



## On the nature of gravity and possible change of Earth mass during geological time

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A number of circumstances can't be explained based on view of the constant force of gravity on the Earth: 1. Dimensions of fossil animals and plants. According to the laws of biomechanics of the giant dinosaurs could not move and fly. 2. The movement of continents, reliably described by A. Wegener, can only be explained on the basis of the model increasing the Earth. Gravity is only one of the fields that define the existence of the world. Field and matter are forms that can be converted into each other. Transition is described, in particular, by Poincare, perhaps not quite accurate:  $E = (K) mc^2$ . There are indications of the existence of the time field (Kozyrev, 1978), which generates energy, and then the following conditional equation:  $T$ , where  $T$  is a time. Through this relationship generated energy glow of stars and planets, the mass increases. In particular, there is an increase in the mass of the Earth. This confirms the divergence of the continents and reducing the size of the animals and plants in the Earth's history. According to presented model, the size of Earth increased during 100 millions years two times in linear scale and 8 times in volume and mass scales. Understanding of general principle of space development needs collaboration of different specialists and branches of geosciences. The basis of possible scheme is: 1. The nature of gravity is not explained by science, although some of its properties are described with high accuracy, and these descriptions have predictive power. Indeed, what attracted threads of the body without physical contact? 2. The velocity of propagation of gravitational forces in the universe is many times the speed of light. Perhaps it is infinite, although it is not proven. 3. The universe is infinite, as is clear from logical calculations thinkers more ancient period. However, our universe, i.e. of the universe, available to our senses and instruments, is finite. The volume of our universe is 1070 cubic kilometers. The total mass of 1023 times the mass of the Sun. The number of stars systems is approximately 1012. 4. Apparent detectable matter - a tiny part of the whole universe. The basis of it the dark matter, which we have not observed, but guess from indirect evidence. 5. One of the most developed cosmogony concepts - the concept of the Big Bang. The basis for the creation of the concept was still unconfirmed opinion of astronomers, that all the galaxies scatter. According to Friedman, Gamov and their followers - proponents of the Big Bang, our universe began 15 billion years ago. Then it was the size of a proton! Density was 1093 g/cm<sup>3</sup>. Its temperature was 1070 degrees. Present these values everyday consciousness is impossible. From this state, our universe began to expand. After one ten-thousandth of a second density has fallen to 1014 g/cm<sup>3</sup>. There were first the elementary particles. When the age of our universe has reached a 0.3 second the density decreased 107 g/cm<sup>3</sup>, temperature up to 30 billion degrees. 6. Big Bang hypothesis is interesting, and, to some extent, is constructive. But she has not acquired the rank of the theory and contains too much unchecked moments. According to the principle of relativity of Poincare and Lorentz, the maximum speed of physical movement in space - the speed of light. The universe is filled with dark matter, which extends, perhaps indefinitely. She has great density and generates a flow of gravity. Chemically, it must consist of hydrogen as a primary element. In the continuum of Dark Matter sometimes cavities appears. One of them is our Universe. Similarly, when our universe came into being as a "pseudocavity" bubble in the continuum of Dark Matter, the material particles are grouped into galaxies, stars and planets. The gravitational field is emitted by all matter of the universe. This hypothesis is toward understanding of continent mobility and both geological and biological evolution of Earth.