



Received: 24-04-2022

Accepted: 04-06-2022

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

The MultiUniverse

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Abstract

The present article deals with the issue of the possible extension of the Universe boundaries, the Universe available at the present moment of time. Everything what is

considered as the Universe is the immediate photo of the Multiverse. The paper offers a method of the significant extension of the Universe boundaries.

Keywords: The Universe, Classical Mechanics, Dynamics, Velocity of Light

1. Introduction

The present article is an example of the philosophical-mathematical approach to the world view consideration. The paper significantly extends the instruments and methods of the world cognition. The conclusions of the study are based strictly on laws of classical physics and mechanics. Moreover, the attempt to explain such common phenomena as dark matter and dark energy by classical physics laws is available in the paper.

Topicality

The modern scientific and technological progress inevitably seeks to amend the picture of the world. Progress both in science and technology surge each other forward.

Objective

The objective of the present article is the significant extension of the cognition boundaries, the establishment of new trends in scientific and technological investigations.

Tasks

The task of the research is the establishment of new trends in scientific and technological investigations in the area of cosmology and the foundation of the physical ability to fulfill the investigations trends.

Scientific novelty

Since the proposed hypothesis is based on the laws of classical physics and mechanics, the scientific novelty lies in the new approach from a slightly different perspective, in a little different approach to of the Universe. Accordingly, the hypothesis opens up a new horizon of research in the area of science and technology.

Main part

The initial data in the proposed constructions are: the speed of light is $3 \cdot 10^8$ m/sec; the movement of material objects is predominantly rotational, spiral. The speed of light is considered as the speed of signal transmission, naturally, it has the character of a linear radial speed. Also, it is necessary to accept as the initial data that everything that we observe in the sky is a snapshot of the Universe in the material and philosophical sense. Everything that is observed in the sky is feedback transmitted at the speed of light with a linear character.

The Earth rotates around its axis with an angular velocity of $6.5 \cdot 10^{-5}$ rad/sec. Question: at what distance R of the eye of the observer will problems commence regarding the transmission and reception of a signal according to the classical correlation $V = \omega R = C$? We have $R = C/\omega = 3 \cdot 10^8 / 6.5 \cdot 10^{-5} = 0.5 \cdot 10^{13}$ m. Naturally, the proposed calculation is approximate, but it shows that this phenomenon should not be neglected.

This calculation shows that everything we observe in the sky is an illusion. Surely, there are objects that are no longer there, but we can see them, and those objects that are available there, are not seen by us at the moment. Everything we see in the sky is objects, a collection of objects that satisfy a set of visibility conditions.

There arises a problem of the Universe observation in the dynamics of development, transformation. Due to the finiteness of the speed of light, we are not able to observe the Universe as a whole.

In other words, it is quite possible to assume that there are material objects in the Universe that move with respect to the Earth at a speed exceeding the speed of light. With rotational, spiral trajectories of material objects movement, such situations are quite possible.

It seemed that on the scale of the Universe, for example, the Milky Way galaxy can be considered as a fixed point, but in reality, the location of the observer is on the Earth. The location of the observer has an angular velocity; the speeds of rotation and displacement are added. The end of the observer's beam has a limited speed. As a result, the observer does not have the physical ability to see the entire real Universe at the same moment.

Fig 1 shows a possible scheme of the object's movement. Movement within the system, movement of the system itself, the addition of velocities may well give the speed of objects movement exceeding the speed of light. Moreover, the speed of the end of the observation beam at some point will certainly exceed the speed of light (the number of possible patterns of material objects movement, combinations is practically unlimited). Naturally, everything that does not meet the requirements of visibility will be invisible. But this does not mean that this invisible object does not exist in nature.

Indirect evidence of the existence of "dark matter" can serve as confirmation of the proposed scheme. The very fact of the impossibility of obtaining direct evidence is also quite eloquent. The impossibility of obtaining direct evidence is due to the limiting speed of light. Indirect evidence of the existence of "dark matter" can serve as confirmation of the proposed scheme. The very fact of the impossibility of obtaining direct evidence is also quite eloquent. The impossibility of obtaining direct evidence is due to the speed of light ultimacy.

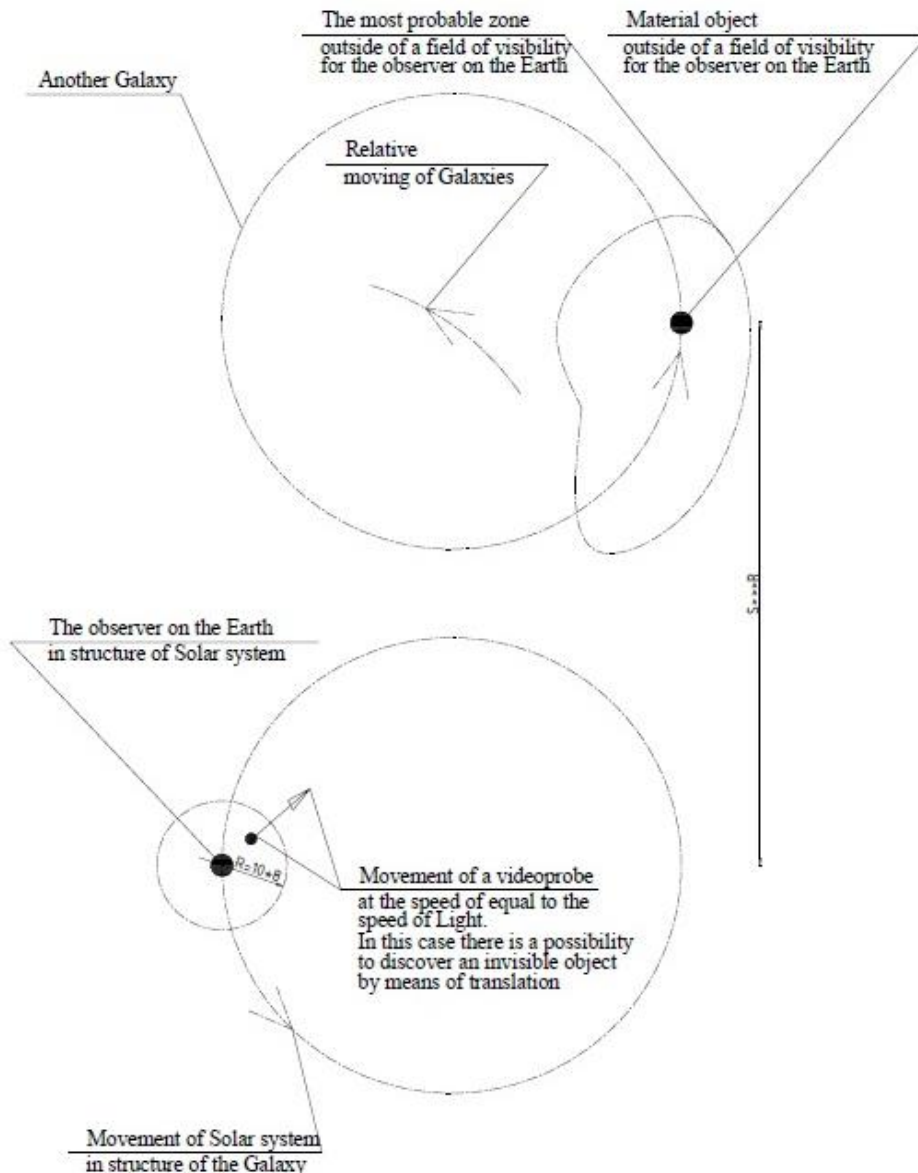


Fig 1: The scheme of the movement of objects

The possibility of experimental verification

It is likely that in the near future it will be technically possible to create a material object capable of moving in space at a speed of at least $0.001c$. It is quite possible that the installation of video recording equipment on such a device will allow us to look beyond the horizon, to see the shores of the new "America".

2. Conclusions

One very simple conclusion suggests itself. What we call the Universe is a special case of the Multiverse. It is only a visible illusory part of the Multiverse. It is a special case that meets the requirements of the visibility conditions. The rest of the Multiverse can only be seen indirectly.

It is quite possible that the mutual influence of visible and invisible matter is what is now called dark matter and dark energy. It is their manifestation.

At the beginning of the article, the new term "philosophical-mathematical approach" was used. Mathematics itself is not intended to be an ideas generator. To implement a mathematical calculation, it is necessary to formulate a task for the calculation. In this case, the task is based on the philosophical approach, which, in turn, is designed to understand a natural phenomenon from a different point of view.

The present hypothesis is based on the laws of classical mechanics and thermodynamics without excluding previously proposed world views.

3. References

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