

Re: SR Unverifiability – GR falsifiability

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- *From:* "JanPB" <filmart@xxxxxxxxxx>
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Mike wrote:

Axioms of SR:

(See for example: <http://casa.colorado.edu/~ajsh/sr/postulate.html>)

1. Space-time is a 4-D continuum ---- fails verification (and common sense)
2. There are globally inertial reference frames – fails verification
3. POR (Principle of Relativity – An epistemological principle that fails verification)
4. Constancy of speed of light is all inertial FoR – fails verification (and common sense)

We've been through all this before on this NG. SR in fact relies on several physical assumptions, e.g.:

1. It takes the same amount of time for light to travel around a triangular path in both directions. Note that only one clock is used, so the issue of synchronisation does not come up. These experiments were done by Fizeau, and Einstein almost certainly knew about them in 1905. Without this (physically verifiable) result Einstein's synchronisation of clocks wouldn't work (Einstein's 1905 paper would grind to a halt at the point where it says: "We assume that this definition of synchronism is free from contradictions", specifically, the relation 2 there).
2. It assumes that the (now consistent) clock synchronisation does not go out of step. IOW the clocks once synchronised, remain synchronised for all time. If this wasn't true (it isn't e.g. when gravity is present), then the second postulate would amount to a mere clock setting convention and the entire SR – while correct – would become entirely vacuous, just like the "relativity" based on clock synchronisation by sound signals would be.

Re: SR Unverifiability – GR falsifiability

There is no way to falsify the base of SR.

There is – perform the two experiments above and check the results.
Certain aspects of space and time homogeneity and isotropy are necessary.

If you want to attack the absurdity of Einsteinian Relativity attack GR.
Dealing with SR is a waste a time, It is no more than a formal mathematical theory.

You haven't studied it in enough detail and got fooled by the mathematical simplicity of its derivation (as were many others – just read this NG).

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Jan Bielawski

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