INTRODUCTION TO PSEUDO VECTOR THEORY OF THE MEDIATING MEDIUM FOR DARK MATTER

J.W.A. Zwart

Abstract
The dark matter mediating medium for the pseudo vectors carries by definition four independent vector cells of the components for acceleration, spin and precession making up twelve combinations of pseudo vectors. The conjugated medium at the absolute zero energy state consists of solely pseudo e-neutrino triplets as a dynamic non destructible equilibrium in cubic pyramid symmetry. At a relativistic thermodynamic level of electron energy the pseudo vector medium consists of pseudo μ-triplets in cubic symmetry mixed to triplet ensembles of τ-pseudo triplets in cubic symmetry together guided by the pseudo e-neutrinos. Both the μ- and τ- triplets carry always the rotations for τ-triplets perpendicular to the μ-triplets suggesting orthogonal cubic pyramid symmetry. The top in equilateral pyramid symmetry of equal dimension for the base triangle in the cubic symmetry provides the dynamic electric charge in one polarity following the acceleration vector component of the pseudo vector cells. The time intervals for the electric charge dynamics give the sequential conjugated inversion shifts along the rotation axis of the height of the equilateral pyramid. Common sense reasoning of some scaling calculations shows the validity of the statement in this abstract explained in the paper below.

Summary
The supposition is that the pseudo vector triplet is composed from three pseudo vector cells defined in par 1. Two cells with equal acceleration components and one cell with opposing equal acceleration. The three cells all have the same spin vector component as onset. The pseudo triplet dynamics always generates overall spin by changing the positions in the triangle geometry. Always the one acceleration component converts continuously from the spin component into precession jumping from position to next position. The definition is valid for matter and antimatter.

The electron or positron dynamic state is defined by a pseudo μ-triplet in equilateral pyramid symmetry maintained by conjugated pseudo τ-triplets in dual opposing cubic pyramid symmetry, opposing pseudo acceleration components to maintain spin integrity. The dynamic resonance comprises the combination of the product of 16 shifts along the equilateral pyramid axis and nine point locations rotations of the base triangle making up the 144 conjugated inversion shifts.

The proton or anti proton dynamic state is given by a pseudo μ-triplet and a pseudo τ-triplet residing together in the base triangle of dual opposing cubic symmetry determining the conjugated state. This conjugated cubic dynamic state is embedded in an equilateral pyramid symmetry generating time intervals of electric charge in one polarity following the main rotation axis along the height of the equilateral pyramid. The conjugated base triangle undergoes a product of sixteen shifts in axial direction and 3 x 36 rotation locations giving 1728 sequential time shifts plus the one for the equilateral symmetry making up 1836 integer shifts, actual the conjugated inversions generating also spin for inertia. Apparently these time shifts can be associated with the unit electron mass displacements.

For better understanding, the axial conjugated inversions involve triplet states of μ- and τ- pseudos together. These compromise eight paired conjugated inversions. One triplet of μ- and a τ-triplet ensemble of 3x 36 = 108 rotation conjugated inversions compromising 4 x 3 x 3 x 3. The four involve axial inversions and the 27 are the actual rotations of the combined triplet state of the paired base triangle for the six conjugation positions. The rule is axial inversions are work and inversion of the base triangle are rotation.

Elaboration on the electron of the 144 conjugated inversions, makes 16 axial inversions for and 9 pseudo cubic μ-triplets of rotation. These sixteen involve paired pseudo τ-conjugated inversions nullifying each other. The axial inversion is a node displacement along the height of the equilateral pyramid symmetry.

The equilateral pyramid height to base triangle of unit one is $\sqrt{2}/\sqrt{3} = 1/3\sqrt{6} = 0.8164965$. Divide by four to get the node interval of 0.2041241 with reciprocal 4.898979. Inversion gives return to the base 5 /4.898979 = 1.20620 ratio giving the 5th node and it points also to a ratio of 1.020620^3 x 1728 = 1837.137 (H atom resonance) in relation to the electron mass as a unit. In cubic pyramid symmetry is the height for the same base triangle $1/6\sqrt{6}$ involving two nodes. A paired cubic node returns to base explaining the conjugated inversion of four nodes. Due to the supposition of ½ c momentum for the medium of pseudo e-neutrinos an additional factor of two is needed. So the eight nodes inversions are normal and eight for the conjugated states. The contraction of eight inversion determines a real pseudo τ-quartet. Both eight positions in the nullification of reflection reduce to four giving the real positions for a τ-quartet.

In the electron or positron resonance the sixteen nodes for the pseudo τ-triplets are in compensation. In Higgs compression the sixteen nodes add up giving a real quartet for the axial conjugated inversions determining the anti pseudo τ-quartet. Apparently to be combined by a 'normal matter' state of 1728 m_e . Similar for anti-matter states. See par 6 for elaboration.

Consequently one can understand why pseudo τ-triplets can survive in the conjugated triangle base plane, the six point locations for the τ-triplets and pseudo μ-triplets are sometimes allowed together or without the μ- triplet. The axial nodes involve the work due to the definition of the acceleration component for a pseudo vector cell generating the dynamic electric charge polarity. The rotations dynamics generate inertia provided the pseudo e-neutrino medium passes sequentially to the pseudo μ-triplets and τ-triplets of right angles between them and together with the axial work, a perpetual equilibrium with the pseudo e-neutrino under some condition is possible with the passing the pseudo e-neutrino triplets acting as a brake. The proton and electron or anti state determine the perpetual resonance in the pseudo vector mediating medium. All other resonance states are non stable or slowly decaying like the neutron or anti neutron or Tritium.

The pseudo neutrino at c-velocity or the anti state is a relativistic rest frame composed of a normal and conjugated pseudo cell as a pair. The conjecture is that the paired cubic conjugation symmetry is contained in opposing non destructive equilateral symmetry both based on pyramid geometry. In general the random opposing equilateral symmetry is the representation of any photon wavelength determining empty space based on Planck's parameters. Without Planck's parameters the definition of the four independent pseudo vector cells cannot exist, opposing each other completely. The neutrinos at c velocity are embedded in the opposing equilateral photon symmetry. Ref 1

See figure, page 4 of the midplane cross sections for the equilateral and cubic pyramids.

All factors of two ($2 = \sqrt{2} \times \sqrt{2}$) in the rest mass scaling are due to dual conjugation inversions of $½\sqrt{2}$ c velocity.

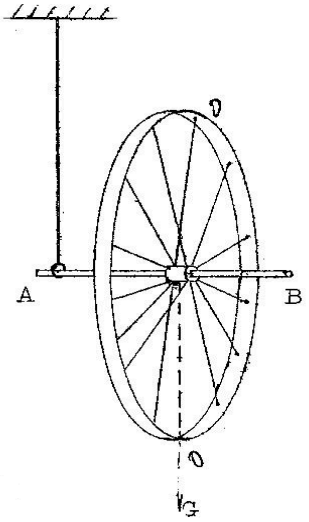
Headings of Paragraphs

Par 1 Introduction
Par 1.2 The four independent pseudo vector cells
Par 2 Pseudo vector cell properties. Half c-momentum for propagation of the mediating medium of pseudo vector cells.
Par 2.1 The pseudo vector engine of the dark matter in universe
Par 3 Cubic and equilateral pyramid symmetry
Par 3.1 The c-mode particle description
Par 3.2 The neutron
Par 4 Proton/ electron to e- neutrino medium assessments. Or the anti-matter states
Par 5 The massive Bosons and Higgs' group resonances. Inversions of pseudo e-neutrinos triplets
Par 5.1 Summary
Par 5.2 See definition neutrinos at c in the summary of this paper. Neutrino energies
Par 6 Discussions of quark stacks of quartets/triplets and lepton stacks

Par 7 Spin complications for the base triangles of conjugated of μ- and τ-pseudos
Par 8 Proof for the existence of a generalized H-atom for dark matter configuration for all possible atoms
Par 9 Appendixes

Par 1 Introduction

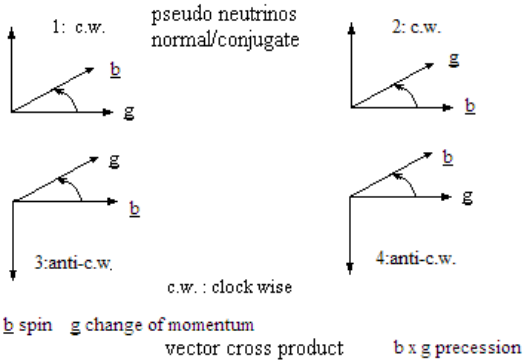
Par 1.1 Definition of the pseudo vectors



If at the mass centre of a spinning inertia wheel the force of gravity pulls, shown as G, then the axis AB gives a precession or AB rotates around the hanging wire. Without friction this precession is continuous. Is the spin rotation the opposite, the precession turns the other way.
This is the definition for the dark matter pseudo cells.
A pseudo vector cell has three perpendicular vector components The spin, angular momentum b , the acceleration force g and the precession component p . These components are different from each other but have unit vector length. Normal summation between the components is not allowed and is subjected to quantum mechanical exchange.

By definition no electromagnetic exchange between the dm pseudo cells is possible. It makes the dark matter medium dissipation free, determining that the ultra light or ultra fast medium surrounding matter is perpetual.

Par 1.2 The four independent pseudo vector cells



In the figure the three vector components for the four independent pseudo cells are shown. Two cells have clock-wise spin components with opposing acceleration vectors. The other two have anti clock wise spin with opposing accelerations.

The ASP is the hypothesis that acceleration is followed by spin giving the precession as a vector cross product.

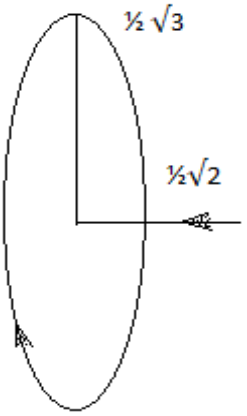
Boolean logic dictates that a pseudo vector cell in three dimensions is composed of energy which should be conserved by above definition (lossless) meaning a fourth component is needed which is the energy component to time generating time energy units or quanta. Consequently the ASP hypothesis is excluded from time but still the time energy quanta have to be real.

The dark matter mediating medium is a rarefied pseudo vector state compromising all the four independent vector cells as a symmetry group.

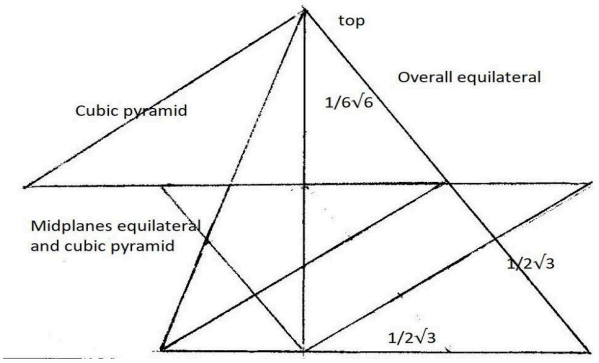
Par 2 Pseudo vector cell properties. Half c-momentum for propagation of the mediating medium of pseudo vector cells.

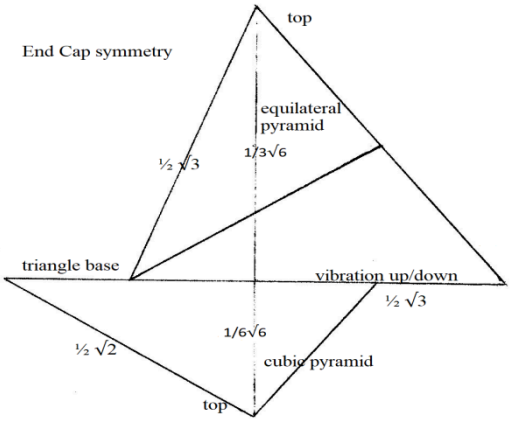
There are three kinds of pseudo vector cells of four matter 's. Namely the e-pseudo neutrinos, μ-pseudo neutrinos and the τ-pseudo neutrinos .The pseudo neutrinos can only reach a momentum of half the light speed . The LIGO experiment (2017) showed that ½ c is correct as a supposition.
One or two perpendicular pseudo cells of the same spin reach after acceleration the ½√2c end velocity. giving the mean momentum of ½c per cell. So pseudo neutrinos have a maximum relativistic energy of $\sqrt{4/3} = 1.1547\ m_o$ according to $m/m_o = \sqrt{\{1/(1-\beta^2)} = \sqrt{4/3} = 1.154700$ for $\beta = ½c$.

Par 2.1 The pseudo vector engine, dark matter in universe
Dark matter energy in universe 25% radial and 75% rotational
or 100% dm but to be corrected for 4% charged matter.



Acceleration one direction to end velocity ½√2 c (unit mass of medium) then energy: s a = ¼ c^2 = ½ (½ √2)^2
Acc. two directions: ¼ c^2 + ¼ c^2 = ½ c^2
Acc. three dir.: (¼ + ¼ + ¼)c^2 = ¾ c^2 .Overall energy: (¼ + ¾) c^2 = c^2 dark matter. For dark matter in general is valid that there are two directions: the cubic propagation of energy resulting in rotation energy and the acceleration due to gravity in solely radial direction because the mass centre for gravity in a macroscopic mass is always directed to a point for the non relativistic ultra fast dark matter medium. carrying also gravity.
Note: Rotation energy: (½√3)^2 c^2 = ¾ c^2 m/m_o = 2 for internal acceleration of atoms.
Work by charged matter: ¼ c^2 .Dark energy cannot exist and it is replaced by the rotation of the dm mediating medium generating a centripetal force, the outgoing acceleration in our cosmos.





Par 3 Cubic and equilateral pyramid symmetry

Par 3.1 The c-mode particle description
The c-mode is in contrast to the ½ c-mode representation of particles which is valid for the mediating medium of the conjugation based on the hypothesis of pseudo vector e-neutrinos of ½c-momentum due to the cubic pyramid symmetry of the medium.

The c-mode is as follows:
The two figures above represent the mid planes of a cubic as well as an equilateral pyramid with the same basic dimensions of equilateral triangle base shifted 30^o degrees. The height of the equilateral pyramid is twice that of the cubic one. The cubic pyramid follows the Cartesian layout of the definition of the pseudo vector cell having 90^o angles as the top of the cubic pyramid. In fact this configuration is ideal for the fast tenuous light dark matter medium. It should contain all the four independent pseudo vector cells, always interacting to each other without destruction having long uncertainty wavelengths of something of the square root of the electron Compton wave, 10^{-7} m or 0.1 μm.

This dm medium of max ½ c momentum acts as the conjugation passing through the triplet configuration of electron and proton. For the electron the left figure is valid. The equilateral part contains a μ-triplet of three μ-pseudo's with angular momentum of each 1/3√3 m_e rest mass and of a quadrate of 1/3m_e energy, while 9 times 1/3√3 = 3√3 carries the angular momentum with the energy of the triplet then having the electron rest mass. The base triangle can be 16 times activated in which per triplet a triangle changes position making up a total of 144 positions in the base. Keeping in mind the

top of the cubic then two times eight positions for cubic exchange or four times four up and downs accelerations acting as the electric charge for 'photons' dynamics. The imaginary state of conjugation reflects as the four τ-pseudos of zero energy of 4 x 34.259 = 137.036 m_e, the reciprocal of the electron fine structure. It is always present around the electron as unit rest mass. However the description of the proton learns differently. The 'charge photon' dynamics has to embrace the two conjugated cubic symmetries.

For the proton the figure on the right is somewhat better to understand. A stack of triplets of τ-pseudos representing 16 triplets of 3 x 34.259 = 102.777 m_e per triplet. Each τ-triplet is linked to a μ- triplet of the nine rotation exchanges of (1/3√3) momentum. So $3(\sqrt{3} + 8.9492\ 10^{-3}) = 5.223\ m_e$ giving the 108-triplet mass. 102.777 + 5.223 = 108 and 16 x 108 = 1728 m_e This rest mass for the proton is the quark stack which is conserved up to Higgs' energy. Minimum energy breaks down the stack giving the resonance states for the π- mesons and the muon lepton, see par 6.

This neutral quark stack cannot exist because of cubic symmetry in opposing acceleration directions. It conforms to the balanced energy of conjugated cubic and equilateral geometry as the above left figure shows. So the end cap configuration shown in the right figure is a requirement. The end cap geometry is equal to the stack triplets also consisting of a rotation triplet combination of μ- and τ-pseudos (τ-pseudos follow μ-pseudo triplet locations). The integer 1836 m_e determines the rest mass of the proton and the end cap is the 17th triplet determining electric charge dynamics with respect to the cubic μ-triplet symmetry conjugation.

In c-mode the base triangle is equilateral in three points. It halves the dimensions in the ½ -c conjugated medium. However the conjugated base triangle is 30° shifted to the c-state. Now apply the 16 displacements along the rotation axis to the positions of the c- triangle. Counted as axial overall work due to acceleration in opposite directions for conserved 'spin'.

Position (c-mode): (1) (2) (3) of the triangle.
Then 4 5 6 7 8 9 10 11 12 13 14 15 16

The last is the return to the position (1). Consequently the sequence of the 3 to 4 ratio for the 9 rotations and 16 displacements, and the counting can start again all over giving the 144 combinations. In energy the difference between 144 – 137.036 = 6.946 = $4(\sqrt{3} + 8.9492\ 10^{-3})\ m_e$ representing the option of rotation for the quartet locations, mostly along the height of the midplane . See par 6 etc.

However the ½ c-mode of the conjugated cubic medium requires that the count of 16 triplets is split into eight conjugated triplets of τ- and μ-state and eight of normal state. It means that the τ- and μ-triplets can be a paired zero state unless pushed in an equilateral pyramid frame. It is the paired conditions for all sub atomic particle states, leptons to baryons.

The above explanation shows that the electron and proton follow the same time sequence. The electron has conjugated medium energy compensation while the proton cumulates the medium energy of 17 x $8.94\ 92\ 10^{-3} = 0.15214\ m_e$. The gap energy of $8.9492\ 10^{-3}\ m_e$ as the combination of axial work and rotation per triplet is compared to that of the electron of ($1 /137.036 = 7.29735\ 10^{-3}$). See the next paragraph, par 4, for accurate calculation. It also shows the existence of time sequence strings for the particles and that the group symmetry is valid because integers are used in counting the exchanges.

Par 3.2 The neutron

To complete above explanation, it is possible to nullify the proton configuration by adding a negative electron, opposing acceleration, same spin but nullifying the electric charge point dynamic having on each side, top to top, of the quark stack the equilateral pyramid symmetry. Only the electron side along the axis has a single μ-triplet. The definition of charge polarity comes from the opposite acceleration direction belonging to the equilateral symmetry. This is the c-mode idea. Then the conjugated accelerations, cubic state (½ c-mode), the proton end cap, μ-part, and the electron μ-triplet, nullify each other but the rotation energy doubles up. The tops on each site have to be co-rotations. However the co-rotation is a counter rotation to the τ-pseudos triplets. The spin is internally conserved but the

direction of the rotation axes are opposite to each other. Using the gap energy of 8.9492 10^{-3} then the μ-triplet has 5.223 m_e rotation while the rest mass difference of neutron and proton is roughly

1838.684 – 1836.153 = 2.531 m_e (times 2) is 5.062. Difference 5.223 – 5.062 = 0.161 m_e

0.161 /8.94992 10^{-3} = 17.999 meaning a stack of 18 triplets.

A more accurate calculation gives 17.93 giving less than 18, in contrast to a guess of the 19 integer. See Par 4.

In summary, the dynamic electric charge induction, contraction to a time interval at the onset of a time string, can only be formed with end cap equilateral symmetry. The so-called conjugated electric charge suggested by the cubic pseudo vector state, four options, cannot exist due to cubic height being half that of the equilateral one. It is the paramount explanation why matter and anti matter only appear into two matter states and not four. Fermi spin as the inertia of the particle is synchronous to the charge zero point, the 'frozen state', for particle observation.

Par 4 Proton/ electron to e- neutrino medium assessments. Or the anti-matter states

Used the Co Data base (Ref 2) or Wikipedia to give the accurate proton and electron mass.

Proton: 1.672621926 10^{-27} electron: 9.109383714 10^{-31} kg

Ratio: 1836.15267743 m_e 0.15267743 /17 = 8.981025 10^{-3} m_e

For electron: 8.981025 10^{-3} /1.062500 = 8.45273 10^{-3} 17/16 =1.062500

1.062500 x 1728 = 1836 integer and 1 /137.036 = 7.297352 10^{-3}

(8.9492 – 7.297352 = 1.65185)10^{-3} (8.45273 – 7.297352 = 1.15538)10^{-3}

Difference: (1.651848 – 1.15538 = 0.49647)10^{-3}

The gap energy of 8.9492 10^{-3} is with respect to 108- triplet.

The ratio : (1.65185 /1.15538) 10^{-3} = 1.42606 /√2 = 1.01095 = 1.003636^2 =1.007286

The factor √2 shows the max velocity of ½ √2c for the gap energy.

8.9492 /8.981025 = 1 /1.003556 product: 1.01095 /1.003556 =1.007368

While (1+ 1 /137.036) = 1.007274. It is guessed as the inversion situation by the mediating medium. The factor √2 depicts the acceleration needed for the cumulative effect in energy by the medium compared to the compensation action by the electron. The factor √2 for the e-neutrino triplets reach inversion acceleration to the end velocity of ½√2 c. The accumulation of triplet work energy explains the difference of compensation for work energy of the electron.

The assessment of the e-neutrino pseudo state for the triplets in electron

1 /137.036 = 7.297352 10^{-3} /144 = 5.067605 10^{-3} x 0.5110^6 = 25.89546 eV

Nine rotations and sixteen axial steps overall energy : 9 + 16 = 25 but also meaning a multiplication of 16 is for the rotation or 144 times .

The energy per triplet internally is 1.035818 eV divided by 25

Suppose that the value of 1.15533 10^{-3} eV belongs to a pseudo e- pseudo triplet:

(1.15538 / 1.035818) 10^{-3} = 1.035209 /1.035818 =1 /1.000587

1.15538 /3 = 3.85127 x √2 = 0.57769 1 /√3 = 0.5773502 ratio: 1.000587

Confirming pseudo e-triplet as exchange base for electron expelling the these triplets at √2, the maximum acceleration for the reciprocal of conjugation the pseudo e-neutrino medium.

Par 5 The massive Bosons and Higgs' group resonances. Inversions of pseudo e-neutrinos triplets

The previous paragraphs Higgs break down was mentioned as the ultimate contraction for the dark matter pseudo vector medium. It leaves further explanations of mesons and leptons to par 6. In this paragraph the scaling calculations are given while in par 6 a more explicit understanding of the physics follows.

Take the observed data rest mass for the boson Z^o and the charged Boson $W^{\pm}$ and Higgs given in GeV or a billion electron volt per c^2. The values are perhaps not up to date but sufficient here.

Z^o = 80.398 $W^{\pm}$ = 91.1876 Higgs 126 GeV

Divide by the electron mass of 0.5110 MeV = 5.11 10^6 eV

1.57 335 10^5 1.78 449 10^5 2.46575 10^5 m_e

Write these values as products to be related to the quark block or stack of 1728 m_e

90.0503 x 1728 103.2695 x 1728 142.6940 x 1728 m_e

For the bosons is valid:

Z^o boson τ- neutrinos is 30.33 m_e making 3 x 30.33 = 90.99 anti matter triplet with respect to the normal matter state of the quark block, not an axial inversion. The neutral pseudo τ-triplet is smaller in size severing the μ-linkages in the 108 combined μ- and τ- triangle planes of the 1728 stack. (τ-triplet always has a right angle to the μ-triplet).

$W^{\pm}$ boson 103.2695 a charged anti matter triplet to basic τ-triplet of 102.777 m_e with respect to the normal matter state of the quark block , no axial rotation. The anti pseudo μ-triplet generates work of a pseudo e-triplets of 1 – (103.2695 – 102.777) = 0.4925 m_e. Again the anti τ-triplet smaller in size severs the μ- to τ-linkages.

Higgs 142.6940 – 137.036 = 5.6580 /4 = 1.41450 m_e close to √2. The μ-state for the electron in max acceleration of ½ c- momentum. So 142.6940 suggests an anti matter τ-quartet for axial inversions with respect to the normal matter quark stack. The τ-pseudos quartet of 137.036 m_e in an excited state driven by the maximum velocity of the pseudo e-neutrinos. According to the explanation in the previous paragraph, the smaller energy anti matter state of the pseudo anti τ-quartet passes through the matter quark stack, along the direction of the pyramid rotation axis of the stack cutting up the μ-τ- linkages for the base triangles (see par 7).

Obviously the above is valid as matter/ anti matter cross symmetry for the above three particles.

For Higgs is valid a substitution resonance inversion to the e- neutrino medium:

1 /137.036 – 1/(2 x1728) = 1 /142.6940

Make the dividing of 142.6940 x 1728 /0.511 10^6 = 1 /(2.073684 /2) = 1 /1.036842 eV. In other words it is the complete dissociation of the contracted Higgs into e-neutrino triplets of matter and anti matter. Compared to the derived pseudo triplet in par 4: Triplet 1.036842 /1.035818 = 1.000988.

Without trying the find the other resonance substitutions the triplet state is not yet confirmed.

1 /137.036 – 1 /(2 x 1604.175) = 1 /143.1502 with $(137.036)^{3/2}$ = 1604.175

Multiply by 2 gives 286.2874. It determines the state for Higgs-2 of 286.2874 x 1728 = 4.947046 10^5 m_e .Higgs-2 is distinct from Higgs-1 above .

Higg-2 can be derived as a dimensionless ratio from:

$(m_{pl} /m_e)^{1/4}$ = 4.947046 10^5 .Then close to 12^5 = 2 x 144 x 1728

Divide again Higgs-2 by the electron mass 4.947046 10^5 /0.511 10^6 = 1 /1.032939 eV It suggests a state of the electron e-neutrino triplet to be divided by the a genuine Monster deviation of 1.002453 (see Ref 1). The electron e-neutrino triplet of 1.035818 /1.032939 = 1.002787.

The next high energy substitution of resonance of pseudo e-neutrinos is the relation less than Higgs-2 and the mediating mass of the H-atom or the H-anti matter atom. For derivation is in *Appendix.*

1 /1837.153 + 1 /250.8082 = 1 /220.6068

In normal exchanges of the atom to electrons the mediating mass of 250. 8082 m_e is the mediation for the pseudo e- neutrino medium. However the substitution mass of 220.6068 is related to the 4^{th} root of $(\sqrt{2})^3 = 2\sqrt{2}$, the Cartesian extension in three directions giving $(2\sqrt{2})^{1/4}$ = 1.296839

286.2874 /220.6068 = 1.297288. So close to it.

Divide the product of (220.6068 x 1728 /0.511 10^6 = 1.34002 eV)

Then again as above: 1.34002 /1.297288 = 1.032939 eV but not as reciprocal

The value of 1.34002 represents no triplet neutrino state but as guessed half of 134.002 is half the rest energy of a pseudo e-neutrino cell either normal or conjugated or the anti-matter state of conjugation.

The factor two in 2 x 143.1502 then is $(\sqrt{2})^2 = 2$. It is suggested as the double inversion for the medium pointing to the two opposing accelerations maximums of paired independent states for the pseudo e-neutrinos.

The derivation of the e-pseudo triplet is as follows:

½ 1.34002 x 1.5 = 1.005015 x 1.025094 =1.030234 eV. It is the factor 3/2 that points to the triplet state while the half of 1.34002 eV suggests the non-triplet state in separate pairs of the conjugated and

normal state of the medium representing the ½ c max momentum. Compared to the value of the electron triplet 1.035818 deviation 1.005419 / 1.0024 53^2 = 1.00504 in order of 1.000588 in par 4 but not too convincing.

Par 5.1 Summary
What is shown and it is the most important conclusion is that the triplets of pseudo e-neutrinos pass in sequence as a time through the quark equilateral geometries in a complicated manner. Just due to the options of the high energy contraction resonances, the inversion to the basic state for the pseudo medium is revealed, giving an e-neutrino time string for any atomic and sub particle resonances.

Internally within lepton or baryonic particles, we learned that e-pseudo triplets are used for the interaction braking the forward acceleration dynamics and inducing the electric charge where possible. Therefore the four independent pseudo cells of the medium in combination, these are always not stable conditions. One situation can be a momentary combination of two cells of equal spin for matter acceleration linked to one component in anti spin of opposite acceleration or vice versa. It always determines an unstable situation for collision interaction. In fact the standard idea of the quantum mechanical idea of vacuum replaces the chaotic sea of e-neutrino triplets continuously composing and decomposing from triplets to pairs at zero energy between the four pseudo cell options. An e-neutrino or the anti e-neutrino at c suggests a paired state.

Par 5.2 See definition neutrinos at c in the summary of this paper. Neutrino energies
In that respect it suggests that μ-triplets decompose in μ-paired states of conjugated and normal pseudos nearly neutralizing the opposing acceleration components or as guessed residing in an alternating equilateral pyramid frame. Similarly it is valid for the paired τ-neutrinos. The scaling of neutrinos at c-velocity, of course existing in matter and anti matter:

e-neutrino: The Katrin experiment with Tritium of long decay:
0.67001 x 1.025094 = 0.68623 x 4/3 = 0.793075 eV with 0.8 eV observed
144 / 137.036 =1.50818 √(144 /137.36) = 1.025094
μ-neutrino pairing of 1/3√3 angular momentum has the quadrate of 1/3 m_e .
Divide by 1.074569 /(1/3) = 0.32271 while 1/3 x 1.074569 = 0.3519
Observed 0.190 MeV 0.190/0.511 = 0.372 as the max μ-neutrino c-state.
τ-neutrino pairing: 144 – 130.4090 = 13.39785 /2 = 6.698925 /6.946 = 1.036882^2 = 1.075125
close to $(4/3)^{1/4}$ = 1.074569 144 /1.050818 = 130.4090
34.259 – 30.33 = 3.029 m_e 4 /3.929 = 1.018070^2 = 1.036466 Compare!

Par 6 Discussions of quark stacks of quartets/triplets and lepton stacks

The explanation of the high energy contraction states of the cubic symmetry medium came by as a discovery of the e-neutrino pseudo triplets. Here follows the discussion of the simple most characteristic states for such as the pion mesons, the Kaon- meson and muon and tau lepton

$\pi^{\pm}$ meson observed rest mass is 273.126 m_e .
Now 2 x 137.036 = 274.072 this indicates that in ½ c-mode there are paired τ- pseudos of four locations along the axis for conjugation of 34.259 m_e . And this behaves as a real quartet along the axis. Apparently a μ-triplet for charge formation is needed embraced in an equilateral symmetry giving the actual rest mass but it suggests this triplets rotates with a right angle to the axis, overall simulating a double rotation of both quartet and triplet. This μ-triplet has to be μ-anti matter state. The rule is that the anti-matter state reduces the axial work in rest mass energy. Anti charged pion similar reasoning.
π^o meson has a rest mass of 264 m_e
It is the same quartet in τ-pseudos in rotation but the neutral state requires ten paired conjugated μ-pseudos of anti matter as an axial mode for the top to top equilateral symmetry. The τ-quartet is smaller, having rotation inversions with right angle to the neutral pseudo μ-triplet ensemble as axial displacement inversion.

Kaons: $K^{+/-} = 968$ $K^{O} = 974\ m_e$ (1728 /2 = 864)

The rest mass can be split in 108 + 864 = 972. There are combinations of μ-triplets = 5.223 and 102.777 τ-triplets in one conjugated triangle plane (six point star) having along the rotation axis (height of pyramid) four paired conjugations alternations. The rule given by the neutron is that adding one electron state gives two electron energy positions. The values of 968 and 974 show the two electron states internally. So the charged μ-triplet has to be anti matter in equilateral conjugation, the subtraction of two electron units. The neutral μ-triplet has from top to top equilateral symmetry like the neutron then one added by a pseudo μ-triplet for the long neutral decay giving the two electron units. The short neutral decay in equilateral symmetry from top to top is the addition of an anti μ-triplet giving the added two units. The higher excitation of the Kaons point to a 1728 quark stack. Then as observed no neutral decays. In cross symmetry the anti Kaons behave identical for the explanation.

Muon lepton: 206.768 m_e

The rest mass is τ-pseudo triplet of 2 x 102.777 = 205.554 in conjugation cubic symmetry for the positions alternation along the rotation axis. It has no anti matter μ-triplet in equilateral symmetry but is has the same matter state as the τ-triplet. The e-neutrinos pass through the dual τ-stack of 206.768 – 205.554 = 1.213 – 1 = 0.213 m_e . The anti matter muon behaves identical.

Tauon lepton: 3477.189 m_e

Split the rest mass into 3456 + 21.189. It is a paired conjugation stack of 16 τ-triplets (2 x 1728) or 2 x15 positions along the axis in a 3/2 ratio leaving two already present μ-triplets in the 108 combined triplet of pseudo μ-τ- for the 32 triplet states linking the two stacks. The added 21st μ-triplet gives in equilateral symmetry the charge condition. The product for the e-neutrino gap energy of 8.9492 10^{-3} of 21 electrons is 0.188 m_e .The anti-tauon is identical.

Summary

The difference between leptons and baryons, quark complexes is that the three leptons have no anti matter conjugation along the axis displacements which shows that the four independent μ- and τ-pseudo vector cells as contraction of the e-pseudo mediating medium are sufficient to explain all possible sub atomic particles. The μ- and τ-are resonance contractions in angular momentum inverses giving inertia energy which decompose at Higgs levels into the medium of the four independent e-neutrino pseudo vectors. The contractions are medium inversions in cubic pyramid symmetry generating the triplets embraced by equilateral pyramid symmetry for the pseudo vector cell definition.

Par 7 Spin complications for the base triangles of conjugated of μ- and τ-pseudos

The discovery that the base triangle of the quark stack of 1728 m_e for the μ- and τ- pseudo triplet is composed of two parts expressed in the triplet electron energy relation of 108 = 5.223 + 102.777, which was highly revealing. In a simple plane geometry for rotation of the two parts of the μ- and τ- triangle, the rotation axes can be parallel to each other. Then synchronous rotations or rotations of different frequencies between them could be imaged. It could still be a zero state option reasoned in perspective of the c-mode. However the ½ c-mode determined by the cubic conjugated medium, introduces a complication:

Firstly, the diameter ratio between two triangle rotations is 102.777 /5.223 = 19.6777 in energy but the √19.6777 = 4.436 angular momentum diameter ratio. Further the μ-triangle lighter and therefore on the outside.

Secondly, if the rotations axes for both are different, only perpendicular axes for spins have to be allowed in the triangle planes. It follows from the pseudo vector definition and the explanation in par 3 but it does not include the base triangles in conjugation for both rotation directions.

In other words the right angle rotations in the plane for the τ-pseudos are very complicated and also in relation to the rotation of the μ- pseudos. It compares to the model for gluon colour exchange of quark quantum mechanical triangles in baryons. However by taking the supposed rest mass of a single τ-pseudo of 34.259 m_e and taking the square root, the angular momentum of

$\sqrt{34.259} = 5.853118\ m_e$ .It can be guessed giving:

$5.853118 / (3\sqrt{3}) = 1.126433 \times 1.025094 = \sqrt{(4/3)}$ $(4/3)^{1/4} = 1.074569$

$1.126433 / 1.074569 = 1.0482641.05818 / 1.048264 = 1.002453$

$144 / 137.036 = (1.050818)^{1/2} = 1.025094$. With 1.002453 close to the genuine Monster deviation (Ref 1).Where $3\sqrt{3}$ belongs to the angular momentum of the μ-pseudo triplet, now guessed to be similar for pseudo τ-triplet.

In summary

One single pseudo τ-pseudo triplet is like the μ-triplet. It determines that a pseudo τ-triplet of 102.777 m_e consisting of three single τ-pseudos can be combined with the μ-triplet in the base plane of either the equilateral or cubic pyramid symmetry. Both rotation axes in the base plane have right angles to each other. Considering the pseudo μ-triangle inversion displacements for the electron one can guess the four nodes in the height of the equilateral pyramid giving the 4 x 4 =16 conjugated μ-states. The 16 displacements along the rotation axis of the height are split symmetrically. Per triangle plane the τ-triplets exchange either from normal to conjugation inversion and vice versa along this main axis, height causing alternating axial inversions as work.

Since it are perpendicular rotation axes, you can make a distinction in co and counter rotation of the pseudo τ-triplets with respect to the pseudo μ-triplet. It explains the Kaon neutral decay or vice versa. Only Higgs has an anti-quartet of an ensemble of four pseudo τ-triplets in the pseudo μ-plane in relation to the 1728 quark stack and vice versa. Further it also explains why there are only three leptons valid for co rotation between μ-triplets and the τ-triplets at right angle. Only the electron as the positron have virtual co rotation of the pseudo τ-triplet in a compensation mode, see par 3 and 4.

In the appendix 2 the picture is shown of a magnetic model to show the axial force of the weak and strong interactions. The magnetic model shows only the axial force in one direction of the rotating magnetic dipole in the centre of the magnetic flux frame for the equilateral pyramid. The cross over due to the angle of magnetic dipole to main rotation axis, shows that the model has to be associated with the dipole momentum exchange over the triangle plane between the normal state of conjugation for the flux of e-neutrino pseudos. The dipole momentum can be defined of ½ c flux energy passing in one direction.

Par 8 Proof for the existence of a generalized H-atom for dark matter configuration for all possible atoms

The statement is as follows. Every atom consisting of protons and neutrons is subjected to the pseudo e-neutrino triplets passing as time sequence string through the nucleon complex. This time string obviously unique, for every atom has a stability maximums for Z- charge protons of $144 / \sqrt{3}$of $144\sqrt{3}$ neutrons respectively. The product of these two values with the 1728 in electron mass of the quark block gives as shown the Higgs instability. What follows from this statement is that the unique time the string is proportional to the number of protons of Z and the number of neutrons of N in a nucleon ensemble. Take the overall mass of the nucleon and divide by the sum of N and Z resulting in a single rest mass to be compared to the Hydrogen atom. This mass combined with the electron defines the generalized H atom. It should be clear that in relation to the time string statement, the electric Z-charge of the atom is independent for the e-pseudo triplets passing accelerated through the atom ensemble. While the overall internal spin giving inertia acts as a brake to the acceleration drive.

The generalized H atom represents the coherent state for the macroscopic gravity generation by the coherent pseudo e-neutrinos propelling the medium and it has nothing to do with the electric Z-charge keeping the nucleon together (The e-pseudo medium can only be the dark matter medium). Ref 2 The interaction of the generalized H atom to the electron can be derived based on Sacharov's induction law for dark matter resulting in the mediating mass of the generalized H atom. See *appendix 1* for derivation.

References

Ref 1: " Scaling calculations with Giant Symmetry Groups" by J.W.A. Zwart
https://vixra.org/abs/2302.0135

Ref 2: "Monster Symmetry and Scalar Theory , Conformal Gravities" by M.A. Thomas
https://vixra.org/pdf/2109.0211v2.pdf

Par 9 Appendixes

Appendix 1
Derivation of the mediating mass. Applications of the laws of gravitational induction.
The fundamental dark matter mass used in the solar calculations.

Apply the relations between electrostatic energy and mass energy of a particle. For the electron and the proton is valid:

$m_e c^2 = e^2/(2\varepsilon_o r_e)$ $\quad$ $m_p c^2 = e^2/(2\varepsilon_o r_p)$

giving: $r_e / \lambda_e = r_p / \lambda_p = e^2/(2\varepsilon_o hc) = \alpha$ (the fine structure constant)

The balance of force with the pseudo vectors:

$f_e = e^2/(2\varepsilon_o r^2)$ idem for f_p

The acceleration of a_x is constant with respect to the electron and proton, so each a_e or a_p .

The derivation of the mediating mass with its two limits follows here. The uncertainty principle applied to the proton and electron defines the generalized Compton length:

$m_e c\, \lambda_e = h$ $\quad$ $\lambda_e = h/(m_e c)$ $\quad$ $\lambda_p = h/(m_p c)$

The self energy of the particles balanced against the potential energy of a unit electric charge is (ε_o is the vacuum dielectric constant):

$f_{ge} = G\, m_e\, M_e / \lambda_{ge}^2 = m_e\, a_e = G\, m_{pl}^2 / \lambda_{ge}^2 = hc / \lambda_{ge}^2$

$f_{gp} = G\, m_p\, M_p / \lambda_{gp}^2 = m_p\, a_p = G\, m_{pl}^2 / \lambda_{gp}^2 = hc / \lambda_{gp}^2$

The relations ($m_e M_e = m_{pl}^2$ and $m_p M_p = m_{pl}^2$) follow the induction law.
So the balance of force determines the radii of (λ_{ge} & λ_{gp}) with respect to the Compton length.

$r_e / \lambda_e = \alpha$ $\quad$ and $\quad$ $\sqrt{\alpha}\, \lambda_e = \lambda_{ge}$ $\quad$ $\lambda_{ge} = r_e$

$r_p / \lambda_p = \alpha$ $\quad$ and $\quad$ $\sqrt{\alpha}\, \lambda_p = \lambda_{gp}$ $\quad$ $\lambda_{gp} = r_p$

Applying the conservation of angular momentum on above relations of (λ_{ge} & λ_{gp}) and taking into account the half spin, one arrives at:

$\lambda_m^2 = \frac{1}{4}\, \lambda_{ge}\, \lambda_{gp}$ $\quad$ so $\quad$ $m_m^2 = m_e\, m_p / 4\alpha$

The mediating mass is expressed in the proton and electron:

$m_m^2 = m_p\, m_e / 4\alpha$ $\quad$ α = fine structure constant.

$m_{at} = 1837.153\, m_e$ ($\alpha = 1/137.036$) giving $m_m = 250.8082\, m_e$ $\quad$ m_e the electron mass.

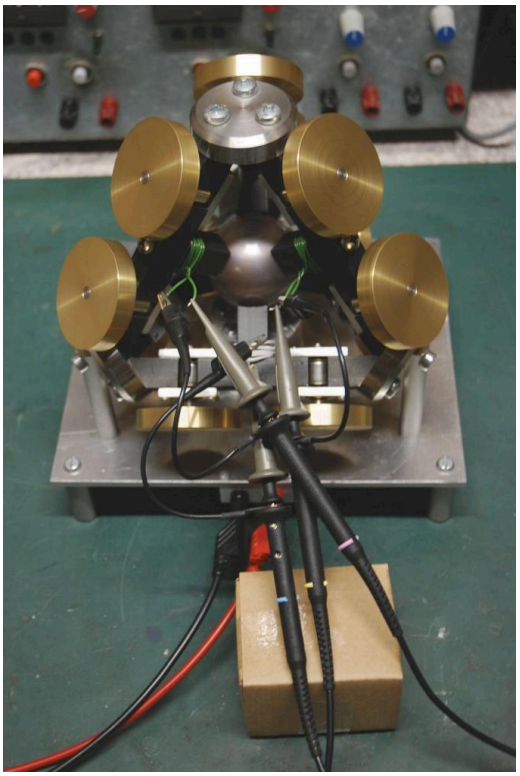
The effective mediating mass of any neutral atom is the same expression but one divides the mass of the atom through the atom mass number for all neutrons and protons in the atom then giving the effective proton mass of the atom with respect one electron. Apparently the effective mediating mass is a constant for the dark matter medium and it varies slowly over the range of atoms, about 1% while the effective proton mass of the atom varies about 2%.

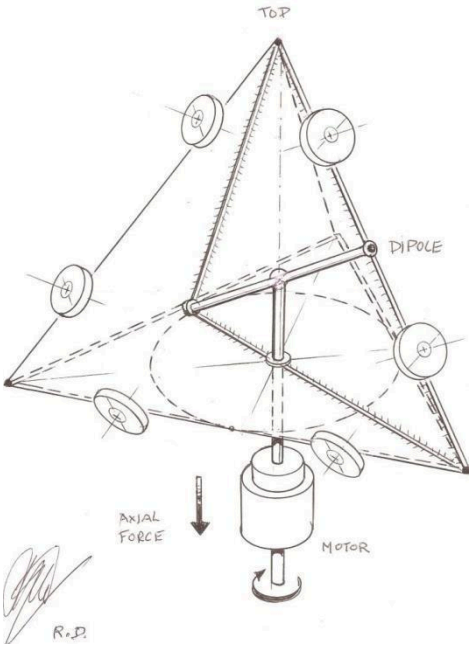
Appendix 2

The photo on the cover shows a weak iron pyramid yoke with a permanent magnetic bar rotating in the centre of the pyramid frame.

By driving with an external electric motor the centre dipole in the yoke, the magnetic flux in the weak iron yoke has a sinus wave shape in time which activates the twelve rotors permanent magnets in the yoke frame. Apparently these dipoles may be either co rotating or arranged in pairs per pyramid limb in counter rotating.

Learned from the magnetic analogue was the axial force along the driving shaft for the centre rotor needed to be restrained by a dedicated bearing. *Link to Harald Chmela* : www.hcrs.at/3iarga.htm





Foundation Cosmic Field Paradigm ©

..... introductory text on standard particle theory and cosmology, the phenomena explained by them, unsatisfactory features of that explanation, and an alternative approach by the Cosmic Field Paradigm which (supposedly) cures those defects .....

The governor of the foundation CFP is a retired armchair physicist previously working as physics engineer in fusion research and the author of this brochure. Registered Chamber of Commerce: KvK no: 41225212. Netherlands.