



Interdisciplinary Conference of Young Scholars in Social Sciences

THE EMERGENCE OF THE UNIVERSE

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Abstract: Usually now they combine the Big Bang theory and the hot universe model, but these concepts are independent. Historically, there was also a notion of a cold initial universe near the Big Bang. The combination of the Big Bang theory with the theory of a hot universe, supported by the existence of relic radiation, is considered further.

Key words: Emergence, Big Bang, Universe, Expansion, Big Bang theory

According to progressive views, the Galaxy we are currently contemplating appeared 13.799 ± 0.021 billion years ago from a certain initial single capital, and from these times it has also been constantly being heard. In accordance with popular limitations according to the applicability of current physiological concepts, a more premature factor permitting representation is the Planck period with a temperature of approximately 1032 Ko (Planck heat) and a density of approximately 1093 g/cm³ (Planck saturation). The Premature Galaxy presented itself as a highly homogeneous non-tensor sphere with an extremely significant density of energy, temperature and pressure. As a consequence of the expansion and cooling in the World, phase transitions occurred, similar to the condensation of water from gas, however, according to the simple particles.

During the period from the zero mark up to 10⁻⁴³ seconds. already after a Significant gap, the movements of the birth of the World from the singularity were made. It is that the presence of this heat and the saturation of the element of the World existed similar to the Planck values. There is no complete physiological concept of this stage. According to the completion of this stage, the gravitational connection was isolated from others, and the period of the Famous Organization also came.

Approximately after 10⁻⁴² sec. Already after the stage of a Significant gap, the phase transformation prompted an exponential increase in the World. This interval acquired the name of Global Economic Stagnation and also ended after 10⁻³⁶ seconds. already after the stage of a significant gap.

Already after the completion of this stage of the construction, the used material of the World showed a fermion-gluon plasma. According to the expiration of a certain period, the heat has descended down to the meanings, the presence of which the subsequent phase transformation, called baryogenesis, is likely to begin. At this stage, quarks and gluons have coalesced into baryons, as well as protons and neutrons. In this case, at the same time, the oblique formation was carried out, as well as the substance that prevailed, thus also antimatter, which mutually annihilated, transforming into electromagnetic radio emission.

The subsequent decrease in temperature led to a subsequent phase transition - the formation of the physiological power of simple elements in their current figure. After that, the period of nucleosynthesis came, the presence of which protons, combining with neutrons, formed the nuclei of deuterium, helium-4 and also some other simple isotopes. Already after the subsequent drop in temperature and the expansion of the World, a subsequent intermediate period came, the presence of which gravity became the predominant power. By 380 thousand . years after a Significant gap,



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the heat was reduced to such an extent that became valid the presence of hydrogen atoms (up to the movement of ionization also recombination of protons with electrons was in the balance).

After the epoch of recombination basis became colorless with the purpose of emission, which is easily spread in place, reached down to us in the version of the relic emission.

In absolutely all stages of a Significant gap, the so-called cosmological rule is made - the galaxy in each of this period of the period looks to the same extent with the purpose of the observer at each point of the place. In particular, during this period, in absolutely all places of the place, the saturation of the substance in the usual is similar. A huge explosion is in no way similar to the dynamite explosion in an empty place, if the element begins to increase from an insignificant size into the vacuum around it, creating a round gas cluster with an exact expansion front, because of which there is a disadvantage. This well-known understanding is incorrect. A huge explosion occurred in absolutely all places of the place at the same time also simultaneously, it is impossible to determine in one or another-or place as well as in the rupture organ, there are no large-scale pressure gradients and density in the place, there are also practically no limits or fronts separating the expanding element from the vacuum. A huge explosion is considered to be the expansion of the most place together with the material contained in the mute, which lies in the usual in any of this point.

Extrapolating the contemplated expansion of the World back into the period leads, when applying the unified concept of relativity as well as certain other other concepts of gravity, to boundless density and fever during the final period of the period in the past. The bend of the place-period reaches inaccurately significant significance. This position is called a cosmological singularity (cosmological exclusivity is often figuratively called the "birth" of the World). The impracticability to exclude singularities in cosmological modifications of the unified concept of relativity has been confirmed, in many other theorems about singularities, To conduct a Conversation. Penrose also Co. Hawking during the 1960s.

The concept of a Significant gap does not in any way provide practically any ability to say about what-or, what preceded a given time (due to the fact that our exact form of a place-period loses its suitability during a Significant gap, the presence of this concept does not in any way reject the probability of life of what-or up to a Significant gap). This indicates the insufficiency of the representation of the World by the traditional unified concept of relativity.

To what extent it is possible to extrapolate famous physics next to the singularity is considered an object of academic debate, but it is almost accepted that it is impossible to analyze the pre-Planck period in popular ways. The question of the singularity's life in this concept is considered to be one of the stimuli for the construction of photonic and other other concepts of gravity, which seek to solve this issue.

There are several hypotheses about the origin of the visible part of the universe:

according to some scholars (including Stephen Hawking, Lawrence Krauss and Michael Martin), the universe could arise from nothing ("area", where there is no matter, space and time) using "quantum fluctuations";

A. Linde's theory that the universe is infinite and filled with a very dense energy, and our visible part of the expansion (inflation) a small part in "the bubble" (as bubbles occur in dense cheese);

Lee Smolin theory that universes arise from the explosion of "singularity" inside black holes;

The ekpirotic scenario is Neil Turok's theory of the birth of universes as a result of the collision of "branes" (multidimensional membranes in string theory).



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According to the Big Bang theory, further evolution depends on an experimentally measurable parameter — the average density of matter in the modern Universe. If the density does not exceed a certain (known from theory) critical value, the universe will expand forever, but if the density is greater than the critical one, then the expansion process will someday stop and the reverse phase of compression will begin, returning to the original singular state. Modern (2015) observational data show that the average density within the experimental error (a fraction of a percent) is critical.

Conclusion: There are several tasks in which the concept of the Big Bang is not yet able to give an answer, but its main statements are substantiated by correct experimental information, and today's degree of abstract physics makes it possible to absolutely accurately state the development of this kind of concept in the period, due to the deduction of the most initial stage - the regime of the hundredth part of the moments from the "beginning of the world". For the purpose of the concept, it is important that this ambiguity in the initial stage, in fact, turned out to be unimportant, since the situation of the World that arises after passing this stage, as well as its further development, can be stated absolutely accurately.

References:

1. Rubin, Sergey. A world born out of nothing // Around the world. - Young Guard, February 2004. - No. 2 (2761). — ISSN 0321-0669.
2. Chernin A.D. Cosmology: The Big Bang. - Century 2, 2006. - 64 p— - 2500 copies. — ISBN 5-85099-150-6.
3. Sazhin M. V. Modern cosmology in a popular presentation. - M.: Editorial URSS, 2002. - 240 p. - 2500 copies. — ISBN 5-354-00012-2.