

The Big Bang. The Formation of the Universe.

The non-stop inertial motion of time gives rise to those spatial forms and structures that we perceive as our universe. We see our universe is such as it was formed as a result of the movement of time from a particular, modern speed.

If the time speed were different, then the world would be completely different. The existence of atomic nuclei known to us is due to the binding energies that are determined precisely by the modern value of the time velocity. If time will start moving at a different speed, then the values of the binding energy of atomic nuclei will be other and it may not be enough to contain elementary particles in the composition of atomic nuclei. As a result, will there are already formed other, not similar to the usual chemical elements and the world consisting of them will not at all resemble ours. But, perhaps, the speed of time can have a single, known to us the value? After all equal to it the value of the speed of light in vacuum modern physics really believes constant. However, everything is not so simple. If some physical body is initially at rest, then to achieve a certain spatial velocity need a period of accelerated movement. For example - the plane to get the right speed, he should accelerate, i.e. Some time to move with acceleration.

Modern physics take the view that our universe was formed in the result of the Big Bang. Up to the moment of this event there was nothing, not even time. In other words, in the past, there was some mysterious point in space-time for which time has not yet passed. At the time of the Big Bang occurred and "Starting" the movement of time. As it was written in the previous article, that the motion of matter in time, and also motion in space, possesses inertial properties. This means that the speed of time could not instantly change its value from zero to its modern speed. Consequently, at the initial stage of the existence of the universe, there must necessarily be a nonzero period of acceleration in time, when there was an increase in the time velocity from zero to its present value. But the time velocity determines the value of the speed of light in a vacuum, which, in its turns into a huge number of physical relationships that describe our world.

All models that describe the initial stages of the development of the universe rely on the value of the speed of light as an unchanged physical constant. However, any a physical particle having a nonzero rest mass, when passing from rest to motion in time experienced a period of temporal acceleration, in which the speed of light and everything the physical quantities associated with it had completely different meanings than those that are indicated in the handbooks on physics. Other values of the binding energies of intranuclear particles could create for some time completely unusual chemical elements, and their Short-term existence in turn could have a significant impact on the course of events in the nascent world.

Taking the view that there was a period when matter having an inert mass of rest, experienced an accelerated movement in time, we inevitably come to conclusion that such dispersal presupposes the existence of peculiar temporal forces, the action of which leads to the dispersal of the body in the time dimension. Hence, the action such forces, even extremely short-term, must be taken into account when building physics of the Big Bang. Mysterious Big Bang is associated with the properties of the movement of time with one more side. All material particles in the universe can be divided into two groups - particles having a rest mass and particles that do not have a rest mass. All material particles with a rest mass have the most important property of incompatibility in space. Two billiard balls in a collision do not pass through each other, but bounce and scatter in different directions. Due to this property, the table does not fall through the floor on which he stands, and we can safely stroll along the street, without falling through the ground. Particles that do not have a rest mass, such

property do not possess. The most known particles of this kind are particles light - photons. When crossing two light rays, they do not bounce off from each other, do not generate any additional glow, that is, photons pass smoothly each other without collision. The existence of the rest mass is associated with motion substance in time. Particles that do not have a rest mass do not experience motion in time.

Let us now return to the initial moment of the origin of the universe. We believe that in the initial moment of time has not yet begun. Therefore, at this moment, all the matter of the Universe does not yet have a rest mass. If so, the properties of incompatibility it does not possess, and can be pulled together into a tiny point (the so-called singularity point). "Running" the movement of time immediately leads to the formation of rest masses moving in time matter. But the appearance of rest masses inevitably entails manifestation of the property of spatial incompatibility of matter, which, we recall, tied to the point. The result - the compressed substance of the universe can no longer be greater is combined in a point, and its incompatibility resulting from the movement of time generates a huge explosion, dispersing matter in space - the Big Bang.

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