A

Copenhagen-Schrodinger

Interpretation

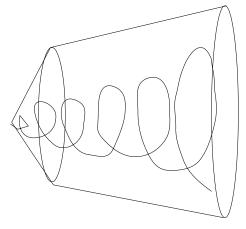
of the

Standard Model

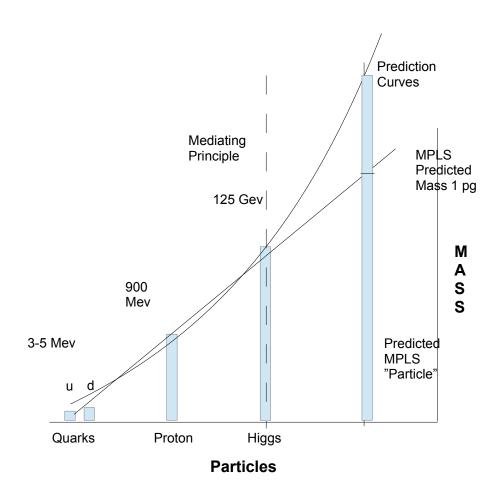
By Woody Stanford – Jan 5, 2015

Abstract

This paper presents an innovative theory of how massive, weakly interacting particles with holographic properties caused the singularity that spawned the physical Universe.



A map of the Universe



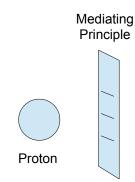
God is the synergistic component of all Life (musing)...

Complex Mass

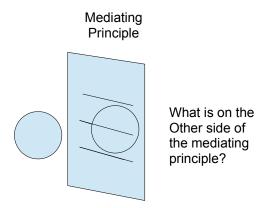
A Thought Experiment:

If the Higgs is a mediating "principle" of reality, what exactly is it "mediating." The term mediation implies there is a connection between one thing and another.

For example,



Rotating the diagram a little, we see the following:



If we are aware of the object's existence, and that of the mediating principle, if follows that the existence of the other object is predicted. In this case, the reflection of the object. Thus is the meaning of the word "mediating."

A Quick Recap of QCD

It is understood that a proton is comprised of 3 quarks: 2 *up*, and a *down*. These quark particles are very light in mass (approximately 3 Mev for each Up and 5 Mev for a Down quark). When these 3 particles are combined they form a proton. However when we add the masses of the quarks:

$$3 + 3 + 5 = 11 \text{ MeV}$$

...but the mass of a proton is about 939 Mev.

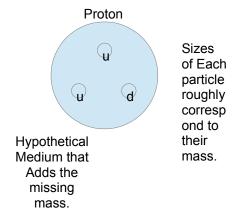
A large discrepancy to be sure. Where does the additional mass come from?

A Thought Experiment:

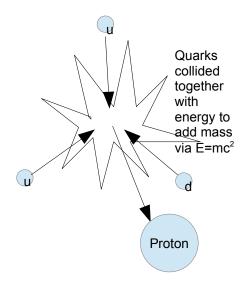
Note: a thought experiment is a mental game designed to test and strengthen the mind

Let us formulate some hypothesis as to what could explain the mass discrepancy.

Hypothesis #1: perhaps the quarks are suspended in another medium that adds mass, a la:



Hypothesis #2: since protons were originally created in the "Big Bang," perhaps the additional mass was "injected" through the energy required to combine the quarks, via E=mc2.

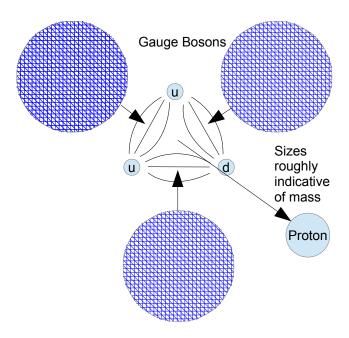


A Conventional Explanation of the Missing Mass

My understanding of the current explanation of the mass differential between a proton and its

constituent quarks is that I has been solved thought the introduction of a mediating principle (perhaps) called GAUGE bosons...gluons.

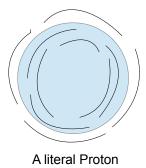
Gauge Bosons are much "heavier" than quarks and it is through the combination of these literal particles (with their associated QM properties such as charge, spin, mass, etc.) Gluonic properties that mediate the chromodynamic forces that overcome like charges and facilitate the stability of the literal proton, a mundane component of everyday matter.



What is "Holographic"?

A term that is being batted around these days at the fringes of the Higgs discussion is the term "holographic."

Looking at a proton's literal structure, we see that its not exactly like macroscopic objects:



Looking at quarks we see this "fuzziness" in the form of a mass range every time we press the quantum physicist for an exact mass value like we would a brick, or a lead weight. There are several macroscopic qualities that microscopic particles have but have to be expressed in what appears to be an

approximation, yet given the physicist's yearning for the exact we can sense that not defining a quantity exactly is is really his attempt at exactitude. That the small is similar to the large but not the same.

Consciousness and Grand Unification

The Copenhagen interpretation has been with us for quite a number of decades and to wax personal, I (as quite a few other scientists feel as well) was uncomfortable with the implications of it. I like my physics pure and if something is physical, damn it, it is literal and physical.

Like many lay scientists I also have an interest in philosophy, ethics and the like having understanding across some of the disciplines. But have seen what I have and what more is a scientist than a person who honestly reports that with is true? As an absolutist, I suppose what I discovered was best told [by myself] because I had to be convinced. A skeptic.



Schrodinger's Cat – Redux

A classic thought experiment: Schrodinger proposed a situation in where a cat's life was determined by a more-or-less random quantum process and surmised that the cat's life was actually in a state of metastability. He even went so far as to say that he presence of an observer was important.

This story is important, in my opinion, because its an early attempt to introduce consciousness (that of the car AND that of the observer) as a possible contributor to quantum processes. Hence, the discomfort the pure physicist feels around the Copenhagen interpretation.

What I'm saying here...supports and extends the the Copenhagen introducing such predictions that choice and even thought itself is not just influencing quantum phenomena but might indeed be the origin of them.

My Story

When I was younger I acquired clinical depression when I was in Alaska [at the age of] 24. To add insult to injury, when I was 33 I contracted what was later diagnosed as schizophrenia. But unlike the

garden variety, the voices, a few at first multiplied and multiplied again. Debilitating pain, disability followed even leading to the dissolution of my consulting practice. Groups of imaginary people all vying for my attention. Luckily, my society fairly enlightened, I was take care of and my malady understood.

Good voices, bad voices, hallucinations, dreams. Pretty soon they were asking me to settle disputes among them, judging matters and making decisions. And all of this going on in my own mind. Strange.

Resonation – An Idea

On a mundane level, when one goes to the movies and is either moved to tears or compelled to cheer, I forward the idea that this is due to a quality of our consciousness called resonance.

On a higher level, how do we know that our scientists, teachers, leaders are telling us true things? We can talk about philosophy, psychology even neurology but on a mundane level, we can define this as resonance.

How do we know something is true? It "resonates."

Methods of "Computation"

To understand what I am trying to convey there is a need to explain the various modes of thought that can lead us forward to truth.

The first that comes to mind is symbolic mathematics. Not much elaboration is required...as it is the primary mode of thought used currently to explain & explore quantum phenomenon. Calculus, probability functions, dependent on algebra.

A second method of computation being used by nanoscientists (in the form of modeling electron orbitals and the like with powerful computers) and out friends at CERN with their number-crunching analysis of proton-proton collisions at the LHC (Large Hadron Collider). Numeric analysis as a subdiscipline of computer science is still the only practical way we can solve certain calculus equations.

But there are still other modes of thought that lead us to truth. The Eastern masters have meditation and samhadi. And here in the west we have thinking, contemplation and even prayer.

And what of that mysterious mode we many times ascribe to women: intuition. And along with intuition the gift of creativity (How did Einstein figure out the things that he did?)

<insert diagram here>

I am trying to weave...a tapestry out of the various threads that I have written so far. But let us get to the meat of the subject at hand. Our origins, even the source of the...singularity that spawned the "Big Bang."

Cosmology and MPLS's (Massive Particle-like Structures)

May hypothesis is that the origin of matter (what comprised the moment of original creation) is due to MPLS's or Massive Particle-like Structures that have exotic properties.

Take for example a beam of light. It has the exotic property of being able to travel at speed, c. Another exotic property is that of a neutrino's ability to travel through solid objects, even a planet without interacting with its matter. What other exotic traits are waiting to be found?

The mythological Tachyon with its ability to travel superluminally perhaps even able to travel into the past is strangely one of those ideas that resonates with us for some reason.

Superluminal Situations

A Thought Experiment:

One of the natural phenomenon we have observed is how the age of the Universe is on the order of 10 billion years, yet we can "see" 90 billion light-years worth of it.

Upon pressing a scientist [on the matter], the explanation is "inflation" that though nothing real can travel faster than light, apparently space (a dimension, rather 3) can. Is it stretching, is it inflating (?), or even is there more of it being produced somehow (???)?

My point is that tachyonic phenomena isn't so far fetched is something as real as reality itself can be superluminal.

MPLS's

It is my hypothesis that large (compared to that of a proton's mass and size) MPLS's are forged in specialized proteins within living beings that have exotic properties like a neutrino in that they can penetrate ordinary matter, tachyonic properties AND have holographic properties.

For the sake of this paper, let us let the term holograph define itself (I do this for a careful reason).

I hear my critics pointing out that there is little chance of nuclear particles being forged within let's say the human body. Let me present this in rebuttal...

There is a strange claim among us at this time, that of cold fusion. The dynamics, the hypothesis of it is pretty well understood in that its based on the empirical findings that certain molecules have point of ultra-high pressure in them. The pitting of ship's propellers are due to the collapsing of bubbles under specific conditions that can, and do, "drill" small holes in solid steel.

I'm not looking to become an apologist for the cold fusion crowd, but point out that there scientific basis for proposing the existence of "molecular forges" might be real.

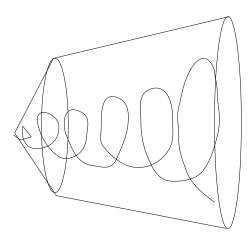
About 2.3 million years ago, genius Homo appeared, animal but possessing a quality that differentiated them from animal-kind called sentience. Just what is sentience and does it have anything to do with

what metaphysics calls, the soul? (musing)

I apologize for bringing metaphysics into this discussion but I beleive3 it has direct bearing on the subject at hand.

A quick question" why do scientists get all sorts of uncomfortable when cold fusion is talked about? Ever stopped to consider why? Maybe there are principles contained in the theory that are so close to the formation of MPLS's within our physical bodies that the deep seated phobia that we have with the metaphysical express themselves even with usually impassive scientific minds. In fact, I would even venture to speculate that it is a holographic principle that MPLS's cannot be defined (or with great difficulty) because of these phobias. An exercise if you will in <u>self</u> observation.

Now much of this speculation is hypothetical. I will admit. However, based on discoveries I have made of the principle holographic. I believe that I can provide the solution to where the Big Bang came from:

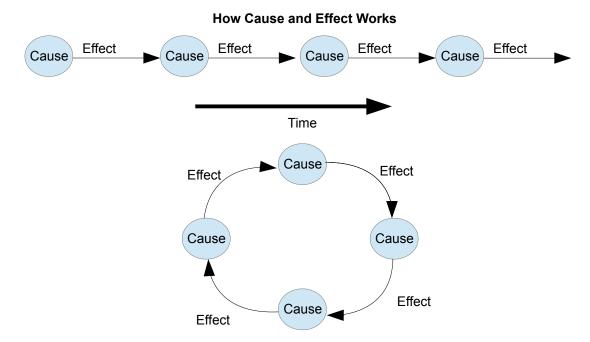


As far as we know..., singularities cannot explode. That Hawking has theorized that they can evaporate if given enough time, this is true. However, a weakness in our chain of explanation is how that much mass started traveling outward perhaps even creating more space-time as it did. It makes sense though that the process was explosive as we already know.

The Principle of Circular Cause

A Thought Experiment:

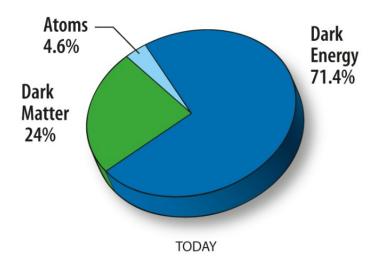
Let us say you could produce a particle that travels backward in time. It is possible to create something in the past with them, and so long as that which was created was careful to produce the original tachyonic particles, is it possible to literally create something out of nothing using the principle of circular cause?



Circular cause can only work with time travel

If this is so, then perhaps the original cause of the matter in the Big Bang could have originated with itself, assuming you could produce the equivalent mass AND send it back in time to "cause" itself.

What if you could "holographically" do it in such a way that it didn't interact with ordinary matter (since they both occupy the same space-time). I will admit that I'm pushing the limits of my defined symbol, but what if that was the only way to do it?



This is a diagram many of us are familiar with. For the physical universe to be comprised of mostly stuff we can't see or explain, maybe this too has that metaphysical property of *phobia* that we mentioned earlier? Early on in our evolution we learned to avoid that which was dark, or hidden.



Could a galaxy be conscious, with it's Dark Matter "halo" actually being its Aura?

Now, so far I've introduced quite a few strange hypothesis but where am I trying to go with this? I'm forming a tapestry and so far [it is still] just a bunch of threads.

Current Theory of the Singularity that Spawned the "Big Bang"

A difficulty that the Standard Model has with the origins of the Big Bang is that it still doesn't explain the origin of the singularity that caused it. We physicists conveniently leave that part out and define the Big Bang [itself] as the beginning. Like the reasoning about God in philosophy that if he is what they say about him (she, it?) then who Created Him? I'm sorry for the parallel but the underlying reasoning, the logic, is identical.

What I'm proposing here is a possible solution to our actual origins, and that of matter and energy. A theory if you will.

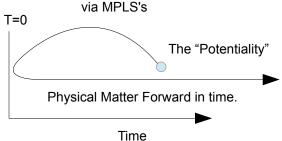
The preceding might now seem a little far-fetched but represents an internally-consistent theory of how something can spring into being by itself (perhaps even generating the very space-time it occupies, via $P \approx D$).

A Possible way Ordinary Matter was Created

Let us return to our original thought experiment that took as an assumption that, the aura of mystery that surrounds the Higgs Boson size size in it being the "God Particle," that it is THE mediating principle (and a cliffic subattograph article) that explains how God's Creation, speaking poetically, came to be.

converting them to ordinary matter.

Mass travels backwards in time

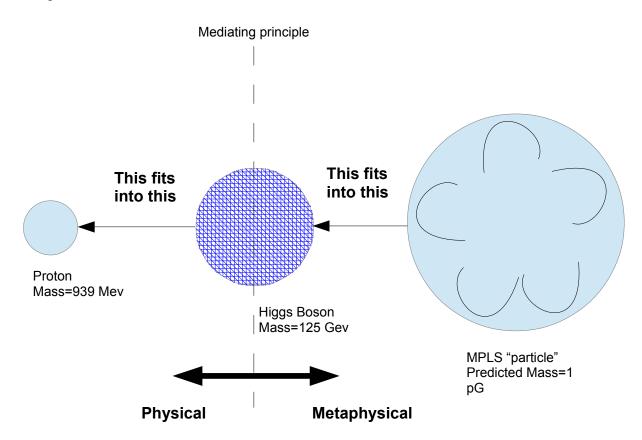


<insert diagram here>

<insert diagram here>

As the MPLS's tumble backward in time, there is less space so they collect together. They are real, so as they are compressed by shrinking space (looking at it from their point of view, time being reversed) their mass is converted to ordinary mass via "gluonic transmission."

According to the preceding graph, assuming the Higgs Boson is a mediating principle we have a prediction. Firstly, the aforementioned existence of a "holographic" MPLS as the partner of the mundane proton:



A reader may ask "How do you fit something more massive into something less massive?" Thro	ugh the
mechanism of <u>complex mass</u> . But that is the subject for another time and another paper.	

Fin...

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