

The essay on physics

On a subject «Paradigm of a physical science»

The last four hundred years, since Isaac Newton in a physical science the paradigm put forward by it reigns.

Newton's paradigm came in the stead of Ptolemaist's paradigm and was absolutely in a revolutionary way for the time. Isaac Newton's physical laws irreproachably operate in a modern physical science. And that less the paradigm put forward by Newton generates many problems which do not have the permission.

In the present article the author does attempt to put forward new representation of a physical peace arrangement.

I want to begin the statements of that at all physical schools the modern physics leans on a paradigm put forward by Newton that the matter generates, forces of universal gravitation being expressed in a physical formula the law, is written down as follows:

$$F = G \frac{m_1 m_2}{R^2}.$$

I.e. puts weight of a body defining dependence on its gravitation. But the physical formula of $F_G = 9,8 N$ is characteristic only for an earth surface, with distance change to a point of the birth of forces of gravitation a size F_G , will change in proportion to R^2 . In terrestrial conditions this error isn't appreciable and has no critical value, but from the beginning of physical studying of a space the error becomes critically significant and generates known dualism. This dualism tried to resolve, having put forward the theory of existence of air, as uniform environment of the Universe. But this theory appeared not well-founded and didn't find the physical confirmation. Despite it, the last 100 years in a physical science, don't stop attempt to find the mechanism, air registration. I adhere to reasonable doubt in air existence, but arguments of supporters of existence of air, fairly nonplus.

I will make an attempt to resolve this dispute. In the first I consider, by analogy to distribution of sound waves, in vacuum the sound wave has no carrying-out environment and on it has no distribution, but light is manifestation of electromagnetic waves and vacuum isn't an obstacle for light distribution, on the contrary, light dispersion in vacuum practically is absent. In the second, for an

example I will give the transformer of an alternating current. In a secondary winding there is a movement of electrons on the conductor with an electric current, energy transfer but what serves as the transfer mechanism? Perfectly – an electromagnetic field. That is, differently there is an existence of the environment allowing transferring energy of movement of electrons from one conductor with a current on another. In the third, probably to create the isolated space (room) in which it will be excluded, thus it is impossible to isolate penetration of any waves, the sound, electromagnetic, ionized and x-ray radiations, but a gravitational field. This argument also allows doubting for lack of Wednesday for transfer of movement of a light wave. But what then is the transfer environment? Just within Isaac Newton's existing paradigm of the answer to this question it was not possible to find. For detection of this Wednesday thousands experiences are carried out, but results remain former.

And what if to assume, what in a law of gravitation there is an error bound to absence at the moment of its writing of knowledge of saved up by a physical science for the last four centuries?

And gravitation isn't generated by existence of physical weight? And on the contrary the physical weight is generated by gravitational fields? And the gravitational field it, Wednesday which, being raised, carries out light waves?

Then searching of air becomes really senseless, because of its absence, as was fairly proved in a physical science.

It is necessary to assume that, unit of a gravitational field, is that "brick" a neutron forming the simplest nuclear structure, a proton, an electron. But if this "brick" is capable to unite with other "bricks" without occupying volume in space, but thus, forming the following heavier element, it seems to me, such explanation will be more logical. Besides experiences showed, change of force of a gravitational field occurs in direct ratio to a distance square that actually and reflects a law of gravitation.

Then it turns out that the modular condition of substance, for terrestrial conditions reflects a ratio of a gravitational field of atom of substance and its electromagnetic induction.

I will explain, an electron, rotating in an orbit of a core of atom of substance, has constant quantity of turns in a core circle, on this principle of constancy, «nuclear measuring apparatuses» with measurement accuracy $2 \cdot 10^{-16}$ are constructed, but the height of an orbit of an electron changes from degree of a initiation of atom. For each atom as exaltation the strictly fixed serves

is long a light wave. This statement is shown in experiments of N of the Bohr on diffraction and light interference, moreover, partial absorption of a light wave and forms color perceived by an eye of the person. On ability of substance to absorb, light waves, strictly fixed are long and is based studying of chemical composition of the remote space objects in an astrophysics.

Gravitational field of a core of atom, affecting an electron, aspires to draw an electron as it is possible closer to an atom core. It is thus allocated surpluses of energy of an electron in the form of a light wave of an infra-red range which we can tactilely feel. It is so arranged in the nature, all alive organisms perceive a surrounding medium as the wave reflected from subjects, various ranges sound, ultrasonic, infra-red, light. The degree of excitation of atoms is directly shown in thermodynamics. The thermal expansion of bodies, that is, increase in degree of an initiation of atom, transition of the electronic shell of atom to higher orbit, increases space volume taken by atom. Manifestation of this effect in a physical science it is accepted to call effect of a cavitation, that is, substance driving against gravity, at thermal change of the volume occupied by atom of substance in environmental space. Therefore, a ratio of density of substance to volume not about

$F_G > B_e$ – a modular condition of a rigid body;

$F_G = B_e$ – a modular condition of a liquid;

$F_G < B_e$ – a modular condition of gas body.

Where, F_G – force of a gravitational field between atoms of substance, at $G = 9, 8 N$;

B_e – An electromagnetic induction of an exaltation of an electron of atom of substance, at $t = 20 C^\circ$.

It is possible to illustrate my statements on experience of the absolute thermal car of Carnot.

Alternating exaltation of atoms in the extending cylinder, over time on transition to less excited state, energy transformation (thermal exaltation) to a mechanical energy on a shaft is made. Not cunning process it is possible to express this in the following physical formula:

$$\frac{(\Delta F h^t)^n}{\omega} = E \text{ of the engine,}$$

Where, n – quantity of cycles of expansion of narrowing;

ΔF – a resultant of electromagnetic forces, cylinder expansions;

H – Cylinder height;

t – Time of expansion of the cylinder from the minimum are long the cylinder to the maximal;

n – Quantity of cycles;

ω – a transmission factor on an engine shaft;

E – Engine.

The quantity of cycles of such car will be in direct dependence on ability of a surrounding medium to absorption of exuberant exaltation.

This dependence is described in works of Maxwell as process of thermal entropy of substance that is process of transfer of heat from larger potential to smaller potential. As will have a direct sense density of substance of the cylinder that is quantity of number of atoms in a crystal lattice of the cylinder as integral value of electromagnetic forces of extending electronic shells of atoms in the cylinder will be formed by ΔF . Therefore, logical and correct will write down a formula of determination of weight as: $m = \Delta F (V q G)$,

Where, ΔF – the integral forces counteracting gravitation;

V – Substance volume;

q – Substance density;

G – Gravitation constant;

I believe as that the weight is formed as a result of counteraction of force of ΔF , on action of gravitation (gravity) on a physical matter.

As the proof of a truth of this statement I suggest to consider the following experience:

The volume of substance of 1 liter, (for an example we use water) with density 1, the same dynamometer undertakes, on a surface of Earth will show 9, 8 N, on a surface to the Moon, 1, 62 N, and for example on Jupiter, will show 41, 16 N, but, thus on humeral weights with the kilogram weight, weights will show equivalence of weight. That completely confirms the stated statement.

To the common components at all these absolutely different processes I find existence of a positive vector of operating forces of ΔF . The unique conclusion from here arises that energy is formed as a result of operating force on physical object. Therefore, Albert Einstein's formula doesn't comprise a key element giving the correct comprehension that such energy. Being based on the foregoing, I come to a conclusion that the formula should sound so:

$$E_{\text{пот}} = \frac{\Delta F \left(\frac{V q G}{a} \right) c^2}{\omega} = E_{\text{кин}}$$

Where, $\Delta F (V q G)$ – value of weight of m ;

V – Substance volume;

q – Substance density;

G – Gravitational level;

a – Perfect work;

ω – A transmission factor.

$E^{\text{пот}}$ – Value of a potential energy;

$E_{\text{кин}}$ – Value of a drop energy;

For comprehension of this formula even it is not required to carry out experiences, a water cycle in the nature visual confirmation of a formula.

Creation of conclusions following from work will be quite extensive and won't go in in a tempered framework. But I can express the main conclusion so:

Filing of forces of gravitation isn't exposed to doubts;

Long-range action of forces of gravitation isn't exposed to doubts,

Existence of these forces isn't exposed to doubts;

Convertibility of these forces isn't called in question;

In total transitivity of these forces, isn't exposed to doubts;

Therefore, these forces can apply for replacement of not found "air", thus changing the concept of a paradigm of Isaac Newton «weight gravitation defines gravitation» on a paradigm «Defines weight». Changes of a paradigm in a physical science, will allow making prime and clear explanations of many phenomena in the nature and at last, to stop anti-matter and statement searching about matter annihilation. But from my work I consider as the most important conclusion that the law "Conservations of energy" is absolutely identical to "Conservation of matter".

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