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The Radius of the Electron is e^2

by Miles Mathis

In a previous paper I have shown that $e = 1/c$. If you haven't read that paper, your first response will be that the numbers don't work, but we have to do a dimensional transform, writing Coulombs in terms of meters and seconds, to compare it to c. I have shown that this is easier to do than you might think.

In a different paper, I showed that the radius of the electron at rest is 1.122×10^{-17}m. I corrected the Bohr equations to discover that. What I did not realize until today is that number is $1/c^2$. It actually required a derivation for me to discover that. I was re-reading my paper on Compton scattering, when I ran across this equation:

$r_e = r_\gamma/\lambda_\gamma$

I then substituted in my new equation $\lambda_\gamma = 8r_\gamma c^2$, to get

$r_e = 1/8c^2$

Since that equation applies to a moving electron, I lose the 8 to get back down to an electron at rest, giving me $r_e = 1/c^2$. I then checked that against my derived number in the Bohr magneton paper, and found a match.

But of course this means that the radius of the electron is just the square of the fundamental charge!

$\mathbf{r}_e = e^2$

Since I have shown that the fundamental charge is the charge on the proton but not the electron, this cannot be read to mean that the radius of the electron is its own charge squared. No, the radius of the electron is determined by the charge field recycled by the proton. The radius of the electron is determined by the charge field around it: the standard charge field. This must mean the radius of the electron is determined by charge pressure.

But since the charge field is not a constant, the radius of the electron must also be variable. Charge can be increased in any experiment by increasing the energy or number of photons present, in which case we might at first assume that the radius of the electron decreases due to this increased pressure. But that is not how it works, as we know from my reworking of the Bohr and Schrodinger equations. A greater charge field is quantized, and actually increases either the radius or the velocity of the electron in a quantized manner. It does this by transfering spin energies in real collisions. In other words, the photons gain energy from stacking spins, and then transfer this energy to the electron. If the electron is in an atomic structure, it increases energy by gaining velocity. But if the electron is free (as in a particle accelerator), the electron can begin stacking spins itself. With enough energy, the electron can become a meson and then a proton. I have provided the equations for this spin stacking. In current accelerators, much of the energy goes to linear motion, but if we could hold the electron still, just adding spin energy, we could actually create stable protons from electrons (or even photons).