



Scan to know paper details and
author's profile

Exploring the Essence of the Universe

Samo Liu

ABSTRACT

Drawing from the philosophical ideas of Daoism, Buddhism, as well as modern scientific theories such as physics and cosmology, this paper explores concepts of space, time, and the universe, reflecting on their significance.

Keywords: essence of the universe, fundamental energy, intellectual energy, material energy, matter, energy, information, the space, the time, the universe.

Classification: DDC Code: 530

Language: English



Great Britain
Journals Press

LJP Copyright ID: 573351
Print ISSN: 2515-5786
Online ISSN: 2515-5792

London Journal of Research in Humanities and Social Sciences

Volume 24 | Issue 5 | Compilation 1.0



© 2024. Samo Liu. This is a research/review paper, distributed under the terms of the Creative Commons Attribution- Noncommercial 4.0 Unported License (<http://creativecommons.org/licenses/by-nc/4.0/>), permitting all noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Exploring the Essence of the Universe

Samo Liu

ABSTRACT

Drawing from the philosophical ideas of Daoism, Buddhism, as well as modern scientific theories such as physics and cosmology, this paper explores concepts of space, time, and the universe, reflecting on their significance.

Keywords: essence of the universe, fundamental energy, intellectual energy, material energy, matter, energy, information, the space, the time, the universe.

Author: Ph.D. Professor-Level Senior Engineer China Occupational Safety and Health Association, Beijing.

I. INTRODUCTION: THE UNIVERSE IS ALIVE

It is widely known that geocentrism was once a philosophical theory, with human and Earth existence as its core. Without scientific revelations about the universe, some might still consider geocentrism as the truth today (Liu, "Reflection and research on the origin of the universe").

Humans are known to be alive; they speak, possess subjective consciousness, and move. Anything capable of change over time, from measurable beginnings to immeasurable ends, is considered alive. It is hoped that human language and numerical information can recognize the existence of matter without discrimination.

Physics tells us that the entire material existence of the three-dimensional universe is in motion (Lange's "Theoretical Concepts in Physics"). The Earth rotates, orbits the Sun; the solar system revolves around the Milky Way; the Milky Way moves around larger galaxy clusters and groups, constantly changing. Molecules, atoms, particles, and quarks also remain in perpetual motion (Landau's "Quantum Mechanics").

The universe, with its beauty and order, is in constant motion and change. Is it artificial? Certainly not, as humans themselves are part of the universe, capable of thinking, having subjective consciousness, and using language, numerical, and scientific tools to discover and study. How much have we discovered? What is right and what is wrong? Humans can use information to judge information (Liu, "Thinking and research on the Human origin").

Research indicates that according to the mechanics of physics, the universe and all things within it possess a natural, non-subjective awareness. At the macro level, matter perceives gravitational and electromagnetic forces; at the micro level, particles perceive strong, weak, electromagnetic, and thermal forces (Liu, "Reflection and research on the origin of the universe").

It's possible that science has yet to identify all the forces between matter; forces are the mutual perceptions of material existence. The structural and qualitative aspects of matter generate, emit, and perceive information. The perceived mechanics of force are a factor. The relationship between cause and factor constitutes mechanics. All forces, beyond just gravitational, electromagnetic, strong, and weak forces, include the crucial concept of thermal dynamics, for which physics has no answer. In mineral processing work, chemical bonding force is also an important concept of material existence (Liu, "Reflection and research on the origin of the universe").

Research suggests that all forces may collectively lead to the creation of mass; mass is related to time. Force is the root cause that creates, sustains, moves, and changes the universe and all things within it, ultimately causing matter to vanish

during motion and change (Liu, "0-dimensional universe Survival test of all things").

Research methodology involves understanding Daoist philosophy (Liu, ".Tao Te Ching – Universal Declaration"), understanding Buddhist philosophy (Liu, "Textual research of the universe original classic"), and dialectical materialism (Engels' "Dialectics of Nature").

It is widely known that humans are alive but will eventually die. Being alive constitutes existence, with feelings and subjective consciousness. When humans die, their bodies remain but devoid of consciousness or sensation. However, do humans still perceive? Yes, otherwise, you would fly off the Earth. Mechanics constitute the shared endowment of mutual perception and causality for all material existence, bestowed by the universe. Research suggests that humans possess the innate ability for material existence twice over, essentially having two lives (Liu, "Thinking and research on the Human origin").

Understanding on the "I Ching," it's found that the universe consists of material and non-material Yin and Yang. Combining Daoist and Buddhist philosophical ideas with cosmological reflections, it's discovered that non-material existence also possesses a natural awareness (Liu, "Reflection and research on the origin of the universe"). Why is the universe the way it is? Where does it come from? Where does it go? Why are humans the way they are? Where do they come from? Where do they go? These are the questions of the essence of the universe.

II. ESSENCE OF THE UNIVERSE

Contemplating the philosophical questions of the essence of the universe is a focal point of human thought in the axial age (Armstrong's "The History of God"; Jaspers' "The Origin and Goal of History").

Western philosophy encompasses numerous schools of thought and an extensive array of literature, with authors critiquing each other. However, two philosophical systems stand out for providing systematic approaches to existential contemplation without attacking other systems:

Daoist philosophy and Buddhist philosophy. Learning modern scientific knowledge such as physics reinforces the belief that these two philosophies are scientific philosophical ideas.

Hence, with limited knowledge of Western philosophy, discussions are superficial and merely based on partial understanding. This paper provides scientific philosophical reference information, avoiding attacks on any theoretical system. Constructive criticism is welcomed, serving as a new coordinate system for thought.

References include philosophical historical works by Russell, Tilly, Robert, and Allen; study of works by Marx and Engels; and browsing through works by Aristotle, Plato, Descartes, Spinoza, Leibniz, Kant, Schopenhauer, Hegel, among others. As a doctor of engineering, numerous scientific works have also been read, including those by Copernicus, Galileo, Newton, and Einstein, leading to the following reflections on the essence of the universe.

III. THE SPACE

Space, a term familiar to people, seems to leave little room for discussion. However, a very serious issue is that the 500 years of scientific development occurred without a clear understanding of the true foundation of space. The development of modern physics brings a harsh fact: without resolving the issue of space, the contradiction between quantum mechanics and relativity may remain unsolvable (Liu, S. (2020)).

Space is a monumental question in the history of human philosophy, one that humanity must address.

3.1 Western Philosophy's Conception of Space

In ancient Greece, many philosophers and scientists pondered the fundamental questions of the universe, with various thoughts on space and the entities within it, lacking unity and systemization, and tending towards materiality. Space was viewed as an unknown deity, possessing a divine presence.

Socrates, out of reverence for the gods, suggested abandoning the study and contemplation of space, focusing only on exploring the material world and human society, as described in Plato's works.

Plato left behind dialogues and stories, summarizing his philosophical thoughts for posterity. Faced with the grand, infinite, and marvelous existence in the universe, he envisioned a divine presence akin to a supreme engineer or architect, without which space and the entities within it, including human existence, could not be explained. However, there was no argument about the nature of space.

Aristotle wrote extensively, contemplating the question of space and void in his work "Physics." Regarding space and the divine presence within it, Aristotle did not deny them but rather left them in the concept of "God" in his work "Metaphysics"; he then systematically developed the categories of material philosophy and science. Logical and rational contemplation of materiality became the fundamental mode of human thought (Liu, "Reflection and research on the origin of the universe").

After the Middle Ages, human science and philosophy developed rapidly.

Kant wrote many books, attempting to study the origin of the universe, discovering its contradictory nature; (Liu, 0-dimensional universe Survival test of all things) Hegel studied the origin of the universe, establishing the dialectical thinking of materialism, which influenced the emergence of Marxist philosophy; philosophers such as Spinoza, Fichte, Schelling, Schopenhauer, and Nietzsche also studied the origin of the universe and raised many lines of thought and methods for consideration, proposing the concept of the existence of a natural god in the universe. Philosophy played a role in promoting the development of material science. (Liu, Thinking and research on the Human origin)

It is recognized through research that without sufficient scientific information, philosophical contemplation can only be materialistic and logical. Since human language, writing, and numerical information are all expressions of

materiality, post-Aristotelian philosophy has become materialistic philosophical thinking (Liu, "Reflection and research on the origin of the universe"). The logical thinking and scientific experimental methods of material science benefited from the thoughts of philosophers such as Aristotle, Bacon, and Descartes.

Descartes created the Cartesian coordinate system, providing a mathematical basis for the existence of matter. Matter is called a three-dimensional existence, and space is called a three-dimensional space, becoming the standard of material science. Zero became the core of the coordinate system, becoming the most balanced central number (Jeremy Webb, "Nothing:" is a good book). All numerical existences of matter in space can be represented using a coordinate system, especially position and distance. While studying rocks, the author discovered that the true existence of matter's external form is the existence of energy and information changes. The external form of matter is the existence of calculus, existing in all directions (Liu, S. (2021)). The three-dimensional coordinate system can be used as a research tool, but it is inappropriate to directly say that matter and space are three-dimensional. Calculus was invented by Newton and Leibniz.

"Mathematical Principles of Natural Philosophy" is Newton's great work, in which he discovered universal gravitation. Although he did not endorse the action at a distance of force and thought that universal gravitation might be transmitted by ether, he was the first to discover the informational power of mutual perception between material masses. Newton creatively proposed the concepts of absolute space, relative space, and place.

In layman's terms, relative space is the space in which matter exists, commonly referred to as three-dimensional space; place is the external form of matter.

After reading several books by Leibniz, I didn't understand why he opposed absolute space. In the "Correspondence of Leibniz and Clarke," it was found that Leibniz was a proponent of absolute space.

Clarke was a believer in Newton's absolute space. His expression of absolute space is: the space of the supernatural world; the space of nothingness; empty space (Leibniz, "Correspondence"). Space is not a substance but a property.

Leibniz scientifically proved absolute space in just one sentence: space is absolutely identical, without matter, there is no distance, and there is no physical meaning of matter. Another interpretation is that without matter, the existence of the divine in the universe cannot be manifested.

Many people only know that Leibniz opposed absolute space, and few mention his proof of absolute space. Later, Mach also opposed absolute space. From his "A Critical Introduction to Mechanics and its Development," it is found that he objected to Newton's proof of absolute space using the "rotating bucket" example, and his objection was valid because Newton's example had problems. However, Mach did not prove what space or absolute space is.

So, the space standards followed by science are those expressed in Newton's "Principles," namely relative space and place, the domain of space in which matter exists, rather than the issue of the existence of space and the divine presence within it discussed by ancestors and shelved in human beliefs by Aristotle. It is not the true space.

The concept of absolute space involves the problem of the fundamental existence of matter. Research suggests that space is a maternal existence. The description and expression of space should be determined by the entities within space.

For example, matter exists in three dimensions, so the spatial domain of its existence is described as three-dimensional space.

Suppose there are non-material entities within the spatial domain, without material dimensions, zero dimensions. In that case, the description of the spatial domain is a zero-dimensional space, the original space of matter. Learning from the works of Newton and Leibniz, it is believed that the zero-dimensional universe is roughly equivalent to the concept of absolute space (Liu, S. (2021.4),

Liu, S. (2021.5), Liu, "0-dimensional universe. Absolute space test").

After studying quantum mechanics, relativity, physical cosmology, and other scientific knowledge, inspired by the philosophical thoughts of Taoism and Buddhism on the origin of the universe, energy and information in physics are designed as the original sources of material and motion changes, non-material existence, zero-dimensional existence, creating and encompassing the material universe. It is hoped that the scientific community will criticize and verify this. The origin of the universe is an extension of material philosophical thinking, and the universe is a collection of non-material and material existences (Liu, S. (2020), Liu, "Tao Te Ching _Universal Declaration").

3.2 Philosophy of the Origin of the Universe in Taoism and Buddhism

I dare not study religion, but admire its thoughts without believing in personalized gods.

Nor do I dare to call myself a researcher of Taoist or Buddhist philosophy, only a natural enthusiast of the thoughts on the origin of the universe in Taoism and Buddhism, which is quite contradictory. Since childhood, I have been fond of contemplating the concepts of "existence(有)" and "emptiness(无)," and the causes(因) and conditions(因缘) of emptiness(空). When I was young, I was a staunch materialist and believer in materialistic philosophy. Learning in a beautiful environment and acquiring knowledge made the materialistic philosophy in my mind collapse and then rebuilt my contemplation of the philosophical origin of the universe. I don't want to say much, but seeing the widespread propagation of the concept of higher-dimensional space, I feel I should say something and provide some food for thought. If it's incorrect, it might as well be ignored.

Thus, I published "Reflection and research on the origin of the universe," "Thinking and research on the Human origin," "0-dimensional universe Survival test of all things," and "0-dimensional universe Survival test of all things" (Taipei, Warmth Publishing), as well as two works on the

interpretations of the "Tao Te Ching," "Heart Sutra," and "Diamond Sutra."

3.2.1 Brief Understanding of Taoist Philosophy of the Origin of the Universe

Space is the infinite Big pocket of all existence, a flexible and changing container; whatever exists can be expressed in the state of spatial domain. "Existence" is called material existence; "emptiness" is called non-material existence, and "existence" originates from "emptiness." "Dao (道)" is called the collection of material and non-material existence in space; "De (德)" is the human expression of Dao in language, writing, and numbers. The universe is a comprehensive description of space and existence.

Material existence originates from non-material existence, which is the origin of matter, both called "qi," as described in the "I Ching (易经)" as the two qi of yin (阴) and yang (阳).

Yin and yang belong to the original attributes of the universe. The foundation energy is designated as yang (referred to as energy); wisdom energy is designated as yin (referred to as information). For the sake of understanding, it is designed as the existence of a four-dimensional universe and a five-dimensional universe; (Liu, Reflection and research on the origin of the universe) "Thinking and research on the Human origin" corrects it to the existence of a zero-dimensional universe.

Energy and information are the original existences of matter, non-material existences, and the origin of material existence. Force and time are designed as the causes (因) of wisdom energy information; force and time create basic energy into material energy and matter, and can also transform matter back into material energy, a change that only occurs in about 4.9% of the material energy of physical cosmology. For example, under the information of light speed, matter becomes energy, and vice versa.

What determines existence and change is about 95.1% of non-material energy existence (Liu, S. (2020), Liu, "Tao Te Ching – Universal Declaration"). In physics, this is called dark energy and dark matter, whose nature is unknown but certainly not material.

3.2.2 Brief Understanding of Buddhist Philosophy of the Origin of the Universe Space is Considered Inconceivable

The existence of matter and the spatial domain of material existence are always changing existences, relative existences; matter originates from emptiness and returns to emptiness; what causes matter to change is the existence of emptiness; it is the changing of causes and conditions. The "Diamond Sutra" predicts that in the last 500 years of 2,500 years later, humans will discover the existence of emptiness in space and will use scientific evidence to prove space and the entities within it.

It is believed that all existences in the universe have consciousness, which is the consciousness of emptiness, natural, and mutually perceptual; without subjective consciousness and sensation, natural creations, movements, and changes are called "Do Nothing But Do Anything (无为而为)" by Taoism (Liu, "Textual research of the universe original classic").

3.2.3 Design

Inspired by the composition of matter in physical cosmology, the concept of a zero-dimensional universe is proposed, hoping to re-demonstrate the problem of absolute space. Inspired by quantum mechanics and the law of conservation of mass-energy, it is believed that matter originates from the yin and yang of energy and information.

The four-dimensional spacetime coordinate system is designed to be considered as the zero-dimensional existence when time equals zero. (Liu, Reflection and research on the origin of the universe)

3.3 Theory of Relativity

The author is a believer in Einstein, considering him a revered teacher. Although I believe I am not qualified to be his student. In the course of study, there were philosophical doubts about his description of the curvature of spacetime.

As a doctoral student in engineering, lacking a theoretical scientific foundation, especially the

mathematical foundation of theoretical science, only philosophical doubts about relativity can be raised. Einstein did not believe in absolute space. The theory of relativity studies the relative changes of matter in spacetime, discussing the relative changes of the existence of matter mass and external form, that is, relative space and place; it has no relation to the space of matter's original space. The speed of light is a major information.

Relativity does not discuss the true problem of space, nor does it discuss the existence of non-materiality in space, or it only discusses materiality, concluding that matter originates from matter, and the origin is also matter. Then, the problem of the original of matter (the problem of quantum mechanics) must be limited to within the speed of light, becoming a contradiction between relativity and quantum mechanics. Matter cannot exist beyond the speed of light, but what about non-material existence?

The resolution of this contradictory issue was provided by Einstein himself, my respected teacher. Einstein, one of the pioneers of quantum mechanics, raised the fundamental question: What are light quanta? Despite pondering over it for fifty years, he admitted, as recorded in Eugene Hecht's "Optics" (translated by Qin Kecheng), that he had not found the answer.

However, the answers lie in the four-dimensional spacetime and the law of mass-energy equivalence, $E=mc^2$. The fundamental and intellectual energy originated from here. Mechanics, optics, and even the concept of time "seconds" are manifestations of this intellectual energy. The composition of material energy in physical cosmology essentially resolves the issue of existence in space. Quantum mechanics elucidates the logical relationships between existences and answers the philosophical contemplations of Daoism and Buddhism regarding the origin of the universe (Liu.S(2020), Liu "Reflection and research on the origin of the universe").

3.3.1 M-Theory

As for the M-theory, I confess my ignorance as I have not studied Professor Witten's works but have gained some knowledge from the writings of Stephen Hawking and Hiroshi Ohguri, I am unable to comprehend the mathematical formulas and principles therein.

From the perspective of the origin of the universe, I raise a concern: the study of the M-theory focuses on the entities within space, not space itself. The promotion of multidimensional space may not be conducive to scientific advancement (Liu, "Thinking and research on the Human origin").

From a philosophical standpoint, I express apprehension: the structure of mass or the information of mass and the energy structure information of matter may not necessarily share the same causal relationship. Force is like a group of angels of the universe. Unifying forces may not necessarily resolve what physics calls the ultimate problem. Human scientific exploration lacks a final theory, so please refrain from using the term "ultimate," which is not suitable. The discovery of force in physics remains incomplete, and mechanics is not yet perfect (Liu, "Reflection and research on the origin of the universe" Volume II).

I bring attention to one issue: while the M-theory may represent a profound study of the genesis of the material universe and may contribute to the understanding of material formation, the concepts of "strings" and "membranes" are unclear, making it difficult to determine the logical relationship between phenomena and essence or origin (Liu, "Thinking and research on the Human origin"). I hold great respect for Professor Witten.

IV. THE TIME

In general language, text, and numerical descriptions, we acknowledge that we exist within space and time. Time is of great significance, and many philosophers have attempted to describe the fundamental issues of time. However, none of these descriptions fully grasp the essence of time.

Humans use language, text, and numbers to refer to the cyclical changes in the natural temperature environment as "years," the periodic changes in the appearance of the moon as "months," and the cycles of sunrise and sunset by the sun as "days." Furthermore, humans have subdivided days into hours, minutes, and seconds. The process of time is perceived as fascinating, leading humans to create clock tools and treat time as if it were a material existence. This is something no other animal would do; indeed, humans are remarkable.

But who perceives time more accurately, humans or ordinary matter? Is time real or illusory? What does it truly signify?

Newton defined absolute time and relative time in his "Principia," while Einstein discovered that the existence of matter can alter time under the influence of human-made or external energy and information. This discovery is significant. In my research on stones, studying relativity and quantum mechanics, combined with the philosophical thoughts of Daoism and Buddhism, I discovered the question of whether matter can be alive or dead, or existent or non-existent.

Studying Lee Smolin's work "Time Reborn," I encountered many profound insights from a physicist, such as his commentary on the multiverse theory and understanding the real existence of matter in time. It was truly inspiring. Especially on page 105, there is a remarkable statement: There is no single ultimate theory in the world, but no new concept has been found regarding the origin of time. (Lee Smolin, "Time Reborn," translated by Zhong Yiming)

Concepts regarding the origin of time are found in Daoist and Buddhist philosophy and are confirmed in the definition of a second at the International Congress of Metrology.

4.1 Buddhist View of the Origin of Time

Buddhism refers to the time of material existence as "kalpa," roughly equivalent to billions of years. The process of material existence is termed "duration(度)." Buddhism holds that all matter is alive and should be respected. It can be understood as the existential process of materiality, starting from zero and ending at zero.

The process of existence involves relative existence and change, which can be expressed in terms of years, months, days, hours, minutes, and seconds, or using other vocabulary. (Liu, "Reflection and research on the origin of the universe") Non-material-energy existence has no concept of time.

Since physical cosmology has discovered that about 95.1% of the universe's composition is non-material, quantum mechanical thinking may be the origin of material creation. When contemplating the origin of the universe, the four-dimensional spacetime coordinate system is designed as the foundation of two cosmic existences: basic energy and intellectual energy, along with the coexistence of about 4.9% of material universes. Both exist within space.

Buddhist cosmological philosophy introduces the concept that the universe's existence is subject to the causal changes of causes(因) and factors(因素). The author designates factors as basic energy, which can give rise to changes into material energy and matter. Matter is a special and complex structure of energy and mass. It changes between material form and material energy form.

The origin is basic energy, filling the entire universe's space. This space is temporarily zero-dimensional and can be called absolute space, which includes the existence of what humans call three-dimensional space.

There is a question: It may be incorrect to refer to space as three-dimensional or zero-dimensional. Because in a thousand or ten thousand years, our descendants might criticize us.

Within the energy-filled universe, there exists an unknown phenomenon called cause and condition, which does not possess energy but governs the aggregation and dispersion of energy. It also has directionality or balance. The author refers to this as intellectual energy, which is information, a spiritual existence, energy's energy. Although "Reflection and research on the origin of the universe" is designed as a five-dimensional universe, the actual form is unknown, leaving one to marvel at the living existence of the universe.

Force is the driving factor behind the aggregation, creation, movement, and change of material energy and matter. Time is the guiding principle of directional change. The synthesis of force and time dictates the form of matter. Basic energy is the material energy and matter.

There are also other undiscovered causes and conditions. Therefore, one should not casually use the term "ultimate," as it implies annihilation or non-existence.

4.2 Daoist View of the Origin of Time

Chapter Four of the "Tao Te Ching" suggests that human descriptions and studies of the origin of the universe can only go as far as understanding the essence and existence of matter, unable to proceed further.

The "Tao Te Ching" believes that the universe acts without action (无为而为), following the natural course of Dao (道法自然).

The universe is a Yin-Yang (阴和阳) existence and change of energy, the Yin-Yang changes of the Five Elements (五行生克). Existences attract and repel each other, but there is directionality. (Liu, "Thinking and research on the Human origin").

The highest principle of directionality is balance. The mechanical cause dominates the movement and change of material aggregation and dispersion. Time guides directionality. For example, within the human body, energy forms sperm and egg, which combine to create life. The directional process of conception, birth, growth, maturity, aging, and death is determined by the cause of time. This process applies to animals, plants, stones, and all matter. Additional energy and information can alter the time factor of matter. (Liu, ".Reflection and research on the origin of the universe")

The Daoist work "Zhuangzi. Gengsang Chu" believes that the cause of time and force governs the dynamic and directional changes of matter, without possessing material energy indicators. (Liu, ".Reflection and research on the origin of the universe")

The Daoist work "He Guan Zi" suggests that the cause of time is the standard for the birth of

material mass and determines the structure of material existence and the lifespan of existence. These views have marvelous connections with the conclusions of modern science. (Liu.S(2021), Liu "0-dimensional universe Survival test of all things")

4.3 Scientific Concept of Time Origin

- In 1967, the 13th International Conference on Weights and Measures defined the "second" as "the duration of 9,192,631,770 periods of the radiation corresponding to the transition between the two hyperfine levels of the ground state of the cesium-133 atom at 0 Kelvin temperature" (13th CGPM, 1969). The cesium atom defined in this manner must be at absolute zero temperature, in a zero magnetic field environment, and free from disturbances.

The scientific community is ought to investigate whether other atoms exhibit similar characteristics. If so, the numerical value of this electromagnetic wave would vary. The state of the atom defined in this manner serves as the original "cause" for the conversion of basic energy into material energy and matter, potentially imparting directionality to the motion and changes of the atom or particles composing it.

If this fact holds true, then the notion that the divine creator endowed time as a factor for the birth of matter stands validated.

- Gravitational force is the cause(因) and condition(因缘) for the mutual interaction of material mass; electromagnetic force is the cause and condition for the mutual perception of the Yin-Yang structure of matter, exhibiting both attraction and repulsion; strong force is the cause and condition for the mutual perception of particle existence; weak force is the peculiar force of cosmic particle creation and matter, endowing matter and material energy with peculiar perception, providing a cause for decay. Analysis suggests that the cause of weak force is related to time and is related to the structure and mass structure of matter, which gives directionality to the cause of mechanical motion and change.

Thermodynamics is the representation of the existence, motion, and change of matter (Langre, "Theoretical Concepts in Physics"). Analysis in the second volume of "Reflection and research on the origin of the universe" suggests that thermodynamics may be the original force behind the creation of Particle and Quark. It is believed that the study of mechanics in physics is not yet complete.

- Atomic matter is the standard of materiality referred to by humans as the three-dimensional universe, originating from the formation of material mass structure. The origin of matter is material energy, and the origin of material energy is basic energy.

What form does material energy take? The study of this question in M theory, using dimensions such as points, strings, and membranes, has been inspiring, although the results of this inspiration are speculative. Please forgive me, Professor Weiteng.

Energy and information have no material dimensions; they are zero-dimensional. Once dimensions are present, it becomes matter. Non-materiality is the original existence of matter, and from the perspective of the origin of matter, the concept or idea of a zero-dimensional spatial form arises. However, the concept of a zero-dimensional universe space, like three-dimensional space, is a human-made conceptual existence, not an absolute idea. It can be understood as Newton's concept of absolute space, a stage in human understanding of the universe. (Liu, "Thinking and research on the Human origin")

V. THE UNIVERSE

He is the collective existence of material and non-material in space, commonly referred to as "Dao" (Liu, "Tao Te Ching – Universal Declaration).

Three-dimensional space represents the existence of matter; zero-dimensional space represents the existence of the universe's origin. It is a unified space, the mechanism of yin and yang changes, which is the fundamental mechanism of the

universe. This was already clearly studied by Zhu Xi during the Song Dynasty in China (Liu, 2020; Zhu Xi, "近思录"). The guiding and directional changes of yin and yang are the divinity of cosmic wisdom energy (Liu, "Thinking and research on the Human origin"). The study of wisdom energy mechanics and time is the study of the combination of cosmic and human minds, called the Philosophy of the mind. This conclusion was reached by Wang Yangming during the Ming Dynasty in China (Liu, "Thinking and research on the Human origin").

The universe created humans, and the human soul software is bestowed by the universe. The cosmic mind and the human mind are integrated. (Wang Yangming, "传习录"). Humans created robots, and the soul software of robots is given by humans. The concerns of humans about robots are concerns about their own souls.

5.1 The Space

It is suggested not to describe space as existing, otherwise conceptual ambiguity may arise. Space is the mother of all existence and the eternal unknown of human scientific exploration. It is boundless and infinite(其大无外, 其小无内) (Liu, "Reflection and research on the origin of the universe").

5.2 The Existence

Science has essentially explored material existence, and space is called three-dimensional space; existence is called matter, energy, and information. Matter changes and transforms among the three, and information is the spiritual force of mutual change and transformation. Quantum mechanics and relativity have opened the door to exploring the origin of the universe, a work that our ancestors began 2500 years ago.

In the West, under the influence of Aristotle, research and thinking shifted towards the material universe and human society, becoming the standard and deeply rooted material philosophy.

In the East, Daoism and Buddhism have continuously and subtly studied the problem of

the origin of the universe, leaving behind a large amount of theoretical and practical records (Liu, "Reflection and research on the origin of the universe"). When material cosmology proposed that about 95% of the existence in the universe is non-material, and when there were contradictions between relativity and quantum mechanics, it was time to think about the origin of the universe. Scientific information is ready.

VI. CONCLUSION

Six books have been published, and several papers have been written. Relevant information can be found in related materials. The writing is not very good and is still being revised. Just providing some philosophical thinking information, seeking criticism and empirical verification or falsification. Thank you for reading, and please forgive and understand any inappropriate parts.

REFERENCES

Primary References

1. Liu, S. (2017). Revelation and Reflection on Mankind by Modern Physics Part I. *Open Journal of Philosophy*, 7, 435-447. <https://doi.org/10.4236/ojpp.2017.74023>.
2. Liu, S. (2019). Revelation and Reflection on Mankind by Modern Physics Part II Consideration on Multidimensional Universe. *Open Journal of Philosophy*, 9, 72-81. <https://doi.org/10.4236/ojpp.2019.92007>.
3. Liu, S. (2020). Philosophical Reflection over the Origin of the Universe. *Philosophy Study*, 3, 213-222.
4. Liu, S. (2020). The Essence of the Universe and Humankind. *Open Journal of Philosophy*, 10, 316-330. <https://doi.org/10.4236/ojpp.2020.103021>.
5. Liu, S. (2021). Cosmic Space in Zero-Dimension: A Discussion on Spatial Question According to the M-Theory, *Open Journal of Philosophy* Vol.11 No.1, February 20, <https://doi.org/10.4236/ojpp.2021.111012>.
6. Liu, S. (2021) A Second Discussion on Cosmic Space in Zero Dimension —A Discussion on Spatial Questions According to

Classical Physics. *Journal of Applied Mathematics and Physics*, 9, 556-564. doi: 10.4236/jamp.2021.94039.

7. Liu, S. (2021) The Third Discussion on Cosmic Space in Zero Dimension_A Discussion on Spatial Questions According to the Correspondence between Clarke and Leibniz. <https://scirp.org/journal/paperinformation.aspx?paperid=109297>.
8. Samo Liu, Revelations and Reflections on Humankind inspired by Modern Physics, Scientific Research Publishing 2021.
9. Philosophical Reflection on the Origin of the Universe, *Science Herald*, 2020, 23, Liu Hongjun p346.宇宙本原的哲学思考, 科学导报, 2020, 23, 刘洪均。
10. Liu Hongjun Samo Liu, Reflection and research on the origin of the universe, 2020.9, Taipei Warmth Publishing,刘洪均 Samo Liu, 《宇宙本原考》, 2020.9, 台北旺文出版。
11. Liu Hongjun Samo Liu, Thinking and research on the Human origin, 2021.1, Taipei Warmth publishing,刘洪均 Samo Liu, 《人类本原考》, 2021.1, 台北旺文出版。
12. Liu Hongjun Samo Liu, 0-Dimensional Universe - Survival test of all things, 2021.5, Taipei Warmth Publishing.刘洪均 Samo Liu, 《0 維的宇宙—萬物生存考》, 2021.5, 台北旺文出版。
13. Liu Hongjun Samo Liu, 0-Dimensional Universe - Absolute space test, 2021.8, Taipei Warmth Publishing.刘洪均 Samo Liu, 《0 維的宇宙—絕對空間考》, 2021.8, 台北旺文出版。
14. Liu Hongjun Samo Liu, Tao Te Ching-Universal Declaration, 2021.12, Taipei Warmth Publishing..刘洪均 Samo Liu, 《道德经-宇宙本原的宣言》, 2021.12, 台北旺文出版。
15. Liu Hongjun Samo Liu, Textual research of the universe original classic, Taipei Warmth Publishing.刘洪均 Samo Liu, 《宇宙本原经典考》, 台北旺文出版。

Other References

1. 老子,《老子道德经注》,王弼(三国。魏)注,楼宇烈校释,2019.12,北京,中华书局。

2. 释迦牟尼,星云大师总监修,《金刚经》 恭让释译;《般若心经》程恭让东初释译;《空的哲理》道安著;2019.9,北京,东方出版社。
3. 元阳真人,《周易》,倪泰一编注,1993.8,西南大学出版社。
4. 朱熹(宋),《近思录》吕祖谦编,中州古籍出版社,2008.1.
5. 王阳明(明),《传习录》叶圣陶点校,北京联合出版公司,2018.1.
6. Newton, "Mathematical Principles of Natural Philosophy", translated by Yu Lian(余亮),2017.12, Beijing, Beijing University of Technology Press.北京理工大学出版社。
7. Einstein, "My Worldview" translated by Fang Zaiqing(方在庆), CITIC Publishing Group,2018.11.中信出版集团。
8. Einstein, "Relativity" translated by Zhang Qianqi(张倩琦), Shaanxi Normal University Press,2020.8.陕西师范大学出版社。
9. Einstein, "Relativity - Special and General Theory" translated by Li Jingyi(李精益), Guangxi Science and Technology Press,2020.12.广西科技出版社。
10. Leibniz, "Collected Works of Leibniz's Natural Philosophy", translated by Duan Dezhi(段德智), Commercial Press,2018.7.商务印书馆。
11. Leibniz, "Correspondence between Leibniz and Clarke", translated by Chen Xiuzhai(陈修斋),2017.3, Beijing, Commercial Press. 商务印书馆。
12. Descartes, "Descartes' Geometry" translated by Yuan Xiangdong(袁向东), Peking University Press,2019.5.北京大学出版社。
13. Aristotle, "Metaphysics" translated by Wu Shoupeng(吴寿彭), Commercial Press,1959.12.商务印书馆。
14. Aristotle, "Physics" translated by Zhang Zhuming(张竹明), Commercial Press,1982.6.商务印书馆。
15. Jeremy Webb, "Nothing:From Absolute Zero to Cosmic Oblivion -Amazing Insights into Nothingness ", translated by Feng Yongyong(冯永勇), Commercial Press,2018.6.商务印书馆。
16. Landau, "Quantum Mechanics" translated by Yan Su(严肃), Higher Education Press,2008.10.高等教育出版社。
17. 都有为, 《物理学大辞典》, 科学出版社,2017.12
18. 俞允强,《物理宇宙学讲义》,2002.11,北京大学出版社。
19. Hiroshi Ohguri, "Super string Theory" translated by Yi Ning(逸宁), People's Posts and Telecommunications Press,2015.1.人民邮电出版社。
20. Jaspers, "The Origin and Purpose of History", translated by Li Xuetao(李雪涛), East China Normal University Press,2019.1.华东师大出版社。
21. Armstrong, "The History of God" translated by Cai Changxiong(蔡昌雄), Hainan Press,2013.8.海南出版社。
22. Eugene Hecht, "Optics" translated by Qin Kecheng(秦克诚), Electronic Industry Press,2019.6.电子工业出版社
23. Mach, "A Critical Introduction to Mechanics and its Development" translated by Li Xingmin(李醒民), Commercial Press,2014.9.商务出版社。
24. 13th CGPM. (1969). Comptes Rendus de la 13e CGPM (1967)., (p. p.103). Retrieved [https:// www.bipm.org/utils/common/pdf/CGPM/CG-PM13.pdf#page=103](https://www.bipm.org/utils/common/pdf/CGPM/CG-PM13.pdf#page=103).
25. Hawking, "The Grand Design" translated by Wu Zhongchao(吴忠超), Changsha, Hunan Science and Technology Press,2016.10.湖南科学技术出版。
26. Smolin's,"Time Reborn. From the Crisis in Physics to the Future of the Univers," translated by Zhong Yiming(钟益鸣), Zhejiang People's Publishing House,2017.2.浙江人民出版社。

This page is intentionally left blank