

**A unified theory of all fields and all kinds of matter.  
Easily. Handsomely. Available. Scientifically.**

**Abstract.** A long-awaited unified theory of all fields was received, for which the giants of world physics fought so hard. In addition, it is shown that not only all fields, but all matter, are solutions of the same equation.

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In the universe, there are hardly any macroscopic fields in the pure form that we describe in Maxwell's equations or Coulomb's law or Newton's law of universal gravitation. All fields observed in nature are superposition of trillions of microscopic fields from elementary particles. In turn, elementary particles are wave vortices in elastic gukuum. And these are microscopic wave vortices in pure fields. For these waves, Maxwell's, Coulomb's and Newton's equations act with absolute accuracy, without any averaging. Therefore, the further presentation can be attributed either to microscopic fields, smaller in size than elementary particles, or in general to a purely mathematical model of all fields and types of matter.

**0. Foreword.**

It was February 2003. I took the article to the paid magazine, not even hoping that it would be published in the budget journal. The experience of living in Russia was available. Later I took them to the journals JETP and "Letters to JETP", it's useless. Reality is very far from what we are portrayed about domestic filmmakers or written by journalists. No reviews were given to me. And on the attempt to send a parcel (with a CD), the parcel returned with the inscription: the refusal to receive. One of the articles fell through somewhere about three years old, until I wrote to them and they returned the article without comment.

But I did publish the opening in a paid magazine. All the formulas that are lower in this article are printed in the journal in March 2003. And then let me be strangled as a scientist, let. Time is. Enemies of the country are many, both outside and inside. Even if somebody appropriates it, partially or completely. But in 100 - 200 years, still, the truth-seekers will unearth and rehabilitate. This is the ecological niche allotted in Russia for real scientists and for real science. And for rogues with their shabby dissertations, budget financing, academic degrees, high ranks, the Academy of Sciences, an additive to retirement, prestigious awards and prizes, laudatory articles and television programs are allotted.

**1. What do we know about the electromagnetic and gravitational field. School level.**

a) Electric field. Coulomb's law.  $\mathbf{F}$  is the force,  $\mathbf{E}$  is the electric field strength.

$$\vec{F} = \frac{q_1 q_2}{r^2} \quad \vec{E} = \frac{q}{r^2} \quad \vec{F} = q\vec{E}$$

b) Magnetic field. Ampere's law for two parallel conductors:

$$\vec{F} = \frac{2I_1 I_2 l}{ac^2}$$

Where  $I_1, I_2$  - currents,  $l$  - the length of the interaction of the conductors,  $a$  - the distance between the conductors,  $c$  - the speed of light,  $r$  - the distance from the charge to the observation point.

The Ampere law for a moving charge  $q$  with a velocity  $V$ :

$$\vec{H} = \frac{q\vec{V} \sin(\vec{V} \wedge \vec{r})}{cr^2}$$

The force acting on the charge from the electric and magnetic fields:

$$\vec{F} = q\vec{E} + \frac{q}{c}[\vec{V}\vec{H}]$$

c) The law of universal gravitation.  $\vec{g}$  is the gravitational acceleration.

$$\vec{F}_{1,2} = \gamma \frac{m_1 \bullet m_2}{R^2} \quad \vec{g} = \frac{\gamma \bullet m}{R^2} \quad \vec{F}_{1,2} = m\vec{g}$$

**2. What do we know about the electromagnetic and gravitational field.** University level.

a) Maxwell's equations in vacuum.

$$\begin{array}{|l|l|} \hline \text{rot}\vec{E} = -\frac{1}{c} \frac{\partial \vec{H}}{\partial t} & \text{rot}\vec{H} = \frac{1}{c} \frac{\partial \vec{E}}{\partial t} \\ \hline \text{div}\vec{E} = 4\pi\rho & \text{div}\vec{H} = 0 \\ \hline \end{array}$$

Here and below *grad*, *rot* and *div* are some differential operators widely known in narrow circles. In everyday life the gradient, rotor and divergence are called.

b) Equation for the gravitational field:

It is known that the gravitational field is a gradient of some gravitational potential  $\psi$ :

$$\vec{g} = \text{grad}\Psi$$

**3. What do we know about the electromagnetic and gravitational field.** The highest level.

According to the generalization of Maxwell's equations, there is some mysterious Vector Potential  $\vec{A}$ , which binds the electric and magnetic quantities  $\vec{E}$  and  $\vec{H}$  as follows.

$$\vec{H} = \text{rot}\vec{A} \quad \vec{E} = -\text{grad}\varphi - \frac{1}{c} \frac{\partial \vec{A}}{\partial t}$$

If there are no free charges, then the electric potential is  $\varphi = 0$ ; and the electromagnetic field vectors are expressed in terms of a single vector potential  $\vec{A}$ :

$$\vec{H} = \text{rot}\vec{A} \quad \vec{E} = -\frac{1}{c} \frac{\partial \vec{A}}{\partial t}$$

satisfying the additional condition:

$$\text{div}\vec{A} = 0$$

In classical electrodynamics, the vector potential has often been treated as a quantity that does not have a direct physical meaning, formally introduced only for the convenience of computations.

Although already in the structure of the "action" for classical electrodynamics, the vector potential enters in such a direct way that it suggests its fundamental character. It leads, but does not promote.

In quantum theory, this has a transparent physical meaning of the direct effect of the vector potential on the phase of the wave function of a particle moving in a magnetic field.

Moreover, it was possible to put quantum experiments that showed that the vector potential is accessible to a rather direct measurement in a certain sense (at least, we are talking about the fact that a vector potential can influence the measurable image on a quantum particle even when the magnetic field intensity in the regions, accessible to the particle, is everywhere zero, that is, the magnetic field can not affect the particle through the intensity, but only directly - through the vector potential, see the Aaronov-Bohm effect.

Just as the scalar potential is related to the concept of energy, the vector potential reveals a close connection with the concept of momentum.

Relative to the gravitational field, the generalization is as follows. Since the rotor of the gradient is always zero, the rotor of the gravitational field is always zero.

$$\text{rot}(\text{grad}\Psi) = 0 \Rightarrow \text{rot}\vec{g} = 0$$

The apparent similarity of the electromagnetic field with the gravitational field consists in the fact that they both decrease with distance. Moreover, the intensity of a purely electric field (Coulomb's law) decreases in exactly the same quadratic law as the gravitational pull (the basic law of gravity). This is the reason for many erroneous judgments, such as the popular in cheap alternative physicists judgments that gravity can be expressed through an electric or magnetic field. As will be shown below, the difference between the electromagnetic and gravitational fields is fundamental.

The difference between the electromagnetic field and the gravitational field is as follows. The rotor of the electric or magnetic field (see Maxwell's formulas) inevitably carries with it, respectively, a magnetic or electric field. For this reason, the electric field is always combined with the magnetic field into one field: electromagnetic. That's what it is in photons, radio waves and wherever. In this case, the electromagnetic field in no way affects the gravitational field. While the rotor of the gravitational field is hopelessly and uniquely always equal to zero. And nothing else. And no external force of the rotor of the gravitational field can be made neither positive nor negative.

But this is not the end. There is a beautiful, purely mathematical operation that sheds special light on the difference between the electromagnetic field and the gravitational field.

#### 4. The Helmholtz decomposition.

A mathematician, Helmholtz, may benefit from it, or maybe for fun, invented and proved the following theorem. For any vector field  $\mathbf{W}$  there exists an expansion of this field into two independent fields  $\mathbf{U}$  and  $\mathbf{V}$ , which have the property that

$\mathbf{W} = \mathbf{U} + \mathbf{V}$	Where $div \mathbf{U} = 0 ; rot \mathbf{V} = 0 ;$
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This theorem probably had some applied applications. But she was waiting for her star application. She was waiting for the Theory of the Elastic Universe.

For reference. Herman Ludwig Ferdinand Helmholtz (1821-1894) is a German scholar, even a foreign correspondent member of the Petersburg Academy of Sciences (1868). Unfortunately, biographical publications have written a lot about his work in medicine, biology, in the direction of science, but in what year he proved this decomposition is not mentioned. However, it is clear that more than 100 years ago.

As it turns out in more than 100 years, it is in this expansion of the vector field that there is a fundamental difference between electromagnetism and gravitation. And, by the way, the impossibility of gravitational waves.

#### 5. The essence of the Theory of the Elastic Universe. Short and accessible.

The universe is an infinite elastic medium, "jelly." Not ether, in which the elements can move, but jelly, which does not allow the elements to shift. Or in terms accepted 10 years ago, the Universe is Gukuum. In the gukuum there is an infinite movement of all kinds of waves. Infinite in time and in space. In this case, all kinds of matter, elementary particles, fields, photons, neutrinos, etc. - these are all the different types of wave formations in Gukuum. That is, the universe is described by one - the only equation, the wave equation:

A single formula of all matter, all Particles, all Fields and all Quantums of our Universe:
$\frac{\partial^2 \mathbf{W}}{\partial t^2} - c^2 \Delta \mathbf{W} = 0;$
$\mathbf{W}$ - displacement vector elastic space
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$\mathbf{W}$  is the displacement vector in Gukuum, a field of very small displacements, oscillations relative to the equilibrium point. Infinite in space, but very small in amplitude, maybe even zero, and then the universe is a game of pure strains in gukuum without deformations.

At the end of the article, mathematical formulas are given for the four main types of material formations. Although in real life there may be more.

#### 6. We apply the Helmholtz theorem to the displacement field in the gukuum $\mathbf{W}$ !

We apply the Helmholtz theorem to the vector field  $\mathbf{W}$ , which is the entire universe. This is the displacement field in the gukuum, the vector wave field.

$W = U + V$	Where $div U = 0 ; rot V = 0 ;$
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And we make a bold assumption.

We interpret the value of  $U$  (up to constant coefficients) as the vector potential of the electromagnetic field  $A$ , and the quantity  $V$  as the vector potential of the gravitational field  $g$ . The value of  $V$  up to a constant coefficient can be interpreted as carrying in itself the intensity of the gravitational field. However, for rigor, subsequently, it is necessary to sweep the dimensions, coefficients, systems of units, etc.

The statement is quite obvious, since we remember well from physics that practically all the equations of physics, including the quantum Schrödinger equation, reduce to a wave equation. Everything in the universe is vibrating. And matter, and field, and magnetic, and electrical. And even the gravitational waves of British scientists have almost determined, they have only the sensitivity of the detectors is not enough. A few billion more injections and they will promise them soon to determine.

So, as a result of the Helmholtz decomposition, we get two fields,  $U$  and  $V$ , which are surprisingly similar to the vector fields  $A$  (electromagnetic vector potential) and  $g$  (gravitational vector potential) available in the real world.

The dimensions of  $A$  and  $g$  coincide, and Maxwell's equations from Hooke's equations (vector) and vice versa are easily obtained. The properties of the other vector  $g$  are such that they coincide with the basic properties of the gravitational field (the rotor is zero). This correspondence between  $U$  and  $V$  on the one hand and  $A$  and  $g$  on the other hand is sometimes even stated in the literature, although the physical meaning as a component of bias in the gukuum has not been established by anyone.

For the vector potential  $A$  itself (in the absence of charges and currents), the wave equation:

<b>Vector potential <math>A</math> of electromagnetic field</b>
$\frac{\partial^2 A}{\partial t^2} - c^2 \Delta A = 0;$
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Recalling the equation for the displacement  $W$  of the gukuum, we conclude that the vector potential  $A$  from electrodynamics is the same component of the displacement vector  $W$  for which  $div A = 0$ .

This is the fundamental connection between the Maxwell equations and Gukuum theory. This is how the cumulative chain of formulas that connect the Gukuum theory with the electromagnetic and gravitational field.

$W$  - displacement vector of elastic space

The Helmholtz decomposition:

$$W = A + g$$

where

$$\operatorname{div} A = 0$$

$$\operatorname{rot} g = 0$$

$A$  - Vector potential  
of electromagnetic field

$g$  - gravitational vector field.

$H = \operatorname{rot} A$  -  
magnetic field vector

$g$  - vector of gravitational field  
strength.

$$E = -\frac{1}{c} \frac{\partial A}{\partial t}$$

- electric field vector

$$\operatorname{rot} g = 0$$

Maxwell's equations:

Newton's law of gravitation:

$$1) \quad \operatorname{rot} E = -\frac{1}{c} \frac{\partial H}{\partial t}$$

$$g = \frac{\gamma \bullet m}{R^2}$$

$$2) \quad \operatorname{rot} H = \frac{1}{c} \frac{\partial E}{\partial t}$$

$$F_{1,2} = \gamma \frac{m_1 \bullet m_2}{R^2}$$

$$3) \quad \operatorname{div} E = 4\pi\rho$$

The gravitational field is a  
gradient of some gravitational  
potential  $\varphi$  :

$$4) \quad \operatorname{div} H = 0$$

$$g = \operatorname{grad} \varphi;$$

The vector electric potential, through which the electric intensity and the intensity of the magnetic field are expressed, is uniquely related to the displacement of the gukuuum (according to Gukuuum theory) having the dimension "cm". And the formula for this vector electric potential is the wave equation, as in the theory for displacement in an elastic body. Hence it is possible to express the TRUE dimension of all electrical quantities that someday will also be done. For at the present time the dimension of all electrical quantities is simply ridiculous, it contains square roots of mass. All this happened because of the unsuccessful choice of the initial definitions.

Why is this idiocy entrenched in the present physics, that in the dimensions of all electric fields and charges the square root of the mass sits? - He sits because in the definition of charge sits the force (and in the dimension of the force - automatically there is a mass) equal to the mutual attraction of two charges, that is, to their product, that is, the square of the charge. And naturally, when a root is extracted from this square, a root is obtained from the mass. But why does not this happen with the law of gravity? There is also a product of two masses? - There all corrects the gravitational constant. So why not introduce an "electrical" constant? And then the dimension of the electric charge would contain the mass in the first degree, which is more natural. It seems that this electric constant will someday be introduced.

### **Another argument for the theory of gukuuum.**

We have often reproached ourselves and are reproached on the Internet for the fact that so far in Gukuuum theory we have not advanced in identifying the electric field and electric charge. And in fact, we found the mass distributions in loks (elementary particles), found the momentum distributions (spins), so what's the matter? Why did they stop?

Well, the main reason for our 10-year standstill is the lack of funding and the need to fight for a piece of bread, instead of solving global problems. And further on the subject of the Electric Field and the Electric Charge, let us state the following considerations.

1) There is a solid mathematical theorem: if two regular functions coincide on an arbitrarily small cut (by argument), then they coincide on the whole domain of the argument (!). Regular - this means having all the derivatives to infinity and all of them are continuous.

As applied to our case, in a purely physical sense, we affirm the following.

- If for one regular function to consider our Mother - Nature, which is undoubtedly regular everywhere, without jumps and breaks. (Nature does not tolerate emptiness ...).

- If we assume localized solutions of the Wave Equation for another regular function, which are also undoubtedly regular in their domain of definition.

- If for the "cut-off" on which these two regular functions coincide, consider all the coincidences of the parameters of loks with the parameters of real particles, as well as the explanation of many physical phenomena within the framework of the Gukuuum theory, in particular,

- 1) the presence of a core in a proton and a neutron;
- 2) the distribution of masses within elementary particles;
- 3) the explanation of the phenomena of ball and even lightning;
- 4) explanation of the phenomena of electromagnetic induction and all electromagnetic phenomena;
- 5) the proposal of three classes of exact formulas for explaining the arrangement of all elementary particles, a photon, a neutrino, a ball and an even lightning;
- 6) the proposal of the corresponding three tables of elementary particles, including all known elementary particles;
- 7) something else not mentioned,

- Then we can safely say that these two regular functions, Nature and localized solutions of the Wave Equation, these two regular functions completely coincide on the whole domain of their definition.

That is, until the fragments of the present available (fragmentary) physics have been studied, they will sooner or later be identified in Gukuum theory, that is, within the framework of axiomatic physics arising from a single formula of the universe - the wave equation. Including all electrical phenomena. Sooner or later.

**Well, in addition, we point out the following aspects.**

- All electrical parameters are parameters that reflect the interaction of particles (loks). If the mass or size or spin of a particle (lok) can be measured (calculated) from a single particle, then the particle charge (lok) is determined in the interaction of particles (loks). We have not yet studied the interaction of loks. We do not quite understand yet, where does this interaction come from.

However, from the available observations, we note that there are substances through which photons penetrate unimpeded. There are substances that trap photons. And there are substances that are semipermeable for photons. Taking into account the wave properties of all particles, we can state that there are substances that are transparent not only for photons, but also for protons - neutrons - electrons. These phenomena of permeability of substances are very close to the phenomena of interaction of particles with each other. Why do not loks jump freely through each other in Gukuum theory? - The essence of the phenomenon is that there is a component of the stress tensor in the lok, which is able to act on some component of the stress tensor in the other lok. Perhaps the role of the law of winding plays a role here. Or maybe without this law there are some elements of loks that cling to each other. Here it is necessary to think and think ...

There is such a consideration (!). Usually the wave propagates rectilinearly. But mathematics proves the existence of localized waves. If there are components of the stress tensor that TURN a localized wave, then these components will cling to each other when interacting with loks!

Of course, it is not difficult to come up with a combination under the integral over space, resulting in something of a dimension coinciding with the charge of an electron or a proton. Similar combination for spin, this combination is seen to be the closest to the charge distribution and the definition of the integral charge of a particle. However, we are refraining from this hasty step until better times, when it will be possible to calmly and deeply think about the causes of the electrical interaction and simply repulsion of uncharged particles. On the causes of transparency in one case, translucency in the other case and full opacity in the third case.

The idea of identifying charges can be to find, for example, the energy of the system "proton + proton" or "proton + electron" starting from the primary wave equation and the total displacement for two particles in Gukuum. The second idea is to determine the electric field of an electron or proton from its expression through a displacement in Gukuum and dimensional considerations. So, the electron and other particles are localized wave objects. These objects are characterized mainly by the volumetric distribution of the amplitude of oscillations of the carrier-gukuum and the shape. And now, it turns out that on the basis of the volume distribution of the wave amplitude it is possible to form several derived quantities from it. 1) The integral over the space of the square of the wave amplitude - this gives the mass of the electron. And the very distribution of the square of the amplitude - gives the density distribution inside the electron. 2) The integral over the space of the product of the wave amplitude at a distance from the axis of symmetry gives the spin, and the integrand itself is the

distribution of the spin in space. 3) Another combination, in order to obtain an electric charge in the integral, is supposed to be composed as follows: the combination for energy must be multiplied by the distance from the center of the particle. In this case, as a result of integration, it is possible to obtain a square of the charge. Such a solution is chosen from dimensional considerations. Both versions are calculated in formulas and graphs. While this has not been tested, there is no time.

It can be noted that, with the experimental results on the charge density, the integral of the spin density (the spin increase graph) and the spin density proper also correlates well enough. There are no global conclusions, except for some visual similarity, the correlation of graphs.

### **Possibility of antigravitation.**

Recall that we are talking about the model of the universe as an infinite, homogeneous elastic medium. In such an environment, localized wave objects are possible. These objects are nothing more than elementary particles. Everything is proven strictly mathematically on the previous pages.

The gravitational field can be identified and analyzed based on the basic solution of the wave equation and the formulas connecting the displacement in gukuum with the vector potential of the electromagnetic field  $\mathbf{A}$ , determined from the Helmholtz decomposition:

$W = U + V$	Where $div U = 0 ; rot V = 0 ;$
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(31-1)

The value of  $U$  can be interpreted as carrying in itself the vector potential of the electromagnetic field  $\mathbf{A}$ , and the value of  $V$ , accurate to a constant coefficient, carrying the gravitational field in itself.

Then follows an interesting and obvious hypothesis.

### **On the possibility of creating an anti-gravity field.**

So, there is the simplest version of the origin of the gravitational field. This - "inflation" looks elastic space, leading to the emergence of a constant radially directed stress. But here comes another version.

As mathematics shows, in the stress tensor in an elastic body there may exist components that "twist" the stress wave (deformations) and cause it to move around the axis. In this case, the wave rotates around the axis, creating localized wave objects - in my looks terminology. Examples of such localized wave objects are elementary particles. This theory, confirmed by rigorous mathematics, but (yet) has no illustrations. True, there are such objects as solitons that have been studied by many scientists. But solitons are movements of masses of matter, they can not "layer" themselves on themselves. And look - in them the whole mass is immovable, and only the wave of stress is spinning.

### **But! Attention!**

It turns out that long ago there are analogues of looks on water. Water analogs of localized wave objects, which we assume in the elastic space, are described. There are flat analogs - this is the argument in favor of the theory of the Elastic Universe!

So even more than a century ago, J. Scott Russell observed "solitary waves" in the form of a hill on the surface of the water. The physical meaning of this hill is very interesting and consists in the fact that here an analogy is opened with both the

formation of elementary particles and with the appearance of a gravitational field!

So, under the external influence, a localized transverse sound wave appears on the water. This wave (sonic!) Winds around the vertical axis and draws (!) Into itself surrounding water. Thus a hill is formed on the surface of the water. The circular wave that forms this hill is an analog of an elementary particle. Forces pulling the surrounding water to the center of the hill - this is an analog of the gravitational field. And here the hill itself is like a "dyed chromosome" as it serves to visualize hidden from the eye wave processes in the water.

What are these external influences that result in a circular stress wave? - It is possible when one obstacle is bent by one wave and some subsequent overlays. This can be an (oblique) collision of sound or shock waves in water. Or the collision of a direct wave with its reflection from something (from a rock on the bottom). Or the presence in this collision of some body floating on the surface of the water. The fact is that these hills were observed experimentally. And these experiments must continue!

It is not necessary to connect the formation of such a hill with the movement of masses of water. The motion of the masses of water here can be neglected. In addition, in the circular motion of water masses, not hills, but pits, funnels, and breakers are formed. But with the cyclic rotation (sound) of the elastic wave inside the water, it contracts to the center and forms a hillock. It is these forces, which pull water to the center of the water hill, and are analogues of the gravitational field.

Initially, many years ago we believed that in the theory of the Elastic Universe, gravity appears as a natural "inflation" of the medium when a localized wave formation appears in it.

Then we had the idea that gravitation in the universe appears by a mechanism analogous to the mechanism of formation of hillocks on the water.

But if this is so, then with the help of electrically conductive windings, it is possible to create a configuration (such as in an electric motor), which, by passing a current through it, will effectively draw in itself an elastic vacuum (we have gukuum). Just like water is drawn into the water mounds. That is, we will get anti-gravity.

This is the fundamental task for inventors. We alone can not invent everything. Einstein invented little. And Edison invented a lot, but he did not discover the theory of relativity. Once Russian officials and the inventor of the steam engine Kulibin were sent on all four sides. Then people regretted it. Yes, everything in Russia was sent: both genetics and cybernetics. But we do not for the future.

It is urgent to tackle the invention of the antigravity apparatus on the principle described here.

## **7. But that's not all!**

Well, it would seem that we found some basic principle of the general theory of all fields. Perfectly. But ... As the further, in-depth scientific analysis shows, fields do not exist at all !!! None! Neither electromagnetic, nor gravitational.

How so? From what? Why? On what occasion?

The answer is this. All that is in the universe, in the gukuum, is purely localized, vortex-like wave formations. Their central parts, the clusters of waves themselves, are perceived by us as elementary particles, photons, ball lightning, even lightning. But the peripheral, remote parts of these elementary particles are what we perceive as fields! And these fields are not homogeneous objects. These all electromagnetic and gravitational fields are alternating oscillations of the gukuum, with enormous frequencies and light propagation velocity. These peripheral areas swirl just like the central ones around the centers, i.e. around elementary particles. And only as a result of averaging many oscillations Coulomb's law is obtained. And only as a result of the movement of electrons, their peripheral parts begin to tickle the surrounding objects, which is

perceived as a magnetic field around the conductor with current.

## 8. What about the elementary particles?

And the elementary particles are solutions of the same wave equation for  $W$  (see above). But not simple (like waves of sound), but localized! There is such a class of solutions, and not one. At least 4 classes of localized solutions are found. This, in particular:

- **Class 1.** This class of solutions defines localized wave objects moving at light speed. Specifically: photons, neutrinos, and possibly other, not yet known in science education, moving at the speed of light. General formula for objects moving at the speed of light:

The displacement formula for objects moving with speed of light (photons, neutrinos, etc.):
$W_i(r, \theta, \varphi, t) = \frac{C_{j,m}^i}{\sqrt{r}} \cdot J_{j+\frac{1}{2}}(kr \pm \omega t) \cdot Y_{j,m}(\theta, \varphi)$
$k$ - Wave number. $i=1,2,3$ (cartesian); $j, m - 0,1,2,\dots$ ; $C_{j,m}$ - Arbitrary; $\omega=c \cdot k$ ; $c$ - Speed of light.
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- **Class 2.** This class of solutions defines "inactive" localized wave objects. And specifically: all the elementary particles known to us, the proton, the neutron, the electron, the mesons, and so on. And other elementary particles, not yet known in science.

Solenoidal solutions. In such a wave All energy moves around the axis. This The class of solutions defines elementary particles: a proton, a neutron, an electron, mesons, etc.
$W(r, \theta, \varphi, t) = \frac{C_j}{\sqrt{r}} \cdot J_{j+\frac{1}{2}}(kr) \cdot P_j^m(\cos \theta) \cdot \sin(m\varphi - \omega t)$
$k$ - Wave number. $i=1,2,3$ (cartesian); $j, m$ - integer; $C_j$ - Arbitrary; $\omega=c \cdot k$ ; $c$ - Speed of light.
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- **Class 3.** In such objects, the energy does not rotate around the axis, but around the imaginary toroidal core, with the entrance into the toroid. We call such localized oscillations toroidal. Their research is also a separate issue. It seems that in toroidal coordinates this will be simpler, more beautiful and there will be no singularities.

Hypothetical formula for objects like spherical  
Lightning (in spherical coordinates):

$$W(r, \theta, \varphi, t) = \frac{C_j}{\sqrt{r}} \cdot J_{j+\frac{1}{2}}(kr) \cdot$$

$$\cdot (P_{j,m}^* - Q_{j,m}^*) \cdot \sin(m\varphi) \cdot \sin(m\theta - \omega t)$$

Here  $\overline{W}$  – displacement vector of the elastic element  
space gukum.

$k$  - Wave number.  $i=1,2,3$  (cartesian);

$j, m$  - integer;  $C_j$  - Arbitrary;

$\omega = c \cdot k$ ;  $c$  - Speed of light.

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I remember the ball lightning. Here its field (not purely electromagnetic!), Rolled up with lightning (this process is assumed by us at the formation of ball lightning, see below) as the fingertip from the finger (or according to Lermontov, as the thimble of debauchery) just turns out to be toroidal. Thus, we can assume that the above is the proposed formula for ball lightning (naturally, in spherical coordinates).

- **Class 4.** Solution in cylindrical coordinates. This solution mathematically should be a kind of endless garland of sausages along the  $Z$  axis. And if it is physically feasible, then it is very likely that this object will turn out to be an Anniversary Lightning.

The hypothetical formula for objects of the type  
lightning (in cylindrical coordinates):

$$W_i(\rho, z, \varphi, t) = c_i e^{iikz} \cdot Z_m(\rho \sqrt{k^2 + K^2}) \cdot$$

$$\cdot (a \cos m\varphi + b \sin m\varphi) \cdot \cos(\omega t + \gamma)$$

This solution should be mathematically a kind of endless  
garland of sausages along the  $Z$  axis.

Here  $\overline{W}$  – displacement vector of the elastic element  
space gukum.  $i=1,2,3$  (cartesian);  $m$  - integer;

$c_i, \gamma, k, K$  - arbitrary;

$\omega = c \cdot k$ ;  $c$  - Speed of light.  $Z$  - Arbitrary

Cylindrical Bessel functions of the first kind.

These are sinusoidal cylindrical waves.

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## 9. Afterword.

The farther the events go, the clearer it becomes, to whom it was needed and what

was the cause of what. That is, who and why it was necessary to strangle my discoveries. Now I am firmly and unequivocally confident in everything. All that followed in the world science after March 2003 is a dramatization. And the artificial inflating of some geniuses, with incomprehensible what achievements, which have no practical significance. And the departure of these geniuses from publicity, because they would be necessarily asked about my theory. And why in 2004 was introduced ubiquitous (in all countries!) Allegedly reviewing, ostensibly to combat the "viola". My messages were mercilessly chopped and deleted at all forums. And they banished me.

Who strangled me like a scientist? You could also specifically name the names of the performers, but there are too many of them and they just silly performed what they were ordered from above. First and foremost, these are all our "nuclear engineers" who, under the mute about the controlled fusion, scrape huge sums out of the budget. First of all, our most untwisted nuclear scientist, who, like in the well-known film, was put forward in the 60's even without a dissertation. And since then they can not push back. Billions of dollars, he lets go a cat every year. And the result was not and never will be. At least for the reason of all of them, that there were gathered, lack of talent. In the same place all the bad guys. And who could solve the problem, there will never be missed there. Well, the system is like that. This is the law: if there is a feeding trough, then the strongest ones get to it, but not the smartest ones. It's a huge problem to make sure that the smart could get through to financing. Publications, recommendations, dissertations, all this works only on rogues.

I already answered in discussions about the comparative importance and value of my theory and theories of some well-known, not so long ago recognized "geniuses". I repeat here. These "geniuses" titanic labor as it were proved that the watermelon is still spherical. That he is not a bagel, he has no holes. If there is any proof at all. And that's all. However, newspaper scribes have already been given their results archival for science, and he himself has already been given the supernatural alleged power over the universe, supposedly the ability to control the universe! I imagemakers created them a halo of significance and sublimity over mere mortals. There is nothing of this. This is a lie from beginning to end.

On the other hand, the theory of gukum seems to prove and explain all the insides and all the taste qualities of watermelon. And also teaches how to grow, store and transport them. So let the readers decide what is more important. However, such malicious actions in science have always been. Destroyed geniuses, geneticists and cybernetics. They inflicted huge losses on the country for the sake of personal greed and ambition. As in the well-known anecdote: I do not eat, so at least I spit or gibberish. We also remember the "right of the first night" of the noble masters of the past, so cute played at the Satire Theater. The first night rogue have already done with my theory. And they continue to do this for 10 years. Letters to the presidents do not reach, and instead of replies, insulting letters from anonymous authors begin to be poured ... And precisely on the e-mail from which the letter was sent to the president. There, all kinds of scoundrels, scoundrels and rascals around the presidents gathered and live.

The theory presented here could bring and accelerate the cognition of the world. I could save tens of billions of dollars on this path to mankind. Many dozens. And it will save hundreds of billions of dollars. But instead of this, there is a breakdown of the whole civilization and world culture and science. Instead, some obscene delirium, black holes, ethers, dark matter, dark energies, antimatter, big explosions, Higgs bosons, decays of mesons into muons, quarks, strings, superstrings and branes, supersymmetries, entangled particles, exotic particles, magnetic monopoles, tachyons, wormholes in space, temporary corridors and time travel, "condensates of the eye" and other delirium.

And by and large, a crime is committed against humanity. Because the non-renewable

resources are being squandered. The knowledge of the universe in which we all live is inhibited. And maybe there are actions that will be late to correct.

That's how Academician Alexandrov said in his speech. "Previously, I knew that nuclear energy could be used for peaceful purposes or in military, but academician Velikhov figured out how to use nuclear energy for personal purposes."

The only meaning of the existence of mankind, if such a term is admissible, is to know the nature, the universe, itself. Only knowledge will help us to save ourselves and save ourselves from possible disasters.

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<http://universe100.narod.ru/>

<http://universe100.narod.ru/002-Oglavlenie-anql-jpg.html> (English)