Quantum Mechanics and Relativity

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My Take on Relativity

(link at lower left)

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All existing numbers are positive a = sqr(a^2)

suppose b > a

-c = a - b

b-c = a (both sides positive, a - a = 0

Note that the expression a – a = 0 can be interpreted several ways:"

1. The destruction of two particles a (0=0)
2. The "destruction of a single particle a (a = 0).
3. The existence of two equal particles a (a = a)

Coordinate space and time

x = vt

x/t = v(t/t) t/t is one tick of a clock to its own base, t

x = (vt)(t/t)

v=n

x = nt = nt(t/t)

space-time is one- dimensional, NOT (x,t)

Phenomenological Physics

= Sight + Touch = Sight(c) + Force(f)

= c + f

(#)^2 = c^2 + f^2 + 2fc

c represents the force of light

f represents the force of mass

Note that f^2 characterizes Newton's Third Law of equal and opposite force $(-f)(-f) = ff = f^2$

2fc represensts the interaction of light with matter (mass)

If $2fc = 0$ then either c or f is equal to zero, or light and matter don't interact, in which case the multiplication product is not defined (have no common origin, are "affine", so that

$(\#)^2 = c^2 + f^2$

Relativity and Quantum Mechanics

$i = sqr(-1)$

Note that Log(_i)(i*2) = Log(_i)("-1") = 2 not equal Log(_1)(-1) = 1 = sqr[(-1)^2]

(Hint: I use the color magenta to keep track of imaginary numbers)

Special Relativity

$p = c + if$

$p^* = c - if$

$pp^* = c^2 - (if)^2 + ifc - ifc$

$(if)^2$ is imaginary, so doesn't exist

Relativity is solipsism (sitting quietly, not feeling anything)

Quantum Mechanics

$p = f + ic$

$p^* = f - ic$

$pp^* = f^2 + (ic)^2$

$(ic)^2$ is imaginary, so doesn't exist

(a blind person who sees nothing)

Note that for interaction of light and matter

$(\#)^2 = [pp^*] + 2fc$, where $2fc$ restores the interaction energy

$h^2 = 2fc$ characterizes planck's constant, but does not exist in either STR or QM

The "Time Dilation" equation

$p = (ct') = (ct) + (ivt')$

$pp^* = (ct')^2 = (ct)^2 + (ivt')^2$

Solve this equation for t' to yield $t' = 1/sqr(1-b^2)$, $v = v/c$

Note that this is either a momentum (m) or energy (m^2) equation for

$b = (mv)/(mc) = v/c$, $b^2 = (mv^2)/(mc^2)$

, i.e., true for all classical (Newtonian) mass provided that $m = m^2$

i.e., that $1^2 = 1$

but $Log(1^2) = 2 <> log(1) = 1$

(a unit integer cannot both multiply and not multiply itself) - Russell's Barber Paradox

"A barber in a village shaves all those and only those that don't shave themselves. Does the barber shave himself"

Again, $(\#)*2 = [(ct)^2 + (vt')^2] + 2(ct)(vt')$ not equal to $[pp^*]$

Light that doesn't interact with matter characterizes surface signals on radar antennas where there is no antenna resistance. Light within matter (electrons and holes) is characterized by an "effective" mass.

Note that Maxwell's derivation for $c^2 = 1/[eu]$ is derived from Ampere and Coulomb force law (experimentally). Einstein rejects this, and simply declares c constant (removing the product vt in the Lorentz transform equations with the specification that $x = ct$ iff $x' = ct'$ constant "velocity" w.r.t. space.

Define prime number $n = n(n/n)$, true for all n.

Goldbach's conjecture "Every even number is the sum of two primes"

Proof for Village Idiots:

$n + n = 2n$

n is prime and odd.

$f(x) + f(x) = 2f(x)$

Fermat's Theorem

$c^n <> a^n + b^n$ for all $(a,b,c, n) > 0$

Proof of Fermat's Theorem for Village Idiots

Let $c = a + b$

$c^n = (a + b)^n = [a^n + b^n] + f(a,b,n)$ (Binomial Expansion)

$c^n = [a^n + b^n]$ iff $f(a,b,n) = 0$

$f(a,b,n) <> 0$

$c^n <> [a^n + b^n]$ QED

(This proof was discovered within 2 months after the theorem appeared by a mathematics "c" student, who was then hustled away by men in black coats, never to be heard from again).

An arithmetic without multiplication is called a "Pressburger" arithmetic"

Note that Goedel syntax ordering does not include even numbers (products of sums)

The above analysis is true for all powers and multi-variables.

e.g.

(Quarks)

$\# = x + y + z = R + G + B$

$(\#)*3 = (R + G + B)^3 = R^3 + G^3 + B^3 + f(R,G,B)$

And so for quaternions... (sort of) ... :)

There is much more to this story, but I don't have the spacetime to write it here.