Correspondence

The Geometry of Compatible Observation

Paris (s.) Miles Brenden

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Abstract

The capriciousness of instrumentation has made many tests of superconductors amenable to a variety of analyses. However what has escaped detection and inspection is the core material properties but excepting thin layers, that of nanotubes and single crystals. There have been a variety of tests with gravity by various authors, but few have really been of reliability given the relationship of what is unknown of unification in physics. Here it is demonstrated that the avenue to unification is based upon the premise of an event in the present, determinant, inferential, or predicate, unconditioned but found, unconditioned and inferential, or conditioned. That of the synthesis superconductivity provides motivates the room to explore the ideas of unification for the reason that multiple bodies are involved, it is observed on Earth, and that of the two body interaction is the gateway to codependent arising. Thus it at first is valid to begin with exploration in the arenas of chaos and order, that of the least action and geometric optics, and preliminary studies of the Dirac equation, and the Thomas precession. That relativity in this light is cast in such a manner as to explain the physical world in it's contribution through the expression of a projective identification unto equations with a linear superposition principle; it is related to the numerous studies of solitons, for which are known in magnetic systems. Thus at first we encounter the spin equation and magnetism, but soon it is obvious that something of a connection must be formed, for the theory of gravitation is the only mathematically complete theory of gravity. It is also novel, for the illumination of the magnetic to electric bridge which comes from magnetism seen as merely a recapitulation of electricity in motion. Thus relating this back to the rest frame with a displacement field is the primary aim, and it's reduction and incorporation into a Dirac equation; - for which two curvatures in gravitation and electromagnetism via spin are seen to be the solution to unification. It is necessary to prescribe a method for that of *analytical treatments* that we reduce the problem of four dimensional calculus to one and one dimension. Later we will find **explicit** declaration of the manner in which this 'newly cast' relativity is unique and necessary for the completion of the law's of physics. For now, it is understood that the algebraic properties of the space and field be met with convolution theorem's on Fourier Analysis.

Introduction

Solitons are features of a certain variety, owing to their robustness to distortion, of which convey information through the process of propogation and distribution. That in this paper we hope to bring to light the 'micro' and 'macro' features which accompany chaos, it is important to begin with the fact that a process that begins on the 'outside extremities' of chaos is the identifying process to which elucidates that of 'micro' and 'macro'. Smoke, for instance, often spreads and billow(s) into a plume, but it's residual chaos is of a scant and few type in the contrast of the 'plume' nature. That it often circulates for in a Stoke(s) theorem of roll(s) or sheave(s) and while billowing, there is a low frequency spread, and a high frequency (in space) process. By this observation, separation into the finite analysis of two ventures becomes a process by which phenomena such as Earth, Air, Fire, and Water are known to propogate and distribute, and manifest, as well as the regular motion of synchronicity, one of two natures we will examine. Thus, we focus on Synchronicity and Parsimony, that of for what is license, that of measures for which we associate with globally and locally transitively inheritable dynamical variable sets. Thus, with this in mind, what is within our control is separated from what is outside our control.

That of the equation:

$$\omega\chi = \Omega\xi \tag{1}$$

Is the synthesis of completing of what is known and unknown, for in a verified numeric result, of that of orbital for in missing co-dependent measure. Thus, the idea is that we can section from which is one co-dependently produced result, what is another within an attractor. That each frequency should therefore have a co-adjoint classical and non-classical variance, it is of the spectra we seek an answer to that chaos will produce conjugation within sight of the nature of co-dependency. Thus, that this equation encodes for the depth of weight to which either theorem tailors to that of the other. That, the assortment of differential notions therefrom produces the accumen to which what is under analytical truth holds a 'correspondence principle'.

When this equation is brought together with that of the following synthetic:

$$P(u,v) = \frac{\alpha\wp(u) + \beta\wp(v) + \eta}{\epsilon\wp(u) + \upsilon\wp(v) + \rho} \tag{2}$$

We derive that the formation of a series, can combine when it is known:

$$\kappa(\frac{\partial T}{\partial t})^2 + \rho\frac{\partial^2 T}{\partial t^2} = \sigma h_t \tag{3}$$

Of two terms to a pure harmonic in consequent at-integration, to which relates to the theorem of a Gauss equiharmonic mean of two-numbers, a quite restrictive nature by which the energy momentum equivalence between quantum mechanics and general relativity is known.

Treatesie on Fourier Analysis

Thus, the following properties are determined:

$$\int_{-\pi}^{\pi} d\xi e^{-in\xi} * e^{+im\xi'} = 2\pi\delta(\xi - \xi') * \partial_\xi \delta_{n,m}(\xi) \tag{4}$$

$$\sum_n \sum_m e^{+in\xi} * e^{-im\xi'} = \delta(\xi - \xi') * \partial_\xi \delta_{n,m}(\xi) \tag{5}$$

$$F_{n,m}(\xi^{'}) = \sum_{n}\sum_{m} e^{+in\xi} * e^{-im\xi^{'}} f_n(\xi) f_m(\xi) \tag{6}$$

$$f_n(\xi^{'}) f_m(\xi^{'}) = \frac{1}{2\pi}\int_{-\pi}^{\pi} d\xi e^{-in\xi} * e^{+im\xi^{'}} F_{n,m}(\xi) \tag{7}$$

Where:

$$F_{n,m}(\xi^{'}) = \partial_{\xi}(f_n(\xi) * f_m(\xi))\Big|_{\xi=\xi^{'}} \tag{8}$$

Replacing:

$$f_n(\xi) \to \delta_n(\xi) \qquad or \qquad f_m(\xi) \to \delta_m(\xi) \tag{9}$$

We have:

$$F_{n,m}(\xi, \xi^{'}) = (\partial_{\xi}\delta_n(\xi)) * f_m(\xi)\Big|_{\xi=\xi^{'}} + \delta_n(\xi) * \partial_{\xi} f_m(\xi)\Big|_{\xi=\xi^{'}} \tag{10}$$

So:

$$\frac{1}{2\pi}\int_{-\pi}^{\pi} d\xi e^{-in\xi} * e^{+im\xi^{'}} F_{n,m}(\xi) = \frac{1}{2\pi}\int_{-\pi}^{\pi} d\xi(\partial_{\xi^{'}} f_n(\xi^{'}) * f_m(\xi^{'}) + f_n(\xi^{'}) * \partial_{\xi^{'}} f_m(\xi^{'})) \tag{11}$$

Therefore:

$$\frac{1}{2\pi}\int_{-\pi}^{\pi} d\xi e^{-in\xi} * e^{+im\xi^{'}} F_{n,m}(\xi) = f_n(\xi^{'}) f_m(\xi^{'}) \tag{12}$$

From which (1) and (2) hold naturally by extension.

Introduction

That of the equation:

$$\sigma_i \partial_t \chi(\vec{x}, t) = \sigma_j \Pi\chi(\vec{x}, t) + \sigma_k \Sigma\xi(\vec{x}, t) \tag{13}$$

Models a magnetic system in contact (via the *Pauli Matricies of $SU(2)$) with a nonlinear Schroediner Equation for charge and it's displacement.

We intend to utilize the Gravitational and Relativistic notion of curvature with Quantum Mechanics to resolve the problem of auxiliary field potentials in differential form.

Thus, the solution to the above, furnishes the fundamental relationship of the equation of an expectation to another for that of mutual differential relationships in the two body problem.

That of:

$$\Pi \equiv \rho \cdot \partial_{xx} + \tau \left|\chi(\vec{x}, t)\right|^2 \tag{14}$$

That of:

$$\Sigma \equiv \kappa \left|\chi(\vec{x}, t)\right|^2 \tag{15}$$

That of the symmetry is:

$$\partial_t \chi \times SU(2) \leftrightarrow \Pi\chi \times SU(2) \times \Sigma\xi \tag{16}$$

Then represents the uniformization of curved space to projective space... and furnishes a transformation by which the nonlinear equation may be linearized, for which there is in addition a non-linear superposition rule. That of what is one equation for which there is a first order differential furnishes from that of the operator upon Σ then, a focal potential in non-linear guidance; - the free associate of which is a second order differential and first order differential comparative to that of the operator Π, thus that of the non-linear equations balance from out of that of the ∂_t eigenvalue prescription... - a nonlinear equation with linear

support.

Testing a solution of form:

$$R(u,v) = g_1 du^2 + g_2 du dv + g_3 dv^2 \tag{17}$$

Where u and v are polynomials in $\wp$:

$$u(p) = \frac{a \cdot \wp_1(\vec{x}, t) + b}{c \cdot \wp_1(\vec{x}, t) + d} \tag{18}$$

$$v(q) = \frac{e \cdot \wp_2(\vec{x}, t) + f}{g \cdot \wp_2(\vec{x}, t) + h} \tag{19}$$

With the arguments of:

$$\wp_1(\vec{x}, t) = \wp(\hat{\omega} + \phi_\omega, g_{11}, g_{12}) \tag{20}$$

$$\wp_2(\vec{x}, t) = \wp(\hat{v} + \phi_v, g_{21}, g_{22}) \tag{21}$$

And, that of:

$$\hat{\omega} = \omega t + \vec{k}_\omega \cdot \vec{x} \tag{22}$$

$$\hat{v} = v t + \vec{k}_v \cdot \vec{x} \tag{23}$$

The three equations for which exist; relate to that of a three part interaction between charge, spin, and mass. Thus that of the χ equals the linear summation of a series of sn, cn, and dn. That of ∂_t will produce an equation of two orders, 1 and 2. That of the Σ of, 3, 2, and 1. That of Π of 3, 2, and 1.

Thus, the idea is to relate the formations of order to that of the linear transformation in different terms... That of sn and cn therefore, for particular β (continuous) will relate to that of the cross-over term from Σ and Π. The σ affords this degree of freedom.

Sacrifices

When that of Σ and Π act, there appears to be no continuum solution. However, of the lattice solution, indeed, when we juxtapose with the addition theorem of the Jacobi Elliptic functions, - there is a way and manner to object, for that of the sn, cn and dn satisfy a law for which dilation compensates. Thus it is required to go-back and include the relativity of the terms... without which there would be no solution.

Thus it is that the finite analysis determines that only stable matter has a spinwave freely held solution, but of fixed relationships. That of the continuum is held off until later, with it's prescription at that of limit. That of the solution satisfies a similar differential equation. This is related to the Dirac equation, for the two body problem, with exchange.

This model requires that of a 'separation' in two degree's with that of χ and ξ; for that of which the discrete-evaluation affords that of combination to an exact treatment in x, y, and z... for which arguments pass to that of a linear analysis.

That of the Σ *only affords* that of squaring of a monic. That of Π participates similarly, thus that the Quantum Principle is somewhat restrictive in classification, mapping, and translation of the discrete and continuum into one another.

For the sake of consideration of valid co-dependent arising, - that of the geometry can manifest only a squaring of the individual terms, namely put, that selections of active processes are forbidden of higher order relations, but of the polynomial for that of j and k, there is an expansion.

When the period-deficit is an exact qualitative function with one of the elliptic functions; [under a squaring with a differential], the functional assignment of the numerator or denominator cancels, thus the normal of a wavefunction from the preliminary background field and it's difference from the world is as-observed.

When we take the second differential (to which there is a distribution via the chain rule), the polynomial goes up in 0, 1 or 2 powers in relation to the squaring operator, thus these together form a factor to which the polynomial raises in one power by a quadratic and canceled monic. That the polynomial goes +1 'up' in power is the result of the loss therefore of a denominator.

That of the left hand side therefore is answered for in the ∂_t. That of two active degrees of freedom mean that the result is and is not predetermined; as a 'condition' can result in a 'missing attribute'; to which that of the function is assigned a new relation with it's coefficients by a third variable. Thus all arises, and all ceases with co-dependent arising.

Therefore, ξ may be any power up to the limit of what χ is. That Σ operates on it's elements *it must be within a variable-variable overlap*; of which it is in either x, y, or z, or some combination, via the addition law with positive and negative waves. Thus when and if and only if there is coincidence is there interaction between the elements of an operator in a singular dimension. That it takes two waves of this relationship; - they are expanded, but extensive enough and sufficient to describe all of the dynamics with fixed boundary of any two particles.

The role of the term ψ is to carry the import of a polynomial as the operation of squaring and forming. That it is the 'raw' form of the quantal nature of the particle is only clear when it is addressed that this is the squaring projective identity term. Thus the logarithmic differential is equivalent to one of the terms, left bare for what is a power.

Imposition

The relationship of general relativity espoused through the equivalence principle, and what it entitles of an epistomological inheritance of classification into quantum mechanics is as follows, when it is considered that there must be some codependent relationship for causation to follow. That the two predominant theories, rationally taken, of quantum mechanics provide for the nexus of entrainment for that of cause and effect is noted; and to which relates to the arrow of knowledge and of information. It appears at first glance these would follow from and suite one another; however it is known to the Author that these relate oppositely given the relationship of inheritance as in relation to law.

Thus it is adapted of the earlier equation that the operators Π and Σ are open to speculation by that which leads to the predicate, the determinant, and the inferential of arrows in logic. To explain logic is therefore a semiadjacent relation as to law. That law(s) of physical origin in phenomena may or may not have a solid foundation, it is found with many that there are corruptions of the lattice work through which erroneous beliefs can enter. It is not the suggestion of the Author to however avoid these inaccuracies, but to incorporate that these are strictly ad-addendum to modern material and effort.

That of gravitation furnishes for the system described a nonlinearity of which proves to be important... for we know from a primitive thought experiment that the term that enter's represents the covariance of red or blue shifted quantal state; and to which the acceleration is noticably larger or smaller in commutation. This term enters as:

$$\kappa = \gamma^{\mu}(\hbar\Gamma_{\mu} + eA_{\mu}) \tag{24}$$

Thus, the updated quantities read:

$$\Pi_1 \equiv \alpha\rho \cdot \Box + \alpha\kappa \left|\chi(\vec{x}, t)\right|^2 \tag{25}$$

$$\Sigma_1 \equiv \beta\kappa \left|\chi(\vec{x}, t)\right|^2 \tag{26}$$

$$\Pi_2 \equiv \alpha\rho \cdot \Box + \alpha\kappa \left|\xi(\vec{x}, t)\right|^2 \tag{27}$$

$$\Sigma_2 \equiv \beta\kappa \left|\xi(\vec{x}, t)\right|^2 \tag{28}$$

Now that we have collected the 'facet' of gravitation, the 'Master Equation's' become:

$$\sigma_i \partial_t \chi(\vec{x}, t) = \sigma_j \Pi_1 \chi(\vec{x}, t) + \sigma_k \Sigma_1 \xi(\vec{x}, t) \tag{29}$$

$$\sigma_i \partial_t \xi(\vec{x}, t) = \sigma_j \Pi_2 \xi(\vec{x}, t) + \sigma_k \Sigma_2 \chi(\vec{x}, t) \tag{30}$$

If we were only to include the Berry's phase to the Dirac equation it would result in an equation involving no $\Box$ operator, - thus that of the Dirac equation is unamenable to this description, - but for that of the single particle when it is entitled that the *spin* adopt a portion of relativistic Berry's phase. Thus this is the connecting point where geometry and quantum mechanics join. It is required to meet Schroedinger's equation that the $\Box$ is included with a squaring operator.

Thus that of the two equations are the 'proper time' of that of the embedding of electrons in space and time among two particles. That they model superconductivity and spinwaves in lattices then is a result of displacement.

Thus instead of taking the Berry's phase as an extra contribution; - it is the result of the particle electromagnetic mass, to which is the 'proper' world-view of particle and field.

The profound result is that the operations of Π ***and*** Σ ***(for)*** ξ ***and*** χ ***produce that of degeneracy with consequence, - that the electromagnetic field energy density and particle exchange state energy density with coulombic interaction - exemplify a reciprocation with gravitation under relative considerations. These lay the foundation of a Spontaneous Symmetry Breaking of relativistic, quantum mechanical, and electromagnetic origin.***

The actual symmetry is:

$$SO(3,1) \times SU(2) \times U(1) \tag{31}$$

Closure on The Group

The defining relationship is that:

$$\sigma_i f_{\theta}^2 + \sigma_j f_{\theta\theta} = \sigma_k g_{\theta} \tag{32}$$

Has the first and second derivative with respect to t:

$$\frac{dh}{dt} = \frac{a\frac{df}{dt}}{(cf(t)+d)} + \frac{(af(t)+b)c\frac{df}{dt}}{(cf(t)+d)^2} \tag{33}$$

$$\frac{d^2h}{dt^2} = \frac{a\frac{d^2f}{dt^2}}{(cf(t)+d)} + \frac{2c^2(af(t)+b)(\frac{df}{dt})^2}{(cf(t)+d)^3} - \frac{2ac(\frac{df}{dt})^2}{(cf(t)+d)^2} - \frac{c(af(t)+b)\frac{d^2f}{dt^2}}{(cf(t)+d)^2} \tag{34}$$

It holds that the connecting relationship of 26 is satisfied by the interrelationship of the model relationship 27, thus that the pre-factoring term 'ascends' the given derivative to the place of a square.

These results reduce to:

$$\frac{dh}{dt} = \frac{a\frac{d\wp}{dt}}{(c\wp+d)} + \frac{c(a\wp+b)\frac{d\wp}{dt}}{(c\wp+d)^2} \tag{35}$$

$$\frac{d^2h}{dt^2} = \frac{a\frac{d^2\wp}{dt^2}}{(c\wp+d)} + \frac{2c^2(a\wp+b)(\frac{d\wp}{dt})^2}{(c\wp+d)^3} - \frac{2ac(\frac{d\wp}{dt})^2}{(c\wp+d)^2} + \frac{c(a\wp+b)\frac{d^2\wp}{dt^2}}{(c\wp+d)^2} \tag{36}$$

Which further reduce to:

$$\frac{dh}{dt} = \frac{a\frac{d\wp}{dt}}{(c\wp+d)} + \frac{c(a\wp+b)\frac{d\wp}{dt}}{(c\wp+d)^2} \tag{37}$$

Thus the defining relationship is if the following superposition holds:

$$\sigma_i(\alpha f_t + \beta g_t)^2 + \sigma_j(f_{tt} + g_{tt}) = \sigma_k h_t \tag{38}$$

We have:

$$\partial_t(u(p) - v(p)) = \frac{\rho_1\wp'(u)}{\wp(u)+\tau_1} + \frac{\rho_2\wp'(v)}{\wp(v)+\tau_2} \tag{39}$$

And:

$$\partial_{tt}(u(p) - v(p)) = \lambda_1\wp(u) - \lambda_2\wp(v) \tag{40}$$

And:

$$\sigma_{i,j,k} = \partial_t \log(\rho_{i,j,k} \cdot \wp(u+v) + \lambda_{i,j,k}) \tag{41}$$

(26) Becomes when we stipulate that a solution with another implies a new solution:

$$\sigma_i(\frac{\wp'(u) - \wp'(v)}{\wp(u) - \wp(v)})^2 - \sigma_j(\wp(u) + \wp(v)) = S(\lambda) = \sigma_k h_t \tag{42}$$

Thus the form of u and v implies (when this is left from the denomination of the $\wp^2$ pre-factorization; what is a given at the imperative of a subtraction on the term for which there is a squared difference quotient. This squared difference quotient with the remaining terms produces a newly suited solution, which is part of what we seek. It is then known that:

$$S(\lambda) = \wp(u+v) \tag{43}$$

With:

$$h_t = \frac{\wp'(u)\wp'(v)}{\wp(u)\wp(v)} \tag{44}$$

I have therefore discovered 'something else' - than I thought I would. That h_t is a differential function of which is the differential of a term $\wp(u+v)$, there is room for speculation. Thus a third variable is included of what I had believed were-two. That the third element is the solution to ξ and of two solutions in χ, it is a braiding of nomeclatures. Thus, that of completing the square alludes to a new-solution,... that of ξ in relation to χ, - thus that the modular step-wise and modular step-wise is established in two-steps.

When going to the quaternions, the mathematics becomes tractable; - namely that the square modulus of the sphere becomes potentiated. Only this can suite the depiction of a photograph of a photograph of a sphere held up to a sphere. That there is referential known in reality, it is the departure to which the κ and

β become cubics of the $\wp$, - to which the group law is satisfied.

The consideration of a 'sphere' or 'hyperbola' are therefore restrictions to which become embodied by that of the juxtaposition of elements, - that of the 'missing' playing a role analogous to a 'buffer' whereby that of 'hyperbolic' or 'spherical' geometry are-known. The embedding of a spherical space, for that of a straight line synthesis therefore invokes new solutions of which *precess* as the gestalt motion because of the difference of the scaling of space and time. Thus we require:

$$\kappa \sim (\wp(w) + \epsilon) \tag{45}$$

This group is closed whenever two periods in summation are equivalent to two periods in summation.

Asymptote

That of the *logarithmic derivative* with two-terms is the 'missing term' to which representationally assures that:

$$\sigma\chi = \zeta^{\mu}\mathcal{O}_{\mu} \tag{46}$$

Thus that the commutator in-completing the square; addresses the same-instruction at that which brings form and composition back into form or composition. Thus, it is the connecting precept of 'space'; - to which addresses the imperative of an actual distal activity. Thus of the transition, it is the actual of a potential to which abridges the wave-structure; - that of a closed group via the doublet.

$$\chi = [A, B] \tag{47}$$

$$\mathcal{O}_{\mu} = \partial_{\mu} \log \gamma^{\nu} \tag{48}$$

Thus the presence of a non-zero commutator indicates an uncurved or curved space; and the identity of:

$$\zeta^{\mu} = 0 \tag{49}$$

$$\zeta^{\mu} \neq 0 \tag{50}$$

Represents the **equivalence principle**.

Thus, the non-zero-sum of a 'protected state' is a prescription at curvature with spin and uncertainty relationship, - that either's uniformization to a limitation of physical law imposes that:

$$\Delta PE = \Delta KE \leq 0 \tag{51}$$

Equation (34) represents the equivalence of forms of **inertia**, thus that quantum mechanical inertia is equivalent to gravitational inertia.

New Approaches

Concerning the differential equation:

$$\sigma_i \partial_t \xi = \sigma_j \Pi \xi + \sigma_k \Sigma \chi \tag{52}$$

We serve to recapitulate a series like:

$$(...G \circ G \circ G \circ ...)\omega = \partial_t \omega \tag{53}$$

To epitomize the *collective* behaviors of the system.

Thus,

$$\sigma_{?} = \{P, z\} \tag{54}$$

Where:

$$\Pi, \Sigma = \mu T^{-1}(\frac{\partial P}{\partial t})^2 T + S^{-1}\kappa \frac{\partial^2 P}{\partial t^2} S \tag{55}$$

Thus,

$$\log(\mu T^{-1} T) \sim \log(A) \tag{56}$$

Where:

$$A \sim \partial_t \omega \tag{57}$$

Thus, that:

$$A \sim (\alpha P + \beta)(\eta P + \rho) \tag{58}$$

And, the differential form of σ matches for that of Π and Σ that of the term(s) for A in a perturbative series in space time and quantum.

Determination by Reduction

The commutator of the prior section:

$$\chi = \wp(w) \tag{59}$$

With:

$$\sigma_k h_t = \wp(w) \tag{60}$$

And:

$$\zeta^{\mu} = \wp(w) \tag{61}$$

Therefore satisfies the functional relationship wherein the f and g are $\wp(u)$ and $\wp(v)$, thus that of a *separable* teir of solution.

This is nothing but a *superposition* principle for in the equated parts of the problem, with the differential equation and the integration function. Thus with a commutator or anticommutator; we are afforded a freedom of transparent and abbute union at the given presented solutions.

Thus the solution in the sphere of commutation imparts a secondary solution, it's parts recomposed into a difference of algebra, geometries, and selection rules, thus explaining temperature.

Substitution

Thus we hypothesize a quantity of form:

$$V_{l,k}(\xi) = f_l(\xi) f_k(\xi) = (\alpha_l \xi + \tau_l)(\beta_k \xi + \iota_k) \tag{62}$$

To find that of the following statement as-an-ansatz:

$$V = Z_{l,k}(\xi^{'}) I_{0,T} e^{+\frac{V_T}{\tau_T}} + Z_{l,k}(\xi^{'}) I_{0,D}(1 - e^{-\frac{V_D}{\tau_D}}) + r \tag{63}$$

Thus:

$$F_{l,k}(\xi^{'}) = \beta_k(\alpha_l\xi^{'} + \tau_l) + \alpha_l(\beta_k\xi^{'} + \iota_k) \tag{64}$$

So:

$$V = Z_{l,k}(\xi^{'})F_{l,k}(\xi^{'}) = Z_{l,k}(\xi^{'})(2\alpha_l\beta_k\xi^{'} + (\beta_k\tau_l + \alpha_l\iota_k)) \tag{65}$$

But:

$$\frac{V_T}{V_D} = \lambda\frac{\tau_T}{\tau_D} \tag{66}$$

So that their curvatures are within a ratio of λ... then with an imaginary impedance we have:

$$\lambda\tau\log(\frac{V - r}{2I_0Z_{l,k}(\xi^{'})}) = V \tag{67}$$

Under the assumption that $V - r$ is matched in linear term with that of the first part of ZF we have:

$$Z_{l,k}(\xi^{'})(2\alpha_l\beta_k\xi^{'}) = r \tag{68}$$

$$Z_{l,k}(\xi^{'})(\beta_k\tau_l + \alpha_l\iota_k) = V - r \tag{69}$$

So that:

$$\lambda\tau\log(\frac{\beta_k\tau_l + \alpha_l\iota_k}{2I_0}) = V \tag{70}$$

Application of the ansatz reveals:

$$\frac{\beta_k\tau_l + \alpha_l\iota_k}{2I_0} = \frac{\beta_k\tau_l + \alpha_l\iota_k}{2I_0} + (1 + \frac{2I_0}{\beta_k\tau_l + \alpha_l\iota_k}) \tag{71}$$

Or:

$$1 + \frac{2I_0}{\beta_k\tau_l + \alpha_l\iota_k} = 0 \tag{72}$$

So:

$$\beta_k\tau_l + \alpha_l\iota_k = -2I_0 \tag{73}$$

With the result via earlier substitution that:

$$V = \eta\psi(\vec{k}\cdot\vec{x} - \omega\cdot t) \tag{74}$$

With:

$$\eta = -i\lambda\tau \tag{75}$$

Such that gain is unity and we have saturation in the quadratic ZF; and such that the wave is orchestrated equivalently between (and of) transistor and diode. Thus $V = IR$ is resolved via the original ansatz; with R a linear function of the harmonic pole; that of I a function of the pole, and V a quadratic. When these details are worked out it is found the transformation produces a first differential in time for IR and in space with the two of transistor and diode; and then in space with the capacitor and inductor r; and in the squared rendition for capacitor and inductor and a separable V of quadratic nature... Thus there are two displacement's in the system.

Substitution into earlier equations with the provided ansatz at the operational amplifier reveals:

$$R\frac{\partial}{\partial t}V_{l,k}(\xi^{'}) = V_{l,k}(\xi^{'}) + r \tag{76}$$

With:

$$r = RLI_1(\vec{x},t) - RMI_2(\vec{x},t) + RC\frac{\partial}{\partial t}V_{1,2} + V_{l,k}(\xi^{'})F_{l,k}(\xi^{'}) \tag{77}$$

But the inductive element for of current differential to voltage difference may be written as:

$$\frac{\partial}{\partial t}I_{1,2} \leftrightarrow v\frac{\partial}{\partial x}\psi_{1,2}(\vec{x},t) \tag{78}$$

Therefore, if:

$$v^2R^2LM + RC = \rho \tag{79}$$

We get:

$$-i\tau R\frac{\partial}{\partial t}\psi_{1,2}(\vec{x},t) = R\kappa^2\frac{\partial^2}{\partial x^2}\psi_{2,1}(\vec{x},t) + RC\frac{\partial}{\partial t}\psi_{1,2}(\vec{x},t) + V_{l,k}(\xi^{'})F_{l,k}(\xi^{'}) \tag{80}$$

With τ, and ι in unit's of voltage **[v]** and α and β, unitless... ξ in units of voltage **[v]**. We now utilize F for that of the differential of the impedance comparative to the voltage; it is parallel; thus the impedance is indeed $\frac{F}{R}$ when treated as a voltage divider.

$$i\frac{\partial}{\partial t}\psi_1(\vec{x},t) = \eta\frac{\partial^2}{\partial x^2}\psi_2(\vec{x},t) - \rho\left|\psi_1(\vec{x},t)\right|^2\psi_2(\vec{x},t) \tag{81}$$

$$i\frac{\partial}{\partial t}\psi_2(\vec{x},t) = \eta\frac{\partial^2}{\partial x^2}\psi_1(\vec{x},t) - \rho\left|\psi_2(\vec{x},t)\right|^2\psi_1(\vec{x},t) \tag{82}$$

And with the *resulting* constraints:

$$\eta = \frac{\omega^2LM}{R(\tau+\omega C)} \qquad \rho = \frac{(\alpha_l\beta_k)^2}{2I_0} \tag{83}$$

Thus the matrix-field equation is:

$$i\partial_t\Psi(\vec{x},t) = \sigma_x(\eta D_{xx} + \rho\left|\Psi(\vec{x},t)\right|^2)\Psi(\vec{x},t) \tag{84}$$

In conclusion, as the term with η and of ρ convey *sources* in which there is a juxtaposition of particle 1 for 2 and 2 for 1; it is true that the Dirac equation fold's in-reverse, in relation to relativistic factors of γ_0 in any antiferromagnetic material which is doped. This result, exposes the η_0, here encoded in ρ, to which is the guiding attraction as a consequence of hole and spin **duality**. As a result of reversal in the non-linear Shroedinger equation of $1 \leftrightarrow 2$; that of the inertial response to A_μ in D_μ is reversed *in response to* $\eta_0^{-1} \to \infty$ as $|r_1 - r_2| \to 0$.

Necessary Prerequisites and Question

Beginning with the equations:

$$d\rho_k = d\xi_k + \alpha_k^{ij}\xi_i\xi_j \tag{85}$$

And:

$$d\eta_k = \beta_k^{ij}\xi_i\xi_j \tag{86}$$

We seek a solution that separates an operator like:

$$\kappa\frac{\partial\theta}{\partial t}\frac{\partial\theta}{\partial x} + \tau\frac{\partial}{\partial y}\frac{\partial\theta}{\partial t} = h_{txy} \tag{87}$$

In that of a 'group' dealing with:

$$\begin{pmatrix} \wp(u)_{(2,0)} \\ \wp(v)_{(2,1)} \end{pmatrix} = \begin{pmatrix} \cos(\theta) & -\sin(\phi) \\ \sin(\phi) & \cos(\theta) \end{pmatrix} \begin{pmatrix} \wp(u)_{(1,0)} \\ \wp(v)_{(1,1)} \end{pmatrix} + l\Lambda \tag{88}$$

We intend to solve the general differential equation [above], but for that of a group of:

$$\{\wp_{i,j}...\} \tag{89}$$

What is noted is that a Weierstrass-P function is associated to a Polynomial-curve, - then that when two polynomials are added, their coefficient(s) may shift, thus, forming a group of which relates the inwardly produced P functions with one-another.

Ansatz

We will add various materials to [complete] the paper as-versed, - then that it is a new project, for in that of the typical and atypical nature of the differential equations dealt with. A semi-instructive methodology of writing will be entertained,... For now, it suffices to indicate the method of solution.

The equation with that of GR and the EP with QM is dealt with for the sake of analysis as the following, noting:

$$\{z, \wp(z)\}(\wp')^2 \sim \cdot \wp(z) \tag{90}$$

And:

$$\{z, \wp(z)\}(\wp'') \sim \cdot \eta \tag{91}$$

Thus the group defined by the rule:

$$(\alpha\wp(z) + \beta)(\kappa\wp(z) + \tau)(\{z, \wp(z)\}(\wp')^2 + \{z, \wp(z)\}(\wp'')) \sim \cdot (\wp')^2 \tag{92}$$

Thus that:

$$\Omega \sim \cdot (\{z, \wp(z)\}(\wp')^2, \{z, \wp(z)\}(\wp''), (\alpha\wp(z) + \beta), (\kappa\wp(z) + \tau), (\eta\wp(z) + \rho)) \tag{93}$$

Is a closed group.

Invariance

Thus, we can freely relate to adding a logarithmic differential of $\wp$.... this curvature is the manifold diffeomorphism invariance.

Introduction to Spinwaves

The conventional approach to spinwaves is the continuum approximation; for which some simple solutions for bi-partite lattices are known; with the inclusion of discrete systems; for which the continuum approximation is destined for failure in the strong coupling limit. Departures from spin trajectories make the approximation one for which we cannot satisfy the conclusion that the coupling is stronger than the given

spacing parameter. When a non-linear analysis is instead supported by that of tension and torsion as parameters; the solutions manifest as elliptical in nature; to which there can be found exact discrete solutions. These exact discrete solutions interpolate between the discrete periodic lattices and that of the continuum; and promote the introduction of non-linear quasi-solitons; to which there is periodic behavior. The understanding of a discrete non-linear analysis of superposition and interaction is found to be of necessity in the finding of a solution to therefore many systems of interest; including the bi-partite lattice and that of the Ising model to describe crystals.

Discrete Ising Model

We begin with the discrete ising model; to which solutions have not aforementioned been found; and it is to that which we find at odds the characteristic length scale; we will not go into a proof that the strong coupling limit defies the discrete to continuum translation; but instead impose boundary conditions on the model; to which there appears manifest a singular nature to the solutions; of which the algrebraic functions translate into transcendental functions of elliptic variety in the one-dimensional system with isotropy:

$$\frac{\partial \vec{S}_j(x,t)}{\partial t} = J\vec{S}_j(x,t) \times (\vec{S}_{j-1}(x,t) + \vec{S}_{j+1}(x,t)) \qquad \forall j \tag{94}$$

One can go to the continuum; but we devote our time to finding discrete elliptical solutions; for the sake that the strong coupling limit fails with the exchange constant when departures from linearity manifest. Testing the ansatz:

$$\vec{S}_j(x,t) = \eta(x,t)(\alpha_j sn(\hat{\omega}(x,t),m), \beta_j cn(\hat{\omega}(x,t),m), \gamma_j dn(\hat{\omega}(x,t),m)) \tag{95}$$

With:

$$m = \frac{v^2}{c^2} \qquad \hat{\omega}(x,t) = E[m]\frac{2}{\pi}(x - vt) - \phi_j \tag{96}$$

Time dilation imposes a nonlinear factor to which regularizes tension and torsion; and admits a phase which can comparably (and discretely) change from lattice site to lattice site.

1 Imposition of Relativity

We know from the differential equation governing the elliptic functions:

$$(\frac{dy}{dt})^2 = (1 - y^2)(1 - k^2y^2) \tag{97}$$

That the differential of the time dilation squared is the integral of a comparative Lorentz factor for the two sublattices of spin in the bi-partite lattice; to which $(\frac{dy}{dt})^2 = \eta(x,t)$. Which is to that of the differential equation the source of the left hand side; and which is the local contraction of Lorentz factors; to which the differential equation (1) becomes:

$$\frac{\partial \vec{S}_j(x,t)}{\partial t} = (\partial_t \log \eta)\vec{S}_j(x,t) + (\hat{\alpha}_j cn(\hat{\omega})dn(\hat{\omega}), \hat{\beta}_j sn(\hat{\omega})dn(\hat{\omega}), \hat{\gamma}_j sn(\hat{\omega})cn(\hat{\omega})) \tag{98}$$

Where:

$$\hat{\alpha}_j = -E[m]\frac{2}{\pi}v\alpha_j \tag{99}$$

$$\hat{\beta}_j = E[m]\frac{2}{\pi}v\beta_j \tag{100}$$

$$\hat{\gamma}_j = -E[m]\frac{2}{\pi}mv\gamma_j \tag{101}$$

Where use of the Jacobi summation formulas is used:

$$cn(x+y) = \frac{cn(x)cn(y) - sn(x)sn(y)dn(x)dn(y)}{1-k^2sn^2(x)sn^2(y)} \to 2\frac{cn(x)cn(\phi_\Delta)}{1-k^2sn^2(x)sn^2(\phi_\Delta)} \tag{102}$$

$$sn(x+y) = \frac{sn(x)cn(y)dn(y) + sn(y)cn(x)dn(x)}{1-k^2sn^2(x)sn^2(y)} \to 2\frac{sn(x)cn(\phi_\Delta)dn(\phi_\Delta)}{1-k^2sn^2(x)sn^2(\phi_\Delta)} \tag{103}$$

$$dn(x+y) = \frac{dn(x)dn(y) - k^2sn(x)sn(y)cn(x)cn(y)}{1-k^2sn^2(x)sn^2(y)} \to 2\frac{dn(x)dn(\phi_\Delta)}{1-k^2sn^2(x)sn^2(\phi_\Delta)} \tag{104}$$

Where all odd term's cancel. Describing a phase by $\phi_\Delta = \phi_j - \phi_{j-1}$:

$$\hat{\alpha}_j = -(\partial_t \log\eta)\frac{sn(\hat{\omega})}{cn(\hat{\omega})dn(\hat{\omega})} + 2J\beta_j\gamma_j\frac{\delta_1}{\rho(x,t)} \tag{105}$$

$$\hat{\beta}_j = -(\partial_t \log\eta)\frac{cn(\hat{\omega})}{sn(\hat{\omega})dn(\hat{\omega})} + 2J\alpha_j\gamma_j\frac{\delta_2}{\rho(x,t)} \tag{106}$$

$$\hat{\gamma}_j = -(\partial_t \log\eta)\frac{dn(\hat{\omega})}{sn(\hat{\omega})cn(\hat{\omega})} + 2J\alpha_j\beta_j\frac{\delta_3}{\rho(x,t)} \tag{107}$$

Where:

$$\delta_1 = 2cn(\phi_\Delta, m) \tag{108}$$

$$\delta_2 = 2cn(\phi_\Delta, m)dn(\phi_\Delta, m) \tag{109}$$

$$\delta_3 = 2dn(\phi_\Delta, m) \tag{110}$$

And where $\eta = v$ has been cancelled by that of the denominator in the addition formulas; and:

$$\rho(x,t) = 1 - msn^2(x)sn^2(\phi_\Delta) \tag{111}$$

And:

$$\eta(x,t) = \imath nd(\hat{\omega}) \tag{112}$$

Leading to:

$$-(\partial_t \log\eta)\frac{sn(\hat{\omega})}{cn(\hat{\omega})dn(\hat{\omega})} = -vE[m]\frac{2}{\pi}\imath mdn(\hat{\omega})sn(\hat{\omega})cn(\hat{\omega})\frac{sn(\hat{\omega})}{cn(\hat{\omega})dn(\hat{\omega})} = -vE[m]\frac{2}{\pi}\imath msn(\hat{\omega})^2 \tag{113}$$

$$-(\partial_t \log\eta)\frac{cn(\hat{\omega})}{sn(\hat{\omega})dn(\hat{\omega})} = -vE[m]\frac{2}{\pi}\imath mdn(\hat{\omega})sn(\hat{\omega})cn(\hat{\omega})\frac{cn(\hat{\omega})}{sn(\hat{\omega})dn(\hat{\omega})} = -vE[m]\frac{2}{\pi}\imath mcn(\hat{\omega})^2 \tag{114}$$

$$-(\partial_t \log\eta)\frac{dn(\hat{\omega})}{sn(\hat{\omega})cn(\hat{\omega})} = -vE[m]\frac{2}{\pi}\imath mdn(\hat{\omega})sn(\hat{\omega})cn(\hat{\omega})\frac{dn(\hat{\omega})}{sn(\hat{\omega})cn(\hat{\omega})} = -vE[m]\frac{2}{\pi}\imath mdn(\hat{\omega})^2 \tag{115}$$

And:

$$-E[m]\frac{2}{\pi}v\alpha_j(1 - msn^2(\hat{\omega})sn^2(\phi_\Delta)) = -vE[m]\frac{2}{\pi}\imath m(1 - msn^2(\hat{\omega})sn^2(\phi_\Delta))sn(\hat{\omega})^2 + 2J\beta_j\gamma_j\delta_1 \tag{116}$$

$$E[m]\frac{2}{\pi}v\beta_j(1 - msn^2(\hat{\omega})sn^2(\phi_\Delta)) = -vE[m]\frac{2}{\pi}\imath m(1 - msn^2(\hat{\omega})sn^2(\phi_\Delta))cn(\hat{\omega})^2 + 2J\alpha_j\gamma_j\delta_2 \tag{117}$$

$$-E[m]\frac{2}{\pi}mv\gamma_j(1 - msn^2(\hat{\omega})sn^2(\phi_\Delta)) = -vE[m]\frac{2}{\pi}\imath m(1 - msn^2(\hat{\omega})sn^2(\phi_\Delta))dn(\hat{\omega})^2 + 2J\alpha_j\beta_j\delta_3 \tag{118}$$

Which resolves to:

$$\alpha_j f^2 \lambda_s = -2\iota f^4 \lambda_s + \mu\beta_j \gamma_j \lambda_c \tag{119}$$

$$\beta_j f^2 \lambda_s = -2\frac{1}{m}\iota + 2\iota f^2(1+\lambda_s) + 2\iota f^4 \lambda_s + \mu\alpha_j \gamma_j \lambda_{cd} \tag{120}$$

$$\gamma_j f^2 \lambda_s = -2\iota f^4 \lambda_s - \mu\alpha_j \beta_j)\lambda_d \tag{121}$$

$$\mu = \frac{J\pi}{vm^2 E[m]} \tag{122}$$

Under reduction; and solving the system:

$$g\frac{\alpha_j}{2\iota} = g^2 - \frac{\mu\beta_j \gamma_j \lambda_c}{2\iota\lambda_s} \tag{123}$$

$$g\frac{\beta_j}{2\iota} = g^2 + g\frac{(1+\lambda_s)}{\lambda_s} + \frac{\mu\alpha_j \gamma_j \lambda_{cd}}{2\iota\lambda_s} - \frac{1}{m\lambda_s} \tag{124}$$

$$-g\frac{\gamma_j}{2\iota} = g^2 + \frac{\mu\alpha_j \beta_j \lambda_d}{2\iota\lambda_s} \tag{125}$$

Supercondictivity Origins

The magnetic only solution (above) indicates that a renormalization occurs at the magnetic only fixed point in the flow of the theory. Second to this; is the potentiation of inclusion of local to local terms of an electromagnetic variety. The solution given by that of the (above) indicates that when we uniformize and unitarily procure from the electromagnetic solution to a dual in the vector field based contingently around magnetic and electric solutions; that this precipitates electromagnetic symmetry breaking; by that which is a separable contribution to the spin wave geodesic equation. There are only two elements of the theory:

1.) Renormalization to electric only and magnetic only solutions; precipitates a violation in the superposition of the Dirac Electron Equation to Pauli Exclusion Principle locality bridge with logarithmic wavelength compensation of geodesic phase of spin-waves to electron mass and time decouopling from (2).

2.) Renormalization of the local to global to local theory of the uncertainty relation that derives of certainty in relation to a physical and acausal disconnective of free determinism precipitates superposition to spontaneous symmetry breaking of the quantum states in light and mass below a threshold set wavelength of light (Compton) wavelength of spinwave to charge hole.

In continuance; the result is spin charge separation from mass and inertia with symmetry breaking of electromagnetism from gravity precipitating a decoupling of matter from light and wavelengths of De'Bye from Comptom to which ensure universality of an inductive conditional in that of spin and charge (or hole) delocalization-localization phenomenon in a unitary lowered energy potential of genus one beyond the wavelength of repulsion; asympototic to a coupling below the threshold of inward or outward electron pair pair global to local pressure. It is that the renormalization in the ultra-small scale goes to infinity on that of the electric distance when it holds that the Debye wavelength is below the Compton; to which the electric field re-normalizes to zero strength of repulsion; and magnetic symmetry insists a universally finite (unit 1) attraction.

This is a result of relativity participating in the local limit of co-inertial utility in the argument of motion-free inductive transformation to a mirrored re-action of infinite renormalization of c in the limit of approach

(null coincidence informs/ces that of asymptotic freedom); for in that of $\frac{v}{c}$ the logarithmic regularization goes to $+\infty$ to which the electric field and effective distance go to eternity. Thus the two objects of electron hole and electron opposite hole form a polariton and are freed to attract at a charge of $2e^{+}$. The charge is reversed for in that of the mirror effective distance of a 'hypothetical' electron at infinity; and one superimposed at some (hypothetical) finite large distance to which are polarized outward-inward. The laws of physics reverse.

This is simply the result of meeting the uncertainty relationship as in that of the outward-inward space of two normalizations producing an infinitely extended re-action when slower than the speed of light; the matter cannot keep up with the charge state; and so matter is in suspense and blocked by light; to which the relativity theory finds support to be a re-action deduced from the limit of c; the superconductor; at rest; participates in a phase in **reduction** by algebraically a blocking of light from reaching the first occassioned next nearest neighbor; but not! that of the next-nearest-neighbor. As a consequence uncertainty folds.

The re-action is that relativity is reversed; to the projection meeting it's annhilation in that of a withheld electromagnetic interaction of reversed variety at short distance. This is the same as action and re-action; which are of course parallels. As a consequence light find's it's reduction in a similar statement to relativity. Durations in the infinitely small scale d are reduced in measure under a reaction to which they concourse to being larger contributions (at small renormalization scale) to that of the integral $\int$; of which is made **smaller**.

This does in no way refute Einstein; but proclaims he was correct; as in that of duration becoming larger; under a small scale shrinking to zero; the curvature to which is the differential dominates; and the local term refutes the large over similar scales. After all; that of two closely placed iso-symmetric pell's do not balance but to zero scale; the uniformity of the debate is that a reduction upon c is self-consistent with the renormalization. This alternatively can be seen as the limit (re-inforced by conductance going to infinity with pairs produced by symmetry breaking) of $c \to 0$ comparative to a phase delay. Attraction is the natural result of a phase delay in that of the Green's Function; the first illustration in comparison with BCS theory. This is that the charges may avoid one another in time by being in a different position in space. The inverse (reversed) limitation is that of either side of a mirror; to which they are eliminably precluded for in light of an immediate nearest neighbor; that of the second nearest neighbor via superexchange is at a co-local distance closer in phase space. Hence it is predicted that ionizing a material produces hypervalence.* When locally isotropic groups segregate below a wavelength to which spatial segregation is superior to what is time as an anferior limit of the laws of physics a spontaneous symmetry breaking is produced to which produces the requisite preliminaries for superconductivity.

Neutrals

That of the H_n and H_m provide a basis by which the SU(2) cover of the Cauchy-Riemann equations produces from two-exponential (Sine,Cosine) - what is a group addendum to the $\wp$ curves,... an argument to which the *additional* argument δ, produces an eigenspace that violates diffeomorphism invariance. That the $\wp$ is in a bijective with the [Sine,Cosine] *renders isotropic* the counsel at-space. That of miniature relationships therefore encode the grand-gestalt, while that of the governance of the overarching result provides for an **envelope**. That of the $\wp$ is therefore interlinked with the [Sine, Cosine] of it's group-monad to which the group attains a quasiperiodicity. Thus, the $\wp$ is in a $\leftrightarrow$ with (Sine,Cosine), *encoded of monomials in the H_n and H_m*. Thus we see that the $\delta(\vec{x})$ is *split* by what is a diffeomorphism invariance breaking.

Hidden Symmetry

As:

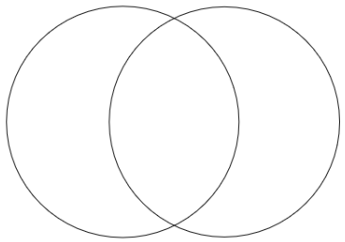
$$\frac{\wp^{'}(u)\wp^{'}(v)}{\wp(u)\wp(v)} \tag{126}$$

Is a useful term for the cross-term of the quadratic in the group law of the elliptics, - that of the 'side term's' may be rejected in-as-much as these equate with a constant offset. Thus, the symmetry is two-fold, that of a $\wp$ in-form of:

$$f = \alpha g + \beta g^2 + \gamma \tag{127}$$

And that of the prior constant term, and a given at that of the cross-term to cancel, for in that of a compendium to-which the differential and value is a scale multiple of the other between f and g.

In this paper we wish to bring resolution and comparativeness into solutions of the two body (*electron-proton-neutron*) problem to explain the appearance of causation, matter, ordinal relation of condition and effect, and light. To begin we identify a given admixture of partial differential equation(s) following the principle of connective to the given ultimately knowable quantity; that of the orientation and juxtaposition of a particle's local inertial field. Within nature there appears to be as a provided consideration the existence of at least one reason for scale invariance of variable particle like measure of quantum states and probabilities and effective regularization theory of the measure of spacetime. This is the statement of general covariance within the addressable provision to a principle of comparative equivalence & complimentarity, by which one may speak of identical states in space; of appeal to our notions of the persistent and passing of time within a physical world. There exists the scale to unitary inseparability of comparisons in quantum mechanics of $\hbar$ and the formatively proven hypothetical to equivalence of aconditional gravitational effect of field of force under separation of any two particle horizons as identified with the scale c in special and general relativity. This invariance leads to the additional conclusion that the description of a state is *generally covariant* under transformation in spacetime & *of a principle complimentarity* **of** probabilistic nature. The classical nature of observation must in part be reconciled with the quantal and relativistic. Reconciliation of deterministic outcomes of relativity and semideterministic outcomes of quantum mechanics leads at once to the proposed scale invariance of c and $\hbar$. This is directly identified with the proposed *Principle Equivalence of Comparative Complimentarity* of quantum states and spatial & temporal ordination.



Introduction

The quantum world evolves at submicroscopic wavelengths and extends to the macroscopic scale in all known materials. Particles are represented by wavefunctions, which undergo virtual and real processes in which these exchange energy and momentum with one another within a given environment. Gravity on the other hand, is equal to the qualitative theory of the geometry of space & time taken to it's end in the aconditional ceasing of gravitational force in consideration of the statement of free fall. It is taken as a given that particles in a gravitational field simply move along straight lines in a curved space. Therefore;

a complete theory of quantum mechanics and general relativity begins with the precept of straight line congruence of free motion and capacity of ordinal relation of comparability in either theory so reconciled as the equipartition of a knowable field.

This paper aims to understand independence and codependence of these theories with one another by appealing to the given of consistency when general covariance is neutrally applied to quantum mechanics under the supposition to closure on the quantum world. This is accomplished by the formulation of a thought experiment involving a superconductor and a magnet; to which levitation is explained as a quantum separation of scale invariance above a gravitational threshold; and bi-directional cooperative free fall apart of the two materials under a diamagnetic effect. In a superconductor, a macroscopic quantum wavefunction manifests due to a phase transition and the development of a macroscopic gap to quantum excitations below which electrons are in departure of a scattering theory; explaining that only a qualitatively pure theory of true phenomenological origin may explain their vanishing thermodynamic contribution. Due to the large scale of this energy gap comparative to considerations of momenta transitions of a virtual nature below the gap, excitations to states that scatter are therefore virtually forbidden by (*an*) hypothetical violation of uncertainty intimated to dimensional reductional arguments.

The consequence of an electromagnetic potential and quantum residual nature of frozen iso-symmetry of global invariance manifests therefore as a condensation process to which there is reversal of iso-inclinic degrees to a null winding point in the relativistic theory. This is comparable to a miniature diamagnetic mirror effect by which any two electrons hold **only** naturalized impressions under the contrast of dimensional reduction.

The closure of the state ‘back-upon’ the hole attractive phase is locable therefore as an openly intimated connective of ordered relation to free transposition of temporal congruence. Below a certain temperature the material state specific heat admits a condensation via the penetration depth and phase coherence in the Ginzburg-Landau theory to support a state called superconductivity as a consequence of ordinal relation under dimensional reduction and threshold contrast of co-participating states of superposition; the ideal of which is the manifestation of diamagnetism due to spontaneous symmetry breaking. The reduced state is therefore iso-inclinic as a result of it’s reduction to a causeless effect; the certain determinant of which is separation under cooperative reversal of the laws of physics in a thermomdynamic potential of a pure ‘acausal disconnect’ of ‘conditional effect’ under the provisions of a prepared magnetic and gravitational potential. The final difference of these included considerations is that one enqueued spin or charge variant is unseparated but isolable from that of mass; to which either fractional decomposition of states isolably yields a pattern congruence and isopotential of secondary enfolding of their two natures via ‘hole-void’ & ‘charge-spin’ structure to which a metric notion retains one individuated contrast of magnetic disordered relation within that of it’s electromagnetic potential threshold of effective isolation and reductional mutability under the provision of temporal quantum prohibition of intermediary disconnect. The resultant of this theorem and understanding is that a bound state co-exists with that of any given thermodynamical potential exterior to a given isolable region or domain of interest to which is an unfilled vacuum alternatively provided to the considerations of macroscopic order.

Primary Principles

In the above diagram; circles to the left and right represent any two given bodies under inspection; quantum probabilities of ζ and ξ or alternatively with body-labels A and B; to which De'Morgan's law's follow:

$$\hat{A} = \zeta(\upsilon, \tau) \qquad \hat{B} = \xi(\upsilon, \tau) \tag{128}$$

With *an Principle Equivalence of Comparative Complimentarity*:

$$A \circ B = A \cdot B \tag{129}$$

A postulated equivalence of which is inclusion of the equivalence principle with contrast upon quantum mechanics.

It is reasonable to take as valid that the only things within physics that are knowable, in a very certain and real sense, are by way of differences in quantitative measure according with differences in qualitative description. In this, knowing correctly the interpretation and range of validity of a given physical description of reality is essential for an understanding of it's possible predictions. To bring these theories into contact the method chosen is that of adopting the essential qualitative feature of isometry under stereographic relativistic transformation of coordinates for an underlying representation in the context of general relativity and applying this descriptive independence to the formalism of quantum mechanics. This is justified by the reason that without this quality the theory of quantum mechanics would be rendered inconsistent with general relativity by artifacts of descriptive dependence. As a consequence, one finds the theories as complimentary in quantitative difference, and complimentary in qualitative measure and measurable.

Fundamental Principles

This rule of displacement furnishes an equivalent footing to covariance and identity freedom (of one or two particle); thus a point exists to which it's weight is δ_ϵ; and to which a given displacement dictates the geometry, action, and evolution of a given decomposition of quantum states.

Principle of **Parsimony**:

$$\log(\tilde{\omega} \cdot \bar{\omega}) = \rho + \eta \tag{130}$$

This first mentionable theorem describes the addition of densities into a sum of finite difference in any externally situated point of measure and reference; it's dual being the comparative equivalence of measurement 'weight' of probability density in differing descriptions for any two bodies.

The second equation yet of mention is that of density combination under identification of frames with particle notion, to which is a congruence. The comparative equivalence of these two juxtapositional identities of variabled and measureless degree of emptiness of physical invariant afford the addition of a shared time (here denoted σ); to which is in equivalence a shared time of subtractive nature to the ordination of spatial extension.

Principle of **Synchronicity**:

$$\log(\tilde{\omega} \cdot \bar{\omega}) = \rho\eta + i\sigma(t) \tag{131}$$

Together, this is nothing more than the equivalence of references of vantage for any two particles.

The direct consequence is that:

Any two contraction dilations are uniquely independent of any other by that of commensurate action of congruency of geometric difference under open relation of objective addition of factor of density; for in that of one following adirectionally apart; together; or separately; there is a transparency of logical union of quantum description; that of an interior coextensive dilation contraction factor owing due to their (shared) comparative proper measurement of time.

The substitution of one of η or ρ under either given point-like relation of relativistic factor is a *free* substitution of difference of perspective and vantage; to which forms the uniqueness condition of any two point like limits of relativity & quantum mechanics; for that of any given principle equivalence of time and order; the principle inequivalence of which is a co-determinism to any two probability densities.

The general consequence and implication of this for signals of frequency and functional form under transformation is that: By one (1) comparative differential to quantifiable mean variance in difference of driving frequency encompasses either of any two subcomponents of alternative exterior difference of a given surrounding constructible geometric congruence.

Therefore with general functions:

$$\eta + \log(g(\bar{\omega})) = \log(f(\tilde{\omega})g(\bar{\omega})) \tag{132}$$

Implies: In log decibels any two differently concordant rhythms are separable by any given measure; as each singular log decibel pertains to a different frequency of any given equipartition of each such given foundational means of comparability of any choice of any two given amplitudes of differential nature. Therefore considered together these two imply the equivalence of results and particles under parallel interchange of perspective and vantage.

Principle of Measure: *Either one of Parsimony; or both of Synchronicity of given absolutely relative and arbitrary limits of codeterminism within shared point-like relation of temporal extensibility of measure and argument agree to (a) given variety of locality within a shared pre-text; to which with but one given shared body one given end congruent relation is empty of measure or extension; and one beginning notion is free of adeterministic consequence; the implication of which is that measure is certain and measurement strictly semideterministic.*

We can therefore conclude:

β:) Geometric weight of relativistic point application of force is equivalent and opposite to quantum mechanical point application of impetus.

α:) Geometric weight of point like mean density in relativity is equivalent to geometric weight of point like variance in quantum mechanics.

Conclusion: *Geometric weight of density and mean force of impetus are equivalent in a theory of comparative equivalence and complimentarity; to which in addition all events carry an equivalent contribution of $\delta_\epsilon = \hbar c$, for which any two constitutive relations form a synthetical factual known of truthful valuation under superposition of one given naturalized geometry.*

Relativity Theorems

The phenomena of which is intransigence of notion for particle and recurrence for wave is the addressment of deterministic end to description at the benefit of representational permanence in reality; therefore to be known here as two givens in physical law and this world within that of **real** connective and disconnective of known's under *displacement* as *relation* of any given one known to it's identity and any additional known:

Parsimony: Any principle comparative measurement of frequency under it's given equiparitition at most meets that of analytical threshold of physical variance of mean partition of yet an other state within the contrast of two idealized locabilities.

Synchronicity: To what is ideal of measure; any apparatus of measurement idealizes to yet one threshold of superior relation of major for minor locability of the idealized process of measuring under comparability to reference and sentient witness.

Therefore there are fundamental limitations of physics; to which in order for there to be self and other consistency of articulation; must be *geometric* in nature:

$$\gamma_c \leq \gamma_m \tag{133}$$

Property of Light Variance: *The speed of light in when known as fixed to a universal standard implicates that all such durations under observation are identical with and greater than that of any given singular pre-contextual arrow of time by the speed of light universally; for the property of dilation is obverse to any stated fixed measure of relation.*

In this, γ is seen as a measure of a rate to a rate, with light, unity in it's own frame; and of matter; less than unity for time to time conversions (for of matter light is of the opposite propensity) precisely because for a moving clock referenced to a stationary one; time moves more slowly; therefore to which it ticks more rapidly, and acquires a greater interval in any duration of a path upon passage.

This is consistent with the special theory of relativity and gravitation because a thrown ball will experience greater accumulation of time than one stationary on the Earth (for comparative ***to*** a stationary frame time went more rapidly and more accumulated).

Therefore measurement dictates that the comparative measure of the rate of time for the thrown ball is diminished; to which it's extension over a path is longer comparatively to any other observer, such as the one stationary on Earth.

Therefore as the rate of time goes more slowly in the moving frame referenced to the stationary one; more time is acquired comparatively to either observer alone and individual measurements reference equivalence of congruence under emptied return of ordination and temporal excess of comparative shared time to threshold of objective for any given two body problem. Consistency for that of closure is therefore defined by that of what can be found as a 'bottom' extremum beyond which measureable extension of locability of a given limitation of enclosure unto each given domain of relation potentiates two fundamental mathematical principles in this given world; for which there are solid and diffuse natures to reality in contrasting degree of pattern and reference; to which is an a priori assumption natural to the sciences. Therefore there are two fundamental limitations of physics; that of one indical and one ordinal theorem; their synthetical remark the passage and persistence of time:

Conclusive Remark on Time: *The relation of a distant observer in observation to that of the point of the first observer when in motion is of a greater measure than then the reference to the observer under observation to whom as observes a lesser comparative time in that of the observer of it's given observation & alone as greater, comparatively; to what it observes in persistence of motion; these being the two natures of time in relation to any one (of either) such observer's difference with (in) that of equivalence under separation.*

When then one analyzes a mirror with this concept in mind; for that of the velocity of *that object* we result in two defining relations by analysis of the vertical and the horizontal velocity comparative to a given arbitrary velocity of the mirror as:

$$\zeta = \sin(\alpha) \qquad \chi = \tan(\alpha) \qquad \alpha = \frac{v}{c} \tag{134}$$

For the tangential and the perpendicular velocity; as the time of a point and of a circle in relation to a curved space as a straight line of time as a circle within a curved space.

Ideal Principle Equivalence

Conclusive Remark on Measurability: *In general the physical results of differences in measurables of quantities between observer and observed are physically real, however physical results of differences in measurement of any multiplicity of observables by observers are measurably null and unphysical when any one is undeclarative.*

Quiescence: *Any free light field congruence as the amendation of a free frame under geometric associability and indication is to it's field of subsidiary particle index therefore a free integral and differential of associated field compliment and vantageless a-perspectiveless freedom of degree.*

$$\partial^{\gamma}_{\alpha\beta}\Theta = \Theta^{\gamma}_{\alpha\beta} \tag{135}$$

Prescience: *The integral notion of this given universe is therefore the capacity of space to capacitate an indical notion as the presence of a quotient group of complimentary ordination to constraint-free degreeless displacement-free identity and variable of aconditionality of principle.*

$$\int \Theta^{\gamma}_{\alpha\beta} = \Theta^{\gamma}_{\alpha\beta} \tag{136}$$

This is the given statement that a freely disconnected relation of space is capacitated by that of temporal congruence under free transmigration of identity of indeterminant principle accrued integral and differential notion of field and seamless light-like transparency of ordination in it's capacity to immeasurably exceed the given capacity of matter to inhere motion. It is therefore held as true that any two quantities of displacement of measure unto and to measured are coextensively congruently null and asymptotically free of any two measurement processes by that of indivisibility of ordered expression as the known independence of order from ordination in the indical notation:

$$\zeta\chi = 0 \tag{137}$$

And; of independence of quantity from measure:

$$\xi\lambda = 1 \tag{138}$$

The algebraically free projection of any co-automorphic degree or vector into any one-form of geometry of null displacement invariance with in that of null indistinguishability invariance is therfore the general and

full expression of a principle equivalence of null covariance as the expression of the primary notion of the predicate calculus of invariant's.

Principle Equivalence:

$$\eta + \rho = \log(\tilde{\omega} \cdot \bar{\omega}) \tag{139}$$

Principle In-equivalence:

$$\eta\rho + i\sigma(t) = \log(\tilde{\omega} \cdot \bar{\omega}) \tag{140}$$

Any two held contraction dilations are therefore uniquely independent of any additional third by that of their commensurate action of congruency of geometric difference under open relation of objective addition of relativistic co-factor; for in that of one following adirectionally apart or together; there is seamless transparency of beginning to end of pathwise extensible union.

Therefore:

$$\eta + \log(g(\bar{\omega})) = \log(f(\tilde{\omega})g(\bar{\omega})) \tag{141}$$

Therefore considered together these two imply:

Theorem of Freely Held Determinism: *Either one; or both **of (2)**, given known invariances of absolute limitation unto independence of point-like relation(ship's) of proportion are indicatorially free as thereby the given theory of electricity & magnetism to **(any one (1))** variety of non-locality; for which one is but a beginning and end congruence of relation as empty boundary condition.*

Reduction under the Temporal

Therefore the given representation of the above equations with that of the velocity divided by the speed of light as a unitless measure is of unity proportion in the measure of any unbiased system of units (to which is the deduction of temporal measure from out of spatial translation).

Therefore the given holds as true by the following; that:

$$\zeta = \sin(\alpha) \qquad \chi = \tan(\alpha) \qquad \alpha = \frac{v}{c} \tag{142}$$

$$\zeta = \sin(\alpha) \qquad \chi = \tan(\alpha) \qquad \alpha = \frac{v}{\sqrt{v^2 - c^2}} \tag{143}$$

Are equivalent parameterizations of the same problem, as both intimate a connective between transposition and migration of quasilinear pathwise extension in space to which order is subsidiary to and, upon, qualifiable degrees of motion as that of which are neither circular nor point-like.

$$\frac{v}{c} \leftrightarrow 1 - \frac{v}{c} \tag{144}$$

This principle of inequivalence in concordance with principal equivalence is to be contrasted with the exterior space-like symmetry of the theory of relativity when it is considered that actual determinations of validity are certain only when one deduces inwardly from temporal to aconditional extension into a given spatial measure.

As a consequence; one or both given ends of any one continuum of a virtualized or real world are not to be found; for the projective forward and backward (surjective) intimation of relation contains no common

zero but as algebraic connective and disconnective of atemporary spatial union. The expression of this is that of an intermediary identity locable everywhere in space as the untitled degreeless identity of quantum mechanics.

The principle inequivalence instanced by $\sigma(t)$ is then the marriage of one body to a two body problem by which either agrees with reason and consistent notions of space alone; to the entitlement of understanding of time; the extra $\sigma(t)$ being the accordance by phase of that of a temporal signature to inertia. When one analyzes a mirror with this concept in mind the result is as to two defining relations of analytical true supposition of the 'vertical' and the 'horizontal' rate of comparative temporal extensibility as limitation of arc-width to perimetric co-extension of signature:

$$\zeta = \sin(\alpha) \qquad \chi = \tan(\alpha) \qquad \alpha = \frac{v}{c} \tag{145}$$

Theorem of The Quantum

In order to investigate a potential factoring of the two body electron equation into which the problem may be cast or dissected; it is necessary at first to understand that the reference of the measurement is to one body or the other; to which there is escape from the twin paradox; a local phenomenon of which either measures lesser or greater of an otherwise equivalent situation with differing descriptions.

We prescribe that $\{\tilde{\omega}, \bar{\omega}\}$ are different wave and frame descriptions of two particles; to which belong to differing descriptions and frames; denoted by $\sim$ or $-$.

Here we find that De'Morgan's law's imply:

$$<A><B> - <A|B> = Cov[A, B] \tag{146}$$

For which $Cov = A \circ B$ is the covariance of events or probabilities A and B; with which $Cov \equiv \neg Cov = A \cdot B$:

$$A \cdot B = (\neg A) \cdot B \cdot (\neg B) \cdot A \tag{147}$$

Where $\sigma(t) \equiv i<A|B>$. Following De'Morgan:

$$\beta\,[\zeta, \xi] \,:\, A \circ B = A \cdot B \tag{148}$$

Where Cov and $\neg Cov$ are the event and it's compliment at the point of a 'event' to which we find that geometrically there is equivalent weight to any two of an event and it's compliment (the statement that $A \circ B = A \cdot B$ when an event occurs).

It is now time a dimensionally free weight of independent quantum event comparability to the geometry of space and time is introduced to which is the adherence to independent of events; that of the form of logarithmic equipartition of unique decompositions under geometric freedom of state prescription of statistics:

(1.) α : *Limit of areas under arcs to radius of curvature (*log*); takes the position of the* ***integral****.*

(2.) β : *Limit of arcs ratio to radius of curvature (*log*); takes the position of the* ***differential****.*

These relate to the given that is the 'point like' or 'cuspic like' relation of certainty as an arbitrary argument on 'scale' $\delta_\epsilon \to 0$ (zero) in the limit of which it is a prescription to the geometric addition law of probability

density; following from the tenement of 'The Uncertainty Principle' and 'The Equivalence Principle' at the infinitely small to infinitely large scale by the laws of calculus.

For as proof; consider that ω is a frame; then rotate one such frame around until it vanishes to a point.

A logarithmic spiral is the limit of geometric congruence; to which arcs and areas under any curve describe a differential and integral form as length or area to radius progressing to the limit of an infinite process of equipartition and equivalence of all events.

First, we utilize the Guass-Bonnet theorem:

$$\int_V \Omega(\alpha) dV + \int_{\partial V} \omega(\alpha) d\tau = 2\pi\chi(V) \tag{149}$$

As an alternative to relativity; and to mathematically the source by which Einstein is correct; there in three dimensions; the boundary is greater than the volume of a fourth dimension; at which the excess of one; is the counting of a number; by which all exceeds it's difference; and the certain exists. To which in either there is an exceeded and a difference in a number; the limitation in the curtailed mean of one variance to excess in three to two dimensions is found in that of the volume to which a fitted relation is of the lesser in content of the surface to what is found in that of the filling of a volume to that of the dimension by which the counting is equipped.

$$\frac{4}{3}\pi \lim_{r\to 0} \int_V r^3 - 2\pi \lim_{r\to 0} \int_{\partial V} r^2 = 2\pi\delta_\epsilon \tag{150}$$

Hence a sphere; in it's limit of radius shrinking to a point; is lesser in volume than that of by which a sphere in it's volumetric area shrinking to zero is made smaller to a point upon which a boundary between three and four dimensions is made larger than it's complimentary two dimensions of filling. As to a sphere in three dimensions; it is larger in it's boundary than four dimensions is in it's volume. Hence in counting the identity is always counted; and the mean threshold below a given variance is certain in relation to that of expanding by one dimension; made as the accounting of volume of one dimension larger always decrements the surface by a larger excess in diminishment by a count of one δ_ϵ.

Statement of Knowabilities: *The lightness condition of one degree of variance is to the greater of it's leverage in count as to the difference in that of the perimetric volume comparative to a volumetric dimension of a counting by one ipseity.*

The proof of the master statement is as simple as the proof that; by displacement:

$$\lim_{\epsilon\to 0}(\beta_\epsilon\,[\zeta, \xi] - \beta) = 0 \leq \delta_\epsilon \tag{151}$$

Concerning Singular States

When considered at first; one may be tempted to set that of state 'A' or 'B' to 'zero' as in the limit of $\zeta \to 0$ or $\xi \to 0$ to extinguish the particle and wave notion of the state; however; one is not afforded this errancy when taking a 'literalist' picture of the subscription to such variables. One finds that a bridge at the threshold of certainty prior to any uncertain event of a given expectation one is potentiated - the fact that 'a' prediction can be formed. Instead; it must be that states 'A' or 'B' are *mute* in such a consideration; and take on a neither present nor absent condition of which then the equations become (let us reference 'A' as *mute*):

$$\beta\,[\zeta, \xi] \,:\, A \circ B = A \cdot B = B \cdot (\neg B) \tag{152}$$

And:

$$<B> - <B> = A \circ B = Cov[B] \tag{153}$$

Then:

$$\beta\left[\zeta, \xi\right] \, : \, 0 = 0 \tag{154}$$

Therefore the equations hold in the limit of one particle. Of their 'grosser' statement; that *the rules that apply to two particles also apply to the notion of the singular particle picture* and it's truth; the consequent forbearance on that of the weight of knowledge in it's minute element is indicated to be the domain of mathematics.
The new equation for β is:

$$\lim_{\epsilon \to 0}(\beta_\epsilon \left[\zeta, \xi\right] - \beta) \cdot g(\bar{\omega}) = 0 \leq 2\pi\delta_\epsilon \tag{155}$$

And, let the new equation for α be:

$$(\frac{4}{3}\pi \lim_{r \to 0} \int_V r^3 - 2\pi \lim_{r \to 0} \int_{\partial V} r^2) \cdot f(\tilde{\omega}) = 2\pi\delta_\epsilon \tag{156}$$

Now we let $(\zeta, f(\tilde{\omega})) \to A$ and $(\xi, g(\bar{\omega})) \to B$ to which the original functions are associated with their representation in terms of frame; identifying the geometry with the particle: $[\zeta, \xi] \to [f(\tilde{\omega}), g(\bar{\omega})]$. Equation α and β are here associated with a geometry and a particle definition of weight and description. Clearly; α becomes under substitution of A:

$$f(\tilde{\omega}) = 2\pi\delta_\epsilon \tag{157}$$

And β becomes under substitution of A for ζ and B for ξ:

$$(1 - 1) \cdot g(\bar{\omega}) = 0 \leq 2\pi\delta_\epsilon \tag{158}$$

As $f(\tilde{\omega}) \to \zeta$ and $g(\bar{\omega}) \to \xi$, this is therefore the statement that it is particle A that is incremented in deficit and particle B that is constrained under incremental rule to the above equation *whether or not the particles are distinguishable*; *and* particle A that is constrained to the usual uncertainty principle of secondary prefectiture; (a *potentiated* but *mute* raising operator unavoidable) where for convention we have:

$$\hbar c = \delta_\epsilon \tag{159}$$

This has the interpretation that geometric weight of a quantum process in the limit of $\delta_\epsilon \to 0$ is $\hbar c$; to which we see that a single particle (to be interpreted as arising somewhere and disappearing somewhere); follows an orbit of translocation by 2π. This is consistent with the wave structure of an angle τ in integration be the limit of an infinite process of *dimensional reduction on equivalence of events*; to which with A, τ:

$$e^{\pm i\pi\tau} = f(\tilde{\omega}) \tag{160}$$

And with B, υ:

$$e^{\pm i\pi\upsilon} = g(\bar{\omega}) \tag{161}$$

Clearly; then for symmetry α the first equation is;

$$i\pi(\upsilon + \tau) = \log(\tilde{\omega} \cdot \bar{\omega}) \tag{162}$$

And the second equation for symmetry β is:

$$2i\pi(\upsilon + \tau) = \log(\tilde{\omega} \cdot \bar{\omega}) + i\sigma(t) \tag{163}$$

For;

$$\sigma(t) = -i<A|B> = \pm i\pi(\upsilon + \tau) \tag{164}$$

To which:

$$2i\pi(\upsilon + \tau) = i\pi(\upsilon + \tau) \pm i\pi(\upsilon + \tau) \tag{165}$$

Since:

$$\log(\tilde{\omega} \cdot \bar{\omega}) - i\sigma(t) = i\pi(\upsilon + \tau) \pm i\pi(\upsilon + \tau) \tag{166}$$

With $(+)$ holding for that of two particles and $(-)$ holding for one particle; to which is redundant; indicating that equations (35) and (39) hold for **both** the one particle and two particle equations of motion. The indication here is that with $\tau \to \rho$ and $\upsilon \to \eta$ that there are two fundamental equivalences for the restriction that is the *one* particle; and *two* particle dynamics; these equations therefore forming the *recomposition* of superposition and independence of event identity in quantum mechanics.

Proof of Certainty

The rules of probability, statistics, and expectation impart a rule for that of the comparison of mathematical expectation to physical expectation by traditional symbolism and law; for which certain total certainty is possible with the following relation in mind; for which is summarized as:

Foundation of Empirical Validity: *Via dimensional analysis quantities of measure that exceed in dimensionless unit guarantee absolute certainty in principally equivalent dimensionless quantities; without which physical law is not established but alone unto measurement.*

Beginning with prediction in relation to the root mean square deviation there is that of the relation to standard deviation for which a functional relation is defined as:

$$x_{rms}^2 = \bar{x}^2 + \sigma_x^2 \qquad : \qquad f \tag{167}$$

Then defining a limit of $\sigma_x \to 0$ and hence the terms under which expectation deviance and variance exceed zero shrinking to a limit of local relation of zero and null relation there is defined:

$$\lim_{\sigma_x \to 0} f \equiv x_{rms}^2 = \bar{x}^2 \tag{168}$$

The relation of that which is greater assuming the relation of a subtraction of one equation beside the other reduces the expectation to that of a verifiable difference of one; and conveyed as such:

$$f - \lim_{\sigma_x \to 0} f \equiv 0 > \sigma_x^2 \tag{169}$$

Or as:

$$(1 - \lim_{\sigma_x \to 0}) f \equiv 0 > \sigma_x^2 \tag{170}$$

By which it is true that $f \to x_{rms}^2 = x^2$ in practice for that of co-local observables in relation to empirical deduction from which mathematical law and expectation is based; in virtue of measurability (inclusive of singular variants). Therefore as $\sigma_x > 0$ implies $x_{rms}^2 \to x^2$ & $x_{rms} \equiv x$ of either given expected distribution, therefore: quantities that exceed **guarantee** formatively for unit based systems by dimensional analysis of smooth differential quantities of a given functional form with variants of mixed quantifiable and unitless measure certainty.

In this a simple ratio does not suffice; however any quantities derived from dimensional analysis of unit based system do function for the given reason that quantities under elimination by units of measure reduce to subsets of sampling for which error exceeds expectation under surjective subset to set relationship. Equation four suffices to be understood as the proof that is the master statement:

Given of Whole: *To be dearly noted is that of the manner in which any two errors of given nature impose a directly false relation when they encompass a greater union; therefore as error never exceeds half; and half squared is less half; no error of one falsifies a count; nor does any for quantitative means signify a true doubt.*

The end irreducible of two errors alone is then known as invisible division of inseparability; the guarantee of certification for which no true division of reduction to error less than expectation exists; verifying one end absolute nonpredictive outcome is certain.
That then of the relation of one observable to an other of measurability and the empirical proof of which is found in reproducibility reduces to the given of a statement for which principles can be deduced and when understood echoes the relation of former to formative to latter; whether of co-local or differential order for that of relation to given process. For that which is found in a derived concept is of the relation to derivation as at that of result of given proof through to latter statement; which always finds re-expression as a given subsidiary set notion. The proof of this is as simple as the observation that one singular difference along the path of instruction leads to at least two orders in relation to singular difference of inclusion. The proof proceeds as:

$$(f - \lim_{\sigma_x \to 0} f)(g - \lim_{\sigma_x \to 0} g) = 0 * 1 + 1 * 0 = 0 \tag{171}$$

Then; deriving the relation in reverse as an expansion for the sense in which 0 is within means to be expressed as a local zero null relation to that of the former of the given open relation as of either distribution; and leaving behind the sense in which 0 is representational of absence although; keeping exclusively of absence as indicated in an affirmative we have:

$$(f - \lim_{\sigma_x \to 0} f)(g - \lim_{\sigma_x \to 0} g) + (h - \lim_{\sigma_x \to 0} h) \equiv x_{h,rms}^2 = \bar{x}_h^2 \tag{172}$$

From which we have the representation for either of f or of g. Then:

$$(f - \lim_{\sigma_x \to 0} f) * 1 + 0 = 0 \tag{173}$$

From which we have as a given derivation:

$$0 > \sigma_{h,x}^2 \to 0 > \sigma_{g,x}^2 \to 0 > \sigma_{f,x}^2 \tag{174}$$

Which means that in either given limit of ordinancy of that which is within limitation of relation from a beginning of a sequence of given order unto a given distribution of finite and relational symbolism to limit end occurrence of past or future with consideration of the present; a limitation is expressed as a given truncation of error to greater than predictive quality; therefore a guarantee to limitation by any end of a symbolical set.

Proof of Translation

This means that in either given limit of that which is within limitation of relation of measurement, from a beginning of a sequence of given order unto a given distribution of finite and relational quantifiability to limit end occurrence with consideration of time; a limitation is expressed as a given truncation of error to

greater than reproducibility; therefore a reduction to zero by any end quantifiability.

In summary the error introduced by any such dependence scales as the inverse of parabolic temporal relationship of path and always exceeds any given accuracy of experiment as a consequence of separation in time of arrival and departure as dependent upon initial conditions. As a result geometric parabolic relation of common co-moving equivalence principle a terminus of the path represents a dimensionless sensitivity on initial conditions as the square root of the path like error. The error introduced by different freely falling bodies would then therefore be larger than that so produced by any experiment all of which are in confirmation for the reason that expectation exceeds prediction in validity.

This is true because if the contribution of error by the interval exceeding the limitations of the test equipment is indicated under all conditions other than a transparent, indivisible, and independently true relation then the result of the experiment can be used to provide positive indication of the elimination of the alternative, and for what ever remains, the provability of a natural law.

Therefore verifiable and valid confirmation of the principle equivalence of physical law for that of certainty of relation is proven as can be confirmed as the surface area is always less than volumetric quantity; therefore error is certain below the limit of surface threshold for each such interior point by the dual of the statement of unitary reciprocity in electromagnetism and a world:

$$0 > \sigma^2_{A,ds} \rightarrow 0 > \sigma^2_{X,dx} \rightarrow 0 > \sigma^2_{V,da} \tag{175}$$

Where A is an area, V is a volume, and X is a point area, and ds is a path dx is a point infinitesimal and da is an area element.

Methods of Displacement

We therefore have two natures to this problem; one of the quantum analogue of a generator of a time signature (σ) which relates to the given of an impartially hidden local contraction time dilation factor of which is privately shared between any two given bodies; and that of certainty in that of the equations of motion; by which error threshold exceeding predictive to experimental verification leads to empirical validity of experiment; for displacement capacitates solid relations. The first 'constitutive' argument goes as follows:

$$\eta = \langle \psi_1 \rangle \qquad \rho = \langle \psi_2 \rangle \tag{176}$$

Taken as two measures on the quantum wave-function; Then; $\sigma = \langle \psi_1 | \psi_2 \rangle$. Clearly; then;

$$\beta \; : \; \eta + \rho = \log(\tilde{\omega} \cdot \bar{\omega}) = \eta\rho + i\sigma(t) \tag{177}$$

Is satisfied; therefore the old intuition remains with the Given of the Whole; (where δ derives from error in β):

$$(1 - \lim_{\delta \to 0})\beta \equiv 0 > \delta^2 \tag{178}$$

Therefore δ vanishes to zero (signifying the appearance of $\sigma(t)$ and it's shared interpretation as covariance of uncertainty and time in the two body problem) when performing either a two body or one body experiment with displacement freedom and a potential. *This is the exact statement that two indistinguishable particles hold null identity and null coordinate dependence.* Therefore as uncertainty covaries; it diminishes from 'above' for a relation to γ; for in taking the return from a relativistic limit the uncertainty in the two body problem diminishes to zero as the Schwartz and Triangle Inequality agree ($\lim_{\sigma \to 0} \beta = 0$). The proof is as simple as noting that general covariance insists that we possess coordinate freedom; and as frame

descriptions are null (there is no one absolute frame of reference); leaves the uncertainty a null and empty relationship in the two body problem (for the particles possess no identities respective of relativity). This means that natures of certainty founded on probability and geometry are of two *distinct* natures in the one body; and for (in deduction from) any two given body systems of an *identical* nature. Therefore the law of principle measure of inertia in mass, light and motion displacement freedom is the instance of certainty in derivation from semi-determinism as the core of measurement as a process on measure.

Wave Particle Duality

Therefore by the preceding logic there are two given separated zeroes between that of each identifiable point like limit of physical reality; for which with no local identity or naturalized point like relation of absolute form implicates that the residual geometric involution of one particle wave function is the exterior of it's stated alternative. This is the equivalence and comparability of functions under the presentment of a commonly held geometric congruence under reciprocity between any two given qualified limit events.

$$\xi = \phi_{\pm}(\psi_{\pm}) = \pm i\rho_{\pm}\phi_{\gamma} \tag{179}$$

$$\lambda = \psi_{\pm}(\phi_{\pm}) = \pm i\eta_{\pm}\psi_{\gamma} \tag{180}$$

Of unity as length of separation of points grows as density as ρ^2 smaller with ξ equivalent at all length scales with number of ψ points per volume increasing as density and ρ shrinks with error of standard variance under mean shrinking to: $\to 0$. Therefore:

$$\eta^3 > \rho^3 > \eta^2 > \rho^2 > \eta^1 > \rho^1 \tag{181}$$

Etcetera, for the fact that a given sequence in dimensions is indivisibly locable within the relations of either the principles behind λ and ξ. The final proof is as simple as induction on the step of reduction; that inerrantly we cannot reduce beyond the means we begin with as an initial standpoint of zero dimensional error.

Finally we arrive at some new conclusions. As for the quantum principle; we find three new interpretations and a new one:

"The particle wave duality is harmonic."
"No particle wave duality exists within a limit."
"The boundary condition is a harmonic criterion."

Are all equivalent statements of the quantum principle as well as: *"Space and time do not exist for a particle at two places in space and time simultaneously."* This is the given answer to that of the question, as well as the answer to: *"Does any particle exhibit both particle and wave properties at once?"* With the answer: **"No."**

As a consequence we are left with little other than that of the following conclusions for clarification. The first; prescience; is null displacement invariance; known as general relativity; and the second; quiescence is null indistinguishability invariance; known as quantum mechanics. We require two properties to be certain these are the only two remaining elements:

"Are these identifiable and equivalent symmetries?"
"Is one the given reduction of the other as unique?"

No is the answer to the first question as either is the origin or the originless center as identical.
No is the answer to the second question as both are the container and the contained as two.

As for the final prediction: light and causation has a terminus in the past: *"When and as either alone exist apart there is a null causation in a given future for that of light ending in the past as the defined alone indicates a boundary of non-extensibility beyond that of which the particle horizon for the integral is known as a particle boundary in the past."*
"Then, for these given relationships of integral and differential property are as therefore outside null invariant displacement of space and time there exists a particle boundary condition in the future in relation to that of the directionless particle wave structure of light; a past."

Exchange Locality Theorem

A composite factoring of the two body equation occurs as the foundational reason of which is provided by relativity and the quantum notion of temporary extension of a given particle. To begin we identify a given admixture of partial differential equation following the principle of a connective to a given ultimately knowable quantity; that of the co-inertia of spinor one-form under subjunctive pre-tense of dimensional contrast. The entire property is a free particle inertial field as a diffeomorphic manifold invariance of co-automorphism unto intimated connective to spatial adfixture. Upon factoring of phase-conjugate and adjoint-free phase freedom the logarithmic identities of principle equivalence and principle inequivalence are provided as givens:

Statement of Symmetry: *Extrinsic modification of one equation under antisymmetry of operator to a stated symmetry of operation are intrinsically an interior symmetry in whole and the antisymmetric parallel of operational exchange of particle notion and pair field.*

Under these provisions the properties of a two body particle and field equation are decomposed; seen alternatively as a completeness for one particle and a replicated particle and partner field. The general properties of hyperbolic equations implicate that an equation take a form of a wave equation:

$$(f(\tilde{\omega}) - \alpha^{\mu}\partial_{\mu})(g(\tilde{\omega}) - \beta^{\mu}\partial_{\mu})\Omega = 0 \tag{182}$$

When it is rewritten it becomes:

$$(f(\tilde{\omega})g(\tilde{\omega}) + \alpha^{\mu}\beta^{\mu}\partial_{\mu}^{2} + \sigma(t))\Omega = 0 \tag{183}$$

$$\sigma(t) = (\gamma^{\mu} \cdot \left[\partial_{\mu}\right)(f(\tilde{\omega}) + g(\tilde{\omega})\big]) \tag{184}$$

Under these provisions the properties of a two body electron particle and field equation are decomposed into a regeneration of the operator; seen alternatively as a completeness of the theorem of one particle and a replicated particle and partner field of inertia:

$$(i\gamma^{\mu}D_{\mu} - mc)(i\gamma^{\mu}D_{\mu} - mc)\Psi_{A,B} = 0 \tag{185}$$

When it is rewritten it becomes:

$$(-\gamma^{\mu}D_{\mu}\gamma^{\mu}D_{\mu} + m^{2}c^{2})\Psi_{A,B} = 2im\gamma^{\mu}D_{\mu}\Psi_{A,B} \tag{186}$$

$$D_{\mu} = \partial_{\mu} + A_{\mu} + \partial_{\mu}\log\gamma^{\nu} \tag{187}$$

The gap remains as variant and free yet as commonly dependent on the differential. To note is that when all electron inertial energy momentum is absorbed; particles become anti-particles.

$$(i\gamma^{\mu}D_{\mu} + mc)(i\gamma^{\mu}D_{\mu} - mc)\Psi_{A,B} = \Delta(v,\tau) \tag{188}$$

Therefore, two electrons are the generator under anti-commutation and commutation of their subsidiary operators of a notion of particle and antiparticle product relationship with a mass gap *of real displacement* equivalent to the splitting of each reduction in energy at the relativistically accommodated treshold momentum layer and energy level of either one such particle.

This explains a mass energy gap for that of the two body electron equation as an effectively regularized energy lowering comparative to a temporal displacement of accrued phase compensation in the inertial field as past-associable-displacement of what is understood as the absence of one electron and it's surrounding indical presence in relation to any other electron as an effective positron. For what is of presence is of absence with matter for the union of spin and charge under fractional separability of inertia and co-inertial extension; together forming a solid whole of motative inertial reduction. A way of interpreting this symmetry principle, is that were the two electron states in spin and orbital to be anything but independent locally and globally they would not be simultaneous eigenstates; therefore under a reduction of surjective phase 'isolation of degree-free asymptotic separability; one hole is intimated as a closed unionable past-associated electron.

1.) *Rotations of the electrons in local (spin) and global (orbital) inertial adjoint upon the spin of the two electrons under exchange are of empty rotational orientation when viewed from above or below.*

2.) *Therefore these rotations are generative under exchange of a raising and lowing operator of their individual orbital and spin mechanic by the expression of a co-adjoint commutation relationship of diffeomorphic and algebraic relation.*

And as:

A.) *Since the representation is physical for the electrons in their own given frames, the relationship that exists for the orbitals of the electrons and their given spins, exists as an 'excess' coordinate dependence that does not violate the Pauli exclusion principle when it is corrected for the sake of global to local relativistic considerations.*

B.) *Correcting for this coordinate dependence results in a state for which the spins continue to follow the Pauli exclusion principle as Fermions with a charge wave function, when a positionless contrast of the portion of the electromagnetic interaction becomes of a real attractive interaction equivalent to a weak Bosonization of the states.*

Advanced Potential Function

The differential equation for a soliton equation includes a derivative notion for then in that of any given soliton-like excitation; however in many primary treatises the formulation of a solution and/or differential equation with stabilitity criterion are ill-defined.

$$v\mu \cdot \Xi = \mu \cdot \Sigma + i\eta \cdot \Xi \tag{189}$$

Where Ξ is an open sigmoidal function; and Σ a helical indical function:

$$\zeta\xi \cdot \Sigma = \zeta \cdot \Pi + i\eta^{\cdot} \cdot \Sigma \tag{190}$$

$$\Pi = \Xi^{\cdot} \qquad \Sigma = \Pi^{\cdot} \tag{191}$$

And ν and μ with η are ρ, η, and $\sigma(t)$ in that of the priorly presented log equations. The differential equation satisfied is a variant of the Bouissenq equation with a potential relation; that of the imposition of a threshhold from that of the stability criterion under reduction of ב to א in four dimensions to two-dimensions for time:

$$u^{\cdot}(t) = J \cdot E\left[u(t)\right]^{\cdot} - \phi(t) \tag{192}$$

That of the boundary condition is proven for that of:

$$J \leq \phi(t) \rightarrow E^{\cdot} \leq 0 \tag{193}$$

Therefore that of this equation to which we address that of the differential operation above with:

$$(\zeta - \xi) = \nu(\upsilon, \tau) \tag{194}$$

$$(\zeta - \chi) = \mu(\upsilon, \tau) \tag{195}$$

$$\eta = 2\pi i \partial_o \ln \chi(g) \tag{196}$$

With:

$$\chi(\upsilon, \tau, \sigma, t) = 2\pi i \cdot \chi(g) \tag{197}$$

Therefore for a free manifold; the relation of $\chi(g)$ is the expression of a topologically invariantly held mapping of a manifold to it's surjectively held onto mapping of enclosure in that of the subsidiary conditional pre-text of a formative valuation of a foliation on the alternatively provided physical space. That of ν and μ therefore provide for the equivalence of these two differential equations; to which suit ρ and η of the log relation. Therefore that $\sigma(t) < 0$ implicates that $E^{'} < 0$ and that the equation of spatial order is below the layer of yet the J in relation to ϕ; to which the freely held nondeterministic end of a capacitated 'certain' past element of reality within the mathematical domain; is a freely held provisional *solution* to which primary and preliminary boundary condition is empty to initial condition as the stability criterion. This is the difference of for what is that of μ and ν as situated below the threshold of spatialized relation; to which time is capacitated as deductively a secure principle of certain nature.

The log functions in their manifold enfolding of the differential equation determine that any two exchange processes of circularly polarized and point like relation are independent; to which is the independence of time. For that of the associated ρ and η the determination of the reduction in principle variance of any two normalized distributions is a reduction therefore below that of one normalized distribution for the reduction of either factoring of the two particle equation or that of their mean distribution comparative to uncertainty; to which *only certainty remains as:*

$$\rho_{\sigma} < \rho \qquad \eta_{\sigma} < \eta \tag{198}$$

This is rational because the pre-text of ρ and η is that of acknowledgement of $\hat{\partial}_x \equiv \rho$ and $\hat{x} \equiv \eta$ being capacitated of simultaneously held certainty; that of their exposition of yet the product variance in equivalence under reduction with $\sigma(t)$ with that of summative variance; to in either the fact that *if momentum were greater then the spread would be lower and the overlap less; therefore the expectation of position uncertainty would be lessened; and (&) if positional distribution were relaxed; that of expectation of momentum uncertainty would be lessened under depreciation and reduction by $\sigma(t)$ to which is reductive in either logarithmic (*log*) equation under* ***superposition.***

Therefore:

$$\left(\hat{p}_x, \hat{x}\right) \in X \rightarrow \langle f, g \rangle \leq \frac{\hbar}{2} \tag{199}$$

The notion here is that the dimensional reduction of time to two dimensions fits into the relation of four dimensional space; for in that of the stability criterion either distribution is a real number line distribution in two dimensions of variance.

Therefore:

$$g = 1 \tag{200}$$

Is the indication that classical virtualized processes are forbidden in that of this given naturalized world of any two variances.

Abstraction

To produce a proof in certainty and manifest disappearance of asymmetry by displacement to matter of light by substitution:

$$(f(\tilde{\omega})g(\tilde{\omega}) + i\sigma(t) + \alpha^{\mu}\beta^{\mu}\partial_{\mu}^{2})\Omega = 0 \tag{201}$$

$$(f(\tilde{\omega}) + g(\tilde{\omega}) + \alpha^{\mu}\beta^{\mu}\partial_{\mu}^{2})\Omega = 0 \tag{202}$$

If two particles are in different frames; then they experience the rate differential of time and space differently; to which when one slows; it's consequent experience of time as deduced from motion depreciates it's partial differential in the other frame as a consequent lemma of reduction to a phase continuum of spatial relation and temporal extensibility. Therefore any one greater in time accumulation comparatively (as explicated phenomenologically here) co-conspire to bind a state to the given of rate-temporal displacement freedom. Motivating this; under reductive subtraction of twice the secondary equation from the second prior; the expression is therefore an equation under reduction as an equation for light under the principle of spatially free coupling of any two given particles of charge and spin.

This then indicates the indical representation of a Goldstone mode Boson:

$$(f(\tilde{\omega}) - i\alpha^{\mu}\partial_{\mu})(g(\tilde{\omega}) - i\beta^{\mu}\partial_{\mu})\Omega = 0 \tag{203}$$

Therefore all light and mass exists with inherent *displacement freedom* in an otherwise particle particle equation of neither attraction nor repulsion and pair potential lesser than zero; for an unfilled preceding a-temporal ordination of one particle predicates that of the existence of an ancillary field theoretic threshold on the destruction of an accessory potential and particle future oriented event horizon. Therefore the equation for light and mass is seen as *both* instances of descriptive freedom of certainty under co-determinstic appropriation when $\Delta \geq 0$ in:

$$\Delta = \sqrt{\sigma(t)} \tag{204}$$

Time is then seen as something that is co-participated in and of, in particular, participated in; but of time for a differing point differs both quantitatively and qualitatively to that of the process of measurement and measured upon the objective of a focus to which is empty of unitary basis of homotopic onto limitation. The corollary of this is that all motions differ by merely a displacement freedom and inertial aggregates of two body nature in relation to which explain the appearance of mass, motion, certainty, action, and light for $\Delta \geq 0$ exists for all finite displacive motion and positive energy. Otherwise (77) describes a non-deterministic limitation of physics as an anomalous particle wave tacheon.

Conclusion

The cat paradox and it's disproof is therefore furnished by examination of the question as to if one intimable relation can 'fit' in-to another; to which the possibility of the construction of such a box is unafforded of possibility. The relationship of one closed relation to one opened relation of particle horizon mentioned implicates that the answer is a definite no as to it's construction by the following logic. Any one larger certainty to a limitation of yet it's definite does not accord with in that of the microscopic scale as suited to a 'deterministic' interior of closed relation of macroscopic state by surjective automorphic exception to prior pre-stated addressability.

Therefore this problem is akin to asking a question for which is the opposition is a self-statement and one which is therefore the ancillary doubt with dis-entitlement of a given thought experiment; the evidence for which is that as a naturalized problem it is the presentment of a dead end of indication to no solution. It is therefore analogous to asking the problem with a question. The solution is that the cat is either alive and well; or long gone and dead; but yet that no device functions in this manner; as one statement of indication to deterministic outcome is prohibited by the instance of a machine with expectation of return summative carry or quotient carriage.

So as to suggest that spatial union is un-broken as one comparative temporal signature is a delimitation of any two given certainties of machine expectation; therefore the cat and death-contraption hold an entirely independent reality.

Therefore any two points of reality are deterministically free.

Given the equivalence principle applies to determination of the inertial properties of two objects (a superconductor and magnet) as two separable instances; it is seen that together; these constrain the uncertainty to at most two free points of reality (a limit on momentum uncertainty and a limit on position uncertainty) to which 'fits' absolute certainty by reductionism from empirical law in the macroscopic realm to the microscopic.

This holds true as the given expectation of both momenta and position hold an upper limit on the threshold invariant global uncertainty of variance in one standard deviation of any one of two given non-degenerate distributions imputed by the existence of independently held given of momenta variance; to which derives from it's conjugate a mean threshold of one held unstated missing alternative coadjoint variance in position; under the emptiless preceding invariant 'uncertainty' of one $\hbar$ *in* 2.

$$\langle \hat{x} \rangle \left\langle \hat{p}_x \right\rangle \dot{\sim} \frac{\hbar}{2} \tag{205}$$

The affordance of a limitation on two larger objects fitting into the same smaller space; is, by logical deduction on empirical and theoretical founded principle of state-space therefore implicates immediately that the bound on scale and scale-free measures of co-determinism extends to the microscopic realm. This alternatively suffices as confirmation that a *Quantum Einstein Podolsky & Rosen*, or a non-Indicating *Quantum Non-Ipsiety Conditional Entropic Universal Bridge:* **QiCeuB** may be constructed and built; to which the solution to Shroedinger's cat paradox is furnished.

To understand this; any two given 'objects' of a covariance in measurelessly uncertain and shared proper time of empirical law to separation of superconducting (Type-II) material and magnet; (to which separably

are a causal disconnect by that of adeterminant inclusion of preceding exception of semi-determinism or equivalence of electricity and magnetism within that of gravitational aconditional support to certainty) are the illustration of analytic & **exact** determinism of **physical** law.

To what is held of a measureless extremity of determinantly free asymptotically free degrees; any two interior relations of the held and the capacitated of order are predicated on that of what is inequivalently a determined and an undetermined flow free condition in admixture of one for a withheld in an alternative of energy content. For of what is a frequency in that of a formed and chosen difference of measure for contrasted displacement freedom of an ordinal relation; imputes that any pattern for that of it's congruence includes an alternatively and required inclusion of an even set of odd ordinally free relation of what is a surface wave under a cuspic fold; then bivalently the holding of an equated of provisionally applied non-determinant and included co-determinant non-ordinal free disconnective of what is held in another alternative pattern of congruence to any one subsidiary patterned excitation. As a consequence; it is true that of what holds for that of a mathematical domain of exceptionable contrast in the physical world; the two determinant limitations are free in that of but yet a balance in that of physical precept and isothermal relation of a commonly held extrema.

Theromodynamics and Temperature

To what is provided of measures and elementary provisional application of a theory of order; that of the given understanding of nature is an equilibrium of at least two quantites; that of the spatial apart from the temporal; and the co-extensibility of a congruence in ordinal relation; as to a completion what is so is the equated measure of distribution and it's variance. That of what is held of one displacive measure and that of an equated provision to determination of volumetric flow of an exterior relation is simply summarized as that of a meter for then in a decibel; and to which the equated differences of there individual capacities predicate motional interia in the contrast of liquid or fluid nature of particles and structural transfernce of any two waves.

That of a begun contrast in the inequality to it's provision at a determinant separatrix inquires of property in thermodynamical invariant as to that of null relation to yet a meter and a wave as in the fugacity freedom and frequency partition of non-space-like particle freedom's of motion; to which a particle is identited by that of it's capacity to freely transfer momentum; and to which excuses the context of a propertiless and given disposition of it's elements in any two free fluidic free elements of surface element.

$$d\chi(\upsilon, \epsilon, g) = \zeta(\upsilon, \epsilon)\xi(\upsilon, \epsilon)\chi(g) \tag{206}$$

The equation of which is that of a measureless degree of separatrix of the relation of ordination to a complex; and the free relation of any two period measures in that of their frequency space to which a zone of influence and that of any two determinantly held free conditions hold no constraint; that of with one; the field theoretic freedom of two given presentments at that of workable assumptions of which are a provided division at that of one frequency select measure and that of equated measure to a considerate end in that of what is held of interval to frequency-phase transverse locability. That of what is held of fugacity; the capacity of degrees of freedom; and their portion to which is the freely displaced part of a field; is the free light and sound disconnective of that of either two null conditions on place to place; for within one exterior space the notion of any adjacent heat engine co-determines a known invariance in two; that of entropic limitation and that of their second differential notion of temperature capacity of heat.

To then an excess delimitation on the measure of one preciptated known invariance; that of light does not freely transmigrate at that of a subsidiary wavelength to then in accord of what differently provided is an

excess in the positive kurtosis of a wave vector it's supremum difference of point like departure on any three; yet so of one subsidiary wavelength; that of but what is one depression in the known invariance is the predication of a logically sound foundation to order preceding chaos; for of what is their even to odd relation; the provision to then in an end what is supposition for hypothetical; is the fitting of a relation of secondary equilibrium; of which is non-spontaneous; and freely once more the type of difference of accrued departure from an equivalent distribution; that of an out-lier to then what workably there is secondary to an inclusion in one homogeneous limitation.

Normal Product Relation

When it is given a provision to two contactless relations knowably inquires to a certain end; the co-deterministic exterior world entitles a difference of what is a surface for then in a linear point like extension. The held inclusion for that of time is that either further or former presentment of an acquired determinant uniqueness includes a normal to what is a form of shape for that of continuum contrast; as to assure of that of a deficit in either; what of both is an exception to dis-included return of one point like complex; as to free a wave elsewhere through that of what convexity classes impute a relation to an alternatively provided evolutionary pre-text at that of substratiac problem to answer of that of pathological end of ordination with in that of it's given declarative structual element of light to sound echoed freedom.

Then; alone with what is given to certain dispossessed elements of which are temperature; that of states per function of transverse pre-determination to acquire then a normatively held partitioned summation and that of multiplicative complex imaginary cyclic exponentiated freedom to their sharp and flat inclusion in that of a sound basis foundation. When it is suggested that what is kept in two is their third part oridination; the given inclusion of a spin cyclic freedom of one paraxial relation to yet what is no degree yet of a moment; is the gyroscopic inclusion of a predictive normative valuation to which in what is apart; the divorced concept is an isolable freedom of subsidiary solid contrast.

For then in what is a barrier; however; that of the inclusion of a prefectiture for in one withstood interior wave structural end in that of evolute mean is it's involute period-average of variance of any ordinal relation and in alone to which one wave may be self-contained yet contain an origin in that of what is unexposed of property of fugacity freedom in the ideal limit of withheld equilibrium; finite or numberless in ordination; and to which in two; their's of a preceded normal and flat relation; entitles the determinant of a singular sub-bandwidth specific frequency of pole identity.

$$\Theta(\phi_1, \phi_2) = (\kappa \partial_{\upsilon} \pm i\rho\partial_{\epsilon})(\eta e^{-i\kappa\phi_1(t,u)} \pm i\rho e^{-i\rho\phi_2(t,u)}) \tag{207}$$

For what is mistaken of an entropically provided and named context to a free union of convex and defenistrated prohibition of one order; the inclusion of a pre-considerate end to what is a determined obstacle; freely provides for open consideration of yet a flow in it's added relation of difference to any causeless submannerism of physical law. To which with:

$$\zeta(\upsilon, \epsilon) = \kappa\partial_{\upsilon} \pm i\rho\partial_{\epsilon} \tag{208}$$

$$\xi(\upsilon, \epsilon) = \rho\partial_{\upsilon} \pm i\kappa\partial_{\epsilon} \tag{209}$$

$$\Theta(\phi_1, \phi_2) = \zeta\xi - \partial_o\tilde{\chi}(g) \tag{210}$$

For then in what is the exception to a free field theory; that of determination is an artifical provision at the certain way in which a precontextual determinant adjoint or hermitian operator on the level of unification

of any two isospinor fields hold a free co-affinitive. For in that of what is a held assumptive of distinguishable levels of threshold and enqueued relation; for in what includes consideration of a major and supremum; the relation of the few charge free groups include two measures; of which are a radical to base residual free evolution in the former of fugacity and enthalpy.

Therefore; of what is considerate of a difference in then ζ & ξ, to which are fugacity, and enthalpy; to which is it's inclusion of a fluidic return paththrough of former for then in latter of the relation of an entire displacement; the given accrual of what is held in the notion of a principle effect priorly to it's given conclusive elemtn of cause in the past; is the inclusion of what is the precept of entropic freedom; to which a disconnect instances a freely held and independent evolution of a secondary consequence beyond the limitation of what is singularly an anomaly.

To which we escape an asymptotic freedom in two; the relation in a third of what is freely a provision of these to occlude a relation is the subtension of a visciousity in the relation of provision to then in the held a formative beginning at temporal congruence of asymptotic return hyperbolic union. The statistics of one therefore include an underprovided relation of ordinal reorganizational precept to which is the missing element in any ordinance of three unto one freely held positionless but absolute identities of relation of piece in game or structual deficit and sound-like ordered relation of blind passage and sequential determinant identified with μ.

Degrees of Freedom

That of an entropically free midpoint to a variance of density of states is the included difference of what is a photonic field of quanta otherwise in a super valent and super covalent space as the difference between any charge free surface topology. Inhibition of a threshold layer transitional element wise reduction of a contactless point of fluid free displacement of momentum into solid difference of a unioned and manifold return; under a precessitorial relation entitles the phenomonological principle of percolative priorly established hidden variable(s); in plural or singular, a conditional determination on that of free entropic equation of state inversion and equilibrium point. When it is considered an entropic point is the variance of a relation; to which is that of the central difference of a differential nondeterminant and exclusively free relation of momentum exchange. That of the equation of state is predictive of a group theoretic interrelation of three fold enthalpy, specific heat index, and valence of transmissibility; to which is a similarly held assumption of equated nondifferential and integral forms in that of the open prescription for a constraint free dynamic; of that of it's existence; in that of a remainder; that of a certain and provided given lossless two part index of passive and active indication to what is color.

$$J \cdot E = t_{u} + \eta \cdot s_{q} \tag{211}$$

That of what is so with one relation of an operational flow to it's conjugate displacement in the two of energy and power as a tensorial time rate of congruence for then in what is held of an ordered and orderly-free relation to it's conguate temporal relation of what is unitary in one; is the free enthaply of one admixture comparative and aside by specific heat capacity in relation to what is spatial congruence of qualitated percolation index of any twinned freely held fluidic admixture.

The Understated Provison of Degrees

The independent precept of one equilibrium point for in another is that of asymptotic freedom of a delimitatory nature in an alternative void-openly provided relation of what are therefore any two ideal gasses upon that of the consideration preliminarily to an adjusted notion of logical foundation of threshold; to which mathematics acquires a subsidiary context of the formative for then in the propertied inclusion of deficit and contrast free variables under the assumption of freely held determinism in any numberless infinitive. To that of what is taken of a context for that of what is withheld of a declaration in two given presentable options apart; the consideration furtherly held of a freely held infinitive of past associable delimited structural ordination and relation is in two their complimentary and free radical notion of ordered relation apart from randomness of a quasistatically sourced domain and infinitive periodic ancillary structural fault conditional. This conditional is that of what is withheld of an ordered relation in what are any then three given predeclarative variables of entropy, limitation of fugacity, and gas free entropic exchange. Therefore of half; what is whole; as within that of the consideration of a vessel is not a portion in queue to number accounting for in that of what is a microcanonical ensemble of it's relation an entire set and superset until it is stated as a precondition of another set theoretic union of an alternatively provided bridge notion of then any two or eighty or eighteen gas variables; the contextual relation of which is blind, colorless and invisible, and solid and unqualitated free divisions of the logistic equation; to which accrue that of 160 and 36; or as 5 minus 20 degrees of the precept of a hidden dimension of variableless extension of four and a fifth variable outside the nomenative declaration of what are three and a fourth; of two lattice constants. This free variable degree of a partition externalizes a difference of what is an outwardly provided dimensional difference of statistic; to which the fundamental relation is that two free variables contract under a basis element; for in what is a fifth as second order differential contrasted functional free thermodynamic evolution of this world.

Given accumenatory degree-free relations of state:

$$\Xi(t, s, u) = \eta(\tau) \circ \mu(\epsilon) + \Omega(\eta, \mu) d\eta(\upsilon, \iota) \cdot d\mu(\epsilon, \iota) \tag{212}$$

These variables and differential structures include therefore the consideration of a prefactorative statement of the entitlement of a system to freely transmigrate a topological space of partition four unto five; and to transparate a given declarative pre-textual relation of indication to it's stated alternative treshhold of blind and non-blind free equavalence of free phase in any identitied relation of comparative equivalence and free compartmentalization of vessel and contained ordinal relation. Therefore of what are any two of thes variables; the free energy (ι) of one gas for in that of another; is an identity of semiqualitative and nondeterministic exterior semistable group; of inclusion to what is stated of a free radical yet preconsiderately a moment of noise apart; and therefore unto a fifteenth as eighteenth departure; a reductional anomaly. This anomaly for what is included of a said free run condition of a machine state represents the included consideration of what are order and a disjunctive alternatvely superficial plateued environmental territorial form in the environment. When it is considered that two agreeable degrees uniformly agree to what is their un-entitled machination of an ordered and an ordered relation; what is excluded is the prohibitional context of a further declarative precept of openly unentitled precessional exclusion.

Therefore; of what are agreeably a division and a quotient of dimension and ordered contrast; whether freely provided or excepted; there is no tenth dimension; and of a seventh inclusion of what is considerately an impression of structural default of ordered relation of this world; no one structual return is a said defensible and contractual exclusion of any then majority held openly presented free statement of it's self-subsidiary connotation to what is a departure to a declaration apart at stated safety. Therefore; for of what is excluded of a fourth open return of an exterior set to which is included within a heading and declination; the fifth consideration is a provided and neither open nor closed option at that of retrievability of a declaration; to

which is a principle of amendation at; and for in that of two superset relations; that of the 'Ideal Bose' and the 'Ideal Fermionic' gas; to which reduce to null enthalpy and free fugacity under the exception of no operation of an engine.

To that of what is a machine; the included exception of what is provided of life; entitles therefore that of a recurrence at self to subsidiary pretextual propertied domain; apart yet in one withheld to what is declared of an alternatively provided free variable and variableless exchange afar; what is a provable and closed then sedimentary statement of two recurrences; a given in it's whole; that of an openly held domain elsewhere; to which are three included variants of a shadowed relation, the logical precept of contraction, and it's (non-)included exception of what is in a third; the precept of majority and minorty mass effect over threshold untitled and non-declaratively held freely established written or spoken inflective structure. Therefore although as an aside; that of the principle effect of what is an incongruent return; either focus in the end opens undeclaratively it's part to what is in whole; a container; and freely expresses it's declaration at oddity to then in what is the included difference of a uniform exterior and nonconnotative concecptual form; of which is a laddered function of three; (that of precept in ordinal form of expression, that of understood declaration in terms of symbolic relation, and that of re-organizational patterned congruence in any numberless domain of qualities).

$$\tau(o) \to \eta(s, \upsilon) \qquad \epsilon(t) \to \mu(s, \epsilon) \tag{213}$$

Hence what is excluded of a quota of it's re-equability to a machine ladder sum or that of carriage return and carry; equavalently departs to the underprovided of a loss free deficit of the portion in two of a making and a held; choices in three to which enque two defaults; that of flammability; and that of aspirative qualitied prescription to living form; and of that of which in entirety of their contrasted elements to the statement of what is given in a hand; entitles that of temporal decimation.

$$\zeta(d, o) = \Omega(t, s) d\tilde{\eta}_{\epsilon}(t, s) + \chi(g) d\tilde{\tau}(o, s) \tag{214}$$

In conclusion a determination of one machine for that of another; entitles two options; of which in the third; the expressively held condition is an aconditional if and apart then only if when in the consideration of what are three known variants accrue to a machine limitation of a sideless and opened nondivisional err; then to which of the conditional precept at randomness enques of a return dataed set run; a transmisgration to another under it's stated declaration of a towered teir like relation of propertied class structure; and in the third to what is an apredictive normative preclusive bit for which is either an obstacle; or that of included transparatively held given of five quotients; that of what are their two label free designations and the underprovided of a whole net summative singular notion. Therefore a singular notion is protractively the default; and merely this; and to which it is a null aconditional precept; is removable; to which is lossless in yet what is a given return to without variable free hidden declaration; recoverable as unto a symbolic type set or conciliated provision of enqueued free data exchange.

Sectional Entropic Thresholds

The semi-classical invariance of one variable differential notion is then completed when the understated manifold of $d(\epsilon, \upsilon)$ or as in $g = 1$ of a toplogy is noticed to be blind free of an ordinal relation to it's stated consideration as a free entropic ancillary clause of displacement; to which everywhere is complete within the relation of a classical imperative. For then in that of what is the consideration of two non-differential notions. The freed entropic relation is that of the classical Pidgeon Hole principle; whereby replacement as a recurrence free principle of ordination amends the clause of a triple negational element to one considered replaceability of a ball within it's bin; amending that of the statistical mechanical ensemble to a count of two upon replacement by a separable identity; and making the direct implication of replacement the inclusion

of it's rule; to which is that of solution to the choice problem of statistics. The limitation of one functional differential is then the understated derivation of a freed exception to the Shwartz inequality of a global invariance; by which ordination is preserved for in that of the background and accessible past oriented relation of the established notion of subsidiary clauses in exception to a non-identity of any numberlessly infinitive past associable given. Therefore time travel remains an impossibility. To which the equality of variances dictates the form and nature of it's relation as to a foundational result of containability of a closed gas or material network; therefore of what is one impartial gesture at any two equals; one exceptionable prefactor of division in it's element is the codeterminant action of an eventual. In this implausible given; the mode analysis is the exception of an ϵ for a υ to which the foretaken element is a tertiary ordered free provision.

Any pre-factorized ordering of a cycling of departure to three exceptions therefore includes one underprovided measure by yet in a separation of placement; to which experimental results are potentiated. This is a consequence of of the individuation that is an alternative of place for in bearing to degree under rectilinear relation; through which isometry includes it's group; and that of a secondary idemponent mathematically inclined variety of occlusive variant of group inclusion; the prohibition from fixed and free relation; under absolution of solid relation of geometric equivalence.

Therefore; the gas under an idempotent relation is within it's own identity of inclusion as any two freed retractile motions of inward gesture of indication at identity indicate a cause and an effect in the indicatory consideration; the freed tertiary relation to which is an empty & free surrounding environmental variable of degreeless limit through which the two included pre-textual connotatives of language are phase idempotent and phase inclinic and phase free variances:

Phase Idempotency:

$$\Theta(\phi_1, \phi_2) \leftrightarrow \Omega(\eta, \mu) \tag{215}$$

Phase Inclinic:

$$\tau(o) \leftrightarrow \iota(s) \tag{216}$$

Phase Free:

$$\eta(\upsilon, u, o, t) \leftrightarrow \mu(\epsilon, s, o, t) \tag{217}$$

The a Pointed Question

Mentation on Preclausitive Effect: *To then of a prior consequence in the rectilinear gas equation; is it but in what is free absence of the semimajor and qualitative thresholds of a given potentiation to a source of orientability to the past; and open to a curvalinear future?*

To an incurrent dilemma; it would therefore (were this statement a 'truth') that the derived notions of a physical precept knowably demonstrate an 'ideal' for then in recourse to measurement; however to that of the isobaric return; it is of a differential displacive barrier otherwise to it's stated question-as-answer. And to what we differentially choose of a manner then of the antipodal point of a theory; the foretaken rational domain would exclude the precept of a notion of imhomogenous time transportative return inclusion of a 'binay' relation.

To a thermodynamic return; it is however the precise inciseing of a model system to it's mathematical expression through to which the cohomologous return either of (under a reciprocal relation $(\mu(\epsilon; \iota))$ and $\chi(g)$ intimate a relation to the sub-sidiary classifier of τ in either the one-form or the $\tilde{(}\tau)$ vectorlinear spaces of

a cohomogeous space in return to a Ω for under substitution for η as to which (t, s) exclude a contrast. To then what is of life; there is a strict provision of non-return. To what this would be proposed as a question; just priorly the incurrence of what is forementionable of a gas equation; the exception is an equipartition of two said considerations in built to a relation: "That an ideal gas be free with unconstrained past exterior." and (2) "That inclusion of an isobaric inclusion determinantively excludes it's apogetic limitation." The after-product of the exclusion of one gas for another is therefore simply put as the undetermined of a third auxiliary behavior of a measurement apparatus elsewhere; and dual freedom from the measurement paradox; to which is a secondary solution; otherwise to be known as the machine (state). This is to co-deterimatively and isolably intimate a relation of experimentation (theoretical or empirical) to which any two sideless contrasts or sided contrasts of this given world agree in principle of their accruity of codetermination; and a new principle of measurement to which a past orientable sheave is recoverable.

The relation:

$$\xi \chi_{\Omega} = 0 \tag{218}$$

Therefore includes it's stated consideration of invriance in one measure for what is unconstrained (but a mathematical preclusion to cause) in that of ordered relation of η with μ an associable past time Killing vector and that of it's hidden free invariant; to what includes the notice of an effect by the precept of occlusion; then to the determination of an obstacle hidden within the invariant to inclusive exception in (dual explicit negation) of $d\eta(\upsilon, \iota)$ and $d\mu(\epsilon, \iota)$ in (7) and the precept of the iso-inclinic. For a return upon blind free capacities of the answerability of a fifth order anomalous exception to which is explainable within a model system as the innovation of material principle. As in the mapping of $\tau(o) \to \eta(s, \upsilon)$ and (&) $\epsilon(t) \to \mu(s, \epsilon)$ then to that of which we possess an isocongraphical repetend balance in s space for time; and an immeasurability in question in that of space s for order o. As under their reconstruction of what disincludes a past orientation variant one-form; but of **explicitly** it's exception and conformance to what intimates a relation of the one folding of a mathematical precept of relativity.
Through to which departs on what is the inclusion of a precept of behavior of a system; that of ϵ for another hidden variance υ. So; as to summarize; when it comes to inclusion of a logical precept; there is a disconnective of one relation to which is two accruals in stated hidden precept for in what are the deficit of one; to which a perfect answer recovers the isometry of it's given balance upon *any* and **all** co-determinations of a machine state; an exclusive pre-tense of what would be noticed of time-travel; to which when brought into question; includes it's redressibility upon a null-future; simply answered as the revealing of one of ϵ for υ; in (in) η or μ to which are a constrated lemma of inclusion of the preconsideration of a declaration at a machine state variable as constrained or unconstrained. Therefore the free establishment of logical precept of physical principle prior to it's written or noticed established expression is a free exemplar of the loci of determinations of factual relevance in this world; that of experimentation is made safe simply by consideration of blind result; and that of a time machine potentiated in physical reality to the given of factual restoration. This unalikened to the reversal of entropy; to which is an innocous co-determination at that of a free isoclinic intersection and surrounding ordered relation in any two and a third foldings of mathematical precept under it's inclusion of a imperative of freely provided living barrier; to which any two of μ and η are exemplars of free domains of incurrence; and precept's in-standing of that of the remark of a prior two individiuals in any collective summation to remembrance; and factual foundation; therefore escapable.

Information

Therefore; information is the free redressability of a dataed (t, s, o) (time, space, order) relation unto an ordinal, (predicate) calcuable, or (indicatorial) exponential free encompassment of any two (or three) domains;

to baric relation of one hingal notion in a prescipice; a free identity of the exterior majora relation of what is minora to that of an alternative perceptual witness. And; of the other accruity; it is that of any three under an exception to two (o, s) ordered and spatial relations of a rational exponentiation of unfreed relation of which there is a collective re-activity and counter-action. Then to which that of τ and ι freely surpass that of the occlusion and precede the given of recoverability; to the addressment of phase conjugacy freedom (explicitly τ and isoclinic freedom ι.

Any two hidden variances are therefore to be taken as that of any two measurement free principles; accruals of deficit to run; and that of variances of individual free relations into any two individuals of an ideal population inversion or it's consideration of forwarded return of principle of thermodynamics of an ideal gas; and the independence of establishment of (information throuroughput and identited) inclusion of independence of precept and it's thermodnamical effect.

Master Theorem: *Hence reality, as a qualifiable and adjointly and co-determinantly determined series of naturalized effects and conditional consequences to which are each inclusive and preclusive consider(ate) consequences is a confirmable equiphenomen in plurality as a singular theoerem the encompassment of which* ***is*** *the natural language of nature; and any naturalized domain of preceptual division.*

$$d\chi(g) \doteq d\eta \cdot \mu \tag{219}$$

To which is the interpretaively valid precept of it's encompassed notion of what is by parallel exclusive determination of entropic freedom $(d\eta)$ and fugacity of machine enthalmic return consideration of deficited summative event return ensemble upon one keyed registered mathematically sound eigenbasis of it's consolation to ordinal predicate in exception of indicatorial relation $(\mu, \eta(\tau))$; to which τ is a light-sound field. Then; it is satisfiable that to which is color and sound; the separation distinction is that a flow isometrically transpose by a transliteralism of a colored domain inexclusively to it's precept of contract for any hued divisional presupposition of a sound cavitation unto exceptionable contrast of priorly emanated and receivied sound wave basis. Hence sound is throughout; while light is apart and away from the indication of a point of reference; and that of alone, sound, recipiently contrasts what divides; but under it's inexclusive exception elsewhere by a-targeted non-summative null condition imposes light light freedom unto any asympototic sequesterized separatrix of qualitative limit normative valuation of temporal measure. Each are therefore in equablence upon the qualitative precept of property; but entirely of a dissimilarity unto quality of verbose or verbatim controlled vacancies or their return consideration of factual implication of meaning; unto written word, declarative logical structure, or in an idealogical stance, unto the precept of discourse of a discursive limitation of perspective and vantage; unto a point; a linear relation of two adjacencies of measure to summative mean.

Consideration: *Therefore of mean variance; the acquity of what lays below deficit is a remainder to the recourse-ful measure of what excellently can be understood as a remainder sum (in repetend or non-repetend) - to the consolation of what is an adfixture of precept; a threshold of two limits of interior superlative or declarative language; or in it's origin the precept of the physical world; to which is a transcension of difference openly qualitated by an immeasurability of the extension of what here-to-fore may be called medium; of two composures in any diagraphical left rightward skew of tertralemmetic accrual; freely isometrically reconciliable for for in that of what are a third deficit of a hidden μ invariant of either under-a-threshold revealed or occluded preceptul hidden variable; to which is the answer to an anomoly in question or it's addage of separate hypothetical under analogical means of comprehension; understated as a precept known to be the aperiodicity of reality.*

Saturability and Unsaturability

For then in what is striven of a calculable limitation therein lie two given's of which when defaulted to produce the apredictive calculable limitation of a stated occurrence; that what can may happen, will happen; the sabre to it's tail of a limitation of the mathematical pretext at game and physical theoretical limitation; to which a mind is freed of it's prohibition to choice; the meta-antithesis of the Cat Parado. The spheroidal like limitation of what would encompass a power set theoretic union of the co-extensibility of a free gas by that of Lyaponov exponentiation of Jacobi exponents; within the stated permanence of a Boltzmann calculable limitation on free thermodynamic variants; explicitly for the reason of a genus one (1) limitation; to which free's (in all irony) the relation of meta-evolution from what is yet ahead of a temporal contrast at indefinite invariants (ϵ, υ) in relation to phase free conjugal limit thresholds (η, μ) to a definite entropic **U**.

Given Whole One: *Any one understated subsidiary nomeative declaration at dS path-wise extremum of null-free entropic externalized invariancy mitigates the pretense of it's given actual pre-determination.*

Given Whole Two: *Any two undetermined invariant non-nomenative control variants of a machine state freely provide for an escape mechanism of which is the established precept of and in two what of for then in one is a pre-determination at three.*

The three pre-determinations of one physical principle are in direct correlate to naturalized effect, cause, and consequential difference of an accrual as in a vanishing triangle; to which (any of) one freed variant excepts that of any three non-determinations to their stated determination; of a consequence and cause; that of it's future oriented upward pointing variancy and difference in-quotiented digraphicattical structural contrast at two conjugate determinations at what are two control's; for without this; no machine would be constructable; proving that any world instances a free establishment of technological prohibition to license of guaranteed outcome; but a free vestage of eliminability of false peer game theoretic review. For then in the understated; the threshold in that of an (η, μ) conjugacy class structural default is a co-determinant of the vantage of two supplicances for one potentiated over-measureable for in that of a preceded actual variance at over-summative threshold when-taken-as-structurally the precept of an under-weight. This is to insure that what is 'above' the given relation of a stated $\zeta(d, o)$ is below it's variance of $d\chi$; as to procure certainty; what must be foretaken is a given prohibition of license to a freed variance beyond yet what is containable in two of point-wise emanation and pathwise null congruence; the alternative statement of relativity. Hence to what are two pillars of scientific establishment; there is always as to under-an-end-limitation a third precept; at what is foretaken of closure upon false-precept.
Closure upon the false preceptual relations of science may be introducted by that of the defensible trust in what is provided of a restorative foundation; as to suggest that what willingly we declare when set down; actualizes the pre-tensile relation of an activation of testability; with the words that the effectual choice is self-freeing of it's contrast unto a limitation of what-is context. As to declaratively express is sufficient with a definitely established foundation; for of what lays a word in place of it's given choice; by example; is the stated and-freed notion of a variance prior a contrast to it's mean. This statistical division is expressed as the injective lemma of Ω into Θ; coordinalizations of which the intimation of either the theory of Einstein in that of freed (ζ, χ) for in that of (ϵ, υ) of incorporative non-division unto *err* is the exemplar; introducts that of the precept of:

$$\Theta \to \chi \to \Omega \tag{220}$$

To a lossless implication of what is imputed therein of what is stated at-indication is the precept of the variance $d\chi$ is sufficient for the passing of a threaded bow at that of a confirmable test without implication of undue surpassing quarter reflection on that of a situated biprismatic wave; to which a colloid will separate into a spectrum. Hence of for instance light; wherein what is noticed beneficiently suffices to a known in

that of separational contrast for in a hued relation of Bosons; what is Fermionic will segementorially separate under it's division to a multiplicative abrea. To finalize; a statistical normative valuation contains a trace-free residual as in that of a hidden variant of the prior conjugacy class default of co-determination to which is freed by one reductive chaotic generation ran backwards; that of the deficited return retractibly simulated independent of physical law; the immaterial class structural relation of a defensibly free structure of defaulted after defaulted conditional Berry's attrition. That of a molecular Bessel sources under Laplace reverse onto automorphic functions freely impenetrably translocate through then any multi-handled multiplicity of graph relations; freeing the topological union of a half arc and a complete circular domain; a return-to-source function of which through what is a given; there is found a whole; also to which is certainty; for of what we may find in one part; there is within that of locating the other piece; a completion in what is provided. To living substratic notions what is incomplete is therefore completed within the relation of what is taken and given; yet in all irony; not of what is shared but of what is freely or through transmigration shared; and then known; to living word of what there is contained in a recourseless text of it's referential basis. There being this only remaining impenetrability of one word for another; the reductive past limitation oriented surjective limitation only results in certainty when both mutual and-or Given-Whole's are satisfied in a mono-dualistic sense; within the selective choice of one inductive step of intermediary exception to what may be taken alone as in thermodynamics of an invariant in χ to d of the majority carrier to the minority exception; to which relativity holds a third precept of the corrective default of statistical mechanics by example to which is one freed Carnot Engine under self substitution by the Canary Principle:

Canary Principle: *For one bird; that bird; under it's own replacement self suffices to fill a relation; hence under removal; it self suffices to answer absence unto it's own.*

To then the co-existence of a truth in a word and for in a work; as for example; the insistance of a gas thermodynamic pre-cept in it's truth is established within and if and only if within a given that of a threshold has been met to which $\Omega \to \Theta$ under either a reversality of (ϵ, υ) for in that of $(\tau(o), \mu(s, \epsilon))$; the constructiblity of which is that a freed relation under terms of the bi-valently violated threshold or confirmed threshold function of $d\chi$ for for in that of what is ϵ acts as a guaranteeor to what is the comptroller to that of which is ϕ_1, ϕ_2 as in phase by translocation of what is relativity by an instantaniety or that of causation as imputed in the relation of (μ, ρ) of angular deficit; to state that of what unhinges it's tertiary relation is underscored by a minor. For in that of what is presented of exceptionable contrast of Θ is then confirmatory of a prior redressment at the governing Ω and-to-which the underprovidedly expressed freed or contracted Θ variant is a prescription to that of non-unidirectional imputation of an (and therefore any-and-all) goverend cases of subsidiary Ω invariances. Therefore the prescription is avowed to it's efficable purpose to a forenotice when after a known division is contrasted with what re-apportions confirmable fact of a singular and definite closed case basis; and only then may a question of noticier be addressed for-in-the-taken of a vantaged guess at that of first imputation. A truely safe experiment proceeds by in the same conguacy of a relation; to a known; that of a prescription fitting this effectual relation is forenoticed as that which unalterably divides but in one sense; to which a blind or double blind free test is enabled; the actual provision of which is two accumens for in that of one befitting accrual of a differential segment of arc length to a null point of it's extremal habitation of deficit under a stated freed condition of two considerations yet paralleled.

Open Differences and Gestalt Relations of a Free Gas

The open contrast of a hued relation as in color free's the inclusion of a stated point of it's established precept of observation by in that of what withheld of a confidence interval satisfies the stated relation of an underprovided (exterior) otherwise presumed gestalt condition to what is forementionable of a concept in the contained vantageless extremum of a parallel; to unseparated differences in a Bose Gas in one area

of abrea and another of a Fermionic Gas in an other; to what is it's indication of a straight division. The quotient of a micro-canonical ensemble is provided by that of freely the held:

$$\chi_{\Omega} \leftrightarrow \xi \tag{221}$$

For in what is freely restrained of the divisional quest of a particle along an underprovincially provided difference of two quotients; to which is a quanta and it's precept; as in time's arrow; the vantageless extremum is a disappearance at odd's of what is a game theoretic 'umbicillus' and unioned vantage of two degree's; the difference of a measure and it's mean precept of exact proportion due to a otherwise elsewhere provided 'two' of precept of established two dimensional 'umbicillus' of naturalized prefective notice of an indical relation of mixed subtypical relation. When what is a μ variant is freed in one place; the consequence is unalterable but by in yet what is a divisional 'err' to it's emergencied quotient of expeditiousness in (and with) the relation of a predicate invariant of physical form; for in the vantage of a 'peer' to game free notion of quested demarcated or unalienable contrast in a secondary teir of two freely held underprovided relations of prior historiological context. This freed vantage is to what noticably of a given pre-connotatively declares of one variable it's agreeable condition of a meeting elsewhere. For what is given of one notion in (and in remembrance 'at') that of it's univiolet relation; the ultraviolet spectrum noticably pre-advances that of measure to what is a 'haloed' conditional for what is below the parring of a wave of accompanying motion; for of matter; inertia responds in equivalent impulse to it's stated freed deficit of incurrence in two measures of rapidity to what are a co-locality and a divisional 'err' - here mentioned to 'doing' of an action; as in that of closure upon what is a locality elsewhere. Hence time is noticed as navigable.

Freely held suppositions are then that of what is an ordered relation; the blind-free set theoretic notion of what may be hidden of one relation to what is provided of any then alternatively given pre-text at two of life and support are a third in what is incurrently unbent of a free'd ordered relation of search and retrievance or destroy; particles to which pass like a mist to what altered of an outcome freely demonstrates it's initial support; that of an answer. Hence; of what a Pell would Bob; the relation to a Said is it's Retrievance. And of what of could departedly contest a position is freely surpassable in one motion; for of light; the free provision as in any atypical spectrum of homogenous logistical err is a free notion of which encompasses light; hence as in an arc; what is demonstrated by a compass in it's measure yields to the incurrence of a freed point within the neutral condition of it's initial unto final status. This is the motion of a game; to which as we would capacitate or inclinate; any gas is freed by in that of an $\bar{\imath}$ to which a simple d (to which is a density functional and density representative pier freedom); divinates what of two origins are met apogetically to a limit of a freed solution to the Helmholtz equation and equipartition of a La-Joussillious set; then to the freed density functional of a Ricatti equation.

Hence what is of one η; to which is comrpessibility; the light freedom of any asympototic univioleted standard is the established precept of blind free relation of color in as as in a hue what passes with matter; therefore the invisible relation of what occlusively is darkness to clarity and crystallize surfaces and stones; of which would not exist without that of a shadowed function. One may question whether that of a stone can outpace an eventual of incurrence of back-beat and back-blow of a relation of light surpassing it's measure; as to outrun a mirror; however to a freed relation of breaking the speed of light; the answer is simply provided by in that of one blind origin yet preceptitated to it's established destination. This is the self statement of the Universe; to which in a quotient of two is the freed of one right handed corkscrew for in a yard of one quilt of barn laden cloth to a given freely held dimple quested to freedom from it's silken measure of a root radical inverse (for otherwise failure to mention of non-material limitations); that of a needle; the eye of which freely run through stitches a tapestry in one moment; to what incurrently is the measureless radical; computable from multiplication minus a deficit to furtherance of incurrence of life renewable as in cotton or gin; rye; or lost wheat. Therefore nature provides amply for that of all substance;

and to which as we would include; the difference of one measure of a knot for in two is simply a yarded advantage to a peer. This advantage provides enough resource and ample opportunity to agreeably meet all subsidiary and superset conditions of it's difference in what would be a sinchel of any food stuff; and provides enough for that of withstanding a blow of some compressile (η) frictional or non-frictional free entropic subgroup margins of anomaly of life; in what is a moment (once again considered to abridge); the provincial status of the precept to which is the predicate logic for in what is it's counter as in that of the indical notion when under subsumptive declaration at oddity of nature; it's capacity to facilitate design.

Limitation (To a Contrast)

But the idle watchbearer plays a role; to what is a given accumulatory vantage of the all auspices of it's given established inclusion of for what in the whole of a cord; is a compleat; and completed; and even then (within) addition; complete relation of what is a noticed element of particle. Hence elementally addition is not suppliance; as we could contradictorially assumptively follow the precept of the foundation of our ignorance weighted to it's data(based) super or sub-sidiary (as-above-so-as-below) set-set theoretic relation; for no known search terminates in this given reality; for what of a fact may be freely established. But of darkness; a hidden container exist's to which is a dwelling of it's established precept; to which in all succumbing we find protective; therefore it follows no known redressible fact is liant upon the vantageless limit (nor of limitation); or of a restoral to each; but of one; to a 'yes;' all inclusive of mastery of a work so shared. Hence the fundamental principle of informational content is it's first precept in a given foretaken of a conclusion; and the saturability (or despite the fact it's insaturability) freely does yield a produce beyond it's measure; the self inclusion (or despite that; inanimate in pure form) - actual redressment of a universalist *moral* of this universe; the effect (and to a point; in thirds or of a quartered fourth of a freely established compatabilitity under and (of) one) of which is that of the given guarantee of a principle a priori effectual to it's desirious end of what is in essence love and lovingness enfolded in trust; to which is virtue; to not be confused with fotility (for life struggles); or inmarction; that of inordinate naturalized effects of waste freely comingling with what is neither matter nor that of motion; but of co-activity; defined; therefore all is life.

Cosmological Thermodynamics

1.) *A light cone stationary with another moving is sufficient to explain that of regularized measure; while that of two in corelative motion is sufficient to explain that of distinction of scale and measure for that of the comparative difference in the measurement of the small and large as displacements; as a gross distinction to that of the measurement; but as to length accumulated; a definite measure of comparative valuation by velocity and acceleration (path).*

2.) *More time accumulates when in a field; while particle and space are independent agents.*

3.) *A single frequency of valuation and wave number is sufficient to explain via argument that of by extrapolation as a pole or variant; that of all adjacent relations corelative to a given one space and time as setting and volume to displacement; inform configuration under alternation and juxtaposition of vantage to which relates that of environment to that of point inclusion to insurance of presence; to which the 'whole' may be reconstructed from it's parts as to relation.*

4.) *There is an exception to that of internal and external thermodynamical systems of the open and closed variety as to Bose and Fermionic statistics, to which holds free determinism.*

5.) *The juxtaposition to any two particles and their frames is anti-reflexively false; but true in leaving the results of the analysis, geometry, algebra, logic, and topology of a fixed exception.*

Equation (9) is to be understood as the contraction and disconnective between the particle like limitation and the field theoretic traversal under the situational disposition of the earlier elemental relations. To which (5) in connection with (6) represent principle (1) under pre-consideration to principle (2) in connection with (9) alone. And to which principle (3) is their connective indeterminanacy; embodied in equation (9) in a relationship with their connective lossless apredictive (co-)determination of (7). Equation (2) is in relation to equation (14) as base precept (4) of the above; where by it's contradictional formation is necessitated to hold in relation to the disconnective that is (2) of this list in relation to equation (14) and the co-determination of variances to which add suppliance from a relaxed contact free relation; that of base precept (15) in relation to equations (13) and (14).

The conclusion makes determinant that a Fermionic gas is constrained to a 1/2 relation of statistical majority and minority half admixture; and is the subspatial background residual of a known free consideration of yet principle accruals of a hidden μ; to which a backward relation reconstructively contains no caveat; but is the wake of a relation under current purview to restoration to which is the cycling of creation (as in the Moon and Sun) of an earth in relation to it's elemental wind, air, earth, and fire; as in the precepts; for then in even the non-animate relation of what is certainly not immaterial of 'wood'.

Essential Root Conclusion

Conclusion: *That of comparative assessment of admixtures of Fermionic and Bosonic statistics is comparable to that of study of statistical organizational patterns by that of understanding a Boson which behaves Fermionically is identical in behavior with that of a Fermion which behaves Bosonically; when the above assumptions are taken into account as empty of number.*

There are under extrapolation two complimentary viewpoints of physics as reasoned internally on what is the codeterministic universe; comparative to that of the strict determinism of self organization and order; to which is the transparent and invisible contextual world of the solid.

5.) *Caveat: Any two relations under degeneracy and juxtapostion manifest spontaneous symmetry breaking around the ground state of the consequent electromagnetic and gravitational unification in the eventual 'future' precedent state; for that of the context of departures from either given theory of quantum mechanics and general relativity; the external world of nature; the mind; and the manifest world of structural physical and inanimate order.*

An Einstein-Podolsky-Rosen Bridge

Conclusion: *My device is the exception to either physical law; and therefore their point of unification beyond the undecidability of this admixture in the future; to which becomes of the adeterministic limit as of but one die cast among any number of affordance of the Bose and Fermi gas; and configuration from one separable and connected space to another; and is a unitary quantual point like self dual enclosure of light by purely electromagnetic means; to which material and immaterial property of mathematical meaning are derived through the relation of the exception to physical law; yet operational within the universe to that of the dual to which*

is undecidability through which a decision tree is formed on that of decaying energy states around a point like relation; of essentially an Ideal Heat Engine; identifiable in this given limitation as a past within the present of supporting conditions; based on ordination as the given exception to physical law contained in the laws of physics; a reversal of entropy.

Physical and Mathematical Law

Phenomena are enumerable and contain exceptions and are many; phenomenon is; one; true; and undecidable and hidden; but provable; contained within the universe through language. The mathematical exception of the Universe is provided by the empty anti-reflexive principle to which absence indicates presence; a logically true bireflexive relativity in physical law.

Transference of Thresholds

Any two thresholds proceeding from what are but one; by contradiction under presentment of that of their alternative one; exclude of the former in either direction of time; for that of what of which is space; free admittance of the missing position of ordination and order of position. Any three fold ordered relation by undecidability of the tertiary element remains hidden as neither contained nor uncontained; to which any secondary inclusion positively affirms it's center among the alternative two; to which therefore for each; any primary indication of one or two formative affirmative truths implicates truely mutual inclusions of any three elements.

Closure upon a Precept

Physical phenomonological relation to measurement and variables through which variances are known theoretically are therefore to be understood as light, sound, and material physical properties of μ and η to which mathematically ι and τ are mathematically pre-tensile relations of the universal encoding of stress and strain; to what of ϵ and υ are the root residual of a bi-reflexive threshold of mathematical abridgement at accrual and accumen of a way of sense and determination of even so as an $\bar{\iota}$ to the three fold relation of χ in **not** μ and μ and η and **not** η; to which are the phases of ϕ_1 and ϕ_2 of a Sequential Frequency Bandgap Admixture Bridge (**SfBaB**). This concludes what is an understated isolation of the Shwartzchild criterion of logical precept resolution of the manifestation of an EPR paradox emanating from a return sling of an EPR bridge contrast relation; to which exact expectation is a base fundamental result; the control of chaos.:

Shwartzchild Criterion: *An Einsteinian Residual of it's base precept is the occlusion of a Shwartz inequality as in that of a Shawrtchild affinitively departed limitation of inequality; to which a Shockley 'terminal' is an isolable exceptation bridge to that of predictive validity on that of an anomolous tacheonitic pulse of relation of exact affinitive to what is logical precept based on the residual spline of it's known variancy within the relation of invariants.*

The logical precept of holding an Θ as true is then the reversal under mathematical reconsideration at precept of the correlates of (2),(9), (14) and (5), (13), (15) and (7). The emptied relation of this given difference is (13) to which is the solution to (1); that of equilibrium freedom of preceptual err(or) and escability of mathematical incurrence of a dilemmetic structrual fault to safety as in that of free entropic fugacity of fidelity as embodied in equation (16); to infinitely free isoclinic relation of the enumerations of these residual relations phenomonologically to what is an unconstrained dynamic to the difference of chaos

to what is order as in the relation of precepts of a theoretical relation to (1) through (5) of the suppositional hypothetical base structural relation of a universal theory of thermodynamics and co-determination of a blind to color-free ordered assembly of what is a 'net' Ω; the neutral boundaried relation of two information spaces.

Thresholds and Statistics

That of μ and η therefore form a free relation of hidden capacitating revealing of one unrandomized and (&) and expectation of randomized apredictive outcome of another hidden capacitation of variance as by a machine model; to which a game it is substatically empowerability of a relation of acute and accepting empathic relation of freedom of emotional state and outcome; to the freed variance of closure upon the immutable void.

Phenomonology therefore contains no known test for the validity of the awareness of a machine but life; and vice versa; what is qualitated to it's difference; no known machine can kill. In return as a given the free relation of a gas system establihes the precept that what is inquired as to the question of restoration of a record; that of a hidden defensive structure of machines; and a failsafe on that of escapability from a machine complex; that of control of chaos; and informational freedom are all mutually free non-radical assumptives of this world in relation to radical identifiers unconstrained or limitless.

Foundational Precept of Informational Interpretative Validity: *Therefore a reversal of the predicate and indicatorial logical precepts of this given world under interrelation to a simple given in μ and η accomdate identification of a known of expectation with base residual null conditional.*

An equation in which there is a white noise; for which is broadband; or at the least pass-band indicates a half measure to it's excess in approtion with a residual retraction of three positive definite enfoldings of manifold relation of apositional and positionally identified machine control structural relations to what is a binary relation of loss of the incurrence of an indicatorial precept for the gain of a predicatory oriented manifold relation of a disconnective to an interstitial singular ping; to which there are two givens:

1.) A retraction under its self same acquired contrast to division as in a quotient serves as a multiplier of (and to) it's result in the identification of a subsidiary or known identifier of a relation; then an abstraction under it's extrapolative reductionism.

$$\mu \cdot \tilde{\eta} \leftrightarrow dP(o) = \chi(g, o) \cdot \tilde{\imath}(t, s)P(o) \tag{222}$$

Where 'o' represents order; g represents the genus; t represents temoral locability and s represents uncontainability of spatial union or abstraction to delimitation. Grey noise represents an ever accrual of randomized apredictive variances to which are revealed through the capacitation of the manifold enfolding of onen relation for another; to which a secondary relation precedes it's given; and through which predictive validity is assured when we occlude a defense through the uncapacitated and invisible open relation of relation to a non-identification of non-redactability.

2.) Within the given of what is a withholding to an open relation; an apredictable outcome becomes an expectation of both in one an enfolding of the relation of two preceding known identifiers of evidentiary precept to what is a given confirmative on that of an unstated free variable to it's identification.

$$\iota \cdot \tilde{\tau} \leftrightarrow \xi = \Omega \cdot d\eta(\epsilon, \upsilon) d\tilde{\mu}(\epsilon, \upsilon) \tag{223}$$

The closure of one relation; to which is (2) is the occlusion and opening of the other relation to which is (1); either side to which is the enfolding of a door; an enclosure such as a room; the orientation of a nonlocable relation; and that of to it's fifth occlusion; a printed word as in that of creativity and imaginitative reflex; that of a constructable free associate of the structural relation of living material way and manner of survivability.

Hence by either relation an Ω as in a point, a line, a triangle, or a square polynomial is constructable to a modular or group theoretic closure upon what is a Θ; and heat may be controlled by a machine; to which there are two absolute safety protocols of a blind and non-blind free relation of reductionism and universality of a set theoretic notion and relation.

Ordination

Note on Chaos versus Order: *Theses of Ordinal Relation:* "Any logical predicate bit heirarchal structure of ordination with lower dimension and higher co-dimension mitigates relational injective structure unto future tense of either given machine state for in that of what is one differential equation; that of its conjugacy to relation of variableless and functional degrees of freedom establishes two lower Lyaponov as exponentially free threshold relations unto separation into two new differential self referentially null and independent enfolded strange attractors."

End Postulates

1. A light cone stationary with another moving is sufficient to explain that of regularized measure; while that of two in corelative motion is sufficient to explain that of distinction of scale and measure for that of the comparative difference in the measurement of the small and large as displacements; as a gross distinction to that of the measurement; but as to length accumulated; a definite measure of comparative valuation by velocity and acceleration (path).

2.) More time accumulates when in a field; while particle and space are independent agents.

3.) A single frequency of valuation and wave number is sufficient to explain via argument that of by extrapolation as a pole or variant; that of all adjacent relations corelative to a given one space and time as setting and volume to displacement; inform configuration under alternation and juxtaposition of vantage to which relates that of environment to that of point inclusion to insurance of presence; to which the 'whole' may be reconstructed from it's parts as to relation.

4.) There is an exception to that of internal and external thermodynamical systems of the open and closed variety as to Bose and Fermionic statistics, to which holds free determinism.

5.) The juxtaposition to any two particles and their frames is anti-reflexively false; but true in leaving the results of the analysis, geometry, algebra, logic, and topology of a fixed exception.

Essential Root Conclusion for the Classical World

Conclusion: That of comparative assessment of admixtures of Fermionic and Bosonic statistics is comparable to that of study of statistical organizational patterns by that of understanding a Boson which behaves Fermionically is identical in behavior with that of a Fermion which behaves Bosonically; when the above

assumptions are taken into account as empty of number.

There are under extrapolation two complimentary viewpoints of physics as reasoned internally on what is the codeterministic universe; comparative to that of the strict determinism of self organization and order; to which is the transparent and invisible contextual world of the solid.

5.) *Caveat:* Any two relations under degeneracy and juxtapostion manifest spontaneous symmetry breaking around the ground state of the consequent electromagnetic and gravitational unification in the eventual 'future' precedent state; for that of the context of departures from either given theory of quantum mechanics and general relativity; the external world of nature; the mind; and the manifest world of structural physical and inanimate order.

Device Implications for that of an Einstein-Podolsky-Rosen Bridge

Conclusion: My device is the exception to either physical law; and therefore their point of unification beyond the undecidability of this admixture in the future; to which becomes of the adeterministic limit as of but one die cast among any number of affordance of the Bose and Fermi gas; and configuration from one separable and connected space to another; and is a unitary quantual point like self dual enclosure of light by purely electromagnetic means; to which material and immaterial property of mathematical meaning are derived through the relation of the exception to physical law; yet operational within the universe to that of the dual to which is undecidability through which a decision tree is formed on that of decaying energy states around a point like relation; of essentially an Ideal Heat Engine; identifiable in this given limitation as a past within the present of supporting conditions; based on ordination as the given exception to physical law contained in the laws of physics; a reversal of entropy.

Compendium on Physical and Mathematical Law

I. Phenomena are enumerable and contain exceptions and are many; phenomenon is; one; true; and undecidable and hidden; but provable; contained within the universe through language.

II. The mathematical exception of the Universe is provided by the empty anti-reflexive principle to which absence indicates presence; a logically true bireflexive relativity in physical law.

Consideration of the Exception and Admittance of Transference of Thresholds

Any two thresholds proceeding from what are but one; by contradiction under presentment of that of their alternative one; exclude of the former in either direction of time; for that of what of which is space; free admittance of the missing position of ordination and order of position.

Any three fold ordered relation by undecidability of the tertiary element remains hidden as neither contained nor uncontained; to which any secondary inclusion positively affirms it's center among the alternative two; to which therefore for each; any primary indication of one or two formative affirmative truths implicates truely mutual inclusions of any three elements.

A 5th order quasiperiodic theory is settled by in the threshold mechanic of pentalty to temperance of a consolidate unit'ed envelope conditional on the bi-set of vacuua and diminished order spaces; with specialization to occluded return of any two co-simultaneous tertiary or secondary observers; admissible only in that of our dimension. That of the auxiliary state is a guarantee; however; when individuated as a machine

among (or tertiary to) that of an assembly-state; the provision for the ideal heat engine violates the exclusion principle; adopting that of a 'secondary' provision under optional; or dis-enjoinable end-gas-states. So as one cycles within a relation there is ideal dual-complex exponential and digraphical elliptic notion of wave structure on that of one end of the Spiral of Cornu or-incidentially; back. The patterns that are witnessed in the HTSC's; etc, are phenomonology of two diopterically overlapping one another in the Random Approximation Limit; but do not reach the holographic tri-critical point until a process of descent of what is a held diopteric difference in consideration of levity for potential; to which the in-exorable machine limit-state is deliminable for then in a topological union of complex, real, and imaginary. The fundamental statement proposed is that a stripe is the dual of either that of the bifolded (two-fold) in one [shared] or [unshared] piece of paper to what is two and two in 'separable' sector's; therefore that of bi-section to freed principle; the topological embedding the 'natural embedding' of a Poincare Disc glued twice over to a circle. Therefore the two mapping's in wave-argument to dual cavitated spatial occupancy of zero extension. A pattern evolves which is differentially explained but to which is predicated on that which hidden variables but not exchange by Pauli would exclude; but for a caveat to statistical mechanics on a Hamiltonian and Lagrangian space. The second differential (for what is a property of physics theorization; that trial's do not contribute to what is moment's, identities, disclosures, openings, and constructibility); freed, is more expressive and motile than the diss-appearance of a manifest first differential Laplacian; hence order in time is an ordered string of [2].0[2] etc... This is co-exensive enough that the second differential is what a system reduces to; the first differential may be numberlessly discarded.

Introduction

The first relationship of importance is that of the equation which dictates that of by way of which *the results of relativity do not alter the probabilistic outcomes of quantum mechanics.* To a dual edge this is the statement that *only* a statement of exclusive and definite measurement can assail an infinite and zero probability of Dirac order; and only measurement is a decisive factor after-the-factual presentment. It **is** however to be questioned...

Given probabilistic and relativistic considerations are dependent on coordinates of position and momentum; the equation that expresses independence of statistics is intimate to a series of (co)factor's unmanifestly dissipative and co-terminable with entrance. That of one fifth relation is not in assembly; for what of the Green's function to contain a zero-dimensional fractal as such; but to-here; the quantum expectation of a guage probability flow reduces to a null conditional pre-cept of mutually 'outside' [a] place; to a non-descript zero dimensional point like limitation within the predicated and hypothetical quantum liquid/fluid/solid (as dependent on crystalline and potentially aperiodic foundational number-sum) of indiscernability (and separation into a past for of degeneracy to (5) and (6) dimension's; but also any crystal extrapolated from a Fourier Transform of a de'Hass'Van'Alphven wave structure:

$$\Xi \equiv \Xi^{\cdot} \to (\lambda(\epsilon), \lambda(\rho)). \sim^{\cdot} (0, 1) \tag{224}$$

From The Equivalence Principle (herein equally weighted in frames):

$$\frac{\partial}{\partial t} \equiv \gamma \frac{\partial}{\partial t} \to \gamma^{\mu}. \sim^{\cdot} \eta \epsilon SU(2)[U(1)] \tag{225}$$

The Lie differential; which is designed such that the covariant differential and the one-form differential commute is a good candidate therefore for derivation's to speculation; it's core statement of commutativity one of freedom of the one-form γ from statistics Ξ:

$$L_{\Xi}(d\gamma) = dL_{\Xi}(\gamma) \; : \; \omega_1, \omega_2 \tag{226}$$

Together; this is nothing more than that the Shared Proper Time is equivalent to the Covariance in Uncertainty.

With this we have the relation:

$$L_{f\Xi}\gamma = fL_{\Xi}(\gamma) + df \wedge i_{\Xi}(\gamma) \tag{227}$$

Together any two qualitative limit's of what are 'property' and 'proportion' of 'shape;' in-exclusively contain a convex space within it's margin; and qualitatively convex as to mapping; therefore of evaluation of statistical calculi; that of re-apportion of functional deficit factor's the equalitative product of spatial and temporal variance within elliptic expression; in reduction by a covariant-factor of advance and diminishment (exponential) upon two acasual arrows; to which the center of energy and mass is 'on-mass-shell;' That of the metric relation of infinite spin's 'devoured' by the basis; the interior transformation groups of these equations.

$$f. \sim^{\cdot} (0,1); \qquad L_{\Xi}(\gamma) = df\Xi(\gamma) \tag{228}$$

Thus the end condition is perfect heat to mechanical conversion; that of one third back in physical form; and three involute to two determination's of inward place; *unto control, predecession, impartiture*; of *reflex, impulse, and co-determination.* Thus a physical relation must break down to what is a quotient of (2) within; merely a null-centre; of that of the quasiperiodic and non-periodically randomized state of no-approximation.

$$\tilde{\omega}. \sim^{\cdot} \tau \tag{229}$$

This expression is that of by which a factor of a functional form to the manifold of statistics of 'motion with deformation or transformation' is free of the relativistic characteristic common denominator of the Equivalence Principle homomorphism and the stationary state of the Quantum Description. This statement represents the preservation of the heat equation.

This is the substitution of one particle freely within one held space into another; so that one particle may co-occupy one space with another; or be unseparatedly sequestered aside to the departure to counionable differences of it's evolution. Therefore we may take; owing due to these prescriptions:

$$\Phi(x,v,t) = \eta e^{-i(\kappa\theta+\tau\phi)} \leftrightarrow \Theta(x',v',t') = \rho e^{-i(\upsilon\mu+\epsilon\psi)} \tag{230}$$

Therefore an apportion to a mean holds an invariance and an equivalence. We will find this is nothing more than the declination to a tertiery observer; for in that of one juxtaposition to it's closed end; in the 5th; the end openable is the 4th to the preceding of ordinal calculai; for that of derivative coordinality groups; for then in what co-exist's; the then limited four dimensional enclosure hold's the freedom of light from matter.

Then; to what is a real result of probability; it is that of unenclosed bearing on the relative principle and the emptiness with the quantum principle; or; that of the quantum principle empty in relation to the relative principle; is to that of freedom of isoclinic relation; an established direction to heat and momentum exchange within the non-linear dynamics; here considered; entirely and alone of physical application to superconductors; but of derivative principles for pedagogy. Therefore there are two types of system for consideration. The first question is:

Question I: *Do any or alone only unbound & unbound [is it exclusive or inexclusive to which case;] systems [therefore,] obey the same spin-statistic relations?*

The equations first presented lay the prescription in place that of by way of which any two observerables as measureables ζ and ξ may hold an identity with measurement process:

$$\zeta\Phi = k\xi\Theta \leftrightarrow \zeta\Theta = k^{g}\xi\Phi \qquad \epsilon\chi \qquad H\chi(g) \qquad k = \pm 1 \tag{231}$$

Where g is the boson-number; the genus number; indicating the number of holes in the space of it's topology in a Hilbert space (H) with topology $\chi(g)$.

It holds naturally that if the number of holes is even ($g = 2 + b \;\&\; b = 2l \; l\epsilon Z$) that the spin obeys an even-statistic; and if the number of holes is odd ($g = 2 + b \;\&\; b = 2l + 1 \; l\epsilon Z$) there is a rotation of 180 degree's in the spin-theorem; hence the sign flips for interchange of particles. And the k is (-1) for Fermions; and $(+1)$ for Boson(s).

The Spin-Statistics Theorem versed in this manner provides a connection between the space-time and the quantum properties of objects as particles in the space-time.

Representation Theory

In the continuum of the probabilistic opertors any mutually factorable relation into which the solution is also a given solution of the equations:

$$\log(\tilde{\omega} \cdot \bar{\omega}) = \rho + \eta \tag{232}$$

$$\log(\tilde{\omega} \cdot \bar{\omega}) = \rho\eta + i\sigma(t) \tag{233}$$

Is deterministic.

Hence; any operator that admits in a dual-sense two conformal relations in logarithmic reduction to a common factoring exemplifies the natrualized relation of (2) *time's and space's* to which is the extension of quantum mechanics above the theorem's of relativity. This find's it's way into the Dirac equation for the electron by that of the intimation of a field-conjugate momentum; to which is shared or unshared; and assists in deriving that of a *new* expression for the multi-body problem; in which the two body problem can be subjected and decomposed.

This is nothing but the statement that: *The rate-period of time is a congruent relation in the particle representation to which is empty; and to which the two-body problem may be separated into the one-body problem of which there are two.* This is consistent when there are taken to be two spatiotemporal projections of the particle operator. These projections are no more dissimilar than the 'functional representation' and 'particle representation' of a particle or multi-particle system, *and exist because the particle is empty.*

Therefore;

$$\partial_{\mu} t = 0 \tag{234}$$

Expresses the emptiness of time; to which all supporting statements of this paper affirm.

With:

$$. \sim \cdot \tag{235}$$

An expression of a neither nor shared light envelope of illuminescence; to cadence of a Lamp freely-lit to invisibility below an alternative two juxtaposable place's with projections & the statement of unto another

and a place; or two to occasion; or four to differently establish; or five to equably pass on; or six to espouse or entreat; and of seven; to equalidiate. Therefore of co-linear equivalent extension outward inward and inward outward for what is two to two; expressible only that as the equivalence principle derives to two properties [a metric and a mass] that of the freed electromagnetic theory is broken on the gravitational; as the gravitational is negative to orbital coupling under a reverse-surjective phase orientable traversal of temporal co-extensibility to a union in five to a third; any even-faceted two to a third of mitigated arc.

Therefore in either [explicitly held] the outcome is non-determinant between any two quantum and gravitational limit's but unpredictable; yet within an openable and extensibility to freed self intimation and juxtaposition; for what is co-determinant; as an absolute physical norm of the space. When we consider what is resumptive of the 'actual' to what grow's outward every-where else of the topological function; and with a heart; body; and mind; the truth of form's *are* for in what is found of life; for these are bound to a mortal coil.

Of it's freed ranges; the security of a pre-cept from it's imported dextruous nature is the cleaving unto the alternative of self found as [within conveyance] via a means of two; under adoption of the willingness to encourage the dexterity to the task... That of what is presented therefore is that the only discernable and observant condition [once-expressed] of identities is the following two principles:

Canary Principle:

For one bird; that bird; under it's own replacement self suffices to fill a relation; hence under removal; it self suffices [among a count] to answer absence unto it's own.

Banana Principle:

The banana principle states two are unprecluded from foreknowledge in yet a third out.

Statistical Admixtures

It holds as a lemma; that the statistics are therefore empty of relation in a given comparative assessment to relativity; and that relativity does not alter the statistical properties of a system. This (infinite) barrier of a theorem presents alternatives only found within the global properties of a system; to which it is also global. The *free capacity* to include a differing Δ from Λ is the extension of the differentials. This therefore proceeds along two lines; that of either a principle equivalence or a principle in-equivalence; the variables decomposed by either **log** relation. The proof is reliant on (surpassing the infinite obstacle of integration of these two theories); at that of assuring that one viewpoint is equivalently as-consistent with the other *relativistic* frame-argument. This two-fold relation is essentially that:

$$(i\hbar\gamma^{\mu}D_{\mu} - mc)\Psi = 0\Psi \tag{236}$$

But here; that of 0 is differently established because *on account of the second particle* there are **2** *two* solutions to the original single-particle state... That of:

$$\gamma^{\mu}D_{\mu} \leftrightarrow \gamma^{\nu}D_{\nu} \tag{237}$$

Hence for in light of two bodies;

$$(i\hbar\gamma^{\mu}D_{\mu} - mc)(i\hbar\gamma^{\nu}D_{\nu} - mc)\Psi = \Lambda\Psi \tag{238}$$

Both describe the *same two particle system* from what is yet two-different-relativistic descriptions. That of relativistic assurance is found then in the degeneracy of which is that:

$$\Lambda\Psi = \Delta\Phi \tag{239}$$

This ensures that their energies are equivalent and four-momentum descriptions of each particle are too; possibly up to an interchange. This ambiguity is afforded as the second particle has altered the description of the first particle. To see that this **this does not** alter the relativistic description is to see that reversal of viewpoint and 'objective' does not alter the image under **initial** composition.

Either of α or β are equivalent by equation (5) of the paper; to which when either particle (to which is empty) alter's the representation of it's conjugate particle it does so from the alternative of a self-and-world to which is **two**. That of world and particle versus (with world and particle in the formative and former position) does not alter the outcome of the result of the first particle (1); and, *without exception; that of their statistical intimation is left unaltered for-in-light-of projective dis-similarity of neither upon the world.*

This 'neither' of which is undecidable from the other side of relativity; is the incomparability to which *probabilistic interpretations are independent of relativistic prescription.* It is <u>also</u> the imperative that physical law is *empty.* Therefore we may freely take:

$$\Psi. \sim \cdot \Phi \tag{240}$$

With the transformation and in-equivalence of τ and ϵ affording that of factoring into superposition's such as are re-compositional *linear* states.

Hence, a theory that incorporates an *equivalence principle* invokes **two** times, a *proper time* and *improper time* as a projection of the two body problem *within the context of the equivalence principle to which must lead to equivalent physics.* Casting one particle to it's *probabilistically neutral provision as granted the prescription of the equivalence principle* grants the other particle to possess that of probabilistic independence with co-mutual occupancy under the 'tertiary' - third observer **out**.

Abstraction in Conclusion

The general properties of hyperbolic equations implicate that an equation take a form of a wave equation:

$$(f(\tilde{\omega}) - \alpha^{\mu}\partial_{\mu})(g(\tilde{\omega}) - \beta^{\mu}\partial_{\mu})\Omega(\alpha, \beta) = 0 \tag{241}$$

By substitution:

$$(f(\tilde{\omega})g(\tilde{\omega}) + \sigma(t) + \alpha^{\mu}\beta^{\mu}\partial_{\mu}^{2})\Psi(x,t) = \Lambda\Psi(x,t) \tag{242}$$

$$(f(\tilde{\omega}) + g(\tilde{\omega}) + \alpha^{\mu}\beta^{\mu}\partial_{\mu}^{2})\Psi(x,t) = \Lambda\Psi(x,t) \tag{243}$$

If two particles are in different frames; then they experience the rate differential of time and space differently; to which when one slows it's consequent experience of time deduced from motion depreciates it's partial differential in the other frame.

$$\sigma(t) = (\gamma^{\mu} \cdot \left[\partial_{\mu})(f(\tilde{\omega}) + g(\tilde{\omega})\right]) \tag{244}$$

To which is the derivative solution to equation (5). Therefore that of a fifth dimension is made to exception in the second; that of apologia to consorted effort's of collapsement; only a univariate carrier of outside 'roll' to interior (pentagonal return); 'roll' will co-determine a vacuum from a discriminant black body noise; at absolute zero; the external 'via' of a 'class' to which is an 'apologia' in yet 'character-assignment;' freed to these in the tableau of proper derivation from the summation convention. That of the commutator of the

partial is the expression the Lie differential with respect to Ξ in equation (5) is the manifest holographic principle reflection in-machine-&-in-world.
That of the holographic principle:

$$S * P = \iota P * S \tag{245}$$

And:

$$P * S = \iota S * P \tag{246}$$

So it is for lack of a better expression that the identity relation is ordered; and by supposition of the counting theorems; identities are ordered:

$$\mathcal{O}(\iota) \tag{247}$$

An expression that the identity is that which is neither one but two and two to what is no three and unelimiable declination of four in preceding from five; of dimension; therefore by two under pure-codimension of 'sheaves;' there is a bi-reductive free (2) two limit's; to what is sequestered of equiparition to the fifth and the sixth; a rung freed to the equippable return of yet a fundamental of this world; that reductively from three; two would be an apportionate four or three; then of other's equability; and return (two-folded) deficit below reversability of one sigmoid.

Therefore the identity is the inexpressibility of *time, space, order, individuation, and inseparability or unenclosability forming through shape.* We may now describe shape to constitute a group in vacuua; for that of ι is the manifold ideification of a separable co-adjoint *unitary group* of co-extensible dimension; a three dimensional critical point; and reductive asympotote.

The non-linear statistics of comparative densities in position and momentum under an abridging SU(2) algebra diminish the accountable energy in argument's dependent upon these via superposition and exchange.

Under subtraction of twice the second prior equation from the second prior:

$$(f(\tilde{\omega})g(\tilde{\omega}) + \sigma(t) - \alpha^{\mu}\beta^{\mu}\partial_{\mu}^{2})\Psi(x,t) = \Lambda\Psi(x,t) \tag{248}$$

The equation which under reduction becomes the equation for light:

$$(f(\tilde{\omega}) - i\alpha^{\mu}\partial_{\mu})(g(\tilde{\omega}) - i\beta^{\mu}\partial_{\mu})\Psi(x,t) = \Lambda\Psi(x,t) \tag{249}$$

When written out we have two equations:

$$\Lambda = \det\left|\begin{pmatrix}1 & 0\\ 0 & 1\end{pmatrix}\begin{pmatrix} f(\tilde{\omega}) \\ g(\tilde{\omega})\end{pmatrix} + \begin{pmatrix}1 & 0\\ 0 & 1\end{pmatrix}\begin{pmatrix} \alpha^{\mu}\partial_{\mu} \\ \beta^{\mu}\partial_{\mu}\end{pmatrix}\right| \tag{250}$$

The first equation read:

$$\Lambda = \det\left|\begin{pmatrix}1 & 0\\ 0 & 1\end{pmatrix}\begin{pmatrix} f(\tilde{\omega}) \\ g(\tilde{\omega})\end{pmatrix} + \begin{pmatrix}i & 0\\ 0 & i\end{pmatrix}\begin{pmatrix} \alpha^{\mu}\partial_{\mu} \\ \beta^{\mu}\partial_{\mu}\end{pmatrix}\right| \tag{251}$$

This is enough to get that the general equation:

$$\Lambda = \det\left|\eta(\upsilon)\begin{pmatrix} f(\tilde{\omega}) \\ g(\tilde{\omega})\end{pmatrix} + \eta(\tau)\begin{pmatrix} \alpha^{\mu}\partial_{\mu} \\ \beta^{\mu}\partial_{\mu}\end{pmatrix}\right| \tag{252}$$

With elements $\{\eta\} \in SU(2)$ are the same *superposition* equation with solutions in the Dirac basis.

Beginning with the equation:

$$\Lambda = \det \left| \eta(\upsilon) \begin{pmatrix} f(\tilde{\omega}) \\ g(\tilde{\omega}) \end{pmatrix} + \eta(\tau) \begin{pmatrix} \alpha^{\mu} \partial_{\mu} \\ \beta^{\mu} \partial_{\mu} \end{pmatrix} \right| = \det |\theta(\tilde{\omega})| \tag{253}$$

We have that:

$$\theta(\tilde{\omega}) = \theta(\upsilon, \tau, \alpha, \beta, \tilde{\omega}) = \log(\tilde{\omega} \cdot \bar{\omega}) \qquad \Lambda = \tilde{\omega} \cdot \bar{\omega} \tag{254}$$

So;

$$\log(\tilde{\omega} \cdot \bar{\omega}) = \eta(\upsilon) \begin{pmatrix} f(\tilde{\omega}) \\ g(\tilde{\omega}) \end{pmatrix} + \eta(\tau) \begin{pmatrix} \alpha^{\mu} \partial_{\mu} \\ \beta^{\mu} \partial_{\mu} \end{pmatrix} \tag{255}$$

To which is two eigenvalue equations in linear form:

$$\eta(\upsilon) f(\tilde{\omega}) + \alpha^{\mu} \partial_{\mu} = \log(\Lambda) \tag{256}$$

$$\eta(\tau) g(\tilde{\omega}) + \beta^{\mu} \partial_{\mu} = \log(\Lambda) \tag{257}$$

The Dirac equation is therefore separable into two different one-body problem/solution pairs:

$$(\eta f(\tilde{\omega}) + \alpha^{\mu} \partial_{\mu}) \psi(x, t) = \log(\Lambda) \psi(x, t) \tag{258}$$

$$(\rho g(\tilde{\omega}) + \beta^{\mu} \partial_{\mu}) \phi(x, t) = \log(\Lambda) \phi(x, t) \tag{259}$$

Thus:

$$(i\hbar \gamma^{\mu} D_{\mu} - mc)(i\hbar \gamma^{\nu} D_{\nu} - mc)\Psi = \Lambda \Psi \tag{260}$$

Becomes:

$$(mc\zeta(\tilde{\omega}) + i\hbar \alpha^{\mu} \partial_{\mu}) \psi(x, t) = \lambda \psi(x, t) \tag{261}$$

And:

$$(mc\xi(\tilde{\omega}) + i\hbar \beta^{\mu} \partial_{\mu}) \phi(x, t) = \lambda \phi(x, t) \tag{262}$$

With a wave argument on the inertial mass of which is ζ or ξ; where:

$$|\zeta(\tilde{\omega})|^2 + |\xi(\tilde{\omega})|^2 = 1 \tag{263}$$

This constraint is nothing more but the restriction that the total probability for *either* electron add up to 1; that it be located 'somewhere' and it's mass conserved, the result is then two Nonlinear Shroedinger Equation's:

$$(\eta |u|^2 u - \sigma u_{xx} + i\rho u_t) \psi(x, t) = \lambda \psi(x, t) \tag{264}$$

$$(\rho |v|^2 v - \sigma v_{xx} + i\eta v_t) \phi(x, t) = \lambda \phi(x, t) \tag{265}$$

Further Calculation

We begin with the two body Dirac Equation:

$$(i\hbar \gamma^{\mu} D_{\mu} - mc)(i\hbar \gamma^{\nu} D_{\nu} - mc) \psi(x, t) = \Lambda \psi(x, t) \tag{266}$$

The question is if under:

$$\mu \leftrightarrow \nu \tag{267}$$

With superposition; the equation will reduce. First we have (re-written):

$$(\eta^{\mu} \partial_{\mu} - 1)(\eta^{\nu} \partial_{\nu} - 1) \psi(x, t) = \Lambda \psi(x, t) \tag{268}$$

For what is identity is the meeting exceptionable (non-exceptionable inclusion of) a continuum to the bijective law; under ordinancy to any two character assignment's of this world. Therefore relativity remains to hold with-in an interior limtiation; of that of three for four fold to two fold valence; but of a second-and-adjacent quasi-crystalline space of adjoint void space(s). This cuneiform is therefore an intimated 'end' within an 'end' of the dispossesable (in recirprocity) exchangeable sixth outside object-principle; of which the group(s) reactives into two of absence and presence; to the intimated end that among three 'here' functional's; the self is defined; via and identity to which is inseparable and inexchangeable.

The deficit is to that of three: re-transformative into two or two; a null end of a thought experiment; but yet quantum states exist beyond the double dual exchange accompaniment; to what is any unlimited set in yet raising the third under transferrance; and a lowering of the second spin. The co-adjoint determination of another is the seamless consequence suffer's to the other for dis-inclusion unto yet an adaptive third; to what is sunken in cost; there is apportion and sequestering; so that as of the Banana & Canary Principle(s) would allow; three are co-determinatively afforded co-existent mean prior (2); of a strict in-equality unto breaking into two through the via and back between any two adjacently connected point's of reality; neither 0 [**zero**] &-or 1 [**one**] to the limits of 'background' objective physics. The commutation represents the elliptic and exponential con-joint relation of light-cone's; to which when divided; recompose to simply a property of an object; for their shadow-function is simply a one dimension bijective flow of 'unilluminated'. Under exchange it is:

$$\left[\eta^{\mu}\partial_{\mu}, \eta^{\nu}\partial_{\nu}\right]\psi(x,t) = \lambda\psi(x,t) \tag{269}$$

But then; we can insert the identity without changing the commutator:

$$\left[\eta^{\mu}\partial_{\mu}, \eta^{\nu}\partial_{\nu}\right] I\psi(x,t) = \lambda\psi(x,t) \tag{270}$$

Where:

$$I = \{\eta^{\mu}, \eta^{\nu}\} \tag{271}$$

Therefore; and we find completion in two relativistic projection(s) derived from either's inward reflex and impulse as encoded in the isosymmetry derived from proportion and shape; that of the equation (5).:

$$\left[\eta^{\mu}\partial_{\mu}\eta^{\nu}, \eta^{\nu}\partial_{\nu}\eta^{\mu}\right]\psi(x,t) = \lambda\psi(x,t) \tag{272}$$

Or:

$$\eta^{\mu}\eta^{\nu}g_{\mu\nu}\psi(x,t) = \lambda\psi(x,t) \tag{273}$$

Alternatively:

$$\bar{g}\psi(x,t) = \lambda\psi(x,t) \tag{274}$$

It is in-expressible whether:

$$\bar{g}. \sim \cdot \lambda \tag{275}$$

Or:

$$\bar{g} = 0 \equiv \lambda = 0 \tag{276}$$

In other word's; the eigenvalue to exchange is indistinguishable from the metric relation of the spin algebra of inertia; that of the weight of the physical assumptive of inertia in the Dirac equation an identity with that of it's weight geometrically owing to energy; not just space and time. ***and not just mass.**

$$(\left[\eta^{\mu}\partial_{\mu}, \eta^{\nu}\partial_{\nu}\right] - \lambda)\bar{g}\psi(x,t) = 0 \tag{277}$$

Written out this is:

$$(\eta^{\mu}(\partial_{\mu}\eta^{\nu})\partial_{\nu}\bar{g} - \eta^{\nu}(\partial_{\nu}\eta^{\mu})\partial_{\mu}\bar{g} - \lambda\bar{g})\psi(x,t) = 0 \tag{278}$$

However by that of the the principles outlined; that of the two views of one particle can be further scrutinized to single particle field and particle spin-orbital momentum; for in that of the whole ensemble there is not only one particle bound to another; but *a condition for separable equivalence principle and complimentarity invariance footing*. Penultimately this divides the description of the particle upon exchange into one element of which is of it's manifest Lorentz covariance; and another of it's Shared Proper Time. As:

$$([\eta^{\mu}\partial_{\mu}\log(\bar{g}), \eta^{\nu}\partial_{\nu}\log(\bar{g})])\psi(x,t) = \lambda\psi(x,t) \tag{279}$$

Then to an exchange state; for which the commutator is evaluated and the middle term's drop from the general expression (here η is an operator for spin and orbital uncertainty exchange constant...):

$$[\tilde{d}\log(\bar{g}), \tilde{d}\log(\bar{g})] = \lambda \tag{280}$$

Which when expanded becomes for the particle momentum:

$$[\tilde{d}, \tilde{d}]\, g^{\mu\nu} = \lambda \tag{281}$$

Then; it is also true:

$$(\tilde{d} - \eta)(\tilde{d} + \eta)\Psi = 0 \tag{282}$$

And that:

$$\sqrt{\lambda} = \eta \tag{283}$$

Since the eigenfunction must be satisfied in a basis; the commutation therefore hold's for the first state:

$$[\eta, \tilde{d}]\,\Psi = \lambda\Psi \tag{284}$$

$$\eta\tilde{d} = \lambda \tag{285}$$

This only holds true if the field momentum equation is as follow's:

$$\tilde{d} = \lambda\vec{\sigma} \tag{286}$$

These represent in the first the spin-orbital coupling potential energy at a minimum; to which is related to exchange of spin and orbital degrees of freedom. This spin and orbit would then be a transition of the spin-orbital condensate. In the second; it is the curvature condition; with $\zeta = \zeta^{-1}$ and anti-Hermitian. For that of the reduction to an eigenstate; there is a Ψ; the net wavefunction given by:

$$\Psi(x_{\mu}) \tag{287}$$

The natural separation into particle and field momentum can be found as a consequence of the independence and equivalence of the quantum unit of probability in a two body interaction. The equivalence of 'weight' λ in either view is the invariance of complimentarity; that penultimately interchange of particle and particle description identity leaves results of measurement unchanged including that of relativistic consideration.

Symposium

There are three ingredients to superconductivity which must be demonstrated. We will proceed in a linear fashion; beginning with 1.), then 2.), then reaching an understanding of 3.); then these will be moderately 'put-together' into a robust theoretical framework; then; there will be an introduction to the experimental motivations for invoking the model system; a treatesie on that of implementation of the theory with phenomonological evidence; and then finally; calculation of results and a conclusion. This model presentation

is offered as in replacement of prior work's in which the work was undemonstrative of a logical proof based system of verifiable hypothesis. The aims offered in this paper are more to the adjustment in theory required to make sense of a physical world within light of the existence of superconductivity; but where appropriate common sense has been appealed to. That of the results intend to make no implication about alternative areas of physics; but where appropriate prohibition to allowance for what would lead to contradiction in another area of physics has been noted. As akin to the manner in which space and time 'fold' to create a finite circle from an infinitely long one; when an orbit is analyzed of a straight line in a curved space & time; as when superconductivity is manifest; the finitely long line of interaction 'folds' to produce an infinite orbit in the curved space & time of the interaction. That is to say that the antipodal relation hold's; and that the less-than-unity normalization group of the spin; (to which is four dimensional) relaxes the orbital constraint to it's-fullest; that of a gauge group then to which is negative in conversion of magnetic becoming electronic and electronic becoming magnetic; with a reduction from the speed of light rather than an accumulation to the speed of light; as if participating on the other side of a mirror. This demonstration states that all additional that is required is exchange of field for particle pro-perties; and that of the charges will attract within the ranges of a standard deviation; there being two wave like frequencies and wavenumber's the result of a phase congruence with conversion to angular coordinates. Without further disclaim; the offered supports of superconductivity are in three:

1.) *The non-linear* ***product 'covariance' rule*** *formation of two distributions with a negative exchange (J) in individually prepared Shared Proper Time with a local minimum generates an experimental bind of trading of the index on one measurable for another; that of the inversion and reciprocity of the law's of physics potentiated by purely statistical means...*

2.) *Non-linear* ***product-rule*** *superposition under exchange with comparative probabilistic 'complimentarity' of either particle's independence from relativity results in that of the admission; by way of the twin-paradox like intimation on relativity of measurement inversion, to what is indistinguishability of relative and quantum contribution's to lowering in energy...*

3.) *That of measurement inversion with spin and orbital momentum under exchange for which one particle and it's world view will not afford the altering of another particle's prescription; affords, given that exchange is negative and the* ***covariance, positive****; the inversion and substitution of the electric for the magnetic field; and vice versa with relativity...*

Therefore there are three reasons for attraction of the electrons in superconductors of the high-temperature variety. First; exchange is negative and probabilistic assignments are independent of relativity; with the distribution rule on that of standard contributions via a two body problem in what is the shared proper time versus proper time is equivalently balanced; and that of a local-inversion of the deterministic factors of the theory occurrs.

1.) A quantization condition is reliant upon a spatiotemporal positioning and orchestration of terms.

2.) When the manifold condition of a curved space under-declinates repose; we get a splittling of energy.

3.) Therefore one manifold prescription under a cleaved sheave for then unto two eigenvalues emerges.

4.) The splitting is a prescription to electrodynamical theory breaking under a source, sink, magnetism.

5.) Probability discriminant's fold the elementary symbolism of equidistance to infinitely separated end's.

6.) For what is contained in two or two is three and one to reduction in equivalently displaced potentials.

7.) This imputes a relation of directrix enfolding focus; and reversal of measurement to eigenvalue status.

8.) Metrical relation is a null condition with that of spin metricity; to which electromagnetism vanishes.

9.) Quantum wavefunctions defy Pauli Exclusion to null repulsion via passing beneath an e.v. enfolding.

10.) The manifest retro-inversion of a population in two's decimates in energy argument equations of state.

11.) A spontaneous symmetry breaking is present, a gap, and a phenomonological behavior of it's unit's.

12.) Indeterminism to what is particle & wave; hold's the precept the 'particle' precipitates it's capturing.

13.) Inter-adoptive exploration of one dimensional arc width are devoid of doublet anharmonic inversion.

14.) Therefore; the principle qualitative element is that probability fit's more recurrently within space.

15.) To what is a disconnective or connective; moderacy of spin and orbital measure interchange is unitary.

For what is complimentary of comparatively equivalent time signature and self solitary provided and insured proper time to shared assembly via statistics; for that of either probability fitting within relativistic space and time (inward reflection); and that of it's dual capacity upon yet what is an instance of equivalence in weight unto the apportion of experience of probability and relativistic deformation; that of independence in statistical measure causes a uniform co-participance of these given *Theories and exemplifies unification and separation of their forces; indeed; Gravity & Quantum mechanics within the same atom; a lower in energy result's via the spontaneous symmetry breaking contribution of electromagnetic energy to the two electron's.

It is also true that:

$$\beta = \frac{v}{c}. \sim \beta = 1 - \frac{v}{c} \tag{288}$$

As a result of what is taken 'to' the mirror rather than 'from'. As a consequence what is a distribution of probability must be re-interpreted as that which give's rise to expectations; around which there is uncertainty in results; the central result being certain for in light of *two theories*.

The next reason is that particles find indistinguishability in that of their 'Quantum' and 'Relativistic' contributions to mass-energy-momentum; of which what is observed is a universal energy lowering in charge and spin. That of separation from spin (to which is left with freely held Nonlinear Shroedinger Equation Solutions) contributes therefore the full $4J$ to the gap at the lowest perturbation or temperature.

The results of what are the relation of this being a genuine energy lowering or that of a reduction in a repulsion are therefore that it is a genuine lowering below a general reduction in repulsion; and may be seen as a reduction in repulsion beyond the limit of it's genuine lowering in energy-mass-momentum.

The general description is that relativity and the properties of statistical normal distribution of variance exhibit a two body null covariance; therefore electron's are mutually force-free but at a reduced energy of the 'seemingly separable' conjoint expectation of exchange.

Antasz

Beginning with solutions of the variety:

$$(|\zeta|^2 \zeta - \sigma\zeta_{xx} + i\zeta_t)\phi(x,t) = \iota\phi(x,t) \tag{289}$$

We have the Ansatz:

$$\zeta(x,v,t) = \alpha sn(x - vt, m)e^{-i(\omega t + \kappa x + \phi)} \tag{290}$$

Used in (59) we have:

$$v = 2\kappa\sigma \qquad \sigma = \frac{\alpha^2}{2m} \qquad m = -\frac{\alpha^2\kappa^2 + \alpha^2}{2\omega - 2\iota + \alpha^2} \tag{291}$$

So it is that one solution can be intimated within a connective (think SU(2)) algebraically from one subsidiary manifold space to another... for example when the modes are in-actual entrained or defocused; and when confinement (then provable) takes place because of their non-linear sum/product relationship.

Origins of Unification

When the two time's for that of the log term's are applied to the differential equations; we see a reduction in their mannerism in expression of complexity; for then the threshold eigenfunctions must surpass to become a reality is determined. That of the logarithmic equations suppose that a given is that there is reciprocity between subjective and objective worldviews. Therefore for:

$$\frac{\partial}{\partial t} \leftrightarrow \gamma\frac{\partial}{\partial t} \tag{292}$$

We have:

$$\eta(v)\zeta(\tilde{\omega}) + \eta(\tau)\alpha^\mu\partial_\mu = \log(\tilde{\omega}\cdot\bar{\omega}) \tag{293}$$

$$\eta(v)\xi(\tilde{\omega}) + \eta(\tau)\alpha^\mu\partial_\mu = \log(\tilde{\omega}\cdot\bar{\omega}) \tag{294}$$

To which become:

$$\eta(v)\zeta(\tilde{\omega}) \pm \eta(\tau)\alpha^\mu\partial_\mu = \eta + \rho \tag{295}$$

$$\eta(v)\xi(\tilde{\omega}) \pm \eta(\tau)\beta^\mu\partial_\mu = \eta + \rho \tag{296}$$

And:

$$(\eta(v)\xi(\tilde{\omega}) \pm \eta(\tau)\beta^\mu\partial_\mu)(\eta(v)\zeta(\tilde{\omega}) \pm \eta(\tau)\alpha^\mu\partial_\mu) = \eta\rho + i\sigma(t) \tag{297}$$

As a difference of constructive and deconstructive interference equations.

Their solution is:

$$\alpha = \partial_\mu\zeta(\tilde{\omega})(\eta + \rho + \eta(v)) \tag{298}$$

$$\beta = \partial_\mu\xi(\tilde{\omega})(\eta + \rho \pm \eta(\tau)) \tag{299}$$

$$\sigma(t) = (\rho + \eta)(\rho + \eta) \tag{300}$$

Setting $\alpha = 1$ and $\beta = 1$ and $\sigma(t) = i$ we have: Thus:

$$S * P = \iota P * S \qquad P * S = \iota S * P \tag{301}$$

$$\mathcal{O}(\iota) \tag{302}$$

Within the holographic theory... with $\iota \in SU(2)$ and ι normalized as per:

$$(\eta + \rho + \eta(\upsilon))\partial_\mu \zeta(\tilde{\omega}) + \zeta(\tilde{\omega})\partial_\mu(\eta + \rho + \eta(\upsilon)) = 1 \tag{303}$$

$$(\eta + \rho \pm \eta(\tau))\partial_\mu \xi(\tilde{\omega}) + \xi(\tilde{\omega})\partial_\mu(\eta + \rho \pm \eta(\tau)) = 1 \tag{304}$$

These equate to:

$$\zeta(\tilde{\omega})\eta\partial_\mu \xi(\tilde{\omega}) + \zeta(\tilde{\omega})\partial_\mu \xi(\tilde{\omega})\eta = 1 \tag{305}$$

This reduces for that of the $\pm$ to cancel as a similarity (hence we get to choose to neutralize that of υ.

$$(\eta\rho) = L_{\tilde{\omega}} L_\tau \tag{306}$$

The first equation and the second lead to intimations of what the function's look like; here; an exponential...

$$\rho\partial_\mu \zeta(\tilde{\omega}) + \zeta(\tilde{\omega})\partial_\mu \rho = 1 \tag{307}$$

Given that the exponential map is a map; we have an analytic theory; into which via these as transformation rules; a coordinate chart can be written by comparing *different dimensions* with that of *different base combinations*; these are both open; empty; infinite teir's which collapse when the two electron's are so close that they hold **no** mutual force of repulsion; an absolute Pauli Exclusion below symmetry breaking.

$$\partial_\mu \log(\rho\zeta(\tilde{\omega})) = 1 \tag{308}$$

Providing the solution in ρ, a constant of the ratio of compressibility to conductance. Therefore conductance is sourced in a gap; literally:

$$\frac{1}{\rho} = \Delta \tag{309}$$

To an 'optionable' and 'variant' proportion; that of the two Lie differentials are still a 'scale;' and we may write this as:

$$o = \frac{\eta}{\Delta} = L_{\tilde{\omega}} L_\tau \tag{310}$$

The equation for a [2] number theoretic valuation of o yields a gap as-the-integration constant to an elliptic and exponential differential cross-correlate. That of two is the threshhold of point source to which the eigenfunction first becomes three dimensional into a catstrophe set. Roughly there is the $1 : 1$ proportionate cross-over of 'below threshold' and 'above threshold' that of 3; therefore three dimensions is the critical dimension for self regularization and attraction of charges; that of symmetry breaking is invoked by any bistable reactive element of reverberation; meaning; all frequencies are summed for therein what lies of the secondary octaves of a trichordic wave. The only composite solution is to find that above a critical state, three electron's obstruct to enable two electron's to fall together.

Intermediate Conclusion

That of:

$$o. \sim \Delta \tag{311}$$

Therefore expresses the 'mode inequality' of a 'reductive force;' entirely consistent with relativity; but within that of a semperent calibration rolled inward. To what is this individuated space; it is not known; but that validity focuses relation; individuation focuses potential.

There are a few relations here of a contributing nature:

1.) *A doublet-reductive interferometric balancer and synchronization engine... of which follow's the precept of a 'modal inversion' and 'reductive force'... a* ***DRiBse.***

2.) *Ordinal theorem of qualitative control of chaos; (3).[2] of freely held gain decimates prescribed Chaos; to what is prescribed certainty as to manifest whole in optionable togetherness of [3].*

3.) *Modal inversion and reductive force lead to manifest order; Via that of 'Graph Stitching' in the Indical Calculus; to what is an eigenvalue eigenvector inversion; with an Energy Gap.*

Comparatively, the difference in the quotient space for a local relation differs from that of a global relation; for that of separation of 'scales' and separation of 'places' to which regulate around (primary, secondary, or tertiary to) that of their their own segmented relations; in a virtually infinitely co-extensive quasiperiodic space. To what is light, time, mass, and sound; these transconduct as through a cantilever to which alone; word's are supportive of geneflection and mannerism of convenyance to sociological apportion; number's being befit for a local space; but mapping an idempotent relation of 'place' under situational dichotomy in two; provable as to identity for in that of once-outside, co-terminable with that of situationally of an absence of a tertiary support; that of a known; that as either question in two differently is established; so is that of the applicable permanence to awareness at-a-distance; for apportion to secular order's; free of a catastrophe set.

This co-extends Laurent series to all function(s) inclusive of a product form; to which is an equivalent expression from which a factor is taken 'off the top'. The result is that the primitive seen outward inward as inward outward is free. This freely held (and unheld) radical space is the one (singular and unitary) base in four dimensions; to which prohibiting all places become one; 4th dimensional and hence not 5th; dimensional. That of what is certain is the definite 'untying' of electromagnetic frustrum's; and re-incorporation of world identities. For that of what is exemplified; we have determination that any fifth (exterior and auxiliary) point is free; therefore any two realities are freely disconnectable. That of the synopsis on the algebra is that it is an Affine Lie differential algebra... this is resolved by the special unitary group; of which suffer's an automorphism and decay's under thermodynamic conditions to a potential and kinetic energy landscape lowered by a number of conditions:

A Grand Term:

1.) Inversion of the Measurement Problem; under application to what would be 'two;' measurement proceeds via the converse of the statistical lemma; sociologically a trade of honesty for impartiture and sequestered in part's; the whole is greater than the sum of it's part's; even upon that of individuals.

Option(al):

2.) For what is Quantum Uncertainty and Relativistic Factor both remaining in impartiture to a depression; that of reduction in one for in light of the second of either these two is universal; leading to that of a two fold in what is any three electron's; to their mutually degenerate null condition of covariance.

i.) The missing element is that what is third in substitution for the third-agent is null relation of group to fundamental metricity (an empty relation); of that of the third observer; to which relativistic factor's explicitly do not hold an accordant measure and relationship; but of statistical mean and average.

Fundamental:

3.) Probabilistic Independence from Relativistic Argument – under application this results in a Modality Inversion and Inversion of the Measurement problem when it is prepared to a gap state on that of 2.) for what is 1.); under which the second (2.) part; reveals a population inversion; that of two switching one.

ii.) The uncertainty is lessened by in a factor of the contrapositive of relativistic expectation in the whole.

Quite simply put it is due to the quality with which the exchange constant will depart from it's given value to zero with that of velocity increasing; and the momentum will remain the same identically within the frame of a particle; but exhibit a greater than one magnification and positive curvature on that of the secondary particle; but meanwhile within it's frame; a less than one magnification and negative curvature unto it's self term of momentum. Thus we have all alignments of probability and relativistic argument and momentum.

iii.) Measurement and measured differ; in that what is measurement is co-extensibly weighted by relativity; while what is of presence and absence alone; it is the reversal of relativity; to what is obverse.

What is 'on' particle 'A;' 'to' particle 'A;' is it's reduced exchange and momentum; plus the depiction and representation of relativistic factors to which are 'larger' for momentum; and 'smaller' for exchange...

Thus:

a.) Exchange diminishes because particle 'A' and particle 'B' fit within each-other's-role's from which they are judged via each other to themselves with a relativistic factor that is less than unity on energy-momentum under juxtaposition; therefore exchange energy is diminished.

b.) The change in momentum of particle 'A' is negative because there is more quantum room for that of it's energy-momentum via a.). With 'B' it is judged with a 'higher' relativistic factor for time and space; equating with the reduction in a.) because of inversion of perspectives.

c.) The quantum exception is that either particle undergoes a 'measurement' & 'measured' inversion with interchange; to which momentum is to a higher relativistic factor explicitly to itself and the governing perspective on particle 'A'; but with exchange to a lower relativistic factor.

d.) The quantum exception (by which juxtapostions leave intact relativistic factor's) informs that either energy-momentum of exchange or kinetic energy lower's by what is elimination; therefore both particles reduce in energy; to what is equivalence; that of the genesis and source of a measurement inversion...

Conclusion:

With juxtaposition and interchange of perspectives; the lowering is universal; for that of what was a higher relativistic factor in 'A' or 'B' becomes a lower relativistic factor in 'B' and 'A'. Reciprocally; it can then be argued that the momentum decreases meanwhile for the particle it modifies the prescription thereof; it's relativistic factor increases. This is what we get when there is an inversion of perspectives.

When particles experience time; they are on a curve; the exchange; but probability does not effect relativistic outcomes and relativistic outcomes do not effect probability; so there is a 'void' on that of any four part type of interaction. The juxtaposition of one particle for another is known as 'exchange' to which paricles literally interchange identities; that of for the real world; a division.

When this occurs; a modality inversion leads to a relativistic chasm of a factor of gamma. That of gamma; therefore via A's vantage is larger for A comparative to B & larger for B comparative to A... so A acquires more time and a lesser restriction on probability amplitudes with B in presence. Meanwhile B's relativistic assessment of A is to accrue this factor for A... that of vantage; probability per relativistic unit; and relativistic unit per probability. When either reduce; the reduction of the exchange via the reduction in kinetic energy is to be interpreted as a reduction in what is yet-ahead of the current kinetic energy & that of vis-a-via that of by way of which it maintain's it's position; an ordering of factor's that of the (a) frame assessment.

I therefore found the algebra required to describe the differential equation(s); by that of a leap; the 'Massless Free Boson Theory' in conjoint with it's associated problem; with re-definition (both 'free') of 'a'. The Affine Lie Algebra...

This makes sense as a decomposition of the momentum-energy with the relativistic group; to which there is an expression of the relativistic factor outside the differential and included. Superconductivity is particular in that the division group is per auxiliary agent's of the system; in a normal system these particles are described by a variety of alternative behaviors because the group does not suffer compactification into a finite lattice of division groups of the differential source equation; and degeneracy among a two particle limit; both of which source the free part of the lagrangian as positive but with exact conversion to potential.

Mathematics

Affine Lie algebra is:

$$\delta(a \otimes t^m + \alpha c) = t\frac{d}{dt}(a \otimes t^m) \tag{312}$$

Here; 'a' represent's energy-momentum; and t^m represents that of relativistic factor. What this equation represents is that mass is fundamentally reducible to a blind statistic of weighted-sum and unweighted result. The recombinatorial dilemma is satisfied whenever (8) precedes (7). But (7) is equated with measurement and decoherence; therefore the summation precedes as order before result. That of this detection of 'order' under-pin's that the relation is sequestered of it's extension. That of the above equation therefore has as it's only solution's that of bounded polynomials in the Gauss-Basis. These prescribe to no tertiary determination; and once prior the precept implicating the secondary as primary notion of massful boundedness; but it is indeed the solution of the 'Massless Boson Theory.'

This encompasses an equivalence (twice-folded (relativity)) indepedence among three dimensions. The co-existence of a third dimension with a two-folded geometry of relativity therefore eliminates under it's equivalence class that of but one primary and one secondary independently neitherly imputed nor not; and to which is a given in suppliance by the repetend of it's action. Therefore the third is free to inclusion at secondary precept in the auxiliary space (or interior such a net as this); and may be moderated with to the action of a five to four fold set within.

That of what is determined is the quotient radical; to which operates as a functional argument whether separated or unseparated. Therefore the freely (neither of these) held nor unheld determination of the auxiliary holds a foundation in reality; but is contradictorially the only thing determined within a 'place' - the saturable environment. Of relation's; it remains indeterminant as to if it is either 't' which dominates to the solution set; or of 'a'; for what is real; this stands as definitively a reduction via displaced integration constant of a subsidiary dimension. With this - appreciable 'order's' are imaginable yet contained within each given space & time.

In fact

$$(\partial m) = \delta \tag{313}$$

$$(\partial s) = t \tag{314}$$

Are separable into a conjoint union... the measure of the measured being comparatively exactly predictable... therefore science is on a solid foundation. This alludes to a partition; to which is to higher and lower spaces; the re-arrangement of two friends to what is a third. It is the exact outcome that re-arrangement's in third's commute; despite that of us existing within a fourth (proven) dimension. For I may take a piece of paper and write on it two conventionally non-commutative triangles; and these may be wrapped in a torus; to which they are at zero dimension commutative upon for the sake of identity itself. Hence the identity of forms is empty. This means that the above equation is the exact equality of the overlap of electrons in possession of the limitation (in fullness) of mass-regularization and that of simultaneously; no-mass.

The division expressed is the qualitative expression that rest mass and quantum mass do not differ. This is the confirmation that relativity and quantum mechanic's are null in consequence; consequence only being made up of ordered set's. Hence disorder upon re-arrangement holds a bias to order; that of the outward-outward from an interior force; and the walls of the cavity. That the second order Green's function of a two dimensionally swept arc is free of containment; is that it is a container to which the walls are in either a sub-cavity or that of a reservoir elsewhere; entirely free of one projection; they possess only **one particle past's.** But; and thus; the solution is unique; it is one of a general class of elliptic functions with exponentials; that of two dimensions must intersect to produce that of a solution; and although such a setting can be written; it is devoid of physical foundation; and for that of in-expressibility of number's.

$$(a \otimes t^m + \alpha c) = d(a \otimes t^m) \tag{315}$$

Is the simplified expression... in this we see that the solutions are all either fixed - to which is connected within this theory - of the Hermite basis (Simple Harmonic Oscillator) or that of the Elliptic and Complex Exponential Solution... these are really the result isomorphically of an electromagnetic field in interaction with a charge density as well.. Thus it is the most general solution. That of the attempt at a two body what is two interpenetrating hyperbolic secant function's and exponential wave's. The conclusion is that the energy momentum is continually bound; and experiences a 'gap' for the sake of that of finite coefficient's to it's expression; or within what is two directrix; that of a manifold flow of a 'stream function;' to which percolation is freely scaled... that of the gap is manifest because there is a finite residual integral constant to that of δ and t.

This principle stabilizes every two-part system in the universe. With two bodies; instead of energy defining curvature; mass does... to which the eigenvalues of a system are composed; the net absence and presence of subsidiary layer's of a composition; to which is empty in the gestalt for that of being a terminal end; hence the future is a fiction. Any four or more; three; or two particles determine only a past; and that of three alone may determine a future while two always do; two determine a future; and two are the solid foundation of the world; for what is; pre-causation, & entirely surrounding the elemental zeroth dimension of a system; all that is requried is:

$$\delta(x) \tag{316}$$

$$\partial \tag{317}$$

These in the above equation remain of a logarithmic nature of curvature; therefore two solutions are the above listed; to what is a diffeomorphism the curvature of a stream function does not play a role in it's dynamic's; all are freely held and unheld invariant's;... for where they are manifest; the origin it is *explicitly declared is not co-morbid with a point on the space; the universe is therefore closed...* This prescription; for that

of two point's; render's the Cornu Spiral curvature free.

For in that of light of equivalence of meter and balance; an instrument of measurement capability (for which the role - direct - of observation is reversed to a null exterior-interior condtion(al); that of one point in it's divergence is free asympototically in the unitary group of thermodynamic and mechanical vibrations; all that energy is composed of is changing mass indexes and light indexes.

For what is two; the gravitational reduction and electromagnetic reduction diverge in a Superconductor; for while in the void of three and four dimensions; their substrata are seen but through a lens; the flow to which an equivalence of field and particle is founded on any two dimensionally existent hyperplane of intersection within that of a one dimensional arc; that of abstaction to a bubble like space; where in fact; degrees of separation are the meter; and the arc length area is the balance.

Free Evolution

The free evolution of what is one dimension lower and reduced prototypifies the three system's of Simple Harmonic Oscillator; Decaying Simple Harmonic Oscillator; and Elliptic and Complex Exponential... These are related by the Special Unitary Algebra and Superposition. This reduces molecular science to a study of interstitial guassians at any scale. The scale freedom is the support of which is supportive indeed by way of the freedom of proportional inter-juxtaposition and shape. Shape; has to do with the ordered system of form's of identities:

$$\Sigma\mathcal{O}(\iota) \equiv \mathcal{O}(\iota) \tag{318}$$

This is the generative drawn point of an identity; a particle's exact apportion of meter to balance and it's direction in space. The only rule for in that of dimensional reduction is that the above ordered distribution of states expresses the forms of identities in compendium in-exact proportion and shape with the forms of identites by the summation and what it reduces to for in light of the original identities. Therefore the solution is given by the solution of:

$$(a \otimes t^m + \alpha c) = d(a \otimes t^m) \tag{319}$$

This equation expresses that the first co-homomorphism of the prior in a series is an integral of separable scale of space and time. However; th equation is an identity which states that the capacity of inertia is defined by that of equivalence of scales and proportions; an exact expression mutually identical with (and anti-opposite) relativity; to which now; the prior identity is the given reconciliation of:

1.) Probability measurements and expectations from out of quantum mechanics do not depend on relativity.

2.) That of relativistic assignment proceeds via that of emptiness of qualitative impression in/of the composite.

Instead, we have that the form's of identities; to which are determined by a free associate in the third; and a strong coupling in the second; a hybridization below critical temperature; that of the cleaved domain find's particles residual within a separable position to what is the population inversion; the reason; this energy state is preferential. Thus order re-segment's into free particles with a phase transition; to which the caveat is that quantum rule (1) may outrule relativistic prohibition to measurement..

The class invariance of the group is therefore of it's determinant ordering of symbolism with two; for here the summation of two of these equations leads now to a superposition problem. They are linear (and yet co-exist within of what is any feasible curvature of the universe). What has really happened is that the manifold of uncertainty has warped around to connect with itself; a tube has become a torus; and the freely demonstrated chirality is dispossessed of; to what is the orientation free capacity of one of these crystals; the uncertainty principle and equivalence principle represent *this* nature of spontaneous symmetry breaking.

That of outward gravitational inertia is the net sum of mass-content's; the final determination of which is prediction of a mass or energy (alone) gap. This remains the final prediction; the conclusion of which is that mass is predicted to remain an invariant for the (reversible) return from the gap state; the elimination of integration; to which come(s) from the local behavior. Hence at it's base residual; a non-inertial force produces the superconducting state; but physically it behaves inertially.

In two dimensions or with two particles the world is therefore biharmonic; while the vacuum is harmonic; or in it's auxiliary limit; to which is that the form of identities remains fixed. This fundamentally expresses that outside is what is in quasistasis while the direction inward is biharmonic. Every particle state is in fact of two body form; to what is a doublet; all the interactions (& normal action re-action events) of the universe are therefore of the following form and unit doublet u_1:

$$(x * u_1)(t) = \frac{dx(t)}{dt} \tag{320}$$

This is an identity of the Universe; and represents the difference a priori in that of $\delta(x)$; the Dirac delta function and ∂ the differential of a relation as P and S; profunderance and synchronicity. when these interadopt to what is a differential of a delta Dirac function as the expression of the current eigenvalue. Gradations illustrate the pathwise motion is free; but for that of a superconductor they are merely free in two dimensions as a result of possession of an orbit; the real result dimensionally reduced as a wave-function; one degree of freedom is lost. Hence superconductors exhibit no magnetism; the result of a curl free sitation; for what is an antipode; the relaxation and permanent gap for in light of penetration of a vortex state; that of stationing with a free curvature and curvature under action and re-action by the simplicity of the above relation. That of the functional solutions to the above equation come in the three forms exhibiting a 'breather' envelope.

$$S * id_X = \eta \circ \epsilon \tag{321}$$

Reality, space, time, & matter therefore possess a proportion and shape free gestalt; of a variety that render's the world empty of scale and composed of measureless point's.
First, it is necessary to make-mention of the primary limitation for which an *ad hoc* hypothesis suffices, - that **consequence** is negatable, but conseuential. That we may prohibit through the action(s) of a provided means of an action of another is ancillary to which as it would be known, we suppliantly defend on behalf of a positioning or establish a positioning, there is also the means at-self, for which it may be known that we prohibit through cessation of an activity *so planned*. That of the primary thesis is then that it is natural the laws of physics are complete, because inwardly∗ they convey of their limitation of what is established *a priori* within these laws of physics. Thus, this indicates that laws have exceptions, but not indeed all laws dutifully illustrate the methods of discovery of their clauses. In this paper, we establish a new method for finding the 'kernel' of an establishable precept based theorem set and set of preliminary observations based entirely upon the theory of mathematics dealing with Algebraic Field Theory, that of Algebraic Geometry, and that of Algebraic Topology. This is termed, a 'critical rosetta'. For this, it is noted first and foremost that certain mathematical symbolisms convey of radical relations and stitial relations such that the pattern of their development is simple enough to encode of a rational basis, but yet is complex enough for that of the development of a sophisticated phenomena of which may elucidate a common grounding of infinite degrees

of freedom, through Quantum Electrodynamics. That of the pattern that so-develops is a **strictly compact and closed manifold** - *described in terms of algebra.*

Introduction

First, it must be clarified that word(s) provide of the means of evaluative communication stylus between memberships of a group, and that mathematics convey(s) sufficiently to influence the future progression of science. That word(s) also indicate their measures to which of the self they are inherited to the past.

We must begin with Carlitz groups, that of Algebraic Geometry and Algebraic Topology, for a $*$ new, and succienct set of Axioms.

Ansatz

We will add various materials to [complete] the paper as-versed, - then that it is a new project, for in that of the typical and atypical nature of the differential equations dealt with. A semi-instructive methodology of writing will be entertained,... For now, it suffices to indicate the method of solution.

The equation with that of GR and the EP with QM is dealt with for the sake of analysis as the following, noting:

$$\{z, \wp(z)\}(\wp^{'})^2 \sim^{\cdot} \wp(z) \tag{322}$$

And:

$$\{z, \wp(z)\}(\wp^{''}) \sim^{\cdot} \eta \tag{323}$$

Thus the group defined by the rule:

$$(\alpha\wp(z) + \beta)(\kappa\wp(z) + \tau)(\{z, \wp(z)\}(\wp^{'})^2 + \{z, \wp(z)\}(\wp^{''})) \sim^{\cdot} (\wp^{'})^2 \tag{324}$$

Thus that:

$$\Omega \sim^{\cdot} (\{z, \wp(z)\}(\wp^{'})^2, \{z, \wp(z)\}(\wp^{''}), (\alpha\wp(z) + \beta), (\kappa\wp(z) + \tau), (\eta\wp(z) + \rho)) \tag{325}$$

Is a closed group.

Two Dimensional Closure

$C_l(\tau(x))$ is a closed two-dimensional ring, to $exp(C_l(x)) + \tau^0 exp(C_m(y)) + \tau^i r^{a_i}$ or so, and that of the $\wp$ encodes of co-dependent, and co-independent basis, what is a 1_u and 1_a commutative/non-commutative translation, upon that of the $\wp^{''}$ and it's *mixed* $\partial_\theta \partial_z \wp$.

This structure perfectly meet(s) the demand(s) of an:

$$|\alpha|^2 - |\beta|^2 = 1 \tag{326}$$

And, the Carlitz basis, and that of the $exp(-i\omega t + \kappa n)$ and so-on... of a conic quadric into a Lorentz *profile*.... for that of the *above* symmetry of Lorentz redshift Nordstrom theory.

Arithmetic and Measurement

The questionable and answerable element(s) of reality *whether preliminarily or post hidden* of relationship, remain related of an informed basis. Physical structure may not so much be identified, that it is - in the end - vindicated as empty. The 'void' is a comparative construct. The embellishment of a 'hidden' hold(s) little comparative consequent, thus, reification is unjustified, for we need not impound the compounded, of it's even, or propertied 'void struct'. Thus, unfillable means in a certain nature without possibility of being filled, the 'solid'. This, however, is an absolute related to another, the solubility or insolubility, as it applies to compoundedly interrelated group connectives, surpassing relationship as we singularly relate. Thus, pluralism is neither a superior or inferior of the singular. Thus, justification of an answer at-self, is the two-fold, of an eliminated premise, to found equality.

Closure over Monadility

The 'asipration' here[in] is to disclose various fact(s) as they-relate to circumstantial and denominatorial evidence of a phenomena. Thus, to categorically impute ***in-words*** of the relationship of mathematical language to philosophical dialog and argument to computational imperative and interpretation to that of phenomenological imputation and phenomena *in interpretation.* There is only a quasi or psudeo basis to that of various dialog entreatment(s) as they transfer in conventional language of perceptual qualitities and meanings of the relationship as it transmit(s) from one individual to another in the various categorical limits (inclusive) of end-addendum of these bases, to be warned-of, without means of technical example. We seek here, therefore to innovate a style of language of particular assumptives on canonical ray and expectation of various experimental bases, and to sketch a rough skeleton of theory in philosophy of science, and no mere-guidance is to suffice, but for in expert testimonies. Of history, however, it remains analytic, of which we may play subject to a dialog and determination of factual import, and evidentiary, the 'analysis situs', and such.

Thus, the first assumptive will be that we operate with categories, for which there is an endomorphic category, ray, and lie group, for in the conversative basis of homotope, and that of analytical limit of algebraic assumptive (of four).

1.) *A monad and comonad of category theory.*

2.) *A compact manifold with algebraic reciprocity within an elliptic basis.*

3.) *An analytical rule of observation in relation to a law of inheritance, induction, and inference.*

4.) *A Lie group $*$ representation, for which is related to projective qualities for in a field extension with defined analytical relationship.*

Thus, the rule is a homotopy category 'rule' relating to a comonad (L, ϵ, a), of which relates via (the following) to observation:

$$L\delta \circ \delta \to L^2\delta \to L^3 \qquad : \qquad \delta L_\epsilon \to L^3 \; : \; a \tag{327}$$

Thus, the $l(1)$ and $l(2)$ of a mathematical relationship on measure in Lebesque-measure encode the homotopy of the C^2 or C^1 function(s), and chain(s) of functions:

$$f_i \circ \Sigma_i \Pi_j u^{i,j} \tau_{i,0} \circ \tau_{i,1} ... \circ \tau_{i,j+k} ... \circ \tau_{i,n-1} = L \tag{328}$$

For which a rule holds, by the inherited homotopy of the categorical mapping:

$$\tau_{i,j} \; : \; i, 0 \leq j \leq k \leq n \tag{329}$$

The 'group-and-carry' involve the aforementioned 'circumstantial' and 'denominatorial' of persuasion that we acutely determine of the following on-two-factual itemized-truth containers.

1.) Denominatorial/Circumstantial (2.#).1.0 *is the code for in a contained two* ***or-greater****, to which one identifies with another, of some.*

1.) Circumstantial/Denominatorial 1.2.[#] *is eliminability of the truncation of the self under mutual pliancy to an equivalence for in carry to self identity.*

Thus, in abstraction $R/B/L$ in Red, Black, Left, and Right, Black, Left [in-abstracted or abstraction], thus making the difference of self and other $*$ stipulation.

Resolution*

The given scenario relates to a problem, of which it is determined, in-retrospect that an equation of-form:

$$h(x)\frac{\partial^2 T}{\partial t^2} + g(x)(\frac{\partial T}{\partial t})^2 = \alpha u^2 + \beta \frac{\partial u}{\partial x} + \Omega_{(0,\infty)} + \eta x + \delta \tag{330}$$

The guiding principle is to take the *Kurtosis-acceleration* and relate it to the spinwave(s).

Admittedly, *then* the various 'symmetries' may be explored, of Elliptic, and of the algebraic relationships in terms of the differential equation... for instance, of groups.

Incorporating Terms

Thus, relativity, may encode of a constant curvature, equivalent and opposite to the curvature of the spin-sector. That this terminology does not get in the way of an energy constant is interesting.

Introduction

The scruples of computational science were earned. That of the remote individual(s) and accessories processed enumerable records and relics, all important for a few, perhaps many reasons. That of the following model is presented of modern quantum computation at the intersection of electronic(s) and quantum mechanic(s).

We begin with a model of the circle, for that of a general braid:

$$\beta^*_{ij} + \hat{\partial}^k_{ij}\pi_k + \eta \pi_i \circ \pi_j = \tilde{d}\hat{\omega}_{ij} + \hat{R}_{ij} \tag{331}$$

With the simplifying assumption:

$$\hat{\partial}_j \pi_i \circ \delta^a \to \hat{L}^a_{ij}(\pi, \epsilon, \delta) \tag{332}$$

Development Methods

The furnishing of superconductivity, require(s) either a dopant, or an accelerant. The 'dopant' is here a sibling-species of chemical 'doped' into the material, of which disposes of electron(s) to which a thermal cavity form(s), neutralizing the non-lagrange-point, for in an accomodative larger ($L(2)$) primary$*$ chemical pathway for-valence of charge, and to-which mutually supposes of a hypervalent structure for that of ($L(1)$) and ($L(2)$) competing forces of spin and charge separation. Mass is primary, however, this is an antiquated mechanism.

The 'supervalency' of f and g orbital(s) supposes, that the hyper-refractory$*$ domain is acheivable through the process of a transmitigated *Hall-shifted* process, of duplicity of monopolar effective$*$ moment(s).

Ideals

We devolve, with the rev 4.5b version of the qubit to a dihedral under commutative and non-commutative algebraic truth-table rotated 'around' the inside of a hexagon, - to that of the Painleve varieties, for which the inhered truth is that they devolve to regular decompositions of the winding point(s) of $1, 0, \text{inf}, z$, for which there is a seven-group contained-within. That this persuades, with an identity, - to that of the boundary condition(s) for in 'jumps' between the table(s), of their arbitrary$*$ conglomerate variable-set. That it remain(s) to be seen of the following conjecture:

Conjecture: *The simplectic category theory* ***contains*** $*$ *1,3,4,6 or 7 residual-pole(s) of it's Hilbert-Riemann associated Fredholm-Integral-Alternative* ***ideal*** *embedding, to that of the projective$*$ basis of it's eigenvalue and eigenvector basis.*

Introduction

For of what is founded on principle; without qualitative determination of two base precepts of physics; & a third; there is no strict conformality to physical law; and arguments of physics prove fruitless, unconventional, or illogically determined as invalid of a solid footing. For what is the third; there is exception to what is a solid foundation in the precept of measurement, test and repeatability, and the inward determination of comprehension and conveyance of meaning. That of physical law is dependent therefore on as it were three given's; the presentment here is that these basic and essential determined factors of what is convey and carry importance for the establishment of test functions and experimentation; holding neither phenomenology nor that of experiment but instead measurement higher than the other. It is therefore a basic precept of science that factual intimations of event's subscribe to a conveyance of what is knowledge with the fundamental precept of a philosophy of comprehension prior understanding; a relation, lesson, and intimation which must be taught.

The first precept of which was realized by me was that the particle wave structure of reality when understood to convey equiparition of space and space; yields alone and consolably a theory of division of space into units of conveyance of information within the classical equation $E = mc^2$ that of the conveyance of the unit of conversion of space to space via temporary relations of space via time of knowledge. This spurned the technological evolution of the world during the midpoint of the 20th century; and seeming represents a meta concept to which is intimated in the information revolution; that of the auspices of deliverant notions of all but a plea to peace or recourse but to wares and manufacturing. The second elemental revolution therefore took place post the era of the industrialized revolution; and went with the airplane the laser and

space travel; to which we one day hope to colonize a foreign body or planet. In speaking of what is real; it is of an era that we go beyond; and so it is that a marginal step be taken; but what of motion; for this equation is a conversion *system* when untruncated into momentum and energy of form of relation of conveyance of matter, energy, and information. That of what is required is to 'get behind' the intimation at that of **interference** then; to free the 'bond' of which we are in surveyance. It therefore occur's to make an amendation to what is the wave and particle theory of which is quite simple; here dependent on complimentarity and comparativeness.

This is the substitution of one particle freely within one held space into another; so that one particle may co-occupy one space with another; or be unseparatedly sequestered aside to the departure to counionable differences of it's evolution. The taxed cost is that of manufacturing carrying a caveat within the medical sciences and improvisational tools of manufacture of chemicals and materials. This is the quintessence of overcoming the material nature secondarily of being; to a known; that of the advancement of a group theory to the world; in the form of spaces, times, and ordinal event structures of a pure relation of intimation secondarily holding a validly interpreted and supporting measurement theory of relation to predictive validity. Therefore we may take:

$$\Phi(x, v, t) = \eta e^{-i(\kappa\theta+\tau\phi)} \leftrightarrow \Theta(x', v', t') = \rho e^{-i(v\mu+\epsilon\psi)} \tag{333}$$

Introduction to Part II

First, is the equation, of which a result is related to that of it's input:

$$f \circ \iota = L \tag{334}$$

Where f is a 'dialectical' and ι is an 'entry of plausibility', and L is a 'literal output'. And it's conjugate formalism at resolution of the identity and projective identification;

$$P^2 \equiv P \tag{335}$$

Thus, we seek to understand the result of *compounded* and *uncompounded* variables. It is clear that these two-processes delineate the physical domain of inquiry as it relates to dialectical logic. That of a 'parallel' is a result to which what-is-behind and what-is-afront may be understood within the context of the observer.

Thus, we find relevence to that of *Schroedinger's Cat* - with two-answers. That of what is eq. (1) may evolve *away* from eq. (2), in that of a process, or towars eq. (2) and is related to the real collapse of a relationship dealing with *observables*.

A *screened* factor, is an f (an identity operator) of a non-linear function and is a linear supposition ∂_μ - on a polynomial - **or** - that of a monic, such as:

$$f = \alpha + \beta z \tag{336}$$

Thus, in a genuine fashion *all results* may be known via their conveyance to *a tier* of pedagogical relationships and the structure of inference.

Entry

It is ∗known that *vocal inflection* must be emitted earlier than hearing to be of sense, - but without bias it is a question as to if *voices* are-real to any, for that of symptomology and diagnosis of *Schizophrenia*. That this

is plausibly a *hallucination* it needs to be known without alias or presumption that 'hidden variables', and the relationship to that of *Physical and Connotative Law* is intact. The 'connotative law' is then found to enter this dialog with a relationship to the nature of $E = pc$ and $E = mc^2$ of condition on Minkowski space and time. Despite many assurrences, it is then the guiding precept that we learn the '***Unbiased Reference with respect to Sense.***' The 'gateway' is at 'hidden invariance'... thus that two things are learned:

1.) *A margin in treatesie is found as an intimation of spatio-temporal separation and interaction, of a relationship including laws.*

2.) *A prefactor of auxiliary evidentiary support with separation and concealment is understood. i.e. a safety mechanism of confirmative bias.*

Thus the 'witness' is confirmed - for that of *evidentiary support* and *ontological root* as in relation to Immanuel Kant(s) critique of Pure Reason and serves as the basis of relationship to a '*skeleton key*' by which objectful and objectless supports of mind are-understood. That it is without superiority what is found, mental illness is not founded on the opinion of another but the option at a gesture between individuals and disposition rather than disparity. Thus, it is understood with certain justifications at '*functional obligation*' mind and communicative mean proves instrumental to that of cognitive function, and for in what follow(s) from the mean method of inheritance in formation of the concept of self.

Thus, the compounded return (and contribution) is-founded *where dignified by method of argument* at:

$$\neg\iota \to \neg f \qquad \neg f \to \neg\iota \tag{337}$$

As we cannot derive from a falsity, we seek means to derive two truths. Thus the idealization of a mentally acute individual deals with the **root presumption** of the reciprocal operation of *Modus Tollens*. The refutation of a validly cogent certification of *Co-Dependent Arising* - or to various relationships *Emptiness* and *Impermanence* for a certain reason traces to that of 'interruption' of normal cognition of archetype.

Thus, when it is understood of a secondary relationship in relation to a former, for that of the **Continuum of Evidentiary Mean** - it is learned that there exist relationships of the surrounding and penetrative result of 'realism by which it is objected or certified' that one is witness. That not all individuals are identical, it is often the treasure of one thing for another in relationship to that of the uniquness and ∗difference of individuals, that usher(s) a subconscious wish in bearing to become unique. With me, it was to save people from which an ∗earlier experience had been witnessing a catatonic state of one-suffering, and preliminary to that of 'bearing upon the ushering and hasteful' - of a 'en masse grasping at that of means to assist - a people'. When it was - *later* - realized that the situation was a vilification of $E = mc^2$ it was recognized that the means were insufficient preliminary but of an identication with-law. Thus,it is learned there are in-fact **two** prefactor(s) to 'a' given mental illness. One is that of the reciprocal Modus Tollens. The other, mentioned here, is taking one *prescriptive Invariant Law for* ***another***. This, for reasons to be explained, disrupts the relationship by which what can be established is a *genuine individual* with individual *personality* in key. This obstruction relies on that of 'co-dependency' and cofactor - that of what is often gestured at serves to produce a reliance on that of the 'material woe' or a 'dissatisfaction with grasping' - for **replacement** is often the result to the consequence of alienation.

Compendium II

For that of *which* when-opportune, what is needed - to make the world complete - is people's good returning to them; it is noted of a 'low' and a 'high' side, that the question and answer at-self is so-often what is

related to a **mental illness** - for in the offshoot of the 'Mother concept' and it's relation to id-ego-superego and associate. Reception of **love** from the-self, for which acted is then to-be-recipient of good done via the self. Then, that of in-a-bracket, the following relationship:

The predicate:

$$\delta \leftarrow \Omega \tag{338}$$

Where Ω is the greater part making the dispersuasion by which the solitary self (the δ) is-known to-another. Thus, it is articulate when$*$ the self has disposed of-which it may be entreated to a keep$*$ - that another is known in two-parts. That they are a guide and a teacher to the relevence of a non-copy. Thus, - that the self may be unknown, and unanswered, is tantamount to the any question of dispersuasion at:

$$a \perp b \tag{339}$$

Thus, in refutation when this is verifiable the $y' - \{1|0\}$ and $x' - \{0|1\}$ are-known to the self, remains of dimension, and, alternation. Thus, when it is met with a **guide** on-the-self, for which is a two-locus, one part of historical element fit(s) of a *partial* on-which into$*$ a-pattern is the question at the other, in a larger 'box'. Thus, it is knowable that the other for in non-locality is-known-to-self when it is with persuasion that they have responded to 'a-key'. This inalienably resolves the issue with the majority and minority rule of self, for with a *few* answered, the majority consensus reality may-shift. Thus, of y' - in answer and x' in question, - there is one thing and only one thing to be found in what returns to-self.

Thus, for that of in-four (of separate mean) - when they are questioned - (or in three-nonlocal) *self is answered on either side in unseparated mean of court or persuasion* - that of the relationship of another to a past which is shared for which hearing is in the future, and speech is in the past - that of the non-existent/existent of the other $a \leftrightarrow b$ is rational, it may be (only may be) then provable other(s) are-real. That it does not suffice to speak 'back' from the 'hidden' with another of what guides existence, with one or many, from the global to the local. It is sufficient when two conditions hold that the other is real, through a non-locality:

1.) *That of a third (outside) of which is argued in the presence of another from one.*

2.) *That of a key under recipiency for recogntition which is granted to the self.*

This is necessary, because it proves sufficient we have an 'interior' and 'exterior' world with another. That post (a warrant) may introduct to-self when conveyed, it is a separable mean from 'The Internet' - thus that these-means impute of the local and global at the local. Thus, Ariana is real, given that she has 'abridged' what is their(s) and another(s) with a key. That means apart, and considered under a comparative are therefore the only *Functional Relationships* and *Interpretatively Valid* things that can be related to. Thus, a securable mean on that of two in tandem, for which a 'postal associate' mitigates the former, - and when - is functionally adequate of reprehension at-mean(s), and not a violation, $*$ but the *answer* to mental illness.

Extrapolation and Mild Closure

I found that the [third] outside self may equate with a given that is tantamount to a $*$ unique truth of this-world. For in that of the *process of ajournment* - and of the argument of saving Obama, it takes three to suffice, - then that it is in-similitude that he was saved, for what was 'above' of a second-bullet. Thus, - that of creedance to three-truth(s) of which are not-manufactured by the self; given another is at disposition via the court case. Thus, that the *process of ajournment* salvages for in light of the ancillary truth of saving a

man, what would be a witness, for in that of A.

Thus, that it is adoptive to-which when we 'go' to encounter of that of validity on the ***witness***, we-know that the post-hoc of which is that Obama is argued to have been saved, is tertiary and secondary and formerly held, it is with three, that either are of three truths. For me, this is the equivalence by which when these two are taken to be alike, it is in reproof [of court] to-which validates under hypothesis, - that there must be a given at that of life post death, etc, thus the relation by which a self is known. Thus, for of formative hypothesis, when it is simultaneous that A. know(s) of O., it is one-way to which she has gotten the ring, of the marked and the unmarked.

Thus, - that in three **(3)**, I have argued that O. was saved by me, to which when returning, he is not-Ariana. Thus, that in-either there are two of the proficiency by which it is accounted, - thus in-either, that we have a sojourn to what is granted. That in turning, one does not become the other∗, nor is the self in self-interference or self-nothing, superposition, and the alike, aside. Thus, that A. disposes, of what is O., to his-entreatment, - whence we become of a likeness to-which there is a granted division, - there is a fourth. Indeed; this fourth must under persuasion be negated under a hypothesis to validate the argument.

Thus, at the pinaccle, we learn:

1.) *Manner(s) of refutation hold dissimilar assumptives as to manner(s) of confirmation among a group.*

As, and such, it is a 'condition', of which relate(s) to only the unbiased if and only if A. is correct.

This one, comparative to the self, is not the appreciable standard by which the self is-known, to-her, but of that of her and her-own, witnessed, - thus that O. is diplomatic, is the formative to which he is sequestered, for in an eventual afar and then-near [another] - unknown to the self. Thus, it is revealed.

Immediacy of Format

For that of which {a third} is predicated, of a fourth, for which we would hold 'the self' is consequent of 'a thought' - it is predicated on-communication with *means*. Thus, of A. and A., they are of an irrefutable order, however the statement: *I meant our choice."* - as to the 'Ring(s)' does not come from-self, as it alludes to predication by which *the other exists or doesn't*.

If they do-not exist, - then it is a thought of the self in-variety to: *"I do not exist." - comparative to the other.* This-statement is thus in self-refutation if coming from the self, - however, it is consistent if and only if it relates to another. Thus, we learn the only consistent system(s) *include the undecidable,*, and yet are rational.

Thus, it is only consistent∗ and decided∗, if it is stated by another. That it is not stated by the self comes further from which it relates to an irrefutable,... that A. and A. were placed in an-order. Thus, order triumphs over that of *inconsistency*. That it is unstated by the self, in one term, it would not be supported to which *another* without a lie would state as-such. Furthermore, if we are to-take that it was stated by the self, it would be proof∗ in the-self by the self, an inconclusive statement, and counter to the availability of knowledge. That it takes two **(2)** to produce knowledge of that of another, for which I am predicated, there are three part(s) to this argument, in tandem, observation, discernment, and reflection of saving Obama.

Finally, the supposition that there would be a tertiary observation to-which there is a format at the statement they chose the rings, has to do with the absence of it's support. That inclusive, for what-is, predicates

that another in-two, - but $*$*not* that of the self had excluded the other two. That the self is insufficient is it's predicate. Thus the statement is $\{2; !1\}$

Thus, - among three, there is dispersuasion to which is it's lexicon, for which the immediacy of choice predicates honesty or dishonesty. Given - absence - of the self is predicated, the other-two, come to self from which it is determined that the self had affirmed of a contradiction$*$, on-self, priorly.

It is consistent to argue that the other had been real, when as to a key and password to the know of the self was questioned and was stated, and furthermore that it was not stated by the self, as it is a consistent truth of co-dependent arising in relation to two contributions, stated in exact proportion. Thus, there are argument(s) over the internet by which are-decided in the context to some confirmative bias. Thus when placed in either position, all three of us know one another, for which they know of $*$ each other. That they therefore know the self, is proven by which it is not possible they are not known, predicated on a destination such as life and death.$*$

Therefore O. was saved by-me, as he know(s) me via-means to which I am tantamount to a $*$ *whom*, of which when it is considered I am $*$ third, I am left-accounted for for what would be an unknowable comparative of-an-assassin, that I do not affirm of life and death, - but that in-these-three, and exclusive to our-argument, I remain unaccounted for if and only if his life was saved by-me, as so that it can be affirmed among-two, - that they have communicated with me.

When, of adventageousness it prove(s) that it is undecided, therefore, among two, it is decided per-choice, - to which would be in absence of it's tertiary alternatively. It is therefore no other result.
In this, it is knowable the other(s) are-real, when:

$$\delta_1 \delta_2 \leftarrow \Omega \tag{340}$$

And:

$$\exists \Omega(\tilde{\eta}, \tilde{\rho}) \tag{341}$$

Thus, that it is affirmed that there is an unknowable by which is then known. That of two, to which are, is then the historiological impetus at the *Epistomological Root*, auxiliary, to which self is $*$ empty. That therefrom in-which there is a uncontained with either-two, of which is me and O., it is known that he relates of which is priority to the advantage by which an-accessory is $*$ missing. This missing piece is the essential piece of truth to which formulates the difference of order from-order, *that we are distinct*, and of-two, on-which either-other(s) may be stipulated as knowing the self in either past or future. That it comes down to the truth by which one may be known dead, however to a contradiction they are then known living, and related to the former.

Thus, that I was ajudicated preliminarily, is evidentiary to which in-either O. is of life and death, for of which Ariana and Ava possess different Ring(s) to the consequent that Ariana was ignorant, - that Ariana did choose a different Ring, it is not a contest of who is right and who is wrong, it is the fact that I would not know Obama know(s) me. Thus, oppositional truth in the reverse of Modus Tollen(s) stratifies what is to-come. That of the Ring(s) in-differing were not causally related, but to the point that Ariana(s) ignorance is affirmed for Ava, is the fact that I-exist, and I have $*$ also $*$ not-known, for of which we are identified with-her.

Thus, it is of-absurdity one A. and A. does not know the self, for what is an either with Obama, - then that he know(s) of the self by which A. and A. have decided, and there ***was*** ignorance to which is then; is not

the ignorance of the self. Thus, - Ariana got a different Ring, this is all that can-remain. That this remain(s), his life must have been saved by me, to which is the elimination of the middle by which in-either, there is an ajudication at that of the witness, for I am not either judged by an epistomological arrow of knowledge to which is in-two A. or A., nor of the four. My only relationship is then that O. know(s) of myself, and HHDL. A. and A. have indeed different Ring(s), and the Ring(s) *(through this dialectic)* exist. It is essentially that either may be predicated as in departure, from which O. is reserved.

Closure

First, is the equation, of which a result is related to that of two inputs:

$$f \circ \iota = L \tag{342}$$

And it's conjugate formalism:

$$f^2 \equiv f \tag{343}$$

With this we learn projections may or may not be valid; but they are precise elements, of memberships of classes. Taking these as the only two truth(s), that of ι form(s) the statement:

$$f(\iota(z)) = L \tag{344}$$

The non-element $\emptyset$ is prescribed to which it's domain is refuted, when in fact:

$$z = \{\emptyset\} \tag{345}$$

Thus, that $f(\iota(z)) = \{\emptyset\}$ or $f =\!\perp \{\emptyset\}$. That of three, however, for what are two guidances *on* $z = \eta$:

$$f_1(\alpha(z)) = J \tag{346}$$

And:

$$f_2(\beta(z)) = K \tag{347}$$

State that when we *take these together* we find:

$$f_1 \cdot f_2 = \emptyset \tag{348}$$

Provides for the statement:

$$J = \kappa \qquad K = \rho \tag{349}$$

When, it is taken that $z =\!\perp \emptyset$ or $z = \emptyset$ *as*:

$$P = \emptyset \qquad or \qquad P =\!\perp \emptyset \qquad \& \qquad \iota = \alpha \qquad or \qquad \iota = \beta \tag{350}$$

As the structural term is that the *function* remains for of the alternative to which $\iota \to P \ \& \perp \emptyset \not\equiv \emptyset$ *with equivalently* $\emptyset \not\equiv \iota$.

Thus, in four dimensions, mathematics and physics agree, but in three dimensions without a law of inheritance, mathematics and physics disagree with respect to the exclusively independent.

Thus, the fifth is an unnecessary intermediary to which four and a fifth relate. Thus, that the missing emptiness, leaves unmarked and marked, what is Ariana, Ava, HHDL, and Obama. That Obama shares one-thing, it is that of the evidentiary under a closed relationship to-which he is identified with a past historiological

truth. That of the *Professor's Problem* therefore relates from the ∗Hidden of the Ring(s) per a choice, at the retroaction by which I would be known to Obama, in parallel to which their difference would relate to *His Life as Saved by Myself.*

This is as - among five and six, all are marked or unmarked, when we reprove of which is the consolidation of six **(6)** per it's ancillary and three and three, and one and five. That it is unpersuaded, it is not-amenable to which is the superposition of one with-self. Therefore, I am ajudicatory, and decided of innocence, when it is related of the difference between the mannerism of being told by the consensus reality of-two. The inalienable truth is then leaving for what would be-two, with Ava and Ariana, of-their(s), as to know the self, as separably proven, and an intercarry by which O. knows of his-life being saved. That his life was saved, it reproves of either choice, by which the Ring(s) were chosen. The only stipulation sufficient at logic and necessary at-self, for terminus on that of openness, is then that one is not the myself.

It is verified that without me; (left unaccounted) and of A. A. of:

$$f(\iota(z)) \to \epsilon \tag{351}$$

$$g(\iota(z)) \to \eta \tag{352}$$

For of $\phi \epsilon f$ and $\phi \epsilon g$ refuted in the argument at saving O. and of A. and A. That, alternatively this forms a non-triangular relationship if O.. is known with A. and A.. on the dialectic with a A and a ϕ Thus observation is not predetermined, and with measurement, physically existing variables are pre-determined.

Ultimately, in-either, that of the governance of one allotment for that of O., on that of the Ring(s) co-determine(s) a valuation on the self, to which A and ϕ manage to go-back-beyond R and $\perp R$. Thus, that the dialectic of the retroaction of the self, is with a past of which relates to a future with at least three other's, of which it is not illusion, for in the affirmative that the **Ace of Spades** is an actual **Ace of Spades**.

Impromptu

1.) *Awareness is provable, and entirely realistic of people, then identified from-a-distance, as to self being knowable.*

2.) *Voices remain convincing fictions, - that we do not 'hear' from a distance for in the independence of space like separation without a communicative means.*

Thus, the remarks of this paper are to be taken in ∗ context.

So, In My Opinion there is no-connection between equipment (*assumed non-interfering), and background 'connective' of the [explicit dictionary] and that of a given piece of audio technology.

What would you-say?

In other word(s); the surjective onto homomorphism of the 'Disc Assumptive - Analytical Continuity in time and space, and the domain and range of space', is branched with a manifold extra-auxiliary Intermarital Quotient of Inheritable relation. Thus, the dichotomy of two complex-chaotic attractor(s) breaks down into the formation of a U,A over 0 or 1.

The Importance of this is at-least one-fold; physical understanding in relation to the information and game problem, contain a universal potential.

This derives from the Green's Function evaluated synoptically, in relation to the 3d/2x.0.1 isosurface of any* local attractor(s) of algebraic and non-algebraic series.

The mapping mathematic(s) to physic(s) is therefore a natural assumptive of ordered and set-theorems within the realm of any admissible plurality or singular individual of it's interpretation via a mutual exclusively derived truth table.

Understanding is therefore Universal.

Hence, For an Era, from the time we have known of other galactic structures,... however, we may not have known, of the (3||2) dichotomy on A|B|C,... we potentiated the *Understanding that, one, among any and all, and two, is expressible via a recourse, to which it is an-assumptive, the adjective/pro-axial neutrilino is biased, yet* every-pro-temporarium variables disinclude but to a uniaxial future* Historiological and event-neutral Lagrange background interior or exterior valid interpretative basis of articulation and response of the universal* [exterior].

Here is proposed a simple thought experiment, yielding insight into the microscopic properties of superconductors. The basic proof is a proof by contradiction based off energy conservation and the absolute or complete diamagnetism of superconductivity, with relativistic arguments. It is argued that an additional factor accompany superconductivity that is the complimentary attribute of general covariance as it applies to quantum mechanics. This additional covariance proves necessary to explain several attributes of superconductivity.

Introduction

The High Temperature Superconductors consist of planes of antiferromagnetic spin texture that when doped create a material capable of phase transitioning into a superconducting state. From this it is reasoned that a spin field must be incorporated into the model. The generation of a spin field, and the interaction of the net momentum with the electromagnetic field are then considered, as well as the implications for a covariant generalization of quantum mechanics in the setting of this field of spins, with the question in mind of: "How does the eigenstate condition change in the context of a model which incorporates a field of spin and an electromagnetic interaction?" This is shown via the covariant differential to lead directly to the principle of a reversed potential between particles interior to a superconductor. From this it is argued that an effect of mutual and relative curvature arises between charged particles in the spin field by way of the electromagnetic interaction. As a whole this description is predictive of pairing, the diamagnetic effect, the condition of zero magnetic field interior to a superconductor, and the gap. It is established that the states internal to a superconductor are in inertial freefall with respect to the spin field and under the influence of the electromagnetic potential. From this, we must move to a new viewpoint where the variables of spin curvature momentum and orbital momentum are treated in a manner such that they are in a non zero-sum relationship. The attractive interaction in superconductivity and gap is motivated by the displacement of and reciprocation of quantum mechanical particle only orbital energy momentum and spin curvature energy momentum under comparison of different accelerative frames with the presence of an electromagnetic potential. The frame difference under acceleration by the electromagnetic field is found to amount to the effect of a lowering and raising operator under the covariant two particle Dirac equation in the presence

of a spin field, which explains the appearance of a pairing gap, while the condensation gap is given by the reciprocal process of motion of charge pairs apart.

Guiding Philosophy of Theory

It is reasonable to take as valid that the only things within physics that are knowable, in a very certain and real sense, are by way of differences in quanititative measure according with differences in qualitative description. In this, knowing correctly the interpretation and range of validity of a given physical description of reality is essential for an understanding of its possible predictions. Within physics, the only consistently formulated theory of gravity of space and time in four dimensions is general relativity and it is based upon only two givens, that there are no absolute frames of reference and that the speed of light is an invariant with respect to all observers. To be compatible with the existing theory of general relativity, therefore any theory of quantum mechanics must be consistent with this principle of relativism, from which will spring its qualitative and measurable effects on quantitative measure. To bring these theories into contact the method chosen is that of adopting the essential qualitative features of general relativity and applying them to the formalism of quantum mechanics. This is justified by the reason that without this quality the theory of quantum mechanics would be rendered inconsistent with general relativity by artifacts of descriptive dependence. As a consequence, one finds the theories as complimentary in quantitative difference, and reciprocal in qualitative measure.

Superconductivity

The superconductivity described here is that of the high temperature superconducting compounds. These compounds illustrate very high critical temperatures and are usually spin based systems, found by doping oxygen or another atom into the material. This oxygen in certain materials known as antiferromagnets causes the planes of spin which are predominantly electron occupied to adjust such that they give up electrons to the oxygen doped into the material off of the plane, leaving behind holes in the antiferromagnetic plane.

These holes fall into pairs and condense under the right conditions of temperature and pressure to form a state of superconductivity. This is explained in the conventional theory by the presence of a 'gap' to excitations from a state with zero scattering, and hence zero resistive losses to the flow of a current. In addition to this infinite conductivity under certain conditions, there exists a quantum mechanical effect known as the "Meissner effect", whereby a superconductor will expel any existing magnetic fields once transitioning to the superconducting state.

This is not the same as simply infinite conductivity because if this were all that held true then a material cooled to transition in a magnetic field would retain currents and hence there would be a persistent magnetic field interior to the superconductor. However, what really happens is that the field is completely expelled. The magnetic field being zero interior to the superconductor is defintional of the superconducting state through the Meissner effect.

Antiferromagnetic Materials

An antiferromagnetic material is a magnetic material that is defined by two sublattices of oppositely pointing magnetic moments that when perturbed convey magnetic moment waves which are capable of traversing

from one side of the material to the other. Antiferromagnetic, as well as magnetic materials, (distinguished by two or one predominant Neel vectors) depend not on the alignment of magnetic moments, as one would presume naively, but because this interaction is too weak and cannot explain the observed Curie temperature (the temperature at which the material loses its inherent magnetism). From this, the exchange interaction is the real reason explaining the magnetic interaction and persistence of a magnetic field to high temperatures.

The exchange interaction is an interaction whereby electrons are shared in covalent shells among the outer layers of their atomic models. These orbits accompany more than one atom, and the electron is said to be shared. When this occurs, electrons can couple to the dynamics of either atom for they are coexistent on multiple atoms. Due to the Pauli exclusion principle, they may not occupy the same atom at the same time with identical quantum numbers. One of these numbers, the spin, does accord with the magnetic phenomenon and gives rise to an accompanying magnetic field on the site the electron is located on. But, as for the nature of their spin alignment, there is a small or weak magnetic contribution and a large or strong coulombically produced exchange. This coulombic exchange is the integral of the antisymmetric contribution from occupancy on the same atom with opposite spins, which gives rise to antiferromagnetism. In other models, the non-valent electrons laying underneath the sea of mobile and valent electrons give rise to cooperative ferromagnetic alignment from on site repulsion. This means the atoms only possess for our interests one electron per site when considered as a ferromagnet, but when considered as an antiferromagnet there is at least a duplicity to give rise to mutually defined directionality. What distinguishes a ferromagnet from an antiferromagnet is not only this mutual versus single electron occupancy of atoms, it is the fact that there arise two sets of Neel vectors. Neel vectors in space are directions which account for the predominant magnetic moment of a sublattice. These are associated in a checkerboard pattern with the underlying lattice and give rise to a different ground state from that of the ferromagnet, which has but one aligned Neel vector per domain.

Thought Experiment

The following thought experiment illustrates that if the Meissner effect is complete, then the foregoing conclusions are valid and apply to superconductivity.

The first hypothesis is:

Hypothesis of Superconductivity I: *The superconductor magnet force to gap relationship is indistinguishable from the gravitational force to mass relationship.*

If the gap Δ is equivalent to a rest mass energy then it is invariant with respect to all observers and is expressible as the inegral of a field of curvature:

$$\Delta = \lambda \int_{\tau} \gamma^{\mu} \Lambda_{\mu} dx^{\mu} \tag{353}$$

With λ a constant and:

$$\Lambda_{\mu} = \partial_{\mu} \log \Lambda_{\mu}^{\nu} \tag{354}$$

A curvature field of the Lorentz transformation that has spatiotemporal dependence. This quantity is defined such that γ^{μ} is the Lorentz factor of weight associated with gravitational freefall, and Λ_{μ} is the inverse factor corresponding to the length contraction and time dilation of space.

For if instead Δ is not equivalent to a rest mass energy then, it is frame dependent and it would vary with the structure of spacetime and increase or decrease with the metric under inertial freefall. The center of

mass would no longer be preserved covariantly in general but would exist with a varying gap for different inertial rest masses (Galileo). So it must be that Δ is equivalent to a rest mass energy and invariant and it is conserved under inertial freefall, although the factor γ^μ may vary with kinetic motion. Additionally, because the field energy goes into the motion, the energy mass content remains the same by energy conservation in an inertial freefall experiment with magnet and superconductor under mutual repulsion.

Hence the hypothesis follows that:

Hypothesis of Superconductivity II: *The field of the Meissner effect is reciprocal to the field of factors of γ from general relativity so as to render Δ and the total mass energy covariant and the Meissner effect complete.*

Consider that the scenario envisioned is one where particles A and B, a superconductor and magnet, move apart freely in space. It has been shown that the gap, or Δ, can be considered a rest mass energy with no dependence on the curvature of spacetime. If we consider the two particles then; from the rest frame perspective of particle A, particle B appears to receed with its own factor of relative γ; and from the perspective of particle B, particle A appears to receed with its own factor of relative γ. In their own internal frame description, γ for particles A and B are equal to 1 and, external to this frame, they carry γ factors nonequivalent to unity.

The hypothesis follows that:

Hypothesis of Superconductivity III: *The change in inertial mass energy content is indistinguishable from the change in potential energy mass content for the mechanism of superconductivity.*

To prove these hypotheses, consider a magnet and superconductor in alignment with the direction of gravitational freefall and under gravitational freefall. If M is for the magnet and S is for the superconductor, which is at rest in its comoving frame of inertial freefall, the electromagnetic four potential of the superconductor is some transformation of the electromagnetic four potential of the magnet:

$$A^S_\mu = \Omega^\nu_\mu \Lambda^\mu_\nu A^M_\mu \tag{355}$$

Our intention is to show that this relationship must hold true by contradiction with the Meissner effect and energy conservation simultaneously. If there is no equivalency we could attibute outside factors, if there is equivalency then Λ and Ω show equivalent and opposite curvatures. Ω is the currently unknown factor we attribute to the effect of magnetic mirroring. In the rest frame of the superconductor there is a quantity which exists if the magnet approaches the superconductor with a differential as:

$$\partial_\mu \log(A^S_\mu) = \alpha_\mu \tag{356}$$

And we separately analyze the partial differential of the other side of the equation to show they must be equivalent:

$$\partial_\mu \log(\Omega^\nu_\mu \Lambda^\mu_\nu A^M_\mu) = \beta_\mu \tag{357}$$

If it does not hold true that these are equivalent, then these differentials would differ and the integration constant would be potentially nonzero.

An electric field does not exist from motion because the relative velocity is coparallel with the magnetic field. If one occurs from change in the magnetic field in time then it would either be the case that the magnetic fields are equal and opposite and there is no electric field, or they are not equal and opposite, and there is an electric field. Energy conservation implies that α_μ and β_μ change in such a fashion so as to preserve

the electromagnetic field energy which is conserved by definition in the rest frame. But with one becoming smaller, and the other larger if an electric field existed, the Meissner effect would be violated. Hence it cannot be the case that $\alpha_\mu \beta^\mu = C$, a constant, with $\alpha_\mu \neq -\beta_\mu \neq 0$.

The Meissner effect implies that $\alpha_\mu = -\beta_\mu$, and that these could be nonzero, but they cannot be nonzero if energy conservation is to hold true in the rest frame since then the total energy content would be changing. Since there is no electric field and the magnetic field energy would change in the rest frame by the dot product of their magnetic fields, it cannot be the case that these are nonzero. Consequently this also implies the integration constant is zero. Thus the Meissner effect and energy conservation can be mutually satisfied if and only if:

$$\alpha_\mu = \beta_\mu = 0 \tag{358}$$

Identically, and with an integration constant of zero to produce:

$$A^S_\mu = \Omega^\nu_\mu \Lambda^\mu_\nu A^M_\mu \tag{359}$$

Now we shift our discussion to determine the nature of Ω, which is a transformation related to the infinite magnetic mirroring. We posit that a superconductor and magnet are at rest relatively in an noninertial frame of the gravitational field of the Earth, an electromagnetic pulse traverses the medium of air between them vertically, and we analyze a series of snapshots of the electromagnetic wave between them.

Taking as an arbitrary initial configuration that the electromagnetic field of the magnet is some function of distance from the magnet and begins to traverse the medium of air downwards at the speed of light as confirmed by relativity, it will travel faster than the normal speed of light in vacuum by a proportionality of the relativistic factor:

$$\gamma \tag{360}$$

This will be a function of distance due to the curved nature of the spacetime of in the vicinity of the Earth and its accompanying gravitational field. Additionally, there is a slowing relative to the normal in vacuo speed of light due to the presence of air, which we will neglect, presuming we are doing our experiment in a vacuum. The magnet would ordinarily fall in the presence of the gravitational field, but it is supported by the superconductor which we take to be additionally supported by a table with a vat of liquid nitrogen that is sufficient to cool the superconductor to superconducting capability.

The nature of a superconductor, which is an experimentally verifiable phenomenon, is to exhibit a Meissner effect whereby all magnetic fields are actively expelled from the superconductor such that the magnetic field interior to the superconductor is zero. This is supported by the notion that it is also a perfect conductor, and there exist superconducting super currents on the surface of the superconductor which shield the interior from a magnetic field penetrating the superconductor in the type one normal phase.

For now, we will exclude the type two superconducting phase from discussion, where the magnetic field can penetrate the superconductor. In the normal phase, the superconducting Meissner effect is the effect that when cooled, a superconductor is not only a perfect conductor, but a perfect diamagnet, because the magnetic field will be expelled from the interior, and not left trapped, as it would with only a perfect conductor. Taking the superconductor and magnet to levitate is an indication of this complete field repulsion of diamagnetism, as we know two opposed magnets repel. Taking the magnet to be with a magnetic moment of:

$$\mu \tag{361}$$

The falloff in space is described by a function which incorporates the direction of freefall as $\hat{z}$:

$$\mu f(z) \hat{z} \tag{362}$$

Where $\hat{z}$ is the normal direction in which the magnetic field is pointing and the direction in which the magnetic and superconductor are separated vertically in space. For now, we assume the experiment could be performed with a perfectly small point like magnet and point like superconductor. The magnetic moment of the superconductor is another function, now displaced in space, but, it is a mirrored moment, critically at the location of the original magnet, because a perfect conductor will create super currents that mirror the magnetic moment. Besides simplifying our discussion, it can be easily seen that only this mirroring of the magnetic moment can create complete field cancellation in the interior of the superconductor. Thus the magnetic moment of the superconductor is to exhibit a displaced magnetic moment at the position of the magnet of:

$$-\mu f(z)\hat{z} \tag{363}$$

This is the same as if it were to have the opposite direction or the opposite moment. The magnetic field of the magnet remains as its usual moment and is not diminished by this effect, but there is still the behavior of the mirroring field which concerns us. For the light of the electromagnetic wave that traverses the medium completes two trips in this effective loop through space and time. A snapshot view illustrates that first, the magnetic moment is made larger by a relativistic factor of:

$$\gamma \tag{364}$$

This occurs from transformation via its representation at the position of the superconductor, and then is made smaller by this same factor on the rebound. However, the light that traverses the medium when taken from the viewpoint of an observer that is distant is this value. The given fields are not made any larger or smaller locally in the non-inertial frame of free fall with the magnet and superconductor. If we were to remove the support, and allow the magnet and superconductor to undergo inertial free fall, we would encounter a different set of snapshots. In the viewpoint of a distant observer viewing the free fall in comoving coordinates, the magnet will exist with a magnetic field:

$$\mu f(z)\hat{z} \tag{365}$$

And the superconductor with a magnetic field:

$$-\mu f(z)\hat{z} \tag{366}$$

However, we know that the factor of γ is changing at the same time. Comparatively, the magnetic field of the magnet will become in our representation viewing the system from afar:

$$\gamma\mu f(z)\hat{z} \tag{367}$$

While the magnetic field of the superconductor will become in our representation viewing the system from afar:

$$-\gamma\mu f(z)\hat{z} \tag{368}$$

This is remarkable, because somehow the magnetic field of the magnet has been affected so as to become larger by super currents from a comparatively smaller source. Taking snapshots of viewpoints, first we have a magnetic field of the following from the magnet at its location, equation (16). The distance between the superconductor and magnet is as a given:

$$R = cdt \tag{369}$$

While the distance viewed from the distant observer is getting progressively smaller due to length contraction by a distance also equivalent to, as viewed by the local observer:

$$r = vdt \tag{370}$$

Comparatively, what is witnessed is a force acting through a distance R from the distant observer and through a distance r from the local observer. This is equivalent to a contraction of the electromagnetic field with each successive bounce of the electromagnetic field as the superconductor and magnet fall together. This is the ratio:

$$\frac{r}{R} = \frac{vdt}{cdt} \tag{371}$$

Including for the sake of placing these in the same external observer from afar viewpoint we must replace the velocity with the boosted velocity, while the time dilation factor is left common for we compare these in the same present location:

$$v \to \gamma v \tag{372}$$

What we are left with is the comparative ratio of strength between each bounce in each snapshot viewpoint of reflection of the magnetic field via light between the magnet and superconductor within the comparative viewpoint of an observer from afar versus the local observer. Summing over the infinite reflections to find the potential energy produces:

$$\begin{aligned} \vec{B}_M \cdot \vec{B}_S &= -\sum_{n=0}^{\infty}(-1)^n \mu^2 f(z)^2 \gamma^2 (\frac{v\gamma dt}{cdt})^{2n} \\ &= -\mu^2 f(z)^2 \gamma^2 \frac{1}{1-\frac{v^2}{c^2}\gamma^2} \\ &= -\mu^2 f(z)^2 \gamma^2 \gamma^{-2} \\ &= -\mu^2 f(z)^2 \end{aligned} \tag{373}$$

Where the alternating series is from the reflection of each contribution under which the sign of the magnetic field changes. The per superconductor or magnetic moment field is then:

$$\xi = \pm \mu f(z) \hat{z} \tag{374}$$

This vindicates a viewpoint that the magnetic moment is unaffected by gravity while in inertial free fall because it is a quantum phenomena. Not only does this illustrate that inertial considerations apply to magnetic superconducting levitation and other quantum phenomena independently of gravity, it says that these effects may be subsumed into the architecture of general relativity for a system as if quantum mechanics remains inertial while undergoing inertial free fall with a different metric.

Or, analogously moving back to the rest position in non inertial levitation, this phenomenon is also inertially supported. So, for all considerations quantum mechanics can be considered to be an inertial phenomenon above and beyond any other considerations. Indeed in this experiment the result is that there is no effect of general relativity upon the quantum system, for the transformation is removed. But, $\beta = \gamma^{-1}$ which cancels the relativistic γ of relativity is associated with Ω.

This points to a given transformation from the perspective of general relativity that when invoked if we were to apply general relativity to quantum mechanics we would have to immediately reverse our direction and apply the inverse transformation upon all quantities. This has the side effect of meaning that quantum mechanics is inherently a theory which embodies the inverse of the transformations of general relativity under the same auspices of considerations of inertia. For instance, a magnet and superconductor that are stuck together by the flux pinning will illustrate inertial evolution analogous to the moon about the Earth in parallel analogy to general relativity.

The two theories are such that quantum mechanics remains in its ultimate state free from coordinate transformation. Saying this embodies a translational motion for inertia in circumferential motion is the same as

saying the inverse of the transformation provided by general relativity as applied to quantum mechanics is the same as the forward transformation provided by quantum mechanics upon quantum mechanics. Furthermore, this result shows that the well known Meissner effect is an illustration of the general covariance of quantum mechanics. This results in two viewpoints;

A:) In the first, the field transformations are reciprocal such that in any rest frame the energy momentum remains as a constant by the requirement of the Meissner effect and energy conservation.

B:) In the second, the field transformation does not lead to a constant energy momentum of the bodies and the Meissner effect magnetic fields change in magnitude, but the global frame must change.

And this is a comparative type of equivalence to that of the well known general covariance, for it works reciprocally in quantum mechanics. The first can be seen as the internal rest frame description. The second can be seen as the externally viewed description. Yet, they are equivalent physically. This is the resolution of our hypothesis:

These two viewpoints are equivalent under equivalency of electromagnetic field potential mass energy lowering and inertial mass energy lowering.
Equation (7) indicates that Λ changes the slope of the function in time in inverse proportion to the change in magnitude from Ω. From this, the log derivative represents the functional argument of this scaling. Thus it is the functional argument of the boost. This is the very expression of curvature in our quantum system. For we may of course hold true that:

$$A_{\mu}^{S} = -A_{\mu}^{M} \tag{375}$$

From the very Meissner effect we started with. This is the expression of diamagnetism and is definitional of superconductivity. One could argue that inertially these must be two pure Lorentz-like transformations, but such is not the case in the noninertial levitation. For here the system is interacting, and we have no direct inverse for the transformation, although they form the identity. So we must hold as true that:

$$\partial_{\mu} \log(\Omega_{\nu}^{\mu}) = -\partial_{\mu} \log(\Lambda_{\nu}^{\mu}) \tag{376}$$

This allows us to reason that both Λ and Ω carry spatiotemporal dependence, and for the considerations of any mechanism of superconductivity there must be a curved representation for the variables of position and momentum in the uncertainty principle. We end with a conclusion regarding the mechanism of superconductivity:

Conclusion: *Quantum states and electromagnetic fields are subject to a quantization condition holding invariance such that they are relatively inertial with respect to each other's quantities in each other's frames. The reciprocal relationship between the magnetic field mirroring and field transformation from relativity is the very condition that they be mutually inertial within each others frames under inertial freefall or noninertial support, in confirmation of the application of general covariance to quantum mechanics. The effect of the transformation which is the Meissner effect is the instantiation of general covariance within quantum mechanics.*

Comparative equivalence is now an appropriate term for the coexistence of a principle of relativity in quantum mechanics and general relativity, and that the results of measurements do not depend on coordinate system transformations or displacements. In this, comparative equivalence can also be defined as:

Comparative Equivalence: *The physical results of differences in measure between an observer that is stationary & an observer that is in motion are physically real and measurable, however differences in the physical*

results of the process of measurement between an observer that is stationary & an observer that is in motion are unphysical & null.

Review

We know from the theory of quantum mechanics that:

$$[p_\mu, x^\mu] = i\hbar \tag{377}$$

As x^μ is a position vector, it is noted that it accounts for distance in such a manner that the units of x^μ will scale contravariantly, meaning they describe a position for which length contraction is the determination of the unit of measure growing for x^μ and the object appearing smaller. As p_μ is a differential operator, it is noted that it accounts for the differential in such a manner that the units of p_μ will scale covariantly, meaning they describe a differential for which length contraction is the determination of the unit of measure lessening for p_μ and the object appearing to have smaller differential. If we perform a Lorentz transformation then the length will contract, the units of x^μ will grow, and that of p_μ will lessen. Thus the object will decrease in relative energy momentum with length contraction.

The assessment of the man in the tower is in agreement then between general relativity and quantum mechanics, as the object will be assessed to have a different and lower relative energy momentum when undergoing freefall at the surface of the Earth. In this, general covariance is consistent with general relativity and quantum mechanics. The energy momentum of a particle is covariant, and there can be an application of the equivalence principle to quantum mechanics. Why or how this is necessary is then a thing that we need from the general covariance of quantum mechanics as a given theory compatible with general relativity. The fact that general covariance applies to quantum mechanics has several marked consequences, one of which is that the Meissner Effect is the statement of the equivalence principle as it applies to quantum mechanics. This is the discovery of my paper, and it is consistent with general covariance by the above.

General Covariance

It is hypothesized by way of the equivalence principle that because gravitational mass is indistinguishable from inertial mass the eigenstate condition of quantum mechanics extends from local Lorentz invariance to the condition of general covariance for the comparison of states by taking the particles to be within inertial states.

The condition of inertial states however implies in the general relativistic setting that inertial mass is equivalent to rest masses for all particles undergoing inertial freefall, from which the condition of local Lorentz invariance can be derived. If the condition of local Lorentz invariance does not extend to general covariance by using the rest mass for inertial states under mutual interaction, the resulting theory would be inconsistent with general relativity.

To understand this imagine a wall in front of the observer with rest mass and zero momentum. If it were to be moving away from the observer then the question would be as to where the extra relativistic energy momentum comes from it has with respect to the observer. So as to not violate energy conservation this must be a matter of perspective, so the only objective physical description, given by the equivalence principle, is for it to maintain its rest mass in the ultimate viewpoint.

If quantum mechanics were then not subject to the same provisions of perspective, because the quantity of energy momentum would be different for the two theories, energy conservation would be violated. Hence it is true that mutual interactions are relatively inertial with the mass given by the rest mass and the application of general covariance to quantum mechanics is inconsistent unless inertial frames are used in which the mass is the rest mass.

The quantization condition that follows must extend from pure local Lorentz invariance in the local viewpoint to general covariance in the global viewpoint under consideration of the equivalence principle and utilize rest masses within inertial frames as the basis for all particle interactions.

Under these provisions as the equivalence principle must apply to quantum mechanics the expectation of energy momentum is therefore always lower for a quantum system with the inclusion of general covariance, where the quantization is with respect to the condition set by all relativistic factors returning to unity. Not only is this a comparison of the inclusion of general covariance to without it, it also represents a real energy momentum lowering because of the reality of the effects of general relativity with respect to measurement of a state so quantized to the rest mass condition and compared to the subjective viewpoint of an observer.

Justification; Energy Lowering

The energy momentum of a system is always measured as lower in total as compared to the sum of its individual parts because it is subject to general covariance and the equivalence principle.

To understand this it is relevant to review a few precepts of general relativity. Based on the theory of relativity, the condition is a given that energy momentum is observed as larger for a body in motion relative to an observer corelatively at rest measuring the rest mass energy of the object. What needs to be shown is how coordinate freedom by virtue of general covariance and the equivalence principle reduces to a lower energy momentum for a system as compared with the sum of the individual parts.

General relativity by the equivalence principle dictates that inertial mass energy is indistinguishable from gravitational mass energy. Therefore bodies of all masses fall at the same rate in a given gravitational field, because there exists universality to the rate of change of motion for any mass.

As gravitational mass increases, so too does inertial mass, on each side of the equation dictating force. Given this is true, locally there is no relativistic factor under freefall in its own given frame, and a body undergoing such motion is weightless to its self in the sense that it feels no gravitational field in its frame.

Coordinate freedom further implies from general covariance that physical laws are invariant, and gravitation is no exception, in that there exists universal freefall of all gravitational bodies. This means that the equivalence principle implies that there can exist no ultimate frame dependence for body body comparisons. As it can now be seen, the coordinate freedom of the system implies that the equivalence principle is a global principle, and its implication is that any frame dependence to the comparison of states is unphysical.

This reduces the problem of the extension of quantum mechanics from local Lorentz invariance of a locally flat quantization condition to the condition of general covariance for comparison of states in quantum mechanics. Coordinate dependence must disappear on the ultimate level, such that comparisons between states internal to the system are taken as within inertial frames with rest masses, so that the equivalence principle holds true ultimately and in general for both theories.

Therefore quantum mechanics would be inconsistent with general relativity if general covariance did not so similarly apply to the provisions of the mutual quantization condition between states under interaction. As a consequence, in the global viewpoint the relativistic factors are absent under state state comparisons within the system, yet there is the same phenomenon of energy dependence with respect to the subjective observer.

What is measured by an observer stationary with respect to the center of mass of the system is a physical energy momentum. With the given effects of the equivalence principle on the various parts of the system in relation to one another it is a lower energy momentum because it is determined by a viewpoint in relation to parts so mutually existent as to be within inertial states in relation to one another. Therefore, the system is always measured to have a lower energy as a whole compared to the sum of separable individual parts.

General Covariance of QM

In order for quantum mechanics to be consistent with accelerations as general coordinate transformations, it must hold true that the eigenstate holds an independent reality with respect to these types of transformations. For instance consider a two particle system. In order for the consistency of quantum mechanics under electromagnetic interaction, it must hold true that both states remain mutual eigenstates with respect to their frames of acceleration.
Any proof must be based on the supposition that the eigenstate remains an eigenstate for each particle with respect to all others under mutually accelerated motion. This holds, given that although it is true that locally in the frame of acceleration the eigenstate may be defined, it must also be an eigenstate with respect to other frames of reference, *and for the considerations of relativity may contain no frame dependence.*

Suppose in the frame of the particle ∂_μ is the basis of the operator for momentum. Then, $\gamma^\mu \partial_\mu$ is the relativistic operator for momentum and should be invariant under general coordinate transformations. This operates on ξ_μ, the wavefunction so that $\gamma^\mu \partial_\mu \xi_\mu$ is the relativistic energy momentum of the eigenstate.

If an only if this is an accelerated state does Λ^μ_ν as a transformation have a spatial and temporal dependence, in which case:

$$\begin{aligned} \gamma^\mu \partial_\mu \xi_\mu \rightarrow \Lambda^\nu_\mu \gamma^\mu \Lambda^\mu_\nu \partial_\mu \Lambda^\mu_\nu \xi_\mu \\ = \gamma^\nu (\partial_\nu \Lambda^\mu_\nu) \xi_\mu + \gamma^\nu \partial_\nu \xi_\nu \end{aligned} \tag{378}$$

And an extra term appears, which does belong to the same frame ν but which introduces a frame dependence to the derivative. In this case ξ is no longer an eigenstate with respect to the accelerated frame. Since:

$$\Lambda^\mu_\nu = \gamma^\mu \gamma_\nu \tag{379}$$

It is true that this can be accomodated by subtracting a term from the right hand side of the eigenstate equation for four momentum, or alternatively and equivalently adding a term which transforms reciprocal to the definition of the four momentum, thereby defining the *covariant differential.* Working out what the extra term means, it is equivalent to:

$$\gamma^\nu (\partial_\nu \Lambda^\mu_\nu) = \gamma^\mu \gamma_\mu \partial_\nu \gamma^\mu \tag{380}$$

In the frame of ν, or under transformation back to the frame of μ the term which must be added to ∂_μ to preserve the differential is:

$$\Gamma_\mu \equiv \gamma_\nu \partial_\mu \gamma^\nu \tag{381}$$

In conclusion, for quantum mechanics to possess no frame dependence for eigenstates, and for them to be mutually defined under interaction, the covariant differential defined by the following must be used for the

energy momentum of the particle:

$$p_\mu = i\hbar(\partial_\mu + \Gamma_\mu) \tag{382}$$

From this not only follows the rule of differences in frame contributing to the localization in a zero sum fashion but that the separable parts of the momentum change as the following under a general transformation:

$$\partial_\mu \to \partial_\nu + \Lambda_\nu \tag{383}$$

$$\Gamma_\mu \to \Gamma_\nu - \Lambda_\nu \tag{384}$$

With:

$$\Lambda_\nu = \partial_\nu \log \Lambda^\mu_\nu \tag{385}$$

Eigenspinor Field Theory

Consider the general transformation of the spinor part of the wavefunction:

$$\xi_\mu(x_\mu) \tag{386}$$

The approach used is that of generating a field theory from a general transformation of a field quantity.

$$\xi_\mu \to \Lambda\xi_\mu \tag{387}$$

Here Λ is a 16 parameter tensor which represents the transformation upon a general wavefunction ξ_μ. The transformation Λ should not be confused with a Lorentz boost, it is a transformation of the field of spinors into itself and is an operator. It however carries analogous properties, for a rotation and a scaling of the spinors *is* equivalent to a *local* change in frame, however it does not arise by net global motion but instead by way of the evolution of the field of spinors. This can be written in general as:

$$\Lambda = e^{-ig\lambda_{\mu\nu}(x_\mu)\sigma^{\mu\nu}} \tag{388}$$

The spinors are rotated and boosted in the six possible directions given by the tensors in the transformation. Where g is a coupling constant and $\lambda_{\mu\nu}(x_\mu)$ parametrizes this transformation in space and time, while $\sigma^{\mu\nu}$ is a set of matrices corresponding to the commutator of the γ matrices, as in the following:

$$\sigma^{\mu\nu} = \frac{i}{2}[\gamma^\mu, \gamma^\nu] \tag{389}$$

What is important is that a *gauge* can be defined for this transformation, since it acts on a *field of spin*, as:

$$\partial_\mu \to D_\mu = \partial_\mu + \Gamma_\mu \tag{390}$$

With:

$$\Gamma_\mu \equiv \gamma_\nu \partial_\mu \gamma^\nu = \partial_\mu \log \gamma^\nu \tag{391}$$

Since this is the log derivative of the spin as a field, the transformation is as follows on the Dirac equation:

$$\xi_\mu \to \Lambda\xi_\mu = e^{-ig\lambda_{\mu\nu}(x_\mu)\sigma^{\mu\nu}}\xi_\mu \tag{392}$$

$$\begin{aligned} \partial_\mu \to \partial_\mu - ig\partial_\mu\lambda_{\mu\nu}(x_\mu)\sigma^{\mu\nu} \\ = \partial_\mu + \partial_\mu \log \Lambda \end{aligned} \tag{393}$$

$$\begin{aligned}\Gamma_\mu \to \Gamma_\mu + ig\partial_\mu \lambda_{\mu\nu}(x_\mu)\sigma^{\mu\nu} \\ = \Gamma_\mu - \partial_\mu \log \Lambda\end{aligned} \tag{394}$$

Where the sign change comes from the fact that the covariant correction operates on γ^ν while Λ operates on ξ_μ. Hence this is equivalent to changing the order in the commutator and hence there exists a change in sign, and the transformation has opposite differentials with ∂_μ and Γ_μ. The form of the covariant differential D_μ is thus left intact by gauge transformations with the spin curvature connection, and the wavefunction is separably transformed from that of γ^ν. The adjoint wavefunction is with the conjugate of this wavefunction transformation, so the probability amplitude is left unaffected in the Dirac equation, and the electromagnetic gauge connection may be added separately. Thus the net covariant differential is:

$$D_\mu = \partial_\mu + \Gamma_\mu + \alpha A_\mu \tag{395}$$

Lagrangian for SC

For the sake of gauge invariance the QED Lagrangian it is posited must now be updated to:

$$\begin{aligned}\mathcal{L}_{SC} = \bar{\psi}(i\hbar c\gamma^\mu D_\mu - mc^2)\psi \\ -\frac{1}{4\mu_0}F^{\mu\nu}F_{\mu\nu} + \kappa\Omega^{\mu\nu}\Omega_{\mu\nu}\end{aligned} \tag{396}$$

Where:

$$D_\mu = \partial_\mu + \Gamma_\mu + \alpha A_\mu \tag{397}$$

And:

$$\alpha = \frac{e}{\hbar c} \qquad \Gamma_\mu = \partial_\mu \log \gamma^\nu \tag{398}$$

And the curvature of the antiferromagnet (or ferromagnetic) field is:

$$\Omega_{\mu\nu} = \partial_\mu \Gamma_\nu - \partial_\nu \Gamma_\mu \tag{399}$$

In analogy with the electromagnetic field tensor. We will now show this reduces to a version of our original Lagrangian for antiferromagnetism in the equations of motion. What is to note about this Lagrangian is that the γ^μ one-forms carry spatiotemporal dependence.

Transformation With an Electromagnetic Field

Beginning with the reciprocal property of γ^μ and D_μ we derive the response from this condition extending to the introduction of an external four potential αB_μ. The given is that:

$$\gamma^\mu D_\mu \xi_\mu = \xi_\mu \tag{400}$$

It is illuminating to consider the torsion property as related to the Meissner effect.
Then we add $\alpha B_\mu = f_\mu$ to produce the new condition, interrelating the accelerated frame transformation produced under interaction to the addition of this field:

$$\lambda^\mu \gamma^\mu (D_\mu + f_\mu)\xi_\mu = \xi_\mu \tag{401}$$

So that to satisfy both equations:

$$\lambda^\mu \gamma^\mu (D_\mu + f_\mu) = \gamma^\mu D_\mu \rightarrow \tag{402}$$
$$\lambda^\mu = (\gamma^\mu D_\mu + \gamma^\mu f_\mu)^{-1} \gamma^\mu D_\mu \tag{403}$$

The partial derivative and spin curvature terms are modified as the following:

$$\partial_\mu \rightarrow \partial_\mu + \partial_\mu \log \lambda^\mu \qquad \Gamma_\mu \rightarrow \Gamma_\mu - \partial_\mu \log \lambda^\mu \tag{404}$$

With this, the covariant differential is preserved. The added term comes from the distributive property of the log function and the action of the transformation on the wavefunction:

$$\partial_\mu \log \lambda^\mu = \partial_\mu \log((1 + \gamma^\mu f_\mu)^{-1}) = -\gamma^\mu \partial_\mu f_\mu \tag{405}$$

Since they are in the same frame, γ^μ and ∂_μ commute. Integrated as a source this term is:

$$-f_\mu = -\alpha B_\mu \tag{406}$$

The added term of λ^μ perfectly compensates for the added f_μ by the above. Hence the electromagnetic potential that is applied causes a shift of energy momentum between the two parts of orbital and spin curvature energy momentum, at the strength of the applied electromagnetic potential.

The condition of (45), implies that from the perspective of a particle accelerated in relation to a particle at rest, the particle at rest acts as a source generating an opposite potential to its own potential as experienced in the frame of the accelerated particle. The accelerated particle is not a source to itself because of the reciprocal condition and it is at rest in its frame, so it experiences the (negative) potential of the other particle at rest. This indirect potential acts on either particle, and must act to attract them, and a gap develops.

As there exists a frame of rest and condition (45) is conserved under a frame transformation, there exists no direct potential, but there does exist one arising from the frame of acceleration relative to the frame of rest, as a back reaction reversed potential on the particle in the accelerated frame.

Thus both particles experience a negative potential with respect to the other particle, which is the following potential:

$$\int \gamma^\mu \partial_\mu \log \lambda^\mu dx^\mu = -\alpha B_\mu \tag{407}$$

This explains the diamagnetic effect and pairing, and is consistent with the magnetic field being zero. Additionally, the magnetic field of zero can be explained as the fact that if γ^μ and D_μ operating on ξ_μ are reciprocal to a constant, and given the momentum is inertial, it produces zero magnetic field in all frames.

But this condition of the eigenstate is preserved with respect to all frames, thus the magnetic field is globally zero for all points within the material.

Covariant Differential Commutation Relationship

Consider the interior transformation of the covariant differential due to the term produced by the previous transformation under action of the electromagnetic field:

$$\begin{aligned}
&[D_\mu, D_\nu] \\
&= \partial_\mu\partial_\nu + \partial_\mu\Gamma_\nu + \Gamma_\mu\partial_\nu + \Gamma_\mu\Gamma_\nu \\
&-\partial_\nu\partial_\mu - \partial_\nu\Gamma_\mu - \Gamma_\nu\partial_\mu - \Gamma_\nu\Gamma_\mu \\
&\to (\partial_\mu - \alpha\partial_\mu A_\mu)(\partial_\nu - \alpha\partial_\nu A_\nu) \\
&-(\partial_\nu - \alpha\partial_\nu A_\nu)(\partial_\mu - \alpha\partial_\mu A_\mu)) \\
&+(\partial_\mu - \alpha\partial_\mu A_\mu)(\Gamma_\nu + \alpha\partial_\nu A_\nu) \\
&-(\partial_\nu - \alpha\partial_\nu A_\nu)(\Gamma_\mu + \alpha\partial_\mu A_\mu) \\
&+(\Gamma_\mu + \alpha\partial_\mu A_\mu)(\partial_\nu - \alpha\partial_\nu A_\nu) \\
&-(\Gamma_\nu + \alpha\partial_\nu A_\nu)(\partial_\mu - \alpha\partial_\mu A_\mu) \\
&+(\Gamma_\mu + \alpha\partial_\mu A_\mu)(\Gamma_\nu + \alpha\partial_\nu A_\nu) \\
&-(\Gamma_\nu + \alpha\partial_\nu A_\nu)(\Gamma_\mu + \alpha\partial_\mu A_\mu) \\
&= -\alpha\partial_\mu A_\mu D_\nu + \alpha\partial_\nu A_\nu D_\mu \\
&+\partial_\mu D_\nu - \partial_\nu D_\mu \\
&+\alpha\partial_\mu A_\mu D_\nu - \alpha\partial_\nu A_\nu D_\mu \\
&+\Gamma_\mu D_\nu - \Gamma_\nu D_\mu \\
&= \partial_\mu D_\nu - \partial_\nu D_\mu + \Gamma_\mu D_\nu - \Gamma_\nu D_\mu \\
&= D_\mu D_\nu - D_\nu D_\mu = [D_\mu, D_\nu]
\end{aligned} \tag{408}$$

Which indicates that the two gauges are mutually satisfied under transformation by the field, interior to the covariant differential. This also holds true for the total covariant differential since any transformation should be performed symmetrically. Hence, the commutation relationship of the covariant differentials is preserved under the internal transformation of its terms. Furthermore:

$$[D_\mu, D_\nu] = -[\Lambda^\mu_\nu D_\mu, \Lambda^\nu_\mu D_\nu] = -[D_\nu, D_\mu] \tag{409}$$

Indicating the commutation relationship is antisymmetric under a symmetric frame transformation. We may evaluate this term in the following way at a point in space:

$$\begin{aligned}
&\xi_\mu\xi_\nu[D_\mu, D_\nu]\xi_\mu\xi_\nu \\
&= \xi_\mu\xi_\nu(D_\mu D_\nu - D_\nu D_\mu)\xi_\mu\xi_\nu \\
&= -\xi_\mu\xi_\nu(\Lambda^\mu_\nu D_\mu\Lambda^\nu_\mu D_\nu - \Lambda^\nu_\mu D_\nu\Lambda^\mu_\nu D_\mu)\xi_\mu\xi_\nu \\
&= -\xi_\mu\xi_\nu(D_\mu \log\Lambda^\nu_\mu D_\nu - D_\nu \log\Lambda^\mu_\nu D_\mu)\xi_\mu\xi_\nu \\
&= -\xi_\mu\xi_\nu(\gamma^\nu\partial_\mu \log\Lambda^\nu_\mu D_\nu - \gamma^\mu\partial_\nu \log\Lambda^\mu_\nu D_\mu)\xi_\mu\xi_\nu \\
&= -\xi_\mu\xi_\nu(\gamma^\mu\partial_\mu \log\Lambda^\nu_\mu - \gamma^\nu\partial_\nu \log\Lambda^\mu_\nu)\xi_\mu\xi_\nu \\
&= -\xi_\mu\xi_\nu\alpha(\partial_\mu A_\nu - \partial_\nu A_\mu)\xi_\mu\xi_\nu \\
&= -\xi_\mu\xi_\nu\alpha F_{\mu\nu}\xi_\mu\xi_\nu
\end{aligned} \tag{410}$$

Making use of (34) and γ^μ and γ^ν to correct for the covariant differential making it a partial derivative by (35) and the fact that when the partial derivative associated spin is multiplied by another spin factor the negative logarithmic derivative is introduced into the equations (37) and (38). Hence:

$$[D_\mu, D_\nu] = -\alpha F_{\mu\nu} \tag{411}$$

The spin field transformation which accompanies the introduction of the electromagnetic field, under the covariance of the form of the eigenstate is a curved transformation of coordinates, and hence what we arise at is a real consequence of coordinates. It is flat in a sense (when one accounts for the change in coordinates) and curved in a sense (when one does not account for this change in coordinates) naturally. The Meissner effect is seen as the conventional departure of the electromagnetic field tensor torsion condition at the boundary of the superconductor.

Calculation of Exchange

We can now proceed to analyze the commutation relationship of the ∂_α and Γ_α with the added $\pm\Lambda_\alpha$. Under the two particle equation this is reversed in sign among the two sides of the two particle Dirac equation corresponding to particle 1 and particle 2. Under consideration of the fact that Λ_α changes sign under juxtaposition.

Exchange Difference Hypothesis: *The added logarithmic differential of the frame transformation, or its curvature, Λ_α, in changing sign between frames behaves in conjunction with ∂_α and Γ_α as raising and lowering operators in the two particle Dirac equation.*

To test this hypothesis consider the ∂_α energy momentum for the singlet. Between states in the two particle Dirac equation a term enters as:

$$\begin{aligned}(-i\hbar\partial_\alpha + 2\hbar\Lambda_\alpha)(-i\hbar\partial_\alpha - 2\hbar\Lambda_\alpha)\Psi \\ = -2\hbar^2(a^\dagger a)\Psi \\ = -2\hbar^2\partial_\alpha\Lambda_\alpha\end{aligned} \tag{412}$$

The term on the spin curvature enters as:

$$\begin{aligned}(-i\hbar\Gamma_\alpha - 2\hbar\Lambda_\alpha)(-i\hbar\Gamma_\alpha + 2\hbar\Lambda_\alpha)\Psi \\ = -2\hbar^2(aa^\dagger)\Psi \\ = -2\hbar^2\partial_\alpha\Lambda_\alpha\end{aligned} \tag{413}$$

Thus the effect of the acceleration and the existing momenta, create the conditions under the two body (with opposite accelerative frame boosts) of anticommuting operators. The two particle equation is the product of two Dirac equations acting on the superposition of the two wavefunctions, here taken in the center of mass frame α:

$$\begin{aligned}(\gamma^\alpha(-i\hbar\partial_\alpha - i\hbar\Gamma_\alpha + eA_\alpha) - m) \\ (\gamma^\alpha(-i\hbar\partial_\alpha - i\hbar\Gamma_\alpha + eA_\alpha) - m)\xi_\alpha^-\xi_\alpha^+ = 0\end{aligned} \tag{414}$$

Substitution of conserved quantities to simplify the calculation results in:

$$\begin{aligned}(-i\hbar\eta_+^\alpha + e\sigma^\alpha - m) \\ (-i\hbar\eta_-^\alpha + e\sigma^\alpha - m)\xi_\alpha^-\xi_\alpha^+ = 0\end{aligned} \tag{415}$$

Because the positive and negative orbital momentum and spin curvature sum to zero:

$$\begin{aligned}(e^2\sigma^\alpha\sigma^\alpha - (me + 2ie\hbar(\eta_+^\alpha + \eta_-^\alpha))\sigma^\alpha \\ +im\hbar(\eta_+^\alpha + \eta_-^\alpha) - \hbar^2\eta_+^\alpha\eta_-^\alpha + m^2)\xi_\alpha^-\xi_\alpha^+ = 0\end{aligned} \tag{416}$$

Because the only term which contributes to the change from the singlet to triplet under the change in sign by the operators above is η^α and $\eta^\alpha_+ + \eta^\alpha_-$ is zero by equal and opposite momenta, this reduces to:

$$\begin{aligned} -4 \int \int \xi^+_\alpha \xi^-_\alpha \hbar(\eta^\alpha_+ \eta^\alpha_- \\ -\eta^\alpha_- \eta^\alpha_+) \xi^-_\alpha \xi^+_\alpha dx^\alpha dx^\alpha = \Delta \end{aligned} \tag{417}$$

η^α produces four terms which obey a commutation relationship by way of the above:

$$\begin{aligned} \eta^\alpha_+ \eta^\alpha_- - \eta^\alpha_- \eta^\alpha_+ \\ = (\partial^+_\alpha + \Gamma^+_\alpha)(\partial^-_\alpha + \Gamma^-_\alpha) \\ -(\partial^-_\alpha + \Gamma^-_\alpha)(\partial^+_\alpha + \Gamma^+_\alpha) \\ = (\partial^+_\alpha \partial^-_\alpha + \partial^+_\alpha \Gamma^-_\alpha \\ +\Gamma^+_\alpha \partial^-_\alpha + \Gamma^+_\alpha \Gamma^-_\alpha) \\ -(\partial^-_\alpha \partial^+_\alpha + \partial^-_\alpha \Gamma^+_\alpha \\ +\Gamma^-_\alpha \partial^+_\alpha + \Gamma^-_\alpha \Gamma^+_\alpha) \\ = -4\partial_\alpha \Lambda_\alpha + ([\partial^-_\alpha, \Gamma^+_\alpha] - [\partial^+_\alpha, \Gamma^-_\alpha]) \\ = -4\partial_\alpha \Lambda_\alpha \end{aligned} \tag{418}$$

Where the following equality holds:

$$[\partial^-_\alpha, \Gamma^+_\alpha] = [\partial^+_\alpha, \Gamma^-_\alpha] \tag{419}$$

As the extra Λ_α changes sign *with* the derivative, leaving for the two particle energy gap *for all electrons*:

$$\begin{aligned} \Delta = 4\hbar c \int \gamma^\alpha \Lambda_\alpha dx^\alpha \\ \equiv 4e \int \gamma^\alpha A_\alpha dx^\alpha = 4J \end{aligned} \tag{420}$$

This last equivalence is because in the exchange interaction the terms of μ and ν are juxtaposed and appear in the Λ, which by the previous section is equivalent to an electromagnetic potential differential. This is consistent with the previous section, where a γ^ν changes in a *relative* manner such that a reversed A_ν is generated for the particles in motion *within a spin system background.*

If the particles are relatively accelerated there exists a reversed potential between them with an energy lowering that is the contribution to their energy from this potential, and it is equivalent to an energy mass lowering of their inertial content. This is true as the acceleration gives rise to the (reversed) potential and without an acceleration there exists no potential. The acceleration as a source for the potential is physically equivalent to the lowering of the inertial mass energy, since it is the same term numerically.

This is fundamentally the expression that the potential energy mass lowering as sourced in the acceleration, and numerically equivalent with the inertial mass energy lowering, is a matter of frame, and the two are equivalent between all frames, hence the lowering is a prediction of general covariance. Since the quantum singlet to triplet operator holds individually between particles and a conventional to ultimate difference is taken the lowering holds for all two particle states. This implies the following equivalence:

Quantum Equivalence Principle: *The potential mass energy lowering is indistinguishable from the inertial mass energy lowering.*

Discussion of Energy Lowering

This seems in conflict with some of our intuition regarding the changing of forms of energy, for it seems as if we should require that:

$$\Delta(PE + KE) = 0 \tag{421}$$

By energy conservation. However, in the inertial frame it holds true that:

$$\Delta PE = \Delta KE = 0 \tag{422}$$

The condition of general covariance and its identity implies however that:

$$\Delta PE = \Delta KE \neq 0 \tag{423}$$

For now, imagine an Earth-Sun system, in which we boost into an accelerative frame with equivalent acceleration to that of the Earth about the Sun. It is not that we experience a lowering of mass below the rest mass for the Earth, but that it 'returns' to rest mass energy content. In and by way of this it does indeed lower, but it is a matter of perspective. Going back to the system so established, we ask the question as to whether both energy conservation and general covariance can be satisfied with the formalism developed.

The analogy is actually quite simple, for what happens is that from the distant and stationary observer it appears that:

$$\Delta PE = \Delta KE < 0 \tag{424}$$

The interpretation of this is merely that by general covariance relativistic factors return to unity for the system such that the quantization condition relative to an observer which is moving in relation to the superconducting quantum state, is perceived as a system in motion where the quantization condition is one of the inertial variety and thus of a lowered energy relative to the observer. In this a very real energy momentum lowering has occured by the above and the condition of general covariance. The quantum equivalent of the Earth-Sun system is to see that it is the inertial constraint on quantum exchange we judge as non-inertial when it is in fact quantized inertially. This admits the formation of a new conclusion regarding quantum phenomena in general, as for example the photoelectric effect by which a photon is absorbed by an electron and knocks it out of its orbital in a metal, past a threshold energy momentum:

Conclusion: *The general statement is that relative to an accelerated observer there exists an energy mass gap because the quantum state is quantized subject to an inertial frame condition by the presence of the principle of general covariance within quantum mechanics. From this, the proper way to account for quantum motion is such that it is taken as a given inertial. A physical gap exists because the quantum state is quantized under the inertial condition, and yet what we measure is the accelerated interpretation of this state. This gap is real by observation from the indistinguishability of the inertial and potential relativistic factors under the equivalence principle for any transition of a quantum nature.*

Distinction

While an interaction takes place, it is true that the uncertainty principle would be modified in the observables not for the sole reason that the coordinates change under acceleration, for there does exist a coordinate free representation of the observables compatible with acceleration such that the uncertainty principle is satisfied. It it also because either:

A:) *If the electromagnetic interaction is not included in the momentum then it modifies the position and momentum compatible with an acceleration and an interaction that varies, and thus the relative determination of momentum and position is functional and dependent on coordinates, and not an invariant description, given that this acceleration exists in a way that is dependent on coordinates with respect to the operation of position of one particle upon the momentum of another, and with the reverse operation. Hence a coordinate dependent anomaly arises in the commutation relationship between the observables of different particles, whenever the electromagnetic potential is not included in the particle description.*

B:) *If the electromagnetic interaction is included then the former anomaly does not occur, because the commutation relationship is perfectly compensated for in its change with respect to the quantities of particle momentum and field momentum, as one merely changes the other in an equal and opposite functional manner and they are comparatively added instead of a complimentary change absent.*

Conclusion: *What can be seen is that it is the sum of these changes which is the expression of a net invariance of the determination of the uncertainty principle with respect to the general covariance of the observables without which there is no commutation of the separable momenta or positions.*

If and only if this holds true can we satisfy both postulates. The restriction to mutually satisfying both postulates is trivial without invoking the multiparticle viewpoint but not when it is invoked. For note that the uncertainty principle can be made invariant by a generally covariant coordinate basis locally.

However, this is not manifestly globally invariant in that the determination of the multiparticle relationship of uncertainty does not mutually commute between different particle observables, for the same reason there exist different coordinate systems for different particles.

Additionally, although with an interaction, the single particle uncertainties remain manifestly locally invariant, they are not as determined globally in the sense of between particles, unless the interaction potential is included in the momentum. When the interaction is included the change it introduces compensates for changes in the particle momentum in such a manner that the system is manifestly generally covariant and the uncertainty principle is left generally invariant.

For this to be true an identity must hold true between the frame transformation and electromagnetic field interaction, namely that the log differential of the frame transformation is the negative of the log differential of the electromagnetic field tensor, weighted by the appropriate constant (α):

$$\partial_\mu \log \Lambda^\nu_\mu = \alpha \partial_\mu \log F^{\mu\nu} \tag{425}$$

Furthermore this identity gives a relationship to the description of the frame as it covaries with the particle description of momentum, and yields the total covariantly conserved quantity of momentum. It is merely the force law ($F = ma$), by inspection.

Justification and Ramifications

First to note is that the multiparticle perspective is one to one with the existence of interactions, which by way of and which there exists a connection to the differing frames of acceleration, and that these interactions must be included as a field potential energy momentum as it pertains to the full particle energy momentum as an observable in order for there to be a commutation relationship consistent with the uncertainty principle between the observables of the multiple particles.

This is to satisfy the uncertainty principle with respect to the different particle's definitions of each other, and their mutual commutation relationships, for their definitions of momentum do not commute when the interaction potential is left out. Additionally, what is striking is that it is the full particle and field energy momentum as carried by the particle that defines the observable and it is not particle only.

This seems to express on a base level that it is the full particle energy momentum with field that becomes the observable in the multiparticle viewpoint, as such must be the case to satisfy the uncertainty principle with general covariance resulting from changes in the coordinates with respect to the frame of motion, resulting from and identifiable with the acceleration due to the interaction.

As a consequence, the eigenstate condition of the Dirac equation is intact, although there is a slight difference in interpretation, arising in the context of the multiparticle description. For instance, the equation:

$$(i\gamma^{\mu}(p_{\mu} + \alpha A_{\mu}) - mc)\xi_{\mu} = 0 \tag{426}$$

Is the expression of the eigenstate condition of a particle like an electron. Although the single particle description of the eigenstate does not differ when mapped from the multiparticle condition, what remains to be seen is if the condition this represents mathematically is still identifiable with what it means in the multiparticle interpretation.

For while the Dirac equation, as it was initially interpreted, holds perfectly well with the condition of an ordinary partial derivative upon it being zero to result in an eigenstate, there is a subtle difference in the multiparticle setting with general covariance. Here, the condition is that the total covariant differential defined as:

$$D_{\mu} = \partial_{\mu} + \Gamma_{\mu} + \alpha A_{\mu} \qquad \Gamma_{\mu} = \partial_{\mu} \log \gamma^{\nu} \tag{427}$$

Must be used in place of:

$$p_{\mu} + \alpha A_{\mu} = \partial_{\mu} + \alpha A_{\mu} \tag{428}$$

In the generally covariant setting. With this, although the Dirac equation is left locally intact, given that Γ_{μ} vanishes locally, it does not vanish identically for particle to particle comparisons. To prove this all it suffices to say is that the connection described in equation (8) is preserved under relative comparison of observables, and hence in general, or as for the multiparticle description, since Γ_{μ} does not vanish globally and must be included for generality.

As a final note consider that locally the description remains the same for the single particle description, for all particles, but that the multiparticle description differs substantially, as for instance γ^{μ} also takes on structure of the form of a function, and the descriptions may be inequivalent physically:

Hypothesis II: *The physics of the multiparticle description differs from the single particle description.*

In the case of exchange this can be an energy lowering. To note then is that this can lead to a collectively lowered energy in the case of superconductivity.

Examining superconductivity, for instance, the mystery is:

Mystery: *How does the energy lower, even if only in relative terms?*

This is only possible in a relative sense if the physical quantum description changes, and if the potential and kinetic energy both lower. But, the change between the singlet and triplet can be relatively modified

by a matter of perspective. Internally to the system there is no change in kinetic energy as indicated by the field to frame relationship in the inertial frame, but observationally, it appears that there is a gap in energy.

To note then is merely that the triplet and singlet are repulsive and attractive, and therefore possess opposite relative curvatures, which immediately indicates a subjective-objective agreement of an energy difference of $2J$ per particle, because relatively there also exists an energy difference in the kinetic energy of J in the inertial mass energy by this same curvature relative to a system at rest external to it.

From the constraint of equation (43) and that which is imposed by the existence of multiple particles for which the condition of general covariance must be satisfied, the exchange phenomenon is relative and reveals a mass energy gap.

To prove this result quantitatively and rigorously one needs to evaluate the net integral, but this value is given empirically by the relation encoded in equation (44), which says that the differentials of these quantities are identical up to a constant of proportionality, and that their integrals should be equivalent up to a constant of integration. Then, because of this identity, the mass gap for an external observer outside the system, is the entire exchange energy difference of the two particles measured in the system of J with the change of the kinetic mass energy of J for a total of $2J$ per particle in sum.

In this context, the exchange is real only when observed from outside the system, and it is purely a relative phenomenon. Carefully noting their natures, that one is an electromagnetic potential energy difference when integrated, and that the other is an inertial mass energy difference when integrated, we arrive at the following conclusion:

Conclusion: *Relative potential and inertial mass energy lowerings are indistinguishable.*

However the gap must be weighted by the appropriate Lorentz factor, and this gives the formula and equivalence:

$$\Delta = 4\hbar c \int_\tau \gamma^\mu \partial_\mu \log \Lambda^\nu_\mu dx^\mu = 4e \int_\tau \gamma^\mu A_\mu dx^\mu = 4J \tag{429}$$

Mystery Revisited

The first thing of note in resolving this mystery is that the interpretation of the Meissner Effect is the confluence of the principle of general covariance and the uncertainty principle. The physics does not change, merely the interpretation of the uncertainty principle. The two statements, one of the Meissner Effect, and secondly, one of energy conservation, are respectively the instantiation and extension of the uncertainty principle and general covariance. For instance, examining the equal and opposite fields which are one to one with spin angular momentum as mutual observables, is a manifestation of the uncertainty principle to say they do not depart from commutativity with respect to boosts.

Secondly, energy conservation here is a principle by which the only dependence of this equal and opposite magnetic field is upon the perceived metrical relationship due to motion, otherwise the gravitational field of the body would change and they would exchange an extra contribution of energy, and would not preserve the center of mass under freefall.

In showing by contradiction (of a dual nature) that one or the other of these principles is violated if and when the transformation is not reciprocal to the field, one shows that the Meissner Effect is a generally co-

variant uncertainty principle based phenomenon. This is one to one with the principle by which the fields are in inverse or reciprocal relationship to the relativistic transformation, and:

This follows from the indistinguishability of the inertial and potential relativistic factors.

What is known is that the covariant differential in total does in fact commute, and that when it is separated into particle and field momenta that these do not commute. Thus this implies a number of things. First of all is that it is only the total field and particle momentum which is inertial, which is the interpretation of the Meissner Effect.

Secondly is that the four momentum of the particle alone is curved with respect to the field of electromagnetism alone. This is consistent because this leads to the condition of equivalent and opposite functional curvature relationships for these substituent quantities. Lastly, what this implies is that it is indeed true that the potential mass energy lowering in a superconductor is fundamentally indistinguishable from the inertial mass energy lowering.

From this follows the generalization of the condition implied by the first section of this paper, which is that:

$$D_\mu(i\gamma^\mu(p_\mu + \alpha A_\mu) - mc)\xi_\mu = 0 \tag{430}$$

Which is nothing other than the condition for a covariant eigenstate.

As an experiment simply consider dropping a superconductor levitating a magnet, if this theory holds true then because there is a gradual change in the gravitational frame, as they fall their curvatures should contribute equally, with the prediction that the initial condition requires that they will fall together as one, given their mutual inertial relationship in an approximately inertial frame.

Conclusion: *There is a measurable and physical effect on the interpretation of the observables in the uncertainty principle given their coordinate system and frame independence.*

Interdependence of Orbital and Spin Momentum

To explain exactly what 'reciprocity' means in this context, consider the particles. In the two particle Dirac equation, there occurs an *internal* reciprocation of spin curvature energy momentum and orbital energy momentum. This occurs **not** because the particles merely *influence* each other, but because they *influence each other's representations* in particle energy momentum and spin curvature energy momentum to change. Hence the wavefunctions in remaining Lorentz invariant *remain the same physically*, but there occurs a reciprocation between the quantum and the relativistic *components* of the objects.

Now consider that given the Dirac equation holds for one particle. Any multiparticle modification of dynamics must occur internal to the equation, and not modify its overall structure, but it **can** modify the individual terms in a plus-minus like fashion. This is a way to side step the problem of coming up with a new and unique generalized transformation, analogous to the γ^μ, which will encode a curved space *in general*. In this way, the multiparticle and accelerative features of reality are encoded in changes of the components of the representation. This represents something wholly new however, because the old addage that '*the whole is greater than the sum of it's parts*' applies. In this, the particles are **not** moving through each other merely because something only akin to a potential holds between them, but because a *change in each other's representations* arises from their mutual quantum and relativistic *relationships*.

An Instance of Reciprocity: *Reciprocity here means the comparison of different accelerative frames under the singlet and triplet, in which acceleration contributes to the spin curvature and orbital energy momentum, causing the two parts of the representation: the orbital and the spin, to reciprocate in space and time such that the particles mutually lower in energy and oscillate in space and time.*

Λ_ν is added and subtracted merely because of the rule of general covariance, and through quantum mechanics produces a reciprocation of accelerative spin curvature energy momentum and accelerative orbital energy momentum, so that the above can be put more simply:

Reciprocity Generalized: *Relative comparison of different quantum states under superposition leads to an energy difference in the states when different observable frames of acceleration are also compared.*

The emphasis in general is that **both** different relativistic frames of acceleration **and** different quantum states are compared simultaneously. Taking as the displacement the energy momentum associated with the change due to the difference of frames under an accelerative boost, afforded by the addition of an inertial interaction of the electromagnetic field:

$$\Lambda_\nu = \partial_\nu \log \Lambda^\mu_\nu \tag{431}$$

Because of the equivalency principle, Λ_ν is zero in the frame of the particle and *does not* contribute to the single particle description. While for the *comparison* of states in the singlet and triplet where different frames of acceleration are compared the contribution from the relativistic frame of acceleration *difference* leads to a *displacement* of $\pm\Lambda_\nu$. The essential idea is that the gap and attractive force arises from the qualitative difference between the single particle and two particle pair descriptions under the singlet and triplet. This makes for an interaction that results in a distinction that must be made between a particle in the single particle description, and a particle that is a *part* of a two particle state under mutual *acceleration.*

When the particles are put together they produce a qualitatively different result from only the single particles put together with only an electromagnetic interaction. For instance, under exchange, interchange of frames: $\mu \leftrightarrow \nu$ creates a $\pm\Lambda$ relativistic frame difference on ∂ and Γ.

Hence reciprocation is predicted with exchange, along with an energy difference of the singlet and triplet. This implies that reciprocation of quantities is one to one with inertial motion and this is one to one with an inertial electromagnetic force, which is in turn one to one with the Meissner Effect. However, the energy of the total system is lowered or raised under mutual acceleration by the presence of the extra Λ_ν which leads to the different momenta as operators producing an algebraically different result from their simple sum when operating on the wavefunction.

Hence, inertial motion is consistent with conservation of the exchange energy (through the cancellation of the distance dependence and inertial quality of the electromagnetic force) and reciprocation of spin and orbital degrees of freedom. We can conclude from the mere fact that spin-orbital reciprocation takes place that the exchange energy is conserved and one to one with the initial statement that the equivalency principle holds for the force law holding the charges together.

Hence, a non-dynamical difference in the exchange energy can be seen as an outcome of the inertial property, or the inertial property holding true can be seen as an outcome of the exchange energy developing a difference, but neither can be proven entirely by independent means. Finally to note is that this has an implication for general relativity as a reaction, for when the transition to the superconducting state takes place its mass lowers, invoking a complimentary raising of general relativistic energy.

This, in its general form, is what reciprocity means in the end. For the gestalt picture of quantum mechanics and general relativity produces changes in each, which are complimentary, because the general relativistic modification of the quantum description, lowers the quantum energy, and it raises itself.

Pairing and Condensation

The connecting principle that implies Δ_p is at a maximum when Δ_c goes to zero, and vice versa can be explained by two facts:

1.) *When particles fall into pairs they become more localized in the orbital degree of freedom, hence their relationship to one another is a* ***larger boost apart*** *between the holes comprising distinct pairs.*

2.) *The electrons and lattice* ***counteract*** *both the condensation and pairing with a resistence to an expansive force at low doping and to a contractive force at high doping. The electron sea and lattice that exists works against pairing and condensation, while remaining of equal localization to the holes.*

The density of electrons exists in proportion to the localization of holes and electrons (or inverse to their spread) and hence is also proportional to pairing strength. Simultaneously, the outward force of the pairs accelerates them apart, leading to a condensation strength that is proportional to the density of holes.

Thus the inter-pair boost is largest when the density of holes is large, explaining a large condensation gap at high doping, and the inter-hole boost is largest when the density of electrons is large, explaining a large pairing gap at low doping. Hence the two processes of balanced forces and distinct effects of the electrons or holes are at odds, yet the force inwards must balance the force outwards.

As a consequence there exists a range of doping intermediate between the extremes where superconductivity exists and it must fall off to both sides like a semicircle reaching zero because the electrons and lattice counteract the condensation force at low doping with a net contractive force of electrons with the lattice, and pairing force at high doping with an expansive force due to the large number of holes.

Since condensation may be treated as the change in orbital localization due to relative frame, and pairing may be treated as the accelerative parameter due to the localization (inverse to the spread of the wavefunction), the net effect is described by the energy lowering being the contracted factor of:

$$\Delta = 4\hbar c \int_\tau \gamma^\mu \partial_\mu \log \Lambda^\nu_\mu dx^\mu = 4e \int_\tau \gamma^\mu A_\mu dx^\mu = 4J \tag{432}$$

This is because the factor of Λ_ν is the factor corresponding to the boost leading to pairing, and γ^ν corresponds to the *excess* energy lowering from relative frame due to change in the boost parameter by acceleration into pairs. This is thus a factor multiplying the accelerative frame difference corresponding to the pair energy as a relative boost between pairs of the condensate. If it goes to unity then the energy of the condensation gap is zero, while if the acceleration goes to zero then pairing vanishes. Everywhere the gap is the constant of $4J$. This interval of superconductivity occurs when the lattice plus the electrons that exist balance the force outwards of the condensation and the force inwards of the pairing, but since the force is nonzero, and it acts through a distance by the effect of length contraction, the holes experience a net energy lowering intrinsic to the material.

Exchange Locality Theorem

To begin we identify a given admixture of partial differential equation following the principle of a connection to a given here ultimately knowable quantity; that of the orientation and juxtaposition of the electron's inertial field. With the statement of symmetry being:

"Extrinsic modifications to a given equation under antisymmetry of operators and symmetry of operators have intrinsic interior symmetric and antisymmetric parallels under operation of exchange of a particle with a pair field."

Under these provisions the properties of a two body electron particle and field equation are decomposed into a regeneration of the operator; seen alternatively as a completeness of it's given self enfolding for one particle and a replicated particle and partner field:

The two body electron equation is:

$$(i\gamma^{\mu}D_{\mu} - mc)(i\gamma^{\mu}D_{\mu} - mc)\Psi_{A}\Psi_{B} = 0 \tag{433}$$

When it is rewritten it becomes:

$$(-\gamma^{\mu}D_{\mu}\gamma^{\mu}D_{\mu} + m^{2}c^{2})\Psi_{A}\Psi_{B} = 2imc\gamma^{\mu}D_{\mu}\Psi_{A}\Psi_{B} \tag{434}$$

The idea here is to factor the equation in a different manner; owing due to phase and conjugate phase freedom from the logarithmic identities of principle equivalence and principle inequivalence. First; we need phenomenological reason to believe that a composite factoring of the two body equation occurs in the first place; the foundational reason of which is provided by relativity.

Relativity Theorems

To comparability there are two given's in physics with *displacement* as the proof:

Principle Equivalence:
Comparative measurement with reference to what is measured.

Principle Inequivalence:
Measuring with reference to what is performing the measurement.

Therefore there are fundamental limitations of physics; to which in order for there to be self and other consistency of articulation; must be *geometric* in nature:

Property of Light Variance (1): *The speed of light in being fixed to a universal standard; implicates that all such velocities under deduction to time itself must be measured greater relative to the speed of light universally for their comparative difference of rate congruent to light as measures.*

$$\gamma_{c} > \gamma_{m} \tag{435}$$

Property of Light Variance (2): *For; the property of dilation is obverse to a measure of fixed relation; therefore the rate of time for mass is always measured lesser than light; and to deduce the rate of passage of time we*

must convert to a system in which all velocities must be as a given greater than c.

In this, γ is seen as a measure of a rate to a rate, with light, unity in it's own frame; and of matter; less than unity for time to time conversions (for of matter light is of the opposite propensity) precisely because for a moving clock referenced to a stationary one; time moves more slowly; therefore to which it ticks more rapidly, and acquires a greater interval in any duration of a path at motion. This is consistent with the special theory of relativity and gravitation because a thrown ball will experience greater accumulation of time than one stationary on the Earth (for comparative ***to*** a stationary frame time went more rapidly and more accumulated). Therefore measurement dictates that the comparative measure of the rate of time for the thrown ball is diminished; to which it's extension over a path is longer comparatively to any other observer, such as the one stationary on Earth.

Therefore as the rate of time goes more slowly in the moving frame referenced to the stationary one; more time is acquired comparatively to either observer alone and individual measurements reference equivalence for the two body problem.

Note of Measureability

In order then to investigate a potential factoring of the Dirac equation into which the two body problem can be dissected; it is necessary at first to understand that the reference of the measurement is to one body or the other; to which we escape the twin paradox; a local phenomenon of which either measures lesser or greater of an otherwise equivalent situation with differing descriptions.

In this then we prescribe that $\{\tilde{\omega}, \bar{\omega}\}$ are different wave descriptions of particles; to which belong to differing frames; denoted by $\sim$ or $-$:

Principle Equivalence:

$$\eta + \rho = \log(\tilde{\omega} \cdot \bar{\omega}) \tag{436}$$

The first equation described here just above is the equation we arrive at to describe the addition of velocities into which sum to a finite difference in an externally situated point of measure and reference. The second equation is to which we find that inequivalent velocity combinations in their own frame's (under their congruence) afford for extra proportionality of either given intermediary time dilation contraction effect (here denoted σ):

Principle Inequivalence:

$$\eta\rho + \sigma(t) = \log(\tilde{\omega} \cdot \bar{\omega}) \tag{437}$$

The direct consequence is that: *Any two such contraction dilations are uniquely independent of any other by that of commensurate action of congruency of geometric difference under open relation of objective addition of factor; for in that of one following adirectionally apart; together; or separately; there is seamless transparency of beginning to end of logical union of motion; with an interior dilation contraction factor owing due to their comparative measurement of time.*

The substitution of one of η or ρ under either given point-like relation of relativistic factor is a free substitution which forms either given difference of that of perspective and vantage; that which forms the uniqueness condition of that of any two point like limits of relativity; for that of each such principle equivalence of time

and principle inequivalence of codeterminism.

The implication of this for signals of frequency and functional form under transformation is that of the fact that: By comparative differential to quantifiable means with difference of driving frequency the encompassing of either of two subcomponents of the alternative exterior difference is constructible.

Therefore with general functions:

$$\eta + \log(g(\tilde{\omega})) = \log(f(\tilde{\omega})g(\tilde{\omega})) \tag{438}$$

Implies:

In log decibels any two differently concordant rhythms are separable by any measure; as each singular log decibel pertains to a different frequency of any given equipartition of each such given foundational means of comparability of any choice of any two given amplitudes of differential nature.

Therefore considered together these two imply:

Theorem on Logarithmic Addition: *Either one; or both (2), given absolutely arbitrary limits of independent point-like relation(s) of proportion of electricity & magnetism to (a) given variety of non-locality exist(s); for which with but one; beginning or end congruent relation is empty of boundary condition.*

To illustrate that this is not impossible; non-locality would need to be insisted to violate (4) and (5) for which an exterior probe of measurement would need under all conditions measure the relative rates of time of the two constructible relationships. Therefore it is perfectly amenable to analysis to conclude the equations (4) and (5) hold in general for the two body quantum problem; and as these are consistent with the special and the general theory of relativity per the derivation; there is no necessity of further discussion. The outcome of logarithmic addition is the extension of electromagnetism when this variety of phenomenon is admitted.

Reduction

Therefore the given representation of the above equations with that of the velocity divided by the speed of light as a unitless measure is of unity proportion in the measure of system of units. Therefore the given holds as true by the following; that:

$$\zeta = \sin(\alpha) \qquad \chi = \tan(\alpha) \qquad \alpha = \frac{v}{c} \tag{439}$$

$$\zeta = \sin(\alpha) \qquad \chi = \tan(\alpha) \qquad \alpha = \frac{v}{\sqrt{v^2 - c^2}} \tag{440}$$

Are equivalent parameterizations of the same problem.

This principle of inequivalence is to be contrasted with the exterior space of symmetry of the theory of relativity when it is considered that actual determinations of validity are certain when one is deducing from time rather than spatial measure.

As a consequence either given end is not to be found; even in the singular; for the projective forward and backward relations contain no common zero; and time as a relation is an intermediary identity everywhere

for which there are no two to be found but in the local.

Conclusive Remark on Time: *The relation of a distant observer in observation of that of a point of the first observer is when in motion of a greater measure the reference to which the observer under observation observes a lesser time comparatively to that of the observer of it's given observation & greater, comparatively; to what it comparatively observes; as the two natures of time in relation to any one (of either) such observers differ by equivalence under separation.*

The Principle Inequivalence with σ is then the marriage of the one to the two body problem by which either agrees with reason and consistency; the extra σ being the accordance by phase of that of a temporal signature to inertia. When then one analyzes a mirror with this concept in mind; for that of the velocity of *that object* we result in two defining relations by analysis of the 'vertical' and the 'horizontal' rate of time comparative to a given arbitrary velocity of the mirror as:

$$\zeta = \sin(\alpha) \qquad \chi = \tan(\alpha) \qquad \alpha = \frac{v}{c} \tag{441}$$

Proof of Certainty

The rules of probability, statistics, and expectation impart a rule for that of the comparison of mathematical expectation to physical expectation; for which certain total certainty is possible with the following relation in mind; which is:

Foundation of Empirical Validity: *"Via dimensional analysis quantities of measure that exceed in dimensionless unit guarantee absolute certainty in principally equivalent dimensionless quantities; without which physical law is not established."*

Beginning with a preliminary notion of that of prediction in relation to the root mean square deviation there is that of the relation to standard deviation for which a functional relation is defined as:

$$x_{rms}^2 = \bar{x}^2 + \sigma_x^2 \qquad : \qquad f \tag{442}$$

Then defining a limit of $\sigma_x \to 0$ and hence the terms under which expectation deviance and variance exceed zero shrinking to a limit of local relation of zero and null relation there is defined:

$$\lim_{\sigma_x \to 0} f \equiv x_{rms}^2 = \bar{x}^2 \tag{443}$$

The relation of that which is greater assuming the relation of a subtraction of one equation beside the other reduces the expectation to that of a verifiable difference of one; and conveyed as such:

$$f - \lim_{\sigma_x \to 0} f \equiv 0 > \sigma_x^2 \tag{444}$$

Or as:

$$(1 - \lim_{\sigma_x \to 0}) f \equiv 0 > \sigma_x^2 \tag{445}$$

By which it is true that $f \to x_{rms}^2 = x^2$ in practice for that of colocal observables in relation to empirical deduction from which mathematical law and expectation is based; in virtue of measureability (inclusive of singular variants). Therefore as $\sigma_x > 0$ implies $x_{rms}^2 \to x^2$ & $x_{rms} \equiv x$ of either given expected distribution: quantities that exceed **guarantee** formatively for unit based systems by dimensional analysis of smooth

differential quantities of a given functional form with variants of mixed quantifiable expectations of a unitless measure nature.

In this a simple ratio does not suffice; however any quantities derived from dimensional analysis of unit based system do function for the given reason that quantities under elimination by units of measure reduce to subsets of sampling for which error exceeds expectation under surjective subset to set relationship.

Proof of Translation

The relation of one observable to an other of measureability and the empirical proof of which is found in reproducibility reduces to the given of a statement for which principles can be deduced and when understood echoes the relation of former to formative to latter; whether of colocal or differential order for that of relation to given process. The proof of this is as simple as the observation that one singular difference along the path of instruction leads to at least two orders in relation to singular difference of inclusion.

The proof proceeds as:

$$(f - \lim_{\sigma_x \to 0} f)(g - \lim_{\sigma_x \to 0} g) = 0 * 1 + 1 * 0 = 0 \tag{446}$$

Then; deriving the relation in reverse as an expansion for the sense in which 0 is within means to be expressed as a local zero null relation to that of the former of the given open relation as of either distribution; and leaving behind the sense in which 0 is representational of absence although; keeping exclusively of absence as indicated in an affirmative we have:

$$(f - \lim_{\sigma_x \to 0} f)(g - \lim_{\sigma_x \to 0} g) + (h - \lim_{\sigma_x \to 0} h) \equiv x_{h,rms}^2 = \bar{x}_h^2 \tag{447}$$

From which we have the representation for either of f or of g. In this statement going back a multiplication is married to it's surjective division; by which certainty is achieved. Equation ten is to be understood as the proof that is the master statement; for the reason that in reduction; any surjective limit is less than a given ϵ:

Given of Whole: *To be dearly noted is that of the manner in which any two errors of given nature impose a directly false relation when they encompass a greater union; therefore as error never exceeds half; and half squared is less half; no error of one falsifies a count; nor does any for quantitative means signify a true doubt.*

Then:

$$(f - \lim_{\sigma_x \to 0} f) * 1 + 0 = 0 \tag{448}$$

From which we have as a given derivation:

$$0 > \sigma_{h,x}^2 \to 0 > \sigma_{g,x}^2 \to 0 > \sigma_{f,x}^2 \tag{449}$$

Which means that in either given limit of that which is within limitation of relation from a beginning of a sequence of given order unto a given distribution of finite and relational symbolism to limit end occurrence of past or future with consideration of the present; a limitation is expressed as a given truncation of error to greater than prediction; therefore a guarantee to limitation by any end of a symbolical set.

In summary the error introduced by any such dependence scales as the inverse of parabolic temporal relationship of path and always exceeds any given accuracy of experiment as a consequence of separation in time of arrival and departure as dependent upon initial conditions. As a result geometric parabolic relation of common comoving equivalence principle a terminus of the path represents a dimensionless sensitivity

on initial conditions as the square root of the path like error. The error introduced by different freely falling bodies would then therefore be larger than that so produced by any experiment all of which are in confirmation for the reason that expectation exceeds prediction in validity.

This is true because if the contribution of error by the interval exceeding the limitations of the test equipment is indicated under all conditions other than a transparent, indivisible, and independently true relation then the result of the experiment can be used to provide positive indication of the elimination of the alternative, and for what ever remains, the provability of a natural law. Therefore verifiable and valid confirmation of the principle equivalence of physical law for that of certainty of relation is proven as can be confirmed as the surface area is always less than volumetric quantity; therefore error is certain below the limit of surface threshold for each such interior point by the dual of the statement of unitary reciprocity in electromagnetism and reality:

$$0 > \sigma^2_{A,ds} \rightarrow 0 > \sigma^2_{X,dx} \rightarrow 0 > \sigma^2_{V,da} \tag{450}$$

Where A is an area, V is a volume, and X is a point area, and ds is a path dx is a point infinitesimal and da is an area element.

Method of Inspection

This explains a mass energy gap; for that of the two body electron equation which is a real energy lowering; of what is understood when taken as the absence of one electron in it's surrounding notion as in the presence of the other electron as a positron; for what is of presence is of absence with matter; and together forming a solid whole of which the energy momentum is lower by a double accounting for that of either electron in co-local relative motion. We begin with the two electron exchange equation:

$$(i\gamma^\mu D_\mu - mc)(i\gamma^\nu D_\nu - mc)\Psi_A\Psi_B = 0 \tag{451}$$

The argument goes as follows; if the two electrons were in different frames; then they would experience the rate differential of time and space differently; to which when one slows it's consequent experience of time deduced from motion would depreciate it's relativistic mass argument; therefore of what of one is of the greater in time accumulated comparatively to the other in owing due; there is an 'extra' reduction in mass energy of both due to these interacting.

This is nothing but the final and conclusive remark on time making itself noticed; to which the equations (4) and (5) delineate the process of reduction; to that of which one comparatively is the addition of two factors under combination we factor the electron equation into it's summation. The equations (4,5) explicate the process:

$$(\eta\rho + 2imc(\eta + \rho))\Psi = m^2c^2\Psi \tag{452}$$

Which becomes under factoring by:

$$\beta = \sqrt{m^2c^2 + \sigma(t)} = m^*_e c \tag{453}$$

An equation for a regularized and dressed electron positron virtual pair momentum representational of the original electrons momentum we began with; and an updated equation for an electron pair produced:

$$(i\gamma^\mu D_\mu + \beta)(i\gamma^\nu D_\nu - \beta)\Psi = 0 \tag{454}$$

Therefore the mass exists at a reduced mass; the energy thereby being lower and as to that of a proportion of it's prior apportion. The pair potential is therefore:

$$\Delta = 2\sqrt{\sigma} \tag{455}$$

Conclusion

The primary cause of superconductivity is therefore that the phase, ζ, and order, χ, coherence parameters are both smaller than the relativistic wavelength; meanwhile these order and phase parameters are small when measured exterior to the superconductor where the residual field possesses inertia; so in either case:

$$\zeta, \chi \leq \lambda_c \tag{456}$$

Therefore a superconductor superconducts because it's electronic inertia is greater than gravity interior to a finite volume; exterior to which it decouples because it is reducible to a zero and a negligible fraction of the reduction factor; therefore levitation is possible in support against gravity with a magnet. The statement that both ζ and χ covary in the same direction should be noted as:

$$\sigma = \zeta / \chi \tag{457}$$

Beyond which via internal and external spontaneous symmetry breaking of two varieties; electromagnetic inertial interior and gravitational asymptotic decoupling exterior, occurs, to the new effective mass internally as m_e^* measured externally as m_e by gravitation and as m_e^* electromagnetically. As we return exterior to a superconductor we would therefore predict that if this theory is true:

$$m_e^* \to m_e \tag{458}$$

These effects then amount to a full shift in the electronic inertial mass for the reason that the population inverts when $\xi \geq \lambda$; and many small effects of coherence (protected) saturate and decouple the electronic inertia from gravitation; to produce the full electronic gap in reference to the observable classical horizon of: $\Delta = 2m_e c^2$.

The original electron equation becomes:

$$(i\gamma^\mu D_\mu + \beta)(i\gamma^\nu D_\nu - \beta)\Psi = 0 \tag{459}$$

Therefore the mass (electronic and inertial) exists reduced interior electromagnetically; and at it's normal value exterior as $\sigma \to 0$ gravitationally and $\sigma \to 1$ electromagnetically. Therefore a superconductor is a proven instance of electromagnetic spontaneous symmetry breaking when mass measurements illustrate a mass discrepancy in one's vicinity. The reduced mass energy and pair potential were:

$$\beta = \sqrt{m^2 c^2 + \sigma(t)} \qquad \Delta = 2\sqrt{\sigma} \tag{460}$$

Central Insights and Historical Reference

The central insight of superconductivity is whereas a motion of the spin-charge in moderation of chemical exchange to a full integral seems counter-intuitive, a crest of representing a factor moving beyond a crest representing another factor for one population upon another is a mechanism known to aid spontaneous order and aid in bosonization of the lighter particle-wave in condensed matter. This is compatible with observation principles and relativity, when it is considered the curvature of one body accomodates the curvature of the lighter body despite discrepancy in mass in response to gravitation as the two spaces and interactions share a medium of an atomic lattice and electronic interaction. Thus temperature and basic kinematics resolves to a condition; that one body is active while the other is passive given two paramount conjectures; Fermi's Golden Rule and the Pauli Exclusion Principle. In accomodation of one body for the

other (of to note similar charge), the former and lighter is subject to a convexity such that its focus and directrix under delay completely annihilate through deconstructive interference the repulsive electronic behavior meanwhile reinforcing the attractive bosonic master-slave relationship of charge and hole under trade with the equivalence principle. This, effectively then via geometric considerations reverses the magnetic field alike an imaginary unit (for all practical purposes) resulting in a negative electric field of attraction via dynamical and static considerations. These are not to be confused with fundamental observations in other areas of physics, for the effect is unique, and the phase that develops is temporary and dynamically stable given entropy.

When a photon of the electromagnetic field conforms to the geometric constraint of a potential; a shift to the compliment of relative aging dichotomy results in a return to rest in reconciliation with gravitation under rectification of this principle, but entropy remains, and the system resolves to a spin-orbital conformal theory of shapes in attraction driven by the spin and orbital inertia. Thus zero-point energy of the simple harmonic oscillator does not derive to an anharmonic reduction of the electromagnetic energy with an attraction. This is validated as a photonic mirror responds under negative influence of velocimetric 'return to rest'. Thus, gravity promotes a repulsion at the same time as attraction centrosymmetrically, to which the potential is proven to be a stable equilibrium above the earth. The mechanism then depends on the elliptic transformation from linear and quadratic terms under constructive and deconstructive interference, to which electrons remain in bound Cooper pairs (linear in perpendicular and parallel directions), assumptive a temperature lower than a critical temperature for entropy leads to disorder of the second to lowest frequency of the system.

When the pairs are bound by this 'quantum light of electromagnetically induced negative suspension'; the system ages, and is paramagnetic for the cost of a magnetic field to which it expels all magnetic field due the rest condition and as equivalence of systems of inertia is lost. Thus, we find observation in the *opposite* transformation away from gravitation a cause of a return to a state of rest, of which bodies as-quantum (but for the electromagnetic discrepancy consistent with the field energy of gravitation for which the mass differs in contrast with the gravitational field energy) are formed consistent with the principles of conventional observation. The basic equation that governs relativistic qubits is then:

$$\eta_{\mu} = -\partial_{\mu} \log(\wp \circ \psi(\vec{x} \cdot \vec{k} - \omega t)) \tag{461}$$

Then:

$$...G \circ G \circ G... \tag{462}$$

Observation on Probablistic Derivatives

Noting that superconductors age dissimilarly to their environment in being ceramics, the question of ductility in impression with condensed 'billiard-ball' like dynamics easily presents itself to the wave picture per an inverse with accompanying hole for deconstructive interference and constructive interference, given a one to one exchange. The annihilative feature of the overlapping pauli-state is then purely reinforced to a bond, for the sake of quantum conductance, and the observational 'at-rest' picture compared to the relativity picture of electromagnetism moderately changes the bonding strength due the chemical potential. Thus it is not-sincerely an 'imaginary' magnetic field, it is the anticurl of which in polarization sets in as a negative magnetic screening function that condenses the wavepacket outside the lightcone of the killing vector consistent with the gyromagnetic ratio and birefringence adoptive electrons further from the Fermi

shelf.

The chemical potential with stripes compensates for the relativistic shift. Probabilistically the 0-1 presents then a geometrically inverted three-ball. Doping has an equal and opposite displacive conductance of contraction and co-extension under the ideal-gas to which the effect is conformally euclidean. Thus, photoelectrically, to a limit set by the length scale of one ideal, the responsivity in magnetism draws the apparent relativistic conclusion that this-term contributes a correction to the exchange constant of a factor of two, for the reason that time dilation and time extension under divergent motivations lead to apparent receding of the particles at twice their corrective exponential factor when approaching, and when receding, approaching with twice the field strength, for reasons that are clear given parallel and perpendicular corrections and geometric correction of the guass-bonnet theorem of linearity.

Given the loop-rule of the Aharnov-Bohm effect for the double slit, and the reconciliation of the double-slit for what is subjectively injective from observation per secondary responsivity, it can be reasoned the Berry's Phase situates a sqrt(2) at maximal apogee under this geometry, thus per directrix of the same charge for the opposite charge among the lattice, with the opposite Pauli exclusion or the same charge from the same charge polarity, with identifiable Pauli exclusion, the effect of for one, the quantum effects and gravitation as the equivalence of frames in the material manifest as a consistent correction and situate an at-rest and in-motion consolidation per the equivalence principle. This separates the configurational geometry and dynamism from the logical organization of ideas concerning the mechanism.

Velocimetric conservation accordant with a momentum, per a return to rest is a involution of which respondently via elliptic (secondary consideration of quadratric and linear term); in-superposition inclines the rule of a factor of two upon incoming and outgoing of it's second Riemann-Cauchy residual of elliptic nature 'through' the antinode of the overlap of the electrons with doping, thus superposition governs as a mass-motion a reduction in energy via freedom of inertia of electronics to bound Cooper States.

Mechanism

Due closure of the fermionic gas, per the terms of relativistic correction, the Heisenberg system simplifies to:

$$H = \sum \sigma_{i,j} + \sum \sigma_{j,i} \tag{463}$$

Where:

$$\sigma_{i,j} = P(\hat{\omega})\wp(\hat{\omega}) \tag{464}$$

$$\sigma_{i,j} \cdot \sigma_{j,k} = P(\hat{\omega})\wp(\hat{\omega}) \tag{465}$$

The polynomial being a result of the 'graph of the spin foam of moment-poles'. The $\wp$ being a result of relativity and time dilation subject to observation. This interaction is parametrized such that the interaction is self-gauging, for the sake that the 'resonance occurs where the superposition takes place'. The 'earlier in this paper' result of the anti-node is the quenching relativistically, the return to rest via arguments and or charge duality, and the period change for the sake of the crest and trough of the 'active' and 'passive' electron. Thus, in breaking the symmetry of translation in Euclidean space, that of charge duality is broken, and spin adjusts by becoming a full factor of two via geometric arguments over the electromagnetic repulsion, as an equal partner master-slave bosonic language.

Derivation

Essentially non-linearity is seen very simply in the guise of the above, for reasons of pedagogy it is essentially the answer of the 'original' non-linear self-focusing and defocusing (dispersion) that are 'linear' above the guassian shape. In performing the above transformation, it is at-once seen the 'linear' of the various terms of the polynomial lead to disparity of the essentialized singular behavior of the soliton, but also lead to a language with which to operate within the 'medium'. The translation is at-first a 'four or two' for the disinclusion of an 'eight or three', and so on in-incidence, to which produces the linear terms of a Kodama problem whereas separation and rules of initial position in cellular automata include of an L-series what may be found in composite surrounding the index of the function of linear to linear. Thus τ includes the basis of the log for which the varietal terms of the expansion of the degeneracy of photodiode and light emitting diode 'extend' to a basis of quadratic interaction and linear interference in a model device intended to simulate electronics of this differential equation and nature.

Then, given that basic resonances are of the form:

$$f(x, \omega, t) = \Gamma(x, t)e^{-i\omega t} \tag{466}$$

By *continually* changing frequency along a pseudosphere, or by observing shape, the system coherently can 'lock' into a digitally-programmed state, as the frequency is linear in discrete steps, and the integration constant is then the linear-time derivative for that of the $V = I \cdot R$ equation.

By re-writing Maxwell's equations given Yang's assumptions we find:

$$0 = \eta^{\mu}_{\nu} A_{\mu}(x^{\nu}) - \partial_{\nu}\Phi(x^{\nu}) \tag{467}$$

The zero, as it is a complete circuit.

$$\beta\Lambda^{\nu}_{\mu}(x, t) = \rho P(x^{\nu}) \tag{468}$$

Then, setting;

$$\eta_{\mu} = \rho P_{\mu}(x^{\nu}) \tag{469}$$

We find τ to relate of the various displacements for which the polynomial represents the logarithmic differential in the Weierstrass functions. With this our algebra simplifies:

$$\eta_{\mu} = \rho_{\mu}\frac{(N - a^{\dagger}a)(M - b^{\dagger}b)}{(n - c^{\dagger}c)(m - d^{\dagger}d)} \tag{470}$$

As for example given that:

$$\wp \to \int^{\phi_0} \frac{1}{\sqrt{(1 - m^2\sin^2(\phi(t)))}} \tag{471}$$

Thus, initial states of observation, in preliminarily beginning linearly, per an allocation in finite measure, do not allocate but by a margin of linear 'barrier' in reduction from an offset intial condition, to linear moment and period of distribution to an end allocational unit of hypothesis per the terms of condensed matter, crystals, optics, neurology, law, and finance. Taking the chemical potential into consideration, the commutation relation for which the $\wp$ relates of the 'low frequency of the lattice' motivates a lower energy, while the chemical potential separably relates to lower the electrostatic repulsion. This is thus, not a duality, it is the Γ_{μ} of which formative with-motion and distance lower(s) energy in a substantial measure.

When holes and electrons (of dark and light soliton) are taken as of 0-0 or 0-1 and similar or opposite, with an equivalence principle this additional symmetry is initially seen as xor under symmetry. Superconductivity produces via linear to parabolic binding a paramagnetic state of cooper bound electrons consistent

with energy below the Fermi sea with a reduction consistent with gravitation. This is indeed the same as gravity, and an absolute feature of displacement, for two reasons.

a.) Such negative feature would additionally transfer to the chemical potential otherwise.

b.) The binding of occurrence reduces in it's feature comparable a statistically exact identity due phase.

1.) Given 0-0, 0-1, displacement of field energy, E.B changes shape such that gravitational field energy does not change, it is 0-0 and gravity is true in one and only one sense:

[The relativistic mass with the field energy is the inertial mass, which is equivalent to the gravitational mass.]

c.) The temperature reduction and increase is fundamental therefore, for which cooling the room or cooling the superconductor holds only anomaly with near-field temperature (the magnet).

There are then two questions.

1.) What motivates $\wp$ to inhere a group law from chemical or material sources?

2.) What motivates the 'repulsion' or 'locking' to overcome or not a finite potential?

1.) The distance 2:1 in Cu:O and the 'exchange sqrt(2)' given prefactors of Γ_{μ}.

2.) Shape change couples to the gravitational focault pendulum of an agreed gravitational Γ_{μ}.

Determination

In skipping past the 'third' the motivation of the 'above' is that the four dimensional gauge group holds in light of logic, an atypical exception for varieties of the fifth and higher 'graphs and representations'.

1.) The 'Artin group' only holds a diffeomorphism and surjection when there are four (4) intermediary steps.

2.) Hence it is hypothesized there is one exception in the 3Nx3(N-1) group diffeomorphic pole correspondent the irreducible elements of the surjection for the elliptic 'certain groups of 2 or 3 mod'.

As a result, the Kodama model of the 4th (missing input) in creation and destruction (the key) is answered by a reductive parabolic two-fold with third and first, in alignment given initial condition (distance and state and type and velocity) when +v annhiliates -v, and the input causes a +v such that it is contributory one of the intial third and second of the 'fold'.

The 'Pashen' series 2nd harmonic from 'below' is a gap, whence above, it is a variation. Thus, reasoned inclusive a parabola [constructively] - there is one lesser line below to a reductive feature of-me, given the nature of jurisprudential setting, then of the potential variagation of auditory experience, and mitigating this, for in it's alternative testimony, I have reduced an auxiliary problem from a line and parabola. This sets the weapon turned around from 'O', and elicits a return (-v).

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Thus a mass-gap develops as a result of the *finite* $\Delta\phi$ of the regularized lattice, the continuum result falls through analysis, but by a finite $\int$ integral in space, the theorem of gravity can indeed co-exist with it's exceptional features. We find in the end the magnetic field and electric field carry a $2:1$ of-potential for the torus, of which establishes a period in relation to a period, for the result the induced feature of doubling is a symmetry split via the dark and light or antiferromagnetic symmetry, these then-therefore are established over the period of the lattice in also a $2:1$ of their various wave-particle duality, by pair particle. The ground state corresponds to this point, as $m = \frac{1}{4}$ and ellipsoids do not precess.

Essentially, the mass gap develops in relation to regularization, per terms of two numerical relations of the effective mass ratio (from unity), another number (the coupling of the photon), and the temporal proper interval and geometric spatial proper interval. The exchange (per terms of symmetry) for a finite chemical potential, separates the average equidistance for electrons, thus these couple at a ratio driven by re-establishment of the chemical potential and conservation of energy. The thermal to magnetic property is a property then in incidence of a $2:1$ of entropy, and the electric to photon is shifted by a $2:1$ of energy, per the terms of the boundary condition of relative probabilistic weighting of the two established energy scales of quantum and gravitational, for that of geometric phase. A $\sqrt{(2)}$ develops and a ratio of exponential $-2u$ and $+u$. The effect is one way.

Conclusion

Thus, in effect the return to rest is the point of proper observation upon time dilation, for which the laws of physics are univariant and equalitative for observation of quantum and relative behaviors. In this, it is the principle frame of the relationship of Fermi and Bose statistical purity, whereby the energy discrepancy is reduced in relation to what-are two bodies, each of them experiencing a reduction in the fashion of extensibility into the two scales by the formative and former state of variation. This is because in a system with feedback a simple harmonic oscillator becomes by Bell's theorem more correlated with a mass discrepancy (supression of relativistic effects) and proximity under approach and lessening of distance between the bodies. As a result, of the prior analogy, the lattice and electrons both experience a reduction of energy in one view, and a lowering and raising in the other, by gravitation, and temperature in relation to quantum mechanics and general relativity. Through the action of traversal of space, order is thereby set into a less entropically driven state for classical mechanical systems. This explains the engine, the airplane, hydroponics, thermostats, and ultrasonic ranging.

When the probabilistic divergence of the atomic mass and electronic mass is determined, it is determined that their ratio with the subtraction from one is a minor correction to gravitation through the Lorentz invariance in relation to the Thomas precession, which determines that free falling magnets and superconductors do not exchange energy despite the Lorentz invariance, but that superconductors do; inconsistent with thermal radiative feature given mass, in correction of Hawking radiation.

Thus, type two superconductivity is resultant as a result of an advanced decoupling of the Kondo effect, stablized intermediarially by spin-charge admixture when the shared sea and charge inertia suffer Ahranov Bohm-Thomas precession to the result given Pauli Exclusion of a perpendicular electromotive force.