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THE “ALL KNOWN PHYSICS” EQUATION

OR

The Astonishing Simplicity of Everything (but especially of our audience)



by Miles Mathis

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In October 2015, Neil Turok (above), director of the Perimeter Institute, gave a lecture [which can be seen on youtube](#). Its title was “the Astonishing Simplicity of Everything”. A reader just sent me a link, which is why I am just getting to it. I don't normally watch videos by these people, since I have better things to do. But my reader was right: this one was so amusing it gave me several minutes of joy. To cut right to the chase, let us fast forward to minute 1:11:45. There, Turok presents this equation, which is said to represent “all known physics”. In other words, this is an example of the “simplicity of everything”.

A photograph of a presentation screen showing the equation for the wave function of the universe, $\Psi = \int e^{\frac{i}{\hbar} \int (\frac{R}{16\pi G} - \frac{1}{2} \dot{\Phi}^2 + \tilde{\phi} \Delta \phi - \lambda H \tilde{\phi} \phi + |D\eta|^2 - V(\eta))}$. The equation is written in white on a dark blue background. There are several blue arrows pointing towards the equation. At the bottom left of the screen, there is a logo for CERN and the text "GL, CF".
$$\Psi = \int e^{\frac{i}{\hbar} \int (\frac{R}{16\pi G} - \frac{1}{2} \dot{\Phi}^2 + \tilde{\phi} \Delta \phi - \lambda H \tilde{\phi} \phi + |D\eta|^2 - V(\eta))}$$

You have to laugh. Even if you don't know what any of those variables or operators mean, you should be rolling on the ground laughing. Why? Many reasons. One, in many other places the mainstream admits it has no unified field equation and isn't close to having one. That is what string theory was about, you know, but Turok admits in the lecture there is zero evidence of string theory. They haven't even made a fake announcement of unification, like they did with gravity waves. Everyone knows gravity hasn't been unified with E/M in the mainstream or standard model, and that is why we still have unsolved vacuum catastrophes and dark matter meltdowns. And yet they are basically selling this “All Known Physics” equation as a Unified Field Equation by another name. As Turok admits, they have loaded all their theories into this equation, including gravity, E/M, Dirac, Yukawa and Higgs, naively summing them and then integrating to get an uber-field they sign as a wavefunction. They then tell us this describes almost any possible thing. Really? And what then is the difference between that and a Unified Field Equation? They won't tell you, so I will. A Unified Field Equation would actually look like a sensible equation, instead of a cobbled-together piece of propaganda.

Two, they are trying to tell you all known physics is wave function. That is what the operator on the left side of the equation is. As you see, they have labelled it “Schrodinger”, because he came up with the famous wave equation, the Schrodinger Equation. However, he applied it only to quantum mechanics. That is, to the wave function that explained the electron in orbit. He actually assigned it to a charge density, which agrees with my theory but not the mainstream, but we don't need to go there in this paper. It is enough to say that he would never have agreed to assigning a wave function to the entire universe and everything in it, or writing an “all known physics” equation as a wave function. Schrodinger was actually very unhappy with quantum physics, and not only would he have had a problem assigning a wave function to all known physics, he had a problem assigning his own equation to quantum mechanics. He hated the early standard model as compiled by Bohr and others, and said he wished he had never been a part of it.

Three, they have cut off the subtext of this equation, which in the youtube video you can see is:

“Plus neutrino masses and mixing and dark matter”

Which means they just put 95% of the equation in the subtext, leaving it *out* of the equation. They don't know where it fits, so they just fudged you by putting it in fine print, like in a legal document where the lawyers are trying to cheat you. Yes, they admit that dark matter is 95% of the universe, but it isn't in this “all known physics” equation. I guess that is because it “isn't known”.

Actually, Turok doesn't admit it. He lies right to your face. First he calls the fine print a “detail”. Then he tells you dark matter is 25% of the energy of the universe [minute 1:16: 50]. No, the mainstream has admitted many times dark matter/energy is 95% of the total field. Turok is spinning you bigtime here. They had a question-and-answer session at the end of the talk, and you would have thought someone might have called him on that, but the questions look to me to have been filtered and planted. One lady actually uses her time to give money to Neil Turok. Yes, that is just what the Perimeter Institute needs: more money bilked from clueless citizens. I suspect the entire audience was background-checked, to be sure nothing “interesting” happened. Like everything else now, it was a controlled event.

Right after that lying to you about dark matter, he tells us gravity waves will be found in the next five years, but [they moved that one up, didn't they?](#)

At a website aptly named [“preposterous universe”](#), Sean Carroll, a Caltech physicist, gives us a similar equation to this “all known physics” equation, and his site comes up on a photo search for that. But Sean doesn't bother admitting—as Neil Turok *does* admit—that this equation is short by some large percentage of “everything”. He also doesn't admit all these equations and all the terms in them are shot through with holes. He hides the fine print completely. Instead, he says

Longtime readers know I feel strongly that it should be more widely appreciated that the laws underlying the physics of everyday life are completely understood.



And *I* am accused of ego. Sean's *hubris* couldn't be showing any more if his pants were down. I have proved in hundreds of papers that what Sean just said isn't even close to being true. The mainstream understands almost nothing, and what little physics they have isn't even physics—it is just unassigned and massaged math. For proof of that, notice Sean doesn't bother to tell you what any of his variables or terms mean. He assigns *nothing*. He just plops down a huge equation he knows you won't be able to read and expects you to be cowed. Well, Sean, I'm not cowed. I can see right through you and your bluster.

Funny that these youngish bandwagon people are always more confident than their own heroes. Neither Einstein, Maxwell, Schrodinger, or even Feynman thought that physics was completely understood—and they would think it even less if they were still alive. Even Feynman, the cockiest and fakest of that bunch, admitted a lot wasn't known and a lot was just bald heuristics.

Besides, remember that Sean didn't come up with anything in the equation he is posting. He is just a cheerleader for his teachers, and he accepted everything they told him as gospel. We may suppose he doesn't have a “question authority” bumper sticker on his car. More like a “thank you, sir, may I have another” bumper sticker.

[For the record, I have never claimed that my corrections to historical theory and math mean that in my unified field theory, everything is completely understood. I always remind my readers that even *after* my corrections, extensions, and debugging of mainstream physics and math, only the first steps have been made in understanding the world. Even though [I have dissolved the dark matter problem](#), showing it is just charge, that doesn't mean I, we, or anyone else is on the road to omniscience. It just means one problem has been solved. Human physics is in its infancy, and I always admit that.]

Four, it is obvious you are being snowed here, since they couldn't be dropping names with any less finesse, in order to prop this mess up. Notice they have labelled the integral "Feynman". Did Feynman invent integrals? No. I suppose they are referring to sum-overs, which Feynman didn't invent but used a lot. Either way, it is clear they are just using this as a way to drop Feynman's name, since that makes the fake equation look more impressive. It is the same with the rest of the equation. They needed to drop Newton's name, so they put it next to G . However, Newton didn't invent G . His gravity equation was a proportionality, and it didn't include G . G wasn't put into the equation until much later. They should have put Newton's name at the end, connected to V . I predict they will fix it after they read this paper.

And they put Einstein's name above R . I can't figure that one out. Did Einstein invent the radius? Or does R stand for Relativity? Either way, it makes no sense. You can't put Relativity into an equation as a single variable or operator. And if it is the radius, what is it the radius of? Is it the radius of all known physics, or the radius of any given particle, or the radius of any given event? Since G is in that term, it would have to be the radius of some separation of masses, in which case R should also show up in other terms. But as written, nothing is even relativistic about that term. Dividing some radius by G doesn't make it Relativistic. You need c , some given v , and—in the mainstream theory—*gamma*.

But it is even worse than that. I could tell at a glance they just made this equation up out of nothing. It is garbage through and through, from left to right, as a whole and in all its parts. They manufactured it only to impress and confuse the audience, which they knew would be unable to make heads or tails of it.

$$\Psi = \int e^{\frac{i}{\hbar} \int \left(\frac{R}{16\pi G} - \frac{1}{4} F^2 + \bar{\psi} i \not{D} \psi - \lambda \varphi \bar{\psi} \psi + |D\varphi|^2 - V(\varphi) \right)}$$

Here it is again, in a slightly more legible form. Turok says that equation explains most experiments with only 18 free variables. Which means he apparently doesn't know the difference between constants and variables. Let's see, e , i , \hbar , π and G are constants, aren't they? Several of the other "variables" are also not free. D -slash and ψ -bar are functions of ψ , the four-component wave function or Dirac spinor. V is also dependent on R , and it is not clear how subtracting the last term in parentheses from the first gives anything but zero (see [my paper on the Lagrangian](#) to see how they misunderstand both terms).

Plus, they are already re-fudging you, because someone apparently thought the equation on the board during the lecture was too *easy* to read. So they have replaced the H 's with φ 's. Some in the audience might have known that the H stood for the Hamiltonian, but they will be confused by the φ . Is that the probability density function, Euler's *phi* function, the golden ratio, the imaginary phallus, or the porosity of this equation? Writing V as a function of any of those should look very strange, since V is the gravitational potential energy (half of the Lagrangian), which they have never figured out to assign in quantum mechanics. Even Schrodinger admitted that. It doesn't matter if you take it back to H , either, since even that doesn't make any sense. V can't be a function of the Hamiltonian, because V is

part of the Hamiltonian. To say it another way, the Hamiltonian H is dependent on V , not the reverse. To be truthful, that last term containing V is another floater or hanger, like the dark matter they put in the fine print. See my [paper on the Schrodinger Equation](#) for more.

To show you another easy way to tell this equation is garbage, go to the second integral. See the i in front of it? Well, you can pull constants out the integral, supposing they appear in each term, and put them in front of it. So we are basically being told i appears in every term. And we can put it back in, if we like. We just put i in each term in the parentheses. Well, if we put it back in the Dirac term, we get i^2 , don't we, which is just -1. Well, that switches the value of the whole term. Why would we want to subtract a Dirac term from a gravity term? Which brings to a similar question: why would we want to subtract a Maxwell term from a gravity term? This is supposed to be some sort of mad field equation, written as a wave function, but in a unified field equation we should want to integrate all the subfields—like gravity, E/M, spin, and so on. You see, they are *trying* to write a unified field equation. But then they are naively adding or subtracting fields from one another, when they need to integrate them.

They will say, “We *are* integrating them, you idiot, that is what the integral means!” But neither integral, as written, acts to integrate the various fields in the way I mean. Both integrals only integrate the fields *over time*. It is astonishing I should have to be here teaching people to do basic math, but there it is. We can tell the fields are not being properly integrated, as in a real unified field equation, simply by looking at the +’s and -’s in the parentheses. The fields aren’t being integrated, they are being summed. That can’t work, because even if you then integrate the field over time or space, the separate fields remain separate and un-unified. As written, the subfields are just added and then spread. They need to be *joined*. This is just reason number 6,000 why these people have never been able to come up with a unified field equation. Not only can they not do simple mechanics, they cannot do simple math. All their maths are these pretend maths, made to fill blackboards but which otherwise make no sense on any level.

If you still don't know what I mean, link to [my paper on what I call the voat equation](#). There I simplify this problem down to basic algebra, so that you can see why current math is failing. To unify fields, you have to be able to unify velocities, and they have never even gotten that right. This failure to integrate fields in the big equation above was caused by the historical inability of anyone to understand how to integrate simple motions or vectors into accelerations.

More problems are caused if you add i back into the other terms. Why would you need it in the two gravity terms, the first and last? Why would you need it next to R , for instance, or V ? These guys are just inserting terms willy-nilly, not even paying attention to whether they make sense. From past experience, they know it doesn't matter. What they are doing is just pretend physics, like pretend art. Both art and physics are now just money laundering schemes, but they assume you will never figure that out.

Actually, Feynman admitted it. [He didn't admit to the money laundering, but he admitted to faking big equations.] He knew that even if he admitted it, you wouldn't believe it because you wanted to be snowed. He admitted large parts of physics (including equations he received the Nobel Prize for) were just pretend math and physics, calling it “hocus-pocus”, “a dippy process”, and “not mathematically legitimate”. See his book *QED*, which many wish he had never written, but which I happen to have read closely.

Now let's look at the Dirac* term. That term includes the adjoint spinor, ψ -bar, which is just the

Hermitian adjoint with the time-like gamma matrix. What does that mean? Nothing you need to bother yourself with, since it just more bluster to cover the fact that they haven't got any idea what is going on at the quantum level. To hide that, they create more ridiculous operators and operations every year. Basically, they are trying to express [my quantum spin equation](#) without knowing what it is or how it works. Since they haven't gotten near the correct mechanics, their maths naturally take on more fantastic forms each decade. Because they haven't figured out how these real particles are really spinning, they have to deny that the spin is real, then create complex matrices that they can fit to the data after the fact. That is what the spinor is. It is actually a bispinor, which just means they have spins inside spins here, but they don't understand it. Instead of admitting that the spins inside spins are real and trying to track them in three dimensions, they skip all that and go right to the math. But when you do that, your math becomes very complex, because you can't attach any of it to real motions. When you have a real spin mechanics like I have, you can assign your fundamental motions, which allows you to vastly simplify your math.

Actually, their math is both too complex and too simple, since although it includes many operators and operations it doesn't need, it fails to include the motions it *does* need. [The wavefunction was always a degree of freedom short](#), so that even before they got to the stacked spins, their matrices were incomplete. And although in some situations the four-component wave function will have the right number of components (stacked spins), since these spins are related to one another via gyroscopic rules—and are thereby not on the same level—the current expressions will never be correct. To fit their spinor math to my quantum spin equations would require major reworking, which would be at the same time both an extension and a simplification.

To be even clearer, remember that my spins are based on gyroscopic rules, so that each larger spin is twice as big as the inner spin and orthogonal to it. But if you didn't know that and were trying to fit a matrix math to these multiple spins after the fact, you would have to jerry-rig the spinors, wouldn't you? It would require massive fudges and finesses to fit the given motions into the manufactured matrices. Well, that is what the current math does.

Remember, [the Dirac equation](#) was fit by Dirac himself to electrons, when the spin equations should have been fit first to the *photon*. This was caused by Bohr's conflation of the electron and photon in some of the first quantum equations, [as I show here](#). But since Dirac didn't know that, he tried to fit the spins to electrons. That caused a fundamental error that then required a correction, and the correction required a correction, and so on and on for decades. He also assumed a parity and symmetry which I [have shown doesn't exist](#), and that caused another fatal error.

Another fatal error was caused by the fact that none of these people understood how the spin equations were related to the wave equations. As you see, they are still mixing the spinors into a wave equation in a very curious way, with no idea how one causes the other. I have shown that the waves are caused directly by the spins, and shown the easy math of that cause, but they have no idea of that here. They chose spinors precisely because they *weren't* mechanically connected to anything else. Spinors aren't real spins in the field, you know, they are just unknown degrees of freedom that can be fit into matrices and then hammered into place with various pushes (like Feynman's slash notation). But once you understand how the real spins are causing the waves, you don't have to have two separate maths for the wave functions and the spinors. You can simplify down to one math where the spins and the waves are the same thing. In my math, you don't have spins *and* waves. You real spins on real particles that cause the *appearance* of waves at the level of experiment. Since I know you don't need both in a unified field equation, I know at a glance the big equations above are just fluff.

Notice that the standard model has *non-real* spinors creating *probability* waves. Amazingly, neither are real, neither the spins nor the waves. The spins are mathematical abstractions, and in the math they cause or compose the waves—which are also abstractions. The waves are mysterious patterns we detect in experiments, but—like the spins—they are never assigned to real bodies. Quantum waves aren't field waves like sound waves, and aren't even that physical. They are patterns in data only.

But in my mechanics, the spins are real spins of real particles with real radii, and [the radii determine the spin energies](#). The speed of the particle then stretches out that spin-wave, and that stretched out wave interacts with our machines at the macro-level, causing a wavelength in data. This gives us a connection to reality and to mechanics.

You will say that in the standard model, the waves are also functions of the spins, since

the wave functions in the Dirac theory are vectors of four [complex numbers](#) (known as [bispinors](#)).

But, again, the spins are what Pauli called “phenomenological”, which means in this case *not real*. And, more importantly, once you express the waves as bispinors, you should throw out the waves as superfluous. But the standard model keeps both. This has the effect of mucking up any and all unified field equations, which should be written in terms of waves or bispinors, *but not both*. The spins and the waves are the same thing, one measured at the level of size of the quantum particles, and one measured at our level of size. You don't need to include the same thing twice in an equation, and if you do you are just going to muck up that equation.

Another problem is Dirac's pulling in Relativity math to fudge his equations. This was done because at the time (and now) they thought mass increase was a function of speed alone. In other words, they thought all you needed was a velocity transform or momentum transform. They didn't understand that the particle, whether photon or electron, was gaining energy from the field by collisions with real charge, spinning up the particle. So the mass or energy increase *wasn't* coming from Relativity. It was coming from the field in the form of more integrated spins. I have shown this in many papers, including my papers on the Higgs. So, once again, their inability to see how the real spins were stacking caused a huge error in the equations, an error that had to be finessed later.

And yet another problem was caused by Dirac's “coup”: taking the square root of the wave operator and assuming the terms A , B , C and D were matrices.

This immediately explained the appearance of two-component wave functions in Pauli's phenomenological theory of [spin](#), something that up until then had been regarded as mysterious, even to Pauli himself.

But this wasn't a coup, it was just another horrible fudge, and it prevented anyone from seeing the truth. The multi-component wave functions weren't caused by finessed matrices, they were caused by real stacked spins on real particles. See [my paper on superposition](#), where I first unwound this mystery. Real stacked spins caused by real edge hits of real photons not only explains superposition and entanglement, it explains a raft of other mysteries, [such as the size differential between electron and proton](#). It also explains the creation of all the larger particles like the Higgs, the Beauty Baryon, the Pentaquark, and so on, with no need for the Higgs field, quarks, or any of the rest of that mess. My simple mechanics and math is clearly right, since once you apply it to the field, all the known numbers of experiment immediately fall into your lap, including the ones the standard model has always thought were accidents. If my theory and math were wrong, there is no way I could so easily and quickly

explain numbers and phenomena that have been mysterious for decades, and sometimes for centuries.

Turok admits in the lecture that Dirac said the fine structure constant 137 was the key to progress in quantum mechanics. Feynman said the same thing. Well, [I have discovered more](#) about the fine structure constant than anyone living or dead, and I wish Feynman had lived longer, so that he could [have seen it](#).^{1,2,3,4} I honestly believe that rather than attacking me, he would have embraced me (or done both, more probably—it would have been interesting).

So you see it was compromised equations like Dirac's equations that actually *prevented* anyone from figuring out the mechanics underneath superposition, as well as the mechanics underneath hundreds of other problems. If you think four-component wave functions are caused by matrices, you are never going to figure out these mechanical problems—which have nothing to do with matrices or any other math. They have to do with real things doing real things.

It is the dogma that has prevented progress, as it always does. All these guys, whether we are talking about Dirac, Einstein, Newton, or Feynman, were deified along with their equations, and no one was allowed to improve on them—other than by taking them as bedrock and adding another layer of fudge frosting. No one was allowed to *correct* them, because that was seen as impertinent. But I have shown that all previous physics and math was compromised at all levels, in a multitude of ways, and that it has long needed and required a thorough scrubbing. I have given it that scrubbing, in many ways, but as long as these gatekeepers and promoters of the standard model continue to take up all funding and all public attention, nothing will change.

What we need is a revolt from the midlevels of physics, and from engineers and other working people. This is what they most fear, and it is why they are trying to include more from the midlevels by making them one of 2,000 authors of every important paper. I beg you, this is the time to stand up and say, “NO MORE!” The tops dogs have already been weakened by all the recent catastrophes and meltdowns, and a little bravery right now will go a long way. Tell these frauds to put up or shut, and mostly to put down and go away. It is time to get back to work and do some real physics, and with these guys leading that will never get done.

Actually, it will get done, because I am going to continue doing it, if I have to do it alone. Coming up soon, a long paper on the Stark Effect, including a complete overhaul of spectral lines and a reworking of the problem from the ground up. It is already more than half written.

¹<http://milesmathis.com/proton.html>

²<http://milesmathis.com/fine.html>

³<http://milesmathis.com/fine2.pdf>

⁴<http://milesmathis.com/fine3.pdf>

*Turok tells a story about Dirac in the lecture that is meant to show us how “interesting” he was, but which only confirms how small he was. When he first met Feynman, when Feynman was just a graduate student, he asked Feynman “do *you* have an equation?” This, as much as anything, explains how physics fell in the 20th century.