**Einstein's Theory of Special Relativity**

**By Elizabeth Howell - March 30, 2017**

<https://www.space.com/36273-theory-special-relativity.html>

***“as an object approaches the speed of light, its mass becomes infinite ....”***

**Nothing that we have discovered yet,**

**travels as close to the speed of light,**

**as do neutrinos**

**(the difference is less than one-billionth of a percent)**

**The 2015 Nobel Prize in physics went to a couple of scientists**

**who discovered the neutrino’s mass ...**

**and it was no where near infinity.**

**In fact, it was quite tiny.**

**So your statement is demonstrably false.**

***“We now know that ... light in space moves in a vacuum.”***

**A true vacuum has never been found anywhere in the universe.**

**So that statement is also false.**

***“This led him to the counterintuitive idea***

***that time flows differently according to the state of motion...."***

**Time is invariant throughout the universe.**

**What Einstein was referring to is the “perception” of time by observers and how objects “experience” the passage of time.**

**Objects in different reference frames or objects travelling at different speeds will experience the passage of time differently.**

**But whichever reference frame you are using, one second will pass in the universe every second ... everywhere in the universe.**

***“It shows that energy (E) and mass (m) are interchangeable;***

***they are different forms of the same thing.”***

**Mass is a property of energy, not a different form of energy.**

**So it is nonsensical to say**

**that they can convert back and forth into each other.**

**If you have some evidence, ANY evidence,**

**that mass and energy are interconvertible,**

**now would be an excellent time for you to present it;**

**and then you could collect your own Nobel Prize.**

**Mathematical equations only show that**

**both sides sum to the same total.**

**They do not show that the two sides are interchangeable.**

**For example: 2 + 2 = 4**

**mathematically shows that the two sides sum to the same total.**

**But the two sides are quite different:**

**the left side has twice as many objects while the right side has an object that is twice the size of any object on the left side.**

**They are mathematically equal – but they are not the same.**

***“If mass is somehow totally converted into energy”***

**Can you provide any evidence that this has ever happened?**

**Since you cannot, what follows below is merely speculation.**

***“it also shows how much energy would reside inside that mass: quite a lot.***

***(This equation is one of the demonstrations for why an atomic bomb is so powerful, once its mass is converted to an explosion.)***

**It’s not the mass that is converted to make an explosion ...**

**it is some of the energy within each atom**

**that is released and changes into other forms of energy**

**(heat being one) that makes the explosion.**

***“As an object moves, its mass also increases”***

**That’s not true. Photons move. Their mass doesn’t increase.**

**It remains zero no matter how far they travel.**

**So that statement is also provably wrong.**

***“Near the speed of light, the mass is so high that it reaches infinity”***

**Good luck trying to explain “reaching infinity.”**

**I’ve never seen anyone do it, but if you can,**

**it sounds like you might get a second Nobel Prize for your mantel.**

***“The only reason light moves at the speed it does is because photons,***

***the quantum particles that make up light, have a mass of zero.”***

**You did not explain why photons move at C.**

**You only stated that because their mass is zero, they move at C.**

**That is not an explanation.**

***“Another strange conclusion of Einstein's work comes from the realization that time moves relative to the observer. An object in motion experiences time dilation, meaning that time moves more slowly when one is moving, than when one is standing still. Therefore, a person moving ages more slowly than a person at rest. So yes, when astronaut Scott Kelly spent nearly a year aboard the International Space Station in 2015-16, his twin astronaut brother Mark Kelly aged a little faster than Scott. This becomes extremely apparent at speeds approaching the speed of light. Imagine a 15-year-old traveling at 99.5 percent the speed of light for five years (from the astronaut's perspective). When the 15-year-old gets back to Earth, according to NASA, he would be only 20 years old. His classmates, however, would be 65 years old.”***

**If a photon or a human travels at the speed of light,**

**and returns to Earth 5 years later,**

**please explain how those classmates could have aged 50 years.**

**When you can do that ... I will believe you.**

**neo**