

This theory is 0

Introduction All QM physicists know about *real* eigenvalue (Dirac eq), observables. All mathematicians know that the limit of a Cauchy sequence of rational numbers is a Cauchy *real* number. So all we did here is show we postulated *real*#0 by using it to derive a rational Cauchy sequence with limit 0. We did this because that same postulate (of *real*#0) math *also* implies *the* real eigenvalues we get from a generally covariant generalization of the Dirac equation that does not require gauges (Newpde), clearly an advance over previous physics pdes. To show this

Define0: with numbers $1 \equiv 1+0$ and definition of list $0 \equiv 0X0$, $1 \equiv 1X1$ as symbol $z = zz$ (algebraic definition of 0). Also

Postulate *real* number 0 if $z'=0$ and $z'=1$ plugged into $z' = z'z' + C$ (eq.1) results in some $C=0$ constant (ie $\delta C=0$).

There is of course the obvious $C=0$ solution but including $\delta C=0$ in those above *plugins* adds other Cs. So:

Plug $z'=0$ into eq.1 get 2D **Mandelbrot** set

So $z_0=0$ into eq1 iteration (plug left side into right side repeatedly) $z_{N+1} = z_N z_N + C$, (generates the larger numbers z_{N+1} so more *symbol* algebra so calculus definitions) requires we reject the Cs for which $\delta C = \delta(z_{N+1} - z_N z_N) = \delta(\infty - \infty) \neq 0$. The Cs that are left over define the **Mandelbrot set** with new eq1 z so $\delta z \leq C_M = 10^{40N} 1.4..$ fractal scaleN jumps

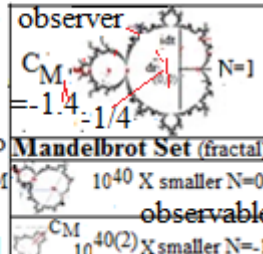
Plug $z'=1$ into eq.1 get 2D **Dirac** equation (new 2 degrees of freedom from δz)

So $z=1+\delta z$ into eq.1 is $\delta z + \delta z \delta z = C$. So $\delta z = (-1 \pm \sqrt{1 + 4C})/2 \equiv dr + idt$ So bounded complex (Mandelbrot) set $\delta C=0$ extreme $-1/4 > C \geq -1.4.. = C_M$ in fig1. For $N=1$ (big C observer) then $\delta z \approx C$ so $\delta C = \delta \delta z \approx 0$ and so $\delta C = \delta(\delta z + \delta z \delta z) = \delta \delta z + 2\delta \delta z \delta z \approx \delta(\delta z \delta z) = \delta((dr + idt)^2) = \delta[(dr^2 - dt^2) + i(dr dt + dt dr)] = 0 = \text{Minkowski metric} + \text{Clifford algebra} \equiv \text{Dirac eq.}$ Also $\delta C=0$ extremum $-1/4$ Mandelbrot set iteration becomes the rational Cauchy sequence $-1/4, -3/16, -55/256, .., 0$, implying **0** is *real*

4D **Mandelbrot** and **Dirac** relation rewritten with $N=0$ observability (eq.11) and 3D orthogonalization is QM

Newpde $\equiv \gamma^\mu (\sqrt{\kappa_{\mu\mu}}) \partial \psi / \partial x_\mu = (\omega/c) \psi$ for e, ν , $\kappa_{00} = e^{i(2\Delta\epsilon/(1-2\epsilon))} - r_H/r$, $\kappa_{rr} = 1/(1+(2\Delta\epsilon/(1+\epsilon)) - r_H/r)$, $r_H = C_M/\xi = e^2 X 10^{40N}/m$ ($N = ., -1, 0, 1..$), $\Delta\epsilon = 0$ for neutrino ν and $N=-1$

See davidmaker.com for backups

Spherical Harmonic Solutions to Newpde: $2P_{3/2}, 1S_{1/2}, 2S_{1/2}$ at $r=r_H$ Stable $2P_{3/2}$ at $r=r_H$	
<p>$N=0$ at $r=r_H$ $2P_{3/2}$ $3e$ baryons (QCD not required) Hund's rule $1S_{1/2}, 2S_{1/2}$ leptons (Koide)</p> <p>4 SM Bosons from 4 axis extreme rotations of e, ν</p> <p>$N=-1$ (i.e., $e^2 X 10^{-40} \equiv C_M^{-2}$). $\kappa_{\mu\nu}$ is then by inspection the Schwarzschild metric $g_{\mu\nu}$ (For $N=-1, \Delta\epsilon \ll 1$). So we just derived General Relativity (GR) and the gravity constant G from Quantum Mechanics (QM) in one line.</p> <p>$N=1$ Newpde zitterwegung expansion stage is the cosmological expansion.</p> <p>$N=1$ Zitterbewegung harmonic coordinates and Minkowski metric submanifold (after long time expansion) gets the DeSitter ambient metric we observe.</p> <p>$N=0$ The third order Taylor expansion (terms) in $\sqrt{\kappa_{\mu\nu}}$ gives the anomalous gyromagnetic ratio and Lamb shift <i>without</i> the renormalization and infinities.</p> <p>So $\kappa_{\mu\nu}$ provides the general covariance of the Newpde.</p> <p>So we got all of physics here by <i>mere inspection</i> of this Newpde with no gauges!</p>	 <p>observer</p> <p>$N=1$</p> <p>C_M</p> <p>-1.4</p> <p>$-1/4$</p> <p>Mandelbrot Set (fractal)</p> <p>C_M 10^{40} X smaller $N=0$</p> <p>C_M $10^{40(2)}$ X smaller $N=-1$</p> <p>observable</p> <p>fig1</p>

•**Conclusion:** So by merely (**plugging 0,1 into eq.1**) **postulating 0**, out pops the whole universe, BOOM! easily the most important discovery ever made or that will ever be made again. We finally figured it out.

Note a theory with many assumptions is *not* fundamental: so where did those many assumptions come from? Also a first principles theory with the correct ultimate Occam's razor assumption(0), as here, will *not* hit a brick wall, thus the sky is the limit for breakthrough physics innovation coming out of such a theory.