

Referee's Report for Special Relativity Theories

Ozgen Ersan^{1*}

Master of Engineering.

Corresponding Author: Özgen Ersan, Master of Engineering

Received: 📅 2025 May 02

Accepted: 📅 2025 May 26

Published: 📅 2025 June 12

Abstract

In this study, the widely known theory of special relativity is autopsied to comprehend how humanity can be mistaken even in technical sciences.

keywords: *Light kinematics, Relativity, Methodology, Atomic Precision Method*

1. Introduction

The theories of special and general relativity remain in their original form as they were at the beginning. Generally, the definitions/analyses in their first approach are updated and revised to become more accurate. Developments in science and technology not only increase our comfort, but also improve the scientific perspective. Methods similar to precision of microsurgery in the field of medicine may also be applied in theoretical/basic sciences. Philosopher and mathematician Bertrand Russell emphasized the definition of "atomic precision method" (APM) for science and philosophy research. In summary, he proposes to take into account the content/expansion of all kinds of information, concepts, experiments, principles, postulates, etc. references used in scientific analyzes until they are not reduced to smaller details (we may call it the "scientific decision process"). When we apply this mentality to the special theory of relativity, serious flaws in the theory - including its postulates - emerge. Although it is unfortunate that these flaws, which remain within the cognitive capacity of humanity, were not detected by the referee of the journal in which the theory was first published, it can be said that it will bring a more functional discipline to current methodology.

They say that when a journalist asked him whether it was true that there were three people on earth who could fully understand the theory of relativity, Eddington thought for a while and asked the journalist "who was the third one?" It is possible to take this anecdote of Eddington seriously [1]. The reasons that the theory is still adopted with admiration even today may be difficulty of understanding and the brilliant inferences of the theory. People, who start reading with the intention of understanding the theory, prefer to cursorily reading after a point where they cannot make the logical connection and are now willing to rely on memorization and general adoption instead of self-reasoning and comprehension.

It is more significant and reputable to produce a more functional theory rather than explaining its flaws; for

this purpose, the "Light Coordinate System" (LCS: Light Coordinate System) method has been proposed [2]. In this method, "space vacuum" is determined as the common processing framework for light kinematics analyses, and the finite value of the speed of light is taken into account as the main reason for space-time confusion (distortion of perception). Its notable difference from the special theory of relativity is that it allows cosmological analysis by taking into account simultaneous/real values of astronomical observational data.

2. The Analyses with Atomic Precision Method (APM)

2.1. Flaws in the Postulates of the Theory

One of the main assumptions of the theory of special relativity (SR) is -for an inertial frame- the source's constant speed and linear motion ("Galileo relativity principle") . In the detailing of AP method, for example, a pebble dropped from the top of a ship's mast falls to the bottom of the mast in the event of the ship's uniform motion; a result is obtained as if the ship were inert. However, this principle is only valid between objects; in other words, due to massive transfer, the pebble continues the ship's direction of motion and speed as the horizontal initial velocity vector. It is not valid in the relation between the photon and its source; because, It does not get an addition from the speed of the light or photon source. When we consider a photon whose vertical travel is provided by a perforated plate filter instead of the pebble, this photon marks the back of the mast on the deck. Interestingly, Einstein himself states that he has the same idea in general relativity (GR) [3]. Einstein leaves this Galileo principle out of the analysis in general relativity. As can be seen in Figure 1, it is understood that the DB path is preferred for the photon going perpendicular to the source path in SR (since it is stated in the theory that it will be ineffective due to technical projection). In SR, the photon of the theory -just like the pebble- acquires a horizontal speed component the movement of the source (that this is wrong for photon) . In its application in GR -in the same fiction- the DA path is claimed; the SP path (Figure 2) is suggested in the elevator cabin; the two theories that are in a complementary relationship

as “exact relative” or “dependent” to the local environment or source (or as the speed of moving away from the source) and have continued the analysis with this acceptance (this is the hidden postulate; it is not questioned, it is not mentioned; it is known to everyone or it is used as a dogma). Just at this point, the Light has set a trap that the capacity of the human mind will find difficult to decipher. In fact, since the initial intention of the measurement experiment is present in the mind as the speed of moving away from the source, whether blurred or clear, the result is also defined in this sense; if the experimenter had intended to measure the speed of light on a universal scale, he would probably have used the same experiment and would have automatically interpreted the result as the “universal speed of light”.

If he could distinguish between “**exact/dependent relative**” and “**hypothetical/pseudo relative**”, he would have applied the scientific decision (AP) process to solve which type of relationship the light source and motion of photon. The speed of light is used in SR and GR with a direct/superficial perspective as “exact relative” labeling and in the sense of the car-road relationship. The locality effect has not been overcome. When we detail the relationship of the photon with its own source in detail, the source produces the photon and releases it; it does not push or throw the photon, consecutive photons do not push each other; the photon does not push the source either. The photon travels with electromagnetic cycle as in Maxwell’s definition, and since the object from which the photon provides its speed is not a light source, there is no “relevance to its source”. The light source does not provide any speed to the photon; The environment where the photon/light provides its speed, in other words, which requires the definition of “exact relative”, is “space”. The point where the photon starts its motion (x; y; z, T) should be marked in space; practically, in LCS (not to be confused with the concept of ether/ether; LCS: Light Coordinate System). The photon moves away from this point marked in LCS with a speed c; its source has transited over this point at the moment the photon is released. The relation between the photon and its source is “hypothetical relativity”. In the road-car example, the relation between the motion of two different cars on the same road is “hypothetical relativity”; These vehicles acquire their speeds without the contribution of the other, and the speed of change of the intermediate distance is the arithmetic/vectorial total of the speeds of these vehicles: $V_A \pm V_B$. The player-ball relationship can also be given as an example; the ball’s “essence relative speed” -that occurs when the player throws the ball- is now the “hypothetical relative” speed with respect to the ground for the following moments; since the player can freely move to a new position -in the following moments- the “relative” of the ball speed with respect to the player cannot be claimed. After the moment the photon is released, the source can freely go in other directions; the relationship transfers to pseudo/hypothetical relativity. SR’s claim that “the intermediate distance always increases with the speed of the value c” becomes invalid when the “subsequent moments” are taken into account. While a photon packet produced by a photoflash flash travels in the +x direction, the photoflash device can freely change its place

in 41253 spherical degrees and fractions. Similarly, photons simultaneously released from a star travel in directions of 41253 spherical degrees and fractions.

2.4. Inaccuracy in the Analysis Mentality of the Theory

The theory of special relativity has made an analysis by considering that the fictitious light emitted from a fictitious light source located on a moving object will move away from this object with the speed of light of the value c. When the problems of understanding were mentioned, Einstein expressed his analysis in his book (1916), which he stated that he wrote for high school students, in an easily understandable way [3]. The theory considers Cartesian systems the K reference system (or train platform) and the K' relative system (or light source in the train). It starts the analysis by the assumption that the distancing speed of a photon (started from the point O at the moment T_1) is the value c, both from point O on the platform and from the source on the train. At T_2 , the K' system reaches point D and the photon reaches point P_1 (Figure-1). When the experimenter in the K system or on the platform measures the speed of this photon, he determines the value of ‘c’ and verifies by calculating: He have not any problems finding that result.

$$\text{Speed} = \text{Distance} / \text{Time} = OP_1 / (T_2 - T_1) = c = \sim 300\,000 \text{ km/sec}$$

The experimenter in the K' system or in the train also determines the speed of light as the ‘c’ value when he measured it. But when he wants to confirm the result by calculation method, he uses the DP_1 distance as the distance and cannot find the c value for the speed of light; because $DP_1 < OP_1$. Einstein steps in at this point and suggests/produces a solution to the problem of the experimenter in the train. If the time tempo in the train runs slowly (thus, the numerical value of the duration decreases), it is expected that the distance/duration formula will give the c value. When this solution alone is not enough, it becomes necessary for the numerical value of the distance to increase (for this, the unit meter etalon must be shortened; so that the numerical value of the distance increases in the measurement by flipping the meter stick. Lorentz transformations have provided the common solution. The theory of special relativity seems to be consistent/accuracy in company with this mentality in the first perception or superficial reading.

However, Einstein and Lorentz found this solution by supposing themselves in the train instead of the experimenter (the train in the thought experiment represents the world); they prioritized the argument “I measured and determined the value of c”; whereas the physicist (who is in the K or other external reference systems) can perceive the event in all its transparency. In other words, those on the train/world are not aware that the same photon also scanned the OD path. If they were aware, there would be no need for special relativity theory. Due to the fact that the photon also scanned the OD path, the external observer cannot have the luxury of confirming Einstein’s solution; there is no a mystery in the experiment. Cognitive flexibility will allow the perception of nuance. The fact that the test photon essentially scanned the

OD distance is simple information that will not strain human cognitive capacity. It is interesting that Lorentz, Poincare, Einstein and others overlooked this simple fact. Similarly, it should be considered that the P2 photon (released from the point O at the $-x$ direction) did not scan the distance DO.

2.5. Neglecting the Types of Relativity

Theories of relativity have not made the distinction between "exact/essential relativity" and "hypothetical/pseudo relativity". They have made all their analyses with this concept of "exact relativity"; whereas, these two kinds of relativity are present in nature and our life. In Latin languages, the concept of relation is coded with single word "relativity", a distinction is not emphasized; therefore, should have been used for "essence relative" and "hypothetical relative". Linguistic/conceptual limitation due to a single word was effective in the thought of Lorentz and Einstein. Although "instant relativity" can be defined at the instant of throwing; the relationship will be transferred to "hypothetical relativity". Not taking into account the types of relativity and neglecting to determine which one fits the photon and its source motion relationship are serious flaws for the theories of relativity.

2.6. Neglecting of Generalization

In SR, photons going in different directions from their source are not analyzed; solely, it is declared with a sentence that it was "ineffective due to technical/geometrical projection" for the photon going perpendicularly. Although the methodology required analysis in different directions with the intention of providing, this operation and then verification of superposing were neglected. If we go back to the original manuscript of the theory, a fictitious light source on a fast-moving object sends photons at spherical directions. Each of the different directions requires different rates of -simultaneous-dimension contraction and different time tempo slowdown, which one will should the object be subject to? Similarly, the -simultaneous- deformations at different rates required by the different values of relative velocities of the object to successive reference systems (the Earth, the Sun, the Galaxy, the local and super cluster, the universe, the multiverse and the space vacuum) create problems in practice. The theory -when generalized- claims unobserved deformations in the flow of life.

2.7. The Laws of Physics are the Same Everywhere in the Universe

SR, using the principle of "the laws of physics are the same everywhere in the universe", claims that the speed of the defined photon will be the same c value according to the source, the observer and other reference frames. This principle is reasonable; however, when we examine it with APM concept in the SR event, the accurate and simple expression must be "The current mirrored measurement experiment determines the universal speed value of light at which everywhere in the universe." SR, on the other hand, makes superficial or inaccurate comments beyond this simple determination; in other words, "it gives the speed of moving away from the source and other reference systems". The nuance -with APM- is within the human cognitive/

comprehension capacity.

2.8. Why are Lorentz Transformations Imperfect?

In Lorentz transformations, the universal light speed c and the source's local speed v are used in the same equation; this is against scientific completeness/equivalence. But there is a more important flaw: When the L' and t' values in the relative K' system calculated numerically in Lorentz transformations are divided, $L' / t' = c \approx 300\,000$ relative km / relative seconds are obtained. In the reference K system, $L / t = c = 300\,000$ reference km / reference second. This is the main claim of Lorentz and the theory. But:

$300\,000$ reference km / reference second \neq $300\,000$ relative km / relative second.

It is not equal. In other words, the number $300\,000$, with different units, does not indicate that these speed values are equal. In normal reading, the mind can be deceived; but parameters have units and units contain the potential power of the parameter's (e.g. the "purchasing power of money"). If, $300\,000$ USD is equal to $300\,000$ Japanese yen, Lorentz and Einstein are right.

Lorentz transformations has not been produced by following the systematic of formula. They are mathematical equations. In formulas, variables have units and the unit of the resulting data is obtained from the operation of these units. Variables in mathematical equations do not contain units; Lorentz transformations therefore focus on finding the number $300\,000$; Units are added by mental error.

3. Methodology Violations

3.1. Superiority of the Common Framework

Analyses in the field of science are generally carried out within a common proceeding framework; this is the gold standard. The world we live in has assumed the role of a common framework since the period when curiosity and consciousness were activated. This situation continued spontaneously and automatically ensured the equivalence of variables. On the other hand, the "relativity calculation method" is also an auxiliary method; the results of this method can be checked and verified with the main method, the common framework method. In the relativity method, one of the actors in the operation is selected as a reference (it is assumed to be fixed/inert) and the relative role is applied to the other actor and the motion parameters are loaded (this rule is valid in case of equivalence of actors in the common framework). Thanks to the Copernicus/Galileo incident, science has clarified the need to select the reference with high coverage capacity; it has determined that the earth-centered -visual/experimental evidence- "the sun revolves around the earth" perception and decision -despite visual/experimental evidence- may be wrong. When we consider the motion relationship between light and its source, it should be remembered immediately that there is no unity of character between these objects: one is matter, the other is energy. When this relationship is wanted to be analyzed due to the speed of light, in the first approach in SR, the world or the light source (local object, observer, train in a thought experiment, etc.) is chosen as the reference frame again spontaneously.

If we apply the Galileo experience, we actually need to make light the reference frame due to its universality feature (Light does not accelerate and travels linearly; according to Galileo's principle of relativity, light is actually the one that fully complies with the reference frame feature). However, light is not a "tangible" object; can the "space", which is the environment where light acquires its speed, be the reference frame? Space is not "tangible" either. Although it is a convenience for the reference frame to be "tangible", is it mandatory? It is possible to assign space as the "Light coordinate system: LCS" and make it the analysis frame with the help of abstract mathematical thinking. Nature does not care about helping the curiosity of a living species. but there is no hopelessness: with the LCS method, a sheet of paper surface is practically functional for analysis; we provide the gold standard "common frame". Of course, in this case, in order not to violate the equivalence, the universal velocity (V_u) of the light source or the observer (or other actors) with respect to space/LCS should be used instead of the local velocity v . This AP mentality determines that c and v violate the equivalence and that their inclusion in the same relation (in Lorentz transformations) is unscientific.

3.2. "Test Photon" Instead of "Light"

Light is a derivative of energy. Although its speed is not infinite, it is high enough to be very difficult to manage; $\sim 300\,000$ km per second. That's why it is necessary to use a especially continuous photon flowing in experiments. However, methodology requires using a single and defined identified object (photon) in experiments. It is also important or essential to direct with a perforated plate filter. When there is a continuous flow of photons, it cannot be guaranteed that the photon at the beginning of the experiment is the same as the photon that determines the result. Similarly, in the Michelson-Morley interferometer experiment, it cannot be guaranteed that two photon packets that reaching the interference screen are halves of the same photon packet; they can be emitted at the moments T_1 and T_2 [4]. A single photon can be considered as a photopsy of a photo-flash in theoretical analysis. In experiments, the first point marked on the analog film can be taken into account.

4. When the Observer is a F-Actor of Analysis

The theory of special relativity uses the observer also as a main actor or determinant while analyzing the motion relationship between light and its source. Thus, it evaluates the observer's perception limitations as the natural flow of the event. As it is known, the speed of light is not infinite, but a finite and limited value; we cannot see anything simultaneously; this phase difference increases at astronomical distances in significant amounts. In other words, the observer perceives an event that occurs between c and $2c$; in nature with the speed of light at the value of c due to this limitation (Figure-3); he can see the event not in its real flow but in a deformed form (not in its real flow). A person can affect the flow of natural events; but the evidence of his visual perception is not always accurate. The fact that the earth rotates around its own axis causes the perception that the sun is rotating around the earth when viewed from the earth; this perception does not actually change the fact

that the earth is rotating around the sun (the testimony of billions of people is invalid) .

This mentality of SR prevents science by claiming and making it accepted that the rate of change of natural events is limited to c . Science, which develops and creates wonders, cannot have the luxury of continuing this shame. While the limiting speed is c in "exact/essential relativity", the upper limit for speed in "hypothetical relativity" fictions is $2c$ [6]. The limit of the collision speed of particles in CERN is $2c$ ($V_{\text{COLLISION}} < 2c$). Photons emitted from a star at the same time create a light spherical surface whose radius increases with the speed c ; the diameter of this light sphere grows with the speed of $2c$ (the claim that the diameter will also increase with c is contrary to causality). Each one of two observers (assumed to be on the CERN particles) and the third observer at the collision point perceive the collision at the same moment. Simultaneous perception requires the collision speed to be the arithmetic/vectorial total of the speeds of the particles (However, the -hypothetical- observer on the particle cannot perceive greater than c). The force of nuance is effective. The motion relationship between light and its source is also in the definition of "hypothetical relativity", there is no the meaning -essence- relativity of SR and the distance between the source and the photon changes with the speed of the value $c \pm V_u$ (although the value c appears in the measurement; figure-3).

In the relation between the photon and its source, the intermediate distance changes with the $c \pm V_u$ value; but when the speed of the photon is measured, the c value is found again. Because the current mirrored round-trip and continuous photon current measurement experiment can only measure the speed of light relative to space or LCS (It cannot measure the speed of moving away from the source). There is "simple and understandable" experimental evidence for this option: The measurement results are isotropic; that is, independent of direction. The reason why the result is always c in the measurements is that the speed of light relative to space is measured. Interpreting the result of the current experiment according to the initial intention is a shallow habit; with the same mentality, if the initial intention was "to measure the speed of light relative to space", the same experiment would be used and the resulting finding, the c value, would this time be defined as the universal speed of light (another secret/game of light). In order for the measurement experiment to measure the speed of change of the intermediate distance, a one-way light speed measurement experiment or theoretical analysis is needed [5].

5. Discussion

SR had emphasized the necessity of four-dimensional analysis on a universal scale for "light kinematics" analyses; four-dimensional analysis prioritizes evaluating the flow of the event by watching it like a movie. Traditional scientific methods analyze a momentary state in a stream of dynamic equilibrium. It cannot be said that SR and GR have gone beyond this traditional attitude; because in SR analysis, the analysis was performed by taking into account the

coordinates on the instantaneous photograph taken at the moment T_2 . In the extraction of Lorentz transformations with the Pythagorean principle and in the reasoning that the photon path would be curved/diagonal in the cabin in GR, this film evaluation could not be applied and the positions of the photon at T_1 and T_2 were combined in the mind. When viewed with AP awareness, it could be perceived that a photon oriented with a perforated plate filter would go like differential steps or stair risers and the result of integral that **the total photon path would not actually change**, and even though SR made the local environment the reference frame, there is a contradiction or cognitive defect.

Another contradiction of SR -when the local environment is used as the reference frame- is the inference the photon's path will be shortened that has not been yet traveled due to the speed of the source. Theoretical mentality of SR shortens the unit meter etalon in the train experiment and thus it hopes greater numerical value for the amount of distance; however, since the length of the moving train (or any length

on the Earth) will also shorten due to the same mentality, the numerical value of the photon path - in the measurement by consecutive somersaults of the shortened meter stick - does not change. In the concept of the Fitzgerald contraction, it is claimed that the photon's way will be shortened. If the lengths are shortened by the reason of relative speed, the numerical value of the way remains the same value because of shortened meter stick; the calculating is not realized properly.

The "observer option" of SR's phrase that "The speed of light is the same for every frame and observer" is confirmed in the LCS method. As can be seen in Figure 3, the distance traveled by the photon at the moment of perception (T_2) is S_1E_2 and is scanned with the speed of the photon at the value of c . The distance between the observer and the source at the moment T_1 was S_1E_1 ; this distance is taken jointly/jointly with the speed $c + V_u$; however, when the observer is an actor in the event, the distance E_1E_2 may be left out -in the first approach- of the analysis.

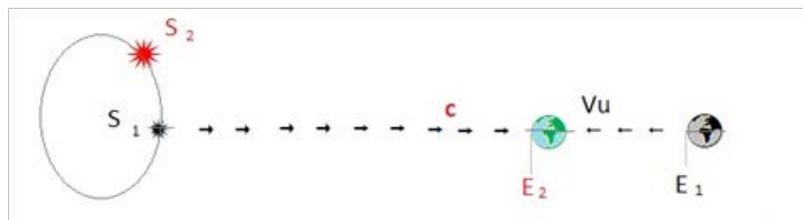


Figure 3: Photons Always Come to the Observer by the Speed c

There are articles supporting the SR theory. Those put forward by the advocates of the theory are experiments such as muon lifetime and atomic clock on the plane (Hafele Keating), GPS correcting, etc. In the muon lifetime experiment report [7]. In the articles on muon lifetime, the life extension is calculated by taking into account the 98 per cent value of the speed of light for coming from the atmosphere by referring to the special theory of relativity. In this case, the zero value is taken into account for the speed of comparison object (produced in the laboratory), which is the comparison material; this mentality is wrong. It is a requirement of science to make the same calculation and comparison for the laboratory muon speed (approximately the same value will be achieved). Also, determining the results with the statistical method may not be sufficient for a definitive opinion. For this reason, the interpretation of the muon experiment does not support the theory.

In the Hafele Keating experiment, the values of the comparison object has been considered the atomic clocks in the planes (going east and west) and on the Earth were compared. However, in the atomic clock experiment conducted during the flight, planes, just like cars, do not gain any additional speed due to the rotation of the Earth around its own axis (the Hafele-Keating team interpreted the experiment on the mentality that the planes gain additional speed). Since the atmosphere rotates with the Earth - and the atmosphere is inertial frame for the planes - there is no advantage of cruising time for planes going east or west - due to the rotation of the Earth around its own axis (Airplanes traveling east or west never gain additional speed from the Earth's axial rotation). There is no such determination in the flow of

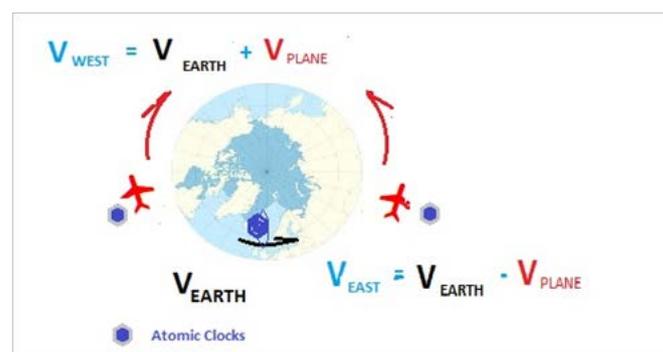


Figure 4: The Scheme of Hafele-Keating Experiment [8]

Life. Another is that corrections are mentioned in the GPS system due to the special theory of relativity. While the time and therefore position deviation of the GPS satellite, which rotates at a speed of 14,000 km/h (~4 km/sec) at 20180 km above, is around 0.012 cm; whereas, permissible aberration [9]. According to the principle "significance level" of the measurement technique, GPS correction is not essential. Since the synchronization of atomic clocks is renewed at short intervals, there will not get cumulative shifts.

In order to invalidate all these explanations, it can be claimed that the inferences of the theory are only perceptual illusions. Such this claim actually also confirms that the theory is invalid. Because, the aim of Lorentz, Poincaré and Einstein was to find evidence for the Fitzgerald contraction; so, the contraction must be real deformation. The fact that the interference fringes did not change depending on the direction in the Michelson-Morley interferometer experiment cast a shadow over the ether hypothesis. However, Fitzgerald, who insisted on the ether hypothesis, put forward a saving prophecy (deductive hypothesis) such as the length dimension (photon path) in the direction of the universal motion of the experimental setup/earth might have shortened due to the universal speed of the earth. As a result, if the inference of the theory were a visual/

perceptual error, this hypothesis would not work; there is no any supportive sentence for the perceptual error in the theory itself -except for the derivative thought experiments produced later-. However, there are perceptual consequences resulting from the fact that the speed of light is not infinite in the LCS method; for example, a receding clock, whose tempo is actually constant, seems to be running slowly, while approaching it seems to be speeding up; when they are side by side with the clock in our hand, they show the same time. The theory of special relativity claims that time dilation regardless of whether it is approaching or receding. The LCS inference should not be confused with the SR inference.

SR has been subject to reasoning limitations by preferring the relative calculation / analysis method; that is, by giving the role of reference to one of the actors in the analysis. If it had used the traditional common frame method, its reasoning would have been easier. That is, when it marks the emission point of the photon in this common system and then analyzes the light source and the test photon parallel to each other and in the same direction, it could have had the chance to consider the "hypothetical relativity" option for the change of the distance between the source and the photon. Similarly, it could have found an example from nature for the photon not to take addition from the speed of its source (Figure – 5).

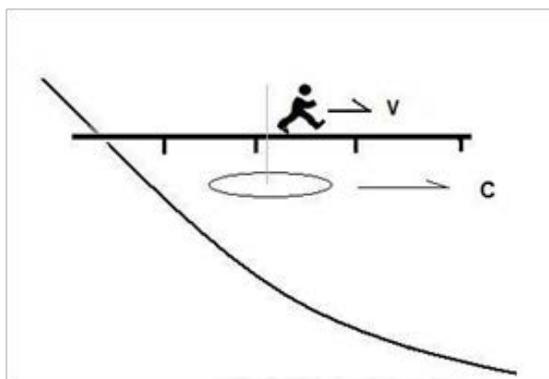


Figure 5: Lake Surface Analogy

If an experimenter on a pier extending into a calm lake and freely drops a pebble into the water, a ring wave is produced. If the experimenter drops the pebble while walking or running, the expansion speed of the resulting ring wave will be the same as he was at rest. In this experiment, the experimenter and the pebble represent the light source, the ring wave represents the photon/light, and the lake surface represents the common processing frame (LCS). The experimenter moves away from the center of the ring wave with a speed v , and a point on the circumference of the ring wave (photon) moves away from the center with a speed c . The expansion speed of the ring wave is not affected by the speed of the experimenter like the light. The distance between the point on $+x$ of circle wave and experimenter is $(v_{\text{wave}} - v_{\text{exp}}) t$ dir. If we consider the light (photon), this time it will be $(c - v_{\text{exp}}) t$; for the LCS method it will be $(c - v_u) t$; the value v_u is the universal value according to space vacuum.

The theory of special relativity does not allow cosmological analysis due to the problems of asynchrony of celestial

objects. The LCS method allows cosmological analysis with some assumptions and has performed a multi-factor and detailed calculation on the age and dimensions of the universe [10,11]. The LCS method supports the intuition of the multiverse.

6. Conclusion

This text is a kind of autopsy report; it is understood that the special theory of relativity is a first approach. Its main subject should have been "light kinematics" due to the connectional integrity. Light kinematics analyses require at least ten main factors [12]. SR realized an analysis with $2 + 1$ (hidden) postulate. The analysis used two postulates causes unordinary/fantasy inferences such as the negative weight of phlogiston theory, which is the definition for the event of burning without knowing oxygen and oxidation. For this reason, SR inferences have played an obstructive role especially for theoretical physics and cosmology. However, it has been an idol and a motivation tool for people to be interested in science due to its inferences such as time

travel. Galileo's relativity principle and Copernicus-Galileo experience (the requirement to give the reference role to the one with a large capacity) necessitate that the space void (LCS) where light or the speed of light acquires the character of relativity in the local object-light motion relationship is made the reference frame.

A photon travels with constant speed and linearly; according to Galileo's relativity principle, the reference candidacy of the defined photon path is stronger. In light kinematics analyses with the LCS method, the photon path should be considered as an absolute constant. Other analysis actors (light source, observer and all kinds of objects) are in motion. The emission point of the defined photon is marked on the LCS; the light source/celestial object has passed through this point at the starting moment of the photon. The LCS method for light kinematics allows cosmological analysis. The revealing of the flaws of the theory has become the seed of valuable new rules for methodology; this is important. In particular, the management of mental references and the investigation of which other hypotheses are supported by experimental results should be put on the agenda of methodology. Humanity has been wasted time for more than a hundred years for "Light Kinematics"; but theory -due to its fame- can be the reason for "leveling up" for human scientific performance. The reasons why the errors of the theory were not noticed and remained unexamined for more than 100 years can be attributed to the fact that it was not understood sufficiently in the meaning of internalization, the relativity method was used instead of the common frame method, the

speed measurement was defined as the speed of moving away from the medium (like a dogma), and the light was a reality that did not easily reveal its own properties. Einstein declared at the beginning of his book [4] that he accepted Maxwell's hypothesis about the propagation of light; however, the SR theory provides a theoretical explanation for the Fitzgerald contraction that revives/supports the ether hypothesis. The initial statement of the theory does not match its conclusion.

References

1. Ersan, Ö. Literary Inexpertness of Physicists.
2. Ersan, Ö. (2024). Alternative method for light kinematics.
3. <https://gutenberg.org/ebooks/30155>
4. Ersan, Ö. (2022). Alternative Interpretation for Light Experiments.
5. Ersan, Ö. (2022). ONE WAY SPEED of LIGHT.
6. Ersan, Ö. (2023). Limit velocity: $2c$.
7. <https://hyperphysics.phy-astr.gsu.edu/hbase/Relativ/muon/html>
8. <https://library-of-atlantis.com/2023/12/08/hafele-keating-experiment/>
9. https://en.wikipedia.org/wiki/Global_Positioning_System#cite_note-152
10. Ersan, Ö. (2022). Age of Multiverse 19.28 Gyrs.
11. Ersan, I. (2013). Light kinematics to analyze space-time. *Physics Essays*, 26(1).
12. Ersan, Ö. (2023). Secret of Special Relativity Theory and New Method.