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Physics of Gravity. Comments and Criticism of the Theory of Relativity

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Physics of Gravity. Comments and Criticism of the Theory of Relativity

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I. INTRODUCTION

As stated in the abstract, a review of the articles "Physics of gravity" and "The picture of the world according to the second law of thermodynamics" is offered [1], [2]. In other words, the article proposes an alternative version of the physics of gravity and rejects all existing ones put forward over the past hundred years. The proposed hypothesis is based on the concepts of classical Newton physics, the planetary model of the structure of the atom.

The article consists of two main parts. The first part is the proposed version with comments and additions, the second part is a criticism of existing versions. The very fact of the existence of many versions is evidence of the relevance of the topic of gravity. The article is constructive in nature, since a new alternative version, a hypothesis, is proposed. The proposed hypothesis explains the physics of gravity as such and the inverse temperature dependence of the forces of gravity. All existing versions (theories) of gravity physics do not even note the inverse temperature dependence of gravity forces.

II. THE PROPOSED VERSION

The articles [1], [2] are conceptually related. The articles present the mechanism of formation of gravitational forces as a cumulative reaction of

gyroscopic forces of rotation of electrons to the external impact of the Expansion of the Universe. The articles also note the inverse temperature dependence of the forces of gravity, namely, an increase in the temperature of objects reduces the forces of gravity, and vice versa. The inverse temperature dependence is explained by the change in the stiffness of interatomic, intramolecular, intermolecular bonds depending on the temperature of the object. Interatomic and intermolecular bonds are schematically represented in the form of a lattice. Electron rotation is the dynamic part of the gyroscope, interatomic and intermolecular bonds are the static part of the gyroscope. The reaction of the dynamic part is transmitted to the static part of the gyroscope. The result of an external influence (gravity) depends on the rigidity of the lattice. As the temperature increases, the rigidity of the lattice decreases, and vice versa. For example, an increase in stiffness increases the effect of the reaction of the gyroscopic forces of rotation of electrons on the lattice itself, thereby increasing gravity, and vice versa. The proposed article [1] presents an attempt to explain the quadratic dependence of gravity forces on the distance between objects. To understand the workings of the forces of gravity, it is necessary to constantly keep in mind that the Expansion of the Universe is initially, everywhere, constantly, isotropic. Accordingly, the reaction (gravity) is initially, everywhere, constantly, isotropic. Yes, there is a gravitational field. Any field must have an energy source. For the forces of gravity, this energy source is the energy of the Big Bang and its consequences – the Expansion of the Universe. This field extends to the entire universe. This is an indirect proof of the common origin of all things. Yes, there are controversial statements about the Big Bang. In any case, by indirect signs, we are in the phase of the expansion process. Moreover, it is quite possible that this expansion has a local character on the scale of the multiverse.

The main property of a gyroscope is the desire to maintain its original position, the desire to return to its original position. It is this property that is the main one in the formation of the forces of gravity and inertia. The proposed hypothesis does not question the existing calculation base, since it has an empirical basis.

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III. CRITICISM OF GENERAL AND SPECIAL RELATIVITY

The main, dominant, generally accepted version on the topic of gravity is the General Theory of Relativity. The main points of criticism of the general theory of relativity are presented in the article [3]. In this article, we will consider some points in the theory of relativity. To begin with, there should be a general belief that classical physics should have priority in the study of physical phenomena. In other words, there is an objective physical phenomenon. There is a need to describe this phenomenon. Let's assume that classical physics cannot give a description of this phenomenon. In this case, some assumptions, postulates, and conventions are possible. In this case, some tricks are possible, the creation of some new theories. But if classical physics is quite capable of describing the phenomenon, why do we need these new theories, tricks, and so on. As an example, let's take the speed of light and Einstein's postulates on this topic, namely, postulate 1 and postulate 2. Wonderful postulate 1, everything is clear and understandable, there is nothing new, everyone agrees. But here postulate 2 arises. At first, everything is fine too – the speed of light has a limit. Like the speed of sound. There are no questions. The interpretation of this point raises questions. It is necessary to start with the fact that speed is a relative concept. It is pointless to impose any restrictions on this phenomenon. There are portable speeds, there is an addition of speeds, there is no absolute rest, that is, the whole universe is constantly in motion. Then there is classical mechanics, there is wave theory. Light has a wave nature, that is, it must obey the wave theory. The wave theory says that the speed of the wave does not depend on the speed of the wave source. The speed of light, the speed of sound, and the speed of the wave from the stem of the vessel must obey this law. A model for understanding this phenomenon can be taken as a wave from the stem of a vessel. There is nothing new in the statement that the speed of light does not depend on the speed of the light source.

Now let's return to postulate 1. We have two reference frames. Let's assume that the reference frame 1 is stationary. The reference frame 2 moves relative to the system 1 at a speed of V . The speed of light in the system 2 is C . For system 1, the speed of light of system 2 will also be equal to C , because the information (return signal) about this speed will pass at the speed of C . In other words, the illusion is created that the speed of C remains the speed of C in all reporting systems, the addition of speeds is excluded. The illusion is that in reality, the speed of the light front of system 2 in system 1 propagates at a speed of $C+V$. This illusion is described by the Lorentz transformations. The Lorentz transformations show the process of inhibition of signal transmission, while (in Einstein's

interpretation) they exclude the existence of real events, namely the phenomenon of $C+V$. Postulate 2 (as amended by the general theory of relativity) assumes a certain absolutely stationary frame of reference and asserts the absoluteness of the speed of light. Now it is proposed to solve the problem. Let's say that engineers and scientists have created a spacecraft capable of moving in space for a long time with constant acceleration "g". How long will it take for the speed of the device to reach the speed of light? The answer is about 300 days, almost 1 year. Earthlings are constantly under the influence of acceleration equal to "g". It turns out that those who are now 50 years old have already overcome the speed of light 50 times. None of these people dissolved, disappeared, and so on, according to postulate 2. Einstein's postulates set the blinders on scientific research at the stage of hypotheses and assumptions.

For example, in the article[3] it was suggested that dark matter is material objects that move relative to us at superluminal speed. Accordingly, we are also dark matter in relation to this dark matter. It turns out that the blinders set by Einstein narrow the scope of research in this direction. Currently, dark matter is literally perceived as some kind of matter with special properties.

IV. CONCLUSIONS

The main conclusion of the article is that the gyroscopic forces of rotation of electrons are the basis for the formation of gravitational forces. The forces of gravity are the cumulative reaction of the gyroscopic forces of rotation of electrons from the Expansion of the Universe. It should also be noted that the Expansion of the Universe occurs initially, constantly, everywhere, isotropic, respectively, the reaction (gravity) is initially, constantly, everywhere, isotropic. Gravity is an indirect evidence of the common origin of all things – visible and invisible. The basis of the forces of gravity is the dynamics of the rotation of electrons, the combined gyroscopic forces from the rotation of electrons. With changes in temperature and distances between objects, the main influence on the change in gravitational forces is exerted by the forces of interatomic, intramolecular and intermolecular bonds, which form a kind of rigid lattice. The formation of a "rigid lattice" does not contradict the concepts of nuclear interactions. Changes in body temperature, distances between bodies change the rigidity of this lattice, respectively, changes the reaction forces, respectively, the forces of gravity. It is also necessary to note the general nature of the forces of gravity and inertia. As a conclusion to the article, it should be noted that postulate 2 contradicts postulate 1 of the special theory of relativity. Attempts have already been made to revise postulate 2. This article proposes a new version of

postulate 2. Postulate 2. The speed of light in a vacuum is constant in all coordinate systems (tied to a light source in accordance with the theory of waves), moving rectilinearly and uniformly relative to each other in accordance with postulate 1. The speed of light is the limiting speed of transmission of the return signal during the transition (recalculation) from one coordinate system to another, while working the classic addition of speeds.

With modern approaches (special relativity theory) to this issue, the position arises that the Earth is the center of the Universe.

Lorentz transformations describe illusions that occur at near-light speeds. It is necessary to affirm in the minds of the general public that mass is a scalar quantity. Currently, mass is associated with gravity in the general public. It is for this reason that theories like Einstein's general theory of relativity arise. Einstein's theory is based on the action of gravity, which "deforms space", forms certain pits, and other matter rolls into these pits, again under the influence of gravity. Yes, gravity arises (in the form of a reaction) when a certain force from the outside, an external force, is applied to the mass. For example, the constantly acting external force of the expansion of the Universe. The force of the Expansion of the Universe causes a reaction in the form of gravity. Inertia forces are also a reaction to some other external influences. Centrifugal forces are also a reaction to giving rotational motion, momentum to a material body, mass. This is confirmed by the fact that if the external forces are balanced, then a state of weightlessness occurs.

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