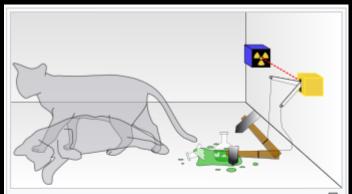
# Schrodinger's Cat Pseudoscience and Fringe Theories sqm, 2018/DEC/01



Schrödinger's cat: a cat, a flask of poison, and a radioactive source are placed in a sealed box. If an internal monitor (e.g. Geiger counter) detects radioactivity (i.e. a single atom decaying), the flask is shattered, releasing the poison, which kills the cat. The Copenhagen interpretation of quantum mechanics implies that after a while, the cat is simultaneously alive and dead. Yet, when one looks in the box, one sees the cat either alive or dead not both alive and dead. This poses the question of when exactly quantum superposition ends and reality collapses into one possibility or the other.

from: https://en.wikipedia.org/wiki/Schr%C3%B6dinger
%27s\_cat

"Pseudoscience consists of statements, beliefs, or practices that are claimed to be both scientific and factual, but are incompatible with the scientific method. [1][Note 1] Pseudoscience is often characterized by contradictory, exaggerated or unfalsifiable claims; reliance on confirmation bias rather than rigorous attempts at refutation; lack of openness to evaluation by other experts; and absence of systematic practices when developing theories, and continued adherence long after they have been experimentally discredited. The term pseudoscience is considered pejorative[4] because it suggests something is being presented as science inaccurately or even deceptively. Those described as practicing or advocating pseudoscience often dispute the characterization.[2]"

from: https://en.wikipedia.org/wiki/Pseudoscience

"Fringe theories include any new area of scientific endeavor in the process of becoming established and some proposed theories. It can include speculative sciences. This includes physics fields and physical theories presented in accordance with known evidence, and a body of associated predictions have been made according to that theory. Some fringe theories go on to become a widely accepted part of physics. Other fringe theories end up being disproven. Some fringe theories are a form of protoscience and others are a form of pseudoscience. The falsification of the original theory sometimes leads to reformulation of the theory."

https://en.wikipedia.org/wiki/Theoretical\_physics#Fringe\_th

"The scientific method is an empirical method of knowledge acquisition which has characterized the development of science since at least the 17th century. It involves careful observation, which includes rigorous skepticism about what is observed, given that cognitive assumptions about how the world works influence how one interprets a percept. It involves formulating hypotheses, via induction, based on such observations; experimental and measurement-based testing of deductions drawn from the hypotheses; and refinement (or elimination) of the hypotheses based on the experimental findings. These are principles of the scientific method, as opposed to a definitive series of steps applicable to all scientific enterprises.[1][2][3]" from: https://en.wikipedia.org/wiki/Scientific method

# Schrodinger's cat debunked:

Simply put an audible heart-rate monitor on the cat; WHEN he dies, you'll *know* and then I'll call the ASPCA on you! [The thought experiment commonly known as "Schrodinger's cat" is *completely irrelevant* to physics. Why? Because radioactive decay is a random process — *completely describable* by statistics and probability — my major at Michigan State University. Given enough time, an unstable nucleus WILL eventually decay causing the hammer to break the cyanide flask, poisoning the cat, and prompting me to

call the ASPCA on you! "Schrodinger's cat" — **nothing** to do with physics and **everything** to do with cruelty to animals!]

## An example of pseudoscience:

http://www.jovion.com/

"Mission Statement

The mission of Jovion Corporation is to develop pollutionfree, portable, scalable, distributed power sources that require no fossil or nuclear fuel and emit no waste, carbon or harmful radiation, based on the Casimir-Lamb shift."

An example of debunking a false claim:

<u>Is Using Gas Vapor to Power an Engine a Myth? Let's find</u>out!

Another example of pseudoscience:

https://en.wikipedia.org/wiki/Cold fusion

An example of a fringe-theory debunked:

<u>https://en.wikipedia.org/wiki/</u>

Biogenesis#Spontaneous generation and its disproof

Another fringe-theory debunked:

https://en.wikipedia.org/wiki/Luminiferous aether

# Claims of Temporal Elasticity Theory:

- as Relativity claims, gravitation is not a 'force'; it's a manifestation of curved space-time; but, curved spacetime is overkill; curved time is necessary and sufficient to explain gravitation
- curving time requires one of two things exclusively:
  - a. 2D time so that bending time has something to bend into XOR, exclusive or,
- b. time has the property engineers call *elasticity* We have no evidence whatsoever that time is 2-dimensional therefore, *time must possess elasticity*, heretofore called *temporal elasticity*.
- 3. as temporal elasticity is the basis for gravitation, it is also the basis for the strong nuclear 'force', the only other exclusively attractive 'force' we know of

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- 3. as temporal elasticity is the basis for gravitation, it is also the basis for the strong nuclear 'force', the only other exclusively attractive 'force' we know of
- 4. because Lorentz / Special Relativistic effects are a function of velocity, and velocity is a function of **time**, 'Relativistic mass' is a misnomer and the difference between 'Relativistic mass' and rest-mass is energy in temporal warp which **causes** time-dilation both Relativistic and gravitational

Why TET, Temporal Elasticity Theory, is *part of science* and NOT part of pseudoscience:

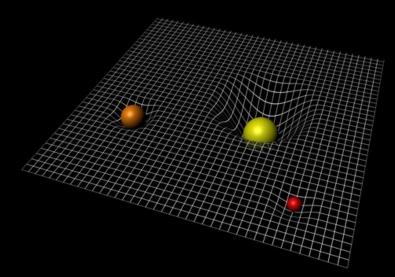
- clearly, TET is not incompatible with the scientific method
- 2. the characteristics of pseudoscience, as listed on page 1 of this essay, do not apply to TET except perhaps for one: unfalsifiable/non-disprovable - except for claim 1: it is disprovable - which means the other associated claims are as well

#### **Heuristic Proof of Claim 1:**

Classically, position, speed/velocity, and acceleration are all functions of time. Newton's law of universal gravitation is based on distance between centers-of-mass, which is another name for relative positions. The force two masses experience based on gravitational attraction between them is based on position, a function of time.

But time is **not** a uniform metric with fixed 'length' **ANY** where except in mythical flat empty space devoid of mass!

So in order to visualize gravitational 'force' as a function of time-dilation between masses, we recall the traditional view of warped space-time understanding here, we are *limiting warp to time*:



With the understanding that warp only applies to time in the image above, we realize there's a dilation around and between masses that never really flattens out — especially between them. This is the key to understand the force of gravitation and the evolution of relative positions with respect to the constantly increasing temporal dilation between two masses. As two masses approach each other, their individual temporal dilation patterns super-pose essentially creating a deeper trench for each to follow — directly toward each other. No wonder masses accelerate toward each other gravitationally; time is increasingly dilating between them!

Exactly how much energy is in the temporal warp near / inside a mass? For me, a fascinating question. One attempt to answer that, from a different perspective, was performed by a small NASA team:

https://www.grc.nasa.gov/WWW/K-12/Numbers/Math/
Mathematical Thinking ppc/possible scalar terms.htm

That question above depends on the elasticity of time, which I notate Y<sub>0</sub>. My previous attempts to calculate it depend on which elementary particle you consider so it's either quantized xor my approach was faulty (and I'm more inclined to support the latter). So there is tremendous 'room for improvement' here; there's opportunity for interested readers to perform some 'cutting edge' physics!

I believe the argument above is sound; we just need some time and positive attention / participation .. Years ago, I appealed to participants of the Natural Philosophy Alliance, but it seemed like everybody had their own [set of] pet theory/[theories]. And many of them seemed fringe or bordering on pseudoscience. So eventually I dropped out of the Alliance .. TET, to me, is clearly not a pseudoscience nor should it be treated as fringe. The basic problem today is that it sort-of competes with the Higgs and portions of the Standard Model which in the process of asking you to 'consider its worthiness', also asks you to 'temporarily discard' those same sections of the Standard Model that took years to develop, evince, and formalize.

So as a final appeal here, I ask any of you dear readers who question the role of the Higgs, or question the roles of intermediate vector bosons, or question the prime assumption that every 'force' is mediated by bosons — to join me in pursuit of the truth — the truth of underlying physics — how our universe actually works — which things are attributable to bosons/forces — and which are not.