

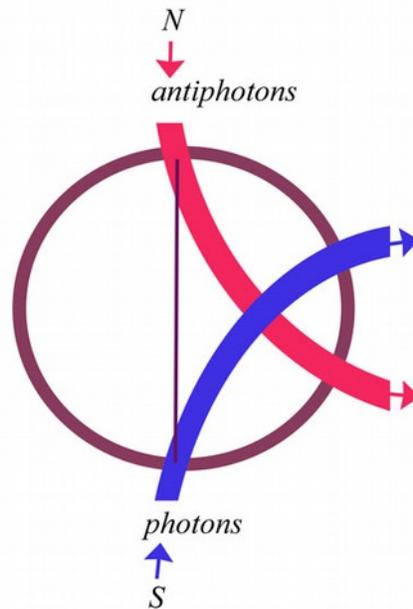
# THE BIGGER POLAR AURORA STORY



*by Miles Mathis*

Yesterday, March 5, [PhyOrg published a press release](#) from Nagoya University entitled “The story of polar aurora just got much bigger: Unknown magnetospheric mechanisms revealed”, admitting that aurora production begins above 30,000km. This more than doubles most previous assumptions, and it is a problem because the aurorae themselves generally appear at about 150km, in the lower thermosphere. The new number puts this production in the outer Van Allen belt—which makes sense in one way—but it doesn't fit previous models at all.

Neither the old nor the new data actually fit any possible mainstream models, and that is because those models are not based on charge recycling by the Earth, like mine are. Mainstream models can't even explain the most basic facts, like why **“When these charged particles get close to Earth, they are deflected and funneled in streams along the planet's magnetic field lines, eventually flowing towards the poles.”** That quote from the article will jump out at my readers, since they know *why* the particles flow toward the poles: the particles are following the charge field, which goes in at the poles and out most strongly at the equator. Yes, the charge field is channeled through the Earth, and charged particles like electrons will follow its paths like boats in a stream. Bodies at all levels of size channel on that basic mechanism, from the proton up to the galaxy. It is a function of angular momentum differences across any spherical/semi-spherical body, which, when spinning, has more angular momentum at the equator. If you now fill that spinning sphere with charge, far more charge with more energy will be flung out near the equator, making it easier for incoming charge to funnel in at the poles. In this way, a charge loop is produced, and thereby a simple engine.



We have seen that this is [how the heat of the Earth is produced](#). It isn't produced by a spinning iron core or any of that nonsense, it is created by recycling charge coming in from the Sun and planets and galactic core. [More recently](#), we saw that this was also the explanation of the high energy particles discovered coming out of the south pole. These are charged particles that entered the north pole very close to the spin axis, and traveled straight through to the south pole, creating what I have called THROUGH CHARGE. Charge that dodges the angular momentum of the spinning sphere by hugging the spin axis. I first explained it in my paper on [Period Four](#) of the Periodic Table, since it happens at the nuclear level as well as at the macrolevel. As this charge passes through the Earth, it meets charge moving the other direction, from south to north, and the two streams spin each other up via edge hits on real photons.

But since mainstream physics don't know of this charge recycling by the Earth, they remain mystified by all such phenomena like the aurorae. Ask them where these charged particles go once they reach the pole, and they won't be able to tell you. I guess you are supposed to believe they simply get absorbed at the surface. But for the most part, they don't. Most of the baryons do, and some of the electrons do, but the bulk of the particles coming to the pole in that vortex are photons, and they can't be stopped. They can only be channeled.

You may wish to consult [my previous paper on aurorae](#) from 2014 for more on this. There I explained the greater mechanisms of aurorae production. But here we hit something I didn't hit there. Here is the tricky part:

**"Most electrons in the magnetosphere don't reach the part of the upper atmosphere called the ionosphere, because they are repelled by the Earth's magnetic field," explains Shun Imajo of Nagoya University's Institute for Space-Earth Environmental Research, the study's first author.**

They admit they don't know why the electrons that take part in aurorae aren't repelled like the others. How do they make it through and why? It's tricky, because the answer is. . . they don't.

The electrons that take part in the aurorae don't come from outside, *they are created*. They are spun-up photons. But since these mainstream researchers like Imajo don't know that photons can be spun up into electrons, that never occurs to them. They tell us that electrons are accelerated from very high altitudes, up in the Van Allen belts, but that isn't what is happening in the first step. What is being “accelerated” is the charge field, not the electric field. In other words, in the first instance it is photons that are gaining energy as they approach the poles, not electrons. You will tell me photons can't be accelerated, since they are already going  $c$ , which is why I switched to “gaining energy”. Photons can't be accelerated, but they can gain energy by stacking on more spins. See my papers on [superposition](#) and the [quantum spin equation](#) to understand more about that. There I show that photons aren't absorbed by matter, they are either spun up or spun down by matter, depending on their original spin. Photons are channeled to the south pole, while antiphotons are channeled to the north pole. But the filtering process is imperfect, so some opposite spinners get through as well.

Since the atmosphere of the Earth is a tenuous gas, especially at high altitudes, most photons and antiphotons dodge it completely, being neither spun up nor down until they hit the surface. But the Van Allen belts have higher concentrations of ions, which interact more strongly with passing photons. So it is the Van Allen belts that spin up these photons in the first instance. The charge field is initially in the infrared, so the first spin-up is from infrared to visible. That is why the Van Allen belts are often drawn as colored. This spin up to visible makes them partially visible. But they aren't more visible because the photons are most often spun up a second time to X-ray. This is why lower levels of the belts are more likely to be X-ray than upper levels: the photons are moving down the whole time, and X-ray production is the *second* step. If the X-rays are spun up a third time, they become electrons. **Electrons are just spun up photons.**

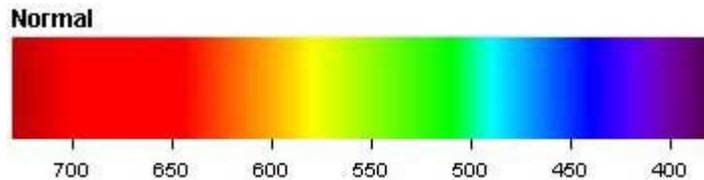
So this aurora production isn't an acceleration of previously existing electrons, it is a spinning up of charge photons coming in from the Sun. Yes, once the electrons are created, they can then be accelerated or further energized by the lower atmosphere in later steps, but the first steps concern photons, not electrons, you see.

And what happens in the final stages? Do these electrons, **“collide with and excite oxygen and nitrogen atoms at an altitude of about 100 kilometers. When these atoms relax from their state of excitation, they emit the auroral lights”?**

No. Just as photons are not absorbed, they aren't “emitted” either. Again, photons cannot be absorbed or emitted, or not like you have been taught. They can only be channeled. These electrons do collide with molecules in the lower atmosphere, but they are spun down, not absorbed. Again, the electrons *become* the photons. The electron is spun down to X-ray, then to visible, becoming the aurora. Most people don't even know that there are X-ray aurorae, since they are rarely publicized. They aren't publicized for two reasons: 1) they don't want people to be afraid of them, 2) they can't explain them. They think the X-rays may be emitted by the ionosphere, but they aren't. They aren't “emitted” at all, as you see. More proof of this is that the X-ray aurorae are above the visible aurorae, as a matter of altitude. The mainstream can't explain that, but I just did. These particles are moving down in the polar vortex the whole time, and since they are spun down to X-ray before being spun down to visible, the X-ray aurorae must be above the visible aurorae.

So can I also tell you why green is the most common color in the aurorae? Yes. The mainstream tells you it is due to oxygen, and the eye being more sensitive to green, but that is the usual fudge. Oxygen actually emits in red, and they admit that in the same section, but then ignore it. The reason green is the most common color is that photons are spun up and down in given steps, based on [a firm spin](#)

equation. As I just told you, visible is one step up from infrared, based on adding a spin. This is how quantum mechanics is right: these steps are quantized. The spins have to double each time. Well, the charge field on the Earth has a definite average value, based on the density of the Earth and its elemental makeup. In other words, most charge photons will be in the infrared, near a given energy, since they have been recycled through matter here. Therefore, when we spin up a charge photon here, there is a high probability its initial energy will be near that average ambient energy. If we now spin that photon up, doubling its spin radius, it will hit a point near the center of the visible range, which just happens to be green. Yellow and cyan are also near the center of the visible range, bookending green, but they exist only in narrow bands. The green band is much wider, which by itself explains the predominance of green over yellow or cyan. We don't see red very often because it is simply too close to infrared and the charge field to start with. To double an energy and get red, the charge photon would have to be far infrared to start with, and that is less common.



You will say the aurora is spun down from X-ray, not spun up from infrared, which is true, but the steps are set regardless, both up and down. The density and elemental makeup of the local field determines the average energy of the ambient charge field here, which then determines all these steps, whether the particles are moving up or down, being spun up or down.

**Addendum July 9, 2021:** To answer this paper, the mainstream is now (just four months later) publicizing a “new” theory about X-ray production by Jupiter. A group from University College London and the Chinese Academy of Sciences headed by Yao and Dunn [has published a paper](#) in *Science Advances* claiming to be surprised to find that X-ray aurora on Jupiter are caused the same way as on the Earth. This is supposed to be “the solution to a decades-old mystery”. You really have to laugh. They never thought of that before? Dr. William Dunn put it this way:

We have seen Jupiter producing X-ray aurora for four decades, but we didn't know how this happened. We only knew they were produced when ions crashed into the planet's atmosphere. Now we know these ions are transported by plasma waves – an explanation that has not been proposed before, even though a similar process produces Earth's own aurora. It could, therefore, be a universal phenomenon, present across many different environments in space.

You see what they are doing, right? They needed some way to answer me without addressing me directly, so they had to make up this story about Jupiter's aurora instead of the Earth's. This way they can publicize their own models once again, while at the same time claiming another exciting new discovery and making all the mainstream outlets that way. This is even being reported at Infowars and all the other “alternative” sites.

Unfortunately, if you read the posted paper, you soon see they have no *evidence* ions are transported by plasma waves. Given mainstream models, this is the only thing they can come up with for ion transport, so they just assume it must be happening. But as I just showed you, no ions are being

transported to cause this. Photons are being spun up to X-ray and electron energies by magnetic reconnection, as in the Solar Corona—but on a smaller scale.

Since these mainstream physicists don't know or won't admit electrons can be spun down to X-ray, or smaller photons spun up to X-ray, they have to come up with the usual tortured theory to account for X-ray aurorae, either here or on Jupiter. In the paper on Jupiter, we are allowed to see the full theory, such as it is, and it not surprisingly turns out to be convoluted and unnecessary in the extreme. In short, EMIC waves are proposed to precipitate the proper ions to the proper place. We are told

**Jupiter's x-ray aurora is known to be dominated by emissions from ions that collide with the Jovian neutral atmosphere and, through charge exchange, generate spectral lines that are characteristic of the precipitating heavy ions (1, 2, 33). A combination of oxygen and sulfur ions has been found to produce excellent fits to the observed x-ray auroral spectra.**

That is where the main assumption enters, and where all evidence is lacking. The entire paper is circular reasoning, since these scientists are assuming what they are expected to demonstrate here. They claim to “know” this is the mechanism even while are trying to demonstrate it: the question is begged. Because they have force fitted spectral lines of oxygen and sulfur to the X-rays, they basically take this as confirmation of their assumption, but their references here are to previous studies that have assumed all the same things they are, proving nothing. A lot of things can produce X-rays at those energies, and they and their colleagues in previous studies have done nothing to rule out any of those mechanisms. Since they have never applied my magnetic reconnection theory to this, they have no way of knowing whether it also fits the observed energies, or fits them better.

But oxygen and sulfur ions being precipitated by EMIC waves and falling from higher altitudes to impact the neutral atmosphere is a ridiculous theory from the start, since Jupiter doesn't have a neutral atmosphere, since the precipitation is forced, and since the production of X-rays by such an impact has never been demonstrated. Why would either the ions or the atmosphere emit X-rays in this impact? As you now see, the ions they are talking about aren't electrons, they are nuclei, and so is the atmosphere. Why would two atmospheric nuclei collide and produce soft X-rays? No logical answer to that in this paper or anywhere else. Even stranger, they have to import this sulfur and oxygen from the moon Io. That's seems like a stretch, doesn't it? Why would they do that? Because that seems to explain why these nuclei are high in the atmosphere or magnetosphere to start with, saving the scientists from having to explain how they got up there in the first place. As we know, Jupiter has very strong gravity, which should have long precipitated out any sulfur.

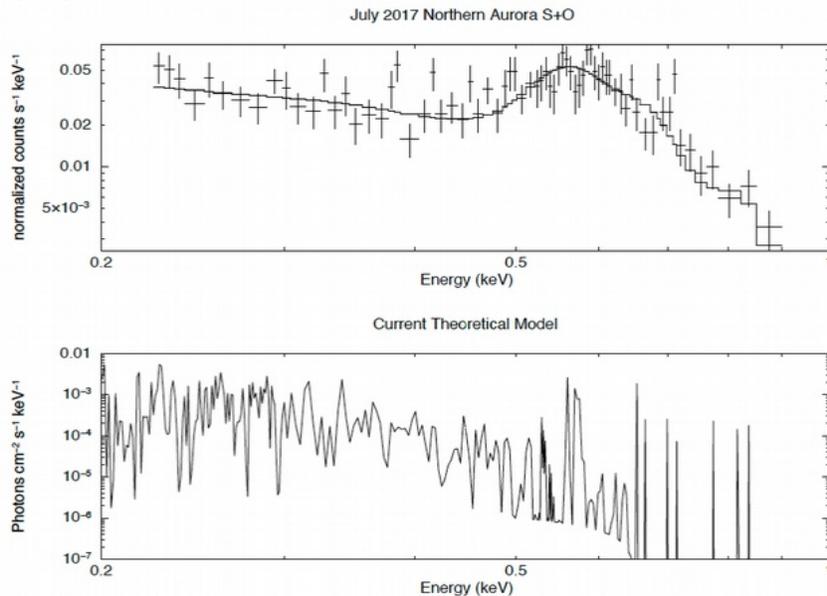
But perhaps the worst part of all this is that they DO mention magnetic reconnection at the end of the first paragraph of the introduction, but dismiss it this way:

**The mapping of the emissions leads to the suggestion that the particle precipitations were driven by magnetic reconnection (11). However, observations show that the x-ray pulsations last for several Jupiter days or longer (8), evidencing that the driver may not be a transient process like magnetic reconnection.**

Unbelievable! I wonder who gave them that suggestion? And they actually admit that my magnetic reconnection theory “matches the mapping of emissions”. In other words, **their own data confirms it**. So of course they have to rush you by that at all possible speed. Also note the footnote numbers there: 11 and 8, aces and eights. It never ends. Their only evidence for dismissal here is that magnetic reconnection is “a transient process”. Since when? Magnetic connection above a large planet like

Jupiter would be transient why? Is it transient on the Sun? No. So this is just pathetic. I can only suppose they hoped no one would read this, being content with reading the mainstream glosses.

To make this even harder to unravel, and to cover up their mechanisms, these people hide a large part of it in a supplementary text and figures. Shameless, since the main paper isn't long enough to justify such a thing. These supplementary figures should be included in the main text. One of the figures they hide there is the model fitting of the X-ray spectrum to sulfur and oxygen, which I have already alerted you is one of the major pushes here.



The top graph is the observed X-ray spectrum and the bottom is the “theoretical” spectrum of charge exchange lines from sulfur and oxygen. Do you see a match? I don't. The top graph is rising at .5 while the bottom one is falling quickly.

You may have also missed this in a quick reading of that paper. In the second paragraph of the Introduction, we are told the origins of Jupiter's X-ray pulses “occurred at these distances from the planet”. What distances? I can only suppose they mean about 65 Jupiter radii out, where our satellite Juno happened to be parked. That's convenient, isn't it? That means our satellite just happened to be right where oxygen and sulfur from Io was being precipitated down by EMIC waves. It also means they have admitted that Juno was in Jupiter's outer magnetic plasma sheet, or its outer Van Allen Belt. Since Jupiter's EM fields [are hundreds of thousands of times to millions of times more powerful than those on the Earth](#), we encounter a further problem. The Earth's own belts are not only too powerful for humans to fly through safely, they are powerful enough to fry circuits on satellites. So multiply that by 100,000 or more. It is not explained why Juno's sensors are not affected by such powerful EM fields. I will be told she is heavily shielded, but that isn't the case. And if it were the case, then the shields would prevent sensing, wouldn't they?

This reminds us that if the oxygen and sulfur are coming down from Io, we don't require EMIC waves to precipitate them down to Jupiter's “neutral” atmosphere. Jupiter's powerful gravity field should precipitate down any sulfur, as I already said. The atmosphere of Jupiter is almost exclusively hydrogen and helium, so anything larger would precipitate out very fast. Io is orbiting at only 6 Jupiter radii, so Jupiter has plenty of gravity to precipitate out those larger elements, especially elements already ejected by Io toward Jupiter. Does the Earth need to precipitate incoming meteors? No, since

they are already *incoming*. The Earth only accelerates them further.

What we also miss is any mention of potassium and sodium atoms from Io that should also enter these equations. Why do these current people focus only on sulfur and oxygen, when Io is emitting all four in large amounts? Could it be because the potassium and sodium should also respond to EMIC waves, but don't even get close to matching the X-ray spectra? So it is just pretended they aren't there. Most readers won't think to ask the question.

Finally, we see the same thing in this paper we see in all mainstream papers: their inability to answer the basic questions or do the basic physics here is hidden by a huge dunking in tangential and minor matters, like pitch angle, differences in Juno and XMM, left-handed linear ellipticity of EMIC, and a host of other diversions. After assuming what they are trying to prove in the first sentences of the Introduction, they quickly bypass any alternate explanations by ignoring them completely, dismissing them out of hand, or lying about them. Next, they claim their data confirms their theory, while hiding the data in a supplement and fudging it mightily even there. Next, they shunt you off into dozens of lingo-ridden sidelines to make it appear they know what they are talking about, when in fact they don't. As just one further example, they go on and on about the handedness and ellipticity of EMIC waves, while the truth is they don't even understand how light creates waves. In other places the mainstream is forced to admit that, since it is still lost in the old wave/particle duality. They still don't have any idea how light travels or what the wave applies to, as you see clearly when they start trying to explain the two-slit experiment, superposition, or any other subtlety of light. So you can see why they would be lost when trying to explain something like aurora production. They could just admit that and accept my help, but they decided years ago that was too embarrassing for them. So they have spent the past two decades trying to bury me, only to soothe their own fragile egos. To try to hide that obvious conclusion, they have hired an army of unschooled hitmen to try to turn those tables on me, claiming it is *my* ego that is the problem. Those hitmen all got destroyed in the ugliest manner possible. And that is how we got where we are.