return to updates

More Proof from HuffPost that Physics is Dead

by Miles Mathis

First published April 24, 2013

An article at HuffingtonPost.com today by Victor Stenger proves how stonedead physics really is. We are told Stenger is a bestselling author with a PhD in physics, so he should be able to do highschool math, right? Nope. In an exclamatory article about space travel, Stenger proposes a rocketship accelerating at *g* for 7 years. Although 7 years is the time period implied by his thought problem, he goes beyond it to say this:

Now, building a spaceship capable of accelerating at one *g* for 14 years is not within any known technology, but we can't prove it's impossible.

So he has unwittingly doubled his own cluelessness for us. Why? Because we can show very easily that both scenarios are strictly impossible, even according to mainstream math and theory—math and theory he should know if he is a bestselling author on such subjects. Let us take the smaller time period, to start. If we let any object accelerate (from rest) at *g* for 7 years, we would use the simple equation v=at. That equation is in chapter one of your high school physics book. In my high school physics book, it is on p. 21. At an acceleration of 9.8m/s^2 for 7 years, we find a final velocity of about 2.16 billion m/s, which is 7.2 times the speed of light. If we use Stenger's second number and let the rocketship accelerate at *g* for 14 years, we find a final velocity of 14.4c. So I have just "proved it is impossible." According to mainstream theory, you cannot match or exceed the speed of light. The mass of his rocketship would have gone to infinity after less than one year, and it is pretty difficult to accelerate something with an infinite mass.

Amazing he doesn't know that, since he is quoting Relativity equations as if he is an expert in the field. Which should make us suspicious of his other math. Although that math is more catholic, it is also wrong. He tells us that although 1,200 years would have passed on the Earth, only 14 years pass in his rocketship. This is just bad post-Einstein science fiction, based on math Einstein himself never did. Einstein didn't believe in the twin paradox, and this sort of science-fiction math was only done by physicists after Einstein who didn't understand his fields or math, and who wanted attention. Although I accept Einstein's transforms (for the most part), I have shown this twin paradox math is fudged. It is nothing more than bad vector math. It makes for good movies like *Planet of the Apes*, but it is terrible physics and worse math.

To show you what I mean, notice that Stenger just plops down an equation for time dilation, applies it to his thought problem, and then *assumes* that the dilated time he calculates is the time the people on the rocketship experience. It isn't, and it never was for Einstein. In a Relativity transform, you transform from t to t', where t is the time on the planet, say, and t' is the time on the rocketship. However, according to Einstein's own definitions, you have to do your transform from one spot or the other. In other words, you have to pick a point of view. That is what Relativity means. Your numbers are *relative* to the place you are measuring from. If you are doing transforms, there is no universal space or time, so it *matters* where you measure from. You can measure from anywhere, and there is no privileged spot, but you still have to pick one. The transforms are not done from the field, they are done from some specific point-of-view, so you have to pick. OK, so say we pick one of the two planets to measure from. We either do the calculation from the Earth or from the distant planet we are traveling to. The time t' then become the time of the rocketship. And in that case, t becomes the time of the rocketship *as measured* from that planet. Time t is how the data from the rocketship will *look* to people on the planet. That data will be skewed relative to t', which is why we need a transform in the first place.

Which means t is in the data only. The data is not equivalent to the time they are experiencing on the rocketship. The time t' has been skewed by having to travel to the planet in the field of light. It is the speed and the distance that has skewed it. Well, if it is skewed, it is *not* what they are experiencing on the rocketship. On the rocketship, they are experiencing local time, which has not been skewed by speed and distance. On the rocketship, they have no speed relative to light. Remember, according to Einstein's own postulates, every object measures itself as stopped relative to light. Every object measures light to go c, therefore every object measures itself going zero relative to light. Therefore, the rocketship measures itself to be undilated. Its local time is not t, it is t'. The time t is only in the data that the planet is receiving. The time t does not belong to the rocketship itself. The time t belongs to the data skewed by the velocity and distance it has had to travel.

This means that there is no twin paradox and no time differential between the rocketship and the planet. If the planet has aged 1,200 years, so has the rocketship.

I have been showing this for over a decade now, and it amazes me how few people can penetrate it. It is straightforward and completely logical, so I don't understand how the mistake has stood for so many decades. It was just idiotic to apply t to the time experienced by the planet, since that application contradicted the definitions and postulates of the field. Einstein himself never did it and never confirmed it. So how has this story stood for 80 years? I suppose it has stood because it is a good story. It is sexy, thrilling, and it leads to good movies. Given that, why would we wish to lose it? If fiction is more interesting than fact, give us fiction, I guess.

We see this at *HuffPost*, which will publish science fiction but which will not publish anything that limits itself to facts. The readers don't care if the math adds up, they just want to hear a good story about time travel. And Stenger is prepared to give them that, since it pays much better than real physics. Real physics pays nothing, as I know too well. But science fiction pays very well. Some get paid for writing articles and books promoting it, and others get paid even better via taxdollars for the really big science fiction projects—like the Higgs project.

Addendum, September 2, 2013: A reader politely informed me today I was wrong on this one. He said I had misused the equation v=at. He reminded me the equation for velocity from acceleration in Relativity was $v = c \tanh(at/c)$. He said that since that equation keeps v below c, Stenger is proved correct. I answered that he and Stenger were misunderstanding both that equation and the problem at hand. Since that equation is a Relativity transform, it must be giving us a velocity as seen from a distance. In other words, the variable v there is *as measured* from a distance. It is not the local velocity, as the spaceship would measure it. If we wish to calculate what the spaceship would measure given an acceleration of a, we would simply use v=at. Since acceleration is local (or proper) by definition, and since t is also local, we get the local velocity. And, as I showed, we get a local velocity way over c, which is disallowed.

No doubt this reader will answer me with the mainstream dodge, which is that objects have no local or proper velocity. Any object can define itself as stationary, according to Einstein, and so they will say this object has a local velocity of zero. They will say that velocity is always a relative measurement, and that the transforms of Relativity are symmetrical around velocity. But we know that isn't so. Moving objects can easily measure their own velocity, and they do it all the time. In my papers, I have shown how to transform between that local velocity v' and the measured from-a-distance velocity v. I have provided the v transform, in other words, proving them wrong.

The transforms would be symmetrical around velocity only in the case that one co-ordinate system was "you measuring me" and the other was "me measuring you." In that case, the operation of measurement would indeed be symmetrical, and the given velocity could go either way. But in Relativity, that isn't the case. In Relativity, one co-ordinate system is "me measuring me" and the other is "me measuring you." There is no symmetry of measurement between those numbers, so the velocity *won't* go either way. It will be different depending on where you measure from.

But even without my proofs and my extended equations, we should have known that. In this particular problem, we have a given acceleration. How could we give an object an acceleration and then allow that object to claim it is stationary? This reader might say we give it an acceleration from our perspective, but don't tell the object itself it has that acceleration. Therefore the object is still free to believe it is stationary. The problem is, even without being told, the object will know. It will be feeling internal forces, right? A object feeling *g*-forces cannot very well claim it is stationary. Once we remember that, we remember that acceleration is a local phenomenon itself, at least in this case. Remember, this spaceship is not said to be accelerating from a gravitational field. *Its own engines* are accelerating it. The spaceship (or those onboard) could hardly be accelerating by the use of internal engines and not know it is accelerating. Did they just forget they set the dial to 1*g* and the timer to 14 years?

I hope you begin to see that the equation given me by this reader cannot be correct, and why. By Einstein's definitions, c is always a local measurement. It is never measured at a distance. It is never primed. You never do transforms on the linear motion of light itself. The reader admits that the t in that equation is *proper*, which means it is also *local*. Well, an acceleration is also local. If you are given an acceleration a, as here, it has to be local. You can't be given a Relative acceleration, for many reasons; and you *aren't* given a Relative acceleration here in this problem, explicitly. You are given an acceleration of 1*g*, and to *set* that given acceleration in the problem you would set it *onboard*. The people on the spaceship not only would *know* they had an acceleration of 1*g*, they would *set* it. They would have both a speedometer and an accelerometer onboard, indash. They could and would check both as they passed known objects, since the only way to measure either one is against the background of those objects. The spaceship would have both a local velocity and a local acceleration, and the given acceleration in this problem of 1*g* can only be the onboard acceleration. If it weren't, we would need a transform.

To see that most clearly, I point out that you *can* back-calculate a Relative acceleration here, but obviously it won't be 1*g*. Since by the Relative equation for velocity above, the velocity is staying below c, it cannot be maintaining 1*g* from the point of view of the observer. The *observed* acceleration has to approach zero as we approach c, right? Therefore, we know the given acceleration a is local.

Well, if we let local variables be primed, we get

v = c tanh(a't'/c)

And since v' = a't'

v = c tanh(v'/c)

Looks like we *do* have a velocity transform here, since we are transforming from v' to v. Which means that velocity is not invariant across coordinate systems, which means the equations are not symmetrical, which means the current interpretation of Relativity is seriously flawed. It also means this equation above is not right, even as a velocity transform. I have long ago redone the original equations from the ground up, showing the velocity transform for one degree of Relativity is

v = v' /[1 + (v'/c)]

That matches the form of the old frequency transforms for light, which we had before Relativity, and which I have shown are actually Relativity transforms. Since those transforms were confirmed by experiment before Relativity even came along, Einstein should have conformed SR to those old frequency transforms. We know he conformed his equations to Maxwell's equations—or tried to—but since he didn't realize the old frequency transform was already Relativistic, he didn't bother. After the fact, we can see that his transforms are actually too complex, and that complexity comes from muddled field definitions and improper first equations.

I encourage you to note that we can do transforms on light's frequency, although we cannot do transforms on its linear motion c. This is very important in other problems I have discussed.

So you see we don't need a hyperbolic tangent to solve this, and we should have known that long ago as well. These basic kinematic transforms come out of Special Relativity, where we have no gravitational curves. With no curves, you shouldn't need hyperbolic functions to solve. Logically, we might possibly need tanh when we get into General Relativity, but please notice that this problem of an accelerating spaceship has nothing to do with GR. The given acceleration of 1*g* is not a gravitational acceleration, and no curves of any kind are implied. The given acceleration can easily be thought of as in a line away from observers on Earth, in which case hyperbolic geometry and functions are just an intrusion.

Addendum, September 3, 2013. This reader (James Reston or James Renton, he called himself both) responded to the above analysis with this:

v is not small, even in its local inertial frame. Hence it transforms as a 4-vector, as does the variable t as the time component of the 4-position. That leads to the expression I gave, which is correct, and which leaves v < c for all t and all T.

That's his whole response to my entire analysis of Relativity, all 400 pages worth. Seeming to realize how inadequate that is, he called me an asshole as a parting shot. In the mainstream, "asshole" = "anyone who catches us pushing equations."

You can tell he is grasping from the fourth word "small", which is beside the point. It doesn't matter how large or small v is. Nothing I say above or anywhere else is answered by making v large. So he then makes v a 4-vector, assuming that I don't know what that means. He should go here to see I know what it means far better than he does. He is trying desperately to add some confusion into the problem, so that the fact he is dead wrong isn't so obvious. But velocity *can't* transform as a 4-vector, by the definition of velocity and 4-vector. Velocity is defined as x/t and is always linear. If we let the spaceship accelerate in a line, we have no y or z components, so velocity in that case is a 1-vector. The same can be said for t, which is also not a 4-vector. Time is a single vector, by definition. It is *part* of the 4-vector, but it doesn't "transform as a 4-vector", since it isn't a 4-vector by itself. Einstein transforms time separately, in a t-transform, and I assume James knows that. So trying to drag in y and z here to muck this up is pretty pathetic.

But I have shown that is what these guys do. If you call them on anything, they hide behind the math, hoping you won't be able to unwind it. Since they have proved they can't follow kinematics, mechanics, real motions, real particles, or any real applied math problems, they hunker behind the biggest math they can find and blow a lot a smoke. If you still manage to drag them out by the ears, they call you an asshole. James says that I am an asshole, "just like everybody says." Who is that "everybody", James? Could that "everybody" be all the small guys you hang out with in the physics forums, avoiding all my line-by-line analyses, as above, and just reveling in your mass whine?

I enjoy getting emails like the ones from James, since he helps prove my point. He justifies my title again, showing us once more how stonedead physics really is.