To brannenworks@Yahoo.com,

NOW

I not only **THINK** you are correct.

I **KNOW** you are correct.

I was having problems along another line with the fermions and this idea of yours completely solves it.

THANKS

My problem was solving the fermion's return to the same energy state took 720 degrees of rotation.

Bosons act like they are built like two equal gyroscopes spinning in exact opposite directions, each counteracting the other exactly.

Using *Ampere's 1825 Laws*, fermions seem to behave exactly like ONE gyroscope that precesses in some manner only 180 degrees as the fermion rotates 360 degrees.

This is why it takes the fermion two rotations to come back to its original energy state.

Thinking along the lines I think, this shows me exactly why we have quantization.

This is important scerir, you need to publish it in your own name.

Good luck

Daniel P. Fitzpatrick Jr.

*web page*

Sun, 11 Jul 2004 16:27:47 -0700 (PDT)

***brannenworks@Yahoo.com*** > wrote:

I've finally managed to derive the structure of the fermion families from my version of ether and the fermions end up naturally quantized and follow Fermi statistics, but I'm having a bit of a problem with the bosons. The problem is that my theory doesn't seem to have a reason why the bosons should be quantized.

Anyway, I began thinking about what it would be like if the world had quantized fermions and unquantized bosons, and I came to the conclusion that this would look pretty much like the world that we see.

That is, the photons would be unquantized vibrations of space-time, while the fermions would be quantized vibrations. As long as we're talking about photons, these vibrations might as well be called electricity and magnetism or E&M. If two fermions interacted through the exchange of energy held in the form of vibrations of space-time,

the quantization of the fermions would require the amount of energy in the "photon" to also be quantized. In this sense, the "photon" is defined as an exchange of energy through the vibration, not as a countable particle as such.

This would well explain the boson statistical nature of light, that's just what you get when you examine electric / magnetic fields and assume that the energy is proportional to the square of the field strength.

It would also explain why the vacuum has energy: it's impossible to get rid of vibrations that have less than enough spin energy to excite an electron. This would also give support for the stochastic electrodynamics (SED) interpretation of quantum mechanics, in that the leftover energy in an empty vacuum at any given frequency would naturally be about 1/2 of the energy of a photon.

Finally, given the ability of a photon to split into an electron/ positron pair, the presence of thermal photons would imply the presence of the vacuum zoo the physicists use to make calculations.

I saw a mention on one of your papers to the effect that you were looking more at low energy photons rather than gamma rays. I thought I would comment on this from the point of view of quantized fermions and unquantized bosons. It seems that if light were quantized, then the emission of exactly one gamma ray would be followed by the later absorption of exactly one gamma ray. If, on the other hand, light were only a wave, these numbers would differ based on statistics. I'm guessing that the answer is that the absorption of the light by one receiver causes a reduction in the probability of any other possible receiver getting hit, and that this reduction is done by a reduction in the E&M field. This is the equivalent of the "wave function collapse" of QM, and of course it is a nonlocal effect.

It would give the appearance of a quantized photon when there actually was no reason in the theory for the photons to be quantized.

I thought for a while that I had a problem giving unquantized photons a mass. The problem was that I give the fermions (bare) mass by having left and right handed versions become each other.

That is, a typicle vertex has a +z moving left handed electron annihilated, and a -z moving right handed electron created. If you set the vertex value to "m^2", the mass of the particle, and sum Feynman diagrams, the result is a renormalization of a massless propagator into a massive one.

The problem with this for bosons is that the presence of a vertex implies a quantization, as without a quantization, it is impossible to assign a vertex value. But the W+, W-, and Z paticles are massive.

I'm guessing that the solution is going to have something to do with the vacuum creating pairs of fermionic anti particles out of, for example, a right handed +z moving W+ wave, and then the particle / antiparticle pair annihilating and creating a new W+ left handed +z moving W+ wave.

This would also renormalize a massless propagator into a massive one, and would apply to unquantized bosons. This would give mass to the W+, W-, and Z, but I have a sneaking suspicion it would give mass to high energy photons as well. Maybe it doesn't because of the way the SU(2) symmetry works. I'll probably work on this over the next day or two.

Anyway, I was wondering if you had any comments on this, and I also wanted to know which of the particles other than the photon you figure aren't actually quantized.