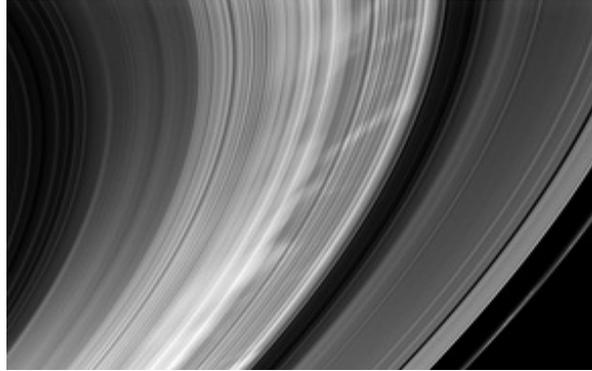


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THE SPOKES OF SATURN



by Miles Mathis

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One of my readers has been trying to explain the rings of Saturn using pyrolytic carbon and magnetism as the mechanism. I fed him a few clues, trying to get him off that idea, but he isn't getting them, so I am taking the ball myself.

[According to the Thunderbolts:](#)

The Electric Universe may explain this mystery. The spokes are caused by radial discharges from Saturn's magnetosphere into the planet's ionosphere. Such low-latitude discharges are observed in the laboratory when a magnetized sphere is immersed in an electrified plasma. In Saturn's case, the rings provide a more easily ionized, "dusty" plasma that would tend to concentrate the discharges in the plane of the rings. The effect on the ring particles is to temporarily alter their polarization and to move them out of the plane of ring. This change in optical properties causes the "spokes" to appear.

[According to the mainstream.](#)

Spokes are thought to be microscopic dust particles that have levitated away from the ring plane. They appear on both sides, near the densest part of the B ring. They rotate at the same rate as Saturn's magnetic field indicating they are affected by electromagnetic forces. Perhaps they are formed by meteorites that punch through the rings, by tiny moonlets as they plunge through the rings, or dust particles that have taken on a charge and levitated off the larger ring bodies.

Already, you can tell the Thunderbolts' explanation is better, as we would expect given that they at least admit the field is an "electrical" one. The mainstream admits the spokes are affected by magnetism, but then ignore that to suggest meteorites as the cause.

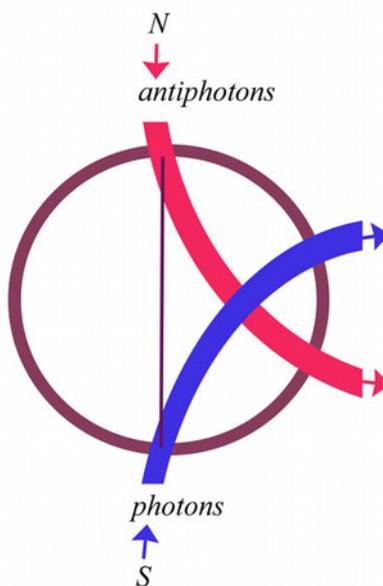
But neither explanation is very good, since neither one takes into account how the rings were formed in the first place. According to the mainstream, there is no reason a planet should have rings to start with,

and if it did there is no reason for them to be at the equator. I will be told that is where angular momentum is greatest, but given the mainstream gravity field, that shouldn't matter. Gravity doesn't work differently at the equator, so the rings could theoretically be anywhere, or everywhere. Why doesn't Saturn have a full halo? We aren't told. The Thunderbolts also do not have a good explanation of the rings, since they don't have my charge recycling theory. None of this can be explained without the correct basic field theory, and only charge recycling gives us that.

As I have explained many times, all spherical bodies work like charge engines due to their basic shape. The ambient charge field, which is composed of trillions of real photons with real spin, causes the body to begin spinning. Once the body is spinning, it naturally sets up charge highs and lows in the field. Since the body is mostly porous to photons, any photons inside the body will be forced out by the centrifugal effect, and—due to differences in angular momentum—more will be forced out near the equator. That, *by itself*, gives us a charge high near the equator and a charge low near the poles. To say it another way, we have more photons near the equator and fewer near the poles.

Given that, we now look at photons coming into that body from the outside, as from the Sun. As they come in, the new photons will encounter heavier traffic near the equator and lighter traffic near the poles, so the new photons will go where they can go most easily, due to the law of probability. They go to the poles.

You will say photons won't be affected by sparse photon traffic like that, which is true. But our body is not just made of photons. The photon traffic will drive larger particles like ions, and these ions *will* affect incoming photon traffic. And so our incoming photons are driven to the poles, where they create incoming polar vortices. Once that happens, an engine has been created, with heavy input at the poles and heavy output at the equator.



Since both poles will be pulling in photons, those two streams will also interact, giving us two exiting streams above and below the equator, instead of just one at the equator proper. If our body is very round and homogeneous, the streams may recombine in the interior, pushing the two streams back together at the equator, or the streams may recombine above the surface due to the fact that they are

opposite in charge (see Birkeland currents). In any case, the exiting charge stream is near the equator, explaining why we find the rings there. All moons will be drawn to that stream of charge, since they are also feeding upon it. This is why the planets are in the Solar equatorial plane, of course. Like everything else, they are herded there by charge.

Given heavy charge streams being emitted at Saturn's equator straight up into the sky, the question then switches. The question isn't why Saturn shows spokes most of the time. The question is why it doesn't show them more obviously, and all of the time. The answer is that spokes are a sign of variation. Given the mechanism I have just described, you would expect spokes only in the case that Saturn was emitting charge more strongly on some lines than others. If the Earth had rings, for instance, you would expect very obvious spokes all the time. Why? Because the Earth is very lumpy internally, as well as on the surface. Just as the most obvious example, we have continents in some places and not others. So exiting charge is being blocked in some places more than others. Hence, rising charge would be variable and we would see spokes.

But Saturn isn't a rocky planet, it is a gas giant. Meaning, its structure is far less lumpy. Saturn may be more lumpy nearer the core, but in the outer levels she has mostly been stirred out. So exiting charge is far less variable on Saturn. Given that, we would *expect* Saturn to have very little spoking in the rings. The little spoking she shows is due to internal lumpiness, which causes these jets of stronger emission.

So you see it has nothing to do with the composition of the rings. All that is required is that the rings be able to respond to charge, and that doesn't require high levels of magnetism. The variations we see causing spoking aren't variations in the rings themselves, but variations in the charge emitted by Saturn. The rings do have variations, but those variations are the cause of the different levels and densities, not of the spokes.

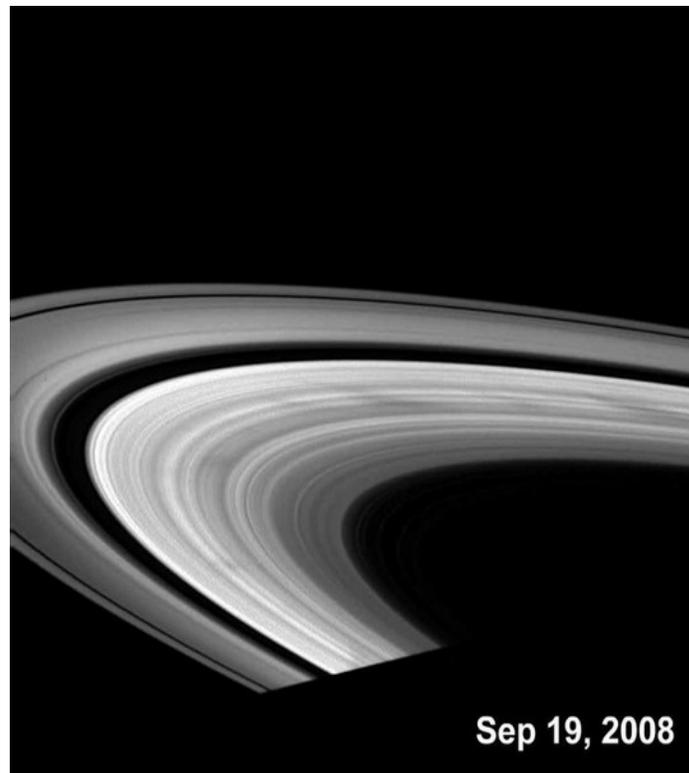
This takes us back to the Thunderbolts' answer, which was that Saturn has spokes because a magnetized sphere in a plasma has them. Yes, but that of course begs the question of why the magnetized sphere has them. The Thunderbolts forget to tell you that, don't they? Why radial discharges in that experiment? I just told you. They can only be caused by inconsistencies inside the sphere. The sphere isn't perfectly spherical, perfectly homogeneous, or perfectly magnetized, causing these variations in the recycled charge field moving in the poles and out the equator. What they don't tell you is that if you vary the magnetization on the sphere, or the electrification of the plasma, you can cause the sphere to begin spinning, at which point a feedback is created. The new spin increases the charge recycling, increasing the levels of magnetism and electrification. In fact, if you aren't careful, the experiment can get out of hand pretty fast.

This is exactly what is happening with a planet in the Sun's field, since neither the magnetization nor the electrification are balanced. About twice as many photons as antiphotons are in the ambient field, so the south pole is twice as strong. So the planet knows very well which way to spin, and does so. But there is no chance of this getting out of hand, since everything is limited by the ambient field. The spin of the Earth is limited by large outer planets, which provide a counter-field and a brake. So the Earth soon reaches a point of balance, all its characteristics being caused by the bodies around it. For more on this balance, you may consult my papers on [Bode's Law](#), [Axial Tilt](#), and many others.

Now, can we explain why Saturn sometimes loses the spokes completely? Well, as I just showed you, all we have to explain is a lack of variation in charge, which would be caused by a more complete stirring in the outer levels of Saturn proper. That would be caused by a more balanced charge field, so the fact we saw it during Solar Minimum is not surprising. Saturn has been feeling Solar Min just like

we have. During Solar Min the whole field loses strength because magnetic alignments among the Sun, planets, and galactic core are poor. This loss of magnetism acts just like a balancing of the field like we are looking at, because magnetism relies on *imbalance*. If the ambient field were perfectly balanced as regarding charge and anticharge, or photons and antiphotons, magnetism would go to zero. This is exactly why Venus has poor magnetism: too much charge balance. So anytime we see a weakness in the charge/EM field, we know we have too much balance. This balance will not only weaken magnetic fields, it will affect the gas giants by equalizing their poles. With more equal amounts of charge coming in north and south, the internal stirring of charge will be more even, more successfully stirring out variations. The outer layers of Saturn will become more homogeneous, especially near the equator where these two charge streams are crossing. And so the mechanism for spoke creation will be greatly lessened. The spokes are always there, but cannot be seen by us unless they become prominent enough. That will only happen when Saturn becomes lumpy, and she will not become lumpy except when her pole differences are maximized and system magnetism is high. In general, we would look for that at Solar Max, but it could also happen during given conjunctions and oppositions.

And why would spoking show most in some rings and not others? Well, notice in the pic under title that spoking initiates in the brightest central rings. That's where the rings are the densest, of course. So naturally that is where we are going to have the most interaction between rising charge and atoms/molecules/ions. Also notice that the spokes are sometimes darker and sometimes lighter than



the areas surrounding them. That may be the strangest thing about them, though it is rarely commented on. This indicates to me that the dark ones are caused by charge and the light ones are caused by anticharge. The added brightness would be a sort of magnetic reconnection, such as we see in the Solar corona or in the bright atmosphere of Uranus. The dimming would be caused by opposing photon spins meeting and canceling. See my papers on [magnetic reconnection](#) and [Enceladus](#) for more.