## **RELATIVISTIC MASS MACROBODIES**

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Resume. The relativistic growth of mass macrobodies differs from microparticles



On a figure 1 Curve **1** are demonstrated with relativistic growth of mass of a separate microparticle depending on its speed pursuant to the formula:

 $m = \frac{m_0}{\sqrt{1 - \left(\frac{V}{C}\right)^2}}$ 

(5.2.0.1.1).

This formula is obtained as a result of the analysis of impulses of components of elementary particle [1, chapter 5.2]. The free elementary particle is moves on a screw trajectory in space in such a manner that the orbital plane of its components is always perpendicular to a traveling direction. It is outcome of gravidynamic self-effect of a particle.

In macrobody there is no capability to analyze a direction of impulses of each elementary particle from which one consists macrobody, since the orbital plane of components of particles is arranged chaotically and is not perpendicular, generally, traveling direction of macrobody. Freely to be turned in space it can not because of interconnection in a body. The plane of very many orbits in the given moment appears almost parallel to a traveling direction of a body and in this case relativistic growth of mass of such particles does not occurs, since on one half of orbit mass grows, and on other drops in the same way. Therefore similar particles practically do not introduce the contribution to relativistic growth of mass, since the screw motion represents independent from each other translational motion and perpendicular to him tangential motion. Therefore relativistic growth of mass of any bodies determines only of translational component of their motion.

For «fixed» macrobody its mass is determined by the sum of weights of all particles from which one a body consists. Each of them represents components rotated with light speed around of common center of gravidynamic interaction. Half of energy of gravidynamic attraction of components at formation of a particle is spent for universal energy of a repulsion, equal  $m_i c^2/2$ , where  $m_i$  - particle mass, and second half is spent for bond energy of components, which one pursuant to a virial theorem also is peer  $m_i c^2/2$ . If now to find common energy of deleting components of each particle on perpetuity (equal energy of

gravidynamic attraction) and to summarize it on all particles of a body, we shall receive the famous formula of energy of «rest» of a body:  $E_0 = m_0 c^2$ . Apparently, that at motion of macrobody to this energy it is necessary to add a kinetic energy of translational component of motion:  $E_k = mV^2/2$  to receive relativistic energy macrobody:  $mc^2 = m_0 c^2 + mV^2/2$ . Then the relativistic growth of mass macrobody depending on forward speed it will be determined by the formula:

$$m = \frac{m_0}{1 - \frac{1}{2} \left(\frac{V}{C}\right)^2}$$
(5.2.0.1.2),

the graph by which is figured (**2**) on a figure 1. Pay attention that the relativistic growth of mass macrobody at its speed equal speed of light can not exceed  $2m_0$ . This growth will become infinite only at motion of macrobody with speed  $c\sqrt{2}$ . Just this speed is the greatest possible running speed of bodies. Just with this speed the photons and particles with «zero rest-mass» move if to add up their translational and tangential velocity on a screw trajectory. It is interesting, what the Einstein and his followers thinks in this reason?

References:

1. <u>http://www.new-physics.narod.ru</u>