

Construction principles for chiral “atoms of spacetime geometry”.

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Abstract,

Construction principles for chiral “atoms of spacetime” based on geometrical 3-D chiral lattice models and some consequences for spacetime and Time, such as cyclic Universal time, and local time.

Introduction.

Many physicists have searched for the ontological base for time and the construction principles of space time fabric.

I present here a recent example with their original descriptions.

J. Ambjørn wrote [ref. 1,2]:

“To show that the physical spacetime surrounding us can be derived from some fundamental, quantum-dynamical principle is one of the holy grails of theoretical physics.

The fact that this goal has been eluding us for the better part of the last half century could be taken as an indication that we have not as yet gone far enough in postulating new, exotic ingredients and inventing radically new construction principles governing physics at the relevant, ultra-high Planckian energy scale.”

Being an architect, I am specially focussed on the geometrical part of these questions.

I found out that spacetime geometry and the geometry of elementary particles could be linked if we consider wave particle duality as a mechanical conversion process inside a 3D energetic oscillating “Massless Higgs vacuum lattice” and elementary particles with real convertible shapes. (Fig, 3,5,10)

I called it “Quantum Follows Form Theory” (Q-FFF) because the functions of each particle is based on its interaction possibilities with the oscillating Higgs vacuum lattice..[ref. 3-32]

Here I humbly present a possible structure of the spacetime fabric, elementary particles, and some consequences for our understanding of TIME.

In Quantum FFF theory, the interaction between oscillating Higgs vacuum particles and Fermions is responsible for a local reference frame with its own local TIME.

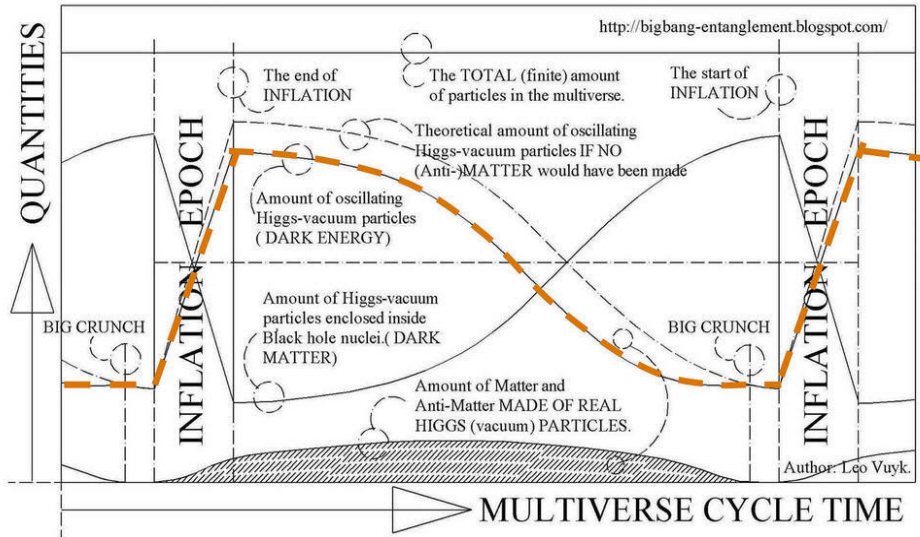
TIME is the ticking of a local clock based on the jitter of the local (Cesium) atoms by the collisionary interaction with its Fermions and the massless oscillating Higgs vacuum particles.

If the oscillating Higgs vacuum lattice is deluded around large masses and BHs then time is retarding and light also. (fig. 3)

The Universe is cyclic by the “constant eating” of the vacuum by all Black Holes leading to a shrinking multiverse and a Big Crunch-- Big Bang based Cyclic system with universal TIME. (fig.1)

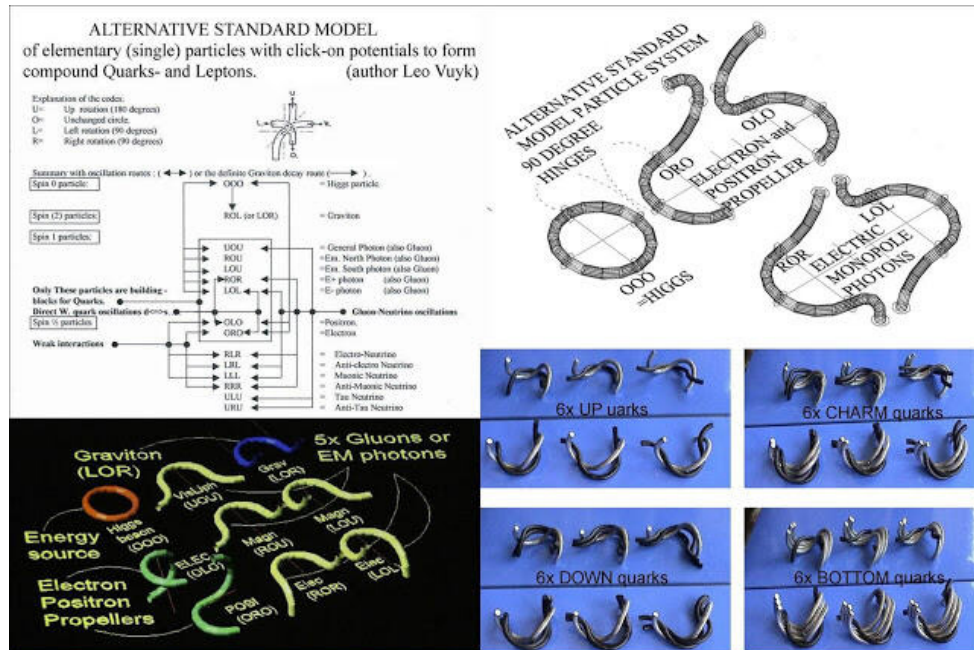
The CPT SYMMETRIC MULTIVERSE CYCLE.

The Inflation epoch starts if the decreasing vacuum pressure equals the increasing Higgs tension of the Big Crunch black hole nucleus. Inflation epoch ends if all splintered black hole nuclei are evaporated, or left behind as Galaxy Anchor Black Holes.



The Pulsating Multiverse depicted as a continuous flow of increasing and decreasing numbers free oscillating- and Black hole condensed Higgs particles and the amount of Quarks and leptons. The size of the pulsating multiverse vacuum is given in orange.

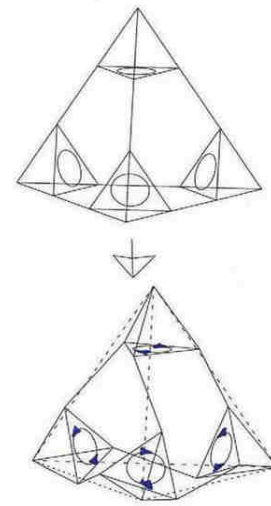
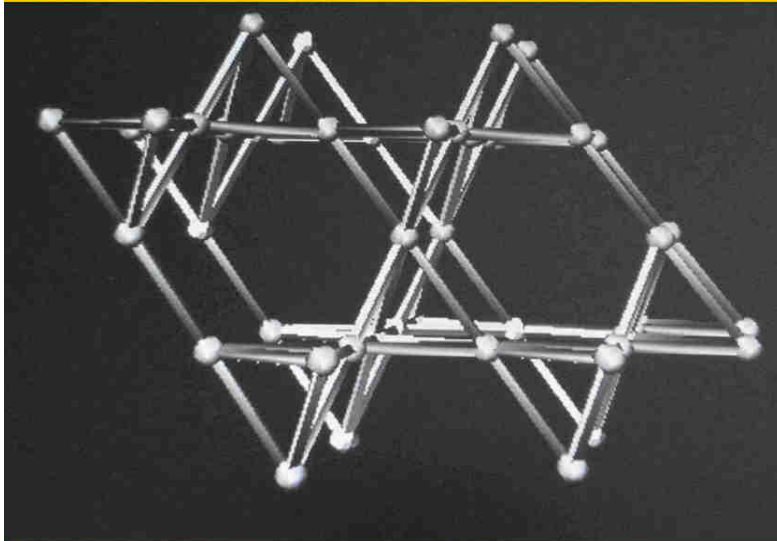
Figure 1, Cyclic universal time, The orange line represents the volume of the total Higgs vacuum lattice.



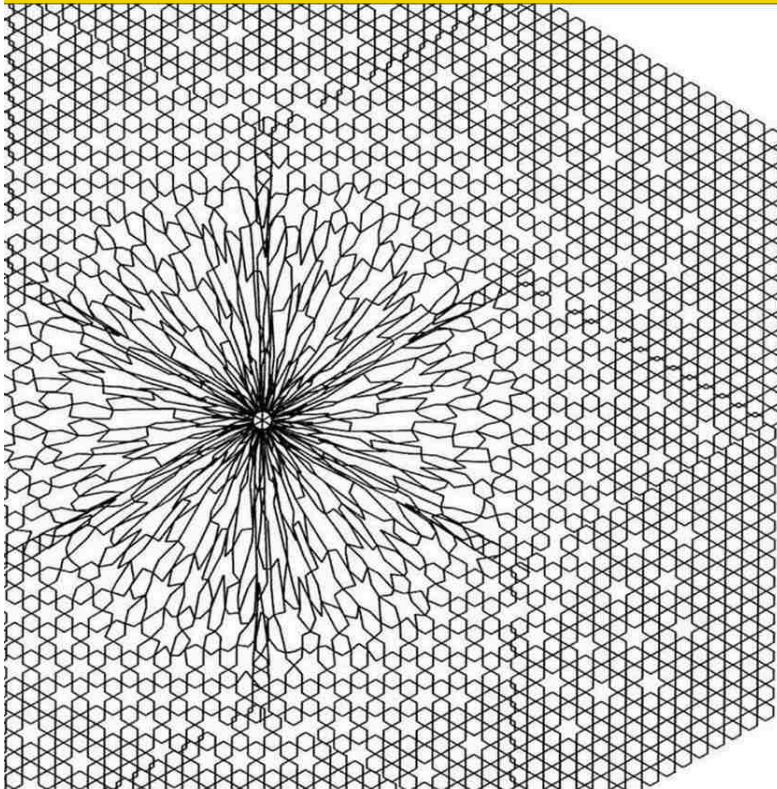
90 degree rotation of the Higgs ring and merging into coumpound knots...

Figure 2, The principle of convertible elementary particles merging into Quarks and some leptons. An alternative standard model with Dark Energy massless Higgs and Dark matter Black Holes.

New Dark Matter Black Hole, “Eat” the chiral oscillating Higgs vacuum.(Quantum-FFF Theory)



Simplified tetrahedral vacuum lattice structure (left), constructed by complex chiral tetrahedral building blocks (right). Each universe has to choose between a left- or righthanded rotation of its tetrahedral building blocks. Each chiral lattice has the Planck length and is supposed to be equipped with at least two oscillating massless new Higgs particles.



Black holes EAT the vacuum lattice with the oscillating Higgs particles, So, the vacuum lattice structure around a black hole could be represented like this.

As a result, the near vacuum is thinner or diluted, it has holes, which could be the origin of the Universal HUBBLE redshift.

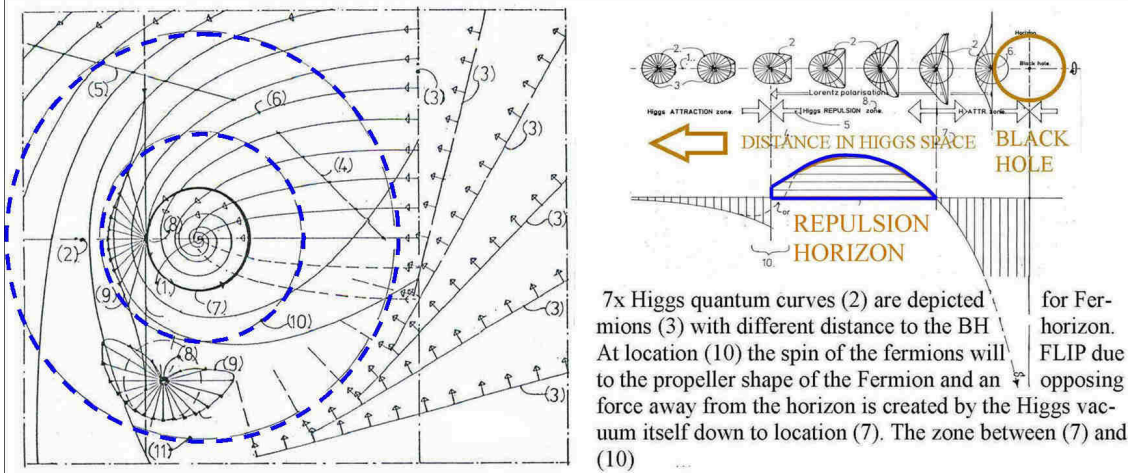
By contrast, my new black hole paradigm says: the origin of universal redshift is Dark matter.

Dark matter is the proliferation of vast numbers of Black holes around Galaxies. Conclusion, based on Hubble redshift, we don't know anything about expansion or contraction of the universe.

(Author Leo Vuyk)

Figure 3, The fine structure of the dual oscillating Higgs vacuum and the influence on the vacuum structure of a dark Matter black hole “eating” the vacuum. The result is that the volume of the vacuum will decrease leading to the Big Crunch, and local time of Cesium oscillations in your watch is retarding in accordance with General relativity

Fermion repulsion zone 10-11 around a Black hole, with Photon and Higgs trajectories around a NEW paradigm Black Holes.(Quantum-FFF Theory)



- 1: Non rotating Black hole nucleus (in 2D cross section).
- 2: Reference axis for trajectories 4,5 and 6.
- 3: Other incoming photonic/Higgs fronts (without depicted trajectories)
- 7: High photon energy collider globular shell, with intense Quantum effects like pair production (e^-e^+). 8: test masses.
- 9: Butterfly shaped Higgs/photon Fermion pushing curves in 2D.
- 10 and 11: Fermion repulsion zone. Due to the propeller shape of the Fermions, they will experience a so called "Spin Flip" in this zone.

Figure 4, There are three horizons around a black hole. 1: a so called Firewall (7) creating pair production, 2 and 3: depicted in blue color; the boundaries of the FERMION REPULSION ZONE.

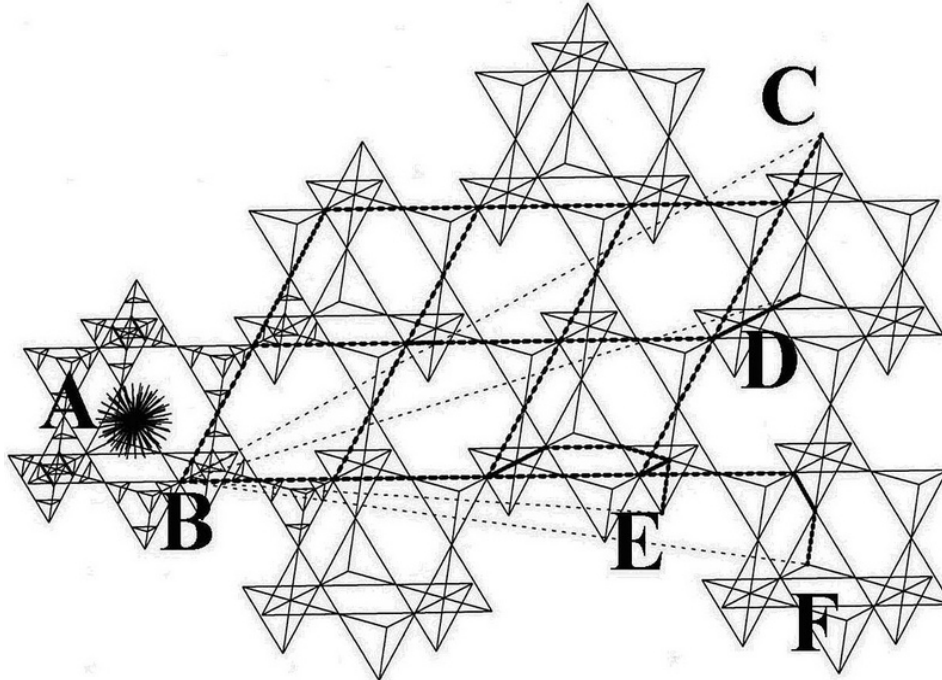


Figure 5, Photon trajectories through the truncated tetrahedral Chiral vacuum lattice. a Fermion is spinning at **location A**, the spinning is the result of Higgs collisions.. Fermion A. radiates 5 types of Gluons and one type of Graviton (**ref 28**) by the constant collision transformation process with the dual oscillating massless Higgs particles. (**figure 2**) Higgs particles are changing form into 5 Gluons / Gravitons by this process.

Most Gluons are supposed to hit and merge with other surrounding Fermions like electrons and other Quarks. However some Gluons will escape and then I call them Photons, which will transfer its Photonic shape and polarisation information to the Higgs vacuum system (**location B**), which seems to be able to transfer this information through the vacuum lattice and transfer the original photon back as a pop-up particle at **locations C,D,E and F after interference with a second fermion.**

The photon information is supposed to be spread over multiple vacuum lattices to present a wavelike form and “collapse” into one real shaped photon by transformation of ONE local Higgs particle. (to be in line with the one photon double split effect)

Quantum Function Follows Form Model

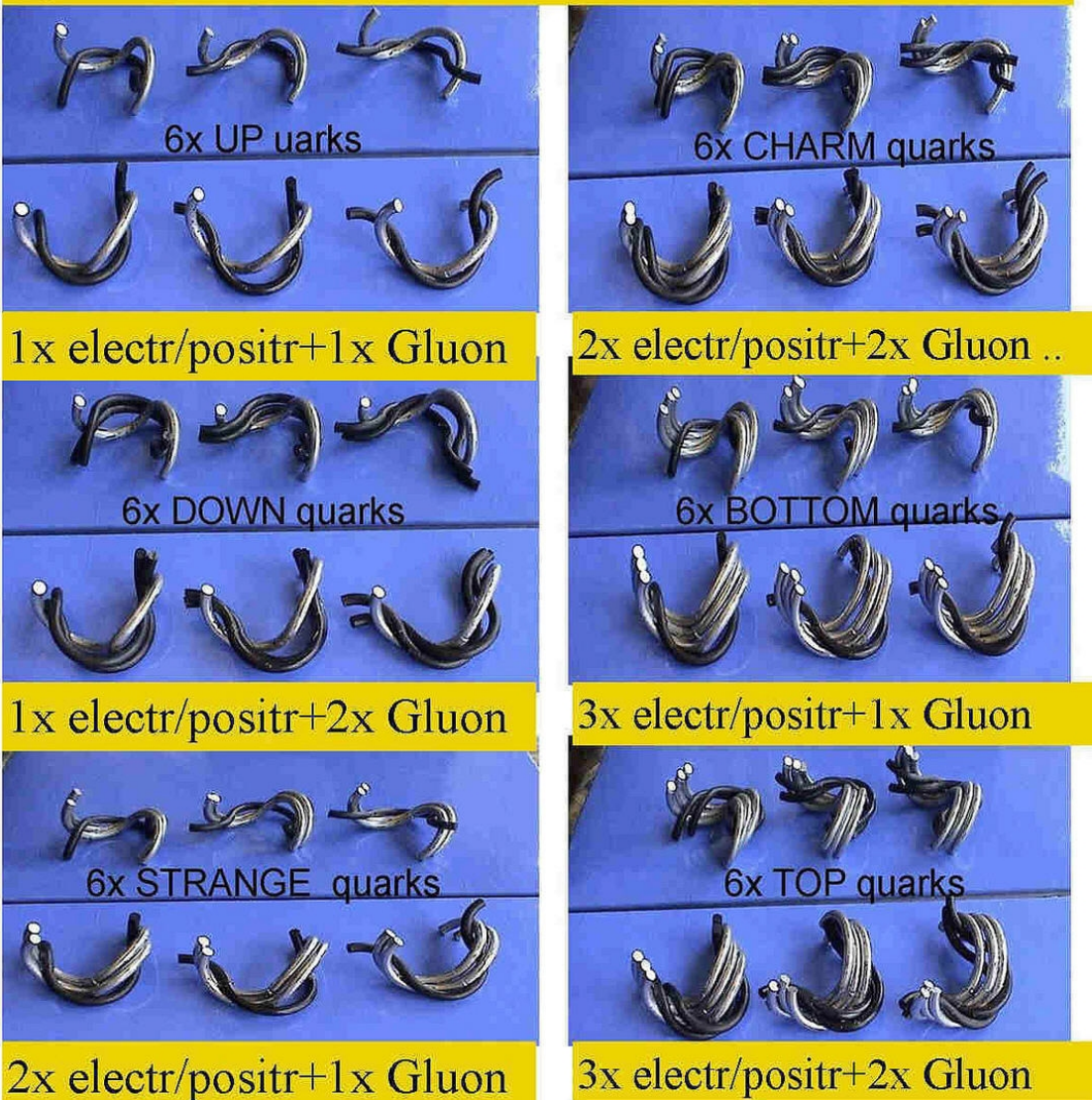
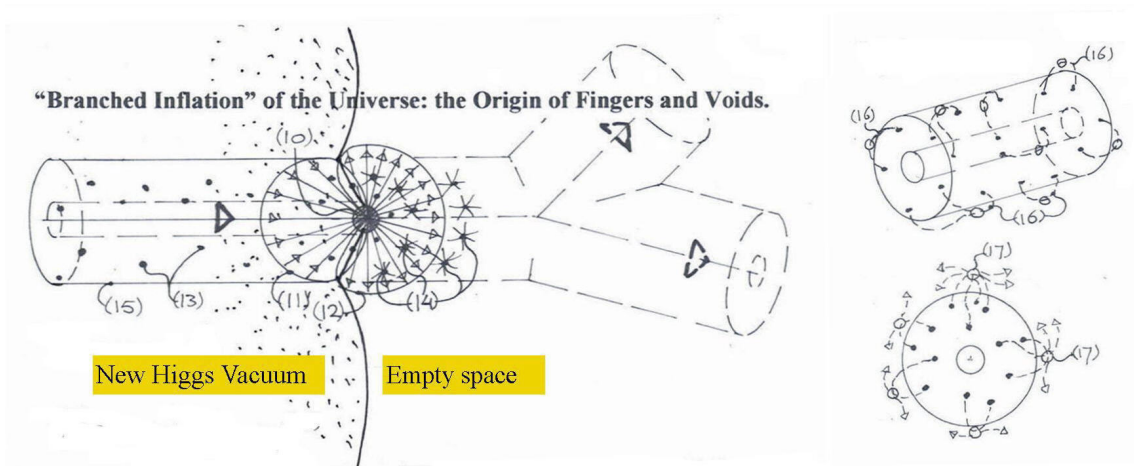
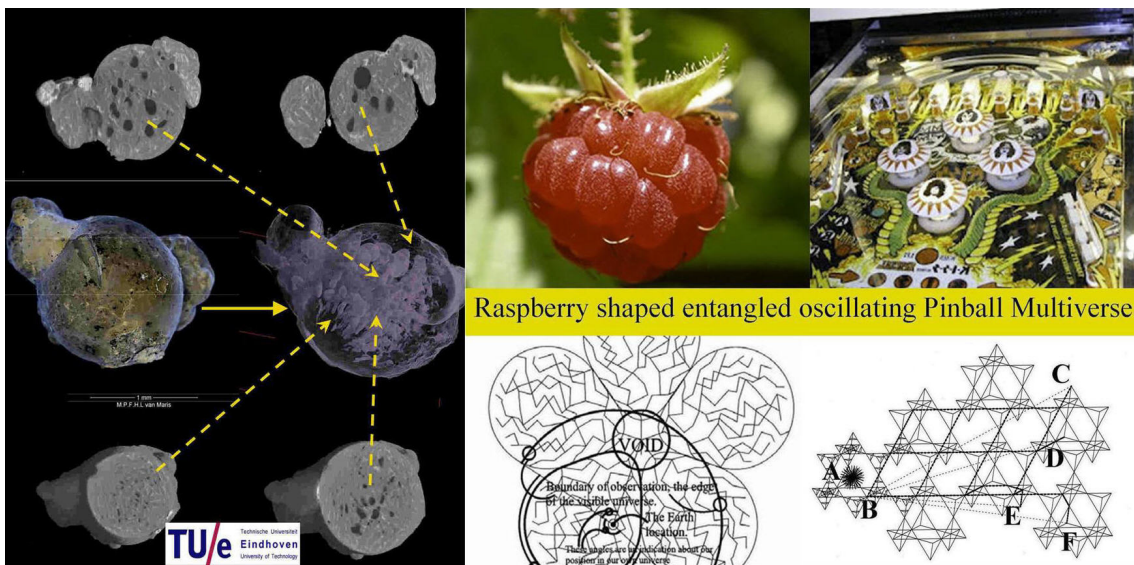


Figure 6, Alternative Standard Model for Quarks as composite particles of positrons, electrons and 5x gluons, able to create the different colors of Quantum Chromo Dynamics.



The origin of the Lyman Alpha Forest (15) and Higgs vacuum, by the splitting of the Big Bang Black Hole (BBBH) into smaller Splinter BHs (10). The splinter BHs (10) evaporate into smaller evaporating black holes at the Front (14) which compensate the pressure from the Backside splinter BHs (11). The BHs (11) are assumed to partly evaporate like BHs (14) also into a newly formed oscillating Higgs vacuum until the Higgs vacuum pressure stops the evaporation and leave Galaxy Forming BHs (13) behind. However single BH will pair (16) with the nearest other BHs to form Dumbbell systems, which efficiently form Giant Stars and Galaxies (17) in between. (author: Leo vuyk)

Figure 7, How the Higgs vacuum lattice was formed by the Big Bang evaporation of the Big Crunch Black Hole, leaving behind a symmetrical Raspberry shaped Multiverse with particle entanglement over universal distances.

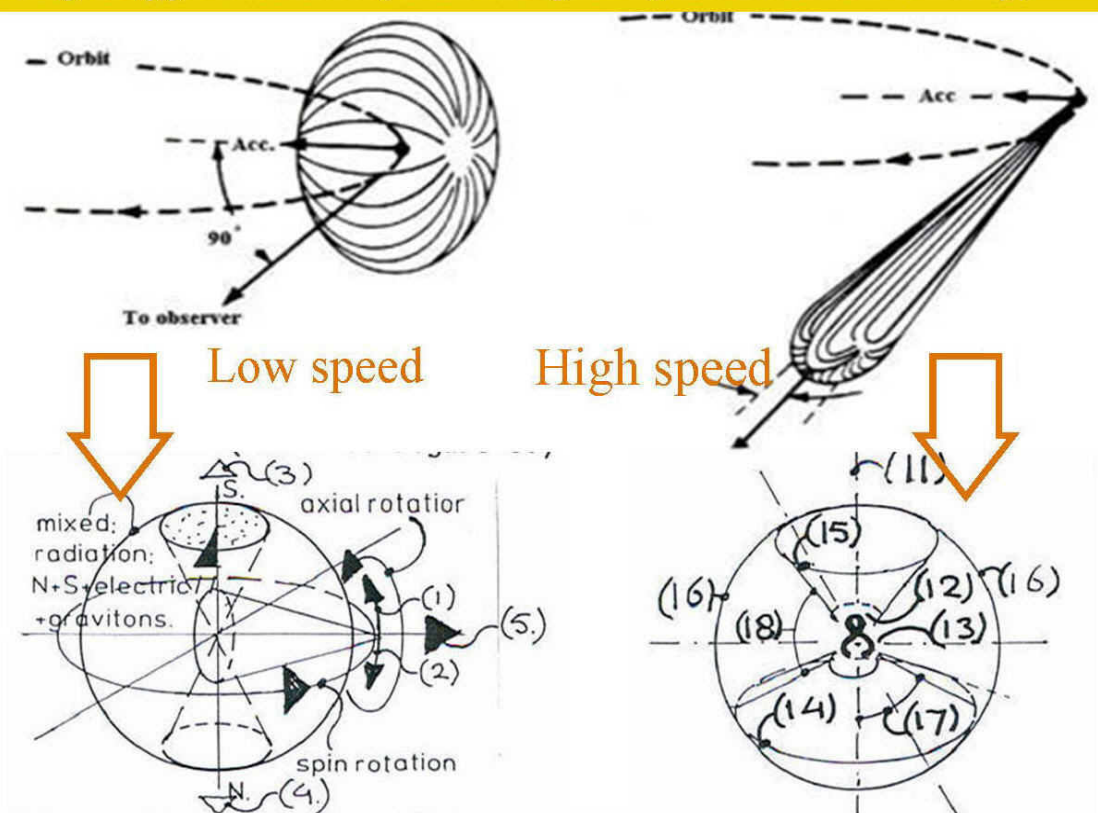


Raspberry shaped entangled oscillating Pinball Multiverse.

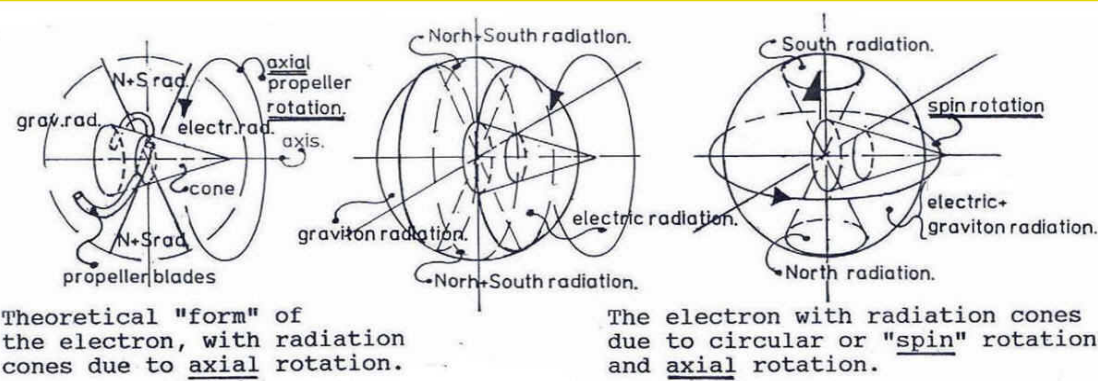
Dark Matter Black holes of all scales even microscopic sized inside silicon globules and outside Galaxies, according to Quantum FFF Theory

Figure 8, In the raspberry Multiverse, the dark matter black hole is of all scales, even microscopic in the lab. Microscopic BHs evaporate by the fierce attack of the Higgs oscillations. Larger BHs (sunspots and Comets) seem to be able to survive and grow by the eating of the Higgs vacuum.

Synchrotron radiation by Polarized Fermion spin combined with high speed motion through the resistive oscillating Higgs vacuum (according to Quantum FFF theory)



The propeller shape of Fermions is the origin of a dual spin state by collision influences of the oscillating massless Higgs vacuum at low speeds. (Spin rotation and axial rotation) At high relativistic speed the Lorentz polarization of the Fermion "propeller nose" (1 or 2) is preferably pointing into direction (11) with synchrotron radiation cone focussing (15) into the opposing vacuum direction and the Spin rotation has gone.

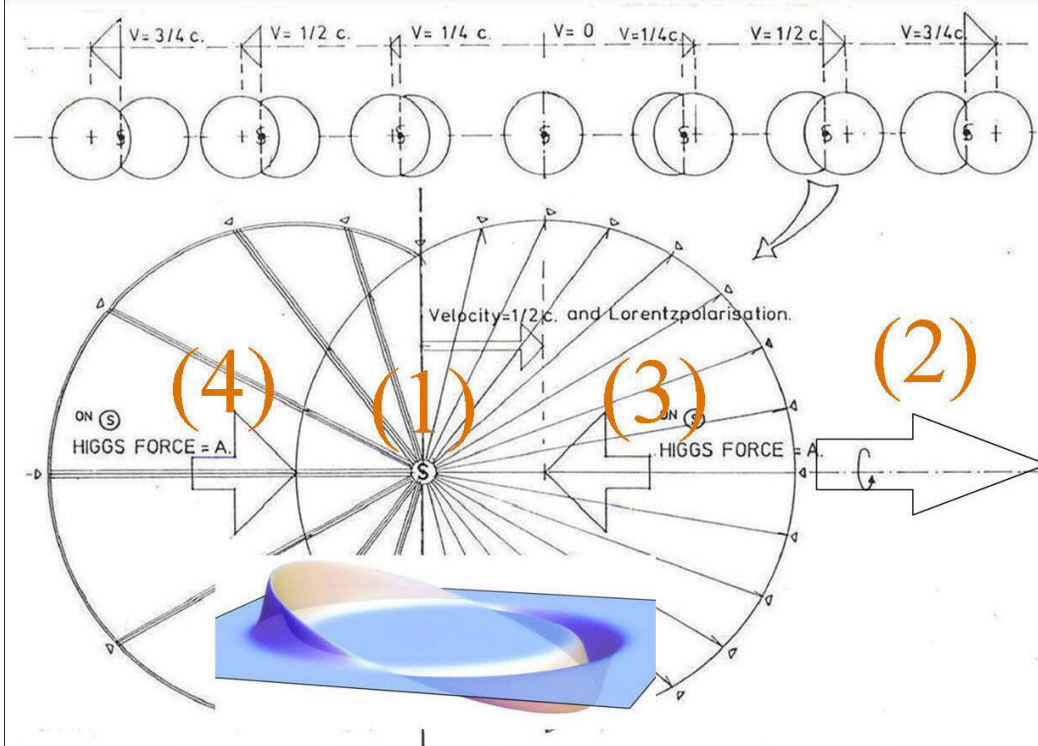


Theoretical "form" of the electron, with radiation cones due to axial rotation.

The electron with radiation cones due to circular or "spin" rotation and axial rotation.

Figure 9, The Double spin of fermions, the radiation cones of different shaped monopole electro magnetic Photons and gravitons and the polarization effect on accelerated Fermions in a synchrotron device.

Polarized Fermion Mass in motion through the resistive, but also pushing oscillating Higgs vacuum (according to Quantum FFF theory)



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)

Figure 10, Warp Drive of the vacuum on Lorentz polarized fermions to overcome the vacuum resistance of the vacuum itself.

All motion related to the local vacuum reference frame creates time retardation. (in accord with Einstein)

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All motion related to this reference frame creates time retardation. (in accord with Einstein)

However the Lightspeed is NOT constant all over the universe. Only around massive objects it seems to be constant. Radar reflection experiments between Earth and Venus proved Einstein wrong. See: Experiments to Determine the Mass Related Lightspeed Extinction Volume (ref.31)

Comparison of the Final ESA CMB Planck map with a cross section through the Raspberry Multiverse according to Quantum Function Follows Form theory. Compare the Cold Spot with the Void and the Warmer and Colder Hemisphere of the Plack CMB (left) with observation boundaries (right)

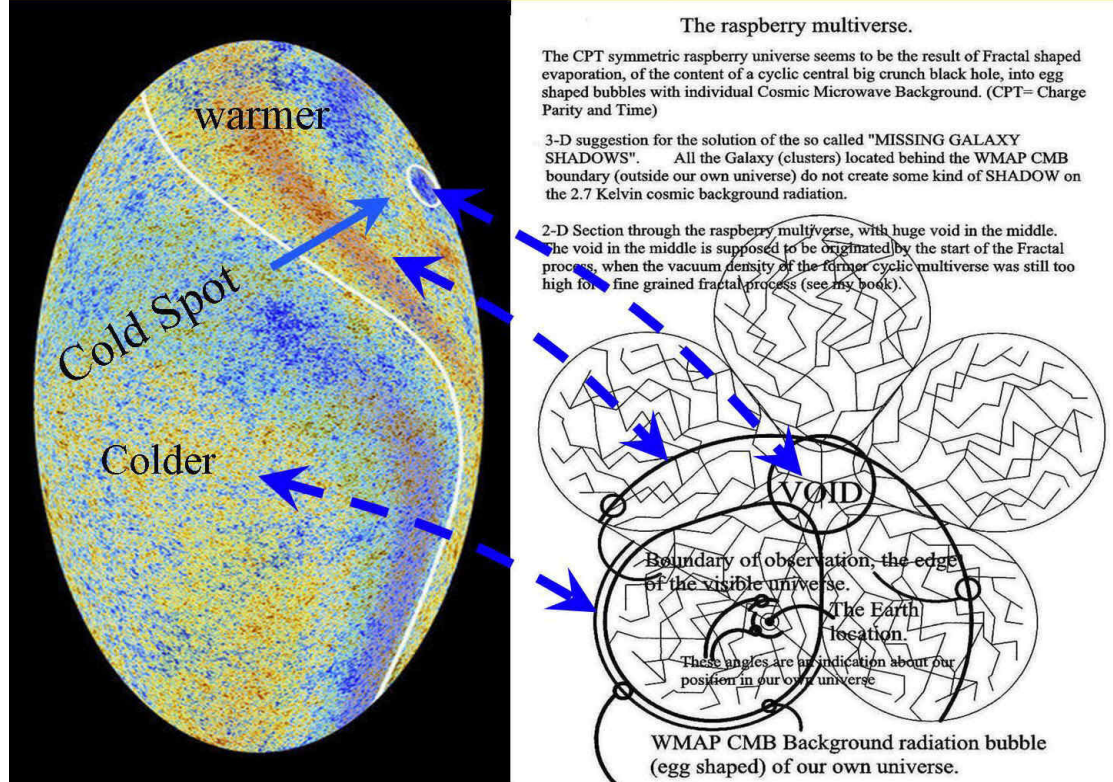


Figure 11, Recent support by the CMB Planck Map for the Raspberry shaped Cyclic Multiverse.

The fourth dimension seems to be the oscillation speed (potential time base) of the Higgs doublets along the Cosmic lattice edges of the vacuum spin field.

Higgs particle doublets are supposed to oscillate in "tandem" or doublets (like a boxer piston engine) along each vacuum lattice edge, to be able to transfer photonic information properly. This system need to have Higgs particle doublets because otherwise it would be impossible to have a decent information transition system at the information properly.

In this system, one lattice edge is supposed to equal one Planck length.

The spiral structure of the vacuum lattices gives the vacuum a chiral influence on spinning and merging

Fermion particles and a photonic polarisation. The chirality of this system is supposed to be the origin of our material universe.

Around black holes, the Higgs lattice system will be absorbed by the black hole and as a consequence, the vacuum is thinned and the Planck length will vary and locally even increase!!!

As a consequence, the lightspeed of radiation passing the black hole, will decrease and suffer a redshift.

However, if we assume that black holes are the same thing and origin of Dark Matter, then the Hubble redshift is not a tell tale of the expansion of the universe.

TIME is assumed to run forward (right-handedness of clocks) because the universe is like a huge pinball machine. Spinning Fermions (the pinball) are driven by the oscillating Higgs field (the electric springs) which is supposed to be the origin of the general increase of entropy base of the second law of thermodynamics.

However dark matter in the form of black holes will eat the dark energy of the Higgs field and decrease entropy again, reason to postulate a pulsating and cyclic universe.

Universal Symmetry is not broken if we accept that each material universe is entangled at a long distance with an anti-material copy universe, equipped with opposite chirality inside the oscillating Higgs lattice field.

As a consequence Time never runs back in anti-material entangled universes, clocks have left-handed rotation over there.

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