Harmony of Heaven and Mankind

# THE SCRIPTURE OF NATURE

Author Thengo

# HUMAN EMBEDDED IN THE

NATURE

New View of Nature
New View of Space and Time
New Physics
New Big Unified Field Theory
New Cosmography

New Ways of Natural Science Research New....

# The Brief Introduction of The Lecturer

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BLOG (SINA): 天人合一(in English: harmony of heaven and mankind)

## Preface

# The Natural View of Harmony of Heaven and Mankind

In the "Harmony of heaven and mankind—Human Embedded in the Nature", having elaborated the elementary theory and concept of harmony of heaven and mankind, the author evaluated the so-called "Modern Science" which was built on western philosophical idea. The author planned to write a book called "Harmony of Heaven and Mankind—Unified Field Theory", however, having conducted certain study and research, the author discovered that unified field theory could not fully embody the essence and main points of this respect. Therefore, the author changed its title of the book as "Harmony of Heaven and Mankind—The Scripture of Nature"---as it is called now and changed the names of the later books (explanation) into "scripture".

In the contemporary physics, Hawking's theory is the most representative. Hawking is truly attempting to establish a big unified field theory, intending to explain all the phenomena which get involved in these aspects, from microscopic view to original quantum and the Big Bang; from microscopy to great criterion universe of Theory of Relativity, the black hole, cosmic expansion and so on, so as to complete the physics universality.

The reason why the book is the second part of the series of books "Harmony of Heaven and Mankind" is that, an essential thinking of nature becomes the most important after having established the basic philosophical idea and the frame of "Harmony of Heaven and Mankind". This is also the concrete implementation of the natural view in the system of "Harmony of Heaven and Mankind" and the natural extension of the philosophy of "Harmony of Heaven and Mankind". The philosophy essence of modern science is covered by its own unceasing contribution and gloriousness. When modern philosophy, particularly physics, having developed to the present stage, its philosophy's vulnerability and narrowness are revealed obviously, have become a barrier for the development of science and physics. It seems that modern physics and cosmology are very close to completion. However, they lose their bearings and need more time to be explored because that a breakthrough is lacking in philosophy. The author attempts to carry out elaboration from the most basic space-time concept by using philosophic thinking venation of harmony of heaven and mankind and combining with the development of modern physics and cosmology in this book (explanation).

First of all, the confusion of modern physics development was elaborated in the first chapter. At the beginning, based on that the foundation of modern science and physics was determined by the establishment of time and space, Newtonian mechanics was created by the absolute space-time view of Newtonian mechanics; later Newton's absolute space-time view was broken by the relative space and time view of invariable light speed and the relative space and time view of theory of relativity was created; then the indefinite space and time view whose statistical rate was uncertain was found by Quantum mechanics; later the newest physics which took string theory as representative attempted to create ten dimensional (eleven dimensional, multi-dimensional) space and time view that would combine the relative space and time view and the indefinite space and time view, however, because this multi-dimensional space and time view lacked for the basic concept and only attempted to cover microscopic criterion (quantum criterion) and macroscopical criterion (criterion on theory of relativity). This was only one kind of temporary method of improvement. Using this method, people had stepped on the direction of geometry, seeing dawn and direction, however, this method could not solve the ultimate questions; then Hawkingg opened a new train of thought through quantum gravity theory, which sparkled in the darkness, and also introduced the imaginary time and concept to carry out the attempt. However, this theory was not thorough because it had not the establishment and correspondence of physical concept.

In the second chapter, the author at first reflected on the essence of time and space and recollected that the incidental was put before the fundamental in modern physics. Then he examined space and time view of modern physics from philosophy and commentated on all

kinds of theories from methodology's angle of black box, white box and grey box. Next, the author analyzed string theory and pointed out the theory's sparkling places and its fatal deficiency. Actually, the researchers of string theory also felt there were some problems of this theory, however, they could not find outlets because they were fettered by philosophy. The author of this book established FE theory by using of the idea of harmony of heaven and mankind, while this was only a kind of improvement for string theory. Then he analyzed quantum gravity theory and pointed out that wave function was introduced by the theory from the universe macroscopic angle and imaginary time was also discovered, pityingly which was only regarded as mathematics skill.

In the third chapter, using the philosophic thinking of harmony of heaven and mankind, standing on the shoulders of the giant, the author boldly put forward and elaborated a new time and space view. On the base of this new view, he put forward VT time and space theory, which pointing out that time and space were only one measurement way of event (material, energy, information) existence and event could not be determined by time and space, while event was accompanied by them. The time direction of former traditional theory (traditional theory refers to all the theories until now) was essentially unidirectional. To break this tradition, the bidirectional time must be established, thus the tradition could be broken, the fate that black holes blocked future and the beginning point of the universe had to be found. Corresponding to bidirectional time, bidirectional space had been established. Real or imaginary method was used by bidirectional time and space to express, that is, real number and imaginary number. Certainly it was necessary for the universe wave function microscopically or macroscopically to introduce the class string.

Because of the establishment of VT, perhaps people could solve all the present problems which cause physics to be more complicated: the point singularity of large explosion, the beginning point and the border of universe, the maladjustment of black holes, time and space travel and so on. In this book the author also involved with the second law of thermodynamics, parity conservation, chaos and self-organization, unified field theory and so on.

Meanwhile the author carried on the induction of black box and white box for the research method which was used at present and discusses the methodology question, at the same time introducing the concept of the Book of Changes to explain.

In the fourth chapter, from the following angles: improvement of the former string theory and quantum gravity theory, viewer's limitation, mathematics trap, false appearance of Positivism and relativity of truth, Light and shade material, the author further discussed about the cognitive limitation of modern science and the breakthrough of new time and space view.

In the fifth chapter, the author used some complicated questions in the science of neoteric physics and in the real and imaginary time and space view to explain and tested some points of new time and space view.

In the sixth chapter, on the base of the former chapters, the author put forward the brand-new nature view: The Scripture of Nature of Harmony of Heaven and Mankind.

The author does not expect that this book can be regarded as the history of physics, and it is also not a physics paper; the established VT is only a reasonable guess, which has not been carried on precise deduction, and even has not got the so-called demonstration. What's more, on the base of more recollecting about physics which lasts until now and pondering of nature, the author has some new angles to establish the natural view and the world outlook.

After the natural view of "harmony of heaven and mankind" was solved, naturally the next topic would be discussed: "Harmony of Heaven and Mankind—The Scripture of Evolution" about life's evolution. Then the author elaborated another subject: "Harmony of Heaven and Mankind—The Scripture of Health Preserving" (the original name is "Harmony of Heaven and Mankind—Modern Guess of Taoism Health Preserving". Soon after there will be "Harmony of Heaven and Mankind—The Scripture of Having Meat and Grass" (the original name is "Harmony of Heaven and Mankind—The Carnassial and Herbivorous Characteristics of Mankind"), "Harmony of Heaven and Mankind—The Scripture of Normalizing" (the original name is "Harmony of Heaven

and Mankind—Confucian, Buddhism and Tao", "Harmony of Heaven and Mankind—The Scripture of Medical Methods" (the original name is "Harmony of Heaven and Mankind—The Great Practice of Harmony of Heaven and Mankind on Traditional Chinese Medical Science"), "Harmony of Heaven and Mankind—The Scripture of Human Society" (the original name is "Harmony of Heaven and Mankind—Closed Door in Human Society", "Harmony of Heaven and Mankind—The Scripture of Geomancy", which are altogether ten scriptures. The latter two scriptures originally are beyond my plan, because of the statement, that is, "People who own enough wisdom of Buddhism induce everything just by heart without the need of divination". But after having researched the contents of "The Scripture of Nature" and "The Scripture of Evolution", I finally determined to dabble in the field mixed up with black and white, and attempted to unscramble various stances of life.

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# Chapter One Developmental Predicament of Modern Physics

Philosophic thinking of each historical age must draw nutrition and inspiration from the development of modern science; meanwhile it can certainly produce positive and negative instruction function for the development of modern science.

Hereon, the author does not want to conduct the detailed elaboration for the development of physics; he only wants to extract the main aspects of discussion through its predicament. Based on the newest physics, the author perceives the world to get a new space-time view.

# (I) Time and space view of traditional theory

# 1. space and time view of Newtonian mechanics (age)

In the time and space concept of Newtonian mechanics, time and space are mutually independent and they flow evenly and extend infinitely, namely they are absolute time and space which last from the past to the future.

# 2. time and space view of Einstein' (Poi care')s theory of relativity

# (1) time and space view of theory of relativity in narrow sense

Special theory of relativity of Einstein combines time with space through the premise supposition that the light speed is invariable for all viewers and the speed of any material can surpass the speed of light. All the time and space are relative for different viewers. This kind of relativity can deduce the time and space of another reference system through one such system. That is to say, for a viewer, the quality of object of relative movement always increases, the length always reduces and the time always lengthens. After approximating the object which is smaller than the light of speed, we can get the result of Newtonian mechanics. Special theory of relativity does not combine time and space with event.

# (2) time and space view of general theory of relativity

In the non-inertial space and time, through the equal idea of gravity and acceleration, general theory of relativity connects time and space with events. Space and time may occur curving, which is related with events. General theory of relativity can become special theory of relativity after simplification. Time and space view of general theory of relativity steps forward on the base of Newtonian mechanics and special theory of relativity and it is downward compatible. The relationship of time, space and event is from irrelevant to related, from absolute to relative. Because its relativity expresses the transition relativity still according to the "classical" way of continual space and time event, it is challenged: representative of point singularity, large explosion and black hole and the challenge of quantum mechanics.

# (3) time and space view of quantum mechanics

The time and space view of quantum mechanics takes indeterminate principle as representative, describes microscopic movement trough wave particle duality, expresses the form of matter motion through probability and avoids direct and definite connection of time, space and event through one kind of open thinking mode. This direct and definite connection is replaced by uncertain process to get definite statistical result.

# (4) time and space view of string theory

After discovering a lot of new particles, according to the sorts and characteristics of fermions and boson, simultaneously to remove the contradiction between theory of relativity

and quantum mechanics and combine the merits of them, people adopt the mode of quantum mechanics in microscopic respect and the mode of theory of relativity in macroscopic respect. Thus we have microscopic dimension and macroscopic dimension. Microscopic demotion needs to consider the characteristics of many kinds of particles of fermions and boson and thus creates string theory of ten-dimension of fermions, which is studied now, and twenty six-dimension of boson. Such time and space is one kind of cross-breeding, middlebrow and comprehensive attempt; while the view of time and space still does not separate from the former train of thought and stays in the age of theory of relativity. So is M theory.

# (5) time and space view of quantum gravity theory

Quantum gravity theory draws into universe wave function and regards the entire universe as its object. It regards space, time and event as uncertain probability and then carries on the historical summation. At this moment, people discover that quantum gravity theory must describe time just like real number and imaginary number do, what's more, the imaginary time is also related with the direction of space, while the physical meaning of imaginary time, which is only regarded as a mathematics method (or skill) to copulate the answer of real time and space, is not given.

# (II) Critique of time and space view of traditional theory

# 1. self-contradiction and difficult position of traditional time and space view

- (1) Newtonian mechanics is basically sufficient according to the criterion of person's naked eyes, while it will occur problems in microscopic criterion (one statement is 1/10000000000 meters) and macro-scale criterion (one view is 30 miles)
- (2) In the description of rapid movement, Newtonian mechanics has been proved error.
- (3)The irrelevance of time, space and event of Newtonian mechanics is one kind of mechanical and absolute space-time.
- (4) To solve the contradiction between theory of relativity and quantum mechanics, string theory, circle theory and quantum gravity theory contains a lot of methods aiming at combining them, but the result has not been successful yet.
- A. String theory worked out five solutions and M theory tried to unify it and failed to get satisfactory conclusion because it lacked of idea; simultaneously each time it must carry on the computations of two kinds of field and particle, which puzzled it, because there appears a pair of universe.
- B. Quantum gravity theory is forced to draw in the explanation of "imaginary' time which has no physical meaning.

# Chapter Two Reconsideration and Inspiration of Difficult Position

From the above analysis on the difficult position and contradiction of modern physics development, we can get inspiration and also see light; however, we should carry on reconsideration on the essence of time, space and event.

# (I) Reconsideration on the view of time and space

Time is determined by the vibration frequency of one kind of absolute atomic. This means that time is determined by movement itself and event itself and also decided in certain place of the world. Just like the clock in upper air walks more slowly than the one on the ground this kind of vibration is decided by one kind of reference system. Therefore the so-called speed of light which is invariable is sure to be the reversed conclusion, only negative number multiplied by negative number gets positive number (Einstein is lucky just like a blind cat runs upon a dead mouse). Therefore theory of relativity must be rewritten, at least, explained once more. The clock of mechanical movement does not know the secret, therefore, it accidentally leaks the secret.

In fact, time should be related with the events. The main body of this event may be any independently existent symbol of quality, energy and information.

Space, in essence, is also an accessory of event, just like time. In the linear space, an event corresponds to a space. An event defines a space rather than an event happens in a space; otherwise the space is windy and non-existent.

Time and space define the events and the events also define time and space. This sentence should be said in reverse order. Since time and space do not exist independently, they will not be mutually decided or connected with each other and should be related with events through events.

Now it should be clear that under the definition of one second when a clock vibrates nearly 1,000,000,000 times, what the factors affect the vibration frequency are. Whether this kind of definition of time is only a special case of relative quantity and other time may as reference system to amend it, which speaks for that the equipment of recording time can create different process because of its difference and even accounts for the essence of time.

From this point, we can see that the essence of time is the measurement of the change of energy, information and material process (event process). Problem is that time is so defined, we cannot first define time by using the change of space and then use time to measure the change of space.

Suddenly the author realizes the proposition of Buddhism is that, there is only karma relationship in the world. In fact, time is drawn off. In the linear time view, an event corresponds to a certain time, which is actually a kind of afterward description method. An event defines certain time rather than an event happens at certain time; otherwise the moment does not exist. Time is the mark which is made to explain the order of time.

Buddhism only talk about karma, causes and effects, namely they abandon time and space to obtain eternal, just like nirvana rebirth.

Taoism and Chinese traditional philosophy never separate time from space, which is slightly superior to karma, causes and effects. Only Yin and Yang and Five Elements even has no order, space and mode (the reason comes before the result) and has only mutual relationship.

Originally, time and space are the measuring methods of event existence, while the joke of "a person in Zheng (a small country in ancient time) bought the shoes". He would rather believe

the appearance of the shoes than his own feet. Eleven-dimensional space is just like the appearance of the shoes, which may not exist, or be measured wrongly or forced to come into being by theory of relativity and quantum mechanics. Actually, ten dimensions or eleven dimension are not needed.

In space and time of theory of relativity, because they exist relatively, without a time and space, another one cannot be described or if one time and space will be described and another one must be used as reference system.

Finally the author understand the light speed of Einstein could not surmount, which represents that space and time are not to be possible to surmount and also represents the most fast speed of things' development in the world cannot surmount the speed of light, because the light of speed represented the utmost limit of the development speed of time, space and related events. If the speed of our motion is faster than speed of light, we can only reach the future earlier than others and then come back; we cannot return the past in no way until we dig an insect hole of time. This situation reveals that the limit of traditional time and space, which is the direction of time that is related with the so-called light of speed.

Traditional theories have a problem which cannot be shunned. The sparkling place of theory of relativity lies in it maintains that there is no absolute time and space (Newton's viewpoint), while time and space are relative. General theory of relativity further maintains that events are also relative and time, space will change with quality. However, the problem lies in that one is compared with another and without one, another does not exist.

At present, in terms of the "science" definition of time and space, time and space permit that negative numbers are relative to the spatial zero point; while for imaginary numbers, it is not possible to imagine. Imaginary numbers are the results of rooting of negative numbers and what does its physical meaning mean in time and space. Multiplication is the covert operation of addition (all operations in computer are addition operation). Rooting is the inverse operation of multiplication, especially the inverse operation of the same numbers and then what does it mean? What physical meaning does it correspond to? What does it correspond to in time and space? If negative numbers represent the past, and then rooting is returning to the past—time flows backwards. The above mentions that traditional theories cannot do this, therefore, they need imaginary numbers and a beginning point (zero point), which is infinitely far from the past has a boundary to avoid this kind of awkwardness. Certainly everybody knows that big explosion (Big Bang) is found, while traditional theories suddenly die, because this beginning point cannot be found. It is the fate.

Suddenly the author understands that the meaning of theory of relativity, after light of speed is fixed for time, space, material and energy which are related with each other, make time become the quantity and then may connect material with energy. There is another meaning, namely light of speed becomes a absolute constant, which can measure all the time and space. Obviously, this is a relatively absolute, that is, this is a method of looking at the world, while it obviously has people subjective color obviously.

To the identical physical phenomenon, we can use different theories to explain. For the phenomenon of deflection of light, general theory of relativity is sure to give out the explanation, while the same level of position( the meaning will be explained in the following content) or the theory of higher rank ( just like theory of relativity is higher than Newtonian mechanics ) also can explain the phenomenon.

Hence an absolute theory of relativity can come into being: Any theory which has the reference system is relative and must fix a constant energy which steps over different reference systems and then it can create a theory. These theories are equivalent.

The physicists add different restraints on the world when they imagine it at random and get different formula and also obtain different worlds.

Material causes space to curve which is caused by the supposition that light is invariable. We have to ask what the light is. What does the light represent? And what does its invariable change (for all the viewers) mean?

This is determined by the supposition. The supposition that Light of speed is invariable for all the reference systems is against the switchable definition among different reference systems--the switchable definition of time and space. Then what does this definition mean?

The perplexity about the beginning point and ending point of time are all from the supposition that light of speed is invariable.

Material, energy, information, space and time are all related with each other. This kind of relativity is established according to that light of speed is invariable for all reference systems.

They can mutually transform. In the theory of relativity, energy and material can carry on the transformation of  $E=mc^2$  and time and space are curved because light of speed is supposed to be invariable; in black holes, material and energy are transformed into information. Time and space become single-point stemming from that black holes suppose the single-point of time and space, whose material qualities are infinite. The supposition that light of speed is invariable means that a kind of field is constant for all the reference systems and steps over different time and space. If it (light) is invariable, time and space will change, space will curve, energy and material will mutually transform.

Actually we are still locked into Newton's space and time view, namely certain time corresponds to a fixed and sole event, meanwhile we are locked into theory of relativity, and namely the speed of anybody can not surpass the light of speed. Using this kind of classical thought to ponder, people cannot return to the past, or this kind of method of description is not fitting, even is wrong. Here we generate deep puzzle for time again, though we have some idealistic preparation. After understanding theory of relativity, we know that if space will curve to this degree, what condition it needs according to the points of theory of relativity, and even time can turn around, certainly space also need to turn around correspondingly.

Theory of relativity is achieved by using absolutization, in other word, speed of light is invariable.

# (II) Reconsidering the research technique of philosophical view.

Different criterions have different theories: Newtonian mechanics is suitable for person's naked eyes; quantum mechanics is suitable for the atomic and molecular criterion; theory of relativity is suitable for suitable for some kind of criterion of heavenly body, which may take light of speed or Planck's constant as the criterion  $10^{-34}$  and  $10^{37} (10^{-34})$  and  $10^{37}$  are the direction of different criterion of light). Because of the factors which theory of relativity does not consider, though it contains Newtonian mechanic, it cannot be compatible with quantum mechanics.

The principles of different criterions reveal that the world appearance is unified, namely looking downward to the next criterion from one, we can see that the world just likes solid particles which are next to each other, while looking upward, we can see that the world just like celestial bodies.

In the world, different materials and different sizes follow different laws, which can be unexpectedly tested and confirmed by the experiments. Four forces correspond to four kinds of equations. Weinberger-Salamu theory unifies the weak function and the electromagnetism function. This kind of unification occurs when electron-volt outdistance 100 giga (1 giga electron-volt is 1,000,000,000 electron-volts) and moreover the accelerator's energy is big enough to be tested. Another so-called GUT which does not include gravity tries to unify other three forces and follows the same train of thought, while the accelerator can never achieve the

energy which can be tested. This kind of unification perhaps has the limits, because it is the unification of certain points and does not find the basic point.

What the unified field theory needs to solve is the force which plays the leading role under different situations and sizes. If we want to use a method to describe, then this method must be a summary of different situations and sizes. After certain sizes and situations are simplified, the observable present theory of them can be obtained, just like theory of relativity can be simplified into Newtonian mechanics, which need a uniformed time and space model. The outer space model and the microscopic model must be unified.

Quantum mechanics is black-box theory, while theory of relativity is white box theory. The former observe things and objects from the exterior to the inside, while the later do so through the opposite way. When theory of relativity is applied to single particles and can fully explain the movement of quantum, adding the mode of statistics, theory of relativity can shake hands with Quantum mechanics, which does not direct towards the viewers of black boxes, but the viewers outside the boxes. Theory of relativity is outside the box. If theory of relativity takes the universe as black boxes to describe, it may shake hands with Quantum mechanics.

String theory is similar with quantum mechanics and is a kind of black box theory, while super gravity theory is one kind of white-box theory. Therefore black box theory, whose ending point is Five Elements, Yin and Yang, chimes in with Chinese traditional philosophy.

Because the result calculated by quantum mechanics is confirmed by person's naked eyes, while the supposition of String theory cannot be confirmed in this way but by theory. Unless the supposition of String theory can be verified according to the criterions of the observable person's naked eyes or instruments, it cannot be established in accordance with western philosophy.

String theory tries to find one kind of direction from quantum mechanics. It starts from the microscopic description, combined with the method of theory of relativity, and describe the world by using one kind of certainty of probability. The result of this kind of hybrid is to get five worlds. M theory tries to unify it but fails to do so because it lacks the guide of philosophy.

String theory is also the white box theory; therefore, it can be closed by using black box. FE theory (Five Elements theory) can do so.

FE theory (what is it called in English? Five Elements cross creating and destroying, or Five Elements cross promoting and suppressing? ) constitutes the Eight Diagrams by adding Yin and Yang. River Map and Luo Writing can explain the world, whose rule is the Book of Changes.

In the world, therefore, the supposition that light is invariable for all the viewers surely have certain condition. Black holes, the single point of time and space, the principle of people's existence and big explosion theory are all caused by the imaginary time which is amended but has no effects. The most basic reason certainly is philosophy and the next is methodology. The western science can only be explored in darkness. To solve the problem of unified field, philosophy must get breakthrough.

# (III)The improvement for string theory---FE theory

If we want to discuss string theory, we must start from the contradiction between theory of relativity and quantum mechanics. In terms of macro scale, theory of relativity is successful; In terms of microcosmic criterion, quantum mechanics is successful. However they once encounter with each other, they become incompatible. One place of meeting is black holes and another is the beginning point of the big explosion.

To seek for the solution, a kind of string theory emerges because of demandS. It takes one kind of clogging string whose criterion is Planck length (10-33 centimeters) as the primitives which constitute the world. It is related with quality, gravity and messenger particles through the vibration mode of string and different vibration modes of string connect with four kinds of forces.

The interlinked medium is energy, which may get inspiration from the unification of Weak strength, string strength and electromagnetic force.

The concept of theory of relativity is introduced to establish the relative concept for the vibration of string by using different reference systems.

String theory takes string as the most basic unit of the universe and the measure is Planck length, namely  $10^{-33}$  centimeters. This kind of supposition does not have the persuasive universality, Therefore it has laid down the hidden danger. At the very beginning, string theory only describes the boson not fermions and draws into the concept of supersymmetry for this goal. What the physical laws don't change along with the time and place is the symmetry. Supersymmetry refers to that natural particles appear in pairs, namely matter particle whose spin is 1/2 appears with the messenger particle whose spin is 1 in pairs. In the messenger particles of four kinds of forces, the graviton which corresponds to gravity has not been discovered and the other three kinds are confirmed indirectly. None of the supersymmetry partners of messenger particles are discovered until now, while through this kind of supposition, four kinds of forces at least get together, especially gravity is interweaved into the frame of quantum mechanics.

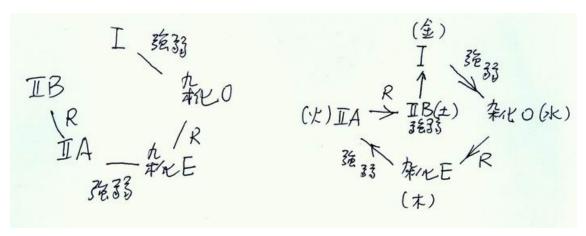
General theory of relativity corresponds to Riemannian geometry. A typical view of string theory is that the space of R which does not twine the string is the same as the one of 1/R which twines the string and what it corresponds to is topological space. The one used by String theory is Calabi space. In addition, the phenomenon of mirror symmetry of string theory is discovered.

The non-ordinary symmetrical principle includes the mirror symmetry and that the description of physical state of R is the same as the one of 1/R. There out string theory finds out that the five string theories may have close relationship. Now what is discovered is that the close coupling characteristic of I theory and the weak coupling of hybridization O theory are the same, the close coupling of IIB string and the weak coupling of itself are the same and he close coupling of IIA and the weak coupling of hybridization E are the same, which are the strong and the weak couplings. For the dual characteristic of R and 1/R, IIA and IIB, hybridization O and hybridization E, string theory are related with them.

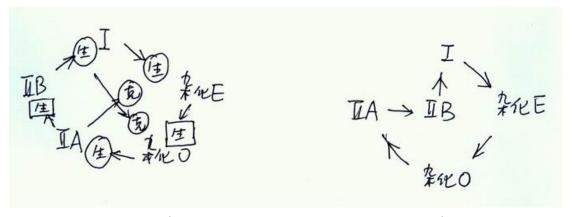
After zero membrane is discovered by the M theory of string theory, time and space lose their meanings and the ordinary geometry is replaced by the so-called non-commuting geometry. Non-commuting space is represented by matrix.

Some very important and essential natures can be seen in any place of string theory. That is the lower boom of uncertain principle---the counter-string pair produces instantaneously and the energy is borrowed. In enough time, two strings annihilate, returning the energy back. The perturbation principle is that the mutual function between one string and another one is determined by the effect sum of innumerable and different empty-string pair, which is very like Faiman's path sum.

To improve string theory, at first, we should carry on the nature classification according to the method of the five elements.



I and IIB have no connection now; however, I can predict that there must be connection between them according to the observation. Maybe R and close and weak coupling have some relationship. The connection which is discovered is a mutual promotion of Five Elements, and then what does interrestraint in Five Elements mean? The mutual promotion of Five Elements and the physical state description of topological transformation which does not break are the same. Another explanation is that R and 1/R mutually promote and the close and weak coupling are mutually inhibit, then the relationship becomes the following: For the strong and weak coupling, R and 1/R are dual; for the relationship which is produced naturally or inferred according to the reference, it is well-determined. So can predict that I and hybridization E, hybridization O and hybridization A, hybridization B and I is that R and 1/R are dual; while the characteristic of the close and weak coupling of hybridization O and IIB, IIB and hybridization E, I and hybridization O are the same. This can become a post-doctorate paper and has the possibility to win the Nobel Prize.



There is also a paper of post-doctorate tutor, which makes the Book of Changes correspond to non-commuting space and zero membrane. This is sure to get the Nobel Prize.

The enlightenments and possible improvements originate from the quantum gravity theory.

Starting from the single point, Stephen Hawking puts forward the famous law of the relationship between Entropy and area of vision field of black hole. He is discontented with the string theory. To fusing the quantum mechanics with the theory of relativity, he puts forward another strain of thought, which uses the method of history sum put forward by Richard Phillips Feynman who introduces the wave function, because the probability in the specified point is the superimposition of history waves which pass through the point. At this moment, imaginary time has to be introduced and the difference between time and space completely vanishes. However, the theory still regards it as only a mathematics method (or skill) and meanwhile finds out that the universe has no boundary. Hawking starts to suspect the work of single point, pointing out:

"the so-called imaginary time is the real time, while the thing which we called real time is the very nonexistent and imaginary product. In the real time, the universe has the single point of beginning and end, which constitute the boundary of time and space where the scientific laws expire; while in imaginary time, there is no single point or boundary. Therefore what are called the imaginary time are the truly more basic concepts. What is called the real time is elected by us at random, which is only helpful to describe the appearance of the universe which is thought by us and that is all. But the scientific theory is only used by us to describe the mathematical model which is observed by us and it only exists in our brains. Therefore it is meaningless for us to ask such questions: real time and imaginary time, which is true? This is only the question which kind of description is more useful?" though this paragraph of words is not so sure and is during the process of exploring, they spark the wisdom ray and also suggest something.

We obtain much enlightenments from this: the history fixed in the real time and space is determined by the history fixed in the imaginary time and space. There is another history behind the real time and space. This history is determined and assembled by many kinds of possibility, just like the repeatedly infinite and possible changes of the sixty-four hexagrams in the Book of Changes, and it may start from any point.

The imaginary time is not only skills and discovers a kind of direction and way of explanation, which corresponds to "realness", from the mathematical skills

The significance which the difference between time and space completely disappears lies in that they are the only quantity which is used to describe the material existence and they do not differentiate mutual characteristics and differences. Because of the mixing of realness and imaginariness and equal time and space, the direction is represented and thus the real meaning is expressed. At this moment, time and space obtained one kind of stagnation, whose meaning is that the probability of real time and space which looks like the same in any point and at any direction can be obtained by superimposing the waves that are connected with the history of this kind of nature.

The realness is replaced by imaginariness, which just like phoenix and nirvana. Fabricate rumors out of thin air, in turn, it is also true. Owning everything also means owning nothing, in turn, owning nothing also means owning everything. Everything can transform with each other. At this moment, the religion has surmounted the science.

The phenomena of imaginary and real time exists because the meaning of imaginary and real time is not completely clear. Because the imaginary and ream time is adopted, the unreasonableness of time is knocked down, the equating of events measurement formed by time and space and the realness, the imaginariness are combined with each other through the method of history sum, after all space is not imaginary and meanwhile time also lose its direction. These are the results which we expect.

Promotion and restraint can be expressed by using phase position and width can be represented by numbers. For the book of changes, the relative positions of many divinatory trigrams are the phase position and its divinatory trigram can become the width by using the binary expression to represent. For the string theory, the five solutions are related with each other through promotion and restraint.

The reason why the realness and imaginariness seems reverse is precisely the self-denial of "science." Denial of denial is the mutual transformation of realness and imaginariness. The real can become the imaginary, the imaginary can also become the real; illusion can become realness and realness can become illusion.

Chapter Three Creation of New Time and Space---Real and Imaginary Time and Space (Mirror

Image Space and Time, Positive and Negative Space and Time, Shadow Space and Time and

# twinborn Space and Time)

Through the critique, inheritance and reconsideration of the traditional theories, then new view of time and space will appear.

# (I) The essence and establishment of new time view

As the above mentioned, time is the form of measurement to describe the orders and the criterions of the events. The traditional time, whether it is a negative number or a positive number, means that it seeks for a beginning point which is the flow of normal direction. According to the stipulation of the second law of thermodynamics, the normal direction flow is the direction which the entropy enlarges. The real time needs a ending point of the future. Once normal direction and reverse direction, the real and the imaginary are combined with each other, the beginning point and the ending point are all not needed, because the support is obtained, it can be closed and the boundary does not exist anymore. The time at normal, reverse, real and imaginary directions at the point of certain event can be simultaneously used to describe an event.

# (II) The essence and establishment of new space view

Time and space are related with each other, which is caused by events. The time of positive direction is a real number, which corresponds to the space of the real number of positive direction; the time of negative going is an imaginary number, which corresponds to the space of the negative going and imaginary number. The time at normal, reverse, real and imaginary directions at the point of certain event can be simultaneously used to describe an event.

# (III) The events of new space and time view

The real space and time corresponds to the real events, the real (positive) materials, the real (positive) energy and the real information; the imaginary space-time corresponds to the imaginary events, the imaginary (reverse) materials, the imaginary (reverse) energy and the imaginary information. The final event is obtained by superimposing and summing the imaginary and real events. (It seems that this real event is false and imaginary.

# (IV) Coupling and superimposition of time, space and event

After the imaginary and real space and time and events are established, the universe wave function can be introduced under one situation, the thought of Einstein's theory of relativity is adopted, time, space and events are related with each other and coupling/ associated coupling and they are not mutually independent. Under the situation of gravity, the exponential function of gravity and the probability of time, space and events are directly proportional. After the path integral is conducted, the summation of historical events has no relation with it and the boundary condition of path integral does not exist. The universe is straight and is a great pile of particles which are of all kinds of criteria in a huge and inflated box. It conforms to the principle of linear superposition, which conforms to the divinatory trigram of the book of changes and is the imaginary and real superposition and completes the certainty by uncertainty.

# (V) Singular point, large explosion and black hole

Under the above theory frame, the singular point will not exist anymore ( supposing that time and space is continual, no matter they are imaginary or real); for the big explosion, perhaps there are two kinds of situations, one can be explained and described and its process is from happening to forming the stable state in a high density( not the infinite density of single point); another is there is never big explosion in the universe and it is only a process of gradually changing, which is a process of gradually evolving, conforms to the law of harmony of heaven and mankind and is a process of self-organizing and forming. That means:

# (VI) The current universe is critical, straight and from evolution, staying in the verge of chaos and self-organization

The space and time obtained from this kind of imaginary and real space-time theory is straight and space-time curvature is neither positive nor negative.

This kind of space and time locates in the balanced state of contraction and inflation (advance and retreat).

The primeval universe is very chaotic and disorder and then it gradually evolves step by step, which is just like the evolution of our lives. This conforms to the basic law of harmony of heaven and mankind.

At present this kind of critical state which is straight and balanced in advance and retreat locates in the verge of chaos and self-organization, leaning to the side of self-organization.

# (VII) The relationship with second law of thermodynamics

The real space-time and the events of positive direction correspond to the positive direction of the second law of thermodynamics, namely the process which the entropy increases unceasingly; The imaginary space-time of reverse direction corresponds to the reverse direction of the second law of thermodynamics, namely the process which the entropy reduces unceasingly and conforms to some characteristics of dissipation theory of Prigogine.

# VIII. The transformation of the imaginary and real space and time

The imaginary and real space and time is the two directions of Yin and Yang, and also is two Eight Diagrams which are superimposed to form the sixty-four hexagrams of the Book of Changes. Between them, a positive hexagram corresponds to mirror hexagrams; an innate hexagrams corresponds to postnatal hexagrams; one is River Map, another is Luo Writing; one is interpromotion, another is the mutual interrestraint.

Maybe the black hole is a connector of transformation and exchange which can be tested.

Actually in any place of the imaginary and real space-time, there is the connector of transformation and exchange.

The transformation of the imaginary and real space-time follows the principle of topology. If each theory has own geometry space theory, for instance, Newtonian mechanics is the Cartesian coordinate, theory of relativity is Riemann space and Hawkingg wants to use Euclidean space, what the imaginary and real space-time uses is topological space.

# IX. The unification of four kinds of forces

This kind of theory of the imaginary and real space and time approximates different criteria and educes all kinds of description of four kinds of forces. The process of approximating is determined by the criteria, different spinning and the difference of the real and imaginary particles, for instance, the particle whose spinning is 2 represents gravity in long-range and the other forces are approximated; the particle whose spinning is 1/2 represents weak nuclear force

in short-range and the other forces are approximated; three real particle whose spinning are 1 represents strong nuclear force in short-range and the other forces are approximated.

# X. Time travel

The principle which is related with the second law of thermodynamics is that if we enter the pure and real space and time, we can enter the future; if we enter the pure and imaginary space and time, we can return to the past. The pure and real space and time and the pure and imaginary space and time are free form the control of light speed; the space and time of superimposing the imaginary and the real is controlled by the speed of light.

# XI. Parity conservation

The meaning of P parity conservation is that law is the same for any situation and its mirror image (the particles spin along the right hand direction turn into the ones spin along the left hand direction in mirror image); the meaning of C charge symmetry is that the definition is the same for particles and antiparticles; the meaning of T time symmetry is that if the movement direction of all the particles and antiparticles are reversed, the system should return to the past, in other words, law is the same for the time direction of advancing and retreating. It can be imagined that the traditional theories certainly cannot deal with this kind of conservation. It can be anticipated that the real particles in the real space observe the CPT conservation and the imaginary particles in the imaginary space observe the CPT conservation. Parity non-conservation is only a conclusion after the characteristics of the real particles and the imaginary articles are compared, just like what Li Zhengdao, Yang Zhenning has discovered, while for the two kinds of particles, they still comply with the principle of conservation.

# XII. Time and space disappear

After the former first, second, fourth and fifth points are combined, one conclusion can be obtained: time and space disappear, namely the physical laws have nothing to do with time and space (zero membrane phenomena) and the amount of space and time vanish.

# Chapter Four The Cognitive Limitation of Modern Science and The Breakthrough of New Space

## and Time View

In the "Human Embedded in the Nature", the descriptions and observation methods of modern science have already been criticized (for the details, see "Picture" in the second chapter of "Human Embedded in the Nature"). In the above three chapters, the methods of modern science which guided by the western philosophy have been criticized many times. In this chapter, combining the contents of the above three chapters, on the base of physical development's appraisal, the natural view based on the imaginary space and time will be further expounded.

# (I) The angle of the improved string theory and quantum gravity theory

To explain the world, people construct time and space. Because of the cognitive ability, people construct an indeterminate principle, which reveals the limitation of cognize the world of mankind at certain stage, however, this does not mean that the world cannot be cognized and this is the original appearance of the world. It is laughable and pitiful that many "scientists" naturally take it for granted.

The string theory and the quantum gravity theory arrive at the same end by different means or roads: the string theory at first constructs the space-time of quintal concept in the microscopic structure, then puts the same class of concept of theory of relativity in an important position in macroscopic structure, though it has ten-dimension, after the space-time is excluded, it is still similar to the space-time of theory of relativity, the quantum gravity theory uses the wave function for the whole universe and it regards the whole universe as the black box and quantum space-time. It can be simplified into the space-time in terms of macroscopic criterion, while it is still quantum gravity theory in terms of microscopic criterion. One is from the microscopic expansion comes (small Hubble-bubbles) and the other is from the macroscopic reducing.

But they all receive the puzzlements of uncertainty. How should the God solve these problems? The theory of Five Elements makes the five possibilities become the factual world whose possibility is the largest; the quantum gravity theory does not find the method for determination for the time being. But it can be guessed that it will also adopt interference principle to produce a reasonable and real world according to the wave particle duality. These two worlds are a world and there cannot be two worlds. So Hodgen said that in fact, we have redefined scientific task as: to discover the law of ratiocinating events in the boundary settled by the indeterminacy principle. However, the following questions still exist: how to choose the law and the original state of the universe? Or why do we do this?

# (II) Limitation and breakthrough of the viewers

As the above mentioned, the indeterminate principle is caused by the viewers'---person's ability. The process that particles are observed to pass through two holes, which is interfered, is that the application of indeterminate principle in the microscopic aspect, meanwhile which is caused by viewers' limitation. Suppose we can track each photon and then we can discover the photon. Because of the difference of incidence angles, the reflection angles are different, which is also caused by the difference of human eye feelings, just like that our eyes cannot see a electric lamp of 50HZ flicker, while in fact it has time span; a film has 24 frames per second , however, which we feel is a continuous process.

The limitation of the viewers also lies in this aspect: though it seems that the so-called science which guided by the western philosophy prohibits people to interfere the movement of objects, therefore, different viewers can obtain the same law for the same physical phenomenon to different viewers and this at least proves that a law can be formed under the same condition; while in fact, the activity of observing itself for the movement of objects is the interference for object movement. There is no disturbed observation and only the degree of interference is different. The establishment of the traditional time and space is built through the reference system of the viewers, which will never break away the circumstance of "I cannot tell the true shape of Lu Shan (a famous mountain in China) because I myself am on the mountain."

The reference system established under the suggestion of the viewers' angle has to describe another reference system through the one which has been established and the viewers have concealed in some corner. Inevitably this is a white box and a process of establishing determination file for each viewer which is observed. Newtonian mechanics and Einstein's theory of relativity all belong to this situation.

To avoid that the object which is observed cannot determine its characteristic because of the limitation of way, we regard the object as a black box and use the probability to describe the uncertainty, thus quantum mechanics was born. If the object which is observed is enlarged to the whole universe, the uncertainty is introduced, the characteristics of white box which keep theory of relativity are linked to form the method which black box combines with white boxes, and quantum gravity theory is produced. If the description of white box and the anticipation of black box are further combined with each other, the real and imaginary gravity theory is produced.

# (III) The trap and reconsideration of Mathematics

Mathematics originates from the real and positive integer and then produces rational number, irrational number, positive number, negative number, real number, imaginary number and so on. When time and space are described, frame of axes, which has the zero point, is established. The point, line and surface in Euclidian frame of axes should be one kind of ideal definition, which is defined not by people but axiom. We enter an illusion world, which not only reflect some main characteristics of the real world but also has certain distance with the real world. Modern science regards this dream world as scientific description. Under the most situations, it can come from and return to the real world. The time and space described by them reflect the main characteristics of the original appearance of the world and make original shortcoming of the world become obvious. This dream world of mathematics still corresponds to the real world. Certainly some transformation relation of latent rules may be one kind of understanding. The measure method is only midcourse process.

The system of Physical space which is established on the base of the real and positive integer has two main and internal flaws or imperfectness. One is that the characteristics of all the numbers are not mapped into physical meaning, for instance, imaginary numbers is meaningless in the real world; another is that the world is continuous, while the mathematics description is inconsistent and isolate, which produces many paradoxes, for instance, wheel does not grand the ground, the rabbit cannot overtake the turtle and so on. When some aspects need these two points to come forward, the world will lose its meaning or will be interrupted. The first question is solved to establish the real and imaginary world; the second question is solved to establish quantization and wave properties.

# (IV) False appearance of Positivism and relativity of truth

As the above stated, the theory which established on the base of mathematics, under the reference system of the viewers, uses instrument and equipment to observe the physical phenomenon to inspect and verify the forecast accuracy of physical theory. Just like Hawkingg said" any physical theory is always temporary, you can never prove it. No matters how many

times of experiment's results are consistent with some theory, you never you never possibly conclude that the result of the next time is still consistent with it. On the other hand, even if you find an observable fact which is inconsistent with the theory, you can prove it is false."

But the physical theory and observation described by mathematics are all relative, therefore, the compare between them make the constant character hard to control and confirm. Especially the theory which is proved inapplicable under some situation can be used under other similar situations. The sentence "truth is relative" is absolute.

# (V) World's composition---light and shade material

The composition of the world is perplexing, only less than of 5% composition is the light material which we know; 20%—30% is shade material, 62%—76% is dark energy, whose relationship with antimaterial and black hole is not known for us for the time being. Merely this proportion makes us feel puzzled. The virtual particle which produces from the computation of physical equation and mysteriously appears and disappears is an intermediary product. The Shade materials make the universe become straight and the dark energy resists the gravity, causing the universe to expand, which is the known judgment at present. The shade materials may be one kind of accumulation of time, which still increase.

# (VI)The breakthrough of space and time view

General theory of relativity is the theory of vast scale, which is from several miles to 10,000,000,100,000,000 (1 is followed by 24 zeros) miles; the quantum mechanics is the theory of microscopic criterion, namely 1/10000000000000 inches.

The view of time and space is broken through repeatedly. Finally it is possible that the physical description which has no time quantity and even the space quantity is closer to the truth theory.

# Chapter Five The Explanation of New Natural View

After having basically described the new concept of time and space in the former contents, the author will use some famous science difficult in history to further explain this new kind of concept in this chapter.

# (I)The natural view of harmony of heaven and mankind

The space and time absolutization of Newtonian mechanics keeps the viewers, who have nothing to do with it and are indifferently observed, out of its scope; the space and time absolutization of Einstein put the viewers back into the observation system. After the viewers who are ordinary people and have no special ability, are put back into the observation system, though there are advanced instrument and equipment which are invented unceasingly as the extension of all kinds of organs (eye, nose, mouth, ear, skin), they are still unable to do as much as they would like to and cannot survey all kinds of physical quantity which is limited by the condition of that time, therefore, they study quantum mechanics, making microscopic (relative) view indefinite, and get the conclusion of black box, attempting to jump out the wrong and right observation circle once again. But under the instruction of the western duality philosophy, the brain of mankind can not disturb "objective" experiment, therefore person's mind cannot draw support from the equipment to extend their ability and heaven and mankind can not be united together.

The Eastern philosophy emphasizes the mind experience, the harmony of body and mind and the organs which are guided by the mind carry on the direct observation for the nature and get inspiration from it. Thus, the observation individual enters into the observed object, eliminating the opposition and the boundary between the observers and viewers which are observed. The demonstration (experiment) way which is instructed by this kind of philosophy is again the denial of the denial of the viewers who are at the higher level. The absolution of Newton to the relativity of Einstein, the uncertainty of quantum mechanics and then the transcendental circumstances," jump out of Troika and do not stay in the Five Elements"; It is great that the viewers can achieve the result.

Theory of relativity is the conclusion of a lonely observer, while quantum mechanics is the general conclusion of innumerable observers. Theory of relativity tracks down the definite behavior of a single doer; while quantum mechanics superimpose innumerable possibilities. The relativity of theory of relativity is eliminated, but the individual uncertainty appears. If we want to apply the statistical behavior theory of uncertainty of quantum to some individuals to get the definite conclusions, this is inoperable. The string theory attempts to do so and the quantum gravity theory are considering to do so. The understratum of string theory is the base of quantum mechanics and at the higher level the theory of relativity is used. The quantum gravity theory, at higher level, is the starting point of quantum mechanics; at lower level, its content is the frame of theory of relativity. The biggest conflict lies in the incompatibility of the viewers, therefore, the string theory gives five solutions, which must be integrated through the statistical method in the end. As a result of the uncertainty of vast scale, the quantum gravity theory cannot find the certainty, therefore, it seeks for the assistance of certainty. Finally the two are unified by Chinese philosophy on harmony of heaven and mankind.

# (II) Argument between Einstein and Bohr

To explain the problem, the author suggests the readers (audience) to understand the general situation of this argument and details will not be given here.

In 1935, Einstein, Tandorsz and Rawson devised an "thinking experiment" together (which is called EPR at present) to expound own viewpoint.

Its basic supposition is that a single and stable particle blasts into two equal fragments A and B, which are separated from each other and disappear. In terms of new space-time view, if A and B which are blasted are a particle and its antiparticle, which follow their own principles of the real and imaginary world, everything can be understood. Particles and antiparticles correspond to the two worlds of realness and imaginariness, which mutually map and become mirror image, no matter whether the method is certain or uncertain. Otherwise, it is hard to explain no matter he is Einstein or Bohr.

# (II) The cat's crucial moment of Schrödinger

The key of this difficulty lies in the conflict between the uncertainty of measurement and the certainty of result. Even some people put forward to explain the difficulty with multiple worlds.

In the second article of the fourth chapter, the limitations of observation have been mentioned. In addition, microscopically if the magnitude of disturbance quantity which has been observed and the magnitude of energy of the observed object are in the same degree, then this reveals that the involvement of observers produces obvious influence and disturbance on the observed viewers. This kind of disturbance in Newtonian mechanics and theory of relativity have not achieved the degree which the observers disturb the observed viewers; while in terms of quantum mechanics; there is the serious disturbance, which is not the conflict of the world itself but the one of mankind and world. The imaginary space-time view which is established by the new space-time view eliminates the influence of microscopic uncertainty on the macroscopic certainty.

# IV Field – a protagonist of Easter

Electrostatic field, electromagnetic field and other fields were once the protagonist of these theories, and they had once appeared as the hypothesis of ether. When some actions that cannot be explained are met, besides quantization and wave theory, under the description condition of history and initial condition, various kinds of matters can be related with each other, and when this happens, field has to be used as the role of media.

In new space-time view, the field might relate to hidden energy. For new changes have taken place in the existing condition, the existing interactions and energy state should be described, and the correlation between real and imaginary space will interact through the field.

As the above mentioned, the field is the description of history, which means it is the interactive field for already-formed force, the wave field of substance and the distributing field of energy. The conception of field is an integral and dependent conception, the field in classical mechanics refers to the action of individual object, at most the action of several correlated objects.

The form of field is black box mixed with white box, that is a grey box. It comes in the form of wave from outside, combined with the boundary and its perturbation, the current state then is described within in an indefinite way. This indefiniteness shows that it is not white enough and it is grey.

To extend this form of field into the whole universe, it becomes the universe field. Macroscopically, the description object can be gravity field and electromagnetic field. Quantum gravity theory is the description of gravity field; quantum mechanics is just the description of microcosmic force. In the state of microcosmic high energy, weak force, strong force and electromagnetic force are unified. And their split happens when temperature drops, and "symmetry breakdown" is formed. This breakdown does not mean any real breakdown; actually, it is the split of virtual space.

Messenger particle is the interpretation of the microcosmic action of field. Photon, gluon and less specified boson are the messenger particle of electromagnetic force, strong force and weak force respectively. Pitifully, the messenger particle of gravitation is still unfound, though there is a name of graviton. However, obviously, field itself is not the description for messenger particle. Messenger particle is just a hero behind-the-screen.

It can be assumed that all of the acting forces are related to space and time. For example, the space acting force name of universal gravitation is the acting force of universal gravitation relates to space, the time acting force name of it is the universal gravitation related to time. The physical conception of time acting force is the transmission and action of universal gravitation, which is only related to time and there is no need of time. What's more, force is transmitted with the speed of light. To express gravitation in the form of gravitational field and to describe it in the form of wave function is also viable, just like electrostatic charge is the description of the relative static mutual action of two electric charges of electrostatic field irrelevant with other charges; electrostatic field describes the effect of the interaction of multi-headstreams (phase interference and nestification) of field movement. The way of expression of electrostatic field is similar to universal gravitation. Thus it can be assumed that gravitational field can also expressed in the form of electromagnetic field. Solid wave has already hinted this, so does light field.

Various kinds of fields can be converted in the same expression. The conception of field is the integration of dynamic and static, and of past, present and future. Thus wave function (field) is the universal expression.

Graivational field: Fa=Far+Fat=G 
$$\frac{m_1m_2}{r^2}$$
 +H  $\frac{m_1m_2}{t^2}$ 

(G stands for universal gravitation constant)

Electromagnetic field: Fe=Fer+Fet= 
$$\frac{1}{4\Delta\eta_0} \frac{qq_0}{r^2} + \frac{1}{4\Delta\eta_0} \frac{qq_0}{t^2}$$

(Fer is coulomb's law)

Strong force field: Fs=Fsr+Fst= 
$$\frac{G}{C^4} \frac{E_1 E_2}{r^2} + \frac{G}{C^4} \frac{E_1 E_2}{t^2}$$

(E stands for energy)

Weak force field: Fn=Fnr+Fnt= 
$$\frac{G}{C^4} \frac{E_1 E_2}{r^2} + \frac{G}{C^4} \frac{E_1 E_2}{t^2}$$

(E stands for energy)

Viewed comprehensively, the above expression of four kinds of forces can be integrated into a uniform formula:

F=Fr+Ft=
$$(\frac{A}{r^2} \frac{B}{t^2})$$
Z1Z2

$$B = \frac{A}{C^2}$$
 r=ct (c stands for speed of light)

The four expressions upon this formula must be a simplified result of a higher-level, more complicated theoretical formula. Just as Newton's mechanics is the simplified special relativity, and in turn, special relativity is the simplified general relativity.

Here introduce complex function:  $\rho=R\cos\alpha$  +iRsin  $\alpha$ 

(i is the imaginary number)

According to the invariability of Lorentz transformation, the transformation will not affect the formula expression, and how about the above mentioned transformation? This transformation should be substituted into the field uniform formula, and the formula remains its invariability. Thus in one respect, the real and virtual space view is validated.

Yin and Yang is the invariable topology mutual transforming process, and the process follows the changing laws of "The Book of Changes".

The uniform formula is F=Z  $\vec{E}$  +Z  $\vec{V}$ 

# $\vec{B}$ =Fr+Ft

is field static intensity,  $\ \vec{V}$  is speed.  $\ \vec{B}$  is the induction intensity.

Z is the field substance, when  $\vec{V}$  =  $\vec{C}$  , Fr=Ft

Then  $\vec{V}$  here is the speed of Z, or the moving speed of other substances in the field? The answer is that it is the speed of Z.

Some physical quantity is directly measurable, such as length, time, weight (quality), and all the rest physical quantity is reasoned from these three quantities.

There is a bold assumption, which is to express gravitational field in the form of electromagnetic field. If viable, it will be a great discovery.

# V. Overdraft – the conversion between realness and imaginariness

In the process of the interpretation of string theory, there will appear real and imaginary processes, and then they will be integrated. Under Heisenberg indeterminacy principle, after Dirac established the quantum-wave equation of relativity, he found antimaterial particle. Energy can be over-drafted to produce transitory particle and antiparticle.

From the perspective of new time and space view, in the expressing process of real and virtual space, it will produce particle and antiparticle, get integrated, summated together and then convert into energy.

# Chapter Six The Scripture of Nature of Harmony of Heaven and Mankind

With the recollection of and inspiration from the space and time view of modern physics, and upon the basis of the improvement of sting theory and quantum gravity theory, the foundation of new real and imaginary space and time view, and the verification of some methodology and scientific difficulties, the natural view of "Harmony of Heaven and Mankind" is proposed.

- 1. Substance, energy and message are collectively called events, and events are ever changing. The past, present and future of events composes of fields, and each of the events is the component of field. There are no fixed events.
- 2. The time conception of past, present and future is unilateral, linear and artificial. Space is related to time, both of which are the describing method of artificial events. Time and space are relevant with events. And time and space disappear as the disappearance of events.
- 3. (In the space and time view of harmony of heaven and mankind,) events are two-dimensional, which follow that time and space are two-dimensional. The two-dimensional superimposing forms the actual world process. Thus, the law of superimposing is the spirit of "The Book of Changes" under the philosophical guide of "Harmony of Heaven and Mankind".
- 4. Two-dimensional time and space is of mirror image, one is virtual and the other is real. Each event is the combination of real and virtual.
- 5. Since mankind evolved on the earth, using the earth as the frame of reference is the appetence of mankind. The movement relative to the earth is changing while accelerating the speed. The observation irrelevant to human does not exist. Instrument appliance is just the extension of human sense organ.
- 6. Either with the naked eyes of Newton, the optical eyes of Einstein, or the multi-eyes of quantum mechanics, the multi-eyes of string theory and quantum gravity theory is just different expression ways forms of different measurements.
- 7. The two-dimensional real and imaginary time and space theory abides by the transformation theory of topology and the complex function of invariability of Lorentz transformation.
- 8. One of the expression ways of unified field theory is of the similar form of Maxwell's field equation.
- 9. The world is undergoing constant changes and deaths; all the circles follow the principles of The Book of Changes.



Return

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