

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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Potential competing interests: No potential competing interests to declare.

- 1. In your conclusion, you argue for the preference of Lorentz transforms based on absolute simultaneity (LTA) over the standard Lorentz transforms (LT) due to their consistency in interpreting the Sagnac effects. Could you elaborate on any potential experimental predictions or tests that could distinguish between these two frameworks?
- 2. You mentioned that the Lorentz transforms fail to predict reciprocity for the one-way invariant interval T in the reciprocal linear Sagnac effect, suggesting a weak form of the relativity principle. How would you propose testing this prediction experimentally, and what observable consequences would confirm or refute this claim?
- 3. Your study implies that the Lorentz transforms based on relative simultaneity encounter difficulties in maintaining spacetime continuity and predicting the behavior of light propagation along moving contours. Could you discuss any specific experimental setups or scenarios where these inconsistencies become most apparent?
- 4. The adoption of Lorentz transforms based on conservation of simultaneity (LTA) is proposed to address paradoxes and unusual consequences encountered with the standard Lorentz transforms. Could you provide examples of these paradoxes and how the LTA resolves them in a more satisfactory manner?
- 5. In your conclusion, you assert that the one-way speed of light is measurable in principle and propose optical experiments to test Lorentz and light speed invariance. What experimental methodologies would you recommend to measure the one-way speed of light, and how could these experiments provide evidence in support of your conclusions regarding the validity of the Lorentz transforms and the nature of simultaneity?