Mass is Frequency of an Elementary Particle

All known experiments have produced answers that agree with the following equations:

$$[(M\vec{a}d)](mass-kg)(acceleration-m/s^2)(\text{distance-}m)$$

$$\left[(M\vec{a}d)=(\vec{h}f)=(\text{constant})(\text{frequency})\right] \quad (1)$$

$$\left[(M\vec{a}d)=Mc^2=(mass)(\text{constant})\right] \quad (2)$$

$$\left[c=\lambda f=r_{\exp} f\right] \quad (3)$$

Equating (1 & 2) : $M=(\vec{h}/c^2)\,f$ Mass = (constant)(frequency of one particle)

Plank's constant: $\left[\vec{h}=6.6260693(11)<34Js\right.$ HBCP $\left.\vec{h}=6.62606957(29)<34Js \text{ codata}\right]$

$$\left(\frac{\vec{h}}{c^2}\right)=\frac{6.626069<34Js}{(2.99792458>8m/s)^2}=\frac{6.626069<34\overbrace{(kg)(m/s^2)(m)}^{Joule}(s)}{8.98755179>16m/s^2}=7.372496<51kgs$$

Equating (1),(2) and (3):

$$\begin{bmatrix} M=\left(\dfrac{h}{c^2}\right)f=\left(\dfrac{h}{c^2}\right)\left(\dfrac{c}{r_{\exp}}\right)=\left(\dfrac{\vec{h}}{c}\right)\left(\dfrac{1}{r_{\exp}}\right) \\ \text{M}r_{\exp}=\dfrac{\vec{h}}{c}=\dfrac{6.626069<34(kg)(m/s^2)(m)(s)}{2.99792458>8m/s}=\overbrace{2.2102<42kgm}^{\text{constant}} \end{bmatrix}$$

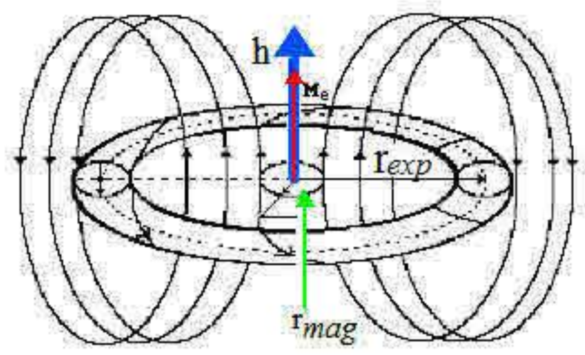
- All mass is built from one elementary particle; a $(\approx 7.37<51kg)$ particle.
- All mass is in relative motion with other mass.
- Time is a description invented to measure the relative movement between different particles of mass.
- Energy is a term invented to describe what happens when masses interact. Energy is a description. Mass does not convert to energy and energy does not convert to mass. The word "Energy" will be replaced with the fundamental equation $(M\vec{a}d)$.
- When the motion of masses interacts, they change to different motions of masses. These different mass forms can be measured and their changes in momentum can be measured. When the change produces photon particles, they have been incorrectly labeled as "Energy"

$[Mass \propto Frequency]$ Frequency is a rotation per second

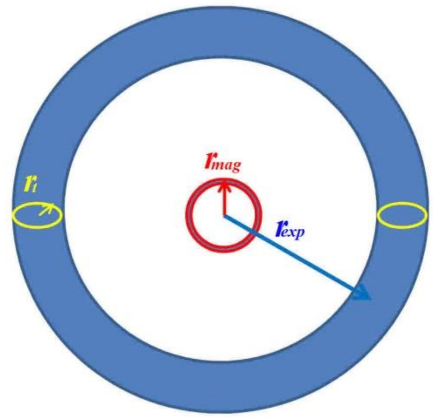
If (f) is set to one rotation per second $[(7.37249638<51kgs)(1rot/s)]$, the equation predicts that the $[7.372496<51kg]$ particle is the elementary mass out of which all mass is made.

$\left[\left(\frac{h}{c^2}\right) = 7.372496 < 51Kgs = 0.7372496 < 50kg\right]$	$\left[f = \frac{M}{h/c^2} = \frac{M}{0.7372496 < 50kgs}\frac{rotations}{\text{second}}\right]$
$\left[f = \frac{2.2 < 39kg}{0.737249638 < 50kgs} = 2.984064 > 11\frac{rot}{\text{s}}\right]$	Kanarev: Smallest measurable photon
$\left[f = \frac{2.4241 < 35kg}{0.7372496 < 50kgs} = 3.28803 > 15\frac{rot}{\text{s}}\right]$	13.598443ev photon 2.424143<35kg
$\left[f = \frac{9.1093897 < 31kg}{0.7372496 < 50kgs} = 1.23559 > 20\frac{rot}{\text{s}}\right]$	$[0.5109906 > 6eV]$ electron 9.109235<31kg
$\left[f = \frac{1.6726230 < 27kg}{0.7372496 < 50kgs} = 2.26873 > 23\frac{rot}{\text{s}}\right]$	938.27241>6eV proton 1.672623<27kg
$\left[f = \frac{1.6749286 < 27kg}{0.7372496 < 50kgs} = 2.271858 > 23\frac{rot}{\text{s}}\right]$	939.5656>6eV neutron 1.674928<27kg
$\left[f = \frac{3.34357629 < 27kg}{(0.7372496 < 50kgs)(2)} = 2.26750117 > 23\frac{rot}{\text{s}}\right]$	(Deuterium nucleus) Proton+Neutron $Mr_{\text{exp}} \neq 2.2102 < 42kgm$ quantum theory: 2 nucleons
$\left[f = \frac{3.34357629 < 27kg}{(0.7372496 < 50kgs)(1)} = 4.535202583 > 23\frac{rot}{\text{s}}\right]$	Proton+Neutron $Mr_{\text{exp}} = 2.2102 < 42kgm$ Kanarev: one binding
$\left[f = \frac{2.23368 < 25kg}{0.7372496 < 50kgs} = 3.029747 > 25\frac{rot}{\text{s}}\right]$	124.3>9eV Higgs Boson 2.215849<25 kg
$\left[f = \frac{2.56482<25kg}{0.7372496 < 50kgs} = 3.47890 > 25\frac{rot}{\text{s}}\right]$	1.44>11eV Fermi Lab particle 2.567033<25kg
$\left[f = \frac{5.703889152 < 16kg}{0.7372496 < 50kgs} = 7.7367 > 34\frac{rot}{\text{s}}\right]$	3.20>20eV highest eV measured 5.704518<16kg
$\left[f = \frac{1.859222909 < 9kg}{0.7372496 < 50kgs} = 2.5218 > 41\frac{rot}{\text{s}}\right]$	$1.0429476 > 27eV$ Fernandes 1.859223<9kg
$\left[f = \frac{2.176450474 < 8kg}{0.7372496 < 50kgs} = 2.95212 > 42\frac{rot}{\text{s}}\right]$	Planck limit
$\left[f = \frac{7.8434 < 28kg}{0.7372496 < 50kgs} = 1.06387 > 23\frac{rot}{\text{s}}\right]$	classical radius of an electron: This frequency and radius are not a particle radius. This mass does not exist

Kanarev's electron Model



Kanarev



$$\begin{bmatrix} r_{\exp-electron} = (2\pi)(\underbrace{\overbrace{2.817<15m}^{classical\ calulated\ radius}}_{Kanarev's\ r_{mag}})(137.036) = \overbrace{2.4263<12m}^{\text{experimental measured electron radius}} \\ r_{\exp} \quad =(2\pi) \quad (r_{mag}) \quad (1/\alpha) \\ (2\pi)(1/\alpha) = (6.283185307)(137.036) = 861.0225818 \end{bmatrix}$$

$$\begin{bmatrix} Mr_{\exp} = \text{constant} = (\overbrace{9.1093826<31kg}^{electron\ mass})(\overbrace{2.426<12m}^{\text{electron's experimental radius}}) = 2.21022<42kgm \end{bmatrix} \text{ Kanarev}$$

$$\begin{bmatrix} Mr_{mag} = (\overbrace{9.1093826<31kg}^{electron\ mass})(\overbrace{2.817940325<15m}^{(r_{mag})=(classical\ electron\ radius)}) = 2.56696<45kgm \end{bmatrix} \text{This is not a particle radius}$$

$$\begin{bmatrix} q^2 = (\overbrace{9.1093826<31kg}^{electron\ mass})(\overbrace{2.817940325<15m}^{(r_{mag})=(classical\ electron\ radius)})(1>7) = 2.56696<38kgm \\ q^2 = (M)(r_{mag})(1>7) \\ q^2 = (1.602176537<19)^2 = 2.56696<38coul^2 \qquad \overbrace{q^2}^{\text{charge}} \overbrace{\propto}^{is\ a} \overbrace{Mr}^{\text{kilogram meter}} \end{bmatrix} \text{ Fernandes}$$

$$\begin{bmatrix} (2.210<42kgm)(1.1615<3) = 2.56696<45kgm \\ (2.56696<45kgm)(0.861>3) = 2.210<42kgm \end{bmatrix} \text{ Factor between Kanarev and Fernandes}$$

$$\begin{bmatrix} \frac{r_{mag}}{r_{\exp}} = \frac{2.817<15m}{2.426<12m} = 1.161<3 \end{bmatrix} (q = e = \sqrt{Mr_{mag}(1>7)} = 1.602176537<19\sqrt{kgm_{mag}>7})$$

$$\left[\begin{array}{l} q = e = \sqrt{Mr(1.1615<3)(1>7)} = \sqrt{(2.21022<42)(1.1615<3)(1>7)} = \sqrt{(2.56696<45)(1>7)} \\ = \sqrt{2.56696<38} = 1.602176357<19\sqrt{kgm_{mag}>7} \qquad q \propto \sqrt{kgm_{mag}} \end{array} \right]$$

308. Is there experimental evidences that an electron has the so-called classic radius of an electron?
A. No, experiments do not exist. From Questions and Answers of Kanarev

Page 95 Electrons-Protons-Neutrons JK ET and Rewrite
The handbook of Chemistry and Physics shows the "classical radius of the electron" as $(2.817<15m)$ Kanarev's theory shows this to be the radius of approach of the magnetic force lines around the torus ring of the electron (r_{mag}). This is confirmed by calculating the dimensionless fine structure constant (α) (which is equal to the circumference of the inner circle $(2\pi r_{mag})$ divided by the experimentally measured radius of the electron $(R_{\exp})$.

$$\left[\frac{2\pi r_{mag}}{r_{\exp}} = \frac{(2)(3.14)(2.817<15m)}{2.426<12m} = 0.007297352568 = \alpha = \frac{1}{137.036} \right] \tag{191}$$

$$\left[\begin{array}{l} r_{\exp} = (2\pi)(137.036)(r_{mag}) = (2)\overset{\pi}{(3.14)}\overbrace{(137.036)}^{\frac{1}{\alpha}}\overbrace{(2.817<15m)}^{r_{mag}} \\ = \overbrace{(861.0225818)}^{(2\pi)(\frac{1}{\alpha})}\overbrace{(2.817<15m)}^{r_{mag}} = \overbrace{2.426<12m}^{r_{\exp}} \end{array} \right]$$

$\left[\vec{h} = (M)(r_{\exp}^2)(f) \right]$ Kanarev *mass* distance kilogram *meter*

All Particle follow Kanarev's $(Mr_{exp} = 2.21022 < 42 kgm)$ constant $(M \quad r_{exp} \quad = \quad kg \quad m)$

Kg	Rotation/sec	meters	experimental	classical r_{mag}	
mass	frequency	radius $r_{exp}=c/f$	Mr_{exp}	Mr(1.1615<3)	
4.27E-41	5.791781E+09	5.17617E-02	2.21022E-42	2.56717E-45	smallest photon
2.42414E-35	3.28809E+15	9.11753E-08	2.21022E-42	2.56717E-45	13.6eV photon
9.1094E-31	1.23559E+20	2.42631E-12	2.21022E-42	2.56717E-45	electron 0.511>6eV
8.91331E-30	1.20899E+21	2.47968E-13	2.21022E-42	2.56717E-45	up quark
1.78266E-29	2.41799E+21	1.23984E-13	2.21022E-42	2.56717E-45	down quark
1.88356E-28	2.55485E+22	1.17343E-14	2.21022E-42	2.56717E-45	muon
2.40606E-28	3.26356E+22	9.18606E-15	2.21022E-42	2.56717E-45	meson
2.48806E-28	3.37479E+22	8.8833E-15	2.21022E-42	2.56717E-45	meson
3.56532E-28	4.83598E+22	6.19921E-15	2.21022E-42	2.56717E-45	strange quark
8.80118E-28	1.19379E+23	2.51128E-15	2.21022E-42	2.56717E-45	meson
8.87249E-28	1.20346E+23	2.49109E-15	2.21022E-42	2.56717E-45	meson
8.87177E-28	1.20336E+23	2.49129E-15	2.21022E-42	2.56717E-45	meson
9.78325E-28	1.32699E+23	2.25919E-15	2.21022E-42	2.56717E-45	meson
1.6726E-27	2.2687E+23	1.32143E-15	2.21022E-42	2.56717E-45	Proton 938>6eV
1.67491E-27	2.27183E+23	1.31961E-15	2.21022E-42	2.56717E-45	Neutron 939>6eV
1.98872E-27	2.69748E+23	1.11138E-15	2.21022E-42	2.56717E-45	hyperon
2.12033E-27	2.876E+23	1.04239E-15	2.21022E-42	2.56717E-45	hyperon
2.12579E-27	2.8834E+23	1.03972E-15	2.21022E-42	2.56717E-45	
2.1347E-27	2.89549E+23	1.03538E-15	2.21022E-42	2.56717E-45	
2.31746E-27	3.14339E+23	9.53725E-16	2.21022E-42	2.56717E-45	charm quark
2.34367E-27	3.17893E+23	9.43061E-16	2.21022E-42	2.56717E-45	
2.35543E-27	3.19489E+23	9.3835E-16	2.21022E-42	2.56717E-45	
2.98061E-27	4.04288E+23	7.41532E-16	2.21022E-42	2.56717E-45	hyperon
8.02198E-27	1.0881E+24	2.7552E-16	2.21022E-42	2.56717E-45	bottom quark
1.43201E-25	1.94237E+25	1.54344E-17	2.21022E-42	2.56717E-45	W
1.62556E-25	2.20489E+25	1.35967E-17	2.21022E-42	2.56717E-45	Z
2.23368E-25	3.02974E+25	9.89499E-18	2.21022E-42	2.56717E-45	Higgs125>9eV
2.56482E-25	3.47890E+25	8.61745E-18	2.21022E-42	2.56717E-45	Fermi labs 144>9eV
3.11966E-25	4.23148E+25	7.08481E-18	2.21022E-42	2.56717E-45	top quark 175>9eV
5.70389E-16	7.7367E+34	3.87494E-27	2.21022E-42	2.56717E-45	Gamma 3.20>20eV
1.85922E-09	2.5218E+41	1.18879E-33	2.21022E-42	2.56717E-45	1.043>27eV 1.86<9kg
2.17645E-08	2.9521E+42	1.01552E-34	2.21022E-42	2.56717E-45	Planck limits

mass	frequency	radius $r_{exp}=c/f$	Mr_{exp}	Mr(1.1615<3)

Mass, frequency and radius allows all known mass to be described.

All mass follow Kanarev's $(Mr_{\exp}^2 f = (Mr_{\exp})(r_{\exp} f) = Mr_{\exp} c = \vec{h})$ Plank's constant:

$\left[\vec{h} = 6.6260693(11) < 34Js \quad \text{HBCP} \qquad \vec{h} = 6.62606957(29) < 34Js \text{ codata}\right]$

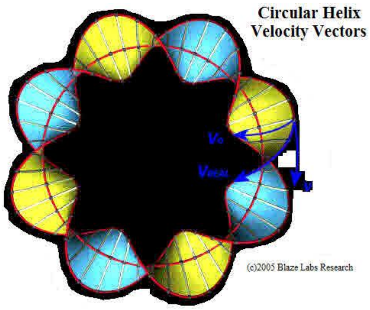
mass	frequency	radius r_{exp}=c/f	$\vec{h} = Mr_{\exp}^2 f$	
2.22E-39	2.98E+11	1.00E-03	6.626069E-34	smallest photon
2.42414E-35	3.28809E+15	9.11753E-08	6.626069E-34	Photon 13.6eV
9.1094E-31	1.23559E+20	2.42631E-12	6.626069E-34	electron 0.511>6eV
8.91331E-30	1.20899E+21	2.47968E-13	6.626069E-34	up quark
1.78266E-29	2.41799E+21	1.23984E-13	6.626069E-34	down quark
1.88356E-28	2.55485E+22	1.17343E-14	6.626069E-34	muon
2.40606E-28	3.26356E+22	9.18606E-15	6.626069E-34	meson
2.48806E-28	3.37479E+22	8.8833E-15	6.626069E-34	meson
3.56532E-28	4.83598E+22	6.19921E-15	6.626069E-34	strange quark
8.80118E-28	1.19379E+23	2.51128E-15	6.626069E-34	meson
8.87249E-28	1.20346E+23	2.49109E-15	6.626069E-34	meson
8.87177E-28	1.20336E+23	2.49129E-15	6.626069E-34	meson
9.78325E-28	1.32699E+23	2.25919E-15	6.626069E-34	meson
1.6726E-27	2.2687E+23	1.32143E-15	6.626069E-34	Proton 938>6eV
1.67491E-27	2.27183E+23	1.31961E-15	6.626069E-34	Neutron 939>6eV
1.98872E-27	2.69748E+23	1.11138E-15	6.626069E-34	hyperon
2.12033E-27	2.876E+23	1.04239E-15	6.626069E-34	hyperon
2.12579E-27	2.8834E+23	1.03972E-15	6.626069E-34	
2.1347E-27	2.89549E+23	1.03538E-15	6.626069E-34	
2.31746E-27	3.14339E+23	9.53725E-16	6.626069E-34	charm quark
2.34367E-27	3.17893E+23	9.43061E-16	6.626069E-34	
2.35543E-27	3.19489E+23	9.3835E-16	6.626069E-34	
2.98061E-27	4.04288E+23	7.41532E-16	6.626069E-34	hyperon
8.02198E-27	1.0881E+24	2.7552E-16	6.626069E-34	bottom quark
1.43201E-25	1.94237E+25	1.54344E-17	6.626069E-34	W
1.62556E-25	2.20489E+25	1.35967E-17	6.626069E-34	Z
2.23368E-25	3.02974E+25	9.89499E-18	6.626069E-34	Higgs 125eV
2.56482E-25	3.47890E+25	8.61745E-18	6.626069E-34	Fermi labs 144>9eV
3.11966E-25	4.23148E+25	7.08481E-18	6.626069E-34	top quark 175>9eV
5.70389E-16	7.7367E+34	3.87493E-27	6.626069E-34	Gamma 3.20>20eV
1.85922E-09	2.5218E+41	1.18879E-33	6.626069E-34	1.86<kg 1.043>27eV
2.17645E-08	2.9521E+42	1.01552E-34	6.626071E-34	Planck limits

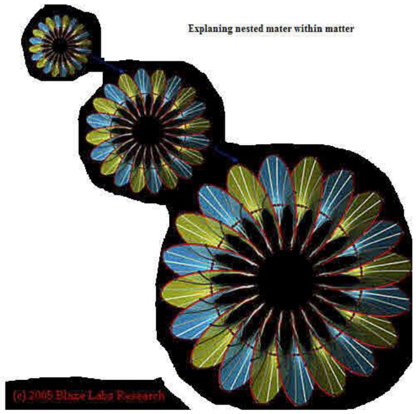
mass	frequency	radius r_{exp}=c/f	$\vec{h} = Mr_{\exp}^2 f$

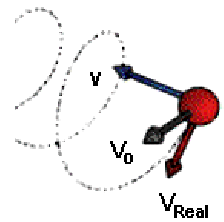
All mass follows Kanarev's $r_{exp}f=C$ constant

frequency	radius $r_{exp}=c/f$	$r_{exp}f=C$	$c = 2.99792458>8 m/s$
5.791781E+09	5.17617E-02	2.997925E+08	smallest photon
3.28809E+15	9.11753E-08	2.997925E+08	13.6eV photon
1.23559E+20	2.42631E-12	2.997925E+08	electron 0.511>6eV
1.20899E+21	2.47968E-13	2.997925E+08	up quark
2.41799E+21	1.23984E-13	2.997925E+08	down quark
2.55485E+22	1.17343E-14	2.997925E+08	muon
3.26356E+22	9.18606E-15	2.997925E+08	meson
3.37479E+22	8.8833E-15	2.997925E+08	meson
4.83598E+22	6.19921E-15	2.997925E+08	strange quark
1.19379E+23	2.51128E-15	2.997925E+08	meson
1.20346E+23	2.49109E-15	2.997925E+08	meson
1.20336E+23	2.49129E-15	2.997925E+08	meson
1.32699E+23	2.25919E-15	2.997925E+08	meson
2.2687E+23	1.32143E-15	2.997925E+08	Proton 938>6eV
2.27183E+23	1.31961E-15	2.997925E+08	Neutron 939>6eV
2.69748E+23	1.11138E-15	2.997925E+08	hyperon
2.876E+23	1.04239E-15	2.997925E+08	hyperon
2.8834E+23	1.03972E-15	2.997925E+08	
2.89549E+23	1.03538E-15	2.997925E+08	
3.14339E+23	9.53725E-16	2.997925E+08	charm quark
3.17893E+23	9.43061E-16	2.997925E+08	
3.19489E+23	9.3835E-16	2.997925E+08	
4.04288E+23	7.41532E-16	2.997925E+08	hyperon
1.0881E+24	2.7552E-16	2.997925E+08	bottom quark
1.94237E+25	1.54344E-17	2.997925E+08	W
2.20489E+25	1.35967E-17	2.997925E+08	Z
3.02974E+25	9.89499E-18	2.997925E+08	Higgs 125eV
3.47890E+25	8.61745E-18	2.997925E+08	Fermi labs 144>9eV
4.23148E+25	7.08481E-18	2.997925E+08	top quark 175>9eV
7.7367E+34	3.87493E-27	2.997925E+08	Gamma 3.20>20eV
2.5218E+41	1.18879E-33	2.997925E+08	1.043>27eV 1.86<9kg
2.9521E+42	1.01552E-34	2.997925E+08	Planck limits

frequency	radius $r_{exp}=c/f$	$r_{exp}f=C$

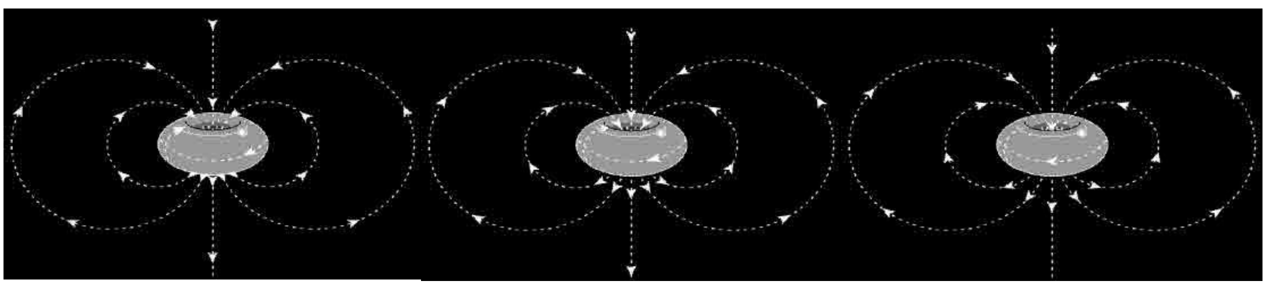


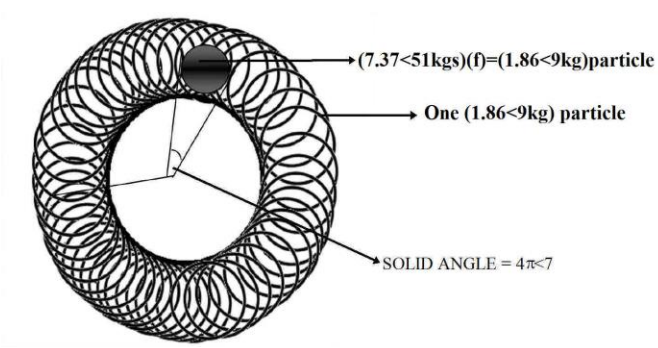




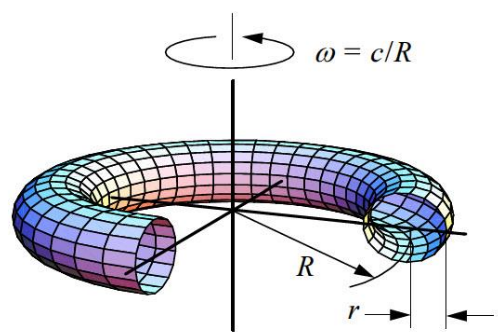
Savior Borg

Two helix makes a mass particle

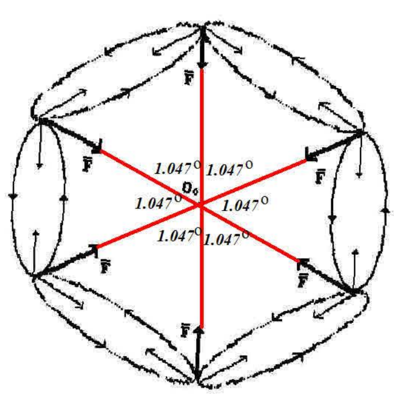




Fernandes



The Spinning Ring Model of the Electron



Kanarev's Photon Model

The mass of the (P+N) Deuterium nucleus is:

$$\left[M_{P\&N} = 2.01355 a.e.m. = (2.01355 aem)(1.660538 < 27\, kg/aem) = 3.34357629 < 27 kg\right]$$

$$\left[f = \frac{M}{h/c^2} = \frac{3.34357629 < 27kg}{(0.737249638 < 50kgs)(2)} = 2.26750117 > 23 \frac{rotation}{\sec} \right]$$

(P+N) Deuterium: Dividing by 2 particles does not equal $(Mr_{\exp} \neq 2.21022 kgm)$

$$\left[f = \frac{M}{h/c^2} = \frac{3.34357629 < 27kg}{(0.737249638 < 50kgs)(1)} = 4.535202349 > 23 \frac{rotation}{\sec} \right]$$

(P+N) Deuterium: Dividing by 1 molecule does equal $(Mr_{\exp} = 2.21022 kgm)$

$$\left[r_{\exp} = \frac{2.21022 < 42kgm}{M} = \frac{2.21022 < 42kgm}{3.34357629 < 27kg} = 0.660968917 < 15m \right] \text{(P+N) Deuterium}$$

The loss of mass when a proton bonds to a neutron is:

$$\left[\Delta M = (\#_P)(M_P) + (\#_N)(M_N) - M_{P+N}\right]$$

$$\left[\Delta M = (1P)(\overbrace{1.672626717 < 27kg}^{mass\ of\ free\ proton}) + (1N)(\overbrace{1.674934864 < 27kg}^{mass\ of\ free\ neutron}) - \overbrace{3.34357629 < 27kg}^{mass\ of\ bonded\ proton\ \&\ neutron} = 0.003985291 < 27kg \right]$$

$$\left[f = \frac{M}{h/c^2} = \frac{0.003985291 < 27kg}{(0.737249638 < 50kgs)(1)} = 5.405619 > 20 \frac{rotation}{\sec} \right]$$

This is the emitted photon frequency when a proton bonds to a neutron to form deuterium.

$$\left[r_{\exp} = \frac{2.21022 < 42kgm}{M} = \frac{2.21022 < 42kgm}{0.003985291 < 27kg} = 5.545391792 < 13m \right]$$

This is the emitted photon radius when a proton bonds to a neutron to form deuterium.

The bonding strength of a proton to a neutron to form deuterium.

- Deuterium mass is:
  $$\left[M_{P\&N} = 2.01355 a.e.m. = (2.01355 aem)(1.660538 < 27\, kg/aem) = 3.34357629 < 27 kg\right]$$
- Proton mass is:
  $$\left[M_P = 1.00728 aem = (1.00728 aem)(1.660538 < 27\, kg/aem) = 1.672626717 < 27 kg\right]$$
- Neutron mass is:
  $$\left[M_N = 1.00867 aem = (1.00867 aem)(1.660538 < 27\, kg/aem) = 1.674934864 < 27 kg\right]$$

During the mass interaction of bonding a proton to a neutron, mass in the form of a gamma photon or a series of gamma photons are emitted with a total mass difference of:

$$\left[(M\vec{a}d) = \Delta Mc^2 = (0.003985291 < 27 kg)(8.98755179\, m^2/s^2) = 3.5818009 < 13 (kg)(m/s^2)(m)\right]$$

Converting $\left[(kg)(m/s^2)(m)\right]$ to electron Volts (eV) :

$$\left[eV = \frac{(M\vec{a}d)}{e} = \frac{3.5818009 < 13 Joul(kg)(m/s^2)(m)es}{1.6022 < 19 (kg)(m/s^2)(m)/eV} = 2.2356 > 6 eV = 2,235,600 eV\right] \qquad (236)$$

NOTE: $eV\ is\ not$ a $(M\vec{a}d)\ unit.\ It\ is\ a\ (M\vec{a}d)\ unit\ divided\ by\ "e".$

The mass interaction $(M\vec{a}d)$ unit is determined by the number of bindings between the protons and neutrons; not the number of protons and neutrons.

In **deuterium**, the proton and neutron are connected by ***one*** binding. The binding mass of this nucleus is equal to the mass of the photons emitted during the mass interaction:

Mass of tritium nucleus is

$$\left[M_{P\&N} = 3.01605 aem = (3.01605 aem)(1.660538<27\,kg/aem) = 5.008265635<27 kg\right]$$

$$\left[f = \frac{M}{h/c^2} = \frac{5.008265635<27kg}{(0.737249638<50kgs)(3)} = 2.264391588>23\frac{rotation}{\sec}\right]$$

(1P2N) Tritium: Dividing by 3 particles does not equal $(Mr_{\exp} \neq 2.21022<42kgm)$

$$\left[f = \frac{M}{h/c^2} = \frac{5.008265635<27kg}{(0.737249638<50kgs)(1)} = 6.793174>23\frac{rotation}{\sec}\right]$$

(1P2N) Tritium: Dividing by 1 molecule does equal $(Mr_{\exp} = 2.21022<42kgm)$

$$\left[r_{\exp} = \frac{2.21022<42kgm}{M} = \frac{2.21022<42kgm}{5.008265635<27kg} = 0.441270524<15m\right]$$

The loss of mass during bonding is: $\left[\Delta M = (\#_P)(M_P) + (\#_N)(M_N) - M_{P+N}\right]$

$$\left[\begin{array}{l}\Delta M = (1P)\overbrace{(1.672626717<27kg)}^{mass\ of\ free\ proton} + \underbrace{(2N)\overbrace{(1.674934864<27kg)}^{mass\ of\ free\ neutron}}_{3.349869728<27kg} - \overbrace{5.008265635<27kg}^{mass\ of\ bonded\ proton\ \&\ neutron} \\ = 0.014231263<27kg\end{array}\right] \quad (237)$$

$$\left[(M\vec{a}d) = \Delta Mc^2 = (0.014231263<27kg)(8.98755179\,m^2/s^2) = 12.7904213<13(kg)(m/s^2)(m)\right]$$

Converting $(M\vec{a}d) = \left[(kg)(m/s^2)(m)\right]$ to electron Volts (eV):

$$\left[\begin{array}{l}eV = \frac{(M\vec{a}d)}{e} = \frac{12.7904213<13(kg)(m/s^2)(m)}{1.6022<19(kg)(m/s^2)(m)/eV} = 7.983036>6eV \\ NOTE:\ eV \text{ is not a } (M\vec{a}d)\ unit\end{array}\right] \quad (238)$$

The tritium nucleus has **2 bindings.**

$$\left[(eV)_{nuclei} = \frac{(eV)_{ph}}{2_{bindings}} = \frac{7.9828 > 6}{2_{bindings}} = 3.9914 > 6eV = 3,991,400eV\right] \quad (239)$$

The low abundance of deuterium and tritium show that the magnetic action of neutrons differs from the magnetic actions of protons.

Conservation of Angular Momentum

The conservation of angular momentum governs the birth of mass.

$$\left[\vec{h} = Mr_{\exp}^2 f = Mr_{\exp}^2 (v_\phi/2\pi) = \text{constant} = (kg)(m^2)(rad/s)\right]$$

The conservation of angular momentum is shown in (Fig-1).

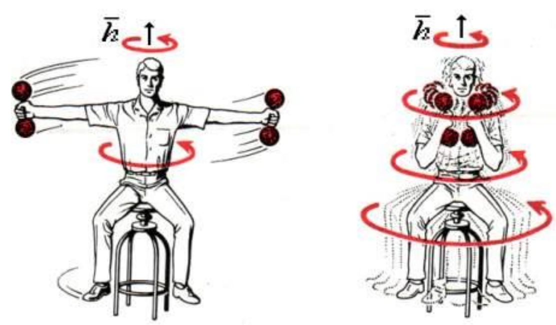


Fig-1: The conservation of angular momentum is a change in rotation velocity when the mass distribution is changed.

When the dumbbells move away from the axis of rotation, the distance (r) from the center of mass is increased. In order to keep the angular momentum $\left[Mr^2(\vec{v}_\phi/2\pi)\right]$ constant, the angular velocity $(\vec{v}_\phi)$ must decrease. When the dumbbells are moved closer to the axis of rotation, the distance (r) from the center of mass of the dumbbells is decreased. In order to keep the angular momentum $\left[Mr^2(\vec{v}_\phi/2\pi)\right]$ constant, the angular velocity $(\vec{v}_\phi)$ must increase.

The equations of angular momentum predict that what has been labelled as a wavelength is actually the radius of elementary particles. When the wavelengths of elementary particles are understood to be equal to their radii, then Planck's becomes the conservation of angular momentum.

$$\vec{h} = Mr_{\exp}^2 f = Mr_{\exp}^2(0.159\vec{v}_\phi) = const \Rightarrow (kg)(m^2)(rot/s)$$

$$\left[\vec{v}_\phi = 2\pi f = 6.28 f \quad \therefore \quad f = (1/6.28)(\vec{v}_\phi) = 0.159\vec{v}_\phi\right]$$

Plank Calculations

Codata $\left[G = 6.67384(80) < 11\frac{m^3}{kgs^2}\right]$

$$\left[\begin{array}{l} M_{planck} = \sqrt{\frac{\hbar C}{G}} = \sqrt{\frac{(1.05457168 < 34Js)((2.99792458 > 8\frac{m}{s})}{6.6742 < 11\frac{m^3}{kgs^2}}} = \sqrt{\frac{3.161526361 < 26Jm}{6.6742 < 11\frac{m^3}{kgs^2}}} \\ = \sqrt{4.7369368 < 16kg^2} = 2.176450474 < 8kg \end{array}\right] \text{Mass}$$

$$\left[\begin{array}{l} L_{plank} = \sqrt{\frac{G\hbar}{c^3}} = \sqrt{\frac{(6.67384 < 11\frac{m^3}{kgs^2})(1.05457168 < 34Js)}{26.94400242 > 24\frac{m^2}{s^2}}} = \sqrt{\frac{7.0376764 < 45\frac{m^5}{s^3}}{26.94400242 > 24\frac{m^2}{s^2}}} = \\ \sqrt{2.61196399 < 70m^2} = 1.616157 < 35m \end{array}\right] \text{length}$$

$$\left[\begin{array}{l} L_{plank} = \sqrt{\frac{G\hbar}{c^3}} = \sqrt{\frac{\left(6.6742 < 11\frac{m^3}{kgs^2}\right)(1.05457168 < 34Js)}{26.9440 > 24\frac{m^3}{s^3}}} = \sqrt{\frac{7.038422 < 45\frac{m^5}{s^3}}{26.9440 > 24\frac{m^3}{s^3}}} \\ = \sqrt{2.612241 < 70m^2} = 1.616243 < 35m \end{array}\right] \text{Length}$$

Codata $[1.616199(97) < 35m]$

$$\left[t_{plank} = \sqrt{\frac{G\hbar}{c^5}} = \sqrt{\frac{7.038422 < 45\frac{m^5}{s^3}}{2.421606 > 42\frac{m^5}{s^5}}} = \sqrt{29.065 < 88s^2} \approx 5.39124 < 44s\right] \text{Time}$$

$$\left[f = \frac{m}{h/c^2} = \frac{2.176450474 < 8kg}{0.737249638 < 50kgs} = 2.95212 > 42\frac{rotation}{\sec} \right]$$ Frequency

$$\left[r = \frac{c}{f} = \frac{2.99792458 > 8\frac{m}{s}}{2.95212 > 42\frac{rot}{s}} = 1.015515826 < 34 meters \right]$$ Planck Radius

Planck Length = $\left[1.616199(97) < 35m\right]$ Planck radius = $1.015515826 < 34 meters$