Absurdity of Relativity and Root of Its Success

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Abstract: There has existed the focus of debate between the viewpoint of space-time of classical physics and that of relativity for almost a hundred years. Which is more reasonable on earth?

The fundamental principle of the theory of relativity and its basic transformation will be discussed in detail in this study. By discussion, I hope we can see the essence of the theory of relativity clearly and make people profoundly understand the fundamental conception of physics on time and space. I wish we can return a sunny sky to physics.

Keywords: Take Measures without Considering Changes in Circumstances, Miller Experiment, Lorentz Transformation, Time Dilation, Mass-Velocity Equation, Mass-Energy Equation

1. Probing into the Theory of Relativity from the Deducing Process of Lorentz Transformation

The Lorentz transformation describes the relationship of a point's time-space coordinates (x, y, z, t) and (x', y', z', t'), or the relationship between the time-space coordinates of one physical incident.

1.1 The Derivation of Lorentz Transformation

As shown in Fig.1.1, There are two inertial frames of reference K' and K. The frame K' is moving in the positive direction along the axis of x in the frame K with a velocity of υ

relative to the frame K. When the two coordinate origins O and O' are at the state of superposition, we suppose that the time in the two frames is zero, i.e. $t' = t = 0$.

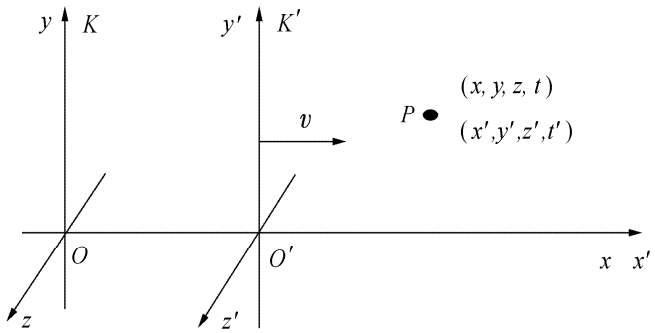

Fig 1.1 The sketch map of Lorentz Transformation

Whenever observing the origin O of system K in the system K, we get $x = 0$. But while observing in the system K' at the time t', we get the coordinate of O is $x' = -\upsilon t'$ or $x' + \upsilon t' = 0$. It is obvious that the numerical values of x and $x' + \upsilon t'$ are both zero relative to the same point O in the space. However, when considering the general case of the relationship between them, we can suppose that the relationship between x and $x' + \upsilon t'$ is linear, that is

$$x = k\left(x' + \upsilon t'\right) \tag{1.1}$$

Where k is a constant relative to υ.

Likewise, relative to the origin O' in the system K', we get

$$x' = k'\left(x - \upsilon t\right) \tag{1.2}$$

But according to the principle of relativity of the Special Theory of Relativity, these two inertial systems are equivalent, which is the Eq.1.2 and Eq.1.1 should have the same form except substituting υ for $-\upsilon$. This requires $k' = k$.

$$x' = k\left(x - \upsilon t\right) \tag{1.3}$$

Now we discuss the transforming relation between t and t'. Substituting x' in Eq. 1.1 with $k\left(x - \upsilon t\right)$ in Eq.1.3, we get

$$x = k^2(x - \upsilon t) + k\upsilon t'$$

Then we can get the results as follows:

$$t' = kt + \left(\frac{1-k^2}{k\upsilon}\right)x \tag{1.4}$$

These are some coordinates transforming formulas through the principle of relativity, and the calculation of k *in these formulas relies on the second assumption of principle of constancy of light velocity. Therefore, when origins* O *and* O' *are in the state of superposition (*$t' = t = 0$*), there is light signal emitted from the superposition along the axis of* ox*. We can get the light signal's coordinates at the point* P *relative to two coordinates systems as below.*

$$x = ct \tag{1.5}$$

$$x' = ct' \tag{1.6}$$

Substituting x' *and* t' *into Eq.1.6 with* $k(x-\upsilon t)$ *and* $kt + \left(\frac{1-k^2}{k\upsilon}\right)x$ *respectively, we get*

$$k(x-\upsilon t) = ckt + \left(\frac{1-k^2}{k\upsilon}\right)cx \tag{1.7}$$

Resolving x *according the Eq.1.7, and then comparing the result with the Eq.1.5, we can get* [1, 2]

$$k = \frac{1}{\sqrt{1-\upsilon^2/c^2}} \tag{1.8}$$

（Albert Einstein, *Relativity: The Special and the General Theory, Appendix I, Simple Derivation of the Lorentz Transformation* 1920, http://www.Bartleby.com/173/a1.html ）

1.2 Is This Our Way to Change the Time-Space View?

Maybe it is Mr. Einstein's neglect!

If one of the supporters of the theory of relativity is more brilliant than Mr. Einstein, please explain the following question definitely. The question is why the time t and t' of the same point P in different inertial systems K and K' is different.

What is time?

What are the physical meanings of t and t' respectively?

Since the theory of relativity considers the time t and t' of the same point P in different inertial systems K and K' to be different, well then how does the variable t contact with the variable t'? Why do they contact with each other in such a way? And how about its importance?

The Lorentz transformation describes the relationship of a point's time-space coordinates (x, y, z, t) and (x', y', z', t'), or the relationship between the time-space coordinates of one physical incident.

Please examine the whole deducing process carefully.

The reason for introducing the principle of constancy of light velocity into the derivation, and the reason for the deduced result of Lorentz transformation, is just on Eq.1.5 and Eq.1.6, that is $x = ct$ and $x' = ct'$.

In the reference frame K, the time t in the time-space coordinates (x, y, z, t) of the point P whether is equal to that in the equation $x = ct$?

While in the reference frame K', the time t' in the time-space coordinates (x', y', z', t') of the point P whether is equal to that in the equation $x' = ct'$?

1.3 Oppugnation

The first one

Is the time t in the time-space coordinates (x, y, z, t) of the point P in the system K equivalent to that taken by light traveling from the origin O to this point? No. But Mr. Einstein made them the equivalence by contraries.

When the point P is motionless relative to the system K, the time taken by light traveling from the origin to this point is a certain value. But the time t in the time-space coordinates (x, y, z, t) of the point P in the system K has infinite values that changing continually.

Isn't it muddleheaded to replace infinite values with a unique one? It just takes a part for the whole.

The second one

In classical physics, the time of the point P is objective. No matter which reference system the point belongs to, the time standard is the same. But the theory of relativity changes the objectivity of time importunately. Well then who can explain the reason on altering the objectivity of time of a point P? What is the great reason that changes the objectivity of time?

—— Does it just rely on the so-called reason that time values t and t' taken respectively by light from the origins O and O' to a point P are different?

Putting the validity of principle of constant speed of light aside at first. If two people go to school simultaneously from the same home, but they arrive at the school at different time, can we say that the school has two different time systems? The same question is in the case of one hundred people and one hundred time systems.

What kind of logic is it?

The third one

Since the light just acts as a signal, how about we take the sound or a bird as the signal?

Won't we create many theories like the theory of relativity, such as the sound speed's relativity, bird's speed's relativity and the snail's relativity? …

1. 4 A Discussion on some simple facts

Here I will discuss some simple facts, which can help you understand the disguised replacement of the time concept, when Einstein derived the Lorentz transformation.

As shown in Fig 1.2. Supposing that the system K is a reference system on the earth's surface, with its origin O in Peking City. Furthermore, supposing that Daqing City locates at the point P of x-axis, with a distance of 1500 km to Peking, that is, $x = 1500$ km.

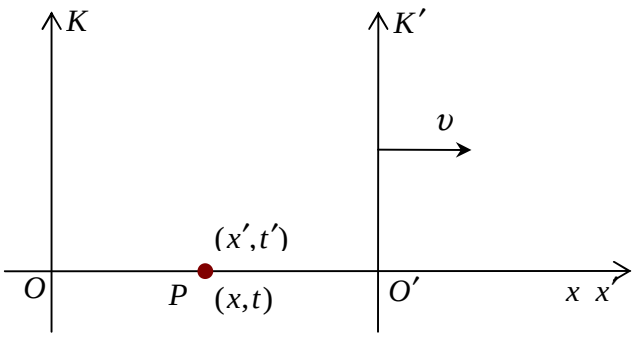

Fig 1.2 Simple incidents

Following is the example of setting off firecracker in Daqing City. We set off a firecracker at $t=1$s, that is, when $t=1$s, there is a physical incident happened at $x=1500$ km. Then we set off another firecracker at $t=10$ s, well then there is also a physical incident at $x=1500$ km, when $t=10$ s. Similarly, these physical incidents of setting off firecrackers can happen respectively at the time of 100 s, 1000 s, 10000 s, ……1h, 100 h, 1000 h, etc.

How long does it take for a beam of light to travel from Peking (the origin O of system K) to Daqing? By $x=ct$, we can get

$$t=\frac{x}{c}=0.005\text{s}$$

Is the time t at which the incident happens equivalent to the above-mentioned propagation time t?

Absolutely not. But when Einstein derived the Lorentz transformation, he actually substituted them for each other. What a more woeful fact is that human time-space view was distorted ungodly!

1.5 Consulting to the Masters of Theory of Relativity

Dear masters, you must know the theory of relativity well, now let me consult some questions to you!

(1) The Lorentz transformation describes the relationship of a point's time-space coordinates (x,y,z,t) and (x',y',z',t'), or the relationship between the time-space coordinates of one physical incident.

(2) When Einstein derived the Lorentz transformation, he derived the relationship of one physical incident's time-space coordinates (x,y,z,t), (x',y',z',t') wherever or whenever this incident happed.

(3) Dear sirs, maybe I am too foolish to understand these procedures, could you please help me deduce one incident? You just help me derive one incident!

As shown in Fig.1.3, there are two inertial reference systems K' and K. The reference

system K' is traveling in the positive direction along x-axis in the reference system K, with a speed υ relative to K. When the two coordinate origins O and O' are in the state of superposition, supposing the time in the two reference frames is zero, that is $t' = t = 0$.

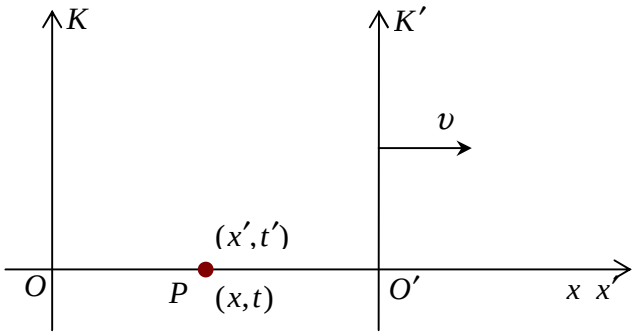

Fig 1.3 An simple event

In order to simplify this matter, let's deduce one incident which occurs in the x-axis and x'-axis!

An incident happens in the system K where $x = 1000\,\text{m}$ and when $t = 10\,\text{h}$. (a bomb explosion for example).

Dear Sirs, now help me deduce the Lorentz transformation between one incident's time-space coordinates! (Attention please, not application but derivation)

You can believe that the principle of constancy of light velocity is right!

You can think that the theory of relativity is right!

When the two origins O and O' are in the state of superposition, the light signal can come out, however strong it is!

Do please! Now let's see together that, in broad daylight, how we can explain the concept of time using the principal of constancy of light velocity!

[Illustrations]

Dare the supporters of theory of relativity answer these simple questions?

Of course not, they dare not face them and cannot answer them.

Whichever derivation of Lorentz transformations will adopt the principle of constancy of light velocity, and "the time that the light when origins O, O' are in the state of superposition travels to that point" substitutes "the time when the incident takes place"!

When Einstein deduced the theory, he put all the points and incidents together and made confusion, well then let us open our eyes to see how they deduce it one by one!

In the simple example described in Fig.1.3, the incident took place when $t = 10\,\text{h}$, while

according to the principal of constancy of light velocity, the time that light travels from the origin to this point,

$$t = \frac{x}{c} = 3.34 \times 10^{-6}\text{s}$$

Let's open our eyes, who dare say that 10 hours equals to 3.34×10^{-6} seconds?!

[Further Illustrations]

Let's further analyze the incident discussed before. The Process of Classical Physics is as follows.

Firstly let's see how the classical physics processes it:

(1) The classical physics believes that time is the objective being in the universe, or time is the reflection of the total existence and changes in the whole universe. It is the same whichever reference system it is in. Obviously,

$$t' = t \tag{1.9}$$

(2) The classical physics believes the distance between two points is objective, and is a space length. It is all the same in any reference system.

(3) The classical physics believes velocity equals distance divided by time. When both of the space distance and time are same respectively, the relative velocity between two reference systems must be equal in value and opposite in direction.

According to the above,

$$x' = x - \upsilon t \tag{1.10}$$

The Process of Theory of Relativity is as follows:

(1) The theory of relativity believes that the time in two reference systems may not be equal——if equal, there will not be time dilation!

(2) The theory of relativity believes that between two reference systems, the space length of the two points may not be equal. ——if the space lengths of the two points are equal, than length contraction won't occur.

(3)Now that space length may be not equal as well as time, the relative velocity between two reference systems may not be equal, either.

——the relative velocities of the two frames of reference are equal, which is the result of classical physics. However, the theory of relativity takes advantage of this result, which is too absurd!

Now you see, based on the theory of relativity, it is even impossible to draw the general solution formula with some coefficients between time-space coordinates (x',t') and (x,t) for the incident above!

Let alone change time concept slinkingly taking advantage of the principal of constancy of light velocity in the daylight!

Now who can deduce the fake Lorentz transformation?

2. Is Lorentz transformation Absurd?

[Time]

What is time? Time is just as an immensely long river flowing from the antiquity to the future.

Time is just like a rushing river ceaselessly on the move. It's like the water of the Yellow River, which flushes into the sea without ever returning.

But how can the Yellow River whose flow is always break compare with time?

Time is like the sun and stars in the sky, rising in the east and setting down in the west day after day. Time is like the immense the Milky Way, going round and round ceaselessly forever.

But the Milky Way cannot compare with the huge time either.

Lei yuanxing said that, the gear wheel of time joggles the whole universe and drives all galaxies to rotate towards the everlasting future. [3]

And Newton has ever said that 'The absolute, real or mathematical time, itself and to the extent of its nature, always lapses uniformly, having nothing to do with any outside body.' [4]

Time is the most essential objective being in the universe, or time is the reflection of the total existence and changes in the whole universe. And time is the most essential foundation stone of the physics.

Time is our sole measurement tool for the process of universal existence and changes. Of course, this kind of measurement is regulated by a time system on the earth's surface familiar to us. [5]

Why has the clear concept of time been changed? The reason lies in Lorentz transformation in the theory of relativity. And it can be said that Lorentz transformation is the magic weapon of the theory of relativity, which can bring you into a logically strange loop and let you experience the relativity completely.

Well then, is there contradiction existing in Lorentz transformation itself?

We don't need to beat around the bush, let's go back to the basic springboard of Lorentz transformation.

2.1 Time Standard in Physics

Before argument, the standard of time in dealing with physical problems should be emphasized definitely.

The time system is uniform in the same frame of reference, namely, the time has synchronism in any position. Then if we refer to a certain time in the same frame of reference, whether are all the points same in the frame at the time or not? Of course, the answer is yes.

For example, a train leaves Beijing for Shanghai at 12:00 (at this moment, the time of any position is 12 in the surface frame of reference), and arrives at the destination at 18:00 (Likewise, the time of any position is 18 at this moment in the surface frame of reference). So, we conclude that it takes six hours from Beijing to Shanghai by train.

---- If the time system is not uniform in the same frame of reference, how do we describe the motion in physics?

Einstein also recognized this viewpoint in the theory of relativity, and discussed how to synchronize the time at each position in same reference system.

The time of the every point in the same frame of reference is completely same, which is the time of the frame of reference.

2.2 The Most Basic Lorentz Transformation

The Lorentz Transformation is derivated by Einstein based on the two basic principles, which are the principle of constancy of light velocity and the principle of relativity.

As shown in Fig. 1.1. There are two inertial frames of reference K' and K. The frame K' is moving in the positive direction along the axis of x in the frame K with a velocity of υ relative to the frame K. When the two coordinate origins O and O' are at the state of superposition, we suppose that the time in the two frames is zero, i.e. $t' = t = 0$.

The Lorentz transformation describes the relationship of a point's time-space coordinates (x, y, z, t) and (x', y', z', t'), or the relationship between the time-space coordinates of one physical incident.

Lorentz positive transformation

$$\begin{cases} x' = \dfrac{x - \upsilon t}{\sqrt{1 - \upsilon^2/c^2}} = \gamma(x - \upsilon t) & (1) \\ y' = y & (2) \\ z' = z & (3) \\ t' = \dfrac{t - \dfrac{\upsilon}{c^2}x}{\sqrt{1 - \upsilon^2/c^2}} = \gamma\left(t - \dfrac{\upsilon}{c^2}x\right) & (4) \end{cases}$$

Lorentz negative transformation

$$\begin{cases} x = \dfrac{x' + \upsilon t'}{\sqrt{1 - \upsilon^2/c^2}} = \gamma(x' + \upsilon t') & (5) \\ y = y' & (6) \\ z = z' & (7) \\ t = \dfrac{t' + \dfrac{\upsilon}{c^2}x'}{\sqrt{1 - \upsilon^2/c^2}} = \gamma\left(t' + \dfrac{\upsilon}{c^2}x'\right) & (8) \end{cases}$$

2.3 The Time Trap

After the investigation of Lorentz transformation, let's look at Fig.1.1 again. In the theory of relativity, it is said that when the two coordinate origins O, O' are in the state of superposition, we suppose that the time in the two reference frames is zero, i.e. $t' = t = 0$.

That is to say that the time of every point in the two frames of reference is zero at the moment, i.e. the time of the points in frame K is $t = 0$, and $t' = 0$ in K'.

However, when $t = 0$, according to the equation of Lorentz transformation:

$$t' = \gamma\left(t - \frac{\upsilon}{c^2}x\right) = -\gamma\frac{\upsilon}{c^2}x$$

$$x' = \gamma(x - \upsilon t) = \gamma x$$

we get the time of every point in frame K'

$$t' = -\frac{\upsilon}{c^2}x' \tag{2.1}$$

It is obvious that the time of every point in the frame K' is completely different, which is inconsistent with the assumption at the beginning of the argument.

At the same time, when $t' = 0$, according to the equation of Lorentz transformation:

$$t = \gamma\left(t' + \frac{\upsilon}{c^2}x'\right) = \gamma\frac{\upsilon}{c^2}x'$$

$$x = \gamma(x' + \upsilon t') = \gamma x'$$

we get the time of every point in frame K

$$t = \frac{\upsilon}{c^2}x \tag{2.2}$$

It is obvious that the time of every point in frame K is completely different, which is inconsistent with the assumption at the beginning of the argument.

To sum it up, Lorentz transformation has dropped into a time trap at the beginning.

2.4 Twins Paradox

In terms of the logical problem of theory of the relativity, Twins Paradox has been condemned by us for more than one century. To avoid the chicanery of the supporters of theory of relativity, we put the problem forward more strident.

As shown in Fig.2.1, the twins A and B are flying away the earth by airships in the opposite directions with the uniform velocity simultaneously. Some years later, they turn around simultaneously, flying towards the earth at the same velocity and landing simultaneously (the accelerating process is neglected).

Who is younger of the twins?

According to New Physics, the motions of A and B to the no-shape substance space are equivalent. Therefore, the twins would be at the same age.

But what conclusions can we draw from the theory of relativity?

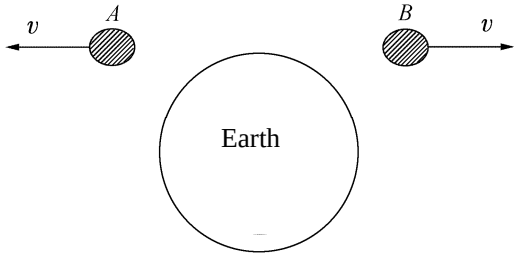

Fig 2.1 The sketch map of Twins Paradox

We can obtain the conclusions as follows:

(1) From the angle of A alone, it looks as if that B is younger because B is moving and its clock is slower.

(2) From the angle of B alone, it looks as if that A is younger because A is moving and its clock is slower.

Therefore, whether is the theory of relativity self-contradictory or not?

When the twins stand together face to face, if only they had a normal thinking, they should not side with the theory of relativity for that the fact might only have two results.

(1) Both of them are at the same age.

That is to say that neither of the observing results according to the theory of relativity is trustable.

(2) One of them is younger than the other.

Then which is the younger one?

No matter in physics or mathematics, there are not values which can result in that A is bigger than B while B is bigger than A.

Therefore, we can take it for granted that there are antinomies like the above one in all the problems about the time transformation in the theory of relativity.

[Illustrations]

It is common for most supporters of the theory of relativity to use the general relativity to prevaricate the problems of Twins Paradox. Because of acceleration the influence of acceleration on time and that of velocity on time happen to counteract each other, however far you fly.

What is more, a number of incompatible formulas are put forwards by many supporters of the theory of relativity to prove Twins Paradox strictly. However, a great of experiments demonstrate that the acceleration has nothing to do with time dilation.

……

There are many experiments including an accelerating process in experiments validating the time dilation. And the range of the acceleration is very wide. For example, in the experiment of atomic clock sailing around the world, the acceleration centripetal on the clock is $10^{-3}g$*, where* g *is the acceleration of gravity on the earth's surface; in the running-disk experiment, the acceleration centripetal of the light source extends to* $10^{5}g$*; in the experiment investing on the temperature dependence of Mossbauer effect, the vibrating acceleration of the nucleus in the crystal lattice and the acceleration centripetal of the meson moving in circle are both larger than* $10^{16}g$*. Although the range of the acceleration is so wide, almost all the experiments get the result consistent with time dilation caused by the speed, which is predicted by special relativity. This fact indicates that, the acceleration has no contribution to time dilation in the experiment. Even if we admit the existence of the effect of time dilation, it can only say that the effect is caused by the speed instead of the acceleration.* [6, 7]

The problem of Twins Paradox is the logical contradiction that the theory of relativity cannot avoid.

3. Is the Principle of Constancy of Light Velocity Absurd?

3.1 The Comparison between Newton's absolute viewpoint of space-time and that of Relativity

The theory of relativity has been with us almost a century. The viewpoint of time-space in the classical physics and that in the theory of relativity has also been argued for one hundred years. Then, which one is more reasonable? Let us survey on it in the following.

First of all, time and space is explained definitely in Newton's classical physics.

That is, the absolute, real or mathematical time, itself and to the extent of its nature, always lapses uniformly, having nothing to do with any outside body. The absolute space will never change or move. It's the nature of the space. It is an independent entity and has nothing to do with other things.

Both time and space are objective, which are the foundation of physics.

Having admitted the precondition that is the objectivity of time and space, the velocity $v = l/t$ is referred by Newton. So, it can be said that velocity is a derivative variable of time and space. That not only consists with the logic but also does with cognitive habit of human being.

Secondly, let's look at the thought of Einstein.

The theory of relativity is established by Einstein based on the two basic principles, which are the principle of constancy of light velocity and the principle of relativity.

Then, what is the principle of constancy of light velocity?

Here citing Einstein's original words: a light beam will always move at a constant speed c in a resting coordinates system, regardless of that the light beam is emitted by a resting object or a moving one.

——here the state of rest is relative to the observer. [8, 9]

"A light beam will always move at a constant speed c in a resting coordinates system." which is the key part of the principle of constancy of light velocity.

The principle of constancy of light velocity can be described in image-bearing words. That is, the speed of a light beam is uniform c, relating to thousands of observers who are running in all directions with arbitrary speed even $0.9c$.

While you are running at the velocity of $0.99c$ toward the direction of a light beam, the velocity of the light beam relative to you is c. When you are running at the velocity of $0.99c$ toward the opposite direction of a light beam, the velocity of the light beam relative to you is also c.

To sum it up, the velocity of a light beam to any inertial system is uniform c. That is the

principle of constancy of light velocity. In the theory of relativity, velocity is absolute, while time and space are variable.

3.2 Logical Problems of Principle of Constancy of Light Velocity

The principle of constancy of light velocity is explained clearly as stated above. What's more, are there any logical problems in this principle?

A light beam travels in the cosmic space as shown in Fig.3.1, which exists actually and objectively, but how about the frame of reference? It's just a mathematical model established to resolve problems, not existing practically.

Why does there exist an inevitable relationship between light and the frame of reference?

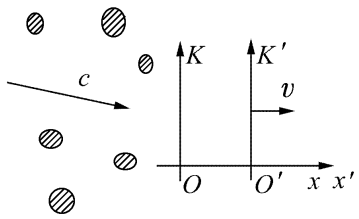

Fig 3.1 Is the light dependent on the frame of reference?

A beam of light travels in the cosmic space, which is actual and objective. The relationship between it and the abstract space frame of reference only having mathematical meaning is established by Einstein toughly, regardless of how large the velocity of the frame to the cosmic space. Does it separate the physics from the practice? And does it go against the logic?

How does the velocity of the light beam to infinite inertial frames of reference K, K' … happen to be c?

A parable named 'Making his Mark' told by Han Feizi (a famous philosopher in the ancient history of China):

A man was crossing a river by boat. His sword fell into the water due to his carelessness. Immediately he made a mark on the boat where his sword fell off. Others asked him: "Why do you make a mark on the boat?" "This is where my sword fell off," he said, "When the boat stops, I will jump into the water to look for my sword at the place where I have marked the boat."…

Though there is no necessary relationship between the boat and the sword because the boat has moved and the sword has not, the mark maker made a relationship between them rigidly. Isn't

it very foolish?

In summary, the light beam and the cosmic space are just like that sword and the water, but the frame of reference system is just like the boat. The light travels in the cosmic space. Therefore, there is no essential relationship between the light and the frame. Despite of that, the light is imposed on the frame of reference by Einstein. Does he have any differences from the mark maker logically?

3.3 Logical Problems on the Viewpoint of Time and Space in Theory of Relativity

Firstly, time and space existing objectively is the standard through which the world is known by human being as well as the most important footstone of physics. For instance, if time and space are compared to father and mother, velocity would be a little son of them. Then, how does velocity come into being without time and speed?

In addition, the velocity is made absolutely by Einstein without regard to time and space in the theory of relativity. Doesn't it put the cart before the horse?

It can be said when Lorentz transformation is deduced at first, the relative velocity between two frames of reference systems has been brought in, it is unconscious for him to employ the valid cognition on the objectivity of time and space.

Then, are there any reasons to support this opinion?

While deducing Lorentz transformation, two frames of reference K and K' are employed in theory of relativity as shown in Fig.3.2. The relative velocity of frame K' to frame K is v.

From the classical physics, the right idea of time and space can be formed in our heart, so it is easy for us to understand what the velocity is. However, if there is no right idea of time and space, that is to say that both time and

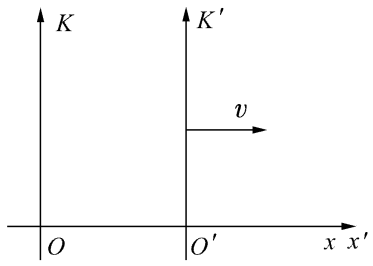

Fig.3.2 How come the speed?

space are uncertain, then how does velocity come into being? When the relative velocity of the two frames of reference is $\upsilon = 100$ m/s, which is given by Einstein, how does the speed come out? What does the “m” mean? What does the “s” mean? And what about $\upsilon = 100$ m/s?

It is said that if the time and space is determined objectively, the velocity would be determined certainly.

The objectivity of time and space has been concerned when the velocity is researched, but it is considered that time and pace would change with the velocity changing inversely, isn’t it a paradox?

We can draw a vivid analogy!

Kittens and puppies would snap at their own tails, running around a loop. What kind of mistake do they make? They forget that the position of their tails is determined by the position of themselves, When they keep running, can the tails’ position be determined?

To sum it up, the velocity is made absolutely by Einstein regardless of space and time. Logically, is there any difference between him and the kittens, puppies talked about above?

3.4 A simple logic

Firstly, the brilliant discourse of Mr. Youngler on the principle of constancy of light velocity.

(1) Any body can be a frame of reference.

(2) A photon can also be a frame of reference.

(3) The velocity of a body relative to the frame of reference of itself is zero.

(4) The velocity of a photon relative to the frame of reference of itself will also be zero.

(5) So the judgment that the light velocity relative to any frame of reference is uniform c is false.

Definitely, how simple the logic is.

3.5 The Contradiction between the Principle of Constancy of Light Velocity and Experimental Facts

It is known for the people who understand the history of physics why the theory of relativity can be established. It is because that the result of Michelson-Morley experiment showed that there was no so-called ether-wind at all on the surface of earth, when it was conducted by Michelson and Morley in an effort to measure the ether-wind on the surface of earth, which result in the fierce conflict with the derivations of classical physics.

The theory of relativity is established by Einstein on the ground of Michelson-Morley experiment discarding the concept of ether.

The important part of the principle of constancy of light velocity is that a light beam will always move at a constant velocity c in a resting coordinates system. That is to say that light is isotropic relative to an arbitrary coordinates system, which can be used to explain the zero result of Michelson-Morley experiment on the surface of earth. Furthermore, do all the results of Michelson-Morley experiments conform to the principle of constancy of light velocity? The answer is no.

3.5.1 Milar Experiment

……

From the year of 1902 to1904, Millar and Morley repeated the Michelson-Morley experiment with better instruments. The result of their experiment was closer to zero than what was got by Michelson and Morley in 1887.

Later on, Millar obtained different result when conducted the experiment rather than the space of the earth surface.

In 1921, Millar repeated this experiment on Mount Wilson by using the same methods as before. As a result, a positive effect of 10km/s *was found, which means light speed deviated by an amount of* 10km/s.

In order to validate this point, he took many measures, including replacing ferromagnetic

materials, substituting cement for the steel frame, substituting copper and aluminum for steel, separating the light source to avoid the change of temperature, adopting many different light sources, even heating up an electric cooker to test the influence of temperature…

At last, Millar came to the exact conclusion that light is drifting at a speed of 10km/s *relative to the earth.* [10]

From the above, it can be said that the principle of constancy of light is denied by this experiment straightly.

[Illustration]

In the year of 1955, San Francisco and other people analyzed the positive effect in Millar experiment, and considered that it was caused by the temperature gradient.-Thereby the Millar experiment is buried completely.

The result of the experiment conducted by Millar on Wilson Mountain can't be understood by people, it is thought that the results of the experiment are affected by temperature gradient contrarily. I can't agree with it.

Let us look at some basic questions together.

(1) Can Millar conduct the Michelson-Morley experiment?

In the year of 1902 to 1904, Millar and Morley repeated the Michelson-Morley experiment many times on the surface of earth. It can be said that Millar is very familiar with Michelson-Morley experiment. The more accurate the instrument is; the closer to zero the result of their experiment is.

What's more, is it reliable for the result of the Michelson-Morley experiment repeated carefully by Millar on Wilson Mountain in 1921? Of course, be reliable. (Note that the altitude is different.)

(2) Michelson-Morley experiment has been conducted many times by human being and it has been also repeated by Millar on the surface of earth. But why haven't the results of the experiments been affected by the temperature gradients? Why was the result of the experiment on Wilson Mountain affected by temperature gradient uniquely?

(How coincident it is! No matter how the condition of experiment was changed by Millar, a

positive effect of 10km/s would always been brought in by the temperature gradient.)

(3) The reason for Millar changing the temperature is to exclude the influence of different factors after the appearance of the non-zero result and the purpose for the changing on temperature is just to exclude the influence of temperature on the experiment. But some people believed that the result of the experiment is affected by the temperature gradient. Isn't it ridiculous?

4) In the year of 1998, Maurice Allais found evidence of a systematic nature detailed in Millers results in his experiments. [11]

3.5.2 Light Aberration Phenomenon

As shown in figure 3.3, when we observe a far-away star, we need change the direction of our telescope when seasons change, that is, we change the telescope's angle when earth changes its position on its orbital course round the sun.

The maximum angle α is about 10^{-4} radian in the practical observation.

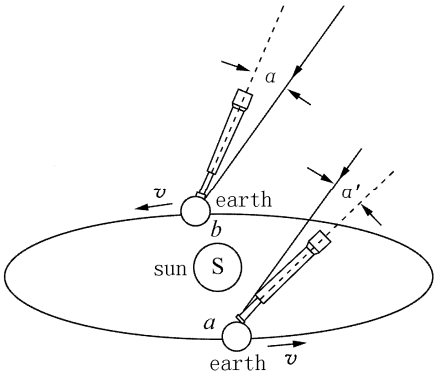

Fig 3.3 light aberration phenomenon

It can be said that the principle of constancy of light is denied by Light Aberration Phenomenon straightly.

Note, as shown in figure 3.4, being on the Earth in this inertial reference frame, we are observing the light from the distant star which is only light sources and moving. (The velocity of star relative to that of the Earth's reference frame is an additional reverse velocity of the Earth relative to the space on the basis of itself velocity relative to that of space).

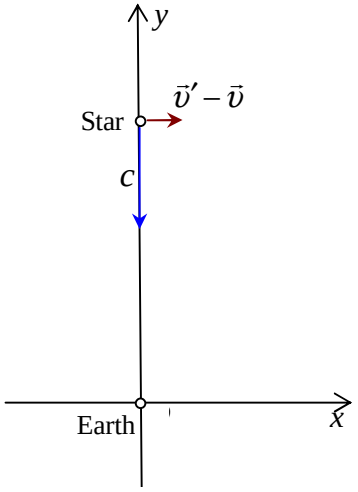

Fig 3.4 Observing star in the Earth's reference frame

Need to note that the star is very distant from the Earth and their orientations relative to the Earth's space

are invariable.

According to invariance principle of the speed of light, the light's speed relative to any inertial frame is constant and independent on light source's speed, so the direction of light from star is always unchangeable and it is observed that the direction of the star is also no change. According to this situation, we have never observed the Light Aberration Phenomenon!

Both the movement of observer and light source could have been completely different. However they are no distinction in the theory of relativity. Light Aberration Phenomenon has shown that invariance principle of the speed of light is simply absurd!

3.5.3 The Sagnac Effect

In 1911, Sagnac invented a ring interferometer as shown in figure 3.5. A beam of light is split into two beams by beam splitter, and the beams of light are made to follow a trajectory in opposite directions. To act as a ring the trajectory must enclose an area .On return to the point of entry, the light is allowed to exit the apparatus in such a way that the interference fringes are obtained on the viewing screen.

The amount of displacement of the interference fringes in the Sagnac effect is proportional to the product of the angular velocity of the interferometer and the area enclosed by the trajectory.

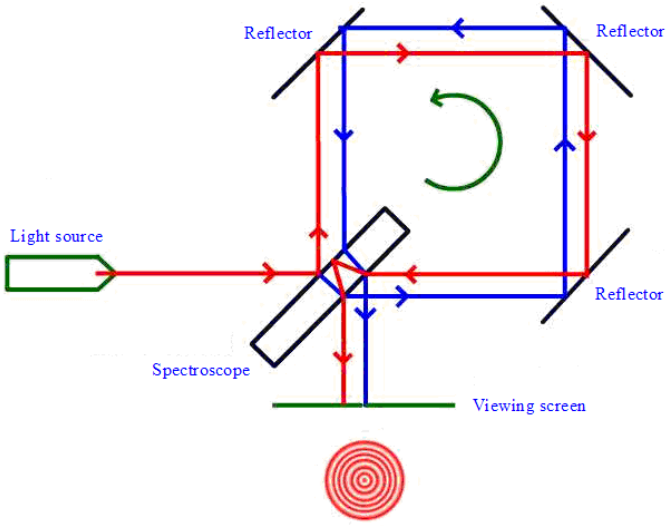

Fig. 3.5 Sagnac Effect

The Segnac effect has been employed in many practical ways. For example, a fiber gyroscope has been successfully utilized in the field of aviation and space flight. It was one of the highly developed gyroscopes in the last 20 years.

From the above, it can be said that the principle of constancy of light is denied by this experiment straightly.

4. Is the Principle of Relativity Rational?

What is the content of the principle of relativity?

Principle of Relativity-Physical laws have the same expressing form in all the inertial reference frames, that is, physical laws are equivalent in all the inertial reference frames.

The principle of relativity that is different from the Galileo's principle of relativity in mechanics is applicable not only to the mechanical laws, but also to all the physical laws, especially electromagnetic laws (including optics).

It is known for us that all the elementary laws of electromagnetic are concluded from a great number of experiments and proved by a great number of experimental facts and applications.

The principle of relativity will be verified through a very simple electromagnetic problem in the following paragraphs.

4.1 What is the Fact on Earth?

There are two inertial systems K and K' in which the system K' is moving along the positive direction of the x-axis with the velocity of v relative to K, as shown in Fig.4.1.

There is a resting system that consists of a thin rigid rod with a length of R and two positive charges Q at both ends of the rod in system K. And it can rotate without friction around the central point P of the thin rod. The conditions of the system observed from both inertial systems K and K' can be judged respectively according to the principle of relativity.

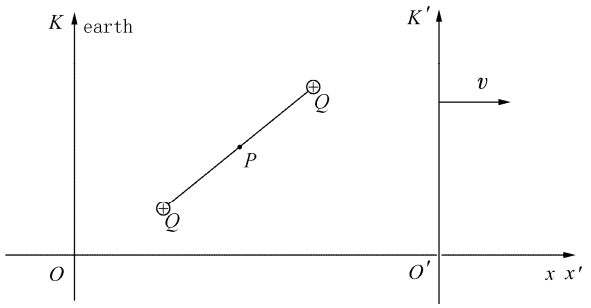

Fig.4.1 The Systems of double Electric charge

4.1.1 Observation in the System K

It can be observed in the system K that both of the charges are at rest, neither of them can generate a magnetic field and between them only Coulomb force exists. Furthermore, they are the same charges so the Coulomb force between them is repellent, as shown in Fig.4.2. The Coulomb force can be described as

$$F_{\mathrm{e}} = \frac{Q^2}{4\pi\varepsilon_0 R^2}$$

The torque acted on the system is zero, so the system doesn't rotate with a steady state.

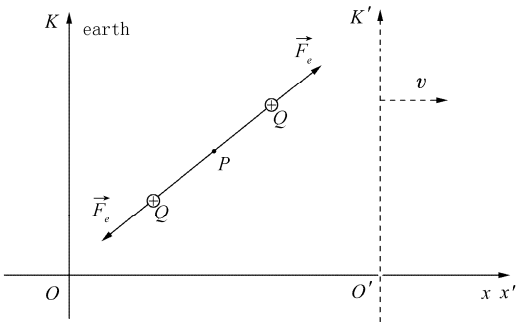

Fig.4.2 Observation in the System K

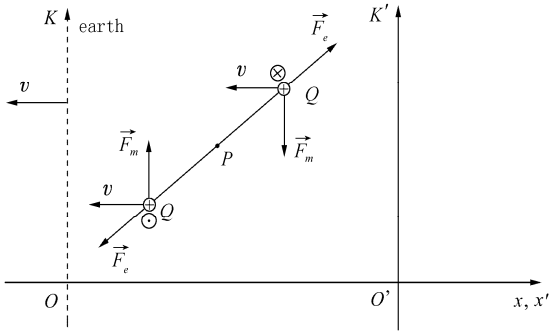

Fig.4.3 Observation in the System K'

4.1.2 Observation in the System K'

It can be observed in the system K' that there is not only Lorentz force but also Coulomb force acting on the two charges that are moving along the negative direction of x'-axis with a velocity of υ as shown in Fig.4.3.

According to the most basic electromagnetic theory, the magnetic induction generated by the moving charge can be described as

$$\vec{B} = \frac{\mu_0}{4\pi}\frac{Q\vec{\upsilon}\times\vec{e}_R}{R^2} \tag{4.1}$$

The Lorentz force acted on the moving charge in the magnetic field can be described as

$$\vec{F}_{\mathrm{m}} = Q\vec{\upsilon}\times\vec{B} \tag{4.2}$$

According to the two basic laws above, it is easy for us to conclude that the direction of the magnetic induction generated by the upper moving charge at the position of the nether one which suffers an upward Lorentz force is outward vertically and the direction of the magnetic induction generated by the nether moving charge at the position of the upper one which suffers a downward Lorentz force is inward vertically.

When observing in the system K', the torque acted on the system is not zero any longer. So the system will rotate clockwise at the same time. Having been swinging to-and-fro, the system will stop at last at the direction of thin rod that is parallel to the x-axis.

4.1.3 Doubts

The two judgments based on the above are got completely according to the principle of relativity as well as to the theory that physical laws have the same expressing form in all the inertial frames of reference. Therefore, it is obvious that the results observed from the two inertial systems are paradoxical.

Firstly, the states of the two charges above-mentioned are certain. Whether they can generate magnetic filed or not is an objective fact, so the result is determined uniquely. When observing in the system K, neither of the charges can generate magnetic filed. But the result observed in the system K' is that both charges can generate magnetic filed. Whether can the two charges generate magnetic filed or not?

Secondly, the states of the two charges are certain. So it is an objective fact that there is a force between the two charges, and the result is determined uniquely. When observing in system K, there is only Coulomb force between the two charges. But the result observed in system K' is that there is not only Coulomb force but also Lorentz force. What's more, which kinds of force do the two charges act on?

Finally, the states of two charges are certain, which are an objective fact and determined uniquely. When observing in system K, it is at rest. But the result observed in the system K' is that it will finally stop at the direction of thin rod that is parallel to the x-axis after swinging to-and-fro. What's more, which state will the system be in?

From the argument as the above, a frame of reference is just a mathematical model. Is there any necessary relationship between it and the physical laws? Why do physical laws have the same form to all the frames of reference?

4.2 The Most Simple Logic and Experimental Facts

Principle of Relativity-Physical laws has the same expressing form in all the inertial frames of reference, that is, physical laws are equivalent in all the inertial frames of reference.

Now let us look up the basic physical facts.

The magnetic field can’t be generated by a resting charge on the surface of earth, but it can be generated by the moving ones. If physical laws are applied to the frame of reference and the principle of relativity is correct, the magnetic field wouldn’t be generated by the resting charge in the inertial system, but it would be generated by the moving ones relative to the inertial system.

On the one hand, a simple problem can be analyzed according to the principle of relativity. When a charge is resting relative to the earth surface, can it generate a magnetic field? The magnetic field can’t be generated by the resting charge when observed in the frame of reference on the surface of earth. But it can be generated by the moving charge observed in the other frames of reference that are moving relative to the earth. To the end, whether can a magnetic filed be generated by the charge or not? That is contradictory.

On the other hand, another simple problem can also be analyzed according to the principle of relativity. When a charge is moving relative to the surface of the earth, can it generate a magnetic field? The magnetic field can be generated by the moving charge when observed in the frame of reference on the surface of earth. But it can’t be generated by the resting charge observed in the frame of reference. To the end, whether can a magnetic filed be generated by the charge or not? That is also contradictory.

In April of 2005, Professor Zhu Yongqiang from Department of Physics of FuDan University in Shanghai conducted some experiments on this problem.

In the experimental installation, an observing system was made to be stationary relative to a

charged body. So the phenomenon whether a magnetic field existed near the body of the charge was to be observed, when the observing system and the body of the charge moved at the same velocity or acceleration. It can be concluded from the results of the experiment that the magnetic signal received was zero while the experimental installation resting on the surface of earth. But when it moved at a constant velocity relative to the earth's surface, the receiving magnetic signal was evident.

We can say that this experiment is a direct denial to the theory of relativity.

According to the theory of relativity, a magnetic field can't be generated by the resting charge in an inertial reference system. However, the result of the experiment shows that the magnetic field can be detected in the system that is stationary to the charge when it is moving on the surface of earth.

Another experiment conducted by Professor Zhu Yongqiang is as follows:

In this experiment, an exact instrument has been completed, which consists of a transmitting device and an amplifying-receiving device. The former can produce smashed electromagnetic wave, and the latter can display the intensity of the received smashed electromagnetic wave.

The receiving intensity was independent of the direction of the instrument, when the installation was resting on the surface of earth. But in a moving reference system, there is obvious relationship between the receiving intensity and the direction of the instrument. [12]

To sum it up, this experiment is also a direct denial to the theory of relativity.

4.3 Cosmic Background Radiation and New Ether Drift

This experiment was conducted in Lawrence Berkeley National Laboratory in the year of 1976 to 1977, using a U_2 airplane at a height of more than 15000 m.

…

A curious radiation that bathes the earth almost uniformly from every direction has turned out to be a unique source of information about the nature and history of the universe. The isotropic three-Kelvin radiation is a background in which all astrophysical objects lie.

…

It is known that the temperature of the three-Kelvin background radiation varies by about one in a thousand across the sky, with the hottest region being in the direction of the constellation Leo and the coolest one in the direction of Aquarius. The temperature varies smoothly between these two regions, following a simple cosine curve. This distinctive pattern ("the great cosine in the sky") leads us to identify the velocity of the solar system as the cause of the anisotropy.

…

There can be only one inertial frame of reference in any region of space where the background radiation is completely isotropic. In any other frame an observer's motion will reveal itself as a variation in the temperature of the radiation proportional to the velocity of the observer and to the cosine of the angle between his direction of motion and the direction of observation.

Physicist P.J.E. Peebles created the term "the new ether drift" to describe the expected motion. [12]

…

The founder of Synergetics Hermann Haken has said that: "The special relativity has denied the existence of the absolute frame, but the three-Kelvin background in the universe is a beautifully absolute frame."

This experiment has also been a direct denial to the theory of relativity.

Is there any inevitable relationship between light and the frame of reference in vacuous space? Is there any inevitable relationship between physical laws and the frame of reference in vacuous space? Since the principle of constancy of light velocity and the principle of relativity are unreasonable, whether on logic or on experiment can the theory of relativity based on them be reasonable?

5. The Root of the Successes of Relativity

Honestly speaking, there exist logic disorders, farfetched conclusions and confused concepts

in theory of relativity, even the basic principles and transformations are incorrect. What is it on earth that makes the theory of relativity succeed? There are a number of complex equations in the theory of relativity, some results of which are consistent with the experimental facts by coincidence, so that we can't understand the theory of relativity completely. And the more confused we are, the more admirable the theory is.

Some basic conclusions of special theory of relativity and the reasons of the successes of relativity are analyzed in the following paragraph. Only we find out the reasons of the successes, we can see the essence of theory of relativity as it really is.

5. 1 The Increasing Mass in Theory of Relativity

5.1.1 Recognition of Mass in New Physics

Firstly, let's study the simple recognition of mass in New Physics before the concepts of theory of relativity are analyzed.

People usually don't distinguish the gravitational mass from the inertial mass, and instead, they often call the two 'uniformly mass'. However, in fact the two kinds of mass are essentially different.

[Gravitational Mass]

The gravitational mass, which is still denoted by *m*, reflects the quantity of substances contained in a body and is a constant.

[Inertial Mass]

While the inertial mass reflects the characteristics of motion of a body and its ability to accelerate when there is an external force acting on the body. It is a variable.

The inertial mass of a body associates not only with its gravitational mass but also with the density of the no-shape substance of the space where the body is. Moreover, the inertial mass of a body also connects with its moving speed relative to the no-shape substance space where it exists.

If we denote the inertial mass of a body by *Q*, we will get

$$Q = mf(S)g(\upsilon) \tag{5.1}$$

Where $f(S)$ is the function of the density of the No-Shape-Substance in the space where the body exists. $g(\upsilon)$ is the function of the velocity of movement of the body in the No-Shape-Substance Space.

In the space near the earth's surface, the density of the No-Shape-Substance, which is denoted by S_0, is uniform. If $f(S_0) = 1$, then $Q = mg(\upsilon)$

From the experiment conducted by Kaufmann and some other people, we get the relationship between mass and speed

$$g(\upsilon) = \frac{1}{\sqrt{1-\upsilon^2/c^2}} \tag{5.2}$$

$g(\upsilon)$ approximately equals 1 when speed is a low value, therefore, in the case of low velocity on the earth's surface, $Q = m$.

Obviously, on the earth's surface, when a body moves at a low speed, its inertial mass is numerically equivalent to its gravitational mass. But this is just the equivalence on the numerical value; they are completely different in nature.

[Eötvös Experiment]

In 1906, Eötvös, a Hungarian physicist, conducted a famous experiment to verify that the gravitational mass is equal to the inertial mass. As shown in Fig.5.1.The suspended mass point will eventually reach a position of equilibrium. There are three forces acting on it:

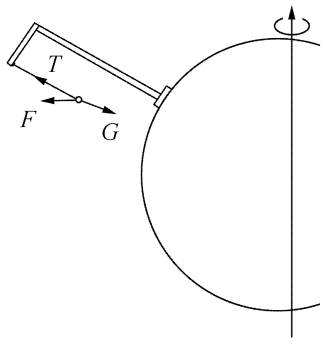

Fig. 5.1 Eötvös Experiment

(1) The gravitation *G* of the earth, which directs the center of the earth.

(2) The centrifugal force *F* of inertia, generated by the rotation of the earth.

(3) The tension *T*, acting on the mass point from the

hanging thread.

What is important is that *G* is proportional to the gravitational mass, while *F* is proportional to the inertial mass. Eötvös found no difference in the position of equilibrium with a variety of substance, such as wood, platinum, copper, asbestos, water and copper sulfide etc.

The 'zero' result denotes that the gravitational mass is equal to the inertial mass.

How should we explain the experiment? First, we need to note that the experiment was conducted at the same spot on the earth's surface and the velocity of object was zero.

From the above analyses we have derived that the inertial mass and the gravitational mass satisfy the following relation $Q = mf(S)g(\upsilon)$.

Well, on the earth's surface, $f(S_0) = 1$ and $g(\upsilon) = 1$, when $\upsilon = 0$, thus we get $Q = m$.

From this we can see that in this experiment the equivalence between the inertial mass of every single body and its gravitational mass is inevitable.

Either the density of the no-shape substance in the space in which the body locates, or the speed the body travels, is different, the gravitational mass will not equal to the inertial mass.

5.1.2 Recognition of Mass in Theory of Relativity

It is proposed in theory of relativity that gravitational mass and inertial mass are completely equivalent. The mass of one object at rest is m_0, it will increase while moving, and the increase here is the true increase. The moving mass of the object is as follows.

$$m = \frac{m_0}{\sqrt{1 - \upsilon^2 / c^2}} \tag{5.3}$$

In 1906, the physicist Eötvös from Hungary conducted the famous Eötvös Experiment, after that it is thought that the conclusion which gravitational mass and inertial mass are equivalent is demonstrated by the experiment. Since then the distinction between gravitational mass and inertial mass wouldn't be distinguished. Since then, the mass-velocity equation obtained by the experiments conducted by Kaufmann et al becomes the basic equation of theory of relativity, which is branded by the theory of relativity.

In high energy physics, while the particle moving at a high velocity, the change of inertial mass resulted from the velocity can't be neglected and it should be modified by the mass-velocity equation.

However, the mass-velocity equation is influenced by the theory of relativity greatly, which undoubtedly result in the thoughts that the experiments on high energy physics are the demonstration of theory of relativity and the theory of relativity is the theoretical basis of high energy physics.

5.1.3 Problem of Floating Wood

Let's study a simple problem of floating wood together and discuss whether the mass increase in theory of relativity is reasonable on logic or not.

As shown in Fig.5.2, the wood block which density is 1.0 g/ml is moving at the velocity of 0.8*c* relative to the water which density is 1.0 g/ml. Whether the wood block floats upward or not?

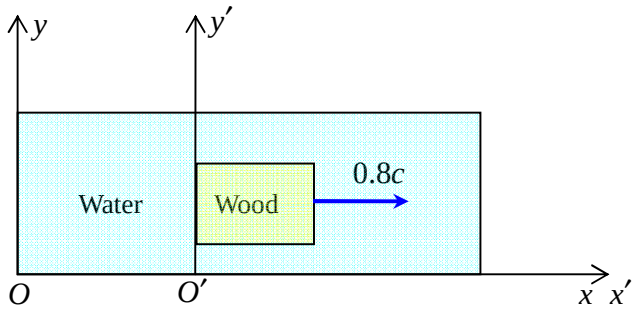

Fig 5.2 The sketch map of floating wood block

The problem is analyzed from the viewpoint of theory of relativity as follows.

(1) On the condition that the water is selected as frame of reference, the mass of the moving wood block increases but the length of it shortens. The increased density of wood block is $\frac{1.0}{1-v^2/c^2}=2.8\text{g/ml}$, and the density of water is still 1.0 g/ml, therefore, the wood block will sink.

(2) On the condition that the wood block is selected as frame of reference, the mass of the moving water increases but the length of it shortens. The increased density of water

is $\frac{1.0}{1-v^2/c^2} = 2.8\text{g/ml}$, and the density of wood block is still 1.0 g/ml, therefore, the wood block should not sink but tend to float upward.

To sum it up, whether the wood block floats upward or sinks? It is obvious that the results of theory of relativity are self-contradictory.

(Attention please, In the theory of relativity, $y = y'$.)

5.2 Time dilation in theory of relativity

5.2.1 The Recognition of Time in New Physics

What is the concept of time? Time is just as an immensely long river flowing from the antiquity to the future.

And Newton has ever said that 'The absolute, real or mathematical time, itself and to the extent of its nature, always lapses uniformly, having nothing to do with any outside body.'

Time is the most essential objective being in the universe, or time is the reflection of the total existence and changes in the whole universe. Time is the most essential foundation stone of the physics. The movements of a trivial object, a star or even a galaxy, absolutely cannot change the objective state of time.

Time is our sole measurement tool for the process of universal existence and changes. Of course, this kind of measurement is regulated by a time system on the earth's surface familiar to us.

[The Prolongation of the Life-span of A Moving Particle]

In a number of experiments, it is shown that the life span of moving particle relative to the earth becomes longer indeed. What is the meaning of this? After a clear distinction between gravitational mass and inertial mass is drawn, the fact that the life span of moving particle becomes longer will be easy to grasp.

How should we explain the problem in this experiment?

It is the high-speed motion of the particles in the no-shape substance space that extends the life-span of the particle.

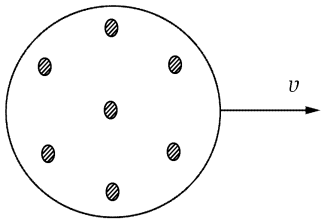

Fig. 5.3 the configuration of μ^- meson

As shown in Fig.5.3, similarly, the particle is also made up of smaller mass units and the mutual collisions among these mass units cause the disintegration of the Particles. When a Particle moves at a high speed in the no-shape substance near the earth's surface, the inertial mass of every mass unit composing the particles increases, and at the same time the relative speed of every mass unit decreases due to the unchanged vibration momentum. As a result, the time interval of collisions among these mass units of the particles increases, and thus the life span of the particles extends.

We will estimate the life span of a particle by means of the following method.

When the particle moves at a high speed in the no-shape substance space, the inertial mass of each mass unit composing the particles increases to be $g(\upsilon)$ times as much as the inertial mass of each mass unit of an immobile particle. Because the vibration momentum of each mass unit doesn't change, the relative velocity of each mass unit decreases to be $g(\upsilon)$ times as little as the relative speed of each mass unit of an immobile particles. Therefore the time interval of collisions among the mass units of the particles extends to be $g(\upsilon)$ times of the original value, and accordingly the life span of the particles extends to be $g(\upsilon)$ times of its original value. We can express it by the following equation:

$$\tau = g(\upsilon)\tau_0 = \frac{\tau_0}{\sqrt{1-\upsilon^2/c^2}} \qquad (5.4)$$

Where τ is the life span of a moving particle and τ_0 is that of an immobile particle.

——we can comprehend the reason of prolongation of the life-span of a moving particle.

Time being objective and absolute is the foundation on which we learn the nature.

The life span of a moving particle extends, which dose not prove the time dilates but shows that the self-reaction of the particle becomes slow after its moving at a high speed relative to the corresponding no-shape substance space where it exists.

5.2.2 The concept of time of theory of relativity

It is proposed in the theory of relativity that different frames of reference have different times and time can be dilated, in other words, the moving time or clock slows down.

Let's pay attention to an interesting phenomenon. All the laws in the theory of relativity are relative. The clock at one place slows down, but at the same time the clock at another place also slows down. Which clock that slows down on earth it is?

It is denied in theory of relativity that the laws are absolute, and it is proposed that all the clocks are similar, none of which slows down in fact.

Can't these arguments be contradictory and confused?

The time dilation in the theory of relativity can satisfy the equation.

$$\tau = \frac{\tau_0}{\sqrt{1-\upsilon^2/c^2}} \tag{5.5}$$

In terms of the particles which life become longer moving at a high velocity relative to the earth, it is not studied from the standpoint of logic and relativity in theory of relativity but the accurate value calculated by the Eq.5.5 is shown.

The equation of time dilation is branded by the influence of the theory of relativity for we don't understand the mechanism of the physical phenomenon. Therefore, we have to side with the theory of relativity. It is proposed that the time is objective and absolute in the classic physics, but it can be dilated in the theory of relativity, which is believed by most of people, even the data are consistent and accurate.

——not only the clocks of particle decay but also those of space systems such as spacecrafts and satellites are modified by the equation mentioned above, which is amazing undoubtedly.

What is amazing is that the theory of relativity is so great that it can exceed the inherent ideas of human being!

What is amazing is that the theory of relativity is so accurate on data that it can coincide with the truth!

…

5.2.3 Confusion and Contradiction of Time View in Theory of Relativity

Don't forget that all the laws in the theory of relativity are relative. One person is moving relative to another one, the clock of one person is slower than that of another person and vice versa. Whose clock is slower on earth? The theory of relativity can't get away from the self-contradictory logic at all events.

Though the absoluteness is denied in theory of relativity, why does the life of the particle moving at a high velocity relative to the earth become longer absolutely?

The problems of time trap and twin paradox are studied in the previous chapters. The absurdity of theory of relativity can be found everywhere.

5.3 The Most Typical Symbol of Relativity—Mass and Energy Equation

5.3.1 The Recognition of New Physics on Mass and Energy

Mass is just mass and energy is just energy. They are two different kinds of things in essence and can't convert to each other.

The mass is conservative and the energy is also conservative.

[Kinetic Energy Equation]

The kinetic energy of a body is the energy which it possesses when it moves relative to the total no-shape substance space where it exists.

We then deduce the kinetic energy *E* of a body. We assume that at first the particle is immobile relative to the total no-shape substance space, that is $\upsilon = 0$, which indicates that its original kinetic energy is zero. And then we exert an external force on the body to make it move along a straight-line path. When the velocity of the particle increases to υ, the kinetic energy equals the work done by the external force acting on it. That can be expressed as

$$E = \int F\mathrm{d}x$$

If substituting Qa for F in the above equation, we get

$$E = \int Qa\ \mathrm{d}x$$

Again replacing $\frac{\mathrm{d}\upsilon}{\mathrm{d}t}$ for a and then $\frac{\mathrm{d}x}{\mathrm{d}t}$ for v in above equation, it follows that

$$E = \int_0^{\upsilon} Q\upsilon\ \mathrm{d}\upsilon \tag{5.6}$$

(1) In the no-shape substance space near the earth's surface, when the body moves at a low speed, $Q = m$. Then at this time the kinetic energy of the body is

$$E = m\int_0^{\upsilon} \upsilon\ d\upsilon = \frac{1}{2}m\upsilon^2 \tag{5.7}$$

This is the kinetic energy equation we are familiar with.

(2) In general case, $Q = m\,f(S)\,g(\upsilon)$. So at this time the kinetic energy is

$$E = \int_0^{\upsilon} Q\upsilon\ \mathrm{d}\upsilon = mf(S)\int_0^{\upsilon} g(\upsilon)\upsilon\mathrm{d}\upsilon = mf(S)\int_0^{\upsilon} \frac{\upsilon}{\sqrt{1-\upsilon^2/c^2}}\mathrm{d}\upsilon$$

As a result,

$$E = m\,f(S)\ c^2\left(1-\sqrt{1-\frac{\upsilon^2}{c^2}}\right) \tag{5.8}$$

This is the kinetic energy equation for the general condition.

(3) Here let's look at the following particular case.

On the earth's surface, what will the kinetic energy be if the speed of a moving body approaches the light speed? Its kinetic energy is

$$E = m\,f(S_0)\ c^2\left(1-\sqrt{1-\frac{\upsilon^2}{c^2}}\right) = mc^2 \tag{5.9}$$

Unexpectedly, this is the mass-energy equation we are familiar with.

[Mass-Energy Equation]

Mass is conservative and energy is also conservative. Mass and energy can not be converted to each other while they are in essence two completely different kinds of things.

When a nuclear fusion happens, an atomic nucleus will release a great number of particles with high energy and their speed is approaching to the light speed. The mass taken away by these particles is the mass the atomic nucleus loses. And the kinetic energy acquired by these particles is converted from the potential energy of the atomic nucleus. Both mass and energy are conservative.

From the above Eq.5.9, we can get the following equation between the mass and energy taken away by these particles

$$E = \Delta m c^2 \tag{5.10}$$

Now it is natural for us to understand the existence of the mass-energy equation.

Photons are no shape substance in nature. So a photon's mass is not zero. It is

$$m_0 = \frac{h\nu}{c^2} \tag{5.11}$$

The theory of relativity considers the rest mass of a photon to be zero. Well then, from the viewpoint of mass-speed and mass-energy relations in the theory of relativity, the energy of a photon in a medium must be zero too. It's completely contradictory to the objective physical facts.

5.3.2 Recognition of Mass and Energy of Theory of Relativity

It is proposed in the theory of relativity that the mass and energy are similar in essence, and they can convert to each other. Their conversion to each other can meet the famous mass-energy equation.

$$E = mc^2 \tag{5.12}$$

All of the mass loss and energy release such as nuclear fusion and fission satisfy the equation, which is undoubtedly the weapons that the proponents is proud to say that the explosion of atomic bomb can't be explained without the theory of relativity.

The mass-energy equation is the brilliant symbol of the theory of relativity. The great power of the atomic bomb is conquering us relentlessly.

What is surprising! It is unbelievable for Einstein to grasp that mass and energy that are of two different kinds have the same essence, and to find the accurate relationship of the conversion between mass and energy. Though the successful explosion of atomic bomb can be attributed to the theory of relativity, why does Einstein try to deduce the mass-energy equation through the way that is not the theory of relativity in his later years?

5.3.3 The Logic Problem of Mass and Energy Conversion in Theory of Relativity

It is proposed in the theory of relativity that the mass and energy can convert to each other, and the energy that is released at the period of nuclear fusion is converted from the mass.

It is well known that the binding energy increases greatly during nuclear fusion and the potential energy decreases greatly. If all the energy released is converted from the mass, then where is the potential energy decreased?

[The electron-positron annihilation]

It is shown in the experiment that the electron and positron can be annihilated and convert into photo. The energy of photo and the mass of electron can satisfy the mass-energy equation. [11]

…

As shown in Fig.5.4, the electron and positron are very far at the beginning, then get closer and change into photos in the end.

We assume that the electron and positron which kinetic energy is zero are static when they are far at the beginning, and the static mass of each electron is m_e. The positive and negative charges attract each other and get closer to each other. Their kinetic energy increases gradually, their potential energy decreases gradually and they tend to be annihilated and convert into photo in the end.

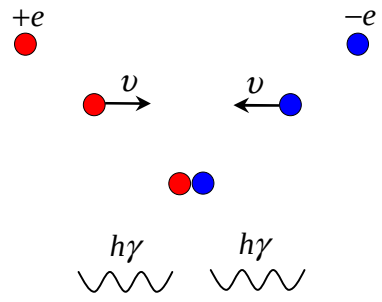

Fig 5.4 The sketch map of annihilation of electron and positron

In theory of relativity, it is proposed that the energy released is converted from the mass in the process of electron-positron annihilation.

$$E = 2m_e c^2 \tag{5.13}$$

If the theory of relativity is true, where is the decreased potential energy? Then, when the two charges get closer to each other, the electric potential decreases and kinetic energy increases (a part of the electric potential energy will convert into electromagnetic radiation energy). It is proposed in the theory of relativity that the larger the kinetic mass is and the larger the whole energy is. Why not all the kinetic mass converts into energy?

[Calorimetry Measurements of Energy]

Mr. Hao Ji, who works in Shanghai Oriental Institute of electromagnetic waves in china, bombards lead target by use of high-speed electrons wich is obtained by the beam current 1.26A with energys of 1.6MeV, 6MeV, 8MeV, 10MeV, 12MeV and 15MeV respectively, based on Bettozzi experiment in 1964. [14] He measures directly electron energy by Calorimetry measurements. Obtained experimental values are highly different from that is obtained by relativity theory. [15]

Compare the experimental datas with various theoretical values

Energy / Temperature	1.6MeV	6MeV	8MeV	10MeV	12MeV	15MeV
Relativistic value	0.67	2.52	3.36	4.20	5.03	*6.29*
Experimental value	0.26	0.29	0.32	0.32	0.32	0.32
New physical values	0.30	0.30	0.30	0.30	0.30	0.30

In the relativistic point of view, when speed of electron approach to the speed of light, the electron energy will tend to infinity. The new physics holds that when speed of electron approach to the speed of light, the energy will tend to a constant value. As shown in listed table, the theoretical values obtained by "new physics" are very close to the experimental value.

[Is there negative mass or virtual mass in the nature?]

Some science workers calculated the rest mass of a particle by measuring its energy and

momentum. They calculated the rest mass of a particle by means of the following formula between energy and momentum from the theory of relativity. The formula is

$$E^2 = E_0^2 + P^2c^2 \tag{5.14}$$

Where E and P are the energy and the momentum of a moving particle respectively, and E_0 is the energy of a particle at rest.

Since $E_0 = m_0c^2$

We can get the following relation

$$m_0^2 = \frac{E^2 - P^2c^2}{c^4} \tag{5.15}$$

Where m_0 is the resting mass of a particle.

Science workers have obtained exact measurements of the energy of particle and the momentum of the particle. As a result, they found that the value of $E^2 - P^2c^2$, which is a negative value, is smaller than zero.

It means that the square of the resting mass of a particle is a negative value. Is it meaningful? Of course, the answer is not. This negative value accurately shows that Einstein's theory may be wrong in the formula for the energy and momentum.

Science workers believed that their measurements were accurate. While they are unable to put an end to the theory of relativity, they brought forward the view that a particle has virtual mass in order to explain the negative value.

Is there any negative or virtual matter in the nature? In order to illustrate the answer to this question, let's look at the following example firstly. If we refer to the case that every one has an apple in his or her hand, we know clearly that the case of holding an apple in everyone's hand exists objectively and even can be seen by ourselves. Any of us can understand it well. Now if we refer to the case by saying that it is a negative apple or a virtual apple in our hand, how can we be understandable?

So we should never violate the objective facts when discussing physical questions.

……

From the argument above, the mass-velocity relationship, time dilation and mass-energy equation are the so called successes of theory of relativity. But it can't stand up to close scrutiny. Let's look up some other conclusions of theory of relativity.

5.4 Static Mass of Photo Being Zero in Theory of Relativity

From the view of theory of relativity, the static mass of photo must be zero, or else the kinetic mass of it will be infinite. Now that the static mass of photo must be zero (i.e. $m_0 = 0$). According to the mass-velocity relationship, the kinetic mass is also zero.

$$m = \gamma m_0 = \frac{m_0}{\sqrt{1-\upsilon^2/c^2}} = 0 \tag{5.16}$$

According to the mass-energy relationship, the energy of photo is also zero.

$$E = mc^2 = 0 \tag{5.17}$$

From the basic equations of theory of relativity, we can conclude that the energy of the photo should be zero whichever frequency it has, which violates the objective physical facts entirely.

Einstein believes that the photo has energy and the photos with different frequencies have different energy, which is known by most people.

$$E = h\nu \tag{5.18}$$

The above inference conflicts with the basic principle of Einstein. What is ridiculous is that some of the proponents of theory of relativity believe that the light travels in the air in the condition of $\upsilon = c$, $\gamma = \frac{1}{\sqrt{1-c^2/c^2}} = \infty$, which results in that the moving mass of the photo is not zero, i.e. $m = \gamma \times 0 = \infty \times 0$. Therefore, they argue that the judgment of theory of relativity that the static mass of the photo is zero is completely correct.

We couldn't help admiring the theory of relativity, which is that the photos with different frequencies have different energy. It can be concluded from it that the mass of the photos with

different frequencies will have different zeros.

Don't forget that the velocity of light traveling in the media such as glass, water and atmosphere is less than that of light traveling in the vacuum, which is also familiar with us. Take glass for example, $c' = \frac{c}{n} = \frac{c}{1.5}$, then $\gamma = 1.342$, the moving mass of photo is shown as follows,

$$m = \gamma m_0 = 1.342 \times 0 = 0 \tag{5.19}$$

Sorry! It is not to multiply zero by an infinite value this time.

While the light is traveling in the glass, the energy of the photo is shown as follows,

$$E = mc^2 = 0 \times c^2 = 0 \tag{5.20}$$

While the light is traveling in the glass, the momentum of the photo is shown as follows,

$$P = m\frac{c}{n} = 0 \times \frac{c}{n} = 0 \tag{5.21}$$

What can the theory of relativity tell us?

It can tell us ——while the light is traveling in the media such as glass, water and atmosphere, both the energy and momentum of the photo are zero, which contradicts with the physical facts entirely.

5.5 The Paradox of Grandparent and Grandchild

In theory of relativity, it is proposed that the clock can be turned back, what would be going on if you went back in time and killed your grandfather?

...

If you went back in time and killed your grandfather (when your grandfather wasn't married), your grandfather would die, your father and you wouldn't be born.

If you weren't born, you wouldn't go back in time and kill your grandfather and you would be born. If you were born, you would go back in time and kill your grandfather.…

If we side with the theory of relativity, it will be impossible for us to make sure the simple question whether we exist or not.

From the argument above, the mass-velocity relationship, time dilation and mass-energy

equation are the so-called successes of theory of relativity. But it can't stand up to close scrutiny. How ridiculous the basic principles, transformations and conclusions of theory of relativity are!

After you understand the absurdity of theory of relativity and the root of its success, I believe that you have a more levelheaded cognition on the problem in physics. As long as we can recognize and correct the mistakes in the theory of relativity, physics will have a bright future.

References:

[1] Ji Qi. *New Physics* [M]. Harbin: Publishing House of Northeast Forestry University, 2006.

[2] Wenwei Ma, *Physics*, Higher Education Press, 1999.

[3] Yuanxing Lei, The Chaos of Time-Space, Sichuan Science and Technology Publishing Company, 2001.

[4] Guangjiong Ni, Hongfang Li, *Modern Physics* [M], Shanghai Science and Technology Publishing Company, 1979.

[5] Ji Qi, *The review on the basic physical laws—the New Physics*, Phys. Essays **21**, 163 (2008).

[6] Yuanzhong Zhang, *the Experimental Basic of Theory of Special Relativity*，Science Press，1979.

[7] Demin Huang, *On the Nature of Physical Phenomena*, Shanxi Science and Technology Publishing Company, 2001.

[8] *Einstein Collected Edition*, Hunan Science and Technology Publishing Company, 2002.

[9] Bolian Cai, *Special Relativity Theory*, Higher Education Press, 1991.

[10] Yiling Guo, Huijun Shen, *Famous Classical Physics Experiments*, Beijing Science and Technology Publishing Company, 1991.

[11] Maurice Allais, *The experiments of Dayton C. Miller (1925 - 1926) and the Theory of Relativity* [J]**.** 21st century - Science & Technology**,** 1998, p. 26.

[12] Yongqiang Zhu, et al. *Characteristics and Applications of Smashed Electromagnetic Wave*[J]. Journal of Physics, 2001, 5: 832~836.

[13] Richard A.Muller. *The Cosmic Background Radiation and the New Aether Drift*[J], SCIENTIFIC AMERICAN, 1978 ,238(5) : 64~74.

[14] W.Bertozzi,Am.J.Phys.32.551(1964)

[15] Ji Hao , Experiment of Measuring Electronic Energy with Calorimetry Method, Chinese scientific and technological achievements, 2009.1, P34-35