Einsteins Relativity Theory Repudiated

Rasjid Chan Kah Chew, Singapore, chanrasjid@gmail.com

8th Feb 2012/23rd Oct 2013

1 Abstract

Application of Special Relativity's time dilation to a perfectly symmetrical twin paradox leads to a logical inconsistency that unequivocally repudiates the theory. Einstein's Special Theory of Relativity is basically the Lorentz Transformation. The reason why the theory is invalid is simply that the Lorentz Transformation is not one that is consistent with our real physical world.

1.1 keywords :

special relativity;symmetric twin paradox;inconsistent;invalid;time dilation.

2 Special Relativity

To be clear as to what the Special Theory of Relativity is, we will set out clearly the form of the theory that is assumed for this article. Special Relativity is based on two postulates:

> Principle of relativity: The laws of physics have the same mathematical forms in all inertial reference frame.
>
> Constancy of the speed of light: The speed of light in free space is a constant independent of the observer or the speed of the source.

From the above two postulates, the original 1906 paper of Einstein derived the Lorentz Transformation. The Lorentz time dilation becomes an integral aspect of the theory:

> Two inertial clocks with a uniform relative motion will each experience time dilation when referred to from the reference frame of the other clock.

3 The Symmetric Twin Paradox

A space station in outer space, far from all other influences, has two identical spaceships on it. The station and the spaceships have ideal navigational ability

and it is stabilized to have no rotation with respect to the fixed stars. With the propulsion system shut down, the station is an inertial frame that may be considered at rest with respect to the fixed stars.

The two spaceships do a pre-determined symmetric journey away from each other and then back towards each other and finally land on the space station to compare clock readings. Time for the pre-determined journey are proper time of the two spaceships - for how long they accelerate or when they start to decelerate. It may be assumed that the spaceships travel along a straight line, first accelerating, then coasting at a uniform speed; then reversing and finally decelerates and land on the space station.

4 Special Relativity gives rise to an inconsistency

Let the two clocks be called A and B. Using Special Relativity's time dilation, we could make the following three predictions about the clock readings when the two spaceships finally meet :

1) The station master predicts that, on return, clock A = clock B. This is so as the journeys of A and B are perfectly symmetrical.

2) Clock A predicts that, on return, clock A $<$ clock B. For the duration of the journey when the spaceships are not in uniform motion, it knows that both clocks would clock the same amount of time because of the pre-determined symmetry. For the duration of the the journey when the spaceships are in uniform motion with each other(and also with respect to the space station), clock A assumes it moves with a uniform velocity with respect to B and, therefore, time dilation apply for his clock. Thus clock A $<$ clock B at the end of the journey.

3) Clock B predicts that, on return, clock B $<$ clock A. The reasoning is similar to that in 2).

If Special Relativity were a valid theory, all the three predictions should be the same - but they are not. Special Relativity gives rise to inconsistency in clock readings.

5 Special Relativity is repudiated

The methodology in judging whether a scientific theory is valid is, firstly, that the theory be free of any logical inconsistency - this is a central tenet of the scientific method; it comes before the need to test a theory against the real world. Any scientifically acceptable physical situation for which the theory apply and that leads to an inconsistency unequivocally repudiates the theory.

It should be mentioned that though this twin paradox seems like a thought experiment, it is more; given the technology, it clearly could be carried out as a space science project.

But how should this inconsistency be seen? It reveals that Special Relativity does not accord with our real physical world. The simple explanation is that the

Lorentz Transformation (and time dilation) does not represent our real physical world.

Time in physics is undefined and has no special interpretation; it is what a clock reads - nothing more nor less. If a value for a time variable need to be determined, it can only come from a clock directly or indirectly. Special Relativity now leads to a logical inconsistency in clock readings in a technically reproducible situation:

Special Relativity is unequivocally repudiated.

This would hold irrespective of any empirical evidence that are found to be in indisputable agreement with the predictions of the theory. The proper philosophical view here should be that any prediction of an invalid theory is also invalid and should not be considered.

6 Conclusion

It is shown that Einstein's Theory of Special Relativity is invalid as it leads to inconsistencies in clock readings and predictions. A new spacetime replacement theory is now needed as if we have again come back to the year 1887 when the Michelson-Morley experiment was done. As General Relativity is based on the Special Relativity, it too is unequivocally repudiated:

General Relativity is unequivocally repudiated.