

Research Article

Cosmical Imaginary and Gravitational Particles and Their Scientific Analytical Calculuses

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Abstract

The linear and spatial and temporal motions can all twin rotation and vibration. The entanglement of the former twins relies on the latter two, and entangles fundamental forces in sequence. The latter two entangle imaginary and gravitational particles sequentially, the comprehensive dimensionalities of their entanglements reveal various physical essences, hence it creates the resplendent world of matter and energy. These entanglements bring about the expansion of Special Relativity to General Relativity. These particles possess the differential and dimensional variabilities, which require to manipulate the differential variations (namely differential increment and domain) to maximally optimize differentiation, and govern the dimensional variations (videlicet dimensional exchange and involution) to timely replace integration, and eradicate the approximate estimation of limit theory to completely exterminate errors. The scientific analytical calculus emerges as these requirements, its integration embraces the extensive operations (e.g., summation, factorial, function, wavelet, etc.). The equations of these particles are confirmed by the theoretical inferences and experimental data and results. The evolutionary Euler's formula shines upon particle and wave as well as dimensionality of particle, the subtraction and addition of the analytical formula of quadratic difference in Einstein's linear motional corrective equation (namely high and low frequencies of wavelet) reveal rotation and vibration, the orbital radii and motions of the Earth and electron glimpse the gravitational constant, all of them demystify these particles from different perspectives.

Keywords

Scientific Analytical Calculus, Gravitational Field of Wavelet, Entanglement of Spacetime, Motional Induction, Involution and Evolution of Cosmical Spacetime

1. Introduction

The mysterious gravitons without trace and the controversy over the dimension of time as well as the anxiety of grand unitive theory bring about the integration of Special and General Relativity into the magical gravitation with the integrals of spacetime and knowledge rather than mediative mesons. [1, 3, 17]

The universe subversively makes use of three

mathematical pairs (wavelets and imaginary numbers, calculuses and natural numbers, logarithms and prime numbers) to construct the world of particles, the partial deconstructions are manipulated by nuclear fission and black hole. [1, 5, 6, 17]

The twins of motion can be mapped to the high and low frequencies of wavelet, and the conversion of space and

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frequency domains facilitates that the gravitational field accepts particle and extends field, but there's no deconstruction owing to the multiplicative product of twins. Because of the logarithmic cardinality of the prime number, the distributions of galaxies and primes are similar, which ensures that the universe is orderly. The imaginary number and the constant mathematical product facilitate the creation of elementary particles. The microscopic and macroscopic particles can't be built without calculus, but their requirements are the elimination of the approximate estimation of limit theory, and aren't merely about summation, thus the scientific analytical calculus is created.

Everyone lives happily in the metaverse videlicet the world of meta-ons, and eagerly aspires that the intelligent products (e.g., communication, etc.) of meta-ons will benefit the world, humankind will no longer suffer from the disaster of scarce energy. The ark of meta-ons must be able to shuttle through the universe. The weapon of meta-ons doesn't harm the innocent, must conquer nuclear arsenal so as to save humanity from nuclear war. [1, 4, 5, 17]

2. Imaginary Particles

According to Leonhard Euler's formula, the involutory and evolutionary equations of cosmical spacetime are deduced: [22, 19, 10, 9]

Set: independent variable: x ; logarithmic cardinality: $e(x) = (1 \pm 1/x)^{(x-2)}$; ($x > 2$); imaginary symbol: i ;

Then:

$$e(x)^{(i*x)} = \cos(x) \pm i*\sin(x); \quad (1)$$

In the two equations, the involution is subtraction while the evolution is addition, the logarithmic cardinality reveals the variability and irreducibility as prime number. In the second formula, the both sides of equation intimate particle and wave. Then the dimension of particle is approximately $f(\ln(x)/\ln(e(x)), \Delta x)$, the Δx is the instrumental variable. Because the cosmical dimensionalities are largely identical with only minor differences, such as, $\lg(10)=1$, it implies that the first ten natural numbers are one-dimensional, the rests may be deduced by analogy.

In accordance with Einstein's Relativity, the space and time of the universe curl inward and outward into the motional meta-ons and evolutionary spacetime, the linear motions of meta-ons curl toward involution and evolution into the rotation and vibration of the cosmical elementary particles. The evolutionary spacetime can make the cosmical expansive space and time no longer come out of nothing, but can also let them vastly different everywhere in the universe. [21, 1-3]

2.1. Motion

On the basis of Einstein's Special Relativity, the equations

of cosmical motion are derived: [1-3, 6, 9, 10]

Set: space: S ; time: T ; linear motion and its rotation and vibration: V, V_r, V_v ; velocity of light: C ; $f(X)$ represents recursive function, $X = S, T, V$; the current recursive factor namely coefficient of motional correction: $B = B_r * B_v$, $B_r = (1 - f(V)/C)^{0.5}$, $B_v = (1 + f(V)/C)^{0.5}$; recursive count: N ; the symmetrical origin of imaginary particles: $V_0 = ((i*C)^2 * f(T)/f(S))/2$; imaginary symbol: i ;

Then:

$$f(V_x) = B_x * f(V)^{0.5}; \quad x = r, v; \quad (2)$$

$$f(V) = f(V_r) * f(V_v); \quad (3)$$

$$f(S) \approx f(T) * f(V); \quad f(V) \neq B; \quad (4)$$

$$f(S) = f(T) * f(V) / [B^2]; \quad N > 0; \quad (5)$$

$$\text{When } \lim f(S) = 0, \text{ Get: } f(V) \approx \pm V_0 + V_0; \quad (6)$$

$$\text{When } \lim f(S) = \infty, \text{ Get: } f(V) \approx \pm C; \quad (7)$$

Thus, the equations (6) (7) support that the universe can cultivate the cosmical elves (e.g., imaginary and real particles, etc.). The growths and developments of cosmical spacetime are particularly different, only then there's motion, and the imaginary particles can acceleratively advance into cosmical real particles.

The equations (2) (3) stimulate and encourage that motion twins rotation and vibration to nurture the motional wave and particle (spinning because of the different twins) in its vertical direction, and generate the material mass (illuminating the recursion of twins) of energy and force, in order to innovate the resplendent world of matter and energy.

The equation (3) is also the natural mechanisms of dimensional and motional mutations, it's essential to construct three-dimensional material matter. The dimensional mutation can be simplified as the variable dimension. The real particles with the different initial velocities due to distinct imaginary particles, are recursed in the orthogonal various directions of trembling motion caused by the symmetrical defects of twins, their motional twins reproduce separately or collectively in their respective vertical directions, so repeatedly until which ultimately evolve into super dimensional particles.

The imaginary particles undergo the multiple dimensional mutations to evolve into the natural and intelligent gravitational particles that can beautify the universe, the legend of the latter may be the controversial telepathy, along with the anthropic knowledge, which intimate that the earthly humankind is destined to undertake the cosmical intelligent evolution. [7, 12, 9, 10]

2.2. Spacetime

In the light of space contraction and time dilatation and

imaginary theory, the spacetime equations of the universe are deduced: [1-3, 6, 9, 10]

Set: temporal and spatial motions and their rotation and vibration: V_t, V_s, V_{ir}, V_{iv} ; other variables (B, C, i) are the same as above;

Then:

$$f(S) * B; f(T) / B; \quad (8)$$

$$f(V_s)^2 + f(V_t)^2 \leq C^2; \quad (9)$$

$$\text{Get: } f(S) * f(T) = f(i); (\text{or } S*T=\pm 1) \quad (10)$$

$$f(V_{ir}) = f(i) * (f(V_s) - i * f(V_t)); \quad (11)$$

$$f(V_{iv}) = f(i) * (f(V_s) + i * f(V_t)); \quad (12)$$

When $f(i) = 1$, the $f(V_{ir})$ and $f(V_{iv})$ are the rotation and vibration of spatial motion respectively;

When $f(i) = i$, the $f(V_{ir})$ and $f(V_{iv})$ are the vibration and rotation of temporal motion respectively;

The equation (12) shines upon the spatial and temporal entanglements of meta-ons, if time dilatates, then space contracts, and vice versa. When the independent variable of equation (9) approaches its limit, the space and time exchange and the transboundary mutation of dimension occurs. These are also called the relativistic effect of the spatial and temporal motions.

The last four equations endow the dimensionless imaginary particles with the ability to create matter. The motion arises from the cosmical spacetime, and linear

velocity is limited by space. The limit of velocity makes the motion twins rotation and vibration (videlicet the hand holding in dance), brings about the spatial and temporal entanglements of motion. The upper limit of velocity is decreased to the static velocity by taking the eighth arithmetic square root, and the count of the root is the dimension of the imaginary and real spacetime. The imaginary particles dance at the static velocity, the dance is very similar to Brownian motion. Through the mutual dance (elegantly known as the collective induction namely corotation and resonance), the imaginary particles can collide into the dimensional meta-ons, the universe is illuminated with ease. Therefore, the universe is composed of the countless meta-ons, which can also explain the cosmical expansion.

The meta-ons, their time and space can respectively contract and dilatate to the extreme (videlicet the Planck's admeasurement), are the cosmical components as well, are vulgarly known as the dark matter and dark energy. The invisible and visible matters induct collectively to form various fields of wavelets, these specters grow into the elementary particles of the universe.

The comprehensive dimensionalities of spacetime reveal various physical essences. According to the reverse deduction of the Planck's admeasurement and cosmical age (13.8 billion light years), the material mass is approximately composed of one-dimensional real time and three-dimensional imaginary spacetime, which can deduce the force and energy and magnetism from it, the dimension table 1 is obtained as follows.

Table 1. Dimension.

name	real time	real space	imaginary time	imaginary space
mass	1	0	3	3
force	0	0	2	2
energy	1	0	1	1
magnetism	1	0	0	0

Thereby, it can calculate that the count of elementary particles (61) is equal to the multiplicative product of four motional directions of spacetime and four dimensions (namely one real dimension and three imaginary dimensions) as well as four temporal motions (due to the fact that three-dimensional space doesn't simultaneously contract) and minus three.

It can also compute the mass (M_m) and wavelength (L_m) and linear velocity (V_m) of meta-ons as well as the count (C_m) of meta-ons in the electron. The static linear velocity of the electrons does it for meta-ons.

Set: Planck's constant and length and time: H, S, T ; mass and energy of electron: M_e, E_e ; velocity of light: C ; [9, 10]

Then:

$$M_m = S^3 * T^4 * i^6 = - 2.008 \times 10^{-68} \text{ (kg)}; \quad (13)$$

$$L_m = H/(M_m * C) = - 1.1 * 10^{26} \text{ (m)}; \quad (14)$$

$$V_m = H/(4 * \pi) / L_m / M_e = 5 * 10^{-31} \text{ (m/s)}; \quad (15)$$

$$C_m = E_e / (S^1 * T^2) = 4.5 * 10^{38}; \quad (16)$$

In accordance with equation (14), if the summation of positive and negative spacetime isn't zero, then the cosmical spacetime is also created out of nothing, and many Planck constants or physical units conceal system biases. The super wavelength makes gravitational wave ubiquitous, and its manifestation merely waits for grand measurement.

According to equations (10) (14) (16), each elementary particle encompasses the massive meta-ons, which serves as the dance platform and experimental field of meta-ons for probability and entropic change. The field embraces infinite wisdoms and potentials. These facilitate creators to recreate particles, and are convenient that the anthropic knowledge designs dance to reduce the entropy inside particles and fill them with intelligence, and accelerate the cosmical evolution, their futures are naturally limitless such as artificial galaxy and so on. It may be the root of wisdom that the universe gave birth to human beings.

In accordance with equations (3) (11) (12), the linear and temporal and spatial motions and directions of two sets of experimental meta-ons are mapped to the high and low frequencies of wavelet and imaginary numbers respectively. The particles with the matching frequency are added to make them rotate and vibrate collectively, and then the two sets dance mutually. The particles of the same direction are synthesized to the completely new, on the contrary, they are analyzed to decrease dimensions, it's the basic principle of the collider of meta-ons. The artificial match undoubtedly accelerates the evolution of particle, the decay of proton isn't groundless. With the natural and intelligent evolution of imaginary and real particles, the anthropic civilization can reincarnate as well. [1, 4, 5, 17]

3. Gravitational Particles

The spacetime and motion of the universe curl toward involution and evolution into the world of matter and energy, the resultant force of the curling interactions shines upon universal gravitation. [8-10, 12, 13]

3.1. Theory

The motion-ons and their twins of rotation-ons and vibration-ons are also simply referred to as the motion and rotation and vibration respectively, are elegantly called the linear and temporal and spatial motions respectively because the latter two depend on the entanglement of spacetime, all of them fully contain the correlative macroscopic physical properties (e.g., magnetism, force, field, etc.).

Motion-ons require external forces to change, their velocities (V) are positively and inversely correlated with the spatial (ΔS) and temporal (ΔT) differences or changes respectively.

Then:

$$V = f (\Delta S / \Delta T); \quad (17)$$

Rotation-ons can produce rotational force field namely nuclear magnetic field, their rotational forces (F_r) are positively and inversely correlated with the velocities of rotation-ons (R) and motion-ons (V) respectively. The R is evolved from the temporal motion (V_t) of equation (3). The rotation and its force are also known as spin and strong force respectively.

Then:

$$F_r = f (R/V); \quad (18)$$

Rotation-ons collectively induct to generate vibration-ons, can also accept and generate rotation-ons, mutually develop and evolve into quark and photon and atom and galaxy and black hole and so on. Hence the rotation-ons (R) and vibration-ons (V) have the recursive relationship of general integral and variable differential with each other. [15, 20, 7, 8]

Then:

$$V = f (\int d_R); \quad (19)$$

$$V = f (V); \text{ (finite or infinite recursion)} \quad (20)$$

Vibration-ons are composed of motion-ons and rotation-ons, can produce vibrational force field videlicet electromagnetic field, their vibrational forces (F_v) are positively and inversely correlated with the velocities of vibration-ons (L or D) and motion-ons (V) respectively. The L or D is the wavelength or semidiameter of vibration-ons respectively, and is evolved from the spatial motion (V_s) of equation (3).

Then:

$$F_v = f (L/V) = f (D/V); \quad (21)$$

Gravitational particles are composed of motion-ons and rotation-ons and vibration-ons, can produce gravitational field, their gravitational forces (F_g) equate the product of rotational (F_r) and vibrational (F_v) forces. Therefore the gravitation comes from the collective induction of motional namely gravitational wave. [7, 8]

Then:

$$F = f (L \cdot R / V^2) = f (D \cdot R / V^2); \quad (22)$$

$$F_i = f (F_i); (F_i = F_r, F_v, F_g); \quad (23)$$

3.2. Formula

The equation (22) is deduced by the mechanisms of dimensional and motional mutations in equation (3), namely Special Relativity is expanded into General Relativity. The general gravitation must also be divided by the coefficient (B) of motional correction and the square of the distance (d) between two objects, and then be multiplied by the

dimensionality (di) of the object and the relevant physical quantity (Fk), which is the rotational count ($r=1, 0.5$) and electromagnetic charge ($v=e$) and material mass ($g=m$) respectively. If the semidiameter of two objects are the D1 and D2, then their distance is $(D1+D2+d)/(D1+D2)$.

Then:

$$F_i = F_k \cdot d_i / B / (d^2); (F_i = F_r, F_v, F_g; F_k = r, v, g); \quad (24)$$

The acceleration of the general gravitation of two objects at zero distance is equal to the multiplicative product of their dimensionality and the rotational and vibrational velocities, and then divided by the square of their linear velocity. The strong and electromagnetic and gravitational forces are all the relativistic effect of the spatial and temporal motions at different linear velocities, while weak force is simply the resultant force of three strong forces.

3.3. Proof

Set: general gravitation: F; material mass: m; gravitational constant: g;

Then:

$$F = m \cdot g = f(m); \text{ Get: } m = f(F); \quad (25)$$

Again: the imaginary dimensional space (L_o) and energy (E_o) of gravitational particle transform into the real dimensional space (L) and energy (E) of gravitational field respectively, according to the mechanism of imaginary and real spatial mutations in equation (6), the equation of spatial transformation is derived. [9, 10]

Then:

$$f(L_o \cdot L) = \pm 1; \quad (26)$$

Set: rotational velocity: R; frequency: F; Planck's constant: H; velocity of light: C;

Then:

$$E_o = H \cdot F \cdot R = H \cdot C \cdot R / L_o = f(R/L_o) = f(R \cdot L); \quad (27)$$

$$E_o = E = f(m \cdot V^2); \text{ Get: } m = f(E_o/V^2) = f(L \cdot R/V^2); \quad (28)$$

Substitute (25), Get: $F = f(L \cdot R/V^2)$; The proof is complete.

3.4. Instance

Visible photons: the velocities of vibration-ons and rotation-ons and motion-ons: (wavelength) $10^{-7} \sim 10^{-6}$, 1, $3 \cdot 10^8$ respectively;

Substitute (22), Get: $F_p = (10^{-7} \sim 10^{-6}) \cdot 1 / (3 \cdot 10^8)^2 = 0.11 \cdot 10^{-23} \sim 10^{-22}$;

The beautiful earth: the velocities of vibration-ons and rotation-ons and motion-ons: (semidiameter of pole)

$6.356 \cdot 10^6$, 465, $3 \cdot 10^4$ respectively; dimensionality: 3;

Substitute (22), Get: $g = 3 \cdot (6.356 \cdot 10^6) \cdot 465 / (3 \cdot 10^4)^2 = 9.85$;

Thus it's consistent with the gravitational acceleration (9.83).

3.5. Experiment

The photoelectric effect of sodium generated by green light. The frequency (f): $5.5 \cdot 10^{14}$; velocity namely wavelength (c/f) of vibration-ons: $3 \cdot 10^8 / 5.5 \cdot 10^{14}$;

Substitute (22), Get: $F_p = 1 / (5.5 \cdot 3) \cdot 10^{-22}$;

Electrons: the velocities of vibration-ons and rotation-ons and motion-ons: (wavelength) L_e , 0.5, $3 \cdot 10^6$ respectively;

Substitute (22), Get: $L_e = F_p \cdot V^2 / R = 2 / (5.5 \cdot 3) \cdot 10^{-22} \cdot (3 \cdot 10^6)^2 = 1.09 \cdot 10^{-10}$;

Thus it's consistent with experimental data, which confirms the gravitational equations.

3.6. Induction

Natural gravitation relies on the entanglement of spacetime. The particles with the same frequency as its field approach it, which can fluctuate the frequency of field because of the changes of energy (videlicet time dilatation), and generate force to corotation and resonance owing to space contraction. The field of wavelet can dilatate and contract freely due to the variability of spacetime, it's motional induction. Intelligent gravitation is no exception, because the anthropic knowledge is also energy. The mediative mesons, the microscopic particles with the deficient frequency can use them to share frequency and force, while the opposite is unnecessary. [21, 1-3]

4. General Integral and Variable Differential

On the basis of equation (3), the twins of imaginary or real numbers, for example, the infinitesimal (r) and infinity (v), their products are normal or imaginary numbers (z), which creates the general integral and variable differential. Their operational rules are completely different from the powerless calculus due to non-integrability and non-differentiability, because those numbers originate from the imaginary and infinite boundless worlds, and are transboundary and correlative and discrete and recursive, are calculated separately without solution. Also because the differential is dynamically calculated, the differential increment and domain are variable and the latter overlaps to prevent information omission, the integral involves the extensive operations (e.g., summation, factorial, function, wavelet, etc.), hence the dreams of infinitesimal and infinite paradises can be pursued progressively. [11, 13, 18, 20]

Order: $x = f(i)/r$; $y = v \cdot i \cdot f(i)$; (It's the interchange of independent variables, when there's the dimensional

mutation).

Then:

$$\int f(z) dz = \iint f(y)/f(x) dx dy; \quad (29)$$

$$t = f(t); (t = \int, dx, dy, dz); \quad (30)$$

Among them, the $\int = f(!)$ and $\sum = f(\Sigma)$ represent factorial and summation respectively, the rest may be deduced by analogy. For instance, $x! \approx \int f(x) dx$, $\int = f(!)$, $dx = f(dx)$, the right sides of the first equation are variables, the three equations are collectively referred to as the general factorial based on the recursive general integral, so as to reclaim the fractional and imaginary world, thus the independent variable and its differential increment are arbitrary numbers.

Just setting threshold and boundary and establishing relativity and functional relationship and so on, the equation (29) can have solution, which can pioneer the motion and its twins and galaxy and black hole and singularity and prime number, and open up human intelligence. The mathematical and physical relativities comprise the difference and denominator and cardinality and so on (and their various combinations), which unitedly manage the aforementioned wilderness. The logarithmic independent variable and denominator tend towards zero to breed respectively the transboundary dimensional mutation and black hole.

The equation (26) intimate that the particle and its wave or field and their diameters are also interdependent and the transboundary variable dimension of the dimensional and complex and imaginary worlds, cast cosmical spacetime and imaginary particle, otherwise the normal and expansive spaces of the universe come out of nothing. The mysteries about extremely small and excessively large particles can be revealed through the branch of discipline, videlicet the cosmical specters are explored and identified in the light of the intelligent information of motional wave, just like the telepathy with latent bloodline, if the alive knowledge such as temporal vitality and so on serves as the interactive pathy of humanity and knowledge (inducting simultaneously between brains with biological timer), then the endless tears of miserable mother are mailed to distant student by it. It's just as that all intelligent creatures based on radium in the universe can predict the worst time of life.

The variable differential is used to correct the counter of the aforementioned prime numbers. The equation (31) considers the dimensionality ($\ln(x)/\ln(e(x))$) and variability ($e(x)$) and irreducibility (-2) of prime numbers. In accordance with the prime dimensions, the prime domain is divided into the countless differential domains, and the differential increment of independent variable is 0.5 or another number instead of 1, all of them are to eliminate errors. It's detailed in the subsequent text and Table 2.

The general integral and the variable differential are simply referred to as the scientific analytical calculus, integrate the analytical number theory and the functional and complex

functions and the variable and fractional and infinitesimal calculus and the differential geometry as well as the curvature analytics and so on, in order to extend its differential and integral calculus to many fields of mathematics and physics, consequently the analytical calculus is increasingly perfect and unitive. However their original ecologies are still the special calculus. Wherein, the fractional calculus serves for the non-orthogonal fluctuative various data. [14-16, 20]

On the basis of the equation (26) and Euler formula ($e^{i*x} = \cos(x) + i*\sin(x)$), the differential increment and domain of variable differential are exactly suitable for wavelet with the local detail of signal, accordingly the analytical calculus can integrate the physical signal analysis (namely curvature analytics), so as to extract valuable information. For example, in solving the relativistic effect of the spatial and temporal motions in the universe, it can retrace dimensional mutations and timely interchange independent variables. The traditional calculus is only the raw data (or zero-order low frequency) of wavelet, abandons all high and low frequencies of wavelet. And its calculation is actually the approximate statistical average in disguise, requires harshly the upper and lower symmetry of average point in differential increment to achieve accuracy. For instance, the analytical calculus of one-dimensional haar wavelet is $f(x) = \int [1, -1] (1/2^{0.5}) f(x) dx$, $\int = f(\Sigma)$, $dx = f(dx)$.

Then the differential is functional wavelet, the differentiability is reined by the high-order high frequency of wavelet, it can eliminate the approximate estimation of limit theory. In the light of the zero tree of wavelet (videlicet curve inflection) to actualize the optimal differentiation and eradicate the defects of the Riemann and Lebesgue integrals that are respectively adapted to high and low frequencies, which can arbitrarily improve accuracy with trade-off error, abruptly reduce infinite division, greatly expand differential increment, sharply decrease iteration and calculation.

If the wavelets are utilized to optimize the differential and dimensional variabilities, then the analysis and synthesis as well as curve inflection manipulate the differential variations (namely differential increment and domain), while the curvature and function govern the dimensional variations. If the imaginary particles are represented as $\iint f(x, y) dx dy$ or $\iint f(y, x) dy dx$ or $\int f(x, f(x)) dx$ or $\int f(f(y), y) dy$, then they require to swap or curl dimensions, and are inseparable from the imaginary number (i). The functions of the latter two catch sight of implicit dimensions, just like the two-dimensional image getting the glimpse of three dimensions. [14, 16, 20, 17]

The existant and corrective equations of the aforesaid prime counter are as follows.

Set: positive integer: x ; prime count: $f(x)$; prime logarithmic cardinality: $e(x)$;

Then:

$$e(x) = (1+1/x)^{(x-2)}; (x > 2); \quad (31)$$

$$f(x) = (x)/(\ln(x)/\ln(e(x))-1); \quad (32)$$

Order: $t = e(x)$; $x \neq t$; natural logarithmic cardinality: $e = \lim (1+1/x)^x$;

Get: $f(x) = \iint \ln(t)/\ln(x) d_t d_x = \sum \sum (\ln(t)/\ln(x))$;

The existant equation: $Li(x) = \int 1.0/\ln(x) d_x = \sum (1.0/\ln(x))$.

The existant counter without scientific analytical calculus collapses as the prime increases, owing to the logarithmic cardinality of natural rather than prime number. The corrective counter utilizes relational relativity and variable dimension, its accuracy is crazily real, which highlight the attractive glamour of the discipline.

Table 2. The Error of Prime Count.

n	$\Delta Li(x)$	$\Delta f(x)$	n	$\Delta Li(x)$	$\Delta f(x)$	n	$\Delta Li(x)$	$\Delta f(x)$
1	2	0	9	1701	0	17	7956589	0
2	5	0	10	3104	0	18	21949555	0
3	10	0	11	11588	0	19	99877775	0
4	17	0	12	38263	0	20	222744644	0
5	38	0	13	108971	0	21	597394254	0
6	130	0	14	314890	0	22	1932355208	0
7	339	0	15	1052619	0			
8	754	0	16	3214632	0			

Annotation: $x = 10^n$; $\Delta Li(x) = Li(x) - \pi(x)$; $\Delta f(x) = f(x) - \pi(x)$.

5. Summary

The simple equations of cosmical elves successfully deduce that the material or intelligent gravitation is the masterpiece of motional wave. Among them, the imaginary number (i) is the heavenly gate that passes through the spatial and temporal dimensions, is also the savior of discontinuous natural matter and its theory.

The gravitational and imaginary particles will conquer the current physical chaos, and cure the correlative anxieties, the mechanical world will be unitive incidentally. These cosmical elves will benefit and shine brightly to the world and physical paradise, assist the advance and evolution of humankind.

The equation (3) enjoys variable dimension along with geometry, wherein the transboundary is undoubtedly the dimensional mutation, the inspiration lurks deeply in the perpendicular line from vertex to bottom of right triangle. All of equations come from the blood and sweat dripped silently by the independent scientific researcher who worries about abnormal death in the purgatory of thought experiment. The relevant data outside gravitational field are certainly required to shore up.

The equation (22) decrease dimensionality to leave merely the dimension of time, namely everyone shares the happiness of cosmical existence and is the temporal pride and has the finite lifetime. But the anthropic knowledge and its creators required by the intelligent evolution of the universe can all be immortal.

Similarly, the equation (28) confirm that the material mass is dependent on the temporal machine videlicet the spacetime integral of the perpendicular to linear motion, therefore the natural gravitation only requires motional induction instead of mediative mesons, but the intelligent gravitation relies on the intellectual integral that consolidates the foundation of the interactive pathy of humanity and knowledge.

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