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Preprint statement: This article is a preprint and has not been peer-reviewed, under consideration and submitted to ScienceOpen Preprints for open peer review.

DOI: 10.14293/S2199-1006.1.SOR-.PPFDKSC.v1

Preprint first posted online: 11 July 2020

Keywords: planetary orbital distribution,, Titius-Bode law, gravitational structure,, planetary evolution, six-level multidimensional geometry

Mirror world and planetary orbit distribution in the solar system

Geometric derivation and physical significance of the distribution law of the orbits of the solar and solar-like planets

Hu Gang. Hu Meiqi. Hu Jun*

Abstract: There are different opinions on the distribution formula of the distance between Titius-Bode's planets^[1,-5] Some people use this theory to prove that exoplanet systems have the same regularity^[4], But the emergence of the Hot Jupiter has made many people less convinced of the empirical formula Titius-Bode law. The explanation of the Titius-Bode law in our past theory is not convincing because of the incorporation of too many traditional theories and concepts, and almost all the papers that explain the distribution of planets are in the present theoretical framework^[2-5] To explain. In fact, the distribution law of the distance of planets is related to the cause of gravitation. I don't know the cause of the gravitation and the process of action. The "planetary distance distribution rule" cannot be interpreted correctly. To use "six-level multidimensional symmetric complex geometry" ^[7] to understand the genesis of the derivation of the solar system's orbit, the actual application is a simple and easy-to-understand explanation of the "gravity of six-level multidimensional symmetric complex geometry" ^[8], so understanding this article requires understanding" Six-level symmetry theory of gravity" ^[7, 8].

Keywords: planetary orbital distribution, Titius-Bode law, gravitational structure, planetary evolution, six-level multidimensional geometry

1.0 Introduction

It has been more than 250 years since the Titius-Bode law was put forward. During this period, there has been a quarrel between the positive and negative voices. We have found that some planets in the exoplanet system have similar laws of distance distribution, and that the satellite systems including our solar system have similar laws, but there are always those who do not satisfy the laws. This is irregular planets and irregular moons, because the existence of irregular objects makes the sounds of negation and coincidence louder and louder, especially the appearance of objects such as hot Jupiter, which makes the sounds of many negative Titius-Bode law even stronger.

Over 250 years, we have explored and studied the significance of this rule, but there is no convincing conclusion. What is the reason?

This paper holds that the Titus bode rule is the expression of the structure of universal gravitation in the galaxy system and the result of the action of universal gravitation. Therefore, we do not know the composition, process and mechanism of gravitation. If we use the "external appearance" of Newton and Einstein's theory of universal gravitation to understand the Titus bode rule, we can't get the real internal "Titus bode rule" The physical meaning and cause of formation.

Many years ago, humans thought the earth was flat , 'the sky' was like a big pot, buckled to the ground, and the stars were set in the sky like gems. With the development of human observation technology, we know the solar system objects that can be observed by simple instruments such as 'Mercury, Venus, Mars, Jupiter, Saturn'. The geocentric theory has some limitations, but it is also a great progress of human understanding of nature, and later came into being Copernicus' heliocentric theory, until now' its theory of mind's unintentional theory' and 'explosive theory', our understanding of nature, in step by step development. The creation of radio telescopes shows us another kind of universe that we didn't see before. We know that the universe exists in forms other

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than optical instruments. According to more and more observations, the concept of dark matter arises, and quantum mechanics brings us to the concept of "parallel worlds" and even "parallel universes ". These make our world more and more mysterious, more and more complex! So what exactly is dark matter? What is the parallel world? A simple answer to one of these questions is the "blind touch ", only a comprehensive overall and systematic look at the problem can solve the problem systematically.

In this paper, the theory of the composition of the gravitational geometric space of the "six-level symmetric gravity theory" is used to derive the Titus-Bode law. It gives different results. Neptune and Eris are irregular planets, and their causes and evolution mechanisms are different from other regular planets. Similarly, the evolution of the asteroid belt and the Kuiper belt, the Oort cloud, the dust ring, and the halo ^[12] also does not satisfy the Titus-Bode rule, but the physical significance of the Titus-Bode rule is profound. It is not something that can be derived and explained using traditional material concepts and traditional logic of thinking.

To understand this article, you need to understand the six-level theory of symmetric gravity^[8], The material, space, time and so on here are different from the tradition, so we should have a certain amount of preparatory knowledge^[7,8,9] in order to well understand the derivation process of the distance distribution of the planetary system in this paper and the logic of reasoning. The core of this preparatory knowledge is 'six-level multidimensional complex geometry'^[7].

As the mathematical forms of various theories in our reality become more and more complex and difficult to understand, such as M theory has put space in eleven dimensions, people seem to like to use more and more complex equations to measure the level of a theory, glorifying the integration of more and more difficult mathematics into the new theory, believing that simple mathematics is only a solution to the elementary things. But there are some problems in this direction. Geometry and 'algebraic mathematics' are two legs of the whole mathematical system. Although we have 'topological geometry', 'differential geometry', 'fractal' and so on, these 'geometry' still can not give the basic mathematical system and physical system a breakthrough inspiration.

2.0. Summary of preliminary knowledge

Six-level geometry is a transformation of the basis of traditional geometry:

1). Modification of base coordinates^[10]

The traditional infinite Cartesian coordinate system is transformed into a six-level finite-dimensional coordinate system. 'Consistent, anti' is a mirror-symmetric coordinate system. Relative to each other' Imaginary, real 'space system. And the coordinate system, Hierarchical from origin to multidimensional coordinates, so that more correctly reflect the authenticity of nature.

2). Transformation of Logarithmic Basic Theory^[10]

The scope and definition of the number domain are expanded. On the basis of the complex number, this paper proposes: The concepts of multidimensional, compound number, symmetric coordinate system, absolute number domain, relative number domain and number and number domain division, so that with the expansion of mathematical foundation, it will certainly bring the development and change of classical mathematics.

3). Extension of the theoretical basis of geometry^[7,13]

build with internal structure and minimal structural units, and build 'Imaginary, real' multidimensional mirror space. a six-level symmetric geometry is an interrelated geometry, which is an independent space based on the symmetry point and the starting point, the starting circle, and at the same time its background

space is superimposed, which can split out n subspaces. the motion changes of these subspaces constitute our space and field.

4). In-depth study of time^[9]

Put forward what time is, how to study it, how to understand it and how to verify it by experiment, make the "time" of "illusory" concrete. The time here is hierarchical and directional. Why the time in relativity becomes faster and slower is described in detail here.

5). Study of Spatial Structure^[7,13]

The structure of space is very complex, not nothing, our material world is the relative average of the absolute space of the matter-space transformation and correlation, thus forming a variety of field states, space is the sum of various field states.

6). Hierarchical time, space, matter^[layers]

Our world, whether it is time, space, objects, and observers and observed objects, is a six-level structure. layers is everywhere in our social life and nature, for example, human society is divided into: community, city, state, country, human society.

natural layers such as nuclei, atomic systems, molecules, objects, planets, planetary systems, galactic systems. Wait.

We have hierarchical ideas, but there is no systematic scientific hierarchical theory, and there is no scientific hierarchical theory that can be verified experimentally. It is a theory that can be "experimentally" validated by linking this layers and layers theory with specific disciplines.

7). The Relativity Principle of the Observer^[Observer]

The observer is the objective of philosophy. Although there are observers of relativity and quantum mechanics, there is no system of observation and special observer. Here the objective quantification of philosophy, so that the observer is not empty concept.

8). Composite theory^[Composite logic]

There are many kinds of theories in the world, so it is necessary to combine the above theories, consider and apply them systematically, and study how to synthesize, unify, synthesize and unify the conditions and changes. The compound logic deduction has the hierarchical division, has the symmetry.

2.1. Preliminary knowledge profile:

2ⁿ in a six-level space of space and physical meaning.

We know, $(2^n \text{ or } 3 \times 2^n)$ and $(2 \times 3^{n-1} \text{ or } 3^n)$ is the most basic thing in mathematics, but in six-level multidimensional geometry, they are the basis for the existence and evolution of everything.

In six levels of space, 2^n and 3×2^n and $2 \times 3^{n-1}$ and 3^n . It is a geometric system of coexistence and symbiosis, which influences each other. The general observer believes that:

$2 \times 3^{n-1}$ are 2^n Background space, $2 \times 3^{n-1}$ the size of 2^n size and scope; Because when $n'=6$, $2 \times 3^{n'-1}$ form a closed system of equality symmetry. That is

$$2^9 > 2 \times 3^6 \Leftrightarrow 512 > 486$$

the largest closed unit (limited source) formed beyond the observer system. So that's why

$$0 \leq n \leq 8 \leq 9_i \text{ (Hierarchical numbers, representing imaginary levels, not mathematical numbers)}$$

But in 2^n An internal observer can not perceive $2 \times 3^{n-1}$ of space, and I don't know $2 \times 3^{n-1}$ the existence of it and its 2^n The internal observer's influence' This is the 'dark space, the base space'.

Same, stand 2×3^n observers on the frame of reference will also observe a similar patten 2^n on the

observer's situation.

When the starting circle system is the same, the Total Observer' knows the existence of the space of 3^n expansion and change, and the outermost edge of 2×3^n is the outer edge 'limitation' of 2^n expansion and change. It is also known that the space of 2×3^n shrinkage change exists, and the outer edge of 3^n shrinkage change is the 'limit' of the outer edge of 2^n shrinkage change.

When a common starting circle system expands and contracts at the same time, the six-level closed circle of 3^n produces two edge restrictions, that is, contraction and expansion $r/3^n < 3^n r$. $r/3^n$ is the external barrier of contraction and expansion, and $3^n r$ is the external edge limit of expansion and expansion. These two spatially symmetrical changes limit, resulting in 2^n and $1/2^n$ limits, resulting in our limited object world.

The geometric meaning represented by 2^n [level theory], and the geometric deduction of the positions of 'rough' and 'myopic' orbits of large planets.

The diameter of the circle of the red starting circle is r , R of the symmetrical circle of light blue are R_n , $n = (0.1.2.3.4.5.6.7.8.)$.

$$R_n = 2^n r$$

2.2.1. Venus' geometric orbit deduction

$$R_0 = 2^0 r = r \text{ (Venus half axis)}$$

Figure1| Golden Star semi-long axis geometric logic derivation.

A point on the circumference of a red starting circle acts as a point of symmetry and expands outwardly into a symmetrical mirror to form symmetrical circle R_0 , the property of the symmetric circle relative to the starting circle is a negative object^[11]. The starting circle is a positive object, and the symmetric circle is called a negative object; when the starting circle is a positive space, the symmetric circle is called a negative space. At the far end of a symmetric circle is the center of another larger symmetric circle, and this axis of symmetry is called R_0 . The planet on the symmetry point is Venus.

2.2.2. Deduction of the Earth's geometric orbit

$$R_1 = 2^1 r = 2r \text{ (Earth's semi-long axis)}$$

Figure 2| Geometric logic derivation of the Earth's semi-long axis. And when R symmetric circle R_0 A tangent point on a symmetry axis is a symmetric point, copying a symmetric circle R_0 . At this point two symmetrical circles R around. The 'cut point' of the axis rotates to form a larger 2-fold symmetric circle, the distal point of the new symmetric circle relative to the 'start symmetry point', forming the 'half-long axis' of the Earth's orbit, which forms the second level of orbit, the symmetry point 2^1 . The planet is the earth.

2.2.3. Geometry of the Mars orbit deduction

When the symmetry circle R1 takes the tangent point on the 2^1 symmetry axis as the symmetry point, copy a symmetry circle R_1' . At this time, the two symmetry circles rotate around the tangent point of the R1 axis to form a larger 2 times symmetry circle R_2 . This new The distal point of the symmetry circle relative to the 'starting symmetry point' constitutes the 'semi-long axis' of Mars' orbit. This point rotates around the starting symmetry point to form a third level of orbit. The planet at symmetry point 2^2 is Mars.

$$R_2 = 2^2 r = 4 r \text{ (Mars half axis)}$$

figure 3| geometric logic derivation of the mars semi-long axis.

2.2.4 . Geometry of asteroid belt deduction

$$R_3 = 2^3 r = 8 r \text{ (Half-length axis of Ceres)}$$

Fig .4| A semi-long axis geometric logic derivation of the asteroid belt.

When the symmetry circle R1 takes the tangent point on the 2^1 symmetry axis as the symmetry point, copying a symmetric circle R_2 , at this point two symmetrical circles are wound around 2^2 . The tangent point of the axis rotates, forming a larger 2-fold symmetric circle, the distal point of the new symmetric circle relative to the 'initial symmetry point', forming the 'half-long axis' of the average orbit of the asteroid belt, which forms the fourth level of orbit, and the planets on the symmetry point are mainly Ceres.

Ceres did not form a large planet, not because of the existence of Jupiter or random collisions between asteroids. It was this position that was destined to be a belt when the planets were formed, and the planets above were destined to be asteroids. When the observer does not know the antecedents and consequences and the initial process, it can only be explained as the chaotic thought of random collision (random is the germination of chaotic thought). There is a regular relationship between the bands, rings and halos of celestial bodies. It is the representation of different objects with different attributes and different levels of observers, not the product of random collisions^[12].

2.2.5. Geometry of Jupiter's orbit deduction

When the symmetry circle R_3 takes the tangent point on the 2^3 symmetry axis as the symmetry point, copying a symmetric circle R_3 . At this point two symmetrical circles are wound around 2^3 . The tangent point of the axis rotates to form a larger 2-fold symmetric circle, the distal point of the new symmetric circle relative to the 'initial symmetry point', forming the 'half-long axis' of Jupiter's orbit, which rotates around the starting symmetry point and forms the fifth level of orbit, where the planet is Jupiter.

$$R_4 = 2^4 r = 16 r \text{ (Jupiter half axis)}$$

Figure 5| Geometric logic derivation of the long axis of Jupiter.

2.2.6. Geometry of Saturn's orbit deduction

When the symmetry circle R_4 takes the tangent point on the 2^4 symmetry axis as the symmetry point, copy a symmetry circle R_4' . At this point two symmetrical circles are wound around 2^4 . The tangent point of the axis rotates to form a larger 2-fold symmetric circle, the distal point of the new symmetric circle relative to the 'initial symmetry point', forming the Saturnian orbit 'half-long axis', which rotates around the starting point and forms the sixth level of orbit, where the planet is Saturn.

$$R_5 = 2^5 r = 32 r \text{ (Saturn half axis)}$$

Figure 6| Geometric Logic of Saturn's Long Axis

2.2.7. Geometry of Uranus orbit deduction

$$R_6 = 2^6 r = 64 r \text{ (Uranus semifinal axis)}$$

Figure 7| Long axis geometry logic of Uranus deduction

When the symmetry circle R_5 takes the tangent point on the 2^5 symmetry axis as the symmetry point, copy a symmetry circle R_5' . At this point two symmetrical circles are wound around 2^5 . The tangent point of the axis rotates to form a larger 2-fold symmetric circle, the distal point of the new symmetric circle relative to the 'initial symmetry point', constitutes the 'semi-long axis' of Uranus' orbit, which rotates around the starting point to form the seventh level of orbit, on which the planet is Uranus.

2.2.8. Pluto orbital geometry deduction

$$R_7 = 2^7 r = 128r \text{ (Pluto semi-major axis, within the 'Kuiper belt')}$$

Figure 8| Derivation of the long-axis geometric logic of the inner 'Kuiper belt'

We put Titius-Bode rule of $n=7$ ' to correspond to Neptune is wrong, because the principles and functions of Neptune's evolution and domination are different from other regular planets. There is no Neptune orbit deduction in the Titius-Bode rule because Neptune is an irregular planet, and its production principle and mechanism are different from regular planets.

When $n=7$, the rule should be Pluto.

2.2.9. Geometry of X star orbits deduction

$$R_8 = 2^8 r = 256 r \text{ (semi-long axis of Planet X),}$$

When the symmetry circle R_7 takes the tangent point on the 2^7 symmetry axis as the symmetry point, copy a symmetry circle R_7' . At this time, the two symmetry circles rotate around the tangent point of the 2^7 axis to form a larger 2 times symmetry circle. This new symmetry The far point of the circle relative to the 'starting symmetry point' constitutes the X orbit. This point rotates around the starting symmetry point to form the orbit of the ninth level. The planet at the symmetry point is the X star.

Due to six levels of 3^6 the limit of the background space, 'forward' at 2^9 position can not produce normal 2^9 As a result, X planets do not normally generate or produce semi-finished products (in the Imaginary space and real space alternation period, may suddenly appear to form a 'ghost planet' need to be observed proof).

Figure 9|X Geometric logic of planetary long axis deduction

3.0. Spatial structure at the end point

Figure 10|When $n=9$, $2^9 > 2 \times 3^{1-6}$ exceeds the closed range of 'six levels' $2 \times 3^{1-6}$, completing a cycle (also the end point of the Titius-Bode rule). Since the symmetrical system of 2^9 is not generated in the real number system, then the 2^9 system becomes virtually symmetrical. As shown in Figure 10, black and gray are the dark matter system and the parallel world we talked about [7], which is also a mirror image of the 'forward' direction 'anti' Symmetrical space^[10]

4.1.0. Derivation of orbital geometry of Neptune deduction

Neptune is not a regular satellite. Although its orbital plane and inclination are very different from the plane of the entire solar system, it is formed by the reverse of the 'anti-initial circle' of the 'anti'.

Fig .11| Geometric Logic Derivation of the Neptune Long Axis

Count the diameter of the anti-start circle as $R^{-1}R^{-1}=2^7/2$ r, divided into three parts (derived from different divisions of the starting and symmetric circles)

$$R^{-1}/3=2^7/2/3= r \ 21.333$$

A R of the position of an anti-start circle to the origin $_z^{-1}$, So

$$R_z^{-1}=2^7-R^{-1}/3-R^{-1}/3 \times 0.251$$

(0.251 is the average coefficient derived from the axis of planetary symmetry oscillation see below)

Radius R from counterstart circle to origin $R_0^{-1}=(R_z^{-1} \times 3 + 4)/10 = 30.794$ AU.

(4 is the coordinate axis relative to the origin distance, see below)

R_0^{-1} That's the half - axis of the star.

Neptune is not formed from the corresponding position of the 2^n of cis, his symmetrical geometric origin is derived from the starting circle of the anti-symmetric space [anti-initial circular symmetry], and Titius-Bode rule is a planet of the forward direction The orbit distance distribution is an empirical formula, so Neptune does not satisfy the Titius-Bode rule.

4.2. Geometry of the orbit of Venus deduction

Fig .12|Geometric logic derivation of the semimajor axis of Eris (outer Kuiper belt)

Let the diameter of the 'reverse starting circle A_0 ' symmetrical to the virtual image of 2^9 be $(R^{-1})_i$, $(R^{-1})_i = 2^8/2r$, divided into 4 parts, which is the radius of a layer of symmetrical circle A_0 inside the starting circles

$$(R^{-1})_i/2 = 2^8 = 64 r$$

$(R^{-1})_i/2$ is the beginning circle A_0 , internal 2-level radius

$$(R^{-1})_i \times 1/2 = 32 r$$

A distance from the position to the origin of the anti-start circle to the starting symmetry point is recorded as R_z^{-1} , '-1' means the opposite, then

$$R_z^{-1} = (2^7 + 2^6 + 32) r = 224 r$$

A value of $32r$ is an internal translation of the 'anti-start circle' (the starting circle also has an axis translation

along the starting circle and the translation is reversed, see later)

A radius (R) from the starting circle to the origin $(R_0^{-1})_i$ (The radius of the base circle $r=3 r_1$)

$$(R_0^{-1})_i = [(R)^{-1}]_i \times 3 + 4 / 10 = 676.0 \text{ AU}$$

$(R_0^{-1})_i$ is the semi-major axis of Eris, 'i' means that the attribute of the anti-starting point is an imaginary number (field or dark state), Eris is the internal entity in the starting circle of the imaginary state in the 'Forward' The representation of the space in the entity (including principles). '4' is the coordinate translation value of the distance of the starting symmetry point from the origin.

5.0. An enumeration of the symmetric combinations of 'anti spaces' and 'continuous' geometric 'contradictory symmetric logic':

5.1. A star (solid state) at the center.

No star at center point (imaginary state)

5.2. A planet at the center of a symmetric circle

No planets at the center of a symmetrical circle

5.3. Point of symmetry, no planets

Symmetrical points with planets

5.4. Inside the starting circle 3ⁿShrinkage

Inside the starting circle 2ⁿShrinkage

5.5. Internal symmetry of the starting circle does not oscillate

The axis of symmetry is fixed in one position

Starting circle internal symmetry axis shock

The axis of symmetry wanders in 3 dotted lines

The compound relativity of certainty and uncertainty principle: The vibration of the symmetry axis has the uncertainty property and at the same time there are rules of change. When the observer does not know the change rule, it is unpredictable; the observer knows the vibration change rule, because there are multiple changes at the same time, the observer will observe multiple changes at the same time, or they are entangled.

Figure 13| includes 5.1 , 5.2 , 5.3 , 5.4 , 5.5.

6.1. Structure and internal linkages of composite spaces

Fig .14| Composite spatial properties and different kinds of spatial correlations. Composite space is a superimposed space system. The superposition of Imaginary space is dominant, and the superposition of real space is recessive. The process of space changing from superposition state to unique state is called "Imaginary transformation reality ", which is called "Imaginary and real alternation ". The observer inside the superposition system can not perceive the superposition of the system. The real state also exists 3ⁿ staggered association, not drawn in the figure. The real space is associated with the Imaginary space and the attributes are different.

6.2. The outer space system of the solar system

Fig .15 Solar system, outer Imaginary symmetry system (dark matter system). At $2^8 \sim (2^8)_i$ Between is the superposition space, in this superposition space the entity visible celestial body, is the change. It could be a ghost object (here just the hypothesis needs the thorough research and the experiment to prove).

7.0. Structure and location of the central point of the turn system

7.1. Rotating circular space fields and orbits

Fig .16| a complete and equal 'six-symmetric circle 'system, the starting circle is an entity and the symmetric circle is a positive imaginary state. around the center of the starting circle to form a circular space field of three r times the radius of the starting circle.

Figure 17|A complete equal 2-fold symmetric circle system, consisting of a solid and a Imaginary state symmetric circle. Rotate around the starting point of symmetry (tangent point) to form a toroidal space field with 4 times the radius of symmetry circle r .

7.2. 2ⁿ Geometric principles of planetary orbits formed by a double-expanding symmetric space

Fig .18| Yellow is the planetary orbit, the black dashed line is the circumference of the expanding symmetric circle, red is the starting circle, black line is the axis of symmetry, the co-cutting point of the symmetric circle is the starting symmetry point; red is the starting circle. the arrows are symmetrical directions.

8.0 The law of variation of the origin (center or center) of the starting circle

8.1. Complex attribute change systems

The center point of rotation (the center of a rotating circle or the ' long axis' center of an ellipse):

1. a symmetric point is the center point of the rotation of a symmetric circle.
2. A central point or symmetry point on the starting circle is the center point of rotation, where the coordinate system (origin) is translated
3. Property is represented by $F, F_n = (i)^n$ Imaginary number attribute alternate system.

Figure 19|2ⁿ and 3ⁿ The laws of transformation:

- Ⓐ inside the starting circle 3ⁿ Change, external is 2ⁿ Change.
- Ⓑ inside the starting circle 2ⁿ Change, external is 3ⁿ Change.
- Ⓒ inside the starting circle 3ⁿ Change, external is 3ⁿ Change.
- Ⓓ inside the starting circle 2ⁿ Change, external is 2ⁿ Change.
- Ⓔ mirror relations of entanglement.
- Ⓕ Chaos is not clear.
- Ⓖ Interrelation and regular transformation.

8.2. System F of real number 'attributes' $n = (-1)^n$ (alternating between positive and negative attributes)

Fig .20| In the composite system, there are three axes of symmetry, which are the superposition of three-circle system and two-circle system. In the view of the total observer, the middle yellow axis of symmetry is the equilibrium axis of symmetry, and the black axis of symmetry on both sides is the product of the translation and division of the yellow axis of symmetry; it can also be said that the black axis of symmetry moves flat to the center of the starting circle to synthesize the yellow axis of symmetry. In the process of symmetry axis splitting synthesis, their symmetrical circle system changes from two-circle symmetry system to three-circle symmetry system at the same time. During the whole process of splitting and synthesis, the observers who stand on their symmetrical circle system also split and synthesize, all of them can not perceive the existence of the other system, and the other system becomes the invisible space of their own existence.

9.0. Translation of coordinates of symmetric points (translation of coordinates origin).

9.1. Two 'symmetrical circle' systems inside the starting circle

figure 21| a, in the middle is the yellow coordinate axis, and the two sides are the coordinate axis on the starting symmetry point. because the symmetry system on the left and right sides has to rotate around the starting circle, their symmetry axis is combined into a yellow symmetry axis. But in the view of the observers in the systems on both sides, they simply translate the origin of the coordinates from the starting symmetry point and do not change themselves.

9.2. Three 'symmetrical circle' systems inside the starting circle

Figure 21|b, the observer at the level of a symmetric circle believes that the coordinate axis shifts to the center of the starting circle due to the symmetrical oscillation balance of the left and right 'cis and reverse'. At this time, the two symmetrical coordinate axes coincide and get balanced, but there is still a shock balance inside the starting circle, so the central coordinate axis splits at the tangent point of the two symmetrical circles in the first level and the starting circle. Two-level balance. At this time, there is an observer at the starting circle level. Because he has a uniqueness, he can only observe his own coordinate axis translation.

At the third level, each symmetry circle will also split into two symmetry axes, which has reached equilibrium. At this time, the uniqueness is broken, and the observer will perceive the existence of multiple symmetry axes. When we observe, there will be uncertainty and entanglement Phenomenon, this situation becomes more complicated as the level increases, and it enters chaos and uncertainty and multi-body entanglement..

9.3. The ' composite' symmetric circular system inside the starting circle

Fig .21|c the level goes deep, the axis of symmetry becomes more and more chaotic, but nature has a way to correct the confusion and uncertainty, which is the compound logic method: this method is to

use a fixed axis of symmetry as the absolute coordinate system, and the depth of the other levels around this absolute axis has a regular reciprocating vibration.

$$A_n = r/3 \pm r/3^2 \pm r/3^3 \pm r/3^4 \pm r/3^5 r/2 \pm r/2 \text{ or } r^2 \pm r/2^3 \pm r/2^4 \pm r/2^5$$

(See the principle of concussion later)

9.4. The overall geometric and spatial structure of the 'Shun' and 'anti' symmetric systems (a full picture of the sequence and the inverse)

Figure 21d, the 'start circle' in the figure is a system with 'three symmetric circles' inside. The left and right 'cis and reverse' symmetry system uses the center point of the red starting circle as the origin, and the co-tangent points of the two sides of the starting circle and the symmetry circle are the starting symmetry points. The origin of the symmetry axis splits and vibrates at the center of the starting circle, and the co-tangent point of the inner one level is the constant standard axis of symmetry, perform An Vibration.

Figure 21e Two starting circles do not overlap the system. On the left is the negative imaginary number 'start circle' system, and on the right is the positive real number 'start circle' system. The interior of the two starting circles is still a system of two symmetrical circles. A common tangent point of an internal symmetric circle at an internal level, a A of an invariant standard axis of symmetry, perform An Vibration.

10.1. The internal structure of the 'composite' starting circle and the position relation of the symmetry point and origin.

Symmetry and fragmentation 2^n and 3^n are two separate non-interference systems.

Figure 23| 3^n independent system geometry (complex structure, many types, just give an example)

In figure 23, the symmetry axis of the symmetric circle is at the center of the circle at the next internal level, and the internal symmetry axis of the central circle is at the symmetry point of the symmetric circle at the next level. The structure and change of the starting circle, the change of the external symmetry point and the origin, the structure of the internal system of the starting circle is the formation mechanism of the hot Jupiter, the mini asteroid system. the translation of the symmetric origin, resulting in eccentric symmetry, resulting in the formation of an elliptical orbit. The derivation is that hot Jupiter, mini-planetary systems are not formed at the same level as solar system planetary systems.

10.2. The internal 'reverse' structure of the 'composite' starting circle, and the position relation of the symmetry point and origin.

Figure 24| 2^n System independent geometry diagram (complex structure, many kinds, here only one example)

in figure 24, there is no central circle, only one starting symmetry point. the axis of symmetry of a symmetric circle is at the tangent points of two symmetric circles. is the formation mechanism of binary or multiple composite binary systems. The translation of the symmetric origin, resulting in eccentric symmetry, resulting in the formation of an elliptical orbit.

10.3. Starting circle's' continuous and counter' composite system (2^n and 3^n are two systems of mutual foundation and background)

Fig .25| is the structure and variation of the starting circle and the change of the external symmetry point and origin. An internal system with 'two' intersecting and partially overlapping, which forms two inner symmetric circular subsystems, and at the same time has three equal central circles plus symmetrical circles of the equilibrium system. This composite system interacts with each other and influences each other 's underlying hidden space. The internal observers of different structures can not see different other mirror systems, and their variation associations take many forms. Relative to the outer symmetry system of the starting circle, the starting circle is the change and constitution principle of the hot wooden star, and the forming mechanism of the mini-planetary system. translation of the symmetric origin, resulting in eccentric symmetry, resulting in the formation of the orbit of the ellipse.

This suggests that hot Jupiter, the mini-planetary system is not at the same level as the solar system^[layers].

10.4. The internal 'reverse' structure of the 'composite' starting circle, and the position relation of the symmetry point and origin.

Fig .26 Composite symmetry axis. the axis of symmetry is at the tangent point of the symmetric circle.

The axis of symmetry of the center circle is an asynchronous change of the axis of symmetry.

10.4. 2ⁿ and 3ⁿ are two separate and fused composite systems.

It is the origin of the solar system's planetary system and the forming factor of eccentricity. It is also the formation factor of the hot Jupiter and mini planet systems.

Figure 27| Figure 27 and Figure 26 are entangled mirror associations. In Fig. 27, the structure and variation of the starting circle, the external symmetry point and the origin change, and the structure of the starting circle are the formation principle of hot Jupiter and the formation mechanism of the mini-planetary system. The translation of the symmetric origin, resulting in eccentric symmetry, resulting in the formation of an elliptical orbit. This suggests that hot Jupiter, mini-planetary systems are not formed at the same level as solar system planetary systems.

10.5. The "forward" structure within the starting circle of the 'composite', and the positional relationship between the point of symmetry and the origin.

Fig. 28| a is a composite symmetry axis of the center circle and the symmetry circle both at the tangent point, or the symmetry axis of the center circle and the symmetry circle are both at the center of the circle, which is the synchronous change of the symmetry axis.

11.0 Derivation of the physical meaning of the Titius-bode law.

11.1. Broken in symmetry of the track, and symmetry in broken.

Fig .29| 'black solid line coordinate system' is the 'classical' rectangular coordinate system as the absolute' rigid 'spatial position reference system. On the left is the Imaginary cis system and on the right is the real positive system. They interact to form a balanced axis at the center of the starting circle; the center of the starting circle becomes the coordinate origin of the system on both sides. Red is the coordinate system after translation along the x axis. The black dotted line on the left is an inverse 'starting symmetry point' and a 'reverse' symmetric mirror solar system (Imaginary solar system).

The two left and right symmetry systems with the starting circle as the symmetry circle are virtual and real (not a symmetry point without internal structure). They form a total of three symmetrical point systems in the starting circle:

1. The imaginary circle symmetric system on the left, the symmetric system observed by the imaginary observer. This is the reason for the broken imaginary number.
2. The real number circular symmetry system on the right, the symmetric system observed by the real observer. This is the reason for the broken real number.
3. With the red symmetry axis as the dividing line, the symmetrical circular composite symmetrical system on the left and right sides is the system observed by the total observer, a perfect system without breakage (the breakage is also symmetrical), or perfect Broken system.
4. We humans are the observers standing on the right, our own reference system is the real number system on the right, the observation results of the left or right observers are relatively whole (total observers), there is a flaw, there is a broken. However, the "yellow planetary orbit" system has changed from a perfect circular orbit to a relatively perfect elliptical orbit.

The perfect point of the circle is that the radials are equal. The break of the ellipse is that there are two unequal axes, but the ellipse is still symmetric at the origin.

11.2. Determination of origin and translation logic of symmetric points:

In Figure 29, there is a symmetric system

1. the imaginary number symmetry system on the left.

2. real number symmetric system on the right.
3. composite system perceived by the total observer.

the positions of the symmetry points of the three systems, relative absolute rigid spaces, are different. The total observer then observes the symmetry system in which each observer is located, which oscillates between the center point of the starting circle and the starting symmetry point on the left and right sides because of the balance of mirror symmetry. The period of this rotation should be synchronized with the period from expansion symmetry to inverse regression to the starting symmetry point (different observers, different observations), and synchronization and unsynchronization constitute a more complex system in turn.

11.3 Geometric derivation of the Mercury orbit:

From the perspective of the general observer, the two systems cannot be absolutely independent of each other, and they are 'virtual and real' to each other. Observers inside the virtual or real system cannot perceive the other party's existence. Become a hidden state or a dark state (collectively called a virtual state). but the two systems are entangled mirror relations to the general observer. They act exactly the same to the general observer. The total observers in different positions will cause systematic errors due to differences in the observation angle, location and information transmission; similarly, different observers at different levels will also produce systematic errors within this level. To a certain extent, qualitative changes will occur, rupture or mutation. This mutation leads to the development and change of the system, it can also cause the system to collapse and perish, and at the same time produce a new system.

Fig .21|c In the view of the total observer, the left and right 'cis and inverse' are mirror relations, are 'imaginary and real' two symmetric systems, which rotate around their respective black starting symmetry points respectively. This rotation destroys the symmetry stability of the cis-trans system and makes the symmetric system disintegrate and the system disappears. If the system is going to maintain symmetry, it's going to change the center of rotation and keep it balanced, Clearly:

At the tangent point of the two starting circles is the center point of rotation equilibrium, so the system with the tangent point of the two "starting circles" as the center is preserved. What the general observer finally sees is two rod-rotating structures rotating at the starting point tangent point. When the rotation trajectory of this system is also recorded by the total observer, then the rod rotation system does not exist, and in the view of the observer who can record the rotation trajectory, the system evolves into two circular space fields at a higher level relative to the observation frame of the total observation itself. The basic space for the survival of a system that becomes an internal observer on a trajectory.

Figure 21|c Starting circle non-overlapping composite system (binary or multi-star system)

Figure 21|d Starting circle overlap system (our current solar system before coordinate translation)

Figure 21|d Starting circle overlap system (our present solar system). in the view of the total observer, the left and right two 'cis and inverse' are mirror relations are entanglement relations, are 'imaginary and real' two symmetric systems, because they are overlapping starting circle systems. Is a start circle, two-layer overlap of the composite start circle space system.

Apparently,

What the general observer finally sees is that the center of the starting circle is the center point of rotation equilibrium, so two 'Imaginary, real' mirror symmetry systems rotate around the center of the starting circle and become a symmetrical, entangled and complementary system. is a rod-rotating structure system rotating in the center of the starting circle. When the rotation trajectory of this system is also recorded by the total observer, then the rod rotation system does not exist, and in the view of the observer who can record the rotation trajectory, the system evolves into two circular space fields at a higher level relative to the observation frame of the total observation itself. The basic space for the survival of a system that becomes an internal observer on a trajectory.

Since the starting circle and the zero-level symmetric circle on both sides produce a larger two-fold symmetric system, in Figure 21|d, a symmetric system is formed at the original starting symmetry point around the center point of the starting circle, which is the orbit of Mercury and the planet above is Mercury (the half-long axis $=r$, the origin is the center of the starting circle). Because Mercury produces different principles from other large planets, its orbital inclination is also different from that of other large planets.

12.0 Determination of origin and oscillation of axis of symmetry

Because the system of Imaginary and real symmetry is independent of synthesis is the equilibrium process to deal with contradictions, this equilibrium process is oscillation and fluctuation. This oscillation process allows the synthetic symmetry axis to split into two symmetry axes, Imaginary and real, at the next level within the starting circle.

12.1. Inside the "start circle" is a hierarchical division system of "3ⁿ times"..

Figure 21|a is an overlapping symmetric circle system. The division of symmetry axis is left and right mirror symmetry division. The middle yellow axis of symmetry splits into layers within the starting circle; the axis of symmetry on the tangent points of the left and right two inner layers of the symmetrical circle.

12.2. One-dimensional and two-dimensional observer observations and the observed 'origin and axis of symmetry'

1) The axis of symmetry on both the left and right sides is also the starting axis of symmetry. The balance point of the two symmetrical systems of right and left is the center point of the starting circle. The axis of

symmetry passing through the center point is the center axis of symmetry. In the absolute coordinate system, it is the 'coordinate origin'. The symmetrical system of 'cis and reverse' on both sides rotates around the center point. According to the observer of the one-dimensional linear reference system, this system is a bar system.

2) Two-dimensional plane observer, what was observed was a vortex system..

12.3. Oscillation principle

1) starting circle 0 level symmetry axis. On both sides of the starting circle ,2nd the starting point of symmetric expansion. This axis is the starting symmetry axis. The whole system's 'parallel and inverse' balance, on the synthesis center symmetry axis.

2) splitting of the center symmetry axis.

When the center begins to expand from level 0, the starting circle corresponds internally to an internal 3rd the symmetry of the contraction of times, the interior produces three circles from the straight line to the axis of the coordinate, the symmetrical circle on both sides, and the center circle in the middle. The two axes of symmetry on the tangent point of the center circle and the two sides of the symmetrical circle are the left and right axes of symmetry after the split of the center axis of one layer contraction. There are two outcomes,

[1] Ipsilateral split: that is, the left side of the 'anti' split to the left side of the symmetry axis, the right side of the symmetry axis split to the right side, left and right symmetry, system 'cis' and 'anti' balance. At this point, the observer in the "cis" and "inverse" systems will see the origin of the symmetric origin relative to the absolute coordinate system, and move $r/3$. in their respective directions.

[2] Heterolateral split (reverse splitting): is the left side of the 'reverse' to the symmetrical axis and side split, the right side of the symmetrical axis left side split, left and right symmetry, system 'cis' and 'reverse' balance. At this point, the observer in the "cis" and "inverse" systems will see the origin of the symmetric origin relative to the absolute coordinate system, Translate $r/3$ to their respective opposite directions.

[3] the observations of the total observer. The total observer stands on the absolute invariant coordinate system observation result: the [1], the [2] two kinds of results exist simultaneously, transforms mutually, this kind of transformation manifestation is the reciprocating oscillation. but observers in 'cis or inverse' systems can only observe the existence of their own systems and can not directly perceive the existence of mirror symmetry systems (if perceived, rise to total observers).

We humans live in the solar system, the current human methods of observation and sensing instruments and equipment, can only be 'forward' observers.

3) There are two kinds of observations of the internal one-level observer: one is [1], the other is [2], the two results are different, but like the two solutions of the quadratic equation of one variable, it is the real reflection of the real world, one is explicit, the other is the recessive background.

Assuming our [2] belongs to our world, then the absolute position of the origin of our forward world relative to the starting point is

If x is a level of origin translation distance, then

According to [1]

$$x = r - r/3 = r(1 - 1/3) = 2/3 r \quad (1)$$

According to [2]

$$x = r + r/3 = r(1 + 1/3) = 4/3 r \quad (2)$$

Let the radius of a level of symmetrical circle in 'red' be r_1 , then $r = 3r_1$,

Under (1)

$$x_{(1)} = r - r/3 = r(1 - 1/3) = 2/3 \times 3r = 2r$$

Mandate (2)

$$x_{(2)} = 3r_1 + 3r_1 = 4r_1$$

4) Four kinds of oscillations of the symmetry axis of the second level inside the first level, set the amplitude value to a

- ①、'Straight and reverse' vibration towards 'left' : $+a = r_1 + r_1/3^2 + r_1/3^3 + r_1/3^4 + r_1/3^5 = +0.497942386$
- ②、'Straight and reverse' vibration towards 'right' :- $a = -r_1 - r_1/3^2 - r_1/3^3 - r_1/3^4 - r_1/3^5 = -0.497942386$
- ③、'Straight and reverse' staggered 'same direction' vibration' :- $a = -r_1 + r_1/3^2 - r_1/3^3 + r_1/3^4 - r_1/3^5 = -0.251028806$
- ④、'cis and reverse' staggered 'reverse' vibration: $+a' = +r_1 - r_1/3^2 + r_1/3^3 - r_1/3^4 + r_1/3^5 = +0.251028806$

Then the distance after the origin oscillation is x , $A \Rightarrow (\pm a, \pm a')$

$$x_n = x \pm A.$$

There are eight values in x_5 , four in the forward direction and four in the reverse direction.

$$\textcircled{1}^{\text{anti-}}x_5 = x + a = 2 + 0.497942386 = 2.497942386 \text{ or. } \textcircled{1}^{\text{Forward}}x_5 = x + a = 4 + 0.497942386 = 4.497942386$$

$$\textcircled{2}^{\text{anti-}}x_5 = x - a = 2 - 0.497942386 = 1.502057614 \text{ or. } \textcircled{1}^{\text{Forward}}x_5 = x - a = 4 - 0.497942386 = 3.502057614$$

$$\textcircled{3}^{\text{anti-}}x_5 = x + a' = 2 + 0.251028806 = 2.251028806 \text{ or. } \textcircled{3}^{\text{Forward}}x_5 = x + a' = 4 + 0.251028806 = 4.251028806$$

$$\textcircled{4}^{\text{anti-}}x_5 = x - a' = 2 - 0.251028806 = 1.748971194 \text{ or. } \textcircled{4}^{\text{Forward}}x_5 = x - a' = 4 - 0.251028806 = 3.748971194$$

12.4. Changes in the level n of the value of r:

- 一、 $r/3 = r/3$
- 二、 $r/3/3 = r/9$
- 三、 $r/3/3/3 = r/27$
- 四、 $r/3/3/3/3 = r/81$
- 五、 $r/3/3/3/3/3 = r/243$
- 六、 $r/3/3/3/3/3/3 = r/729$

12.5. Vibration principle table

Table 1, a ranking table of vibration levels of the origin of planetary coordinates with respect to absolute coordinates.

	0	One	2	3	4	5	6	7	8
0.Venus	$r/3^0=r$,	$r/3=r/3$,	$r/3^2=r/9$,	$r/3^3=r/27$,	$r/3^4=r/81$,	$r/3^5=r/243$,	$r/3^6=r/729$,	$r/3^0=r$,	$r/3^0=r$
I. Earth	$r/3^0=r$,	$r/3=r/3$,	$r/3^2=r/9$,	$r/3^3=r/27$,	$r/3^4=r/81$,	$r/3^5=r/243$,		$r/3=r/3$,	$r/3=r/3$
II. Mars	$r/3^0=r$,	$r/3=r/3$,	$r/3^2=r/9$,	$r/3^3=r/27$,	$r/3^4=r/81$,			$r/3^2=r/3$,	$r/3^2=r/3$
III. Asteroid	$r/3^0=r$,	$r/3=r/3$,	$r/3^2=r/9$,	$r/3^3=r/27$,				$r/3^3=r/3$,	$r/3^3=r/3$
IV.Jupiter	$r/3^0=r$,	$r/3=r/3$,	$r/3^2=r/9$,					$r/3^4=r/3$,	$r/3^4=r/3$
V. Saturn	$r/3^0=r$,	$r/3=r/3$,						$r/3^5=r/3$,	$r/3^5=r/3$
VI. Uranus	$r/3^0=r$,							$r/3^6=r/3$,	$r/3^6=r/3$
VII. Pluto									
VIII. X Planet									

Because the level changes to 36, it is the level of termination, and the n of 2n and 3n change synchronously and correspond to each other, then the space of n=7,8,9 of 2n can only be inverse or imaginary in the real field Projection space, so their symmetrical axis rotation adjustment value is different from the way n changes within n=6..

Different levels and the same level of observers at different times, corresponding to different adjustment layers, will lead to changes in the adjustment value.

2ⁿ and 3ⁿ And there are two kinds of n values: one-to-one correspondence and independent variation.

12.3. Symmetrical Axial Oscillation laws of the Venus:

Because Eris is a virtual reverse symmetric starting circle, its internal structure is relatively forward 'a 3ⁿ-fold contraction of the real starting circle' and becomes the opposite internal 2ⁿ contraction. Therefore, the vibration relationship of his internal symmetry axis is also different from the 1/3ⁿ of the "forward" starting circle, which is a 1/2ⁿ relationship.

Let the amplitude be A_{2ⁿ}, then:

$$A_{2^n} = 1/2 \pm 1/2^2 \pm 1/2^3 \pm 1/2^4 \pm 1/2^5 = 0.34375 \text{ or } 0.96875.$$

The imaginary reverse symmetry (refer to Figure 12), the symmetry of its 'symmetric circle' is also opposite to the 'forward' symmetry of the internal structure, which is a 3ⁿ expansion method.

12.4. Principle of uncertainty in the relativity of orbits

Uncertainty principle: In quantum mechanics, there is the uncertainty principle. Macroscopically, there is still the phenomenon of uncertainty, because from one level into the inner one level, the axis of symmetry splits into two, at this time the total observer can observe two. After entering the inner two levels, the axis of symmetry splits into six (the two plus one of the original split of the first level, the mother of the split of the original one level), and when entering the inner three levels, there will be 18 changing axes of symmetry. Each axis of symmetry satisfies the principle of division and synthesis, and the previous level or the total observer can only observe one at a time, then this relationship leads to each measurement being $r/3^n$ times the original, determined by the determined "unique event" It became 'probability event' and 'entanglement event'.

This is an inevitable result of the observer's observation and is called the 'relative' uncertainty principle (the macro and micro uncertainty principles are interlinked).

12.5. Principle of change of absolute nature of orbit (deterministic principle)

relative to the 'absolute coordinate system', the level of each level goes deep and the level goes up, and the observer inside the changed level itself will observe a different observation result from the original, called qualitative change, this change relative to the absolute coordinate system is called the absolute change principle.

13.0. Compound Derivation of Titus-Bode law

Let R_n be the semi-major axis of the planet,

$$R_n = X_n + \beta 2^n r \quad (1)$$

$X_n \Rightarrow$ (vibration principle, ①、② of x) is the horizontal movement value of the coordinate axis relative to the absolute coordinate system, n represents the level inside the starting circle, r is the base radius. β is the adjustment coefficient, $\beta \Rightarrow (1, 1/3, 1/9, 1/27, 1/81, 1/243)$. The size of β determines the size of the boundary of the solar system.

$$X'_n = \sum_{i=1}^5 k_{=(r/3^i)} \quad (2)$$

When the unit of measurement of r is r_1

$$R_n = x \pm X'_n + 3\beta 2^n r_l \quad (3)$$

Only when $x = X_{(2)}$ meets our solar system, expand R_n

13.1. Observer on a whole system at a level within the starting circle.

Table 2. Is the regular planetary orbit.

Observers standing on the "one level" take the overall one-level reference system as the coordinate system (not standing on the earth). The "coarse" derivation of the observation conclusions of the observers on this frame of reference. Observers in this coordinate system observe that the symmetry axes of other planets are unchanged (changes in other planets have little effect on communication, and such minor changes are not considered), but the standard size is the semi-major axis of the Earth To measure the solar system, the small changes in the earth's semi-major axis have a great influence on the measurement results. The average value of the earth's coordinate axis vibration must be considered. This method of observation and the way of considering the results of observation are similar to the traditional Titius-Bode law of thinking.

name	$X_{(2)}$	$3\beta 2^n r_l$	R_n	AU	Earth $R_{\oplus}$ *** of values
Mercury	4	0	4	0.3811	10.497
Venus	4	3×2^0	7	0.6828 or 0.73678	10.251 or 9.502
Earth	4	3×2^1	10	1	10
Mars	4	3×2^2	16	1.524	10.497
Ceres	4	3×2^3	28	2.731	10.251
Jupiter	4	3×2^4	52	5.2	10
Saturn	4	3×2^5	100	9.525	10.497
Uranus	4	3×2^6	196	19.12	10.251
Pluto	4	3×2^7	388	39.799	9.749
X Planet	4 or 2*	3×2^8	772 i or 770	81.246 i or 81.036	9.502
Dark Planet	4 or 2**	3×2^9	1540 or 1538	154 or 153.8	10

* Mercury is a complex of regular and irregular planets.

** Reverse.

***Earth's axis of symmetry within one level is dynamic, and the observer also changes with the axis of symmetry.

Table 3 is an irregular planetary orbit.

the observer standing at the 'one level', taking the overall one-level frame of reference as the coordinate system (not standing on the earth), then the semi-long axis of the earth and all planets is not a constant value, the 'rough' derivation of the observation conclusions of the observer on this frame of reference.

name	$X_{(2)}$	$3\beta^2 r_l$	R_n	AU	Earth $R_{\oplus}$ *** of values
Mercury	4	0	4	0.3811	10.497
Neptune	$4-16.064^{\#}$	$3(2^7-2^6/3)$	307.936	30.03961	10.251
Star	$4-33^{\#\#}$	$3(2^8-2^6/2)$	643	67.669964	9.502

Neptune's orbit and planets have four possibilities 4 ± 16.064 or 4 ± 31.868 .

Eris orbit also has four possibilities 4 ± 33 and 4 ± 99.0968 .

The difference between Eris and Neptune is that Eris is a virtual reverse world that starts with a symmetry point of 2^8 . It is the opposite of the internal structure of the starting circle of the real circle. The internal structure of the starting circle of the world is 3^n , then the internal structure of the starting circle of the virtual world is 2^n , and the vibration of the symmetry axis satisfies $1/2\pm 1/22\pm 1/23\pm 24\pm 25$. The average adjustment value of the two changes produced $=0.34375$ or 0.96875

We call the vibration changes of $1/3$ and $1/2$ as level transitions (these transitions are similar at the atomic level and the macro level). When this change is close to the central axis of the vibration, the change is accelerated, using Kepler The law cannot explain this transition phenomenon. We use the concept of Kepler's law to observe celestial bodies in this period of rapid change. Observers existing in the 'cis or anti' reference frame will observe erratic celestial bodies. May think it is a ghost planet.

*** The Earth's axis of symmetry is dynamic, and the Earth's observer oscillates. If we don't know the exact details of the changes, we can only measure the observations from a probability perspective; from a cis point of view alone, there are four kinds of mean oscillation cycles per Earth value, and there are also four kinds of oscillations of the observed planets in a symmetric system, and their combination: $C4^1 \cdot C4^1 = 16$ kinds, when we know more details, the type of combination is less; but as the level goes deeper, the more possibility we face the combination, Will change from unique certainty to multiple combinations of uncertainties and entangled states, and vice versa will expand from the inside out of the uncertainties, closer to the observer's frame of reference level, the greater the certainty, and finally to uniqueness (similar to quantum decoherence).

13.2. Observations of the solar system by observers on Earth

Expand R_n

Table 4. Table of orbits of regular planets

The "one level" observer located inside the starting circle on the earth. The standard size of the observer on the earth is the semi-major axis of the earth's orbit. This semi-major axis vibration change cannot be perceived by the observer on the earth. At that time, it will be considered that the semi-major axis of the earth is a constant value. Observing other planets with this constant value method must inevitably consider the vibration value of the origin of other planets in order to derive the correct value of the distribution distance of the planet's orbit. Table 4 is a "rough" derivation of the conclusions of observing other celestial bodies after considering the vibration adjustment values of other planets. Observers on the earth observe the observations of the solar system using their own semi-major axis as a constant ruler.

We previously used the Titus-Bode rule to predict the distance distribution of planets. The reason for the divergence is that we do not know that other planets have vibration adjustment values, and at the same time, we do not know that the value of n for the Titus-Bode rule is limited, and Incorporating Neptune, which originally belonged to irregular planets, into regular planets will inevitably lead to the failure of rules and the confusion of uncertainty.

names	$x_{(2)}$	$3\beta 2^n r_l$	R_n	AU	Earth $R_{\oplus}$ *** of values
Mercury	4-0.251028806	0	3.748971194	0.37489	10
Venus	4+0.251028806	2×3^0	7.251028806	0.72510	10
Earth	4	2×3^1	10	1	10
Mars	4-0.497942386	2×3^2	15.502057614	1.5502	10
Ceres	4-0.251028806	2×3^3	27.748971194	2.7748	10
Jupiter	4-0.251028806	3×2^4	51.748971194	5.17489	10
Saturn	4-0.497942386	3×2^5	99.502	9.9502	10
Uranus	4-0.497942386	3×2^6	195.50205761	19.55	10
Pluto	4+0.497942386	3×2^7	388.498	38.8498	10
X planets	4-0.4979 or 2^{**}	3×2^8	771.5 i or 769.502	77.15 i or 76.95	10
Dark Planet	4-0.4979 or 2^{**}	$3 \times 2^9 i$	1539.5 i or 1537.50i	153.95 i or 153.75 i	10

Mercury is a complex of regular and irregular planets. ** There are four possibilities in reverse, from unique to four simultaneous entanglement states. *** the axis of symmetry of the earth is dynamic, the observers on the earth also oscillate with it, and all the observers on the earth can not perceive this change. only a long period of observation accumulation, and standing on the angle and absolute coordinates of the total observer, can be found in different periods of observation and comparison.

Table 5 The orbits of irregular planets.

An 'one-level' observer inside the starting circle on earth, observing the 'rough' derivation of other celestial conclusions. An observer on Earth, using his own semi-long axis as a constants, observes the results of the solar system.

Name	$x_{(2)}$	$3\beta 2^n r_l$	R_n	AU	Earth $R_{\oplus}$ *** of values
Mercury	4-0.251028806	0	3.748971194	0.37489	10
Neptune	4^*	$3(2^7-2^6/3)$	324	32.4	10
Eris	4^{**}	$3(2^8-2^7/2/2)$	676	67.6	10

14.0. Discussion

14.1. Discussion of the level and position of the observer

① Man is the observer, and standing on the earth, the change of the earth's semi-long axis orbit is not felt by himself. When the earth is the observer centered on his own position and measured the world by his own half-long axis as a 'foot' degree, then the half-long axis is always an integer multiple of a fixed value r . or r , and the natural standard scale is produced. This is the observation of 'Table 4,5'.

② In the non-absolute coordinate system, the semi-long axis of the earth is variable relative to the absolute

coordinate system. Therefore, the measured length is different from the other time. This change is in a certain range of changes, in this range of changes, the results before and after the comparison will lead to differences in the results of contrast, resulting in uncertainty (different time measurement results are different).

So, in the view of the observer on this 'relative absolute' coordinate system in which the non-total observer is located, the coordinate system is changing; the semi-long axis of the earth changes regularly in a certain range, and this change becomes more and more chaotic and uncertain as the layers go deeper and deeper, from the only 'solution' to multiple solutions. This is the observation of 'Table 2,3'.

⑩ In the view of the general observer, these two situations exist simultaneously, influencing each other, at different levels, in different positions, in different frames of reference, from clarity to confusion, or from confusion to clarity, or from a moment of clarity to chaos, which is a hybrid of clarity and chaos. This is one of the reasons for the errors that we have accumulated for a long time, and also the causes of systematic errors and time errors (instrument errors are not included here).

14.2 Historical analysis

We've been arguing about the Titius-Bode law for years, some people think it has no physical meaning, some people think it makes sense, but those who affirm the whole theory don't have a clear explanation for the irregular causes of the irregular planets and irregular moons; the emergence of hot Jupiter makes many people more skeptical and negative about the Titius-Bode law.

From the analysis and derivation of the big planets in the solar system, we know that Uranus and Eris are not regular planets, do not satisfy the Titius-Bode law. We used to have no concept of 'limited' for the n of the Titius-Bode law, and think that we can have infinite values and do not know the irregular source of 'planets', so we mistakenly think that the Titius-Bode law is just an empirical formula or accidental coincidence. The discovery of hot Jupiter, which is believed to be a practical proof of the denial of the Titius-Bode law, is a "fortuitous" interpretation of the theory of the solar system that we do not have enough knowledge of and do not know the law of inevitable evolution.

15.0 Summary

The above analysis shows that the solar system is of various kinds, β determines the type of solar system, x_n Determine the difference of the same type of solar system, in the Titius-Bode law + the physical meaning of 4 is the coordinate system translation of the balance of the left and right Imaginary system. The evolution of the solar system is not the result of random collisions, nor is our gravity just what Einstein said about mass bending to space and Newton said: it is the property of objects so simple; our space is not empty, dark matter is not illusory, parallel world is not just hypothesis and fantasy, it is in our solar system, right around us, and participate in our gravitational process.

From the theoretical derivation here, we can know that the solar system we live in is not just the structural system we observe with existing instruments and the naked eye. They are also composed of symmetrical mirror systems, the solar system with dark matter and the parallel world of the solar system with dark matter.

From this theory we conclude that the structure of the solar system is hierarchical, there are two different levels of the external expansion level and the initial circle internal system, their mechanical basis range is different, the level is different; so hot Jupiter and tiny solar system^[5]. The laws of planetary orbit distribution do not satisfy the Titius-Bode law and are governed by the internal laws of its starting circle.

From the inference of the article, we can see that the semi-major axis of our earth is not static. It changes

periodically. With the change of the semi-major axis of the earth, it will lead to the planetary orbit of our entire solar system and other small objects, Dust rings, belts, etc. will also change. This change is divided into relative change and absolute change. This relative change causes our observations to change. This relative change also promotes symmetric radiation and rotation, Let the entire system produces an absolute change, and at the same time, the absolute change causes the relative change to occur again, and so on.

From this, we derive our solar system, and the comparison of observations over a long period of time will produce different errors.

From here we can know that the Titius-Bode law has a physical meaning, it comes from the gravitational symmetry of our world, our solar system (including other solar systems), is made up of the mirror symmetry world of our visible and invisible dark matter, and the evolution of the planets of our solar system is not an accidental random result, and the evolution of each solar system is the same as the growth and change of our cells. The laws of the genetic genes of our solar system can be understood by the laws of the six-level multidimensional symmetric space.

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