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Article 9. The applicable theories on the universe formation and development/宇宙形成与孕育的适用理论

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Abstract

The theories underlying the universe formation and development, which have been comprehensively discussed over this journal, are summarized in this article, mainly including Newton's Law of Universal Gravitation, Universe Big Bang theory, Dark Matter theory, Anti-Matter theory, Parallel-Space theory, Electromagnetic Induction theorem, Boundary Layer Formation theory.

Key words: Newton's Law of Universal Gravitation, Universe Big Bang theory, Dark Matter theory, Anti-Matter theory, Parallel-Space theory, Electromagnetic Induction theorem, Boundary Layer Formation theory.

1.Discussion

According to the universe big bang theory, at the beginning of the explosion, substances can only exist in the form of elementary particle such as neutrons, protons, electrons, photons and neutrino. The continuous expansion after the cosmic explosion results in a rapid decrease in temperature and density. As the temperature decreases and cools, atoms, nuclei, and molecules gradually form and recombine into the usual gas. Gas gradually condenses into nebulae, which further form various stars and galaxies, ultimately forming the universe we see today [1].

However, in the early stage of the formation and gestation of our universe, this article proposes that the form of cosmic matter is mainly composed of energy matter but the substances of mass properties are much less. In this stage the universe big bang theory is applicable on universe formation, that is, energy matter with high calorific value diffuses rapidly from a particle point into the four-dimensional spaces. After sufficient mass properties of substances are accumulated in the universe, the universe development suits for the boundary and layering theory proposed by this journal [2]. When the heterogeneity of substances in a space reaches a certain level, the substances with different properties will form the boundary between them and begin to divide and stratify, which is like the propagation mode of cell division. At this time,

the space is divided into several sub-spaces in the four-dimensional space. Therefore, the cosmic subspace in which we are located is within the detectable range of all electromagnetic waves (such as within the visible light observation range). Other cosmic sub-spaces are not within the detectable range and need to be understood through spacial modeling.

Next it is to outline the theories underlying the universe formation and development, which have been comprehensively discussed over this journal:

Firstly, the Newton's Law of Universal Gravitation (derived from Keplers third law of planetary motion). As proposed by my another article, "**creatures would be hatched in stars, whose metabolites become the sources of new mass in our universe (myth stories?), increasing the total mass of our three dimensional space which is always expanding, so that our three dimensional space can keep its balanced state in rotational motion.**[3]" Astronomy observation shows that our three dimensional space is always expanding and the other galaxies are moving away from us. According to the Newton's law of universal gravitation, if the distance between asters is expanding but the mass of asters remains constant, the universal gravitation will be decreased, so that the asters at outer layer of galaxies may eventually become the free ones like free electrons, which may travel across different galaxies. However, this is not the fact. **The mass of our stars increases due to the creatures' metabolites firstly, and then the elementary particles emit from the stars, which are subsequently captured by the planets around the stars, so that the universal gravitation is increasing correspondingly to keep the stable rotation motion state.**

Secondly, the Universe Big Bang theory. The Universe Big Bang theory may also explain the inertial force for our three dimensional space to keep its expanding motion.

Thirdly, the Dark Matter theory. Dark matter is the energy binder to combine elementary particles in the universe [3][4].

Fourthly, Anti-Matter theory. Anti-matter theory indicates that our whole universe is mainly divided into two symmetric three-dimensional spaces [3][5].

Fifthly, Parallel Space theory. In parallel spaces, there are only parallel fields (both magnetic and electric fields) without electromagnetic waves, which constitutes the majority of our universe spaces [3][6].

Sixth, Electromagnetic Induction theorem. This theory explains the transmission pathway of driving force which leads planets to rotate around the stars (or the driving force of other celestial bodies' rotation motion) [7].

Seventh, Boundary Layer Formation theory. This theory not only explains the

sub-spaces divided by boundary layers in our universe, which is discussed above, but also explains the elementary motion in celestial bodies (stars and planets) [2].

Table 1. Summary of applicable theories on the universe formation and development.

Applicable Theories	Key original viewpoints in this article
Newton's Law of Universal Gravitation	The mass of our stars increases due to the creatures' metabolites firstly, and then the elementary particles emit from the stars, which are subsequently captured by the planets around the stars, so that the universal gravitation is increasing correspondingly to keep the stable rotation motion state.
Universe Big Bang theory	To explain the inertial force for our three dimensional space to keep its expanding motion.
Dark Matter theory	Dark matter is the energy binder to combine elementary particles in the universe.
Anti-Matter theory	Anti-matter theory indicates that our whole universe is mainly divided into two symmetric three-dimensional spaces.
Parallel Space theory	In parallel spaces, there are only parallel fields (both magnetic and electric fields) without electromagnetic waves, which constitutes the majority of our universe spaces.
Electromagnetic Induction theorem	This theory explains the transmission pathway of driving force which leads planets to rotate around the stars (or the driving force of other celestial bodies' rotation motion).
Boundary Layer Formation theory	This theory not only explains the sub-spaces divided by boundary layers in our universe, but also explains the elementary motion in celestial bodies (stars and planets).

2.译文

我们宇宙在形成与孕育初期，宇宙物质形态主要是以能量物质为主要成分而物质的质量属性很少，适用于宇宙大爆炸理论，即：高热值的能量物质从一个质点，向四维度空间极速扩散。宇宙在孕育初期之后，也就是宇宙空间中累积了足够的质量物质属性之后，开始适用于本期刊提出的物质的边界与分层理论[2]。当一个空间中物质的异质性到达一定程度时，不同性质的物质之间会形成边界并且开始分割分层，犹如细胞分裂一样的繁殖模式。这时宇宙空间在四维度空间中被分割为多个亚空间。因此，我们所在的宇宙亚空间即为所有电磁波可探测范围内（比如可见光观察范围内），其它宇宙亚空间并非在可探测范围内，需要依靠空间模拟来实现理解。

References:

[1] 宇宙大爆炸。搜狗百科。
[2] Liu Huan. The formation mechanism of substance boundary layers /物质在各形态中的分层与边界形成机制. 2021(02). Journal of Environment and Health Science (ISSN 2314-1628). https://doi.org/10.58473/JAES0004
[3] Liu Huan (2023). Essay: original review of high-dimensional spaces and astronomy theories in modern physics. Journal of Astronomy and Earth Sciences (ISSN2958-4043). 2023(07). https://doi.org/10.58473/JAES0010
[4] Liu Huan. (2021). Van der Waals force and Dark Matter. Journal of Environment and Health Science (ISSN 2314-1628), 2021(02). https://doi.org/10.58473/JQPMC0006
[5] Liu Huan. (2021). The anti-matter of symmetric three-dimensional spaces along the fourth dimension axis. Journal of Environment and Health Science (ISSN 2314-1628), 2021(2). https://doi.org/10.58473/JAES0002
[6] Liu Huan. (2021). The materials, relativity and its philosophy attributes. Journal of Environment and Health Science (ISSN 2314-1628), 2021(2). https://doi.org/10.58473/JAES0001
[7] Liu Huan. (2021). The magnetism across time-spaces and the driving force of celestial rotation. Journal of Environment and Health Science (ISSN 2314-1628), 2021(2). https://doi.org/10.58473/JAES0003