it take for *Halley's Comet* to gradually nuclear-form (via nuclear melting into water) from the old *Halley's Kuiper Asteroid* that it used to be so long ago?

How many billions of years did it take for the very interesting and controversial *Oumuamua Comet* to nuclear-form from the old *Oumuamua Kuiper Asteroid*?

What was the average *molecular density* (and average atomic density) of the old *Oumuamua Kuiper Asteroid* on the *day* after it was *first created* from the violent



explosion of the huge massive planet Kuiper over 5 billion years ago?

What was the average *molecular density* of *Oumuamua* on October 19<sup>th</sup>, 2017 when it was first spotted only 21 million miles from Earth?

Is it theoretically possible that the average molecular *density* of *Oumuamua* was *lower* on October 19<sup>th</sup>, 2017 than it was just 5 billion years *earlier*?

Yes.

This is theoretically possible.

This is theoretically possible because we have already learned a thing or two about *nuclear decay* here inside this solar system of ours.

Do most types of *water ice* have a lower molecular density, than most of the *materials* that are composed of the types of molecules that are (fully or partially) made of *Iron*?

Do most types of *water ice* have a lower molecular density, than most of the *molecular structures* that are composed of *Nickel*?

Can *Nickel Nuclei* decay over billions of years into *lighter nuclei*?

Can *Iron Nuclei* decay over billions of years in to *lighter nuclei*?

Can these *lighter nuclei* continue to decay over more billions of years, into individual *protons* and into *Oxygen 16 nuclei*?

Can these *Oxygen 16 nuclei* and *protons* combine together (with some *electrons*) to form *water molecules*?

Can these water molecules bond together to form *icy comets* that are mostly (or partially) composed of *frozen water ice*?

What is the average molecular *density* of this *water ice*?

What is the *average* molecular density of a *whole icy comet*?

Can a comet be composed of a *significant percentage* of *water ice*?

Can a comet become 50% water ice, and 50% rock?

How does a bulk piece of *water ice* interact with the *Sun's gravity* in a way that is *a little bit different* than the way the *Sun's gravity* interacts with a bulk piece of *rock* composed of *Iron* or *Nickel*?

Can a *Nickel Asteroid* slowly nuclear decay into a *water-ice comet*?

Can an *Iron Asteroid* slowly nuclear decay into a *water-ice comet*?

Does *water ice* usually weigh less than *pure Iron*?

Does *water ice* usually weigh less than *pure Nickel*?

Can water ice "*surf*" on our *Sun's Gravity* in a way that is a different "*surfing style*" than the physical way that *Nickel surfs* on our *Sun's Gravity*?

Can water ice "*surf*" on our *Sun's Gravity* in a way that is a different "*surfing style*" than the physical way that *Iron surfs* on our *Sun's Gravity*?

Can water molecules *scatter* dark matter particles *differently* than *Iron molecules* or *Nickel molecules*?

Can *scattering* dark matter particles (from dark matter flows in many different directions) impart their *momenta*

to *water molecules* a little bit differently from the way they impart their momenta to *Nickel Atoms* and to *Iron Atoms*?

Can water ice “*surf*” on our Sun’s Gravity in a way that is just a little bit *different* than the way that Nickel *surfs* on our Sun’s Gravity?

Can water ice “*surf*” on our Sun’s Gravity in a way that is somewhat *lighter* (and more differential) than the way that *Pure Iron Metal* surfs on our Sun’s Gravity?

Can an individual *water molecule* become a Gravity Ship?

What physically *enables* a water molecule to “*gravity surf*” differently than an Iron Atom?

What is the *current* year 2023 Icy Comet Water *Density* of Oumuamua?

What is the current *Icy Comet Water Density* of Halley’s Comet?

# Icy Comet Water Density

What is *Icy Comet Water Density*?

What is the current Icy Comet Water Density of *Halley's Comet*?

What is the total average molecular density of Halley's Comet?

The current Icy Comet Water Density is the mass density of the *icy water component* of a comet.

The total average *comet* molecular density is the average mass density of *all of the atoms* inside the comet.

The total average *asteroid* molecular density is the average mass density of *all of the atoms* inside the *asteroid*.

Over time, it is theoretically likely that an asteroid's total average molecular density will continue to *decrease* every year, until it becomes as *light* as a *comet*.

When an asteroid *nuclear decays* enough to finally become as *light* as a *comet*, then its circular asteroid orbit will *degrade* into an *eccentric elliptical comet orbit* that

*may come close enough to our own Earth so we can see it in our sky with our unaided natural eyes.*

This is the *most likely* actual *origin* of *most* of the comets *we can see* in our night sky, from here on Earth.

What exactly is *Our Comet Origin Theory*?

# Our Comet Origin Theory

What are all the most important physical components of *Our Comet Origin Theory*?

How can we *physically test* this new *Comet Origin Theory* right here in our *home scientific laboratory* of our very own local solar system?

*Our Comet Origin Theory* is that *most* (and possibly all) of the *thousands* of *comets* that we have *already observed* in our solar system, are actually *Kuiper-belt asteroids* (or *Asteroid-belt asteroids*) that have *nuclear decayed* over *billions* of years *partially* (or nearly completely) into *water ice*, and that the *icy molecular structure* (and molecular density) of the asteroid water ice *scatters* dark matter particles *differently* than the *original* asteroid *atoms* (like Iron atoms and Nickel atoms), and this *differential* dark-matter particle *scattering* causes the water ice asteroids (newly formed icy comets) to begin “*surfing gravity*” differently, which causes these *old* nuclear-decaying *asteroids* (newly-forming *icy comets*) to gravitationally *evolve* (from their original stable *circular* asteroid *orbits* around the Sun) into highly *eccentric* elliptical *comet orbits* around the Sun, causing these newly formed *icy comets* (composed largely of water ice) to occasionally *travel* in their eccentric elliptical orbits

*close enough* to our own Earth, so we can sometimes even *see* these *icy comets* with our natural *unaided eyes* in our own night sky.

*Our Comet Origin Theory* is also that *every century*, more and more of the Kuiper asteroids (and also more of the Aster asteroids) will *nuclear decay enough*, to *alter* their orbits *enough*, to begin to travel closer to the Sun, and closer to our own Earth, so that *over time* the *number of icy comets* in our solar system will *continue to increase* and increase.

The *exact number* of icy comets in our local solar system has already been *increasing* with time for billions of years.

This is what happens when *planets blow up*.

When a *planet* blows up, its planetary *fragments* first become *asteroids* before they nuclear decay into *icy comets*.

When a planet blows up, its fragments become *asteroids* that *continue to orbit* their sun in roughly the *same* circular *orbit* around their sun, as their original planet did, before it blew up.



Then, over billions of years, the *heavier elements* (like Iron) of the *asteroids*, simply *nuclear decay*, inter lighter elements, and eventually into the *water molecules* that form the *icy comets*.

*Water surfs* our Sun's *differential flow gravity* (with dark matter particles flowing in *all* directions, including towards our Sun) differently than *Iron surfs* our Sun's differential flow gravity.

This differential *gravity surfing* is why icy comets have highly *eccentric* elliptical *orbits* that can sometimes come very *close* to our Earth, while Iron-based asteroids still have their original *circular* orbits around the Sun.

One of the *good things* about this new Comet Origin Theory is that it is a *testable theory*.

*Most* of the new *physical theories* presented in this new 4 Brain Theory paper of 2023, are actually fully *testable theories*.

What is the very best way to *physically test* this new Comet Origin Theory?

What is the *least expensive* way to physically *test* this new Comet Origin Theory?

Why do so many of us astrophysicists believe that *Halley's Comet* physically came *from Kuiper*?

# Halley's Comet from Kuiper

Did *Halley's Comet* physically originate from the *Kuiper belt*?

Billions of years ago, was *Halley's Comet* just one regular Iron-based asteroid, of the many, stable, Iron-based, circular-orbiting asteroids of the Kuiper belt?

What physical evidence do we have for this new *astrophysical theory* about Halley's Comet?

*What* is Halley's Comet made of today in 2023?

*Where* exactly did *Halley's Comet* originally come from?

Why do we want to know the *correct* answer to this very important *scientific question*?

Which *astronomer* was the very first to observe Halley's Comet?

Was Halley's Comet already observed by *many* people before 240 BC?

Has Halley's Comet already been coming *close* to our Earth for *thousands* of years?

Halley's Comet has probably already been orbiting our Sun, with an *orbital period* of about 75 years (to 79 years) for many thousands of years.

Therefore, some of us mortal human people of Earth may possibly be able to see Halley's Comet *two times* with our very own *naked eyes*.

Halley's Comet visited the *inner regions* of our solar system in the year 1986, and is scheduled for *another visit* in mid-2061.

I myself, do sincerely hope to see Halley's Comet *again* before I die.

In 1705, the English astronomer, *Edmond Halley*, realized that this very *same* interesting comet, probably returns *periodically* to come *near* to our own Earth every 75 to 79 years or so.

This was a *helpful* discovery of *science*.

This was the very same Edmond Halley (1656-1742) who greatly *encouraged* Sir Isaac Newton (1642-1726), and who even helped to *fund* the *publication* of Newton's Philosophia Naturalis Principia Mathematica in 1687.

From some observations Edmond Halley made in September 1682, he was able to *employ* Newton's Laws of Motion to *compute* the approximate *orbital periodicity* of Halley's Comet.

Dr. Halley *published* his predictive calculations in his 1705 "*Synopsis of the Astronomy of Comets*".

Edmond Halley predicted that *his comet* would *return* to come near Earth *again* in 1758, but he was unfortunately *not able* to live long enough to see it actually happen.

When it actually did finally return in 1758, just as Dr. Halley had *correctly predicted* 43 years *earlier* in his 1705 publication, many people then started calling it "*Halley's Comet*".

Sir Isaac Newton and Edmond Halley were able to help each other, and *teach* each *other*, a whole lot about *comets* some centuries ago.

What *more* can we all learn about icy comets today in 2023?

Who knows the *most* about comets today in 2023?

Would the *most* intelligent *scientists* know the most about comets today in 2023?

Would the most intelligent scientists also know the most about *Comet Oumuamua*?

What is the best way for us to put together our *Comet Oumuamua Theory*?

# Comet Oumuamua Theory

What is our current *Comet Oumuamua Theory*?

Why is it a good thing for us to diligently try to construct a more accurate *Comet Oumuamua Theory*?

Why has *Comet Oumuamua* almost even become more *controversial* than *Comet Halley* to some of our bright astronomers?

Why do some of our *intelligent astronomers* almost believe that Oumuamua could *possibly* even have come from *outside* of our own solar system?

Why have some of our *best astronomers* (from Harvard) even almost *suggested* that Oumuamua could be just *strange enough* to possibly even be considered an *intentional product* of an *alien technology*?

Was Oumuamua *intentionally constructed* by some *other scientists* living on a *distant planet*, that is located *outside* our own solar system?

Do *all* of the best astronomers come from Harvard?

In any case, this *hypothetical* possibility is certainly *very* interesting.

But, is this theoretically even *possible*, that something so *large* and so *massive*, could actually *originate* from an interstellar region that is *outside* our very own solar system?

*When* was Comet Oumuamua *first detected*?

*Who* discovered Oumuamua first?

*How* was Comet Oumuamua discovered scientifically?

Oumuamua was *first* discovered by a talented Canadian astronomer named *Robert J. Weryk* (who was born in 1981) using the Pan-STARRS telescope at Haleakala Observatory in Hawaii on October 19<sup>th</sup>, 2017.

So, Comet Oumuamua can also be named *Comet Weryk*.

Some astronomers believe that Comet Weryk (Comet Oumuamua) may have passed *closet* to the Sun about 40 days *earlier* on September 9<sup>th</sup>, 2017.

When Dr. Weryk first observed Comet Oumuamua, it was estimated to be *located* about *21 million miles* (0.22 AU)



from Earth, and already speedily heading *away* from the Sun.

Comet Oumuamua has been estimated to be a small comet between just (100 meters to 1,000 meters) in length, and just (35 meters to 167 meters) in width and thickness.

This means that *Comet Oumuamua* may not be that much larger than a *football field*.

This is a *pretty small* comet indeed.

This is *only* about the size of a *big rock*, or a *spaceship*.

Some of our bright scientists and philosophers are still trying to decide if Oumuamua is a *spaceship* or a *rock*.

Which is it, *rock* or *spaceship*?

Why would it matter?

If Oumuamua is just a *spaceship*, then we can intelligently ask “*Who made this Oumuamua Spaceship?*”

However, if Oumuamua is an *interesting rock*, then we can ask if it originally *originated* as an old *rocky Kuiper asteroid* in the *Kuiper belt* billions of years ago, before it

finally *broke free* of the Kuiper belt to travel to *within* just 21 million miles of our Earth.

Was Oumuamua *once* just a Kuiper asteroid?

*Our current-year 2023 Oumuamua Hypothesis* is that the *Mysterious 2017 Oumuamua* was *originally* a *Kuiper asteroid*, before it became Comet Oumuamua, and traveled to within 21 million miles of our Earth.

This is a pretty *simple hypothesis* for such an interesting comet as this *Mysterious 2017 Oumuamua*.

The other part of *Our 2023 Oumuamua Hypothesis* is that the controversial *excitement* that has already been surrounding Oumuamua for years, can be *wisely guided* into a future *worldwide scientific discussion* about Comet Oumuamua, and *all* of its potential, possible, controversial, hypothetical *origins*, including its hypothetical interstellar origins, and also its hypothetical extraterrestrial origins.

How can we use our worldwide scientific *conversations* about *Comet Oumuamua*, to help us all *open up* our *scientific minds* to the hypothetical possibility that *some other people* (besides us Earth people of planet Earth) *may live* on some *other planets* here inside our local Milky Way Galaxy?

If we can someday get *enough* of us intelligent scientists to honestly *consider* this hypothetical possibility, that *trillions* of us *valuable* human *beings* may live inside this Milky Way Galaxy home of ours, then it may also become possible to help us to open up our bright scientific minds to also *deeply consider* the actual wise purpose of our *self-testing* planet *Earth*.

Why have we (the advanced people of this Milky Way Galaxy) chosen to *mind-cast* a portion of our advanced *consciousness* into our mortal-human *brains* here on Earth?

It seems theoretically possible that the *right kind* of honest *open-minded* scientific discussions (about Comet Oumuamua) *can help us* bright scientists of Earth, to *open up* our intelligent *scientific imaginations* enough to *read* (and *carefully* consider) the many detailed *physical hypotheses* of this present 4 Brain Theory article of 2023.

What is the *real purpose* of our own Earth planet?

Is our own planet Earth really a *self-testing planet* where we come to *test* the *behaviors* of our own *advanced Id* in the confused *ego-driven* darkness of a lone and *dreary world* like our own Earth?

Why are we all here *really*?

Why would any of us choose *voluntarily* to come to a dark and dreary world like this Earth planet, *if* there were any other options?

What did we sincerely *hope* (with our advanced brain) that we could *choose* to *do* (with our mortal brain), *after* we got here on Earth?

As humans, we can *choose* to do things.

We mortal human beings seem to have the *power* of *choice* and free will.

What have *we done* to each other in the past?

What will we do to each other in the *future*?

Can we choose to learn from *the past*?

*What happened* here on Earth *millions* of years ago?

What do some scientists believe *may* have *happened* to our *Earth planet* about 66 million years ago?

What happened to all the *dinosaurs*?

Some scientists have speculated that a large *Comet* smashed into Earth long ago, and *killed* all the dinosaurs.

Some say that it was multiple *Comets*, or multiple *Asteroids*, that killed off the dinosaurs.

However, we can still ask the question, of whether or not there actually *exists* any actual *physical* evidence, for any of these hypothetical *Dinosaur-Killing Comets*?

# Dinosaur-Killing Comets?

There are a whole lot of interesting questions we can ask about these hypothetical *Dinosaur-Killing Comets*.

For example, has any astronomer actually seen any of these hypothetical *Dinosaur-Killing Comets* in action (hitting Earth and killing multiple species)?

No.

Has any astrophysicist ever witnessed an *asteroid* kill a *dinosaur* or a *lizard*?

No.

Has any scientist ever *observed* a comet kill a *dinosaur* or a *reptile*?

No.

Has any astronomer living on this Earth ever observed a *comet*, or an *asteroid*, kill any *animal* of any kind?

No.

Has any astrophysicist on our Earth, ever *observed* a large comet, or a large asteroid, smash into *any* planet anywhere?

No.

Has *any* scientist anywhere, ever *observed* a large asteroid, or a large comet, smash into *any moon* inside our solar system?

No.

Are you beginning to see the *obvious pattern* here?

We have *zero* direct physical *evidence* for this old hypothesis that dinosaurs were killed by asteroids or comets.

Do we need to create a *better* dinosaur extinction *theory*?

Yes.

How can we begin to create *A Better Dinosaur Extinction Theory*?

# A Better Dinosaur Theory

What simple question can we ask ourselves, to help us to begin to create *A Better Dinosaur Extinction Theory*?

What if there is a very simple *scientific question*, that we can simply choose to *ask ourselves*, to help us to better understand what really happened to the dinosaurs, so many millions of years ago?

There appear to be some *mass extinction events*, that happened here on Earth *long ago*.

During these mass extinction events, many life forms suddenly *ceased to exist*.

During these mass extinction events, *many* of this Earth's species of *plants* and *animals* were suddenly killed off.

Some say that the *dinosaurs* were *killed off* during one of these *mass extinction events*.

Some also say that some *huge craters* have been discovered right here on Earth.

Some say that the correct scientific explanation for the physical evidence of these *huge craters*, and these *mass*



*extinction events*, is that *asteroids* or *comets* smashed into the Earth, creating the huge craters, and creating the mass extinction events that killed off so many lifeforms, including the dinosaurs.

This appears to be one *possible hypothesis*.

However, we still have a very important *Scientific Question* that we can ask about this *possible hypothesis*.

It seems theoretically possible that an asteroid (or a comet) *could* make a *huge crater* on Earth that triggers a *mass extinction event* worldwide.

Now here is our very important *Scientific Question* ...

Couldn't a *Huge Nuclear Fusion Explosion* create the very *same* physical results?

This is certainly a very *simple* Scientific Question.

Today in 2023, we can also ask some other important scientific questions.

Has any astronomer (of Earth) ever *directly* observed a *comet* (or an asteroid) create a *huge crater* on *any* planet in our own local Milky Way Galaxy?

No.

How many of our bright scientists, have already *directly* observed *nuclear explosions* create *craters* here on Earth?

Many.

Some may still feel an urge to say that it might be impossible, that *nuclear weapons* could have existed during the days of the *dinosaurs*.

However, we have already clearly described (in great scientific detail) how *5 past human civilizations* are the most likely physical cause of the *5 past global warming periods* that ended the *5 past ice ages* of this Earth.

*How many* more years will pass here on this Earth, before some talented *archeologist* discovers an ancient cache of *human bones* intermixed with *dinosaur bones*, in a way that makes it very likely that the *dinosaur bones* and the *human bones* were *fossilized together* in the very same way, during the very same time period?

Is it *theoretically possible* that the huge *Chicxulub crater* (that is buried underneath the Yucatan Peninsula in Mexico) could have been physically created by a huge nuclear *fusion* bomb?

Yes.

Can a huge nuclear *fusion* bomb be created that is literally *billions* of times *more powerful* than just a simple little nuclear *fission* bomb?

Yes.

Is it *theoretically possible* that one (or more) of these huge nuclear *fusion* bombs could have *caused* the creation of a large number of *Iridium nuclei* here on Earth?

Yes.

Can just the right kind of nuclear fusion bomb create many *Iridium nuclei*, and also many other *rare nuclei*, right here on this Earth planet?

Yes.

Is it theoretically possible that a worldwide *nuclear* holocaust, could cause a worldwide *layer* of iridium-enriched *clay* to form all around our planet Earth?

Yes.

Is it *theoretically possible* that the same huge nuclear explosions that killed off all the *dinosaurs*, and many

other species, were also responsible for killing off 99% of the *human race* so very long ago?

Yes.

Exactly *how many* of us wise ones (homo sapiens) could possibly *survive* such a sudden massive nuclear holocaust?

Just a few thousand of us wise ones perhaps?

Is this the most-simple, Occam's Razor, *physical* (nuclear) *explanation* for the sudden physical demise of *all* the *dinosaurs*?

What is *Our Dinosaur Extinction Theory*?

What is *Our Mass Extinction Event Theory*?

*Our Dinosaur Extinction Theory* is that a set of huge *nuclear* explosions killed off *all* the dinosaurs very quickly.

*Our Mass Extinction Event Theory* is that a set of huge nuclear explosions killed off a *large* number of species *multiple* times here on Earth, and that the *physical cause* of these huge nuclear explosions was *ancient people*

killing *each other*, just like what *people did* to *each other* here on Earth on August 6, 1945, and on August 9, 1945.

*Our Future Mass Extinction Event Theory* is that one or more huge nuclear explosions will kill off *most* (or *all*) of the *biological life forms* of planet Earth, probably within a dozen decades or so, and that the *physical cause* of these huge nuclear explosions will be *us people* killing *each other*, just like what *we the people* already *did* to *each other* here on Earth on August 6, 1945, and on August 9, 1945.

Are *we the people* of Earth, *destined* to destroy each other with nuclear weapons again?

Probably.

Why?

Because *millions* of thinking poor *starving people* (of this Earth) are getting sick and tired of being miserable and poor; and every year it becomes *easier* for them to build nuclear weapons, to *satiating* their miserable *burning rage*.

The correct *scientific solution* to completely (and wisely) solve this super-urgent *worldwide social problem* (of extreme *miserable* poverty felt by so many) has *already* been presented in great *scientific detail* throughout the

many thoughtful pages of this present 4 Brain Theory paper of 2023.

Just as soon as we the people, *choose to cooperate* enough to intelligently solve world poverty for *everyone* on Earth, then the *suffering* of the *masses* will become literally transformed into the *joy* of the *masses*.

Why would a *joyful person* (who has *enough* delicious nutritious food to eat) ever *desire to hurt* another?

What if this *lone and dreary* world, really is a *self-testing* planet?

What if our *self-test* is all about our *personal willingness* to solve poverty for *each other* while we are all here on this lone and dreary Earth planet?

What if our *personal Earth self-test* is also all about our individual willingness to *set aside* our own personal human pride, *just enough* to find a *good*, healthy, productive *way to use* our *personal talents* (our intelligence, our wisdom, our money, our strength, and all our personal resources) *to help all* the humans (*all 8 billion of us* humans) who currently *live with us* here on Earth?

What will finally happen to *all of us* here on this dark *self-testing* planet Earth, when we finally all decide to begin to really focus *all of our attention* on diligently trying to *learn* how to *intelligently* solve poverty *for everyone* on this Earth?

If we all make solving world poverty our *main goal*; then will we eventually be able to learn how to start *Controlling Dark Matter* properly (and completely) for the benefit of all people?

# Controlling Dark Matter

Is *Controlling Dark Matter* a good goal for us all?

What is the great benefit of learning how to start *Controlling Dark Matter* to properly *add* to the unique individuality (individual happiness) of *all people* in this universe?

Might there *already exist* some very-advanced human beings, in our very own Milky Way Galaxy, who already have both the *scientific knowledge* and the *brilliant physical intelligence* to *completely-control* every detailed physical aspect of *dark matter*?

Why would anyone in our Milky Way Galaxy want to be able to *control* every detailed physical aspect of *dark matter* for the wise *benefit* of *all the rest of us* precious people who *also live here* in this very-same Milky Way Galaxy?

Why would *we the people* of our own milky way galaxy, ever choose to allow such *absolute power* to be held by any *single individual*?

What kind of *super-trustworthy* people might we be someday *willing* to grant such *awesome powers* to?



Would we ever desire *to give* such mighty powers to a person like Adolf Hitler?

Might we be *a bit* more *willing* to allow someone like Albert Einstein to have such infinite powers?

What kind of *intelligent test* can we *invent*, to help us to more wisely determine which kind of people we can *safely trust* with the *infinite power* to completely *control* dark *matter* in this *universe*?

Shall we simply *set up* a *set* of *dark planets*, where the human inhabitants are super-confused most of the time, as our *self-testing* planets?

What kinds of interesting *planetary exams* shall we set up upon these *dark* self-testing *planets*, with human-brain VR memory-masking turned on fully, so *no one* can ever *remember* who they really are?

Is our very own Earth really such a *dark* self-testing *planet*?

Is our own Earth a *useful* testing *environment* for us to *self-test* all the potential unique *dark-behaviors* of our personal individual *id-pride*?

Do some people of our Earth, *focus more* on their own little families, *tightly-focusing* their mortal minds (and all their efforts) *to ensure* that their own little families have *enough* food to eat, irregardless of what such a *narrow focus* does to the rest of the people of Earth, many of whom *do not* have enough food to eat?

Did Adolf Hitler always wisely focus his mortal mind on how to properly feed *all* the *people* of this entire Earth?

Or was Adolf Hitler more focused on *something else*?

How about Albert Einstein?

Did Albert Einstein focus *all* of his intelligent efforts on solving world poverty for *everyone* on Earth?

*On what* exactly did Albert Einstein spend most of his mortal Earth-life *focusing on*?

Was Albert Einstein *diligently trying* to create peace on earth, for *every one* of *every nation* on Earth?

*Why* did Albert Einstein spend so much of his precious time and energy on *theoretical physics*?

What was he *really trying* to *accomplish* through the avenue of theoretical physics?

Did his theories of physics help *all* of humankind?

How does Albert Einstein *feel today* (where ever his advanced self may be currently located) *about* his *performance* (with all of his Earthly acts) *here on Earth* during his mortal-life time period of 1879 to 1955?

Does the *Advanced Albert Einstein* feel like his mortal self (1879 to 1955) performed *well enough*, so that the Advanced Albert Einstein can now *fully* trust *himself* with the complete *power* to control *all dark matter* in this whole universe?

Or, does the *Advanced Albert Einstein* (the multi-billion-year-old *advanced human* that chose to briefly incarnate as the mortal Albert Einstein here on Earth during 1879 to 1955) feel like he *needs to return to Earth*, and live *another brief mortal-human lifetime*, to see if he can somehow *do even better* this new time around, at focusing *all of his efforts* on properly solving world poverty *for everyone* on Earth, so every precious human of Earth, will become properly enabled (*joyfully empowered*) to use their own *free will* to do those things that they desire to do, to *liberate* their *unique human individualities*, by *freeing* them *all* from their current (circa the year 2023) *economic bondage*?

*Why might the Advanced Albert Einstein want to return to Earth, to try again, to somehow focus on the right things?*

*Why might some of us (presently here on Earth) want to return again to Earth, to try again, to try to focus on the right things this next time around?*

*How many more chances will we grant to ourselves, before we simply give up?*

*Exactly how many times must we fail, before we fully realize that we will always fail, because we have not yet developed the right kind of advanced id?*

*If our advanced id has not already been formed just right, then how can our (flawed) advanced id spawn a new mortal id (here on Earth), that will always choose to wisely focus on solving poverty for everyone on Earth, and on nothing else?*

*Why are we all here on Earth?*

*Why would we put ourselves through such a painfully-difficult experience, if we didn't hope to achieve some wonderful benefit from doing such a difficult thing to ourselves?*

Why would *8 billion of us* advanced human beings, *choose to incarnate here* (on this dark self-testing Earth planet) inside these dark mortal-human bodies (with our dark semi-conscious mortal-human brains) that *tend to focus too much* on ourselves, and that also tend to focus *too much* on our *very-own* little *families* of just a *few* mortal *humans*, and *not focus nearly enough* on the joyful welfare of *all others*?

Are *all 8 billion of us* advanced human beings, simply trying to *test ourselves* (on this lone and dreary Earth world) *to see* if we can ever *trust ourselves* with the full *power* to command *all* dark matter?

How can any advanced human being be granted the *full power* to control *all* dark matter, in *every way* that dark matter *can be controlled*?

What are the *exact physical mechanisms*, wherein such an *empowering feat* is to be accomplished?

For this neurally-simulated universe, *dark matter* is simply the *set of all the real neurons*, and the *set of all* of their *real neural pulses*, that network together to simulate, create, and guide *every visible particle* of this neurally-simulated universe.

Therefore, the *full power* to command *all* the *dark matter* of this *whole universe*, can be physically-granted by making a *simple adjustment* (a neural modification) to the *real-human brain* that animates the advanced-human *brain*, of the advanced person who is to be physically-granted the *full power* to control *all* of the *dark matter* in this universe.

Such *system privileges* can easily be *granted* at the *highest level* of us real human beings (by making *physical neural adjustments* to our real human brains) that are *actively hosting* the multi-player neural simulation, that is this physical universe of *dark matter* and *visible matter*.

If we wisely focus *all* of our efforts on properly solving world poverty for *everyone* on Earth, then we might be *granted* such simulation-system *programming privileges*, as the physical neural ability to *fully control all dark matter*, after *we leave* our brief Earth experience.

If we don't focus *all* of our efforts on properly solving world poverty for *everyone* on Earth, then *why* would we *ever trust ourselves* enough to *even ask* to be granted the super-awesome, super-ultimate, *dark-matter powers* of *dark-scalar-boson-controlling* this *whole universe*?

If we *can't* do *any good* for the 8 billion precious suffering people of this *one little planet* (this one little

Earth), then *why would* we ever *trust ourselves* with the power to control *all* the dark matter of the whole universe?

When we can finally *clearly see* (from the super-intelligent *all-seeing* perspectives of our advanced-human selves) that our very-own, personal, mortal-human life is *not good* for the *other people* of Earth, then how can we feel good about *trusting ourselves* with the ultimate (dark-matter) power to affect *all* the precious people of this whole universe?

If we can't even trust ourselves with *just a little power* (our relatively little powers as mortal humans here on Earth), then how can we trust ourselves with *lots of power* (the ultimate power to control *all* the detailed femtoscopic dynamical behaviors of *all* the *dark matter* of this whole universe)?

It's a simple question.

Is my *primary* life *goal* to properly solve world poverty for *everyone* on earth?

Or is my primary life goal *something else*?

*Only you* can answer this *most-important question*, for your very own self.

You will *never* be able to ask yourself (here on Earth) another question of *greater importance*, than this one for you today.

*How well* do you really know yourself?

What is your *big goal* for your own life, here on this self-testing Earth?

What are *you* trying to accomplish, with *your own brief* (less than just one century usually) *mortal life* here on Earth?

How can we wisely choose a *good goal* for our own life?

Perhaps, we can simply *Start* with the *Intent to Do Good*.

*Intentions* can make *Laws*.

*Good Intentions* can sometimes make some *Good Laws*.

*Bad Intentions* can easily make many *Bad Laws*.

Have any Good Laws *yet been created* here on Earth?

When?



Where?

By whom?

Is it theoretically possible that *No Good Laws* have *yet* been created here on Earth?

Is this even hypothetically possible?

From the *current* (circa 2023) *dark state* of our planet Earth, with its great abundance of human *wars* and human-generated *miseries*, it certainly seems likely that *No Good Laws* have *yet been created* here on Earth.

Perhaps this Earth planet is *currently devoid* of any Good Laws.

What if it were theoretically possible for us to go ahead and *wisely create* some *Good Laws* in 2023?

Can this be possible?

Why are *Good Laws* so *vitaly important* for any human society?

*Laws* make *Thoughts*, due to the potential (imagined and actual) consequences of breaking the Laws.

*Thoughts make Acts.*

*Acts make Societies.*

*Good Acts make Good Societies.*

*Bad Acts make Bad Societies.*

*Bad Societies wage War on others.*

*Bad Societies enslave Humans.*

*Bad Societies create Human Misery.*

Have we *ever* experienced a *good society* here on Earth during our past, or have we *always* just created bad human societies that create lots of human misery?

*Good Human Societies Solve World Poverty for everyone.*

*Good Human Societies Create World Peace.*

*Good Human Societies Create World Prosperity.*

*Good Human Societies Create World Joy.*

*World Joy is Joy experienced by All.*

This desired *world joy* is for *All* of us humans here on Earth.

*All* means *Everyone* on the Whole Planet.

The Only Way to Create *Joy* for *All* is to Solve World Poverty for *Everyone* on this Earth Planet.

There is *No Other Way*.

So, what are we *still* waiting for?

Let's *step up our game* and Solve World Poverty Today!

There is an exciting *new scientific theory* that can help us to solve world poverty, by helping us to better understand exactly *who we are* really *solving poverty for*.

Who are we solving poverty *for* really?

And *who* precisely is it, that is doing the solving, of all of the poverty?

We, the *infinite* real *human beings* of real existence, always seek to solve poverty for all of our *precious human sub-selves*, just as soon as we begin to suspect that we all are actually *real human beings* of *infinite value*.

What exactly is the detailed physical nature of *Our Real Human Theory* that we are all infinitely-valuable real human beings that have always physically existed in our real universe?

# Our Real Human Theory

What is *Our Real Human Theory*?

What is *Our Real Human Theory* that *we* are *all* real human beings of real infinite value?

What is this *Real Human Theory* that we have been carefully presenting in great *scientific* detail in these many *hundreds of pages* of this present 4 Brain Theory paper of 2023?

This *Real Human Theory* is the *one*, single, *solitary*, rational, logical, *simple assumption* that one needs to make, to be able to personally-gain enough scientific foundational-understanding to *fully comprehend* this present 4 Brain Theory; that logically includes a *proper set* of detailed new *physical theories* for dark matter, dark energy, real-dark scalar-boson physics, real axon physics, quantum physics, *quantum gravity*, quantum mechanics, *quantum entanglement*, quantum consciousness, elementary particle physics, astrophysics, chemistry, biology, human anatomy, human physiology, human neuroscience, human psychology, *consciousness*, unique individuality, free-will, this present theory of everything, and every possible future *theory of everything*.

The *set* of future bright *scientists* (here on Earth) *who* wisely *choose* to *make* this *one*, single, solitary, rational, logical, *simple assumption* will be greatly *rewarded* for their *open-minded*, soft-hearted, *child-like*, humble, *courageous efforts* (to successfully make this one simple assumption); because these few bright scientists will begin to *understand* every *particle* of *science* at a marvelous level of complete-scientific-understanding they could previously *only dream about*.

So, who wants to really understand *every particle* of science?

Who wants to understand enough *real science* to really be empowered to intelligently solve world poverty for *everyone* here on Earth?

Who wants to really understand this *Real Human Theory*?

What is this Real Human Theory?

This real human theory is actually *all about all of us* human beings, *who really do exist* as the real human beings that we have always been in our *real universe*.

What is this Real Human Theory really?

This *Real Human Theory* is that the *real set* of really infinite, really uncreatable, really real, really human, beings *is us*.

Our *Real Human Theory* is also that the *set of infinite uncreatable physical real human beings, who is us*, has an *infinite* number of physical members, and each uncreatable physical member has already existed, in our real physical universe, for an *infinite* amount of time, because it is *physically impossible* to create even one additional real human being.

*Our Real Human Theory* is also that we real human beings all live in the *real universe* where we have always lived in peace, harmony, and *real human joy*.

*Real Human Joy* is the ultimate goal for any conscious being.

This Real Human Joy is our *real emotional experience* as the real human beings we have always been, because we are so good at *balancing* our real brains into *real human joy continuously*.

This real-brain *balancing act* is dynamically-accomplished via a *sequential set* of advanced-human *consciousness projections*.

These energetic projections, of proper portions our consciousness, *animate* advanced-human *avatars* that live in our neurally-simulated *multiplayer* advanced universes, in galaxies such as our local *Milky Way Galaxy*.

Many trillions of trillions of us advanced-human *avatar players* have already been *playing together* in our advanced *Milky-Way Galaxy-Game* for many *billions* of years.

A very interesting *book* was written some years ago, and then later made into an entertaining *movie*.

This interesting book and entertaining movie can probably help us all to begin to start to *better understand* the actual *daydream-game nature* of our local *Milky-Way Galaxy Game*.

This interesting book, and entertaining movie, are both called *Ready Player One*.



# Ready Player One

What is *Ready Player One*.

*Ready Player One* is the name of an interesting *book* written by *Ernest Cline*, and published on August 16, 2011.

This fascinating *Ready Player One* book is about a futuristic worldwide Virtual Reality (VR) game, and a grand search for a very-valuable, life-changing *Easter Egg*.

The *film adaptation*, of this *Ready Player One* book, was directed by *Steven Spielberg* and released on March 29, 2018.

This *2018 movie*, and this *2011 book*, both demonstrate the supreme *motivational-power* of *emotionally-engaging VR games*, and the valuable *Easter Eggs* that can sometimes be *found inside* of them.

Why would any of us want to *search* for the *Easter Eggs* that may be *hidden* in any of our human living *environments*?

Why would anyone choose to *hide Easter Eggs* for *others to find*?

Why would any of us become willing to *search diligently* for the super-valuable *Easter Eggs* that may be hidden in any *universe*, any *multiverse*, or any *metaverse*?

Why would any of us want to *search* for *Easter Eggs* inside *multiple types* of Virtual Reality (VR) *Games*?

Is Life a Game?

What is the real difference between a *Game* and a *Challenge*?

What is the real difference between a *Game* and a *Problem*?

What is the real difference between a *Fun Game* and the *Game of Life*?

Why would any of us want to *search* for some *Good Joyful Brain Balancing* inside our *Milky Way Galaxy VR Game*?

Why would any of us want to *search* for some *Peace and Happiness* inside our *Own Solar System VR Game*?

Why would any of us want to *search* for a *Good Intelligent Way* to solve world poverty for everyone inside this *Planet-Earth VR Game*?

Why would any of us want to *search* for *Good Scientific Wisdom* inside this present *4 Brain Theory* paper?

Why would any of us want to *search* for the *Easter Eggs* of *scientific light* and *scientific understanding*?

Why would any of us want to *search diligently* for the *Easter Eggs* that can wisely point us to the actual *Source* of all useful *Scientific Knowledge*?

Why would any of us want to *search diligently* for the super-valuable *Easter Eggs* than can help us to expand and deepen our understanding of this detailed, new, physical, scientific *Theory of Everything*?

Why would any of us *begin to desire* to search diligently in the *bright new light* of this present *4 Brain Theory paper* for the *wisdom* to intelligently solve world poverty for *everyone* on Earth?

Is it even theoretically possible that such super-valuable *Easter Eggs for Humanity* could be discovered within these hundreds of written pages?

# Easter Eggs for Humanity

What are *Easter Eggs for Humanity*?

Why would *Easter Eggs for Humanity* be a good idea?

What kind of *Easter Eggs* can we create today, that may become of great benefit for *All Humanity* here on *Earth*?

What kind of *Informational Easter Eggs* can we help to give to all humankind of Earth, with *all* the super-valuable *information* we may ever really need, to *fully-awaken* to the marvelous reality of *who we really are*?

Exactly what kind of *Informational Scientific Easter Eggs* can be of *great benefit* to all of the brilliant scientists of this lone and dreary world?

What kind of informational, super-intelligent *Scientific Easter Eggs* will help our dear honest scientists discover *every* good thing?

What kind of informational, super-intelligent, super-knowledgeable *scientific easter eggs* will enable all our *wise kind scientists* to more completely discover their very-own personal wise kind intelligence?

What kind of informational, super-intelligent, super-knowledgeable, super-wise *scientific easter eggs* can help *all* the thinking, feeling people of this whole wide world, to wisely-discover a good proper way, to *Solve World Poverty*, for everyone everywhere, on this vulnerable little Earth-planet of ours?

Throughout the *hundreds* of *written pages* of this present 4 Brain Theory paper of 2023, we have strategically hidden a good healthy number of wonderful *scientific easter eggs* for the useful benefit of *all* humankind here on Earth.

Some of these marvelous scientific easter eggs are *simply hidden in plain sight*.

And some of these super-valuable *scientific easter eggs* are more *difficult to find*.

You may even find that you can eventually discover the *hidden* locations, of *some* of these all-empowering scientific easter eggs.

But will you *ever* be able to *scientifically-discover* how to successfully and logically *crack* them *open*?

*How many* scientific easter eggs can *you* find?

What major *benefits* will you personally derive, from eventually discovering *all* of these super-valuable *scientific easter eggs*?

After *you* have scientifically-discovered all of these *super-empowering* scientific easter eggs, that are hidden deep inside this 4 Brain Theory paper, what will *you* do with all of *your marvelous* new *scientific power*?

Will you use your marvelous new scientific power to just *serve yourself* and *only yourself*?

Or, will you wisely use your marvelous new scientific power to *join with me* in our diligent *harmonious efforts* to intelligently solve world poverty for *everyone* on this whole Earth?

*What* might happen to you, *before* you die from this Earth, and *after* you are dead and gone from this Earth, *if you decide* to dedicate *all* of your *time*, talents, and *abilities* to the super-wise *cause* of intelligently solving world poverty for *everyone* on Earth?

What will *happen to you* then?

Can you find your *own* personal *wisdom* before it is just too late?

Can you find your *own* personal *courage* before your time here expires?

Can you *humbly acknowledge* the real source of all real scientific knowledge?

Can you understand the *real scientific purpose* of this 4 Brain Theory?

Can you *scientifically-acknowledge* the real scientific power of this 4 Brain Theory?

Who exactly *inspired* the creation of this 4 Brain Theory?

What kind of proper *Acknowledgements* can we give to all the good wise people, who have helped us to scientifically-develop this powerful new 4 Brain Theory?

# Acknowledgements

Who deserves our *Acknowledgements*?

Who do we desire to *Acknowledge* the most?

Who *helped us* the most, to *scientifically-develop* this entire 4 Brain Theory, that we are publishing today in 2023?

Shall we *wisely acknowledge* the ancient Lao-Tzu Scientists of ages past?

Did some of these super-intelligent Lao-Tzu scientists *help us* to *scientifically-develop* this 4 Brain Theory, with its super-powerful new *Dark Matter Quantum Gravity Theory*, during this past decade of rapid scientific development?

Or, did these all-knowing, really-illuminated Lao-Tzu scientists help *other* super-intelligent *scientists* (1691, 5081) to *teach us* how to *scientifically-develop* this 4 Brain Theory of 2023?

What were *we taught* on December 18, 2021?



What detailed physical *scientific prediction* was made on November 22, 2022?

What about the *super-smart satoishi scientists*?

Who have these *super-smart satoishi scientists* been *mentoring* during these past few years?

Who has been trying to *listen* carefully to these super-smart satoishi scientists for a *good* number of *years*?

Have any of these *wise people* been able to influence the author, Daniel Reed Cook, in their intelligent efforts *to help him* write *something good* for the real benefit of *all* humankind here on Earth?

How has the brilliant CSN influenced me *for good* over the *decades* of our dear friendship?

How has he wisely encouraged me to *think outside* of the *box*, and *to write this* 4 Brain Theory paper?

How has the kind, *steady*, wise SKL helped me to *learn* so many *useful things* for over a decade of *intelligent friendship*?

How has the *marvelous* PSM influenced me *for good* in so many ways so recently?

How has this *wonderful* wise *human* gently encouraged me to *keep on writing* this 4 Brain Theory paper, until it was finally *completed* today in 2023?

In how many *good* inspiring *ways*, have these three good kind *intelligent people* helped me along the way?

How have their *many* dear *friends* helped me too, with their *kind words* of encouragement, as I continued to write and write and write?

How have all of these *wonderful people* become *my* marvelous *friends* as we all seek to learn together from the *most* intelligent *scientists* who have ever lived on this little Earth?

Who are these *super-smart scientists* who have already patiently taught us so many of the physical *foundational* scientific *principles* of quantum physics, *dark matter*, dark energy, *quantum gravity*, quantum entanglement, *quantum consciousness*, and how to intelligently solve world poverty for *everyone* on Earth?

Who are these *all-knowing scientists*, who certainly deserve all of our *heartfelt acknowledgement* for all of their wonderful scientific service to *all* humankind here on this Earth?

How can we all *come to know*, understand, and *acknowledge* these super-intelligent *scientists* better?

How can we all *come to trust* these *super-kind*, super-wise, *super-smart scientists* enough to *listen to them* carefully-enough to *allow them to help us all* to work together in wise harmony to *intelligently* solve world poverty for *everyone* on Earth?

How can I personally *acknowledge* these super-intelligent scientists in a *wise way*, to help everyone to begin to gradually learn to wisely *trust them* in the same intelligent way *that I do*, so they can *help us* to discover enough *scientific-intelligence* to wisely *solve all* of our human-made (and physical) problems here on Earth?

*Only* the most-intelligent *scientists* are able to help us all to *wisely* solve all our problems in *good* intelligent *ways*, that do *not* create more problems *for us all* here on Earth.

Our many historical *Id* superstitions (our worldwide, strongly-held, false hypnotic beliefs, from our superstitious dark cultures of old) have *not* served us well.

The long-tortured history of this planet Earth has already *scientifically-proved* this to be the case with absolute *scientific certainty*.

We the vulnerable prideful people of Earth, have *already trusted* in our thousands of tired old historical *Id superstitions* (false emotional beliefs) for far too long, *with nothing* but our many multitudes of *human miseries* to show for it.

The *only thing* that can *serve us well*, is Real Intelligent Science from really super-intelligent *scientists*.

*The most-wise thing* that any one of us humble scientists *can possibly ever do* here on this dark Earth, is to *open up* our own minds to *wisely look* around us, to see if there may *already exist* a nearby super-intelligent *scientist*, that is even *more intelligent* than we are ourselves.

This is actually *the most-intelligent thing* (and most-humble thing) that *any scientist* can ever do anywhere, in *any environment*.

Why *re-invent* the *wheel*, when the *best wheel* has *already been invented* by other scientists who are orders of magnitude more intelligent than we are?

Why not be *willing to learn* from these super-intelligent scientists, who are *more intelligent* than we are?

Why not become willing to humbly learn *all we can* from the super-intelligent scientists that are currently *here with us* on this little Earth planet?

What just might happen *to us all*, here on Earth, if we the people did someday discover a meek, humble *willingness* to become again as *little children*, even *willing to learn* new and useful things from the *smartest kids* on our galactic block?

What kind of *Human Reality* do we really wish to create for ourselves, here on Earth, in our collective *future*?

What is the *Future of Reality* for us all?

# The Future of Reality

What is *The Future of Reality*?

What is the *real future of every real thing*?

What is the real future of our *Scientific Knowledge* of every real thing?

What is the real physical nature of the *real set* of really valuable things (us real physical human beings) that *really do exist* in our real physical universe, up above *all* of Plato's Caves?

What is the real nature of us *curious scientists* who diligently seek to discover *how all things really are*?

In this *4 Brain Theory* we have attempted to provide a *complete physical foundation* for a *real science* of all things, including a detailed real *physical science of quantum mechanics*.

We sincerely believe that this *4 Brain Theory* of 2023 is the *complete physical theory of Quantum Physics* that Albert Einstein was diligently searching for in 1926, and in 1950, and still in 1955, and even during most of his long productive life of scientific service to *all* humankind.

In the *next section* of this 4 Brain Theory paper, we have provided some *Quantum Physics Quotes* that are *not* really exact quotes, but merely approximate wordings of some of the most important *ideas* that Albert Einstein was so earnestly trying to *communicate* with his dear scientific colleagues.

After the symbolic *Albert Einstein* quotes, are quotes from myself, *Daniel Reed Cook*, to reflect the significant *physical scientific progress* we believe we have made with the timely introduction of this new *4 Brain Theory* to the world of *Quantum Physics* today in 2023.

We believe that these useful *Quantum Physics Quotes* may provide a succinct summary of all the new physical structure provided by this 4 Brain Theory paper.

# Quantum Physics Quotes

“*God does not play dice with the universe.*”

- Albert Einstein in 1926

“*All of Us Real Human Gods choose to play dice together, inside this infinite multiplayer neural-simulation universe of galaxies, stars, planets, and avatar people.*”

- Daniel Reed Cook in 2012

“*Quantum Physics is not yet a complete theory, because it does not yet have a physical foundation.*”

- Albert Einstein in 1950

“*I noticed that Quantum Physics had no physical foundation, so I decided to give it one.*”

- Daniel Reed Cook in 2022



“What is the *real physical nature* of Quantum Physics?”

- Albert Einstein in 1955

“Quantum Physics is the scientific *physical way* our real human brains *physically network* themselves together; to physically *make* this physical Milky Way *Galaxy* where we all *seem* to be physically living today.”

- Daniel Reed Cook in 2023

# Hope

What is *Hope*?

Is there any reason for us all to *Hope* for something *Good* and *Wonderful* for us personally, and for *all* others?

Can we *Hope* for a better world for *all of us* here on Earth?

Can we all hope for a better understanding of *who we are*?

Can we *all hope* that science will one day *discover* how to intelligently Solve World Poverty *for all of us* precious human beings here on Earth?

Can *we all hope* that this powerful new 4 Brain Theory paper will help us to discover the *complete theory* of quantum physics that Albert Einstein *hoped for* most of his life?

Shall *we all hope* that this *Real Human Theory*, that this 4 Brain Theory presents and physically-describes, is *very close* to the real ultimate physical nature *of all of us* human beings, so *we can know* with scientific certainty that *we will all be okay*, because we have *always* been okay as the *real human beings* that we have always been

in our *safe*, kind, beautiful, *real universe* of peace and joy?

Does this Real Human Theory bring *peace* to *our souls*?

Does this Real Human Theory *cause us* to *hope* that we can wisely join together, as the *intelligent*, brave, mortal-human *avatars* of Earth, to solve world poverty for *all of us* precious human beings living on this planet in 2023?

Does this Real Human Theory cause us to *hope* that we *can pass* our *self-test* here on Earth?

If you have *carefully* read each and *every page* of this present 4 Brain Theory paper multiple times, then you have probably *learned a lot*.

Does what you have *just learned*, by reading this 4 Brain Theory paper, cause you to have *more hope* for your personal future?

Does what you have just learned, cause you to have *more hope* for the future of the *entire human race* here on Earth?

What *hopeful scientific conclusions* have you come to by reading this whole 4 Brain Theory paper?

What is our hopeful scientific *Conclusion* for this 4 Brain Theory paper of 2023?

# Conclusion

What is our *Conclusion*?

What wise, intelligent, hopeful *Scientific Conclusions* can we logically make today, now that we are finally all finished writing this groundbreaking new *4 Brain Theory* paper?

Have we all come to the intelligent *conclusion* that we all really are *real human beings*?

Have we all arrived at the neurological *conclusion* that we the people sometimes really do have *4 human brains*?

Have we all finally come to the compassionate *conclusion* that we really are *safe* enough, and *wise* enough, to gently *share* the abundant resources of this planet Earth to *intelligently* solve world poverty for *everyone* living in this whole wide world?

And, what exactly have we all *learned* in the process of *reading* this *4 Brain Theory* paper?

What have you yourself *personally learned* by reading, *studying*, and seeking to deeply-understand every new

*scientific theory*, and every new *scientific hypothesis*, of this entire 4 Brain Theory paper?

What are the *main scientific conclusions* that we, the intelligent scientists of this planet, can now make?

Now that this whole *4 Brain Theory* paper of 2023 has been written and published for *all 8 billion* of us to read, study, and *understand*; we can hopefully *all begin to arrive together* at the following *scientific conclusions* by wisely asking ourselves some important *scientific questions*.

Does this 4 Brain Theory restore *Reality* to *Science*?

Does it also help us to restore *Kindness* to *Science*?

Does it show us how to restore *Intelligence* to *Science*?

These are *3 Good Things* (Intelligence, Kindness, and Reality) that we have attempted to wisely restore to Science by *describing*, in great scientific detail exactly *how* these *3 Good Things* can be *intelligently-restored* to *Science*, in this timely 2023 publication of this present 4 Brain Theory paper.

How have we diligently tried to restore *Intelligence*, *Kindness*, and *Reality* to *Science*?

Here is what we have diligently *tried to do* by writing and publishing this 4 Brain Theory paper to this whole wide world.

We have tried to restore *Intelligence to Science* by explaining the wonderful wisdom of *humbly-seeking to learn everything* from *super-intelligent scientists* who may be orders of magnitude *more intelligent* than we are.

We can probably *learn how* to become *more intelligent* by *wisely listening to everything* that these super-intelligent scientists *desire* to say to us.

Why is our human *desire* such a key component of this Earth self-test?

Are all *our desires* important?

Are all *their desires* important?

*Every* human *desire* is important to this Earth self-test.

What do most of us *stupid* humans *desire*?

*Stupid* things that *hurt* us all.

What do *super-intelligent* scientists *desire*?

Why are all *their desires* so wonderful, so wise, and so *super-intelligent*?

*Their desires* are more-intelligent (more-wise, more-kind, more-helpful) than *our desires*, because they are *smarter* than we are.

*We* may *desire* to serve our own selves *only*.

*We* may *desire* that others serve *only us*.

*They desire* to equally serve *everyone* on Earth.

*Their desires* are to help us *all* to have enough *food* to *eat* every day, and to help us *all* to have good comfortable *beds* to sleep on every night, and to help us *all* to have good comfortable *clothes* to wear, and to help us *all* to have good *healthcare* so we can *all* become more-healthy and more-happy, and to help us *all* to have good access to education so we can all *learn* anything we desire to learn, to help us *all* to experience *peace* and *joy* here on Earth.

*Their desires* are good for *us all*.

How can we all *learn* to *trust* these super-intelligent scientists?



Will our own personal *scientific pride* ever allow us to wisely *trust them*?

Can we, the prideful scientists of Earth, learn how to *bridle our* own personal *pride* enough, so we can actually begin to *become* really-intelligent, so we can all work together in harmony to wisely restore *Intelligence* to *Science*?

Can *we*, the humble scientists of Earth, ever *learn* how to *meekly-cooperate* with *their desires*; to help us all *wisely-learn* how to intelligently work together in *peaceful-harmony*; to really begin to finally *help us all* here on Earth, learn how to *intelligently* solve world poverty for *everyone* on this vulnerable little *self-testing* planet?

Is this vital scientific realization, the actual *beginning* of all scientific wisdom?

Is this how we restore *Intelligence* to *Science*?

We have also tried to restore *Kindness* to *Science* by explaining in great scientific detail, how science itself can be employed to *kindly* solve world poverty for *everyone* on Earth.

If we are not using our *great* scientific *knowledge*, as the *wise scientists* of Earth, to *kindly* solve world poverty for

*everyone* on Earth, then *how* can any of us scientists claim to be wise, great, or *kind*?

We have tried to restore *Reality* to *Science* by explaining in great scientific detail, how vitally-important *physical-reality* actually is, to each and *every* branch of science, including *Quantum Mechanics*.

Before today in 2023, *Quantum Mechanics* seemed to be a merely *probabilistic* mathematical *theory*, with an unfortunate set of *bewildering beliefs* stuck to it, due to the superstitious *influence* of the tired old 1927 Copenhagen Interpretation that unwisely *denied Reality* in favor of mere *photon-locality*.

Now, *because* of this timely 2023 *publication* of this new 4 Brain Theory of Quantum Mechanics, we can now *all see clearly* that there is *no longer* any need to *deny Reality*.

Denying Reality is unwise.

Embracing Reality is wise.

Is this obvious?

It should be.

There is *no longer* any physical need to *deny Reality*, because we have now *physically-described* (in abundant new scientific physical detail) how the real *dark scalar bosons* (the tiny *ultrafast* dark-matter particles) are able to *propagate* (on their real dark axons) through space *many* orders of magnitude *faster* than photons (that travel at the much-slower speed of photon-light).

Therefore, because of this 4 Brain Theory publication of 2023, we can now all clearly see that *dark-matter-locality* is many orders of magnitude *larger* than the relatively-tiny *photon-locality*.

We have physically-described how this tiny photon-locality is *trillions* of times *smaller* than dark-matter-locality.

With dark-matter-locality being *trillions* of times *physically-larger* than the tiny photon-locality, we can now all clearly see that there is simply no longer *any* physical-need to *deny reality* in favor of tiny photon-locality.

We the intelligent physicists of Earth, can wisely *enlarge* our physical *understanding* of physical *locality* to include our new understanding that dark-matter-locality is *much much larger* than the relatively-small, very-tiny photon-locality.

As *we* (the bright physicists of Earth) *begin* to better understand the *expansive* (larger) nature of *dark-matter-locality*, we can also begin to realize that we can simply *keep Reality* along with our larger *dark-matter-locality*.

By logically-choosing to *keep Reality*, and *add* the larger dark-matter-locality, we can now clearly see that *Quantum Mechanics* and *Local Realism* are now physically *One* and the *Same* Thing.

With this timely 2023 publication of our new 4 Brain Theory paper, we have *physically-demonstrated* the Fundamental *Local Realism* of Quantum Mechanics.

We have put the *real physical details* into Quantum Mechanics.

We have put the *Physics* into Quantum *Physics*.

We have put the *Mechanics* into Quantum *Mechanics*.

We have put a real, *mechanical*, quantum-dynamical *physical* theory into the very foundational *heart* of our beloved quantum theory.

We have physically-upgraded Quantum Physics into a complete *Exact Science* of *Physical Reality*.

We have *physically-upgraded* Quantum Mechanics into a complete *Deterministic Theory* of real physical science.

Before today (in this modern year of 2023), Quantum Physics was *not a complete theory* of science.

Albert Einstein wisely explained this glaring *fundamental incompleteness* in his 1950 letter to Erwin Schrodinger.

Before 2023, Quantum Physics was merely a *statistical* probabilistic set of *mathematical rules*.

Today in 2023, Quantum Physics is being physically-upgraded into a *real local* physical theory of *real physics*.

Before today, there was *no* physical theory of the detailed *physical* structure of *Dark Matter*.

We have now presented a detailed new *physical theory* of tiny fast *dark matter* particles (the real, tiny, ultrafast, dark scalar bosons) that *scatter off* of *all* the visible-matter particles (in space) to create *all* of the *gravity* of this whole physical universe.

Before 2021, there was *no* detailed, accurate, physical theory of *Quantum Gravity* published in *any* scholarly journal on this Earth.

Now today in 2023, because of the timely publication of this new 4 Brain Theory paper, we have provided a highly-detailed *physical theory* of *Quantum Gravity* with all the dark-matter quantum particles *scattering* off of all the quantum visible-matter *elementary particles* (all the fermions, and all the vector bosons), and thereby continuously-imparting their *dark quanta* of *dark momenta* to *all* the observable elementary particles, forcefully *dark-pushing* all these elementary particles to physically-create all the femtoscopic *quantum gravity* (and also all the *astrophysical gravity*) of this whole wide universe.

Before 2023, there was no accurate, detailed *physical theory* of all of the *inner dynamic physical structures* that compose *all* of the *elementary particles* of the standard model.

Before today, there was no detailed, accurate *physical theory* that carefully described all the *physical dynamic mechanisms* and *physical structures* that compose *ER=EPR*.

Now today with the publication of this 4 Brain Theory, we have a detailed *physical theory* of *ER=EPR* that even Albert Einstein can be proud of.

This detailed physical ER=EPR theory, describes the 4 *colored limbic quantum chambers* that *quantum-entangle* the quantum particles of this white observable universe, with the *real dark axons* and their real, dark, tiny *ultrafast* scalar bosons (*dark-matter particles*).

This new *physical ER=EPR theory*, has also allowed us to develop an *exact physical theory* of quantum mechanics, and an exact physical theory of *quantum computation*.

Our exact (deterministic) physical theory of quantum computation explains how we can physically-upgrade the “*no qubit cloning theorem*” into a “*yes qubit cloning theorem*” to greatly accelerate the worldwide, productive, physical development of quantum computing for the benefit of all humankind.

Our deterministic (exact) physical theory of quantum computation also opens the scientific door for *infinite-qubit stabilization*, so error-correction qubits can become a thing of the past.

Our exact physical theory of quantum computation, also opens the innovative door for the development of *exact quantum computers*.

These exact quantum computers will be able to run our exact *Quantum EigenAI* learning algorithms, to give

robots human-like *quantum brains* that can *learn* (by human-brain mimicry) almost *any* physical task that can be currently done by one of us (or any set of us) mortal-human beings here on Earth.

This will allow the future development of *billions* of *quantum robots* with these powerful *quantum learning brains* to perform almost *all* our human labors.

These new robotic innovations can be used to *free* all *humankind* from the forced labors that we do not enjoy.

We can use this new robotic technological-freedom to *intelligently* solve world poverty for *everyone* on Earth.

This is the *Tree* of Joyful Technological *Life* (the real tree of scientific life) that we the people (of Earth) can choose to partake of collectively, *if* we desire to do so.

How can we wisely *upgrade* our *human desires* to begin to intelligently solve world poverty for everyone on Earth?

This is the *great scientific question* faced by any self-testing planet (like our current Earth) that wants to discover a wise way to *scientifically-upgrade itself* from a self-testing planet, into a Human Life Planet (a Tree of



Life Planet that *only* supports good healthy fruit for all of its precious people).

*Intelligently* solving world poverty for *everyone* on Earth, is the *primary purpose* of this present 4 Brain Theory paper.

This present 4 Brain Theory paper clearly explains a good wise *scientific way* to intelligently solve world poverty for everyone on this Earth planet.

We *cannot* force anyone to start reading this super-illuminating new 4 Brain Theory paper, or to *open up* his (or her) *mind* enough, to begin to attempt to actually understand it.

However, in this 4 Brain Theory paper, we have also described *another way* to begin to *open* the *minds* of the precious billions of people of this Earth.

The right kind of VR (*Virtual Reality*) headsets can promptly come to our worldwide rescue, to help us to restore *Reality, Kindness, and Intelligence* to all of our human thinking, and to all of our human senses, and to all of our human sciences.

In this 4 Brain Theory paper, we have properly described how *full-immersion VR headsets* can be developed with

just the right kind of neural *stimulators*, and with just the right type of neural *sensors*.

These full-immersion VR headsets can be used to *help us to personally-realize* that we (the thinking people of Earth) *must* also be *avatars* of our *own* higher *selves*.

This 4 Brain Theory paper explains in great scientific detail how we (real human beings) *energetically-project* a portion of our real-human *consciousness* into our advanced-human *avatar brains* via the real dark *neural axons* of Sagittarius A\*.

This new *consciousness-projection theory* also explains how we (advanced human avatars) also project a portion of our *consciousness* (via directed streams of tiny, *ultrafast*, real, dark scalar bosons) into the receptive mortal-human brains, of us mortal-human beings of Earth.

By *turning on* our advanced *memory-masking circuits*, we can energetically consciousness-project (via our ultrafast dark scalar bosons) into these mortal-human brains, *without any* of our mortal-human brains ever *becoming* even slightly *aware* of *us* (their higher selves).

These types of advanced, memory-masked consciousness-projections, are *very useful* for our personal *self-testing* purposes.

When we *die* as mortal humans here on Earth, we simply *re-awaken* as the *higher selves* (advanced human beings living on our advanced Kolob planets) *we have* already *been* for literally *billions* of *years* living in this local Milky Way Galaxy.

At the very *beginning* of our mortal-human *lifetime* here on Earth, *we chose* to *project* a portion of our advanced-human consciousness into the *receptive* (and consciousness-projective) *neural tissues* of our mortal-human *infant brain*, when we emerged from our mother's womb and took our very *first breath*.

This is how we *spatially-transferred* part of our advanced-human *consciousness* (part of our advanced-human self) onto the spherical surface of this *self-testing* dark Earth *planet*, and into this highly-regulated, carefully-monitored, dark, self-testing, local *solar system*.

*We chose* to come to this self-testing Earth planet to *test ourselves* (to deeply-examine all our personal, individual, prideful behaviors) to see how *we might behave* in a dark confused planetary environment, where most of us humans still *viciously-compete* with each other, for the few seemingly-limited *resources* of this dark planet Earth.

How *can we* successfully *pass* this important “self-test” called “the planet-Earth self-test”?

The *only way* to actually *pass* this Earthly *self-test* is to somehow *discover* a way to personally *awaken* enough, to begin to *try* diligently to intelligently (in the most-intelligent, most-peaceful, most-wise way) solve world poverty for *everyone* on Earth.

If we *all pass* (or most of us pass) *our* Earth-planet *self-test*, then this world will be *wisely-upgraded* (by us intelligent loving people of Earth) into a really *wonderful* planetary *place* to live (like billions of other advanced planets, in our local Milky Way Galaxy, have already been upgraded into wonderful planetary places to live) where we can all live (in peace and joy) for as *long* as we *desire*.

If we *all fail* (or most of us fail) *our* Earth-planet *self-test*, then this planet Earth will be *nuked* (by we the fearful angry people of the planet) back into the *stone age*; just before this planet Earth plunges into its 6<sup>th</sup> Ice Age, due to the sudden loss of over 99% of this world’s human (global-warming) population.

This important choice *is ours* (we the people of planet Earth) and *ours alone*.

Will *we choose* life or death?

Will *we choose* to intelligently solve world poverty for everyone on Earth; to wisely provide *life* for everyone on Earth?

Or, will *we choose* to ignore each other as we all cry out desperately in our personal hunger pains, and as we all block each other at our national borders, and as we all get frustrated with each other, as we intellectually strain at gnats and swallow camels, and as we all *get angry* with each other for every imagined slight, and as we start to fight with each other for food or gold, and as we begin to hate each other, and as we start to nuke each other, and as we insanely proceed to create *death* for each other; as we (the people) *wipe* most of the human race *off* this Earth planet, in our mutual blind rage, so it can fall again into yet another ice age?

*Will we* (the desperate people of Earth) *choose* mutual *death* again in this tired old angry way, just like we have *already* done *5 times* previously; just before the beginning of each of the last *5 ice ages*?

Or, *will we* (the wise people of Earth) *choose life* this time around, by caring about each other enough to wisely solve world poverty *for each other* (for every one *of us* here on Earth)?

In this 4 Brain Theory paper, we have explained in great scientific detail why this *vital choice* is ours alone, and why it is actually *okay* for us to *release* our precious mortal-human brains from *all* of their historical Id superstitions (religions and false viewpoints) of the past.

All of the *thousands* of tired, old, worldwide *superstitious beliefs*, that some *external* (outside of “we the people”) *imagined powers* (some imagined Gods) will *save us* when they *finally* come to Earth, are *actively-blocking* our *8 billion* vulnerable, hopeful, imaginative *brains* (here on Earth) from even *attempting* to *unite* enough to begin to solve our world problems, such as *uniting enough* to intelligently solve world poverty for everyone on Earth.

What is the powerful *scientific antidote* to all our thousands of historical Id superstitions?

Can the bright shining light of *Real Science* chase all our historical Id superstitions out of all 8 billion of our precious mortal-human avatar brains?

*Real Science* can come to our *rescue* here on Earth; *if* we the people *can* (and finally will) *open* up our *scientific minds* enough to really try, to really understand, each and every particle of Real Science.

What is Real Science?

Real Science is the *set* of all completely-correct *theories* of every science.

Real Science is the accurate *Theory of Everything*, that really does completely explain everything about everything of the past, everything in the present, and everything that will exist in the future.

How can we scientifically discover such a wonderful *Theory of Everything*?

The very *best way* to scientifically discover such a fully-accurate *Theory of Everything* is to listen closely to the *set* of super-intelligent *scientists* who *already* know it.

This 4 Brain Theory is a *Pointer Theory*, that can *point* any humble scientist to such a *Theory of Everything*, if the humble scientist is fully-willing and completely-able to become again as a little child, who is *willing to learn* how to *intelligently-bridle* her (or his) *own pride*, enough to begin to understand *all* of the dynamic *physical details* of Real Science.

We have scientifically described many of these dynamic *physical details*, in this present 4 Brain Theory paper of 2023.

These important *physical* scientific *details* are included in all the many *physical* scientific *upgrades* (our many new detailed physical descriptions) we have made to real human theory, dark matter theory, quantum physics, quantum mechanics, quantum gravity, quantum entanglement, quantum information, quantum computing, and quantum consciousness.

Why exactly did *we do* so many important *physical* scientific *upgrades* in this powerful new 4 Brain Theory paper?

Why have we done *all* of these important *physical* scientific *upgrades*?

Because all of these important *physical* scientific *upgrades* needed to be *done*; to properly prepare for what is to *come* ...



# References

[1] Nick Bostrom, “*Are You Living in a Computer Simulation?*” *Philosophical Quarterly* (2003) Vol. 53, No. 211, pp. 243-255. First Version (2001)

[2] Vitaly Vanchurin, “*The World as a Neural Network,*” [arXiv:2020] (August 4, 2020) *Entropy* 2020, 22, 1210 (2020)

[3] David John Chalmers, “*Reality+: virtual worlds and the problems of philosophy,*” A book published in 2022 by New York, NY: W.W. Norton & Company, 2022. Identifiers: LCCN 2021037439 | ISBN 9780393635805 (hardcover) | ISBN 9780393635812 (epub) (2022)

[4] Plato, “*Plato’s Cave,*” Book 7 of Plato’s *Republic*. (Circa 375 BC)

[5] Luke Dormehl, “*EyeMynd is building a virtual reality system you control with your brain.*” *Digital Trends*, Portland, Oregon (November 22, 2016)

[6] [www.EyeMynd.com](http://www.EyeMynd.com)

[7] Dan Raile, “*Virtual reality powered by ... our minds? 10 years from now, it will seem obvious,*” Guardian UK, London, England, (November 12, 2016)

[8] Erwin Schrodinger, “*Quantization as an Eigenvalue Problem,*” Annalen der Physik, Volume 384, Issue 4, pages 361-376 (January 1926)

[9] Sir Isaac Newton, “*Philosophia Naturalis Principia Mathematica,*” Newton’s Second Law of Motion (1687)

[10] Walther Gerlach and Otto Stern, “*Der experimentelle Nachweis der Richtungsquantelung im Magnetfeld,*” Zeitschrift für Physik 9, 349 (April 1922)

[11] James Clerk Maxwell, “*A Dynamical Theory of the Electromagnetic Field,*” Philosophical Transactions of the Royal Society of London. 155: 459-512 (1865)

[12] Daniel Reed Cook, William Greg Flynn, James J. Morehead, Allan Nathan Kaufman, “*Phase-Space Action Conservation for Non-Eikonal Wave Fields,*” Physics Letters A, Volume 174, Issues 1-2, pages 53-58, received on October 29, 1992, accepted on December 21, 1992 (published on March 1, 1993)

[13] Alain J. Brizard, Daniel Reed Cook, Allan Nathan Kaufman, “*Wave-Action Conservation for Pseudo-*

*Hermitian Fields,*” Physical Review Letters 70, 521  
(published on February 1, 1993)

[14] Daniel Reed Cook, Allan Nathan Kaufman, Eugene R. Tracy, Tor Flå, “*Collective-Wave Spin-off and the Gyroballistic Continuum in Gyroresonant Absorption,*” Physics Letters A, Volume 175, Issue 5, pages 326-333, received on February 1, 1993, accepted on February 7, 1993 (published on April 19, 1993)

[15] Daniel Reed Cook, Allan Nathan Kaufman, Alain J. Brizard, Huanchun Ye, Eugene R. Tracy, “*Two-Dimensional Reflection of Magnetosonic Radiation by Gyroballistic Waves: An Analytic Theory,*” Physics Letters A, Volume 178, Issues 5-6, pages 413-418, received on May 21, 1993, accepted on May 21, 1993 (published on July 19, 1993)

[16] Albert Einstein, “*On a Heuristic Viewpoint Concerning the Production and Transformation of Light,*” Annalen der Physik (June 9, 1905)

[17] Louis de Broglie, “*Recherches sur la Theorie de Quanta,*” Ph.D. Thesis (1924)

[18] Arthur Holly Compton, “*A Quantum Theory of the Scattering of X-Rays by Light Elements,*” Physical Review 21 (5): 483-502 (May 1923)

[19] Albert Einstein, “*The Field Equations of Gravitation*,” Preussische Akademie der Wissenschaften, Sitzungsberichte, 1915 (part 2), pages 844-847, completed on November 25, 1915 (published on December 2, 1915)

[20] Paul Adrien Maurice Dirac, “*Quantized Singularities in the Electromagnetic Field*,” Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character, Volume 133, Issue 821, pages 60-72, received on May 29, 1931 (published on September 1, 1931)

[21] John Stewart Bell, “*On the Einstein Podolsky Rosen Paradox*,” Physics. 1 (3): 195-200, (1964)

[22] Alain Aspect, Philippe Grangier, Gérard Roger, “*Experimental Realization of Einstein-Podolsky-Rosen-Bohm Gedanken Experiment: A New Violation of Bell's Inequalities*,” Physical Review Letters. American Physical Society (APS). 49 (2): pages 91–94 (published on July 12, 1982)

[23] Werner Karl Heisenberg, “*On the Perceptual Content of Quantum Theoretical Kinematics and Mechanics*,” (“Über den Anschaulichen Inhalt der Quantentheoretischen Kinematik und Mechanik,”)

Zeitschrift für Physik, 43 (3–4): pages 172-198 (published on March 21, 1927)

[24] Paul Adrien Maurice Dirac, “*The Quantum Theory of the Electron*,” Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences. 117 (778): pages 610–624 (1928)

[25] Albert Einstein, Boris Podolsky, and Nathan Rosen, “*Can Quantum-Mechanical Description of Physical Reality be Considered Complete?*” Physical Review, volume 47 (10): 777, received on March 25, 1935 (published on May 15, 1935) (This is the original EPR paper of 1935.)

[26] Erwin Schrodinger, “*The Present Situation in Quantum Mechanics*,” Naturwissenschaften 23 (48): pages 807–812 (published in November 1935)

[27] Yakir Aharonov and David Bohm, “*Significance of Electromagnetic Potentials in the Quantum Theory*,” Physical Review. Volume 115, Issue 3, pages 485-491 (published on August 1, 1959)

[28] Albert Einstein and Nathan Rosen, “*The Particle Problem in the General Theory of Relativity*.” Physical Review, Volume 48, Issue 1, pages 73-77 (published on July 1, 1935) (This is the original ER paper of 1935.)

[29] Juan Maldacena and Leonard Susskind, “*Cool Horizons for Entangled Black Holes,*” *Progress of Physics (Fortschritte der Physik)* 61 (9): pages 781–811 (published on August 1, 2013) (This is the original ER=EPR paper of 2013.)

[30] Leonard Susskind, “*Copenhagen vs Everett, Teleportation, and ER = EPR,*” *Progress of Physics (Fortschritte der Physik)* 64 (6-7): pages 551–564 (published on June 6, 2016) (This is the ER=EPR paper of 2016.)

[31] Scott C. Steffensen, Rong-Sheng Lee, Steven J. Henriksen, Thomas L. Packer, Daniel Reed Cook, “*A Novel Electroencephalographic Analysis Method Discriminates Alcohol Effects from those of other Sedative/Hypnotics,*” *Journal of Neuroscience Methods*, 115 (2) pages 145-156 (published on April 15, 2002)

[32] Talmage D. Egan, M.D., Shinju Obara, M.D., Thomas E. Jenkins, Ph.D., Sarah S. Jaw-Tsai, Ph.D., Shanti Amagasu, M.S., Daniel Reed Cook, Ph.D., Scott C. Steffensen, Ph.D., and David T. Beattie, Ph.D.; “*AZD-3043: A Novel, Metabolically Labile Sedative-Hypnotic Agent with Rapid and Predictable Emergence from Hypnosis,*” *Anesthesiology* 116 (6) pages 1267-1277 (published in June 2012)

[33] Dustin Silgado, “*What if this is all a dream?*” LiveMint, New Delhi, India (November 25, 2016)

[34] Avi Loeb, “*Was Our Universe Created in a Laboratory?*” Scientific American (October 15, 2021)

[35] Nick Bostrom, “*How Long Before SuperIntelligence?*” International Journal of Future Studies, volume 2 (year 1998)

[36] Satoshi Nakamoto, “*Bitcoin: A Peer-to-Peer Electronic Cash System,*” Published to a Cryptography Mailing List at [www.metzdowd.com](http://www.metzdowd.com) (circa October 31, 2008)

[37] Daniel Reed Cook and Allan Nathan Kaufman, “*Scattering of an ICRF Magnetosonic Wave by Plasma Density Turbulence,*” Lawrence Berkeley Laboratory Report LBL-27108. 5 pages (April 1989)

[38] Daniel Reed Cook, “*Scattering of a Dark Matter Particle by a Proton,*” in preparation, to be submitted to Physical Review Letters (est. 2023)

[39] Jason Kehe, “*Of Course, We are Living in a Simulation,*” Wired Magazine (March 9, 2022)