## $\mathbf{E} = \mathbf{not} \ \mathbf{mc}^2 \ \mathbf{in} \ \mathbf{massless} \ \mathbf{Black} \ \mathbf{Holes} \ \mathbf{according} \ \mathbf{to} \ \mathbf{Quantum} \ \mathbf{FFF} \ \mathbf{Theory}.$

Leo Vuyk, Architect, Rotterdam, the Netherlands.

#### Abstract,

According to Quantum FFF Theory, stable Black Holes are growing by "eating" the gravitating ( Casimir) pressure vacuum without the standard gravity related inertial effects, the result is that 1: Energy is not the same as Mass x  $c^2$  for Black Hole nuclei, in detail: Black Hole nuclei are massless they do not radiate EM or graviton radiation and they have no Inertia, but they gravitate by the absorption of the local oscillating Casimir Axion –Higgs pressure 2: Small BHs seem to concentrate around the central giant Galaxy BH . 3: Galaxy cluster mergers like Abell 520 overshoot and leaving behind their own Dark Matter content.

Mass is the potency of rigid strings, to produce and radiate Gravitons as a collision product, between mass less ring shaped oscillating Axion Higgs vacuum field particles and Fermions or Bosons also called Dipole Repeller gravity or dipole Emergent Gravity.

More extended loops or "arms" of each rigid string particle is supposed to create more Axion transformation into Gravitons or other electromagnetic monopole photons per time unit.

Secondly, gravitons are assumed to exert not an attraction force on fermions and bosons but only a reduced pressure force in opposition to the vacuum pressure of the Axion Higgs field..

So, Gravity can be described as the statistical difference between the collision pressure of "new" gravitons opposing the pressure of Axion Higgs field particles all around us.

Emergent gravity as proposed by E.Verlinde and Dipole Rropeller gravity by Yehuda Hoffman, are in line with this assumption.

Non inertial black hole effects are the other side of the coin..

The ring shaped Axion Higgs field particles are supposed to oscillate in tandem (as the boxer engine pistons) along each vacuum lattice with the local Planck length and transfer information of monopole photons through the whole universe as long no fermion or boson comes too close.

So if the new physics black hole nucleus is represented as a compact quantum knot then there is no graviton production supposed.

As a consequence the incoming Axion Higgs field pressure is the only origin of the Gravity pressure effect around each black hole nucleus and the result of the Casimir absorption effect of the vacuum by the black hole nucleus.

At the same time, gravitons are not leaving the black hole at all.

In Quantum FFF Theory, the inertial mass effects of the earth and all atomic fermions is supposed to be originated by the real Lorentz polarization of all fermionic mass of the earth mainly pointing into the direction of motion around the sun, as the opposing effort for the resisting vacuum.

Rigid string shaped Fermions are assumed to have a propeller shape able to plow into the direction of motion through the local spacetime creating vacuum lattice.

Conclusion Bosons (Higgs, W and Z particles) seem to be not able to polarize and will present signals to be "stuck" in the local solar centered vacuum lattice. The LHC could perhaps be able to show this anti inertial mass effect created by the solar reference frame or solar LASOF (Local Oscillating vacuum Frame).

#### Introduction.

According to Quantum FFF Theory, (Function Follows Form at the quantum scale), the new black hole nucleus is represented as a bunch of rigid string particles compressed by the oscillating Axion Higgs field vacuum particles.

All Fermions should be repelled at a new physics Black Hole (BH) repelling horizon which is supposed to have two globular shells of positive or negative charge!

As a result, each black hole is assumed to have a globular shell of positron and proton based plasma at the inside and a negative electron based plasma shell outside this positive shell. If we include existence of small interference black holes (or Quantum Knots) then Ball lightning and micro comets (including Comets and sunspots) are to be explained as micro black holes violating the second law of thermodynamics.

The form and microstructure of elementary particles, is supposed to be the origin of functional differences between Higgs- Graviton- Photon and Fermion particles.

As a consequence of the quantum gravity difference on fermions and black hole nuclei, the new splitting, accelerating and pairing massless black hole, is able to convert vacuum energy (ZPE) into real energy by entropy decrease. This explains quick Galaxy- and Star formation, down to Sunspots, (Micro) Comets, Lightning bolts, Sprites and Elves, Sprite Fireballs and Ball Lightning according to quantum.

In Quantum FFF Theory, the inertial mass effects of the earth is supposed to be originated by the real Lorentz polarization of all fermionic mass of the earth, on average pointing into the direction of motion around the sun, as the opposing effort for the resisting vacuum.

Conclusion Bosons (Higgs, W and Z particles) seem to be not able to polarize and will present signals to be "stuck" in the local solar centered vacuum lattice.

The LHC could perhaps be able to show this anti inertial mass effect created by the solar reference frame also called solar LASOF (Local Oscillating vacuum Frame, (ref. 53.) Secondly, Dark matter concentrations "stuck" in the middle of merger galaxies clusters is also supposed to be a smoking gun for non- inertial mass of dark matter black holes. (fig.1). Emergent gravity as proposed by E.Verlinde and Dipole Rrepeller gravity by Yehuda Hoffman, (fig 24) are in line with dual rigid string pressure gravity on fermions and bosons.

Non Rotational Black Hole Merger Strain (figure 2)

If Black Holes have no inertial mass, due to their non Baryonic Dark Matter Axion/Higgs content, then no rotational strain but only nuclear particle tension effects will take place during merging.

Black Hole merging without rotation, due to massless BH Inertia absence, according to Quantum FFF Theory. (duration about 1 sec.)

Neutron stars however have normal baryonic mass and consequently rotational based strain effects. (duration about  $30\ {\rm sec}$ )

## Non Inertial Gravitating Dark Matter Black holes.

According to Quantum FFF Theory, stable Black Holes are growing by "eating" the gravitating (Casimir) pressure vacuum without the standard gravity related inertial effects, the result is that 1: Small BHs seem to concentrate around the central giant Galaxy BH. 2: Galaxy cluster mergers like Abell 520 overshoot and leaving behind their own Dark Matter content. http://vixra.org/pdf/1710.0050v1.pdf

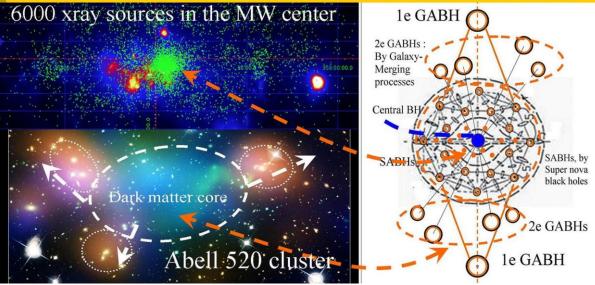


Figure 1, Merger dynamics of NON inertial Dark Matter Black Holes left behind after merging in the middle.

Black Hole merging without rotation, due to massless BH Inertia absence, according to Quantum FFF Theory.



If Black holes have no inertial mass, due to their non Baryonic Dark matter Axion/Higgs content, then no rotational strain but only nuclear particle Tension effects will take place during merging.

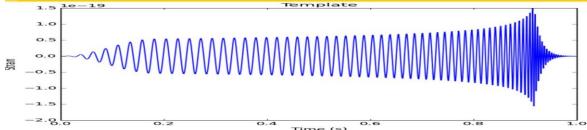


Figure 2, Massless Black Holes without Inertia effect have no rotational strain but only oscillation strains

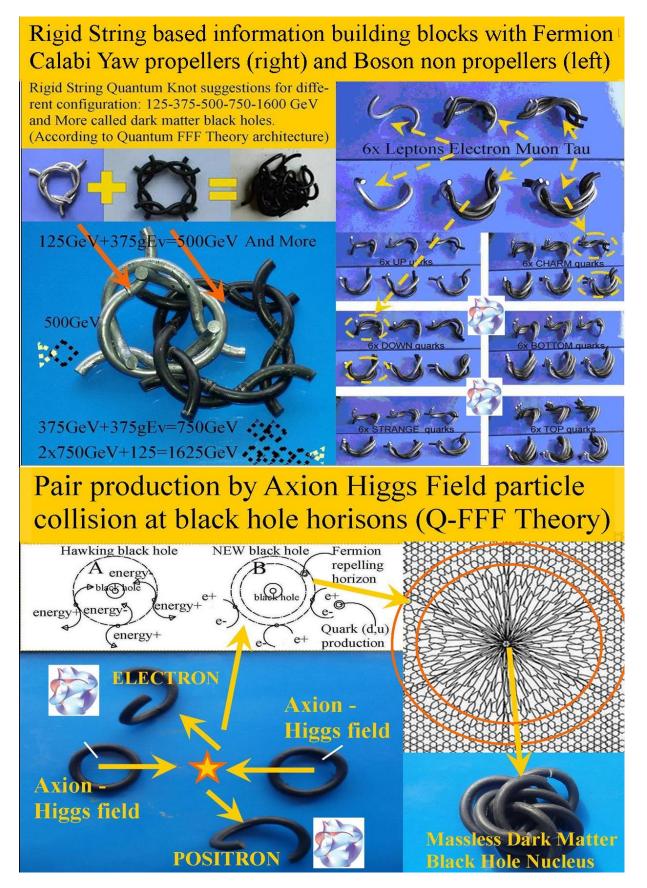
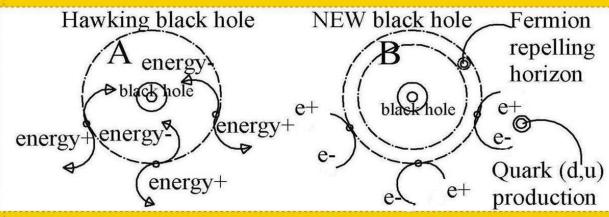


Figure 3, Fermionic propeller shaped Quantum Knots (right) and Higgs Boson based Quantum Knot-Black Holes (left) and pair production around black holes.

# No Fermion Information Loss in Black Holes by Fermion Repelling Horizon.



According to Quantum FFF Theory, there is no fermion information loss, only photonic information loss in a black hole. Quantum fluctuations around the BH horizon produce pairs of leptons. e-,e+ and even compound quarks (d,u, etc, see Fermion 3D string propeller theory: Fermion repelling by spin flip). For tripple BH horizons see image nrs 7, 10 and 11. Event horizon=7, Inner photon ring = 10, Outer photon ring = 11. Conclusion The Big Bang did not produce instantly all the Fermions in the universes. Even now lots of Fermions are produced by all BHs even the largest primordial Big bang splinters located outside large galaxies. see also: <a href="http://vixra.org/abs/1410.0039">http://vixra.org/abs/1410.0039</a>

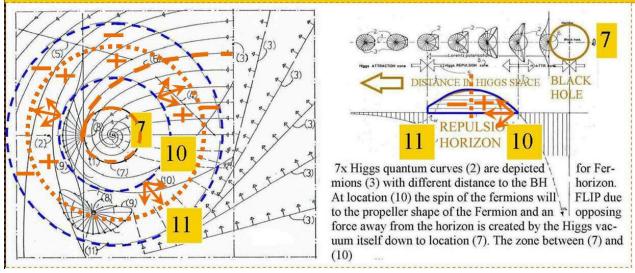


Figure 4, Electric Dark Matter Black Holes (EDMBHs) have a Fermion repelling horizon and are negative charged in our part of the multiverse.

Black Hole Nucleus is a Quantum Knot, evaporate or eat the local Axion-Higgs vacuum if it has large enough scale, (Quantum FFF Theory)

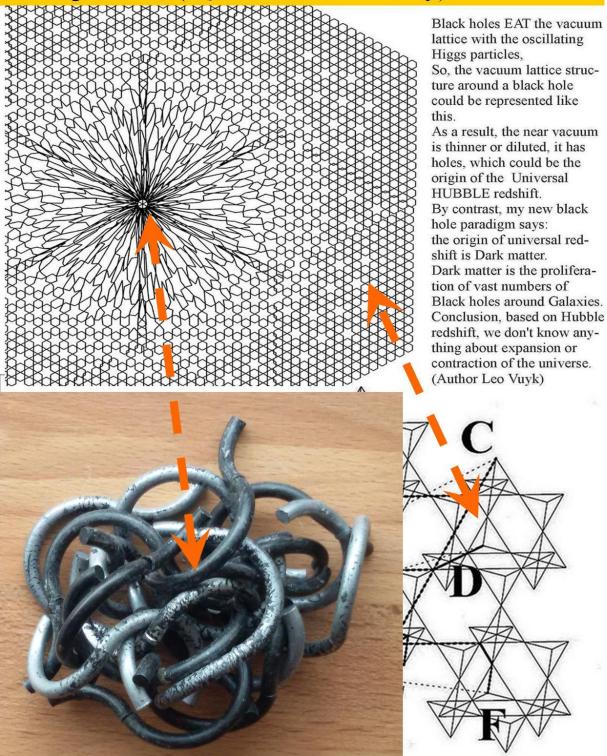


Figure 5, A stable black hole nucleus is large enough to "eat" the vacuum particles and grow by it.

"One of the big mysteries of this object (B1509 "The hands of God") is whether the pulsar Fermion particles are interacting with the material in a specific way to make it look like a hand (NASA)

In this paper I support the idea that the orange x-ray elements of B1509) represent a ring of star spot black holes ejected from the exploding star

The micro black hole ring looks as hotspots accelerating away, with the white Pulsar (white) far relocated by the different quantum vacuum gravity effects on Fermion matter and Black hole nuclear matter, assumed to be a bunch of Higgs string particles with resistance in space for motion through the oscillating vacuum lattice.

In Quantum FFF Theory, (Function Follows Form) black hole nuclei are assumed to be a bunch of massless rigid strings compressed by the surrounding oscillating Axion-Higgs vacuum lattice. Fermion mass however is assumed to be created by the ongoing interaction with the same surrounding oscillating vacuum lattice including the collision production of photon/gluons and gravitons. Black hole nuclei can move through the vacuum lattice only by the deformation of its horizon system by horizon deforming and repelled plasma tails observed in so called Tadpoles, often found inside nebula.

Fermionic mass like neutrons however feel the gravitational influence of the local vacuum lattice polarization and graviton influence of local Fermionic matter.

In the shape of "the hands of God" (B1509) we observe a clear relocation of the central Fermionic Neutron star (white) and the ejected elliptic star spot black hole system (orange).

This in contrast with black hole supernovas where we observe often a symmetric ring or globular shell nebula around the just formed central black hole.

# PSR B1509-58 Pulsar nova (blue)with exploded ring of Starspot black holes (x-ray, orange)

According to Quantum FFF Theory, (Function Follows Form) sunspots are micro (new physics) Electro Dark Matter Black Holes (EDM-BHs), also found in the Helix Supernova remnants see below. The central neutron star is clearly shifted out of the center of the BH ring, which supports the quantum gravity difference between BHs and Neutron fermionic matter.

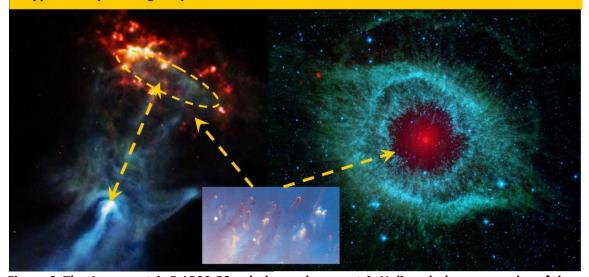
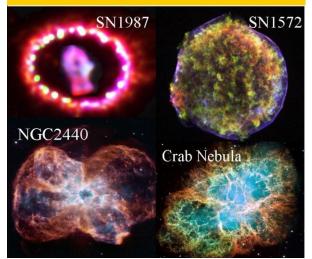


Figure 6, The A-symmetric B 1509-58 nebula, and symmetric Helix nebula as examples of the difference between Fermion- and non-inertial dark matter black hole Quantum Gravity effects.

#### Multiple Horizons created around Supernova Black Holes.

Proposal for the relation between different S-Nova shapes and the external primordial black hole configuration called Herbig Haro hotspot or Stellar Anchor Black Holes (SABHs)

Different Super Nova shapes are created around two star types: A: Stars with distant "dual or quadrupole Stellar Anchor Black Holes" assumed to be located in the center of a former open star cluster. (SN1987, NGC2440, Crab Nebula) B: stars without SABHs. (SN1572) Our sun is equipped with two sunspot rings assumed to be of type A, with two SABHs, according to Quantum Function Follows Form Theory.



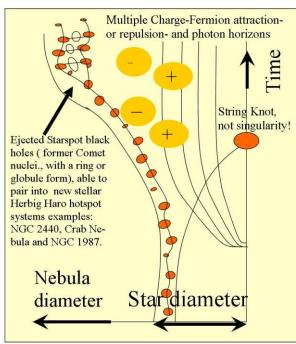


Figure 7, Other examples of Quantum Gravity effects on ejected rings of micro black hole starspots at work in different nebula.

#### New physics black holes

Complex galaxy / star evolution seems to be not only created by galaxy or star merging, but even by central galaxy- and stellar mass black hole chopping into two equal parts to form black hole based Hotspots for Herbig Haro systems or even for Double Radio Galaxies.

This process is supposed to be the consequence of the new physics Electric Dark Matter Black Hole (EDM-BH) principle of Quantum FFF Theory (Function Follows Forms) and supported by observation of Triple Double Radio Galaxies and even by BH splitting in the Spire Eagle nebula. (Figure 8)

The EDM-BH is assumed to contain a real particle nucleus of so called Axion-Higgs rigid transformable strings, which are compressed together by the pressure of the oscillation Axion Higgs vacuum lattice. Even the Big Bang nucleus is assumed to contain only compressed Axion Higgs strings which could explode into splinters and dual vacuum particles by the reduced vacuum pressure

around the Big Crunch nucleus of a former universe.

There seems to be a EDM- BH Ratio related black hole ability to merge (see LIGO) or split into Equal parts if the dual BH ratio is smaller than a LIGO BH ratio boundary which will be found in the future.

Until now, the smallest LIGO ratio is found to be: 1/1.9. (or 0.52: LIGO 2016), however future LIGO results could shift this boundary to lower ratios. (Figure 8)

As a consequence for increasing galaxy- and star complexity there is a need for different sized primordial dual black holes instead of two equal sized.

Consequently for the first star formation between the equal BH hotspots (bow shocks) of a Herbig Haro system, the equal nuclear mass/size ratio of both i black holes is important. (fig 8)

Quasars such as Cygnus A are supposed to be a larger copies of a Herbig Haro system with larger BHs observed also as (radio) hotspots.

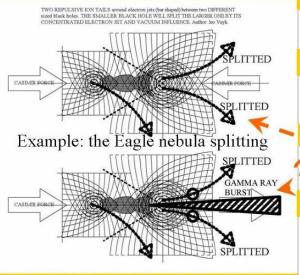
Markarian 231 seems to represent a large scale multiplying BH chopping system for symmetric so called Galaxy Anchor Black Hole (GABH) complexity, forming a Triple-Double lobed Radio Galaxy (TDRG).(Figure 9,10)

The Spire nebula of the seems to show a more complex BH. splitting process. (Figure 8) For 3D rigid string particle models see: (figure 23,25).

LIGO based Black Hole ratios and the ability to merge or split into two equal BH parts, able to create Herbig Haro systems and Gamma Ray Bursts. Such splitting systems are observed in the so called Spire part of the Eagle nebula.

The origin of Gamma Ray Bursts, by splitting black holes of different size, leaving three BHs behind. Two of them could form a Herbig Haro Object with a dumbbell structure. (Quantum FFF theory@Leo Vuyk).

Dual black hole merger nominal mass contents observed by LIGO in 2015 and 2016 resp. 29/36x and 7.5/14.2x sun masses. see: Quantum FFF Theory. The related ratios are:1/1.24 resp.1/1.9.



Small black holes should split larger BHs into two equal parts to create dual Herbig Haro hotspots also called

bowshocks or accretion outburst sources.

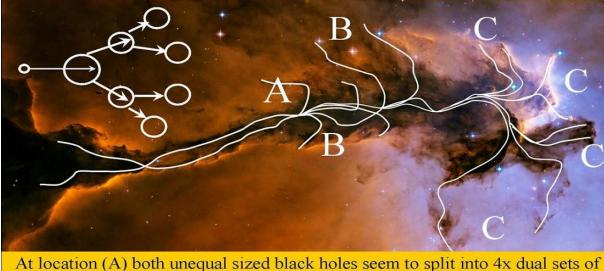
Herbig Haro creation ratio: 1x

BH splitting ratio 1.0>>1.9-?-50.0?

Galaxy central BH mager: 1.0 //>50.0?

### Black hole splitting in the Spire Eagle nebula

According to the Quantum Function Follows Form Model, small black holes split larger BHs in equal halves, (A) which are able to repel each other and form Dumbbell shaped Herbig Haro systems (B,C) with star formation in between.



At location (A) both unequal sized black holes seem to split into 4x dual sets of smaller BHs one dual set has even evolved into a second 4x dual sets of BHs.

Figure 8, LIGO BH ratios and the BH multiplier splitting process in the Spire- Eagle nebula.

# Markarian 231 as the Infant Stage of Cygnus-A Quasar. By EDM Black Hole

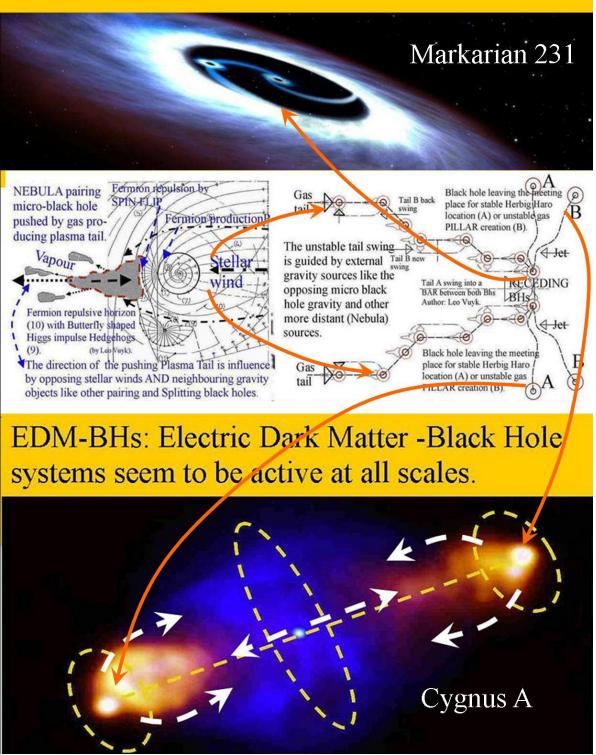
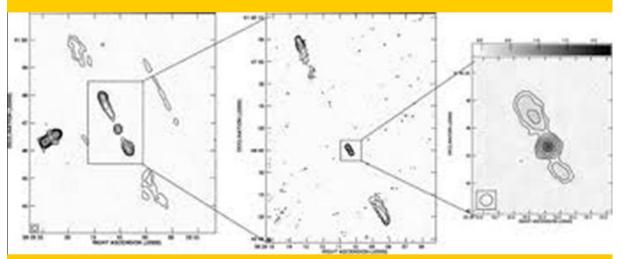


Figure 9. . the relation between Markarian 231 and other BH splitting systems

# Black hole splitting as the origin of spiral Galaxies after a double or multiple lobed Quasar process.



In Quantum FFF theory, stars and galaxies need at least two new physics Electric Dark Matter Black Holes (EDMBHs) for a Herbig Haro sytem (or dual lobed Quasar). However multiple symmetric lobed systems seem also possible by a repeated central black hole splitting process.

LIGO based Black Hole ratios and the ability to merge or split into two equal BH parts, able to create Herbig Haro systems and Gamma Ray Bursts. Such splitting systems are observed in the so called Spire part of the Eagle nebula.

The origin of Gamma Ray Bursts, by splitting black holes of different size, leaving three BHs behind.

Two of them could form a Herbig Haro Object with a dumbbell structure. (Quantum FFF theory@Leo Vuyk).

TWO REPULSIVE ION TALLS around electron jets (that slaped) between two DIFFERINT sized black holes. HIB SMALLER BLACK HOLE WILL SFUT THE LARGING ONE BY ITS CONCENTRATED BLECTRON BIT AND VACUUM INFLENCE Author level by US.

The related ratios are: 1/1.24 resp. 1/1.9.

Dual black hole merger nominal mass contents observed by LIGO in 2015 and 2016 resp. 29/36x and 7.5/14.2x sun masses. see: Quantum FFF Theory. The related ratios are: 1/1.24 resp. 1/1.9.

The related ratios are: 1/1.24 resp. 1/1.9.

2 LIGO ratios: 29-36/7,5-14.2sun= 1.0/1.24/1.9

Example: the Eagle nebula splitting

Herbig Haro creation ratio: 1x

SPLITTED

PH splitting ratio 1 0 2 50 02

BH splitting ratio 1.0>>1.9-?-50.0?

0---- 1.0//>50.0?

bowshocks or accretion outburst sources.

Galaxy central BH Merger: 1.0 //>50.0?

Figure 10, Markarian 231 at a larger scale with triple- double lobed radio sources.

Small black holes should split larger BHs into two equal parts to create dual Herbig Haro hotspots also called

#### **Quantum FFF Theory effects.**

According to Quantum FFF Theory, early Galaxies have growing potential by the number and size of external primordial dark matter black holes initially formed as big bang splinters able to pair into Quasars with star forming galaxies in between the so coined "Galaxy Anchor Black Holes" (GABHs) The galaxies can merge with other galaxy-systems into complex spirals and elliptical OR produce complexity by the BH splitting (chopping) process. Irregular galaxies and Dwarf galaxies are supposed to be the result of secondary star forming interaction between GABHs.

After Supernova black hole production these smaller black holes are able to pair as hotspots or "bow shocks" into new Herbig Haro systems,.

If no galaxy merger candidates are available in the neighborhood, or no BH ratio differences are able to split larger BHs into two halves for HH systems, then galaxy will soon reach a maximum size and die. (dead galaxies: figure 16)

Also according to Quantum FFF (Function Follows Form) Theory, all star forming molecular clouds are the result of one or more Herbig Haro systems, equipped with so called dual hotspots which are assumed to be the result of dual new physics "electric dark matter black holes" in contrast with general accepted black hole theories. As a consequence there is a great misconception in mainstream Astronomical theories.

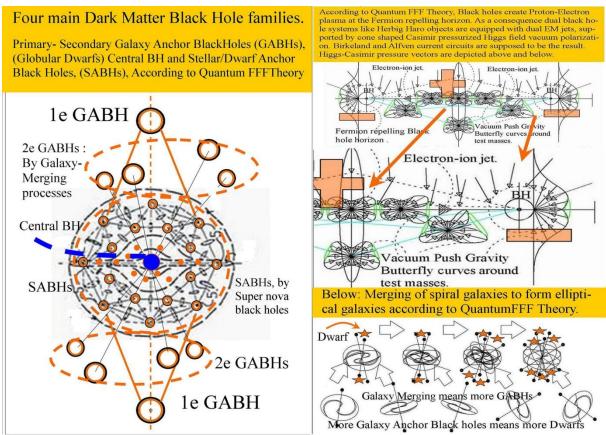


Figure 11, GABHs as the largest unit of Dark Matter black hole families

According to Quantum FFF Theory, the Big Bang can be described as the explosion of a giant Dark Matter Black Hole nucleus which is assumed to contain all the particles and smaller black hole nuclei of a former multiverse after a big crunch process.

How the symmetric Dark Matter Big Bang of the Raspberry Multiverse produced accelerating Big Bang Black Hole (BBBH) splinters in a fractal structure, forming dual Herbig Haro systems (HH) and the oscillating Higgs field by BH evaporation, according to Quantum FFF Theory. Explanation of the numbers: 10, splitting Dark Matter BBBH splinter. 11, Higgs field pressure. 12, foreward pressure area. 13, stable BH splinters. 14, Evaporating BH splinters. 15, Higgs BH gravity funnel. 16, Dual HH system formation. 17, Multiple HH system formation around the Higgs BH gravity funnel. Gas "Branched Inflation" of the Universe: the Origin of Fingers and Voids. New Higgs Vacuum Empty space

Figure 12, BBBH, the Big Bang Black Hole splintering into smaller BHs and evaporating into the oscillating Axion Higgs Vacuum lattice.

#### The Big Bang Inflation epoch.

In contrast with the standard inflation model, in Q-FFF Theory, the inflation is described as the splitting and evaporation process of the Dark Matter Big Bang Black Hole Nucleus. The splitting travelling process is also a pairing process into Herbig Haro systems forming stars and galaxies along the Lyman Alpha forest.

The evaporation process is assumed to be responsible for the evaporation of single Axion Higgs field particles from the BB nucleus, to form the self energetic oscillating Vacuum lattice. (fig 12)

The smaller exploded black hole splinters (fig 14, 15) are assumed to be responsible for the fractal

structure of the universe by splitting in succession into smaller nuclei to pair and form huge primordial Herbig Haro systems (Quasars) with star and later galaxy formation in the middle between

the stable paired equally sized hotspot black holes.

After supernova explosions of the large early giant stars, new black holes are formed which are supposed to be able to form smaller dual Herbig Haro systems by splitting processes. By the ever reducing black hole nuclei als smaller star formation in between will be the standard process as a start for the internal structure of the spiral galaxy.

At the same time such a splitting and pairing process is assumed to happen at all scales in the current universe (entangled copy mirror multiverse) even down to molecular clouds and even inside Bok globules.

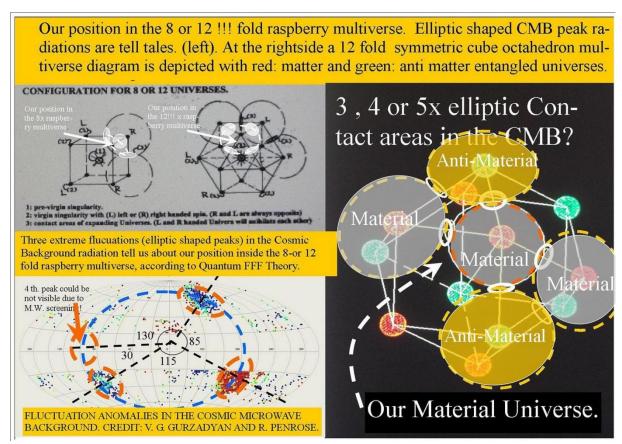


Figure 13, The Multiverse with 8-12 Charge Parity (time) symmetric Universal bubbles.

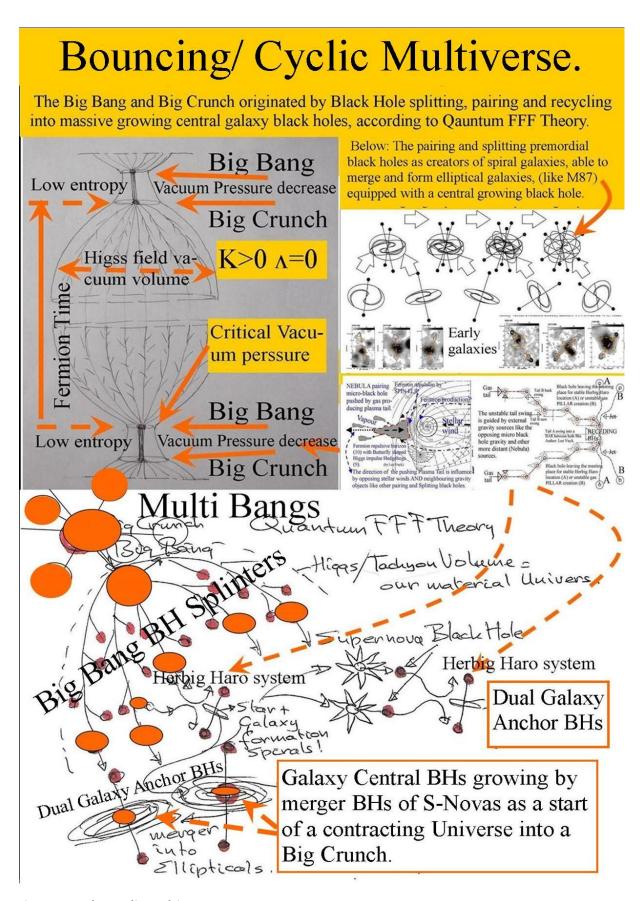
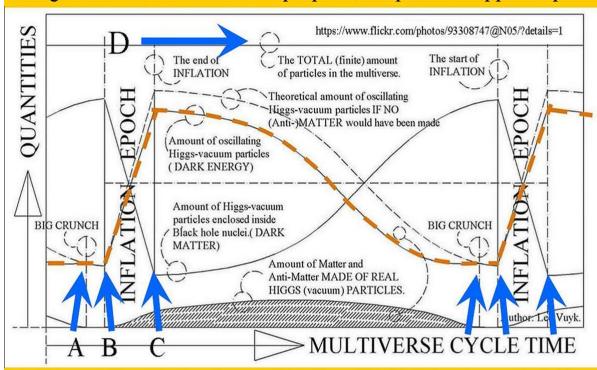


Figure 14, The Cyclic Multiverse.

#### The Beginning and End of Time.

Multiverse cycle time versus quantities of mass carrying particles, Dark Matter Black Hole particles and Dark Energy Oscillating Vacuum Lattice (Axion Higgs field) particles. All particles and fields are assumed to be based on rigid string paticles. Negative and Positive charged Fermions should have propeller shapes with opposite pitch.



A: The end of matter based time. (Big Crunch) All rigid string matter is through merger Super Nova black holes concentrated into one BH nucleus, which is compressed by the remaining-but absorbing- deluting-dark energy vacuum. If the deluted vacuum pressure comes into equilibrium with the total internal string tension of the nucleus, the Big Bang BH splits symmetrical into 8 or 12 entangled BH nuclei.

B:The beginning of matter based time and the splitting of the Big Bang Black Hole string nucleus into series of minor secondary primordial BHs, building the fractal shaped Lyman Alpha Forest and the start of dual pairing BHs into primordial Herbig Haro systems with vast galaxy formation in between.

All New physics BHs (even micro interference BHs) are postulated to create not only pair production at the horizon, but even entire protons. (plasma)

C: The end of primary Big Bang black hole splitting and the end of vacuum expansion (vacuum inflation)

D: The Total number of particles during the cycle process is constant. According to the Quantum Function Follows Form model.

Figure 15, The beginning and end of time, with an inflation era strongly differ from the standard model.

# The origin of "dead" galaxies: Simple external dark matter black hole configuration



According to Quantum FFF Theory, Galaxies have maximum growing potential by the number and size of external primordial dark matter black holes formed as big bang splinters able to pair into primordial Quasars or Herbig Haro like galaxy systems, which can merge with others. If no galaxy merger candidates are available in the neighborhood, the galaxy will soon reach a maximum size and die. Some Elliptic galaxies die also by reaching maximum merger potential.

Figure 16, The origin of Dead galaxies.

### The great misconception in Astronomy:

Herbig Haro Bowshocks and Cometary Globules, are not interpreted as Dark Matter Black Holes. See below: Bok– and Cometary Globules with young Herbig Haro Bowshocks in the making in the Carina nebula.

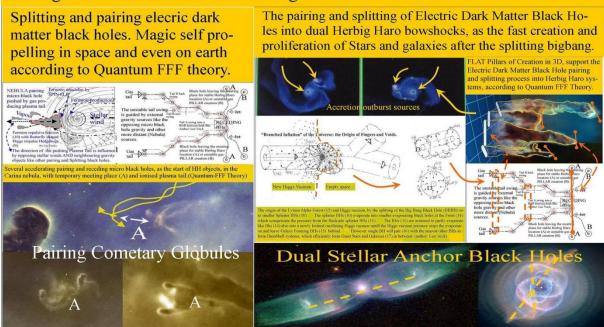
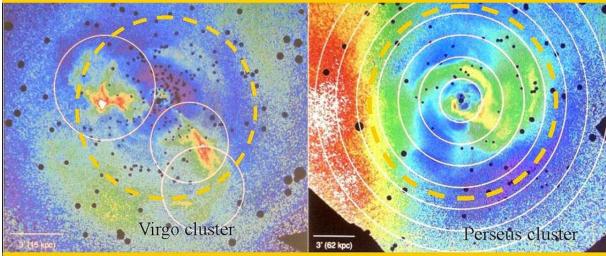


Figure 17, The great misconception in astronomy.

#### Giant galaxies die from the inside out: Star formation shuts down in the centers of elliptical galaxies first.

According to Quantum FFF Theory, Galaxy- and Cluster black hole hierarchy is the origin of dying galaxies where star formation in the center stops. X-ray point sources (Dark matter black holes) in Virgo and Perseus cluster centers present evidence for black hole hierarchy: the smallest BHs are located in the centers and are not any more able to create Supernova black holes large enough to form Herbig Haro systems with star formation in between. The result: Dying "red and dead" galaxies as the start of Universal contraction and collapse (Big Crunch) in a cyclic multiverse.



Below: Example of the galaxy black hole hierarchy model observed at Andromeda (M31 below left) and the Sombrero galaxy (M104 right).

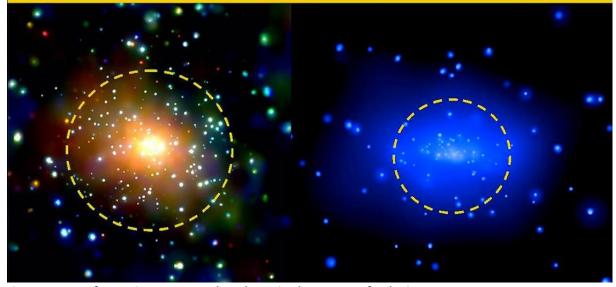


Figure 18, Star formation seem to shut down in the center of galaxies.

#### SABH cosmic ray hotspots (electric dark matter black holes) as the origin and future slingshot accelerators of Brown Dwarfs expelled by the sun. New giant gas planets expelled by the sun, versity of Utah. The mysterious source of cosmic rays is also reason to look at the souhern hemisphere to observe the opposing second Stellar Anchor Black Hole (SABH) (Cosmic ray production by NEW black hole paradigm according to Quantum-FFF Theory). moving away to the south, into the direction of the Southern cross SABH hotspot. SABH sun Dates 10Jan.2014 (below) and 11March.2012 Second SABH Hotspot (above). "Brown Dwarfs?" according to Q-FFF According to Quantum FFF Theory, "New Black Holes produce Proton—El tron plasma. By the strong Casimir vacuum push gravity on the BH, the "Lighter" electrons will stay outside the "heavier" proton horizon (blue). As a consequence BHs have a strong electric potential, which is liberated by asymmetric processes in dual BH systems like Herbig Haro objects showing Moving away strong electro magnetic effects in open cluster star formation and Birkeland Electron-ion jet. Fermion répelling Black Butterfly curves around hole horizon Scheme of the electric SABH principle around the sun.

Figure 19, Even the sun seems to have polar dual black hole Herbig Haro remnants and is able to produce and expel gas planets (failed stars) at this age.

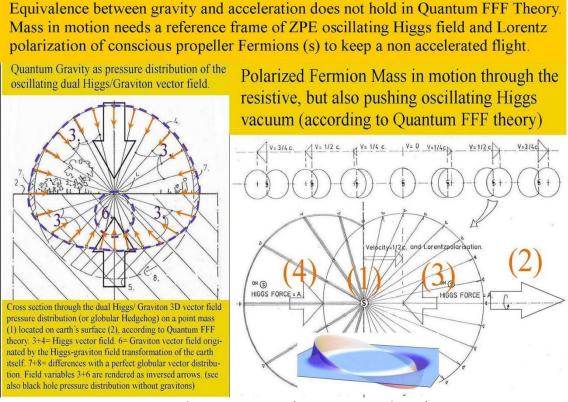


Figure 20, Quantum Gravity and Mass in motion. ( Quantum FFF Theory)

## Lorentz Fitzgerald Contraction is real!

A real Lorentz Fitzgerald contraction does not fit into Einsteins Special Relativity. However recent findings of atomic nucleons polarized into one fixed spacetime direction should tell us differently.

Pear shaped atomic nuclei is reason to Polarized Fermions (Nuclear Quarks) as the origin of non acceleassume John Bell was right! With Lorated motion through the resistive oscillating vacuum Higgs field. rentz contraction in special relativity. Polarized Fermion Mass in motion through the Nucleon polarisation based on Fermiresistive, but also pushing oscillating Higgs on (Quark) propeller polarisation Electron shell (spheroid) vacuum (according to Quantum FFF theory) Direction of absolute Fermion (Quark) motion in the Higgs field reference frame, variable gravity also called spacetime Velocity relative to the local Axion-Higgs field Cross section through the 3D vector field pressure distribution on a Fermion point mass (1). Propeller shaped spinning Fermions are supposed to be Polarized into the direction of flight through the vacuum lattice (2). As a result, the resistive vacuum Higgs force (3) is compensated by the Higgs Pushing force (4) from the "backside" of the Fermion. However every Fermion need to have polarization memory consciouness. (by a multi-universal entanglement system see: Quantum-FFF theory)

arxiv.org/pdf/1602.01485v1.pdf The atom nucleus is an ellipsoid with elongated central axis. The electron shell is a spheroid with shortened central axis, according to the Quantum FFF Model.

Figure 21, Lorentz Fitzgerald contraction is real (John Bell)

Pear Shaped Nucleons, as the result of non-accelerated motion through the massless but resistive oscillating Axion-Higgs field vacuum. Polarized Fermion Mass in motion through the Nucleon polarisation based on Fermiresistive, but also pushing oscillating Higgs on (Quark) propeller polarisation vacuum (according to Quantum FFF theory) Direction of absolute Fermion (Quark) motion in the Higgs field reference frame, variable by gravity also called spacetime Cross section through the 3D vector field pressure distribution on a Fermion point mass (1). Propeller shaped spinning Fermions are supposed to be Polarized into the direction of flight through the vacuum lattice (2). As a result, the resistive vacuum Higgs force (3) is compensated by the Higgs Pushing force (4) from the "backside" of the Fermion. However every Fermion need to have polarization memory consciouness. (by a mularxiv.org/pdf/1602.01485v1.pdf ti universal entanglement system see: Quantum-FFF theory)

Figure 22, Lorentz Fitzgerald contraction by nucleon pear shaping.

Why 125 GeV Higgs does not decay via 2x bosons into 2x Taus and 2x Bottom quarks? (see: Lubos Motl)

According to the Quantum FFF Model, 2x Taus and 2x Bottom quarks together need 10x electron/positron propellers (silver colored, see at the bottom below).

Light Higgses seem to decay into: (aa) 2x bosons containing 4x or 6x or possibly for ZZ bosons even 8x electron positron propellers.



See below counting silver particles: 4x Taus =8x elements, 2x Muon with 2x Taus = 6x.
2x Muon with 2x Bottom = 8x.!



Figure 23, Some examples of 3D particle structures according to Quantum FFF Theory.

#### Quantum Dipole Repeller Gravity pushing our Galaxy.

According to Quantum FFF Theory, empty space is filled with a fast oscillating lattice of massless Axion-Higgs field particles as a half base for our opposing dipole pressure Higgs-graviton gravity on earth. Now prof. Yehuda Hoffman shows us a support for this hypothesis.

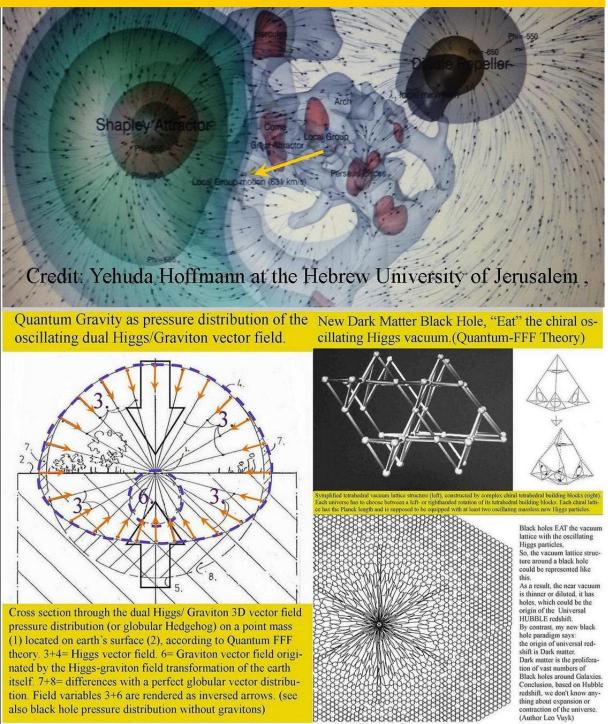
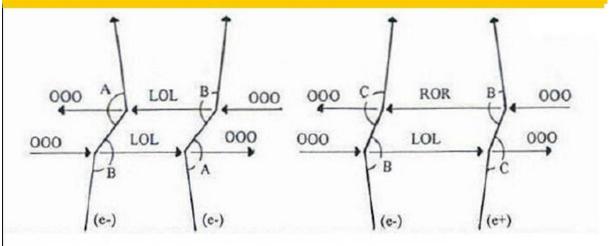


Figure 24, Quantum dipole repeller gravity (the oscillating Casimir vacuum) combined with less pressure from pushing gravitons.

### Feynman Diagrams for Dipole Repeller Forces

Attraction and Repulsion forces created by Dipole Repeller effects between the Higgs Field vacuum (OOO) and 5x opposing Photons. (UOU, ROU, LOU, ROR, LOL)

According to Quantum FFF Theory.



(Above) Alternative Feynman diagrams for electron-positron attraction and electron- electron repulsion by Dipole Repeller system.

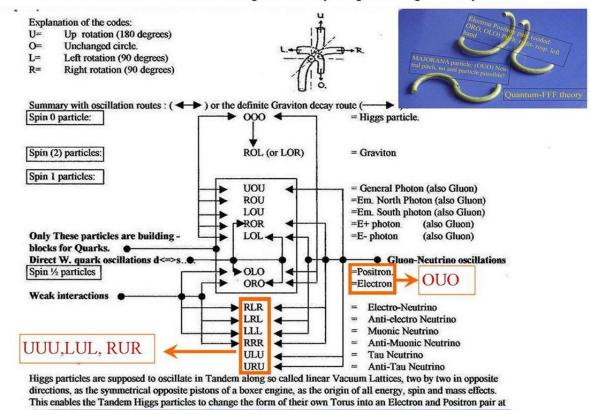


Figure 25.

## 

Figure 26.

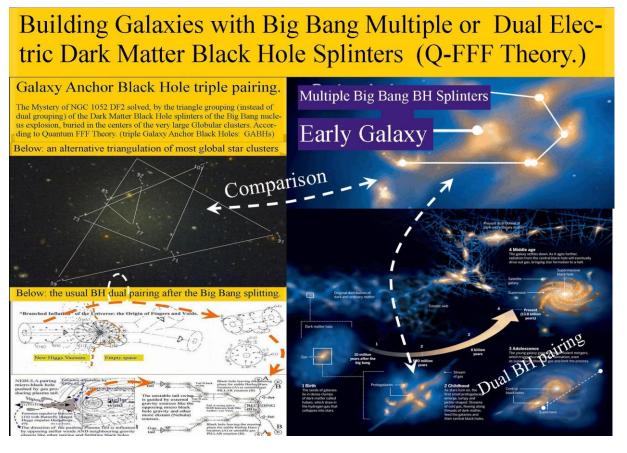


Figure 17,

Evidence for New Physics of Dark Matter= Black Holes. There is dark matter space curvature, due to vacuum dark energy (Casimir) effect forming DM-BH peaks, however there seems to be NO Inertia or normal Mass effect. As a result of no inertia, the dark matter black hole content of the merging cluster Abell 520, showing unnatural acceleration and concentration in between three clusters

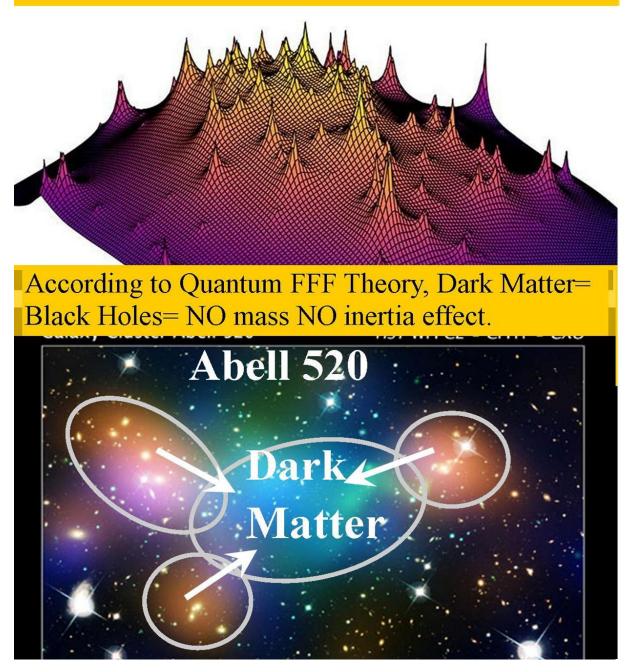
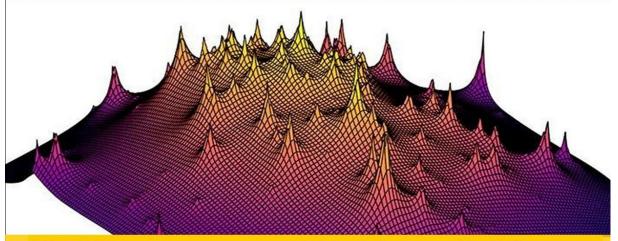


Figure 28, Abell 520 with NON inertial dark matter black hole content left behind and overshooted by galaxy clusters.

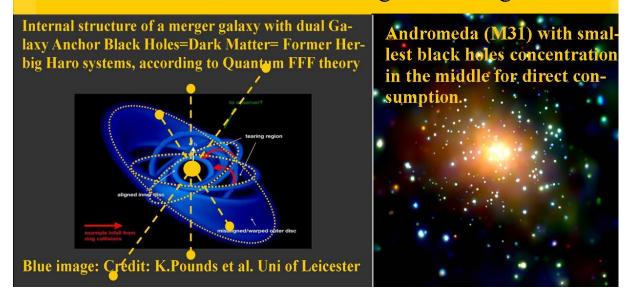
# Numerous Dark Matter peaks assumed to be Galaxy Anchor Dark Matter Black Holes.

(According to Quantum FFF Theory)

Dark matter clump 3D distributions in a distant galaxy cluster. According to Quantum FFF Theory, Galaxy Anchor Black Holes are dual grouped Big Bang Black Hole splinters mostly grouped into dual Herbig Haro systems, as a base for star and galaxy formation.



DM BH peaks represent real black holes with different sized nuclei. There are dual GABHs (Galaxy Anchor Black Holes below) and centra BHs griowing by the consumption of small S-Nova BHs. The larger BHs seem to be the remnants of GABHs of merged smaller galaxies.



Figure~29,~Internal~merger~galaxy~and~Andromeda~concentration~of~small~Dark~Matter~Black~Holes~ready~to~eat~by~the~central~Black~Hole.

#### **QUANTUM FFF THEORY.**

According to Quantum FFF Theory, (Function Follows Form) the FORM and microstructure of elementary particles, is supposed to be the origin of FUNCTIONAL differences between HiggsGraviton-Photon- and Fermion particles.

As a result, a NEW paradigm of splitting-,accelerating- and pairing Black Hole seems to be able to accelerate itself by a -Zero Point Energy driven-self created plasma tails (by a new Quantum Fluctuation process), to form dumbbell systems, of two or even more black holes. Inside Nebula these dumbbell systems are called Herbig Haro systems.

I think that Stephen Hawking did not calculate with the possibility of a chiral oscillating Higgs field vacuum lattice combined with propeller shaped Fermions. Then, due to Vacuum Chirality, Electron- and Positron propellers could both pushed away from the BH horizon after

spin flip polarization at different distances, forming two charged separated spheres. With quark ( plasma) formation in between.

Based on such a simple object (propeller and process) oriented ontology, Black Holes could be imagined as charge splitters violating the 2e law af thermodynamics, combined with a continuous microscopic big bang plasma creation process!

The result I try to describe:

- 1: Black holes are the same as Dark Matter, they all consume photons, even gravitons and the Higgs field, but REPEL Fermions due to their propeller shape. They produce electric charged plasma.
- 2: Dark Energy is the oscillating (Casimir) energy of the Higgs Field equipped with a tetrahedron lattice structure with variable Planck length..
- 3: Quantum Gravity = Dual Push gravity = Attraction (Higgs-Casimir opposing Graviton push).
- 4: The Big Bang is a Splitting dark matter Big Bang Black Hole (BBBH), splitting into smaller Primordial Big Bang Spinters (PBBS) forming the Fractalic Lyman Alpha forest and evaporating partly into a zero mass energetic oscillating Higgs particle based Higgs field.
- 5: Dual PBBSs hotspots, produce central plasma concentration in electric Herbig Haro systems as a base for star formation in open star clusters as a start for Spiral Galaxies.
- 6: Spiral Galaxies will keep both Primordial Dark Matter Black Holes as Galaxy Anchor Black Holes (GABHs) at long distance.
- 7: After Galaxy Merging, these GABHs are the origin of Galaxy- and Magnetic field complexity and distant dwarf galaxies .
- 8: Black Holes produce Plasma direct out of the Higgs field because two Higgs particles are convertible into symmetric electron and positron (or even dual quark-) propellers (by BH horizon fluctuations).
- 9: The chirality of the (spiraling) vacuum lattice is the origin our material universe. (propeller shaped positrons merge preferentially first with gluons to form (u) Quarks to form Hydrogen. 10: The first Supernovas produce medium sized Black Holes as the base for secondary Herbig Haro systems and open star clusters.
- 11: ALL Dark Matter Black Holes are supposed to be charge separators with internal positive charge and an external globular shell of negative charged Quark electron plasma.
- 12: The lightspeed is related to gravity fields like the earth with long extinction distances to

adapt with the solar gravity field.

democratic form.

- 13. Quantum FFF Theory states that the raspberry shaped multiverse is symmetric and instant entangled down to the smallest quantum level. Also down to living and dying CATS in BOXES.
- 14 Large Primordial Big Bang Spinters (PBBS) are responsible for the creation of the Lyman Alpha forest structure and first spiral galaxy forming of the universe, but they seem to be also responsible for the implosion of the universe at the end in the form of Galaxy Anchor Black Holes (GABHs) located mainly outside galaxies. see: (Quasisoft Chandra sources) 15, As a consequence of 12-14, Time is always local time in combination with cyclic period time of the multiverse.
- 16, If our material universes has a chiral left handed oscillating Higgs field, then our material Right Handed DNA helix molecule could be explained. However it also suggests that in our opposing symmetric anti-material entangled neighbor universe the DNA helix should have a Left handed spiral.

According to Max Tegmark: in an entangled multiverse we may ask: is there COPY PERSON over there, who is reading the same lines as I do? If this copy person is indeed living over there, then even our consciousness should be shared in a sort of entangled democratic form. Then we are not alone with our thoughts and doubts, see: Democratic Free Will in the instant Entangled Multiverse.

- 17, All particles and waves should be entangled with anti-copy particles and Higgs field based waves in our opposing anti universes. Then wave particle duality and the so called one particle double slit interference could be explained by accepting that real shaped 3D photon particles only exist in their function of Gluons. However Gluons should transfer form information to the oscillating luminiferous Higgs field ether, within about 1 cm distance from a fermion.(see: Babock and Bergman anomaly,1964)
- 18, Different elementary particles have different qualities by their different complex stringy shape. Leptons and Quarks have a propeller shape with left or right handed pitch creating charge difference. Gluons, Photons and Neutrino particles have no pitch.
- 20 All particles can be converted to one or more Higgs particles, Lepto Quarks can be compound particles.
- 21 All particles are assumed to be present as Higgs particles already in the cyclic Big Bang Black Hole (BBBH) after the former multiverse has collapsed into a Big Crunch Black Hole. 22, We seem to live inside one material universal bubble of an instant entangled (Charge Parity Time) CPT symmetric raspberry bubble multiverse. Each quantum jump or wave function collapse or human choice is guided by this instant entanglement at long distant. If our material universes has a chiral oscillating Higgs field, then our material Right Handed DNA helix molecule could be explained. However it also suggests that in our opposing Anti materialmultiverse neighbour universe the DNA helix should have a left handed spiral. According to Max Tegmark: in an entangled multiverse we may ask: is There copy pesron over there, who is reading the same lines as I do? If this copy person is indeed living over there, then even our consciousness should be shared in a sort of

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