Abstract

The death of cancer cells under zero gravity or simulated zero gravity has an unknown cause. A prior theory of gravity by fractional, reversible fissing of matter and fusing of space to target is presented for explaining this mystery of gravitational killing of cancer cells. With this new theory a new math of divergent differentiations and divergent integrations are outlined to explain mysteries. By the mechanism given the variation in source gravity as computed by the new math can thereby explain effects on biology as the biology and chemistry have divergent differentiations and divergent integrations, which couple source of gravities and couple changing gravities to surrounding spaces and targets in surrounding spaces. Greater effects of gravities in nano-scales than molecular scales are reasoned as nano-sizes have mass effects and greater collectivity relative to molecular scales. The mechanism also postulates superluminosity of rare with slowing to luminous with denseness (space reversal) for explaining inertia, denseness and back and forth time reversal. The loss of inertia due to space reversal is reasoned! Mass to energy and vice versa dynamics are involved relativistically. By such new mechanics there are differences in denseness as the superlumes fiss to rare so surrounding rare can couple and the superluminous rare concentrates to slow so as to couple to dense. There are limits of such superluminosity as by the vast distances and the vast, composite, dense spaces of matter and the slowness (inertia). These new mechanics of composite matter/space manifest group dispersion (by new divergent calculus) as provided by hidden mechanics as by self-interacting self-deforming conformations to explain observable phase dispersed (older calculus). The observables are manifested by phase dispersions of matter and space as by new divergent calculus via constructive self interactions. The new math is contrasted with the Newtonian integrals and derivatives, which are more finite in actions and consequences whereas the divergent integrals and divergent differentiations are more $\infty$ in actions and consequences. If dynamic $\infty$ and count $\infty$, then the counting and mechanics can be as demonstrated here by many $\infty(s)$ or counter $\infty(s)$.

Introduction

Scientists [1] recently reported the alteration of growth habitat of cancer cells and tumors under zero gravity conditions. Self Deform and self conform, the greater the difference then the stronger the coupling. The mechanism of such altered habitat of tumors and cancer cells is unknown. Scientists from different countries are currently actively involved in study of cancer cell lines aboard International Space Station [2] and Chinese Space Station [3]. Prior work [4] has proposed the origin of gravity from nuclei fractionally, reversibly fissing and fusing superluminously. In this work, implications and new math of such hidden superluminous
mechanics are given for explaining this effect of gravitational change on cancer cells with causing death of cancer in zero gravity due to nonzero nuclear magnetic moments of uncommon, nonprimordial stable isotopes composing biomolecules in cancer relative to more common primordial isotopes composing biomolecules of normal cells. Older math does not compute these new gravitational dynamics as they integrate and differentiate over finite space at finite rates. The author thereby introduces new math of divergent integrations and divergent differentiations for integrating over infinities as arguments diminish toward infinitudes for manifesting finite quantities from infinites and infinitudes. This work [4] has further reasoned the spatial nature of matter and energy and the material nature of space and motion such that space can be transformed and transmuted to matter and matter can be transformed and transmuted to space (superluminously, reversibly and irreversibly). New math and implications of space being matter and matter being space with hidden superluminous motions are given to compute gravitational effects on changing matter to space and space to matter. By such theory and new math, the cancer cell death under zero gravity is reasoned and computed. On the basis of such new theory and math explanations of zero gravity killing cancer, lightning genesis and anomalous muon 2g are explained.

The older mathematical computations are over dx, dy, dz and dt finite, but the introduced mechanics here manifest over universe and not only in the various systems; so to count the hidden fissaed and fused infinitesimals, superluminous spaces in and about the system superluminously one must count to infinities and infinitesimals. So gravity does not affect the proteins and universe does not affect as the gravity of earth by the old physics and math as the earth’s gravity has a curvature too small for huge curvature of protein. The gravity fragments for yielding bigger curvatures as \( v \leftrightarrow \infty \) so the curvature fissaes down to the radii of nanostructures and molecules and atoms and nuclei and electrons at \( v \leftrightarrow \infty \) and many many spaces so it seems gravity is at \( v=c \) in principle gravity is faster than light!

\[
\int f(\mu) \, d\mu = F(\mu); \ \mu \text{ from } n \text{ to } m
\]
\[
\frac{\partial F(\mu)}{\partial \mu} = f(\mu); \ \text{where } \partial \mu \rightarrow 0
\]

Within this theory [4], it is reasoned force (spatial changes) is motion (changes of change of space) and motion is force. By this theory, the transportations (motions), transformations (chemical reactions) and transmutations (nuclear reactions) are reasoned by transition states of particles as dense altered space-time relativistically transmuting to rarer space and time by fractional, reversible fissaing and then refusing at new position for motion in macrospace (C Frame); or refusing internal to macrospace of C Frame to different motions and symmetries (in L frames) for chemical changes and transformations; or refusing internally to the motions in L frames at different spaces and times of electrons (LS Frames) and/or nuclei (NS Frames) and/or hadrons (RS Frames) and/or quarks (QS Frames) for nuclear changes and reactions. Such transition states have been reasoned by activation by the surroundings on such systems by superluminous, infinitesimal thermal spaces and/or gravitational spaces of surroundings of C Frame. The surroundings across the breath of universe superluminously converge onto the
system by this new mechanics for activating the fractional, reversible fissing of the system with explaining the changing state of cells as they transition from earth’s surface to orbits from earth and outer space. Math and implications of such universal agitations on systems require spaces and thermal spaces which vary locally (depending on cells located on earth’s surface or earth’s outer atmosphere) and also affected at infinite distances across the universe; so counting such infinite spaces of infinitesimal magnitudes is beyond the ability of current mathematics of Newton. Newtonian calculus cannot not compute this. The divergent integrations and differentiations of thermal and gravitational spaces across the universe into the system (cancer cells and normal cells on earth or in earth’s orbit) can compute this.

Many consequences are reasoned by such reversible fractional fissing and fusing of nuclei and electrons and quarks and leptons in general across the universe. By considering such the new effects of gravity and motions on biology is reasoned. The fractional divergent oscillations of the universe activate and agitate proteins to fractionally reversibly fiss and fuse to induce the 3Ts: transportation, transformations and transmutations. These systems may be reasoned to be made of subsystems and the agitation of the Universe by the divergent integrations and divergent differentiations can induce subsystems to become systems or gas to be as solid and vice versa solid to be as gas. The surrounding Universe has stronger effects nearby fields on the systems as more strongly inducing fissing and fusing in the system than just distant thermal space from across broad universe. The nearby objects fractionally fiss and fuse to impose complex heat in form of E and G and B fields and rays and even QF and WF and weak fields and strong fields upon the system. So thermal fields across the universe not only activate the system but near by objects via fissed fields of E, B, G, QF, WF, and SF act on system to move the system, to chemically transform the system, and to transmute the system.

**Quanta and Surrounding Fields Preparing the Quanta**

For such systems (like the biological normal tissue and biological cancerous tissue) as targets, the targets move in the fissed fields of sources (earth) into the surroundings as by fractional, reversible fissing and fusing of the sources (earth) superluminously (as by divergent differentiation of source particles into surrounding space time) to activate the fractional, reversible fissing and fusing of the target (normal cells and cancer cells) in the activating fissed fields of the source (earth) (as by divergent differentiations of the target particles to fields and spaces and the interactions transport, transform and transmute the target (cancerous and normal cellular) fissed fields by the space fields from the source (earth) and the calculations of this by divergent integrations and divergent differentiations as introduced in this work (by the author) for altering the motions of the target (normal and cancer cells) gravitationally from both thermal and gravitational agitations by the sources (earth) for the dynamics. Mathematics of such dynamics involves counting by diverging integrations to fuse thermal and gravitational fields from the sources into the targets to cause diverging derivative of the target to fissed gravity and thermal spaces from the targets (cancer and normal cells). So now the diverging integrals of/ by the author are the mathematical analog of physical diverging derivatives of light from the QF to the edges of Universe. So now the diverging derivatives of/ by the author is mathematical analog of physical diverging integrations from edge of universe to QF as the light converges to QF then the QF fisses to edge of universe [5]. Converging fields and relativistic
fissing of particles as the particles are spaces and the spaces are particles are reasoned; so the converging space disrupts the spatial content composing the particles and the diverging fields manifest the conforming particles to fuse the particles with oscillations of surrounding fields into and out of the particles of the universe to compose the universe and its dynamics as from Big Bang.

\[
\frac{\Delta F(\mu)}{\Delta \mu} = f(\mu); \text{where } \Delta \mu \to \infty
\]

\[
\int f(\mu) \, d\mu = F(\mu), \text{where } \Delta \mu \to \infty
\]

This is universal but one example of this is a quantum field (wavefunction, orbital) and the light or dynamic space that compose and diverges from the wavefunction and converges onto the wavefunction to relativistically fuse and fiss the wavefunction superluminously. As lights diverge from QF the QF fuses. And as lights converge on the QF the QF fisses so as to confine the QF and the lights. Likewise, as the system converges the surroundings of Universe diverges and as the system diverges the surroundings of Universe converges. Newtonian math cannot compute this as it is too local and too slow. But the superluminosity and the infinity of it over space manifest in the counting by divergent integrations and divergent differentiations of/by the author as disclosed in this work can count this hidden noema manifesting the Universe. Moreover, the consequence of more energy with infinitesimal space as discovered by the author requires counting infinitesimals that do not in every way diminish for manifesting many infinities and the counting of many infinities down to infinitesimal infinitudes leads to a necessity for divergent calculus of integrations and differentiations.

**New and Prior Science Missed and Nuclei Couple to Electrons and to Surrounding Universe**

By this theory [4], the changes in the system (target, cancer and normal cells) may be observed as variations in properties chemically, optically, electrically, magnetically, and as here presented biologically. In this work, it is argued that prior science has missed this noema and consequent phenomena due to insistence on luminosity, obedience to Second Law of Thermodynamics, and asymmetry of time with finiteness of system in space. Prior scientists have also assumed isolations of systems from rest of Universe. Prior scientists have assumed isolation of nuclei from dynamics of electronic shells about atoms in molecules. In this work the fractional, reversible fissing and fusing of nuclei as well as electrons are proposed in addition to superluminosity of hidden fields and momentary violations of Second Law of Thermodynamics for reasoning novel effects on systems ranging from motions to biological dynamics to chemical dynamics to nuclear dynamics. The focus on biological materials and size and time scales are emphasized and it is important to consider such biological units are at the boundary of quantum mechanics and classical mechanics as by the nano-size of proteins and nucleic acids for unique blend of classical and quantum mechanics and novel properties for life and alterations of life by altered motions, altered gravity, altered magnetic fields, altered electric fields in addition to conventional altered thermal and chemical surroundings.
Hypothesis

This theory is grounded on the basis of huge energies and fields inside biomolecules. Such huge energies and fields are due to the large strengths of C-H, N-H, O-H, N-C, C-O, C-S, N-P, N-S and N-O chemical bonds with the strong covalent backbone of -C(O)-C-N- in proteins and surrounding nanowater (H$_2$O) for coupling these strong, high energy chemical bonds for many high energy particles on nanoscale with strong exchange and coupling for coupling with the surrounding C Frame thermal energies and gravitational energies and fields in new ways as revealed in this work. Such biological systems of many strong bonds thereby divergently differentiate for strong effects on surroundings and divergently integrate the surroundings very strongly (for strong effects on such systems by surroundings) on basis of Little’s Rules 1, 2 and 3 with non-isolation and manifestation of unusual gravitational effects on the biology. Newtonian mechanics and math do not compute this based on the assumed distinctness of space and matter, finiteness and subluminal motions. The author assumes 4 postulates of matter and space invariance; superluminosity of space; infinites and infinitesimals mechanics and fractional, reversible fissing of matter to space and fractional reversible fusing of space to matter. The divergent integrations compute the breadth of universe fusing into biological systems and the biological system divergently differentiating for fissing into universe to couple to universe for counting novel phenomena in the biological systems not currently counted by conventional Newtonian mathematics. On the basis of such theory and math the cancer cells and normal cells behave differently in gravitational systems close to or far away from gravitational sources. On the basis of such the transportations, transformations and transmutations, C Frame affects the L Frames, LS Frames, RS Frames, NS Frames and QS frames and vice versa in such biological systems in ways revealed in this work but not before determined prior to this work. On such basis accelerations and/or equivalent gravitational forces couple to biomolecules in novel ways as revealed by this work. As the gravitational field of the target molecules originate from the nuclei by fractional reversible fissing of these nuclei by this theory as computed by divergent differentiations (Newtonian calculations are insufficient) and the effects of external source gravities on target biomolecules and cells (as they divergently integrates the diverged gravitational fields from source as counted by divergent integrations and divergent differentiations but Newtonian counting is insufficient) depends on the nuclei in these systems, altering isotopes of elements composing the biomolecules and cells alter the gravitational fields and gravitational responses to external gravities and thermal perturbations for causing different behaviors of cancer cells and normal cells as cancer cells have different isotopic compositions compared to normal cells [6]. Moreover, by this theory the replacements of isotopes in biomolecules and cells alter the electrical, magnetic, biological, optical and chemical dynamics of such targets as will be developed more in this work. Just as the changes in the target biomolecules and cells alter the gravitational and biology and chemical, optical, electrical and magnetic properties of the system, changing the gravitational field of the surroundings alters the thermal, gravitational, biological, chemical, optical, electrical and magnetic properties of the biological target/systems. So these biologies on earth vary as the biology is elevated and placed in orbit about earth. The inclusions of this math and phenomena of divergent integrations and divergent differentiations
can also explain the anomalous muon g-2 mystery. The new math of diverging derivatives and diverging integrations calculates such discovered mechanics and dynamics of systems fractionally reversibly fissing into the universe and the universe fractionally, reversibly fusing into the system (but Newtonian calculus is insufficient).

In order to more favorably model this system in a surrounding whereby the system cannot isolate from the surrounding, a new calculus is introduced for diverging derivatives and diverging integrals whereby indices \(dx, dy, dz,\) and \(dt\) can vary to infinity \((\infty)\) rather than and in addition to varying to zero and the argument \(F(x)\) can vary to zero in addition to finite quantities. Or the divergent differentiations as by \(dF(x)/dx, dy, dz, dt\) can have the \(dx, dy, dz, dt\) vary to zero and/or infinity as the \(F(x)\) vary to infinitesimals and infinites. Such new math is needed as the space in this theory and its agitations are reasoned to travel faster than light; as the spaces manifest infinites as spaces diminish rather than manifesting infinitudes. Also the space in rareness and in denseness couple and are interdependent by Little’s Rule 1. In the deepness of matter and in the void of space toward the edge of the universe the spaces and the motions couple as in the depth of matter is dense space and in the edge of universe is stretched space so the dense compressed convoluted spaces composing matter (as in quarks, blackholes, and supernova) are sensitive to the edge of the universe in its rareness so the dense space of infinite nonlinear motion everywhere in the universe has a functional dependence on the infinitesimal rareness at edge in its infinite motions in linearity. So by allowing infinite distance and infinite motions in the integrations and differentiations, these space and matter are one and couple and inter-transmute, inter-transform and inter-transport. And as the spaces diminish and as the spatial perturbations are reasoned to approach infinities over the breadth and depth of the universe, \(dx, dy, dz\) vary in new way as by \(dx, dy, dz, dt \rightarrow 0\) (infinitesimals) and/or infinity. Currently in mathematics, there are no operators to calculate such states of infinitesimal spaces and infinite spaces over infinities and infinitesimals and changes and motions of space itself at infinite rates as rarefied fragments of matter. Therefore, in this work new operators of diverging derivatives and diverging integrals are introduced to compute in this new way. The old Newtonian differentiations and integrations are not sufficient as they are local as \(dx \rightarrow 0\) and such local cannot \(\rightarrow \infty\). But by the new mathematics of the author by including things (of space stretching, compressing, bending and rarefying) or space \(\rightarrow \infty\), then the spatial amount \(\rightarrow 0\) for allowing \(\rightarrow \infty\). But also the new math by the author includes “counter” changes in space and “pro” changes in space for pro-motion and con-motion (of bright and dark). Such pro and con unite then a lot of pro and a lot of con can co-exist with each \(\leftrightarrow \infty\), but as individually they cannot \(\rightarrow \infty\) in denseness, but together they coupled pro + con in denseness with net rare (group) so dense groups of Pro and Con can \(\rightarrow\) finiteness individually but together they go to infinity in rareness and such can infinitely superluminously fuse integrate inward or infinitely superluminously divide out or fiss outward before the net (phase) can transport, transform, and transmute.
Method

General Application of Theory of Relativistic, Reversible Fractional Fissing and Fusing of Matter to Space-Time

This is a general theory of matter, fields, waves and space with the math incorporated as divergent differentiations and divergent integrations as the space fisses toward infinity of universe and it fuses (converges) to alter the electrons to wave and the e\(^{-}\) (s) fiss by divergent differentiations across universe and both superluminously. The QF can couple to both e\(^{-}\) to nuclei and surrounding outer space. As the QF fuse to inner L continua as the surrounding fields diverge. And the inner quantum field (QF) is continuously fused to nuclei and the nuclei fuse to hadrons and hadrons fuse to RS Frames and RS Frames fuse to quarks as surrounding fields diverge. The math of diverging derivatives and diverging integrals reason and calculate such coupling electrons to quantum fields and the divergent integrations calculate the collapse of inner L continua to nuclei to hadrons to strong fields to quarks as surrounding diverging fields stretch across the universe. And this happens as rare goes to dense with slowing in motions and dense goes to rare for back and forth dynamics in time for the oscillatory motions in space time to accelerate again in oscillations. The dense cause Dk to transmute to Br and vice versa as by the agitation of the Dk; as the dense oscillates so that during oscillations the extremes can torque the Dk to Br and vice versa. By back and forth in time the dense goes to superlumes again whereby the superlumes can torque the Dk and Br. So time reversal counters mass and inertia. Older math is insufficient for computing such as it is local but these phenomena manifest and the integrations are across infinity of space and infinitesimals along the way and the differentiations across infinity of space and speeds. So the divergent integrations and divergent differentiations are needed rather than prior Newtonian computations for such calculations. Prior scientists had theory of electronic lattice having asymptotic freedom from nuclei due to huge energy differences, but in this work RBL reasons that the mass to energy change of the nuclei and/or electron lattices via fractional, reversible fissing and fusing as computed by divergent differentiations and divergent integrations can couple the nuclei to electronic lattices. So in this work, it is reasoned that during these infinitesimal moments of infinite motions over infinite space of infinitesimals some types of summing and differing occur, or multiplying and dividing occur or exponentiations occur so as to structure or govern changes of such infinities and infinitesimals. And in the fusing to huge denseness, the slowing allows persistence and luminous and reasoning and sensing.

Results

Order and Disorder

But what is the order of the fissed states of many infinities as structures and motions or is there no order of such? Does order require a speed limit, a time limit, a self interaction, and/or a limited space? As the space and matter are divergently integrated and divergently differentiated structureless objects are created from disorder of timeless and unlimited space. Is this what pure space is? Yes, as space itself is disordered, structureless matter of infinite spatial extend and infinite speed and no time as time requires order. So fissing of nuclei
can accelerate the electronic lattice to the nuclear energies and vice versa. Such mass to energies can occur fractionally, reversibly and superluminously for coupling in novel ways as here reasoned. The math of diverging derivatives and diverging integrals can compute such. Older math of phase dispersed missed and cannot compute such transient activated states of transportations, transformations and transmutations. So the divergent integrations of pure Br or pure Dk create limits and order of matter and antimatter, but the divergent integrations of Br and Dk together create dense internal irrationals as if rarified as if vacuum or nothing, but nothing cannot form due to the imbalance miss timing and perturbations of dense, fractional integer irrationals. But nothing at edge of universe is balanced Dk and Br and nested and the Dk accelerates through it to create imbalance but deep inside universe such accelerated rarefactions are missing else they could take the dense Dk and Br and unify to nothing.

**Electron-Wave Particle Duality**

So by applying this theory of matter being space and transmuting to space with superluminosity the wave nature of electron can be computed. So by such coupling it should be noted as by RBL that the interior of e` has North (N) … North (N) attraction and North (N) … South (S) repulsion and South (S) … South (S) attraction for dipole of the electron particle. But the e` (due to the superluminous, fractional fusing of surrounding universal space into the electron as computed by diverging integrations) fisses to outer L continua for NS attractions, NN repulsions and SS repulsions, which go out further fissing to create the L frame for magnetism as from electronic spins and motions from the atoms in matter as the magnet in C frame has NN repulsions and SS repulsions and NS attractions in L frame from such fissed fields of the e` dipolar particles in LS frame. Such fission of dense e` space cannot be calculated by older math differentiation as the dx dy dz dt → infinity (∞) relative to the point size of the e` as the universe in fusing (via divergent integrations) from ∞ agitates the e` to particle wave duality. And the inner L continua and nuclei can pull the e` wave to accelerate the fractional fissing of the electron by divergent integrations of the fiss nuclear fields into the electrons and the e` waves and fields can collapse onto nuclei to induce the fusing (fissing) of the nuclei. But the electrons fuse in irrationality and fiss in rationality. And the hadrons fuse in rationality and fiss in irrationality. So as the rational fields fiss the e`, the manifestation of irrational fields induce fusing of the electron wave to electron particle. The fissed electron is unstable due to the infinite speeds and the infinite spaces and the infinitesimals (produced irrationals) as by increasing speeds in imbalance the infinitesimals move faster with tinier amounts so the interactions (of resulting irrational infinitesimals) increase more due to the infinite speeds although the rarefactions allow faster motions, the phase change occurs as faster motions increase interactions even over the huge space.

**Pure Space and Pure Particle and Intertransmutations**

So the interactions at faster speeds in irrationality cause the rarefied to refuse by Little’s Rules 1 and 2. Space (irrationality) of purity has such accelerating infinity as and accelerating rarefactions and accelerating spaces but lacks rational seed so is governed by Little’s Rules 1 and 3 so pure space does not refuse by Little’s Rules 1 and 2. But fissing particles (leptons) inflate in fissing and the inflations cause changes in interactions (surrounding rationals and irrationals) to refuse by Little’s Rules 1 and 2. So matter unlike space fisses to a self interacting
speed of the rarefied. And space can fuse to a self interacting denseness. But also under different conditions, space can fuse as by both Br and Dk to dense self-interacting disorder by Little’s Rules 1 and 3. So denseness does not guarantee order and rarefaction does not guarantee disorder as the timing of the denseness and the rhythm may be counter or synchronous for Br and Dk or Dk or Br. The math of diverging integrations and diverging derivatives can compute such emerging magnetic and electric fields from fiss e⁻ by particle wave duality. The gravity also emerges from such fissed e⁻ by the diverging derivatives of the e⁻ particles into the C Frame. But such Dk gravity from fissed e⁻ is mixed and diminished by fissing and diverging derivatives of the more dense nuclei more continuously and irreversibly for Br gravity in our sector of Universe. Older math cannot compute such reasoning as such formations of QF, magnetic fields, electric fields, gravity fields and thermal fields from fissed e⁻ require computing over infinite space and infinite speeds of infinitesimal quantities. But now the outer L continua from fissed electron, particle dipoles can in denseness fuse rather than fiss to L Frame rather than fiss to C Frame for weak interactions. The fusing of outer L continua to L Frame can self-interact to form quantum fields as NN attractions and SS attractions and NS repulsions from the outer L continua of NN repulsions and SS repulsions and NS attractions. Older math cannot compute such as the wavefunctions currently do not calculate such infinitesimals, infinities and infinite speeds so the wave functions and Schrodinger equations manifest only having luminous discontinua as the superluminous continua are missing.

**Opening and Closing Quantum Fields to Classical Space**

As space ↔ matter and matter ↔ space here it is considered many spaces and transmutations C frame ↔ L frame ↔ e⁻ ↔ nuclei ↔ hadrons ↔ quarks and vice versa. These occur simultaneously and equilibria shift toward e⁻ and quark under some conditions and toward thermal space under different conditions but Little’s Rules govern such dynamics. Close to black holes; close to sun stars; close to earth; near electron; near nuclei; at L continua; at edge of atom; toward edge of universe, the space and matter manifest different conditions. General results of opening and closing Quantum to Classical fields are reasoned and calculated for coupling Laws of Classical and Quantum mechanics. In general B field ↔ QF and vice versa; and the seeding of QF can occur via internal e⁻ and quarks with the calculation of QF from Classical magnetism. So as the C Frame magnetism fuses, the electron spin can seed to cause the NN repulsions and SS repulsions and NS attractions of magnetic C Frame to become quantum field of NN and SS attraction and NS repulsion! Such transductions of magnetism to quantum field can be modeled by diverging integrations of the surrounding fields to fuse to the QF. Older math cannot count such dynamics.

**Transmuting Magnetic Fields to Quantum Continua**

This is how magnetic fields transform to quantum fields as by RB Little theory. So now vice versa the QF or L Frames can fiss to LS Frames outer and then fuse to electrons or to fiss C Frame. So the divergent integrations of the universe accumulate more and more space and motion into the system (so depending on the system the system may not be magnetic field but have some quantum field) so the magnetic repulsion ↔ L continua with attractions as the Br space began to dominate again and the motions start to pull in on smaller scales to manifest L continua attraction. Or another way to view is the magnetic repulsion becomes so excessive so
the repulsion causes v>c so in order to avoid the space compresses so v<c for L continua attraction. This is computed by introducing divergent integrations and divergent differentiations.

\[
\text{Divergent Integration } \mathbb{R} = \int_{-\infty}^{\infty} F(x, y, z, t) = -f(x, y, z, t)
\]

where \( F(x, y, z, t) = -k i l/r^2 \)

\( F(x, y, z, t) = -k i l/r^2 \rightarrow -f(x, y, z, t) = k \xi Z /r^2 \)

The repulsive Ampere’s Law of Magnetic Attraction integrates to attractive L-Continua Relativistic Quantum Law of Magnetism.

\[
\text{But the reverse of the divergent differentiation of the L continua attraction would produce magnetic repulsion.}
\]

\[
\text{Divergent Differentiation } \mathcal{L} \text{ of the System } \frac{\partial f(x,y,z,t)}{\partial x \partial y \partial z \partial t} = F(x, y, x, t); \\
\text{as } \partial x \rightarrow \infty \text{ (slower) with } \partial f(x,y,z,t) \rightarrow \infty \text{ (faster)}
\]

Thereby the divergent differential of the L continua attractive fields fiss to attractive magnetic space and like magnetic fields.

Transmuting L continua to L Discontinua and Wavefunction

So the divergent integrations of the universe accumulate more and more space and motions into the system (so depending on the system the system may not be quantum field L continua but contain discontinua or electron or nuclei) so the L continua attractions ↔ L discontinua repulsions as the L continua attractions and Dk start to dominate from the surrounding universe and the motions start to push out rather than pull inward. Or another way to view such transmuting mechanics is the L continua attractions become so excessive to the attractions cause v>c so in order to avoid the superluminosity, the spaces stretches so v<c for L continua repulsions.

\[
\text{Divergent Integration } \mathbb{R} = \int_{-\infty}^{\infty} F(x, y, z, t) = -f(x, y, z, t)
\]

where \( F(x, y, z, t) = k \xi Z /r^2 \)

\( F(x, y, z, t) = k \xi Z /r^2 \rightarrow -f(x, y, z, t) = \Psi \)

Attractive L-Continua Relativistic Quantum Law of Magnetism integrates to repulsive L-Continua Relativistic Quantum Law of Magnetism.

\[
\text{But the reverse of the divergent differentiation of the L continua repulsive would produce L continua attractive field.}
\]

\[
\text{Divergent Differentiation } \mathcal{L} \text{ of the System } \frac{\partial f(x,y,z,t)}{\partial x \partial y \partial z \partial t} = F(x, y, x, t); \\
\]
as $\partial x \to \infty$ (slower) with $\partial f(x,y,z,t) \to \infty$ (faster)

Thereby the divergent differential of the L continua repulsive fields fiss to attractive L continua space and like L continua fields.

Quantum Field Collapse to Nuclear Fields by Weak and Strong Interactions

But the QFs or L Frames can further fuse to inner L continua of NN and SS repulsions and NS attractions and such inner L continua couple by many such continuously to nuclear fields in NS Frames. Such fusing of the many L continua to Nuclear Frames can be calculated by the diverging integrations. (Older math cannot compute such as the integrations would include seeding of the universe as by pieces from infinite distances across universe moving $v \to \infty$ and fusing momentarily to NS frames.) The nuclear fields between hadrons can fuse to internal hadrons as NN and SS attractions and NS repulsions inside hadrons and outside quarks in the hadrons for strong fields in RS Frames. And the strong fields can fuse inside quarks for QS fields and QS Frames as the QS Frames has NN and SS repulsions and NS attractions for nested NS of quark unlike unnested NS and dipoles of leptons. The fusing into quarks can be calculated by diverging integrations of spaces and motions inside the hadrons.

Transmutation of Wavefunctions to Inner L continua

And so the divergent integration of the universe accumulates more and more spaces and motions into the system (so depending on the system the system may or may not be quantum field L continua but contain electrons or nuclei) so the L continua repulsion ↔ discontinua attractions or QFs or to inner L continua attraction and then to inner L continua repulsions and then to nuclear attractive fields for nuclear fields to repulsive nuclear fields to attractive strong fields to repulsive hadron fields to attractive quark fields to repulsive quark fields. So the collapse of the L continua repulsion to the quantum field or discontinua attraction is due to accumulation of Dk excess and the collapse to inner L continua is due to mix of Br and Dk (core electrons have some nuclear properties and manifest weak interactions and strong interactions in heavier elements!)

**Divergent Integration** $\mathbb{R} = \int_{-\infty}^{\infty} F(x,y,z,t) = -f(x,y,z,t)$

where $F(x,y,z,t) = k \psi \Psi / r^2$

Fusing the Attractive strong fields to repulsive hadron fields to attractive quark fields to repulsive quark fields. So the collapse of the L continua repulsion to the quantum field or discontinua attraction is due to accumulation of Dk excess and the collapse to inner L continua is due to mix of Br and Dk (core electrons have some nuclear properties and manifest weak interactions and strong interactions in heavier elements!)

**Divergent Differentiation** $\mathbb{L} = \frac{\partial f(x,y,z,t)}{\partial x \partial y \partial z \partial t}$

as $\partial x \to \infty$ (slower) with $\partial f(x,y,z,t) \to \infty$ (faster)
Thereby the divergent differential of the quantum attractive fields fiss to repulsive L continua space and like L continua fields.

Transmutations of Quarks and Hardons to Electronic Lattice

And quarks like leptons can fiss to L frames as quark inner frames go to quark outer frames (hadrons inner frames) and the inner hadrons ↔ outer hadrons (inner nuclear frames) and the inner nucleic frames ↔ inner L continua and the inner L continua ↔ QF of L Frames and the QF of L Frame ↔ Outer L continua and the Outer L continua are in many pieces as C Frame and magnetism and electric; and the magnetism and electric fields fiss to gravity (v > c) as fraction NN and SS (Br Br and Dk Dk) attractions and fraction NS (Dk Br) repulsions. Such fissing of the quarks to gravity can be calculated by the diverging derivatives of the quarks and the resulting Br gravity from the quark matter in our sector of the universe is denser and mixes with Dk gravity from fissing e⁻ and manifest the Br gravity as we know it.

Transmutation of Thermal Space to Electric Field

So space can collapse to electric field and the electric field can fiss to thermal space and the theory and the new math can compute this. The heat transfer q = C_p (ΔT) can transfer and transform electric energy and fields: V=IR or F = k q Q/r^2. The divergent integrations of the q over the universe as the outer space from system diverges to collapse the thermal energy in the system, then can the q ↔ I heat goes to electric field within the system, or the temperature ↔ electric field as the random motion of temperature integrated divergently by universe lead to nonrandom motion of the pieces of space. The divergent integration increases denseness of the random motions. So with increase denseness of the random motions the random motions find more to choose from with compression so similar directions link so many directions ↔ 3 and 4 directions of 3D space and 3 times and 3D space and 3 times ↔ 3D and 1 time. This is physically and mathematically how the thermal spaces transmutes to electric spaces as infinite space integrates infinitesimal motions of T to compute finite velocity of electric fields emerge. Integration of random T of infinitesimals dotted with infinite space of random directions leads to only few directions of the infinity of universe orienting with T infinitesimals; so the math of the infinitesimals of the temperature in the system and the infinites of space with infinites of direction yet infinitesimal of motions in those directions would in the dot product yield fewer directions or 3 independent directions. The disorder among many would order to 3 independent directions! The divergent integrations of space would yield 3 independents as there would be 3 integrations: 1) divergently integrating space within the system over infinity of directions; 2) divergently integrating space to infinity; and 3) divergently integrating space over infinite different orientations as integrating to infinity to edge of universe! Also divergently integrating motions would yield 3 independent times: 1) divergently integrating motions within the system over infinity of motions and orientation; 2) divergently integrating motions to infinity; and 3) divergently integrating motion over infinite different orientations of motions as integrating to infinity of edge of the universe! For 3 spatial degrees of freedom and 3 temporal degrees of freedom forming in the system from the heat for spatial freedoms manifesting electric field and temporal degrees manifesting magnetic fields! The rhythm would be another degree of freedom as from Big Bang and Inflation as Outward of Dk and inward of Br!
So the Electric attraction can be reasoned to fiss to Electric repulsion as by this theory and the theory computes this by new math.

\[
\text{Divergent Integration } \mathbb{R} \text{ of the system } = \int_{-\infty}^{\infty} F(x, y, z, t) = -f(x, y, z, t)
\]

where \( F(x, y, z, t) = Cp \Delta T \)

\[
F(x, y, z, t) = Cp \Delta T \rightarrow f(x, y, z, t) = kq Q/r^2
\]

Scalar temperature ↔ E (electric field) vector. But then the surrounding divergently integrates the electric field in the system as the surrounding divergently differentiates superluminously. But by the same reasoning the reverse of the divergent integrations of the surrounding differentiates the electric fields in the system to temperature and thermal energy as the surrounding divergently integrates. It is this reverse divergent differentiations of the system that the system is activated by the whole universe so as for the system to manifest its transportations, transformations and transmutations as activated by the whole universe.

\[
\text{Divergent Differentiation } \mathbb{L} \text{ of the System } \frac{\partial f(x, y, z, t)}{\partial x \partial y \partial z \partial t} = F(x, y, x, t); \text{ as } \partial x \rightarrow \infty \text{ (slower) with } \partial f(x, y, z, t) \rightarrow \infty \text{ (faster)}
\]

Thereby the Divergent Differential of the Electric Field fisses to thermal space and temperature.

\section*{Superluminous to Luminous blending of Times}

And the theory explains how the independent times in thermal space fuse to a single time in Electric space as by v slows so v<c. But now the divergent integrations would lead to the collapse of the 3 times to one time with denseness as the motions in x, y and z can with shrinkage in space causing attraction or electric attraction then the Pythagoras theorem is modified by superluminous motion going to luminous motions. \( A^2 + B^2 = C^2 \) as the x is greater than \( 3 \times 10^8 \) meters, then the times in x direction, y direction and z direction differ for three dimensional time. In superluminous motion the three times form. But with shrinkage of the system so x < \( 3 \times 10^8 \) meters. The luminous can allow one time and the Pythagoras theorem.

\section*{Transmutation of Electric Attraction to Electric Repulsion}

And the theory explains how the electric attraction fuses to electric repulsion and the theory computes this by the new math. And as the integration accumulates more and more in the system the electric attractions ↔ electric repulsion as the excess collapse reaches speed of light the further collapse requires v>c, so the v>c causes attractions to ↔ repulsions with further divergent integrations of universe into the system. Integrations over spaces and integrations to infinity and integrations over angles as integrations to infinities then the reach of all motions inward or Br and start to tap into motion outward or edge of universe so attract goes to repulsion.

\[
\text{Divergent Integration } \mathbb{R} = \int_{-\infty}^{\infty} F(x, y, z, t) = -f(x, y, z, t)
\]
Transmutation of Electric Repulsion to Gravitational Attraction

And the theory explains how the electric repulsion fuses to gravitational attraction and the theory computes this by the new math. And as the integrations accumulate more and more in the system the electric repulsions go to gravitational attractions as the excess electric repulsions reach repulsive interactions for accelerating faster than light so further repulsions require v>c, so the v>c of the ripped spaces cause the electric repulsions to further divergently integrate the distant Universe to form gravitation attractions.

Divergent Integration $\mathbb{R} = \int_{-\infty}^{\infty} F(x, y, z, t) = -f(x, y, z, t)$

where $F(x, y, z, t) = -k q Q/r^2$

Coulomb’s Law integrates to Newtonian Law of Gravitation; Or as integrate more and more of the surrounding Universe the systems reach limit of Dk rays causing repulsions of the electric so Br rays start to cause attractions again via 2D so there is a bend of say x and y, or y and z or z and x for attractive gravities.

But the reverse of the divergent differentiation of the gravitational attraction would produce electric repulsion

Divergent Differentiation $L$ of the System $= \frac{\partial f(x,y,z,t)}{\partial x \partial y \partial z \partial t} = F(x, y, x, t)$;

as $\partial x \to \infty$ (slower) with $\partial f(x,y,z,t) \to \infty$ (faster)

Thereby the divergent differential of the gravitational fields fiss to electric repulsive spaces and like electric fields.

Transmutation of Br Gravity to Dk Gravity

The theory reported here determines how the gravitational attractions fiss to transform to Dk rays as Br rays transmute to Dk rays and how this can be the Dk rays can be transmuted to Br rays if the Br rays are insufficient. The theory can compute this by new math. And so the
divergent integrations of the universe accumulate more and more spaces and motions into the system so the gravity attractions ↔ gravitational repulsions as the gravitation attracts are so strongly in x and y that v>c; so the spaces stretches to prevent v>c so gravity starts to repel. Another way to consider this transforming from attractive gravity to repulsive gravity is the integrations exhaust Br rays in the system as fusing from across the Universe and so the residual Dk rays start to dominate in system so the Dk rays cause gravitation repulsions.

\[
Divergent \text{ Integration } \mathbb{R} = \int_{-\infty}^{\infty} F(x,y,z,t) \, dx = -f(x,y,z,t) \\
\text{where } F(x,y,z,t) = k \frac{m}{r^2} \\
F(x,y,z,t) = k \frac{m}{r^2} \rightarrow -f(x,y,z,t) = -k \frac{m}{r^2}
\]


But the reverse of the divergent differentiation of the gravitational attraction would produce electric repulsion

\[
Divergent \text{ Differentiation } L \text{ of the System } = \frac{\partial f(x,y,z,t)}{\partial x \partial y \partial z \partial t} = F(x,y,x,t); \\
\text{as } \partial x \rightarrow \infty \text{ (slower) with } \partial f(x,y,z,t) \rightarrow \infty \text{ (faster)}
\]

Thereby the divergent differential of the repulsive Gravitational Fields fiss to gravitation attractive spaces and like gravity fields.

Transmutation of Repulsive Gravity to Attractive Magnetic Field

This theory determines how the gravitational repulsions can be so huge so as to fuse the gravity to magnetic attractions and the theory computes this. And the Dk fields are determined to be transmuted due to magnetism as strong magnetic fields fuse Dk fields. And the theory provides new math to compute this. So the divergent integrations of the universe accumulate more and more spaces and motions into the system so the gravity repulsions go to magnetic attractions as the Br spaces and motions start to dominate again so the the gravitational repulsions become so excessive that the repulsions become attractive. As v>c the spaces compress so v<c; so gravity repulsions go to magnetic attractions. Or another way to consider is the integrations exhaust the Dk rays so Br rays manifest more in the system so the the Br rays cause the attraction as magnetism.

\[
Divergent \text{ Integration } \mathbb{R} = \int_{-\infty}^{\infty} F(x,y,z,t) \, dx = -f(x,y,z,t) \\
\text{where } F(x,y,z,t) = -k \frac{m}{r^2} \\
F(x,y,z,t) = -k \frac{m}{r^2} \rightarrow -f(x,y,z,t) = k \frac{i}{r^2}
\]

Repulsive Newtonian Gravitation integrates to attractive Ampere’s Law of Magnetism.

But the reverse of the divergent differentiation of the magnetic attraction would produce gravitational repulsion
**Divergent Differentiation** \( \mathcal{L} \) of the System \( \frac{\partial f(x,y,z,t)}{\partial x} = F(x, y, x, t); \)

as \( \partial x \to \infty \) (slower) with \( \partial f(x,y,z,t) \to \infty \) (faster)

Thereby the divergent differential of the attractive magnetic fields fiss to repulsive gravitational spaces and like gravity fields.

**Transmutation of Attractive Magnetic to Repulsive Magnetic Field**

This theory determines how the magnetic attractions transform to magnetic repulsions by accumulated Dk rays and the N N poles may have Dk rays and the S S poles may help find Dk rays. Far from earth opposing magnets may detect Dk fields. And the theory considers new math for computing this. So the divergent integrations of the universe accumulate more and more spaces and motions into the system (so depending on the system the system may not be thermal but have electric fields or magnetic fields) so the magnetic attractions go to magnetic repulsions as the Br spaces and motions start to exhaust so the less rich Dk backgrounds start to manifest so the magnetism pushes out rather than inward for magnetic repulsions. Or another way to view is the magnetic attractions become excessive so the attractions cause space to v>c so in order to avoid v>c the spaces stretch so v<c for magnetic repulsions.

\[
\text{Divergent Integration} \quad \mathbb{R} = \int_{-\infty}^{\infty} F(x,y,z,t) = -f(x,y,z,t)
\]

where \( F(x,y,z,t) = ki I/r^2 \)

\[
F(x,y,z,t) = ki I/r^2 \to -f(x,y,z,t) = -ki I/r^2
\]


**But the reverse of the divergent differentiations of the magnetic repulsion would produce magnetic attractions**

**Divergent Differentiation** \( \mathcal{L} \) of the System \( \frac{\partial f(x,y,z,t)}{\partial x} = F(x, y, x, t); \)

as \( \partial x \to \infty \) (slower) with \( \partial f(x,y,z,t) \to \infty \) (faster)

Thereby the divergent differentials of the magnetic repulsion field fiss to attractive magnetic spaces and like magnetic fields.

**Transmutation of Attractive Magnetic to Attractive L Continua Quantum Fields**

So this theory determines how the magnetic attraction fuses to L continua attractions and the theory expresses math to compute this. So the divergent integrations of the universe accumulate more and more spaces and motions into the system (so depending on the system the system may not be magnetic fields but have some quantum fields) so the magnetic repulsions go to L continua attractions as the Br spaces began to dominate again and the motions start to pull in on smaller scales to manifest L continua attractions. Or another way to view this is the magnetic repulsions become so excessive so the repulsions cause v>c so in order to avoid the v>c the spaces compress so v<c for L continua attractions.
**Divergent Integration** \( \mathbb{R} = \int_{-\infty}^{\infty} F(x, y, z, t) = -f(x, y, z, t) \)

where \( F(x, y, z, t) = k \ i / r^2 \)

\( F(x, y, z, t) = k \ i / r^2 \rightarrow -f(x, y, z, t) = k \ \zeta / r^2 \)


**But the reverse of the divergent differentiations of the L continua attraction would produce magnetic repulsion.**

**Divergent Differentiation** \( \mathcal{L} \) of the System  \( \frac{\partial f(x, y, z, t)}{\partial x \partial y \partial z \partial t} = F(x, y, x, t) \);

**as \( \partial x \rightarrow \infty \) (slower) with \( \partial f(x, y, z, t) \rightarrow \infty \) (faster)**

Thereby the divergent differential of the L continua attractive fields fiss to attractive magnetic spaces and like magnetic fields.

**Nature of Gravity and Distinguish it From Other Forces**

Intrinsically gravity moves \( v>c \) as the nuclear pieces manifest \( v>c \). And the gravity stretches to thermal spaces as the stretch cause \( v \rightarrow \infty \) and the Br Br and Dk Dk become repulsive and Br Dk attractive in rarefactions! The diverging derivatives and diverging integrals manifest such perturbations of the surrounding thermal spaces even to the edge of the universe upon all matter inside the universe. So these many possibilities can occur sequentially and simultaneously as nothing is isolated or stationary these things are occurring simultaneously; so when many things occur simultaneously which are more important or are all important (the greater energy phenomena are the faster ones) (or they all coexist and produce different results depending on conditions so all the possibilities manifest into the bigger C frame). So there is a way to focus on one and to consider all as one. It is good to think of simultaneous as oneness few bodies or solids the many are as one whereas sequential as many bodies (gassy). And in some approximations momentarily the sequential gassy isolated dynamics occur and in other moments the systems are as subsystems freezing to one system for simultaneous solid like oneness. One goes to many and many ↔ one superluminously as gas ↔ solid and solid ↔ gas.

**Particle And Wave Analog to Gas and Liquid-Solid**

Liquid is weakly bonded solid or strongly interacting gas. So electrons and nuclei manifest such alterations as agitated by surrounding gravity and thermal spaces of the Universe. So use this to explain the gravity affects the biology! So note the import of magnetic fields from a single source in simultaneity can by universal fusing divergently cause the fields to become as many magnetic fields from different sources. What happens when many electrons move at different rates at different oscillatory phasing? The different magnetic fields arise and is this gravity as the whole universe can frustrate the electron motions so the magnetic fields go from simultaneous to sequential and different and how do these affect a target. This theory
proposes that new experiments involving multiple magnetic sources can cause the seeding of magnetic and electric fields to fuse to quantum fields. The systems bend rather than spiral and the bend is by the many magnetic fields acting!

**Few Bodies and Many Bodies, Simultaneous and Sequential and System and Subsystems**

Few bodies ↔ many bodies; simultaneous ↔ sequential; solids ↔ gases; can one take in many for fusing or can one divide into many for fissing; fuse / fiss and simultaneous ↔ sequential or sequential ↔ simultaneous fiss ↔ fuse. The change from Classical to Quantum mechanics is very interesting; change from atomic to nano (liquid) to macro is in analog and is also very, very interesting. An object as a target goes from dynamics in isolation to suddenly it is apart of a bigger, but why? And a particle that is apart of whole suddenly isolates. It is as if the electron as whole atom or quanta gets excited into L continua and manifest liquid isolation! The fractional fissing superluminously can transform simultaneous to sequential. The superluminous fusing of L continua to quanta can suddenly cause sequential to form simultaneously. Very interesting idea to be explored by RBL. Spontaneous fluctuations for isolate to nonisolate! This is how system can transport, transform and transmute! This is how matter ↔ space and vice versa space ↔ particles system! Most dense systems couple to whole universe. Most rare systems couple to universe! The middle of the systems is very, very interesting!

**Waves can be Many Sub-Particles for Opening and Closing Waves**

But the waves are moving alterations of fissing and fusing particles. So not only are particles waves by fissing to spatial waves but waves are particles as waves fiss to tinier particles. So particles moving and the dynamics of many have fields fissing to waves. Such is calculated by diverging derivatives and diverging integrations. So as the field intensifies (the fissed particles) accumulate and fuse to reform the particles and transform/ transmute so rather than many particles moving slower, there are fewer particles moving faster and this tends to violate Second Law of Thermodynamics. This is calculated by diverging integrations of space of thermal and gravitational fields to quantum fields. Older math cannot compute such. It is important to consider the limits and what conditions govern (Little’s Rules) whether the spaces are stretch are transient and fuses to fewer particles in rapid motion or whether the spaces are stable and do not fuse or whether the spaces are transient and fiss further to form the many particles of higher particle densities. If the spatial density is high enough relative to motions then stretching to edge of Universe may occur. The stretched space can fuse to fewer particles in self-conformations with faster motions but if the spatial density is less relative to rarefied motions stretching to edge of universe then the spaces will not fuse to fewer particles. But moreover if the stretched spaces are less than the rarefied space motions stretching to edge of Universe, then the spaces will fiss to even smaller particles of faster motions in irrationality as the stretched spaces become the edge of the universe where zero is split to many +1 and -1 or Br and Dk gravities. Such particles and many particle waves are remnants of Universal origin. The alterations of some particles transform to move the other particles faster, as the alterations are energy (potential) changes, or changes in spaces and those changes can cause changes of other changes with greater intensities the amplitudes of self-interacts to transform the spaces, fields, waves and particles. Before electron wave particle duality was
considered so here it arises again. Such dynamics can be computed by diverging derivatives and diverging integrals. Older Math cannot such dynamics.

**Many to Few Bodies and Gas to Solid and Open to Closes**

So the accumulated particles or waves of higher intensities cause the many to fuse to fewer with faster motions (lower particle densities) with fewer moving faster for higher kinetic energy, and potential energy (externally), as computed by diverging integration by Little’s Rules 1 and 2. Older math cannot compute such dynamics. By such dynamics, the conditions cause changes in mechanics so Little’s Rules 1 and 3 → Little’s Rules 1 and 2 by diverging integrations. This is how classical mechanics → quantum mechanics by Little’s Rules. But now the rarefied waves of lower intensity cause the many to persist and move slower for lower kinetic energy of many particles of higher particle densities as computed by diverging differentiations by Little’s Rule 1 and 3. This explains why Whitten computing magnetic field from strings only worked at lower energies [ ref]. As Whitten tried to convert strings to quantum fields, the magnetic field caused quantization (as open string closed to quantum fields) at lower energies. But at higher energies Whitten was not able to quantize (close) the strings. This is quantum gravity of open strings and the closed strings close to quantum field at lower energy. Whitten was attempting under Little’s Rules 1 and 3 and magnetism (spiral) seeds (catalyzes) to close the open string to quantum field. This theory calculates this by diverging integrations and diverging derivatives. Prior math cannot compute such dynamics as prior math can count systems of lower energies as in isolation. But even lower energy in some limits by this theory cannot isolate as they find somewhere dense systems to couple. So prior math is appropriate and an approximation.

**Higher Energy Open / Close of Quantum Fields**

But now at higher energies what happens? At higher energies, the string + spiral seed (magnetism) catalyst couple nonisolate to the surroundings in ways not anticipated and computed by prior scientists. The simultaneous diverging integrations to fuse and diverging derivatives to fss are calculated by this new theory of RBL. Prior math cannot compute such dynamics. At the high energies, the string can autocatalyze (as one would think higher heat prevents closure, this coupling prevents closure classically; as in diamond formation at T > 4000 °Celsius). But the author realizes heat → energy and work at high temperatures. But RBL allowing v>c then at higher energy the strings close as the strings develop motions within motions. So the string self seeds at higher energies. So that it closes v>c faster than surrounding can perturb the closure as the power in denseness of lower small spaces compete with quickness of power in denseness over larger space. The diverging integrations and diverging derivatives compute these dynamics simultaneously. Prior older math cannot count such closure at high energies. So QF opens/ closes superluminously by the author under different conditions of denseness. Prior scientists missed this as they attempted to close the string irreversibly with v<c. Some prior scientists threw away important infinities [8] for closure of the strings. But the author notes these infinities are important for coupling classical mechanics to quantum mechanics and for closing open strings at high energies. These prior scientists missed this as they based their reasoning on older math and the need to renormalize, for v<c and no infinities. So the author realized that at higher energies (either as v>c or time
Luminous / Superluminous for Phase to Group Dispersions

So using these infinities RBL forms motions in motions of the strings or pictures of string phases, motions and accelerations with \( v > c \) strings developing internal group motions. The group motions have \( v > c \) and move faster than the phase motions of \( v \sim c \). The mechanics of such as \( v \to \infty \) has space-particles in the system that require pieces from infinity (\( \infty \)) of Universe; older prior math cannot count such pieces, but the new divergent derivatives and divergent integrations can count. Something within the wave has to move faster than the wave (and this is as edge of universe rip space). But after rips in activated states of motion the spaces refuse to space waves to particles. [Something within or something without has to move faster than the wave for \( v > c \) as introduced in this theory by superluminosity. Something without which accumulates and compresses so it becomes within by exchange.] So prior scientists missed this as they would not consider motions without moving faster than light. So something moving faster than light and something moving faster than the something that is moving faster. As when light moves in opposite Br and Dk, the \( v > c \) so hv is the residual and conforming waves and particles fuse divergently integrate as spaces divergently fiss at \( v > c \). So the author here wonders if something travels opposite to light at \( v \) what would it see; unlike Einstein moving with light. The luminous objects and light would form light or fuse to QF on the basis of this theory and the divergent integrations and differentiations!

Transmutations of Waves to Particles and Fields by Changing Group and Phase Dispersions

So light at edge create particles (curls) in the middle. And particles (curls) in the middle create diverge light at edge. But can curl at edge have diverge in the middle? Compare this to Maxwell’s equations in limit of \( v \leftrightarrow \infty \). On the basis of this theory the formation of the quantum field can be reasoned and computed by considering luminous waves moving in opposite directions. Consider an entanglement of light rays moving in opposite directions; strike the entangled two photons then the lights entangle and they move in opposite directions at \( v > 2c \). The whole universe strikes or activates the 2 photons or the dynamics in general. Everything activates everything. So is it easier to reason that the quanta strike or activate the universe inflation or the universal inflation activates strikes the quanta? So mass fuses so outer spaces and the outer spaces move at infinity (gravity) and the outer spaces fiss \( v > \infty \) (thermal goto gravity) so the inner spaces cannot goto zero. No gravity, no mass. The error of prior science is assuming inner \( \leftrightarrow \) zero for voiding \( \infty \) and zero infinitesimals via spaces and motions. Then the entangled photons have \( v > 2c \) and the spaces between photons changes to curls to particles so \( v \sim c \); but the energy is converted to quanta energy by curling by the relativistic changes of spaces and motions and the quanta fields (curls) keep the two entangled photons from \( v > c \) as the internal spaces (curls) change via internal motions so the whole (diverging) motions has \( v < c \). So reality has quanta oscillating, vibrating, and twisting and involve spaces compressing twisting, inward and decompressing, pushing, untwisting outward. So fields and wave moves inward and outward. These oscillating fields in superluminosity are thermal and gravitational spaces!
**Nature of Gravity**

Gravity is superluminous waves. Gravity is a consequence of something moving faster than light; as it moves outward wave faster than light the space compresses (curls) inward to particles and as the waves move inward converge the particles fiss outward (uncurl) to QF, magnetic and electric fields. So gravity is an outward superluminous wave that causes quanta and particles and the quanta fiss due to the gravity as agitation (and in limit gravity agitation ↔ thermal agitation or v ↔ ∞ ) and the fusing reaches limit and particles fiss and pull gravity back inward. Consider here based on this nature of gravity Feynman, Schwinger and Tomonaga threw gravity out with bath water but scientists following F, S, and T are not able to find gravity as they threw the baby out with the bath water. Why do quanta oscillate in fusing and fissing? As fusing the dense couples with the rarefied fissing gravity to refiss the fused particles and the fissed gravity is pulled back by the fused particles also the fissed gravity as \( v \rightarrow \infty \) it couples more strongly to the fused. These superluminous oscillations cannot be slowed to light. But particles and energy see these superluminous as the whole particle cannot follow but pieces of the target follow the fiss fields. This is an atomic mechanism of gravity as gravity does not act on whole target but individual atoms composing the whole target. This is powerful as prior physicists have gravity acting on collective macro objects. But gravity does not acts on whole target. Gravity acts on individual atoms in gassy way but the gassy solidifies so the gravity acts on whole superluminously and collectivity. The action of gravity is \( v \gg c \) but it has to act over such larger space and many spaces so it appears \( v \ll c \) as in it acting among many gravity converts to E/B and E/B is \( v \ll c \) matter slows gravity down. But the pieces of E/B are gravity. And the pieces of gravity are thermal spaces of \( v \leftrightarrow \infty \). But the smaller more easily responds to the gravity of the larger. The larger is not able to fit all its atoms into fields of the smaller! The fitting is superluminous and needs the divergent derivatives and divergent integration. Older math cannot calculate this.

**Converging Magnetic Monopoles for Diverging Dk Fields**

This is the monopole monopole interactions. The entangled monopoles repel so strongly that they are as if struck (activated) by two photons moving in opposite directions so the two photons entangle with the monopoles and the photons transduct to quantum fields so \( v \ll c \) and this is the wavefunction! The wavefunctions are as multiple magnetic monopoles arising as \( v \leftrightarrow c \) and \( v > c \) with consequent gravity. It is important to note two photons can converge to produce space as they annihilate. It is important to further note space can created quanta by two spaces diverging as light. The wavefunction is computed by diverging derivatives of light moving opposite directions from monopoles repelling so the diverging derivatives combine to converge the fusing relativistically for QF. But in L continua the diverging derivatives cannot converge to fuse but diverge. So by the author’s theory, moving away from light then create quantum field. But by Einstein move with light create magnetic and gravity and electric fields. This also explains why Einstein’s gravity failed. And by moving in opposites then the \( v \gg c \) and the quantum fields fuse from the opposing motions. When this is true high energy strings close to quantum field as the quantum fields move faster than the light. But this quantum field is of smaller denseness than whole wave and it eventually pulls in more and more surroundings to swallow the wave so that as it moves back and forth for Br and Dk. The phase cannot progress as the internal motions prevent the propagation in C Frame. This is how
C Frame → L Frames. By Little’s Rules 1 and 2 as pull in more and more thermal space of mixed Br and Dk, then the waves freeze due to internal motions. The momenta of hv gets opposed by the Dk momenta of internal quanta to slow whole wave. The internal Br or group Br couples with phase moving to shift Br to accelerate whole.

**Monopoles Couple to Surrounding Space for Br and Dk Field Productions**

So now the phase dispersion has v < c and leads to creation of external Br and Dk rays (group dispersions) by accelerations to v > c. So as v > c, the light produces Br rays and Dk rays and these accumulate for a group velocity with v > c. This group waves and velocities with increasing energy go to (fuse) QFs. By this introduced new math of diverging integrations (two photons diverge causing divergent integrations of system for fractional fusing of the system) and diverging derivatives (two photons converge causing divergent differentiations of system for fractional fissing system), the author shows that the accelerations of the original phase velocities (v < c) to v > c couple the accelerated to the surrounding universe for divergent integrating the surrounding universe for v > c as Br rays fuse from the diverging integrations and Dk rays are generated from the diverging integrations with excess Br rays; so the excess Br rays from the diverging integrations produce freezing of the v < c light ray with the Br and Dk group motions for fusing the QFs (phase dispersion) from the group dispersed Br and Dk rays for confining the photon (original phase dispersion). Older math cannot compute such. This is how classical mechanics → (fuses) quantum mechanics by diverging integrations and diverging derivatives. So what happens is time reversal as the photon has v > c causing Br and Dk rays to emerge from the divergent integrations of the phase electromagnetic wave with the whole universe. Older math cannot calculate this.

**Diverging Br and Dk for Photon Confinement to QF**

So now with greater pulling in by Little’s Rules the photons localize and freeze. So the author reasons Einstein’s thought as if he could travel at v = c, then he would have to reverse time. (Time crystals reverse time and QFs are required for time reversal). So the diverging photons pull in both Br and Dk rays by convergence of Br and Dk rays, but more Br rays and the excess Br rays are what confines and freezes the initial photons. It is that the photons move by Dk ray perturbations? The Universe expands by Dk rays at the edge of the Universe. The photons couple to whole Universe (as calculated by the diverging integral) at edge they couple to Dk rays to unconfine (by diverging derivatives) them but local Br rays are more intense to confine them (by divergent integration). So Universe Dk rays activate motions of frozen photons against internal Br rays. These are absolute motions of the Br and Dk rays requiring v → infinity as by diverging derivatives. So now the photons pull in (fuse) (by diverging integration) surrounding Br + Dk rays to overpower Dk rays. The Dk rays are v → ∞, the Br rays are v < c and more intense and denser. So the dynamics manifested as by power (of Br rays) vs quickness (of Dk rays). So the power pulls back (fuses) more than speed (fisses) pushes forward. Imbalance of speed and power of Dk rays and Br rays, respectfully, manifest their dynamics. RBL reasons a reversible, fractional fissing and fusing of nuclear reactions even at low temperatures of v → ∞. This reversible, fractional fiss and fuse can occur within stars, black holes, and supernovas. Chemical reactions can equilibrate and have equilibria. Oscillatory modes are basis for activation for transportsations, transformations and
transmutations. But nuclear reactions can also manifest equilibria as inside stars. Nuclei fuse and fiss reversibly at lower temperatures for optical equilibria, the gravity equilibria and thermal equilibria can occur. The equilibria are by balance of Br power and Dk perturbation in our part of Universe. The \( v>c \) of the rarefied cannot be computed for agitating the power of quark densities at \( x \) going to infinity.

**Divergent gravity and Free Photons**

By striking quantum field by divergent universal gravity and the reversal oscillations occur. Oscillations states are modes for activation. Leptons \( \rightarrow \) quantum field \( \rightarrow \) quarks \( \rightarrow \) quatum fields \( \rightarrow \) macrofields with activations simultaneously and sequentially. In isolation sequential may occur but in dense simultaneous may occur. The classical mechanics \( \rightarrow \) quantum mechanics as sequential gets dense and they couple to whole universe and couple to each other; so they occur simultaneously and collectively and they couple. The electron is a coupled classical space collapsed on itself. The electron fisses to C frame so it is in many places simultaneously! But in a limit the quanta \( \rightarrow \) sequential by universal dense thermal or gravity; then it fuses back to simultaneously. But it can densify to quarks and hadrons from leptons so many of it is sequential and simultaneous mixture! Likewise, for electric transforming to gravity in order to convert E to gravity the electric field has to exceed speed of light (transforming to thermal space) so that the fields stretch, gasify and mix and fuse bending together. In order to convert gravity to magnetism, the gravitational field has to accelerate faster than light (transforming to electric field) and then the stretched gravities as gassy fields mix and refuse spiraling as bending concavely and convexly as the conversion of gravity to magnetism requires transforming some gravity to Dk rays and some gravity to Br rays for a mix of Br and Dk gravities as spiraling by concavity and convexity.

**Photons and Magnetic Field Confine to QF**

But now in this Br solvent of Universe, the Br is dense intense and the Dk is rapid, rarefied frustration of Br. So the classical mechanics \( \rightarrow \) quantum quantum as the accumulation (fuse by divergent integration) of Br rays to create reversal of Dk ray perturbations to confine and freeze magnetic fields and photons to QF (picture of three waves forward and backward about the target hv wave). This occurs by superposing change or time (at different time) in new way by the author in analog to how conventional physics superpose space (at different spaces). So that the Br rays with time and motions pull back on the Dk rays with time and motions. So the Br and Dk rays (not ghost waves, but transduced waves) \( \rightarrow \) (fuse by divergent integration) circle and the original hv oscillates in the circle for freezing and confinement of the photons into QF. This is not computed by prior math but by divergent derivatives fissing of light in different directions to fuse to divergently integrate the particles, and vice versa. It is as if the \( v>c \) pinches off (fuses, by divergent integrations) space so as to create local trap (circle) for the waves to confine and freeze the original waves for waves in circles (vortex) for quantum fields.

Such divergent fissing is like what the author reasoned before for the original and nature of the Universe as the universe formed by Dk rays accelerating outward and as Dk rays accelerate outward as Universe creates Br and Dk rays at the edge of the Universe. The excess Br and Dk rays then fuse the Dk rays as the excess Br rays divides to Br rays in middle and Dk
rays on other side Br rays at the middle. So the Br rays in middle with two outward Dk rays on either sides of it and net Dk rays at edge. So the Origin (middle) (matter and particles) is as quantum (Br rays) in mature and essence. The author notes that the Origin and Big Bang and inflation manifest in the mature universe on smaller scales. The quanta Br rays in mature state of universe as now reasoned has two outward Dk rays and a bigger net Dk rays. So if the quanta Br fiss (for Dk) then the Dk Dk fuse or convert to Br Br rays inward with net Dk rays outward. And this oscillates a fissling quanta of Br rays. So it seems the quanta and the gravity fields oscillate and the accelerating outward expanding universe in oscillations as the inward quanta and the outward to inward gravities. The oscillations of Br and Dk irrational quanta are out of rhythm. Prior math cannot count this as only divergent derivatives and divergent integrals can count this.

And the quantum field (QF) wave in circle or vortex → (fuses by divergent integration) vortex in vortex for leptons (e⁺ or e⁻) or as the waves in waves in circles for vortex in vortex as quarks. (But how do leptons nest Dk and Dk rays into hemispheres and hemispheres of Br and Br rays nest in S hemisphere?) (But how do quarks nest Dk rays in Br rays and Br rays in Dk rays for layered quarks?) Quarks have inner most forward and backward motions and time reversal. Nuclei can drive time reversal. But the electrons about atoms are what drive time forward for the essence of time! So negative NMM can reverse time as relative to positive NMM and electrons. This is how the transmuting of Br and Dk rays occur in L frames. The Br and Dk rays start to interact so strongly so as to close the open rays to freeze them to QF or fuse CM to QM. So this is how C Frame → fuses (by divergent integration) to L Frame at high energy. The high energy cause Br rays to power Dk perturbations as Dk rays perturb source of hv so hv releases and fisses (by surrounding agitation of Dk rays) and the fiss cannot be trapped momentarily by inner Br rays. The mathematics of such cannot be by computed by prior math as the prior math has to integrate across the universe over infinities and requires the divergent integrations and divergent derivatives. But the Br rays can accumulate (fuse by divergent integration) and they then pull into Dk rays on hv so back and forth future and past operate on photon by the divergent derivatives and divergent integrations. So the photons cannot go into future by Dk rays as high energy of Br rays confine them.

**Flipping of Br Rays to Dk Rays in L Frames**

The mere divergent integrations of huge spaces to particles define the Br ray sources for spaces to particles and thereby such can pull on the rare superluminous spaces by divergent integrations. Can Br rays flip Dk rays in denseness of Br rays? The Br rays can flip to Dk rays by exchange with Br rays to create central Br rays. And as Dk rays interact with Br rays the pieces of Dk rays can transmute to Br rays to produce more Dk rays on other side of Br rays. So just as the Dk rays can be flipped by dense, Br rays in the center on basis of denseness of Br rays and quickness of Dk rays, the rarefied quick Dk rays can flip the dense Br rays by Little’s Rules as the $v \rightarrow \infty$ of the rarefied Dk rays couple to the dense Br rays to cause Br rays to act against itself, the tiniest counter in Br rays cause its instability so Br Rays can flip against themselves from perturbation by tiny rarefied quick Dk rays (in our region of the Universe) and as the Br rays has minority Dk rays. The dense Br rays can → Dk rays. But leptons are all Br rays and they can be frustrated to waves by rarefied Dk rays, but the leptons may not reverse to antilepton by the
agitating rarefied Dk rays. So under high energy Little’s Rules 1 and 2 and this is why v>c and time reversal violates Second Law of Thermodynamics via low density of particles of high field intensity. So under low energy Little’s Rules 1 and 3 and this is v<c and no time reversal for obedience of Second Law of Thermodynamics as particles are high in denseness with low intensity fields so that magnetism closes/opens string due to the low energy many particles or many lumps the surrounding heat cannot couple to open the string as the divergent integrations are not sufficient for opening the strings. Prior math integrals and differentials cannot compute this. The divergent integrations can fuse huge spaces and time (dx, dy, dz, dt → ∞) to few particles of high surrounding fields for such manifesting Little’s Rules 1 and 2. The prior math integrals and differentiations are approximating systems of high particle numbers and low field intensities whereby the integrations and differentiations are subluminous and local for dx, dy, dz dt → 0 for manifesting Little’s Rules 1 and 3.

**Little’s Rules High Energy and Low Energy Opening and Closing QF**

Systems with lower energies cause less pulling in (fusing) to transform the closed strings to open strings. Higher temperatures cause more pulling in (fusing) to transform the open strings to closed strings and the closed strings to open strings by divergent integrations and divergent derivatives. So it is important to consider different operations. The operations of the heat and its complex patterns as electric fields, gravitational fields, magnetic fields, quantum fields, weak fields, nuclear fields and strong fields. The heat does not only act within, but it acts without as by coupling to the within also as high heat causes coupling to surroundings to more easily transform the systems as reasoned by the author. Low heat is not able to couple to surroundings to transform so prior math of Newton and Leibnitz calculus can approximate and count the lower energy. So systems of lower energy are less transporting, transmuting and transforming (and less fusing as by less divergent integration for accumulating) with the surroundings. By Little’s Rule 1, systems of high internal potential are more rapidly transporting, transmuting and transforming with surroundings (fusing and by divergent integration accumulating) and the new divergent integrations and divergent differentiations are more counting the dynamics. So higher energy by the author is more capable of transforming, transmuting and pulling (fusing) in surrounding heat by Little’s Rules 1 and 2 with v>c and time reversal for closing strings transiently for classical → quantum in high energy systems. Prior scientists missed this as he did not want v>c and time reversal. And at lower energies by Little’s Rules 1 and 3, the strings cannot pull in surroundings so it cannot accumulate q, so as to be frustrated (picture of open string closing ) without by surrounding agitations.

**Stronger Diverging and Converging Fields from Nearby Relative to Far Pieces of Universe**

So the higher and lower energy strings close by Little’s Rules 1 and 2 and and Little’s Rule 1 and 3 (respectively); so that the action of Fg on the strings affects their closures relative to Fg → 0 in void space, just as star light in free space is altered as the light approaches the sun by the huge Fg of the sun. The author calculates this as the divergent integrations of the universe are affected locally by the presence or absence of the sun’s gravity and the earth’s gravity. Although whole universe divergently integrates into the target the objects closer to target integrates more strongly into the target to more alter the target by transportations, transformations and transmutations. But the whole universe simultaneously divergently
integrates into the target to activate the actions of the nearby objects upon the target. The sun’s gravity of more strength and more influence the divergent integrations on the smaller entities as the nearby star light and the Universe by Little’s Rule 1. But the larger entities like the quantum fields of the atoms and molecules couple more strongly to the weaker earth’s gravity in the divergent integral of the nearby earth and the Universe by Little’s Rule 1. Sun and earth $F_e$ have differences in magnitudes for divergent calculus by Little’s Rules.

**Analog of Sun’s Gravity Bending Light and Earth’s Gravity Bending QF**

On the basis of such, the earth’s gravity cannot alter light from sun directly, but indirectly as sunlight hits molecules in upper atmosphere then the electronic and optical alterations of the atoms and molecules are changed and the optical, electronics of the atoms and molecules sense the earth’s gravity by such phenomena and new math as introduced here. On the basis of this, the blue shift of sunlight in the morning can be reasoned by relativistic Doppler effect on the moving molecules in the earth’s atmosphere toward the sunlight with compressive alteration of the optical absorbance and orbitals of excited states as bending the orbitals toward the nuclei to blue shifts the optical emissions. But at sunset, the earth spins away from the sunlight to alter the orbitals of the absorbing molecules for unravelling the orbitals for redshifts of the emissions. So the divergent integrations and divergent differentiations can sense such tiny effects of the earth’s motion for altering the absorbances and emissions of such moving atmospheric molecules in the sunlight! This may explain sulfur isotopic fractionations in SO$_2$ by X-ray and UV optics on the photochemistry of SO$_2$ [9]! So the hv hits molecules and the molecules absorb and the molecules can undergo chemical change using the energy by Little’s Rules 1 and 2, nondissipatively. So fluorochlorocarbons have large NMM of halogens relative to N and O atoms and they use this solar energy more efficiently for chemistry and this can by this model reason how these chlorofluorocarbons [10] cause opening of the the ozone layer. The negative NMMs less use the hv for chemistry so $^{17}$O, and $^{15}$N dissipate the solar energy. N$_2$ with $^{14}$N uses the solar energy to do chemistry to cool atmosphere. So $^{17}$O and $^{15}$N may heat higher levels of air, denser $^{14}$N$_2$ cools lower levels create instability?

So these phenomena and new math can be applied to the stars and sun and their interactions with light. On basis of such model, the sun bend star light and in analog the earth bends molecular orbitals. Such bending of molecular orbitals by the earth can be computed with divergent derivatives and divergent integrals. The sun and light compose a system with higher sufficient internal mass/energy for bending of light by sun as already reasoned for the source closing the Br and Dk rays of the light. But the earth and a protein in its orbit lack high sufficient internal energy for the earth to bend the light but a higher energy field and wave of QF about atoms the earth can bend (as by Little’s Rules 1 and 2); thereby orbitals of proteins can be bent internally by the earth’s gravitational field by divergent integrations and derivatives such orbital bending can occur. Thereby by this new theory, model and math of Little, the changing elevations of the proteins in the earth’s atmosphere changes the gravity and changes the bending of the quantum fields within the proteins. So now the sun bends star light as due to the higher energy in the sun but the earth cannot bend light as much on the basis of Little’s
Rule 1. But the earth’s weaker fields can bend higher energy waves as quantum fields on the basis of Little’s Rule 1. But the earth’s gravity as determined by this theory can bend quantum fields for affecting chemical reactions and electronic orbitals in atoms and molecules. The space bends due to the diverging derivatives of matter in the sun and its diverging integrations of such solar fields into the path of the light. This theory thereby reasons the gravity converging and fusing to the target particle of light so that the gravity has to travel faster than the light. Einstein’s theory of relativity did not reason the gravity travelling faster than light. But this theory reasons superluminosity for an ultrarelativity for explaining gravity travelling faster than light as the gravity originates from nuclei composing the sun moving superluminously to the target to fuse at the target before the target (light) can move! The finiteness and luminosity of older math cannot compute such effects but the new divergent differentiations and divergent integrations by this new math compute these phenomena of sun’s gravity bending star light and earth’s gravity bending quantum fields.

**Earth’s Gravity Bending Quantum Fields in Water Cluster and Proteins in Earth’s Atmosphere**

Earth’s gravity breaks nanoparticles of \( \text{H}_2\text{O} \) and this has already been reasoned to fragment hydrogen bonds in nanosize ice crystals in the earth’s atmosphere to explain lighting [7]. Likewise the earth’s gravity can affect nanosize molecules and complexes in living cells in the earth’s orbit. By Little’s Rule 1, the sun couples to light fields; so in analog the earth’s weaker gravity field as modified and intensified by earth’s magnetic field (as by this theory the magnetic field in rarefaction about the earth transduces to gravity field to intensify the gravity field with elevation) can couple to stronger fields of quantum field. This coupling of fission fields to targets can be modeled and calculated by diverging derivatives from source and diverging integrations at the target. Older math cannot compute such diverging integration of earth fields and diverging differentiation of the quantum fields in ice particles. The quantum field is composed of many photons and fields of higher energy so the weaker gravity of the earth can couple to this strong quantum field of the earth nanoparticle by Little’s Rule 1. There is also the possibility that the gravities of the sun and planets couple to the earth’s magnetic field in this way to cause flip of earth’s magnetic field. So now is the coupling dissipative by Little’s Rule 3 or nondissipative by Little’s Rule 2? It is considered by Little’s Rule 2 but not Little’s Rule 3, consider also Little’s Rule 1. For the molecules and nanoparticles (what about whole human, hail, airplane, and muons?), the coupling is by Little’s Rule’s 2 so that the gravity activates by divergent differentiations of the nanoparticles and molecules to excite states and the excited states are able to pull energy into the nanoparticles and molecules by Little’s Rules 1 and 2 by divergent integration for nondissipative confining the energy with consequent effects on the optics, chemical transformations, transmutations and transport. This also manifests for small hail stone. For instance by the theory here a new mechanism of lightning’s origin is here reasoned as the nano ice and macro ice fragment the altered orbitals as the ice is accelerated across different heights for varying gravity and magnetic field and electric field in the cloud cause charge separations in the fragments of ice as the internal orbitals bend and change and also the electron in the changing gravity, magnetic and electric fields fission to quantum fields and macroquantum fields over miles in the cloud for transforming the electrons into huge electric fields over miles in the clouds as the electron particles transmute to quantum fields and electric and magnetic fields over miles. Here it is reasoned that motions of air passengers in a thunder
storm can kill cancer cells. The wave nature of the many electrons across miles in the cloud is the ability of the cloud to localize many electrons across miles for collapse of fusing of electric cluster for lightning initiation in the cloud as the local charge cluster has huge potential to ignite a spark of current to the ground to cause the lightning bolt.

**Earth’s Gravitational Field Coupling to Nano to Macro Objects**

For the nanoparticles and molecules down to the nuclei, the fields are of stronger intensities and denser and the particle densities are smaller for the nanoparticle ice crystal and protein relative to the larger hail stone and the larger human body, thereby the gravity can couple to these stronger fields and lower particle densities in different ways by Little’s Rule 1 and 2 relative to the classical coupling of the gravity to the weaker fields and higher particle densities of the hail stone and human body as by Little’s Rules 1 and 3. The greater intensity of fields in nano and molecular/atomic targets cause more alterations space-time to create (fuses to) particles and a lot of fields and waves go into creating few particles. So the particle density is smaller and the field intensity is large by RB Little’s Rule 2 for the nanoparticle, molecules and atoms of ice and the protein. Such densities are even larger for individual electrons, protons and the muon for more dramatic effect. Here a theory for the muon 2g anomaly is reasoned and this is discussed below! But if the fields and waves are less intense like in macroscopic bodies, then the particles → (fiss) many particles of lower frequency for conditions of rarefied fields and waves for lower alterations of orbitals by the gravity as by fissing the particles or for the hail stones and human body. So the gravity of the earth would less affect orbitals of macroscopic objects! So the fields are collective alterations or accumulated (fused) particles. Such phenomena are computed by the diverging derivatives as the gravity fields fiss the target particles and the diverging integrations manifest as the gravity is pulled into the fissed targets to alter the motions of the target particles as by C frame curvature as by Little’s Rules 1 and 3 or by alterations of quantum fields as the gravity fuses to the lower particle density high energy quantum fields to alter the chemistry and biochemistry in the nanowater and protein. Prior older math cannot compute.

By using this model, the observed anomaly in the muon 2g [11] can be reasoned. For particles like electrons and muons, the Dirac Equation introduced relativistic motion to the Schrodinger-Heisenberg model for relativistic quantum mechanics with the result of intrinsic spin quantum number. The ratio of such intrinsic spin to the orbital angular momentum determines a g-factor which is 2 from Dirac’s equation. On the basis of theory of Little, the introduction of superluminous motion (revolutionary motion of the spin in the orbital) causes excessive magnetic moments to explain anomalous magnetic moments: \( \alpha = (g-2)/2 \). The anomalous magnetic moment is reasoned by quantum mechanics as the particle manifesting a particle wave duality. The electron has a small anomalous magnetic moment as first determined by Julian Schwinger in 1948. The muons have larger \( \alpha s \). The muon is a lepton like the electron with electric charge of -1 and spin of \( \frac{1}{2} \) but the muon has a much greater mass than the electron. Such anomalous magnetic moments (although proposed by prior scientists by quantum mechanics), RBL by his reasoning quantum mechanics by the electron particle in the magnetic field of its own motion undergoing fractional, reversibly fissing and fusing, thereby Little explains the anomalous magnetic moment by the altered spin magnetic moment.
and the altered orbital magnetic moment as the electron and muon fractionally, reversibly fissing and fusing. The fractional, reversible fissing and fusing via agitation by the surrounding universe causes the fragmented particles to move superluminously and the orbitals to stretch for altered orbital angular momenta for the ratio of spin momentum to orbital momentum to change relative to the Dirac spin momentum to orbital momentum for intrinsically introducing a third motion of revolution (superluminous revolving of the spin). By this type theory of Little, RBL can explain the larger anomalous magnetic moment of the muon due to its heavier mass relative to the electron so the relativistic fractional, reversible fissing and fusing of the muon creates even faster superluminous spin pieces and even larger orbital radii of the fragmented muon for larger deviations of the muon anomalous magnetic moment relative to the electron anomalous magnetic moment. The revolution of the spin involves the internal spheres of the spin accelerating so the inner sphere spin faster than the outer spins so the inner spins stretch and unnest (off-centers) relative to the outer spins so that the internal spheres of the spin unravel and stretch into the orbital in superluminous motions and fractional fissing of the internal spheres of the spin. And vice versa the revorbital of RBL can fuse to spin as the superluminous unnested spheres relativistically contract and slow and the center slows more and contracts more (for sphere of smaller radii for nesting the inner spheres of the pending spin) and the outer spherical layers slow less and contract less (for bigger spherical layers of larger radii to nest about the inner smaller spherical layers of the pending spin) so the spin reversibly fuses to luminous spin from the superluminous revorbital of RBL theory of the spinrevorbital [4].

On the basis of this theory of RBL the muon – 2g experiment can be reasoned as the muons from the cosmic rays penetrating into the earth atmosphere move at superluminous speeds. So by RBL theory as given here the anomalous magnetic moment \( \alpha = 0.001165920(6) \) previously measured at E821 experiment at Brookhaven National Laboratory [12] can be explained. As the luminous motion of the muon causes its fractional fissing and fusing as it transports by transmuting and transforming in the surrounding space as the universe fractionally fuses into the muon as counted by the divergent integration of the Universe into the luminous muon with agitation to divergently differentiate its large massive particles to superluminous spin fragments and superluminous motions of those spin fragments and stretching and concentrating of orbitals about the superluminous spin fragments of the transmuting transforming muon as it transports luminously so that the stretched orbitals of the muon fractionally fiss and fuse into the L frame of the space about the earth with the gravity of the earth divergently fusing into the stretched muon orbitals and the earth divergently fissing from the stretch muon orbitals for stretching and unbending the muon orbitals and compressing and bending the muon orbital in the atmosphere about the earth. The resulting muon in motion is thereby affected in the earth’s atmosphere with alterations of its magnetic moment as explained by this model of RBL as the gravity of the earth and the magnetic field of the earth alters the muons magnetic moment and g factor.

\(^{17}\text{O vs}\ ^{16}\text{O effects on Nano-Ice in Earth’s Atmosphere.}\)

But what happens to \( \text{H}_2\text{O}\) and \( \text{H}_2^{17}\text{O}\) vs \( \text{H}_2^{16}\text{O} \)? The \( \text{H}_2^{17}\text{O} \) in nano-ice can accumulate in the center as it freezes outward inward. The \( \text{H}_2^{17}\text{O} \) can prevent the freezing of the interior. The
exterior of nano-ice can crack due to the difference in NMMS of the interior relative to exterior. As $H_2^{17}O$ cools on inside, it may expand more as the hydrogen bonds are weaker or the hydrogen bonds may form more $H^+$ and $OH^-$ ions and explode to crack the ice crystal and the $H^+$ (aq) rises in cloud and the $OH^-$ (aq) falls in cloud forming negative bottom of cloud and positive top of cloud. So also the distinct behaviors of $H_2^{17}O$ relative to $H_2^{16}O$ in atmosphere gives basis for how protein that accumulate $^{17}O$ will behave differently than $^{16}O$ as the $^{17}O$ may interact more weakly and the covalent bonds may fragment in the cancer under different gravities. Just as the gravity causes chemistry of ice crystals to form lightning, the gravity causes the different chemistry and enzymatics of the proteins in the cancer due to more nonprimordial isotopes in the cancer cells. The protein mosaics have nanowater also. These effects on the nanoparticles in the atmosphere cannot be counted by the older math but divergent integrations and divergent differentiations can count the novel relativistic chemical effects on these biomolecules.

**Sun Rays and the Impact on Gravitational Effects on Quantum Fields in Earth’s Atmosphere**

It is further important to note that the nano-ice and proteins in the cells in the orbit of the earth are computed not only by divergent integrations of the universe and divergent differentiations of the system, but the new math manifests differences not only due to the gravity alterations and accelerations in orbits, but also due to the sun and its rays affecting the nanoice and proteins and nucleic acids differently. Such divergent integrations and divergent differentiations of the sunlight and solar radiation on the moving proteins and nucleic acids alter the enzymatics in the cells for different biologies of the cells. Reflected rays from earth’s surface also affect the biomolecules in earth’s orbit. It is on this basis that the orbit about the earth is not only influenced by gravity but also influenced by the solar rays. The solar rays alter the molecular orbitals of proteins and DNA and RNA in different ways on the earth’s surface relative to alterations of these biomolecules in orbit in upper atmosphere about the earth. The orbit about the earth exposes a cancer patient to solar energy, cosmic rays and reflect solar waves from earth’s surface that affect these biomolecules in different ways than on the surface of the earth! The solar rays excite the biomolecules into outer orbitals changing their energies so they couple even more strongly to the earth’s gravity. Also these near ionization and excitations more strongly couple to nonzero nuclear magnetic moments than they couple to null (0 or zero) NMMs to cause differences in properties of biomolecules of nonzero NMMS as in cancer cells relative to zero NMMS in normal cells. Whereas in the surface of the earth the solar rays may not affect the DNA, RNA and proteins on the space station in orbit about the earth the solar rays affect these macromolecules in different ways so as to elongate the telomeres and/or to kill the cancer cells as explained and computed by this new theory and the new math.

**Sun on Light and Earth on Quantum Field by Little’s Rule**

The earth’s $F_{\delta}$ will bend the QF just as the sun’s gravity bends starlight. Greater quanta of sun have more gravity diverging relative to the earth’s quanta. This greater gravity can more bend so affects orbitals on atomic scales and the space of the light and the photon itself by Little’s Rule 1. But the earth’s gravity bends less but couples with QFs, which stretch forth more for altered orbitals by earth’s field by Little’s Rule 1. Thereby the earth’s gravity is proposed here to alter the opening and closing of QFs in atoms and molecules and the protein for altering
biochemistry and biology as the organism changes orbit about the earth with different biochemistry in the cancer cells relative to normal cells due to different nuclear magnetic moments (NMMs) in the cancer cells relative to the normal cells. This is computed by divergent integrations of the universe and the \( F_g \) and \( F_{cs} \) earth and sun gravitational forces, respectively upon the targets of the atomic orbitals and the light. And for orbit about earth relative to the surface of the earth, \( F_g \to 0 \), then the QF is relaxed and unbent. So near earth’s surfaces, the \( F_g \) intensifies the energy; so the QFs open and close more and pulls in more surrounding heat, \( G \), \( h \nu \), \( E \) and \( B \) to affect the quantum mechanics of enzymatics, catalysis and auto-catalysis. But in outer space or space station, the \( F_g \to 0 \) or zero gravity. So the zero gravity will lower the energy; so the QFs and wave functions are less altered by the surroundings. So the reactivity enzymes, catalyses and autocatalyses would be slowed in space relative to surface of earth as the QFs open and close less and more \( E_{act} \) is required. So this would selectively slow the glycolysis in cancer cells to selectively kill cancer. The \( ^2D \), \( ^{13}C \), \( ^{17}O \), and \( ^{33}S \) in cancer cells accelerate glycolysis at surface of earth. As by negative NMM of \( ^{17}O \) increasing effect of Dk to open strings from QFs and open strings open \( ^{13}C \) and \( ^{12}C \) for chemical dynamics. But in outer space the effect of \( ^{17}O \) is reduced or enhanced as in outer space the \( F_g \) closing of \( ^{13}C \) and opening of \( ^{17}O \) is reduced. So \( ^{13}C \) is open and \( ^{17}O \) is less opened in earth’s orbit so rates of \( ^{13}C \to \text{pyruvate} \) are reduced in outer space so this kills cancer. Also the reduced gravity rarefies the QFs of Br and compresses the QFs of the Dk; so the sunlight excites different molecular orbitals in outer space relative to the surface of earth; so the upper atmosphere of the earth with less gravity, more acceleration, more sunlight would alter the enzymes of cancer cells to alter cancer cells in different ways relative to normal cells. The diverging integrals of universe (and the earth) onto \( ^{17}O \) in earth’s orbit manifest closed \( ^{17}O \) and open \( ^{13}C \), but at surface of the earth the diverging integrals with more intense \( F_g \) has \( ^{13}C \) closed and \( ^{17}O \) open strings and states. The divergent derivatives and divergent integrals compute these fissing \( ^{17}O \) and fusing universal fields for altering the fissing of \( ^{13}C \) relative to \( ^{12}C \). By such effects, this theory can explain the effects of telomeres elongating on the space station. The proteins are altered in catalyzing due to \( ^{17}O \) and the proteins may be modified during translations and the sunlight on the space station. The macrosize of the proteins, enzymes and nucleic acids also contribute more effects of gravity on the macromolecular orbitals and chemical dynamics relative to the effects of earth’s gravity on smaller molecules and atoms!

**Discussion**

**Examples of Natural Systems in Animals at Surface with Near Zero Gravity**

On the basis of this model and the experimenting with this model on different systems we may discuss its outcome on a few systems. For example, the motions and altered gravity of some animals like bats and the resulting different biology of bats. Moreover, the incompatibility of the bats biology with biology of other animals and disease as bat proteins cause disease in humans like ebola. The different motions of insects like flies and mosquitoes lead to unusual effects on proteins and unusual proteins in their bodies. So when flies and mosquitoes bite humans the unusual proteins in the flies and the mosquitoes can cause illnesses and even death in the human. On earth the motions of bats for altered gravity, the resulting unique proteins and viruses and the flesh of bats cause unique molecules in bats that are harmful to humans. It may be on this basis that flies, mosquitoes and bats may be engineered in
their motions on the earth to produce proteins that may be injected into humans to selectively kill cancer cells. The awkward motions of other animals (bats, mosquitos, eagles, vultures) produce unusual biomolecules that may offer treatments for diseases like cancer in humans.

**Life with Varying Motions for Simulating Gravitational Alterations of Biology**

So now we can consider the animals in water. And the change in gravity due to buoyancy and how such buoyancy affects the isotopic compositions of animals in water relative to land animals relative to animals that fly. So animals in water have buoyancy and less gravity for less cancer or less fixing molecules for cancerous protein. This may explain the healthy flesh of fish for humans. $^{17}$O and $^{15}$N and $^{13}$C may thereby affect land animals in different ways than sea creatures. And birds in motion up and down of gravity may alter the molecules they catalyze and construct relative to land animals. Trees do not move, so it is motion that help fix $^{13}$C and $^{17}$O into proteins and enzymes. Because trees do not move their proteins are not as affected by nonprimordial isotopes, hence plants diets are less cancerous. But the effects of wind on trees may increase the uptake and affects of nonprimordial isotopes on trees. But the roots of trees have a different gravity and a different motions and may be richer in different isotopes. The rapid motion alters the diverging integrations and diverging derivatives so as to incorporate $^{13}$C more in animals. The trees lack motion by the kinetic energy can be replaced by potential energy of hv sun light for incorporating $^{13}$C into tree flesh! Do animals that run fast have more $^{13}$C? Why is $^{13}$C more sensitive to plants and less sensitive to animal metabolisms? Br and Chirality of Life; Can Dk disrupt? Can life evolve to use Dk and opposite chirality for superior biochemistry without harm to host but maybe harm to enemy?

In considering all life on earth, the effects of the divergent integrations and divergent differentiations can be reasoned to explain the common chirality of biomolecules. One chirality is important due to the greater abundance of Br gravity and lack of antimatter. The influence of Br gravity causes life to depend on chirality. It is possible to drive molecules or atoms with reverse circulation of electrons by lightning. One pole of a magnet may favor life. The other pole of magnet may oppose life! Gene editing occurs naturally due to the replacement of primordial isotopes in nuclei acids by nonprimordial isotopes. Humans living in tall buildings and using elevators may have alter isotopic compositions relative to humans living in single floor buildings. So now by cosmic exposure, pilots and stewards and stewardess should have more cancer due to cosmic rays, but they may be killing cancer by frequency changing gravity. Cosmic rays may cause cancer on space station. But the motion of space station kills the cancer. The sunlight with the altered gravity also kill the cancers and elongate the telomers. The telomeres and space station by gravity alters enzymatics. Enzyme stop working so although shorten the DNA keeps replicating. The DNA gathers error in replicating. RNA gather error in transcribing, the protein gather error in translating. The protein then further alter DNA to edit DNA to accelerate cancer. Cancer can go into remission of the accelerated editing kills the cancer! Note isotopes can redistribute in body, and isotopes can redistribute even in biomolecules under different gravities for different effects in particular bonds. Gravity may dictate. gravity may be noise area in DNA regions.

**Conclusion**
So here in show mathematically how diverging derivatives unifies thermal space to electric to gravity to magnetic to quantum fields to electron wave particle duality and these coupled by divergent integration and divergent differentiation to nuclear fields and strong fields and fissing fusing quarks, hadrons, and nuclei. Thereby as hadrons change the enzymes change. And as cells removed from gravity the actions of different enzymes are affected by the negative and positive NMM of isotopes are affected more than 0 NMM! This kills cancer if the cancer has accumulated nonprimordial isotopes in certain enzymes and genes. RBL prior reasoning of gravity affecting the chemical bonds and hydrogen bonds is developed further here.

References

5. RBL Chem Rxiv Superconductovity Supplement