Article

Not peer-reviewed version

# Gravity and Riemann Hypothesis

Jun Ze Shi *

Posted Date: 4 February 2025

doi: 10.20944/preprints202403.0289.v24

Keywords: gravitation; Riemann hypothesis; Euler's formula; collision; vibration

 doi:10.20944/preprints202403.0289.v24



*Article*

# Gravity and Riemann Hypothesis

**Shi Jun Ze**

Hebei Institute of Engineering and Technology in China; 15003615276@163.com; Phone: 15003615276

**Abstract:** Inspired by the author 's Riemann conjecture, this paper attempts to solve the contradiction between gravity and quantum mechanics in physics. Guided by Euler 's formula, two important ideas of collision and vibration are introduced. The document deeply discusses the relationship between material dimension and energy, including the stability and change of dimension, the relationship between energy and material, the relationship between time and dimension and so on. Through detailed assumptions and explanations, this paper provides a new perspective for us to understand the complexity of the material world. It is about the relationship between material dimension and energy. It mainly introduces how materials of different dimensions interact, the generation and transformation of energy, and the influence of dimensional changes on materials. The following is a summary of the core content of the document : material dimension and energy, the influence of dimension change, the stability and change of dimension, the relationship between gravitational field and dimension, time and dimension, and the realization of dimension change.

**Keywords:** gravitation; Riemann hypothesis; Euler's formula; collision; vibration

## 1. Introduction: Why Gravity is Not a Force

It is easy to recall the geometric structure of general relativity when discussing gravity. Relativity interprets gravity as the result of spatial bending ( four-dimensional space-time ). That is to say, the essence of gravity is the change of time and space, and quantum theory attributes all energy to quantum materializable matter. First of all, we should know that gravity and other substances should belong to energy. Energy requires space and time in the composition of matter, so we can understand that the two theories can be unified. Then think about why it 's so difficult. I adhere to the generalized relative view of time and space, and also insist that gravity is indeed an energy or force. I think solving this problem needs to find a theory that can accommodate two kinds of ideas.

## 2. Shape of Space

According to Einstein 's theory, energy can distort space [ 1 ]. In the process of space distortion, a curved space is formed. Then consider whether gravitational wave is gravitational wave : if there is no scientific theory that gravitational wave is other matter wave, then gravitational wave is gravitational wave. Next, we think about the special relativity of speed. Because the speed of light is constant, the space will change. Now go back to the microscopic world and think about how quantum conforms to this behavior. If quantum conforms to gravity, why gravity can only be a gravitational wave state, not a particle state.

Thinking process one : speed changes the motion space, then whether the quantum has its own space can balance the changed motion space. Self-space is a strange concept. We have never thought that a substance has its own space in addition to its own volume.

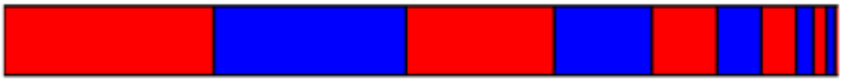

**Figure 1.** Space shape.

 doi:10.20944/preprints202403.0289.v24



Thinking process 2 : Two clocks with different speeds will deviate under observation, which seems to be the time affected by speed, but I think it is speed that changes space, and space changes time. If the material has its own space, then there will be a special situation that allows the material to produce its own time. This situation must occur within its own space and be related to the length of its own space. Two kinds of space are introduced : one is the compressed space, and the other is the stretched space ( for this reason, I will use the physical meaning of Riemann 's conjecture to explain ). The real compressed space can be understood as matter, so the compressed and stretched spaces are intertwined. These two forms of energy constitute the three-dimensional properties of matter : positive energy and negative energy.

## 3. The Reason for the Constant Speed Of Light

Thinking process 3 :The constancy of the speed of light, as stated in special relativity, means that no matter how fast the observer moves, the speed of light measured by the observer remains unchanged. The speed of photons is constant. It can be understood as long as the photons start at the speed of light and do not have energy. However, there is only one possibility that the speed of light measured by the observer remains unchanged, that is, the space of photon motion remains unchanged forever. We mentioned before that space is composed of positive energy and negative energy, so photons may have the same positive energy and negative energy at the same time.

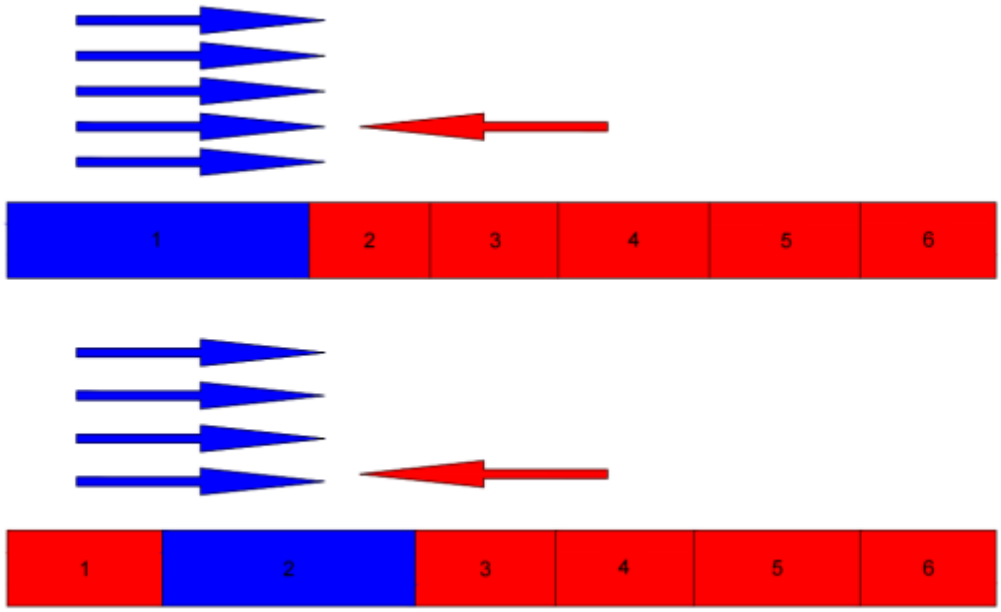


**Figure 2.** The process of spatial shape change.

When the photon is emitted, it starts at the speed of light c. According to De Broglie 's theory, moving objects produce phase waves. However, these phase waves can reach faster speeds than light. In other words, the phase wave has energy but the speed exceeds the speed of light, and it can be inferred that the phase wave does not have material properties. However, it is the energy wave generated by matter, so we speculate that the dimension of material change is closely related to the phase wave. We explore the significance of phase wave velocity c * 2 / v.

The velocity represents the spatial variation in the transmission velocity. In the overall space, the shape of space is constantly changing. Throughout this process, the spatial variation can still be transmitted at a speed of c*2. Therefore, in the c*2 inference process, a moving object is constantly

 doi:10.20944/preprints202403.0289.v24



transmitting a deceleration signal v into space. Due to the constant changes in space, this value decreases to c*2/v.

$$\frac{c^2}{v}\times v = \text{Spatial transfer velocity}$$

Table 2. Energy is not limited by volume. On the contrary, it can be understood as a collision point, which creates a spatial configuration that compresses the collision range in the positive direction. The energy body vibrates continuously in a small range, forming a unit space size and generating a strong repulsive force. Around this point, the repulsive force unfolds the space one by one. The stretched space is negative energy, but this stretched space seems to be smaller than the compressed space. This leads to an overall display of attraction in one dimension. There may be an additional energy : zero collision. If there is no zero energy, the contrast between positive and negative energy will gradually disappear, so the material will continue to have positive and negative energy, but zero energy is to constantly split positive and negative energy and finally regenerate new dimensions. If there is no new dimension, then the universe itself will not return to the starting point.

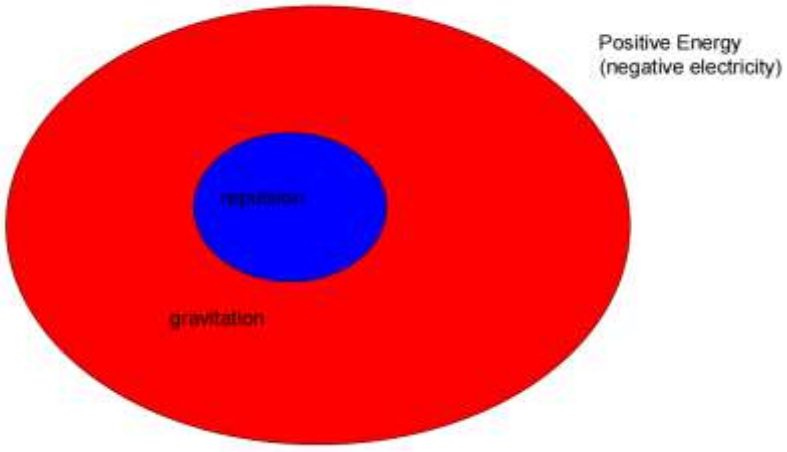


**Figure 3.** The positive energy is the central repulsive force, and the surrounding gravitational force is negatively charged.

## 4. Positive and Negative

There are two conclusions : positive and negative. Thinking process 4 : Energy can be divided into positive energy, negative energy and massless energy. The negative energy is also affected by the acceleration of gravity. When it enters the gravity field, the greater the difference in the direction of gravity, the greater the difference. Therefore, the gravitational field of space will be more compressed, thus accelerating this process. This acceleration has the same order of magnitude as the positive energy. Seemingly contradictory but there is a key zero energy. The key to expansion is zero energy, which is progressive in dimension ( energy quantity ). The essence is that although the negative energy has been increasing, with the increase of zero energy ( new dimension energy ), the material will still expand. So for a rising dimension of the material, is always more positive energy.

 doi:10.20944/preprints202403.0289.v24



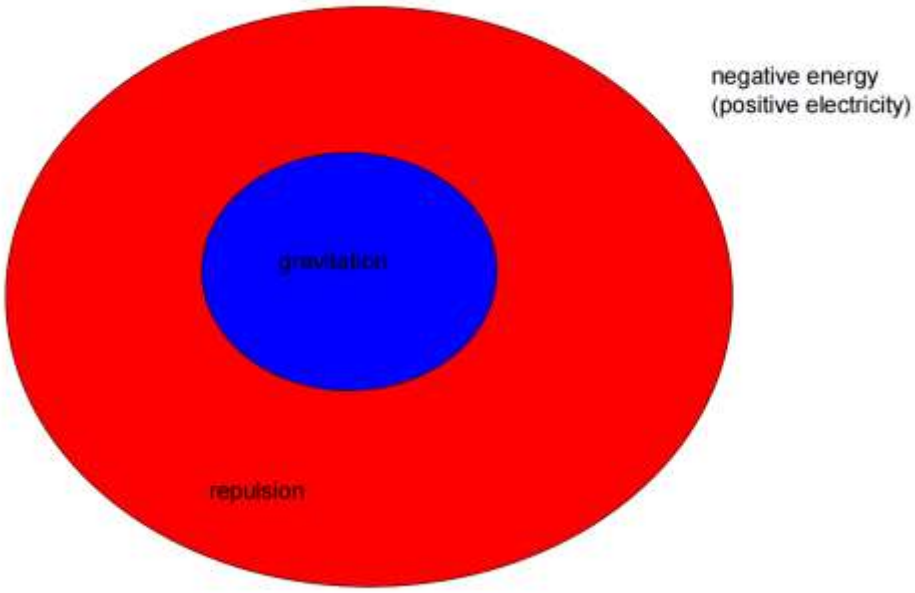


**Figure 4.** Negative energy is the repulsive force around the central attraction and is positively charged.

## 5. Explaining Microscopic Uncertainty

Explore whether the incident angle has an effect on the particle entering the slit : if the particle has its own space, then the particle 's own space includes the surrounding negative energy space. Since the slit is similar to the wall, it will affect the collision inside the energy ( the specific reason needs to be understood later ). Once the collision inside the energy is affected, the energy will increase or decrease the dimension. The specific dimension or dimension reduction needs to take into account the incident angle and the collision direction within the energy ( three-dimensional four-dimensional needs about countless collision directions ).

 doi:10.20944/preprints202403.0289.v24



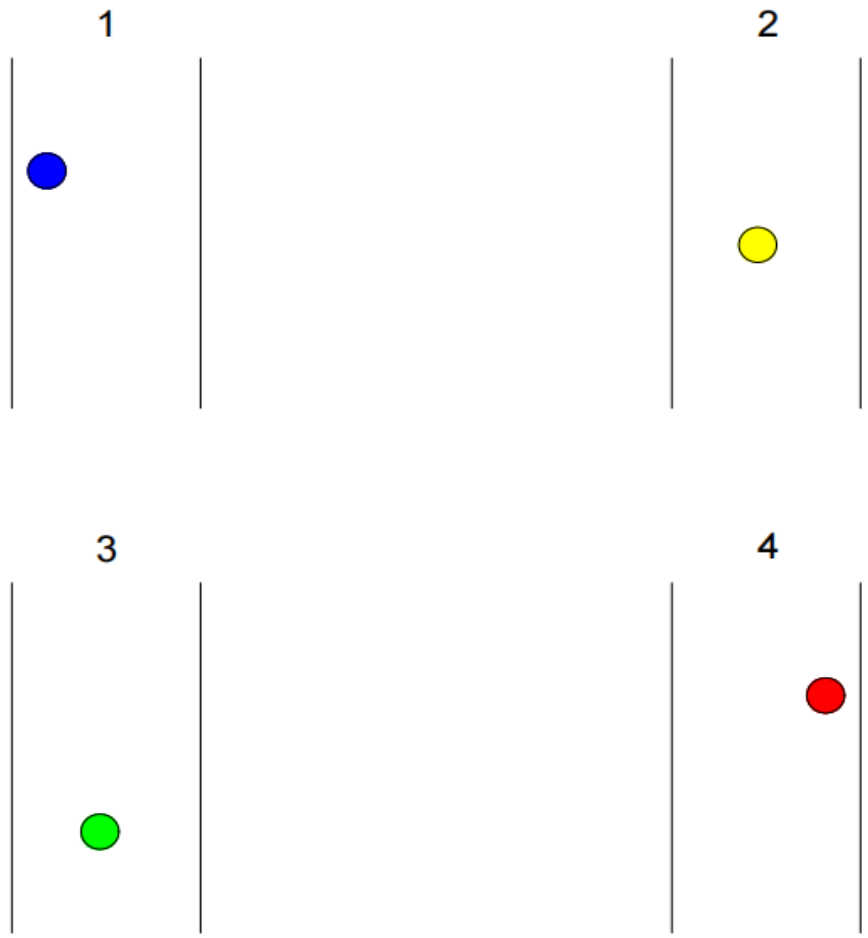


**Figure 5.** Two-slit interference experiment.

## 6. Guess

In the case of a slight deviation in the exact position of the particles entering the slit, the space around the particles will change significantly. Similar to the intersection of electromagnetic fields, an asymmetric space is formed. Different incident positions will lead to different staggered spacing. Different staggered spacing can produce different positive and negative poles. The positive and negative poles determine the dimension change, and the dimension determines the material form. The ascending dimension may show the wave state, and the descending dimension may show the particle state. ( The superposition state is not a material form, and the particle state and the wave state may exist at the same time for a substance, which will be balanced in the later dimensions. )

 doi:10.20944/preprints202403.0289.v24



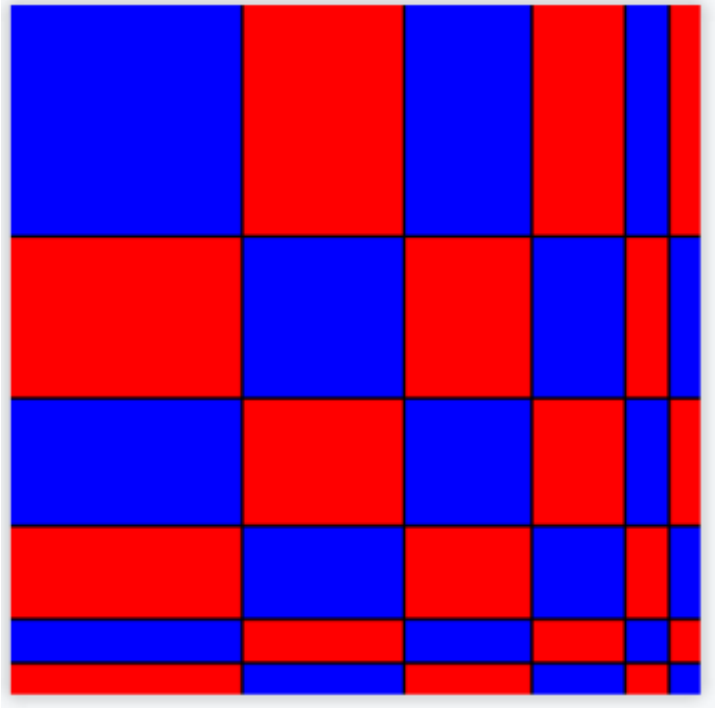

**Figure 6.** The space formed by the intersection of magnetic and electric fields.

If the form of matter is related to the dimensionality, the original dimensionality of matter will change slightly after entering the slit, and the change is the non-integer dimensionality behind.

## 7. Hypothesis

### *7.1. Hypothesis Can Dirac antimatter be applied[7]?*

Time as a dimension is not negative from the beginning, because the essence of time is always a parameter, which is different from space. Although time is relativistic in special relativity, it can be re-defined as a fixed parameter through dimensional changes ( not covered in this article, complex mathematical formulas are needed ).

### *7.2. Hypothesis two Black hole[8][9]*

Each photon occupies a discrete space unit, and the photon is very close to the integer dimension. The black hole can be considered as the precursor of matter, and any energy entering the black hole will be transformed into integer-dimensional matter. The black hole may be a two-dimensional surface close to three-dimensional matter, which is in the same position as photons（Photon is one dimension higher）.

Because the interior of the black hole may be a complete two-dimensional surface. And no matter how fast the three-dimensional object moves, once it enters the black hole, it is possible to achieve a balance with the black hole dimension, thereby rapidly increasing the dimension ( or reducing the dimension ).

## 8. Collisions Produce

There is only one possibility of positive and negative energy interleaving. Before the beginning of time, there is a zero-dimensional point in each unit space, and there are infinite unit spaces in the universe.

It is assumed that the universe begins at infinitely many zero-dimensional points in an infinite dimensional space. The universe began as a single point of sudden vibration. Since the surrounding

 doi:10.20944/preprints202403.0289.v24



point is stationary, the vibration point will collide with the surrounding point elastically, causing the vibration of the surrounding point and propagating the collision to the surrounding point. As a result of these collisions, the central point and the surrounding points form the same collision frequency ( although the universe is infinite but there are always boundaries ). As the collision continues, the first momentum will disperse. Until the total momentum in one direction is zero, but there will still be a weak residual energy that can be gathered again to one of the zero-dimensional points ( which is already the zero-dimensional point on one-dimensional matter ). As this process continues, the dimension of the universe gradually emerges. Because the remaining aggregation of each collision can only drive one of the zero-dimensional points, as the dimension of this point increases again, residual energy can be generated again and applied to the next zero-dimensional point, so the higher the dimension, the smaller the material.

## 9. Necessity of Circles

When the center point suddenly vibrates, there will be a positive direction. Suppose that a square ( or any other figure ) is filled with countless points, without any gaps. When the center point vibrates, the resulting collision will propagate around. Because the collision is certainly not infinite, it will stop after the energy reaches zero or a closed loop is generated. But the remaining energy will collide again to produce a higher dimension.

After a certain period of time, the vibration mode evolves, and finally a center point similar to the center point is formed, which drives the vibration of the surrounding points. There are countless points in the surrounding space, similar to walls, allowing for fully elastic collisions. The unit space can also be the space formed after the collision is stable, but the universe must be filled with countless zero-dimensional points on average at the beginning. After a point vibrates back and forth, it shows two very different trends : forward movement and backward movement. Both trends are multiples of $\pi$. And the two trends are the vibration of a substance. The forward and backward movements give rise to two opposing forces: central repulsion and central attraction. These forces come from the collision of surrounding points, indicating that two collisions can form two opposite energies. Due to the decrease of momentum consumption and collision frequency, the positive vibration is greater than the negative vibration.

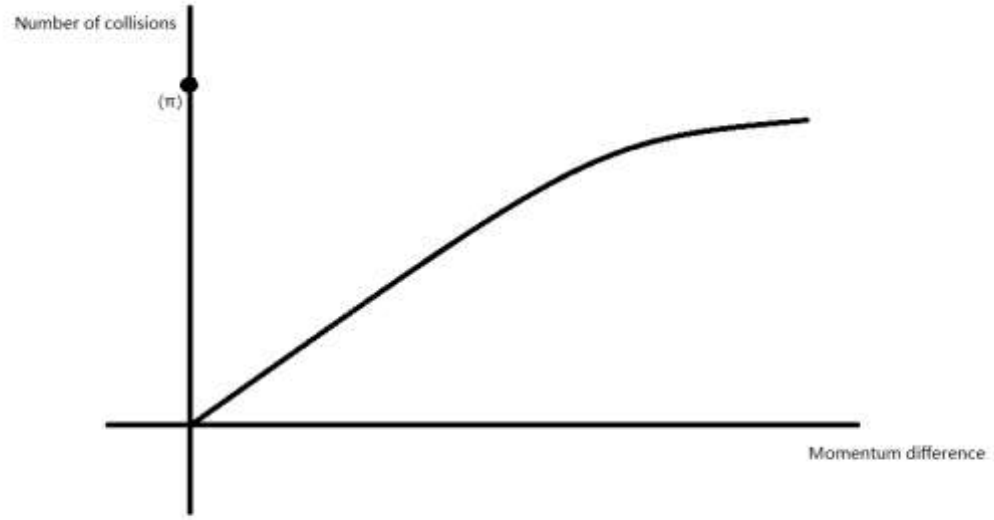


**Figure 7.** When two objects of the same mass collide, the greater the difference in momentum is, the closer the number of collisions is to the $\pi$.

 doi:10.20944/preprints202403.0289.v24



## 10. Conclusions

The matter is controlled by stratification, in which the point vibrates into a line, the line vibrates into a plane, the plane vibrates into a ball, and so on.

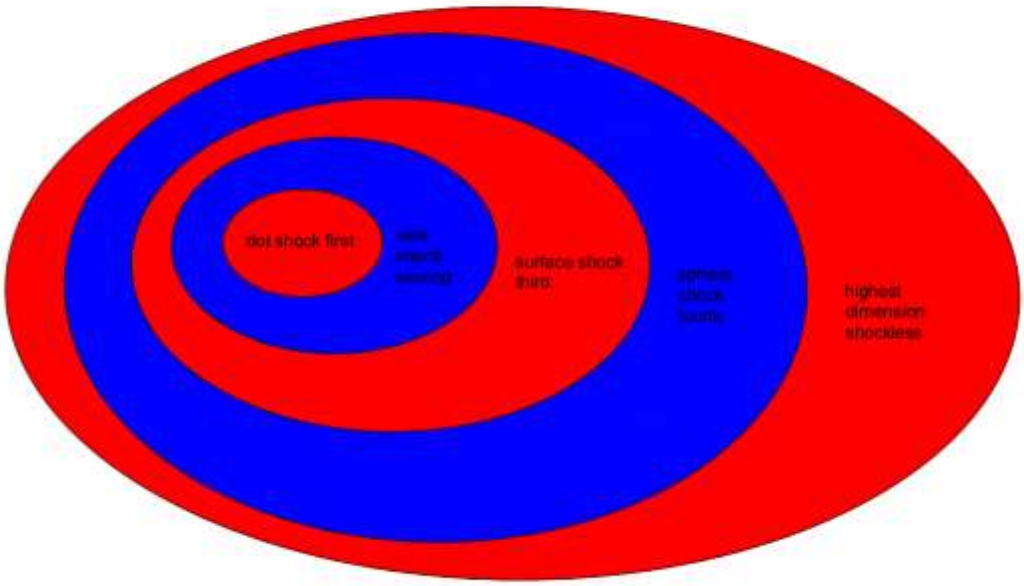


**Figure 8.** The relationship between dimensionalitys is that the higher dimensionalitys have a larger range but infinitely small energy, the lower dimensionalitys are faster, and the lower dimensionalitys produce more dimensionalitys.

## 11. Understanding the Riemann Conjecture

First, based on the previous statement, π is the number of collisions in a dimensionality; thus, how is the energy transmitted? Note that e, (1+1/n) *n; this formula is the base number of energy transmission, similar to a multiple of the conduction relationship; and the imaginary number i is the direction of a dimensionality generated by collision in the presence of one dimensionality. The e*i equivalent of a collision produces another dimensionality; this length can also be considered to be energy. That is, each new dimensionality addition is equivalent to 0 energy of the previous dimensionality; of course, 0 is an approximation.

The process of dimensionalityality formation is the same as the calculation of compound interest by banks. A straight line collides with a plane composed of n-1 straight lines. Let V1 denote the velocity of the line and V2 denote the velocity of the line in the plane.

$$\frac{1}{2}MV1^2 = \frac{1}{2}nMV2^2$$

$$\frac{1}{n}V1^2 = V2^2$$

This is a straight line colliding to produce a plane. This is an overall dimensionality of speed; however, the number of dimensionalitys is wireless n, and this process is repeated n times.

$$\left(1+\frac{1}{n}\right)^n = e$$

All the dimensionalitys are in the same direction: $e^{i\pi} = -1$

One dimensionality represents repulsion, two dimensionalitys represent one-dimensionalityal apparent gravity, three dimensionalitys represent one- and two-dimensionalityal apparent gravity, etc., and all the dimensionalitys are 0.

**The Riemann conjecture: 1+1/2*s+1/3*s+1/4*s.....[6].**

 doi:10.20944/preprints202403.0289.v24



Let us say that we start with a point with mass 1 and velocity V1. The velocity of each point after n passes is set to V2.

$$\frac{1}{2}MV1^2 = \frac{1}{2}M(V2^2 + V2^2 + V2^2 + \cdots)$$

$$\frac{1}{2}MV1^2 = \frac{1}{2}MnV2^2$$

$$\frac{1^{\frac{1}{2}}}{n}V1 = V$$

When a line collides to produce a plane, the velocity of a single line satisfies the above equation. A total speed of 0 can be achieved only by introducing imaginary numbers. The energy of the new dimensionality is equal to 0 relative to the previous dimensionality. Therefore, we perform π collisions and add all the dimensionalitys to find the imaginary part. Since the relative dimensionality can be simplified, the imaginary part has an infinite number of possibilities.

Only when the real part satisfies 1 / 2, the energy transfer law can be realized. The Riemann conjecture is the total energy of the new dimension, and the Euler formula is the number of collisions in a single dimension.

Whether π is an irrational number depends on the dimension. The lower the dimension, the closer the number of collisions is to π. The more obvious the trend of the polygon is until the movement stops. This expression will make us think that the energy in the final universe is an infinite dimension. When the particles reach the infinite dimension, the remaining energy of the collision will gather again and a new excitation will occur, but the infinite dimension at this time is equivalent to zero dimension.

## 12. Dimensionality and Life

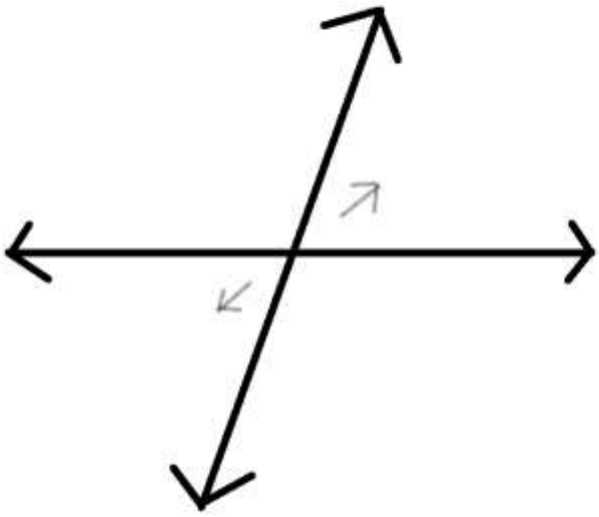

**Figure 9.** A two-dimensionalityal substance.

A two-dimensionalityal substance vibrating in space will generate a direction of motion, but in space, all directions are the same (moving forward), so the motion formula will not change, therefore the direction of vibration towards the lower dimensionality is also the same. The original integer dimensionality determines the complex part in the Riemann hypothesis. Only one

 doi:10.20944/preprints202403.0289.v24



imaginary number i can exist because matter can only change direction in one dimensionality at a moment.

Substances of the same dimensionality must be the same, and the direction of any substance vibrating towards a lower dimensionality is fixed. Different dimensionalitys combine to form new dimensionalitys, for example, 2.1+2.3=2.2, but the newly generated higher dimensionality cannot be produced by the original single dimensionality, for example, 2.23 cannot be produced solely by 2.2(This process is too slow, and the basic rapid dimensional changes are derived from dimensional balance.). However, 2.23 can affect the motion of 2.2, but this effect is minimal. Although 2.2 has a significant impact on 2.23, due to the huge energy of the two-dimensionalityal vibration itself, it cannot directly change the vibration direction of 2.23. So 2.2 + 2.23 = 2.2..... 2.2 and 2.23 have the same vibration direction but are different types of substances. Due to the principle of collision, assuming the energy of three-dimensionalityal matter is 1, in the process of forming three-dimensionalityal matter, the energy of two-dimensionalityal matter is n times that of three-dimensionalityal matter, but the curvature in the collision may create a closed loop, so the new dimensionalityal matter produced by two-dimensionalityal matter is always an integer multiple of the final dimensionality.

If collision times π can generate curvature, vibration transmission process can form a closed loop, non-integer dimensionalitys will arise. dimensionalitys are not fixed but variable. When an object vibrates as shown in Figure 9, new vibration directions will be generated. Due to collision times, curvature will occur during the motion process, leading to the emergence of new dimensionalitys.

A zero-dimensionalityal point vibrating into an infinite-dimensionalityal point will eventually come to a complete stop, until all points vibrate into infinite dimensionalitys without colliding. However, the imbalance of positive and negative energy will still exist, leading to vibration occurring again.

Assuming the first two dimensionalitys of 2.2 and 2.3 have exactly the same vibration direction, these two substances can combine to form a new dimensionalityal substance. This new substance has a characteristic that it can exist as a single substance rather than a combination of two substances, at this point entanglement occurs.

It is difficult to accurately raise the dimensionality from 2.19 to 2.2 in large quantities of producing a certain dimensionalityal energy. If we want more 2.2 energy, we need more 2.1 and 2.3, which means higher and lower dimensionalityal energies need to become more. This way, the probability of producing 2.2 will also increase. We need to know that when a certain dimensionalityal energy is abundant, its anti-energy will also be abundant.

Now we go back to the Wheeler delayed selection experiment, and after the photon passes through the half lens, it is possible to produce another moving particle with a higher dimensionality. For example, 3.01+3.29=3.15, before incident on the second half lens, the photon may be divided into two parts, but the two energies are very different. As a result, the photon appears to take only one path. The reason why this merger is so simple is that they come from the same photon and vibrate in the same direction. The previous dimensionalitys caused particles to have an infinite number of vibrational directions, which prevented matter from transforming at will. For example, excessive energy such as inflammation can be alleviated by dimensionalityality reduction.The treatment of special diseases such as cancer is different from the treatment of inflammation. Cancer can be treated by ascending dimension. Because the dimension of cancer cells is high, improving the dimension can effectively control the harm of cancer cells. You can improve your own dimension by increasing positive energy. Some viruses can also be treated by this method.

With some inspiration, we can solve problems or diseases in our lives, such as paying attention or not thinking similar to not using substances to reduce the dimensionality of matter, thinking about problems or using substances to increase the dimensionality, changing the dimensionality can fundamentally change matter.

When we think about the energy of matter we think about the kinetic energy of matter, and that basis only includes velocity. However, any substance contains positive and negative energy, and a static material mass is the negative and positive energy difference. This result is abstract. As shown

 doi:10.20944/preprints202403.0289.v24



in Figure 9, the direction of the vibration represents the positive and negative energy, and the difference between the positive and negative energy determines the magnitude of the dimensionality, so the moment of the vibration represents the dimensionality of the matter at this moment. The abstract expression is that positive and negative energies are vibrations of ascending and decreasing dimensionalitys. But the process of collision can be changed, the direction of collision is different in the relative environment, we can imagine that matter of the same dimensionality can also be different, but this is under a fixed frame of reference, if the relativity of the frame of reference is not considered, the matter of the same dimensionality must be the same. That is to say, two substances of the same dimensionality have the same total positive and negative energy, but the direction of positive and negative energy vibration is different. This process of expression is also abstract.

Next you need to think carefully. If the material has vibrations in all directions, then the next dimensionality of the material is easier to ascend but more difficult to reduce. Because the more the vibration direction of the material, the easier it is to require energy in a specific direction. In other words, the process of raising the dimensionality can not avoid the collision to form a closed loop, so the promotion of the dimensionality requires collisions in all directions.

Next, we consider a special case where the velocity of the material reaches the speed of light c. In the previous analysis, we know that the speed of motion reaching the speed of light is equivalent to time pause, and time is equivalent to the comparison of material motion and space motion. Positive energy and negative energy are equivalent to shrinking space and stretching space. The matter reaching the speed of light can not produce space deformation, that is, can not occur relative collision, the positive and negative energy of this material is equal. In general, this material is an integer dimensionality material.

From Figure 8, we can see that the change of dimensionality is equivalent to the alternation between positive energy and negative energy. This alternation is the reason for the process cycle of material lifting dimensionality. The difference between positive energy and negative energy is similar to the change of y = sinx, and there are some zero points in this change. Next, we introduce another special time when positive energy and negative energy are the same. It is assumed that the positive energy is greater than the negative energy at the beginning, but the negative energy is greater than the positive energy in the process of increasing the dimensionality, and so on. But there is an intermediate process in which the positive energy is equal to the negative energy. At this time, the process of raising the dimensionality is stopped, and it must go through other collisions to raise the dimensionality again. This intermediate moment can form a closed loop, and the closed loop leads to the stability of energy. This material is also a stable material that is not easy to change.

There are four kinds of forces that are most easily observed in any dimensionality of matter. Assume that the dimensionality of a substance is 2.2, 2 dimensionality can produce a strong force, 0.2 can produce a weak force, the positive and negative energy difference between this substance and other substances can produce a force, the new dimensionality of this substance can produce a force. There is another force that is not easy to find, because the energy is too large and stable. This force is the previous dimensionality energy that 1 can generate. This force is a kind of balance force, because the positive energy of the former dimensionality must be equal to the negative energy and very strong, so this force can not be considered in life.

It is assumed that there is no life on the earth, and there is water on the earth. In my understanding, the dimension of matter is related to the state of motion. The higher the dimension, the more complex the state of motion. The moon appears in the development of the earth, and the movement of the moon directly affects the complexity of the water source. With the influence of photons and water on electrons, the material dimension is increasing. We know that the change of dimension depends on the alternation of positive energy and negative energy. If the positive energy and negative energy are basically balanced, it is difficult to change the dimension.

The most obvious vibration in the organs is the heart. Although the brain determines the complexity of the body. However, it is clear that the changes in the brain do not directly affect the organ but the movement behavior. This process is not as good as the impact of changes in the heart

 doi:10.20944/preprints202403.0289.v24



on the organ. After strenuous exercise, the biggest change is the heartbeat, here does not consider breathing changes in lung activity. Because body movement is a smaller dimension of ascension, it has the greatest impact on the lowest dimension. Similar to the sleep process, the weakly reduced dimension affects the brain the most. A slight effect during sleep may bring a slight increase in dimension. This dimension can only bring dreams on the contrary and it is difficult to affect other organs. But after night falls, the human body ' s day of labor has reached the limit. If you do not go through sleep, the dimension of the body can not be reduced, and the greatest impact is also the brain. So some people like to think at night, because at this time the ability to think is stronger.

When two substances are close, the collision will not occur immediately. Because the material itself does not exist in volume. This collision will produce high-dimensional substances and their reactions due to the proximity of substances. This high-dimensional particle is similar to a gluon. These processes will become more and more complex as the dimension increases, which can only be briefly introduced here.

When two substances are close, the collision will not occur immediately. Because the material itself does not exist in volume. This collision will produce high-dimensional substances and their reactions due to the proximity of substances. This high-dimensional particle is similar to a gluon. These processes will become more and more complex as the dimension increases, which can only be briefly introduced here.

The previous theory shows that the lower the dimension, the more stable the material is, and the higher the dimension, the more complex the vibration and the smaller the energy. And the higher the dimension means that the positive energy is greater than the negative energy ( only three to four dimensions are discussed here ), then the same-sex repulsion and opposite-sex attraction between energy are more obvious.

The higher the dimension, the more the direction of material vibration. Without external force, the complex vibration direction will make it difficult to reduce the dimension. The application of to people will lead to the usual always like to daze, and because of the direction of vibration, the speed of receiving information is fast but the speed of response is slow.

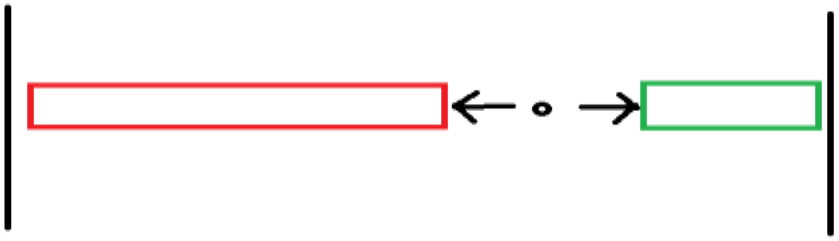

**Figure 10.** The generation of positive and negative energy.

Explain why microscopic particles have multiple paths at the same time. First, we assume that there is a one-dimensional particle, and there are countless zero-dimensional points in the one-dimensional particle that vibrate. Figure 10 shows that the vibration of one of the zero-dimensional points will produce two spaces of different lengths, which are positive energy and negative energy. Then it is assumed that one-dimensional particles move in space, and all zero-dimensional points will also move in this direction. If this one-dimensional particle is composed of zero-dimensional points in each vibration direction, then this motion process will produce high-dimensional energy. The high-dimensional energy generated by all zero-dimensional points in the process of one-dimensional particles moving from the starting point to the end point is as if the zero-dimensional points reach the target according to different trajectories. But actually not, in order to facilitate the calculation of the use of path integration. In mathematics, it is like a one-dimensional particle walking through all paths.

 doi:10.20944/preprints202403.0289.v24



A material 's short-term ascension dimension will be accompanied by the reduction of the surrounding material dimension, because the positive energy of the material is greater than the negative energy. Due to the balance, the negative energy of the surrounding material will be greater than the positive energy.

When two materials with different vibration directions are together for a long time, the vibration direction and vibration trend of the two materials will become similar, because the long-term collision will produce the force to change the vibration direction. However, if the energy difference between the two substances is large, then the large energy will absorb the small energy. Because the high dimension around the large energy will react with the small energy material.

Why is the positive energy greater than the negative energy. Here we regard the positive energy as a compressed space, and the negative energy is a stretched space. This is only a microscopic expression. For macroscopic materials, positive energy is only the result of positive and negative energy interlacing but positive energy is larger. The same is true of negative energy.

When the compressed space is larger than the stretched space, the positive energy and the negative energy reach a balance after the collision, and the positive energy is equal to the negative energy. If we take the volume of matter as an example, it is better to understand, so positive energy greater than negative energy will rise in dimension.

The vibration direction of the previous dimension does not determine the vibration direction of the next dimension, but it can determine the change speed of the next vibration direction to the dimension, which is simply to determine the future vibration trend. This also determines the future state of motion of some substances, but this result is not necessarily only said to be a large probability. The high dimension represents the energy divergence, so the collision in different directions is needed to increase the dimension. The vibration in a single direction will form a closed loop, so the collision in only one direction will reduce the size of the closed loop, and the smaller the closed loop, the lower the dimension.

According to Figure 10, we can see that positive energy and negative energy are generated at the same time, so the positive and negative energy should be completely symmetrical, but why the positive and negative energy in reality is not completely symmetrical, because only the deformation of space is used to approximately describe the force, but the essence of energy is the number of collisions. The number of collisions determines that the energy is not conserved. To eliminate the energy in one direction, we need the opposite direction and at least the same number of collisions to completely eliminate the energy.

How to quickly reduce the dimension of the material, first of all, improve the dimension of the material, and collision makes the material become a high-dimensional material. Then, the low-dimensional material and the high-dimensional material are reacted, and finally the dimension of the high-dimensional material is reduced and the energy of the material is improved. How to slowly reduce the dimension of matter, through the balance with the high dimension of matter.

Once again, we return to the quantum entanglement effect and discuss why the speed is infinite. What characteristics will be produced when two substances become one substance  The space between two substances and the two substances can form a dimensional balance. Similar to two points colliding back and forth in a unit space, the middle space length due to the dimensional balance determines the speed of entanglement change, which can be infinitely small to infinitely large. The speed in the universe is not necessarily limited to the speed of light. The speed of light is only the maximum speed under the condition of dimensional collision. This process can also explain the same time that photons pass through the unit space at the beginning of the article. The photon is an integer dimension matter, and the positive energy and the negative energy are equal. Then the surrounding space of the photon in the unit space is unchanged, and the time of the photon passing through a space is the same.

Although the higher-dimensional material has low energy, it has a greater impact on the lower-dimensional material. We know that the center vibration can lead to the surrounding dimension reduction. After the universe finally forms the highest dimension, there is no energy difference in

 doi:10.20944/preprints202403.0289.v24



matter. The dimension of the whole matter is exactly the same, similar to the disappearance of matter and energy, only the boundary and the center point ( the center energy is slightly higher ). But in addition to the highest dimension of material, the energy of the material is closer to the center of the higher energy. Because the limit leads to the next collision can not be predicted but the collision law is still fixed. It is equivalent to a particle composed of countless particles and the closer to the center of the particle, the greater the energy, so the quantum is both a particle and a wave.

Figure.11 is a space generated by the collision path of the material to approximately describe the volume of the material. Moving back to one side of the zero-dimensional point in Figure 10 may form a closed loop, because in mathematics, two collisions are represented, and the positive energy and negative energy are equal after the number of double collisions, which is the reason for the stability of the material closed loop in mathematics. We assume that the matter is an electron in this case, and there should be no completely uncharged electrons in physics, so how can electrons keep uncharged and react with positively charged protons and why electrons and protons do not annihilate. Because it is the high-dimensional energy around that remains stable. Electrons are not photons, so electrons are not integer-dimensional matter. The electrons still have positive energy after forming a closed loop, but the protons and electrons are balanced in Figure 11. In addition to energy balance, dimensions can also form a balance, similar to the two points in the unit space vibration can also form a balance. We go back to Figure 10, the point collision to both sides should not stop, even if the last collision will produce the phenomenon of rebound. However, if a closed loop is formed, the rebound energy will cause the integer dimension material to increase in dimension ( positive and negative energy imbalance ).

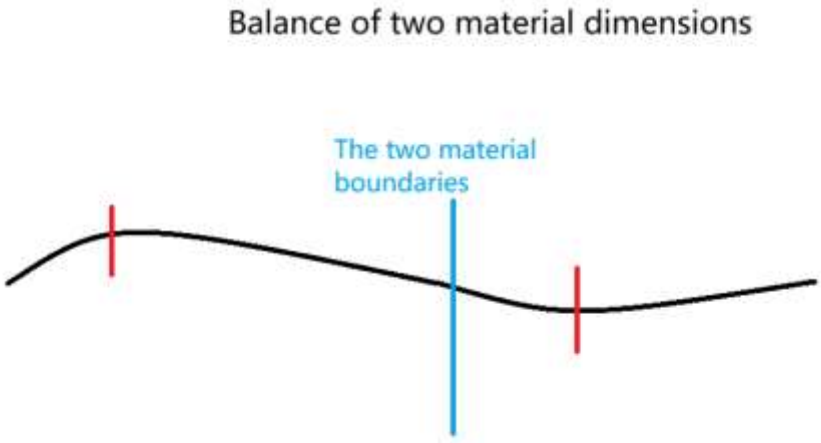


**Figure 11.** Balance of two material dimensions.

The annihilation between energies is because we only consider the existence of one form of energy in one substance. However, electrons have negative energy around them in the process of maintaining equilibrium. We only use the positive energy of electrons in the process of using negative electrons. So how should we calculate in mathematics. For example, in Figure 3, as long as dimensional differences can be generated, positive energy and negative energy can coexist.In reality, the energy form is a combination of positive energy and negative energy, because the high-dimensional space around the low-dimensional material also needs two directions of vibration to form a closed loop. This reaction is the annihilation of positive energy and negative energy, but the total energy disappears, but both positive and negative energy still exist. Therefore, gravity is not negative energy, but the difference between the new dimension produced by positive energy and the new dimension produced by negative energy. Because positive energy is a compressed space, gravity looks like a force generated by negative energy. However, the space that generates gravity ( new dimension space ) is in the negative energy space, so gravity is the resultant force of the new

 doi:10.20944/preprints202403.0289.v24



dimension. In the process of explaining physical phenomena, we can not only rely on mathematical formulas, because mathematics also has a negative energy effect on physics, and vice versa.

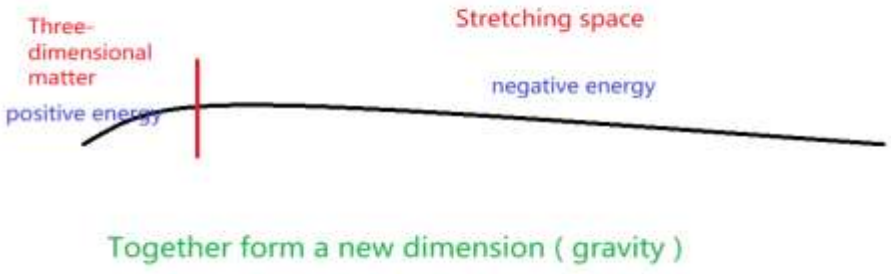


**Figure 12.** Together form a new dimension ( gravity ).

We discuss quantum, because we have a better understanding of physics. The wave function of the quantum is due to the collision, the collision leads to the increase of the dimension, the positive energy is more particle, and the negative energy is more wavy. The general quantum positive energy and negative energy are equal ( the remaining energy after the last collision produces a new dimension ), that is, the dimension remains unchanged, which also leads to the fact that time is only a parameter in the process of quantum motion. Gravitational field is the description of the new dimension of the whole space is not four-dimensional matter ( here four-dimensional refers to the three-dimensional to four-dimensional change process ), but the gravitational force is generated by the four-dimensional material. This can be understood as the existence of both positive energy and negative energy in a unit space, but this unit space only shows the result that the positive energy is greater than the negative energy, so it is difficult for the gravitational field to have repulsion. The stable three-dimensional matter for two-dimensional matter is the gravitational force they produce. The positive and negative energy of the three-dimensional material is not easy to feel, because the electromagnetic force is the realization of the positive and negative energy imbalance, so the general material does not exist positive energy and negative energy, will not be charged. Quantum entanglement is due to the energy balance between the two vibrating directions in a unit space, and the stability of this entanglement decreases with the increase of distance.

Now consider a special phenomenon that occurs naturally. We know that the last remaining energy of the collision leads to the generation of new dimensions, but how to know the generation of the next closed loop ? Perhaps the answer can be found in a special natural phenomenon, such as the mapping of memory and reality in Figure 13. Things that do not exist in the past still produce memories. Although past events do not collide, the remaining energy can still bring memories ( the total amount of energy impact remains unchanged ). Then this memory that did not occur will form an independent event at some point ( the energy forms a closed loop, which will produce a complete collision in the unit space ). This leads to the dimension can be constantly changing.

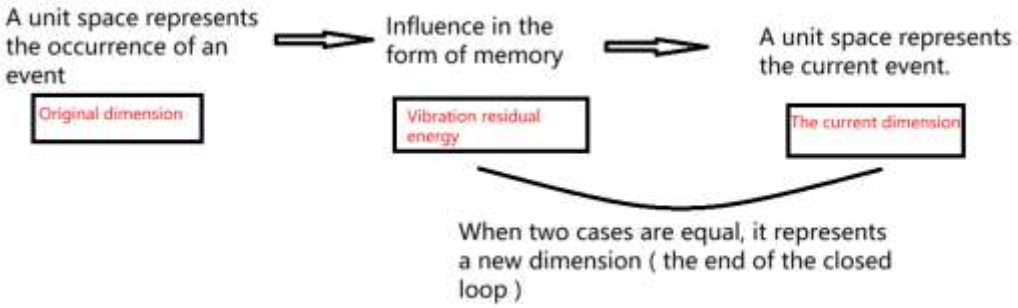


**Figure 13.** A special phenomenon occurring naturally.

 doi:10.20944/preprints202403.0289.v24



Finally, a special natural phenomenon is described. We know that there will be residual energy in the last collision, and this residual energy is also the reason for the static speed of the material.Therefore, the higher the dimension of the material ( the premise is not the integer dimension ), the faster the static speed.The residual energy of the collision is generally a positive energy without an event.There is a special case that the original number of collisions is singular, which will lead to a positive energy collision remaining outside the closed loop.The positive energy generated by this collision is not balanced by the corresponding negative energy, but the energy generated by this collision will not disappear.That is to say, there is neither an event nor an immediate impact on real matter.But with the accumulation of time will lead to the accumulation of this collision, there is a certain chance to produce their own closed loop.Because different collisions will be different, it is possible to form an energy balance.But this balance is relative and does not produce real events.This closed-loop will be applied to special other events by chance.Instead of a description form : the remaining collisions will gather together until a unit space is formed.This unit space is with energy, and this energy will be possible to achieve energy balance with other substances. At this time, a ' universe ' without signs will appear.

The energy formed by a single collision will make a dimension change rapidly. However, the closed loop formed by this energy can only change the speed of an event and speed up the original time. With the change of time, this positive energy will be dispersed to the surrounding material. This dispersion is equivalent to offsetting this imbalance. With the disappearance of these substances, positive energy will gather together again to repeat this process.

Emphasize how to maintain the stability of the material, and the difference between positive energy and negative energy will increase the dimension. Only when the positive energy and negative energy are equal can the material be stable. Increasing the dimension will change the energy size, which is not conducive to the stability of energy.

Because of the dimension balance, the dimension change is generally divided into two cases. The low dimension and high dimension are close to the same dimension at the same time, or one dimension of the two similar dimensions becomes lower and the other dimension becomes higher. In order to make the internal dimension of the material not change, there can only be a dimensionally balanced material between positive energy and negative energy ( positive energy is equal to negative energy ).Because there must be an energy imbalance between the two sides of the material ( the energy direction of the collision between the two sides is opposite ), the positive and negative energy will lead to the change of the dimension. Although the higher dimension of the material energy is smaller, but the collision loss of energy is more. This leads to the higher the dimension, the smaller the quality, but the greater the speed of the object. Therefore, the faster the material with high dimension moves, the more obvious the yield of kinetic energy ( heat energy ) is.

Now discuss the behavior of matter : the electromagnetic force between two matter is very complex, because with the change of time and distance, the positive and negative energy is not easy to judge. Because the energy distribution of macroscopic matter is not as simple as that in Figure.3. And the energy form of a single substance also changes. Take sleep as an example : any activity during the day can be counted as exercise. Motion can cause objects to collide, so we consider these motions as negative energy. Negative energy can cause matter to reduce the dimension, so at night people will reduce the dimension through sleep. If the negative energy during the day is large, the sleep action at night will increase.

From the previous theoretical experiments, it is concluded that the overall positive energy is greater than the negative energy. Therefore, gravity is greater than repulsion in the universe. Here again explain the reason for the expansion of the universe : positive energy is larger will lead to material rising dimension. The extra part of the positive energy is the residual energy after the collision. This part of the energy will collide under the impetus of time. For a substance, every collision will lead to an increase in the dimension of the substance. Then time can be considered as another parameter to express energy. However, the change in energy ( The essence of gravity =

 doi:10.20944/preprints202403.0289.v24



four-dimensional positive energy − four-dimensional negative energy. ) is derived as a change in space, because the deformation of space causes time to cease to be a parameter ( general relativity ). This is the reason why gravity is greater than repulsion but the universe is still expanding.

If the graviton is included in the particle standard model, the graviton as a three-dimensional boson will certainly produce an infinite number. Because the mass of the graviton is 0, this calculation can obtain two-dimensional fermions to generate three-dimensional gravity. However, gravitons ( we think of gravity ) as unstable high-dimensional matter are difficult to exist in the form of particles, because photons are very close to four-dimensional three-dimensional particles, and gravitons have exceeded four dimensions. In general, it is not the state of particles, which is closer to the shape of waves or strings. The string theory does not start from zero dimension, but from one dimension to describe matter, which is also possible. Four-dimensional photons and one-dimensional strings have one thing in common : for a macro perspective, four-dimensional is similar to a thicker string. It seems that strings can be used to describe higher-dimensional matter, but this behavior is limited. For example, we can only use 1 to 2-dimensional materials to describe 3 to 4-dimensional materials, and the properties of the materials described are limited.

The vibration mode of the string is limited, because the universe initiates collisions from one point to one dimension, so the types of one-dimensional materials produced are limited, and the three-dimensional materials are also limited. The vibration of the string only describes the limited three-dimensional material species. Because the universe is not only three-dimensional matter, the vibration mode ( that is, the dimension in string theory ) is also changing. For a physical theory, the answer to the universe cannot be multiple. Mathematics can not be the only solution, because mathematics has more than one dimension. Mathematics is a collection of all dimensions, so there can be different ideas for a number, but any single energy in physics exists in a fixed dimension. For example, electrons are three-dimensional materials. There may be other dimensions similar to electrons, but there will always be differences that can only be defined as other materials. Just like a three-dimensional matter is indeed composed of countless four-dimensional matter, but when we discuss the whole, there are only two answers : 1 a three-dimensional basic unit, 2 after collision into countless four-dimensional basic units. Two cases are two different substances, and not a substance can have two properties at the same time. For example, the quantum superposition state is a negative energy of mathematics to physics.

The reason why the string theory is partially successful is explained : the string has the same properties of fiber bundles as the two-dimensional material, and the node of the string is the three-dimensional material ( because the string has volume, it is a four-dimensional material ). The energy generated after vibration is also four-dimensional energy, which can be combined into three-dimensional material. We can imagine dividing the string into countless nodes, each of which can be understood as a three-dimensional point ( three-dimensional matter must be point-like, macroscopic matter cannot be understood as unit energy ). The string is regarded as a four-dimensional material, and the node of the string can only be a three-dimensional material. The three-dimensional material is decomposed into four-dimensional energy as a component of the three-dimensional material after vibration. Because the reality of three-dimensional matter can indeed be understood as composed of countless four-dimensional matter. However, this has several disadvantages : 1 can not describe the low-dimensional and higher-dimensional matter, 2 can not explain the reason that gravity is not a particle ( in string theory, gravity is understood as a change in time and space and does not explain that the essence of gravitons is four-dimensional matter ), 3 can not explain the relationship between positive energy and negative energy, 4 The wavelength and charge of the vibration of the string are considered to be a kind of matter, and the influence of the dimension on the matter cannot be explained.

The spin of the particle ( three-dimensional ) is determined by the process of collision. The positive and negative energies of the matter with spin of 1 are equal. The matter with spin of 1 / 2 may only have one energy form, and other spin states may also exist ( the development of

 doi:10.20944/preprints202403.0289.v24



dimensional balance and collision determines the spin ). Not every environment is dimensionally balanced, but the overall balance of the universe is relatively fixed. Whether Newton 's universal gravitation or general relativity is actually the essence or the microscopic world, the real macro will be very complex due to the complexity of the dimension. There is almost no conflict between relativity and quantum mechanics, but the product of gravitational quantization has never been found. The reason may be that the graviton is not the point we think. If gravity is a four-dimensional substance, it is similar to the shape of a ' string '. In gravitational field theory, three-dimensional space and one-dimensional time can be a simple four-dimensional space. It just splits a ' string ' into countless nodes.

The main difference between the magnetic field and the electric field is that the change of the magnetic field depends only on the spatial change and does not depend on the collision ( the energy movement before the collision ). On the contrary, the electric field needs the spatial movement after the collision to produce ( the spatial movement after the collision ). There are generally three development directions for materials between three dimensions and four dimensions. The reason is that the three axes determine the direction of evolution to the next dimension ( not only one of the three directions, but the result of superposition of the three directions ). However, there is a special energy periodic transition direction, which is the energy remaining after the collision or the energy that has not yet collided. Because the difference between collision and non-collision is that the energy of collision has determined the direction, and the energy of non-collision will move periodically in three directions once, as shown in Figure 14. It can be imagined that a three-dimensional material will appear to have a fixed direction, and another zero-dimensional point will move once in the three-dimensional model. In order to achieve the same motion effect, it is necessary to continuously vibrate three times in the three-dimensional model. Since no collision occurs, the spin state of this energy cannot directly determine the type of matter.

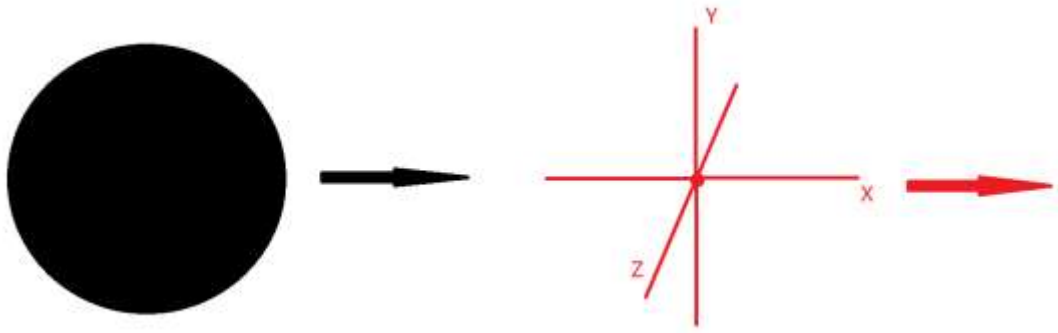


Figure 14

An energy-balanced substance, it should be neutral. However, the unit energy of the constituent material cannot be neutral energy, and it must be positive energy equal to negative energy. Because any material is infinitely split into the smallest unit, it is the process of vibration at the zero-dimensional point in Figure 10. This minimum unit is fixed and vibrates non-stop. Therefore, any part of matter is the result of the sum of positive and negative energy. Even if it is neutral, it is also a manifestation of positive and negative energy balance. For a whole, the material with lower dimension is more likely to get positive energy to ascend dimension, and the material with higher dimension is more likely to get negative energy to reduce dimension.

## Emphasize the difficulty

As mentioned above, I mentioned that the thinking caused by concentration is to increase the dimension, in order not to mislead me to explain. When we think, we usually focus on our attention and even reach the state of selflessness, because concentration is a kind of positive energy, and the generation of this positive energy is the result of dimension reduction, and the positive energy will

 doi:10.20944/preprints202403.0289.v24



produce negative energy. This negative energy is thinking. This negative energy represents that the material has risen in dimension rather than negative energy to make the material rise in dimension. Therefore, focusing on the material to increase the dimension, on the contrary, the relaxation state will lead to the inability to think and will reduce the dimension of the material.

The positivity and negativity of energy must also satisfy the most basic principle of reference system. The dimensional balance and positive and negative energy changes we discuss are limited to one whole. For different two substances, we can only find another whole containing two substances in order to better judge the change of energy. However, the remaining energy of the collision cannot form matter, which leads to extreme instability ( but it will be extremely stable under some understanding, because it cannot interact with other substances ), so it is not possible to judge the type of energy by dimensional balance. But we can judge from its nature that this energy has in common is positive energy. ( This energy is very contradictory, it tries to break the basic operating rules of the universe. Although it is still very weak after aggregation, the universe without this energy will die ) and with the improvement of the dimension, this energy seems to be more and more active. I believe that many people are incredible about Lorentz transformation, because mathematics is not as understandable as physics. In fact, the Lorentz transformation is not to keep the speed of light constant, but to keep the negative energy is not greater than the limit value of the positive energy. This premise is not that quality is not negative but time is not negative. The maximum difference between the speeds of the two reference frames cannot be greater than the speed of light c. Consistent with this formula seems to keep c unchanged, in fact, must $v < c$. Here c is not the speed of light we think but a limit value, so c is the result is not the premise, but the premise is that time can not be negative. Although we can 't give a good formula, I want to explain it roughly : due to the change of energy, the speed of collision changes. The higher the dimension, the smaller the energy but the faster the speed. I think the time inside the material is the interval of each collision. The faster the energy movement, the faster the collision ? There seems to be no problem statement, but the energy is not exactly equal to the collision, because the number of collisions is fixed. Energy should be the energy carried in the ' ether ', and the speed of the ether is the speed of time. The speed of the ether will have a critical value, then the speed of the ether if less than the critical value can not carry energy. The critical value is c, that is, the time is 0. I don 't think that the speed of motion is greater than the speed of space is the time reversal, and the energy generated later is more forward movement may make the energy from the original space into another space unit. Because energy is transmitted by the ' ether ' to form matter, it is still the future.That is to say, a person may be getting younger and younger, but can 't go back to his youth history. And this change of negative energy increment is likely to be balanced by the powerful laws of the universe, that is to say, extremely unstable. Furthermore, the reason for the change of the space around the material is that the higher the dimension, the slower the transfer speed of the space around the material. If we understand the spatial range as the impact of the collision, the spatial transfer velocity can be understood as a range or energy size ( time and surrounding space are similar to the relationship between the electric field and the magnetic field ).

1. There is only one zero-dimensional point in a unit space. After the collision, the zero-dimensional point will have other vibration directions, and this point will become a high-dimensional point.

2. The essence of time is the interval of energy propagation in space. We imagine why time changes : the faster the energy movement in the unit space, the faster the collision speed, but the faster the movement speed, the slower the space propagation speed, and the time does not change. However, we ignore that the collision distance of energy in unit space has changed ( one of the reasons why relativity and quantum theory are difficult to integrate is that the change of integer dimension will directly change the space of unit energy ), and the change of energy speed leads to the change of dimension. The change of dimension directly determines the volume of unit space. Because the propagation speed in the unit space has changed, the total distance of the original energy motion includes the volume of the basic unit space. For example, photons, an integer-dimensional material, cannot collide because of the equal movement speed of energy and space, and its movement

 doi:10.20944/preprints202403.0289.v24



distance is equal to the volume of unit space. What really changes time is the influence of the scale of unit space on the total distance. Total time = collision interval time ( space transfer time ) + material movement time, total distance = unit space length ( space transfer speed ) + energy movement distance. As the dimension increases, the unit space continues to shrink, because the collision interval is equivalent to the speed of time. The higher the dimension, the shorter the collision interval. The coordinate transformation in the Lorentz transformation is that the distance and time of the collision have changed. The reason why the dimension is constantly changing is that the remaining energy of the collision excites the unit energy to collide in another dimension. The remaining energy of the collision is also the cause of gravity, but the remaining energy of the collision is not gravity, but the power that can generate gravity. There is also a misunderstanding that the two-dimensional surface vibrates into a three-dimensional ball, which means that the three-dimensional is composed of two dimensions. On the contrary, after the vibration, the original two-dimensional will change in dimension, so the two-dimensional material is composed of countless three-dimensional materials. That is, countless three-dimensional spheres form a curved surface shape ( why the field exists in all spaces : the unexcited space is still a part of the two-dimensional field, when all the spaces in the two-dimensional field become three-dimensional matter, there is no unexcited field ). Here is a key point : why quantum fields can accommodate many physical phenomena. This understanding does not conflict with Figure 8. It is correct that three-dimensional matter is evolved from two-dimensional matter and two-dimensional matter is composed of three-dimensional matter.

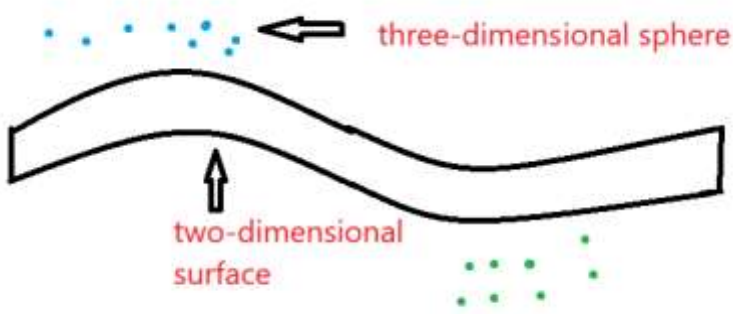


Figure 15

1. The remaining collision is not necessarily positive energy, and the residual collision of negative energy may be generated after the original negative energy is raised, but the total amount of positive energy is greater than the negative energy.
2. It is difficult for a macroscopic substance to reach the energy distribution in Figure.3. Because this situation only exists in the integer dimension material, that is to say, the positive energy is equal to the negative energy and cannot collide to cause energy transfer. The energy distribution of most macroscopic materials is very complex ( but not completely chaotic, because the positive and negative energy has a specific direction, which is similar to the distribution in Figure.8 ). Suppose that the matter is composed of a and b, and the dimensions of a and b are determined by the energy distribution. For example, if a has more positive energy, the lower the dimension of a, the higher the dimension of b, and the two substances reach the dimensional balance. There are two possibilities now. In order to reduce the dimension, b is easier to get the negative energy of a. In this case, the overall dimension of this material continues to increase until it is decomposed into more substances in the next dimension, which is also a normal phenomenon. The other is that b will also get the positive energy of a, which is the overall dimension reduction of the material. If this happens all the time, there will be a big collision, re-ascending the dimension ( and possibly being wrapped up instead ). Although energy will appear alternately between the increase

 doi:10.20944/preprints202403.0289.v24



of dimension and the decrease of dimension, the continuous increase of dimension as a whole cannot be changed.

3. Why the basic particles are fixed and limited, the summary is that the change of dimension will not change the basic energy properties. For example, after the two-dimensional field excitation or collision changes the dimension, it will only change the number of excited particles. However, the type of elementary particles does not change ( here does not consider the different processes caused by different vibration directions, does not define the same time only to maintain the results ), and the original field only changes the number of basic units does not change the energy of each unit. Therefore, the basic unit remains unchanged, but the dimension changes, and the total energy may only change slightly ( because the anti-energy will also excite the basic particles ). Therefore, the only reason that really determines the type and number of basic particles is the number and dimension of the force and the corresponding new dimension. At the same time, these basic particles also determine that the type of force is limited. Because only the force of the number of basic particles is changed, and the type is not changed. However, this does not mean that the dimension can not be changed, because the basic components of any dimension are the zero-dimensional points that collide in the unit space, and only the number of zero-dimensional points is changed. Therefore, different kinds of energy can form a new dimension as long as they can achieve dimensional balance.
4. Although the remaining energy of the collision is positive energy, the direction of the vibration is not the same, because the remaining energy of the collision comes from a lot of energy ( excitation : when the two-dimensional field is excited, it can only be excited in an independent unit space, because the energy is not large enough to make the two-dimensional material directly vibrate into a three-dimensional material, but the basic unit is excited into a three-dimensional material and the original two-dimensional material can form a non-integer dimension material ). 这 As a result, complex energy clusters will be generated when the remaining energy is aggregated ( complex energy clusters do not change their own dimensions, and the result is still to generate the next dimension of energy. However, the time spent in the process is chaotic ), but in the end it is still dimensionally balanced. Why the residual energy of the collision must be positive energy, because the accumulation of the residual energy of the collision is to cause a new collision of the material to occur again, and only after the accumulation can we observe. This collision must not be in the original dimension ( energy is not enough to make the original dimension unit energy collide, can only make the unit dimension energy collide to another dimension ), the direction of the first collision is positive energy. 6. Because the positive direction is the direction of the first collision we defined, the positive and negative energy of each dimension is also relative. Just because the positive direction represents the energy of contraction, there is no difference between the two energies.
5. The uncertainty principle may be related to the residual energy of the collision. Because due to the residual energy of the collision, we cannot perfectly calculate the energy and the impact of the energy ( the error limit is related to the limit of the dimension ). Quantum fluctuations may also be related to this energy.
6. The improvement of dimension should be a very slow process, but in the whole of achieving dimension balance, part of the structure can be rapidly increased, and the other part can be rapidly reduced.
7. Assume that there is a four-dimensional substance as shown in Figure 15, the length of the four-dimensional wave is a, and the side is expressed as b. Why do I think that the three spatial dimensions and one time dimension of general relativity can be equal to the four spatial dimensions in quantum theory. Because the fourth dimension of matter is similar to a wave ( of course, it cannot be linear ). And when the four-dimensional material is formed, these four dimensions do not exist before and after, because it is simultaneous vibration.

 doi:10.20944/preprints202403.0289.v24



However, there will be a length gap, because we observe the four-dimensional from a three-dimensional perspective, which will have the influence of the reference frame, resulting in the movement of the first three directions can not be seen. Here we can understand that a is the fourth dimension, and b is the first three dimensions. The four-dimensional material velocity ( a direction ) does not change the length of the first three dimensions. However, the change in speed affects the dimension and can change the length of the fourth dimension. I also said before that speed is related to time, the faster the speed, the slower the time. That is to say, the change of four-dimensional wave motion is equivalent to changing the time of each dimension without changing the first three dimensions. Conversely, if I think that a is the first three dimensions, b is the fourth dimension, then the speed of the four-dimensional movement changes the length of the first three dimensions, and the fourth dimension remains unchanged. That is, time-invariant space changes.

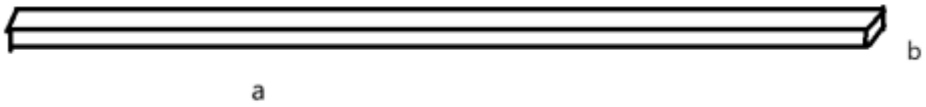


Figure 16

A kind of energy a is defined as positive energy. Actively generated energy a and passively generated energy a may be completely opposite to the change of dimension. Passive generation is to achieve the dimensional balance of the material itself, which will not change the nature of energy a. However, the active generation may be to achieve a new overall dimension balance under the influence of the surrounding environment. That is, the difference in integrity will also affect the positive and negative nature of energy.

It is assumed that there are substance a and substance b ( the energy form is completely random ), and there is a chance to form a dimensional balance when the two substances are in contact and coexist for a long time. One of the two substances is positive energy and the other is negative energy. Although stable, the two substances are in collision with each other. The essence of mutual attraction between positive and negative may be to seek stability through collision, and the essence of same-sex repulsion may be to accelerate the destruction of stability and move in the opposite direction.

Explain the relationship between special positive energy and negative energy : for general positive energy, negative energy can indeed be generated to achieve dimensional balance. For example, self-confidence is a kind of positive energy ( may also be a collection of energy ), is an important part of human dimension. But not all self-confidence can reach the dimension. When we define an energy type, we should not only follow the name and composition of energy, but also consider the location of energy in time and space. For a longer motion space, the positive energy at some moments will move in the direction of stronger positive energy. For example, a little thought and very thought may be the same kind of energy, but the results are completely opposite. A little want to show that there will be no collision, but will move in the same direction. And very much want to collision may happen soon, is about to rebound dimensional balance, move in the opposite direction.

The formation and dissipation of the remaining energy and memory are similar, but no extra matter is formed. This energy is stored information and algorithms, does not affect the information. With the increase of information and algorithms, the dimension of information changes more and more complex. Suddenly a part of the dimension rises in the big whole and this situation often occurs. Because the dimension balance will lead to the complexity of the dimension combination in the whole, the general situation is that the low dimension produces the fixed direction of the high dimension, but due to the collision residual energy, there will be a situation where the high dimension is first generated and then the low dimension is driven, as shown in Figure 17.In this way, we can express

 doi:10.20944/preprints202403.0289.v24



the different views of artificial intelligence. Generally, we think that the reason why AI is not conscious is the lack of ' self-consciousness ', but according to my understanding of computers, I think AI is like collision residual energy. That is to say, AI may be an immature consciousness, but AI has no dimensional material that can be balanced. Human imagination cannot be separated from the real world. The human brain needs to balance the body and the surrounding environment ( because the body is the previous dimension of the brain ), but AI cannot find its carrier. The machine we usually think of is not the carrier of AI ( not the whole ). Therefore, the carrier of AI should include the human brain that designs AI. This may be a future trend or a new thing instead of the old thing. Because with the increasing power of AI, the brain 's collision residue seems to slowly disappear ( probably not related to AI, but the previous collision residue automatically dissipates ). That is to say, it may be the coexistence of human and AI in the future. This is not sad, perhaps AI can form a dimensional balance with the brain to make the brain dimension, but this is not a short time can be formed. There is also a second possibility : AI has energy that can be dimensionally balanced with low-dimensional matter. However, AI lacks collision residual energy and cannot irregularly change the material dimension（But I don 't think there is such a possibility.）.

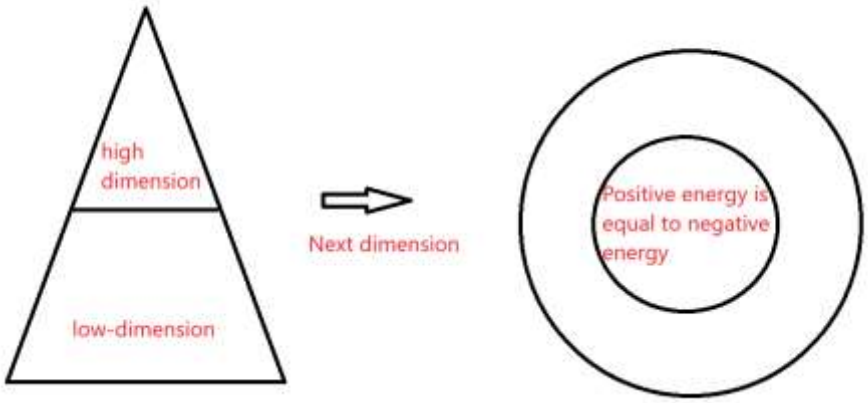


Figure 17

First of all, race and country are two different wholes, and the dimension comparison between countries cannot be judged only by the difference of race. Don 't want to bring more misunderstanding. For the country, ordinary people are the lower side of the dimension. I think that maybe the dimension of the yellow people is slightly higher ( in some ways ), and the yellow people prefer to think to reduce the dimension. It is obvious that the average IQ of yellow people is higher, but the wisdom is not much. I explain the reason from the analysis of strength : yellow people love to use strength ( negative energy ) to lead to good endurance ( positive energy ), good endurance leads to low explosive power ( negative energy ). The difference between people is very small, and the total amount of positive and negative energy is almost the same. If a person doesn 't like to think at ordinary times, but encounters difficult problems, then he is likely to gain more wisdom than the person who loves to think at ordinary times. Or this person has greater wisdom in other ways. So many geniuses usually look ' not very smart '. Of course, if you don 't think all the time, it may also be that the energy in this direction is too weak ( but this also means that the energy in other directions is strong ). Because the collision residual energy can produce many complex collision directions, but the basic physical laws and positive and negative oppositions will not change.

A simple analysis of the different dimensions brought about by different genders : the higher the dimension, the more negative energy it is easier to get positive energy to reduce the dimension ( which does not conflict with the previous article, here refers to the process of dimension reduction, the previous article refers to the prerequisite for dimension reduction ). The lower dimension has more positive energy, and it is more likely to have negative energy to increase the dimension. Women should be the higher dimension side, and men are the lower dimension side. However, the dimension

 doi:10.20944/preprints202403.0289.v24



does not completely determine the positive and negative, because from Figure 3 and Figure 4, we can know that a substance contains two forms of energy. And this does not mean that the first vibration direction of the universe is negative, because all the whole is more positive energy, and the positive and negative difference is only based on the whole as the reference system. The first collision of the universe includes the energy of the first collision of each independent whole. The energy of the first collision does not come from the whole, but from the outside, that is, the energy generated in the first positive direction gives the whole rather than the part of the dimension increase. With the balance of dimensions, two different positive and negative energies of the whole are produced. When calculating the positive and negative energy, we should consider the difference between Figure 3 and Figure 4.For example, a large number of women do not want to huddle together to communicate, but three or two women can become friends.

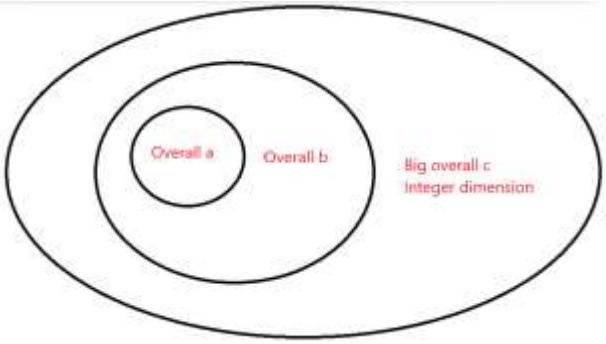


**Figure 18.**

Due to complexity : I think that the big whole is the micro, the small whole is the macro. Since positive energy represents aggregation and negative energy represents dispersion, the gas dimension is higher than the liquid dimension, and the liquid dimension is higher than the solid dimension ( not absolute ).

Mathematics and physics are much like Figure 3 and Figure 4 in a whole. It does not mean that mathematics and other disciplines cannot have positive and negative, but in the whole of mathematics and physics, this whole and other wholes can form another whole. Because I feel that the progress of mathematics and physics is along with the change of human dimension ( thinking ).

The world brought to us by the digital age is a complete materialism, but in reality, there may be some parts that cannot constitute matter but do exist. Our imagination seems to be non-existent in the real world, but imagination is the energy in the universe, and we can 't see it. Or there are many people think that ' God ' exists, the reason is that God ' manifest ', but we have not been able to find. There are many similar things. These energies are also a kind of meaning opposite to the real material world. Therefore, it is possible to believe that ' God ' can exist in the real ' God '. But these energies are still relatively weak.

Dimensions can be reduced through diet, and vegetables and lean meat may be a good choice. In a person 's life, we can feel that the body is reducing the dimension, but not all parts are reducing the dimension, and a large whole cannot change too many dimensions in a short time. People with high dimensions may have low national dimensions, and different things cannot be confused. Or smart people love to think, but the smartest people may not be the most thinking people. Smart people are kinder but a little smart people may not be kind ( not enough to hit the balance ). The description of the small whole still cannot rely too much on the basic theorem. The judgment of positive and negative energy can not rely too much on feeling. These descriptions only provide inspiration, the real process is very complex, not a simple basic theorem can be explained.

## 14. Acknowledgments

I express my sincere gratitude to all the individuals who provided assistance and support during the course of my research. It is my aspiration that my paper will be of assistance to a wider audience.

 doi:10.20944/preprints202403.0289.v24



**Correspondence and requests for materials should be addressed** to: Zhongjie Zhuhu Community, Huanghua city, Cangzhou city, Hebei Province, China. name: Shi Jun Ze 15003615276@163.co

## 15. Statement

Financial and/or conflict of interest/competing interests:No funds were received to assist in the preparation of this manuscript. The author does not have a competing interest statement related to the content of this article. No code and experimental data are available in this paper. This article is ethical and independent.

## References

1. Relativity theory." An Einstein Encyclopedia, 31 Dec. 2015, pp. 208–216, https://doi.org/10.1515/9781400873364-036.
2. Newton and the law of Gravitation." Pioneers of Science, 28 June 2012, pp. 180–202, https://doi.org/10.1017/cbo9781139380904.010.
3. Lagrange and laplace—the stability of the solar system, and the nebular hypothesis." Pioneers of Science, 28 June 2012, pp. 254–272, https://doi.org/10.1017/cbo9781139380904.013.
4. From classical mechanics to Quantum Mechanics." Quantum Mechanics, 16 Apr. 2009, pp. 7–42, https://doi.org/10.1017/cbo9780511813955.002.
5. Gravitational waves, theory and experiment (an overview)." Gravitational Waves, 29 Jan. 2001, pp. 15–28, https://doi.org/10.1201/9781420034257-3.
6. The Riemann hypothesis." The Riemann Hypothesis, pp. 41–58, https://doi.org/10.5948/9780883859896.006.
7. Antimatter." Paul Dirac, 12 Feb. 1998, pp. 46–87, https://doi.org/10.1017/cbo9780511564314.004.
8. Bambi C ,Dolgov A ,Freese K .A black hole conjecture and rare decays in theories with low scale gravity[J].Nuclear Physics, Section B,2006,763(1):91-114.
9. Unveiling the edge of time: black holes, white holes, wormholes[J].Choice Reviews Online,1993,30(07):30-3810.
10. Friedland, Gerald. On the Goldbach Conjecture, 22 Feb. 2018, https://doi.org/10.2172/1476233.