

Electricity, magnetism, force

by Sanhua Lin

Abstract:

At the microscopic level, the electrons and protons within an atom cannot perfectly combine to form zero magnetic and electric fields. Instead, they resemble one or more rotating electric field models, emitting complex electric field waves and magnetic field waves outward from the atom.

At the macroscopic level, phenomena such as surface tension and universal gravity are the collective effects of this overflowing force, they share common characteristics. Scientists have overlooked the existence of the collective effects of countless atoms due to the difficulty of detecting the weak manifestations on individual atoms. Antimatter is in fact direct evidence for the existence of this force permeating the universe. Antimatter is simply the amplification of peak and valley phenomena of these force waves, which results in density variations. Density variations give rise to particle properties, and many unexplainable phenomena in the field of quantum mechanics stem from neglecting the influence of this electromagnetic overflowing force. point out that Einstein's theory of relativity confuses the absolute velocity and relative velocity of photons when using moving objects as reference points, overturning the theory of relativity regarding time and space, and providing an alternative explanation for experiments proving relativity. Propose the hypothesis that neutrons are particles with both positive and negative electrodes, rather than being electrically neutral. The strong nuclear force is actually an electric field force that is inversely proportional to the square of the distance, and there is no material basis for the strong nuclear force.

Behind force lies matter, and forces do not disappear as distance increases, but rather weaken to a degree that is negligible to humans.

The distinction between the macroscopic and microscopic worlds lies in the complexity of the charged and magnetic conditions in the microscopic world, which is often overlooked in the macroscopic world.

Keywords: atom, atomic overflow force wave, surface tension, gravitational force, negative particle, relativity, neutron, strong nuclear force, Doppler effect.

About atom model

Nikolaus Copernicus published his heliocentric theory in his book "De revolutionibus orbium coelestium" which was published in 1543. Ernest Rutherford proposed the atomic nucleus structure in 1912. In view of the similarity in the structure of the two models, it cannot be ruled out that the structure of the solar system had an influence on the latter theory subconsciously. Many ideas of human beings come from imitation and association, sometimes, preconceived knowledges leads people to subjective interpretations of the objective facts of experimental results, often leads to some untrue conclusions. During the time when the heliocentric model of the solar system was established, the human subconscious mind was influenced to make deductions that electrons revolve around the nucleus of an atom. But according to the same force will cause the same structure, the macroscopic force will cause such a structure, and the microscopic force will also create the same structure. Base on this idea, the first premise of this article is to assume that the theory of atomic structure that electrons surround the nucleus is correct.

Now assume that the speculation about the atomic structure is correct, just like planets revolve around the sun, assuming that electrons revolve around the nucleus, what can be deduced?

Let's start with a hydrogen atom. Assuming you are standing at a very, very far distance away from the hydrogen atom, where the distance between electron and proton could be negligible, and making measurements of the atom, you will reach a conclusion that the detected atom is uncharged.

Then suppose you stand between the electron and the proton, you will find the atom is a rotating electric field.

According to Maxwell's theory of electromagnetic induction, all moving charged particles produce magnetic fields. Moving point charges, such as electrons, produce complicated but well known magnetic fields that depend on the charge, velocity, and acceleration of the particles.

The atoms of other elements contain multiple proton-electron pairs, which can be regarded as multiple electric fields rotating, which may generate a magnetic field model in which the magnetic poles are constantly changing direction,

I prefer to think that the magnetic field itself generates electric potential, which will affect the electrons to travel along specific orbitals. Atoms or molecules of every substance have different electron orbitals. The model is like what we have observed, Milky Way, the solar system, the ring systems of planets, they all run on a flat surface like orbital, just because the driving force behind them is by no means accidental. Therefore, the attached conclusion is that the motion of electrons is not random, and only when it is regular, will it release the atomic spectrum of specific colors.

In most cases, multiple atoms and molecules come together to make matter. At this time, it is equivalent to multiple magnetic fields gathered together, a balance between multiple atoms is reached again, including substances composed of pure molecules and compounds composed of various elements. They reach a balance with each other, that is, they can be combined stably. If the

balance cannot be reached, there will be no chemical reaction. The influence still has certain rules, not completely random.

The most basic observations are that certain substances present a fixed color. This color phenomenon is complicated to explain uniformly with electronic transitions. I explained it as "A certain pattern forms a certain frequency".

One of them is that the direction of the magnetic field is relatively consistent. Scientists named it a magnetic domain. Whatever, if you want to form a fixed thing, you must follow certain rules.

Iron can be magnetized, from irregular arrangement to regular arrangement. The Curie temperature can cause the magnetism to disappear because thermal motion disrupts the regular arrangement. Magnetization and demagnetization, or microscopic magnetic dipole, are all evidences for the existence of magnetism of atom.

Objects that are arranged in an orderly fashion have magnetism, while objects that are arranged randomly do not have magnetism. This kind of evidence actually proves that each atom is magnetic.

The other atoms or molecules are arranged according to the rules of the electric field which exerts a greater force on them, and the directions of the magnetic poles between the atoms are not the same.

When the magnetic field directions formed by each atom are highly aligned, a stronger magnetic field is formed. When the alignment is inconsistent, it is believed to form changing waves or fields. For example, magnets exhibit a consistent overall direction, while ordinary iron can be rearranged to exhibit magnetism.

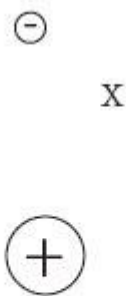
However, this electromagnetic force has reached a balance rather than being neutralized and disappeared. Macroscopically, it can be proved experimentally, if magnet crumbs are mixed together, will the magnetic force disappear? if the magnetism is regarded as a state of motion of energy, without the gap-fall of external force, it still obeys the law of energy conservation. It's just

that this force is related to distance. After synthesis, when the distance is too far, it will not be so powerful and becomes difficult to detect.

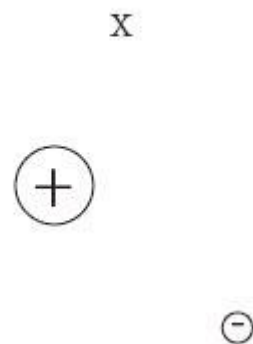
about electric field

By the same reasoning, when two point-like electric fields approach each other, without allowing positive and negative charges to neutralize through conduction, their electric fields will not disappear.

Still taking an atom as an example, let's look at the influence of an electric field on a certain position. Assume two instants, the electric field emitted by the nucleus and electrons, a certain point x in Figure A is located between electrons and proton, Figure B is another instant at position x , and the electrons run to the other side.



Schematic diagram of hydrogen atom A
[figure A, figure B]



Schematic diagram of hydrogen atom B

At these two moments, the electric field strength at the point x exhibits a state of alternating between strong and weak.

From this, it can be inferred that measuring the electric field strength at any point would exhibit an oscillating wave-like pattern of strong and weak intensities over time. When an electron appears nearby, the electric field exhibits an opposite force. The outward manifestation of its characteristics is the alternation between attraction and repulsion - one moment there is attraction, the next there is repulsion.

For the sake of the image, I'm assuming that this electrical attraction and conduction is through a medium. There is basis for such an assumption. That a force can exist out of nothing and generate some kind of attraction, this is idealism. In the materialism world, there is nothing that exists out of nothing. So electric field force is a kind of energy or matter, although this substance cannot be detected experimentally, according to the mass-energy equation, Einstein's equation reveals the intrinsic relation between mass and energy:

$E = mc^2$, where E represents energy, m represents mass, and c represents the speed of light.

According to the mass-energy equation, the relation between energy and matter is by no means a coincidence. Energy is postulated to be one of the intrinsic components that constitute particles, acting as one of the primary substances. This theory is substantiated by a number of scientific findings, leading some researchers within the domain to refer to it as a "field".

Since the electric field force originates from matter, it does not simply vanish into thin air, but rather decays over distance. Many scientists propose the existence of forces like the strong nuclear force and the weak nuclear force, which are believed as abruptly disappearing after traveling a short distance.

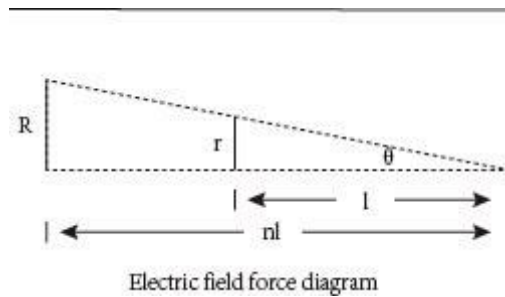
However, I believe that they actually attenuate rather than mysteriously vanish. Which perspective aligns more with materialism?

The forces likely attenuate to such minute levels that they become negligible. In other words, they diminish until the discrepancy falls below observability thresholds and can be disregarded.

When the quantity of the extremely attenuated forces emitted by each atom becomes enormous, their effects can no longer be ignored.

The electric field emitted by a positively charged atomic nucleus scatters omnidirectionally in the form of a sphere, attract electrons in all directions.

The formula for the decay with distance is as follows:



consider a small spherical surface at a distance l from the atomic nucleus, as shown in the figure, and measure the amount of scattering received within this sphere. Here, at the rightmost vertex of the triangle, positive electric fields are emitted by the atomic nucleus, l is the distance between the nucleus and the surface, r is the radius of the sphere, and θ is the angle. It follows that $r = l * \tan\theta$.

At a certain instant, the force exerted by the electric field received on this surface area can be calculated as

$$a = \pi r^2 = \pi * (l * \tan\theta)^2 = \pi * (\tan\theta)^2 * l^2,$$

and the amount received per unit area is the reciprocal, $f = \frac{1}{a}$.

Assuming that this point has not been received, then the amount of scattering emitted by this atomic nucleus continues to propagate in its original direction towards further distances. Assuming it reaches a distance nl away, where n can be any positive number, looking at it from a planar perspective (adding R and nl to our original diagram), we observe that its direction remains unchanged; thus, there is no change in angle. Now $R = nl * \tan\theta$,

$$A = \pi R^2 = \pi * (nl * \tan\theta)^2 = \pi * (\tan\theta)^2 * (nl)^2$$

$$F = \frac{1}{A}.$$

When the same force is dispersed over a larger area, the force received per unit area decreases. The distance is n times the original distance, and the amount of scattering received per unit area is the reciprocal, $\frac{1}{n^2}$.

This formula is actually also applicable to receiving magnetic force, or other energy or electromagnetic force of electromagnetic wave propagating in a straight line,

Have you noticed any similarities between this r squared and the formula for universal gravitation?

$$F = G * (m_1 * m_2) / r^2$$

Among them, F represents the gravitational force between objects, G is a constant called the gravitational constant, m_1 and m_2 are the masses of two objects, and r is the distance between them.

When we examine the electric field formed by electrons, the situation is more complicated. Since electrons are at the periphery, their fields are more likely to spill out. And they move around freely inside the atom, they have smaller masses and their charges are not concentrated like atomic nuclei, so their running direction are easily altered. At any moment, they may be attracted and

deviated by where the strongest positive electric field is. When combined with other substances, they will readjust to find new equilibrium trajectories. But fortunately, I only need the conclusion that the negative electric field emitted by the electrons also overflows outside the nucleus. Positive and negative electric charges mix together, presenting wavy outward radiation.

Of course, the electric field waves and magnetic waves leaking out of a single atom will be received by electrons and nuclei in other atoms to be neutralized and replaced, but never will it be so perfectly neutralized, the positive and negative electricity are not synthesized with each other, not perfectly synthesized away, but there will be an overflow from a single atom. A pile of matter still has overflow.

The real situation, mixing magnetic containing debris and hoping their south pole and north pole neutralize to become non-magnetic, is just hoping. The internal structure (magnetic domains) hasn't changed, the macroscopic manifestation won't change.

in conclusion:

Now you have to establish such a concept for the atom, the positive and negative charges of a individual atom are not neutralized with each other, not perfectly integrated, and the atom still has a moving magnetic field.

The characteristics presented at any location around it are positive electricity for a moment, negative electric field for another moment, magnetic south pole for a while, and magnetic north pole for a while, showing very fast switching in an instant. When measured with a large time unit, no fluctuations can be detected. In other words, the switching occurs with great rapidity, such that over longer timescales, no oscillation would be detectable with measurement tools and techniques operating at far lower frequencies than that of the fluctuation. While the fluctuations themselves may evade detection by conventional means, the atomic fields nonetheless interact with one another.

The characteristics observed at any given position around it exhibit momentary positive and negative electric fields, switching rapidly between the south and north magnetic poles. These fluctuations occur at such high frequencies that they cannot be detected using measurement tools and methods operating at much lower frequencies. However, the atomic fields themselves can interact with each other.

A single such atom, constantly producing magnetic force and wave force from an electric field, mixes together and has an effect on the neighborhood. Because other atoms have the same microscopic principles, there is some effect on other atoms, and any matter is made of atoms, which means that it has an effect on any matter.

But because it is proportional to the square of the distance, it decays too much at too great a distance.

It is still possible to observe, because the force is related to distance, the closer distance is the surface of the substance, we observe the surface of the object first.

The droplets of water resting on lotus leaves, the liquid rising above the rim of a cup without spilling over, and the boundary between the walls of a beaker and the liquid contained within - these phenomena, called "surface tension" by scientists, are in fact manifestations of these outspilling forces.

The siphon effect, also known as the capillary siphon, describes the upward flow of a liquid against gravity within a tube or other narrow channel. This phenomenon contradicts gravitational forces and can be explained by the intermolecular cohesion between liquid molecules combined with adhesion to the walls of the confining vessel, resulting in an asymmetric meniscus and capillary action. It's also this kind of forces. and it is due to the surface tension force of the material being greater than the downward gravitational force on the water itself.

Other similar ones are:

Boundary layer in fluid dynamics - The air velocity near the object's surface decreases to zero due to viscosity, forming a boundary layer with varying velocity.

Viscous force - When air flows past an object's surface, viscous drag is generated due to viscosity.

Now let's study light, about diffraction.

When the wavelength is comparable to the size of the obstacle or opening, the light wave will change direction after passing through the obstacle or opening, causing the light wave to deviate from its original propagation direction. This phenomenon is called diffraction.

For example, radio signals can diffract around hills when propagating.

In the laboratory, scientists use something like narrow slits, double slits, circular apertures, triangular or other irregularly shaped apertures, etc., to observe the diffraction patterns of light.

Scientists associated light with waves and used the characteristics of waves to explain light phenomena. Scientists' explanation is that light has both particle and wave properties, which is not wrong.

However, I can provide another novel explanation - treating light as particles. When passing through slits, the particles are acted upon by forces from the slit surfaces, causing them to change direction. Depending on the distance from the slit surfaces, different degrees of bending occur. Evidence supporting this is the observable refraction and reflection of light, where the turning points of direction also come from surfaces of objects. Therefore, it can be inferred that there exists a kind of force that can change the direction of light.

Alternatively, the macroscopic wave can be reinterpreted when scientists use the wavefront theory to explain wave phenomena. As the wave passes an edge, due to the coherence and phase

changes of the wave at the edge, interference occurs between different parts of the wave, ultimately resulting in changes in the propagation direction.

I directly treat the object surface or slit as a new wave source. There must exist some kind of force that enables it to generate a new wave source. In the propagation of water waves or sound waves, the direction remains unchanged during uniform internal propagation. When encountering gradually weakening or strengthening forces that are non-uniform, the direction changes.

This may not necessarily be correct, but it is novel, useful for analogizing the "observer effect" phenomena of quanta in the microscopic quantum world. Why do the wave characteristics suddenly disappear, treating the obstacle as a detection of the wave, the macroscopic detection process on any wave also affects the wave result, changing its direction. As will be mentioned later, treating the sun as a detection tool similarly causes the bending and redshifting of light rays.

Regardless of which theory is used to explain the diffraction of light, I believe there exists a force behind it.

Gravity

This same force, at greater distances manifests itself as the force of gravity. It becomes more uniform and smooth.

As mentioned earlier, not all the electric and magnetic fields in the atom are perfectly integrated. The undulating overflowing electric and magnetic fields of the atom will act on the surrounding matter.

According to Newton's third law of motion on action and reaction, it can also be viewed in reverse - the surrounding group of atoms exerts a reaction force back onto the single atom.

Continuing this reasoning, it can be inferred that group forces act on group forces.

Regarding this group force, there are two opinions here. One is that this force suddenly disappears as the distance increases, and the other is that it gradually decays as the distance increases. Which one do you support more? Which possibility is more willing to believe. The attenuation is related to the square of the distance, is it a proof or a coincidence?

As shown in Figure [schematic diagram of hydrogen] and Figure [Electric field force diagram], it is assumed that energy is a kind of matter or the movement mode of matter. In this case, assuming that the electron does not appear at positions r and R , is the energy weakened or suddenly disappeared?

Some people would say, if this gravitational force is caused by electric and magnetic fields, why can't scientists detect it?

First is that this force, this energy, before it is emitted, is balanced by many atoms inside, and it is originally uniform, rather than disappearing due to balance.

The second is because of the principle of the detection itself. In my philosophical system, it is called fall-gap. There must be a fall-gap, and people can get the result of the test by comparing the differences.

For example, if you put the thermometer in the thermostat and measure it everywhere, there is no change in the thermometer. The environment must have a temperature difference in order to produce a thermometer.

For another example, if a wire is placed in a magnetic field and does not move, the wire cannot generate current. At this time, it is equivalent to not feeling the magnetic field at all. Electric current is generated only when the wire or magnetic field moves, creating a fall-gap in position, or a fall-gap in electromagnetic strength.

When this kind of force is everywhere and the distribution is quite uniform, it will happen that it cannot be detected. All detection instruments and methods have been adapted to the force at the beginning of their birth. only change can be felt, change is fall-gap.

The measurement principle is the comparison with the fall-gap. If the surrounding is full of this kind of substance, it cannot be measured. If this kind of substance does not exist in a certain place, what can be measured is non-existence, and non-existence may be defined as some kind of negative matter. It can only be found by comparing with the outside.

Scientists often remove factors that are too small to be considered. This wave force is too small to be ignored compared with light waves.

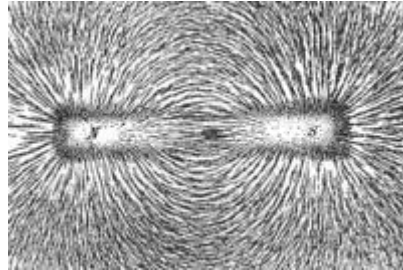
Although it is difficult to detect, we can still speculate that this is the same force by observing the similarities between them, by analyzing what they have in common, may prove that they are the same force.

The first characteristic is that this force is proportional to the square of the distance, as shown in the formula presented earlier. Of course, this characteristic cannot definitively determine they are the same.

The second characteristic is rotation, which is a trait of electromagnetic forces. Whether it is the rotation of electrons, atoms, or the rotation of electric motors, rotation is a feature of electromagnetic forces.

We can observe the universal gravitation, with the Earth revolving around the Sun, and at the same time, it is rotating on its axis. There must be a certain force causing this rotation. Traditionally, gravity is considered to be non-directional, yet, only forces with direction can cause rotation, or balance is achieved through rotation.

The third characteristic is orbitality, we Observe the magnetic lines of force with the naked eye, the performance of iron filings around the magnet, as shown in the "magnet iron filings diagram",



Can you see orbits and waves of magnetic field lines by observing a magnet with the naked eye? have you found that the iron filings actually present a kind of orbit and wave.

Similarly, according to the wave mechanics proposed by Austrian physicist Erwin Schrödinger in 1926, the concept of electron shell was first proposed. Electrons also run in orbits, but the difference from the orbits of planets is that two electrons repel each other, and if two planets run in one orbit, the two planets attract each other.

Protons and electrons have strong control, and the electrons repel each other, so there are two electrons in one orbit, which is balanced. And the planets in the orbit of the solar system are gravitational, so they are easy to merge to one.

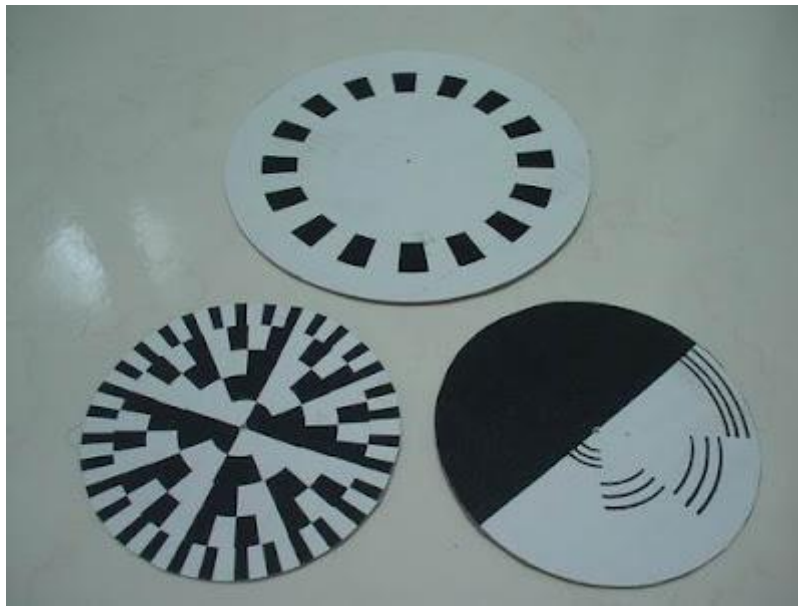
Also, the planets, the galaxies, the planetary rings, they orbit in an approximate plane, not in three dimensions, and also this flatness can be seen as belonging to a kind of orbit.

The fourth characteristic is orbitality. Planets orbit within their respective orbits, just as electrons orbit within an atom.

The formation of orbits is typically the result of two forces pulling in opposite directions. For example, scientists explain the circular motion of planetary revolution using centrifugal force and centripetal force. Like in the atomic model, the attractive force of the nucleus and the repulsive force between electrons work together to achieve equilibrium.

It is necessary to explain the principle of waves, such as water waves, where some parts are above the water surface and some parts are below. Although it may appear that gravitational forces do not flatten them out, they actually exist in positions of equilibrium. Or, some people refer to it as inertia. Inertia is waves?

Impulses generate waves. The human brain's perception of color is based on impulses with different frequencies. Refer to Figure



Pierre Bouguer , a French scientist, discovered colored visions when studying visual mixing by equipping a black-and-white sector on a color wheel that rotates at high speed. It appears that various colors are caused by pulses with different frequencies.

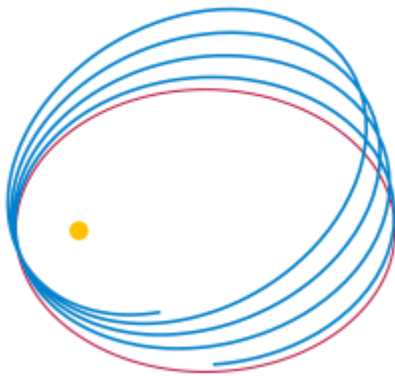
Rotation generates periodic impulses; impulse generation produces waves; and wave generation ensures orbital stability.

Like poles repel each other magnetically, similar charges repel each other electrically - during rotation processes they exhibit both attraction and repulsion intermittently with varying strengths even between adjacent points. Despite their complexity, they reach equilibrium and stability at certain positions along several orbits. When viewed inversely, these layers of orbits present themselves in an appearance resembling waves.

Another characteristic is that the solar system, galaxy, and planetary rings all operate within a single plane of motion. I often speculate whether there is a force acting perpendicular to the direction of gravity, constraining them to move in a flat plane.

The generation of such a force perpendicular to the plane of motion would align with the gravitational field's orientation. Interestingly, electromagnetic forces exhibit similar features. For instance, an electromagnetic field rotating around a wire generates electrical potential perpendicular to the rotation plane.

Of course, it is also possible to explain the alignment of the solar system through long-term gravitational interactions between planets gradually converging their orbits towards a common plane. But astronomers have observed the phenomenon of precession, as shown in the diagram:



This force causes the particle's elliptical orbit to precess (cyan orbit) in the direction of its rotation; this effect has been measured in Mercury, Venus and Earth. The yellow dot within the orbits represents the center of attraction, such as the Sun.

The fifth characteristic is magnetic poles. Many planets have north and south magnetic poles.

This force causes planets, under suitable conditions such as the presence of liquid iron, to become magnetized and generate magnetic poles. I believe this phenomenon is related to the influence of gravity.

The ability to induce a magnetic field in liquid iron on a large scale suggests that this force is significant in magnitude.

The Method of Exclusion and Reverse Thinking

The method of exclusion is to look for any other sources that can generate the universal gravitation. If we cannot find any, then it is the source. The idea that a force could exist without a material basis, from nothing, is clearly idealist. Without a material basis or origin, what is the mechanism by which this force acts? If every source has an origin, when modern physics has already discovered almost all the various particles, it is reasonable to assume that the basic substance that generates the universal gravitation force has been studied.

We can also use a process of elimination - if it is not a force that overflows from atoms, then we need to consider where exactly universal gravitation truly comes from.

Assuming we negate this force is electromagnetic, it is necessary to demonstrate the perfect integration of the electric and magnetic fields within the atom. Alternatively, it needs to be proven that this force completely disappears with distance, or that energy diminishes entirely with distance.

Black holes absorb light. From the perspective of the gravitation of the black hole, it proves that the photon is matter and has the gravitation. Conversely use reverse thinking, from the perspective of light, light is an electromagnetic wave, and if it can attract electromagnetic waves, it can be deduced that the universal gravitation of the black hole is electromagnetic force.

In conclusion, my argument is that energy or force always exists in some form of matter. It is similar to light, which is present throughout the universe. The weak wave-like substances emitted by numerous celestial bodies over thousands of years interact and neutralize each other, forming relatively uniform waves of varying density. We know that light has electromagnetic properties, and

if we consider light as matter and energy, then this overflow force must also be considered as matter and energy.

Past scientists and philosophers have mentioned the existence of dark matter or ether in a vacuum, but it is actually a force that needs to be redefined.

The issue of detecting this particular force involves challenges related to precision and fall-gap. It can be likened to attempting to measure nanometer-scale lengths using a conventional millimeter ruler, which inherently cannot give a result.

Viewed in relation to the size and energy of particle, they are comparable to air or dust. If you were to examine a cup of water with the naked eye, you wouldn't be able to see the movement of the water, but in reality, each water molecule is in motion, so it's a precision issue. You can only observe the motion caused by stirring with a spoon. Similarly, although air is constantly in motion, it may not be perceived as wind unless it reaches a certain intensity.

Why can electromagnetic waves be detected? The detectability of electromagnetic waves arises from the energy differential they establish with their surrounding environment or the employed detection methods. They either possess an electric charge or a magnetic field.

Although the detection of this force is challenging, there are several known experiments that can explain this electromagnetic force overflow to space.

One such explanation is the particle nature. For instance, when we talk about wave-particle duality, particles generally refer to entities, and another example is that particles are hit by particles to produce rebounds, which all show that particles are a kind of entity, at least with strong cohesion. If someone considers two colliding particles as two wave functions, their fusion would become more facilitated.

When scientists generate antiparticles, they often describe the process as the creation of electron-positron pairs in a vacuum, where two physical entities emerge out of nothingness and

matter appears, which defies the conventional principle of conservation of matter. Matter is always conserved, unless a part of it is transformed into energy.

In the past, only limited knowledge could be used to explain this. Now assuming the explanation is based on this rarefaction waves, also known as longitudinal waves, which refer to a type of wave in which the vibration direction of particles in the medium is parallel to the direction of wave propagation, resulting in a waveform characterized by areas of rarefaction and compression.

the high-energy lasers resonates with this gravitational waves field. If regarding the force as a kind of matter or the motion of matter, in certain regions where density increases, these regions exhibit properties similar to solid particles, leading people to mistakenly identify them as solid positrons.

Solid electrons also possess such characteristics. Assuming electrons are solid particles, when an electron passes through an area, it carries its own electric field and the magnetic field generated by its motion. Therefore, they share some similarities.

When scientists conducted the double-slit quantum experiment, they found that the act of observation caused the wave property of quantum to disappear. Scientists tried to explain this phenomenon by suggesting that the wave function was being destroyed. But what principle could destroy the wave function? And why does it collapse into a particle instead of collapsing into a wave? The answer lies in the interaction of various electromagnetic forces and quantum resonance, which leads to a larger fall-gap in density and results in the expression of particle properties.

At the same time, if high energy or vacuum itself has no charge, it is not reasonable to spontaneously generate positive and negative charges out of thin air.

Assuming that positive and negative charges already exist, it is not easy to separate these charges.

However, it can be hypothesized that they actually exist as electric field waves, when external stimuli resonate, the fluctuations will intensify, causing an increase in wave amplitude, just like a big stone thrown into the microwave water, stirring up huge waves. This resonance phenomenon leads to a significant change in electric field wave density, thereby exhibiting detectable positive and negative charge properties.

This type of positive-negative particle pair quickly disappears, which also indicates that under the influence of the surrounding environment, the waves tend to calm down, like the water waves tend to reach a state of equilibrium.

The swift dissipation of positive and negative particle pairs indicates a tendency for waves to subside in response to external influences. As a particle, this should not happen.

Describing them as particles with positive and negative charges necessitates an energy level comparable to that of nuclear fission to overcome the strong attractive force between them and prevent them from clustering together. Otherwise, achieving annihilation becomes arduous.

If this were an easily achievable process, a common occurrence, the motion of particles within atoms would continuously exhibit such phenomena, with electrons incessantly combining and annihilating with ubiquitous positive and negative electron pairs, thereby giving rise to the generation of new electrons. After separating them, if a positron combines with a negative electron from another electron pair, according to conservation, another positron will be generated from the other electron pair.

So my conclusion is that the antiparticles are in fact evidence of particle-like behavior exhibited when this overflow force is stimulated.

If we treat the electron as a substantive particle, it moves along with the electromagnetic field around it. Once a similar electromagnetic field or a region with a higher density of longitudinal waves is detected, even though it disappears instantly, it can be mistakenly identified as a particle.

Many phenomena in the quantum realm that violate common sense and can't be explained have led to the development of various theories. In fact, we should not overlook the effect of this electromagnetic overflow forces present on acceleration devices, detection devices, or receiving devices on particles with very small mass. Taking this into account can help resolve these phenomena.

In quantum experiments, why can't any reflection, redirection, or acceleration be considered as a measurement collapse?

About relativity theory

Modern physics has been led astray. There are many absurd conclusions. There are many absurdities.

For example, a fast moving object and a slow moving object share the same time. All things in the universe share the same universal time, yet in relativity a fast moving object can somehow alter time. And the amount of energy needed to change this time does not have to obey the law of conservation of energy. The notion that a moving object has the will or ability to alter time is clearly idealist and absurd, yet someone believe it.

In the theory of relativity, it is even speculated that time is local, meaning that it can vary depending on the reference frame.

Time actually is a measurement introduced by human to quantify objects. Objects themselves do not have a direct connection to time and do not mutually influence each other. Time is not a substance, time has no energy.

According to Newton's third law, if the motion of an object affects the passage of time, then the passage of time also affects the movement of matter. Time is therefore a form of energy, and the

question arises: how can we measure this energy conversion? All conservation of energy laws must take time energy into account. Without energy, an system cannot run or function.

There are some who believe that fast-moving objects can warp space, which is even more absurd. If there were physical entities in this space, how much energy would be required to warp them?

Does changing space and time require energy? If so, how can we ensure that time and space return to their original state?

Since we can measure energy, does it mean that energy has already leaked to us? If there is insufficient energy, will time and space be unable to return to normal?

Light moves at the speed of light, and its high speed fundamentally changes what about time and space?

In short, it can lead to various absurd conclusions.

Before refuting this space-time theory, I will introduce one theory: the Doppler effect.

Doppler effect is a phenomenon that when the wave source and the observer are in relative motion, the frequency of the wave received by the observer is not the same as the frequency emitted by the wave source. like birds flying, or the flight of the aircraft, the air molecules hit the wings more often because of the increase in speed, the speed increase results in a higher frequency of air molecule collisions on the wings. the huge amount per unit time becomes the lifting force. I also regard it as the Doppler effect.

The cutting of magnetic field lines by a conductor, which generates the induced electromotive force, also accompanies this Doppler effect.

If it is still not understood, try placing your hand outside the window of a moving car and feel the air - the force felt at low speeds versus at high speeds is different. Or run into a tornado and experience it. You will feel a greater resistance at higher relative speeds. Although air is technically still the same physical substance, but with more air molecules striking you per unit time.

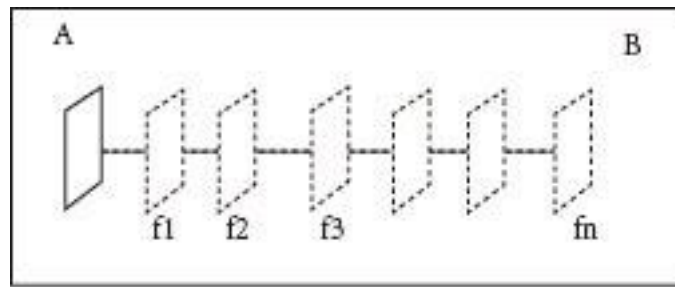
The main difference between an inertial frame and a non-inertial frame is that the forces emitted in an inertial frame arrive sequentially due to the superimposition of the object's own velocity, while the forces emitted in a non-inertial frame are subject to the superimposition of the Doppler effect, resulting in differently experienced forces and requiring different formulas to be used.

Through the mass-energy equivalence equation $E = mc^2$, mass and energy can be converted into one another. We can hypothesize that energy is a kind of substance, and force is the state of motion of energy. Then, force propagates at the speed of light, and it does not have an unlimited speed or instant arrival. The transmission of force takes time, which is the speed of light. Therefore, force propagates at the speed of light. I speculate that this might be the ultimate speed limit for the motion of matter.

The invariance of the speed of light refers to the fact that the speed of light is completely independent of the velocity of the light source. The speed of light does not change based on the motion of the emitting object. Similarly, the propagation of electromagnetic forces is independent of the motion of the object exerting the force. The velocity of transmission of electric and magnetic forces is unrelated to the speed of the object generating those forces. Just as the speed of light remains constant regardless of the speed of its source, the rate at which electromagnetic forces propagate does not vary based on the velocity of the object emitting them. This invariance of transmission speed is a property shared by both light and electromagnetic forces.

The speed of light is independent of the motion of the light source, and does not change with the motion of the luminous object. The transmission of electric and magnetic forces is also similar to light, and its speed is also independent of the motion of the force-emitting object itself.

The figure shows two forces that are different.



Doppler effect diagram

When f_n reaches point B, the light source or force source follows f_n and approaches point B simultaneously, and at the same time emits another force f_1 . During this period, all the forces, f_1, f_2, \dots, f_n , are concentrated in the region near point B.

The figure above shows a low-speed situation, in which the force or light source is still in the vicinity of its original location A, while all the forces, f_1 - f_n , are uniformly distributed between points A and B. This is very similar to the inertial system, whose schematic diagram is also similar to Figure above. Each force is the speed of the force itself plus the speed of the force source, showing a uniform speed, resulting in uniform distribution.

In the low-speed regime, the Doppler effect of non-inertial systems is weak at low speeds and is ignored by scientists, so they will approximate it and use the formula of the inertial system.

However, in the high-speed regime, the Doppler effect cannot be ignored and the resulting force experienced a significant change, as shown in Figure above. Therefore, the original formulas become inapplicable. The original formulas are no longer applicable, and it is even more wrong to mechanically infer from the inapplicable formula. That assuming that the patterns remain the same and that the formulas are still valid, continuing to reason based on the incorrect formulas, it's easy to believe that time changes and space distorts are the issue, using unmeasurable and intangible time and space problems as the solution, which may appear to be the most reasonable.

Before proceeding with derivations using formulas, one must pay attention to the applicable scope for each formula.

Regarding the scope of applicability of the formula, in this paper, for example, the force conduction between protons and electrons requires time, and the distance between them represents velocity. When the velocity of atom is extremely slow, means the object's motion speed is much smaller than this velocity, it can be neglected.

However, when the object's speed approaches this velocity, it cannot be ignored, and this factor must be taken into account.

As shown in the figure, force radiation results in different forces in different directions.

When the velocity is extremely fast, the differences in force in various directions need to be considered. The forces experienced in these two situations are different.

When stationary, multiple forces arrive evenly, while at the speed of light, all these multiple forces emitted and the force-emitting object arrive simultaneously at the same moment.

In the macroscopic world, the observed physical laws expressed through formulas are often approximations that neglect the Doppler effect.

In the realm of high-speed phenomena where the Doppler effect cannot be ignored, these laws are no longer equitable. The traditional universal gravitational formula, for instance, disregards the Doppler effect.

To determine if a formula accounts for the Doppler effect, a simple method is to examine whether the value of the force approaches infinity when an object approaches the speed of light. Verifying whether the universal gravitational formula exhibits the Doppler effect can also shed light on whether it encompasses the electromagnetic force beyond atomic overflow.

The physical laws of inertial systems that are applicable at the macro level are not applicable at the micro level. For example, light has no inertia. Why does the macroscopic world have inertia but the microscopic world does not have inertia? To explore the principles behind inertia, we should start by looking for the difference between the two.

As far as this article is concerned, I guess inertia is also the result of the influence of this atomic spillover wave force. The motion of an object can be regarded as the state of motion of energy, and the conduction of energy in waves does not require additional force, and can naturally diffuse to the distance.

Since the formulas may not be applicable, we put aside the formula and do not apply it mechanically. Making this kind of formula only complicates things. Just take some facts and build a simple and easy-to-understand model. Only one example is needed to overturn the theory of relativity and prove the error of the theory of relativity.

Now find clues from some experiments. In 1881, while developing his own Maxwell's theory, Joseph John Thomson discovered that it is more difficult to make charged objects move compared to uncharged objects. He also noticed that the mass of a body in motion increases by a constant amount. In an electric field, this manifested as charged bodies appearing to have an "electromagnetic mass" in addition to their mechanical mass. In other words, according to

Thomson, electromagnetic energy corresponds to a specific mass. The implication was that electromagnetic energy and mass are equivalent.

Tomson's discovery would later be further developed and improved upon by FitzGerald and Heaviside (1888) and by George Frederick Charles Searle (1896, 1897). FitzGerald and Searle also discovered that the mass of an object is not a constant but is related to its velocity.

Likewise for Lorentz (1899), mass was not only related to velocity but also to the corresponding direction. He proposed what later Max Abraham called "longitudinal mass" and "transverse mass", the latter being the mass in special relativity.

these experiments actually proved this Doppler effect of the force.

They believed it was a change in mass. That behind the concept of mass is the quantity of protons, neutrons, and electrons, and cannot be changed here. Mass is essentially a collection of particles, depending on the quantity and size of the monomer. As the movement, the number of particles changes? Or does the size of the particle change without requiring huge energy?

The conclusion of the change in mass is also this Doppler effect: The change in force leads to measurement problems. The Doppler effect is superimposed in the longitudinal direction, but not in the transverse direction. This shows the "longitudinal mass" and "transverse mass".

American physicists Michelson and Morley designed an experimental apparatus called the Michelson-Morley interferometer, which verified the independence of the speed of light. The constancy of the speed of light does not even require experimental proof. Assuming that the speed of light is related to the movement of the object emitting the light, then the speed of light in the universe would be different for different sources of light, the light emitted by high-speed particles will have different speeds in different directions.

But the reference system for the constancy of the speed of light is relative to the absolute, stationary coordinates in the universe, or relative to the space through which light passes. If a

moving reference system is introduced, the speed of light is related to the relative speed between the reference system and the absolute, stationary coordinates.

Suppose you are stationary, and emit two photons moving in opposite directions to your left and right. After one second, these two photons are $1c$ away from you in each direction. You are certain that the time for the photons has not changed, it is simply one second multiplied by the speed of light, otherwise the distance would not be correct. Now remove yourself as the reference point, and take one of the photons as the frame of reference. In reality, in that one second it has traveled a distance of $2c$, so the speed of light becomes $2c$ in this case. I refer to it as the relative velocity of light.

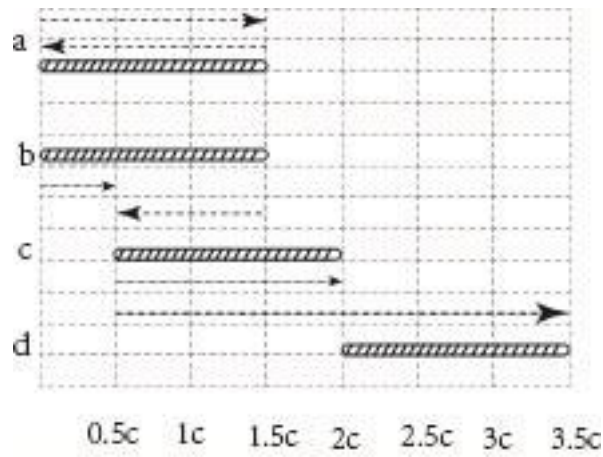
It is not that the speed of light has changed, but rather that we cannot use a moving object as a reference point.

Introducing a reference frame, similar to introducing time, is merely for measurement convenience and does not change anything.

If we still assume light speed is unchanged in this case and stubbornly apply the formulas, the only way to reconcile this is to modify either the distance or the time, thus giving rise to the concept of variable space-time.

Therefore, if we adopt a moving reference frame, light should be described using relative velocity, and the speed of light is no longer c .

Now let's discuss "On the Electrodynamics of Moving Bodies," Einstein's first paper on special relativity published in 1905 in the German journal *Annalen der Physik*. The original German title is "Zur Elektrodynamik bewegter Körper." Based on this work, I have constructed a simple model, as shown in the figure:



When discussing a rigid rod, we cannot set its velocity to be the speed of light c . We can set it to be $0.5c$. You can try any velocity, with the rod length set to $1.5c$. When the rod is stationary, the round trip time for a photon is 3 seconds. Like the equation $2ab/(t'a-ta)=c$.

When a rigid rod is moving to the right at a velocity of $0.5c$, and light starts from the right end of rod, reaches the left end, and returns to the right end.

The motion can be divided into two separate parts: one is the motion towards each other, approaching each other, which takes one second. They meet at point B-C in the diagram, and it's important to note that you give each one 1 second, both the time and length remain unchanged at this moment, otherwise, the velocity would not be $0.5c$ and c .

The second part of the motion involves motion in the same direction. You give them 3 seconds, as shown in figure c-d. The distance traveled by the rigid rod is $3 \times 0.5c = 1.5c$, and the distance traveled by the photon is $3 \times 1c = 3c$, which conveniently reaches the right end of the rigid rod. It is important to note that the time is given by you, and the velocity is predetermined. According to the equation velocity multiplied by time equals distance, the length of the rigid rod remains unchanged during this interval.

Since neither the time nor the length changed when calculated separately, if you combine two parts of motion together, you will find that a photon takes $1+3=4$ seconds to travel back and forth at a fixed length of $1.5c$. The time is different when in motion compared to when it's stationary.

Alternatively, if we assume the speed of light is invariant, then the rigid rod which originally had a length of $1.5c$ now has a length of $4 \text{ seconds} * c/2 = 2c$. So the length has changed.

why do they change when considered together? When does this change occur?

$2AB/(t'A-tA)=c$, the original formula in the paper is no longer valid when the object is moving. In fact, because there is an enhancement and weakening phenomenon in the direction of Doppler affect of velocity, the correct algorithm should be divided into two sections and calculated separately. If it is considered that time and space are changed, then it should be seen how much time and space have changed in the two sections, respectively.

Suppose you are Superman and your eyes have the function of measuring speed. Fix your eyes on the left end of the rigid rod and observe. In the first section, the photons move at a relative speed of $1.5c$ and arrive in one second. The light is actually measured at a relative speed of $1.5c$, otherwise it cannot arrive within one second. The constancy of the speed of light refers to a relatively stationary object. In the second section, what you find is that the photons move away at a relative speed of 0.5 , then it will take 3 seconds to reach the right end of the rigid rod.

If you take the photon as the reference frame, and imagine placing your superhuman eyes on the photon to observe, you would find that the left end of the rigid rod approaches at $1.5c$. Doesn't this achieve faster-than-light speed?

Since all objects are in motion, it seems reasonable for scientists to use a moving object rather than its location in space as a reference frame. Adopting a moving object as the reference frame echoes the geocentric model, where the Earth was first assumed to be stationary. In the morning, a star is measured to be several billion light years east of the Earth. In the evening, ignoring the Earth's change in orientation and position, the same star is found to be several billion light years

west. If measurements are also made midday, it would appear the star revolves around the Earth like the Sun does, with a high relative velocity. But in terms of absolute velocity, this is clearly absurd.

Einstein's paper confused relative speed and absolute speed. When measuring the speed of a stationary object (actually a stationary cosmic coordinate, assuming a map is drawn), the absolute speed is measured.

Taking the moving object as the coordinate, what is measured is the relative speed. The absolute speed of light is c , and the relative speed of light depends on the two directions in which the object and the photon move.

Using a moving object as a reference object, you can only use the relative velocity of the object to calculate, not the absolute velocity of the stationary object.

If you enjoy complexity, you can design objects with velocities of $0.9c$ and rod lengths of $1.9c$. Alternatively, you can establish a three-dimensional coordinate system and take into account the physics law of the Doppler effect. By calculating in segments, you can observe how time and rod length are affected. If Einstein's formula holds true, it should apply to any case or specific numbers plugged into it. However, using simpler cases makes it easier for people to understand.

The use of clocks in a laboratory to measure time adds complexity to the problem. To simplify, one could emit a photon every second. Assuming the speed of light remains constant, the time interval between receiving two photons at the left end of a moving rigid rod should be equal to the time interval for emitting the photons. This can be used to determine time. Based on this time measurement, one can calculate the relative velocity of light. The question then arises whether the photons are received every second or if the Doppler effect allows for instant reception of all photons, which would determine if the relative velocity of light when measuring the rigid rod is still equal to c .

Popular explanation for the general public.

I try to simplify the model as much as possible to make the theory easy to understand, explain this in a simplified and easily understandable way.

Imagine a scenario on a distant planet involving a drinking event. Why use drinking instead of a clock? The clock can be adjusted at will. If the drinker is accelerated or decelerated by the observer, he may choke or die of thirst. Take two pictures, the picture of just picking up the cup and the picture of finishing drinking and putting down the cup, and send them to you in the form of light.

By the way, let me talk about the modeling method. It is complicated to analyze a series of motion processes. We can only examine the two points of the beginning and the end. The motion speed should not be 0.5 times the speed of light, no need to be in line with the actual situation, but directly assume the speed of light. Even if it is difficult to achieve in reality, it can make the model clear. Determine the starting point and the ending point, no matter how many frames there are in the middle of the movement, they could be evenly distributed.

Now, let me explain the modeling method briefly. Analyzing the entire motion process can be complex, so we can simplify it by only considering the initial and final points. Instead of multiplying the speed of light by 0.5, we assume the speed of light directly. This simplification makes the model clearer. We determine the starting and ending points, and then evenly distribute the intermediate frames of the motion, regardless of how many frames there are.

Now let's consider four different situations:

1. In the first scenario, assuming you are stationary, you receive two frames of the drinking event at two moments, and the time interval between them is the same as the drinking speed. You observe a normal drinking speed.

2. In the second case, suppose you are flying towards the drinker at the speed of light. At the second moment, in addition to receiving the previous two pictures, the third and fourth pictures are still on the way, and they have been intercepted by you who have flown halfway. Due to the Doppler effect, the four pictures are transmitted at the two time. In an instant, he finish drinking two large glasses of water. Has the drinking speed increased? Will he choke because of your movement?

3. In the third case, you and the drinker are doing reverse motion, moving in the opposite direction at the speed of light.

So you will never receive the picture of him finishing drinking water in your life. You can only receive the picture of him picking up the cup and drinking water in your life. You can't receive the light of finishing drinking. So is it that he can't finish drinking in his life? Will he die of thirst because you are moving at high speed and haven't finished a glass of water in hundreds of years? Or from the perspective of life, when others pick up the cup, you are already old with white hair. There are countless examples in the universe of moving away from us at the speed of light or approaching us. We may as well use them as a reference system to prolong our life. What's the significance?

4. In the fourth scenario, take the drinker as the center and move around the circle at the speed of light. At this time, the interval between the two received pictures is normal. But you are also moving at the speed of light. So why doesn't the time change for you?

Now, let's replace the pictures with forces. At these two moments, how many forces are received? The total force received is changing.

In the duration of the two moments, the stationary object can receive 2 forces. The object approaching at the speed of light receives 4 forces, and the force that was still in the middle has been intercepted. Objects moving away from each other receive only 1 force because the second force has just reached the starting position. Circular motion is also two forces. However, the physical laws summarized in macro terms do not change much. When the speed fall-gap between the two is too large, it belongs to the first case, two forces.

When it reaches the speed of light, there is a change in the forces. Does this require a change in the formula?

Complexity often confuses scientists. It is through the use of simple models that one can overturn relativity.

In my philosophical system, idealism is relative and different conclusions will be drawn due to different objects of comparison. The conclusion depends on different objects of comparison and draws different and untrue conclusions. On the other hand, materialism is absolute. The laws of physics do not change based on the objects being compared, and neither does time or space.

In the materialist system, it is necessary to lock its characteristics through countless objects of comparison. For example, in a three-dimensional coordinate, when the position of a point cannot be determined based on its distance from the x-axis alone, it must be determined by its distances from the y-axis and z-axis as well. Either does time or space.

From a philosophical perspective, if three-dimensional space is viewed using an observer-based reference frame and if relativistic deductions are to be made using a moving reference object, countless objects moving at high speeds in different directions must be used as reference objects simultaneously. There must also be countless observers and a comprehensive coordinate system that takes into account the effects of all these moving objects on space and time. Evaluating the impact of countless moving objects on space and time simultaneously is actually impossible to calculate. So, when using such a reference object to observe other reference objects, it is not actually space that is deforming. Instead, it can be considered that the coordinates used to locate objects are constantly changing.

Reinterpretation of various experiments that prove the theory of relativity

As for why so many experiments seem to prove relativity theory, the underlying psychological principle is as follows: First, your acquired knowledge is limited and excludes other knowledge. As a result, you are compelled to use this limited knowledge to explain all problems. I call this the "tunnel effect." It is analogous to a car entering a tunnel - with no other roads on either side, the car would be forced to exit through the tunnel's outlet. The same holds true for attempts to interpret relativity experiments, with all explanations necessarily relying on the pre-determined knowledge.

1. The gravitational force causes light to be deflected.

British astronomer Arthur Eddington conducted a light deflection experiment during a solar eclipse in 1919,

The gravity of the Sun bends the light emitted from stars. scientists confirm it as the predictions of general relativity.

There are also phenomena like gravitational lensing.

If the brain has the concept of general relativity to begin with, it will use it to explain experiments. In the same way, if the brain has the concept that gravity is an electromagnetic force, it can explain these experiments through that lens.

If gravity is just a type of electromagnetic force that attracts light and causes electromagnetic waves to bend and change direction, it is also very reasonable.

Furthermore, related to gravity, such as the precession of Mercury's perihelion. The precession of Mercury's perihelion refers to the tiny shift in the closest point of Mercury's elliptical orbit. According to Newton's theory of gravity, the elliptical orbit of Mercury should remain fixed. However, actual observations have shown that the closest point of its orbit undergoes a small movement. This phenomenon was successfully explained by the theory of general relativity. It can also be said that it proves the formulas used in the macroscopic world mentioned earlier were

derived without considering the Doppler effect. By incorporating the Doppler effect into the calculations, the results can also align with the facts.

According to the general theory of relativity, strong gravitational fields can also cause time dilation and length contraction, similar to this. For example, spacetime near black holes is extremely warped. Time passes slower near a black hole compared to far away from it. So over the billions of years that have accumulated, wouldn't time keep getting slower and slower? For instance, yesterday's strong gravitational field slowed down time and shortened length. Today there is also a gravitational field. Is time flowing at the same slow rate as yesterday, or is it even slower than yesterday? Is length the same shortness as yesterday, or has it become even shorter? If it's the same as yesterday, then there is no change. But if it changes every day, over billions of years, how short would it become?

In my opinion, black holes precisely prove that universal gravitation can attract light, which is a kind of electromagnetic force. When close, it is inversely proportional to the square of the distance, so the force increases rapidly. This can be calculated using different formulas.

2. Gravitational Redshift: When light escapes from a strong gravitational field, its wavelength becomes longer, causing a shift towards the red end of the spectrum. This phenomenon was confirmed in the Pound-Rebka experiment in 1960.

The red shift of light is thought to be caused by the expansion of space. This theory uses the influence of mass on the curvature of space-time.

The original definition of the Doppler effect can also be seen as a change in frequency.

3. Time Dilation Experiment: This experiment involves placing high-precision clocks on a fast-moving airplane and comparing them with clocks on the ground to demonstrate the variability of time.

The question arises whether it is the high speed that changes time, which in turn affects the rhythm of the clocks, or if it is the high speed that alters the rhythm of the clocks, leading to the perception of a change in time.

Clocks have their own mechanical principles that humans use to manufacture them and empirically judge time. For example, a pendulum made in the earth's environment will change its swing frequency when it is on Mars because g is different. This suggests that changes in time rhythm cannot be attributed solely to time itself.

In the flying clock experiment, can the atomic clock perceive that time is slowing down and thus adjust its rhythm accordingly to adapt to time, or does the atomic clock operate based on its own laws, while being capable of recognizing the slowing of time and consequently adjusting its speed?

Do objects pay attention to time and adjust their own rhythms to match, or do they oscillate according to their own mechanical principles? Can they sense time and strictly oscillate according to the sensed time, or oscillate at their own fixed frequencies? Do they consciously reference the changed local time nearby or the common time further away?

Time is actually something we humans impose on objects in order to measure their motion, is a measurement standard introduced by humans. Do materials themselves sense time and operate according to it? Consider a rigid $1.5c$ long rod, assuming it rotates with the left end as the center and the right end rotating at the speed of light, the left end remains stationary while the right end moves at the speed of light. How would different parts of the rigid rod perceive time?

Objects do not adjust their motions based on your time speeding up or slowing down, let alone use any means, principles or energy to alter time itself.

According to Joseph Thomson in 1881, while developing his own theory based on Maxwell's theory, he discovered that it is more difficult for charged objects to move compared to neutral objects. He also observed that the mass of objects in motion increases by a constant amount. In the

presence of an electric field, this manifests as an apparent increase in their "electromagnetic mass" on top of their mechanical mass. It can be speculated that during high-speed motion, the resistance to the clock's own movement increases due to the increase in force.

In the flying atomic clock experiment, disregarding preconceived notions, it can be assumed that in a strong force field or at high speeds, the resistance to the clock's movement is greater.

For example, just like how a wire experiences different forces and internal motion of electrons when stationary or in motion within a magnetic field, resulting in different potential energies.

4. Cosmological effects. Astronomers have observed that distant galaxies are rapidly moving away from us. They explain this as the expansion of space itself on a cosmic scale, and this expansion is accelerating.

Redshift observations. By observing the redshift in the spectra of distant galaxies, it has been confirmed that the universe is continuously expanding and space is expanding.

It can also be explained that the cosmic space itself is infinite, without a starting or ending point, and galaxies are moving normally within space.

This can only explain the motion of galaxies. for example, the gravitational control of the outer galaxies of the Milky Way is weak, similar to the gravitational effect of the Sun on Pluto, and it can be visually observed that the gravitational influence from another galaxy is relatively strong on it. Or something else like circle motion.

If the gravitational force or relative velocity between two objects creates spatial expansion, what is the extent of its effect? Does the space deformation occur between the two objects or does it extend to the entire line of deformation?

Is it a partial expansion of space between two points, with another part of space being compressed, resulting in a constant distance between the two objects?

Or is it a partial expansion of space with space extension, causing displacement in the space along an infinitely distant straight line? Based on the description of galaxies moving away, it seems to be the latter. However, the latter is not possible because countless celestial bodies in the universe cause spatial displacement in various directions, some of which are in the opposite direction. It is impossible to calculate and reason based on just two celestial bodies. The formulas used do not consider all the celestial bodies in the universe, so the results obtained are fundamentally incorrect. Assuming the former, there would be no distant separation occurring.

Take a more vivid example, such as the distance between the earth and the sun is assumed to be 1.496×10^8 kilometers. At this time, suppose that a certain space between the earth and the sun expands, will it squeeze the earth out of orbit? All the space on the earth-sun line is quite a long space in the entire universe. Is it successively transmitted to affect the entire universe? What will happen when other planets just happen to run on this line? According to the expansion of the space of distant galaxies, is it the gravitational effect between galaxies that backfills the space, or does the space expansion affect the space in this direction of thousands of light-years away?

Does maintaining the original distance between the Sun and the Earth require a balance achieved by compressing another portion of space? Can gravity or velocity both expand and compress different segments of space? Alternatively, does the Earth enter the expanded space to maintain its original distance? Would that mean it didn't actually expand? How can we measure this?

In reality, the distortion of space is a typical idealistic concept. Space itself is intangible and immaterial, merely a concept. Can something intangible and immaterial alter the motion state of matter? Without anything present, it is impossible to cause any changes. The alteration of the trajectory of matter is due to external forces, not a result of space changing. Space itself does not have any predetermined energy determining the trajectory, so why would a curved distance be shorter than a straight one? If it represents the path of least resistance, then it implies the existence of a force. I think it is the electromagnetic overflow force of atoms interacting with each other.

Some questions, such as the origin of the universe, are unlikely to be answered with scientific evidence and may require philosophical solutions.

The difference in thought between Eastern and Western cultures, such as the heaven and hell described by the West, as long as the population continues to be born, for a long enough time, it will eventually be filled with souls. The East is about reincarnation thinking, where the soul is reincarnated. There are similar ways of thinking in science, which propose the existence of a singularity that marks the beginning or end of time and space, that there was no time before, or there was no singularity that had been stable for countless long periods of time before, and suddenly one day it exploded, this conflicts with the principles of matter's operation.

In my thoughts, the universe and time have no beginning or end and are infinite in and of themselves. The finite nature of human thought, including the concept of the beginning or end of time and space, comes from the finite nature of the material that humans can observe. The big bang detected by scientists may actually be the explosion of a local black hole, and the cyclical model that follows is that black holes gather until they reach a certain volume and then explode due to instability, much like an atomic nucleus exceeding a certain size will explode due to instability.

Understanding this pervasive force of atoms' electromagnetic interaction throughout the universe can help solve many problems in both relativity and quantum mechanics. This force reflects a fundamental principle: it may not be detectable on a macroscopic scale but has a significant impact on the microscopic level. For example, measuring the electric charge of a hydrogen atom thousands of light-years away would yield a neutral result, but at a specific position between the proton and electron of the hydrogen atom, the measurement would reveal a microscale electric field. This discrepancy between the macroscopic and microscopic worlds is the reason behind many phenomena and formulas that differ. Based on this idea, let's consider neutrons.

Neutron Hypothesis

Scientists explain how protons in the atomic nucleus are held together using the strong nuclear force.

In 1932, British physicist Chadwick conducted experiments by bombarding beryllium metal foils, which are extremely thin, with alpha particles. It was observed that some alpha particles were scattered at large angles, indicating that the alpha particles experienced strong repulsion when interacting with some positively charged particles (i.e. nucleons) inside the beryllium nucleus.

By analyzing the results of the alpha particle scattering experiments, the existence of a new strong force inside the atomic nucleus was inferred, namely the strong nuclear force, which overcomes the electromagnetic repulsion and binds the nucleons together.

The strong nuclear force only acts over an extremely short distance (within the diameter of a nucleon) and decays very rapidly as the distance increases.

This is deducing a strange force based on the phenomenon, and its characteristics suddenly disappear as the distance increases. This seems somewhat idealistic, whereas an explanation that gradually diminishes with distance appears more materialistic and is also theoretically plausible.

If such a strong force exists, why can't nuclei with more than two protons consist purely of protons and require neutrons? What underlying mechanism gives rise to this phenomenon of an extremely strong force that can dissipate rapidly?

According to two experiments:

1. Spontaneous decay: The average lifetime of a free neutron is about 15 minutes. It undergoes spontaneous β decay, transforming into a proton while emitting an electron and an antineutrino. The chemical expression is as follows: $n \rightarrow p + e^- + \bar{\nu}_e$.

2. Proton and electron can combine to form a neutron through weak interaction. The specific reaction process is as follows: Proton (p) + Electron (e-) -> Neutron (n) + Electron neutrino (ve) .

Based on these phenomena, we can consider the neutron as a simplification of a combination of a positively charged proton and a negatively charged electron from an electric field perspective.

In what way are the proton and electron combined?

Are they mixed together like a liquid or powder? That would not be easy to separate them into two.

Or are they encapsulated? this is requiring a layered structure?

Or something like a linear or wave-like structure. The question is, after fusion, how can it be fully separated into proton and electron?

If it is not a rigid and condensed structure, can it still be completely and intact separated after fusion?

I guess that neutron synthesis from a proton and electron does not involve fusion and mixing (unstable in liquid or powder form), but rather two small spheres leaning against each other, which would still be bipolar. It seems more like two stones leaning against each other, where one end of a neutron is a particle with a positive charge and the other end carries a negative charge. In this way, the proton can be absorbed at the negatively charged end of the neutron.

When a neutron and a proton are together, they form an attractive sandwich of positive-negative-positive charges. In fact, there is no need to create another strange strong nuclear force. The attraction between positive and negative charges can be used to explain it directly.

Since neutrons are not truly neutral but have one end with a positive charge and the other with a negative charge, why can't electric charge be detected in neutrons?

That's because during testing, the positive and negative ends of the neutron, which carry opposite charges, are positioned at nearly equal distances from two parallel plates. The attractive and repulsive forces between the charges cancel each other out. Therefore, it will not turn.

Why is it that the detection of the charge in neutrons yields a result of no charge? When attempting to measure its charge using an electric field, the attractive force on the positive end and the repulsive force on the negative end are nearly equal.

Even in the case of a hydrogen atom, where the distance between the electron and proton is much greater, and no polarity can be measured, it is judged to be neutral and uncharged, let alone neutrons. This is even more applicable to neutrons.

Is it also possible to explain the instability of neutrons because there is a certain degree of external force, which is the positive and negative electric fields and magnetic fields pulling it in opposite directions?

One end carries a positive charge while the other end carries a negative charge. The polarity of neutrons explains why the protons inside the atomic nucleus can attract each other. In reality, the protons are actually attracted to the negatively charged end of the neutrons, similar to two protons sandwiching an electron, forming a layered structure. This also explains the coincidence of the roughly equal number of neutrons and protons within the atomic nucleus.

However, even with this layered structure, the electric field cannot be completely eliminated.

Two positive charges are sandwiched with one negative charge. Such a combination monomer exhibits positive charge characteristics in the axial direction, but the negative charge still leaks from the radial direction, thus attracting each other with another pair of proton-neutron combinations in the axial direction.

The proton-neutron pairs themselves carry positive charges and repel each other. The lateral negative electric field acts as a binding agent within the atomic nucleus. This can also explain the

instability of larger atomic nuclei and elements beyond the periodic table. The repulsive force between the positive charges within the atomic nucleus increases as the number of proton-neutron pairs increases. Once the positive charges reach a certain quantity, such as exceeding 118, the repulsive force surpasses the attractive force leaking from individual proton-neutron pairs, resulting in nuclear instability.

On the other hand, traditional strong force theory suggests that protons can stick together without repulsion, and that positive constituents do not repel each other. According to this theory, atomic nuclei should be stable regardless of their size. It is important to provide a clear explanation for why atomic nuclei are unstable.

The radioactive nature of the elements towards the end of the periodic table is due to the squeezing of attractive forces against repulsive forces. When it reaches a certain volume, it becomes unstable and cannot exist stably. Scientists explain that the strong nuclear force has saturation, where the force no longer increases after a certain number of nucleons. What is the mechanism? In theory, the attractive force must continue to increase in order for radioactivity to become stronger. I guess we can use modern computers to build models to calculate which statement is more reliable.

Any force has a source of power, which is the material basis. By applying the mass-energy equation, it is easy to deduce that energy is a form of matter. If the strong nuclear force is a form of energy, it also needs to explain why matter can spontaneously dissipate and disappear.

If the nuclear force exists and there is attraction between protons, it would be possible to find atomic nuclei without neutrons, consisting solely of protons. Until such nuclei are discovered, I am inclined to believe that neutrons play a role in binding the protons within the atomic nucleus.

Because this electric field force is actually inversely proportional to the square of the distance, it becomes very strong when the distance is extremely close.

Later scientists did not use the electron plus proton model to explain the neutron, but instead used quarks: The neutron contains 2 down quarks and 1 up quark. The down quark carries negative charge, the up quark carries positive charge, so the total charge of the neutron is 0, making it electrically neutral. This requires explaining clearly how to put the three particles, the three quarks, together such that from the perspective of the electric field, their positive and negative charges perfectly cancel out, making the electric field at any point around it equal to 0.

What I can think of is the quark sandwich structure.

At least at the macro level, designing and detecting the electric field around a group of three points charges is quite straightforward. If experimental evidence has shown that an electric field existed, what impact would the attractive force between the positive and negative charges have on surrounding particles?

In conclusion, many of the models proposed in this article cannot be tested. This is because the principle of measurement itself is analogous to using a nanometer ruler to measure a centimeter ruler, yet being unable to use a centimeter ruler to measure at the nanometer level of precision.

However, each time a new technology is born, it can be used to re-examine old domains. I tend to think that the development of computer technology and artificial intelligence has made massive computations possible. This allows results consistent with reality to be calculated through mathematical models, thereby proving the correctness of such models.

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