

Numerological Physics

J. Iuliano
jerryiuliano@aol.com

Numerological physics concerns physics-only mathematics and their connection to a specific set of integers. These integers are very specific (57 and 37) and do 90% of the source load to the fundamental force values; electron, proton etc. There really isn't any numerology in these numbers as defined by numerologies assignment to prediction dates for the end of the world etc., letters in names as numbers etc. I really don't believe in that stuff. I do believe in a set of individual numbers, however, that can represent physical exact force constants in Nature and that these are unique and invariant without their dimensioning!

$$(938.272029/.510998908)*4.669201609*10 = 1/.0000116640286 (.0000116637)$$

This equation by itself links two fundamental forces , electrical phenomenon (fine-structure constant = $1/137.30359997$) and the weak nuclear force, G_w , (fermi-coupler = $.0000116637$) to the primitive energies of the electron = $.510998908$ and proton = 938.272029 with the strange bifurcation constant of Feigenbaum (<http://mathworld.wolfram.com/FeigenbaumConstant.html>) controlling any chaos generated in the equation. Of course everything would be fine and dandy without the "numerological" numbers, 37 and 18, but they are as key in the equations as the physical numbers themselves, thus this is the link to the pre-wired state of human brains as they react to the holographic matrix in everyone's brain that links to the outside universe, both macro and micro. That these numbers are a fit to the spiritual side of the brain and thus are key to deriving information out of the chaos through these integers in various formulas. Einstein said to be wary of extremely simple equations that fit nature's pickiness of results, but I am from the Occam's razor school of less is more.

From the book, *Mathematical Sorcery*, by Calvin Clausen, on page 220 and 221, is an example of an infinite product series:

" Suppose we begin with a circle which has a radius of one unit length , and then inscribe within this circle an equilateral triangle. We then inscribe another circle within that triangle. Inside the second circle we inscribe a square followed by a pentagon. We continue this process, each time inscribing a circle followed by a regular polygon, with one more side. Surprisingly, the figures do not continue inward toward the center of the first circle, but approaches a smaller circle as a limit. This is because each successive polygon has an additional side. The inscribed polygons approach the shape of a circle. What is the radius of the limiting circle?"

Clausen gives the answer as an infinite product series: 3 = triangle , 4=square , 5=pentagon ...etc.

$$\text{radius} = \cos(\text{Pi}/3) * \cos(\text{Pi}/4) * \cos(\text{Pi}/5) * \cos(\text{Pi}/6) * \dots = .11494\dots$$

Clausen gives no more detail on what this limiting radius number (.11494...) is . Studying this number led me to believe it is connected to the radian ($180/\text{Pi}$) and thus fine-structure (aem) through the fourth root:

$$(\text{Pi} / 18000)^{1/4} = .11493951\dots$$

Using cosine forms and the radian one can derive the fine-structure constant... $aem = 1/137.0359997 \dots$ $Fd = 4.66920251$ cosine and tangent in radians, $Fd =$ Feigenbaum delta constant, $IN =$ reciprocal log e function

$$(\cos^{-1}(IN (\tan Fd / 10)^{1/2}) * 180 / \text{Pi} = 137.0359997$$

By rearranging the radian to the fine-structure constant:

$$(10^2) * (.11493951^4) = \text{Pi} / 180$$

Such that:

$$aem * (\cos^{-1}(IN (\tan Fd / 10)^{1/2})) = (10^2) * (.11493951^4)$$

Transferring fine-structure to the right side: limit radius = .11493951

$$((\cos^{-1}(IN (\tan Fd / 10)^{1/2})) / (10^2))^{1/4} = .11493951 / (aem^{1/4})$$

$$(((\cos^{-1}(IN (\tan Fd / 10)^{1/2})) / (10^2)) * aem)^{1/4} = \text{limiting radius} = .11493951$$

This equation shows the relationship between the limiting radius of infinitely nested polygons, bifurcation constant, Fd , and the fourth root of fine-structure. However the best fit to the design is indeed through the golden section, using an ancient integer, 57, as used with the master number 37, although 57 rules in this form because it connects to the golden section through the four fundamental force constants and the limited radius formula. The four fundamental force constants are exact with the error in the strong nuclear force as = 13.99630621

$$(\text{Pi} / (aem * as * 10^5) + (Gw * Gn * 10^{19}))^{-1/4} = .11493992925$$

Using 5 as a product of fifty-seven to the limited radius power equals Pi , as follows: $\theta = 1.61803398758$

$$\begin{aligned} ((\theta * 2) - \text{unity})^2 * 57^{-.11493992925} &= 3.141592654 \\ 5 * 57^{-.11493992925} &= 3.141592654 \end{aligned}$$

Using the cosine form as infinite product : infinite nested polygon formula :

$$\begin{aligned} \cos(\text{Pi}/3) * \cos(\text{Pi}/4) * \cos(\text{Pi}/5) * \cos(\text{Pi}/6) * \cos(\text{Pi}/7) * \dots \\ = .11493992925 \end{aligned}$$

The four fundamental forces are:

$$\begin{aligned} aem &= \text{fine-structure constant} = 1 / 137.0359997 \dots \text{exact} \\ as &= \text{strong nuclear force} = 14 \text{ (used in formula, } as = 13.99630621 \text{)} \end{aligned}$$

Gw = weak nuclear force = fermi-coupler = .0000116637.....exact

Gw = gravitational force = 6.67428 * 10⁻¹¹exact

Fermi Coupling Constant: http://www.physics.nist.gov/cgi-in/cuu/Value?gf|search_for=atomnuc!

The fact that theta squared minus unity, squared limited radius, equals the integer 57 is deeply symbolic to the Egyptian pyramid Cheops due to the previously discovered radian connection, Cheops ratio = 2/Pi :

$$\text{radian}^{2/\text{Pi}} / 57.00007176 = 10^{-2/\text{Pi}}$$

$$57^{\text{Pi}/2} = 1799.996441/\text{Pi}$$

$$(10^{-2/\text{Pi}} * .370000606 = 137.0359997^{1/2} = (1/\text{aem})^{1/2}$$

Combined, using the harmonic mean of 57 and 37 and used in the Fermat form: e = natural log e,

$$(e^{\text{Pi} + 7.999999806} * (1/57 + 1/37))^2 = 137.0359997 = 1/\text{aem}$$

Stonehenge has 56 Aubrey holes which creates 57 spaces ??? ...57 has Islamic derivatives through 19*3, 19 being sacred. The symbolic form coming from the three and a half windings of the Kundalini serpent and the collective unconscious constant 144/37 = 3.891891891... a time (1) times(2) and half a time(1/2)..... Book of Revelations = 1+2+.5 = 3.5

$$(3.5 * 5700.00033)^{1/4} = 10^{144/37}$$

$$(10^{144/37} / 37 / 18.000013653 = 137.0359997^{1/2} = (1/\text{aem})^{1/2}$$

The Viswanath constant has a very complicated origin which can be simplified in the end by the reciprocal , log e.....2.7182818...The discoverer, Viswanath was amazed at the simplification due to e. Most of the calculations in the Viswanaths' effort is to calculate the number: .1239755699... which then goes to the Vn constant:

$$e^{-.123975599} = 1.131988249 = \text{Viswanath number} = Vn = \text{Beta}(1)$$

The Viswanath constant is defined as the exponential rate at which the average, absolute value of a random Fibonacci sequence, with a probability of one, the nth root of the absolute value of the nth term in the sequence converges to the value of a constant, for large values of n:

$$\text{nth root (fibonacci n)} \text{ -----} = 1.131987886 \text{ ...used in formula}$$

This was derived by random matrix products. Viswanath was able to calculate K, (1.13198824...) even though there is no known algorithm to calculate K. He described the key to his discovery in a cryptic way..." The problem was that fractals were coming in the way of exact analysis. What I did was to guess the fractal and use it to find K. To do this I made use of some

devilishly clever work carried out by Furstenberg in the 1960's...." end quote. It turns out that the Viswanath constant is a derivative of another even deeper, stranger constant called the Embree-Treltflen constant, $\text{Beta}(0) = .702585..$ the Viswanath constant is the derivative of the E.T. constant when there is unity.... $\text{Beta}(1) = \text{Viswanath constant} = 1.131987886$. The new discovery is that the ratio of the two constants $\text{Beta}(0)$ and $\text{Beta}(1)$ equals the square of the dimensionless electron energy: $.510998908....\text{Beta}(0) = .70257419$ used in formulas

$$(1 + (\text{Beta}(1) / \text{Beta}(0)) / 10 = \text{emev}^2 = .510998908^2$$

....the harmonic mean of the two Beta's shows an attachment to the fine-structure constant
 $\text{aem} = 1/137.0359997$, through a Keplerian function of mass orbitals in that the electron energy squared can be thought of as a period of orbit, while a special form of the $\text{Beta}(1)$ constant (a Hausdorff dimensional (IN_x/x)) can be thought of as the mean radius of the orbital distance as it connects to the period , electron energy . Showing the harmonic mean first: $\text{IN} =$ reciprocal natural log e

$$\frac{((\text{IN Beta}(1))^3) / \text{Beta}(1)}{\text{hausdorff dimensional}} = \text{aem} / 10 * (\frac{1}{\text{Beta}(0)} + \frac{1}{\text{Beta}(1)})$$

harmonic mean

..then the Keplerian orbital mass to period ratio: period of orbit squared / mean orbital radius cubed = Keplers second law

$$\begin{aligned} ((\text{IN Beta}(1))^3) / \text{aem} &= \text{electron energy}^2 \\ 1 / 10 * ((\text{Beta}(1) / \text{Beta}(0)) + 1) &= \text{electron energy}^2 \\ 1/\text{aem} = 137.0359997 &= (\text{emev}^2) / ((\text{IN Beta}(1))^3) \\ \text{fine-structure constant} &= \text{period of orbit} \quad \text{mean radius of orbit} \end{aligned}$$

$$\begin{aligned} \text{emev} &= \text{electron energy} = .510998908 = \text{period of orbit} \\ \text{IN Beta}(1) &= \text{viswanath number} = .123975278 = \text{mean orbital radius} \end{aligned}$$

...to note that the harmonic mean of the two Betas work off the amplitude for an electron to emit or absorb a photon... $\text{aem}...$ and that is a Hausdorff dimensional. One possible solution to the mystery of the Viswanath constant is that the Fibonacci numbers ratio itself will describe the electron energy. The number five from fibonacci , pentagonal , is the source to the simplicity of this solution along with the number 12 , which exists as the "12" symbolic to the dimensionless gravitational - electronic connection: $\text{Gn} = 6.67428 * (10^{-11})$

$$\log(\log \text{Gn} + 12) = .511000113^2 = \text{electron energy}^2$$

...to demonstrate the "5" connection use Fibonacci constant = 1.6180339875:

$$\begin{aligned} ((4 * 1.6180339875^2) - (4 * 1.6180339875) + 1 + \text{Beta}(1)) / 12 &= .510998989 \\ ((\text{IN Beta}(1))^{3/2} / \text{sqrt} & \end{aligned}$$

$$\begin{aligned}
\text{aem} &= .510998910 \\
& \left(\left(1 + \text{Beta}(1) \right) / 12 \right) + (1/3) \\
&= .510998991 \\
& \left(\left(5 + \text{Beta}(1) \right) / 12 \right) \\
&= .510998991 \\
& \text{Me} * (c^2) / \text{ev} / 10^6 \\
&= .510998908
\end{aligned}$$

$$\begin{aligned}
\text{Me} &= \text{electron mass} = 9.109382177 * (10^{-31}) \\
c &= \text{speed of light} = 299792458 \\
\text{ev} &= \text{electron volt} = 1.602176487 * (10^{-19}) \\
\text{Beta}(1) &= \text{Viswanath} = 1.131987886
\end{aligned}$$

Note how the Viswanath constant connects to the electron through 12 and the Fibonacci constant, 5. Probably as simple as it gets, except for the following symbolic relationship to fine-structure through the number 272, an ancient megalithic measure unit first investigated by Thom in the 60's. This relationship shows the dimensionless energy of the alpha particle or a.k.a. the helium nucleus using fine-structure...aem... and fibonacci constant, number $5^{1/2}$, Eddington's number, 136, occurs here as his intuitive number for fine-structure...aem. The base 10 logarithm of the dimensionless energy of the electron squared, times the electrons ability to transform into a photon, fine-structure - aem, is the root of the ancient megalithic yard measure as discovered by Alexander Thom, 2.72:

$$\log \left((.510998908^2) * \text{aem} \right) = -2.719994728 = \text{Egyptian metric}$$

Once outside the log brackets, divide by fine-structure...aem... again, to get to the energy of the alpha particle :

$$\left(\log \left((.510998908^2) = 2.0 * \text{aem} \right) \right) / \text{aem} = -372.7371968 = \text{alpha particle energy}$$

Eddington's number, 136, does this through the fibonacci number constant, 5, and thus so will the Viswanath constant, 1.131987886:

$$-2.719994728 * 5 = -13.59997396$$

$$\left(\left((.510998908^2) * \text{aem} \right)^{1/3} \right) = \text{IN } 1.131987886$$

$$(\log(\ln 1.131987886^3)) / aem; = -.372.7371962$$

$$\log(\ln 1.131987886^3) * 5 = -13.59997362$$

$$(1.131987886+5) / 12 = .510998908$$

The megalithic yard 2.72 feet also can connect to Feigenbaum delta and strangely the speed of light, c, through 288 squared ...288 sparks from broken vessels...Kabbala

$$4.669201609 = \text{radian} * (2.719999901^9) / 10^5$$

$$299792458 = 82944^{1/\pi} * 2.720001866^9 / 10^3$$

<http://witcombe.sbc.edu/earthmysteries/EMthom.html> for megalithic yard = 2.72 feet

More proof that it is not only the ratio of the Cheops constructs ...2/Pi.. that is important but the actual metric measurements:

$$148.21129241 \text{ meters} / 232.8097536 \text{ meters} = 2 / \pi = \text{height} / \text{base leg}$$

The log (base 10) of the harmonic mean of the measurements (height and base leg) equals the electron energy:

$$\log((1 / 148.2212591) + (1 / 232.8097536)) = -1/.510998908$$

$$Me = \text{electron mass} = 9.10938214 * 10^{-31}$$

$$Me * (c^2) / (10^6) / \text{ev} = .510998908$$

$$\text{ev} = \text{elementary charge} = 1.60217649 * 10^{-19} \text{ volts}$$

$$c = \text{speed of light} = 299792458 \text{ meters/second}$$

The Sumerian form (360), through the radian, 180/Pi, and the harmonic integers 57 and 37:

$$((37 / 232.8097536) + (57 / 148.21080814))^{-4} = 36/\pi$$

37 and 57 are used in the fine-structure constant and the Fermat form ...e^{Pi+8}: ...IN = reciprocal natural log e

$$\ln(aem * ((1/37 + 1/57)^2)) = -\pi - 7.99999981$$

$$\ln(a(s) * (10^{ht * 2/bl})) = (\pi + 8.0000068) / 2$$

$$aem = \text{fine-structure constant} = 1/137.036$$

$$a(s) = \text{strong nuclear force} = 14$$

From a previous article

Inside the Cheops pyramid sits the sarcophagus coffer with internal dimensions:

$$1983\text{mm} * 874\text{mm} * 681\text{mm}$$

These dimensions have several connections to physical constants:

$h = \text{Planck's constant} = 6.62606896 * 10^{-34} \text{ J} \dots \text{exact}$
 $c = \text{speed of light} = 299792458 \text{ m/s} \dots \text{exact}$
 metric conversion to inches = 39.37 inches = 1 meter
 $82944 = 288^2 = \text{ancient symbolic number} \dots$ 288 sparks from broken vessels "
 $e^{(\pi+8)/2} = 262.6431658 = \text{Fermat form as follows:}$

$$c * 39.37 / 10 = 1983.022186 * 874 * 681$$

$$(c^{.37}) * (e^{\pi+8/2})^7 / (10^{11}) = 1983.023438 * 874 * 681$$

$$288 / (h * 10^{31})^{1/2} = 1983.054448 + 874 + 681$$

Relating to the integer 288 and the fine -structure constant: cosine in radians

$$(288^{2/\pi})/10 = \cos 137.036000986 \dots \text{fine structure} = 1/137.036$$

Using the harmonic mean of the coffer dimensions:

$$(1/1983) + (1/874) + (1/681) = 3.116879976 * 10^{-3}$$

Dividing the cubic form of the dimensionals by the inverse of the above leads to the cosine form:

$$1 / 3.116879976 / 10^{-3} = 320.8336567$$

$$1983 * 874 * 681 / 320.8336567/10^7 = .3678759$$

$$\cos 137.036004139 = .3678759$$

This can be rewritten as:

$$((874 * 681) + (1983 * 681) + (1983 * 874)) / (10^7) = .3678759$$

Total surface area of the coffer is:

$$(1983 * 681 * 2) + (1983 * 874 * 2) + (681 * 874 * 2) = 3678759$$

From a previous article....

It seems that the sarcophagus coffer sets the measuring standard to the meter....39.37 inches = 1 meter. This structure in the center of the pyramid is connected to the overall structure of the pyramid constructs...2/Pi, through the golden number...1.61803398758. This relationship can only be shown when the meter is used. Using Petrie's numbers:

$$486.2565483 \text{ feet} = \text{height}$$

$$763.81 \text{ feet} = \text{base leg}$$

Converting to meters:

$$\begin{aligned} 148.2112924 \text{ meters} &= \text{height} = h \\ 232.8097536 \text{ meters} &= \text{base leg} = bl \end{aligned}$$

The key is to find the vertex slope length. This can be found through the following formula:

$$(bl^2/2 + ht^2)^{1/2} = \text{vertex slope length}$$

This is equal to : 221.5102207 meters

Now introduce the magic number (37) , which has the physical constant connections:

$$\begin{aligned} a(s) &= 14 = \text{strong nuclear force} \\ aem &= 1/137.036 = \text{fine-structure constant} \end{aligned}$$

$$37^2 = e^{a(s) / aem / 37} = e^{51.85145935} = \text{face angle pyramid}$$

$$10^{ht/bl} / .370000606 = 137.036^{1/2}$$

The vertex slope length divided by 37 squared derives the golden number

$$.1.61803398758$$

$$10 * 221.5102207 / (37.00011424^2) = 1.6180339875$$

Note how the ancient number , 288 , uses the Cheops constructs, $ht/bl = 2/\text{Pi}$, to determine the angular form of fine-structure:

$$288^{ht/bl} / 100 = \cos 137.036000986$$

Note this is also the source of the mysterious beast number , 666 ,log in base 10

$$\log (137.036 * (666^2)) * 37.0000031 = 288$$

The speed of light $c = 299792458$ is connected to the magic number 37:

$$299792458^{.37} = 37.000861^2$$

The origin of the symbolic number ...360...(Sumerian) can be traced back to the beginning , which is a black hole. When using the black hole singularity constant... $\text{Hod} = \ln 3/8/\text{Pi}$ in the previously discovered electron squared form... $e\text{mev}^2$... one can link to the Viswanath

constant...1.131987886. Go to Chapter 11: Quantizing the Black Hole Area , in the following PDF to find the source of Hod's constant: IN = reciprocal natural log e

<http://www.phy.olemiss.edu/GR/gravity07/Vitor.pdf>

$$\begin{aligned} \text{Hod} &= \text{IN } 3.000001719 / 8 / \text{Pi} = .043712416.. \\ \text{Viswanath constant} &= \text{Vn} = 1.131987886 \end{aligned}$$

$$((\text{Vn}^2) + (\text{Vn} * 10) + 25) / 144 = (.8 * \text{Pi} * \text{IN} 3.000007219) - 2.5 = \text{electron squared}$$

By cross multiplying, another ancient measure appeared, the Egyptian foot symbol ...1152 , along with the Sumerian ...360 :

$$(115.2 * \text{Pi} * \text{IN } 3.00000732) - (\text{Vn}^2) - (\text{Vn} * 10) - 25 = 360$$

If one uses the Hod black hole constant (.437124911) as the loop radius , R , in the torus structure , then the tube radius , r , is an ancient number form , 32 / 2 , from the 32 paths of Kabbalic wisdom and the " 32 smokes " of dimensioning from Hindu's flying ancient Vihamas or saucers. The surface area of the torus is used because as in black hole singularity horizons it is the surface area of a black hole that carries all the information and this information is through the Hod constant. The torus structure , surface area , ends up being analog to the electron energy squared:

$$\begin{aligned} \text{torus area} &= 4 * (\text{Pi}^2) * \text{R} * \text{r} \\ \text{R} &= .437124911 \\ \text{r} &= 3.2 / 2 \\ \text{electron energy squared} &= .510998908^2 = .261119884 \end{aligned}$$

$$((\text{Vn}^2) + (\text{Vn} * 10) + 25) / 144 = (.4 * (\text{Pi}^2) * \text{R} * \text{r}) - 2.5$$

.261119968

261119965

Converting the above to Sumerian, 360, brings forth the ancient symbol, " 288 sparks from broken vessels " ...Kabbala and the 32 paths of wisdom.

$$(288 * (\text{Pi}^2) * .437124911 * .32) - (\text{Vn}^2) - (\text{Vn} * 10) - 25 = 360$$

This relates to the previous torus discovery relating to the nested radical constant and electron squared energy as shown below.....

<http://www.phy.olemiss.edu/GR/gravity07/Vitor.pdf>

$$\text{area} = A = 16 * \text{Pi} * (\text{Mass}^2)$$

$$\text{derivative area} = dA = 32 * \text{Pi} * \text{Mass} * dM(\text{derivative mass})$$

Relating the two equations above to the QNM constant (.0437123), two tori appeared. The tori are equal only when comparing the volume of one to the surface area of the other. In both cases the tube radius (r) remains invariant (.0437123) while the loop radius(R) changes by duplication: r = .0437123 , R = 32 or 16 :

$$\text{VOLUME TORUS : } R = 32 , r = .043712394$$

$$2 * (\text{Pi}^2) * R * (r^2) = (\text{IN}3)^2$$

$$\text{SURFACE AREA TORUS: } R = 16 , r = .043712394$$

$$4 * (\text{Pi}^2) * R * r = ((\text{IN}3)^2) / r$$

The surface area form...((IN3²) / r)...has the electron energy built into its structural membrane:

$$\text{Me} = \text{mass of electron} = 9.109276937 * (10^{-31}) \text{ kg:}$$

$$c = \text{speed of light} = 299792458 \text{ m/s}$$

$$\text{ev} = \text{electron volt} = 1.602176528 * (10^{-19}) \text{ volt}$$

$$\text{electron energy} = \text{Me} * (c^2) / \text{ev} / (10^9) = \text{sqrt}(((\text{IN}3^2) / .043712394 / 10) - 2.5)$$

$$3.000003654$$

The nested radical constant was discovered by the Indian mathematician T. Vijayaraghavan

<http://www.research.att.com/~njas/sequences/A072449>
<http://mathworld.wolfram.com/NestedRadicalConstant.html>

It can be described as follows:

$$\text{sqrt}(1 + \text{sqrt}(2 + \text{sqrt}(3 + \text{sqrt}(4 + \dots \text{infinity}))) = 1.75793275...$$

This constant can be transformed into two important physical constants, the electron, proton energies and fine-structure constant, log in base 10, cosine in radians: c= 299792458 m/s

$$\text{aem} = \text{fine-structure constant} = 1/137.03599915$$

$$\text{emev} / (c^2) = \text{electron energy} = .510998918 \text{ mev}$$

$$\text{pmev} / (c^2) = \text{proton energy} = 938.272029 \text{ mev}$$

$$(\log 1.75793275) * (10^3) / 666 = \cos 137.03599915$$

$$(\log 1.75793275) * (10^3) / (.510999714^2) = 938.272029$$

Viswanath's constant enters here due to the nested radical constant:

$$((\text{Vn}^2) + (\text{Vn} * 10) + 25) / 144 = \log 1.757929618 * 10^3 / \text{proton} = .2611199886$$

Addendum

The nested radical constant is unique in its form....see web-site, Sloane's integer sequences . This convergent series has a strange philosophical paradox as it relates to its connection to physics. That is the measurement and time line for real matter , as it moves through time and space, is always counted from the NOW to a future NOW and measurements are recorded in that forward movement and studied for information and patterns. Richard Feynmann proved in 1948, through QED (fine-structure constant) , that time in forward motion , for short periods of passage can actually move backwards along the time line. This is similar to the nested radical constant, in that if infinity is the future and the beginning is unity then you have to have infinity and the beginning as one and the same, it is time moving forward and backwards at the same instant(NOW) , (somewhat analogous to AC electric current and its changing direction 60 time per second....black hole QNM's ?) The nested radical constant can only be calculated from the BEGINNING(infinity) and working (backwards along the time line) towards the integer one(1) which represents the END(unity), resulting in the convergent number 1.757929657. as proved by Vijayaraghavan. using the calculus of limits and nested radicals mathematics. Doing a dimensional factoring in the SI system of measurement for the electron , proton , speed of light and the electron volt , one is led to the root equation:

$$(Me^2) * Mp * (c^6) / (ev^3) / (10^{21}) = \log 1.757929921...$$

$$Me = \text{electron mass} = 9.109381483 * (10^{-31}) \text{ kg}$$

$$Mp = \text{proton mass} = 1.672621706 * (10^{-27}) \text{ kg}$$

$$c = \text{speed of light} = 299792458 \text{ m/s}$$

$$ev = \text{electron charge} = 1.602176528 * (10^{-19}) (m^2) * kg / (s^3) / A$$

$$A = 1 \text{ angstrom}$$

$$m = 1 \text{ meter} (39.3700787 \text{ inches,, } \mathbf{m} \text{ on the Antikythera device)}$$

$$s = 1 \text{ second}$$

$$kg = 1 \text{ kilogram}$$

Doing a dimensional reduction only , results in the following:

$$(kg^2) * kg * (m^6) / (s^6) * (s^9) * (A^3) / (m^6) / (kg^3) = (s^3) * (A^3) = (s * A)^3$$

The dimensionals cancel to an electrical SI unit called the coulomb charge, but in CUBE form !
electric charge * coulomb C = s * A

The entire sum of nested radicals, sequentially summed and square rooted, in absolute order from the BEGINNING in infinity to the END in unity equals the electron charge cubed !!! This is like some kind of a super-Pythagorism in that the pure integers do rule the time line in the sense that pure causal order is an accumulation and yet , not an accumulation , resulting in the effect that chaos rules in the quantum yet has order in the overall scheme of things ,these orders being hidden in the integers. The stuff that makes things work protons and electrons through the quantum probabilities of the fine-structure constant is the result of the absolute ordering of the infinite quantity of natural numbers in the integer system as it's accumulated roots, accumulate ,one nested monad ,after one nested monad.. after one nested monad.....into unity....the integers being God..

Since the beginning of the work that was done investigating the collective unconscious number. 144/37 = 3.891891891, and the subsequent amazing finds of the 37-derived module the . 891891891 decimal residue caused by division of the integer 37. To me 37 was always the "the

librarian" of the natural numbers and I was always able to associate it to ancient metrology and physics both ancient and modern through documentation. When I mean documentation, I mean serious documentation such as the Dengler character, who seriously took a case to the supreme court to, <http://www.court.state.nd.us/court/opinions/9205.htm> change his name to a module of the 37 form, that is $37 * 28.389189189 = 1069$. He wanted to change his name to a single number, 1069. Last I heard he was found somewhere in N Dakota wandering around in the cold in a catatonic state a few years back). Other modern examples are Leahy's triple logic number also contracted in a dream state, $82944 / 37 / 576 = 3.891891891$, Van-Halens 5 150 obsession, album cover, his address, code numbers etc., $37 * 139.1891891891 = 5150$. Ancient examples are 288 sparks from broken vessels, Kabbala, 144 half light, $1260/666 = 3.891891891$ from John of Patmos, Revelations etc. etc. So as to always searching for new examples of the 37 phenomenon I happened across this article in the New Scientist called: "Inside the mind of an autistic savant". Daniel Tammet, the autistic savant in the article, describes how he does his number tricks through the idea of number "lumpiness" for each individual integer that all contain this strange "lumpiness" - quoting Tammet:

<http://www.newscientist.com/article/mg20126881.800-inside-the-mind-of-an-autistic-savant.html>

"I have a relationship with numbers that is similar to the relationship that most people have with language. Every number has a texture. If it is a "lumpy" number, then immediately my mind will relate it to other numbers which are lumpy, the lumpiness will tell me there is a relationship, there is a common divisor or a pattern between the digits."

Then the moderator asks Tammet for an example of a lumpy number, this is what Tammet said:

"FOR ME, THE IDEAL LUMPY NUMBER IS 37. ITS LIKE PORRIDGE. So 111, a very pretty number, which is 3 times 37, is lumpy but it is also round. It takes on the properties of both 3 and 37, which is round. It's an intuitive and visual way of doing maths and thinking about numbers. When I was growing up, because of my autism, I didn't make friends. Numbers filled that gap. The numbers came alive. My mind was able to pick out patterns and to make sense of them. It was similar to how a child would acquire his first language."

In the rest of the article he gives his opinion of where this phenomenon might come from in the brain and talks about mathematical connections to languages. To read his profile is one of astounding formality with at least ten languages self-taught.

These are the examples that are important in research of the 37 phenomena, all seeming to arrive as a hard wired brain preset to these primitive numbers, in this case now a powerful lumpy number keyed out of an autistic savant. Is John of Patmos a savant (source of $44/37$, $260/666$)? Don't know but it did say he went into a trance (epileptic seizure) What about Prof. Leahy is he a savant? Don't think so but he did have a recurring dream that was his Key number ... $37 * 75.891891891 = 2808$. Was Eddie Van-Halen a savant? In a certain sense of the definition of manic genius, odd behaviour, control problems, I would say yes. Am I a savant also due to this obsession with the integer 37? Sadly I wish. All my discoveries came through the rigor route of mathematics. Never dreamed about numbers, never had lucky numbers, don't believe in numerology, but I do believe in this fantastically powerful number 37 that happened to be at the

bottom of the solution nodes to the Fermat Last Theorem form. (Discovered in 1992 after reading an article on Carmichael numbers in a Scientific American magazine). 37's power in the world physical constants is documented with over a hundred relationships established in the last 10 years, a few of which are shown below: Cheops pyramid, the Fibonacci series, Feigenbaum bifurcation, The Golden number, Viswanaths constant, Embree -Trefe then and especially the Theta-Unity equations at the bottom of the article which key off 37

The Cheops pyramid constructs, $4/\pi$, have been shown previously to have a very important role in the metrology of physics, such as: $e = \text{natural log} = 2.7182818...$

$$(1 / aem) * (.37^2) = 10^{3.99999552 / \pi}$$

$$(10^{3.999995363 / \pi} * a(s) = \text{sqrt}(e^{\pi + 8}))$$

$$a(s) / aem * .37^2 = \text{sqrt}(e^{\pi + 8.000000229})$$

And as previously demonstrated the Fibonacci derived Viswanaths constant... $V_c = 1.13198824$, concerning random numbers and the Golden Section as it relates to the collective unconscious form... $37 * 18 = 666$: 99.9994% accurate

$$666^{1.131981246} / 500 = \pi$$

However the true power of the Cheops pyramid constructs, $4/\pi$, is in it's ability to unite the constant that works on fractals and turbulent flow. Feigenbaum delta constant 4.669201609 "order out of chaos", with the Viswanath constant $V_c = 1.13198824...$ "order out of randomness" "predicting the randomness of numbers, but only when attached to the Fibonacci forms of the Golden section... $\phi = 1.6180339875...$

$$F_d = (V_c * 3) + (3.999991657 / \pi)$$

From this root follows to the Golden Section because of the strong force... $a(s) = 14...$ and the Tetrakys... $1+2+3+4 = 10...$:

$$(F_d * \pi) - a(s) = (V_c * 3 * \pi) - 10 = 3 D \text{ sqrt}(1 / (\phi^2) - 1)$$

Because of the gnomonic growth of the Fibonacci sequence, changing the equal sign to a product sign eliminates the square root sign of the Golden Section... ϕ :

$$((F_d * \pi) - a(s)) * ((V_c * 3 * \pi) - 10) = 1 / ((\phi^2) - 1) = 1 / \text{sqrt} 5$$

Now that the pentagonal number five is isolated, the Planckian unit called the boundary of Nature...Planck force in newtons, can be shown: $G_n = \text{gravitational constant} = 6.674205607 * (10^{-11})$, $c = \text{speed of light} = 299792458 \text{ m/s}$:

$$(c^4) / G_n = \text{Planck force}$$

Boosting through the "wall" with a speed of... (c^1)... or approximately 15.7520 mph creates the pentagonal structure: $h = \text{Planck's constant} = 6.6260693 \times (10^{-34})$, $E = \text{permutivity of space} = 8.854187818 \times 10^{-12}$:

$$c^{4.1}/G_n = 5 / h / E = \text{Planck force} * c^{-1}$$

By substitution all Fibonacci derived units, V_c , F_d , and ϕ , can express the Planck force in newtons:

VISWANATHS CONSTANT... $V_c = 1.131988504$
 $((1 / ((V_c * 3 * \text{Pi}) - 10))^4) / h / E / (c^{-1}) = \text{Planck force}$

FEIGENGAUM DELTA CONSTANT. $F_d = 4.669205057$
 $(1 / (F_d * \text{Pi}) - a(s))^4 / h / E / (c^{-1}) = \text{Planck force}$

FIBONACCI CONSTANT, $\phi = 1.6180339875$
 $((\phi * 2) - 1)^2 / h / E / (c^{-1}) = \text{Planck force}$

PENTAGONAL ROOT, 5
 $5 / h / E / (c^{-1}) = \text{Planck force}$

If all values are left exact then strong force, $a(s)$ calculates to 13.999986668 ..

<http://www.americanscientist.org/template/AssetDetail/assetid/20834/page/5>

The above article is about the Viswanath constant and its offshoot the Embree-Trefethen constant. At $\text{Beta} = 0$ the Viswanath constant is apparent. There is also a minimum value, 36747 and a neutral value, .70258.

The Embree-Trefethen constants link directly to the fine-structure constant through the Viswanaths constant:

$$\begin{aligned} ET_n &= \text{Embree-Trefethen neutral value} = .70258 \\ ET_m &= \text{Embree-Trefethen minimum value} = .367496861 \\ V_c &= \text{Viswanaths constant} = 1.13198824 \\ a_{em} &= \text{fine-structure constant} = 1 / 137.03599911 \end{aligned}$$

The fine-structure constant as follows:

$$\begin{aligned} ET_{\text{neutral}} * ET_{\text{minimum}} * V_c &= \text{sqrt sqrt } a_{em} \\ .70258 * .367496861 * 1.13198824 &= \text{sqrt sqrt } a_{em} \end{aligned}$$

Viswanaths constant

http://www.sciencenews.org/pages/sn_arc99/6_12_99/bob1.htm

Feigenbaum delta

http://en.wikipedia.org/wiki/Feigenbaum%27s_delta

Golden section

<http://mathworld.wolfram.com/GoldenRatio.html>

a_{em} = fine-structure constant

h = Planck's constant

E = permittivity of space

c = speed of light

Planck force

G_n = gravitational constant

<http://physics.nist.gov/cuu/Constants/>

Cheops pyramid

<http://farshores.org/a03vc.htm>

THETA - UNITY EQUATIONS

$$\cos(c * a_{em} / .37^2) = \cos(2 * \text{Pi}) = 1 = \text{unity}$$

$$\cos(ec^2 / 2 / E / h (.37^2)) = \cos(2 * \text{P i}) = 1 = \text{unity}$$

$$(\cos(c * a_{em} / .37))^2 = 1.61803398875.. = \text{theta}$$

$$(\cos(ec^2 / 2 / E / h / .37))^2 = 1.61803398875... = \text{theta}$$

...solving for a_{em} - fine-structure constant when c = speed of light = 299792458 m/s

$$a_{em} = 1 / 137.03599970078....2002 \text{ NIST} = 1/137.03599976$$

$$ec = \text{elementary charge} = 1.60217646 * (10^{-19}) \text{ C}$$

$$E = \text{permittivity of space} = 8.854187818 * (10^{-12})$$

$$h = \text{Planck's constant} = 6.62606874 * (10^{-34}) \text{ J}$$

The importance of theta, the golden section constant (Fibonacci), 1.61803398875 as a "holographic gnomonic" function of the "rotation" (cosine in radians) of the fine-structure constant, a_{em} , the amplitude for an electron to emit or absorb a photon. Of note is Beta's (.37) holographic exchange with c , (light speed metric). 37 means light !! 37's role is as all encompassing to theta's rule of "harmonic gnomonic" growth. The integer 37 breaks the cosine barrier of linear to angular transformations. This isn't supposed to be possible with the cosine function acting as a "shield" to mathematical attacks on the cosine enclosed formulae. 37 defeats this shield and passes through as a function of theta's gnomonic growth pattern. Again this shouldn't be possible, but 37 dances through the formula as water through a sieve, there's no loss of value, no change in meaning, no semantic disfunction, nothing. I believe no other integer can do this without a mathematical transformation when "cocooned" by the cosine function.

Amazingly, 37 literally translates as "slipping out of unity", a strange first step, in that 37, symbolically acting as light, is mathematically jarred loose out of the unity, one. The translation is obvious: God = 1 = unity, 37 = Christ = light. The Father, one-unity, mathematically shakes out the son (37) Christ who becomes the theta or the golden section, that is in the unit one, lie the two hearts of the Father, 37 squared, or energy product.

MASTER EQUATION

$$((\cos(c*aem / .37)) * 2) + (\cos(c*aem / .37^2)) = ((\cos(c*aem / .37))) * 2)^2$$

THETA + ONE = THETA squared

37 is mentioned in the book THEOMATICS by Jerry Lucas (the NBA basetball star) , a forty year old book about pre-genre bible codes. From a chapter in the book is the following, quoting from the book.

JESUS AND THE NUMBER 37

" At the beginning of this chapter we showed the many references to the birth of Christ were all structured on multiples of 111. The number 111, of course , speaks of Jesus. But there is another number which also speaks of Jesus. It is the number 37. Thirty-seven is a prime number, which means that it can only be divided by itself and one. It is also the base number on which all of the references to Christ are structured. If we were to divide 111 by 3, the result would be 37. In other words, $37 * 3 = 111$. For this reason, many of the features to be presented in the remainder of this chapter will only be divisible by 37 and not by 111. However everything that is divisible by 111 is also divisible by 37.

An excellent example of a design using the number 37 is found in those verses that speak of the Messiah" Many examples are then given of theomatic values for Greek letters relating to a Messiah

The Messiah = $37 * 25$

Jesus = $37 * 8 * 5$

Jesus Christ = $37 * 8 * 8$, etc. etc.

Quoting from the book, THEOMATICS, concerning 37's role in the biblical context of the collective unconscious,

"All of the earliest manuscripts of the New Testament were originally written on this form of material. Some of the documents from this period remain to this very day, and they are considered to be the most treasured and priceless artifacts in existence, for they are the earliest known copies of the New Testament. One such manuscript exists in Dublin, Ireland, in a collection of manuscripts owned by a man named Charles Beatty. It is unquestionably and by far the earliest known copy of the book of Revelation. The date of this papyrus has been placed in the third century, or somewhere between 200 and 300 AD.

The most amazing thing about this particular manuscript is the fact that it gives all the numbers in the book of Revelation with number or theomatic values. Every single number in the book of Revelation is shown with the letters of the Greek alphabet; for example 7 is referred to many times in Revelation, in the papyri this number would be expressed with the letter (ζ), which has a value of 7. The number 12 would be expresses by the two letters (λ) (κ) and so on.

Revelation 13:18 is, of course, the verse which describes the number of the beast, $666 = 37 * 18$. If you look at the picture of the papyrus, you will notice on the left side the number 666 with a little arrow pointing to the right. Follow the arrow for about an inch and a half, and you will see the following symbol with a line over it, this is the number 666, given in theomatic values. The first letter has a value of 600, the second letter has a value of 60, and the last letter has a value of 6. When you add up all three of these numbers you have 666. Therefore in Revelation 13:18 , the verse states that the one having wisdom is to calculate the number of the beast, and it gives the number 666.

Verse 1 of chapter 14, which immediately follows, describes how the lamb stood on Mt. Zion, and with Him there were 144 thousands. If you look at the picture of the papyrus again, you will see beneath the 666 the number 144 with an arrow pointing to its right. Follow this arrow for about an inch and a half, and you will see the symbol. This is the number 144 given with theomatic values. The first letter has a value of 100, the second letter has a value of 40, the last letter has a value of 4 all adding to 144".

Follow the arrow for about an inch and a half, and you will see the following symbol with a line over it, this is the number 666, given in theomatic values. The first letter has a value of 600, the second letter has a value of 60, and the last letter has a value of 6. When you add up all three of these numbers you have 666. Therefore in Revelation 13:18, the verse states that the one having wisdom is to calculate the number of the beast, and it gives the number 666.

A different look at the connection between gravity and electricity involves the electron mass, m_e , and the classical electron radius, r_e . The problem is to convert the very weak gravitational force, G_n , into the fine-structure constant, α , electrical fundamental force, using only the distributive properties of the two constants, m_e and r_e . The fine-structure constant is the first point:

$$\alpha * \hbar / c = m_e * r_e$$

To transform α into G_n without loss of invariance to m_e and r_e , invert \hbar (field change 90 degrees) and multiply by the two carrier forces of the gravitational and electrical constants, Planck mass = M_p for gravity, and the electron volt = ev for electricity:

$$10^{-7} * M_p^2 * G_n / \hbar / c * ev^2 = m_e * r_e$$

The best illustration of this affect is to combine the two fundamental forces, G_n and α , distributively:

$$\alpha * G_n = (c^2) * m_e * r_e / (M_p^2)$$

The right side is a density equation because r_e represents the charge on the sphere or torus with radius r_e , while c squared times the mass ratio (m_e/M_p) is the total Einsteinian energy in this sphere, the electron sphere of radius r_e . Light speed squared has deep origins due to the fact that the electron mass times the electron radius divided by the electron volt equals unity:

$$10^7 * \alpha * M_p^2 * G_n / ev^2 = c^2$$

Note how the electron mass density is transformed into both electrical and gravitational phenomena. The last formula shows that in the end you have to have an accelerated format, M_p^2/ev^2 combined with their respective force constants to have a mass to energy converter, light speed squared, c^2 .

ev	= electron volt	= $1.602176487 * 10^{-19}$ volts
M_p	= Planck mass	= $2.176437408 * (10^{-8})$ kg
m_e	= mass of electron	= $9.109382117 * (10^{-31})$ kg
r_e	= electron radius	= $2.817940298 * (10^{-15})$ m

a_{em} = fine structure constant = $1/137.035999701$
 G_n = gravitational constant = $6.67428 * 10^{-11} \text{ m}^3/\text{kg}/\text{s}^2$

Apr. 13, 2009:

A little known fact that shows that the origin of the fine-structure constant , a_{em} = $1/137.035999701$, is derived from black hole parameters: Planck mass = smallest black hole:

Planck mass = $2.176437408 * 10^{-8} \text{ kg}$ = M_p
 Planck radius = $1.616252458 * 10^{-35} \text{ m}$ = R_p

Electron mass = $9.109382117 * 10^{-31} \text{ kg}$ = M_e
 Electron radius = $2.817940298 * 10^{-15} \text{ m}$ = R_e

Proton mass = $1.672621665 * 10^{-27} \text{ kg}$ = M_{pr}
 Proton radius = $1.534698222 * 10^{-18} \text{ m}$ = R_{pr}

Elementary charge = $1.602176487 * 10^{-19} = e_v$

$$\frac{e_v^2}{M_p * R_p} * 10^{-7} = a_{em}$$

$$\frac{e_v^2}{M_e * R_e} * 10^{-7} = \text{unity}$$

$$\frac{e_v^2}{M_{pr} * R_{pr}} * 10^{-7} = \text{unity}$$

....every "normal" mass reduces to unity , only the Planck mass derives fine-structure.

Apr. 26, 2009: An interesting number , 322 , is associated to the super secret elite club called the skull and bones society , with origins from Yale University in the early 1900's . The number 322 appears directly on the clubs logo , a skull with two leg bones appearing as an x underneath the skull , with the number 322 appearing directly under the skull and crossed bones. The origin of this number is speculative , mostly relating to address connections or heights of buildings and such. The factors are :

$$322 = 23 * 7 * 2$$

...dividing 322 by Eulers gamma constant , .577215665..., , shows the Metric to English root connection to 37:

$$\left(\frac{322}{.577215665} \right)^{1/8} = \frac{1}{.4536127778} = 322^{.37^2}$$

...one pound - english = 453.6 grams - metric. Another connection is 153 and 13:

$$322 = 13^2 + 153$$

...the fibonnaci number , 610 , is connected to 288 sparks from broken vessels Kabbala :

$$288 + 322 = 610$$

...it turns out that the fibonnaci series is the deepest secret of the integer 322 , golden number = 1.6180339875 = fibonnaci constant.... , this using the twelfth root of the coefficient in the same vein as Johann S. Bach's 1700's discovery of the musical temperment constant , 1.059463094 , or the inverse twelfth root of two , which led to the changing musical instrument technology which led to modern standards. If you take the twelfth root of three hundred and twenty two , you get the golden number , which is a form of Lucas number:

$$322^{1/12} = 1.618035289..$$

$$2^{1/12} = 1.059463094$$

Apr. 26, 2009: An illustration of just how much information can be stored in inertial energy forms:

$$\frac{\text{meters}^2 * \text{kilograms}}{\text{seconds}} = \text{inertia}$$

....the primitive form for this dimensional is the reduced Planck's constant...h-bar = h / 2 / Pi...or Dirac's constant. The primitive mass for inertia is the Planck mass as a density...mass times length:

$$h - \text{bar} = c * M_p * R_p \quad (m^2 * kg / s)$$

....where Mp = Planck mass , Rp = Planck mass radius , and c = light velocity. Amazingly, all of the four fundamental forces and the masses of the electron and proton can be displayed in a single ratio that expresses the initial inertial force carrier:

$$\hbar = c * M_p * R_p = \frac{G_n * G_f^{1/3} * G_w^{-1/3} * a_{em}}{M(e,pr) p^{-2} * c^3 * R(e,pr)}$$

...where:

aem = fine-structure constant	= 1/137.035999701
Gn = gravitational constant	= 6.67428 * 10 ⁻¹¹ (m ³ / kg / s ²)
Gf = neutrino (weak force)	= 3.685756997 * 10 ⁻⁸² (ev/c ²)
Gw = fermi-coupler (weak force)	= .0000116637 (ev/c ²)
c = velocity of light	= 299792458 m/s
Mp = Planck mass	= 2.176437408 * 10 ⁻⁸ kg
Me = electron mass	= 9.109382117 * 10 ⁻³¹ kg
Mpr = proton mass	= 1.672621668 * 10 ⁻²⁷ kg
Rp = Planck mass radius	= 1.616252458 * 10 ⁻³⁵ m
Re = electron radius	= 2.817940298 * 10 ⁻¹⁵ m
Rpr = proton radius	= 1.534698222 * 10 ⁻¹⁸ m
h = Planck's constant	= 6.62606896 * 10 ⁻³⁴ J
ev = elementary charge	= 1.602176487 * 10 ⁻¹⁹ v

...there are four force constants, three primitive masses, three exclusive lengths for density, one ultimate speed, resulting in a minimum vibration allowed, Planck's constant. The question is this....Is it the natural gel allowed by the laws of mathematics that determines the rules of the observable and theoretical universes, meaning it has no other alternative but to align by these equations, due to the natural laws of physics and value numberings accountable to them?....Or is it the work of an entity that is outside of mathematics, creating this equation as a general rule for particle densities and the four interactional forces ruling their chemical and nuclear tendencies?...Which one is correct?... An argument for the Creator side is that so much complexity can be basically reduced to a vibrational matrix, an amazing, miraculous feat. An argument for the natural mathematical side is that you can solve this equation with different force constant values, resulting in infinite universes of this form. Are the other mathematical solutioned universes also capable of being real? What is the "exclusion" secret that selects only these certain values for the forces and masses to create reality? What makes this the "God" equation, that makes these values and proportions naturally exclusive to other values, allowing for the interpretation of natures meaning as to form and function, meaning once the rules are found there is no other solution to a "real" reality, in other words no "thing" known as electron in any real or imagined universe can exist without the dimensionless ratios of the primitive masses remaining unchanged?

One interesting effect of the fundamental forces is the interaction of the weak and gravitational forces, which in a certain sense describes the one third quark values...1/3, -1/3, 2/3.... as exponential functions to the weak and gravitational forces:

$$\hbar = c * M_p * R_p = \frac{G_f^{2/3} * G_w^{-2/3}}{M(e,pr) * c^3 * R(e,pr)} * a_{em}$$

$$\hbar = c * M_p * R_p = \frac{G_n^2 * M_p^4}{M_{(e,pr)} * c^3 * R_{(e,pr)}} * a_{em}$$

....so this is the great secret , the gravitational constant squared , times the fourth power of the Planck mass is two thirds root of the weak nuclear force derivative. So when one square roots the gravitational form , one is left with its equivalent in one third form, weak nuclear , which allows one to combine the two into the master formula:

$$\hbar = c * M_p * R_p = \frac{G_n * G_f^{1/3} * G_w^{-1/3} * a_{em}}{M_{(e,pr)} p^{-2} * c^3 * R_{(e,pr)}}$$

....the elementary charge , e_v , is also nested in the above equation through the dimensionless fine-structure constant:

$$\hbar = c * M_p * R_p = \frac{G_n * G_f^{1/3} * G_w^{-1/3}}{M_{(e,pr)} p * c^3 * R_{(e,pr)} p} * e_v * 10^{-7}$$

May 1, 2009:

<p>\hbar , is the smallest vibr- fine-struc- ation allowed in the constant an electrical standard model force</p>	<p>c , is the fastest velocity allowed in the stand- ard model</p>	<p>R_p , is the smallest length allowed in the standard model</p>	<p>G_n , is the gravitational constant , a fundament- al force</p>	<p>G_f and G_w are the nuclear weak force , neutrinos and ferm-coupler, a fundament- al force</p>	<p>a_{em} , is the ture fundamental</p>

$$G_n * G_f^{1/3} * G_w^{-1/3}$$

$^{1/3} * a_{em}$

$$\hbar = c * M_p * R_p =$$

<p>$R_{(e,pr)}$ and $2/\pi$ is the circumference of the circle, a ring</p>	<p>M_p, is the heaviest mass all- owed in the standard model a black hole</p>	<p>$M_{(e,pr)}$ is the proton and el- ectron masses, the weights of the standard model</p>	<p>$R_{(e,pr)}$ are the electron proton radii , the density forms for the masses</p>

$$M_{(e,pr)} p^{-2} * c^3 *$$

...where:

$$a_{em} = \text{fine-structure constant} = 1/137.035999701$$

Gn = gravitational constant	= 6.67428 * 10 ⁻¹¹ (m ³ / kg / s ²)
Gf = neutrino (weak force)	= 3.685756997 * 10 ⁻⁸² (ev/c ²)
Gw = fermi-coupler (weak force)	= .0000116637 (ev/c ²)
c = velocity of light	= 299792458 m/s
Mp = Planck mass	= 2.176437408 * 10 ⁻⁸ kg
Me = electron mass	= 9.109382117 * 10 ⁻³¹ kg
Mpr = proton mass	= 1.672621668 * 10 ⁻²⁷ kg
Rp = Planck mass radius	= 1.616252458 * 10 ⁻³⁵ m
Re = electron radius	= 2.817940298 * 10 ⁻¹⁵ m
Rpr = proton radius	= 1.534698222 * 10 ⁻¹⁸ m
h = Planck's constant	= 6.62606896 * 10 ⁻³⁴ J
ev = elementary charge	= 1.602176487 * 10 ⁻¹⁹ v

Jul. 1, 2009:

A little known fact that shows that the origin of the fine-structure constant , aem = 1/137.035999701 , is derived from black hole parameters: Planck mass = smallest black hole:

$$\begin{aligned} \text{Planck mass} &= 2.176437408 * 10^{-8} \text{ kg} = M_p \\ \text{Planck radius} &= 1.616252458 * 10^{-35} \text{ m} = R_p \end{aligned}$$

$$\begin{aligned} \text{Electron mass} &= 9.109382117 * 10^{-31} \text{ kg} = M_e \\ \text{Electron radius} &= 2.817940298 * 10^{-15} \text{ m} = R_e \end{aligned}$$

$$\begin{aligned} \text{Proton mass} &= 1.672621665 * 10^{-27} \text{ kg} = M_{pr} \\ \text{Proton radius} &= 1.534698222 * 10^{-18} \text{ m} = R_{pr} \end{aligned}$$

$$\text{Elementary charge} = 1.602176487 * 10^{-19} = e$$

$$\frac{e^2}{M_p * R_p} * 10^{-7} = aem$$

$$\frac{e^2}{M_e * R_e} * 10^{-7} = \text{unity}$$

$$\frac{e^2}{M_{pr} * R_{pr}} * 10^{-7} = \text{unity}$$

...every "normal" mass reduces to unity. Only the Planck mass derives fine-structure

Jul. 20, 2009: Definition: Schwarzschild radius....

The Schwarzschild radius (gravitational radius) is a characteristic radius associated with every quantity of mass. It is the radius of a sphere in space , that if containing a correspondingly

sufficient amount of mass(and therefore reaches a certain density) , the force of gravity from the contained mass would be so great that no known force or degeneracy pressure could stop the mass from continuing to collapse in volume into a point of infinite density, a gravitational singularity (colloquially referred to as a black hole).....

The world of black holes is ruled by the limit of mass shrinkage called the Schwarzschild radius , or the radius that a spherical mass has to assume to create an event horizon that separates reality from the singularity, it is defined by this relationship:

$$R(x)_{sw} = \text{Schwarzschild radius} = 2 * G_n * \text{mass}(x) / c^2$$

.....for the electron the R(e)sw radius equals: Me = mass of electron = 9.109382117 * 10⁻³¹ kg
 $R(e)_{sw} = 2 * G_n * Me/c^2 = 1.35294409 * 10^{-57} \text{ m}$

.....the connection between electromagnetism and gravity can be shown through the Schwarzschild radius if one uses mass spherical, classical radius. In this case the electron radius : Re = 2.817928385 * 10⁻¹⁵ m....aem = fine-structure = 1/137.035999701

$$R(e)_{sw} = Me^2 * 2 * Re / Mp^2 / aem = 1.35294409 * 10^{-57} \text{ m}$$

...to separate the masses from their radii, use the gravitational constant , Gn = 6.67428*10⁻¹¹ , and light speed , c = 299792458

$$R(e)_{sw} = G_n^2 * 2 / Re * Mp^2 * aem / c^4 = 1.35294409 * 10^{-57} \text{ m}$$

....note the inversion of the Planck mass squared with the electron radius. This conversion transforms a mass , squared , into the gravitational entity , isolating Gn and c⁴ creates the smallest distance allowed in the standard model...Planck length or radius of the black hole object Planck mass....Rp = 1.616245167 * 10⁻³⁵ m:

$$R(e)_{sw} = Rp^2 * 2 / Re * aem = 1.35294409 * 10^{-57} \text{ m}$$

..the above demonstrates an original discovery , a new way to calculate the Schwarzschild radius, using the radius of an object only,R(x) , versus the older method that uses mass only. Comparing the forms side by side illustrates the affect:

$$R(e)_{sw} = \frac{Rp^2 * 2 / Re * aem}{c^2 * 2 * Me * Gn}$$

...this demonstrates the relationship between the electromagnetic and gravitational forces. Interpretations suggest that the electronic (aem) constants can achieve singularity through radii, while gravity uses mass along with light speed squared, relativity....to achieve singularity. According to the

above relationship if one knows the the proton or neutron mass one should be able to calculate the respective radii of the masses through the Schwarzschild radius: $M_{pr} = \text{mass of proton} = 1.672621665 \cdot 10^{-27} \text{ kg}$

$$G_n \cdot M_{pr} / c^2 / R_p^2 / a_{em} = 1/\text{radius proton}$$

...the above calculates to ... $1.534691734 \cdot 10^{-18} \text{ m}$...which is the classical radius of the proton. The big connection between electro-gravity here is the fact that any mass squared with accompanying classical radius is equivalent to gravity strength proportional to the fourth power of light speed, the stress energy is generated by the inversion of the dimensional factors.... kg^2/m to m/kg^2 ... In the formulas , the fine-structure constant , a_{em} , in ratio with 2 , remains invariant through the stress energy inversion process. In the final form which reduces to the limit of the standard model, which is the Planck length , R_p , the shortest distance allowed in quantum theory , and placed into a singularity ratio...Iuliano/Schwarzschild....ones arrives at the fundamental root of the relationship between gravity and electromagnetism:

$$\begin{array}{l} \text{.....Iuliano} \\ R(e,pr)_{sw} = \\ \text{.....Schwarzschild} \end{array} \quad \begin{array}{l} R_p^2 \cdot 2 / R(e,pr) \cdot a_{em} \\ c^{-2} \cdot 2 \cdot M(e,pr) \cdot G_n \end{array} \quad \begin{array}{l} \text{.....} \\ \text{.....} \end{array}$$

...reduction to unity:

$$\text{unity} = a_{em} \cdot c^2 \cdot R_p^2 / G_n / M(e,pr) / R(e,pr)$$

revealing the assigning of static space filled mass to its unique spherical form...radius times mass , $m \cdot \text{kg}$, which is the potential energy:

$$\begin{array}{l} \text{electron} \\ M_e \cdot R_e = a_{em} / G_n \cdot c^2 \cdot R_p^2 \\ \\ M_{pr} \cdot R_{pr} = a_{em} / G_n \cdot c^2 \cdot R_p^2 \\ \text{proton} \end{array}$$

One of the most aesthetic of unification formulas is the link between the gravitational force , G_n , and the weak nuclear force , $G_f/G_w = (\hbar \cdot c)^3$. This equation shows the inverse fields that exist between the two fundamental forces, (mass per meter = density) and (mass times meter = charge potential) The fact that c squared is invariant to both fields , shows that both forces follow the standard model of relativity ...energy = mass * c^2:

$$G_n \cdot M_p / R_p = c^2$$

$$G_f^{1/3} \cdot G_w^{-1/3} / M_p / R_p = c^2$$

...these are the sources of the stress energy that exists in sub-space. To bring these fields into the space realm one has to attach the electromagnetic , fine-structure constant , a_{em} , to bring things to chemical realities , electron , proton , masses and radii:

GRAVITATIONAL $6.67428 * 10^{-11}$

$$G_n / a_{em} * M(e,pr) * R(e,pr) / R_p^2 = c^2$$

WEAK NUCLEAR $G_f/G_w = (\hbar * c)^3$

$$a_{em} * G_f^{1/3} * G_w^{-1/3} / M(e,pr) / R(e,pr) = c^2$$

...note the inversion of the electromagnetic field (Maxwellian).

G_n = gravitational force = $6.67428 * 10^{-11}$
 a_{em} = fine-structure = $1/137.035999701$
 M_e = electron mass = $9.109382117 * 10^{-31}$ kg
 R_e = electron radius = $2.817926786 * 10^{-15}$ m
 M_{pr} = proton mass = $1.672621665 * 10^{-27}$ kg
 R_{pr} = proton radius = $1.534698222 * 10^{-18}$ m
 G_w = fermi-coupling = $.0000116637$
 G_f = weak force = $3.685703981 * 10^{-82}$
 M_p = Planck mass = $2.817926786 * 10^{-8}$ kg
 R_p = Planck radius = $1.616244708 * 10^{-35}$ m

Aug. 2, 2009:

J-max is a term invented by Kerr to derive the maximum rotational energy (angular momentum) of black holes. This Kerr described by this equation:

$$J\text{-max} = G_n * \text{mass}^2 / c$$

....if one were to calculate the J-max of the electron-proton masses an interesting thing happens:

$$J\text{-max}(e,pr) = G_n * M(e,pr)^2 / c = M(e,pr) * c * R_p^2 / R(e,pr) * a_{em}$$

....the numerator has root value: mass of electron or proton times light speed times Planck mass radius , squared. Since the J-max value for the smallest blackhole , Planck mass , M_p , is \hbar :

$$J\text{-max}(Mp) = Gn * Mp^2 / c = \hbar = Mp * Rp * c$$

...then the following unification formulas can be shown using the numerator root value:

$$\text{ROOT FORM..... } J\text{-max} = Gn * M(e,pr)^2 / c = M(e,pr)^2 * c^2 * Rp^2 / \hbar$$

$$\text{STRONG FORCE.... } J\text{-max} = Gn * M(e,pr)^2 / c = M(e,pr)^2 * c * Rp / Mp$$

$$\text{GRAVITATIONAL..... } J\text{-max} = Gn * M(e,pr)^2 / c = M(e,pr)^2 * c^3 * Rp^2 / Gn / Mp^2$$

$$\text{WEAK FORCE..... } J\text{-max} = Gn * M(e,pr)^2 / c = M(e,pr)^2 * c^3 * Rp^2 / (Gw/Gf)^{1/3}$$

$$\text{ELECTRONIC..... } J\text{-max} = Gn * M(e,pr)^2 / c = M(e,pr) * c * Rp^2 / R(e,p) * aem$$

....interesting to note that the J-max, angular momentum, describes parallel force fields between the gravitational and weak forces, that is at J-max potentials , all fields are parallel . However in primitive form , gravity and the weak force are inverse fields to each other:

$$Gn = Rp / Mp * c^2$$

$$(Gf / Gw)^{1/3} = Rp * Mp * c^2$$

...Thus, Kerr's J-max formula automatically unifies the inverse force fields of the gravitational and weak forces. Electromagnetism's role is one of neutrality when dealing with the inverse fields of gravity and the weak force. since it is the inversion of light speed , squared !! that determines fine-structures neutrality:

$$Gf^{1/3} * Gw^{-1/3} = M(e,pr) * R(e,pr) * c^2 / aem$$

$$(a) \quad 1 / Gn = M(e,pr) * R(e,pr) * c^{-2} / aem / Rp^2$$

$$(b) \quad G_n = \frac{M(e,pr) * R(e,pr) * c^2}{M_p^2 a_{em}}$$

....combining the Planck mass and Planck radius leads to greatest simplification:

$$M(e,pr) * R(e,pr) = M_p * R_p * a_{em}$$

.....electromagnetic

$$c^{-2} = M_p * R_p * G_f^{1/3} * G_w^{-1/3} \dots$$

.....weak force

$$c^2 = M_p / R_p * G_n \dots$$

.....gravitational

....from the equations above, one can observe the inverse field phenomenon between the gravitational and weak forces. Light speed c is the generator of the inversion between their fields. The dimensionals of the equations show electromagnetism (fine-structure = a_{em}) to be dimensionless, the weak force is in the form of a pressure equation measured in kilograms volume per second squared, acceleration of inertia, the gravitational dimensionals are interesting, suggesting a fourth-dimensional " volume" , accelerating.... m^4/s^2 . Note how the Planck mass times its radius is an energy potential that sits at the core of the three fundamental forces. Concerning , a_{em} , fine-structure , the energy potential of the Planck mass as an object concentrated to a radius of Planck length times the amplitude for electron-photon absorption and emitting , fine-structure , equals the energy potential for the electron and proton... $M_{epr} * R_{epr}$. The energy potential of the Planck mass has Dirac's reduced Planck constant , $\hbar/2\pi$, as its root , and this I think represents the strong force.

$$c^{-1} = M_p * R_p * \hbar$$

.....strong force

..... 2 times π is the fourth fundamental force!! The fact that the field generated by... $1/c$... is the same as the weak nuclear force field... $1/c^2$...is fundamental to the understanding of the dimensionals of the strong, weak , and gravitational forces. The dimensionals of the weak and gravitational forces... m^2/s^2 and s^2/m^2 ...are defined as a torque or energy defined in joules. However the strong force ... \hbar ... is defined as pure velocity...inverted !! Two times π times the radius , R_p , equals a two dimensional ring(string?) Assign a weight to this ring by multiplying it by Planck mass ... $M_p * 2 * \pi * R_p$...Now rotate the ring to the limit of the standard model , light speed c . When this ring rotates once t the smallest vibration allowed in Nature occurs, the limits of the standard model, the singularity of black hole objects sits on this limit. Note how in the gravitational form the energy is static (non-rotating) with the black hole densities , mass per unit radius , being the energy or torque generator. The scale of the

gravitational form demonstrates the unit weakness of the energy. Two masses , one the Planck mass , Mp, the other , one kilogram are placed 299792458 meters apart, the gravitational energy between these two objects one would think would be zero, but there is an extremely tiny value , Planck radius , Rp , that is equivalent to this energy . Although small it does exist. This shows that there is an energy in space itself defined at the Planck length as a scaling unit that determines space volume. The weak force is tiny, but not to the extremeness of gravity, this is due to the fact that Planck mass is converted into pure energy, this causing an inversion of the weak force with its scalar Planck length. Gravity also has a nuclear space energy form that is attached to the gravitational energy form:

$$c^2 \cdot \text{gravitational energy of space} = G_n \cdot 1 \cdot M_p / R_p$$

$$c^2 \cdot R_p = G_n \cdot M_p / 1^2 \cdot \text{nuclear energy of space}$$

$$c^2 \cdot R_p = G_f^{1/3} / G_w^{1/3} / M_p \cdot \text{nuclear energy of space}$$

...the difference between nuclear and gravitational energy is when in nuclear form the Planck mass and single kilogram are separated by one meter , while in the gravitational form they are separated by 299792458 meters.

- aem = fine-structure = 1/137.035999701
- Gn = gravitational = 6.67428 * 10^-11
- Gw = weak force = .0000116637
- Gf = weak force = 3.685756998 * 10^-82
- Mp = Planck mass = 2.176437408 * 10^-8 kg
- Me = electron mass = 9.109382117 * 10^-31 kg
- Mpr = proton mass = 1.672621665 * 10^-27 kg
- Rp = Planck radius = 1.616252458 * 10^-35 m
- Re = electron radius = 2.817940298 * 10^-15 m
- Rpr = proton radius = 1.534698222 * 10^-18 m
- h = Planck's constant = 6.62606896 * 10^-34 J
- h-bar = Dirac's constant = 1.054571628 * 10^-34 J
- c = light speed = 299792458 m/s

Aug. 15, 2009:

In the unification formulas for the four fundamental forces, the fact that every thing can be reduced to five constants.... two masses ,planck mass -Mp and the electron , proton masses - Me,pr , two radii , planck radius -Rp, and electron ,proton radii- Re,pr, and light speed c , should be looked upon as a work of mathematical art , this definition of Natures laws as a symbolic yet functional form or as an aesthetic thing of beauty that transcends understanding.

WEAK NUCLEAR FORCE: $G_f^{1/3} * G_w^{-1/3} = (\hbar * c)^3 \dots$ (inertial energy: $\text{kg} * \text{m}^3 / \text{s}^2$)

$$M_p * c^2 * R_p = G_f^{1/3} * G_w^{-1/3}$$

GRAVITATIONAL FORCE: $6.67428 * 10^{-11} \dots$ (density energy: $\text{m}^3 / \text{kg} / \text{s}^2$)

$$M_p * c^2 * R_p = G_n$$

STRONG NUCLEAR FORCE: $\hbar / \text{Pi} \dots$ (moment of inertia: $\text{kg} * \text{m}^2 / \text{s}$)

$$M_p * c * R_p = \hbar$$

ELECTROMAGNETIC FORCE: $1/137.035999701 \dots$ fine-structure constant = $a_{em} \dots$ (dimensionless)

$$M_p * M_{e,pr} * R_{e,pr} * R_p = a_{em}$$

$M_p = \text{planck mass} = 2.176437408 * 10^{-8} \text{ kg}$
 $R_p = \text{planck radius} = 1.616252458 * 10^{-35} \text{ m}$
 $M_e = \text{electron mass} = 9.109382117 * 10^{-31} \text{ kg}$
 $R_e = \text{electron radius} = 2.817940298 * 10^{-15} \text{ m}$
 $M_{pr} = \text{proton mass} = 1.672621665 * 10^{-27} \text{ kg}$
 $R_{pr} = \text{proton radius} = 1.534698222 * 10^{-18} \text{ m}$
 $c = \text{light speed} = 299792458 \text{ m/s}$

$a_{em} = \text{fine-structure constant} = 1/137.035999701$
 $G_n = \text{gravitational constant} = 6.67428 * 10^{-11} \text{ m}^3/\text{kg}/\text{s}^2$
 $G_w = \text{fermi-coupler} = .0000116637$
 $G_f = \text{neutrino coupler} = 3.685756998 * 10^{-82}$
 $\hbar = \text{Dirac's constant} = 1.05471628 * 10^{-34} \text{ J}$

Since 1975, the year M. Feigenbaum discovered his now famous mathematical constant, $F_{\Delta} = F_d = \text{Feigenbaum constant} = 4.669201609 \dots$, the bifurcation constant of chaos to order phase transitions, mathematicians have been trying to link the Feigenbaum constant to physical realities, especially the dimensionless, static constants such as the electromagnetic fine-structure or gravity, natural log e or Pi, etc. This discovery, unlike other discoveries of math anomalies relating to this subject, has a sense of unexplainable consequences and thus can be classified as magic driven mathematics. This means that the following two equalities have an unusual relationship in that the mathematical rules that converts the angular measure from one system to another (degrees(360) to radians (180/Pi)) does not follow "normal" procedures for angular measure conversions, especially in the linkage between Feigenbaum delta ($F_d = 4.66920 \dots$) and fine-structure ($a_{em} = 1/137.035999701$). The magic shows that halving the reciprocal natural log e (1/N) is equivalent to the negative, inverse Pi power. This only occurs in

the linkage between Feigenbaum delta and fine-structure constant: $\text{aem}^{-1} = 137.035999701$, tan in radians:

$$\frac{\tan Fd}{100} = \frac{1}{2} \text{COS aem}^{-1} \text{ degree} \quad \dots Fd = 4.66920251$$

$$\frac{\tan Fd}{\text{Pi}} = \text{COS aem}^{-1} \text{ radian} \quad \dots Fd = 4.669204754$$

....the magic continues....from the Kabbalic mystic Hebrew bible is the electronic code , " 288 sparks from broken vessels" , refering to a casting out of the "sparks"(mankind) out of heaven to shatter upon hitting reality(earth) and being released to the "fall"(Adam and Eve) of mankind(carnal existence). Next door to ancient Palestine is the greatest manmade(?) structure ever made on earth , the Great Cheops (Kufu) pyramid on the Giza plateau , which has the proportional constructs , height = 486.256 feet , base leg = 763.81 feet , ratio = 2/Pi. Combining the forms in the Feigenbaum delta , fine-structure constant , radian forms , links to the discovery:

$$\frac{288}{100} = \frac{2}{\text{Pi}} \text{COS aem}^{-1} \text{ radian} \quad \dots \text{aem} = 1/137.036000986$$

$$\frac{82944}{100} = \frac{1}{\text{Pi}} \text{COS aem}^{-1} \text{ radian} \quad \dots \text{aem} = 1/137.036000986$$

$$\frac{\text{Pi}}{100} = \tan Fd \quad \dots Fd = 4.669204313$$

....the number 82944 is used inclusively in the philosophy of the modern mystic , D.G. Leahy (New Universal Consciousness) ,as the base of his triple logic cube and " thinking NOW , created 100" philosophy.

Oct. 9, 2009

This is a mathematical interpretation of W.Pauli's dream " the vision of the world clock "...page 151:

" Then Pauli has a dream that he calls " the great vision - the vision of the world clock". It is an impression of " the most sublime harmony " he tells Jung, and it fills him with happiness and peace:

There is a vertical and horizontal circle , having a common center. This is a world clock. It is supported by a black bird. The vertical circle is a blue disc with a white border divided into $4*8=32$ partitions. A pointer rotates upon it. The horizontal circle consists of four colors. On it stand four little men with pendulums and around it is laid the ring that once dark is now golden....The clock has three rhythms or pulses:

1....The small pulse: the pointer on the blue vertical disk advances by $1/32$.

2...The middle pulse: one complete revolution of the pointer. At the same time the horizontal circle advances by $1/32$.

3...The great pulse: 32 middle pulses are equal to one revolution of the golden ring.

(end book quote)

To interpret this dream one determines the total number of clicks (small pulses) that generates one revolution of the golden ring , which is 32 cubed = 32768 small pulses. Assuming this is the total circumference of a two dimensional ring or circumference , the radius of this structure = $32768 = 2 * \text{Pi} * \text{radius}$, where:

$$\text{radius} = 5215.189175...$$

...the collective unconscious constant .8918918914... is involved due to:

$$\begin{aligned} 192962 / 37 &= \text{radius} = 5215.1891891... \\ 192962 &= 2 * 7 * 11 * 1253 \end{aligned}$$

...assume now that 32768 equala the area of a disk , such that:

$$32768 = \text{Pi} * \text{radius}^2$$

..where radius = 102.1292238 . This form is Egyptian due to this equality: (four is Pauli's reoccurring mandela)

$$(102.1292238 / 37) + (4^2) = 18.76024929$$

$$\begin{aligned} (10^{(4/\pi)} - 4^2) * 37 &= 102.1307256 = \text{radius} \\ \log 18.76024929 &= 3.999997048 / \pi \end{aligned}$$

...this is where the Egyptian form appears....(4/π) and it's connection to Pauli's obsession number , fine-structure constant:

$$(10^{(3.999995526 / \pi)}) / (.37^2) = 137.035999701$$

...this is related to Prof. Leahy's dream, room key number ..2808:

$$(10^{((2807.9999881 / 37) - 72)}) / 666 = \text{sqrt } 137.035999701$$

...and the triple logic cube number 82944 and the world clock generator 32: (page 259):

$$(10^{(82943.99304 / 32) 666}) / 666 = \text{sqrt } 137.035999701$$

...note the number 72 which is 144/2:

$$(10^{(143.9999879 / 37)}) / 666 = \text{sqrt } 137.035999701$$

...the most astounding connection of 32 to the geometric forms is the torus volume form (golden ring) where:

R = loop radius = fine-structure constant = 1/137.035999701 = aem
r = tube radius = Feigenbaum alpha = 2.502907875 = Fa (width constant of the bifurcation map)

$$32 / ((\pi^{\pi}) - 1) = 2 * (\pi^2) * (Fa^2) * aem$$

...this form is exact..!!

Oct. 9, 2009:

A mathematical interpretation of Pauli's dream of the " imaginary number " , i , square root of negative one. (page 185)

" In 1948 , around the time of the spring equinox , Pauli had two dreams. For him the equinoxes , he said were times of " relative psychic instability , which can manifest itself both negatively and positively (creatively) " . The dreams that arose at those times were always of particular significance. His dreams were full of mathematical symbols. In one of them , i , appears , i , being the square root of -1. i is an " imaginary number" because it is not one of the numbers we use in daily life -- the so called real numbers. Neverthe less , i often functions to unify complicated formulas by making them more compact.

In one of his dreams a woman brings Pauli a bird. It lays an egg that then divides into two eggs. Then he notices that he has another egg in his hand which makes three. Suddenly the egg in his hand divides into two. He now has four , a quaternity has appeared. Before his eyes the four eggs morph into four mathematical symbols , in two groups , side by side:

$$\begin{array}{cc} \cos(\delta)/2 & \sin(\delta)/2 \\ \hline \cos(\delta)/2 & \sin(\delta)/2 \end{array}$$

...cos(cosine) and sin(sine) are quantities from trigonometry (a form of mathematics that deals with triangles.), while delta is the angle formed by two sides of a triangle. These four symbols coalesce into a simple expression , unified by the symbol , i :

$$\frac{\cos(\delta)/2 + i \sin(\delta)/2}{\cos(\delta)/2 - i \sin(\delta)/2}$$

...this expression is well known to mathematicians. In his dream he forms this expression into an equation:

$$\frac{\cos(\delta)/2 + i \sin(\delta)/2}{\cos(\delta)/2 - i \sin(\delta)/2} = e^{i(\delta)}$$

....where e , the " base of the natural logarithms " has a numerical value of 2.718281828... (referred to an irrational number) and $e^{i(\delta)}$ has a magnitude of 1. The insertion of i into these sets of four created a unity . Reflecting on the eggs in his dream , Pauli realized that it was precisely what Maria Prophetissa , the early practitioner of alchemy , had described some seventeen centuries earlier: " One becomes two , two becomes three , and out of the third comes the One as the fourth ". This transformation he noticed , " typically comes about for me through mathematics." Describing it to Jung , he explains that $e^{i(\delta)}$ is a number that always lies on a circle of radius 1. Through the power of the mathematical symbol i , a mandala has appeared in the form of a circle. In Pauli's dream i , " has the irrational function of uniting pairs of opposites -- the cosine and sine functions arranged in two groups of opposites - " and thus producing wholeness ". But e too is irrational , it is an irrational number. This shows , he says , that mathematics , " is a symbolic description (of nature) par excellence ". Mathematical symbols, are the perfect way to unite and represent counterintuitive features of the quantum world , such as the wave particle duality , which can never be visualized.

Reflecting further , Pauli suggests that the successive splittings of the eggs are analagous to the splitting of spectral lines. When one examines the fine-structure of a spectral line, the spectroscopist shows that what appears to be a single line is actually two and that the spacing between the two lines is defined by the number 137. In that case could it be , he wondered , that two was the predominate number in physics , not four? In both physics and psychology there were complementary opposites suggesting that two was the predominate number in the psyche as well. But four - the quaternary- had appeared in his dreams, signifying the wholeness of the material world and our conscious knowledge of it as well as the unconscious. Pauli's discovery of the fourth quantum number indicated precisely the need for this wholeness and therefore, although it was surprising at first , it should have been expected all along , given that four was the archetype of completeness....(end of book quote)

A mathematical analysis of Pauli's dream archetypes revealed some interesting facts. In the modern measuring systems of angular forms, there are three basic forms (Pauli's archetype of the trinity) , the radian ($180/\pi$) , the degree form (360 degrees in the unit circle)) and the gradian (100). It can be shown the following equalities:

$$\cos_{\text{radians}} 137.036006272 / (10^{(-2/\pi)}) = e^{ \cos_{\text{degrees}} 137.036006272 * -2 / \pi }$$

...there are two archetypes here, the Cheops pyramid constructs, $2/\pi$, and Pauli's dream number, natural log e . Amazingly the transformation of the two angular systems only occurs through Pauli's dream archetypes, the natural log e , and the Cheops constructs, $2/\pi$. Pauli was actually very close in his dream state to the unification of the two forms due to this fantastic formula that links Euler's discovery (1700's) of natural log e , and the imaginary number i , or square root of negative one:

$$i^i = e^{-\pi/2}$$

...Euler showed that the imaginary number i to the power of itself (Pauli's archetype of self unity) is actually a real number:

$$e^{(i * \pi)} + 1 = 0$$

...this formula is generally acknowledged as one of the deepest mathematical formulas in mathematics! However there is a mathematical form that exists that definitely shows Pauli's dream state archetypes in a simplified formula. This formula unifies Pauli's archetypes of the primal number 137, natural log e , the Eulerian form i^i , and the unification of the two angular measurement systems, radians and degrees:

$$i^i = (\cos_{\text{radians}} 137.036004347^{\cos_{\text{degrees}} 137.036004347}) / 10$$

...the natural log e can be separated from this form using the ancient archetype, Cheops pyramid constructs... $2/\pi$!!

$$e = (\cos_{\text{radians}} 137.036004347^{(\cos_{\text{degrees}} 137.036004347 * -2/\pi)}) / (10^{-2/\pi})$$

...the latter formula unifies four archetypes: the natural log e , the primal number 137, the unification of the two angular measuring forms (radians - degrees) and the Cheops pyramid constructs... $2/\pi$. As a further extension of Pauli's dream of natural log e and the sine and cosine functions is the involvement of the famous, rather recent, discovery (1975) of the Feigenbaum delta constant (4.669201609..) in Pauli's dream patterns:

$$\cos_{\text{degree}}^{-1}((\text{IN}_{\text{radian}}((\tan Fd) / 100)) / 2) = 137.0359996 \quad \dots Fd = 4.66920251$$

$$(\tan_{\text{radian}} Fd)^{-1/\pi} = \cos_{\text{radian}} 137.0359997 \quad \dots Fd = 4.669204754$$

...to separate into the degree and radian forms:

$$(\text{IN}_{\text{radians}}((\tan Fd) / 100)) / 2 = \cos_{\text{degrees}} 137.03599996 \quad \dots Fd = 4.66920251$$

$$(\tan_{\text{radians}} Fd)^{-1/\pi} = \cos_{\text{radians}} 137.0359997 \quad \dots Fd = 4.669204754$$

...note how the reciprocal log e (IN function) bridges the two angular measuring systems...degrees to radians. To isolate the Feigenbaum delta constant, Fd, one can use both the cosine and sine ala Pauli's dream state through a 90 degree rotoation:

$$100 * (e ^ { 2 * \sin(-137.035999701 + 90) }) = \tan 4.66920251$$

degree
radian

$$100 * (e ^ { 2 * \cos(137.035999701) }) = \tan 4.66920251$$

degree
radian

(Page 263)

" From there Pauli went to California where Feynman for one, had no compunction about telling the great (Neils) Bohr that he was an idiot. Audiences there too offered ruthless criticism. Pauli was beginning to conclude, as he wrote to Heisenberg later that year, that " something entirely new, in other words very ' crazy ' (was) needed ", if he and Heisenberg were to crack the mystery of the masses of the elementary particles, one of the key aims of their unified theory ...(end of book quote)

...the electron and proton energy constants (.510998908 and 938.272029 respectively) can be determined from these ancient archetype symbols:

$$(82944 ^ { 1/Pi }) * 6.66 / (.510998908 ^ 2) = 938.272024 + 1/136$$

D.G.Leahy
John of Patmos
electron
proton
Eddington

$$938.272029 * (.510998908 ^ 2) / 666 = \cos 137.03599789$$

$$(82944 ^ { 1/Pi }) / 100 = \cos 137.036000986$$

radians

$$(100 ^ Pi) / 82944 = \tan 4.669204313$$

radians

...the reason for the hidden meaning of 666....from Page 202:

" Jung enthusiastically agreed that mathematical probability must correspond to an archetype. Bringing archetypes and synchronicity together, he suggested, that the archetype " represents nothing else but the probability of psychic events ". Although all of us are born with a collective unconscious made up of archetypes, it is not inevitable that any single archetypal image will actually appear in our consciousness. It is only highly probable - not inevitable - that patients recovering from deep depression will draw mandelas. The laws of probability in quantum physics are a law of nature and laws of nature contain the patterns of the cosmos. Given

that the archetype is also a pattern of behaviour, does this mean that laws of nature have their bases in psychic premises? And how do archetypes enter our human minds in the first place? Jung suggested that they were "out there", ready to be plucked out of the air, and in this way entered our minds. We are, after all, merely small elements in one world. The origin of the word is immaterial, Jung insisted, it's what the archetypes can do that is important. Returning to the ever-fascinating issue of threes and fours, Jung perceived that quantum physics widened the threesome of classical physics--space, time and causality-- to include synchronicity, thereby becoming a foursome. This happy development solved the age old problem of alchemists, encapsulated in the "so-called axiom of Maria Prophetissa: Out of the Third comes the One as the Fourth....this enigmatic observation confirms what I said above, that in principle new points of view are not as a rule discovered in territory that is already well known, but in out-of-the-way places that may even be avoided because of their bad name". (end of book quote)

...this explains why the beast number 666 is a pariah, that is, to "be avoided because of their bad name" since it has lain in "territory that is already well known, but in out-of-the-way places"....This is the deep irony of the collective unconscious forms in that as popular culture has set up walls of non-approach to the real answers of things, that one must look into exactly the things that have been road blocked by the culture of the times at hand to seek the answers both spiritually and materially with human philosophy linking both by a common psychic archetype.

...Eddington's obsession with 136....from Page 250:

"Eddington argued that according to relativity theory, particles cannot be considered in isolation but only in relationship to each other and therefore any theory of the electron has to deal with at least two electrons. Applying a special mathematics that he had invented, Eddington found that each electron could be described using sixteen E-numbers (E stood for Eddington). Multiplying 16 by 16 gave a total of 256 different ways in which electrons could combine with each other. He then showed that, of these 256 ways, only 136 are actually possible; 120 are not. He wrote this mathematically as $256 = 136 + 120$. Like pulling a rabbit out of a hat, he thus magically produced the number 136 from purely mathematical (if dubious) reasoning. Of course 136 was not 137, but for Eddington it was close enough. He was convinced that the elusive "one" would "not be long in turning up". As the physicist Paul Dirac put it, "Eddington first proved for 136 and when experiment raised to 137, he gave proof of that! The obsessive pursuit of 137, took over Eddington's life." (end of book quote)

....Numbers as archetypes...from Page 212:

"By the early 1950's Jung agreed with Pauli that numbers undoubtedly were archetypal and added that they could "amplify themselves immediately and freely through mythological statements", such as the one attributed to Maria Prophetissa. The common ground between physics and psychology was not to do with parallel concepts "but rather in that ancient spiritual 'dynamis' of numbers...the archetypal numinosity of numbers impress itself on the one hand in Pythagorean, Gnostic, and Kabbalistic (Gematria) speculation and in the other hand in the arithmetical method of the mantic (divinatory) procedures in the I Ching, in geometry and horoscopy." This Jung wrote to Pauli in 1955.

Mathematicians might argue over whether numbers were originally invented or discovered, just as psychologists debate whether archetypes are innate or acquired. "In my view both are true

" , wrote Jung. Jung was not interested in what mathematicians did with numbers, but what number itself does when given the opportunity. This is certainly the method that has proved particularly successful in the field of archetypal ideas. He was curious in other words, about whether numbers have mystical powers and what these might be. It was certainly a fresh approach to numbers, evidence of the fruitfulness of the collaboration between the two men".
(end of book quote)

Oct. 26, 2009

Concerning the collective unconscious constant which is any number when divided by the integer 37 creates the modulo decimal remainder , .891891891..., which is the link to the fine-structure constant:

$$(10 ^ (143.9999879 / 37)) / 37 / 18 = \text{sqrt } 137.035999701$$

...there have been many numbers associated to the divisor 37 and the collective unconscious forms:

Leahy's dream number2808
Van Halen's number.....5150
Hindu number108
Druid number.....144
Hebrew number288
John of Patmos number....1260 and 666
Leahy triple logic number....82944
Denglers number as name...1069
John Michell number.....1080+666 = 1746
Mayan/Aztec number2304
R.Tomes harmonic.....3456....etc.

...the key has always been the divisor number 37. The following is from an article in the Jan. 10 , 2009 , magazine , New Scientist, called , " Inside the Mind of a Autistic Savant ". The article goes on to talk about the savant Daniel Tammet , who is a human calculator of whose one of many feats , set a European record for the number of digits of Pi he recited from memory (22514). The article interviewer , Celeste Biever , interviewed D. Tammet and here is a portion of her interview concerning the number 37 and D. Tammet's fascination with this particular number:

Question: When did you realize you had special talents?

Tammet: At the age of 8 or 9 , I was being taught maths at school and realised I could do the sums quickly , intuitively and in my own way--not using the techniques we were taught. I got so far ahead of the other children that I ran out of textbooks. I was aware already that I was different because of my autism, but at that point I realised that the relationship I had with numbers was different.

Question: To most people, the things you can do with your memory seems like magic. How do you do it ?

Tammet: The response that people often have to what I can do is one of " gee whiz" but I want to push back against that. One of the purposes of the book I've written , " Embracing the Wide Sky " , is to demystify this, to show the hidden processes behind my number skills. I have a relationship with numbers that is similar to the relationship that most people have with

language. When people think of words they don't think of them as separate items , atomised in their head , they understand them intuitively and subconsciously as belonging to an interconnected web of other words.

Question : Can you give an example?

Tammet: You would'nt use a word like " giraffe " without understanding what the words " neck " or " tall " or " animal " mean. Words only make sense when they are in this web of interconnected meanings and I have the same thing with numbers . Numbers belong to a web. When somebody gives me a number , I immediately visualise it and how it relates to other numbers. I also see the patterns those relationships produce and manipulate them in my head to arrive at a solution, if its a sum , or to identify if there is a prime.

Question: But how do you visualise a number ? In the same way I visualise a giraffe ?

Tammet: Every number has a texture. If it is a " lumpy " number then immediately my mind will relate it to other numbers which are lumpy--the lumpiness will tell me there is a relationship , there is a common divisor , or a pattern between the digits.

Question: Can you give me an example of a " lumpy " number ?

Tammet: For me the ideal lumpy number is 37 . It's like porridge. So 111 , a very pretty number which is 3 times 37 , is lumpy but it is also round. It takes on the properties of both 37 and 3 , which is round. It's an intuitive and visual way of doing maths and thinking about numbers.

Question: Why do you think you treat numbers this way ?

Tammet: When I was growing up, because of my autism , I didn't make friends. Numbers filled that gap. The numbers came alive. My mind was able to pick out patterns and to make sense of them. It was similar to how a child would aquire his first language....

Question: What can we learn from the way your mind works ?

Tammet: The differences between savant and non-savant ability have been exaggerated. Savants are not freaks, cut off from the rest of humanity. The thinking of savants is an extreme form of the kind everyone has. The aim of my book is to show that minds that function differently such as mine , are not so strange , and that anyone can learn from them. I also hope to clear up some misconceptions about savant abilities and what it means to be intelligent or gifted ...(end of article quote)

Wolfgang Pauli knew through his mandelas and the collective unconscious parameters of Carl Jung that the fine-structure constant ($1/137.035999701$) , a primal number , has a connectiveness to the primal numbers of man. This connectiveness number is the integer...37:

Leahy dream number2808:

$$(10 ^ { ((2807.9999879 / 37) - 72) }) / 666 = \text{sqrt } 137.035999701$$

Van Halen's number ...5150:

$$(10 ^ { ((5149.99999881 / 3.7) - 1388) }) / 666 = \text{sqrt } 137.035999701$$

Hindu number....108:

$$(10 ^ { (107.999999879 / .37) - 288 }) / 666 = \text{sqrt } 137.035999701$$

Druid , John of Patmos number ...144:

$$(10 ^ { (143.999987919 / 37) }) / 666 = \text{sqrt } 137.035999701$$

John of Patmos numbers ...1260 and 666:

$$(10 ^ { ((1259.99978254 / 666) + 2) }) / 666 = \text{sqrt } 137.035999701$$

Leahy's triple logic number ...82944:

$$(10^{(82943.9930413 / 32 / 666)}) / 666 = \text{sqrt } 137.035999701$$

Plato's number of the world soul...2592:

$$(10^{(2591.99978254 / 666)}) / 666 = \text{sqrt } 137.035999701$$

Dengler's name change number ...1069:

$$(10^{((1068.99998792 / 37) - 25)}) / 666 = \text{sqrt } 137.035999701$$

Mayan/Aztec number ...2304:

$$(10^{((2303.99978254 + 288) / 666)}) / 666 = \text{sqrt } 137.035999701$$

R.Tomes master harmonic number ...3456:

$$(10^{((3455.999789 / 666) - 46)}) / 666 = \text{sqrt } 137.035999701$$

Nov. 14, 2009:

" Fibonacci numbers are a sequence of whole numbers in which each number starting from the third is the sum of the two previous ones. The sequence begins , 0,1,1,2,3,5,8,13,21,34,55,89,144,233,377,987, and so on. If we take the ratio of successive numbers in the series.....we reach 1.6180339875 , the Golden Ratio , which has been a guideline for architecture since the days of ancient Greece. It appears on the pyramids of ancient Egypt , the Parthenon in Athens , and the United Nations building in New York City. Fibonacci numbers were discovered by the Italian mathematician Leonardo Fibonacci in the twelfth century. It was Kepler who discovered their relationship to the Golden Ratio. Then Eduardo Lucas, a French mathematician , used them to develop the Lucas numbers in the nineteenth century. Lucas numbers are like Fibonacci numbers but begin with 2: 2,1,3,4,7,11,15,29,47,76,123 and so on. Like the Fibonacci series, the Lucas series also produce the Golden Ratio....Because all these numbers are related, any formula for 137 in terms of the Golden Ratio , can be rewritten in terms of Fibonacci and Lucas numbers , though whether this is anything more than abstruse relationships between certain numbers is not clear. "(end book quote)

The following shows how the integer 37 clears up this abstruseness between the Golden Ratio and the primal number137.035999701 (fine-structure constant):

....the integer 37 has a unique relationship to the fine-structure constant (1/137.035999701) through the cosine in radians form and the Golden Ratio (1.6180339875..). First is how to convert Pi to the Golden Ratio:

$$\cos(\text{Pi} * .2) = 1.6180339875 / 2$$

...using this form and the speed of light , c = 299792458 m/s , one has the following:

$$\begin{aligned} \cos(c / 137.0359997078 / .37) &= 1.618039177 / 2 \\ \cos(c / 137.03599970078 / (.37^2)) &= \text{unity} \end{aligned}$$

...thus by squaring .37 one can transform the Fibonacci constant (1.6180339875) into unity.

(page 250....relating 2π to the fine-structure constant)

" Eddington had a strong mystical streak. To him mysticism offered an escape from the closed logical system of physics. " It is reasonable to inquire whether in the mystical illusions of man there is not a reflection of an understanding reality " , he mused. Like Pauli , he struggled with the dichotomy between these two worlds, both equally invisible , of science and the spirit. He was sure that mathematics was the key that would open the door between these two worlds and he set about an obsessive quest to derive 137 , however he could. The equation for the fine-structure is : (note formula in the book is wrong ??)

$$1/137.035999701 = 2 * \pi * (e v^2) * c / (10^7) / h \dots(\text{correct formula})$$

...and the charge of the electron ev appears in this equation as $ev * ev$ or ev^2 . As a result, besides being a measure of the fine-structure of spectral lines , the fine-structure constant ($1/137$) also measures how strongly two electrons interact. " (end book quote)

...how the archetypal numbers determine the interaction between two electrons through the electron energy...($.510998908$ =electron)...(938.272029 =proton)

$$(82944 ^{ (1/\pi) }) * 6.66 / (.510998908 ^ 2) = 938.272024 + (1/136)$$

- 82944 = Leahy's number (triple logic cube)
- 6.66 = John of Patmos number ($37*18$)
- .510998908 = electron energy (2008NIST)
- 938.272029 = proton energy (2008NIST)
- 136 = Eddington's original primal number for fine-structure

(page 251 ...Pauli and 137)

" It seemed that Pauli had not caught the 137 bug. In February 1934, however , he wrote to Heisenberg that the key problem was " fixing $1/137$ " and the ' Atomistik ' of the electron charge . " At the time he was trying to find a version of quantum-electro-dynamics in which the mass and charge of the electron were not infinite , but no matter which way he manipulated his equations , the concept of electric charge always entered--hence the mystical " Atomistik - atom plus mystic of the electron charge. " (end of book quote)

...how the archetypes , Cheops pyramid constructs ($2/\pi$) and the John of Patmos numbers , 144 and 666 , relate to 37 and the fine-structure constant ($1/137$)

$$\begin{aligned} 144 / 37 &= \log(666 * \text{sqrt } 137.035999701) \dots\dots 143.999987919 \\ 2 / \pi &= \log(.37 * \text{sqrt } 137.035999701) \dots\dots 1.9999977629 \end{aligned}$$

.... the entire unification of the archetypal number forms:

$$\begin{aligned} \cos((10^{4/\pi}) * c / 137.0359997004) &= 938.271917 / 1000 \\ \cos(.37^{-1} * c / 137.03599970078) &= 1.618039177 / 2 \\ \cos(.37^{-2} * c / 137.03599970078) &= \text{unity} \\ (\cos(.37^{-2} * (10^{(3.999995508/\pi)})) * 666 / (.510998908^2)) &= \\ 938.272106 \end{aligned}$$

Dec. 8, 2009:

The following is an example of the collective unconscious constant (.891891891...) appearing in the structure of the purposefully placed constants that make up the fine-structure constant ---incorrectly..... if this was done for both equations, purposefully, then it is definitely strange behavior....:

(page 41...(the discovery of 137)

" Sommerfield called the quantity that set the distance between the split spectral lines in this extra term the " fine-structure constant " and designated it with the Greek letter (alpha), this equation was :

$$\alpha = 2 * \pi * (ev^2) / h / c . " \dots\dots(\text{end book quote})$$

...this formula, as it appears multiple times in the book, is incorrect for the number 137. The formula for alpha is actually:

$$\alpha = 2 * \pi * (ev^2) * c / h / (10^7)$$

...however through a very strange coincidence the " wrong formula " can actually determine the fine-structure constant (Sommerfield's alpha) when using the reciprocal natural log e (IN) of the " wrong formula " :

$$\text{IN}(2 * \pi * (ev^2) / h / c) = -5 * 49 * 11 * 1033 / (10^5)$$

...1033 is a collective unconscious integer:

$$1033 / 37 = 2791.891891891\dots$$

....such that fine-structure is expressed as:

$$(10^{((1032.9999998745 / .37) - 2788)}) / 666 = \text{sqrt } 137.035999701$$

...fantastic that the electron charge , Planck's constant and the speed of light has an integer like sub-structure when placed in reciprocal natural log e:

$$e^{(-5 * 49 * 11 * 1032.9999998745 * (10^5))} = (ev^2) * c / h\text{-bar}$$

...Amazingly the other " wrong formula " in the book does the same thing. On page 257 from the book , is Enrico Fermi's famous photograph of him standing next to a chalk board with the " wrong formula " for alpha written on it :

$$\alpha = (h\text{-bar}^2) / ev / c \quad (\text{page 257})$$

" It was an excellent joke-- and a joke comprehensible only to scientists. However the joke backfired when the photograph was used for a stamp to commemorate him (Fermi) after his death. So he was caught forever standing next to this iconic equation--incorrectly written. " ... (end book quote)

... even though it also does not represent alpha , Fermi's " wrong formula " has the same internal structure as the other " wrong formula " , that is the collective unconscious constant is embedded in the reciprocal natural log e :

FERMIwrong formula

$$(h^2) / 4 / (Pi^2) / ev / c = e^{((5^2) * -8 * 71 / 106.999932363)}$$

BOOK.....wrong formula

$$2 * Pi * (ev^2) / h / c = e^{(-5 * 11 * 49 * 1032.99999944 / (10^5))}$$

....fine-structure and the collective unconscious integers , 107 and 1033:

$$\text{FERMI}(10^{((106.9999879 / 37) - 1)}) / 666 = \text{sqrt } 137.035999701$$

$$\text{BOOK}(10^{((1032.99999988 / .37) - 2788)}) / 666 = \text{sqrt } 137.035999701$$

$$\begin{aligned} h &= \text{Planck's constant} = 6.62606896 * 10^{-34} \\ c &= \text{speed of light} = 299792458 \\ ev &= \text{electric charge} = 1.602176487 * 10^{-19} \end{aligned}$$

Dec. 20, 2009:

The radius of the Earth has several mathematically holographic , gnomonic relationships to the metrics of Nature (SI measurement). The Earth's radius varies from 3947 miles (polar) to 3965 miles (equatorial), the mean radius being approximately 3955 miles. One of the stranger gnomonic relationships is the collective unconscious root:

$$.891891891 \dots \text{modulo}(37)$$

$$\log((10^{(33/37)}) / 1.8) * (10^7) * 39.370078 = 250637549.1 \text{ in.} = 3955.7694 \text{ miles}$$

....note the modern metric length , 39.370078 with the primal number one-ten millionths (metric Earth quadrant) part of the mandela quadrants(Wolfgang Pauli) .. Earth quarter circle , as converter to English inches. The simplest version is the archetype structure , Cheops pyramid with a height to base-leg ratio of 2/Pi:

$$2 / \text{Pi} * (10^7) * 39.370078 = 250637700.9 \text{ in.} = 3955.77179 \text{ miles}$$

....the primal , integer number 37 is involved in several primal and physical constants , including the radian (180/Pi). 37 can be considered here as the cross-Theomatics(37) with the integer 57 as the crescent , with 113 being one- half of the 5th century Chinese Pi....355/113 = 3.14159292...

$$\log(\text{sqrt}(37 * \text{radian} / 113)) * (10^7) * 39.370078 = 250638954.5 \text{ in.} = 3955.7916 \text{ miles}$$

$$\log(57 / (\text{radian}^{(2/\text{PI})})) * (10^7) * 39.370078 = 250637485.7 \text{ in.} = 3955.768 \text{ miles}$$

$$\log(\text{sqrt}(37 * 180 / 355)) * (10^7) * 39.370078 = 250638954.5 \text{ in.} = 3955.7916 \text{ miles}$$

...the mathematical constant Euler-Mascheroni , gamma = .577215665.. , often used in physics and number theory, has a very accurate representation of the Earth radius through the integer 13 = Chinese Pi...100 + 13 (thinking NOW, created 100 plus thirteen)

$$\log(13 * (.577215665^2)) * (10^7) * 39.370078 = 250637621.3 \text{ in.} = 3955.7705 \text{ miles}$$

...strangely to combine the two primal transcendental numbers , Pi and natural log e (2.718281828..) , one also uses the integer 13:

$$\log((13 * e) - (\text{Pi}^3)) * (10^7) * 39.370078 = 250640545.3 \text{ in.} = 3955.8167 \text{ miles}$$

...the electrical mystery of the fine-structure constant can be linked to the Earth radius due to the primal integer 37:

$$\log(.37 * \text{sqrt}137.035999701) * (10^7) * 39.370078 = 250637420.6 \text{ in.} = 3955.7674 \text{ miles}$$

...the mass of the electron ($M_e = 9.109382117 * 10^{-31}$ kg) can be combined to be the symbolic sum of the four cardinal directions , one for each quadrant of the circle , a sacred number :

$$\log(4 + (\text{sqrt}(1/M_e/10^{31}))) * (10^7) * 39.370078 = 250638134.7 \text{ in.} = 3955.77864 \text{ miles}$$

(Page 186...(Pauli's dream of i)

"...Pauli realized that it was precisely what Maria Prophetessa , the early practioner of alchemy had described some seventeen centuries earlier: " One becomess Two , Two becomes Three and out of the third comes the One as the fourth . " This transformation he noticed , " typically comes about for me through mathematics . " (end book quote)

...." One as the fourth" , means the Earth's radius (the length that determines a single spherical object , or One) and is equivalent to the inverse electron mass summed with Four. Thus the Earth sphere (macro) and the electron sphere (micro) are symbolically equal , linked through the sum of the four cardinal direction quadrants. All of the drawn and described mandelas of the Pauli-Jung conversations and corresponce (1945-1958) relating to dream, drawn mandelas were actually representations of the electron sphere but unconsciously , from dream interpretations ,were drawn as cardinal directions attached to Earth-like symbols.

Jan. 4, 2010:

Sometimes the collective unconscious constant lies hidden away in mathematical integers , unassuming until driven out into the light. One of these forms is the rather ancient French metric to English inch conversion factor: (A number that has evolved in 300 years to the modern equivalent below:)

$$39.370078 \text{ inces} = \text{one meter}$$

....the metric conversion factor 39.37 is a collective unconscious constant when transformed by the fine-structure constant and 37:

$$(39.37003937^2) / 37 = 41.8918914891....$$

...such that:

$$(10 ^ ((((39.3700392166^2) / 37) - 38) / 37 / 18 = \text{sqrt } 137.035999701$$

...so a modern measuring constant is actually an ancient primal number archetype that uses 37 and the fine-structure constant to express itself. This is interesting because the modern form evolved from the primitive (1670 ad)...39.592 inches , geometric foot , equals one meter to the more negotiated modern form (a period of 330 years of refining and redefining the meter) that exists today as exactly 39.370078 inches = 1 meter . This is the first time I have seen an archetypal number actually evolve over time to settle in as the collective unconscious constant versus the more common method of springing out of the unconscious in whole number integers , from the various (human) savant sources both ancient (John of Patmos , Hindu , Plato ,

Sumerian etc.) and modern (D.G. Leahy , D. Tammet , M. Dengler , R. Tomes , Eddington , Pauli , etc.) The fine-structure --37 meter derivation is 99.9999 % of the most recent definition of the meter , a length of red light vibration of a cesium atom , which is a difference in length of four thousandths of an inch , when compared to the 37 form. In researching the history of the metric length to find the source of the collective unconscious constant , it seems one only has to look pre-1866 , the date of the Metric Act (1866) which defined the meter as 39.37 English inches. In 1792 the quadrant meridian of a 9.5 degree arc from Dunkirk , France to Barcelona , Spain was measured at one-ten millionths of this distance to 32808992 English feet, which produced a meter of 39.3707904 English inches. In 1850 the meridian arc was recalculated to 32813000 , which is 39.3756 English inches per meter. No collective unconscious constant yet. Then in 1864 England decreed that the meter was 39.708 inches , which is even farther from the 39.37 squared number meter needed for the collective unconscious constant. However an amazing thing has appeared , the 1864 English meter is in itself a collective unconscious constant:

$$39708 / 37 = 10731.891891891...$$

...and then to make matters more complicated, the original number from the 1798 Mechain-Delambre , French expedition to measure the arc meridian from Dunkirk , France , to Barcelona , Spain was corrected in 1875 in the ten millionths factor of the quadrant to ($10^7 + 2290$) instead if 10^7 to allow for Earth curvature flatness (oblateness) . The correction factor 2290 , is a collective unconscious constant:

$$2290 / 37 = 61.891891891....$$

...finally in 1983 the meter was decreed to be the distance that light travels in 1/299792458 of a second. It hasn't changed since.....Strangely the final product is a collective unconscious constant:

$$(299792458 / 2 / 7 / .37) - 57874988 = 3.891891891$$

...the fine-structure constant is:

$$\text{light speed}..... 10 ^ { ((299792458 / 2 / 7 / .37) - 57874988) / 37 / 18 } = \text{sqrt } 137.035999701$$

$$\text{meter}..... 10 ^ { (((39.3700392166 ^ 2) / 37) - 38) / 37 / 18 } = \text{sqrt } 137.035999701$$

....according to the 1798 expedition , they calibrated everything to the French foot (144) through the toise

$$\text{toises } 57027 * 90 * 864 / (10^7) = 443.44 \text{ lines}$$

...strangely the 864 integer when corrected by the log in base 10 of the collective unconscious constant:

$$(10 ^ { ((144 / 37) - 7) } + 864 / 863$$

...is equal to 99.9999998% of the 2008 NIST value of one of the most precisely measured constants in Nature , the G-minus two constant. This accuracy is to ten decimals:

$$G\text{-minus two: } 2008\text{NIST} = 1.00115965215$$

$$G\text{-minus two} = (864 + (10^{((144 / 37) - 7)})) / (864 - 1) = 1.00115965195$$

...the above equation might be the source of the collective unconscious constant, linking it to the French foot as determined by 144 lines for .24839ths of a meter (year 1798). There is a pre-date to the 1798, 864, however when between the years 1735 to 1740, the French survey teams measured the geodetic arc of the quadrant meridian as 439.15 lines. In 1740 they measured their number lines in toises and thus would convert by this formula for lines to French feet:

$$(10^{-7}) * 57027 \text{ toises} * 90 * 864 = 443.442 \text{ lines}$$

...this is the formula source for the integer 864 dated 1740. Interestingly 864 is an ancient archetypal number, being an extension of the Hindu sacred number 108 and 432 ... $(864 / 2 / 2 / 2 = 108)$. 108 is also a collective unconscious constant. By one more doubling $(864 * 2 = 1728)$ one is left with the most important number in algebraic mathematics the j-function constant of the Jacobian interval. Again doubling this $(1728 * 2 = 3456)$ one is left with the mystic / mathematician, R.Tomes, and his master harmonic number...3456. Now it gets strange, both the 1740 and 1798 French expeditions to measure the geodetic arc meridian expressed their results in French foot-lines:

1735--1737.....	geodetic arc meridian =	439.15 lines
1739.....	" " "	= 440.5597 lines
1740.....	": " "	= 443.44 lines
1792.....	" " "	= 3208992 * 12 = 393707904 English feet
1850.....	" " "	= 32813000 * 12 = 393756000 English feet
1864.....	" " "	= 33090000 * 12 = 397080000 English feet

...the French lines can be expressed by the collective unconscious constant ... $37 * 18$:

$$((37 * 18)^2) / (10^3) = 443.556 \text{ lines}$$

....uniting all measuring forms including the French toise:

$$39.37 / 12 / 144 / 57073 / 90 * (10^{11}) = 443.556 \text{ lines}$$

$$328083328 / 144 / 57073 / 90 * (10^7) = 666^2$$

meter = 39.37
 English foot = 12
 French foot = 144
 French toise = 57073

.....in 1792 the English arc meridian was listed as 32808992 English feet or a difference of about 660 feet from the above formula :

$$32808992 / 144 / 57074.15 / 90 * (10^7) = 666^2$$

...by substituting the modern metric form 39.370078 into the formula above, results in a French toise of 57073.11:

$$39.370078 / 12 / 144 / 57073.114 / 90 * (10^{14}) = 666^2$$

...the amazing thing about the latter two formulas is that the number 32808992 is from 1792 while the modern meter 39.370078 is from 1983 , and their difference in toises is less than one-toise. An even stranger connection to this form is the Fermat solution node equation:

$$e^{(Pi + 8)} = 68981.43253$$

...this equation multiplied by the harmonic mean of 37 and 57 equals the fine-structure constant:

$$e^{(7.999999806 + Pi)} * ((1/57 + 1/37)^2) = 137.03599701$$

...the roots of the metric transformation can describe fine-structure through the Fermat equation:

$$(666^2) * 12 * 144 * 90 / (10^6) = e^{(8.000005749 + Pi)}$$

...the French foot is 144:

$$(10^6) * 12 * (666^2) / 90 * 137.035999701 / ((1/57 + 1/37))^2 = 143.9991441$$

...to unify multiply by the toise:

$$(e^{(Pi + 8)}) * 57073.5 = 39.3701179 * 10^8 \text{ ...French meter}$$

$$(e^{(Pi + 8)}) * 57073.5 / 12 = 32808431.58 * 10^2 \text{ ...English feet}$$

...here is another form that shows precognition of the metric. In 1850, England decreed the arc meridian as , 32813000 English feet. This is a primal and archetypal number:

$$5 * (666^4) * (10^4) / 299792458 = 32813021.12$$

...note the accuracy to the 1850 English arc length 32813000 and the modern speed of light $c = 299792458$ m/s , the modern metric gauge:

$$32813000 / (10^4) / 5 / (665.9998928^4) = 1/299792458$$

....when using the collective unconscious number as integer ($37*18$) one is off by 21.1 English feet from the 1850 number:

$$(666^4) * (10^4) * 5 / 299792458 = 32813021.123 \text{ English feet}$$

EATHS RADIUS....

...how the Earths dimensions determined the meter. The Earths radius is not constant but varies from 6357 km = radius polar to 6378 km = radius equatorial. The approximate mean of the two radii boundaries is the Cheops pyramid constructs , $2/Pi$

$$2 / Pi * 10^4 = 6366.19772 \text{ km}$$

...this means that everything cancels to determine the raw meter , a Pi determined function!

radius polar = 3950.056 miles
radius equatorial = 3963.12 miles

$$3955.771795 * 5280 * 6 * \text{Pi} / (10^7) = 39.370078 \text{ inches}$$

...the secret lies in 10^7 (in physics called the Giorgi constant also known as one energy unit ..erg) . In this case it is the perfect quadrant of the circumference of the Earth which makes $2/\text{Pi}$ redundant. (probably known by the early French surveyors)

$$39.370078 \text{ inches} / 20886475.08 \text{ earth radius feet} * 10^7 \text{ quadrant} = 6 * \text{Pi}$$

...deeper analysis reveals that the ratio of the modern mean earth radius measured in feet and the 1792 English number for the arc meridian quadrant (32808992 feet) equals the Cheops pyramid ratio $2/\text{Pi}$:

$$20886475.08 / 32808992 = 1.999963811 / \text{Pi}$$

$$20886475.08 / 32808398.34 = 2 / \text{Pi}$$

...it can be demonstrated the similarities between the Earth radius metric and the fine-structure constant metric:

$$3955.771795 * 5280 * 6 / (10^7) * \text{Pi} = 39.370078$$

$$3955.759533 * 5280 * 12 / (10^7) / (\log((\text{sqrt}137.035999701) * .37)) = 39.370078$$

...this leads to an astounding coincidence , the Earth radius in the above formulas equals 3955.76737 miles as compared to the Pi generated earth radius of 3955.771795 miles or a difference of 23.3 feet in almost 4000 miles. This leads to confirmation of the legend that the Cheops pyramid height is a function of the Earth's dimensions , since the radius of the Earth reduced to $\dots 2/\text{Pi} * 10^4 \text{ km}$. So let the fine-structure constant determine the Earth's radius:

$$\begin{aligned} \log(\text{sqrt}137.035999701 * .37) * (10^7) * 39.370078 &= 250637420.6 \text{ inches} \\ (3955.767371 \text{ miles}) \\ 2 / \text{Pi} * (10^7) * 39.370078 &= 250637700.9 \text{ inches} (3955.771795 \text{ miles}) \end{aligned}$$

Jan. 23, 2010

http://arxiv.org/PS_cache/arxiv/pdf/0908/0908.0852v1.pdf

(from the above article)

" A long standing prediction of universality is the Efimov effect , which was presented in the early 1970's. It is an anomalous effect which occurs in neutral three-body systems when at least two of the underlying subsystems have resonant s-wave interactions , a diverging scattering

length (or at least much larger than the range of the physical force). This corresponds to the subsystems being close to the thresholds for binding. Under these conditions an exceptional sequence of infinitely many geometrically spaced three body bound states occurs with an accumulation point at zero energy. More over , the ratio between the energies is a universal constant depending only on the mass ratios and the particle statistics. For three identical bosons the famous ratio is:

$$(E^n) / (E^{n+1}) = e^{(2 * \text{Pi} / S(o))} = 515.028$$

...it is emphasized that this specific scaling factor is independent of the mass and that the same effect in principle can be found at all physical scales. " (end article quote)

.....an investigation showed the following:

The Efimov equation for quark resonance was described in the article above by this formula:
(e = natural log = 2.718281828)

$$e^{(2 * \text{Pi} / S(o))} = 515.0280503$$

....S(o) equals the transcendental number (1.00624...). What was not explained in the article is the simpler meaning to the quark resonance phenomena. The natural log e form is equivalent to a dodecagon that has phi as the polygons edge:

$$\begin{aligned} e^{(2 * \text{Pi} / S(o))} &= (10^4) / \text{phi} / 12 \\ 515.0280503 &= 515.0283245 \end{aligned}$$

...phi has the unique ability to pull Pi out of the natural log e function , in ratio, to describe the resonance constant:

$$\begin{aligned} e^{(2 * \text{Pi} / S(o))} &= (10^3) * \text{phi} / \text{Pi} \\ 515.0280503 &= 515.0362142 \end{aligned}$$

...this is related to the fact that ten times Pi divided by 12 equals phi squared:

$$\begin{aligned} \text{phi}^2 &= 10 * \text{Pi} / 12 \\ 2.6180339875 &= 2.617993878 \end{aligned}$$

....the relationship of the resonance constant (515) to phi is through one-half the dodecagon or hexagon(6-quarks):

$$\begin{aligned} 515.0280503 * 6 &= (10^4) * (\text{phi} - 1) / 2 \\ 3090.168302 &= 3090.169935 \end{aligned}$$

...in the presentation slide show, the resonance constant (515) is used in inverse form...1/515...If one makes one leg of a dodecagon polygon equal to one-tenth phi , then the perimeter is the resonance constant....1/51502834 / 10^3 :

$$\begin{aligned} (10^{-3}) * \text{Pi} / \text{phi} &= 1/515.02834 = \text{phi} / (10^4) * 12 \\ 1/515.0362142 &= 1/515.0283245 \end{aligned}$$

...treating the perimeter like an approximate circle the radius equals: $(\phi - 1) / 2$

$$\frac{(10^3) / 515.02834 / 2 / \text{Pi}}{.309021719} = \text{radius} = \frac{(\phi - 1) / 2}{.309016993}$$

...by placing the resonance constant as a leg on a dodecagon creates a polygonal perimeter of... $(\phi - 1) * 10^4$... and a strange split of the circular radius of the dodecagon caused by the special qualities of phi... $\phi^2 = \Phi + 1$:

$$\frac{515.02834 * 12}{6180.34008} = \text{perimeter} = \frac{(\phi - 1) * (10^4)}{6180.3398758}$$

...the dodecagon also illustrates the connection of 12 to phi and then to Pi. If the perimeter is 12, leg equals 1, then the radius equals a phi link:

12 and phi

$$\frac{1 * 12 / 2 / \text{Pi}}{1.909859317} = \text{radius} = \frac{5 / (\phi^2)}{1.92983006}$$

phi and Pi....perimeter = Pi

$$\frac{(\phi^2) / 10 * 12 / 2 / \text{Pi}}{.500007659} = \text{radius} = .5$$

...an interesting consequence of the resonance constant (515) is that by squaring the node (515.02834^2) , phi is eliminated from the equation:

$$515.03227^2 = (10^7) / 12 / \text{Pi}$$

...a new constant has appeared (one erg = 10^7 = Giorgi constant) and the leg of the dodecagon is now Pi ! Knowing the importance of Pi in the resonance constant, a series of Pi equalities can be shown: IN = reciprocal natural log e

$$\begin{aligned} \text{Pi} &= \text{IN}((10^4) * (\phi - 1) / 12) * \text{S(o)} / 2 \dots\dots\dots \text{S(o)} = 1.006239915 \\ \text{Pi} &= \text{IN}((10^3) * \phi / \text{Pi}) * \text{S(o)} / 2 \dots\dots\dots \text{S(o)} \\ &= 1.006237446 \\ \text{Pi} &= \text{IN}(\text{sqrt}((10^7) / \text{Pi} / 12)) * \text{S(o)} / 2 \dots\dots\dots \text{S(o)} = 1.00623868 \\ \text{Pi} &= \text{IN}((10^4) / \phi / 12) * \text{S(o)} / 2 \dots\dots\dots \text{S(o)} = 1.006239915 \end{aligned}$$

...What is the mysterious transcendental constant, S(o) ? Since the unit one is the non-decimal remainder of S(o), it seems the more important number to investigate is the decimal remainder... (.006239915) that is derived from phi only equations. The inverse decimal remainder equals $(1/.006239915 = 160.258593226)$. This is a very complex number, seemingly random, without a pattern, transcendental. This is the last puzzle of the Efimov resonance effect, directed by the resonance equation for the energy nodes of particles... $e^{(2*\text{Pi})/\text{S(o)}}$. To me to crack this puzzle and understand its meaning, one has to use the limited tools of the primal numbers ..37, $37*18$, 137(fine-structure constant), Cheops constructs $(2/\text{Pi})$, etc. The first attempts were using S(o) as expressed in the equations as a power to 37, the results were interesting:

$$\frac{37^{(1.006239915^{22})}}{62.83346517} = \frac{\text{Pi} * 20}{62.83185307}$$

...this result was fairly accurate with 22 being Kabbalic. The next attempt was using inverse S(o) as a power to 37:

$$\frac{(37^{(1/1.006239915)}) - 30}{6.180699605} = \frac{(\text{phi} - 1) * 10}{6.180339875}$$

...again fairly accurate, odd to note that 37 was the only number up to 75 (don't know about greater than 75) that when powered by inverse S(o) gave a good approximation for phi. The next primal number used as a power base to S(o) was 666 (37*18). This result was interesting because phi again was involved as well as the dodecagonal number 12:

$$\frac{666 / (1.006239915^{12})}{618.0957263} = \frac{(\text{phi}-1) * (10^3)}{618.03398758}$$

...this result is very strange in that the number from the shield of Yale University's secret society , Skull and Bones , which is the integer , 322 , is related directly to phi by the dodecagon number 12:

$$\frac{322^{(1/12)}}{1.618035289} = \frac{\text{phi}}{1.6180339875}$$

...this approximation is very accurate , 99.99992% of phi. However more accuracy is needed , and this was given by the constructs of the greatest structure on Earth, Cheops pyramid , 2/Pi. Its relationship to S(o) is stunning , but not surprising , and once this equality was shown , both the fine-structure constant , aem = 1/137.035999701 , and the strong nuclear force , a(s) = 14 , were able to derive S(o):

Efimov resonance formula : S(o) = 1.00624

$$e^{(2 * \text{Pi} / S(o))} = 515.0280503$$

..S(o) derivatives from 37 , 57 , a(s) and aem:

$$\begin{aligned} S(o1) &= ((10^{(2/\text{Pi})}) * 37)^{-1} + 1 = 1.006239912554 \\ S(o2) &= (\text{sqrt}137.035999701 * (3.7^2))^{-1} + 1 = 1.006239922786 \\ S(o3) &= (a(s) * (1/57 + 1/37)) / (10^2)^{-1} + 1 = 1.006239924135 \end{aligned}$$

...so the secret of the decimal remainder of S(o) is primal. To check for accuracy plug S(o) into this formula for Pi:

$$\text{Pi} = \text{IN}((10^4) / \text{phi} / 12) * S(o) / 2$$

$$\begin{aligned} \text{Pi}(S(o)1) &= 3.141592648 \dots\dots\dots 99.9999998\% \text{ of Pi} \\ \text{Pi}(S(o)2) &= 3.1415926804 \dots\dots\dots 99.9999992\% \text{ of Pi} \\ \text{Pi}(S(o)3) &= 3.141592685 \dots\dots\dots 99.999999\% \text{ of Pi} \end{aligned}$$

...one of the strangest coincidences of S(o) is with the actual dimensions of the Earth...radius = 3955 median miles. Since it has been shown that the Cheops constructs, 2/Pi , is a function of the Earth's radius:

$$2 / \text{Pi} * (10^7) * 39.370078 = \text{Earth's radius in inches} = 3955.771795 \text{ miles}$$

$$2 / \text{Pi} = \text{Earth's radius} / \text{meter} / (10^7)$$

$$S(o) = ((10 ^ (\text{Earth's radius} / \text{meter} / (10^7)) / 37) ^ -1 + 1 = 1.006239913$$

...thus it seems anything related to 2/Pi will derive S(o). A related phenomena is the Fermat form... $e^{\text{Pi} + 8}$...and the strong nuclear force $a(s) = 14$:

$$\log(\text{sqrt}((e ^ ((\text{Pi} + 8) / 2)) / a(s))) = 1.999997681 / \text{Pi}$$

$$S(o)^4 = (\text{sqrt}((e ^ ((\text{Pi} + 8) / 2)) / a(s)) * 37) ^ -1 + 1 = 1.00623992316$$

$$\text{Pi}(S(o)^4 = 3.141592682 \dots 99.9999991\% \text{ of Pi}$$

...S(o) has a link to the primal number 82944 or 288^2 , through the natural log e:

$$\frac{(((10 ^ (2/\text{Pi})) ^ (S(o) ^ 6)) + 82944) ^ (1/\text{Pi})}{36.7879441288} = \frac{100/e}{36.7879441171}$$

...another equality involving the inverse decimal remainder oif S(o):

$$S(o) = (\text{Pi} / ((2109 / 94) ^ 2)) + 1 = 1.006240975$$

$$S(o) = (2109 / 94 / a(s) * (10^2)) ^ -1 + 1 = 1.00623992413$$

....2109 / 94 is the inverse harmonic mean of the integers 37 and 57:

$$(1/57 + 1/37) = 94 / 2109$$

...collective unconscious constant root .891891891... and S(o): .510998908 = electron energy

$$S(o) = (37 / 3030 * .510998908) + 1 = 1.006239920659$$

...the S(o) constant's flesh is the decimal remainder. But the kernel of the whole thing is the Cheops root ... $10^{(2/\text{Pi})} = 4.331315029$

$$(10 ^ (2/\text{Pi})) * 18 = 10 ^ (70/37) \dots\dots\dots\text{collective unconscious} \dots\dots$$

$$(70.00001427 / 37)$$

$$(10 ^ (2/\text{Pi})) / 18 = \text{IN}(\text{sqrt phi}) \dots\dots\dots\text{the golden number} \dots\dots\dots$$

$$(1.61810745)$$

$$(10 ^ (2/\text{Pi})) * 37 = 1 / (S(o) - 1) \dots\dots\dots\text{quark resonance} \dots\dots\dots$$

$$(1.006239913)$$

$$(10 ^ (2/\text{Pi})) / .37 = \text{sqrt } 137.035999701 \dots\dots\dots\text{electrical fine-structure} \dots\dots\dots($$

$$137.0364491)$$

Feb. 8, 2010

In the article is the following equation for S(o): sin , cos in radians:

$$(-v * \cos(v * \text{Pi} / 2)) + (8 / \text{sqrt}3 * \sin(v * \text{Pi} / 6)) = 0 \text{equation (2.51)}$$

...where to solve for v answers the three-body gravitational problem. Actually the complicated formula is another way to express the relationship between the dodecagon and phi:

$$(-v * \cos(v * \text{Pi} / 2)) + (8 / \text{sqrt}3 * \sin(-v * 2 / \text{Pi} / 300)) = 0$$

...where v = 1.006239861. Restating the equation defines Pi and 12:

$$\sin^{-1}(-v * \cos(v * \text{Pi} / 2) * \text{sqrt}3 / -8) * 1800 / v = -12 / \text{Pi} = -10 / (\text{phi} + 1)$$

...solving for exactly 12/Pi calculates v to 1.0062398615. Where did ...sin(v * 2 / Pi / 300)...come from ? In equation (2.50) is the answer:

$$1 / \text{sqrt}(2/P) * (-v * \text{Pi} / 2)) + (8 / \text{sqrt}3 * \sin(v * \text{Pi} / 6)) / \sin(v * \text{Pi} / 2) = 1/a \text{equation (2.50)}$$

...look at this MONSTER !! This formula was Efimov's main discovery in his 1973 paper. Apparently inverting the denominator, sin(v * Pi / 2), eliminates sin(v * Pi / 6) from the equation leaving a dodecagon divided by Pi. However its not a pure inversion being that only the Cheops constructs...2/Pi...inverts, plus this inversion is inside the sine function which should act as a barrier to inversion mathematics. The square root of 3 and 8 are geometric analogies to dimensional space This leaves the meaning of ..300 * 6 = 1800, as all that's left to the Efimov equation's encapsulation into the dodecagon polygon divided by Pi. As shown previously, 18, is the mass body weight of the distributive effects of the four fundamental forces of Nature:

$$18 = ((a(s) / aem)^2) * Gn / Gw * Me * pmev * (10^{27})$$

a(s) = strong nuclear = 13.9993765 ... (14)
aem = fine-structure = 1/137.035999701exact
Gn = gravitational constant = 6.67428 * 10^-11exact
Gw = weak nuclear(fermi) = .0000116637exact
Me = electron mass = 9.10 * 10^-31kgexact
emev = electron energy = .510998908exact
pmev = proton energy = 938.272029exact
c = speed of light = 299792458exact
ev = elementary charge = 1.610 * 10^-19exact

...since the electron and proton symbols, Me and pmev, are in different forms, Me=mass, pmev=energy, equalizing the electron to an energy mode only, shows that 18 is actually a mass of 18 kilograms! Converting to pure energy shows: E=m*c^2:

$$18 * (c^2) / ev = ((a(s) / aem)^2) * Gn / Gw * emev * pmev * (10^{33})$$

...18 is also how the collective unconscious is linked to the fundamental forces through the electrical synapse form, the amplitude for an electron to emit or absorb a photon (light to energy), fine-structure constant aem:

$$18 = 10^{((33 / 37) - (1.999998189 / \text{Pi}) + 1)}$$

$$\text{emev} / \text{pmev} / \text{Gw} / 10 = \text{Fd} \quad \dots \text{Gw} = .0000116640286$$

....thus by substitution:

$$666 \quad (\text{Fd}^2) * (\text{pmev}^3) * (\text{Gw}^2) * 100 / \cos 137.035999701 = \dots \text{Gw} = .00001166405531$$

...Gw equals the fermi-coupling charge , aka the weak nuclear force.

Feb. 21, 2010

An example of the collective unconscious phenomena is the cross-over link between different time references. This cross-over link has two separate savant individuals separated by 90+ years in time. The first person is from 1875 , who published a paper called , " Key to the Hebrew-Egyptian Mystery , The Source of Measures " , by J. Ralston Skinner , an epic 400 page report on his interpretation of the source of measure as something mixed with Christianity ,the Kabbala ,various Chinese and mid- eastern sources with mysticism and earth measures combined. It is a very undecipherable document rattling on like a Pentacostal preacher. However ,he does focus in particular on two numbers , both derived from his obsession with the twelfth century ,Chinese Pi ratio , determined by the two integers 113 and 355 ...355/113 = 3.14159292...In the paper he transforms this ratio into HIS root ratio , two integers , 6561 and 20612 ...20612/6561 = 3.141594269... as inspired by two lesser known characters (Parker and Metius) 30 years earlier who used these same numbers in their Earth measure studies. An example of the tone from the book is from the introduction to , " A Source of Measures " , page 6:

" The relation of 6561:20612 is both in the pyramid structure and in the Bible coupled with the form 113:355. Some connections between the two will be shown, but what the exact basic relations between them were , as anciently recognized , remains to be discovered. " (end quote)

...from page 357

" The two values 113:355 and 6561:20612 are welded together in ancient use, and the attachment of a man (113) to the cross (the unfolded cube of a circumference 355) is in display , the symbol of such welding. " (end quote)

...Skinner goes on in his paper to describe some special qualities of the integer 20612 , mostly undecipherable links to Chinese Pi and Christianic mysticism , but he is somehow quite impressed with this particular number. The second savant individual example is from the 40 year, continual studies of a man named John Michell (1936-1998) a rather infamous underground researcher of ancient Earth structures , Cheops pyramid , Pyramid of the Sun , etc. and in particular Stonehenge. He thought that the stone lintel measurements of Stonehenge were an important Earth metric related to the Cheops pyramid. He was able to calculate ,in the early 1960's , the lintel stone measurements of Stonehenge to this constant...3.4757485 feet... by measuring the inner and outer diameters of the Stonehenge lintels and dividing by two...Inner diameter = 97.32096 ft, Outer diameter = 104.27245 ft ... (104.27245 - 97.32096) / 2 = 3.4757485..(Michell's exact numbers). He was quite impressed that this result was the measurement of the Sacred Rod of Kabbalic ancient mythical history. What Michell never mentioned and thus could not have known, was the secret to his mysterious Stonehenge lintel rings and their link, as Michell always searched for, to the Cheops

pyramid. The link is pure energy as demonstrated by the primal energy of the electron... $e_{mev} = .510998908$, and the Cheops pyramid constructs defined by the height to base leg ratio..($2/\pi$): $e = \text{natural log } e \dots 2.71828182 \dots$ all which determine the Sacred Rod = 3.47575

$$\begin{aligned} 3.475832155 \wedge .510998908 &= e \wedge (2 / \pi) \\ 3.475832155 &= e \wedge (2 / \pi / e_{mev}) \end{aligned}$$

...the electron energy is also holomorphic to phi (1.6180339875..)

$$3.475771234 \wedge (\text{phi}^4) / (10^4) = e_{mev}$$

...concerning J.Ralston Skinner's number , 20612 , it turns out it is an Earth metric:

$$\begin{aligned} 2 / \pi * (10^7) * 39.370078 &= \text{Earth radius in inches} = 250637700.9 \text{ in.} = 40000 \\ * 39.370078 / 2 / \pi & \end{aligned}$$

$$\begin{aligned} \sin 20612 &= -.0105996 \\ -666 / \pi / 20000 &= -.010599719 \end{aligned}$$

...such that one-half the Earth's circumference = 20000 km

$$-665.992354 / \pi / \sin 20612 = 20000$$

...amazingly the link to the two constants, (Skinner)20612 and (Michell)3.4757485 , separated by 90+ years , is the amplitude for electron-photon emission and absorption, the electrical , fine-structure constant , $a_{em} = 1/137.035999701$:

$$\begin{aligned} \sin 20612 * 20000 &= -665.992354 / \pi \\ \sin 20612 * (3.474752384 \wedge 4) / a_{em} &= -665.992354 / \pi \end{aligned}$$

...which reduces to Earth metric:

$$20000 = (3.475752384 \wedge 4) / a_{em}$$

...thus the link to Michell's Stonehenge lintel constant , 3.4757.. , to Earth metric circumference divided by two is electrical in origin. Since the lintel measurement is in the fourth dimension, what happens in the third dimension...interesting results: $e = \text{natural log } e$:

$$\begin{aligned} 3.475683831 \wedge 3 &= e \wedge 3.737373\dots \\ 3.475366603 \wedge 3 &= e \wedge (e \wedge (1 + 1/\pi)) \end{aligned}$$

...what happens in the second dimension?...the electron mass !!: $M_e = \text{electron mass} = 9.1093821 * 10^{-31} \text{ kg}$

$$\begin{aligned} 3.475744482 \wedge 2 &= e \wedge (e \wedge (e \wedge (-M_e * 10^{29}))) \\ 3.475797265 \wedge 2 &= e \wedge (e \wedge (e \wedge (\log 3/3.7))) \end{aligned}$$

...turns out this number for the Sacred Rod , was independently discovered in the 1950's by a meso-american explorer and researcher , named Hugh Harleston Jr.. He discovered a unit measure of the Aztecs that he decribed as the " Standard Teotihuacan Unit " or STU. ...STU = 1.0594 meters. The Sacred Rod connects to this number through the metric conversion:

$$\text{STU} = 1.059408163 = 3.475748501 * 12 / 39.370078$$

$$(1.059463094 * 8) - 5 = 3.475704755$$

...this means that Michell's precise measurement of the diameters of the Stonehenge lintels can be used to determine the metric origins of Harleston's STU:

$$\begin{aligned} 97.32096 * 12 / 39.370078 / 28 &= 1.059408184 = \text{STU} \\ 104.27245 * 12 / 39.370078 / 30 &= 1.059408184 = \text{STU} \end{aligned}$$

...thus the ratio of the inner and outer diameters is 28/30:

$$97.32096 / 104.27245 = 28 / 30$$

...all measuring systems are electrical in origin , all equalling the Sacred Rod:

$$\begin{array}{ccccc} (20000 * \text{aem})^{(1/4)} = 1.0594 * 39.370078 / 12 = (1.0594^2) * (10^2) * \text{sqrt} & & & & \\ \text{aem}^{-1} / 378 & & & & \\ 3.475752396 & & 3.475721719 & & 3.475723527 \end{array}$$

... the far right equation solves another mystery concerning Harleston's study of ancient Aztec ruins , that is his insistence that the Aztecs used a standard measuring theme in all their structures , a standard unit called a " hunab " , which is represented by the integer 378 !! Note that the " hunab " form and one-half Earth circumference , 20000 km , can be reduced:

$$(20000 * \text{aem})^{(1/4)} = (1.0594^2) * (10^2) * \text{sqrt} \text{aem}^{-1} / 378$$

$$(.0002^{(1/4)}) * (\text{aem}^{(3/4)}) = (1.0594^2) / 378$$

Since the investigation of the Sacred Rod , 3.475 ft , was shown as an ancient Earth metric , the attempt to link all of the sources , Modern Metric:39.370078 inches , Egyptian Cubit:20.6320498 inches and the Sacred Rod : 41.703 inches (3.475 * 12) resulted in a strange harmony , that again involved electron roots. In fact the mathematical , harmonic mean of the three measures , MM , EC and SR is mathematical anagram for the electron: emev = .510998908

$$\begin{aligned} \text{EC} &= \text{Egyptian Cubit} = 20.6320498 \text{ inches} \\ \text{MM} &= \text{Modern Metric} = 39.370078 \text{ inches} \\ \text{SR} &= \text{Sacred Rod} = 41.7028277 \text{ inches} \dots (3.475 * 12) \end{aligned}$$

$$1/39.370078 + 1/20.6320498 + 1/41.70282766 = 1 / \text{emev} / 20$$

$$1/\text{MM} + 1/\text{EC} + 1/\text{SR}$$

...incredibly , Pi is hidden the structure of the three measures:

$$\text{EC} / \text{MM} / \text{SR} = 4 * \text{Pi} / (10^3)$$

...this leads to the revelation of the " Secret of the Three Measures "....

" Pi times the Sacred Rod times the Modern meter is one quarter of the Egyptian cubit. "

$$EC / 4 = \text{Pi} * \text{MM} * \text{SR} / (10^3)$$

...this equation solves the ancient geometric problem of squaring the circle. If one lets the Egyptian Cubit equal the circumference of a circle, then the radius of said circle is:

$$EC / 2 / \text{Pi} = \text{MM} * \text{SR} * 2 / (10^3)$$

...which means a rectangular area with sides equal to the Modern Metric and Sacred Rod, respectively equals one-half the radius of the Egyptian Cubit circle. As a bonus the surface and volume geometries of a 3-dimensional torus can be shown. This strange result shows the paradoxical crossover point of torii where the volume and surface area of a torus object are equal:

$$R = 2 = \text{loop radius}$$

$$r = 1 = \text{tube radius}$$

$$\text{Area of torus} = 2 * (\text{Pi}^2) * 1 * 2 = (EC / \text{MM} / \text{SR})^2 * (10^6) / 2$$

$$\text{Volume of torus} = 2 * (\text{Pi}^2) * 1 * (2^2) = (EC / \text{MM} / \text{SR})^2 * (10^6) / 2$$

...another secret of the three measures involves the number seven or one-half the fundamental force constant, strong nuclear = 14. This is a holomorphic effect where the area of a triangle with sides equal to the three measures respectively, divided by fourteen (as=14), the fifth root of this result is equivalent to 20 times the harmonic mean of the three measures, which is the origin of the functions to begin with: Using Herons formula (60 a.d.) for areas of irregular triangles:

$$\text{Area of triangle} = \text{sqrt}(S * (S - \text{MM}) * (S - \text{EC}) * (S - \text{SR})) \quad \dots S = (\text{EC} + \text{MM} + \text{SR}) / 2$$

$$(\text{Area of triangle with sides equal to MM, EC and SR} / 14)^{(1/5)} = (1/\text{MM} + 1/\text{EC} + 1/\text{SR}) * 20$$

...a deeper source is the weak nuclear force, $G_w = .0000116637$, sometimes called the fermi coupling charge for weak nuclear decays. This uses the inverse harmonic mean of the three measures: log in base 10

$$333 + \log(G_w * (10^5)) = \text{MM} * \text{EC} * \text{SR} / (\text{MM} + \text{EC} + \text{SR})$$

Mar. 22, 2010:

<http://www.deuceofclubs.com/rv/ca1230b.htm>

<http://www.integratron.com/2History.html>

<http://www.lucernevalley.net/giant>

Explain this....go to Google Earth coordinates:

34d 19m 58.14s Nlatitude
116d 23m 19.41s W ...longitude

...this is the object called the Giant Rock , GR , steeped in legend and mystery. Then go to Google Earth coordinates:

34d 17m 39.64s Nlatitude
116d 24m 13.42s Wlongitude

...this is a man-made object called the Integratron , IN , This structure is directly related to the Giant Rock. Now go to Google Earth coordinates:

51d 10m 43.81s N ...latitude
1d 49m 34.21s W ...longitude

...this the exact center of Stonehenge, SH , Then go to Google Earth coordinates:

29d 58m 45.28 Nlatitude
31d 8m 4.9s E ...longitude

...this is the exact center of Cheops pyramid , CH . The three Earth points, the Giant Rock , the Integratron and the Cheops pyramid can show that the electron energy is an inverse form of the proton energy, or in other words , they are the same object !! This occurs, whether by coincidence or intentional , because the Cheops pyramid latitude is symbolically and mathematically the representation of the speed of light ... $c = 299792458 \text{ m/s} \dots 10^{-7} = \text{Giorgi constant} = 1 \text{ erg}$

$$\text{CHlat} = 29\text{d } 58\text{m } 45.28\text{s} = 299792458 * 10^{-7}$$

...the Integratron latitude is key to this form:

$$c = (\text{INlat} - ((\text{pmev} * (\text{INlong} - \text{CHlong}) * (9^2)) / (\text{INlong} - \text{GRlong}) / (10^8))) * 10^7 \quad \dots \text{GRlong} = 116.388709722 \dots 116\text{d } 23\text{m } 19.3\text{s}$$

$$c = (\text{INlat} - (\text{pmev} * \text{emev} * 9 / (10^3))) * 10^7$$

..the Giant Rock longitude for light speed is 1.7 meters from its center . The inverse effect of the electron to the proton can be shown:

$$1 / \text{emev} = (\text{INlong} - \text{GRlong}) / (\text{INlong} - \text{CHlong}) / 9 * 10^5 \quad \dots \text{GRlong} = 116.388709739 \dots 116\text{d } 23\text{m } 19.3\text{s}$$

$$10^8 \quad \text{pmev} = (\text{INlong} - \text{GRlong}) / (\text{INlong} - \text{CHlong}) * (\text{INlat} - \text{CHlat}) / (9^2) * 10^8 \quad \dots \text{GRlong} = 116.388709721 \dots 116\text{d } 23\text{m } 19.3\text{s}$$

....Stonehenge is holographic to these forms: cosine in radians:

$$\text{SHlat} - \text{CHlat} = 66.6 / \text{PI} \quad \dots \text{SHlat} = 51\text{d } 10\text{m } 43.26\text{s N } \dots 17 \text{ meters from exact center of Stonehenge}$$

$$\text{INlat} - \text{CHlat} = 66.6 * \cos 137.035999701 / \text{emev} * 9 / 10^2$$

...the Cheops constructs , $2/\text{Pi}$, is a combination of the Stonehenge and Integratron latitudes :

$$2.000009324 / \text{Pi} = \log(\text{sqrt}((\text{SHlat} - \text{INlat}) * 10 / 9))$$

...to find the Giant Rock use the Stonehenge and Cheops pyramid latitudes:

$$\text{GRlong} = \text{INlog} - (1 / ((\text{SHlat} - \text{CHlat}) * \text{Pi})) \quad \text{GRlog} =$$

116.388712893116d 23m 19.3s

...the accuracy of the findings are astounding , comparing the correction factor only in the Giant Rock longitude shows this:

c = light speed.....116.388709722
 emev = electron ...116.388709739
 pmev = proton.....116.388709721
 GR and Pi.....116.388712893

...the electron and proton energies are exact to 2009 NIST:

emev = .510998908
 pmev = 938.27209
 fine-structure constant = $1/137.035999701$

Apr. 5, 2010

Explain this....go to Google Earth coordinates:

34d 19m 58.14s Nlatitude = GRlat
 116d 23m 19.41s W ...longitude = GRlong

...this is the object called the Giant Rock , GR , steeped in legend and mystery. Then go to Google Earth coordinates:

34d 17m 39.64s Nlatitude = INlat
 116d 24m 13.42s Wlongitude = INlong

....this is a man-made object called the Integratron , IN , This structure is directly related to to the Great Rock. Now go to Google Earth coordinates:

51d 10m 43.81s N ...latitude = SHlat
 1d 49m 34.21s W ...longitude = SHlong

...this the exact center of Stonehenge, SH , Then go to Google Earth coordinates:

$$\begin{aligned} 29\text{d } 58\text{m } 45.28\text{ N} & \dots \text{latitude} & = & \text{CHlat} \\ 31\text{d } 8\text{m } 4.9\text{s E} & \dots \text{longitude} & = & \text{CHlong} \end{aligned}$$

...this is the exact center of Cheops pyramid , CH .The three Earth points, the Great Rock , the Integratron and the Cheops pyramid can show that the electron energy is an inverse form of the proton energy, or in other words , they are the same object !! This occurs, whether by coincidence or intentional , because the Cheops pyramid latitude is symbolically and mathematically the representation of the speed of light ...c =299792458 m/s...10⁻⁷ = Giorgi constant = 1 erg

$$\text{CHlat} = 29\text{d } 58\text{m } 45.28\text{s} = 299792458 * 10^{-7}$$

...the Integratron latitude is key to this form:

$$\begin{aligned} c & = (\text{INlat} - ((\text{pmev} * (\text{INlong} - \text{CHlong}) * (9^2) / (\text{INlong} - \text{GRlong}) / \\ (10^8))) * 10^7 & \dots \text{GRlong} = 116.388709722 \dots 116\text{d } 23\text{m } 19.3\text{s} \\ c & = (\text{INlat} - (\text{pmev} * \text{emev} * 9 / (10^3))) * 10^7 \end{aligned}$$

..the Giant Rock longitude for light speed is 1.7 meters from its center . The inverse effect of the electron to the proton can be shown:

$$\begin{aligned} 1 / \text{emev} & = (\text{INlong} - \text{GRlong}) / (\text{INlong} - \text{CHlong}) / 9 * \\ 10^5 & \dots \text{GRlong} = 116.388709739 \dots 116\text{d } 23\text{m } 19.3\text{s} \\ \text{pmev} & = (\text{INlong} - \text{GRlong}) / (\text{INlong} - \text{CHlong}) * (\text{INlat} - \text{CHlat}) / (9^2) * \\ 10^8 & \dots \text{GRlong} = 116.388709721 \dots 116\text{d } 23\text{m } 19.3\text{s} \end{aligned}$$

„Stonehenge is holographic to these forms: cosine in radians:

$$\text{SHlat} - \text{CHlat} = 66.6 / \text{PI} \quad \dots \text{SHlat} = 51\text{d } 10\text{m } 43.26\text{s N} \dots 17 \text{ meters from exact center of Stonehenge}$$

$$\text{INlat} - \text{CHlat} = 66.6 * \cos 137.035999701 / \text{emev} * 9 / 10^2$$

...the Cheops constructs , 2/Pi , is a combination of the Stonehenge and Integratron latitudes :

$$2.000009324 / \text{Pi} = \log(\text{sqrt} ((\text{SHlat} - \text{INlat}) * 10 / 9))$$

...to find the Great Rock use the Stonehenge and Cheops pyramid latitudes:

$$\text{GRlong} = \text{INlog} - (1 / ((\text{SHlat} - \text{CHlat}) * \text{Pi})) \quad \text{GRlog} = 116.388712893 \dots 116\text{d } 23\text{m } 19.3\text{s}$$

...the accuracy of the findings are astounding , comparing the correction factor only in the Giant Rock longitude shows this:

$$\begin{aligned} c & = \text{light speed} \dots 116.388709722 \\ \text{emev} & = \text{electron} \dots 116.388709739 \\ \text{pmev} & = \text{proton} \dots 116.388709721 \end{aligned}$$

GR and Pi.....116.388712893

...the electron and proton energies are exact to 2009 NIST:

emev = .510998908
pmev = 938.27209
fine-structure constant = 1/137.035999701

...the three objects go on to describe even stranger phenomenon , they can define the symmetry of the fundamental forces. The first example is the gravitational force...Gn = 6.67428 * 10^-11:

$$(INlong - GRlong) * 4 * 4 / 360 * erg(10^{-7}) = Gn = 6.674693778 * 10^{-11}$$

...the second example is the strong nuclear and electrical forces: as = 13.9994911 and aem = 1/137.035999701

$$1 / (INlong - CHlong) * 4 * 4 / 360 = aem / as$$

...the third example is the electron as a function of the electrical, strong nuclear and gravitational forces. This is a result of the product of the the two forms: emev = .510998923

$$(INlong - GRlong) * 4 * 1 / 360 / (INlong - CHlong) * 10^6 = 1/emev$$

...which means a deep insight into the origin of the electron can be shown:

$$\begin{aligned} aem * Gn / as / 4 / 4 * 360 / 4 * 10^{13} &= 1 / emev \\ aem * Gn / as * 180 / 32 &= 1 / emev \end{aligned}$$

...that is ,the electrical force times the gravitational force divided by the strong nuclear force times cubing the circumference of the four quadrant circle (radius = Cheops constructs = 2/Pi) equals inverse electron. 360 acts in the single dimension as a single degree function , in the third dimension it acts as a volume transform. Since the neutronic form is carried out by the strong nuclear force gluon of the neutral W-particle...as(Wz) = .118701515 , it's connection is through the product of the fundamental forces and through the ratio of the three earth objects longitudes, INlong , GRlong and CHlong:

$$(INlong - GRlong) * 4 * 2 / (INlong - CHlong) * 10 = as(Wz) ^ 2$$

...which again shows a deep insight into the structure of the electron:

$$\begin{aligned} aem * Gn / as / 4 / 4 * (360^2) / 2 &= as(Wz) ^ 2 \\ 1 / emev * 360 * 2 / 10^5 &= as(Wz) ^ 2 \end{aligned}$$

...combining the two forms:

$$as(Wz)^2 / 360 / 2 * 10^5 = 1 / emev$$

...reducing to the integers , 360 the Sumerian for the unit circle in degrees and the 32 paths of wisdom from the Kabbala or the Hindu " 32 smokes " (dimensions)

$$aem * Gn / as / as(Wz)^2 = 32 / (360^2) / 10^8$$

...this form led to the previous discovery of the fine-structure constant ..aem.. as loop radius of a torus with Feigenbaum alpha...Fa = 2.502907875 .. as tube radius:

$$32 / ((Pi^Pi) - 1) = 2 * Pi^2 * aem * Fa^2$$

...the Feigenbaum alpha form opened up the door to reveal the hidden structure of the elementary particles and the interaction of the fundamental force fields. From the original equation above for Fa as torus tube radius , one can rearrange to:

$$32 / aem = 2 * Pi^2 * ((Pi^Pi) - 1) * Fa^2$$

...this Pi enriched equation is the the root of the three object , IN ,GR and CH , expression:
pmev = proton = 938.272029 , Gn = 6.674231042 * 10^-11

$$\begin{aligned} 32 / aem &= ((180 * 2)^2) * Gn / as / as(Wz)^2 * 10^8 \\ 32 / emev &= 180 * Gn / as / aem^{-1} * 10^{13} \\ 32 / emev &= 1 * Gn * pmev * 10^9 \end{aligned}$$

....since 32 and the gravitational constant are the common numerator and denominator , rearrange:

$$\begin{aligned} 32 / Gn &= ((180 * 2)^2) * aem / as / as(Wz)^2 * 10^8 \\ 32 / Gn &= 180 * emev / as / as(Wz)^2 * 10^{13} \\ 32 / Gn &= emev * pmev * 10^9 \end{aligned}$$

...the last equation is new !! A direct connection of the electron-proton energies to the gravitational force. This now gives physical meaning to the latitudes of the Integratron and Cheops pyramid used in the proton formula:

$$\begin{aligned} (INlong - GRlong) / (INlong - (CHlong)) * (INlat - CHlat) * 4 * 4 / 360 / 360 \\ * 10^{10} &= pmev \\ 1 / emev * (INlat - CHlat) * 4 / 360 * \\ 10^{16} &= pmev \end{aligned}$$

...since the proton and electron can now be expressed as a function of gravity and the electron:

$$\begin{aligned} 32 / Gn / emev / 10^9 &= pmev \\ 32 / Gn / emev * 10^{13} &= 1 / emev * 4 / 360 * (INlat - CHlat) * \\ 10^4 &= pmev \end{aligned}$$

... the origin of the difference of the Integratron and Cheops pyramid latitudes can now be shown:

$$\begin{aligned} (INlat - CHlat) &= pmev * emev / 4 * 360 / 10^4 \\ (INlat - CHlat) &= 32 / Gn / 4 * 360 / 10^{13} \\ (INlat - CHlat) &= 288 / Gn / 10^{12} \end{aligned}$$

...paradoxically the angular difference of the latitudes of the Integratron and the Cheops pyramid infers that the forces and elementary particles , all interact under angular circumstances ,

since the four cardinal directions (Pauli's dream mandalas) represent the sum of four arc quadrants and that the equal division of the circumference (4) by 360 degrees shows the standard unit of one degree of measure. This unity is the gravitational energy between the electron and proton placed exactly the square root of $32 * 10^{-9}$ meters apart: grvitational formula = $G_n * Mass1 * Mass2 / \text{distance between } M1 \text{ and } M2 , \text{ squared}$

$$G_n * P_{mev} * e_{mev} / (32 * 10^{-9}) = \text{unity}$$

... all fundamental forces and elementary particles can now be expressed as a function of the ratio...32 / gravitational constant: $F_d = 4.669201609 = \text{Feigenbaum delta}$

force	$32 / G_n = 180 * e_{mev} / a_s / a_{em}^{-1} * 10^{13}$electrical
	$32 / G_n = (180 * 2)^2 * a_{em} / a_s / a_s(W_z)^2 * 10^8$strong force
proton	$32 / G_n = e_{mev} * p_{mev} * 10^9$electron-
	$32 / G_n = e_{mev}^2 / G_w / F_d * 10^8$weak force

...once the meaning of the difference between the two latitudes ..(INlat - CHlat) was expressed , the following ancient Kabbalic phrase..." 288 sparks from broken vessels " ,(referring to the Seripoth throwing(gravity) towards earth of the vessel containing the " 288 sparks " , shattering the vessel and releasing the " 288 sparks " from its container,) this is all symbolic to the electrical phenomenon of the fine-structure constant... a_{em} .. which is defined as "sparks" emitting or absorbing off the proton:

$$INlat - CHlat = 288 / G_n / 10^{12}$$

...from a previous discovery the gravitational constant and 10^2 have a log(base10) relationship to the electron:

$$\log \log (G_n * 10^{12}) = e_{mev}^2 \quad \dots G_n = 6.6742 * 10^{-11}$$

...the unification of the fundamental forces through the number 32 explains Pauli's dream of the " world clock " which is rich in symbolism of time and the number 32 . This means a decay function for the electron from physics which leads to the amazing transcendental function... $e^{(2/Pi)}$...Eulers famous expression for the imaginary number i : sine in cosines

$$\sin(32 / .51099888) = - (e ^ - (Pi / 2)) = - (i ^ i)$$

Apr. 22, 2010:

The unification of Pauli's dreams of the "world vision " clock rich in the symbolic number 32 , and his dream of the imaginary number i , the square root of negative one.

" Pauli's interpretation of this whole dream is far removed from mathematics. Describing it to Jung , he explains that $e^{(i^{\delta})}$ is a number that always lies on a circle of radius one . Through the power of the mathematical symbol, i , a mandala has appeared in the form of a circle. In Pauli's dream , i , " has the irrational function of uniting pairs of opposites" - the cosine and sine functions arranged in two groups of opposites - " and thus producing wholeness. " (4). But e too is " irrational " , it is an irrational number. This shows, he says , that mathematics " is a symbolic description of nature par excellence. " Mathematical symbols are the perfect way to unite and represent counter-intuitive features of the quantum world , such as wave particle duality , which can never be visualized "..... (end quote)

....this dream is united to the " world clock vision " through the electron as sine function: $e = \text{natural log} = 2.718281828...$

$$\sin(32 / .5109988805) = - (e ^ - (\text{Pi}/2)) = - (i ^ i)$$

....which can be interpreted as two revolutions of the world clock , 720 degrees divided by the strong nuclear force gluon... $\alpha_s(W_z) = .118701515$...:

$$.510998908 = 720 / (\alpha_s(W_z)^2 / 10^5$$

....this is related to the proton ...938.272029... through Pauli's Jan. 23, 1938 , dream of a circle divided into two 90 degree quadrants and one half circle , 180 degrees:

$$938.272029 = 180 * a_{em} / \alpha_s * 10^4$$

...here one has the half circle 180 degrees times the ratio of fine-structure ($a_{em} = 1/137.035999701$) and the strong nuclear force($\alpha_s(14) = 13.999388407$)

...page 187

" Reflecting further, Pauli suggests that the successive splitting of the eggs are analogous to the splitting of spectral lines . When one examines the fine structure of a spectral line , the spectroscope shows what appears to be a single line is actually two and that the spacing between the two lines is defined by the number 137. In that case he wondered that two was the primal number in physics and not four ? In both physics and psychology there were complimentary opposites suggesting that two was the predominant number in the psyche as well. But four - the quaternity - had appeared in his dreams, signifying the wholeness of the material world and our conscious knowledge of it as well as the unconscious. Pauli's discovery of the fourth quantum number indicated precisely the need for this wholeness and therefore , although it was surprising at first , it should have been expected all along, given that four was the archetype of completeness. "(end quote):

$$\text{FOUR} = e_{mev} * a_{em} * \alpha_s(W_z)^2 / p_{mev} / \alpha_s * 10^9$$

...page 205

" In psychological terms , Fludd offered a more complete view of nature based on the number four , which enabled him to see the world as more than simply a mechanical system governed by mathematics , as Kepler did . Pauli , an astute historian , was well aware of how difficult it would be to put oneself into the mind of Kepler or Fludd , living as they did in times

radically different from our own. Jung's work offered a way to understand them as different personality types , " a differentiation that can be traced throughout history " , wrote Pauli. Kepler was a thinking type , who focused on the parts rather than the whole , while Fludd was a feeling type who sought , " a complete experience ". This meant including emotions and the " inner experience of the observer " , which Fludd did by taking into account the , " power of this number " , namely four". (end quote)

...page 257

" Even Heisenberg had a go (deriving 137) , fired by Eddington's number speculation. In a letter to Bohr in 1935 , he reported " playing around " with the fine-structure constant, which he expressed as :

$$\text{Pi} / (2^4) / (3^3) = 137.5098708$$

...he was quick to add " but other research on it is more serious , referring to his and Pauli's attempts to derive it from quantum electrodynamics ".....(end quote)

....Bohr's formula was close to solving the dilemma of the 360 degree unit circle , this is synchronicity: $\phi = 1.618021594$

$$\begin{aligned} 360 / \phi^2 &= (3^3 * (2^4) / \text{Pi} \\ 137.5077643 &= 137.5098708 \\ 360 / 432 &= 1.618021594^2 / \text{Pi} \end{aligned}$$

...360 is Sumerian , 432 is Hindu

...page 263

" Disillusioned Pauli attacked Heisenberg's calculation of the fine-structure constant as 1/250 , which seemed so promising and had played a part in his decision to join Heisenberg's project. He wrote Fierz bitterly, " I have never considered it as correct. It's so totally stupid. " Some time later Heisenberg's co-worker on that calculation , Roberto Ascoli , recalled that he had originally deduced the fine-structure as 8 on the basis of Heisenberg's theory , " Only after Heisenberg had doctored it up , was the value reduced to 1/250, ($4 * 10^{-3}$) ".....(ended quote)

...Pauli was wrong in letting his emotions rule his rationality on this subject as the electron can be derived from Heisenberg's number 1/250 through the fine-structure constant: log in base 10

$$\log (137.035999701 * 1/250) = - (.510998908 ^ 2)$$

...here 1/250 is 250.0083745.

THE ROSICRUSIANS TRINITY

The secret society, Rosicrusians , have always remained impenetrable to outsiders, having repulsed efforts at investigating the secrets of the society from many learned men including , Descartes , Leibnez , and Sir Isaac Newton , no less. The importance of the investigation into the Rosicrusian sect is because the number 32 shows up as the unit measure of the compass which is

used in the main symbol of the 18 degree coat of arms. The compass points are eight units apart , and each unit is divided into four parts... $8*4 = 32$. The number 32 was derived from the electron equation concerning Euler's discovery of the imaginary square root of negative one or , i :

$$\sin(32 / .5109988805) = -(e ^{-(Pi/2)}) = -(i ^ i)$$

...the above equation can be placed into a pythagorean form due to the rules of sine. Each angle of the triangle (the Trinity of Fludd's Rosicrusianism) is labled , A , B , and C , and each leg or side is labled , a , b , and c (hypotenuse). Due to Paracelsus , an early 15th century alchemist , the trinity or triangle symbol of the Rosicrusians involved three symbols: SPIRITUS , CORPUS and SEPARA ANIMA. Paraclesus , who was thought by his sect to be a reincarnation of the founder of the Rosicrusians , G. Rosencranz , named atomic elements to each symbol of the Trinity with an explanation as follows.... the first in each, is part of the three-fold soul:

SPIRITUS:

Spititual , Divine Mind; the element Mercury: transformative agent (fusibility, volatility)

CORPUS:

Sensible , Elementary ; Earthy , the element Salt(Rubidium) : solidifying , substantiating agent, (fixibility , non-combustibility)

SEPARA ANIMA:

Intellectual, Ethereal, Starry; the element Sulfur: binding agent between substance(Corpus) and transformation(Spitual), (flammability)

...since the electron equation is in the form of a triangle, the following associations can be shown:

$$A = 32(\text{Rosicrusians}) / \text{electron energy}(.5109988805)$$

$$\begin{aligned} \text{SPIRITUS} &= \text{c-hypotenuse} = 1 = \text{radius of a circle} = \text{unity} \\ \text{CORPUS} &= \text{b-leg} = \cos A = .978154425 = \text{body} \\ \text{SEPARA ANIMA} &= \text{a-leg} = \sin A = -(i ^ i) = \text{intellect} \end{aligned}$$

...Pi can be isolated due to Euler's equation for i: $\text{IN} = \text{reciprocal natural log } e$:

$$e ^{ (i * Pi) } + 1 = 0$$

$$\text{IN}((\sin A) ^ 2) = - Pi$$

$$\text{IN}(\text{a-leg} ^ 2) = - Pi$$

...Feigenbaum delta (length bifurcation parameter: chaos to order)... $Fd = 4.669201609 - (4 * 10^{-4})$

$$\begin{aligned} \text{IN}-(\sin A) &= - Pi / 2 \\ \cos^{-1}(-(\sin A ^ 2)) &= Fd - Pi \end{aligned}$$

...this is the primitive form. The extended form uses the Trinity:

$$Fd = 4.669201932 = \tan^{-1}(((\cos A / \sin A)^2) + c) + \pi$$

$$Fd = 4.669201932 = \tan^{-1}(((b\text{-leg}/a\text{-leg})^2) + c) + \pi$$

...the interest is in the meaning behind the constant , " 10 rotations on the circle (Pi) " , or $10 * 2 * \pi$ or $20 * \pi$:

$$\cos^{-1}(b\text{-leg}) - (20 * \pi) = -A$$

$$\tan^{-1}(a\text{-leg}/b\text{-leg}) + (20 * \pi) = A$$

$$\sin^{-1}(a\text{-leg}) + (20 * \pi) = A$$

...there is a symmetry breakdown due to , i , being imaginary:

$$(IN \sin -A) * 2 = -\pi$$

$$IN(\sin -A^2) = -\pi$$

$$(IN \sin A) * 2 = \text{does not calculate in real numbers}$$

$$IN(\sin A^2) = -\pi$$

....note the difference when one inverts the Corpus..Separa Anima ratio ,squared , and adds Spiritus..unity:

$$\tan^{-1}(a\text{-leg}/b\text{-leg}) + (20 * \pi) = A$$

$$\tan^{-1}(((b\text{-leg}/a\text{-leg})^2) + c) + \pi = Fd$$

...one goes from angle(A) to bifurcation length , Fd. That is, Fd minus 1/2 rotation of the circle (180 degrees) or π , the tangent inverse of this result minus Spiritus (transformation agent) equals the square of Corpus(substantiating agent) divided by Separa Anima(binding agent). The secret of the universal force fields of Nature lies in the Rosicrusian(32 units in compass) ,Pauli " 32 in world clock" , Hindu "32 smokes", Kabbalic,"32 paths of wisdom" or the number key ..32, the angle A and Feigenbaum delta:

WEAK NUCLEAR FORCE.... $G_w = .000011664027$

$$G_w = 32 / A / \text{pmev} / ((\tan^{-1}(((b\text{-leg}/a\text{-leg})^2) + c)) + \pi) / 10$$

$$G_w = 32 / A / \text{pmev} / Fd / 10$$

GRAVITATIONAL FORCE $G_n = 6.674231042 * 10^{-11}$

$$G_n = 32 / e_{\text{mev}} / \text{pmev} / 10^9$$

$$G_n = A / \text{pmev} / 10^9$$

ELECTRICAL FORCE...fine-structure constant = $a_{\text{em}} = 1/137.035999701$

$$a_{\text{em}} = 32 * a_s / e_{\text{mev}} / G_n / 180 / 10^{13}$$

STRONG NUCLEAR FORCE.... $a_s(W_z) (\text{boson}) = .118701515$... $a_s(\text{carrier}) = 14$, (13.99949111)

$$a_s(W_z)^{-2} = 32 * a_s / a_{\text{em}} / G_n / 360^2 / 10^8$$

Apr. 26, 2010

One of the more mysterious of the force constants is the meaning of the ratio of the electron-proton masses , which results in a dimensionless constant , a pure number so to speak. A number that exists across the universe....

" A new research has determined the laws of Nature are the same in the distant Universe as they are here on Earth. The research was conducted by an international team of astronomers , including Christian Henkel , from the Max Planck Institute for Radio Observatory in Bonn (Germany). It shows that one of the most important numbers in physics theory, the proton-electron ratio , is almost exactly the same in a galaxy six billion light years away as it is in Earth laboratories- approximately.. 1836.15. "

...this problem has been solved and it results in a paradox , that was first determined by P. Dirac's famous Large Number paradox:

" Nobel laureate , Paul Dirac , discovered a puzzling numerical relationship in astronomical measurements, (Large Number Hypothesis): the relationship is:

$$(e v^2) / G_n / M_e / M_p r = c T / R_e$$

On the right side Dirac speculated that $cT=R$..where R is the radius(size) of the universe: R = the reciprocal of Hubble's constant. The divisor is the classical radius(size) of the electron. Dirac's mystery was: " Why should the size ratio of the smallest and the biggest objects of the universe also be the ratio of the gravitational(smallest) and electrical(biggest) forces"

...Dirac was not that far off from the meaning of the electron - proton ratio , in fact the solution uses his Large Number formula , but with a subtle change ...the magic number 32. It was previously shown the bifurcation constant, Feigenbaum delta = 4.669201609 , had a relationship with the dimensionless electron proton energy ratio , through the weak nuclear force , fermi-coupler .. $G_w = .00001166402884$:

$$e_{mev} / p_{mev} = G_w * F_d$$

...this can be explained as the weak force times the constant for ordered bifurcation equals the mysterious ratio. This analogy can be extended and proved to be a "magical" entity due to this very strange gravitational relationship of G_n with the e_{mev}/p_{mev} ratio through the magic number 32. Take two electrons and place them exactly the square root of $(32 * 10^{-9})$ meters apart , then the gravitational energy between the two electrons is exactly the dimensionless ratio of the electron- proton pair: Force = $G_n * M_1 * M_2 / \text{distance}^2$:

$$G_n = 6.674231042 * 10^{-11}$$

$$* F_d \quad e_{mev} / p_{mev} = G_n * e_{mev} * e_{mev} / \sqrt{(32 * 10^{-9})^2} = G_w$$

...conversely, take two protons and then place them exactly the square root of $(32 * 10^{-9})$ meters apart , the gravitational energy between the two protons is exactly the INVERSE of the dimensionless ratio of the electro-proton pair:

$$/ F_d \quad p_{mev} / e_{mev} = G_n * p_{mev} * p_{mev} / \sqrt{(32 * 10^{-9})^2} = 1 / G_w$$

...the number 32 is the magic that causes this effect...ancient references: the Rosicrusian coat of arms compass points separated by 32 units, Wolfgang Pauli's dream of the "world clock" , ruled by the number 32, the Hindu - Buddic " 32 dimensions or smokes " of the Vihana , the Kabbalic mystery of the " 32 paths to wisdom". The physical meaning of the formulas means that the electron and proton energies are connected gravitationally , as a function of the others existence. The Feigenbaum constant or the length of distance between chaos to order dynamics , ZPE (zero point energy) , rules the transformation of the gravitational energy between the two masses, that transforms two dimensionfull masses (gravity) into a dimensionless ratio of each particles pure name-tag or number. The number 32 does this exclusively.

Other ancient references are Plato's number 215925 , a cyclic mystery number that links the modern mystic D.G.Leahy and his collective unconscious number 82944:

$$(D.G.Leahy) 82944 / 32 = 2592(Plato)$$

...the modern mystic, R.Tomes, says that the universe's harmonic scale is the special number ..3456:

$$(R.Tomes) 3456 / 32 = 108(Hindu-Bhuddic)$$

....108 is the Hindu-Bhuddic , kali-yuga , main number in religious time frames. The Egyptian foot is integer..1152:

$$(Egyptian) 1152 / 32 = 36(Sumerian)$$

...Mayan-Aztec , clock cycle ...2304:

$$(Mayan-Aztec) 2304 / 32 = 72 (Druid)$$

....Kabbalic genesis number..288:

$$(Kabbalic) 2880 / 32 = 90 (quadrant)$$

.....this is where the Dirac Large Number formula comes in. By placing one electron and one proton exactly the sqrt of (32*10^-9) meters apart , the gravitational energy between the two particles is equal to unity: this is the same form as Dirac's Large Number formula except substitute the elementary charge squared , ev^2 , by the magic number 32:

$$Gw / Fd / 10 \quad \text{Unity} = Gn * emev * pmev / \text{sqrt}((32*10^{-9})^2) = emev / pmev /$$

...the unity formula is spiritual , that is the "thing" that exists is a result of the in-falling of the "thing" itself. This can be shown through the dimensionals of the equation which are:

$$\begin{aligned} Gn &= \text{meters}^3/\text{seconds}^2/\text{kg} \\ emev &= \text{kg} \\ pmev &= \text{kg} \\ \text{sqrt}(32*10^{-9}) &= \text{meters} \end{aligned}$$

...everything reduces to meters per second per second, which is the gravitational equation for normal gravitational acceleration:

$$m^3 * kg * kg / s^2 / Kg^2 / m^2 = m/s^2$$

...that is , unity has a dimension of perpetual in-falling of the two elementary particles, electron and proton , as a function of the gravitational force which in accumulation rules the structure of the universe. The gravitational constant , Gn , can be factored into other constants , which results in a dimensioning of Joules meter per second...Jm/s. This is a time function which can be linked to W.Pauli's dream of the ring with 32...time reference.. from the world clock dream where 32 is used as circles or rings cycling in 32 units. The diameter of the circle resulting from the the gravitational equation is a ring with diameter equal to ...32*10^-9 meters... , which is the ring equivalent of W.Pauli's dream of the world clock: ...(2010 NIST) ...h= Plancks constant = 6.62606896 * 10^-34 Js , c =light speed = 299792458, emev = .51099891 , pmev = 938.272013.. Mp = Planck mass = 2.176445376 * 10^-8 kg

$$32 \cdot 10^{-9} \cdot 2 \cdot \pi = e_{\text{mev}} \cdot p_{\text{mev}} \cdot h \cdot c / M_p^2 \dots \text{Joule meter}$$

...by placing Planck's constant, h , (Js) and light speed, c , (m/s) to the ring one is left with the electron - proton in energy and the Planck mass:

$$32 \cdot 10^{-9} / \hbar / c = e_{\text{mev}} \cdot p_{\text{mev}} / M_p^2$$

...converting to mass only...(2010 NIST)...electron mass = $M_e = 9.10938215 \cdot 10^{-31}$ kg, proton mass = $M_p = 1.672621636 \cdot 10^{-27}$ kg, elementary charge = $e = 1.602176487 \cdot 10^{-19}$ C :

$$32 \cdot 10^{-9} / \hbar / c = M_e \cdot M_p / M_p^2 \cdot c^4 / e^2 / 10^{12}$$

...one now has the ingredients for the fine-structure constant... $\alpha = e^2 \cdot 2 \cdot \pi \cdot c / h \cdot 10^7 = 1/137.035999676$...(2010 NIST)

$$32 = M_e \cdot M_p / M_p^2 / \alpha \cdot c^6 / 10^{10}$$

...this leads to an equation that shows the product of the electron-proton masses divided by the constant that rules their interactions, fine-structure constant as a function of 32 Planck mass squared:

$$32 \cdot M_p^2 / c^6 \cdot 10^{10} = M_e \cdot M_p / \alpha$$

...the pairing of the two strong nuclear forces: $a_s = 14$ (carrier) and $a_s(Wz) = .118701515$ (boson), can be shown through the number 32:

$$13.9993887 (a_s) = 360^2 / 32 \cdot (e \cdot c / M_p / a_s(Wz))^2$$

...an interesting comparison of the equations is showing that the weak nuclear force (G_w) affects the electron - proton pair, the same as the gravitational force (G_n):

$$\begin{aligned} \text{Unity} &= G_n \cdot p_{\text{mev}} \cdot e_{\text{mev}} / 32 \cdot 10^{-9} = e_{\text{mev}} / p_{\text{mev}} / G_w / F_d / 10 \\ 10^{22} \cdot G_w / G_n &= G_w \cdot p_{\text{mev}} \cdot e_{\text{mev}} / 32 \cdot 10^{-9} = e_{\text{mev}} / p_{\text{mev}} / G_n / F_d / 10^{22} \end{aligned}$$

...if one substitutes the G_w force by the strong force... $a_s(Wz)$... an interesting thing happens...the collective unconscious constant:

$$a_s(Wz) \cdot p_{\text{mev}} \cdot e_{\text{mev}} / 32 \cdot 10^{-9} = 879.8 \wedge (1/\pi)$$

...8798 is a collective unconscious constant:

$$8798 = 37 \cdot 118.891891891 \cdot 2$$

...the next form is very strange and hard to explain. Since the cosine of inverse fine-structure constant... 137.035999676 ... can be shown as a function of the product of the electron-proton pair:

$$p_{\text{mev}} \cdot e_{\text{mev}}^2 / 666 = \cos 137.03599\dots$$

...the invariant ratio... $G_n/32 \cdot 10^{-9}$... for the gravity equations is key to a previous discovery for the double log in base ten form of the gravitational constant G_n :

$$\log(\log G_n + 12) = e_{mev}^2$$

....working backwards from the true value of the fine-structure constant:

$$11 = G_n \quad \cos 137.035999676 * 666 / e_{mev} / 32 * 10^{-9} = 6.674200477 * 10^{-11}$$

....then placing G_n into the double log form:

$$\log((\log(6.674200477 * 10^{-11}) + 12)) = .5109989085^2$$

...this is exact to the electron value ...2010 NIST !!

$$e_{mev}^2 = \log - (\log(\cos 137.035999676 * 666 / e_{mev} / 32 * 10^{-9}) - 12) =$$

...the amazing thing is that the electron that is buried in two levels of base 10 in the left equation, is exactly the same as the squared electron on the right, to eleven decimals. Balancing the electron calculates to $e_{mev} = .5109989085$. Plugging the Harvard value of fine-structure constant...137.035999084, shows a balanced electron value of:

$$\log - (\log(\cos 137.035999084 * 666 / e_{mev} / 32 * 10^{-9}) = .510999102^2$$

...probably meaning the fine-structure constant is higher than the Harvard value, since the 2010 NIST value for the electron = .510998910, which calculates fine-structure as $1/137.0359997$. The equation means because of the special invariant nature of the number 32, that one factor, either the electron energy or the fine-structure constant, will predict the value of the other. Also this equation lets Leahy's or the Kabbalic form of the collective unconscious 82944 or 288^2 , transform into the electron through the gravitational constant, this eliminates the cosine:

$$e_{mev}^2 = \log - ((\log(82944^{(1/\pi)}) / 100 * 666 / e_{mev} / 32 * 10^{-9})) - 12 =$$

.... $e_{mev} = .5109985..$

$$G_n = e_{mev} * 32 / (82944^{(1/\pi)}) / 666 * 1erg(10^{-7}) \quad \dots G_n = 6.674178774 * 10^{-11}$$

...the ingredients in the gravitational formula are the keys to the fine-structure constant... a_{em} ... and the collective unconscious constant... $\text{mod}(37) = x.891891891..$:

$$137.035999676 \quad (10^{(82943.99304 / 32 / 666)}) / 666 = \text{sqrt}$$

$$137.03599901 \quad (10^{((82944^{((\pi-1)/\pi)} * e_{mev} / G_n / 666^2 * 10^{15})) / 666}) = \text{sqrt}$$

... $G_n = 6.674179334 * 10^{-11}$

...a comparison of the electronic and gravitational forms:

$$\begin{aligned} (82944^{(1/\pi)}) / 32 * 666 / e_{mev} &= 1erg(10^{-7}) * 1/G_n \\ (10^{(82944^{(1/\pi)} / 32 / 666)}) / 666 &= \text{sqrt } 1/a_{em} \\ (\cos 1/a_{em} * 100) / 32 * 666 / e_{mev} &= 1erg(10^{-7}) * 1/G_n \end{aligned}$$

$$p_{mev} * e_{mev} / 32 / 10^{-9} = 1/G_n$$

...an interesting comparison of the source of the number 32, can be demonstrated by contrasting the energy and mass forms of the electron and proton. Very interesting results due to fine-structure constant ...aem:

$$32 = e_{mev} * p_{mev} / M_p^2 * h * c / 2 / \pi * 10^9$$

$$32 = M_e * M_p / M_p^2 * c^6 / aem$$

.....note that h-bar times light speed is the frequency constant, for the electron-proton energy equation. The second form involving six powers of light speed, divided by fine-structure constant is beautifully simplistic and by analogy represents the frequency constant of the electron, proton and Planck masses ratio. Reducing by factoring fine-structure:

$$32 = M_e * M_p / M_p^2 * c^5 * h\text{-bar} * 10^{-3} / eV^2 * 10^7$$

...the meaning of 32 is strange in that it carries six powers of inverse velocity (s⁶/m⁶) as its dimensioning, that is to balance out the equation since the fine-structure constant is dimensionless:

$$aem = (kg)M_e * (kg)M_p / (kg^2)M_p^2 * (m^6/s^6)c^6 / (s^6/m^6)32$$

...light speed, c, is the key having an integer base:

$$299792458 / 32^{(3/2)} = 1656135 = 5*9*13*19*149$$

$$32 = (299792458 / 5 / 9 / 13 / 19 / 149)^{(2/3)}$$

Jul. 19, 2010:

Now that the gravitational relationship of the electron-proton pair energies has been established, an attempt was made to relate it to any record of existing historic experiment concerning anti-gravitational mechanics. By far the most interesting attempt was by the Russian physicist, E. Podkletnov, and his accelerator ring. Of all the searches on the internet, UFO researchers, B. Lazar, M. Freidman etc., Podkletnov's device had drawings of an exact dimensional layout. His device consisted of a rectangular cross sectioned ring of volume: cross-section = 6 * 15

$$((2 * \pi * 75) - (2 * \pi * 69)) * 15 = \text{volume Podkletnov's ring}$$

...above the ring plane were two so-called accelerator boxes, an upper(218 units) and lower(37 units), with the lower accelerator box directly above the ring perimeter at R=75 units, and the upper accelerator box at 218 units above the plane of the ring, directly above a neutral accelerator box, 36 units from the radius point of the ring and in the plane. The first extraordinary discovery concerning the dimensioning of the ring is that the volume of the ring equals 180 * Pi!

$$((2 * \pi * 75) - (2 * \pi * 69)) * 15 = 180 * \pi = 565.4866776$$

...this is extraordinary, What about the accelerator boxes? The immediate discovery was a strange collective unconscious discovery. (Hindu vimana device uses 108 , kali yuga number): aem = fine-structure constant= electron -photon exchange = 1/137.035999701:

$$((\log (\sqrt{137.035999701} * 666)) + 2) * 37 = 217.9999879 =$$

upper accelerator box

$$37 * 36 / 2 = \text{lower times neutral accelerator boxes} / 2$$

... which is the dimension of the upper accelerator box(218). The length of the hypotenuse from accelerator box(36) to (37) is 37 squared times ten:

$$(36 + 69 + 6) ^ 2 + 37^2 = 37^2 * 10$$

...Podkletnov uses a ceramic mixture of super conductor materials spun at 5000 rpms. I have a version that uses Podkletnov's ring and accelerator boxes, composed of equal amounts of Rubidium(37) , Lanthanum(57) , Mercury(80) and Hydrogen(1): Densities= Rbd=1.53 , Lad= 6.15 , Hgd= 13.5336 , Hd= 1

$$\text{volume ring} / 90 / \text{Pi}^2 = \text{IN}(1/\text{Rbd} + 1/\text{Lad} + 1/\text{Hgd} + 1/\text{Hgd}) = 2/\text{Pi}$$

13.53458956

...this equation is the Cheops pyramid construct ...2/Pi. The secret of Podkletnov's ring is the dimensioning. Tracking the source of how exactly this schematic drawing was sourced has proved unfruitful.. Yet the numbers exist and this is what is important. The fact that the volume of the ring structure is 180*Pi , leads to many interesting mathematical forms. One can take the rectangular cross-section of the ring (6 * 15) and convert to a torus using the rectangular units as the loop and tube radius of a torus , with no loss of variance: loop radius = 15 , tube radius = 6

$$\sqrt{ 2 * \text{Pi}^2 * 15 * 6^2 } * 30 = \text{volume ring in torus form}$$

...the above equation is amazingly equivalent to radian(180/Pi) times Pi squared:

$$\text{radian} * \text{Pi}^2 = \text{volume ring} =$$

565.4866776

...it is also equivalent to the golden number , phi=1.61803398875 , through the vimana number , (Hindu kali-yuga = 108)

$$1.6180339875 ^ 2 * 2 * 108 = \text{volume ring} =$$

565.4953403

...another strange form is the ring volume is the power function of the Cheops pyramid construct..2/Pi: IN=reciprocal log e

$$360 / \text{IN}((2/\text{Pi} ^ 2/\text{Pi} ^ 2/\text{Pi} ^ 2/\text{Pi}) + 1) = \text{volume ring} =$$

565.5164857

...360(Sumerian base number) has several collective unconscious constant links to Podkletnov's ring volume. The first is the metric-English conversion factor ..39.370078 inches = 1 meter and the upper(218) and neutral(36) accelerator boxes:

$$-360 / ((\text{IN}(\text{IN}(\text{IN}(39.370078 - 1.44)))) - (33/37)) = \text{volume ring} = 565.4874014$$

where:

$$10^4 / (218 + 36) = 39.37007874 = \text{metric converter}$$

...33/37=.891891891 is the collective unconscious constant , 144 is twice the centerline radius of Podktnenov's ring(R= 72). Another collective unconscious form:

$$360 / ((33/37) + 1) - \log 18) = \text{volume ring} = 565.4870201$$

...the quark resonance constant equals... So = 1.00624....., also uses 360 in the ring volume:

$$360 / \log (1 / (\text{So}-1) / 37) = \text{volume ring} = 565.4920838$$

....this is the same form as the electrical constant , fine-structure = aem = 1/137.035999701:

$$360 / \log(\text{sqrt}137.035999701 * .37) = \text{volume ring} = 565.4873102$$

....this form is ancient, using 12th century Chinese Pi...Pi = 355/113:

$$355 + (67 * \text{Pi}) = \text{volume ring} = 565.4867078$$

...the electron and proton energies are in the ring volume when one uses the atomic weights of the elements , Rubidium = Rbaw =85.4678mol and Lanthanum = Laaw = 138.9055mol: Rban = atomic number = 37 , Laan = atomic number = 57, emev = .51099891, pmev = 938.272013

$$18 * \text{Rban} * \text{Laan} * (\text{Rbaw} + \text{Laaw}) / 10 / \text{Pi} / \text{pmev} / \text{emev} = \text{volume ring} = 565.485732$$

...one can link to the phi , Pi product through the ring volume:

$$(9 - ((\text{emev} / \text{pmev}) / 10)) ^ (2 * .37) = \text{Pi} * \text{phi} \dots\dots(\text{almost exact})$$

...the voume of Podktnenov's ring has special affinities to other fundamental forces , when using the sum of the upper(218) and neutral(36) accelerator boxes:

- Gw = weak nuclear force = .0000116637
- Me = mass electron = 9.109382115 * 10^-31 kg
- Mpr = proton mass = 1.672621636 * 10^-27 kg
- Gn = gravitational constant = 6.674245942 * 10^-11
- as = strong nuclear force = 14
- aem = fine-structure constant = 1/137.035999701

$$\begin{aligned} (\text{IN}(\text{IN}(\text{IN}(39.370078 - 1.44)))) - (33/37) &= 2/\text{Pi} \dots\dots 1.999999744 \\ \text{IN}(\text{IN}(39.370078 - 2.88)) / 37 / 10^{18} &= \text{Gw} * \text{Me}^2 / \text{Mpr}^2 \\ \text{IN}(\text{IN}(39.370078 - 2.88)) / 37 / 10^8 &= \text{Gn} \end{aligned}$$

$$\frac{\ln(\ln(\ln(\ln(39.370078 - 2.88))))}{37^2 * 100} = -aem * as \dots as = 13.99953485$$

...the transformation abilities of the ring volume geometries shows a linkage to all forms , holographically:

$$\begin{aligned} pmev * emev / (Rbaw + Laaw) / Rban / Laan &= \text{radian / volume ring / 100} \\ 32E-9 / Gn / (Rbaw + Laaw) / Rban / Laan &= \text{radian / volume ring / 100} \\ (Rbaw + Laaw + Hgaw) * (Rban + Laan + Hgan) / Rban^2 / Laan^2 / Hgan^2 &= \\ 10^4 * Gn * (\log(\sqrt{aem}) - \log 666) & \end{aligned}$$

...by assigning mole weights of the elements , Rubidium , Lanthanum and Mercury , to equal distributions to the ring volume...180*Pi.... or one-third each , three reciprocal log e layers equals the permittivity of space:

$$\begin{aligned} Eo &= \text{permittivity of space} = 8.854187818 * 10^{-12} \\ Hgaw &= 200.59 \text{ mol} \\ Rbaw &= 85.4678 \text{ mol} \\ Laaw &= 138.9055 \text{ mol} \end{aligned}$$

$$\frac{\ln(\ln(\ln(60 * \text{Pi} * (Rbaw + Laaw + Hgaw)))}{10^{11}} = Eo$$

200.5253

...phi can be shown as a vimana number:

$$\frac{\text{Pi} / 108 / 20 * (Rbaw + Laaw + Hgaw)}{200.553994} = 1 / \text{phi}$$

...squaring phi is a rational number:

$$60 * \text{Pi} * (Rbaw + Laaw + Hgaw) / \text{phi}^2 = 275372 / 9$$

...the disc area representing interior ring fields is the key to the collective unconscious interlink to the electronic navigation of the gravitational field, through the nuclear strong (as) and electronic(aem) forces:as = 14 , aem = 1/137.035999701

$$\text{disc area} = (69.00052^2) * \text{Pi} = (10^{(33/37)}) * 14 * 137.035999701$$

...the disc area has other holographic oddities : log in base 10

$$\begin{aligned} (69.0016692^2) * \text{Pi} / 14 / 10^3 &= \log \sqrt{137.035999701} \\ (69.00049406^2) * \text{Pi} / 14 / 666 * 10^3 &= aem^{-1.5} \end{aligned}$$

...gravity sits in the dic area when R=75 (outside ring radius):

$$\begin{aligned} \text{volume ring / disc area}(R=75) * 10^3 &= 32 \\ \text{volume ring / disc area}(R=75) &= Gn * pmev * emev / 10E-6 \end{aligned}$$

.....strange the volume of the ring divided by the disc area of the ring when the radius is the outside perimeter of the ring...R=75, is equal to the gravitational energy of two particles , electron and proton , when separated 10^3 meters . To convert the proton-electron energies to mass use the electro-static unit...esu = ev/c^2

ev = electron volt = $1.602176487 \cdot 10^{-19}$ v

c = speed of light = 299792458 m/s

$$esu^2 \cdot \text{volume ring} / \text{disc area}(R=75) = G_n \cdot M_e \cdot M_{pr} / (10^E-3)^2$$

Jul. 26, 2010:

The secret to Podkletnov's ring is the geometries of the ring are a wave-guide to the fundamental forces and the elementary particles. The geometries of the ring are:

$$\frac{\text{volume ring}}{\text{disc area ring (R=75)}} = \frac{((2 \cdot \text{Pi} \cdot 75) - (2 \cdot \text{Pi} \cdot 69)) \cdot 15}{(75^2) \cdot \text{Pi}} = \frac{180 \cdot \text{Pi}}{17671.45868}$$

...when these two geometries are put into a ratio, the link between Newton's gravitational law and Coulombs electrical law can be shown:

$$\frac{\text{volume ring}}{\text{disc area R=75}} = K \cdot \frac{p_{mev} \cdot e_{mev}}{10^{-6}} \cdot a_{em}^{-1} \cdot \frac{ev^2}{M_p^2}$$

$$\frac{\text{volume ring}}{\text{disc area R=75}} = G_n \cdot \frac{p_{mev} \cdot e_{mev}}{10^{-6}}$$

$$\frac{\text{volume ring}}{\text{disc area R=75}} = K^{-1} \cdot \frac{p_{mev} \cdot e_{mev}}{10^{-6}} \cdot a_{em} \cdot \frac{R_p^2}{ev^2} \cdot c^4$$

K = Coulombs constant = $(c^2) / (10^7) = 8987551787$

Gn = gravitational constant = $6.67421131 \cdot 10^{-11} \text{ m}^3/\text{kg}/\text{s}^2$

aem = fine-structure constant = $1/137.035999701$

pmev = proton energy = $938.272013 = M_{pr} \cdot c^2 / ev / 10^6$

emev = electron energy = $.51099891 = M_e \cdot c^2 / ev / 10^6$

Mpr = proton mass = $1.672621636 \cdot 10^{-27} \text{ kg}$

Me = electron mass = $9.109382115 \cdot 10^{-31} \text{ kg}$

ev = elementary charge = $1.602176487 \cdot 10^{-19} \text{ volts}$

Mp = Planck mass = $2.176445376 \cdot 10^{-8} \text{ kg}$

Rp = Planck mass radius = $1.61624654 \cdot 10^{-35} \text{ m}$

c = speed of light = 299792458 m/s

h = Planck's constant = $6.62606896 \cdot 10^{-34} \text{ Js}$

Re = electron radius = $2.817940298 \cdot 10^{-15} \text{ m}$

Rpr = proton radius = $1.534698249 \cdot 10^{-18} \text{ m}$

Gw = weak force fermi = .0000116637

Gf = weak force neutrino = $3.685756998 \cdot 10^{-82}$

...reducing the fundamental forces to their integer-Pi roots:

$$\frac{360 * \text{Pi}}{75^2} = \frac{h * \text{pmev} * \text{emev} * c}{M_p^2} * 10^6$$

$$\frac{90}{75^2 * \text{PI}} = \frac{h^{-1} * \text{pmev} * \text{emev} * c}{R_p^{-2}} * 10^6 * c^2$$

...further reducing:

$$\text{volume ring} = \frac{h^2}{M_p^2 * \text{PI} * c^2 * R_p^2} * 45 = 90 * \frac{h}{M_{pr} * c * R_{pr}} * a_{em} = 90 * \frac{h}{M_p * c * R_p} = 90 * \frac{h}{M_e * c * R_e} * a_{em}$$

....from the last four equations the function of the geometries of Podktlevov's ring can be shown as having a symmetrical relationship to factors linking gravity and electricity. The paths of science are strange, even though the ring has a mass due to the elements of construction , mostly ceramic based , and a kinetic energy due to 5000 rpms , the effect of electrical-gravitational interactions is , I think , due to the geometric proclivities of the structure itself. This geometric structure , ring volume, is unique for its force unification abilities:

$$\frac{(G_f / G_w)^{1/3}}{R_p^2} = \frac{h\text{-bar} * c}{R_p^2} = c^4 * \frac{\text{pmev} * \text{emev}}{R_p^{-2} * 32E-9} = K * \frac{\text{ev} * \text{ev}}{a_{em}} = G_n M_p * M_p$$

....the gravitational energy between two Planck masses , placed the radius of their structure apart , fusion , is the ultimate energy of Podkltlenov's ring:

$$\frac{(G_f / G_w)^{1/3}}{R_p^4} = \frac{h\text{-bar} * c}{R_p^4} = c^4 * \frac{\text{pmev} * \text{emev}}{32E-9} = K * \frac{\text{ev} * \text{ev}}{R_p^2 * a_{em}} = G_n * \frac{M_p * M_p}{R_p^2}$$

....the non -Planck radius equation is how Podkltlenov's ring shows the gravitational energy resulting from the fusion of two Planck masses. The disc area , when R=75 , divided by the ring volume , times the product of the electron proton energies , times the fourth power of light speed equals this energy limit:

$$\frac{\text{disc area } R=75}{\text{ring volume}} * c^4 * p_{\text{mev}} * e_{\text{mev}} * 10^6 = G_n * \frac{M_p * M_p}{R_p^2}$$

$$\frac{\text{disc area } R=75}{\text{ring volume}} * 1 * p_{\text{mev}} * e_{\text{mev}} * 10^6 = G_n^{-1} \dots \text{anti-gravity}$$

...when the ring volume is divided by 90 and then divided again by Pi squared , a fantastic thing happens , the Cheops pyramid constructs ...2/Pi

$$\frac{\text{ring volume}}{90 * \text{Pi}^2} = \frac{2}{\text{Pi}} = \frac{h}{M_p * c * R_p * \text{Pi}^2} = \frac{h}{M_e * c * R_e * \text{Pi}^2} * a_{\text{em}} = \frac{h}{M_{\text{pr}} * c * R_{\text{pr}} * \text{Pi}^2} * a_{\text{em}}$$

....note that in the geometry ratio of the volume ring/disc area R=75 , that the equations are exactly equivalent in form , but by dividing out the factor that determines black hole fusion (Planck masses)...light speed to the fourth power, one is left with inverse gravity (anti-gravity) ...Gn^-1. Gravity can be attached to the ratio, which demonstrates the pairing of the electron proton masses and radii:

$$\frac{\text{disc area } R=75}{\text{ring volume}} * \frac{G_n * c^4}{10^{13}} = \frac{R_e}{M_{\text{pr}}} = \frac{R_{\text{pr}}}{M_e}$$

.....this is extra-ordinary...the geometry ratio of Podkletnov's ring times the gravitational constant , Newton Gn , times the black hole fusion constant ...c^4...equals the crossover of radii to masses of the electron-proton forms. This is a strange world , the radius of the proton is linked to the mass of the electron and vice-versa, the electron radius determines the proton mass !! Gravity has a dual role in these equations, in that if the invariant form is considered as a static armature , then switching Gn from inverse to normal will show the relationship between theoretical mass structures , Planck mass , and real structures , proton-electron masses and radii:

$$\frac{\text{disc area } R=75}{\text{ring volume}} * G_n = \frac{10^{-6}}{p_{\text{mev}} * e_{\text{mev}}}$$

$$\frac{\text{disc area } R=75}{\text{ring volume}} * G_n^{-1} * c^4 = \frac{M_p * 10^{-6} * M_p}{p_{\text{mev}} * R_p^2 * e_{\text{mev}}}$$

$$\frac{\text{disc area } R=75}{\text{ring volume}} * G_n * c^4 = \frac{R_e}{M_{pr}} * 10^{13} = \frac{R_{pr}}{M_e} * 10^{13}$$

....in its pure form, Podkletnov's ring ratio to disc area describes the integer 32 and this number can be simplified to the gravitational energy between either the electron or proton in mass form separated by the complimentary radii of the opposite particles:

$$.032 = \frac{\text{ring volume}}{\text{disc area } R=75} = G_n * \frac{M_{pr} * 1}{R_e * 10^{13}} * c^4$$

$$.032 = \frac{\text{ring volume}}{\text{disc area } R=75} = G_n * \frac{M_e * 1}{R_{pr} * 10^{13}} * c^4$$

....or one kilogram and the electron mass separated by the proton radius scaled by 10^{-13} , times light speed squared, squared, equals the Podkletnov ring ratio. Coulombs law constant ...K... can be substituted into Podkletnov's ring:

$$\frac{\text{disc area } R=75}{\text{ring volume}} * a_{em} * c^4 = \frac{ev^2 * 10^{-6} * K}{p_{mev} * R_{p^2} * e_{mev}}$$

....note the similarity to the gravitational form and the fundamental forces:

$$\frac{\text{disc area } R=75}{\text{ring volume}} * a_{em} * c^4 = \frac{10^{-6}}{p_{mev} * R_{p^2} * e_{mev}} * K * ev^2 \dots\dots(\text{electrical})$$

$$\frac{\text{disc area } R=75}{\text{ring volume}} * G_n^{-1} * c^4 = \frac{10^{-6}}{p_{mev} * R_{p^2} * e_{mev}} * M_{p^2} \dots\dots(\text{gravity})$$

$$\frac{\text{disc area } R=75}{\text{ring volume}} * (G_w/G_f)^{1/3} * c^4 = \frac{10^{-6}}{p_{mev} * R_{p^2} * e_{mev}} \dots\dots\dots(\text{weak})$$

$$\frac{\text{disc area } R=75}{\text{ring volume}} * \frac{c^3}{\hbar} = \frac{10^{-6}}{\rho_{\text{mev}} * R_{\text{p}}^2 * e_{\text{mev}}} \dots\dots (\text{strong})$$

To be continued...