Journal of Physics and Astronomy

Hypothesis |Vol10 Iss8

Dynamic Component of Gravitational Forces

I.V. Kuzminov[1,2*]

[1]Russian Geographical Society (Russian Academy of Sciences), Russian Federation

[2]Royal Geographical Society, Kensington Gore, London, UK

[*]**Corresponding author**: I.V. Kuzminov, [2]Royal Geographical Society, Kensington Gore, London, UK; Email: garikuzminov@gmail.com

Received date: July 19, 2022, Manuscript No. tspa-22-69686; **Editor assigned:** July 21, 2022, PreQC No. tspa-22-69686 (PQ); **Reviewed:** Aug 3, 2022, QC No. tspa-22-69686 (Q); **Revised:** Aug 5, 2022, Manuscript No. tspa-22-69686 (R); **Published:**Aug 10, 2022, DOI:10.37532/2320-69686.2022.10(8).291

Abstract

The proposed article is a development of a new alternative version (hypothesis) of gravity physics. The version is based on the concepts of classical physics and does not negate the existing calculation base. The hypothesis denies the existence of gravitational forces as such (special) by nature, especially the concept of a gravitational field and gravitational waves (These concepts are allowed conditionally). Those forces that are commonly called gravitational are similar in nature to the forces of inertia. The forces of inertia are the forces of reaction to external influences to bring the body out of a state of rest (balance), the forces of gravity are the forces of reaction from the forces of the expansion of the Universe. The nature of these reactions is connected with the cumulative reaction of the gyroscopic forces of rotation of electrons, in connection with the macro- and micro world.

Keywords: Gravitation; Forces of reaction; Dynamics; Acceleration; A black hole; A condition of rest

Introduction

The proposed article is a development of the direction presented in the articles [1-3]. The articles are conceptually related. The articles noted the inverse temperature dependence of gravitational forces, namely, an increase in the temperature of an object reduces the gravitational forces, and *vice versa*.

The denial of gravitational forces as such does not exclude the use of the term "gravitational forces" in the text of the article, since in this case we mean the natural phenomenon of gravity in the generally accepted sense.

This article attempts to explain the nature of the dynamic component of gravitational forces, see [3]. Article also presents an explanation of the inverse temperature dependence of gravitational forces [3].

Main Part

This article aims to perform a preliminary analysis of the dynamic component of gravitational forces. The dynamic component is the main force in the structure of gravitational forces. As mentioned above [1,2], the forces of gravity are the forces of reaction to the withdrawal of the body from the equilibrium state (state of rest). To begin with, let's define the forces that bring everything in nature out of a state of rest. The first force is the force of the Big Bang. This force gave impetus to everything that exists, this process is

Citation: I.V. Kuzminov. Dynamic Component of Gravitational Forces. J Phys Astron.2022;10(8):291.

expressed in the expansion of the Universe. The second force is the influence of local black holes. At present, at least, the solar system is under the influence of these two components of the dynamic forces of influence simultaneously. The reaction to the impact of these forces are gravitational forces. The real gravitational force is determined taking into account thermal effects [3,4]. The process of expansion or contraction of matter in space probably occurs with the movement of matter in space. Depending on the trajectory of movement, according to the laws of classical dynamics, in any case, there is a second derivative of this movement. An absolutely straight trajectory is unlikely. The most likely spiral trajectory. Such a trajectory of movement, the most common in nature. Movement along such a trajectory causes significant radial accelerations. These accelerations cause the reaction in the form of gravitational forces. In passing, it can be noted that it is not gravity that dictates the conditions, but the conditions form gravity. Therefore, for example, when the Solar system moves towards a black hole, the characteristics of the trajectory (curvature) change, the acceleration (linear and radial) changes, the temperature of matter changes, and the forces of gravity change accordingly. Earthlings will only need to periodically update the gravitational constant and the free fall acceleration on Earth.

For the convenience of perception, awareness of the presented scheme of gravity physics, it is enough to perceive the planet Earth as part of the Galaxy, as part of a conglomerate, according to this scheme. Initially, the conglomerate was affected by the Big Bang, and now it is additionally affected by the compression process on the way to the black hole against the general background of the expansion of the Universe. Gravitational forces are the forces of reaction to a combination of dynamic and thermal influences.

The Thermal Component of Gravitational Forces

It is clear that gravitational forces have two components: dynamic and temperature, thermal. In other words, the forces of gravity depend on the dynamics of the expansion-compression of the medium and the temperature of the medium, thermal effects. The main component of gravitational forces is dynamic. In addition to article [3], it is necessary to note the moment of the thermal component of gravitational forces. We witness this moment every day. An example of the operation of the thermal component is the process of vapor condensation during cooling, lowering the temperature. In this process, the strengthening of gravitational forces during the cooling of matter is clearly shown. Modern science states the process of condensation itself, but does not represent the physics of the process. In fact, the process of condensation is a manifestation of the forces of gravity, the thermal component. This refers to the formation of drops, clouds, spherical planets during cooling. Formation of droplets by combining smaller ones into larger ones. A similar situation, but less obvious, can be observed when the medium is heated in a phase transition, for example, evaporation, vaporization. Evaporation is a less obvious example, since in this case the energy of breaking intermolecular bonds is much greater than the gravitational forces.

Conclusions

The main conclusion of the article is that the gyroscopic forces of electron rotation, the dynamic component, are the basis for the formation of gravitational forces. The dynamics of electron rotation does not affect a significant change in the forces of gravity with a change in temperature. When the temperature changes, the main influence on the change in gravitational forces is exerted by the forces of interatomic, intramolecular and intermolecular bonds. Thermal action changes the rigidity of the lattice of interatomic and intermolecular bonds. When heated, the rigidity decreases, and the influence of the gyroscopic forces of electron rotation decreases accordingly. And vice versa. At present, for example, the Earth in the Milky Way conglomerate is simultaneously in the expansion phase of the Universe and in the phase of local contraction, cooling on the way to the black hole. The forces of gravity are a consequence of this twofold process of expansion and contraction.

REFERENCES

1. Kuzminov I V. The Physics of Gravity. J Phys Astron. 2021;9(9):1-4.
2. Kuzminov I V. How the Universe works. Thermodynamics. Hypothesis. Materialy konferentsii “Sintez mezhdistsiplinarnogo nauchnogo znaniya kak factor razvitiya sovremennoy nauki”. Petrozavodsk, 2021;79-83.
3. Kuzminov I.V. The Comments on article “The Physics of Gravity”. J Phys Astron. 2022;10(2):1-3.
4. Dmitriev A L. A simple experiment confirming the negative temperature dependence of gravity force. J Eng Phys. 2012;48-51.