

This Theory Is Zero

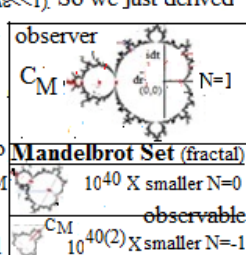
Abstract: All QM physicists know about *Lorentz* covariant(9) Dirac equation *real* eigenvalues. All mathematicians know that the limit of a Cauchy sequence of rational numbers is a Cauchy *real* number. So we **postulated** " $z=zz+C$ implies *real*#0" (C constant so $\delta C=0$ and $z=zz+C$ eq1 defines the multiplicative properties of **0**) which thereby implies a rational Cauchy *sequence* with limit 0 that doubles as a *iteration* of eq1 in $\delta C=0$ that gives the Mandelbrot set. Also plugging eq1 into $\delta C=0$ gives the Dirac equation and, with that Mandelbrot set, *generally* covariant Dirac *real* eigenvalues of a Newpde, clearly an advancement over prior knowledge (Also see fig2.).

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Summary postulate0: " $z=zz+C$ implies *real*#0". (C constant so $\delta C=0$ and $z=zz+C$ is eq1) where $z=zz$ needed for multiplicative properties of **0**. Thus plugging $1 \equiv 1+0$ into $1=1X1$ gives the required relations $0X1=0$, $0X0=0$ part of appendix M4 'list number-define symbol' math method itself implying $z=1+\delta z$ into eq1 results in $\delta z+\delta z\delta z=C$ (3) so $\frac{-1 \pm \sqrt{1^2+4C}}{2} = \delta z = dr \pm i dt$ (4) for $C < -1/4$. So C is generally *complex* in this complex plane. But the definition of *real*0 implies that Cauchy sequence "iteration" so requires **plugging** the **eq1** *iteration* ($z_{N+1}-z_N z_N=C$) into $\delta C=0$. Given *real*0, $1 \equiv 1+0$ then creates these other rational number eq4 *Real*₁ and *Real*₂(times*i*) components of C that then requires two Cauchy sequences or a single (*Real*₁,*Real*₂*i*) complex iteration (recall $z_0=0$) implying $\delta C = \delta(z_{N+1}-z_N z_N) = \delta(\infty-\infty) \neq 0$ for some $C=(\text{Real}_1, \text{Real}_2 i)$. The Cs that result instead in finite complex z_∞ (so $\delta C=0$) define **Mandelbrot set** fig1 Given the fig1 circles, for symmetries other than radial, $\delta C=0$ scale dependence is complicated. But $\delta C=0$ implies lemniscate min *single* radial scale $\delta C = (\partial C / \partial R) dR = 0$ vertical scale variation at $-1/4 + i1.23$ and max radial R scale variation at $C_M = -1.7$ along the first right radial filament. So extreme $(-1.766..., -1/4)$ solve $\delta C=0$: $-1.766 = C_M$ yields lemniscates with $10^{40N} X C_M$ scaling. So for *observer* huge Nth scale $|\delta z| \gg 1/4 = -1/4$ rational Cauchy sequence ($z_{N+1}-z_N z_N=C$) = $-1/4, -3/16, -55/256, \dots$. So **0** is a *real* #. QED Also

Plug eq1 into $\delta C=0$ using

eqs3,4: $\delta C = \delta(\delta z + \delta z \delta z) = \delta \delta z (1) + 2(\delta \delta z) \delta z \approx \delta(\delta z \delta z) = \delta((dr + i dt)^2) = \delta[(dr^2 - dt^2) + i(drdt + dt dr)] =$ (5)
 $= 0 = \text{Minkowski metric} + \text{Clifford algebra} \equiv \text{Dirac eq.}$ (See γ^μ s in eq7a) 2D Mandelbrot+2D Dirac=
 4D Dirac Newpde $\equiv \gamma^\mu (\sqrt{\kappa_{\mu\mu}}) \partial \psi / \partial x_\mu = (\omega/c) \psi$ for v, e ; $\kappa_{00} = e^{i(2\Delta\varepsilon/(1-2\varepsilon))} - r_H/r$, $\kappa_{rr} = 1/(1+2\Delta\varepsilon - r_H/r)$;
 $r_H = C_M/\xi = e^2 X 10^{40N}/m$ (fractal jumps $N = -1, 0, 1, \dots$) $\Delta\varepsilon \equiv m_e$, $\varepsilon = \mu$ are zero if no object B (appendix B)

| Spherical Harmonic Solutions to Newpde: $2P_{3/2}, 1S_{1/2}, 2S_{1/2}$ at $r=r_H$ since Stable $2P_{3/2}$ at $r=r_H$ | |
|---|---|
| N=0 at $r=r_H$ $2P_{3/2}$ 3e baryons (QCD not required) Hund's rule $1S_{1/2}, \mu, 2S_{1/2}$ leptons (Koide) |  |
| 4 SM Bosons from 4 axis extreme rotations of e, ν | |
| N=-1 (i.e., $e^2 X 10^{-40} \equiv G m_e^2$). κ_q is then by inspection the Schwarzschild metric g_i (For $N=-1, \Delta\varepsilon \ll 1$). So we just derived General Relativity (GR) and the gravity constant G from Quantum Mechanics (QM) in one line. | |
| N=1 Newpde zitterwegung expansion stage is the cosmological expansion. | |
| N=1 Zitterbewegung harmonic coordinates and Minkowski metric submanifold (after long time expansion) gets the DeSitter ambient metric we observe. | |
| N=0 The third order Taylor expansion (terms) in $\sqrt{\kappa_q}$ gives the anomalous gyromagnetic ratio and Lamb shift <i>without</i> the renormalization and infinities. | |
| So κ_{qv} provides the general covariance of the Newpde. | |
| So we got all this physics by mere inspection of this Newpde with no gauges! | |

Conclusion: So by merely *postulating* **0**, out pops the whole universe, no more, no less, BOOM! easily the most important discovery ever made or that will ever be made again.

Note the ‘postulate(0)→Newpde’ idea answers the most important questions that the mainstream doesn't even ask!!!! (davidmaker.com for backup.) Like:

1) What is the origin of mathematics? (that physics requires)

Answer: **list-define definitions and** (single simple *axiom*) **postulate0: $z=zz+C$ implies real0** (C constant so $\delta C=0$. $z=zz+C$ eq1 needed for multiplicative properties of 0. See math appendixM)

2) Where does the Dirac equation come from?

Answer: **equation 5** (resulting from plugging eq1 into $\delta C=0$)

3) Where does the vacuum come from?

Answer: **eq.9** (One of the eq6 factors of real(eq5))

4) What is the origin of the complex numbers and space-time?

Answer: eq1 is a quadratic equation resulting in eq.4 giving complex numbers (negative under the discriminant sqrt sign) **$dr+i1dt=ds$** which is also **the origin of space-time** dr,dt .

5) Why is the speed of light c constant?

Answer: In eq4 the above natural unit **$1=c=dr/dt$** is always a coefficient 1 for **light cone solutions eq.8** of eq6 in uniform space-time (C8). So sect C4 IVth to Ist quadrant rotation through these two v solution diagonals also implies a light cone photon since excess mass then cancels given these two Dirac eq. applications.

7) Where does charge come from?

Answer: Charge $e^2=$ **CM**=Fiegenbaum pt. (Fractal Mandelbrot set CM extremum comes from plugging *iteration* of eq1 into $\delta C=0$, Then plug eq.12 into eq16 getting $C_M/m=r_H=e^2/m$.)

8) Where does the cosmological oscillation come from? (We are in the expansion stage.)

Answer: **Newpde zitterbewegung oscillation on the N=1 fractal scale explaining cosmology!!!**

9) Where does general relativity (GR) come from?

Answer: The Newpde **κ_{ij}** for $N=-1$ fractal scale(top of fig2).

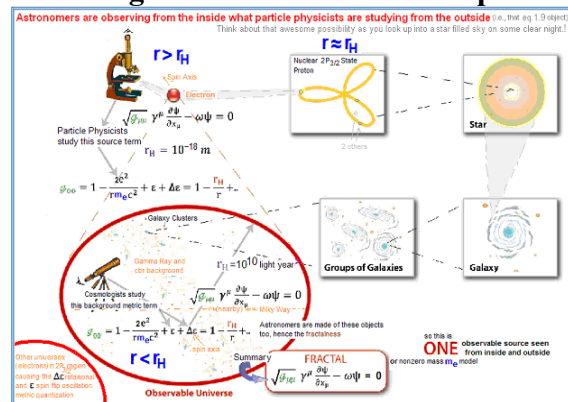
10) Where does quantum mechanics (QM) come from?

Answer: Invariance of eq5 *circle* and so eq11 QM operator formalism. So **QM comes from a circle**. Also the 3rd order Taylor expansion term of $\sqrt{\kappa_{ij}}$ replaces renormalization(appendix B).

11) Where does the strong force come from?

Answer: Newpde spherical harmonic $2P_{3/2}$ at $r=r_H$ with **B flux quantization** gives ultrarelativistic $+e s$ ($\gamma=917$ explaining large baryon mass) so extremely **narrowed E field lines at center** hence a huge force there (partII, davidmaker.com. QCD and gluons are not required.)

Result: The selfsimilar scale jumps ($10^{40N}XC_M$, N integer) of fig2 implies “**astronomers are observing from the inside of what particle physicists are studying from the outside**”,



the Newpde electron. Think about that as you look up into a clear night sky: With a single power of 10^{40} scale jump we are back to where we started!