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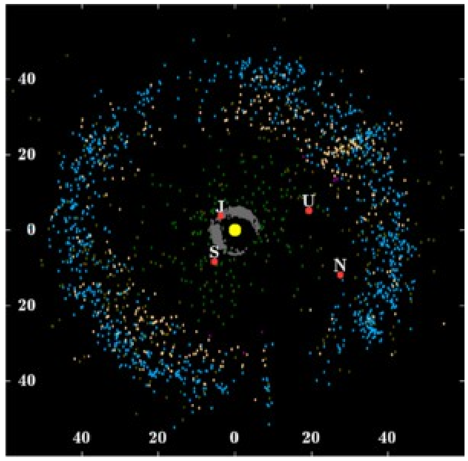
THE KUIPER CLIFF



by Miles Mathis

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Some are wondering why my production of science papers has fallen off in the past few years. 2018 was actually an upswing, with 25 new papers, but that doesn't begin to compare to earlier years, when I was publishing 80 a year. Honestly, it is because the field of physics is beginning to bore me. I have already solved most of the big substantive problems in physics, as you can see by going to [this page](#) at Wikipedia that lists them. That page is a pretty good match-up to my homepage, which addresses the bulk of them. I say "substantive" because some of those problems are manufactured, as with the supersymmetry problem or the Yang-Mills problem. In Yang-Mills, for instance, the problem begins "Given a compact gauge group. . . ." But I don't accept that given. I have shown we don't need mathematical formulisms or manufactured operators to ditch "redundant degrees of freedom" in the Lagrangian. We just need to unwind the Lagrangian itself, understanding better what the terms stand for. Primarily we must understand **the Lagrangian is a Unified Field Equation.** In this sense, I *have* solved the Yang-Mills problem, by [correcting the Lagrangian directly](#). They should have already awarded me that Millennium Prize, and most of the others, but I am not holding my breath. I can see that the Millennium Prizes—like the other big prizes—were just created as another wall, since in refusing to admit these problems have been solved, the judges and sponsors can stall all progress in the field, protecting all the mis-given Nobel Prizes of the past century and the mis-taken fame of those currently at the top of the field.

Actually, even that is to state it too nicely. Modern mainstream physics and physicists don't just bore me . . . they disgust me. I got out of the field of art because I found it was inhabited by the vilest people on the planet, and I have since discovered it is the same with physics. I wouldn't work with these people for all the money in the world, and I begin to feel defiled just knowing they are reading my papers. I feel like a beautiful young woman undressing in a room filled with ugly and diseased old men.

Which is just to say that my innate sense of generosity and *noblesse oblige* is wearing thin. So if these papers soon dry up altogether, you will know why. Fifty-five years of unrequited goodwill may be about all I have.

I know what the response to that last paragraph will be. I will be asked how I can expect to be given consideration by those I am attacking all over the web. I will be asked how that can be called "goodwill". Well, the goodwill is in the gifting of my ideas to the world for free, with no demands for payment or patent. But I had already seen the lay of the land by about 2003: those in positions of power in physics (and all other fields) were never going to be gracious to me or give me fair consideration. There was no chance of advancement via the normal channels for someone like me. So I took the only path I could, walking around and over the roadblocks, kicking the barriers aside as I went. Since many of these barriers were human, they felt my shoeprint as they deserved. Which is to say they started the battle and therefore can never paint me as the aggressor. I didn't want the fight, but I am not one to back down, either. I have a path to walk, and I will walk it, with or without the help of others.

Besides, although I have said I enjoy a good fight, I don't enjoy fighting with these people. The fight isn't good. They don't know how to fight, and just leave me feeling sticky. They aren't manly, or even womanly, and I feel like I am battling a brigade of deformed trolls arising from some deep slimy cave. In a proper battle, you can learn from your enemies, since they tend to attack your weak spots. This forces you to shore up your weaknesses. But these goblins don't know a weak spot from a strong spot, and tend to attack my strongest spots with a false and unctuous confidence. They cock and preen while cutting themselves to shreds on my ideas, never seeming to notice the pool of blood at their feet. It is impossible to fence with someone who doesn't know when he has missed you, and can't feel it when you have pierced his heart.

We have seen this most clearly with my *pi* papers, where the opposition has plumbed the dark depths of argumentation, blabbing in ways that have never been blabbed before. In over a decade, they have never gotten near a substantive point. Someone should be collecting these sad responses for a future course in failed sophistry, but I don't wish to soil my hands or my computer memory.

So even the battle has begun to bore me. I have posted the work and am not really required to defend it. It speaks for itself, and will lodge in those ears that can hear. If the mainstream prefers to remain corrupt, that is its business. I cannot single-handedly cure all the diseased old men and women of the world, just by the light that is within me. I would if I could, to be sure, but I haven't figured out how to recycle the required number of photons for the vast laying-on of hands. It would take a second Sun to do it.

Anyway, I am waiting today for a drawing-paper order, so that I can get back to my portraits, and I need something to kill a few hours. I am hoping this Kuiper Cliff problem will fill the bill, since I think I see a way to solve it easily. As I found out today, the cliff is a steep drop-off of bodies in the Solar System at about 47.8 AU. This gives a sort of hard edge to the System, one that was not predicted by the mainstream, and not confirmed until very recently. However, it was obvious to me at a glance that this must be caused by the charge field. This distance must be the limit of capture by the Sun.

Since I have redefined the Bohr Radius as the limit of capture for the electron by the proton (rather than the radius of electron orbit), there should be a charge analogy there. So let us compare the Bohr Radius to the Kuiper Cliff. I have re-calculated the Bohr Radius as 9.69×10^{-9}m, while my radius of the proton (Hydrogen) is 4.09×10^{-14}m. A ratio of about 237,000. The radius of the Sun is 432,000 miles, while the AU is 93 million miles. Giving us a ratio in the Kuiper Cliff problem of 10,290. Which gives us a difference of 42 times. Doesn't quite work, but the nearness of the miss is suggestive, giving us hope. It is hopeful, since we wouldn't expect the radii or this simple proportionality to give us the right answer by itself.

In fact, with a proton density of about 6×10^9 g/cm^3, versus 1.4 for the Sun, we would immediately expect the proton to be that much more powerful as a charge entity. Or, 4.2×10^9 more powerful.

But the simple ratios I just calculated don't support that. Or do they? **They do if we consider the objects being captured.** The electron is only about 1822 times smaller and less powerful than the proton, as a charge channeler. So the proton has to create a strong charge vortex to capture it. Its high speed also makes the electron harder to capture. But the objects in the Kuiper belt are moving much slower, and are much smaller relative to the Sun than that. Only Jupiter is that large relative to the Sun, and there are no Jupiters in the Kuiper belt. The small size of the bodies and their slow speeds make them much easier to capture. This would raise our number 42 by many times, since there is no way the Sun could capture a Jupiter moving at a good fraction of c at that distance. You may be surprised that the Sun can capture anything at that distance, but the calculations I have done on the proton show you the real power of the charge field. If the proton were a Sun, it *could* capture a Jupiter moving at a fraction of c, 42 times further out than the Kuiper Cliff. It does the equivalent every time it captures an electron. It does it by creating a powerful charge vortex of real photons, that act as a capturing and guiding wind.

We can use Eris to produce some rough numbers here. Eris has a mass of .27E, which is about 8×10^{-7} Suns. Which is 677 times less massive than the electron relative to the proton. At 3,400m/s, it is moving about .00001c, which is about 100,000 times slower than than the (precaptured)* electron. Which is a combined difference of about 6×10^8. Which means the Sun isn't 42 times weaker than the proton, it is about $42 \times 6 \times 10^8 = 2.5 \times 10^{10}$. So again we see a rough match. The proton density indicated the same number for field strength, within a factor of about 6. Our analogy between the Kuiper Cliff and the Bohr Radius continues to hold.

This extra weakness of the Sun relative to the proton—even beyond what was predicted by the densities alone—also helps my theory. In other words, I welcome that extra factor of 6, since we would not expect the Sun to be as efficient as the proton for many other reasons. To fully solve this problem, we would also have to include many other factors. We would have to know the ambient charge density around the proton, and the ambient charge density of the Solar System (the charge density of this area of the galaxy). The body densities only tells us the relative charge strengths at the surfaces of the proton and Sun, but do not include external charge variations. In the case of the proton, we can ignore the variation, since it comprises such a tiny area. But in the case of the Solar System, we can't ignore it. We would have to include a galactic charge density coming in from above, and be able to calculate it as a percentage of the Sun's recycled field. In other words, I assume some of the ambient charge in the Solar System *hasn't* been recycled through the Sun first. Some of it has missed the Solar vortex and come into the System directly. The further away from the Sun we go, the higher that percentage is. Without knowing that percentage, we cannot possibly do the full math here.**

And we have many other variables. We have many other reasons to predict the Sun won't be as efficient as the proton itself. To start with, the Sun isn't composed of Hydrogen only. He has converted a lot of Hydrogen to Helium, and we have a lot of neutrons getting in the way as well. So the Sun can't channel as efficiently as a single proton, which means he can't reach out as far to capture objects. Beyond that, the field of the Sun also isn't as pure as the field of the proton. Between the proton and the Bohr radius, nothing exists but ambient charge. An electron with too much energy to be captured may fly through that gap occasionally, but by and large that radius is pristine. But we cannot say the same of the Solar System. It is full of previously captured bodies, and these bodies eat up some small fraction of the Solar charge. So when calculating a charge density at the Kuiper Cliff, we have to subtract out all the charge being used inside that, by planets, moons, comets, asteroids, and all other bodies. The Solar System is still relatively sparsely populated, but it is much fuller than the Bohr Radius.

Which all goes to say that we can compose that factor of six with all these variables. Just as a first estimate, we could say the Helium and neutrons drop the field strength of the Sun relative to the proton by a factor of 1.3. The galactic charge drops it by another 1.5. The planets and other bodies in the field drop it by another 1.8. Free electrons in the Solar System drop it by another 1.5, with the other 1.1 being composed of further variables. With a lot more work, I could firm up those numbers, and I may in future. But Grand Solar Minimum doesn't inspire me to enter a long bout of number crunching at this time.

However that may turn out, I think you will agree that the fact I was able to get within single digits of an answer here with almost no work indicates I am on the right track. We should have always expected that the Sun would have a capture limit, and the best way to have predicted that limit was always by tying it to the Bohr Radius. Problem was, the Bohr Radius wasn't defined as a charge or capture limit until I did it, so this solution was not possible until now. That this problem is on an "Unanswered Physics" page is just one more sign that the mainstream's gravity-only theory isn't working. It is nearly beyond belief that I was the first to make this connection, and that circumstance was only allowed by the mainstream's refusal to define the charge field in real physical terms. Yes, the Copenhagen Interpretation has kept the mainstream from doing physics for almost a century now. Like Jacob Marley, the ghost of Bohr should be visiting top physicists in their sleep, rattling his chains and warning his business partners to repent.

**Until it is captured*, the electron is moving with the charge stream, which is moving at c. So we can estimate its precaptured speed that way. Once the free electron interacts with matter, it slows way down. Depending on the specific interaction, its speed may drop by many orders of magnitude. As it circles the proton pole, it is going on the order of .0057c.

**In previous papers, I have used the physical characteristics of the planets to calculate rough numbers for this, but I don't wish to get into it again here, at this time. But just to jog your memory, studying the polar regions of the planets shows more antiphotons in the ambient field the further out we move from the Sun. This is due to the influence of the galactic field moving in from the outside, against the main stream of the Sun. The same equations that allow us to calculate the percentage of antiphotons should allow us to calculate the relative strength of the galactic field. Extrapolating from the fall-off on the planets, it should be simple to calculate a relative strength of the galactic field at 50 AU. As usual, we don't require absolute numbers here. We only require relative field strengths.