Review of: "A Study on the Absolute Stationary Inertial Frame and the Relative Velocity, Inertia Mass, Momentum and Kinetic Energy in the Inertial Frame moving relative to it"

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Potential competing interests: No potential competing interests to declare.

This study presents a provocative alternative to special relativity by positing the existence of an absolute stationary inertial frame. While the theoretical framework is intriguing, its speculative nature and lack of empirical support limit its scientific impact. Strengthening the mathematical foundation and experimental feasibility of the theory will be crucial for advancing its credibility and potential applications in physics. The abstract introduces the concept of an **absolute stationary inertial frame** and proposes that the speed of light is constant only in this absolute frame. New equations for inertial mass, momentum, and kinetic energy in a moving frame relative to this stationary frame are presented, along with a proposed experiment to determine Earth's velocity relative to this frame.

Strengths:

1. The abstract sets a clear research objective and distinguishes its assumptions from Einstein’s special relativity.
2. Proposing an experiment to validate the theory adds a practical dimension to an otherwise theoretical discussion.

Weaknesses:

1. The abstract lacks specific details on the derived equations or experimental methodology.
2. It does not address potential limitations or challenges of the proposed assumptions.
3. The assumptions appear speculative, with limited justification provided for the existence of an absolute stationary frame.
4. The introduction does not address why prior experimental results supporting special relativity might still align with these new assumptions.