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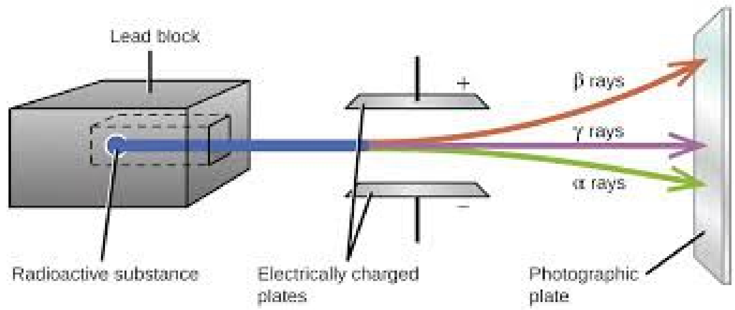
What Rutherford really proved about the Electron



by Miles Mathis

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As my loyal readers may know, I am not nearly as interested in the electron as most physicists and chemists are. I gave up on electron bonding theory long ago, for reasons I have given elsewhere, and in fact that is what allowed me to discover many of the things I have. I wouldn't have discovered charge channeling by the nucleus if I had remained yoked to electrons like most of my ~~colleagues~~ contemporaries. For this reason, my papers on electrons are few. I mention them occasionally, only to dismiss them as minor players in most phenomena. But now I have finally been forced by circumstance to return to the early years of modern physics, to address what some would call primary and fundamental data. Many will not understand why I haven't addressed this sooner, and I can only respond that I get to things when I get to them. In short, I didn't have an answer until now, so now is when I give that answer.

Some will not be satisfied with that, I know. They will reply that I should have kept my theory to myself until I could answer these primary questions. But I don't see it that way. No one can answer all questions in these realms, especially revolutionary theorists, so in my opinion it is best to start with what you have and work out from there. I was always confident that I could eventually answer the important questions, so my job—as I saw it—was to answer as many questions as I could in the beginning, letting the others hang for a bit. This question is one of those that has hung.

Rutherford's experiments on radioactivity in around 1900 showed three forms of radiation, which he named *alpha, beta,* and *gamma*. Before I get into it, I want to mention something incredible I tripped across in this research. To update my knowledge—and to prepare for future papers—I bought a new general chemistry book. Basic chemistry hasn't changed much since the 1970s and 80s, when I was first studying it, but I thought I would get a newer book anyway. Closely reading college textbooks for inconsistencies has yielded many of my insights, and I thought I would do that again here. So I purchased a used copy from Ebay of Brown, Lemay, and Bursten's book. On p. 39 of this textbook, we find this:

He [Rutherford] further concluded that gamma radiation is high-energy radiation similar to X-rays; it does not consist of particles and carries no charge.

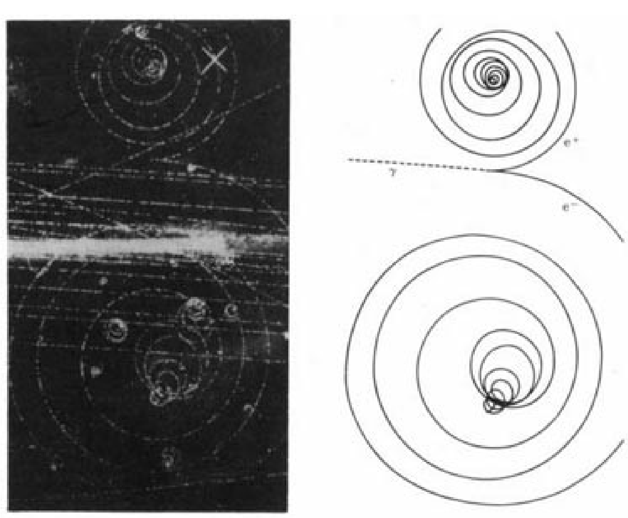
What? Gamma radiation does not consist of particles? But are the authors telling us Rutherford believed that, or are they telling us that as a fact? It is difficult to tell, but since this is the only mention of the question in the entire book, you would think they might have taken the time to tell their students Rutherford was wrong about that. Due to the photoelectric effect, we know that any light radiation is composed of particles. So it is very curious that this common textbook is spreading misinformation on such an important subject.

The "no charge" claim is likewise false, though it is somewhat less startling than the "no particle" claim. We now know that the gamma rays are bent very little by the field simply because they are going so much faster than the alphas or betas. Because of the speed of light, the photons are in that small field for much less time than the larger slower particles. In short, the field has *no time* to bend them. The much smaller size of the photon also makes it more difficult for an EM to work on. The photon is a million time smaller than an electron and a billion times smaller than a proton. But since then we have come to know that light IS affected by EM fields, just in much smaller ways than ions.

Anyway, back to electrons. Of course Rutherford found that in a common magnetic field, the electrons were bent the opposite way of the alphas. That never seemed like a problem to the early theorists, since they had already discovered two kinds of electricity: positive and negative. So they simply assigned the electrons to one and the alphas to the other. But for me it has always been a problem, since in my theory there are no attractions. For me, charge is always an emission, and both protons and electrons are recycling and emitting photons. So why would one be bent the opposite way to the other?

Well, I could see immediately that it had to be caused by spin. Obviously, the electron was spinning opposite to the alpha, and this was causing the opposing bends by straight mechanics. But if the electron and alpha are initially in the same charge field, why would one be spinning opposite the other? This is what I didn't fully understand until recently.

Let me start by reminding you that my charge field is a split field, being composed of both photons and antiphotons. Basically, these are the same particles, but the antiphoton is upside down to the photon. In other words, if the photon is spinning left, the antiphoton is spinning right. Otherwise, they are the same. On the Earth, we have about twice as many photons as antiphotons, as we saw from this mainstream diagram I have published many times before:



That is a photo+diagram of the spin-outs in pair production, and you can see the spiral of the positron is almost exactly half the radius of the spiral of the electron. This is because the electron is being spin-tamped by antiphotons, while the positron is being spin-tamped by photons.

Since the ambient field here on Earth contains both charge and anticharge like this, any nucleus here must recycle both. I have shown in many previous papers that the nucleus is like a tiny charge engine, recycling charge through the nucleons. This recycling of charge through the nuclear interior is what ties the nucleus together, saving us from the need for a strong force. But the nuclear charge engine isn't just polar, it is what I have called **bi-polar**. Like the Earth, the nucleus pulls charge in on the poles, usually releasing it at the equator. Also like the Earth, the nucleus pulls in charge at one pole, and anticharge at the other. Since we know here on Earth that the south pole is stronger, I have (usually) assigned photons and charge to the south pole of the nucleus, and antiphotons and anticharge to the north pole. It is sort of arbitrary which assignment you make, since there is no true up or down in space. It just depends on your point of view.

In the beginning, to simplify matters, when I diagrammed the nucleus I diagrammed only the protons. I left the neutrons out of it. This is because the major charge streams can usually be determined by the protons. Later, in more complicated problems, I began including the neutrons in the architecture. You saw this last week, when I diagrammed Graphene. There, it was necessary to diagram the neutrons to discover some of the finer points of the architecture. But even then, I left the electrons out of it. They weren't necessary.

Here, we have to bring the electrons back in, in order to understand what Rutherford was really seeing. I have shown in previous papers that although the electrons don't orbit the nucleus, they do tend to pair up with protons. In this question, we will only have to look at the pole electrons, which I have previously called valence electrons—to match mainstream theory. These electrons do indeed take part in many phenomena, including ionization and bonding, so they are not completely unimportant. They don't *cause* bonding in any way, but they do take part. Because they sort of clog up the charge channels at the poles, the nucleus finds it efficient to blow them out of there before bonding. I have described electrons as being like pingpong balls in a sink. They want to follow the water down the drain, but they can't because they are too big. So they simply circle with the water close to the drain. Although they are drawn into these eddies by the charge stream, they aren't actually adding anything to the architecture. In fact, they are impeding it a bit. For elements to bond, those electrons have to be jettisoned. This creates a stronger bond, and explains why elements ionize before bonding.

To be thorough, the electrons at the north pole are pairing up with the protons plugged in there. The electrons aren't plugged directly into the north nuclear pole, in other words. No, they are plugged directly in to the pole of the proton there, which is then plugged into the north pole of the nucleus.

Now, if we take a closer look at these electrons on the nuclear poles, we notice something amazing: the electrons in the south pole can't be exactly like the ones on the north pole. Since the north ones are held by anticharge, and the south ones are held by charge, *they must be spinning opposite to one another*. In a very important sense, the electrons at the north pole are positrons.

Or, they would be, if we defined the ones in the south pole as electrons. But what if we define the ones in the south pole as positrons and the one in the north pole as electrons? Why? You are about to see why. Since charge predominates, the stronger charge stream will be coming in the south pole. So the south pole is the female plug in this scheme, while the north is the male plug. That is where charge is coming *out*. You will say anticharge is coming in there, which is true, but only in about half the amount. So in bonding, it is much more efficient to blow the electrons on the north pole and bond there. They are much less tightly bound to start with, you see. And because they are less bound to start with, they are much more likely to be released in non-bonding situations as well.

Which bring us to radioactivity. Radioactivity isn't about bonding, it is about decay. It is about unstable nuclei disintegrating into component parts. Therefore, we may assume that when a nucleus decays, the electrons on the north pole will be released first. They will go before any "electrons" on the south pole will go. They are bound in half the amount, so they will go first.

What this means is that in both bonding and decay, we see a strong preference for releasing electrons on the north pole of the nucleus. Therefore, we may deduce that most free electrons in any given field came from the north pole.

And that explains why they are spinning opposite the baryons. Only the south pole "electrons" will be spinning the same direction as the nucleons. They are in a charge eddy entering the nucleus, so they will be spinning the same way as the nucleus as a whole, the alphas in it, and the nucleons in the alphas. But the north pole electrons are in an anticharge eddy, and are therefore spinning opposite the main field.

What this means is that the "electrons" in the south pole of the nucleus are technically. . . **positrons**. Many positrons in mainstream diagrams are simply mistagged as electrons, since in many cases the mainstream doesn't know the difference. You will say that if that is so, we should see many more positrons than we do. However, most of our experiments aren't set up to differentiate electrons from positrons, so that argument doesn't fly. Also, it is quite easy to turn a positron into an electron, and vice versa, since all you have to do is flip it.

I think you can now see why the mainstream missed this. Because they never discovered charge channeling by the nucleus, they never realized that atomic leptons are taking their places in and around the nucleus itself. They are pairing up with protons in the nucleus. Because the mainstream discovered the electron before the nucleus, and because they needed to explain molecular bonding from the early stages, they rushed the theory, manufacturing electron orbitals to do this. Although we never had any evidence of orbitals and lots of evidence against them, the theory was kept and protected because it propped up all molecular bonding—and therefore all physical chemistry. And once you have these electron orbitals, the question of some of them being positron orbitals never raises its head. Since most of the free leptons we see in experiment are electrons, why even bother coming up with a theory of positrons? Plus, after the orbital is redefined as a mathematical probability cloud, the possibility of such a question is buried even deeper. Clouds have no possible chirality, and the very idea of real spin has long since been jettisoned as a nuisance. Given "intrinsic" spin in a matrix, who is going to be rash enough to even ask such questions?

Obviously, they hoped the answer to that would be "no one". And, conveniently for them, until I came along, that was the full answer. Absolutely no one thought to question the dogma. No one questioned orbital theory, so no one could possibly question the place of the positron in all this.

You will say that if I am right, nuclear leptons should run about 50/50. Yes, but since most free leptons are electrons, that explains why most leptons *we see* are electrons. We don't see the nuclear positrons, since they mostly remain in the nucleus. They are bound twice as strongly, so with no other considerations, we would expect to see them half as often. But we do have lots of other considerations.

For instance, another common source of free electrons is ionized gasses. Gasses are often ionized whether they are preparing to bond or not. Electrons can be stripped from gasses in any number of ways, and as we have seen, north pole electrons will be stripped preferentially. In any environment such as that of the Earth—where higher temperatures create more gasses and more ionization—we would expect to see far more electrons than positrons, for this reason.

In fact, we now have strong experimental evidence I am correct. Ultra-intense lasers have been used to irradiate a gold target, producing very large numbers of positrons. There is no indication of beta decay or the weak force in this phenomenon. Rather, it appears to me that the energy of the laser is able to knock positrons directly out of the south poles of the gold nuclei. Properly aimed, the laser may even be knocking positrons out of other positions as well, including positions in the carousel level. Because hundreds of billions of positrons are produced this way—not just a few—it strongly indicates the positrons were in the gold nuclei to start with.

I remind my readers of several things at this juncture. It is known that positrons are created in radioactive decay, but currently they are said to be created by invoking the weak force (mainly in beta decay). I have shown you this is completely *ad hoc* as well as unnecessary. If they are already in the nucleus, their appearance in decay doesn't have to be explained as a creation by some new-fangled process. They aren't created, they are simply freed from the south pole and other normal locations in the nucleus. And, as we will see below, in most cases, the leptons "produced" in decay aren't ionized at all. They aren't freed from the nucleus at all. They are free both before and after the decay.

Also, in my research I rediscovered the fact that in the early years, positrons were explained as electrons **going backwards in time**. It wasn't just some internet cranks proposing this, remember, it was people like Stuekelberg, Feynman, Wheeler, and Nambu. So this gives you some indication of the state of the art in physics theory in the 20th century. These famous physicists were prepared to propose time reversal before they considered opposing spins. How could they possibly do that? How could anyone overlook opposing spins as the answer here, instead proposing time reversal? You should really ask yourself that question and demand an answer. In my opinion, there can be only two possible answers: either these guys were absolutely awful physicists, or they were misdirecting us away from the right answer on purpose, in order to hide military secrets. Whatever the real answer is there, you have to remember that time reversal has not been jettisoned as irrational or unphysical to this day. It is used to "explain" things all the time now, and it remains part of the current theory of positrons. As they admit at Wiki:

The backwards in time point of view is nowadays accepted as completely equivalent to other pictures, but it does not have anything to do with the macroscopic terms "cause" and "effect", which do not appear in a microscopic physical description.

Typical new-physics slop, in other words. Physics from people who not only can't do physics, but who can't write in the English language. Notice that it is not only time reversal that is allowed here, it is the breaking of all other rules of rationality. We are told that cause and effect do not appear in quantum mechanics. Which is informative, seeing that the field of physics was originally built on cause and effect. Mechanics is practically defined as the study of cause and effect on real bodies, so ditching cause and effect in a field entitled quantum *mechanics* can only be called wildly perverse.

You can see the perversity in the very next paragraphs at the Wikipedia page on positrons, where they admit the particle was first observed by Skobeltsyn in 1929. And how was it observed? It was observed in a cloud chamber, curving the opposite of an electron—as in the photo above. Now, how could that opposing curve be explained by time reversal? Are we being told that time is reversing in only one part of that photo? Amazing, isn't it, that a camera going forward in time can photograph particles going both forward and backward in time? But seriously, given that we are trying to explain spirals here, how could anyone miss the spin explanation? To propose time reversal rather than spin as the explanation for that, you would not only have to be incredibly stupid, you would have to be insane. It simply isn't credible. It is beyond belief that a famous physicist would do that.

As a bonus, we will take a quick look at the decay of Potassium-40, which is known to produce positrons. I append this analysis here because it shows us that even in the case of common positron production, the positrons are *not* coming from the protected south pole of the nucleus. Although positrons exist there, they aren't freed in these common decays. That will show you why positrons aren't seen as often as electrons. Potassium-40 decays about 89% of the time into Calcium-40, but only decays into Argon-40 by positron emission about .0001% of the time. So what is happening there? As I showed in my old paper on beta decay, in this process we do not have a transformation but a hit. The nucleus is hit by a free lepton, causing a spin reversal. In almost all cases, the nucleus is hit on the weaker north pole. When Calcium is produced, what we have is a high-energy free lepton colliding with a neutron on the north pole. If the spin of the lepton is opposite the spin of the neutron, the spins "catch", reversing one another. As I showed in that older paper, a neutron whose outer spin reverses is no longer a neutron. It is now what we would call a proton, since the charge channeling profile of the baryon has changed. Whereas before, the outer spin prevented release of charge at the equator of the particle, the spin reversal now allows that release of charge. A baryon that can release charge at the equator is what we call a proton.

The reverse transformation happens with the production of Argon, since in that case the proton on the pole is hit by the lepton, becoming a neutron. This happens less often because the proton is the stronger particle. Precisely because the proton has this equatorial emission profile, it tends to drive free particles like leptons away (except those that are caught in the proton's own polar charge eddy**). The neutron, having a weaker charge profile (see its magnetic moment), is more prone to be hit. It is emitting, but only on its poles. Since the poles are a small part of a spherical particle, it is much easier to hit a neutron. Therefore, any incoming particle is more likely to collide with the neutron.

We can even do the simple math, showing why a neutron in Potassium is hit 89% of the time. The magnetic moment of the neutron is 68.5% that of the proton. But in Potassium-40, we have two neutrons on the poles and one proton. Which makes the odds of hitting that proton in this field 31.5/3 = 10.5%. Or 89.5% of the time a neutron will be hit. We were trying to match 89.3%, so we are very close. The reason this is just an estimate is that the three nucleons aren't on the same pole. One neutron is on the north pole, while one proton and one neutron are on the south pole. This skews our simple math somewhat. But the near number match does tend to confirm that my nuclear diagram of Potassium is correct. Otherwise we wouldn't be able to estimate the answer so easily.

I will be told that in most cases, Argon is produced here by electron capture. Only rarely is Argon produced by positron emission. Yes, but notice that electron capture and positron emission are almost the same thing. The electron and positron are opposite, and the words capture and emission are opposite. So, what we are seeing is *not* that the positron emission happens less often, but that it is harder for us to detect. It is hard for us to detect the positron leaving the site of this impact, so we simply assume it usually isn't happening. But it is *always* happening. Only a fraction of the time will we be able to detect the positron leaving. Why? Because in leaving, it overwrites the track of the incoming electron. Since we detect these particles by the tracks they leave, if it overwrites the electron track perfectly, we can't detect it. This means there is no such thing as either electron capture or positron emission (during beta decay). All these events are collisions, not captures or emissions.

What this means for us here is that the positron "produced" by Potassium-40 isn't ionized from the south pole. It is a free electron that has been flipped by a collision. This is further indication that electrons are preferentially released both in ionization and decay, explaining the greater numbers we see in the ambient field. It thereby explains why we think positrons are relatively rare when they aren't. In most cases they are tied up at the protected south pole (or in equally protected carousel positions). And even in cases like beta decay we miss the positron, since we can't see its track. In the production of Argon-40, we are failing to detect almost all the positrons produced by the collision.

You may still not understand why the south pole is more protected than the north. Again, this is where charge is coming *into* the nucleus, in a tight vortex. This incoming charge acts like a strong wind, or a strong glue. The particles on the south pole are bound tightly by that charge wind. The particles on the north pole are bound half as much, in the first analysis. But further analysis shows they are bound even less in many situations. For instance, if we have any through charge (pole-to-pole), that summed through charge will be coming out the north pole. That through charge may weaken the north pole bonds even more.

You will tell me that if electrons are more weakly bound on the north pole, the ones already there should be jettisoned in beta decay, during the hit. Or, they should be when the proton is hit, at least. Electrons don't pair with neutrons, so they won't be affected by a neutron hit. But if a proton is hit in beta decay, shouldn't its electron also be affected?

Well, to start with, in looking at Potassium, the proton is on the south pole, so it *isn't* bound weakly. And anyway, these nucleons in beta decay don't become unbound, do they? No, they only reverse the outer spin: they don't get bounced out of the nucleus altogether. It would take a much stronger hit to carve a nucleon out of the nucleus completely, and we aren't dealing with those energies in these beta hits. Which explains why the electron is also not jettisoned. Yes, its nucleon flips, but the electron stays with it. "But wouldn't that mean that an electron is now paired with a neutron? If the proton's outer spin reversed, it is now a neutron." Yes, it appears that with Argon-40, we now have an electron at the south pole that is not paired with a proton. It is either pairing up with the neutron, circling its pole, or it is just generally stuck in the charge vortex of the south pole. This may help us explain some of the finer points of Argon-40 in future. It might explain an odd characteristic in bonding. . . except that Argon is a noble gas, and doesn't normally bond. But in the decay of other elements like Thorium or Uranium, it may help us understand the finer points of their charge streams.

By the way, given the natural decay of Potassium into Calcium or Argon, why does anyone still think alchemy is witchcraft? It should be quite easy to create Gold from either Mercury or Platinum in a similar way, simply by flipping a baryon. You start with an isotope of Platinum that has an extra neutron on the pole and then you hit it with a positron. Or you bombard the pole of Mercury with electrons, in order to flip a proton. I have no doubt Newton accomplished this in his own day. He was master of the mint, remember? What better place to hide newly created gold.

On the way out, I wish to stress once again that my method of building baryons with stacked spins explains away the CP violation of baryogenesis—also called baryon asymmetry. I mention it here because on the Wikipedia page for the positron they again try to sell this CP violation as something that has been proved, and as a big mystery. Yes, they admit the cause of this asymmetry is currently unknown. But in my field, this asymmetry is no mystery. As we have just seen, there is no mystery with position/electron asymmetry: the positrons at the nuclear south pole are never detected by us as positrons simply because they are protected. Likewise with the nucleons tied up in the nucleus, some of which might be antiparticles without us knowing it. But the greater cause of asymmetry is the ambient charge field of the Earth, which is asymmetrical to start with. Remember, we are near a Sun that is spinning one way and not the other, inside a galaxy that is spinning one way and not the other, so I don't know why anyone ever thought our ambient field here would be symmetrical. I can only suppose it is because they don't assign these symmetries to real spins, so it never occurred to them to do that basic analysis.

We should have expected symmetry only globally, never locally. In other words, if we sum the spin of all galaxies, we should expect a sum to zero. But since each galaxy is spinning in only one way, *inside* each galaxy we should have predicted a high degree of non-symmetry as regards spin.

As for why the split here is about 2/3rd to 1/3rd, that has to do with the specific composition of our Solar System, and our distance from the Sun. If we were positioned close to our Sun like Mercury, with no other planets in the system, the asymmetry would be far greater, and we would find far fewer antiphotons. But, as it is, we find ourselves in the middle of a charge loop, with charge also coming back to the Sun from four very large planets. This acts to split the field, making it strongly bi-polar. This bipolarity then acts to increase the magnetism of elements like Iron via the process of through-charge, as well as causing many other effects. It is probable that life relies on this charge asymmetry, and cannot exist without it. Which means that in our search for life in other systems, we should be looking for planets like Earth: ones that exist between their stars and large outer planets.

We can do the easy math here as well. The four big planets have .14% the mass of the Sun, which seems too little to contribute 1/3rd antiphotons. And it would be far too little but for one fact: their emitted charge fields are compressed as a matter of density both in emission and as they return to the Sun. Here is what I mean: the planets are at an average distance from the Earth that is 23 times that of the Sun. Therefore the charge field is compressed 23 times more than the Sun's outgoing field, as it returns to the Earth and Sun. Charge coming back to the Sun must follow field lines set by the outgoing field, you see. So as charge going out becomes less dense, charge returning must become more dense.* But the field was already compressed by the planet, before it even began its return journey. To emit a charge field, the planet first has to recycle it, pulling it through its body. For this math, we can look only at Jupiter, since Jupiter provides most of the radius and volume of the four big planets. Jupiter has a radius about 1/10th that of the Sun, so although Jupiter has far less total charge, any charge passing through it will be compressed 10 times more than the Sun. With just these facts, we can estimate the return anticharge as a fraction of outgoing charge:

.14% x 23 x 10 = 32.2%

That number is somewhat too low precisely because we didn't include charge compression by the other three big planets.

It is also worth repeating that my mechanics forbids the sort of "annihilation" we are now sold. We are told that when a positron and an electron are slammed together in a particle accelerator,

The high impact energy and the mutual annihilation of these matter/antimatter opposites create a fountain of diverse subatomic particles.

As you see, that is also strictly illogical, and always has been. It contradicts the definition of "annihilation", which means to come to nothing. *Nihil* means nothing. If a fountain of particles is the result of the impact, then we have no annihilation. We have an explosion into fragments, which is not an annihilation. What we actually have is a stripping of outer spins, so that leptons are decomposed into their constituent photons. Nothing is annihilated or created.

*I have been told that by this strange mechanism, more charge could return to the Sun than ever left it. But, again, we are looking at charge *densities* here, not total charge. The big planets obviously can't capture all of the Sun's emitted charge to start with, so there should be no talk of them returning more charge than they received. What I am calculating is the densities of returning charge as a fraction of outgoing charge. That solves the problem for us, because of course the Earth is also not capturing all the Sun's charge. It is capturing a small sliver of outgoing charge and a small sliver of incoming charge, so we just have to calculate the relative densities of those fields. It is those densities that will determine what is seen and experienced here on Earth.

**This means that for leptons to plug into a proton's pole, they must come into the vicinity at a lower speed, with a lower energy. In this way they can catch the charge vortex there and be *drawn* in. The lepton's energy in position is then determined not by its previous energy, but by the energy of the charge stream holding it in socket. Higher energy leptons will either blow by altogether or will impact the baryon in a crash of some sort—as we see in beta decay.