

[return to updates](#)

MATTER FROM LIGHT



Photo by Lawrence Manning/Corbis

by Miles Mathis

First published February 16, 2016

[It has just been announced](#) in the journal *Nature Photonics* by researchers at Imperial College that matter will be made directly from light within the year. That's great, and it may even happen this time, [unlike all the other things we are being told](#). However, the announcement, even if true, is still major misdirection. They are selling you the idea in these mainstream glosses that this will be a natural outcome of QED, but it isn't.

The process is one of the most spectacular predictions of a theory called quantum electrodynamics (QED) that was developed in the run up to the second world war. "You might call it the most dramatic consequence of QED and it clearly shows that light and matter are interchangeable," [Steven] Rose told the *Guardian*.

Not only is it *not* a prediction of QED, it is a *refutation* of large parts of QED, and all top theorists and mathematicians should be in a panic. To start with, we are told that Wheeler and Breit predicted the production of matter from photons in 1934, but they didn't. As the *Guardian* article admits, all they did was propose that in rare circumstances photons might create electrons. This was basically a reversal of the **pair production** thought to happen when an electron and positron collided, creating a pair of photons. But they in no way thought that was a creation of matter, since according to the standard model then as now, you cannot build matter from electrons anymore than you can build it from photons. Having a few electrons reverse out of pair production was not seen by them or anyone else as "the creation of matter". To create matter, you would have to create baryons from photons. Baryons are the main ingredient of matter, not electrons.

Besides, according to the postulates, rules, and math of QED, the *purposeful* colliding of photons to create electrons or positrons simply should not happen—for many reasons. Reason one: we are told that photons are massless and have no real radius. So how do they collide? How can two point

particles possibly collide? Reason two: supposing they did collide, by what possible mechanism could they create a lepton? The mainstream has run many experiments showing that if the photon has mass, it must be below 10^{-36} kg, so how can two of those photons merge to create two particles each with a mass of 10^{-31} kg? We have a size miss of around 100,000 times. It is like claiming two fleas collided and created two blue whales. Reason three: photons are bosons, and in the standard model bosons are not allowed to interact like this, because if they do it screws up decades of math, including the gauge math, the Bose-Einstein statistics, and much more. Bosons are defined currently as field particles, and field particles like the photon need to have a radius of zero and zero interaction, because if they don't, all the math explodes. The math has already exploded, since we are privy to many things like the vacuum catastrophe, which misses by 120 orders of magnitude, and the dark matter catastrophe, which misses by 95% or 19 times. But if you start giving photons mass, these problems are just made worse. Given the limits of current theory, a photon with mass leads to a field-wide meltdown that makes the vacuum catastrophe look like a garden party. That is why I said many theorists should be in a panic: when the photons are shown to hit and create leptons, about a century's worth of math and theory will immediately be out the window. [Not that I really think anyone is panicking. These people don't normally panic, because they know they can just jerry-rig the equations for the millionth time and tell you another lie, moving ahead as before. They will tell you they had their fingers crossed when they taught you all that stuff; they will rewrite all the history pages at Wikipedia and in the new textbooks; and young people are on too many drugs to spot the contradictions anyway.] Reason four: photons hitting like this also dooms the current theory of Hadronization. See my paper on solid light for more on that.

Reason five may be the easiest for some of you to understand: If reversing pair production to create electrons from photons were a *creation* of matter, then according to the standard model, pair production would have to be an example of the *destruction* of matter. But according to the old conservation laws, you should not be able to destroy matter. The mainstream theory of matter-antimatter annihilation was never logical, since the photon pair produced has never been shown to equal in either mass or energy the lepton pair that created it. We were thereby sold a destruction of matter, which could not flout the various conservation laws more outrageously.

This problem is one hidden when they teach you about bosons and fermions. Given the current definitions of each, one should not produce the other in collisions, and I just told you why. If an electron colliding with a positron creates two photons, we have fermions creating bosons. That is a problem because fermions were defined as interacting, while bosons were defined as non-interacting. So a collision has just turned off the ability to interact. How and why? In the current problem, we have the reverse problem, with bosons creating fermions. Two photons colliding changes the definitions of particles. How and why?

But with real spins and a defined spin mechanics, these problems evaporate: it isn't mass that is being lost, it is spins that are canceling. Spin equations, done correctly, allow you to conserve energy that could not be conserved where you were only tracking mass and linear energy. And of course with spins, we have no fermions or bosons to start with. I have shown in previous papers how those categories are manufactured. I have been saying for years that photons are not bosons, are not massless, that they have real spin, and that they can and do interact.

You see, in my theory, you cannot "create" matter from photons, simply because there is no creation going on. Matter is not being created, it is simply changing forms, from photon to electron to baryon. Since charge and light are *already* material, no matter is being created. Matter is simply being spun-up into larger and more complex structures.

I suggest you revisit my paper from a couple of years ago, [where I critiqued the announcement of solid light](#). I made many of these same points there, when Princeton announced in 2014 that light was condensing into solid structures. There I critiqued at length the proposed theory of solid light, showing that the researchers had once again flagrantly misread data to force it to fit the standard model. In this newest announcement, we get no theory of that sort, since no paper has yet been published. I will have to wait until next year I guess to tear into that again. But for now it is enough to remind you that these researchers have no sensible theory for creating matter from light. As usual, they simply announce it and couch the announcement in a lot of salesmanship and false historical links. Normally they find a way to put Einstein in the title, claiming something like “Einstein proved correct: we know almost everything and are almost gods!” But since Einstein didn't do much work on light, they have to make do with Wheeler here. Wheeler also didn't do much work on light (no one in the 20th century did, which is why we are where we are), but that doesn't faze anyone. They assume you don't anything about Wheeler, except that he is semi-famous. Suffice it to say that by 1950, say, physics had collapsed into such a heap there was no longer any hope of explaining anything physically or mechanically, and no one had even tried to do that since around 1930. Which means that when they try to tell you how photons are creating matter next year, they will have to divert you into the same sort of empty lingo and faked math they hit you with in the solid light announcement. You will get more cubits, polaritons, Jaynes-Cummings sites and photon-hopping terms. In other words, a lot of unassigned abstractions posing as physics.

In a year and a half, we have gotten no updates on that announcement, although this announcement from Imperial College could be seen as an update of sorts. I showed then that these new experiments on light were fatal to many things, including the current explanation of the Meissner Effect, quantum dimer theory, Cooper pairs, BCS theory, and RVB theory. This newer announcement is an even greater blow to all of QED and QCD, because it signals *they were wrong about everything*. It is hard proof that focusing all their attention for a century on the electron and all but ignoring the photon was a massive error, one that has infected all of quantum physics, solid state physics, and even Relativity. In literally hundreds of important papers, I have shown how [Bohr's conflation of the electron and photon](#) in early math—and other equally gigantic errors—have doomed Modern physics from the very beginning. I have claimed physics needed to be rewritten from the ground up, and then I have done it—rewriting it from the ground up.

As my readers know, I have been telling everyone for over a decade that everything was made of spun-up photons, so it is *my* predictions that are being proven by these new experiments, not the predictions of Wheeler, Breit, or anyone else. I published [a quantum spin equation](#) many years ago, not only predicting that the electron was made of a spun-up photon, but showing the simple equation to indicate how it was done. But I went even further, showing that the baryon was a spun-up electron, and providing the equation for that as well. So, unlike Wheeler and Breit, I have predicted that matter *can* be made from photons—not just electrons, but all particles. More recently I used my quantum spin equation to build even larger particles, including [the Higgs](#), the [Beauty Baryon](#), [the Pentaquark](#), and so on. No one else has done that.

I was able to do that because I have done what no one before came close to doing: [I pulled apart Newton's gravity equation](#), showing it was a unified field equation. This is what allowed me to do all the things I did afterwards, including discovering the quantum spin equation. You see, I realized that the constant G in Newton's equation was telling us not only a size differential between the charge field and the matter field, it was telling us a *relationship*. G was not just some un-assignable and accidental constant, it was a pointer to the relationship between the photon and the proton. The number of G itself

told us the size relationship between the photon and proton, but the way it fit into the equation suggested it was far more than that. I could see it was an indicator of *unification*.

As I pursued this idea, I could see that unification of this sort wasn't just indicating a unification of the charge equations with the gravity equations, it was indicating a unification of all the particles involved in both fields. In other words, I could soon see that baryonic matter wasn't just unified with and influenced by charge, it was a *function* of charge, so much so that matter could just be seen as a larger charge structure. That is what these new experiments are really telling us: matter is a charge structure itself. Matter is simply a larger architecture of charge.

So when these researchers do create leptons from photon collisions, they will not be the first to do so. Nature has been doing it from the beginning. I said years ago that the galactic core probably creates matter directly from photons, just as they will be doing at Imperial College. The only difference is, the galactic core is not limited to creating leptons. It can also create baryons. Is it possible larger stars can do this as well. All matter was created this way. This is how it is done.

In previous papers, we have seen other mysteries of the mainstream solved by similar spin-ups and spin-downs. I have shown it is probable electrons are created in our own ionosphere, when X-rays are spun-up directly into electrons. It is even more likely [this is happening in the Solar Corona](#). I have shown how these spin-ups and spin-downs create a wide variety of phenomena, including the [Rayleigh Effect](#), magnetic reconnection, [comet tails](#), [opposition surge](#), and so on.

And this is why the new announcements must be fatal to *all* mainstream theory. I have shown that every sub-field in physics has had to be massively fudged due to this very ignorance of the quantum spin equation. In hundreds of specific cases, I have shown that the current answer is wrong, the correct answer being some variation of real photon spin in the real charge field. More recently, I showed this was the [correct answer to the Hall Effect](#), [Anderson Localization](#), [Diode Theory](#), [Solar Cycles](#), and so on. I have rewritten large parts of solid-state theory, celestial mechanics, light theory, atomic theory, molecular bonding theory, and much more, and it was all made possible by understanding that photons spin, and [how they do so](#). Since these new experiments must prove me right, they must prove the mainstream wrong.

Why must they prove me right? Because these photons can only be creating leptons by being spun up, in the manner and in the amount described by my quantum spin equations. One thing they will discover pretty fast is that these electrons don't have to be created in pairs with positrons, since the whole pair production thing is beside the point. Yes, in some circumstances pairs of photons are produced, but that was just a byproduct of that specific collision. Depending on the actual collision, just about anything can be produced. For instance, we are told that in this new experiment in London, they first create high-energy photons. But they don't seem to understand why that is necessary, beyond a matter of energy levels. It is necessary because they need to create photons that are only one spin-level below the electron. When this photon stacks on another spin, it becomes what we call an electron. The photon *becomes* the electron. The only question at that point is, "What was the thing it collided with to stack on that spin, and what did that thing become?" Yes, if the photon collided with an anti-photon just like itself coming from the opposite direction, a positron can be produced. But that will happen only 50% of the time. The other 50%, the photons won't add spins, they will cancel, and the X-rays will be stripped down to smaller photons. And the high-energy photons can be spun-up by other particles than themselves. For instance, an X-ray can collide with an electron. If they both spin each other up, the X-ray becomes an electron, and electron becomes a meson. If they both spin each other down, the electron becomes an X-ray and the X-ray becomes ultraviolet.

We saw this previously [in my paper on beta decay](#), where a free neutron was hit by a positron. Both their spins were affected, showing that spins do not have to be equal [in energy or angular momentum] to affect one another. I proposed there that the neutron probably had to be hit by several positrons to reverse its outer spin and become a proton, but that is beside the point here. The point is that spins are real, and spin energy can be transferred between any particles that can collide with each other on-edge—which would be most particles.

This must disprove most parts of the standard model, because if most electromagnetic phenomena are correctly explained by real spins of real particles with real radii, then QED collapses into a giant heap. All the fudged solutions fall, all the fudged math falls, and all the fudged theories fall. In fact, it is happening as we speak. If you put your ear to the wall, you can hear all of Modern physics turning to dust.

I will be told that my spin theory cannot conserve energy either, since if both particles gain spin energy in the collision, energy hasn't been conserved. But notice what I said above about the odds being only 50% that would happen. Because these spin transfers are caused by edge hits between real particles, the opposite effect is always equally likely. Conservation of energy is only true in a system; it is never true applied to a single event. A single event cannot conserve energy, by definition of “conserve”. Think about it.

But because in any given event of this sort, the odds of a spin-up exactly equal a spin-down, energy must be conserved. Yes, energy can be increased in a given locality, and that locality can be any size, but if it does, an equal amount of energy must be lost from adjoining localities. The conservation of energy law doesn't say that energy levels must remain flat. They can and must have peaks and valleys. All the conservation of energy law says is that the peaks and valleys must sum to zero.

I will then be told my spin equations and diagrams don't follow Newton's Third Law. If both particles are being spun up, for instance, there is no equal and opposite reaction. The equal and opposite reaction to a spin up is a spin down. But that is simply to misunderstand the Third Law. The Third Law does not imply that energy cannot increase in a given event or a given locality. The Third Law simply says that in any and all events there is an equal and opposite reaction. In all my spin transfers, the Law is upheld. The opposite reaction to a spin-up is not a spin-down, as you see if you actually draw the spinning particles with their arrows. For instance, if a left-spin meets a right spin head-on, they cancel. In that cancellation, the left spin loses **an equal amount** to the right spin, confirming the Third Law. And yet they were both spun down.

That said, I admit that spins are tricky to follow. It takes a lot of visualization to track them, especially once you start stacking them. Even a computer can't do it for you if you don't feed the right information into it. Someone has to visualize the effect first, then feed the visualization into the computer. Only *after* that can the computer do it. A computer can extrapolate from given information, but it cannot create initial input like this sort of visualization. I suspect that is why spin mechanics has been avoided for so long. It required advanced visualization skills that physicists of the time simply did not have. When these skills were *most* needed in the early years of the 20th century, they were *least* to be found. [I have reminded my readers](#) that Bohr, Heisenberg, and the rest of those fellows were possibly the least artistic physicists who ever lived. They were so averse to visualization they ended up forbidding it, which has hamstrung physics since then.

This is how the problem was left for me to solve. Many haven't understood how I could see something

decades of geniuses could not see, but this is the reason. They didn't have the right kind of genius. Physics is after all supposed to be *physical*, so it shouldn't be too surprising that the abilities of an artist might turn out to be useful. The logical thing would have been for these physicists to consult with artists, but again many things conspired against that. The 20th century was an inartistic century from the beginning, with classical art collapsing (or, more precisely, being destroyed) due to many factors at precisely the same time Modern physics was being born. Artists of the old sort were driven out of the field, and the new artists—with their deconstructing theories and minimalist art—would not have been much use to physicists had they been consulted. Of course they were *not* consulted, and we have to imagine that even had Leonardo been around he would not have been consulted, either. The physicists of the 20th century were not the sort to share the spotlight with anyone, even for a moment. Physics, like everything else in the 20th century, was not a field of cooperation but of predation. Physics didn't wish to co-exist with astronomy or chemistry or mathematics; it wished to co-opt them and take their funding. Someone like Feynman only sniffed at astronomy or mathematics or philosophy, taking what he wished from them and damning the rest. For art he had no use. It was beneath notice.

Which is why I have had to beat the door down by main force. Not invited to the party, I have nonetheless crashed it, knocking the bouncer senseless before driving into the ballroom on the loudest Harley I could find. Given the state of things, this was the only thing I could do, as even my enemies must realize. Sitting outside and throwing pebbles against the ballroom windows was not going to get anyone's attention, over the loud music within. The people feebly crouching inside, drunk on punch, have long deserved a hail of bricks, or worse, so I do not apologize for anything. I could only wish for more bricks and more arms to throw them.

