

Review of: "Does energy always have mass?"

Gabriel Ferrari¹

¹ Instituto Federal Catarinense

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First of all, must be said that the boldness in approaching such a matter is remarkable. The author expresses familiarity with the subject and intends to develop a way to answer some ultra-relevant questions in relativity. Nevertheless, here seems dwell the main critical point in the article: there are very few references to a subject that has been largely discussed over more than a century. One can find only a couple of well known references and two articles from the author himself. So, just by the fact that the paper is like a self-referenced manuscript, always referring to proper works, one sees that must pay attention to eventual partiality.

Contrary to the manuscript, it's not widely spread that "every type of energy also has mass". Over the past decades the scientific community understood very well that.

The sentence "by using two simple thought experiments, we show that (...)" is dangerous, because no one can fully show, prove or demonstrate anything by thought experiments.

It's difficult to note care when the author cites a classic work in "unfortunately, Misner, Thorne, and Wheeler's argument is problematic." Who else told the argument is problematic? Is it a personal opinion based on something that is aimed to be defended?

Let us take a look at "we will show that the existence of the gravitational frequency shift, taken alone, is not compatible with energy conservation (section 2, see also [4]) and, consequently, that energy does not always have mass": is it really believed that something so historical and important will be proven by experimental thoughts and not using appropriate and well-established equations?

So, finally, the idea is fine, but the paper could be more modest and not trying to make history with a couple of not literature-based arguments.