The Quest for Truth: 1) Special Relativity Theory

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- What is the meaning of special relativity? Where is special relativity originated from? What are the consequences of special relativity if it were right? How should special relativity be understood?
- What are thought experiments? What is the danger of thought experiments?

Special relativity was intended to explain the problem of simultaneity of events that were situated at different places and at different velocities. The observation method from the point of view of the observer was the use of light. When an inertial reference frame is emitting a signal, another inertial reference frame is receiving the signal at another time, defined by the velocity of propagation of that signal, and also depending from the velocities of the considered inertial reference frames.

The derivation of the theory was made by setting up a thought experiment, but not a real experiment. In that calculus, light was supposed to always propagate at the speed of light, whatever the speeds of the inertial reference frames were. Furthermore, the initial setup of the thought experiment didn't mention any differences from the usual Euclidian world, in which time and place are defined as corresponding to the measurements of a standard ruler, a scale and a standard clock.

The result of the calculus however suggests that the standard ruler, the standard mass and the standard clock are changing. The moving mass is allegedly increasing, the length of the moving objects are allegedly decreasing and the time is allegedly dilating. Is this possible?

In fact, Einstein's thought measurements between the inertial reference frames are made by using light. Light can however never change the fundamental properties of the very objects in the inertial reference frames.

Let us now look at several inertial reference frames with different speed.

In the special relativity theory, every inertial reference frame can pretend that it is standing still and that the other inertial frames are moving.

Hence, every inertial reference frame can pretend that the other inertial frames' masses are increasing, their length contracting and their time dilating. This is self-contradicting.

The conclusion is that the special relativity theory is not consistent in different ways:

1) The thought experiment comes to changes of the standard ruler, the standard mass and the standard clock, while the setup of the thought experiment was Euclidian, and only light was used between the inertial reference frames.
2) The changes of the standard ruler, the scale and the standard clock are self-contradicting for different inertial reference frames.

Hence, the special relativity theory is not valid.

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