Surely one of the most under-analyzed and poorly analyzed particles in the quantum zoo is the neutron. The mainstream has mainly ignored it, focusing decades of attention on the electron. But of course the mainstream has mainly ignored all mechanics, being more interested in playing with their fancy maths. After more than forty years of toying with quarks, the mainstream still has not linked quark construction to charge. I have shown that this linking should have been job one, and in current theory it still sitting in the garage on blocks.

What I mean is that in building baryons with quarks, QCD should have been able to give us some more information about how and why the particles are charged. What is charge? How does the baryon create it? Instead, QCD has continued to dodge both mechanics and the creation of charge for almost half a century. Charge is no more transparent as a concept than it was in the 1830's, with Faraday; and in many ways it is now less transparent. The theoretical holes of Faraday are still there, unfilled, but QCD has hidden them under heavy mathematical blankets and a Dadaist theory. Charge has gone from undefined to virtual, but either way it is still non-physical. Charge is now so far underground that physicists no longer bother to include it in the field. At the macrolevel, it is nothing but a forgotten ghost—which is why we need dark matter to take its place.

In my particle unification papers, I have shown that all quanta are stacking spins, and that—above the photon level—this stacking is used to actually channel the charge through the particle. That's right, electron and protons and neutrons all recycle charge. I have shown that electrons and protons pull in photons at the poles and emit them at the equator. But so far I have left the neutron only partially defined as a charge recycler. I have shown that its stacking of spins blocks the normal emission at the equator, which is one reason why we call the neutron neutral. But of course the charge cannot just be swallowed. If charge weren't released in some way, the neutron would explode from charge pressure.

While that is true, it hasn't been a priority up to now. I had other things more pressing to hit first, as you have seen if you have been following the show. But now that I have used the neutron to “block holes” in my nuclear diagrams, I have begun fielding questions about the neutron. All these questions could be boiled down to: what is its charge profile?

Well, just like the electron and proton and mesons, the neutron pulls in charge at its poles. But the way the four spins of the neutron stack prevent charge from escaping in the normal way at the equator. I have shown exactly how this works in a previous paper. Charge gets funneled back to the core or
central spin axis. Of course from there, it can only escape back out one of the poles. I assumed that this would be obvious, but nothing is obvious concerning baryons. And it needs some clarification even for those who had come to this conclusion on their own.

Some current “fringe” theorists have proposed that the neutron seems to act like a dipole in ways the proton doesn’t. This proposition is based on several experiments that are otherwise difficult to make sense of. I will show here that they are at least partially correct. I have not studied these theories with any rigor, so I cannot say how much my charge recycling will help or harm their theories. For now, I will simply show the mechanics. Later we can decide whose theory was closest to the real mechanics.

What happens with charge channeling is that the photons, being trapped, exit the neutron by the opposite pole they came in. But they don't just move straight through along the major spin axis, you see. They have to go in, rattle around in the neutron, taking the four given spin paths, and then exit in an orderly manner. If the charge field is mixed (antiphotons as well as photons), the photons will go in the south pole and the antiphotons will go in the north. Then they go out the other pole. As they leave, they collide with photons coming in, and we get spin cancellations. If the charge field is balanced—same number of photons as anti-photons—then we get a near-total spin cancellation. This means we have a magnetic field cancellation, and the neutron is then neutral regarding magnetism. This despite the fact that we do have huge numbers of photons being recycled.

However, even in that case, the neutron is not neutral regarding electricity. Remember, the spin of the photon creates magnetism, and the linear motion c creates electricity (given ions in the field). Photon collisions affect only the spins, not c. So it is the sub-magnetic field that is diminished or cancelled, not the sub-electrical.

This means that in a balanced field, the neutron will be non-magnetic, have no normal emission at the equator (like a proton), but it will have a strongly directionalized sub-electrical field, along the poles. If free neutrons align or are aligned with an ambient electrical field along their poles like this, they can greatly increase it. But in most cases they will not be aligned, and the power of the neutron will be wasted and unseen.

That was a balanced field. But here on Earth, we don't have a balanced charge field. We have a very unbalanced charge field, which is why the magnetic field is strong here. We have a lot more photons than anti-photons, so we don't get total spin cancellations. This means that neutrons will only tamp down the magnetic field of the exiting photons, but they will not cancel it. So neutrons in our local field will be less electrical and more magnetic than the neutrons we were looking at above. They will be less electrical because they will have a weaker dipole: they are missing a large part of the other pole. But they will be more magnetic because they won't have the anti-photons cancelling all the spins. Even then, neutrons would be expected to be less magnetic than the ambient field. This is because some anti-photons will be present. No field is totally unbalanced. Therefore, the magnetic field in and right around the neutron is weaker than the ambient field. Again, this is why we call the neutron neutral. It is not completely neutral, it is relatively neutral.

When neutrons are in the nucleus, they act very differently than when they are out of it. In the nucleus, neutrons are pushed by the charge field to take positions where their axes are 90 degrees to the charge channel. This makes them charge blockers in the nucleus. I call them “stoppers” in my other papers, because that is how they tend to act in the nucleus.

You can see why they would act this way just by comparing them to the protons. The protons are
channeling the charge through the nucleus like little fans. But since they are spin fans, not angled blade fans like room fans, they channel sideways. In other words, they channel in the plane of their spin. Charge moves in the equatorial plane of the protons. Since neutrons are spheres the same size as the proton, and since they also spin on an axis in the same way, the charge moving through the nucleus will make them spin just like the protons. The neutrons and protons will align their axes, in other words. But the neutrons are recycling their charge up and down instead of to the side. So they not only do not take part in the charge channeling, they can actually stop it. They act like little dams or walls in the nucleus.

However, if we take them out of the nucleus and away from the influence of their brothers the protons, they can begin channeling charge almost as effectively. But to do this, they have to be polarized in the right way. And to polarize them correctly, you have to know what they are doing as a matter of mechanics. You have to know what induced field will turn them, and how it will turn them. The above analysis should help you do that.

I will have more to say about neutrons in future papers.