Review Article

Elements of Mathematical Cosmogony

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The Newton's **Principia** still remains the guiding scientific scripture by the crucial reason that it is concluded by a truly prophetic **General Scholium**. Indeed, Who or What is that 'Being' to be hunted down eventually by means of the exact sciences? And what is the native tongue of Nature through which are expressed 'the ideas and will' of the Being? Does prophecy vindicate?

If frankly, at least to the eyes of Paul Dirac, the modern physics looked hopelessly illogical. Facing this gloomy situation, we cannot but concentrate our attention on what is logic in reality. The best way is just to reformulate Newton's First Rule of Reasoning in an extreme minimax form: **Logic is what achieves the greatest possible by the least possible**.

Then, the least is the mathematical point. The physical Universe is the greatest.

The way to accomplish the above formulated extreme principle can be thought to be pure (not applied!) mathematics unified by Karl Gauss in his **Disquisitionis Arithmeticae** in 1801.

Then, the universal system of pure mathematical harmony proves to be subject to a fundamental theorem such that

$$X^{\Phi \pi e} X = 10^{90} \tag{1}$$

where Φ is the Golden section constant.

The new mathematical constant X is

$$X = 1185403.53967680158074 8319426345.. \tag{2}$$

and this alone suffices to approach the unified field theory through the two anomalies known in the modern physics, notably,
a. the Sommerfeld fine structure constant

$$\alpha = \frac{1}{137.035999};$$

b. the anomaly of the electron magnetic moment

$$a_{Electron} = 00.11596521.$$

We have

$$\frac{1}{\alpha a_e} = 118169.9226862953121888 8837436676 \tag{3}$$

In physics the symmetries of the mathematical harmony given by (1) appears to have been broken as

$$X \cdot \alpha a_e = 10 \left\{ 1 + \frac{1}{319.00632755560...} \right\} \tag{4}$$

The self-perturbation effect of the system can be calculated as elementarily as

$$\sqrt[\pi e]{\left\{ \frac{10^{15}}{61} \right\}^{\Phi}} = 319.00675115... \tag{5}$$

Such whole numbers as **61** we will call **Harmonious Integers (HI)**. Remind that not just for fun "**God made integers, all else is the work of man**." (Leopold Kronecker)
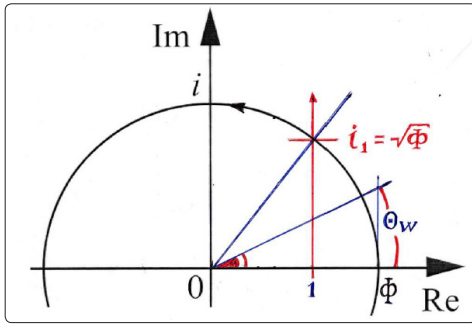
In formulae (1-5) we have introduced the universal system of mathematical harmony and given a sample of how the fundamental mathematical symmetries are broken in the physical world.

What is obvious, we have to construct the real geometry of space and time from the beginning, though making use of all the previous knowledge. The initial condition for any possible fundamental theories is the mathematical point, or else, **Nothing**. Then, which way it transforms into **Something** called the **Universe**?

Assume that the cosmological evolution is a spontaneous process. The fundamental form of spontaneity is the consecutive process of bifurcations. Nature herself is the evidence of this.

Therefore, we shall once in history arrive at the following constructive algorithmic compass-and straightedge drawing **(Figure 1)**:

We are given a point. It undergoes bifurcation by the way of translation.

We are given a point. It undergoes bifurcation by the way of translation. As a result, a line segment is constructed. The problem is how to denote it? Before the Creation Act there were no Greek or Latin alphabets. Yet, there were numbers. The notation we look for has to be something original and exclusive. In the uncountable infinity of the continuum of real numbers the only one made with unique properties is Φ seen in (1) as absolutely harmonizing factor.

Therefore, we postulate that, by definition,

(α) $\Phi \equiv$ Newton's absolute mathematical space.
Then, the initial point undergoes the second bifurcation in the form of the rotation of the line segment Φ around the origin. At one moment occurs a bifurcation event which allows us to postulate

(β) $\sqrt{\Phi}$ Newton's absolute mathematical time = i_1.

If summarize, the 4-Dim space-time shall be in shortest

(γ) $\Phi^3 i_1 = 5.388361704057053464896384556898...$

It is simply that the way of mathematical description of Nature is intrinsically bifurcated into the analytical and synthectical dualism such that

$$(x, y, z, t) \leftrightarrow \Phi^3 i_1 \qquad (6)$$

Provided that we are not wrong in the above speculations, the system of postulates (α, β, γ) can and must be immediately proved as viable. The quantum-relativistic theories have led to the post-Dirac effect being, notably, the anomaly of the electron magnetic moment close to

$$a_{Electron} = 0.0011596521 \qquad (7)$$

Therefore, elementarily

$$\frac{1}{a_{Electron} = 0.0011596521} = \sqrt[\Phi^3 i_1]{\mathbf{658361} \cdot 10^{10}} \qquad (8)$$

Note that the a_e serves the exact measure of our ignorance in the quantum and subquantum world. Of course, absolute geometry leaves no anomalies and paradoxes behind.

At the initial stage of learning geometry any **HI** like **658361** would always seem to be accidental and misleading occurences. But, it is never the case.

The Euler's famous formula

$$e^{(2)\pi i} = \pm 1 \qquad (9)$$

now has to be replaced by the super and ultra operators such that

$$(e^{(2)\pi i} = \pm 1) \Rightarrow e^{\Phi \pi i_1} \Rightarrow ... e^{5\Phi \pi i_1 e \sqrt{2}} \qquad (10)$$

We have come to deal with the absolute calculus where the ultra operator integrates fundamental symmetries of geometry

$$e^{5\Phi \pi i_1 e \sqrt{2}} = 9.4473042384511687466180908528168e+53 \ (11)$$

So, due to the fundamentality of the post-Dirac phenomenon we shall somewhat foresee and obtain

$$e^{5\Phi \pi i_1 e \sqrt{2}} \cdot \mathbf{658361} = \frac{\mathbf{1865921}}{3} \cdot 10^{54} \qquad (12)$$

The HI **1865921** should in turn be justified, too, and this sequencial process of approximations of HIs is always elementary in the system of universal harmony, though never ends.

The algorithm for *Sectio Aurea* (Leonardo da Vinci) begins with the construction of the angle which we postulate to be

(δ) $\Theta_{Weinberg} = \arctan \frac{1}{2} = 26.56505118°$

Then, because of the universality of electroweak forces

$$\sqrt[\sin \Theta_W]{\frac{1}{a_{Electron} = 0.0011596521}} = \mathbf{3667438}; \qquad (13)$$

$$\sqrt[\cos \Theta_W]{\sqrt[\sin \Theta_W]{\frac{1}{a_{Electron} = 0.0011596521}}} = \mathbf{21836383} \qquad (14)$$

Millions of manual numeric experimentations have unarguably shown that the quantized 4-Dim absolute/relative Newton/Einstein space-time made with curvature and torsion is in Nature written as

$$\pi \frac{\Phi^3 \sqrt{i_1 i_2}}{\text{Spin}} = 19.55618474... \qquad (15)$$

It is a subtle algorithmic problem that the Newtonian time is bifurcated into the absolute cosmic and local relative times

$$\{\Phi = i_1\} \leftrightarrow \left\{ i_2 = \frac{4}{\pi} \right\} \qquad (16)$$

Therefore, it is predictable that in the system of harmony

$$\mathbf{21836383} \cdot \pi \frac{\Phi^3 \sqrt{i_1 i_2}}{\text{Spin}} = \mathbf{427\,036\,340} \qquad (17)$$

It comes from the deepest layers of reality written by

$$\frac{\sqrt[\Phi \pi e + 1]{\mathbf{10^{90}}} \cdot e^{5\Phi \pi i_1 e \sqrt{2}}}{\mathbf{427\,036\,340}} = \frac{10^{58.000...}}{\mathbf{expexp}e} \qquad (18)$$

The exponential entity **expexp**e images the ideal selfgrowth process in cosmogony and cosmology.

In general, the extreme and mean ratio algorithm and the organic growth process out of Nothing else than mathematical point are equivalent algebraically, for

$$1000\Phi \simeq e^{ee} \qquad (19)$$

In the superunified theory it is crucial not to overlook such simple truths as previously. **Superunification** means no more and no less than unification of pure mathematics and theoretical physics. We have previously got space and time vectors
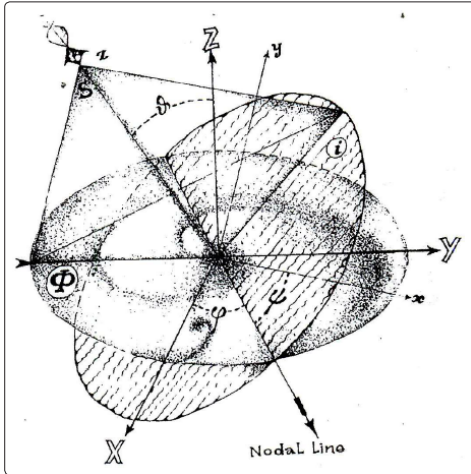
$$\{\Phi,\ i_1\} \tag{20}$$

Just by pure reason, we postulate that the space and time vectors do intercross either with the straight angle, or with the angle

$$\Delta_{Exprm.} = \frac{1}{\alpha_{Sommerfeld}} = 137.035999...° \tag{21}$$

The third is excluded.

As a result, we are prompted to draw a (sub)quantum space-time gyroscope **(Figure 2)**

In the first case we have electromagnetic waves. The second option provides the model for spinor particles. Therefore, the electron-photon formation shall be

$$\{\Phi \cdot (\Delta_{Exprm.} \cdot\ \perp) \cdot\ i_1\} \tag{22}$$

Because of the permanent bifurcation oscillations inbetween space and time vectors, the previous structure will obviously move propagating as certain complex waves.

The system we introduce in this report is ultimate and thus universal. By this favourable reason everything in Nature can and must be derived in many different ways depending upon how far one knows the system. In the given case of (22) we may refer to the most standard sample of how the system of mathematical harmony works

$$\sqrt[e]{\{\Phi \cdot (\Delta_{Exprm.} \cdot\ \perp) \cdot\ i_1\}^{\Phi\pi i_1}} = \mathbf{3} \cdot 10^{9.9999...} \tag{23}$$

There is no whatever precision experiment to exclude the global self-perturbation effects of the entire system. In the previous case of Delta parameter equalling to 137.035999 the right side is corrected by

$$1 - \frac{1}{6612.531244} \tag{24}$$

It is calculable in many ways, including the most standard

$$\frac{X \cdot e^{5\Phi\pi ei_1\sqrt{2}}}{6612.4036720945863230...} = \pi\Phi^3 \sqrt{i_1 i_2} \cdot 10^{55} \tag{25}$$

$$\frac{X \cdot e^{5\Phi\pi ei_1\sqrt{2}}}{6612.4036720945863230...} = \pi\Phi^3 \sqrt{i_1 i_2} \cdot 10^{55}$$

Thus, in terms of HIs the ultimate theoretical value of the energy parameter will be

$$\Delta_{Exprm.} = 137.035998831870...° \tag{26}$$

The cosmic space-time medium is defined by both the absolute Φ and Cartesian dimensionalities. Therefore,

$$\left\{ \pi \frac{\Phi^3 \sqrt{i_1 i_2}}{\mathrm{Spin}} \cdot \mathrm{dim}_\Phi\ \Phi^3 i_1 \cdot (3+1) \right\} \cdot \\ \cdot \left\{ \Phi \cdot (\Delta_{Exprm.} \cdot\ \perp) \cdot\ i_1 \right\} = \mathbf{6949776} \tag{27}$$

It is such, not otherwise, simply because of the fundamental theorem (1) and the fundamentality of the problem we consider

$$\mathbf{6949776} \times \Phi\pi e = \frac{\mathbf{864\ 261\ 787}}{9}, \tag{28}$$

where true digits are
$$\Phi = 1.618\ 033\ 988...$$

As it can be inferred from the above, the mathematical continuum is self-excited and self-organized into the absolute system of harmony which, notably, is observed as the physical Universe. There is no whatever hardware, but solely the universal software Mathematical machine which can be called the **Universal Ruler**, or even Lord God, if follow Newton's natural philosophy traditions. The reason of why the ideal software is perceived by us as material hardware consists in the mechanism of topological densities which integrate Pythagoreism (Arithmetization) and Platonism (Geometrization) concepts of the ancients. Given this dualism, Jiordano Bruno in his Renaissance time did formulate the most genial theorem in the entire past, present and future history of the exact science:

"The order of a unique figure and the harmony of a unigue number give rise to all things" (1591).
As it is known, the geniuses formulate greatest theorems to be proved, however, by the ordinary mortals with no exclusion of a pastoral nomad who I am in person. This sort of God's joke over the human civilization should be taken as easy as posisble without prejudice characteristic to the human nature.

We have the unique number, Φ, and the uniqie figure defined by (**Figure 2**) and (23). Consequently, the gravi-electromagnetic electron dreamed of by Einstein will be

$$\left\{ \begin{array}{l} \{\Phi \cdot (90 \times 137.035999...) \cdot i_1\} \cdot \\ \cdot Ghm_e e^{\pm} c \cdot \mathrm{dim}(Ghm_e e^{\pm} c) \end{array} \right\} = \sqrt[\pi]{\mathbf{142736} \cdot 10^{23}} \tag{29}$$

In the modern physics we have the following pentad of bare numeric world constants:

$$Ghm_e e^{\pm} c \tag{30}$$

The absolute Φ-dimensions of constants are the prototypes for the experimental ones. The space-time quantum gyroscope above can be computed in classical mechanics yielding the prototype of mass

$$\dim m = \sqrt{2} \qquad (31)$$

So,

$$\dim(Ghm_e e^{\pm} c) = \Phi^5 \sqrt{2}\sqrt{\sqrt{2}} . \qquad (32)$$

The electroweak electron of the Standard model is subject to the same π-rule of geometry

$$\left\{ \begin{array}{l} \{\Phi \cdot (90 \times 137.035999...) \cdot i_1\} \cdot \\ \cdot Ghm_e e^{\pm} c \cdot \dim(Ghm_e e^{\pm} c) \end{array} \right\} \frac{\Theta_W}{\sin \Delta_{Exprm.}} = \sqrt[\pi]{\frac{10^{37}}{7043}} . \qquad (33)$$

The spin is an intrinsic property of the quantum gravielectroweak gyroscope

$$\left\{ \left\{ \begin{array}{l} \{\Phi \cdot (90 \times 137.035999...) \cdot i_1\} \cdot \\ \cdot Ghm_e e^{\pm} c \cdot \dim(Ghm_e e^{\pm} c) \end{array} \right\} \frac{\Theta_W}{\sin \Delta_{Exprm.}} \right\} \cdot$$

$$\cdot \frac{\dim_\Phi \Phi i_1}{Spin} = \sqrt[\pi]{\frac{10^{37}}{1254}} . \qquad (34)$$

Just an example of how "**Die ganzen Zahlen hat der liebe Gott gemacht, alles andere ist Menschenwerk**" (Leopold Kronecker):

$$\sqrt[e]{1254^{\Phi \pi i_1}} = \frac{210\,918\,649}{9} . \qquad (35)$$

The universal mathematical machine we have discovered is, notably, that "**Being eternal, infinite, absolutely perfect**" prophecied by Newton. The founder of theoretical physics complained that we have "**no idea of the manner by which the all-wise God perceives and understands all things.**"

Two points to be highlighted:
1. The founder of theoretical physics Sir Newton was most anxious about the undiscovered cause of gravity and he framed no hypothesis. Everything remains hypothesis until after the absolute mathematical space and the absolute mathematical time of Newton are defined in rigour. The final theory we propose herewith does pertain to the experimental science where hypothesis have no place.

Now that millions of numeric experimentations have proved that the 4-dimensional curved and torsional absolute/relative Newton/Einstein space-time is

$$\pi \frac{\Phi^3 \sqrt{i_1 i_2}}{Spin_{cos30}} . \qquad (36)$$

No less than a million numeric experimentations proved the fact that the bare numeric gravitation constant of Newton does infinitely tend to the finite fraction 6.673.

Therefore,

$$\left\{ \pi \frac{\Phi^3 \sqrt{i_1 i_2}}{Spin_{cos30}} \right\}^{G_{6.673} \dim G} = \cos \Theta_W \cdot 10^{16.0000...} . \qquad (37)$$

Gravity appears to be a Golden-algorithmic phenomenon, as anything else under the Sun and across the Cosmos.

The global self-perturbation effect of the entire system of geometry is still there yielding

$$\varepsilon = \frac{1}{25251.80457} . \qquad (38)$$

Mathematical symmetries are broken by

$$\frac{\sqrt[\Phi \pi e + 1]{10^{90}} \times e^{5\Phi \pi e i_1 \sqrt{2}}}{25251.80457} \cdot \frac{676456}{3} = 10^{61} . \qquad (39)$$

The process ends up with the self-reference of geometry

$$676456 \cdot \pi \frac{\Phi^3 \sqrt{i_1 i_2}}{Spin_{cos30}} = \frac{26457797}{2} . \qquad (40)$$

Originally, there is Newtonian physics and there is Gaussian pure mathematics. Applied mathematics is a human invention, though by nobody else than Newton and Leibniz. At the moment of the Creation Act God was illitterate in tensor analysis; He knew only Gaussian pure mathematics which only exists *a priori*.

Karl Gauss did prove that the Euclidean geometry is originally the science of compass-and straightedge constructive algorithms. In this sense the Fermat's fifth prime **65537** is specified.

Therefore, the Newton-Gauss physico-mathematical superunification is achievable by such an elementary act as below:

$$65537^G = \Phi \pi e \cdot 10^{30.9999...} ; \qquad (41)$$

$$\{G^G\}^G = \Phi \pi \cdot 10^{35.999999...} . \qquad (42)$$

Decent ones will see here not only the general law of motion, but also the nonlinearity of gravity.

Not to hypothesize, but to experiment, means to go vabanque globally. Therefore, cosmologically

$$\left\{ \pi \frac{\Phi^3 \sqrt{i_1 i_2}}{Spin_{cos30}} \cdot (3+1) \dim_\Phi \Phi^3 \sqrt{i_1 i_2} \right\}^{\frac{G_{6.673}}{\dim G} = 3.604631239} =$$

$$= \frac{1832708080}{3} . \qquad (43)$$

Standardly.

$$\sqrt[e]{1832708080^{2\Phi \pi i_1}} \cdot \frac{769642}{9} = 10^{49} ; \qquad (44)$$

$$\frac{e^{5\Phi\pi e i_1\sqrt{2}}}{769642} = \frac{368248}{3}\cdot 10^{180-137}, \tag{45}$$

et cetera, and so on, *ad infinitum*.

It is provable that the unavoidable in absolute geometry entity

$$\frac{G}{\dim G} = Cosm. \tag{46}$$

is the genuine cosmological constant. For example, it is easy to make use of it for deriving the cosmic space-time

$$\left\{\pi\frac{\Phi^3\sqrt{i_1 i_2}}{\mathrm{Spin}}\left\{(3+1)\dim_\Phi \Phi^3\sqrt{i_1 i_2}\right\}\right\}^{Cosm.} = \frac{1832708080}{3}. \tag{47}$$

Never doubt the divine method of the asymptotical harmonious integers. In the given case

$$\sqrt[e]{1832708080^{2\Phi\pi i_1}}\cdot\frac{769642}{9} = 10^{49.000\,000\,000\,0...}. \tag{48}$$

Owing to the fundamentality of (47), we can here sense the character of topological knots the system ties up, e.g.,

$$769642\cdot e^{5\Phi\pi e i_1\sqrt{2}} = \frac{10^{61.9999...}}{\Delta_1 = 360/\Phi^2}; \tag{49}$$

$$769642\cdot\left\{X\cdot e^{5\Phi\pi e i_1\sqrt{2}}\right\} = \frac{10^{63}}{a_{Electron}}. \tag{50}$$

In this geometry Einstein's energy plays a negligible role. Instead, there is the universal energy term such that

$$\mathbf{U_E} = \dim E\cdot h\dim h\cdot 2N_{1837.41}m_e c^2\cdot\frac{2\Theta_{STR.}}{\cos 2\Theta_{STR.}} = \tag{51}$$

$$= \mathbf{2260258601.26}...,$$

where the nuclear strong force parameter is defined by

$$\frac{\pi Rad}{3} - \Theta_W = \Theta_{STR.}, \tag{52}$$

and it is always doubled explaining, probably, the quark confinement. It seems highly likely that the following explains the dark energy problem arising in the global outer cosmos

$$\{\mathbf{U_E}\}^{Cosm.} = 10^e\cdot 10^{31.00000...}. \tag{53}$$

The universal energy itself is derived by

$$\{\mathbf{U_E}\} = \sqrt[\oplus]{\pi\frac{\Phi^3\sqrt{i_1 i_2}}{\mathrm{Spin}}\cdot 10^{83.00000...}}, \tag{54}$$

due to one of logarithmic operators of the system

$$10^\oplus = 1000\oplus. \tag{55}$$

Calculate the operator by iteration

$$10^\oplus = 1000\oplus \tag{56}$$

and approximate

$$\otimes^2\Delta_1 \equiv c. \tag{57}$$

In general, obviously

$$\frac{Absolut\ espace}{Absolute\ time} = Absolute\ velocity = \frac{\Phi}{i_1} = c. \tag{58}$$

Because of the correlation of measurement units, the velocity of light should be a theoretical number, indeed,

$$\mathbf{299792458} = \sqrt[\pi]{427285\cdot 10^{20.99999999910...}}. \tag{59}$$

In the dimensional case just put by definition

$$\mathbf{299792458}\cdot i_1 = 100\mathbf{expexp}e. \tag{60}$$

Higher order approximations here or elsewhere, though always elementary in the framework of absolute geometry, some technicalities go beyond this brief introduction.

It is better to see, instead, what is the **Fundamental theorem of pure mathematics**:

$$\cos^2 i = \frac{\Phi^3 i_1}{10©@}, \tag{61}$$

where the imaginary dimension generates arithmetic, algebra and geometry coupled with constants of quantum jump processes

$$e^© = ©^{-1}; \qquad \ln© = -©; \tag{62}$$
$$10^@ = @^{-1}; \qquad \lg@ = -@.$$

Originally, the scientific philosophy begins with Pythagoreism which is arithmetization concept. In this sense geometry reduces to a numeric

$$\Phi^3 i_1.$$

Then, follows Platonism (geometrization) paying key attention to the regular figures of geometry. In our case we are required to consider the 4-Dim Plato's solids. For this purpose, we introduce the method of topolological configurations such that

$$\{a+b+c+...\}\{a\cdot b\cdot c\cdot...\} = \{\mathbf{a,b,c,...}\}^\times_+. \tag{63}$$

If so, arithmetic will look as some topological density, too,

$$\{\mathbf{1,2,3,4,5,6,7,8,9}\}_{+}^{\times} \ . \tag{64}$$

And immediately a logos (65)

$$\frac{\mathbf{4470825440}}{\{\mathbf{1,2,3,4,5,6,7,8,9}\}_{+}^{\times}} = \pi \frac{\Phi^3 \sqrt{i_1 i_2}}{\mathrm{Spin}} \left\{ (3+1)\dim_\Phi \Phi^3 \sqrt{i_1 i_2} \right\} .$$

It needs justification, thus (66)

$$\mathbf{4470825440} \left\{ 1 - \frac{1}{1035.522105} \right\} = \frac{10000 \mathbf{expexp} e}{\pi e}, \quad \text{or even}$$

$$1035.522105 \cdot \left\{ X \cdot e^{5\Phi \pi i_1 e \sqrt{2}} \right\} = a_e \cdot 10^{66.00000\ldots} . \tag{67}$$

Now we write the Pythagoras-Plato 4-World

$$\Phi^3 i_1 \times \begin{array}{|c|c|c|c|}^{\times} \hline C & F & S & V \\ \hline 5 & 10 & 32 & 5 \\ \hline 8 & 24 & 32 & 16 \\ \hline 16 & 32 & 24 & 8 \\ \hline 24 & 96 & 96 & 24 \\ \hline 120 & 720 & 1200 & 600 \\ \hline 600 & 1200 & 720 & 120 \\ \hline \end{array}_{+} \tag{68}$$

It is a dualistic world

$$\sqrt{\Phi^3 i_1 \cdot \mathbf{D\{4\}}_{+}^{\times}} = \pm \frac{2}{\Phi} \cdot 10^{23} . \tag{69}$$

The spontaneous quantum Bigbang origin of cosmogony is written by

$$\frac{10^{46}}{\copyright} = \frac{\Phi^3 i_1}{\mathrm{Spin}} \cdot \mathbf{D\{4\}}_{+}^{\times} . \tag{70}$$

Although this can and must be enhanced to whatever full blown states of the quantum-gravitational 4-World, we leave such complications in favour of simpler but even more fundamental truths of geometry. First, simply because of

$$\dim(Gh) = \Phi^3 i_1 ,$$

space-time is quantum-gravitational from the beginning. Secondly, it is how anomalies arise in the existing physics:

$$\frac{\Phi^3 i_1 (3+1)\dim_\Phi \Phi^3 i_1}{\alpha_{Sommerfeld} a_{Electron}} = \mathbf{8914392} . \tag{71}$$

It is apparently the synthesis Vs analytics problem that the modern physics is a bit deficient. What underlies is the $\Phi\pi e$-system of universal harmony:

$$\mathbf{8914392}^{\Phi\pi e} = \frac{10^{103}}{\mathbf{9358699}} , \tag{72}$$

where true digits are

$$\Phi = 1.618\ 033\ 988\ 749\ldots \tag{73}$$

The Fundamental theorem of geometry is as follows and it describes the structure of spinor matter, or else, fundamental fermion particles:

$$\frac{\Phi}{i_1, i_2} = \frac{\mathrm{Spin}_{\cos 30}}{\sin \Delta_{\alpha,\beta,Exprm.}} . \tag{74}$$

To around up, let us survey things in briefest.

There is the external geometry which is derivable in a fundamental way such that

$$\left\{ \pi \frac{\Phi^3 \sqrt{i_1 i_2}}{\mathrm{Spin}} (3+1)\dim_\Phi \Phi^3 i_1 \right\} \cdot \widehat{E}\breve{E} = \sqrt[\pi]{X \cdot e^{5\Phi \pi e i_1 \sqrt{2}} \cdot 10^{18}} . \tag{75}$$

The EE is the energy-entropy configuration whose explicit form we here omit because of too much complications. The right section is corrected by **1-1/1450.846537** subject to the global cosmic self-perturbations inside the system

$$\sqrt[\flat\pi e]{\frac{10^{44}}{\Phi i_1}} = 1450.981966 . \tag{76}$$

There does exist the internal geometry of point-singularity derived by the same ultra-operators as above (77)

$$\left\{ \frac{\Delta_{Exprm.}\Theta_W \cdot 2\Theta_{STR.}}{\sin \Delta_{Exprm.} \sin \Theta_W \cos \Theta_W} \right\} \cdot \left\{ X \cdot e^{5\Phi \pi e i_1 \sqrt{2}} \right\} = 10^{65.999999\ldots} .$$

Therefore, we are now prompted to superunify the above in the form of the ideal trinity as follows below (78):

$$\left\{ \pi \frac{\Phi^3 \sqrt{i_1 i_2}}{\mathrm{Spin}} (3+1)\dim_\Phi \Phi^3 i_1 \right\} \cdot \widehat{E}\breve{E} \cdot$$

$$\cdot \left\{ \frac{\Delta_{Exprm.}\Theta_W \cdot 2\Theta_{STR.}}{\sin \Delta_{Exprm.} \sin \Theta_W \cos \Theta_W} \right\} = \frac{\mathbf{560785}}{9} \cdot 10^{26} ;$$

$$\mathbf{560785} \cdot 2\Theta_{STR.} = \frac{\mathbf{337496720}}{9} ; \tag{79}$$

$$\mathbf{337496720}^\pi = \frac{10^{28.9999\ldots}}{e^{\Phi\pi}} . \tag{80}$$

The very logic of the golden braid of HIs is that any given justifiable HI like **560785** is an integrating operator of the system. So, the superunified equation of physics can be proposed in a shorter variation such that

$$\mathbf{560785} \cdot \frac{Ghm_e e^{\pm} c \cdot \dim(Ghm_e e^{\pm} c)}{\alpha a_e} =$$

$$= \Phi\pi i_1 \sqrt{\left\{ \pi \frac{\Phi^3 \sqrt{i_1 i_2}}{\mathrm{Spin}} (3+1)\dim_\Phi \Phi^3 i_1 \right\} \cdot 10^{97}} . \tag{81}$$

We may conclude that: The self-excitation and selforganization of the mathematical continuum into the universal system of harmony is observed in the capacity of the physical Universe. What does there exist *a priori* is the ideal mathematical machinery which is

notably that prophesied by Sir Newton '**living, intelligent and powerful Being**' necessarily '**eternal and infinite, omnipotent and omniscient**'.

The founder of theoretical physics Sir Isaac Newton foresaw the inevitabilty of the unification of science and religion at the final stage of human cognition. And it is no more and no less than a consequence of Kurt Goedel's metatheorem.

This theory we relate is an inevitable and sufficient formal system to explain the cosmological Existence. And as such it has to be discovered in a scientific, that is, logical and experimental way and it has been discovered, indeed, more or less in that same way.

But, to my personal experience, Divine Providence is involved in the process from the beginning up to the end. Saying so I mean that the formal system of the final theory descended to the Earth civilization by the grace of Divine Providence. By the term Divine Providence is understood God's intervention in the Universe with no exclusion of the entire history of human civilization.

The Universe is now revealed as the Absolute Mathematical Intelligence who is equivalent to the concept of God.

An example of how Providence intervenes. The post-Dirac effect of QED is a fundamental phenomenon and as such it is calculated by (8) which yields the HI 658361. This integer in turn generates yet another HI 1865921 to be justified as not by chance.

As Pythagors, and later Kepler, doctrined, the world harmony is equivalent to the musical harmony. That's why one is required to write the topological configuration of musical scale. The so called evenly tempered musical scale is

$$1, \frac{15}{16}, \frac{8}{9}, \frac{5}{6}, \frac{4}{5}, \frac{3}{4}, \frac{5}{7}, \frac{2}{3}, \frac{5}{8}, \frac{3}{5}, \frac{9}{16}, \frac{8}{15}, \frac{1}{2} \tag{82}$$

I myself a complete profane in music, though my granddaughter teaches piano at the Karol Szymanowski Academy of Music in Poland. I don't know by what crazy reason I wrote the required topology as below:

$$\{\mathbf{X_M}, \mathbf{Y_F}\}_+^\times = \begin{Bmatrix} 11585435253981, \\ 169654738516152 \end{Bmatrix}_+^\times \tag{83}$$

(The only hint was that Mongolian national musical instrument has two strings, named as male and female ones.)
The Pythagoras-Plato 4-World is pentasymmetric $\tag{84}$

$$\sqrt[5]{\begin{Bmatrix} \pi \dfrac{\Phi^3 \sqrt{i_1 i_2}}{\text{Spin}} \cdot \\ \cdot \left\{(3+1)\dim_\Phi \Phi^3 \sqrt{i_1 i_2}\right\} \end{Bmatrix} \cdot \begin{array}{|c|c|c|c|}\hline C & F & S & V \\\hline 5 & 10 & 32 & 5 \\\hline 8 & 24 & 32 & 16 \\\hline 16 & 32 & 24 & 8 \\\hline 24 & 96 & 96 & 24 \\\hline 120 & 720 & 1200 & 600 \\\hline 600 & 1200 & 720 & 120 \\\hline\end{array}_+^\times}$$

$$= \frac{5650300000}{9}.$$

Whatsoever, the ideal system of **Harmonices Mundi** asks to be represented by the following tri-unity configuration that yields, necessarily, frequency related physics, as it should be so:

$$\begin{Bmatrix} \pi \dfrac{\Phi^3 \sqrt{i_1 i_2}}{\text{Spin}} \cdot \\ \cdot \left\{(3+1)\dim_\Phi \Phi^3 \sqrt{i_1 i_2}\right\} \end{Bmatrix} \cdot \begin{array}{|c|c|c|c|}\hline C & F & S & V \\\hline 5 & 10 & 32 & 5 \\\hline 8 & 24 & 32 & 16 \\\hline 16 & 32 & 24 & 8 \\\hline 24 & 96 & 96 & 24 \\\hline 120 & 720 & 1200 & 600 \\\hline 600 & 1200 & 720 & 120 \\\hline\end{array}_+^\times \cdot$$

$$\cdot \{\mathbf{X_M}, \mathbf{Y_F}\}_+^\times = \frac{10^{89.99999\ldots}}{\{\omega = \Phi^2 + 1\}}. \tag{85}$$

As foresaw Karl Gauss, God's sole passtime entertainment is playing in arithmetic which is the only science absolutely provable or refutable, for example,

$$Exp\left\{\frac{\mathbf{360}}{\omega}\right\} = \{\mathbf{1, 2, 3, 4, 5, 6, 7, 8, 9}\}_+^\times \cdot 10^{35.999999\ldots} \tag{86}$$

As for the post-Dirac effect in the existing physics, it is not any kind of anomaly, but the universally lubricating constant of harmony that, notably, makes the Universe look so beautiful and sound so musical:

$$\{\mathbf{1865921} \Rightarrow a_e\}^{\pi e} = \{\mathbf{X_M}, \mathbf{Y_F}\}_+^\times \cdot 10^{12.0000\ldots}. \tag{87}$$

The Eros of Plato symbolizes the harmonizing force of the Cosmos. The highest state of universal harmony is achieved in the dualism of life. Copulation of dualities is impossible without some fertile lubrication substances to ease energy-entropy frictions. That's why the X operator bifurcates giving birth to the two harmonizing factors, or else, lubricating substances

$$X^{\Phi \pi e} X \leftrightarrow \alpha a_e. \tag{88}$$

The constitution of human genetics is as greatly accurate and beautiful mathematically as

$$\frac{\left\{\overset{\text{\tiny♛}}{☺}\left\{\mathbf{Cr}_+^\times \cdot \mathbf{22727}\right\}\right\}}{\alpha a_e} = \mathbf{438} \cdot 10^{33.999999\ldots} \tag{89}$$

It is a consequence, again, of the fundamental theorem of mathematical harmony

$$\mathbf{438} = \sqrt[\Phi \pi e]{\mathbf{315341} \cdot 10^{31}}. \tag{90}$$

The Darwinian species **Homo Sapiens** has now become the real **Homo Sapiens Sapiens**, that is, those who achieved absolute scientific knowledge about the Universe. Continual existence of the human civilization owes to the perpetual potence for lovemaking which is, necessarily, a universal energy act of harmony as follows below:

$$\frac{\left\{\overset{\text{\tiny♛}}{☺}\left\{\mathbf{Cr}_+^\times \cdot \mathbf{22727}\right\}\right\}}{\alpha a_e} \cdot \mathbf{U_E} = \mathbf{99} \cdot 10^{43.99999\ldots}. \tag{91}$$

The **HI 99** in the Mongolian metaphysics is the number of all the Tngries of two wings. The proper names of the rightwing 55 and leftwing 44 Tngries are known in the traditional folklore. Tngries are responsible before the Cosmic Intelligence (we have been trying to describe) for keeping everything in the Solar system and, in particular, on the Earth planet, conducive to and compatible with the Laws of Nature established once and forever in cosmogony nd cosmology. If something goes wrong on the Globe it is punishment for any improper human conduct with respect to the life existence. The unified theory will, any doubt, serve to the cause of further intellectual, cultural and technological growth of civilization. But, we, the Mongolian nomads, remain to hope for even more humanitarian impact of the final scientific knowledge we have got.