

Peer Review

# Review of: "A Common Origin for the Sagnac Effect and Einstein's Train-Embankment Thought Experiment"

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Dear Stefano

I gave the paper only three stars because, although it is clearly written and nicely illustrated, the “failure of simultaneity” your paper proves is not the failure of simultaneity in the relativistic sense.

The failure of simultaneity in the relativistic sense refers to the fact that two distant events that are simultaneous for one observer are not simultaneous for an observer moving with respect to the former one.

Note that in E-TETE, the judgment of simultaneity by the observer on the embankment and on the train refers to the same two distant events. The two distant events are the emissions from Ra and Rb of light signals. The observer on the embankment judges the emissions as simultaneous, while the observer on the train judges those same two events as not simultaneous.

In your example, it is not clear to what those same two events are that are differently judged by the two observers. Perhaps you can clear that up for me.

In any case, it seems to me that you are discussing some modification of the linear Sagnac effect and the circular Sagnac effect without any implications for the original E-TETE.

## Declarations

**Potential competing interests:** No potential competing interests to declare.