

# Review of: "In the Optical Effects, the One-Way Synchronization Foresees Transformations Conserving Simultaneity and Spacetime Continuity, Replacing the Two-Way Einstein Synchronization and the Lorentz Transformations, Which Predict Instead a Spacetime Continuity Breach and a Weak Form of the Relativity Principle"

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In this article, the author has compared the relative synchronism and absolute synchronism by presenting the one-way measurement plan of the speed of light inside the optical fiber and has shown that these two are not equivalent and are two different categories.

The relative simultaneity is the prediction of Lorentz's coordinate transformations, and the equivalence of relative simultaneity and absolute simultaneity is based on the survival of the simultaneity of the Mansouri and Sexl proposal. With the one-way experiment of measuring the speed of light and solving Sagnac's paradox, it has been practically tried to challenge Einstein's principles of special relativity, and hence the possibility of alternative theories is proposed.

Because the principle of the constancy of the speed of light in Einstein's special relativity is based on Lorentz transformations, although it is stated in the scientific literature that Einstein accepted this principle regardless of Lorentz transformations, he used Lorentz transformations as the most appropriate option to create symmetry between the electromagnetic equations and their generalization to relativistic mechanics.

I have also read the questions and comments of the honorable referee, and it seems that the challenging questions have been stated correctly, but I must admit that the article is written professionally and the correctness and bias of each of the models is honest. Various topics have been analyzed and are worth printing.

But in the meantime, I must point out an important point that as I pointed out previously in my reviews of the articles with the same topic in 'Qeios', the best practical test is related to a test of the constancy of the speed of light and the test of the principle of special relativity and the validity of Lorentz transformations by satellites in the outer atmosphere, where there is no material environment, so that two neighboring satellites conduct two different tests, one-way and two-way, to send an optical signal and compare both. In better words, I must remind readers that Einstein's special relativity accepts the constant speed of light in a vacuum, not in a material environment. In the test proposed in this article and previous articles

written by others with a similar topic too, light propagation is done in an optical fiber, not in a vacuum, and hence it cannot be used as correctly to announce the acceptance or rejection of Einstein's principle of special relativity and the validity of Lorentz transformations too.

Sincerely yours,

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