

Latent Postulate of Special Relativity

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Abstract: The special theory of relativity has a third postulate. This presupposition is never mentioned, it is included in the analysis as everyone knows or as a dogma. A scientific decision process was not realized for this postulate. For this reason, physicists in particular cannot overcome the captivity of this hidden local postulate and wake up to the real natural truth, even if they have some hesitations in their minds. Science cannot bear this flaw any longer.

Keywords: Special Relativity; universal physics; Light Kinematics; Methodology; Locality

Introduction: Natural sciences have developed with locality. Methodology and principles are also generated by locality. Adaptation of methods when we consider the universal issues; the principles need to be rearranged with project discipline. The most important victim of neglect in this regard has been the theory of special relativity - due to its fame.

Which speed of light are we measuring?

The speed of light is very high, therefore light experiments are arranged with a continuous stream of photons. The light speed measurement device or experiment is specific to light, it is not used to measure the speed of another object.

Experimental results are -generally- examined, interpreted and labeled in line with the initial intention. In traditional natural sciences, the world automatically functions as a common reference frame and is implicit in expressions/meaning without emphasis/specification. The measured speed of light is taken into account as "the speed of departure from the source or measurement medium (relative speed)" as a matter of habit from mechanics, and it has also been used in this sense in the special relativity theory and Lorentz transformation analyzes [1]. Theory SR also takes into account that measuring the speed of light in successive larger reference frames will give the same result.

When we measure the speed of a car, we find the speed of the car with respect to the road in the meaning of "exact relative". We can use it without question; because, it never be a problem; The event and analysis method/principles are local. Light, as a type of energy, has universal properties. The theory of special relativity labeled and used the measured value of Light/photon speed -directly/without questioning by mechanical habit- "exact relative" or the increasing speed of the distance between the source and the photon. There is no problem as the car gains speed by pushing the road; but the photon does not push its source; The source does not throw the photon, there is no mass action-reaction or contribution. Light acquires its speed thanks to the electro-magnetic cycle in space, and its relativity partner/reference is space, which is the environment in which the electro-magnetic cycle takes place. When the scientific decision process is realized, we may comprehend the speed of light is "exact/genuine relative" to the outermost frame, the vacuum of space. The fact that the measurement result has the same value in all directions is experimental evidence of this option. On the other hand, after a defined single photon is emitted, the source

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can freely move in any direction (the theory of special relativity does not allow this; as if the source follows the photon). While the player takes his new position after throwing the ball; It cannot be claimed that the distance between the player and the ball at each new moment increases/decreases with the ball speed (Newton's action-reaction law is valid between objects with mass)².

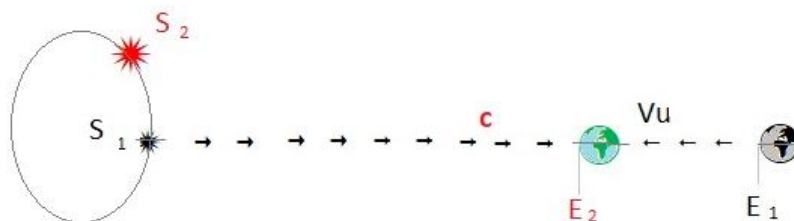


Figure – 1 Light always reaches the eye with speed c

After released, It is false that the speed of photon remains to have the same value according to its source [2]; the increasing speed of the distance between the photon and its source is the value $c + Vu$; however when it is measured by mirrored experiment, we will find the value c again. But it is true that the speed of light remains the same relative to the observer. The photon always reaches the eye or a sensor at the speed of light (Figure 1). When the observer is a factor in the analysis or experiment, distance E_1E_2 does not affect the rate of arrival; because the moment of observation is taken into account. The measurement experiment therefore measures only the photon speed scanning the S_1E_2 distance, not the reception speed of the E_1S_1 distance. There is a significant difference in evaluation depending on the source and the observer.

Conclusion

The interpretation and use of the experimental results in the context of the initial intention has made the opinion that the measured speed of light is relative to its source or measurement medium a postulate or dogma. (If the initial intention had been "to measure the universal speed of light", the same experiment would probably have been used and the resulting interpretation would have been more accurate) .

Since the world rotates around its own axis causes erroneous perception for the Sun's moving; although we have visual/experimental evidence. Similarly, the theory of special relativity maintains the same error; light or space should be the reference frame, the local object (source, observer, train, etc.) should be the relative object. To overcome the dogma (about the opinion that every measured speed is "exact relative" according to local frame) and to realize scientific decision process is key information for discovery the flaws of SR.

The mentality in this text - accompanied by its explanations - is within the perception capacity of humanity.

References

[1] <https://www.gutenberg.org/cache/epub/5001/pg5001-images.html>

[2]https://www.researchgate.net/publication/372231046_Limit_velocity_2c (DOI: [10.13140/RG.2.2.21355.11044](https://doi.org/10.13140/RG.2.2.21355.11044))

² When we examine the player-ball relationship in space conditions, the ball speed is "exact relative" according to the player within the framework of Newton's action and reaction law; The relativity continues for next moments. But this third law is valid between bodies. This does not apply to light, since the photon does not interact massiveness with its source.