

## Cover Letter

In this theory, I prove that you cannot have existence without also having time. It therefore follows that the passing of time cannot go to zero, and thus general relativity is wrong. I therefore restructured the spacetime metric to allow for time to pass at the same rate everywhere, while letting the speed of light dilate. The results have been phenomenal:

- 1) This approach allows the derivation of Maxwell's Equations for light but in a gravitational field. Using these equations, yields the same results for gravitational redshift, and lensing as predicted by GR.
- 2) This approach resolves a conflict between quantum mechanics and GR by removing the singularity inside of a black hole. Inside the black hole the velocity reverses, so all of the matter is deposited at the event horizon, not a singularity. This is consistent with Susskind's theory that the amount of information inside of a black hole is proportional to the surface area of the event horizon, as the mass is actually at the event horizon.
- 3) This theory tells us that the ticking of a clock is tied to the local speed of light since all of the particles communicate with light. This gives rise to the appearance of time dilation when viewing events with a different local speed of light. However, this theory shows that time and length don't actually contract. If we consider muons at a height  $H$  above the surface of the earth, the percentage that hit the ground before decaying is consistent with the predictions of special relativity. However, it should be very clear that  $H$  didn't actually decrease as predicted by length contraction. So special relativity gets the correct answer, but for the wrong reason. Since particles communicate via light, it makes sense that the decay rate is a function of how the particle perceives light. Thus, this issue is resolved in a manner that is consistent with logic.
- 4) In this research paper it is shown that nothing is such that if you could take subsets of nothing, those too would also be nothing. Thus, adding subsets of nothing will always yield nothing, thus you cannot create something from nothing. Therefore the universe is not created from nothing, but rather is organized from fundamentals that have always existed.
- 5) This theory also tells us how to write our constitutive equations so that they hold everywhere by tying them to the local speed of light.

So, this theory solves paradoxes of physics, opens the door for the unification of gravity with quantum mechanics, yields the same experimental results as GR, and never violates logical principles. This theory has been presented to several physicists, with identically zero mathematical objection so it is now time to seek publication. A monetary reward was also offered to anyone that could disprove this theory and it never happened. When a new theory accomplishes this much, it is time to consider removing the old theory even though I understand that spacetime is hard to let go of. This paper is in no way meant to take lightly the contributions of Einstein as he is forever my superhero of physics. Thanks for the consideration.