

Review of: "Accelerated Motion Towards Relativistic Velocities Described by Newtonian Mechanics"

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Potential competing interests: No potential competing interests to declare.

The author presented an interesting model.

1.

I have already met with similar concepts in the articles:

[1] Nawrot Witold, *Alternative Idea of Relativity*, International Journal of Theoretical and Mathematical Physics 7 (5), 95-112, 2017.

[2] Nawrot Witold, *Theory of Relativity – Biggest Mistake of the 20th Century*? International Journal of Theoretical and Mathematical Physics 11 (1), 1-14, 2021.

2.

However, it seems to me that the presented model has serious flaws.

According to assumption 2: "matter manifests itself only in the 3-dimensional space ... which is perpendicular to its direction of motion through this 4-dimensional space".

In another place the author wrote that: *the result of the 2nd postulate, which states that matter manifests itself only in the 3-dimensional space perpendicular to its velocity vector*".

Let's look at Figure 1. The observer at point B does not see the rocket when the rocket is at point C. OK, it is consistent with the assumption 2.

The observer sees the rocket when she is in point D because then: <code>pbserver</code> is located inside the space of existence of the rocket.

The problem is that in such a model the observer sees not 3 dimensional, but 4 dimensional space. It is correct that in this model each body is perceived by observers from a 3 dimensional space. But the observer can perceive 4 dimensional space. Unfortunately, the drawing cannot be placed here, with the presentation of this property of the presented model.



This is undoubtedly the property that is not in line with the properties of our reality.

3.

It should be noted that the model proposed in the article is an attempt at a different interpretation of mathematics on which Einstein's STR is based.

The problem is that STW is a wrong theory. This is a theory describing measurements made using incorrectly synchronized clocks. Einstein proposed a misinterpretation of the mathematics of this theory.

This was proven in the article:

[3] Derivation of all linear transformations that meet the results of Michelson-Morley's experiment and discussion of the relativity basics

https://link.springer.com/article/10.3103/S0027134920060181 (online https://www.researchgate.net/publication/350050565)

The model presented in this article also has this disadvantage.

4.

An alternative theory for a Special Theory of Relativity is the Special Ether Theory derived in the articles:

[4] Kinematics in the Special Theory of Ether

https://link.springer.com/article/10.3103/S0027134918040136 (online https://rdcu.be/bSJP3)

[5] The derivation of the general form of kinematics with the universal reference system

https://doi.org/10.1016/j.rinp.2017.12.053