

The Theory of Relativity Is a Dead End in Physics

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ABSTRACT

Einstein's theory of relativity was published more than 100 years ago. Since then, many people have been researching and discussing it. Many theories have been born from the theory of relativity. See black holes, wormholes, time travel, etc. Even today, there is no exact scientific explanation for these. These are the most familiar to ordinary people. The idea of time travel is one of the most familiar. It has stirred the imagination of many people. Is time travel possible? That is why it is worth examining the question of time more closely. The theory of relativity has given time new properties. The passage of time is not the same everywhere. According to Einstein's theory, the passage of time is influenced by two factors. The speed of the inertial frame and gravity. That is why we will examine time measurement and our clocks. We will study time measurement and the structure of clocks. We will see that our current time measurement and our clocks contradict the claims of the theory of relativity.

Keywords: time measurement; virtual time; true time; atomic clock; quantum clock; pendulum clock; relativity theory; time dilation; Lorentz transformation; Einstein; Newton; Kepler; gravity.

INTRODUCTION

As a first step, we will study the measurement of time. Many researchers have tried to define time. As a result of research, several concepts of time were born. /Simultaneity, proper time, system time, sidereal time, universal time, mathematical time, philosophical time/. They thought that time could be measured. Therefore, they did not deal with time-measuring devices. Newton had already dealt with the issue of time. Perhaps he approached the problem of time measurement the best. (The) Absolute, real, and mathematical time flows evenly in itself, in its own nature, without any external reference, and is also called duration. (A) Relative, apparent, and ordinary time are the durations that we can perceive and measure (accurately or inaccurately) by external motion; such a measurement - for example, an hour, a day, a month, a year - is usually used instead of real time. - Principia-SCHOLIUM [1].

Newton already distinguished between ordinary and true time. He also established that we can only measure ordinary time with clocks and other time-measuring devices. True time flows regardless of this. He also recognized that with clocks or other time-measuring devices, we only produce virtual time, not true time. We still view time today as a real physical quantity. We treat time as something we can measure with a clock. We view the clock as a time-measuring device. In our calculations, we calculate time as a real physical quantity. The reality is that we live in virtual time and calculate with it. Let's examine how we "measure" time today.

The problem of time measurement. Let's examine the measuring devices with which we measure time. To help us, let's first examine how we measure different physical quantities. Let's look at the most basic ones. Mass, electric field, electric current, temperature. The measurement of mass can be traced back to the measurement of force; if the mass changes, then the force acting on the balance also changes. The change in the electric field, the change in the electric current can also be measured by the change in the force, but it can be measured in many other ways. The temperature change can also be measured by the change in volume or by the change in pressure. In other words, we can say that the measurement of some physical quantity or its change can always be measured by some physical effect caused by it, or by its change, which affects the measuring device. However, the passage of time, or perhaps the change in the speed of its passage, does not cause a perceptible effect. This is the problem of time measurement. Not a single clock has a component that the passage of time or its change would affect. This is true from the simplest sundial to atomic clocks. Clocks only produce signals, calculate them, and display them. However, the clock does not perceive how much time passes between two signals. It does not know whether the passage of time is faster or slower. No clock perceives the passage of time. A clock has no component that senses the passage of time. Every clock is powered by some kind of energy. This can be gravity, a spiral spring, or electrical energy. When a clock stops, time does not stop. The energy needed to operate the clock is not available.

If a clock does not work accurately, it is caused by its own structure or a change in its environment. For full details, see "Can we measure time or do we live in virtual time?" [2].

Clocks only produce virtual time for us because we need it for our calculations and our lives. Our time measurement is the counting of events that have happened. What are the consequences of living in virtual time? - The time shown by clocks is not a real physical quantity; it is only virtual. - We cannot measure real or true time. - The time member of the space-time theory is only a virtual, not a real physical quantity. - Space-time is also only a virtual, not a physical reality. - Considering virtual time as a real physical quantity is the first dead end of the theory of relativity.

Let us examine the second property of time given by the theory of relativity. The relationship between gravity and time. According to the theory, in a strong gravitational field, the passage of time slows down. In black holes, the passage of time is supposedly stopped. So, gravity must have an effect on the passage of time. However, we do not know which property of time gravity can change. Since we do not know any perceptible property of time. But we also do not know which property of gravity is related to time. Here again, the problem of time measurement appears. All virtual time measurement means counting some kind of repeating events. This is true from the simplest hourglass to atomic clocks. Let us examine the pendulum clock. The pendulum clock has a direct relationship with gravity and is considered a time-measuring device. The period of the pendulum's swing can be given by the following equation.

l is the length of the pendulum, and g is gravity.

$$T = 2\pi \sqrt{\frac{l}{g}} \quad (1)$$

We know for sure that time does not affect the length of the pendulum. So, the length of the pendulum is independent of time. However, gravity can change in the environment of the clock. However, changes in gravity have an effect on the period of oscillation. According to the equation, if g increases, the period of oscillation decreases. The clock will hurry up. If g decreases, the period of oscillation increases. The clock will be late. However, this contradicts the theory of relativity. This says that in a larger gravitational field, the passage of time slows down. The pendulum clock proves the opposite. /The pendulum clock is also a time-measuring device that we have been using for hundreds of years to measure time/. This simple equation points out several very important things.

- The pendulum clock is not affected by the passage of time or its change.
- Gravity and its change affect the clock.
- The pendulum clock gives signals proportional to gravity.
- We do not know how much true time elapses between two signals.
- These signs are nothing more than virtual time for us.

- The pendulum clock also proves that gravity does not affect the passage of time, but the pendulum.
- Most importantly, the pendulum clock is "not a time-measuring device" but a device for generating virtual time.

Based on equation (1), this is the second dead end of the theory of relativity. Let's look at what we know about atomic clocks. Today, there are quantum clocks that are more accurate than classical atomic clocks. The common feature of both atomic clocks and quantum clocks is that they both calculate the frequency of very high vibrations. Both are designed in such a way that the number of vibrations remains stable. However, we do not know how either clock perceives the change in the passage of time. How does time affect the number of vibrations? However, we know based on the current state of science that changes in gravity affect these clocks. Based on the reporting of Origó, the following experiment was conducted with a quantum clock. Experts at the US National Institute of Standards and Technology (NIST) have now measured this effect with their recently developed quantum clock in the same room, with a height difference of just 33 centimeters (this is how high one clock was above the other). The clock placed higher ticked faster, as predicted. This means, among other things, that those who go up a few steps now demonstrably age faster. The measured time difference is, of course, imperceptibly small for humans: 25 billionths of a second over 79 years [3].

The experiment tries to confirm that gravity affects the passage of time. This also confirms one of the statements of the theory of relativity. In a stronger gravitational field, the passage of time slows down. However, it is no longer written which part of the clock senses the change in the passage of time. The clock senses the change in the gravitational field, which has an influence on its operation. No one has yet been able to manufacture a part that could sense any effect of the passage of time. The quantum clock does not have one either. Let's put the pendulum clock and the quantum clock next to each other. Let's examine which one is affected by gravity and how. Let's look at the pendulum clock first. Based on formula (1), we know that if the gravitational field is stronger, the pendulum clock will speed up. The oscillation period will be shorter. If the gravitational field decreases, the oscillation period will increase. Based on the described experiments, the quantum clock behaves in the opposite way. If the gravitational field is stronger, the clock counts fewer vibrations. It shows the slowing down of the passage of time, that is, the clock is running late. There are two time-measuring devices, yet they do not perceive the passage of time in the same way. According to the theory of relativity, gravity influences the passage of time. From the comparison of the two clocks, one thing follows: gravity has no influence on the passage of time. Gravity influences the operation of the clock. This is the third step into the dead end of the theory of relativity.

The researchers also observed another relativistic effect, called time dilation. This phenomenon causes time to pass more slowly for faster travelers (many people know this from science fiction stories). Its magnitude is calculated using the Lorentz transformation. With the new super-accurate clock, this effect can be measured even at a speed difference of 30 km/h. To detect this, they no longer moved the entire clock mechanism, but only the aluminum ion inside it was set in motion at a speed of a few meters per second (m/s). The clock containing the moving ion ran slightly slower than the other, as predicted by the theory of relativity. (Time dilation can also be detected with a caesium atomic clock, but for this, one of the clock mechanisms has to be transported on a fast plane.) [3] Here, they are trying to prove another statement of the theory of relativity. Time passes more slowly in systems with higher speeds than ours. We have already established earlier that the time we measure is only virtual. The question is, what changes happen to an atomic clock or quantum clock that it runs slower at higher speeds? What is the explanation for this? Let's look at what we have established about clocks so far.

- The clock only produces virtual time.
- The clock does not measure real time.
- No component in the clock would sense the passage of time.
- Gravity affects the operation of the clock. This is also proven by the pendulum clock and atomic clocks.
- Gravity does not affect the operation of the clocks in the same way.

The theory of relativity states that the passage of time slows down at higher speeds. So, there should be a relationship between speed and time. According to the Lorentz transformation, there is a relationship between the passage of time and speed. However, we also know that the clocks do not have any component that senses the passage of time. Therefore, the relationship between time and speed cannot be detected with a clock. However, we know that changes in gravity affect the clocks. Based on this, the relationship between gravity and speed must be examined. Because these two change in the environment of the clock. Based on current information, no relationship has been found between gravity and speed so far. There is no equation for this. /But I could be wrong, and there is research in this direction/ Then let's see if we can find a connection between speed and gravity. As a starting point, let's look again at Newton's law of gravitation and gravity.

$$F = G \cdot \frac{M_S \cdot M_E}{R_{SE}^2} \rightarrow g_E = G \frac{M_E}{R_E^2} \quad (2)$$

Using the example of the Sun and the Earth. This equation gives the force between the Sun and the Earth. Also, the value of the Earth's gravity. Cavendish measured the force between two masses on Earth.

$$F = G \cdot \frac{M_1 \cdot M_2}{R_{12}^2} \quad (3)$$

However, neither equation refers to an important thing. In both cases, we are talking about masses moving at a given speed. In equation (2), the Earth orbits the Sun. In equation (3), the Cavendish measurement, the two test masses orbit the Sun together with the Earth. The equations do not contain any reference to speed. The result is that gravity is considered only as a property of mass. G is considered a constant of nature. However, the reality is that in both cases, we are talking about moving masses. The question is where the speed is hidden in the equations. Let's write equation (2) with its units. Let's do a unit analysis.

$$\frac{m}{s^2} = \frac{m^3 \text{ kg}}{\text{kg s}^2 \text{ m}^2} \quad (4)$$

G unit of measure

$$\frac{m^3}{\text{kg s}^2} = \frac{m \text{ m}^2}{\text{kg s}^2} \quad (5)$$

There is also a square of velocity in the unit of $\frac{m^2}{s^2}$. Based on these, it can also be written in the following form $G = \frac{R \cdot v^2}{M}$ (6). This is the first sign that there may be a connection between velocity and gravity. This equation can be written using Newton's laws, but also Kepler's third law and the solar constant. The question is, for what distance R, velocity v, and mass M does this equation hold? Let's do a test calculation with the data for the Sun and the Earth.

$$G = \frac{1.495978 \cdot 10^{11} \cdot 29.789^2 \cdot 10^6}{1.989 \cdot 10^{30}} = 6.67424 \cdot 10^{-11} \frac{m^3}{\text{kg s}^2}$$

We can calculate with the data of any planet; we always get the value of G. But this does not only give the correct result with the data of the planets. This is true for a satellite or even an airplane. Science today considers G to be a natural constant. Let's look at equation (6). M is the mass of the Sun. The mass of the Sun is constant in the equation. Its change is negligible. However, the speed of the Earth changes because the Earth moves around the Sun in an elliptical orbit. The speed of the Earth varies between 30.287km/s and 29.291km/s in its orbit around the Sun. The distance of the Earth from the Sun varies between $1.47098 \cdot 10^8$ km- $1.52092 \cdot 10^8$ km. If we consider G to be constant, then $R \cdot v^2$ should be constant. v^2 is constantly changing, and as a consequence, R also changes. R always follows the change of v^2 . Therefore, G must change periodically, even if only slightly. Therefore, we cannot accurately measure the value of G today. When measuring the value of G, the following should always be taken into account.

1. What speed does the Earth travel at?
2. The corresponding orbital radius.

If G did not change within small limits, the Earth would not be able to orbit the Sun in an elliptical orbit. The Earth would only orbit in a regular circular orbit. In full detail, see "What is hidden behind G?" [4]. If G can change, then gravity also changes.

This is a consequence of the change in velocity. This shows that if the velocity of a mass changes, then its gravitational field also changes. If the velocity of the clock changes, its gravitational field also changes. If its velocity increases, then its gravitational field also increases according to equation (2). The first experiment already showed that in a higher gravitational field, the atomic clock is delayed. The consequence of this is that atomic or quantum clocks slow down if their velocity increases relative to the Earth. So, it is not time that slows down as the velocity increases. The gravitational field strength of the mass with a higher velocity increases. The clock does not slow down due to the relativistic effect. This also shows that there is no relativistic mass increase at higher speeds. The delay of atomic clocks proves that there is no relativistic mass increase at higher speeds. Time is not affected by speed. Here again, it is the change in gravity that affects the clock. This is the fourth step into the dead end of relativity theory.

CONCLUSIONS

Based on classical physics, it can be seen that the theory of relativity is indeed a dead end in physics. This is proven by the relationship between gravity and clocks. Let's see what we have established about gravity in relation to clocks and time.

1. The time measured by clocks is not a real physical quantity, only virtual. We cannot measure real or true time with a clock. The time member of the space-time theory is only a virtual, not a real physical quantity. Space-time is also only a virtual, not a physical reality. Virtual time is not a real physical quantity. It cannot be considered real or true time. True or real time cannot be measured with any measuring device. The result of the Lorentz transformation is false, since we can only measure virtual time. The Lorentz transformation is also a built-in error in the theory of relativity.

2. Gravity acts in the opposite way on pendulum clocks and atomic clocks. Yet both are called time-measuring devices. Clocks should measure time the same way if gravity changes around the clock. This implies that gravity has no influence on the passage of time. Changes in gravity affect the operation of the clock.

3. It is not time that slows down as speed increases. The gravitational field strength of a mass with a higher speed increases. The delay of atomic clocks proves that the gravity of a moving mass changes, and not time that slows down. The other finding is that if the speed of a mass increases, there is no relativistic increase in mass. The gravitational field strength of the mass increases. The effect of this is that we perceive it as having more mass. Where the Lorentz factor is used in calculations, it gives a false result.

4. Our time measurement and the operation of our clocks are proof that the theory of relativity is a dead end in physics. All this shows that there is no time dilation, no relativistic mass increase. It is no coincidence that the theory of relativity is not related to quantum mechanics.

That is all that our clocks and the measurement of time tell us about the theory of relativity. However, there are still more dead ends. So, a thorough revision of the theory of relativity is definitely necessary.

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