

ФИЗИКО-МАТЕМАТИЧЕСКИЕ НАУКИ

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NEW THEORY OF GRAVITATION. ENERGY CONCEPT

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НОВАЯ ТЕОРИЯ ГРАВИТАЦИИ. ЭНЕРГЕТИЧЕСКАЯ КОНЦЕПЦИЯ

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АННОТАЦИЯ

Автором предложена новая теория гравитации, согласно которой материальные частицы не обладают собственной энергией гравитационного притяжения и не излучают каких-либо гравитационных волн.

Возникновение любых материальных объектов сковывает часть энергии, отбирая её от единого безграничного базового энергетического поля, понижая в результате энергетический уровень среды в зоне своего существования.

В образующуюся «энергетическую яму» стягиваются все материальные объекты, оказавшиеся в сфере её влияния, что воспринимается как эффект проявления сил их взаимного притяжения.

ABSTRACT

According to the new theory of gravity, material particles do not have their own energy of gravitation attraction and do not emit any gravitational waves.

The emergence of any material objects fetters part of the energy taking it away from the single boundless basic energy field lowering as a result the energy level of the environment in the zone of its existence.

All material objects that are in the sphere of its influence are drawn into the resulting "energy pit" which is perceived as the effect of the manifestation of the forces of their mutual attraction.

Ключевые слова: гравитация, энергия, новая концепция, материальность, анизотропия энергии, базовый энергетический уровень.

Key words: gravitation, energy, new conception, anisotropy, basic energy level

1. Introduction. General ideas about gravity

According to modern ideas gravity is a universal interaction between any types of matter.

According to Newton, gravity (or gravitation) is the interaction between bodies that have mass. According to modern concepts, mass is characterized as a physical quantity that is a source of gravity. Newton's law of universal gravitation assumes that the force of gravity propagates in space instantly.

Einstein's general theory of relativity (GR) defines gravitation as a consequence of the influence of matter on the geometric properties of space-time (in particular, the presence of matter causes the curvature of space). According to general theory of relativity, gravitational radiation propagates in space in the form of waves at the speed of light.

The quantum theory of gravity postulates the existence of gravitons – particles that are sources of gravitational attraction.

However, all existing theories of gravity do not give an answer to the question of what is the source of energy that generates the forces of gravitational attraction and existence of a gravitational field.

2. Energy basis of gravity

The basis of the birth and existence of the material world is a boundless basic energetically isotropic medium, which has an inexhaustible potential for movement. The processes of motion in this initial energetically isotropic medium lead to the appearance in it of various kinds of local anisotropic formations in the form of waves, vibrations and vortex. Any anisotropic formation is an object of the material world, because the presence of energy anisotropy is a defining sign of materiality [1].

At a sufficiently high intensity of the resulting vortex, the formed funnel can become stable. The head of this stably existing vortex is a stable anisotropic formation – a material particle (a particle of matter).

The appearance of a vortex violates the energy isotropy of the medium, since a certain amount of energy is spent on the formation and existence of a vortex. Consequently when a vortex funnel appears, the field energy level in the zone of its existence decreases in comparison with the basic energy level (BEL) of the medium.

The energy taken from the basic energy level of the medium for the formation of a vortex funnel and concentrated in the zone of existence of the vortex is the free energy of the material world, while the energy concentrated in the head of a stably existing vortex

(material particle) is the energy bound in this material particle.

According to Einstein, the relationship between the mass of a material object and the energy associated (bound) in it is determined by the equation $E=mc^2$. For objects of varying degrees of stability the relationship between mass and energy can be expressed by the equation $E=m^RA \setminus$.

Thus, the energy taken from the basic energy level for the formation of a vortex funnel lowers the basic energy level of the medium in the zone of existence of the funnel, creating a gradient of the energy potential of the medium and forming a kind of “energy pit” into which any material objects that is in the field of action of the funnel slides down.

The centripetal forces arising from the rotation of the vortex funnel act on any material object that is in the zone of the rotating vortex, directing it towards the axis of the vortex, i.e. to the zone with the lowest energy level of the medium. This is presented as the attraction of this material object to the material particle, which is the center of the vortex.

The effect of attraction of material objects to each other is perceived as a property of their gravitational interaction, although the material objects themselves do not exert any gravitational attraction of material particles, and their pulling together (the phenomenon of mutual gravitation) determined by the effect of dumping them into the zone with the lowest energy level of the medium.

It should be noted that the appearance of a vortex funnel generates in the surrounding isotropic basic medium the occurrence of local fluctuations in the energy level (like waves diverging from a stone being thrown into water). These wave vibrations, rotating under the influence of the rotation of the vortex funnel, create a kind of “ethereal halo” around it. The energy spent on the formation of this “ethereal halo” around

any material object is anisotropic energy which can be considered as “dark energy” \setminus

The boundary of the zone of influence of a material object should be considered the distance from the axis of the vortex at which the energy level of the funnel (decreasing as it moves away from the axis of the vortex) becomes equal to the energy level of the “ethereal halo”.

Outside the sphere of influence of the vortex funnel and the “ethereal haloes”, the energy level of the medium returns to its original level which is the basic energy basis of gravity (BEL).

3. Conclusion. Gravity

Based on the presented ideas, the following conclusions can be drawn:

- material objects are not sources of gravitational radiation and do not form gravitational fields in space with a finite or infinite speed;
- material objects do not bend space (space is a geometric concept and is not a material entity to which the ability to bend, expansion-compression or torsion could be applied);
- gravitational fields do not consist of any special particles (such as gravitons, etc.).

Thus the presented concepts allow us to formulate the following definition of the concept of gravity:

Gravity is a phenomenon of mutual attraction of material objects due to their gravitation in the direction of the lowest energy level of the medium under the influence of the energy potential gradient.

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