# THE SOLUTION OF THE BOLTZMANN CONSTANT 

$$
\begin{gathered}
8.610225818 \times 10^{-5} \times e=k \\
2 \pi \times 10^{-7} \times 137.036 \times e=k
\end{gathered}
$$



FRANCIS VIREN FERNANDES

## $P V=n k T$

$$
\begin{aligned}
& I f \\
& n=1 \text { particle } \\
& P V=k T \\
& E= E \\
& P=\frac{I^{2}}{R^{2}}=\frac{F}{A} \\
& V= R_{1} \times R_{2} \times R_{3} \\
& k= 2 \pi \times 10^{-7} \times 137.036 \times e \\
& T= e V=e a
\end{aligned}
$$

## My Discoveries

## ETHER IN DYNAMIC PULSATE MOTION

PLANCK ETHER MASS

$m_{P l} \equiv \sqrt{\frac{\hbar c}{G}}=$ Planck Mass $=2.176450474 \times 10^{-8} \mathrm{~kg}$ or $\pi \mathrm{B}^{2} \cdot 137.036=\pi \cdot(\text { Plancklength })^{2}$
I have discovered this correspondence in the dynamic living pulsations of ether

$$
B=1.380668031 \times 10^{-36}
$$

## WAVE-PARTICLE DUALITY

- Particle:

$$
q^{2}=M \times R \times 10^{7}
$$

- Wave:

$$
\lambda=2 \pi R \times 137.036
$$

- Field:

$$
\frac{M}{R}=\frac{1.859222909 \times 10^{-9}}{1.380668038 \times 10^{-36}}=1.346611109 \times 10^{27} \mathrm{~kg} / \mathrm{m}
$$

## ETHER TORUS[Ђ]

186 ether $\times$ velocity $\times$ Boltzmannradius $=$ Planck' $^{\text {'sh }}$ $1.86 \times 10^{-9} \times 25812.8075 \times 1.380668 \times 10^{-29}=h$

'37 Aitheron $\mathrm{xf}=186$-ETHER [E]
ONE 186-PHOTON TORUS

## TWIN MASS



## 737 Wave-Maker

The energy of 737 equals the Planck's constant times one second

$$
7.37 \times 10^{-51} \times c^{2}=h \times 1.0
$$

$1.86 \times 10^{-9} \times V_{\text {RK }}=7.37 \times 10^{-51} \times c^{2} / 1.38 \times 10^{-29} \times 1.0$

So, the imposed condition is 1 second for the wavemaker to exist.

## Coulomb's Constant

$$
K=c^{2} \times 10^{-7}
$$

Velocity squared $=\mathrm{v} 1 \times \mathrm{v} 2$
$258128076 \times 3.481818765 \times 10^{5}=K$

## The Boltzmann Constant

## Superconductivity of SQUID \& resistance

The ratio of the velocity of 186 -ether to the electrical resistance of a photon, c/e

$$
R=\frac{\left(2 \pi \times 10^{-7}\right) \times 137.036 \times \lambda}{Q \times t}
$$

$258128076 \mathrm{~m} / \mathrm{s}$
$\Omega=c / e=1.871157469 \times 10^{27} \mathrm{~m} / \mathrm{s} . C$
$25812.8076 \div \frac{c}{e}=$ Boltzmann' $k$

## The Coulomb constant $25812.8076 \times 34181.8779 \mathrm{~m}^{2} / \mathrm{s}^{2}$

$$
\begin{aligned}
& f=2.521836314 \times 10^{41} \\
& f=\frac{1.859222909 \times 10^{-9} \mathrm{~kg}}{7.37249637 \times 10^{-51} \mathrm{~kg}} \\
& f \times 1.859222909 \times 10^{-9}=4.688655847 \times 10^{32} \mathrm{~kg} \\
& \text { length }=\frac{4.688655847 \times 10^{32} \mathrm{~kg}}{1.346611109 \times 10^{27} \mathrm{~kg} / \mathrm{meter}}=34181.8779 \mathrm{~m} \\
& 258128076 \mathrm{~m}=\left(2 \pi \times 10^{-7}\right) 137.036 \times \frac{\lambda}{\mathrm{t}}
\end{aligned}
$$

## $\mathrm{E}=\mathrm{mc}^{2}$

$258128076 \times 3.481818765 \times 10^{12}=c^{2}$

## Ohm's Law $\mathrm{V}=\mathrm{IR}$ is $\mathrm{F}=\mathrm{ma}$

- oHM'S LAW Rewritten as $F=$ ma
$\bullet$
- $\quad V=I R$
- FERNANDES LAW

$$
\begin{gathered}
a \times 10^{7}=\sqrt{F} \times \frac{c}{e}=\sqrt{I^{2}} \times \frac{I}{m}=\frac{F}{m} \\
R=\frac{\left(2 \pi \times 10^{-7}\right) \times 137.036 \times \lambda}{Q \times t}
\end{gathered}
$$

- Acceleration, $a$ as volts equals current, I the root of force, $F$ times resistance, $R$.
- Resistance, $R$ is current, I per photon mass about one 186 -seed ether.


## Voltage is acceleration

Consider 511 keV for an electron

$$
\begin{gathered}
\frac{e V}{e}=V \\
\frac{511000}{1.60217653 \times 10^{-19}}=3.1894 \times 10^{24} \text { Volts }
\end{gathered}
$$

Acceleration $=\frac{c^{2} \times 10^{-7}}{r}=\frac{\left(2.998 \times 10^{8}\right)^{2} \times 10^{-7}}{2.817940325 \times 10^{-15}}=3.1894 \times 10^{24} \mathrm{~m} / \mathrm{s}^{2}$

$$
q^{2}=M \times R \times 10^{7}
$$

$\left(1.602176537 \times 10^{-19}\right)^{2}=$
$1.859222909 \times 10^{-9} \times 1.380668031 \times 10^{-36} \times 10^{7}$

## CURRENT

Momentum $=\mathrm{mv}=\mathrm{Ft}$
$1.859222909 \times 10^{-9} \mathrm{~kg} \mathrm{xv}=25 \times 3.20435306 \times 10^{-20} \mathrm{~s}$
$v=4.3087263 \times 10^{-10} \mathrm{~m} / \mathrm{s}$
One coulomb of ether in $\mathrm{kg}=1.859222909 \times 10^{-9} \mathrm{~kg} \times 6.24150948 \times 10^{18}=1.160435741 \times 10^{10} \mathrm{~kg}$ Current is the momentum of one coulomb of ether,
Ether Current I = $5 \mathrm{amps}=1.160435741 \times 10^{10} \mathrm{~kg} \times 4.3087263 \times 10^{-10} \mathrm{~m} / \mathrm{s}$ per one coulomb Energy of ether drift, $E=F r$ where $r=9.6064088 \times 10^{-12} \mathrm{~m}$ and $F=I^{2}$
$\mathrm{E}=25 \times 9.6064088 \times 10^{-12}=\mathbf{2 . 4 0 1 6 0 2 2} \times \mathbf{1 0}^{-10} \mathrm{~J}$
$\mathbf{E}=\boldsymbol{m}(\mathbf{c v})=1.859222909 \times 10^{-9}\left(2.99792458 \times 10^{8} \times 4.3087263 \times 10^{-10}\right)=\mathbf{2 . 4 0 1 6 0 2 2} \times 10^{-10} \mathbf{~}$
Copper Current I $=5 \mathrm{amps}=2.672142823 \times 10^{-27} \times 6.24150948 \times 10^{18} \times 2.99792458 \times 10^{8} \mathrm{per}$ one Coulomb
The drift velocity of changed mass $2.672142823 \times 10^{-27} \mathrm{~kg}$ of copper atoms

$$
\mathbf{v}=7.34295219 \times 10^{-4} \mathrm{~m} / \mathrm{s}
$$

$$
E=m(c v)=2.672142823 \times 10^{-27} \times\left(2.99792458 \times 10^{8} \times 7.34295219 \times 10^{-4}\right)=5.88235283 \times 10^{-22} \mathrm{~J}
$$

$$
E=F R=25 \times 2.352941132 \times 10^{-23}=5.88235283 \times 10^{-22} \mathrm{~J}
$$

## Remarks

The drift of ether and atoms of the conductor can be calculated by $\mathbf{E}=\mathbf{m}$ (cv) The mass of copper atoms changed under eVe stress from $1.05520602 \times 10^{-25} \mathrm{~kg}$ to 2.672142823 $\times 10^{-27} \mathrm{~kg}$

$$
G=\frac{B}{\wp} \cdot c^{2}
$$

$$
G=\frac{1.38066803 \times 10^{-36}}{1.859222909 \times 10^{-9}} \cdot c^{2}
$$

$$
\text { Ether }=1.346611109 \times 10^{27} \times 6.371 \times 10^{6}=8.57926 \times 10^{33} \mathrm{~kg}
$$

Force, F of earth mass, m oscillators $\mathrm{F}=\mathrm{m} \mathrm{a} \quad F=8.57926 \times 10^{33} \times 9.82$

$$
F=m \cdot \frac{c^{2}}{r} \quad F=8.42483332 \times 10^{34} N
$$

$$
F=8.42483332 \times 10^{34}=m \cdot \frac{c^{2}}{6.371 \times 10^{6}}
$$

$$
\text { Force of entrained ether } \mathrm{F}=\mathrm{m} \text { a }
$$

Entrained Ether for Earth
The acceleration of entrained ether produces an acceleration of $9.8 \mathrm{~m} / \mathrm{s}^{2}$ Radius of Earth $6.371 \times 10^{6} \mathrm{~m}$

## Magnetism

- MAGNETISM IDENTIFIED

The effect of magnetic flux [LHS] is caused by current [RHS]

$$
\Phi=I \times \pi \times r \times 10^{-7} \times 137.036
$$

## UNIFICATION OF GRAVITY WITH ELECTROMAGNETISM

## GEM

This is the unification of gravity with electromagnetism which is being searched for because no one cared about the units of eV

## MASS

Mass is an attribute of an oscillator measured differently by $\mathrm{eV}, \mathrm{R}=\mathrm{I} / \mathrm{m}$ and $\mathrm{F}=\mathrm{ma}$.
These experimental mass measures differ by a rotational factor of
$2 \mathrm{Pi} \times 10^{-7} \times 137.036$
Francis V. Fernandes (Born 1961)


Idiocy of energy units - It's too bad, but I have already apologized, and there is nothing else I can do... Richard P. Feynman (1961)

You Feynman recognized the error which physicists and engineers memorized as truth; so here is my solution...

$$
\begin{aligned}
& T=2 \pi \sqrt{\frac{m l}{m g}} \\
& T=2 \pi \sqrt{\frac{q^{2}}{I^{2}}} \\
& T=2 \pi \frac{q}{I} \\
& q=I \times T
\end{aligned}
$$

## $Q=I x t$

This formula $\mathrm{Q}=1 \times \mathrm{t}$ represents a physical reality when squared

$$
\begin{aligned}
& q^{2}=I^{2} \times t^{2} \\
& m \times r \times 10^{7}=F \times t^{2} \\
& F=m \times \frac{r \times 10^{7}}{t^{2}} \\
& F=m \times a
\end{aligned}
$$

## $P V=k T$

$$
\begin{gathered}
\frac{I^{2}}{R^{2}} \times R_{1} \times R_{2} \times R_{3}=2 \pi \times 10^{-7} \times 137.036 \times e \times e V \\
R^{2}=R_{1} \times R_{3} \\
\frac{h}{2 e}=B A=\frac{I}{R^{\circ}} \times R_{1} \times R_{3} \\
P=\frac{F}{A}=\frac{I^{2}}{R_{1} \times R_{3}}
\end{gathered}
$$

## METHOD

- $\mathrm{CV}=$ velocity squared
- $E=P V=k T=e V e=e a e=h f=m c^{2}$
- $m \times r=e^{2}$
- $\Phi=I \times \pi \times r \times 10^{-7} \times 137.036$

I know the formulas for volts, current and resistance

$$
a=\mid \times 1 / m
$$

Time period of a pendulum

## Particle volume of gas at 300kelvin

- $\mathrm{Vol}=\mathrm{R} 1 \times \mathrm{R} 2 \times \mathrm{R} 3$
- $\mathrm{Vol}=4.084572793 \times 10^{-26} \mathrm{~m}^{3}$
- $\mathrm{R} 1=0.278731462 \mathrm{~m}$
- $\mathrm{R} 2=0.557462906 \mathrm{~m}$
- R3 $=2.628722405 \times 10^{-25} \mathrm{~m}$


## Structure of EM Unfolding

 Atmospheric \& Magnetic pressures solved- $\mathrm{I}=8.616186234 \times 10^{-11} \mathrm{C}$
- $\mathrm{R} 1=0.278731462 \mathrm{~m}$
- R2 $=0.557462906 \mathrm{~m}$ Note: R2 $=2 \times$ R1
- $\mathrm{R} 3=2.628722405 \times 10^{-25} \mathrm{~m}$
- $\mathrm{R}_{\mathrm{o}}=3.053023765 \times 10^{-21} \mathrm{~m}$
$\frac{h}{2 e}=B A=\frac{I}{R_{o}} \times R_{1} \times R_{3}$
$R_{2} \times \pi \times 137.036 \times 10^{-7}=\frac{R_{1} \times R_{3}}{R_{\rho}}$

$$
P=\frac{F}{A}=\frac{I^{2}}{R_{1} \times R_{3}}
$$

$$
B^{2}=\frac{I^{2}}{R^{2}}
$$

## kT

$$
e a=T=e V
$$

## $8.610225818 \times 10^{-5} \times e=k$

$2 \pi \times 10^{-7} \times 137.036 \times e=k$

## Energy, E=kT=PV

$$
\begin{gathered}
e a=T=e V \\
2 \pi \times 10^{-7} \times 137.036 \times e=k \\
2 \pi \times 10^{-7} \times 137.036 \times e \times e V=k T \\
2 \pi \times 10^{-7} \times 137.036 \times e \times e a=k T \\
2 \pi \times 10^{-7} \times 137.036 \times E=k T
\end{gathered}
$$

## $E=$ eae $=e V e$

- At a temperature of say for example 300kelvin and so
acceleration, a or volt, $\mathrm{V}=1.612224182 \times 10^{17} \mathrm{~m} / \mathrm{s}^{2}$
- $\mathrm{E}=\mathrm{kT}=$ eae $=4.138530517 \times 10^{-21} \mathrm{Joules}$

$$
\begin{aligned}
& 2 \pi \times 10^{-7} \times 137.036 \times e \times e V=k T \\
& 2 \pi \times 10^{-7} \times 137.036 \times e \times e a=k \times 300
\end{aligned}
$$

# Speed of hydrogen molecule mass, m at 300 K is $1927 \mathrm{~m} / \mathrm{s}$ 

acceleration, $a=1.612224182 \times 10^{17} \mathrm{~m} / \mathrm{s}^{2}$

$$
\begin{aligned}
& a=\frac{v^{2}}{r}=\frac{v^{2}}{3 r} \quad v=1927 m / s \\
& q^{2}=m \times r \times 10^{7} \\
& r=7.673488995 \times 10^{-12} m
\end{aligned}
$$

## angle $x$ alpha $^{-1} x$ exea

$$
\begin{aligned}
& 2 \pi \times 10^{-7} \times 137.036 \times e \times e V=k T \\
& 2 \pi \times 10^{-7} \times 137.036 \times e \times e a=k \times 300
\end{aligned}
$$

Boltzmann, $k \cong e \times p r e c e s s i o n$

## $T \times e=e a \times e=300 \times e=E=m(c v)^{2}$

$$
\begin{aligned}
& E^{*}=300 \times 1.60217653 \times 10^{=19} J \\
& E^{*}=4.80652959 \times 10^{-17} J
\end{aligned}
$$

$$
E^{*}=4.80652959 \times 10^{-17} J
$$

$$
E=4.80652959 \times 10^{-17} \times\left(2 \pi \times 10^{-7}\right) 137.036
$$

$$
E=4.138530517 \times 10^{-21} J=P V=k T
$$

## $R_{2}=0.557462906 \mathrm{~m}$

$$
\begin{aligned}
& E=4.138530517 \times 10^{-21} \mathrm{~J}=P V=k T \\
& E=m c^{2}=h f \\
& f=6.245830416 \times 10^{12} \mathrm{~Hz} \\
& t=\frac{1}{f}=1.601068126 \times 10^{-13} \mathrm{~s} \\
& m=4.604736212 \times 10^{-38} \mathrm{~kg} \\
& R=\frac{I}{m}=\frac{c}{q}=\frac{2.99792458 \times 10^{8}}{1.60217653 \times 10^{-19}}=1.871157469 \times 10^{27} \mathrm{ohms} \\
& I=m \times R=4.604736212 \times 10^{-38} \mathrm{~kg} \times 1.871157469 \times 10^{27} \mathrm{ohms} \\
& I=8.616186554 \times 10^{-11} \mathrm{Amp}
\end{aligned}
$$

## $R_{2}=0.557462906 \mathrm{~m}$

$$
\begin{aligned}
& m=4.604736212 \times 10^{-38} \mathrm{~kg} \\
& q^{2}=m \times R_{2} \times 10^{7} \\
& R_{2}=0.557462906 \mathrm{~m}
\end{aligned}
$$

## $R_{1}=0.278731462 \mathrm{~m}$

$$
\begin{aligned}
& m=4.604736212 \times 10^{-38} \mathrm{~kg} \\
& q^{2}=m \times R_{2} \times 10^{7} \\
& R_{2}=0.557462906 \mathrm{~m} \\
& q^{2}=2 m \times R_{3} \times 10^{7} \\
& R_{1}=\frac{R_{2}}{2}=0.278731453 \mathrm{~m}
\end{aligned}
$$

$$
\begin{aligned}
& R_{3}=2.628722405 \times 10^{-25} \mathrm{~m} \\
& R_{o}=3.053023765 \times 10^{-21} \mathrm{~m}
\end{aligned}
$$

Volume $=4.084572793 \times 10^{-26} \mathrm{~m}^{3}$
$\frac{\text { Volume }}{R_{2}}=$ Area
Area, $A=\frac{4.084572793 \times 10^{-26}}{0.557462906}=7.3270764 \times 10^{-26} \mathrm{~m}^{2}$
MagneticField, $B=\frac{\phi}{A}=\frac{2.06783717 \times 10^{-15}}{7.3270764 \times 10^{-26}}$
$B=2.822181187 \times 10^{10} \mathrm{Amp} /$ meter

## DONE AWAY WITH SIN COS ijk $R_{3} \& R_{0}$

$$
\begin{aligned}
& B=\frac{I}{R_{\mathrm{o}}} \\
& R_{\mathrm{o}}=\frac{8.616186234 \times 10^{-11}}{2.822181187 \times 10^{10}}=3.053023765 \times 10^{-21} \mathrm{~m} \\
& R_{3}=R_{\mathrm{o}} \times 2 \pi \times 10^{-7} \times 137.036=2.628722405 \times 10^{-25} \mathrm{~m}
\end{aligned}
$$

## Drift velocity $\quad E / B=v$

$$
\begin{aligned}
& \text { Electricfield, } E=\frac{F}{q}=\frac{I^{2}}{q}=\frac{\left(8.616186234 \times 10^{-11}\right)^{2}}{1.60217653 \times 10^{-19}} \\
& E=0.046336133 \mathrm{~N} / C \\
& v=\frac{E}{B}=\frac{0.046336133}{2.822181187 \times 10^{10}}=1.641855357 \times 10^{-12} \mathrm{~m} / \mathrm{s} \\
& v=\frac{R_{3}}{t}=\frac{2.628722404 \times 10^{-25}}{1.601068127 \times 10^{-13}}=1.641855434 \times 10^{-12} \mathrm{~m} / \mathrm{s}
\end{aligned}
$$

## Drift velocity squared cv

$$
\begin{aligned}
& q^{2}=m \times R_{3} \\
& m=9.765084473 \times 10^{-14} \mathrm{~kg} \\
& \text { Energy, } E=e \times 300 \mathrm{kelvin}=e e a \\
& E=m c v=4.806529413 \times 10^{-17} \mathrm{~J}
\end{aligned}
$$

Squid Velocity of 186-ether propels hydrogen gas molecules - the reason for Brownian motion 186ether $\times$ velocity $\times$ Boltzmannradius $=$ Planck'sh $1.86 \times 10^{-9} \times 25812.8075 \times 1.380668 \times 10^{-29}=h$

$$
a=\frac{v}{t}=\frac{258128076}{1.601068127 \times 10^{-13}}=1.612224182 \times 10^{17} \mathrm{~m} / \mathrm{s}^{2}
$$

$$
a=\frac{v^{2}}{r}=\frac{v^{2}}{3 r}
$$

$$
v=1927 \mathrm{~m} / \mathrm{s}
$$

$$
q^{2}=m \times r \times 10^{7}
$$

$$
r=7.673488995 \times 10^{-12} \mathrm{~m}
$$

VELOCITY SQUARED OF LIGHT SPEED $c^{2}$ $25812.8076 \times 3.481818765 \times 10^{12}$

$$
\begin{aligned}
& m=4.604736212 \times 10^{-38} \mathrm{~kg} \\
& q^{2}=m \times r \times 10^{7} \\
& R_{2}=0.557462906 \mathrm{~m} \\
& v_{2}=\frac{0.557462906}{1.601068132 \times 10^{-13}}=3.481818761 \times 10^{12} \mathrm{~m} / \mathrm{s}[F T L] \\
& v_{1}=258128076=\frac{\lambda}{t}=\frac{\lambda}{1.601068132 \times 10^{-13}} \\
& \lambda=4.132806365 \times 10^{-9} \mathrm{~m} \\
& m \times c \times \lambda=h \\
& m=5.347985402 \times 10^{-34} \mathrm{~kg} \\
& E=m c^{2}=4.806529576 \times 10^{-17} \mathrm{~J} \\
& E=e T=e e a=e \times 300 \mathrm{~J}
\end{aligned}
$$

## Txe=eaxe

$$
\begin{aligned}
& a=\frac{E^{*}}{e^{2}}=\frac{4.80652959 \times 10^{-17}}{\left(1.60217653 \times 10^{-19}\right)^{2}} \\
& a=1.872452844 \times 10^{21} \mathrm{~m} / \mathrm{s}^{2} \\
& T=e a=e V=300 \text { kelvin }
\end{aligned}
$$

## Analysis of Volume $=R_{1} \times R_{2} \times R_{3}$ AT 300 KELVIN

$R_{1}=0.278731462 \mathrm{~m}$
$R_{2}=0.557462906 \mathrm{~m}$

Used to calibrate voltmeters

$$
A=R_{1} \times R_{3}
$$

B A is the magnetic flux quantum

Pressure = Current squared per area A

The photon mass measured due to 737-frequency

The FTL component velocity of speed of light squared

$$
R_{3}=2.6287224 \times 10^{-25} \mathrm{~m}
$$

Measured in magnetism

The source of magnetism

## $P \mathrm{~V}=\mathrm{k} \mathrm{T}$

$\frac{I^{2}}{R_{1} \times R_{3}} \times R_{1} \times R_{2} \times R_{3}=2 \pi \times 10^{-7} \times 137.036 \times e \times e \times a$
$\frac{F}{A} \times V=2 \pi \times 10^{-7} \times 137.036 \times E$

## Spectroscopy

The mass of a proton, m 2 is changed from $1.672622216 \times 10^{\wedge}-27 \mathrm{~kg}$ to $3.634114179 \times 10^{\wedge}-29 \mathrm{~kg}$ when 0.068 amps of current is passing thru water during electrolysis

The energy as measured for a proton $\mathrm{E}=\mathrm{FR}=1 \wedge 2 \mathrm{R}$ The radius of a proton $q^{\wedge} 2=m R 10^{\wedge 7}$ and so $R=1.5347 \times 10^{\wedge}-11 \mathrm{~m}$
$\mathrm{E}=0.068^{\wedge} 2 \times 1.5347 \times 10^{\wedge}-11=7.0964528 \times 10^{\wedge}-14 \mathrm{~J}$
$\mathrm{E}=\mathrm{m} 1 \mathrm{c}^{\wedge} 2$ and so $\mathrm{m} 1=7.895868606 \times 10^{\wedge}-31 \mathrm{~kg}$
Originally before electricity was passed the energy of the proton $\mathrm{E}=\mathrm{mc}^{\wedge} 2$
$\mathrm{E}=1.672622216 \times 10^{\wedge}-27 \times \mathrm{c}^{\wedge} 2=1.503275 \times 10^{\wedge}-10 \mathrm{~J}$
$E=1 \wedge 2 R$
$1.503275 \times 10^{\wedge}-10=0.068^{\wedge} 2 \times R$
$R=3.251029 \times 10^{\wedge}-8 \mathrm{~m}$
$Q^{\wedge} 2=7.895868606 \times 10^{\wedge}-31 \times 3.251029 \times 10^{\wedge}-8$

In any interaction its always
$11 \times \mathrm{l} 2$ or $\mathrm{m} 1 \times \mathrm{m} 2$ or $\mathrm{r} 1 \times \mathrm{r} 2$
So $m 1 \times m 2=7.895868606 \times 10^{\wedge}$ -
$31 \mathrm{~kg} \times 1.672622216 \times 10^{\wedge}-27$
Square root of these masses $=$
$3.634114179 \times 10^{\wedge}-29 \mathrm{~kg}$ [ $\mathrm{R}=\mathrm{I} /$ m ]
$Q^{\wedge} 2=3.634114179 \times 10^{\wedge}-29 x$
$7.063536 \times 10^{\wedge}-10$
This is the oscillator that yields the clock frequency
The radius of the proton changes
from $R=1.5347 \times 10^{\wedge}-11 \mathrm{~m}$ to
$7.063536 \times 10^{\wedge}-10 \mathrm{~m}$

$$
\begin{aligned}
& \Omega=\frac{I}{m}=1.871157469 \times 10^{27} \mathrm{amp} / \mathrm{kg} \\
& \Omega=\frac{0.068}{m} \\
& m=3.63411424 \times 10^{-29} \mathrm{~kg}
\end{aligned}
$$

## Transient mass

The Planck energy involves $2 \mathrm{Pi} \times 137.036$
$\mathrm{E}=\mathrm{m} \times 2 \mathrm{Pi} \times 137.036 \times \mathrm{c}^{2} \times 10^{-7}=2.81225386 \times$ $10^{-16} \mathrm{~J}$
$E=h f$
$\mathrm{f}=4.24422646 \times 10^{17} \mathrm{~Hz}$
$t=1 / f=2.35614196 \times 10^{-18} \mathrm{~s}$
$18000 / 2.35614196 \times 10^{-18}=7.639607603 \times 10^{21}$
Thus the time for hydrogen to evolve at the cathode is inversely proportional to the frequency of the changed mass of a proton under external current stress during electrolysis of water.

## Mass Length Time period

This experiment is conclusive evidence that .....

- Our measure of mass is at light speed. Mass is already at light speed.
- The frequency of the oscillator changes drastically on insults
- Frequency change means mass and radial length change
- I am able to crack these issues because voltage is acceleration, current squared force and resistance always constant at $1.87 \times 10^{\wedge} 27$ amp/kg or velocity / elementary charge


## Magnetism

- $\mathrm{h} / 2 \mathrm{e}=\mathrm{I} \times \mathrm{Pi} \times \mathrm{R} \times 137.036$
- $\Phi=0.068 \times \operatorname{Pi} \times 7.0635359 \times 10^{-17} \times 137.0359991$

I have deconstructed the magnetic flux quantum.

## Gravitational force

$\mathrm{F}=\mathrm{mg}=0.008 \mathrm{~kg} \times 9.8=0.0784 \mathrm{~N}$
$F=I^{2}=0.392 \mathrm{~A} \times 0.2 \mathrm{~A}=0.0784 \mathrm{~N}$

- So, current of 0.392 A is required to flow thru a 0.50 m 8.0 g conductor placed 90 degrees to the magnetic field, of strength 0.40 T for a levitation effect.
- Let us consider current generated by the magnetic field, B of 0.4 T on 0.5 m length of the conductor.
- $\quad I=0.4 \mathrm{~T} \times 0.5 \mathrm{~m}=0.2 \mathrm{~A}$
- $F=I^{2}=0.392 A \times 0.2 A=0.0784 N$


## The Rydberg Mass

13.6 eV the first ionization electron volt energy of an electron for the hydrogen atom corresponds to a Rydberg photon and not a 511 keV electron
$13.60569223 \times \mathrm{e}=2.179872077 \times 10^{-18} \mathrm{~J}$
$E=m c^{2}$ and so $m=2.425434789 \times 10^{-35} \mathrm{~kg}$

## The Reason for Spectra

$2.425434789 \times 10^{-35} \times c \times \lambda=h$
inverse of lambda is the Rydberg number
Radius $\mathrm{R}=1.5347 \times 10^{-11} \mathrm{~m}$
Energy $E=F \times R=I^{2} \times R$
$E=m c^{2} \quad$ where $m$ is external photon
Resistance $\Omega=\frac{I}{m_{r y d b e r g}}=\frac{c}{e}=1.871157469 \times 10^{27} \mathrm{~m} / \mathrm{sC}$

$$
m_{\text {rydberg }}=\sqrt{m_{\text {proton }} \times m_{\text {externalphoton }}}
$$

## Changed measured mass

1. Maxwell drift of changed copper mass
2. Electrolysis of water
3. Spectrum of Hydrogen
4. A magnetic field which contributes to gravitational force of a rod. I have shown how a plane has lift in a similar manner.

THERE IS ONE MASS [ $7.37 \times 10^{-51} \mathrm{~kg} \mathrm{xf}$ ] MEASURED DIFFERENTLY AS IT MOVES ALONG 4 PATHS NAMELY

$$
\begin{array}{llll}
R_{1} & R_{2} & R_{3} & R_{0}
\end{array}
$$

# Twin Mass -Ether \& Matter 

Point mass 737-wavemaker must exist

## 186-Photon Torus



## Twin Mass Structure Ether Mass and associated charge

$7.372496 \times 10^{-51} \mathrm{~kg}$ Oscillator x frequency , $\mathrm{f}=$ Photon mass

$$
c=f \times \lambda
$$

Photon mass x \# = $1.859222909 \times 10^{-9} \mathrm{~kg}$ (Matter) (Elementary charge / oxidation state)
$1.859222909 \times 10^{-9} \mathrm{~kg}$ Torus x \# = Ether Mass (186-ether)
$\frac{\text { ethermass }}{1.346611109 \times 10^{27} \mathrm{~kg} / \mathrm{m}}=$ radiusofploton

## STRUCTURE OF SPACE

1. Twin mass = Ether and Matter
2. Etheric sea = Ether and Ether
3. Void = Soul

## Entropy Units! ????

$$
\begin{aligned}
& S=\frac{H}{T \times m o l} \\
& S=\frac{e V}{m o l} \times \frac{e}{T}=\frac{T^{*}}{m o l} \times \frac{e}{T} \\
& S=\frac{e V e}{e V \times m o l}=n \times e \times m o l^{-1}
\end{aligned}
$$

## Entropy

Slowing down of photon speed is my idea of generating free energy from the structure of space

Entropy is the energy required to raise the energy of one mole of substance from zero to 298 kelvin

I would redefine entropy as the energy input to slow down speed of a photon from light speed $c$ to drift velocity $v$

$$
\begin{gathered}
E=m c^{2}=m \times 25812.8076 \times 3.481818 \times 10^{12} \\
E=m \times c \times v
\end{gathered}
$$



