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since 1997*

THE UNIVERSE IS NOT EXPANDING

A LIGHT WAVE IT SELF LOSES ENERGY DURING ITS JOURNEY RADIATING DAUGHTER ELECTROMAGNETIC WAVES (RADIO WAVES) . GENERALLY THE RED SHIFT IN THE LIGHT WAVES IS NOT DUE TO RECESSION OF THE STARS AND GLAXIES BUT IT IS DUE TO THE LOSS OF ENERGY BY THE PHOTON DURING ITS JOURNEY. EVERY QUANTUM SYSTEM TRY TO STAY IN BEST POSSIBLE LOWEST ENERGY STATE.

THEORY : It is presumed that energy of an electromagnetic wave remains intact during its journey. We observe red shift in the light coming from about all stars and glaxies of the universe and conclude (actually misconclude) that these light sources are receding from us. But actually (1) an electromagnetic wave is energetically an unstable quantum system.

(2) A photon possesses intrinzc energy states within it and loses energy as secondary radiation of daughter radio waves by jumping in to its lower energy states. (3) E.M. waves continuously (actually quasi continously) radiate secondary daughter e.m. waves but emmission of daughter waves is one by one. (4) An electromagnetic wave radiates energy as secondary daughter e.m. waves untill it attains its best possible lowest energy state of a quantum system i.e. $h/2\pi$ Joule = 1.054×10^{-34} Joule, or it acquire the frequency $1/2\pi$ Hertz = 0.159 Hertz, where h is a constant having numerical value equal to Plank constant and unit of energy Joule but not Joule seconds [It can be experimentaly varified by the detection of radio waves (in smallest frequency range) coming from outer space, that these possess minimum frequency of $1/2\pi$ Hertz = 0.159 Hertz or integral multiple of it, that is $n/2\pi$ Hertz = 0.159 Hertz, 0.318 Hertz. 0.477 Hz. 0.627 Hz. etc.

[Please ask for our quantum limit theory in which it is shown that about all physical quantities related to a quantum system possess their minimum and maximum limits i.e. boundries. In quantum limit theory energy, angular momentum, size (length), time of a quantum transition, moment of inertia, temperature, mass, charge etc. of a quantum sysetem are quantized and lie

(Contd....2)

$$(2)$$

in between their minimum and maximum limits. For example a quantum transition (event) can take a time of minimum $h/2\pi c$ second = 3.51×10^{-43} second and maximum 2π second = 6.28 second, similarly a quantum oscillator can have a frequency maximum $2\pi c/h$ Hz = 2.9×10^{42} Hz, and minimum $1/2\pi = 0.159$ Hz, where c is speed of light and h is a constant with numerical value = 6.62×10^{-34} .

5. The rate of change of energy of an electromagnetic wave is directly proportional to the instantaneous energy of the wave. If energy of an e.m. wave is $\mathcal{E} = h\nu$ where ν is the instantaneous frequency of the photon then

$$-d\mathcal{E}/dt \propto \mathcal{E} \quad \text{or,} \quad d\mathcal{E}/dt = -k\mathcal{E}$$

where k is the proportionality constant.

$$\text{or,} \quad \int d\nu/dt = \int -k\nu$$

$$\text{or,} \quad \int d\nu/\nu = \int -k dt, \text{ Which on integration gives}$$

or, $\ln \nu = -kt + C$, where C is the integration constant

Taking limit conditions, when $t=0$, $\nu = \nu_{\text{source}}$ then $C = \ln \nu_{\text{source}}$

and when $t = t$ (time taken to travel at observer)

$$\nu = \nu_{\text{observer}}$$

Thus we find

$$\nu_{\text{observer}} = \nu_{\text{source}} e^{-kt}$$

$$\nu_{\text{observer}} = \nu_{\text{source}} e^{-kd/c} \dots \dots \dots \text{equation (1)}$$

d is the distance travelled by the light wave in between the source and observer and c is the speed of light. This gives red shift in the frequency of photon as

$$\Delta \nu = \nu_{\text{source}} (1 - e^{-kt})$$

$$\Delta \nu = \nu_{\text{source}} (1 - e^{-kd/c}) \dots \dots \dots \text{equation (2)}$$

(3)

Hubble's Law: - The light waves lose energy during its journey by radiating secondary radio waves and we misconclude that red shift in light waves is due to relative motion between the source and observer. In deed due to some wandering stars in the universe, red shift (Doppler shift) in the wave length of light sources due to relative motion has just equal possibility than that of blue shift. If V is the relative velocity equivalent to red shift in the light waves i.e. photons (which is actually due to loss of energy by the photon) if we assume that it is due to relative motion, i.e. recession of stars and glaxies, then

$$V \approx c \cdot \Delta v / v_{\text{source}} \approx c (1 - e^{-kd/c})$$

$$\approx kd - (kd)^2 / (c \cdot 2!) + (kd)^3 / (c^2 \cdot 3!) \dots \dots \text{equation (3)}$$

For nearer sources $kd/c \lll 1$ then we can neglect higher terms and find $V = kd$, which is Hubble's Law.

But for distant sources kd/c factor is not ingnorable . When we shall plot a graph between $v_{\text{observer}} / v_{\text{source}}$ and the distance d of the sources, we shall find a straight line. Equation (3) explains why Hubble's constant is not a perfect constant.

DETECTION OF SECONDARY DAUGHTER RADIO WAVES: - For detection of daughter radio waves we can take an intense and about 500 meter long monochromatic light (as Sodium light) beam. Since the daughter radio waves travell along the same direction of the mother light waves, intensity of daughter radio waves increases with increase in the length of the light beam and as well as intensity of the beam. The detection should he carried out by a powerful detector in dark night to avoid radio noise. I estimate that the secondary daughter waves related to light waves, U.V. and even gamma γ range may fall into radio range but high energy gamma ray may emmite daughter waves in far infra red range or micro waves range .

Use : Since the earth crust is opaque to the heat, light ,UV and γ (gamma) radiation but their small frequency daughter radio waves can penetrate the earth crust. Therefore these radio waves can be utilized as a tool to look into the earth for the study of geophysical changes and discovery of new radio active deposits.

Where there high energy region developes in the earth crust, the temperature of the region grows, consequently intensity and frequency of heat radiation increases, which results in increase in the intensity of corresponding daughter radio waves which can give the perior information of earthquakes. Moreover this new discovery will be proved a turning point in the field of astrophysics.

Conclusion: Thus light waves radiate secondary radio waves during their journey and lose energy, consequently show red shifts in their wave lengths, but we misconclude that the light sources are receding from us. A light wave lose more energy for a more distant source and we misconclude that the source is receding with more velocity, without thinking that which strange force is accelerating such massive bodies outwardly, independent of their masses, sizes etc, since all the equidistant sources show equal velocity of recession.

Suppose somewhere an explosion takes place, just after explosion, all the matter escapes in all possible direction. The centre of gravity is, near to the some where the point of explosion. The particles of the explosion are moving away from the centre of gravity. Hence their potential energy is increasing, consequently their kinetic energy should decrease, which will results in gradual decrease in the velocity of the particles of the explosion. . Contrary to this fact velocity of the stellar bodies are continuously increasing in big bang theory. Nobody think that, how and from where, such massive stellar bodies are receiving their kinetic energy.

NOTE: According to quantum limit theory a system will be said to be a quantum system if all the physical quantities related to a system lie between the quantum boundry, other wise it will be a classical (or other) system.

Smallest Quantum (zero or.....)	Physical Quantity	Maximum Quantum limit
$h/2\pi$ meter = 1.054×10^{-34} m	length	$\leq 2\pi c$ meter = 1.88×10^9 meter
$\pm h/2\pi$ Joule = 1.054×10^{-34} J	Energy	$\leq \pm 2\pi c$ Joule = $\pm 1.88 \times 10^9$ J
$\pm 1/2 h/2\pi$ Js = $\pm 0.527 \times 10^{-34}$ Js	Angular Momentum	$\leq \dots\dots\dots$
$h/(2\pi k)$ kelvin = 7.41×10^{-12} K	Temperature	$\leq 2\pi c/k$ kelvin = 1.35×10^{31} Kelvin
$\sqrt{\{hc/(4\pi^2)\}}$ m/s = 6.2×10^{-14} m/s	Velocity	$\leq c$ meter/second = 3.0×10^8 m/s
$h^2/8\pi^2 c$ kg-m ² = 2.38×10^{-76} kg-m ²	moment of Inertia	$\leq h/2\pi = 1.054 \times 10^{-34}$ kg-m ²
$h/2\pi c^2$ kg = 1.17×10^{-51} kg-	Mass	$\leq 2\pi/c$ kg = 2.09×10^{-8} kg
$\pm 2 \sqrt{(\pi^{1/2} \epsilon_0)} h$ coulomb = $\pm 0.833 \times 10^{-39}$ C	charge	$\leq \pm \sqrt{(4\pi^{1/2} \epsilon_0 ch)}$ coulomb = $\pm 24.28 \times 10^{-19}$ C (Net Charge on a Single System)

Here all the symbols have their usual meanings. h is a constant with numerical value 6.62×10^{-34} and unit of h is some where meter, some where Joule and some where Joule-seconds, c is the speed of light.

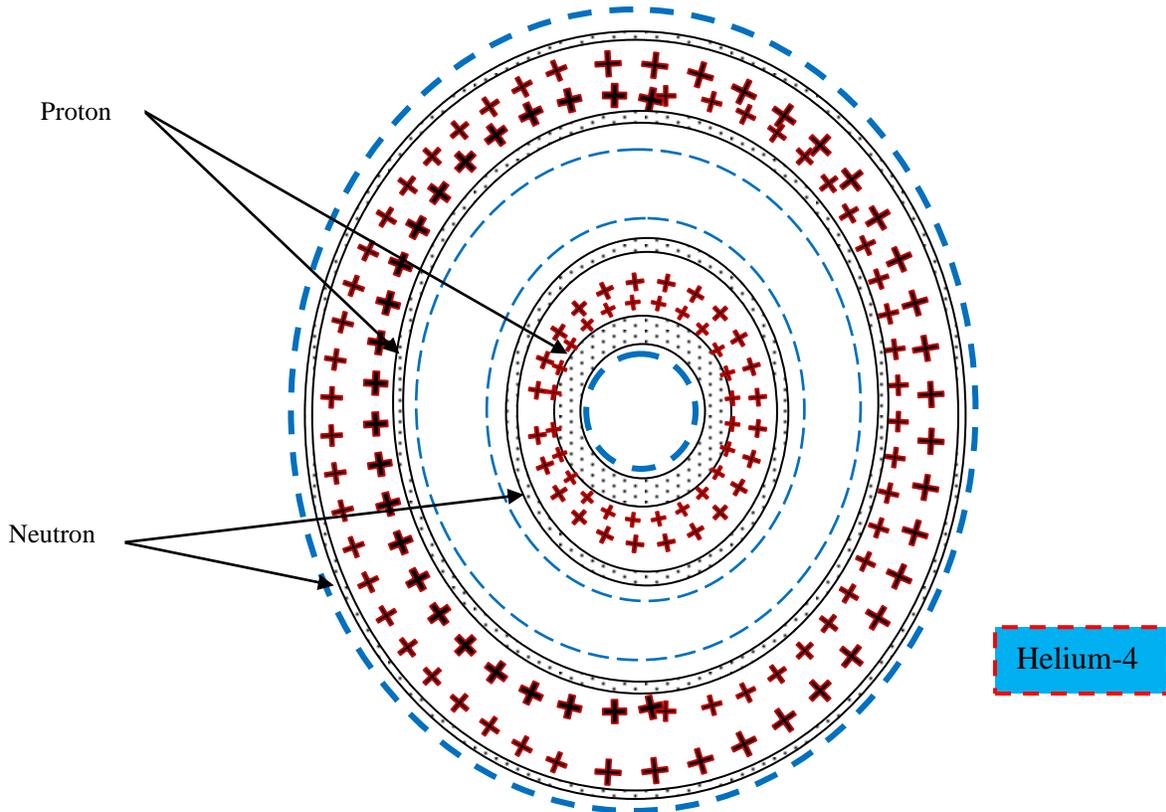
We are also working on smallest fundamental particle (Mulanu) According to mulanu theory, the matter is made of smallest particle having mass \hbar/c^2 kg = 1.17×10^{-51} kg, charge

$$\pm 2 \sqrt{(\pi^{1/2} \epsilon_0)} \hbar \text{ coulomb} = \pm 0.833 \times 10^{-39} \text{ C and size (diameter)} = (1/\sqrt{\pi}) h/2\pi \text{ meter} = 1.22 \times 10^{-34}$$

meter with spin zero. The mulanu can not be a quantum rotator because its moment of inertia $I = (2/3) mR^2$, falls beyond the minimum quantum limit $h^2/8\pi^2 c$ kg-m² = 2.38×10^{-76} kg-m². The mulanu has quantized surface area $(h/2\pi)^2$ m². Negative and positive type of Mulanu constitute a plasma fluid, a super fluid, with a surface tension order of 10^{14} Newton/meter. Surface tension of plasma fluid is

quantized. The negative and positive type of muon usually do not annihilate and always stay at quantum distance at $(h/2\pi)$ meter, or $2(h/2\pi)$ meter or $3(h/2\pi)$ meter etc .

The surface tension of plasma fluid balances the electrostatic force of repulsion. And the nucleus is made of electrically polarized charged (proton) and neutral (neutron) spherical shells one above another having hail stone like structure. There are more than one quantum state of surface tension for the neutron shells. The surface tension is quantised and can have the value $T_0, 2T_0, 3T_0, 4T_0, 5T_0$ etc, Hence there can be more than one neutrons in between the two proton shells. In heavy nuclei two or more energy states are possible for the neutrons in between the two proton shells. Distortion of the shells is the result of magnetic forces due to spin (rotation) of the charged shells.



HIGHLIGHTS OF MULANU THEORY (*working since 1992*)

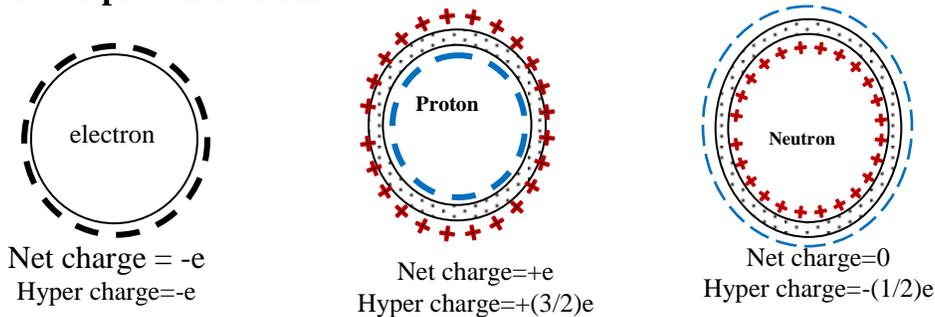
According to mulanu theory matter is made of a plasma fluid of positive and negative type of mulanu. Plasma fluid is a flexible fluid with quantized surface tension order of 10^{15} Newton/meter having property of a super fluid which show super fluidity and super viscosity.

The Electron: The electron is made of about 8×10^{20} mulanu's out of which 1.93×10^{20} negatively charged mulanu's are excess to contribute a net electronic charge. Structure of the electron is like a charged soap bubble (charged spherical shell) in which surface tension balances the electrostatic force of repulsion as

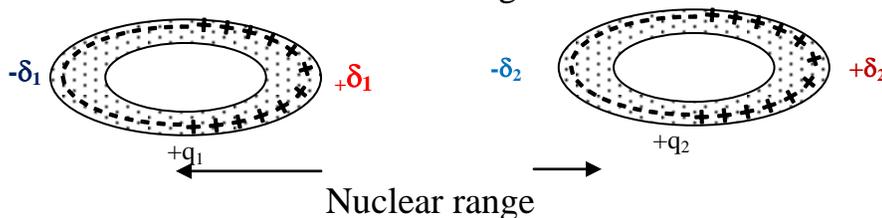
$$4T/r = e^2/(32\pi^2\epsilon_0 r^4)$$

The surface tension of electron is lowest .

The Proton:- Structure of the proton is like electrically polarized thick charged spherical shell having a net charge $+e$ (due to 1.93×10^{20} excess positively charged mulanu out of 1.4×10^{24} mulanu) and hyper charge $+(3/2)e = +(e + 1/2.e)$. The charge $+1/2e$ is due to the polarization of plasma fluid. Electrical polarization of plasma fluid is to contribute higher but quantized surface energy. The surface tension of proton is **5.018×10^{15} newton/meter** assuming radius of proton **1.01×10^{-15} M.** proton and neutron are spherical dipole.



Nuclear Forces:- Nuclear forces are nothing but induced dipole – dipole interaction type pure electrostatic forces. When two nuclei stay at a distance of more than two or three fermi they act as point charge and hence a strong electrostatic force of repulsion works between them. But when the two nuclei approach together within 1-2 Fermi, due to very strong repulsion of electrostatic forces, induced charge develops on them. Because, due to strong repulsion by positive nuclear charge the positively charged mulanu of the flexible plasma fluid are slightly repelled by the repulsion forces and the negatively charged mulanu are attracted. Hence the interacting nuclei become electrically polarized and act as a dipole.



Now Induced charge δ_2 is proportional to the electrostatic force of repulsion.

$$\text{i.e., } \delta_2 \propto q_1/r^2$$

The induced charge is also proportional to the amount of plasma matter ie,

$$\delta_2 \propto m_2$$

$$\text{or, } \delta_2 \propto m_2 q_1/r^2$$

similarly ,the induced charge developed on first nucleus $\delta_1 \propto m_1 q_2/r^2$.Then the strong force of attraction (Nuclear force) of dipole-dipole interaction is given by

$$F_{\text{Nuclear}} \propto \delta_1 \delta_2 / r^4$$

$$\text{Or, } F_{\text{Nuclear}} \propto q_1 q_2 m_1 m_2 / r^8 \quad \text{--- (for the beginning of the Nuclear range)}$$

$$\text{and } F_{\text{Nuclear}} \propto m_1 m_2 / r^8 \quad \text{--- (after larger polarization)}$$

Induced charge δ can vary from $e/100$ to $10e$,therefore the strength of nuclear forces are 100 times stronger than usual electrostatic forces.

We think that quarks are three equal fragments of interacting protons having equal mass $1/3$ and fractional charge $\pm 1/3$ and $\pm 2/3$. Higgs boson particle is a unstable large bubble of mulanu plasma having two spherical shells (each shell has $1/2$ and parallel spin, each shell are one above another) with spin 1. It is a result of conversion of kinetic energy of interacting protons, in to mass.

Distortion of the nucleus and electrical quadrupole moment:- When electrically polarized shells rotate about their own axes, the flexible plasma shell at the equator ,experience maximum magnetic force. Although all the particles of the shell (of either proton or neutron) possesses same rotational frequency but different linear velocity. At the pole it is zero and at the equator, it is maximum. Due to maximum linear velocity at the equator of charged shell, maximum magnetic force acts, between the two shells and hence distortion appears at the equator, because at the pole of the rotational axis, zero magnetic force acts.

When the shell at the equator experience force of repulsion it appears as prolate shaped and when the shell experience force of attraction it appears like elongate shaped. Thus nuclear forces are of purely electrostatic and magnetostatic origin. The spherically electrical polarization of neutron shell , explains why neutron possesses negative magnetic moment and why it is stable in nucleus and unstable in out side of it ,Because there is no permanent electro static force of repulsion to balance the surface tension, out side of the nucleus.

We think that the star are made of mulanu plasma and a completely different reaction is going on in the stars. In stars mulanu plasma is converting in to matter (atom) at the same rate at which the star is radiating energy by its surface.

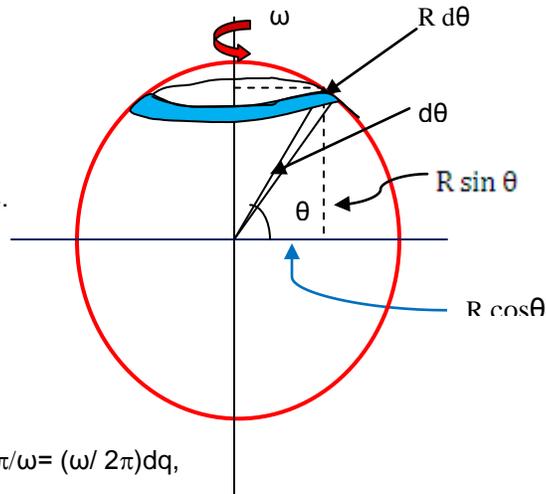
When we assume radius of proton ,equal to 1.01×10^{-15} m , we **find** ,the rotational energy $3 \hbar^2/4 MR^2$ of proton comes about 28 Mev. It is not possible .It should be about 2-3 Mev. From spin angular momentum $J=l\omega=\hbar$, $\omega= \hbar/l$,the rotational energy $E_r=(1/2)I\omega^2 =\hbar^2 /2I = \hbar^2 / (2 \times \frac{2}{3} MR^2) = 3 \hbar^2/4 MR^2$

Similarly when we take radius of electron order of 10^{-15} m we find rotational energy of electron is equal to order of 10^4 Mev .It is impossible. It can not exceed its mass energy $mc^2 = 0.5$ Mev. Hence there is certain error in measurement of radius of proton and electron. The spin angular momentum of electron is certainly \hbar . It can be

deduce that magnetic movement of electron is $eh/4\pi m$, assuming electron as a charged spherical shell and spin angular momentum \hbar . The mass of these particle seems correct. Thus radius of proton should be ,3-4 times more than 1.01×10^{-15} m.

Magnetic moment of electron assuming a charged spherical shell:-

Spin Angular momentum of electron $J = I\omega = \hbar$, $\omega = \hbar/I$
 Surface Charge density $\sigma = e/4\pi R^2$
 Take a strip making angle $d\theta$ at angle θ with x axis.
 Thickness of strip = $Rd\theta$,
 Area of the strip = $2\pi x Rd\theta$,
 Where $x = R \cos\theta$,
 Area of the strip $ds = 2\pi R^2 \cos\theta d\theta$,



Charge on strip $dq = \sigma ds$,
 $dq = \sigma 2\pi R^2 \cos\theta d\theta$,
 electric current due to rotating strip $di = dq/T = dq/2\pi/\omega = (\omega/2\pi)dq$,
 $di = \sigma \omega R^2 \cos\theta d\theta$,
 Magnetic Moment of the strip $d\mu = di A = \pi x^2 di = \pi R^2 \cos^2\theta \sigma \omega R^2 \cos\theta d\theta$,
 $d\mu = \pi \sigma \omega R^4 \cos^3\theta d\theta$,
 The magnetic moment due to the whole shell

$$\mu = 2 \int_0^{\pi/2} \pi \sigma \omega R^4 \cos^3\theta d\theta,$$

$$\mu = 2\pi \sigma \omega R^4 \int_0^{\pi/2} \cos^3\theta d\theta,$$

$$\mu = 2\pi \sigma \omega R^4 \cdot \frac{2}{3},$$

$$= (4/3) \pi \sigma \omega R^4$$

$$= (4/3)\pi (e/4\pi R^2) (\hbar/I) R^4 \text{ where } I \text{ is moment of inertia of rotating electron shell, } I = (2/3) mR^2.$$

$$= e \hbar/2m$$

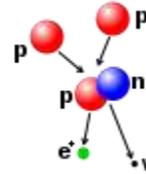
$$= eh/4\pi m$$

Thus, this deduction shows that the electron is a charged spherical shell, like soap bubble, with spin angular momentum $h/2\pi$ and not a solid sphere. This also reveals that electron is made of a plasma fluid which is made of still smaller particles. The surface tension of the film balances the electrostatic force of repulsion.

The size of the proton should be order of 3-4 Fermi and the size of the electron should be order of 334 Fermi (in next stage we shall prove that it should be order of 557 Fermi,) and hence the size of nucleus should be order of 3-20 Fermi. From $J = I\omega = \hbar/2\pi$, $\omega = \hbar/I$, hence the rotational energy $E_r = (1/2)I\omega^2$ or $E_r = 3\hbar^2/4mR^2$, where $I = (2/3)mR^2$ assuming it a hollow spherical shell. The rotational energy of electron can not exceed its mass energy mc^2 . For $mc^2 > 3\hbar^2/4mR^2$, $R > (\sqrt{3}/4)\hbar/mc = 334$ Fermi. If we assume the electron a spherical charged shell, the linear velocity $\{v = R\omega = 3/2(\hbar/mR)\}$ of the matter at the equator will exceed the velocity of light. Velocity of mass greater than c , will lead to infinite mass of the particle. Therefore the speed of light should be always greater than linear velocity of the matter at equator of the electron as $c > 3/2(\hbar/mR)$. Hence the radius of electron

,can not be lesser than $3/2 \hbar/mc=557\text{fermi}$, since other parameter m seems correct. Now it is need to explain Heisenberg`s uncertainty principle for the existence of electron in the nucleus in different way .

These deduction also reveal that the electron is the lightest particle, after mulanu, and there is no existence of neutrino. The stable neutrino can not attain a spherical shell, since it has no net charge on it, to balance the surface tension. If it acquires , the shape of a solid sphere, its radius will be very small. Hence its rotational energy will be very higher than that of its mass energy. Otherwise its radius (mass energy $mc^2=3\hbar^2/ 4mR^2$, the rotational energy, hence $R=(\sqrt{3}/4) \hbar/mc$) will exceed the size of atom. We think that the neutrino is a product of scientist`s brain to balance the parity or spin angular momentum of some nuclear reaction like,



We think that spin angular momentum, in the nuclear reactions is not conserved. It can be converted into linear momentum. Suppose a small solid sphere is attached on the circumference of a rotating disc. After some times , it detaches from the disc and attains a linear velocity in the direction of the tangent of the rotating disc. Finally the angular momentum of the disc decreases and converted in to linear momentum. Similarly a beam of light or electron can rotate a light wheel kept in its path converting linear momentum into angular momentum. Hence the neutrino does not exist. UREKAAAAA.....HA, HA .HA.....

For any detail please contact preferably by the post on the given address.

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I need your help ,although there is a program PRISM of DSIR for the financial support up to Rs. 20 Lakhs . But you know that the governmental bodies do not work properly in India. This is why I could not obtain sufficient marks in academic and various competitive exams including SCRA of Union Public Service Commission and JNU entrance, although doing well in exams, so I could not accomplish my MSc. Now there is no scientific job on BSc. If there are some chances, all require high marks. If you want that these research should be published and should be utilized in public benefit ,you can help me , by any one of the following ways-----

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2nd, By providing me a fellowship or a job in research laboratories so that I can carry out research.

3rd, By providing me financial support by yourself or by the help of some NGO.

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4th, By propagating the files to others , because the scientific knowledge should spread and all should know their capability of upliftment.

5th, By providing me a loan up to Rs10 Lakhs (20,000 US\$) on belief of the projects.

