Calabi Yau shaped double Fermion spin states.

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Abstract,

The Calabi Yau manifolds are in Q-FFF Theory not reserved for the oscillating Higgs vacuum lattice , but for all Fermion dual axis rotation. The vacuum Higgses are supposed to oscillate along a linear but tetrahedron shaped lattice for the energetic propulsion of the Fermion propellers.

Quantum FUNCTION FOLLOWS FORM or Q_FFF theory describes how the SHAPE of Fermion and Photon particles is able to do suggestions lots of unresolved features in physics, such as the Fermion propeller shape with different complexity configurations is responsible for mass and charge differences (The Hierarchy problem) http://vixra.org/author/leo_vuyk

In particle physics it is an interesting challenge to postulate that the FORM and structure of elementary particles is the origin of different FUNCTIONS of these particles.

In this paper we present a possible solution based on complex 3-D ring shaped particles, which are equipped with three point like hinges and one splitting point, all four points divided equally over the ring surface.

The 3-D ring itself is postulated to represent the "Virgin Mother" of all other particles and is coined Higgs particle, supplied with the 3-hinges coded (OOO).

Introduction,

It is assumed that the vacuum is seeded with massive numbers of massless Higgs particles, all energetic oscillating inside a chiral vacuum lattice system and as such the origin and bearer of all energy in the universe. (reference: 1)
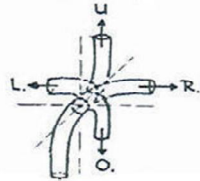
If by a local energy excess, two Higgs particles collide with enough energy, it is assumed that at fist an electron and positron emerges by the transformation of the two Higgs particles. Due to the propeller shape of the Fermions, these Fermions start to spin by a constant collision and scattering process with the Higgs vacuum, changing Higgs particles continuously into different forms of Photon/Gluons.

ALTERNATIVE STANDARD MODEL
of elementary (single) particles with click-on potentials to form compound Quarks- and Leptons.

Explanation of the codes:
U=   Up rotation (180 degrees)
O=   Unchanged circle.
L=   Left rotation (90 degrees)
R=   Right rotation (90 degrees)

Summary with oscillation routes : (◄——►) or the definite Graviton decay route (——►) .

Spin 0 particle:	OOO	= Higgs particle.
Spin (2) particles:	ROL (or LOR)	= Graviton

Spin 1 particles:

	UOU	= General Photon (also Gluon)
	ROU	=Em. North Photon (also Gluon)
	LOU	=Em. South photon (also Gluon)
	ROR	=E+ photon (also Gluon)
	LOL	=E- photon (also Gluon)

Only These particles are building-blocks for Quarks.
Direct W. quark oscillations d<=>s..●.

Spin ½ particles

Weak interactions ●

● **Gluon-Neutrino oscillations**

OLO	=Positron.
ORO	=Electron

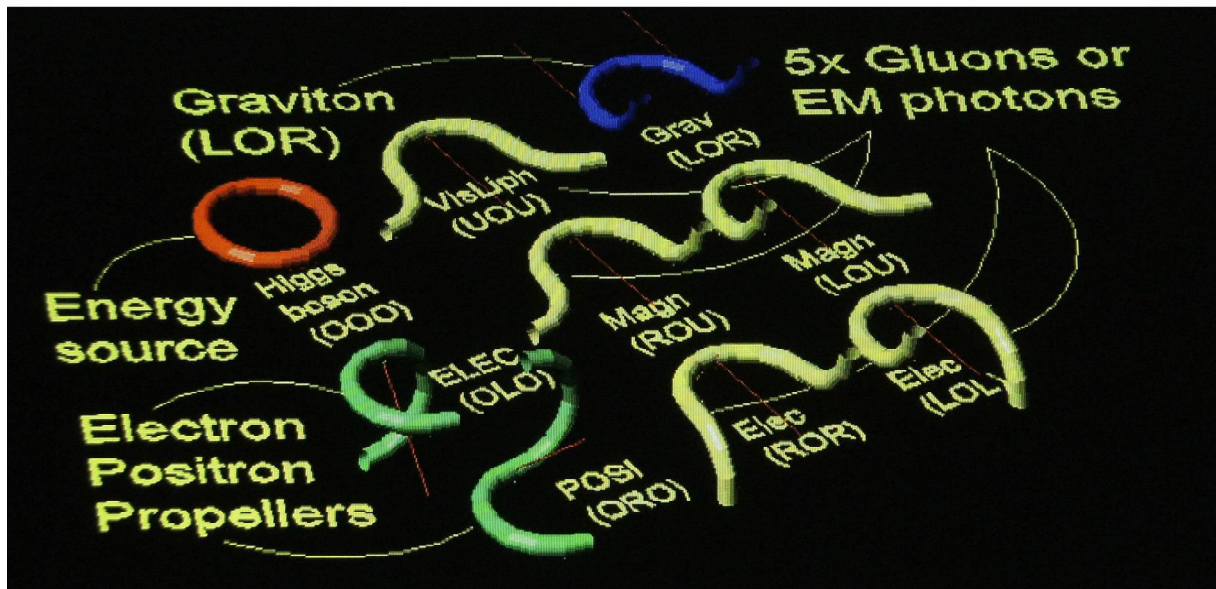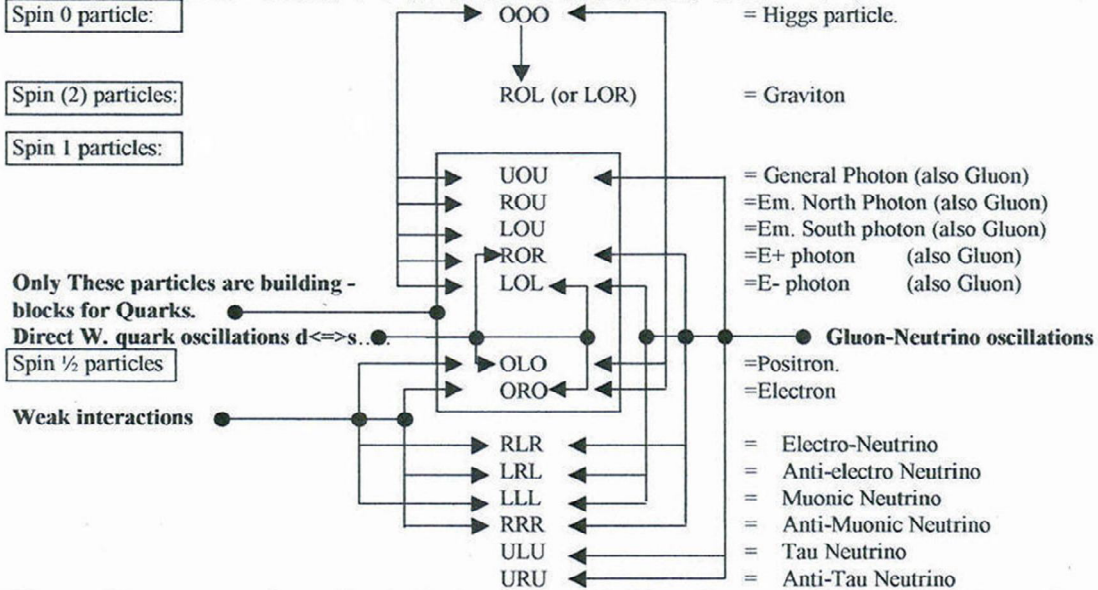|		
RLR	=	Electro-Neutrino
LRL	=	Anti-electro Neutrino
LLL	=	Muonic Neutrino
RRR	=	Anti-Muonic Neutrino
ULU	=	Tau Neutrino
URU	=	Anti-Tau Neutrino

Figure 1, 3D image of Basic Singular Particles;
ONE Higgs boson (OOO), TWO basic single mirror symmetrical Fermions: the Electron and Positron (OLO and ORO), ONE Graviton (LOR), TWO sets of mirror symmetrical monopole Gluons/Photons (ROU-LOU, ROR-LOL) One symmetrical Gluon Photon (UOU).
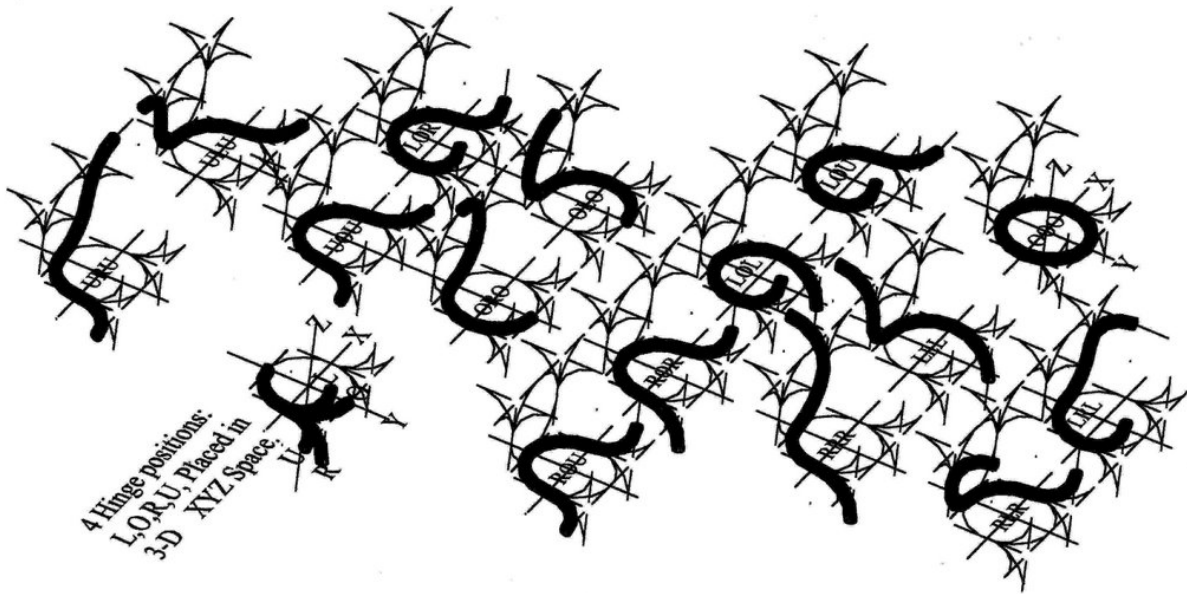
Figure 2, 3D image of all Singular particles including 3 sets of mirror symmetrical Neutrinos: RLR-LRL, RRR-LLL, URU-ULU.

6x Leptons Electron Muon Tau

Figure 3, 3D image of the Leptons: Electron, Positron, (singular) Muons and Tau particles (Compound particles).

Figure 4, 3D-Image of all 36 Quarks: UP-DOWN-STRANGE-CHARM-BOTTOM-TOP.

Geometry of the GOD particle based on four ELBOW MACARONI shaped arms connected with three hinges. These hinges are only able to rotate in steps of 90 degree rotation, coded with: O, L, R, and U relative rotations.
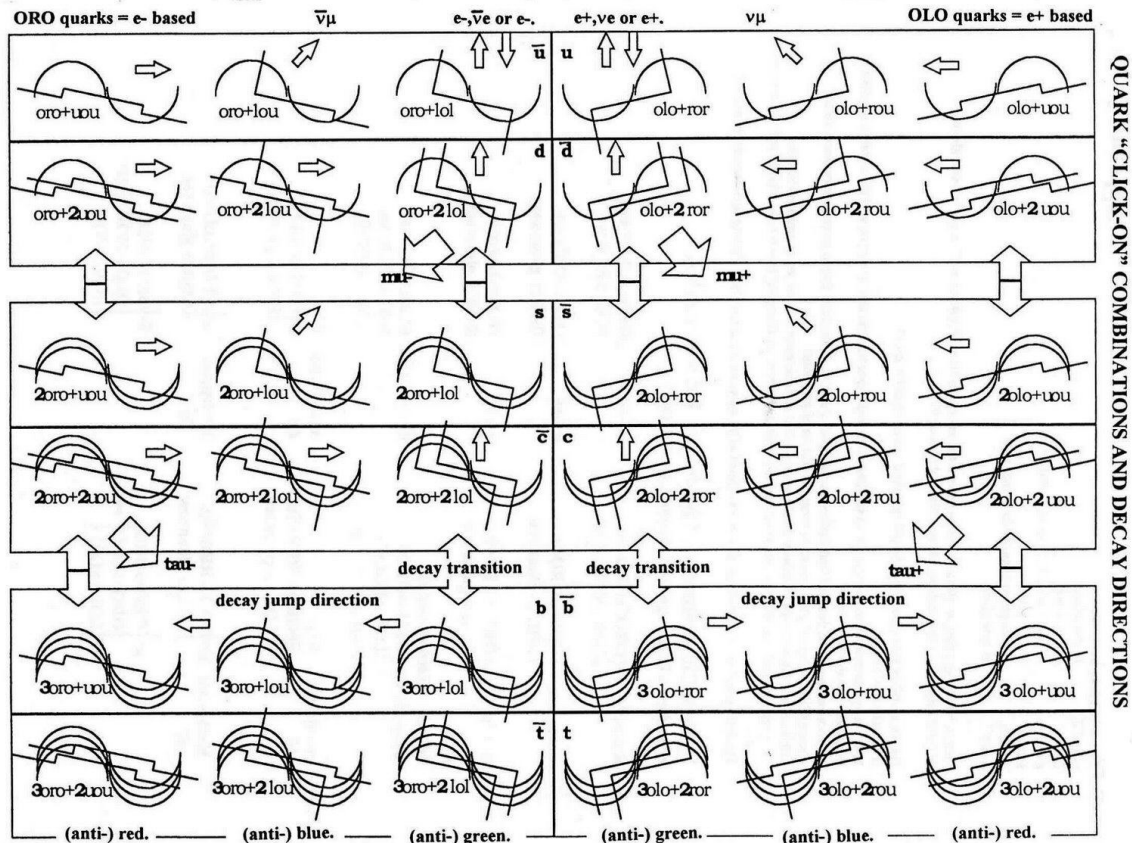

OLO

ORO

OOO

LOU
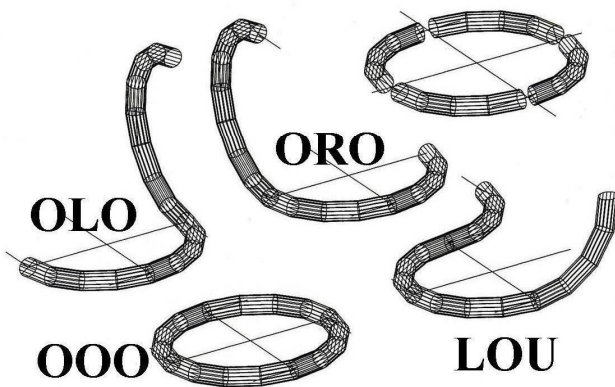
Figure 5.

Figure 6, Simplified 2D image of Leptons and Quarks including indications for Decay routes indicated by arrows.

The Weak force, how change a d-quark (ORO+LLL+LRL) into an u-quark (OLO+ROR) in the case of Neutron-- Proton decay.

semi-leptonic processes

n$\Rightarrow$p + e- + $\bar{v}$e

ddu$\Rightarrow$duu + e- + $\bar{v}$e

The principle interaction is :

d$\Rightarrow$u + e- + $\bar{v}$e

d $\Uparrow$

ORO$\Rightarrow$ORO= e-

LOL$\Rightarrow$LLL= vµ$\Rightarrow$$\Rightarrow$$\Rightarrow$

LOL$\Rightarrow$LRL=$\bar{v}$e

     $\Downarrow$

=u

OLO=e+

ROR=gluon

     $\Uparrow$

gluon from the sea
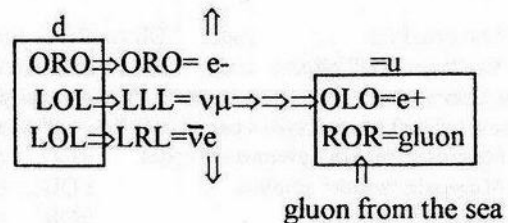
Figure 7, The WEAK force in action by a complex exchange of particles and without a clear sign of the Weak particle. Conclusion there is no need for a massive Weak particle in this system. The massless Higgs particle, seems to do the job properly by transformation of two compound Gluon particles (LOL) attached to the electron (ORO): (LOL into LLL) and (LOL into LRL) . In succession, the (LLL) particle is changed into (OLO) a Positron, able to combine with a free Gluon (ROR) out of the SEA of Gluon plasma.

THE DECAY OF QUARKS AND LEPTONS

According to my model: elementary particles have a **sub-quantum structure**, caused by the postulate that a kind of Higgs particle is the **basic elementary particle**. (see the relation with the model page: 4)
Two Higgs particles can change form by collision into an electron and positron pair.(ORO+OLO)
Each Higgs particle can change form by collision with a quark or lepton into one of the
6 different possible types of photons:

1: **The graviton**   code: LOR (or ROL) can **not** "click-on" to e+ or e- particles to form quarks.
2: **The " general" photon** code   UOU.   can "click-on" to e+ or e- particles, to form quarks for all "red, anti-red"
(the colors are my own choice) quarks. The general photon has no quark confinement function, so is not a "real" gluon.
The 4 (gluon) photon types can also "click-on" to e+ or e- they are:
3: **Magnetic "north" photon** (in code)   ROU.   combining for all "positive/blue, anti-blue"   quarks.
4: **Magnetic "south" photon**   LOU.   combining for all "negative/blue, anti-blue"   quarks
5: **Electric + photon**   ROR.   combining for all "positive/green, anti-green"   quarks.
6: **Electric - photon**   LOL.   combining for all "negative/green, anti-green"   quarks.
Quarks are "click-on" combinations of e- and e+s with 5 different types of photons: **4 gluon** types and **1 general** type.
(so: quarks are not elementary)

Together with 1,2 or 3 **electrons**, 3 photon types can "click on" and combine into different **negative charged quarks.**
The **electron:** ORO can combine with LOL, LOU (gluons) and UOU (general photon)
Together with 1,2 or 3 **positrons**, 3 photon types can "click on" and combine into different **positive charged quarks.**
The **positron:** OLO can combine with ROR, ROU (gluons) and UOU (general photon)

Higgs boson   (in code) OOO
The H-bosons is responsible for:
A: all .photon/gluon production, as continuous collision product with all masscarrying particles.
(OOO+lepton/quark= photon/gluon+lepton/quark
B: spontaneous pair production (OOO+OOO=ORO+ OLO (e- and e+)),

Z	=ORO+OLO	Z-boson (electron + positron can "click" together, without anihilating each other)
Wo, W+ and W-		don't excist as particles.
e-	=ORO	electron.
e+	=OLO	positron.
ve	=RLR	electr. Neutrino.
v̄e	=LRL	anti-electr. Neutrino.
vμ	=LLL	muonic neutrino.
v̄μ	=RRR	anti- muonic neutrino.
vτ	=ULU	tau neutrino
v̄τ	=URU	anti- tau neutrino

For quark click-on combinations: see page 25 (opp.).
Quark "up-grading" due to subjoining of extra ORO's (or OLO's) (energy addition)
and extra gluons, joining from the "sea" of gluons (energy addition)

$$e- \rightarrow \bar{u} \rightarrow d \rightarrow s \rightarrow \bar{c} \rightarrow b \rightarrow \bar{t}$$
→   ORO→ 1 ORO→1 ORO →2 ORO→2 ORO →3 ORO →3 ORO.
      1gluon→2 gluon →1 gluon→2 gluon-→1 gluon→2 gluon.

$$e+ \rightarrow u \rightarrow \bar{d} \rightarrow \bar{s} \rightarrow c \rightarrow \bar{b} \rightarrow t$$
→   OLO→ 1 OLO→1 OLO →2 OLO→2 OLO →3 OLO →3 OLO.
      1gluon→2 gluon →1 gluon→2 gluon-→1 gluon→2 gluon.

The **muon** is equivalent with the **naked** (anti) green d(own)-quark
The **tau** is equivalent with the **naked** (anti) red b(ottom)-quark

The differences between:

e- and $\overline{u}$,	is one gluon,.
$\overline{u}$ and d,	is one gluon,
d and s,	is one gluon changed form into an e-·
s and $\overline{c}$,	is one gluon,
$\overline{c}$ and b,	is one gluon changed form into an e-·
b and $\overline{t}$,	is .one gluon .

Quark "down-grading or decay" is going down the energy ladder, "spitting out" e-, e+'s and gluons in their original form (unchanged) or changed into neutrino's.

Quark stability is originated by the sub-quantum structure of the quark
If the structure has
1: an A-symmetric form (such as the (anti-)blue u-,s- and b-quarks), the ability to spin, and the stability is minor to those with a symmetric form.
2: more components, this will lead to:decrease of stability and mass increase due to more protuberances (more vulnerability for Higgs impulses) resp. more production of gravitons)
Lifetimes and decay routes of quarks should be dependant of these rules, but we see interesting changes:
The prefered (anti-) red-blue- green sequences of the decay ladders are changing between the **charm** and the **bottom** quarks.
The differences in the sequences of charges related to the mass ladder is not clear. Further investigation is needed.

Systematic summary of basic quark decay modes.
e- and e+$\Rightarrow$UOU = general photon   (anihilation)

$\overline{u}\Rightarrow$e-,$\overline{v}$e	ORO$\Rightarrow$ORO = e- LOL $\Rightarrow$LRL =$\overline{v}$e	u$\Rightarrow$e+ ,ve	OLO$\Rightarrow$OLO= e+ ROR$\Rightarrow$RLR=ve
$\overline{u}\Rightarrow$e-	ORO$\Rightarrow$ORO=e- LOL $\Rightarrow$ gluon sea	u$\Rightarrow$e+	OLO$\Rightarrow$OLO=e+ ROR$\Rightarrow$ gluon sea
$\overline{u}\Rightarrow\overline{v}\mu$	ORO$\Rightarrow$RRR=$\overline{v}\mu$ LOL$\Rightarrow$ gluon sea	u$\Rightarrow v\mu$	OLO$\Rightarrow$LLL=$v\mu$ ROR$\Rightarrow$ gluon sea

(d (anti-)green is also:μ)

d$\Rightarrow$e-,$\overline{v}$e,vμ	ORO$\Rightarrow$ORO=e- LOL$\Rightarrow$LRL=$\overline{v}$e LOL$\Rightarrow$LLL= vμ	$\overline{d}\Rightarrow$e+,ve,$\overline{v}\mu$	OLO$\Rightarrow$OLO=e+ ROR$\Rightarrow$RLR=ve ROR$\Rightarrow$RRR=$\overline{v}\mu$

π-$\Rightarrow\mu$-,vμ d$\overline{u}$	d=μ- $\overline{u}$=ORO$\Rightarrow$RRR=$\overline{v}\mu$ LOL $\Rightarrow$ gluon sea	π+$\Rightarrow\mu$+,vμ du	$\overline{d}=\mu$ u=OLO$\Rightarrow$LLL=vμ ROR$\Rightarrow$ gluon sea

K-$\Rightarrow\mu$-,vμ s$\overline{u}$	$\overline{u}$= ORO$\Rightarrow$RRR=$\overline{v}\mu$ LOL$\Rightarrow$ gluon sea	K+$\Rightarrow\mu$,vμ $\overline{s}$u	u= OLO$\Rightarrow$LLL=vμ ROR$\Rightarrow$ gluon sea

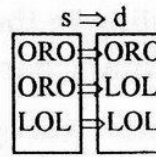|			
	s= ORO$\Rightarrow$ORO ORO$\Rightarrow$LOL =μ- LOL $\Rightarrow$LOL		$\overline{s}$= OLO$\Rightarrow$OLO OLO$\Rightarrow$ROR =μ+ ROR$\Rightarrow$ROR

Three different kinds of Weak interactions.

Hydronic decays:

$\Lambda o \Rightarrow \pi- + p$
$uds \Rightarrow udd \Rightarrow \bar{u}d + uud$
The principle interaction is:

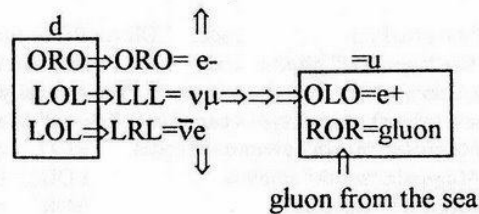$s \Rightarrow d$ and pair production (addition) of u and $\bar{u}$ from the Higgs and gluon "sea"

$$s \Rightarrow d$$

ORO	ORO
ORO	LOL
LOL	LOL

semi-leptonic processes

$n \Rightarrow p + e- + \bar{v}e$
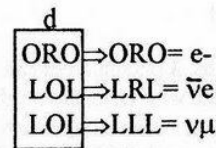$ddu \Rightarrow duu + e- + \bar{v}e$
The principle interaction is :
$d \Rightarrow u + e- + \bar{v}e$

d ⇑

		=u
ORO⇒ORO= e-		
LOL⇒LLL= vμ ⇒⇒⇒	OLO=e+	
LOL⇒LRL=v̄e	ROR=gluon	

⇓

gluon from the sea
⇑

leptonic processes

$\mu- \Rightarrow e- + \bar{v}e + v\mu$
$d \Rightarrow e- + \bar{v}e + v\mu$

d

ORO⇒ORO= e-
LOL⇒LRL= v̄e
LOL⇒LLL= vμ

Some electromagnetic decays.

$\pi o \Rightarrow \gamma + \gamma$ **ORO+OLO anihilation⇒1x γ**
$u\bar{u} \Rightarrow 2 \gamma$

ū   u

ORO⇒OOO sea	OLO⇒OOO sea⇒γ =uou
LOL⇒UOU ⇒γ	ROR⇒OOO sea

$\eta o \Rightarrow 2\gamma$ **ORO+OLO anihilation⇒1x γ**
only: $\bar{d}d$ decays⇒ 2γ
so first: $\bar{s}s \Rightarrow \bar{d}d$.

d   d̄

ORO⇒ OOO sea	OLO⇒⇒OOO sea⇒γ =uou
LOL⇒LOL sea	ROR ⇒ROR sea
LOL⇒UOU=γ	ROR ⇒ROR sea

$\Sigma o \Rightarrow \Lambda o + \gamma$
$uds \Rightarrow sdu + \gamma$ $d \Rightarrow \bar{u} \Rightarrow d$

d ⇒   ū ⇒   d

ORO		ORO		ORO
LOL	⇒	LOL	⇒	LOL
LOL⇒UOU=γ		from the gluon sea ⇒		LOL
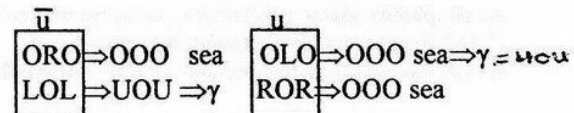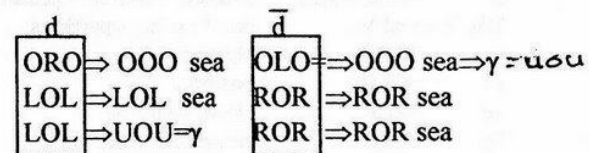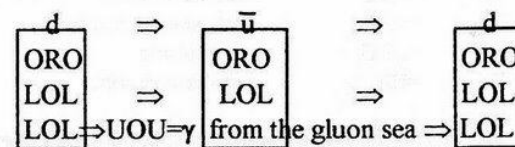
Some strong interactions.

$\Lambda++ \Rightarrow p + \pi+$: $uuu \Rightarrow duu + u\bar{d}$
⇑———⇑
$d\bar{d}$ pair production from the Higgs and gluon sea

$\Delta o \Rightarrow p + \pi-$: $ddu \Rightarrow duu + d\bar{u}$
⇑———⇑
$u\bar{u}$ pair production from the Higgs and gluon sea

$\Delta o \Rightarrow n + \pi o$: $ddu \Rightarrow ddu + u\bar{u}$
⇑———⇑
$u\bar{u}$ pair production from the Higgs and gluon sea

The double spin of Fermions.
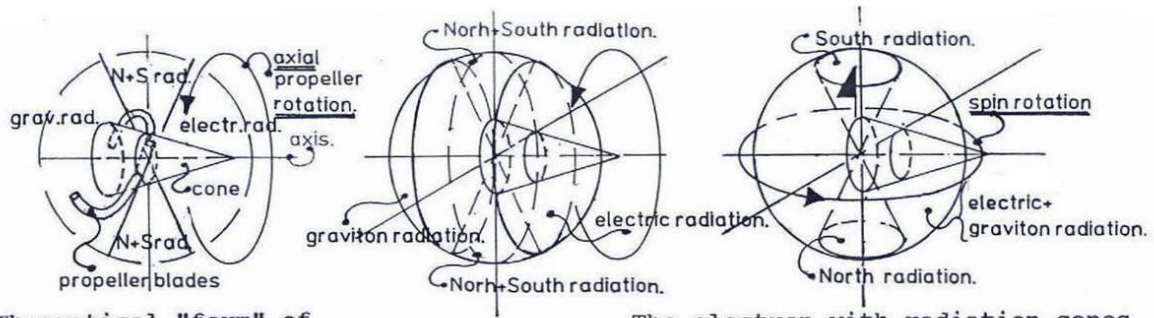
Theoretical "form" of the electron, with radiation cones due to axial rotation.

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

The "Eigen energy" distribution around the spinning Fermion propeller, is supposed to come in cone form. The Fermion spin and radiation is the product of a scattering process with oscillating Higgs vacuum particles. As a result, the Fermion has a double spin around two polar axes. This is supposed to be the origin of a dipole Magnetic field with North and South monopole photon radiation and the circular distribution of graviton and electric radiation. In addition it must be stated that all Fermions are entangled with their object /subject particle far away.

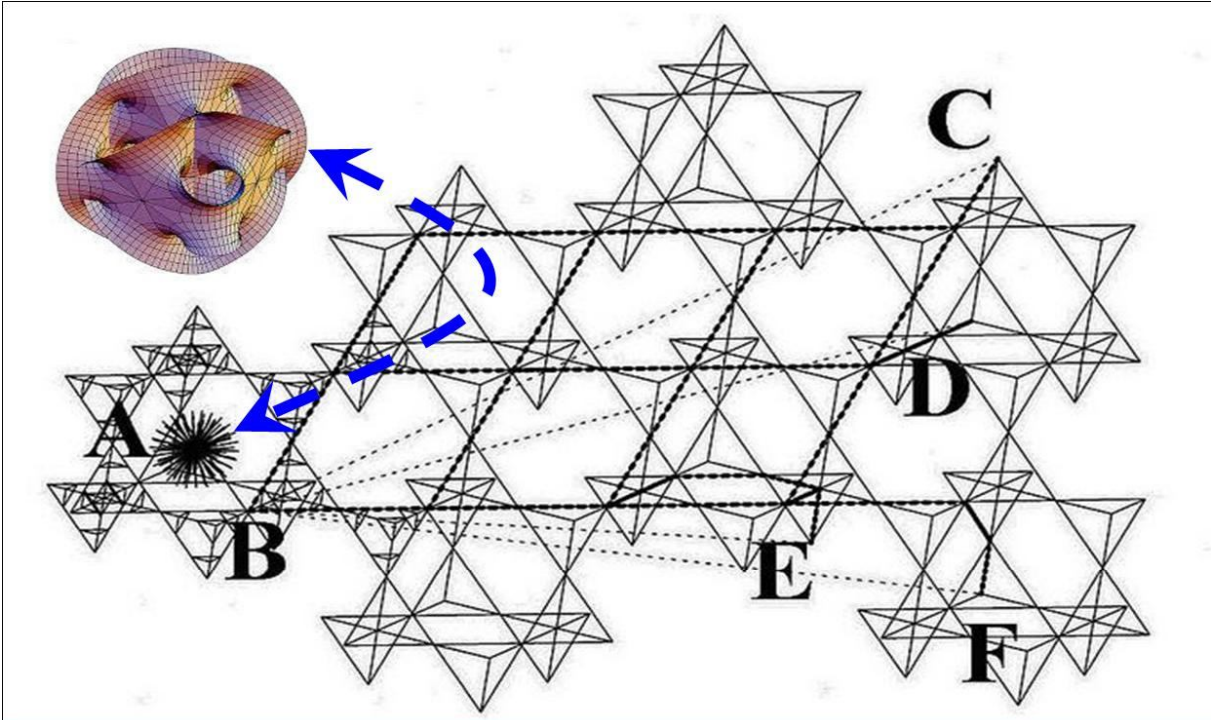**Figure 8, double spin of Fermion and Quark propellers.**
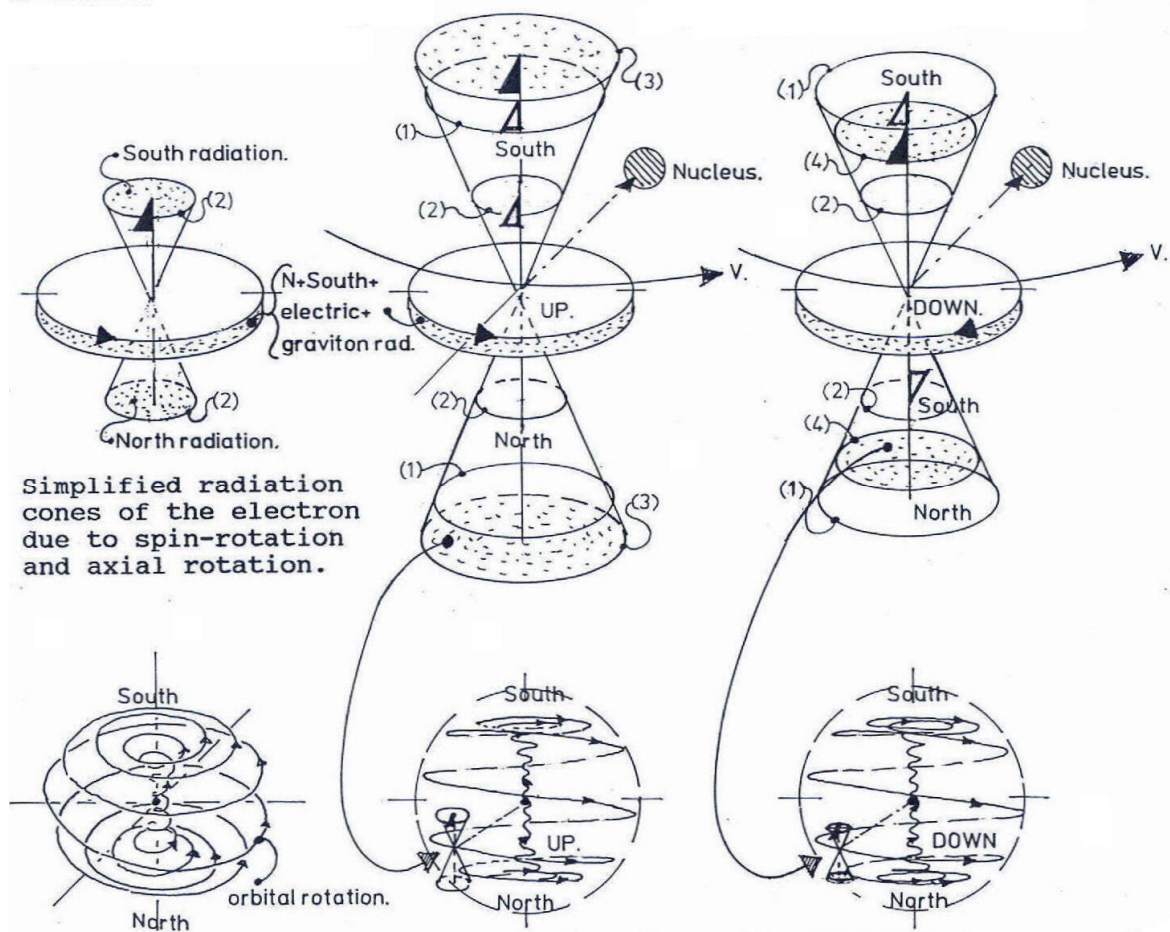
Simplified radiation cones of the electron due to spin-rotation and axial rotation.

Figure 9, The difference between up and down Atoms.

Some Calabi Yau relation presented in the Q-FFF model.

The Calabi Yau manifolds are not preserved for the oscillating Higgs vacuum lattice (as suggested below), but for all Fermion dual axis rotation. (as suggested above). The vacuum Higgses are linear oscillating in a tetrahedron lattice for propelling the Fermion propellers. According to Quantum FFF Theory. .
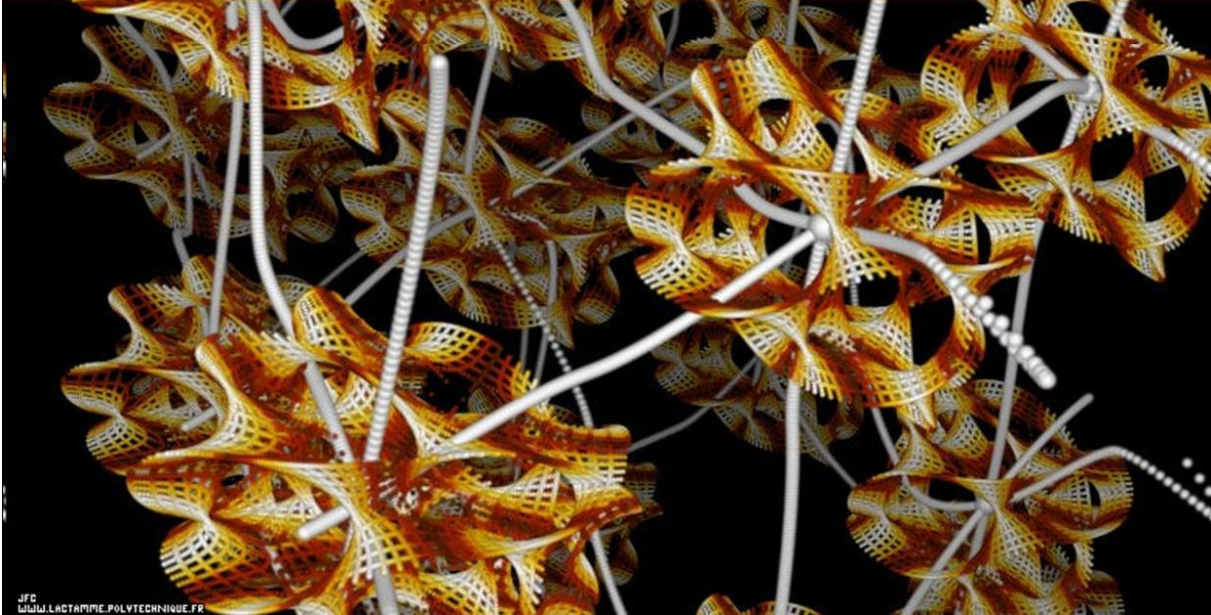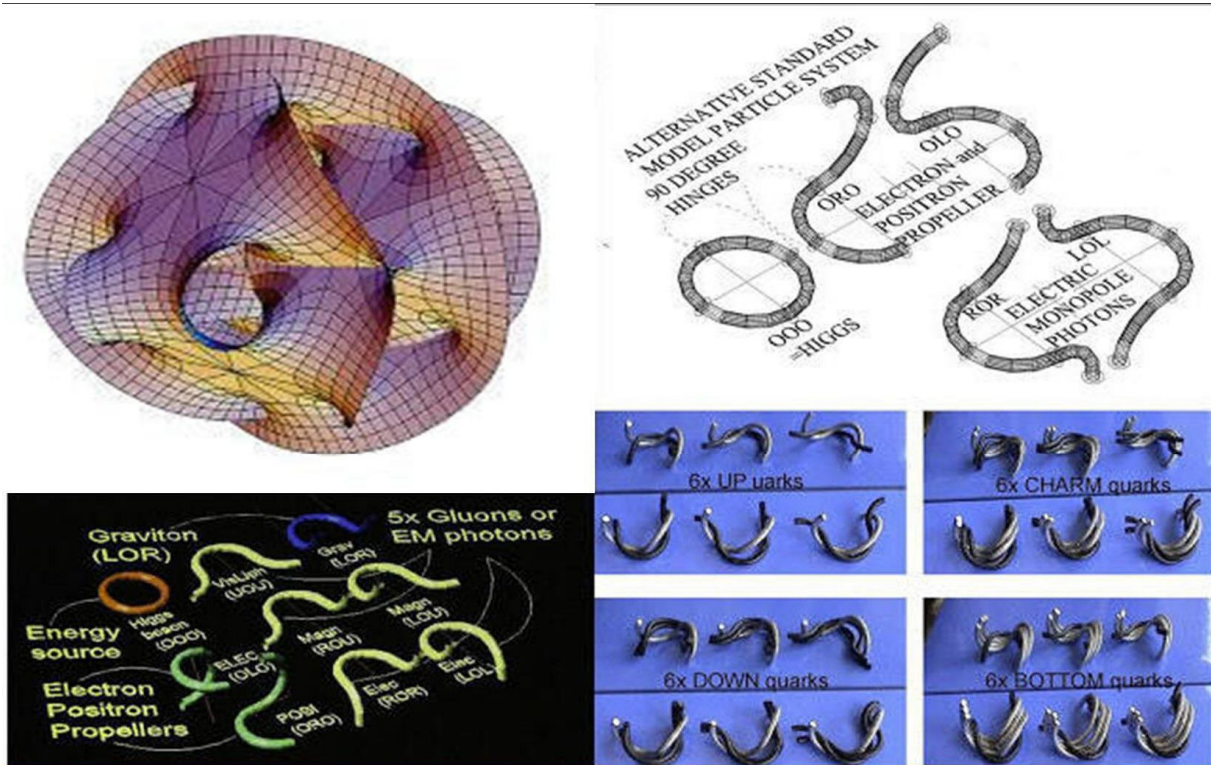
Figure: 10.

Calabi Yau structures by the dual axis spin of Fermions, according to Quantum FFF Theory.
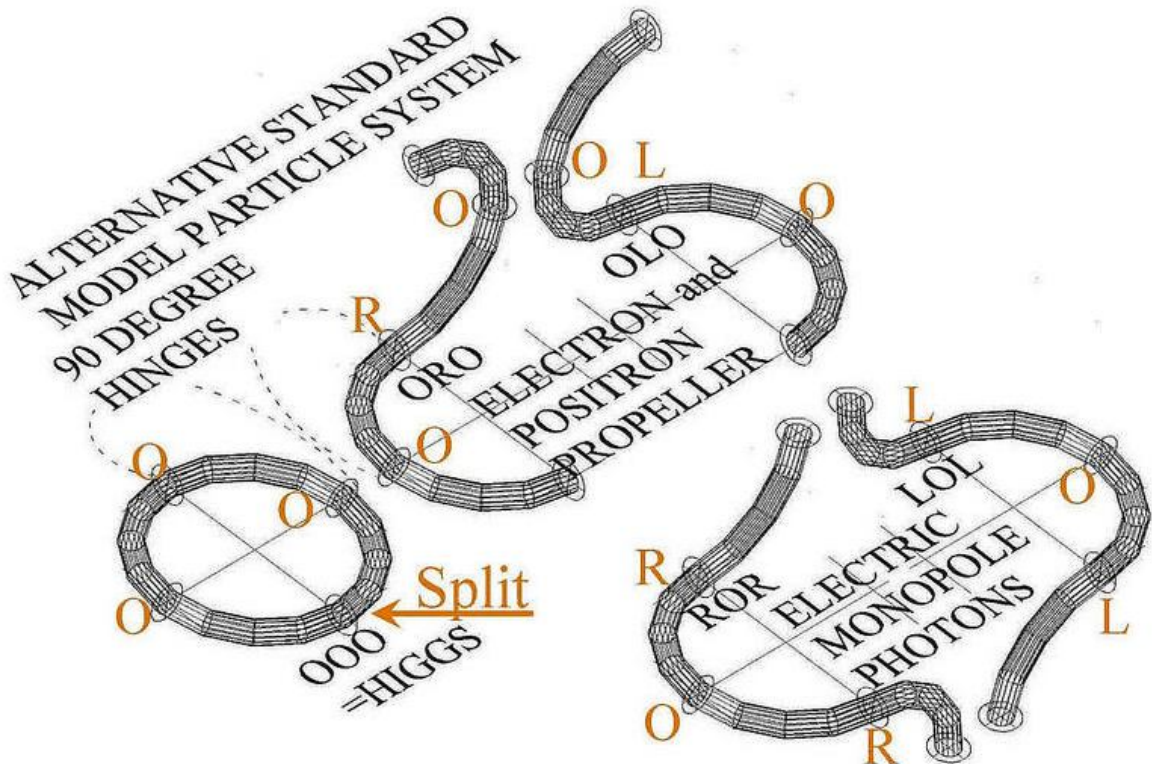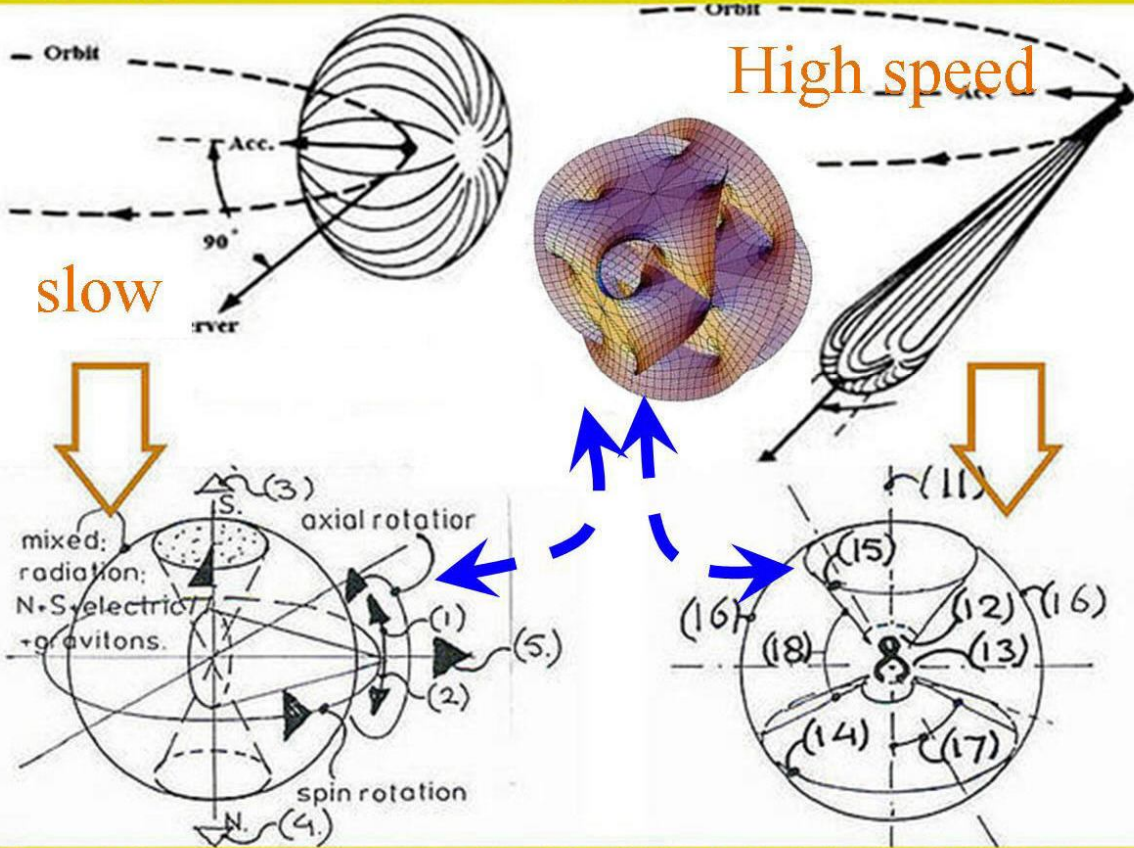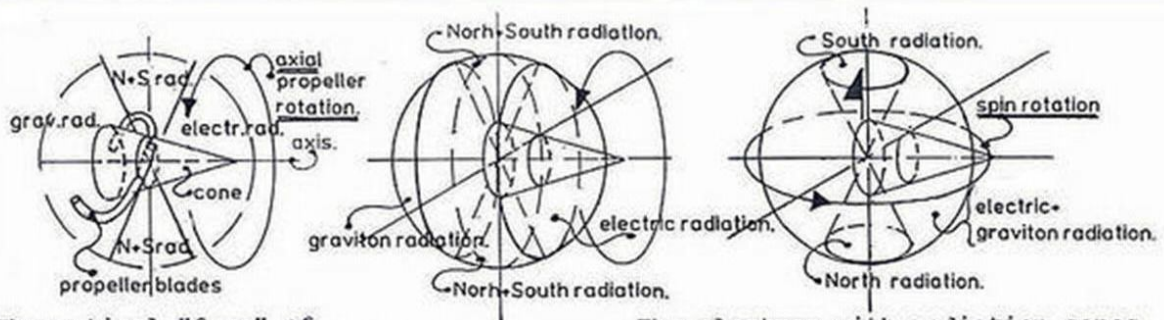
Figure: 11.

Figure: 12.

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

High speed

slow

mixed:
radiation:
N+S electric
+gravitons.

axial rotation

(3)
S.
(1)
(2)
(5.)
spin rotation
N.
(4.)

(11)
(15)
(16)
(12) (16)
(18)
(13)
(14)
(17)

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 preferently pointing into direction (11) with photon cone focussing into the opposing vacuum direction (15) and the Spin rotation has gone. (Calabi Yau)

N+S rad.
grav.rad.
electr.rad.
axial
propeller
rotation.
axis.
cone
N+S rad.
propeller blades

North-South radiation.
graviton radiation.
electric radiation.
North-South radiation.

South radiation.
spin rotation
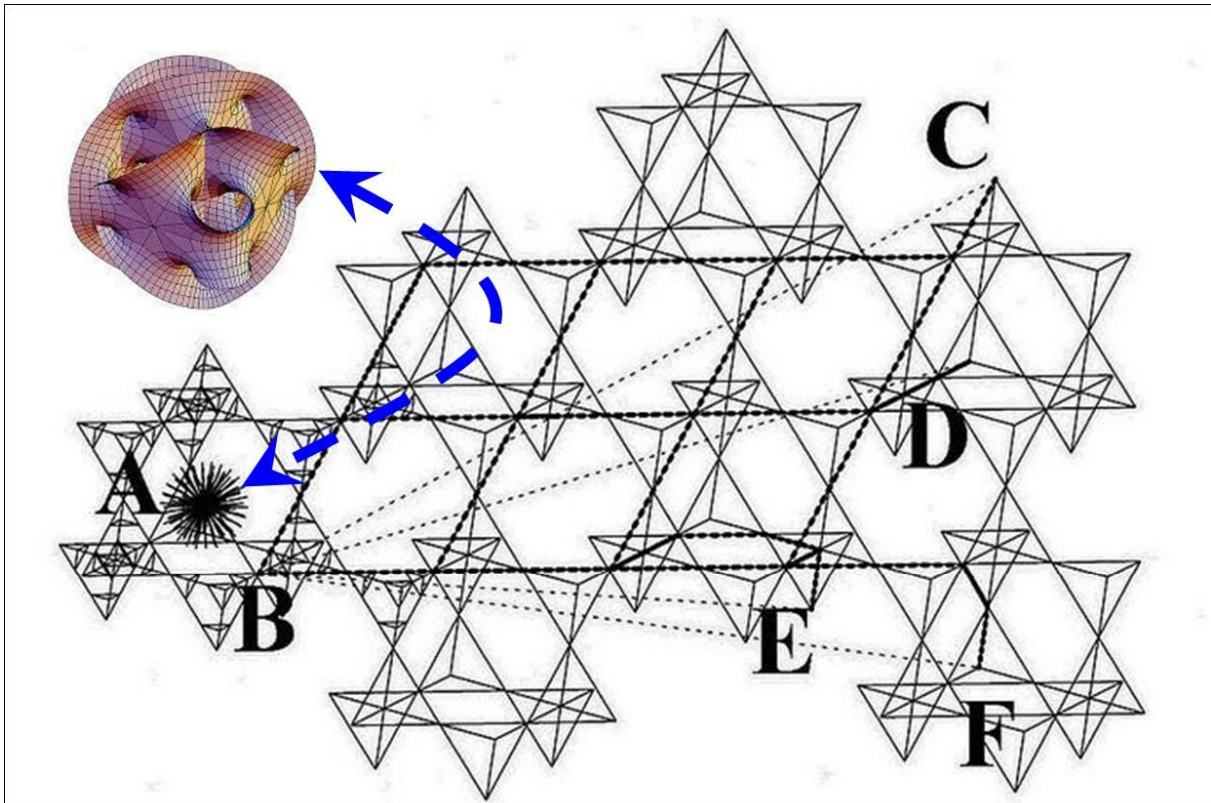electric+
graviton radiation.
North radiation.

Theoretical "form" of
the electron, with radiation
cones due to <u>axial</u> rotation.

The electron with radiation cones
due to circular or "spin" rotation
and <u>axial</u> rotation.

Figure: 13.

Photon trajectories through the tetrahedral oscillating Higgs vacuum lattice. (Acc. to Quantum FFF Theory)
A: a real shaped Photon is created by Higgs collision with a dual axis spinning (Calabi Yau) Fermion propeller.
B: that Photon transferes CODED form information (monopole photon info) and direction information into one Higgs particle which transferes this information by mutual Higgs collisionary oscillations through the vacuum in one specific direction. C,D,E,or F.
I: Only magnetic photonic information (2x : North and South) are subject to curvature by an undisturbed symmetric oscillating vacuum
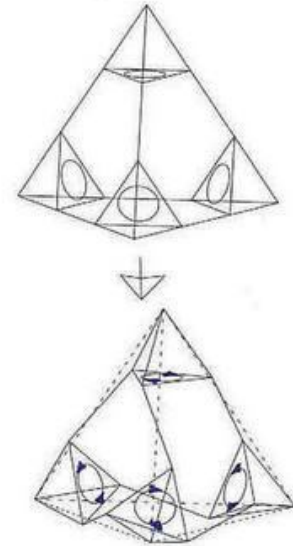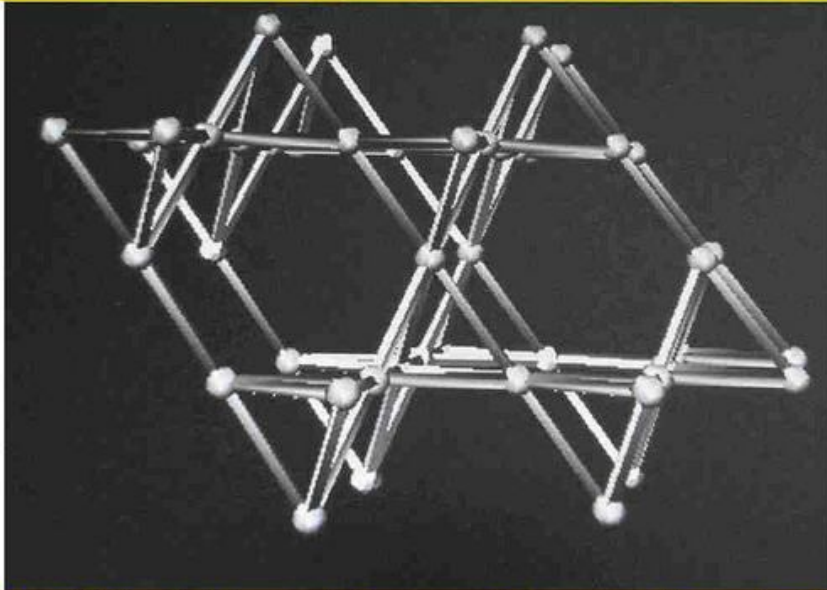II: Local Anti-Symmetric Oscillating vacuum Frames are influenced by massive objects like the earth and responsible for semi relativistic effects.
III The vacuum lattice has helix- or chiral quality being the origin of our material universe.

Figure: 14.

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

Symplified 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.
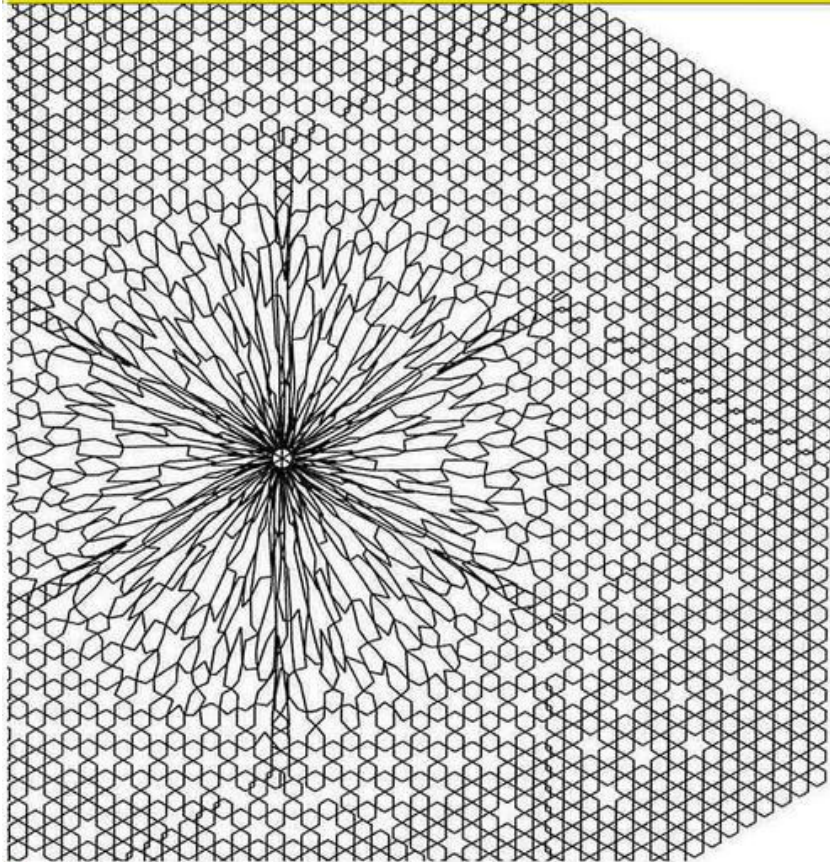
Black holes EAT the vacuum lattice with the oscillating Higgs particles,
So, the vacuum lattice structure around a black hole could be represented like this.
As a result, the near vacuum is thinner or diluted, it has holes, which could be the origin of the Universal HUBBLE redshift.
By contrast, my new 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: 15.

References:

[1] viXra:1102.0052 *27 Feb 2011*
Construction Principles for Chiral "atoms of Spacetime Geometry".
Authors: Leo Vuyk
Category: Quantum Physics
[2] viXra:1102.0054 *27 Feb 2011*
Atomic Nuclear Geometry Based on Magic Number Logic.
Authors: Leo Vuyk.
Category: Nuclear and Atomic Physics
[3] viXra:1102.0056 *28 Feb 2011*
Experiments to Determine the Mass Related Lightspeed Extinction Volume Around the Earth and Around Spinning Objects in the Lab.
Authors: Leo Vuyk.
Category: Relativity and Cosmology
[4] The New God Particle and Free Will.
By Leo Vuyk, LuLu publishers, 2008.
ISBN number 978-1-4092-1031-3