return to updates

How to unify the constants G, *k*, and α

Feynman misses another one

by Miles Mathis

Since I have shown in previous papers that G and α are mass to charge transforms, what of Coulomb's constant *k*? How it that constant related to these other constants? Very simply, as it turns out.

Let's start with a closer look at Coulomb's constant *k*. Its current value is $8.988 \times 10^9 \ Nm^2/C^2$. But I have shown that Coulomb's constant is compromised by the Bohr radius and other quantum numbers, from which it is derived. Since the Bohr radius is off by 177x, each charge density is also off by that amount. So we need to multiply *k* by 177^2, to get $\mathbf{2.8 \times 10^{14}}$.

Now let us run the equation in a new and different way. Let us turn those charges into masses first, using the fine structure constant α. I have shown that the fine structure constant is actually a mass to charge transform in a recent paper. That makes our numerator transform in the Coulomb equation $[1/\alpha]^2 = 18{,}769$. If we divide by G, we get $\mathbf{2.8 \times 10^{14}}$. We have a match, as you see.

This means that

$$\mathbf{[1/\alpha]^2/G = \mathit{k}[177]^2}$$

If you aren't clear on this, we divided by G instead of multiplying because G normally scales smaller. Here we are forcing it to scale larger, to replace *k*, which scales larger. They are inverse size scalers, sort of. Where we would use *k*, we use 1/G instead.

So, the new Coulomb equation can be written in one of two ways:

$$1)\quad F = k\frac{[177]q_1[177]q_2}{r^2}$$

2) $$F = (1/G)\frac{[1/\alpha]q_1[1/\alpha]q_2}{r^2}$$

You will say, that can't be right, since it throws the equation off data by 31,000 times. No, it throws the equation off *assumed fields* by 31,000 times, but that only helps us solve other problems, like the vacuum catastrophe. It is due to the Coulomb equation that physicists think the force between the proton and electron is 10^{22} greater than it is. If they can make a mistake of 10^{22} times or 10^{120} times, they can certainly make a mistake of 10^5 times. Of course, to resolve this large correction with other accepted numbers and experiments, I have to correct them, too. But my readers know that I have done that as well, and continue to do it.

Am I saying they have mismeasured the force F by a factor of 10^5? No, I am saying they have mismeasured the unified field in this particular problem by that much. In other words, it is the charges in the equation they have wrong, as well as the constant. You see, if you lower the value of q_1 and q_2 by 177 each, while at the same time making my other corrections, the force stays the same. So in equation 1, you have to correct both k and the q's. In equation 2, you correct only the q's. This means the correction is field correction of only 10^2.

Yes, the q's are actually 177x smaller than we think, and that is because they are unified field numbers, not just charges. They are smaller because 1) they are being resisted by gravity, 2) the charge part has already dissipated more than we think before the first measurement. Remember, in the Coulomb experiment and experiments like it, charge is applied to small pith balls with an electrified pinhead. We assumed up to now that we can just apply a charge, and whatever charge we applied the body now has. But that isn't how it works, as we can now see. Charge transfer is not perfect. Charge leaks into the field about 177 times more than we thought. One reason is because the Bohr radius is 177 times larger than we thought. That is where I got the number 177, remember? Bohr made many fundamental errors in his first equations, and they have never been corrected. A second reason is because we have misunderstood what the Bohr radius stands for. We have been told it is the orbital distance of the first electron. No. Although electrons do circle protons or alphas in the nucleus, they don't orbit the nucleus as a whole. So that definition of the Bohr radius is not right. The Bohr radius was always quite large, and now I have made it 177 times larger, so it can't have anything to do with electron orbits (or clouds). The Bohr radius is simply the effective limit of the boosted charge field, as it is recycled and emitted by the nuclear baryons and alphas. It is the limit of effective electron capture, but it is not the actual orbit of any real electron. You will have to study my previous papers to understand this.

Now, because the Bohr radius is larger, the charge (in experiments like that of Coulomb) is smaller. Why? Because charge, as we measure it, is a function of photon density, and photon density decreases with increasing distance from the nucleus. The analogy is the Earth's atmosphere, which decreases in density as we go out from the Earth. The density decreases simply because the volume increases. The photons are moving into more space, so of course the density drops. It drops by the inverse square because the surface area equation drops by the inverse square.

In other words, the charge density is 177 times smaller than we think because its baseline is smaller than we think. You can't transfer charge with 100% efficiency because the nucleus is not a point. Current theory knows that, *sometimes*. Charge cannot be transferred with 100% efficiency because once it leaves our device (the pinhead or whatever it is) and enters the atoms, it would have to spread out, at least to the extent of the radius of the nucleus. *Any* spreading out is a loss of charge density. But since the Bohr radius is 177 times larger than we thought, the charge is spreading out 177 times more than we thought. The Bohr radius is determined by the charge density in the nucleus, so we may assume that the nucleus is also on the order of 177 larger or less dense than we thought.* Regardless, and for whatever reason, we have overestimated the charge transfer efficiency by 177 times. That is the fundamental problem here.

This will beg other questions, such as, "Haven't you been telling us the charge field is much stronger than we thought? This seems to refute that, since you are now telling us the charge field is 177 times *less* dense. Which is it?" There is no contradiction, because I am not talking about the ambient charge field here, I am talking about an induced charge field. When we transfer a charge to a pith ball with an electrified pinhead—as in the Coulomb experiment—we aren't creating the ambient field. The ambient field pre-exists any experiment. And yes, it is very much stronger than we realize. No, here we are boosting that ambient field by some amount over its normal baseline. We take that baseline as zero, then transfer *extra* charge with our pinhead. An electrical current, as we might produce in a wire, is not the ambient charge field, it is an artificially enhanced charge field, artificially directionalized. That is what we are adding to our pinhead and then to our pith balls. It is this artificially boosted field that we cannot transfer with 100% efficiency, and that we have overestimated by 177 times. The ambient field we have *underestimated* by millions of times (or by infinity, since it has no real presence in current field equations).

*Actually, in my paper correcting the Rutherford scattering equations, I have shown the nucleus is probably more like 137 times larger, not 177. I have yet to resolve the difference between Rutherford's errors and Bohr's errors, but I suspect it has something to do with nuclear density variations. Rutherford was working with gold and Bohr was working mainly with hydrogen.