SUPER QUASARS **viXra:2001.0085**

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Introduction.

Modern physics rests on many problems, facts that go beyond its theoretical concepts. The theoretical models and fundamental concepts themselves are largely contradictory. Mathematics answers the question HOW? Physics answers the question WHY? We will look for physical reasons. It is very important.

If (+) the proton charge (p +), in quark (p = uud) models it is represented by the sum: $q_p = \left(u = +\frac{2}{3}\right) + \left(u = +\frac{2}{3}\right) + \left(d = -\frac{1}{3}\right) = (+1)$ fractional charges of quarks, then exactly this (+) charge (e +) of the positron , has no quarks. Such a model and representation (+) of charge does not correspond to reality. This is a fundamental contradiction; it has no solutions in theories.

The charge interaction, with the unsolved problem of the model (+) of the charge of the proton and positron, refers to the electromagnetic interaction. This means that the interacting particles exchange massless electromagnetic (γ) –quantum (photon). This is valid for interactions of (e -) electrons, (μ) muons, (π, K ...) mesons. But the (p +) proton of the nucleus, in charge interaction with the (e -) electron in orbit, does not exchange an electromagnetic (γ) quantum with it. Nobody anywhere has ever seen radiation (p +) by the proton of an electromagnetic (γ) quantum, a photon. That is the reality. Similarly, the exchange Z – boson in the electroweak interaction (e – ν_e) of leptons and the quark – gluon in the Strong Interactions of the Standard Theory. The principle of exchange interaction is presented in the Feynman diagrams:

Electromagnetic electroweak and strong interaction:

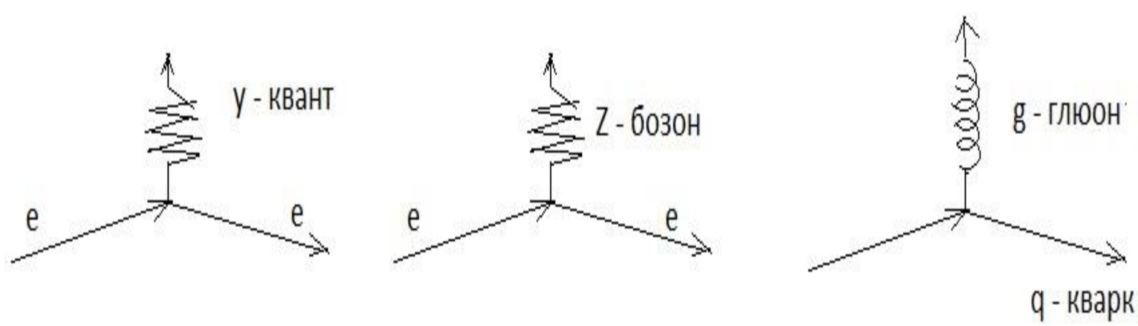


Fig. of 1 chart of Feynman

It is Standard model of the specified interactions, with the corresponding representations, type: $(e\psi\gamma^{\mu}\psi)A_{\mu}$. But upon, the proton does not radiate a photon, and the neutrino ($\nu_e \sim 13\ eV$) does not radiate Z-a boson (($\sim 90\ GeV$) in exchange electroweak interaction. (L. I. Sarycheva, MSU-2007g. FVE and ECh):

Такие кванты были впервые обнаружены в 1983 г. на $Sp\bar{p}S$-коллайдере (ЦЕРН) коллективом под руководством Карла Руббиа. Это заряженные бозоны — $W^{\pm}$ с массой $m_{W^{\pm}} = 80$ ГэВ$/c^2$ и нейтральный бозон — Z^0 с массой $m_{Z^0} = 90$ ГэВ$/c^2$. Константа взаимодействия α в этом случае выражается через константу Ферми:

$$\alpha_w = \frac{G_F}{\hbar c (\frac{\hbar}{m_p c})^2} = 1,02 \cdot 10^{-5}.$$

На диаграмме Фейнмана (рис. 2а) показана реакция взаимодействия

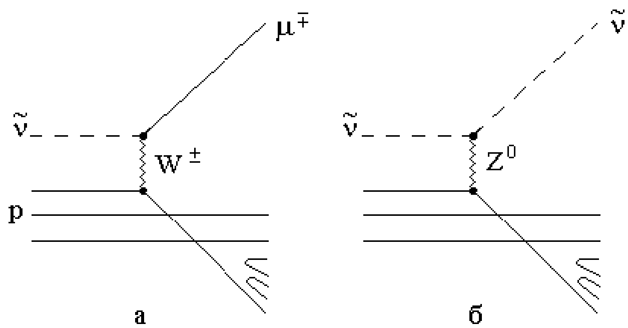


Рис. 2: Диаграммы Фейнмана для реакций: а — с заряженным и б — с нейтральным токами.

антинейтрино с протоном, осуществляемая путем обмена $W^{\pm}$-бозоном. Такая реакция называется реакцией *с заряженным током*. Обмен нейтральным Z^0-бозоном (рис. 2б) называется реакцией *с нейтральным током*.

From where undertake where as well as why Z and W bosons disappear ($\sim 90\ GeV$) in disintegrations free, out of any fields of a neutron? There are no answers.

Even in classical physics there are contradictions in the theory. In the well-known formula of Newton, gravity: $F = G\frac{Mm}{r^2}$ two masses (M) and (m), at distance (r) between their centers. The formula (theory) tells nothing about distances (r<R_0+r_0),) where R_0 and r_0 radiuses of spheres of this masses. But if in a diametrical opening of the sphere of $R_0$to throw $r_0$then on Newton's formula, at$(r \to 0)$, force$F \to \infty$, , strives for infinity. But it contradicts experience. Newton's formula is valid only for (r>R_0+r_0), what in the formula nothing is told about. We speak about theoretical models, often and densely not perfect. But laws of dynamics of matter are perfect, and in them there are no contradictions. Then where they?

The second moment in classical physics of the same Newton, his 2nd law: $F = ma$ where $(a \neq 0)$ acceleration. It is well-known that the body the weight (m), falling on the planet weight (M), has the speed$(v = v_0 + at)$of which there is no limit. $(a = g = G\frac{M}{r^2})$There is an acceleration of gravity. It is the mathematical truth of classical physics. In practice, according to the Theory of Relativity, speed cannot exceed velocity of light. Einstein saw this problem. Therefore the General Theory of Relativity was created. Without going deep into a question now, we will note only what General Theory of Relativity Einstein has too$(g_{ik} = const)$, , conditions $(\sqrt{g_{ii}} = 1)$in which the theory is valid. The speech about the fixed condition of gravitational potential.

In variation $(g_{ik} \neq const)$(quantum) gravitational fields, General Theory of Relativity Einstein invalid. In other words, there is no theory of quantum gravitational fields. But their existence follows from mathematical conditions$(g_{ik} \neq const)$and nothing more. There is no theory. There are also no theories of black holes, dark matter, dark energy. There are no answers to questions: from where undertake and where the same black holes

that at them disappear inside and why the cores of galaxies … blows up. There are no answers on these, and many other questions.
(L. I. Sarycheva, MSU-2007g. FVE and ECh):

не объяснено:

- соответствие между кварками и лептонами;
- количество поколений фундаментальных частиц;
- истинное происхождение масс частиц или механизм спонтанного нарушения симметрии;
- почему эти симметрии калибровочные, а другие — нет (например, симметрия, соответствующая барионному заряду).

The fundamental fact is the fact that there is no matter out of space and there is no space without matter. Space matter this same.

The main property of matter, the movement, is represented dynamic space matter. It follows from properties of Euclidean axiomatics.

1. Communication of space matter with Euclidean space.

Straight lines of a dynamic $(\varphi \neq const)$ bunch, do not cross an initial straight line $(AC \to \infty)$ on infinity (fig. 1), that is parallel.

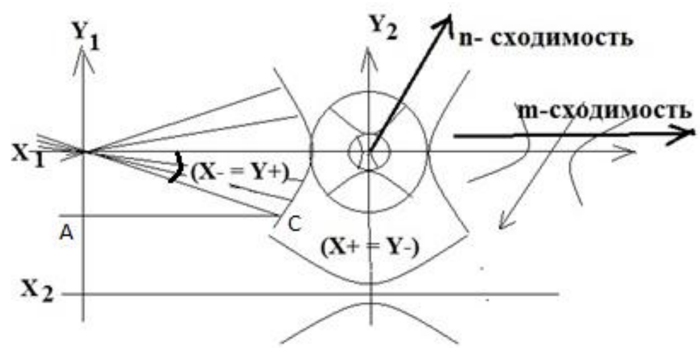


Fig. 1.1. Dynamic space matter.

Infinity cannot be stopped. Therefore the dynamic space matter of a bunch of parallel straight lines, exists always. Orthogonal bunches of direct lines trajectories, have own external $(X+)$, $(Y+)$ fields. They form Indivisible Areas of Localization $(X+)$ $(Y+)$. At the same time the Euclidean space with a nonzero and dynamic corner $(\varphi \neq const)$ of parallelism in each (X, Y, Z) axis, loses meaning.

Such dynamic $(\varphi \neq const)$ space matter has the geometrical facts as the axioms which are not demanding proofs.

<u>Axioms of dynamic space matter</u>

1. The nonzero, dynamic corner of parallelism $(\varphi \neq 0) \neq const$, a bunch of parallel straight lines, defines orthogonal fields $(X-) \perp (Y-)$ of parallel lines - trajectories as isotropic properties, space matter.

2. The zero corner of parallelism $(\varphi = 0)$, gives "length without width" with zero or nonzero Y_0 - sphere point radius "not having parts" in Euclidean axiomatics.

3. The bunch of parallel straight lines with a zero corner of parallelism $(\varphi = 0)$, "equally located to all the points", gives a set of straight lines in one "without width" to the Euclidean straight line.

4. Internal $(X-)$, $(Y-)$ and external $(X+)$, $(Y+)$ fields of lines trajectories of the nonzero $X_0 \neq 0$ or $Y_0 \neq 0$ material sphere point, form Indivisible Area of Localization $НОЛ(X\pm)$ or $НОЛ(Y\pm)$ dynamic space matter.

5. In unified fields $(X- = Y+)$, $(Y- = X+)$ orthogonal $(X-) \perp (Y-)$ trajectory lines there are no two identical spherical points and trajectory lines..

6. The sequence of Indivisible Areas of Localization $(X\pm)$, $(Y\pm)$, $(X\pm)\ldots$, on radius $X_0 \neq 0$ or $Y_0 \neq 0$ spheres points on one line trajectory gives n convergence, and on various trajectories m convergence.

7. To each Indivisible Area of Localization of space matter there corresponds unit of all its Criteria of Evolution (КЭ), in uniform, $(X-=Y+)(Y-=X+)$space matter on $m-n$ convergence,

$$НОЛ = КЭ(X-=Y+)КЭ(Y-=X+)=1, \qquad НОЛ = КЭ(m)КЭ(n)=1,$$

in system of numbers of units, equal by analogy.

8. Fixing of a corner $(\varphi \neq 0) = const$ or $(\varphi = 0)$ bunch of direct parallel lines, spaces matters, gives the 5^{th} postulate of Euclid and an axiom of parallelism.

Any point of the fixed lines trajectories, is presented by local basic vectors of Rimanovy space:

$$\boldsymbol{e_i} = \frac{\partial X}{\partial x^i}\boldsymbol{i} + \frac{\partial Y}{\partial x^i}\boldsymbol{j} + \frac{\partial Z}{\partial x^i}\boldsymbol{k}, \qquad \boldsymbol{e^i} = \frac{\partial x^i}{\partial X}\boldsymbol{i} + \frac{\partial x^i}{\partial Y}\boldsymbol{j} + \frac{\partial x^i}{\partial Z}\boldsymbol{k},$$

with a fundamental tensor $e_i(x^n) * e_k(x^n) = g_{ik}(x^n)$ and topology $(x^n = X, Y, Z)$ in Euclidean space. That is, Riemannian space, this fixed $((\varphi \neq 0) = const)$ condition of dynamic $(\varphi \neq const)$ space matter. $(K = -\frac{Y^2}{Y_O} = \frac{(+Y)(-Y)}{Y_O})$

(Smirnov t.1, page 186) Riemannian space, the space of geometry of Lobachevsky (The mathematical encyclopedia, page) isa special case of negative curvature. There are nine distinctive signs of geometry of Lobachevsky from Euclid's (fig. 2) geometry. (Mathematical encyclopedia, t.5, page 440-442).

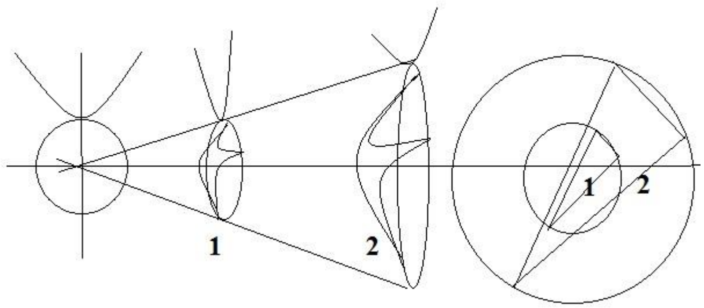


Fig. 1.2 Isotropic dynamics.

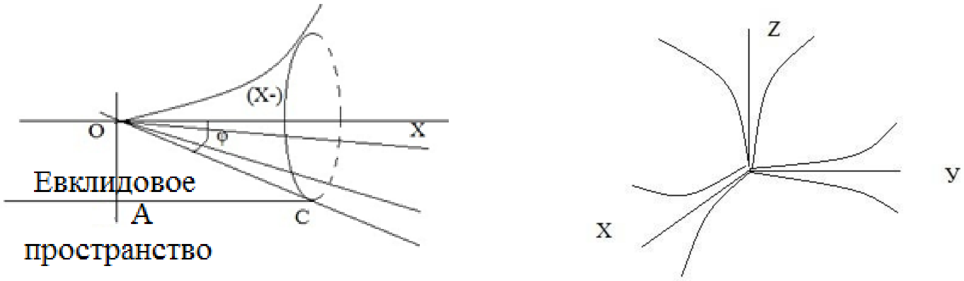
The sum $0^0 < (\Sigma\alpha) < 180^0$ of corners of a triangle, unlike their Euclidean projection $(\Sigma\alpha) = 180^0$ to the plane is one of signs of geometry of Lobachevsky. Equal triangles, with equal corners in tops, in a bunch of parallel direct lines projections of space matter, are similar triangles in Euclidean space. Equal triangles of space matter lie in the surfaces of spheres, equal in Lobachevsky's space, but with various radiuses of Euclidean spheres. In dynamic $(\varphi \neq const)$ space matter, these Euclidean spheres of various radiuses, are one **sphere of non-stationary Euclidean space** which is not in Euclidean axiomatics. The Riemannian space at the same time, has dynamic topology

$(x^n = XYZ \neq const)$ that is not present $(x^n = XYZ = const)$in Euclidean stationary space. Euclidean axiomatics has own unsoluble contradictions. For example:

1. The set of points in one "to the point which does not have parts", gives a point again. It is a point or their set determined by elements and their interrelation?
2. The set of lines in one "length without width", gives the line again. It is the line or their set defined similarly?

The axiomatics does not give answers to such questions of Euclidean . If in times B.C., these axioms of all arranged, for measurements of the areas, volumes …, then in modern researches such axioms just do not work.

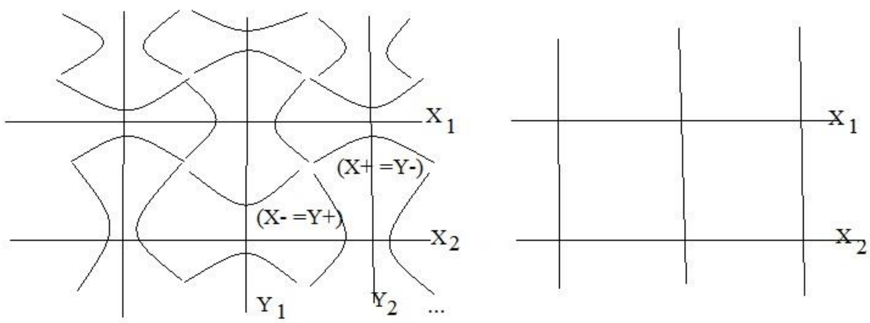
For example, under the terms of parallelism in the plane, the straight line OH, does not cross an initial straight line the AC→∞, on infinity.



Rice 1.3. Dynamic bunch of parallel straight lines.

But within dynamic (infinity it is impossible to stop) a corner (φ ≠ const) parallelism, a bunch of straight lines the EXPERT on infinity does not cross a straight line too. This real (X-), along an axis (X), space of a dynamic bunch of straight lines which we do not see in Euclidean space. Exactly here new fundamental idea of dynamic space of a bunch of parallel straight lines is entered. Such dynamic space (X-) of parallel lines - trajectories, nullifies Euclidean space on limit corners of parallelism φ (X-) in each axis (XYZ). In 2-dimensional space, the zero corner of parallelism (φ=0) for (X-) and (Y-) of lines, gives Euclidean straight lines. In a limit case of a zero corner of (φ = 0) parallelism in each axis, the dynamic space matter passes into Euclidean space as a special case.

These are profound and basic changes of the technology of theoretical researches which form our ideas of the world around. As we see, in Euclidean representation of space, we see not everything. These problems are solved in dynamic space matter on $m-n$ convergence of spheres points, on their $(X-)\perp(Y-)$ trajectories in uniform $(X += Y-)$, $(X -= Y+)$ space matter in the plane (fig. 1.1; 1.4).



Rice 1.4. dynamic and Euclidean space.

Fixing in time of a dynamic corner of parallelism, gives to Evklidovuyu space time axiomatics. These $(\varphi \neq 0) = const$ and $(\varphi = 0)$ special cases of Euclidean axiomatics, dynamic $(\varphi \neq const)$ space matter, are the cornerstone of all modern theories. In other words, the technology of modern theories does not give us understanding of space invisible to us.

2. Uniform representation of all space matter.

The dynamic space is a form of matter therefore such neEuclidean geometrical properties of space, correspond to physical properties of matter. Proceeding from the specified axioms of dynamic space matter, postulates of physical properties of matter as non-Euclidean geometrical properties take place.

POSTULATES

1. Accepting the fact of the dynamic sphere $(R(X-)_{j\to\infty}^{i\to 0})$ as the field of the Universe, in this field the system of coordinates $0Л_{ji}(m)$ of convergence of quanta$(X\pm)(Y\mp)(X\pm),\ldots$ dynamic space matter is allocated.
2. In such field of the Universe mass trajectories $(Y-) = (e_j^-..e^-..\gamma_i^-)$ and $(X-) = (p_j^+..p^+..\nu_i^+)$substances, and geometrical properties of antimattertake place, give structural Forms of substance, in the form of model of products of annihilation

proton $(X\pm = p^+) = (Y- = \gamma_0^+)(X+ = \nu_e^-)(Y- = \gamma_0^+)$, and

electron $(Y\pm = e^-) = (X- = \nu_e^-)(Y+ = \gamma^+)(X- = \nu_e^-)$, for (ОЛ$_1$) of level of indivisible quanta (p^+, e^- , ν_μ^+ , γ_0^-, ν_e^-, γ^+), in ($X-= Y+$), ($X+= Y-$) uniform space matter.

3. In massfields, ($Y- = X+$)change of curvature$p$(X +)of the field of gravitation, changes the periods(T)of dynamics of quantum trajectories ($Y -) = (e_j^- .. e^- .. \gamma_i^-$)on which measure time course ($t = N * T$). The speech about uniform spatially (X + = Y-) a temporary continuum.
4. Proceeding from НОЛ=КЭ(m)КЭ(n)=1, not euclidean dynamic space matter, in system of coordinates $\text{ОЛ}_{ji}(m)$of convergence, $R_{ji}(n)$ singularityobjectswhich do not prove in other Areas of Localization ОЛ_{j+1} or ОЛ_{i+1}indivisible quanta($X\pm$)($Y\mp$)($X\pm$),… space matter take place $R_{ji}(n)$. Such objectsof singularity (invisible), in $\text{ОЛ}_{ji}(m)$system of coordinates, there can be a set.
   a. $R_{ji}(n)$singularityobjectsin mass fields НОЛ=$m(p_j)m(\nu_i) = 1$ or
   НОЛ=$m(e_j)m(\gamma_i) = 1$, j=1,2,3 …, i= 1,2,3 …, include ОЛ$_1$ the level of indivisible quanta (p^+, e^- , ν_μ^+ , γ_0^-, ν_e^-, γ^+), our atoms,
   b. in ОЛ$_1$- the level of indivisible quanta (p^+, e^- , ν_μ^+ , γ_0^-, ν_e^-, γ^+), atoms and molecules known to us, we do not see quanta ОЛ_0, ОЛ_{-1}, ОЛ_{-2}…physical vacuum, or quanta ОЛ_2 , ОЛ_3, ОЛ_4…, levels of a cores of stars, galaxies …, but we can see curvature of trajectories ($Y- = \gamma$) of photons$p(X+)$in the field ofgravitation for example, star coress.
5. Dynamics uniform, ($X-= Y+$), ($X+= Y-$)space matter and it ($X\pm$), ($Y\mp$), quanta on
(X-) or (Y-) trajectories, is fixed in physical vacuum, quanta invisible to usОЛ_0, ОЛ_{-1}, ОЛ_{-2}…, space matter levels, in the allocated directions (XYZ) of Euclidean space - time (t=N*T). The Criterion of Evolution (CE), are formed in space ($K^{\pm N}T^{\mp N}$) speeds for (N=1), in the form of НОЛ=W$_j$v$_i$=1, singularity objects $R_{ji}(n)$, or $e_i e_k = g_{ik}$(x^n) fundamental tensor.
6. In such (Y=$K^{\pm N}$)(X=$T^{\mp N}$) in the second quadrant (Y=K^{+N})(X=T^{-N}) multidimensional space of speeds, can be allocated to system of coordinates of all Criteria of Evolution (CE)$K^{+N}\,T^{-N}$: speed (W=$K^{+1}T^{-1}$), acceleration (b=$K^{+1}T^{-2}$), potential ($\Pi = \frac{K^2}{T^2} = W^2$), weight($m = \Pi К$)) or a charge($q = \Pi К$), density($\rho$)of charging$q(X-= Y+)$or mass$m(Y- = X+)$fields in a look:($\rho = \frac{m}{К^3} = \frac{1}{Т^2} = \nu^2$), etc. Their dynamics($R(X-)_{j\to\infty}^{i\to 0}$)in the field of the Universe, with $\text{ОЛ}_{ji}(m)$system of coordinates, with(λ)the wavelength and (T) the period of dynamics of quanta ($X\pm$), ($Y\mp$) ...,spaces matters, has an appearance:
   a. $\lambda(X-)_{j\to\infty}^{i\to 0} * \rho(X-)_{j\to 0}^{i\to\infty} = b_{ji}(X-)$, acceleration$b(X- = Y+) = \frac{F}{q}$,
   $\lambda(Y-)_{j\to 0}^{i\to\infty} * \rho(Y-)_{j\to\infty}^{i\to 0} = b_{ji}(Y-)$, acceleration $b(Y- = X+) = \frac{F}{m}$
   b. The course of time is defined($t = N * T$)by dynamics of the periods (T) proceeding from relative ($j - i$) density ($\rho = \frac{1}{T_{ji}}$)as relative period of dynamics$T = \frac{1}{\sqrt{\rho}}$, quanta($X\pm$), ($Y\mp$), with various($\lambda$)wavelength. In$\lambda(X-)^i \to 0$, physical vacuum, with$T_i(X-) = \frac{1}{\sqrt{\rho_i(X-)\to\infty}} \to$ 0dynamicsperiodsinНОЛ $= t\frac{1}{T} = 1$, our (ОЛ$_1$ -level) time$t \to 0$, is slowed down to zero concerning$\text{ОЛ}_i(X-)$the level of physical vacuum. To the contrary, at the movement on infinity$\lambda(X-)_j \to \infty$of the field of the Universe, our time (t) with the periods of dynamics of physical vacuum
   $T_j(X-) = \frac{1}{\sqrt{\rho_j(X-)\to 0}} \to \infty$,will infinitely last long($t = N * T \to \infty$).

   In other words, moving deep into $\lambda(X-)^i \to 0$,, physical vacuum from (ОЛ$_1$) of level of our atoms and molecules, we rest against "a firm bottom"$\rho_i(X-) \to \infty$, with delay of time of our dynamics to zero ($t \to 0$). On the contrary, to move to an infinite distance $\lambda(X-)_j \to \infty$),fields of the Universe, we will be($t = N * T \to \infty$)infinitely long. Here, designation $(X-)_{j\to\infty}^{i\to 0}$, means ($\lambda(X-)^i \to 0$), и ($\lambda(X-)_j \to \infty$).

7. Let's decide on the mass of indivisible quanta of ОЛ$_1$ -of level, protons$p(X\pm)$and$e(Y\mp)$electronsknown to us. In fact it is various masses with (X +) the field SI-GI, Strong and Gravitational Interaction and mass (Y-) trajectories$(Y- = \mathrm{e})$, in uniform gravit (X + = Y-) the mass field. In other words there is$m_X(p_j \ldots \nu_i)$masses and$m_Y(e \ldots \gamma_i)$the mass$R_{ji}(n)$of objects inОЛ$_{ji}(m)$system of coordinates. Various masses, for example a proton and an electron, is in uniform gravit (X + = Y-) mass, electro (Y+=X-) magnetic fields of interaction, without any exchange of photons in charging interaction of a proton and electron. The proton cannot radiate or absorb a photon, as in a case with an electron.
8. Urgent there are movements of the Structural Forms (SF) of our ОЛ$_1$-level of atoms and molecules, alongОЛ$_{ji}(m)$system of coordinates. Passing to other (X-) and (Y-) of a trajectory, otherОЛ$_j$ orОЛ$_i$of Physical Vacuum, we change own periods of dynamics, and also own time of dynamics is equal, moving in the Universe.

2.1. Uniform Criteria of Evolution of space matter.

All Criteria of Evolution of dynamic space matter, are created

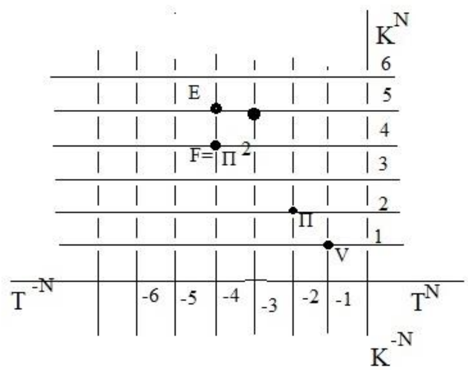


Fig. 2.1. Criteria of Evolution in space time.

in multidimensional on (m-n) convergence, space - time, as in multidimensional space of speeds: $W^N=K^{+N}T^{-N}$. Here for (N=1), V = $K^+ 1T^{-1}$ speed, (W^2 =П potential, ($П^2$= F) force …, 2- quadrant. Their projection on coordinate (To) or the temporary (T) space time is given: the ПК=q(Y+ =X -) charge in electro (Y + = X-) magnetic fields, or the mass ПК=m(X + = Y-) in gravit (X + = Y-) mass fields, energy of (E=$П^2$K), impulse (p=$П^2$T), action (ћ=$П^2$KT), etc., uniform space - matter НОЛ= (X + = Y-) (Y + = X-) =1. Any equation comes down to these Criteria of Evolution in $W^N=K^{+N}T^{-N}$ space-time. There are many other Criteria of Evolution in space-time that we do not use yet.

2.2. **Electro (Y + = X-) magnetic also gravit (X + = Y-) mass fields.**

In uniform (X + = Y-) (Y + = X-) =1, space - matter, remove Maxwell's equations[1] for electro (Y + = X-) magnetic field. In a space angle $\varphi_X(X-)\neq 0$ of parallelism there is isotropic tension of a stream A_n a component (Smirnov, t.2, page 234). A full stream of a whirlwind through a secant a surface $S_1(X-)$ in a look:

$$\iint\limits_{S_1} rot_n A dS_1 = \iint \frac{\partial(A_n/\cos\varphi_X)}{\partial T} dL_1 dT + \iint\limits_{S_1} A_n dS_1 .$$

A_n component corresponds to a bunch $(X-)$ of parallel trajectories. It is a tangent along the closed curve L_2 in a surface S_2 where $S_2 \perp S_1$ and $L_2 \perp L_1$. Similarly, the ratio follows: $\int\limits_{L_2} A_n dL_2 = \iint\limits_{S_2} rot_m \frac{A_n}{\cos\varphi_X} dS_2$.

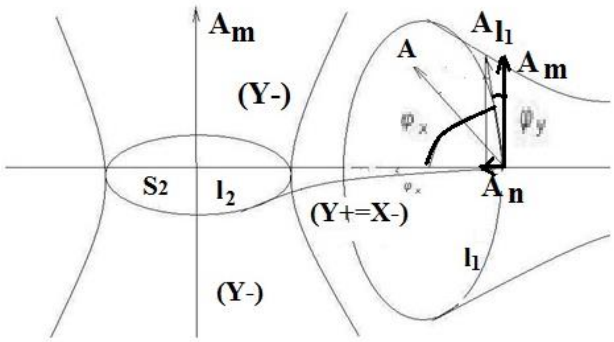


Fig. 2.2-1. electromagnetic$(Y+=X-)$and gravitmassovy$(X+=Y-)$fields.

In a space angle $\varphi_X\,(X-)\neq 0$ of parallelism the condition is satisfied

$$\iint_{S_2} rot_m \frac{A_n}{\cos\varphi_X} dS_2 \quad + \iint \frac{\partial A_n}{\partial T} dL_2 dT = 0 = \iint_{S_2} A_m(X-)dS_2 .$$

In general there is a system of the equations of dynamics (X - = Y+) of the field.

$$\iint_{S_1} rot_n A dS_1 = \iint \frac{\partial(A_n/\cos\varphi_X)}{\partial T} dL_1 dT + \iint_{S_1} A_n dS_1$$

$$\iint_{S_2} rot_m \frac{A_n}{\cos\varphi_X} dS_2 = -\iint \frac{\partial A_n}{\partial T} dL_2 dT \quad \text{and} \quad \iint_{S_2} A_m dS_2 = 0 .$$

In Euclidean $\varphi_Y = 0$ axiomatics, accepting tension of a stream vector a component as tension of electric field $A_n/\cos\varphi_X = E(Y+)$ and an inductive projection for a nonzero corner $\varphi_X \neq 0$ as induction of magnetic $B(X-)$ field, we have

$$\iint_{S_1} rot_X B(X-)dS_1 = \iint \frac{\partial E(Y+)}{\partial T} dL_1 dT + \iint_{S_1} E(Y+)dS_1$$

$$\iint_{S_2} rot_Y E(Y+)dS_2 = -\iint \frac{\partial B(X-)}{\partial T} dL_2 dT \text{, in conditions} \quad \iint_{S_2} A_m dS_2 = 0 = \oint_{L_2} B(X-)dL_2 .$$

Maxwell's equations.

$$c * rot_x B(X-) = rot_x H(X-) = \varepsilon_1 \frac{\partial E(Y+)}{\partial T} + \lambda E(Y+);$$

$$rot_x E(Y+) = -\mu_1 \frac{\partial H(X-)}{\partial T} = -\frac{\partial B(X-)}{\partial T};$$

Induction of vortex magnetic field $B(X-)$ arises in variation electric $E(Y+)$ field and vice versa.

For L_2 the ratio which is not closed there are ratios $\int_{L_2} A_n dL_2 = \iint_{S_2} A_m dS_2 \neq 0$ a component. In the conditions of orthogonality $A_n \perp A_m$ the vectorcomponent A, in nonzero, dynamic$(\varphi_X \neq const)$and$(\varphi_Y \neq const)$corners of parallelism $A\cos\varphi_Y \perp (A_n = A_m\cos\varphi_X)$, is dynamics $(A_m\cos\varphi_X = A_n)$ components along a contour L_2 in a surface S_2. Both ratios are presented in the full form.

$$\int_{L_2} A_m \cos\varphi_X dL_2 = \iint_{S_2} \frac{\partial(A_m(X+)*\cos\varphi_X)}{\partial T} dL_2 dT + \iint_{S_2} A_m dS_2$$

The zero stream through S_1 a whirlwindsurface $(rot_n A_m)$ out of a space angle $(\varphi_Y \neq const)$ of parallelism corresponds to conditions

$$\iint_{S_1} rot_n A_m dS_1 \quad + \quad \iint \frac{\partial A_m}{\partial T} dL_1 dT = 0 = \iint_{S_1} A_n(Y-)dS_1 .$$

In general the system of the equations of dynamics (Y- = X +) of the field is presented in the form:

$$\iint_{S_2} rot_m A_m(Y-)dS_2 = \iint_{S_2} \frac{\partial(A_m(X+)*\cos\varphi_X)}{\partial T} dL_2 dT + \iint_{S_2} A_m dS_2$$

$$\iint_{S_1} rot_n A_m(X+)dS_1 = -\iint \frac{\partial A_m(Y-)}{\partial T} dL_1 dT \quad , \qquad \iint_{S_1} A_n(Y-)dS_1 = 0 \quad .$$

Entering tension $G(X+)$ of the field of Strong (Gravitational) Interaction and induction of the mass fieldby analogy $M(Y-)$, we will receive similarly:

$$\iint_{S_2} rot_m M(Y-)dS_2 = \iint \frac{\partial G(X+)}{\partial T} dL_2 dT + \iint_{S_2} G(X+)dS_2$$

$$\iint_{S_1} rot_n G(X+)dS_1 = -\iint \frac{\partial M(Y-)}{\partial T} dL_1 dT \text{, at } \iint_{S_1} A_n(Y-)dS_1 = 0 = \oint_{L_1} M(Y-)dL_1 .$$

Such equations correspond gravit (X + = Y-) to mass fields,

$$c * rot_Y M(Y-) = rot_Y N(Y-) = \varepsilon_2 * \frac{\partial G(X+)}{\partial T} + \lambda * G(X+)$$

$$\mathrm{M}(Y-) = \mu_2 * N(Y-); \qquad rot_y G(X+) = -\mu_2 * \frac{\partial N(Y-)}{\partial T} = -\frac{\partial M(Y-)}{\partial T};$$

by analogy with Maxwell's equations for electro (Y + = X-) magnetic fields. Here the uniform mathematical truth of such fields in uniform, dynamic space matter is presented.

Thus, the rotations $rot_y B(X-)$ and $rot_x M(Y-)$ of the trajectories, give the dynamics of $E'(Y+)$ and $G'(X+)$ of the electric $(Y+)$ and gravitational $(X+)$ fields, respectively. And the rotations $(Y+)$ of fields around $(X-)$ trajectories and $(X+)$ fields around $(Y-)$ trajectories give dynamics $rot_x E(Y+) \to B'(X-)$, and dynamics $rot_y G(X+) \to M'(Y-)$of mass trajectories.

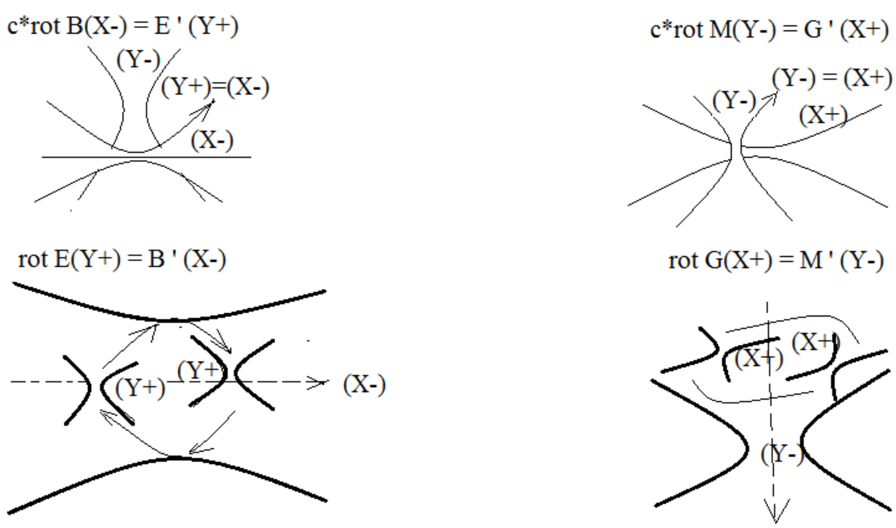


Fig. 2.2-2. Uniform fields of space matter

Turns around axes (z1 z2 z3) of a diagonal matrix (Korn, page 449)

$$\begin{vmatrix} z1 & 0 & 0 \\ 0 & z2 & 0 \\ 0 & 0 & z3 \end{vmatrix} = 1, \text{ as Euclidean } z_1 \perp z_2 \perp z_3 \text{of axes}$$

in fields uniform$(X-) = (Y+)$, $(Y-) = (X+)$spaces matters, are represented by the corresponding minors of a matrix of a condition of dynamic space matter.

$$\begin{vmatrix} z1 & a_{12}(Y+) & a_{13}(X+) \\ a_{21}(X-) & z2 & a_{23}(Y\pm) \\ a_{31}(Y-) & a_{32}(X\mp) & z3 \end{vmatrix} =$$

$$= {}_{z1}\begin{vmatrix} z2 & a_{23}(Y\pm) \\ a_{32}(X\mp) & z3 \end{vmatrix} + {}_{z2}\begin{vmatrix} z1 & a_{13}(X+) \\ a_{31}(Y-) & z3 \end{vmatrix} + {}_{z3}\begin{vmatrix} z1 & a_{12}(Y+) \\ a_{21}(X-) & z2 \end{vmatrix};$$

in corresponding charging $(Y+= X-)$and mass$(X+= Y-)$trajectories. First composed there is a structural form$(X\pm)$and$(Y\pm)$quanta in (z_1) the direction, the second electro$(Y+= X-)$magnetic fields with the equations of dynamics of Maxwell.

$$c * rot_X B(X-) = \varepsilon_1 \frac{\partial E(Y+)}{\partial T} + \lambda_1 E(Y+); \qquad c * rot_Y E(Y+) = -\mu_1 \frac{\partial B(X-)}{\partial T}.$$

Also gravit$(X+= Y-)$mass fields, with the corresponding equations of dynamics

$$c * rot_Y M(Y-) = -\varepsilon_2 \frac{\partial G(X+)}{\partial T} + \lambda_2 G(X+), c * rot_X G(X+) = -\mu_2 \frac{\partial M(Y-)}{\partial T},$$

in the fixed $z_1 \perp$ (X-) $\perp$ (Y-) space matter. For single masses $m_x = 1$, or $m_y = 1$ Indivisible quanta of (НОЛ=1), with a charge$q = (m_0 = 1) * \left(\alpha = \frac{1}{137}\right) * (G = 6{,}67 * 10^{-8}) = 4{,}8 * 10^{-10}$. Here $a_{ij} = cos\varphi$ cosines of limit corners of parallelism

$$cos(\varphi_{(Y-)}\max) = \frac{1}{137.036} \quad \text{and} \quad cos(\varphi_{(X-)}\max) = \sqrt{G},$$

Where $G = 6.67 * 10^{-8}$, gravitational constant.

2.3.Communication of axiomatics of dynamic and Euclidean space.

(X-) and (Y-) of a trajectory are represented by space of speeds of v (X) of complex space of Euclidean axiomatics of points and lines. Speeds: $iv(X)* sin\varphi$= v*$\sqrt{(+\sin\varphi)(-\sin\varphi)}$, or v(X) = $v*(cos\varphi+i\ sin\varphi)$ = v*$e^{i\varphi}$. Here ($\varphi=\omega_z t$), parallelism corner. In the conditions of the Local Invariancy (LI), for

$$\text{НОЛ}=ch\left(\frac{X}{Y_0}\right)(X+)\cos(\varphi)(X-)=1, \qquad \varphi\neq 90^0,$$

at $\varphi=0$, cos (φ) =1, we have: $ch\left(\frac{X}{Y_0}\right)=1$, $ch\left(\frac{X=0}{Y_0}\right)=1$, or $ch\left(\frac{X}{Y_0\to\infty}\right)=1$, the Euclidean sphere ($\infty$) of radius.

Relativistic dynamics in Lorentz's group, with turns in the fixed plane (YZ) of a circle upon transition from 2 to a point 3 lines (X-) of a trajectory Local Invariancy under the terms, is followed by transformations of the hyperbolic movement $ch\left(\frac{X}{Y_0}\right)$(X+) fields of quantum (X±), in this case.

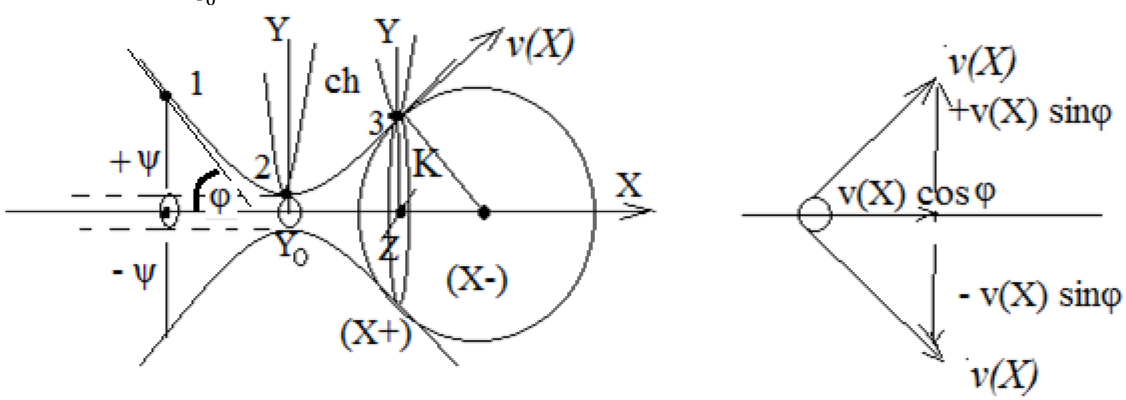


Fig. 2.3 Uniform representation of dynamics

For (±ψ) wave (ψ=Y-Y$_0$) functions, ($i\psi$=$\sqrt{(+\psi)(-\psi)}$), we will receive the iψ=iψ, transformations $i\psi e^{ax} e^{i\omega t} = i\psi e^{ax+i\omega t}$, for (X±). Space of speeds of the line - a trajectory (X-)′=v(X)= v(cosφ+$i$sinφ), in extremals of transformations at (t=0) or ($ax = \frac{X}{Y0} = 0$), give to H-a zero corner of parallelism ($\varphi = ax + i\omega t = 0$), that is Euclideanan axis (X).

In extremals, from ratios $\frac{Ve(Y-)}{c(Y-)} = \cos\varphi\,(Y-) = \alpha = \frac{1}{137}(Y\pm)$, similarly $\cos\varphi\,(X-) = \sqrt{G}$,(X±) quantum, limit ($\varphi_{MAX}$) corners. The equation of variable asymptotes of a hyperbole YX=1, y=y′x, c (y′ ≠ const) gives (y′′ ≠ 0), the equations: y=y′′x. Such equations have solutions of the equation of Dirac, with the specified way of introduction of calibration fields and scalar bosons. Hyperboles $НОЛ = КЭ(X-=Y+)КЭ(Y-=X+)=1$, variable asymptotes, or $НОЛ = КЭ(m)КЭ(n)=1$, in axioms of dynamic space matter.

2.4.Representation of the main equations in dynamic space matter.

For $(X \pm)$ quantum of dynamic space matter, the loudspeaker of the quantum $(X +)$ field of interaction, it is characterized in Euclidean space time K_Y by a curvature radius projection $K = \frac{Y^2}{Y_0}$ (Smirnov, t.1, p. 186) the fixed sphere, a tangent in a space angle of parallelism $\varphi_X (X -)$ of a trajectory in this case. This K_Y projection of radius K, is function of the equations of dynamics.

$$Y = K_Y = \frac{Y_0}{2}\left(e^{\frac{X}{Y_0}} + e^{-\frac{X}{Y_0}}\right), \quad \frac{1}{2}\left(e^{\frac{X}{Y_0}} + e^{-\frac{X}{Y_0}}\right) = ch\frac{X}{Y_0} \approx \exp\left(\frac{X}{Y_0}\right), \quad Y_0 > 0, \ X = 0, \ Y = Y_0,$$

$$1 + (Y')^2 = \left(\frac{Y}{Y_0}\right)^2, \quad Y'' = \frac{Y}{Y_0^2}, \quad K = \frac{(\pm Y)^2}{Y_0}, \quad Y = K_Y = K\cos\varphi_X (X -) \approx K\exp\left(i\frac{X}{Y_0}\right),$$

where K - the radius of curvature $(X -)$ of a trajectory $(X \pm)$. At the same time ψ - function characterizes only dynamics $\pm\psi_X = \pm|Y - Y_0|, \quad Y_0 \to 0, \quad \pm\psi = \pm Y$, the quantum $(X +)$ field of interaction or $(X -)$ a trajectory in limits $\varphi_X (X -) \neq const$, a parallelism corner. Conditions $\varphi_X = 0^0$ give $Y = Y_0, \quad \psi = 0$. Such function is called wave function of a condition of dynamic Criteria of Evolution of quantum $(X \pm)$ as uncertainty of equally parallel lines on $(X -)$ a trajectory. Analogies for $(Y \pm)$ space matter quantum. On the one hand the projection $K = \frac{(\pm Y)^2}{Y_0}$ - the radius of curvature $(X -)$ of a trajectory of quantum $(X \pm)$ of dynamic space matter in a look: $K_Y = Y = Y_0 ch\frac{X}{Y_0}$, is the solution of the differential equation of dynamics of the valid argument of X,

$$Y'' - \left(\frac{1}{Y_0^2}\right)Y = 0, \qquad \frac{Y}{Y_0} = ch\frac{X}{Y_0} \approx \exp\left(\frac{X}{Y_0}\right).$$

On the other hand the projection $Y = K_Y = K\cos a_X (X -)$ of the fixed single $(K = 1)$ - radiuses of curvature $(X -)$ of a trajectory of quantum $(X \pm)$ is the solution of the equation of dynamics of already imaginary argument,

$$Y'' + \left(\frac{1}{Y_0^2}\right)Y = 0, \qquad Y = K\cos a_X = \frac{K}{2}\left(e^{\frac{iX}{Y_0}} + e^{-\frac{iX}{Y_0}}\right) \approx K\exp\left(i\frac{X}{Y_0}\right).$$

Accepting entry conditions of a zero corner of parallelism $\varphi_X = 0^0$, in Euclidean space the ratio takes place $Y = K\cos 0^0 = K = Y_0$. Any fixed nonzero value of a corner of parallelism $(\varphi_X \neq 0^0) = const$, in Euclidean axiomatics $\sqrt{(+X)(-X)} = iX$, in the presence, of the principle of uncertainty of a dynamic $(Y = Y -)$ trajectory, gives its fixed state in the form of function of a complex argument,

$$(K_Y - Y_0) = \psi_X (K,T) = \psi_X (K)\exp\left(i\frac{X}{Y_0}\right) \quad \text{for} \quad Y_0 = const.$$

In the conditions of physical Criteria of Evolution of quantum $(X \pm)$ of dynamic space matter, the equation, for the fixed $(X = Y_0)$ spheretakes place,

$$\frac{X}{Y_0} = \frac{2m(E - V)}{\hbar^2} = 1, \ \psi_X (K,T) = \psi_X (K)\exp\left(\frac{iET}{\hbar}\right) \ \text{and} \ \frac{\hbar^2}{2m} = (E - V),$$

It is about wave function of the one-dimensional Schrödinger equation (BKF, p. 270), as about the mathematical truth in axioms of dynamic space matter.

$$-\frac{\hbar^2}{2m}\frac{\partial^2}{\partial X^2}\psi_X (X,T) = (E - V)\psi_X (X,T).$$

The same ratios of wave function $\psi_Y(K,T)$ in the Schrödinger equation, have quanta $(Y\pm)$ of dynamic space matter, already within a dynamic corner of parallelism $\varphi_Y(Y-)$ of a trajectory, with quantum electric $(Y+)$ field of interaction, $\pm\psi_Y(K,T)=\pm|X-X_0|$.

Thus, dynamics of Criteria of Evolution $(X\pm)$ and $(Y\pm)$ quanta of dynamic space matter, in the conditions of their infinitesimal dynamic spheres points $X_0\to 0$ and $Y_0\to 0$, comes down to dynamics of their wave functions $\psi_X(K,T)$ and $\psi_Y(K,T)$. The physical sense of such wave functions satisfying to the Schrödinger equations comes down to boundaries to an extreme condition of the fixed Criteria of Evolution $(X+)$ and $(Y+)$ fields of interaction of quanta $(X\pm)$ and $(Y\pm)$ dynamic space matter, within their own dynamic corners of parallelism $\varphi_X(X-)$ and $\varphi_Y(Y-)$ trajectories.

At infinitesimal radiuses of spheres points $Y_0\to 0$ in this case, projections of turns γ in temporary space of wave function,

$$\psi_X=(Y=K_Y)-(Y_0\to 0),\qquad НОЛ=\omega(X-=Y+)T(X+=Y-)=1,$$

in the fixed circle x^0, with the adjoining hyperbole of the fixed asymptote, correspond to Lorentz's group (V. Paulie, p. 99, 105), in a look,

$$\begin{matrix}\bar{X}_1=X_1\cos\gamma+X_4\sin\gamma\\ \bar{X}_4=-X_1\sin\gamma+X_4\cos\gamma\end{matrix},\qquad \begin{matrix}\bar{X}_1=X_1ch\varphi+X_4sh\varphi\\ \bar{X}_4=-X_1sh\varphi+X_4ch\varphi\end{matrix}.$$

In the course of dynamics of a corner of parallelism $a_X(X-)$ of a trajectory of quantum $(X\pm)$ of dynamic space matter (fig. 2), the tangent point of intersection to $(X-)$ a trajectory with the Euclidean axis X, is displaced along this axis. At the same time covariant dynamics of wave function in Lorentz's group remains, at shift along $(X=X-)$ a trajectory of group of Poincare.

In the conditions of dynamics of wave function $\pm\psi_X=\pm|Y-Y_0|$, quantum $(X\pm)$

$$1+(Y')^2=\left(\frac{Y}{Y_0}\right)^2,\qquad 1=\left(\frac{Y}{Y_0}\right)^2-(Y')^2,\qquad (Y=K_Y)\approx\psi \text{ for } Y_0=const,$$

in technology of dynamic axioms facts the Indivisible Area of Localization of quantum $(X\pm)$ of dynamic space mattertakes place,

$$НОЛ=i\left(\psi'+\frac{\psi}{Y_0}\right)(X+=Y-)i\left(\psi'-\frac{\psi}{Y_0}\right)(X-=Y+)=1.$$

For the closed system of coordinates, a space angle of parallelism $\varphi_X(X-)$ of trajectories of quantum $(X\pm)$ of space matter of quantum, in Euclidean axiomatics of a zero corner of parallelism $\varphi_X(X-)=0^0$, all Criteria of Evolution of such corner of parallelism are equal to zero too. In this case ratios of such Criteria of Evolution take place,

$$i\left(\psi'-\frac{\psi}{Y_0}\right)=0,\qquad \psi'=\frac{\psi}{Y_0},\qquad \text{or}\qquad \frac{\partial\psi}{\partial T}=\frac{\psi}{Y_0}.$$

In the conditions of the principle of uncertainty $i\psi=\sqrt{(+\psi)(-\psi)}$ of temporary $(X-=icT)$ space, it CPT is symmetry where $i\omega=\frac{i}{T}$ defines C - a charge, and $(\pm\psi_X=\pm|Y-Y_0|)$, spatial P - symmetry, on $(X-)$ a quantum space matterquantum trajectory $(X\pm)$, there are their ratios as the mathematical truth of dynamic axioms. For Euclidean axiomatics of a zero corner of parallelism $\varphi_X(X-)=0^0$, in a look,

$$\frac{i}{T}=\frac{H}{\hbar},\qquad \frac{\partial}{\partial T}=\frac{H}{i\hbar},\qquad i\hbar\frac{\partial\psi}{\partial T}=H\psi,\qquad \frac{\partial n}{\partial T}=\frac{1}{i\hbar}(nH-Hn),$$

mathematical truth of the Schrödinger equations and Heisenberg (P. Dirac, page 83-88). Here their rather deep physical meaning is not discussed.

Transition state of Criteria of Evolution of quanta $(X\pm)$ or $(Y\pm)$ dynamic space matter, within their own dynamic corners of parallelism $\varphi_X(X-)$ or $\varphi_Y(Y-)$ trajectories, corresponds to matrixes of an initial and final state, operators of the birth and destruction of their Criteria of Evolution, with their invariable extremals in Global Invariancy. At the same time transition state in operators of coordinate and temporary space in the closed system of zero corners of parallelism $(\varphi = 0)$, in Euclidean axiomatics, corresponds to operator representation of the equations of dynamics of wave function

$$H=\left(\frac{\hbar^2}{2m}\right)\frac{\partial^2}{\partial K^2}, \qquad E=i\hbar\frac{\partial}{\partial T}, \qquad (E-H)\psi=0 .$$

The Hamiltonian H corresponds to Einstein's equation in pulse representation

$$\frac{E}{c}=W , \qquad \frac{H}{c}=\sqrt{p_K^2+m^2c^2} \text{ , equations } (E-H)\psi=0 .$$

The square root of a Hamiltonian $\frac{H}{c}$, undertakes in algebra of quaternions in the strict mathematical truth (Korn, p. 449).

$$b_{K=1,2,3}^2=1, \qquad b_4^2=1, \qquad b_K b_4-b_4 b_K=0,$$

$$\frac{H}{c}=\sqrt{p_K^2+m^2c^2}=\sqrt{(b_K p_K+b_4 mc)(b_K p_K+b_4 mc)}=(b_K p_K+b_4 mc).$$

The equation of dynamics of wave function takes a form of the equation of Dirac,

$$(E-H)\psi=0, \ \left(W-\frac{H}{c}\right)\psi=0, \quad (W-b_K p_K-b_4 mc)\psi=0,$$

$$\left(i\hbar\left(\frac{\partial}{c\partial T}-b_K\frac{\partial}{\partial X_K}\right)-b_4 mc\right)\psi=0,$$

Where b_K, b_4 Dirac's matrixes (P. Dirac, p. 77), as mathematical truth of algebra of quaternions of the fixed sphere, in space $\varphi_X(X-)$ angles of parallelism or $\varphi_Y(Y-)$ trajectories, with the principle of uncertainty in each Euclidean axis of the sphere on these trajectories.

The speech about the uniform mathematical truth of technology of dynamic axioms, quanta of Indivisible Areas of Localization of dynamic space matter, and the mathematical truth of quantum theories in technology of Euclidean axiomatics of space time.

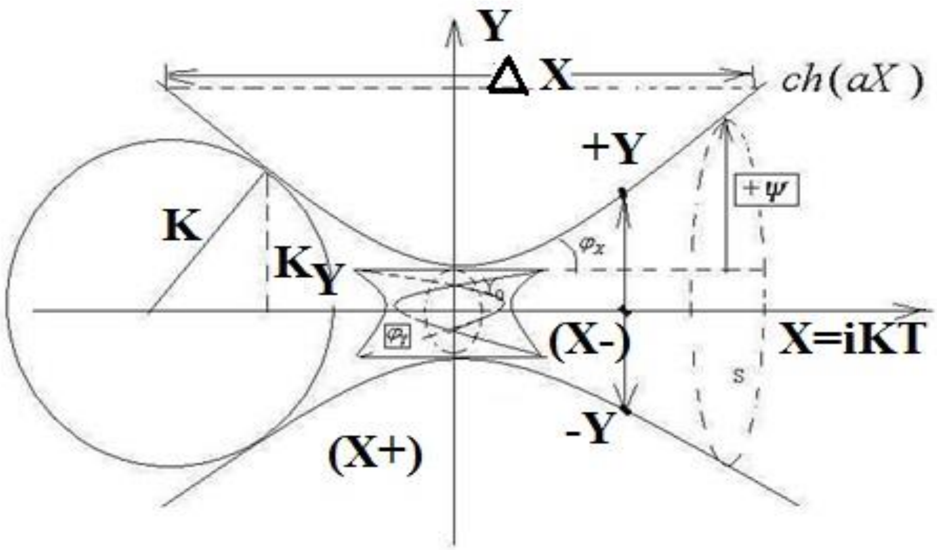
2.5. Scalar bosons.

Action of quantum $\hbar=\Delta p\Delta\lambda=F\Delta t\Delta\lambda$,it is impossibleto record in space $\Delta\lambda$ or in time Δt . It is connected with a nonzero $(\varphi\neq const)$ corner of parallelism $(X-)$ or $(Y-)$ a trajectory $(X\pm)$ or $(Y\pm)$ quantum of space matter. There is only a certain probability of action. Transformations of relativistic dynamics wave ψ - functions of the quantum field with a probability density ($|\psi|^2$) interactions $(X+)$ in the field of(fig. 3), correspond Globally Invariant $\psi(X)=e^{-ia}\overline{\psi}(X), a=const$ Lorentz's group. These transformations correspond to turns in S circle plane, and relativistic - to the invariant equation of Dirac.

$$i\gamma_\mu\frac{\partial\psi(X)}{\partial x_\mu}-m\psi(X)=0, \quad \text{and} \quad \left[i\gamma_\mu\frac{\partial\overline{\psi}(X)}{\partial x_\mu}-m\overline{\psi}(X)\right]=0 .$$

Such invariancy gives conservation laws in the equations of the movement. For transformations of relativistic dynamics in the hyperbolic movement,

$$\psi(X)=e^{a(X)}\overline{\psi}(X), \quad ch(aX)=\frac{1}{2}(e^{aX}+e^{-aX})\cong e^{aX}, \qquad a(X)\neq const,$$



rice 2.4. Quantum $(X\pm)$ of dynamic space matter.

in Dirac's equation additional composed appears.

$$\left[i\gamma_\mu \frac{\partial\overline{\psi}(X)}{\partial x_\mu} - m\overline{\psi}(X)\right] + i\gamma_\mu \frac{\partial a(X)}{\partial x_\mu}\overline{\psi}(X) = 0.$$

Invariancy of conservation laws is broken. For their preservation calibration fields are entered. They compensate additional composed in the equation.

$$A_\mu(X) = \overline{A}_\mu(X) + i\frac{\partial a(X)}{\partial x_\mu}, \quad \text{and} \quad i\gamma_\mu\left[\frac{\partial}{\partial x_\mu} + iA_\mu(X)\right]\psi(X) - m\psi(X) = 0.$$

Now in such equation, substituting value $\psi(X) = e^{a(X)}\overline{\psi}(X), a(X) \neq const$ wave function, we will receive the invariant equation of relativistic dynamics.

$$i\gamma_\mu \frac{\partial\psi}{\partial x_\mu} - \gamma_\mu A_\mu(X)\psi - m\psi = i\gamma_\mu \frac{\partial\overline{\psi}}{\partial x_\mu} + i\gamma_\mu \frac{\partial a(X)}{\partial x_\mu}\overline{\psi} - \gamma_\mu \overline{A}_\mu(X)\overline{\psi} - i\gamma_\mu \frac{\partial a(X)}{\partial x_\mu}\overline{\psi} - m\overline{\psi} = 0$$

$$i\gamma_\mu \frac{\partial\overline{\psi}}{\partial x_\mu} - \gamma_\mu \overline{A}_\mu(X)\overline{\psi} - m\overline{\psi} = 0, \quad \text{or} \quad i\gamma_\mu\left[\frac{\partial}{\partial x_\mu} + i\overline{A}_\mu(X)\right]\overline{\psi} - m\overline{\psi} = 0.$$

This equation invariantno to the initial equation

$$i\gamma_\mu\left[\frac{\partial}{\partial x_\mu} + iA_\mu(X)\right]\psi(X) - m\psi(X) = 0$$

In conditions $A_\mu(X) = \bar{A}_\mu(X)$. Presence of scalar boson $(\sqrt{(+a)(-a)} = ia(\Delta X) \neq 0) = const$, in the limits of calibration $(\Delta X) \neq 0)$ field (Fig. 3.). These conditions give constant extremals of dynamic space-matter in global invariance. And there are no scalar bosons here. Thus, scalar bosons in calibration fields are produced artificially, to address deficiencies of $A_\mu(X) = \bar{A}_\mu(X) + i\frac{\partial a(X)}{\partial x_\mu}$ Theory of Relativity in quantum fields.

2.6. Transformations of relativistic dynamics.

It is impossible to determine properties $(X-)$ or $(Y-)$ trajectories of quanta ofНОЛ $(X\pm)$, $(Y\pm)$ space matter, by one straight line, in a dynamic bunch of parallel straight lines. This physical principle of uncertainty $\hbar = \Delta p\Delta\lambda = F\Delta t\Delta\lambda$, the line trajectory in space - time $(\Delta\lambda, \Delta t)$ as the experiment fact, is an axiom of dynamic space matter. It is impossible at the same time, to synchronize relativistic dynamics in the uniformly accelerated $[b^2 = const]$ circular or hyperbolic movement.

$$Y^2 \pm (icT)^2 = [a^2 = \frac{c^4}{b^2} = const] = \left(\Delta\bar{Y}^2 \pm (ic\bar{T})^2 \neq const\right) = \left(\bar{Y}^2 \pm (ic\Delta\bar{T})^2 \neq const\right)$$

Here, transformations of relativistic dynamics of the circular $(-)$ or hyperbolic $(+)$ movement in the classical Theory of Relativity of Einstein are invalid. In the conditions of variable acceleration $[b^2 \neq const]$, such transformations of relativistic dynamics are invalid too.

$$Y^2 \pm (icT)^2 = [a^2 \neq const] = \bar{Y}^2 \pm (ic\bar{T})^2 .$$

In both cases, in quantum fields, the classicalSpecial Theory of Relativity (STR) of Einstein is invalid. Transformations of relativistic dynamics of the circular $(+)$ or hyperbolic $(-)$ uniformly accelerated $\left(a^2 = const\right)$ movement,

$$Y^2 \pm (icT)^2 = \left(a^2 = \frac{c^4}{b^2} = const\right) = \bar{Y}^2 \pm (ic\bar{T})^2 ,$$

give Lorentz's transformations of classical relativistic dynamics.

Table 1.

a) Uniform mathematical truth STR and QTR

Special Theory of Relativity (STR).	**Quantum Theory of Relativity (QTR).**
Classical representation: $Y^2 \pm (icT)^2 = \left(a^2 = \frac{c^4}{b^2} = const\right) = \bar{Y}^2 \pm (ic\bar{T})^2$ Circular $(+)$ or hyperbolic $(-)$ uniformly accelerated movement. 1). $\bar{X} = a_{11}X + a_{12}Y$, $Y = icT$, $T = \frac{Y}{ic}$, $\bar{X} = a_{11}X + a_{12}\frac{Y}{ic}$ $\frac{\bar{Y}}{ic} = a_{21}X + a_{22}\frac{Y}{ic}$ $\bar{Y} = a_{21}X + a_{22}Y$, $\bar{Y} = ic\bar{T}$, 2). $\bar{X} = a_{11}X + \frac{a_{12}}{ic}Y$, $\bar{Y} = a_{21}icX + a_{22}Y$. $a_{11} = b_{11}, \frac{a_{12}}{ic} = ib_{12}$, $a_{21}ic = ib_{21}$, $a_{22} = b_{22} . a_{22} = b_{22}$. 3). $\bar{X} = b_{11}X + ib_{12}Y$, $\bar{Y} = ib_{21}X + b_{22}Y$, $\delta_{KT} = 1$ для $K = T$, $b_{11}^2 - b_{12}^2 = 1 = b_{22}^2 - b_{21}^2$ conditions of orthogonality vector component. In Globally Invariant conditions of the sphere $b_{11} = b = b_{22}$ $b_{12}^2 = b_{21}^2$ $(\pm b_{12})^2 = (\mp b_{21})^2$ $b_{12} = -\frac{a_{12}}{c}$, $b_{21} = a_{21}c$ $b_{12} + b_{21} = 0$, take place: $a_{21}c = \frac{a_{12}}{c}$, or for: $c = \frac{\Delta Y}{\Delta T}$, $\frac{a_{21}\Delta Y}{\Delta T} = \frac{a_{12}\Delta T}{\Delta Y}$. 4). Further two cases take place. a). Conditions $\left(a_{21} = 0 = a_{12}\right)$, nullify projections $\Delta Y = ic\Delta T$, dinamk spatially $(c = \Delta Y / \Delta T)$	The special Theory of Relativity is invalid under conditions: 1). not the uniformly accelerated $(a^2 \neq const)$ movement. 2). Owing to the principle of uncertainty $\Delta Y = c\Delta T$, impossibility of fixing of points in space - time, do Lorentz's transformations hopeless. 3) Wave function of quantum is brought to an initial state by input of the calibration field, in the absence of relativistic dynamics, in the process of its dynamics, that is in the absence of quantum relativistic dynamics. Relativistic dynamics in parallelism coal $\alpha(X-)$ space quantum trajectories - matters. Instead of X,Y, projections K_Y K_x , dynamic radius To, the dynamic sphere, a tangent to a surface of a dynamic space angle $\alpha^0(X-) \neq const$, parallelism are considered K_Y K_x $\alpha^0(X-) \neq const$. The speech about the material sphere with a nonzero minimum radius $Y_0 = 1 = ch0$, and wave function $\psi = K_Y - Y_O$. $Y = K_Y$ $X = K_X$ 1). $\bar{K}_Y = a_{11}K_Y + a_{12}K_X$, $\bar{K}_X = a_{21}K_Y + a_{22}K_X$, where $K_X = cT$, $T = \frac{K_X}{c}$, time is entered. 2). $\bar{K}_Y = a_{11}K_Y + \frac{a_{12}}{c}K_X$, $\frac{\bar{K}_X}{c} = a_{21}K_Y + \frac{a_{22}}{c}K_X$ $\bar{K}_Y = a_{11}K_Y + \frac{a_{12}}{c}K_X$, or $\bar{K}_X = a_{21}cK_Y + a_{22}K_X$. A). In external GI - it is global - Invariant conditions, components $\cos\gamma = \sqrt{(+a_{11})(-a_{11})} = ia_{11}$ give the principle of uncertainty, with a certain density of probability $\lvert\psi\rvert^2$ in an experiment, and a matrix of transformations:

temporary a component of the quantum of a photon, and give GI - Global and Invariant conditions.

b). The reality is that the photon which synchronizes relativistic dynamics has the volume $(a_{21} \neq 0) \neq (a_{12} \neq 0)$ in space - time. Such reality corresponds to reality of the principle of uncertainty: $\Delta Y = 0 = (+Y) + (-Y)$ .It is about - Local Invariance in volume

$$(a_{21} \neq 0) \neq (a_{12} \neq 0).$$

5). Paulie (p. 14): "… it was assumed … $\chi\sqrt{1-\frac{W^2}{c^2}}$ ", orSmirnov (t.3, p. 195): "… we will put … $(b_{12} = ab) = -b_{21}$ …". That is, there is no initial reason of such provisions. But already from these provisions, for the unknown reason, according to Smirnov, the mathematical truth follows:

$\overline{X} = bX + iabY$

$\overline{Y} = -iabX + bY$, $b^2 - a^2b^2 = 1 = -a^2b^2 + b^2$,

$b^2(1-a^2) = 1$, $b = \frac{1}{\sqrt{1-a^2}}$,

$\overline{X} = \frac{X + iaY}{\sqrt{1-a^2}}$, $\overline{Y} = \frac{Y - iaX}{\sqrt{1-a^2}}$.

6). Substituting reference values $Y = icT$ $\overline{Y} = ic\overline{T}$, we will receive:

$$\overline{X} = \frac{X + iaY}{\sqrt{1-a^2}}, \quad ic\overline{T} = \frac{icT - iaX}{\sqrt{1-a^2}},$$

$$\overline{T} = \frac{T - \frac{a}{c}X}{\sqrt{1-a^2}}, \quad a = \frac{W}{c} = \cos\alpha^0,$$

Lorentz's transformations in classical relativistic dynamics

$$\overline{X} = \frac{X - WT}{\sqrt{1 - W^2/c^2}}, \quad \overline{T} = \frac{T - \frac{W}{c^2}X}{\sqrt{1 - W^2/c^2}},$$

$$\overline{W} = \frac{V + W}{1 + VW/c^2}.$$

transitionQTRin STR.

The mathematical truth of transition of the Quantum Theory of Relativity to transformations of the Special Theory of Relativity takes place.

For zero corners of parallelism in Euclidean axiomatics, with speeds smaller velocity of light $W_Y < c$, limit cases of transition of quantum relativistic dynamics vector a component take place $a_{22} = (\cos(\alpha^0 = 0) = 1) = a_{11}$,

$\overline{K}_Y = ia_{11}K_Y + (\frac{a_{12}}{c} = b_{12})K_X$

3). $\overline{K}_X = (a_{21}c = b_{21})K_Y + ia_{22}K_X$

For parallelism corners $\alpha^0(X -) = 0$, in GI, such that

4). $a_{11} = \cos(\alpha^0 = 0^0) = 1 = b$, $(b = 1)K_Y = K_Y$

$a_{22} = \cos(\alpha^0 = 0^0) = 1 = b$, $(b = 1)K_X = K_X$ conditions take place

5). $\frac{a_{12}}{(c=1)} = b = a_{21}(c = 1)$, $b_{12} = b = b_{21}$ period $(T = 1)$.

In Globally - Invariant conditions $ia_{11} = ia = ia_{22}$, the matrix has an appearance

6). $\overline{K}_Y = ia_{11}K_Y + b_{12}K_X$, $\overline{K}_X = b_{21}K_Y + ia_{22}K_X$, or $\overline{K}_Y = iabK_Y + bK_X$, $\overline{K}_X = bK_Y + iabK_X$,

$\overline{K}_Y = iabK_Y + bK_X$

$\overline{K}_X = bK_Y + iabK_X$

The same GI a representation form $K_Y = \psi = Y - Y_0$, takes place in any multiple $T \leq \Delta T$, timepoint.

7). In the conditions of orthogonality $\delta_{KT} = 1$ $K = T$, takes place $-a^2b^2 + b^2 = 1 = b^2 - a^2b^2$, $b^2(1-a^2) = 1$, $b = \frac{1}{\sqrt{1-a^2}}$.

matrix multiplier with conditions: $ia_{11} = ia = ia_{22}$ or $a_{11} = a = a_{22}$.

B). (LI) already in - Locally - Invariant conditions, relativistic dynamics $a_{11} \neq a_{22}$, with external GI conditions, takes place:

$\overline{K}_Y = b(a_{11}K_Y + K_X)$

8) $\overline{K}_X = b(K_Y + a_{22}K_X)$, where: from $K_Y = \psi + Y_0$

$K_X = c(T = \frac{X}{c} = \frac{\hbar}{E})$, follows $A_K = b(a_{11}Y_0 + K_X)$.

It is also the moment of truth of relativistic dynamics of quantum of space matter which is presented in modern theories by the calibration A_K field.

$\psi = \psi_0 \exp(ap \neq const) + A_K$

9). Under the terms $a_{22} = \frac{K_X}{cT} = \frac{W}{c} = a = a_{11}$,

GI - loudspeakers $a = a_{22} = a_{11}$ $b = \frac{1}{\sqrt{1-a^2}} = \frac{1}{\sqrt{1-W^2/c^2}}$, the matrix of transformations takes a form:

$\overline{K}_Y = \frac{a_{11}K_Y + cT}{\sqrt{1-a_{22}^2}}$, $\overline{K}_Y = \frac{a_{11}K_Y + cT}{\sqrt{1-W^2/c^2}}$, $c\overline{T} = \frac{K_Y + a_{22}cT}{\sqrt{1-a_{22}^2}}$,

$\overline{T} = \frac{K_Y/c + a_{22}T}{\sqrt{1-W^2/c^2}}$, $\overline{W}_Y = \frac{\overline{K}_Y}{\overline{T}} = \frac{a_{11}K_Y + cT}{K_Y/c + a_{22}T}$

$a_{22}=1$, $a_{11}=1$, $Y=WT$, $(\overline{K}_Y=\overline{Y})=\frac{(a_{11}=1)(K_Y=Y)\pm WT}{\sqrt{1-W^2(X-)/c^2}}$, $\overline{Y}=\frac{Y\pm WT}{\sqrt{1-W^2/c^2}}$, $\overline{T}=\frac{K_Y/c+(a_{22}=1)T}{\sqrt{1-W^2(X-)/c^2}}$, $K_Y=K(\cos\alpha^0=\frac{W}{c})$, $\overline{T}=\frac{T\pm KW/c^2}{\sqrt{1-W^2/c^2}}$, in Lorentz's transformations classical relativistic dynamics.	$\overline{W}_Y=\frac{a_{11}W_Y+c}{a_{22}+W_Y/c}$, Local Invariance (LI) in conditions $(a_{22}\neq a_{11})\neq 1$, in extremals when: $a_{11}=\frac{W}{c}=\alpha=\frac{1}{137.036}$, $W=\alpha\ c$; $\alpha=\frac{q^2}{\hbar c}$ 10). Speed limits $W_Y=c$, in conditions $a_{22}=a_{11}\neq 1$, give $\overline{W}_Y=\frac{c(a_{11}+1)}{(a_{22}+1)}=c$, invariable velocity of light $\overline{W}_Y=c=W_Y$, in any system of coordinates.

A deeper conclusion about such quantum relativistic dynamics is that with a constant isotropic Euclidean sphere $(К_Y)(cT=К_X)$ space-time, in a dynamic $(\uparrow a_{11}\downarrow)(\downarrow a_{22}\uparrow)=1$, space-matter, has place of the dynamics of the ellipsoid $(\overline{К}_Y)(c\overline{T}=\overline{К}_X)$. On the contrary, looking at the dynamic ellipsoid of space-time, there is a stationary Euclidean sphere inside it. Such transformations in the angles of parallelism of dynamic space-matter, with induction of relativistic mass, are impossible in the Euclidean axiomatic, $(a_{11}=1)(a_{22}=1)=1$.

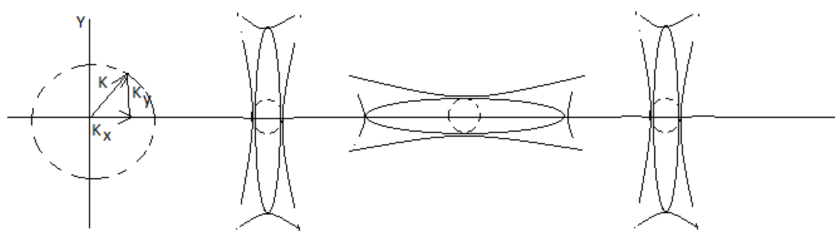


Fig.2.5 quantum relativistic dynamics of space-matter.

Such transformations in angles of parallelism of dynamic space-matter, with induction of relativistic mass are impossible in Euclidean axiomatic. Both theories STR and QTR accept superlight(v_i = N*c) space.

$\overline{W_Y}=\frac{c+Nc}{1+c*Nc/c^2}=c$, $\overline{W_Y}=\frac{a_{11}Nc+c}{a_{22}+Nc/c}=$ c , for $a_{11}=a_{22}=1$.

b) General Theory of Relativity (GTR) of Einsteinin dynamic space matter.

The theory is characterized by Einstein's tensor (G. Korn, T. Korn) as the mathematical truth of a difference of relativistic dynamics of two (1) and (2) points of Rimanovy space (fig. 1.2) as fixed $(g_{ik}=const)$, states dynamic$(g_{ik}\neq const)$, spaces matters. (Smirnov V. I. 1974 t.2).

$$R-\frac{1}{2}R_i a_{ji}=\frac{1}{2}grad(U)\ , \quad \text{or} \quad R_{ji}-\frac{1}{2}Rg_{ji}=kT_{ji},\quad (g_{ji}=const).$$

In this case the matrix of transformations in single units of measure

$$\begin{matrix} R_1=a_{11}Y_1+0 \\ R_Y=0+a_{YY}Y_Y \end{matrix},\ a_{11}=a_{YY}=\sqrt{G}\ ,\qquad R^2=a_{YY}^2Y_Y^2=GY_Y^2\ ,$$

Gives classical Newton's low $\quad Y_Y^2=\frac{m^2}{\Pi^2}\ ,\qquad R^2=G\frac{m^2}{\Pi^2},\qquad$ or $\qquad F=G\frac{Mm}{R^2}\ ,$

For relativistic dynamics:

$$c^2T^2-X^2=\frac{c_Y^4}{b_Y^2}\ ,\qquad b_Y=\frac{F_Y}{M_Y}\ ,\qquad c_Y^4=F_Y\ ,\qquad c^2T^2-X^2=\frac{M_Y^2}{F_Y}\ ,$$

$$F_Y=\frac{M_Y^2}{c^2T^2(1-W_X^2/c^2)}\ ,\qquad c^2T^2=R^2=\frac{R_0^2}{(cos^2\varphi_X=G)}\ ,\qquad F_Y=G\frac{Mm}{R^2(1-W_X^2/c^2)}\ ,$$

It is relativistic view of Newton's law for mass (Y-) trajectories,

$$W^2=\frac{2GM}{R_3},\qquad F_Y=G\frac{Mm}{R^2(1-2GM/R_3c^2)}\ ,$$

It is particular case of General Theory of Relativity. From these relations it follows only that $(1-2GM/Rc^2\neq 0)$. This means that the space of velocities of mass $(\sqrt{G}W2(2\pi R)\sqrt{G}W=2GM)$ cannot have the speed of light. We obtain for the proton mass $(M=1{,}67*10^{-24}g)$with the conditional circle $(2\pi R)$ of the sphere and the limiting velocity$(W=\mathrm{c})$, we have the radius of the proton.

$$R=\frac{GM}{2(2*3.14)c^2}=\frac{6.67*10^{-8}*1.67*10^{-24}}{2*(2*3.14)*9*10^{20}}=0.98*10^{-13}cm.$$

This is the minimal "black hole", with the space of the velocities of quanta $(\gamma_0 + \nu_e + \gamma_0) = p$ less than the speed of light. And this is proof that the neutrino has a nonzero mass. To recognize such "black holes" with an event horizon equal to the speed of light is to divide by zero. But the infinities obtained in this way are not found in mathematics or in nature. But there are several types of "black holes" of this kind with limiting masses $31 * M_{Sun}$, $6242 * M_{Sun}$ and $10^{11} * M_{Sun}$, in different levels of the singularity of the physical vacuum. This follows from the calculations.

It is significant, that gravitational constant$(a_{11} = a_{YY} = \sqrt{G})$, is math truth of maximum $(a_{11} = a_{YY} = cos\varphi_{MAX} = \sqrt{G})$, angle of parallelism, it is absent $(k = 8\pi G/c^4)$ in General Theory of Relativity of Einstein. The second moment is that, there are strict conditions of fixation of potentials$(g_{Ji} = const)$, with adjustment of them to Euclidean space$(g_{ii} = 1)$. Introduction of coefficient in equation (λ) that is changing energy vacuum,

$$R_{Ji} - \frac{1}{2} R g_{Ji} - \frac{1}{2} \lambda g_{Ji} = kT_{Ji}.$$

This does not change the conditions for its fixation. In dynamic space-matter on (m) – convergence of energy level of vacuum, equation has a view:

$$R_{Ji} - \frac{1}{2} R g_{Ji}(x^m \neq const) = kT_{Ji} \ .$$

It is a single model of dynamic vacuum of The Universe and “latent” induction mass (similar to magnetic) fields of dynamic core of galaxies. In every level, presence of variable $(g_{Ji} \neq const)$field, with uncertainty principle, only points on quantum gravity without theory itself. Outside these limits, other laws take place.

3. Range of indivisible quanta of space matter.

To indivisible Areas of Localization of quanta $(X\pm)$, $(Y\pm)$ dynamic space matter stable quanta of space matter correspond. In both cases it is about the reality **facts**. The stable $(Y\pm = e)$ electron, radiates a stable $(Y\pm = \gamma)$ photon $(X\pm = p)$, and $(X\pm = \nu_\mu)$, $(X\pm = \nu_e)$ the neutrino interacts with stablea proton and. In uniform $(X- = Y+)$, $(X+ = Y-)$ space matter they form the first $(ОЛ_1)$ Area of Localization of indivisible quanta on their $m-n$ convergence (fig 3.1).

Similarly everything $(ОЛ_2)$, $(ОЛ_3)$ … $(ОЛ_j)$ Areas of Localization.

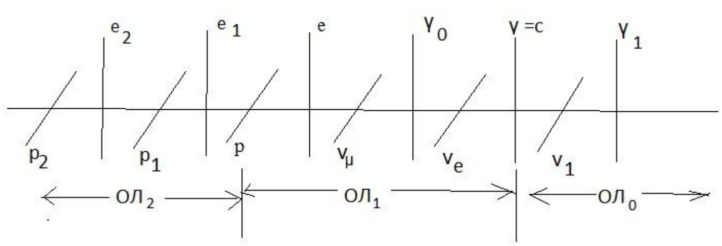


fig. 3.1. Indivisible quanta of space matter**.**

For preservation of continuity uniform $(X- = Y+)$, $(X+ = Y-)$ spaces matters $(Y\pm = \gamma_0)$ the photon similar $(Y\pm = \gamma)$ to a photonis entered. It corresponds to analogy of a muonic $(X\pm = \nu_\mu)$ and electronic $(X\pm = \nu_e)$ neutrino. At the same time, and neutrinoes (ν_μ), (ν_e) and photons (γ_0), (γ), can disperse as well as a proton, or an electron, to speeds (γ_1), $(\gamma_{2\dots})$, on the same transformations of Lorentz. It to experiences in CERN. Having standard, out of any fields the speed of the electron $(W_e = \alpha * c)$ radiating standard out of any fields a photon $V(\gamma) = c$, the constant $\alpha = W_e / c = \cos\varphi_Y = 1/137{,}036$ gives on analogies, calculation of speeds $V(c) = \alpha * V_2(\gamma_2)$ for superlight photons in a look: $V_2(\gamma_2) = \alpha^{-1} c$, $V_4(\gamma_4) = \alpha^{-2} c$ …$V_i(\gamma_i) = \alpha^{-N} c$, in standard, out of any fields conditions. The orbital electron, with a corner of parallelis $\alpha = \frac{W_e}{c} = \frac{1}{137} = \cos\varphi_{MAX}(Y-)$ a trajectory does not radiate a photon, as well as in rectilinear, without acceleration, the movement. **This postulate of Bohr, as well as the principle of indeterminacy of space-time and Einstein's principle of equivalence, are the axioms of dynamic space-matter.**

Like radiation $(e \to \gamma)$ the sequence of radiations in a range of Areas of Localization $(ОЛ_1)$ Indivisible $(X\pm)$, $(Y\pm)$ quanta, including superlight space of speedsexists

$e_j ... \to e_{10}^+ \to e_8^- \to e_6^+ \to e_4^- \to e_2^+ \to \underline{(e^- \to \gamma^+)} \to \gamma_2^- \to \gamma_4^+ \to \gamma_6^- \to \gamma_8^+ \to ...\gamma_i$ analog:

$p_j ... \to p_{10}^-. \to p_8^+ \to p_6^- \to p_4^+ \to p_2^- \to \underline{(p^+ \to \nu^-)} \to \nu_2^+ \to \nu_4^- \to \nu_6^+ \to \nu_8^- \to ...\nu_i$.

These are "visible" range of radiations which can absorb ("to see") and radiate atoms of the first Area of Localization $(ОЛ_1)$ of indivisible quanta, usual $(Z(p^+/n) + Ze^-)$ substance of atoms. But the electron cannot radiate $(Y\pm = \gamma_0)$ a "heavy" photon. It cannot it and absorb ("to see"). Such $(Y\pm = \gamma_0)$ "heavy" photon, can radiate and absorb only a "heavy" $(e_1 \to \gamma_0)$ electron. Similarly invisible $(p_1 \to \nu_\mu)$ radiation. Therefore, in a range of Areas of Localization indivisible $(X\pm)$, $(Y\pm)$ quanta, there is a sequence of "invisible" quanta of radiation.

$e_j ... \to e_9 \to e_7 \to e_5 \to e_3 \to e_1 \to \gamma_0 \to \gamma_1 \to \gamma_3 \to \gamma_5 \to ...\gamma_i$ Similarly:

$p_j ... \to p_9. \to p_7 \to p_5 \to p_3 \to p_1 \to \nu_\mu \to \nu_1 \to \nu_3 \to \nu_5 \to ...\nu_i$ invisible radiation

$(p_3/e_3) \ldots (p_1/e_1) ... (\nu_\mu/\gamma_0) \ldots (\nu_1/\gamma_1)$ substances of the world "parallel", invisible to us.

Atoms $(Z(p^+/n) + Ze^-)$ of usual substance, cannot in principle directly, interact with this range of radiations. These ranges include both "heavy" protons and electrons, and superlight photons and a neutrino. For us it - "dark matter", and nevidimy structures of substance.

$$\ldots (p_3/e_3) \ldots (p_1/e_1) ... \quad (\nu_\mu/\gamma_0) \ldots \quad (\nu_1/\gamma_1) \ldots$$

Dynamics $(\varphi \neq const)$ of mass (Y- = X+) fields is caused by dynamics (Y+ = X -) of electromagnetic fields and vice versa, in quanta $(X\pm)$, $(Y\pm)$ uniform (Y- = X+) (Y+ = X -) dynamic space matter. To limit corners of parallelism $(\varphi_{MAX}(Y-))$ also $(\varphi_{MAX}(X-))$ there correspond interaction constants. For the speed of the electron $W_e(Y\pm = e) = \alpha * c$ radiating $(Y\pm = \gamma)$ a photon, a constant $\alpha = \frac{W_e}{c} = \frac{1}{137} = \cos\varphi_{MAX}(Y-)$. Similarly for the proton $(X\pm = p^+)$ radiating an electronic $(X\pm = \nu_e)$ neutrino, $W_p = \cos\varphi_{MAX}(X-) * W_{\nu_e}$ where $\cos\varphi_{MAX}(X-) = W_p/(W_{\nu_e} = c) = \sqrt{G}$, a constant$(G = 6{,}67 * 10^{-8})$.

From the experimental mass $m(p) = 938.28 MeV$ of a proton, electron $m(e) = 0{,}511 MeV$, andmuonic $m(\nu_\mu) = 0{,}272 MeV$ neutrino, settlement masses follows.

$$\left(\frac{X=K_X}{K}\right)^2 (X-) = cos^2\varphi_X = \left(\sqrt{G}\right)^2 = G \ , \qquad \left(\frac{Y=K_Y}{K}\right)(Y-) = cos\,\varphi_Y = \alpha = \frac{1}{137{,}036}$$

$$m = \frac{F=\Pi^2}{Y''} = \left[\frac{\Pi^2 T^2}{Y} = \frac{\Pi}{(Y/K^2)}\right] = \frac{\Pi Y = m_Y}{\left(\frac{Y^2}{K^2} = \frac{G}{2}\right)} \ , \qquad \text{where from} \quad 2m_Y = Gm_X \ ,$$

$$m = \frac{F=\Pi^2}{X''} = \left[\frac{\Pi^2 T^2}{X} = \frac{\Pi}{(X/K^2)}\right] = \frac{\Pi X = m_X}{\left(\frac{X^2}{K^2} = \frac{\alpha^2}{2}\right)} \ , \qquad \text{where from} \quad 2m_X = \alpha^2\, m_Y$$

$$(\alpha/\sqrt{2}) * \Pi K * (\alpha/\sqrt{2}) = \alpha^2 m(e)/2 = m(\nu_e) = 1{,}36 * 10^{-5} MeV \text{, or: } m_X = \alpha^2 m_Y/2$$

$$\sqrt{G/2} * \Pi K * \sqrt{G/2} = G * m(p)/2 = m(\gamma_0) = 3.13 * 10^{-5} MeV \text{ or: } m_Y = Gm_X/2$$

They coincide with the known masses (Sarycheva, MSU-2007g.). At the same time, communication of mass and charging fields uniform (+ = Y-)(X-=Y+) of space matter follows X from ratios: $\overline{m} = \sqrt{(\overline{h}c)/G} = \sqrt{q}$; or: G$\overline{m}^2 = \overline{h}c = q^2/\alpha$; from where for mass (X + = Y-) fields of quanta of НОЛ=m(X+)m(Y-)=1, G$(\overline{m}^2 = q(m_0 = 1))\alpha = q^2$; follows: ; or G$(m_0 = 1)\alpha = q$, charge.

Таблица 2: **Свойства фундаментальных фермионов**

Частицы		Лептоны		Кварки	
Электрический заряд, Q_i		0	-1	$-1/3$	$2/3$
I поколение		ν_e	e	d	u
	m	< 17 эВ$/c^2$	0.511 МэВ$/c^2$	0.34 ГэВ$/c^2$	0.33 ГэВ$/c^2$
II поколение		ν_μ	μ	s	c
	m	< 270 эВ$/c^2$	105.7 МэВ$/c^2$	0.45 ГэВ$/c^2$	1.5 ГэВ$/c^2$
III поколение		ν_τ	τ	b	t
	m	< 35 МэВ$/c^2$	1784 МэВ$/c^2$	4.9 ГэВ$/c^2$	175 ГэВ$/c^2$

Кроме характеристик частиц, указанных в таблице, важную роль для лептонов играют лептонные числа: электронное L_e, равное $+1$ для e^- и ν_e, мюонное L_μ, равное $+1$ для μ^- и ν_μ и таонное L_τ, равное $+1$ для τ и ν_τ, которые соответствуют ароматам лептонов, участвующих в конкретных реакциях, и являются сохраняющимися величинами. Для лептонов

At the same time, in gravit (X + = Y-) mass fields two differ, a type of masses: (m_X) and (m_Y), for example weight ($m_X = p^+$) proton and weight ($m_Y=e^-$) an electron, it is various masses just as in electro (Y+=X-) magnetic fields there are two look (+) and (-) a charge. Similarly, the dynamic mass of a photon (the mass of rest =0) has an appearance: $\sqrt{G/2} * ПК * \sqrt{G/2} = G * m(\nu_\mu)/2 = m(\gamma) = 9.07 * 10^{-9} MeV$ mass (γ = Y-) a trajectory which is bent in (X + =Y-) the field of a star.

Charging (Y+ = X -) isopotential $q(p) \approx q(e)$ of a proton and electron, generates the mass (Y- = X +) isopotential $m(\nu_e) \approx m(\gamma_0)$ of quanta $(X\pm = \nu_e)$, $(Y\pm = \gamma_0)$ spaces matters, similar to $m(e) \approx m(\nu_\mu)$ isopotential. Similar to it, there is a subcharging (X- = Y +) isopotential $q(\nu_e) \approx q(\gamma)$ of leptons. For a photon $\gamma(Y-)$ the mass trajectory $(Y-)$ $\sqrt{G/2} * ПК * \sqrt{G/2} = G * m(\nu_\mu)/2 = m(\gamma) = 9.07 * 10^{-9} MeV$, a photon, is bent in $(X+)$ gravitational field, the fact of uniform (Y- = X +) space matter.

Indivisible Area of Localization of an electron and proton as substances, in space matter correspond products of annihilation of Indivisible quanta of antimatter:

$$(Y\pm = e^-) = (X- = \nu_e^{\,-})(Y+ = \gamma^+)(X- = \nu_e^{\,-}), \quad (X\pm = p^+) = (Y- = \gamma_0^+)(X+ = \nu_e^{\,-})(Y- = \gamma_0^+).$$

Dynamics of this mass field in limits $\cos\varphi_Y = \alpha$, $\cos\varphi_x = \sqrt{G}$, interaction constants, gives the charging isopotential of their single masses.The calculation of the masses of the Indivisible Areas of Localization, of dynamic space-matter as quanta, within the interaction constants, has the most general form.

$$(m_{\nu_\mu} = 0{,}27\ MeV), \quad m_X = \alpha^2 m_Y/2, m_Y = Gm_X/2, \qquad m(\nu_e) = \frac{\alpha^2 m(e)}{2} = 1{,}36 * 10^{-5} MeV$$

$$(m_e = 0{,}511\ MeV), \quad m(\gamma_0) = \frac{Gm(p)}{2} = 3{,}13 * 10^{-5} MeV, \quad m(\gamma) = \frac{Gm(\nu_\mu)}{2} = 9{,}1 * 10^{-9} MeV,$$

$$(\boldsymbol{X}{+}= \nu_e^-)(\sqrt{\boldsymbol{2}} * \boldsymbol{G})(\boldsymbol{X}{+}= \nu_e^-) = (Y{-}= \gamma^+), \qquad \text{or} \qquad \frac{(\boldsymbol{X}{+}{=}\nu_e^-/2)(\sqrt{\boldsymbol{2}}*\boldsymbol{G})(\boldsymbol{X}{+}{=}\nu_e^-/2)}{(Y{-}{=}\gamma^+)} = 1 \ ,$$

$$q_e = \frac{(m(\nu_e)/2)(\sqrt{\boldsymbol{2}} * \boldsymbol{G})(m(\nu_e)/2)}{m(\gamma)} = \frac{(1.36 * 10^{-5})^2 * \sqrt{2} * 6{,}67 * 10^{-8}}{4 * 9{,}07 * 10^{-9}} = 4{,}8 * 10^{-10}\text{СГСЕ}$$

$$(\boldsymbol{Y}{-}= \gamma_0^+)(\boldsymbol{\alpha^2})(\boldsymbol{Y}{-}= \gamma_0^+) = (\boldsymbol{X}{+}= \nu_e^-), \quad \text{or} \qquad \frac{(\boldsymbol{Y}{-}{=}\gamma_0^+)(\boldsymbol{\alpha^2})(\boldsymbol{Y}{-}{=}\gamma_0^+)}{(\boldsymbol{X}{+}{=}\nu_e^-)} = 1,$$

$$q_p = \frac{(m(\gamma_0^+)/2)(\alpha^2/2)(m(\gamma_0^+)/2)}{m(\nu_e^-)} = \frac{(3{,}13 * 10^{-5}/2)^2}{2 * 137{,}036^2 * 1.36 * 10^{-5}} = 4{,}8 * 10^{-10}\text{СГСЕ}$$

This coincidence cannot be casual. To such calculations there corresponds the model of products of annihilation of a proton and an electron (fig. 3.3).

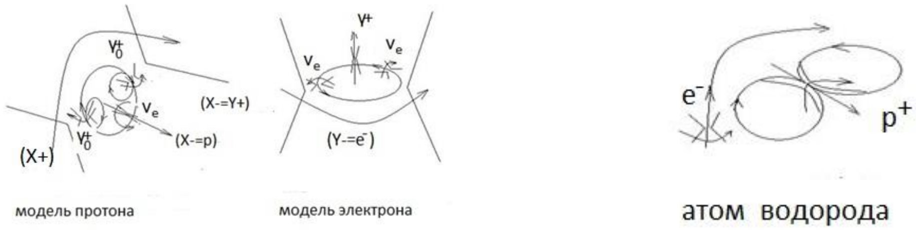


Fig. 3.3. geometrical facts of dynamic space.

In the same models the hydrogen atom model is formed. Availability of antimatter in the substance of a proton and an electron is the geometrical **fact** here. At the same time, products of annihilation of a proton

$$(X\pm=p^{+})=(Y-=\gamma_0^{+})(X+=\nu_e^{\ -})(Y-=\gamma_0^{+})$$

and products of disintegration of a neutron

$$(Y\pm=n)=(X-=p^{+})(Y+=e^{-})(X-=\nu_e^{\ -})\ ,$$

correspond their kvarkovy $(Y\pm=u)$ and $(X\pm=d)$ to models: $(p=udu=uud)$, $(n=dud=ddu)$ ... Similar to everything elementary particles have kvarkovy models in compliance products them disintegration (http://pva1.mya5.ru)"Technology of theories. Quantum Theory of Relativity").

Other **stable** quanta of space matter are not recorded. Kvarkovy models give a proton charge. But just the same charge has a positron without quarks. Such kvarkovy model of charges is invalid, it is not in the nature. And all range of masses pays off without quarks, in full accordance with their kvarkovy $(Y\pm=u)$ $(X\pm=d)$ models.

4. Bosons of electroweak interaction.

Their calculations follow from mass isocapacities of uniform $(Y+=X-)$ $(X+=Y-)$ fields in $(G),(\alpha)$ constants of interaction of an electron $e^{\pm}$ and a muonic neutrino ν_{μ} as Indivisible Area of Localization in space matter**.**

$$НОЛ(Y)=(Y+=e^{\pm})(X-=\nu_{\mu}^{\ \mp})=\frac{\alpha\sqrt{2m_e m_{\nu_\mu}}}{G}=81.3GeV=m(W^{\pm}),\ \text{with a charge}\ e^{\pm},$$

$$НОЛ(X)=(X+=\nu_{\mu}^{\ \mp})(Y-=e^{\pm})=\frac{\alpha\sqrt{m_e m_{\nu_\mu}\exp 1}}{G}=94.9GeV=m(Z^{O}),$$

5. New **stable** particles

on counter bunches of muonic antineutrinoes (ν_{μ}^{-}) in magnetic fields:

$$НОЛ(Y=e_1^{-})=(X-=\nu_{\mu}^{-})(Y+=\gamma_O^{-})(X-=\nu_{\mu}^{-})=\frac{2\nu_{\mu}}{\alpha^2}=10.216GeV,$$

on counter bunches of positrons (e^{+}) which disperse in a stream of quanta $(Y-=\gamma)$, photons **of the "white" laser** in a look:

$$НОЛ(X=p_1^{+})=(Y-=e^{+})(X+=\nu_{\mu})(Y-=e^{+})=\frac{2m_e}{G}=15{,}3TeV,$$

On counter bunches of anti-protons(p^{-}), takes place:

$$НОЛ(Y=e_2^{-})=(X-=p^{-})(Y+=e^{-})(X-=p^{-})=\frac{2m_p}{\alpha^2}=35{,}24TeV\ .$$

Similarly, for quantum $НОЛ(Y-)=(X+=p^{+})(X+=p^{-})$, the mass of quantum of space - matter pays off.

$$M(Y-)=(X+=p^{+})(X+=p^{-})=\left(\frac{m_0}{\alpha}=\overline{m}_1\right)(1-2\alpha)\qquad \text{or}$$

$$M(Y-)=\left(\frac{2m(p^{\pm})}{2\alpha}=\frac{m(p)}{\alpha}=\overline{m}_1\right)(1-2\alpha)=\frac{0.93828GeV}{1/137.036}(1-\frac{2}{137.036})=126{,}7Gev$$

It also is that, an elementary particle, newly opened on a collider of CERN. Here, indeed, in annihilation, a zero charge of the mass trajectory arises, like a scalar quantum of mass, but in a dynamic space-matter.

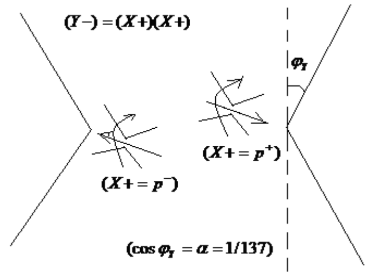


Fig. 5.1. new "Higgs's particle"

The principle of formation of particles is based on fragmentation in limits G, α - constants, "dumped" in vacuum at collisions of particles, density $\rho = v^2 = \frac{E^2}{\hbar^2}$ of mass $(Y-)$ or magnetic $(X-)$ field induced by dispersal. The fragmented matter density, has the respective mass $(Y- = X+)$ andcharging $(Y+ = X-)$ fields and their symmetry. Similarly the mass $p_2^- = 2e_1 / G = 2{,}8 * 10^5 TeV$ of a "heavy" proton. To level of mass $НОЛ(Y = e_1^-)$ of "heavy" stable "electron", **there correspond unstable levels an ipsiloniya**. **It is the fact** of existence $(Y = e_1^-)$ of quanta. To the mass of new particles $НОЛ(X = p_1^+)$ $НОЛ(Y = e_2^-)$, by analogy, there correspond **unstable** levels of masses $15{,}3TeV$, an electron - positron bunches and $35{,}24TeV$ a proton - an anti-proton bunch, without quarks and higgsovy bosons as artificial models.

Within the Quantum Theory of Relativity (http://pva1.mya5.ru) calculation of a range of mass of the known particles is carried out:

$$\overline{m} = \left(\left(\left(\frac{m_0}{\sqrt{2}ch2} = \overline{m}_1\right)(1+\alpha) = \overline{m}_2\right)(1+\alpha) = m_3\right)(X+) + m_O(X-).$$

Uniform representation STRand GTR

The Special Theory of Relativity (STR) is created in space - time. $x^2 - c^2t^2 = \frac{c^4}{b^2}[\text{К}^2]$; dimensions$c^4 = \frac{K^4}{T^4} = \left(\Pi = \frac{\text{К}^2}{\text{Т}^2}\right)^2 = (\Pi^2 = F)$of force,$\left(b = \frac{K}{T^2}\right)^2$acceleration.

The General Theory of Relativity (GTR) is created in Riemannian space of local basic vectors$e_i(X, Y, Z)$with dimension $(e_i = \frac{\text{К}}{\text{Т}})$ spaces of speeds.$e_i * e_i = R_{ik}(x^n)$, tensor. $R_{ik} - \frac{1}{2}Rg_{ik} = kT_{ik}$, a tensor$T_{ik} = \left(\frac{\text{Е}=\Pi^2\text{К}}{\text{Р}=\Pi^2\text{Т}}\right)^2$, energy $(\text{Е} = \Pi^2\text{К})$ - an impulse $(\text{Р} = \Pi^2\text{Т})$ in dimensions $\left(\frac{\text{К}^2}{\text{Т}^2} = \Pi\right)$of potential.

Both equations STRand GTR are connected by density of matter$(\rho = \frac{\Pi\text{К}}{\text{К}^3} = \frac{1}{\text{Т}^2})$, mass fields$m = \Pi\text{К}(X+ = Y-)$, or charging$q = \Pi\text{К}(Y+ = X-)$, fields in two various points in a look:

$$\rho(x^2 - c^2t^2) = \rho(\frac{c^4}{b^2}), \qquad \text{where}$$

$$\rho_1 x^2 = \left(\frac{x}{T} = e\right)_i \left(\frac{x}{T} = e\right)_k = R_{ik}; \quad c^2 = g_{ik}; \quad \frac{t^2}{T^2} = (cos45^0)^2 R = \frac{1}{2}R; \quad (R = \frac{v^2}{c^2})$$

relativity coefficient$\rho\left(\frac{c^4}{b^2}\right) = \frac{F}{T^2(F/m)^2} = \frac{F*m^2=(mc^2)^2}{(F*T=p)^2} = \left(\left(\frac{E}{p}\right)_i \left(\frac{E}{p}\right)_k\right) = T_{ik}$; T_{ik}- energy impulse tensor. Thus, in the strict mathematical truth we receive the equation GTR:

$$R_{ik} - \frac{1}{2}Rg_{ik} = kT_{ik}.$$

Potentials of relativistic dynamics of uniform fields.

Electro$(Y+ = X-)$ Magnetic fields of the equation of Maksvella in uniform Criteria of Evolution.

$c\left[\frac{K}{T}\right]; \quad B(X\ -)\left[\frac{1}{T}\right] = \mu_1\left[\frac{\text{Т}}{K}\right] * \text{Н}\left[\frac{\text{к}}{\text{Т}^2}\right]; \quad \varepsilon_1 * E(Y\ +)\left[\frac{K}{T^2}\right] = D(Y+)\left[\frac{1}{T}\right]; \quad \varepsilon_1\left[\frac{\text{Т}}{K}\right]; \ \lambda\left[\frac{1}{K}\right];$

$$\frac{1}{\sqrt{\mu_1\varepsilon_1}} = c; \quad c * rot_x B(X\ -) = rot_x \text{Н}(X\ -) = \varepsilon_1 \frac{\partial E\ (Y+)}{\partial T} + \lambda E\ (Y+); \ \text{dimensions} \left[\frac{1}{\text{Т}^2}\right],$$

$$rot_x E(Y\ +) = -\mu_1 \frac{\partial \text{Н}\ (X-)}{\partial T} = -\frac{\partial \text{В}\ (X-)}{\partial T} \qquad \text{dimensions} \left[\frac{1}{\text{Т}^2}\right],$$

We multiply equation components: $(x^2 - c^2t^2) = \frac{c^4}{b^2}[\text{К}^2]$; Relativistic dynamics

$$x^2 rot_x \text{Н}(X\ -) - c^2t^2 rot_x \text{Н}(X\ -) = \frac{c^4}{b^2}\varepsilon_1 \frac{\partial E\ (Y+)}{\partial T} + \frac{c^4}{b^2}\lambda E\ (Y+);$$

$$x^2 rot_x E(Y\ +) - c^2t^2 rot_x E(Y\ +) = \frac{c^4}{b^2}\mu_1 \frac{\partial \text{Н}\ (X-)}{\partial T} : \text{We will receive}[\text{К}^2] * \left[\frac{1}{\text{Т}^2}\right] = \left[\frac{TO^2}{\text{Т}^2}\right] = \Pi,$$

Relativistic transformations of potentials электро$(Y+=X-)$ Magnetic field.
c the subsequent definition of the Criteria of Evolution necessary to us. Similarly further. In the equations gravity$(X+=\ Y-)$ Mass fields in relativistic dynamics look like.

$$c * rot_Y M(Y\ -) = rot_Y N(Y\ -) = \varepsilon_2 * \frac{\partial G\ (\text{X}+)}{\partial T} + \lambda * G\ (\text{X}+); \ \text{dimensions}\left[\frac{1}{\text{Т}^2}\right],$$

$$\text{M(Y-)}= \mu_2 * N\ (Y-); rot_y G\ (\text{X}+) = -\mu_2 * \frac{\partial N\ (Y-)}{\partial T} = -\frac{\partial M\ (Y-)}{\partial T}; \ \text{dimensions} \left[\frac{1}{\text{Т}^2}\right],$$

Multiplying by transformations of relativistic dynamics (К^2), We will receive relativistic transformations $\left(\frac{1}{T^2}\text{К}^2 = \Pi\right)$ Potentials already gravity$(X+=\ Y-)$ Mass fields in a kind:

$$x^2 rot_Y M(Y\ -) - c^2t^2 rot_Y N(Y\ -) = \frac{c^4}{b^2}\varepsilon_2 \frac{\partial G\ (\text{X}+)}{\partial T} + \frac{c^4}{b^2}\lambda\, G\ (\text{X}+)$$

$$x^2 rot_y G(\text{X}\ +) - c^2t^2 rot_y G(\text{X}\ +) = -\frac{c^4}{b^2}\mu_2 \frac{\partial N\ (Y-)}{\partial T} = -\frac{c^4}{b^2} * \frac{\partial M\ (Y-)}{\partial T} \ :$$

the subsequent definition of the Criteria of Evolution necessary to us.

Elements of quantum gravitation.

They follow from the General Theory of the Relativity, тензора Einstein, as mathematical true of a difference of relativistic dynamics in two (1) and (2) points Riemannian spaces, with fundamental tensor$g_{ik}(x^n) = e_i e_k$.

$$g_{ik}(1) - g_{ik}(2) \neq 0, \qquad e_k e_k = 1, \text{ On conditions } e_i(Y-) \perp e_k(X-),$$

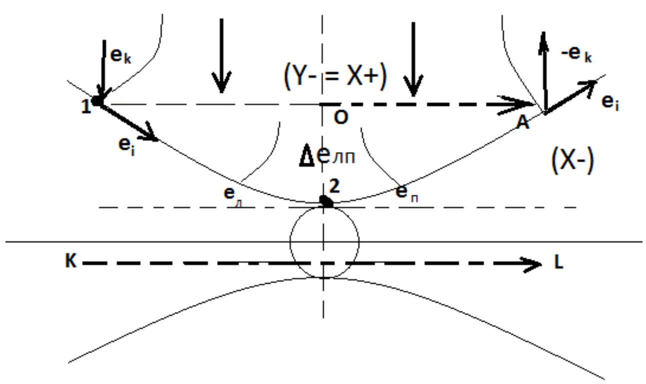


Рис1. Space-matter quantum

The point (2) is led by Euclidean to sphere space, where $(\text{e}_i \perp \text{e}_k)$ And $(\text{e}_i * \text{e}_k = 0)$. Therefore in a point vicinity (2) we allocate vectors (e_L) And $(\text{e}_\text{п})$ Also we take average value $\Delta\text{e}_{\text{лп}} = \frac{1}{2}(\text{e}_\text{л} + \text{e}_\text{п})$. Accepting $(\text{e}_\text{п} = \text{e}_\text{к})$ and $\Delta\text{e}_{\text{лп}} = \frac{1}{2}(\text{e}_\text{л} + \text{e}_\text{п}) = \frac{1}{2}\text{e}_\text{к}(\frac{\text{e}_\text{л}}{\text{e}_\text{к}} + 1)$, We will receive:

$$g_{ik}(1) - g_{ik}(2) \neq 0, \qquad g_{ik}(1) - \frac{1}{2}\text{e}_i\text{e}_\text{к}\left(\frac{\text{e}_\text{л}}{\text{e}_\text{к}} + 1\right)(2) = \text{к}\text{T}_{ik}, \qquad \left(\frac{\text{e}_\text{л}}{\text{e}_\text{к}} = R\right).$$

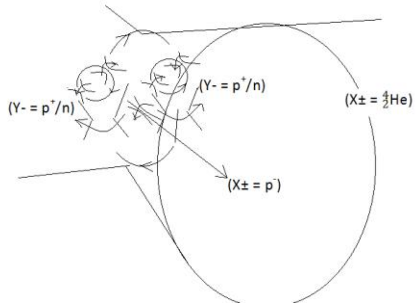
In a full kind the equation of the General Theory of the Relativity:

$$R_{ik} - \frac{1}{2}Rg_{ik} - \frac{1}{2}g_{ik} = \text{к}\text{T}_{ik}$$

Average value of a local basic vector Riemannian spaces $(\Delta\text{e}_{\text{лп}})$, it is defined as an uncertainty principle, but for all length of a wave $KL = \lambda(X\ +)$ Gravitational field $G(X\ +) = M\ (Y-)$ Mass trajectories. This uncertainty in the form of a piece (OA = r), As wave function $(r = \psi_Y)$ The mass $M\ (Y-)$ Quantum trajectories $(Y\pm)$ In gravity. A field $G(X\ +)$ Interactions. $\lambda(X\ +) \equiv 2\psi_Y)$ Backs $(X\ +)$Fields.Projection $(Y-)$Trajectories on a circle plane (πr^2) Gives the probability area $(\psi_Y)^2$ Hits of mass quantum $M\ (Y-)$, In gravity. $G(X\ +)$ Interaction field.

These are initial elements quantum gravity. $G(X\ +) = M\ (Y-)$ Mass field. They follow from the equation of the General Theory of the Relativity.

PS. Based on models of a spectrum of atoms, model of quantum (X± = ${}^4_2He$)of a core of helium is



Picture 7. model of quantum

Structural form of quantums (Y- = p^+/n) of Strong Interaction of structured by (X-) field of antiproton (X± = p^-) in this case. That is why it is convenient to structure deuterium-tritium plasma in continuous thermonuclear reaction by beams of antiprotons. There are two versions of the models. Either (${}^2_1$H)plasma +(p^-)antiprotons of low energies, or (${}^3_1$H)plasma +(p^+)protons of high energies.2 grams of such plasma is equivalent to 25 tons of gasoline.

General equations of the General Theory of Relativity and quantum gravity.

Elements quantum gravity (X + = Y-) a mass field follow from the General Theory of the Relativity. Speech about a difference relativistic dynamics in two (1) and (2) points Riemannian spaces, as to mathematical true tensor Einstein. (G. Korn, T. Korn, c.508). Here

$$g_{ik}(1) - g_{ik}(2) \neq 0, \qquad e_k e_k = 1, \qquad \text{on conditions} \qquad e_i(Y-), \ \ e_k(X-),$$

Fundamental tensor $g_{ik}(x^n) = e_i e_k$ Riemannian spaces in (x^n) system of coordinates.

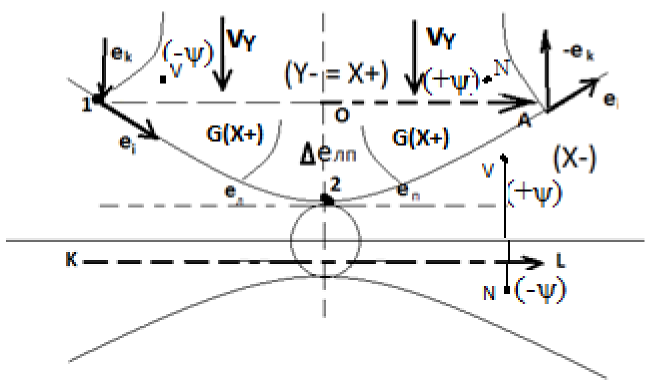


Fig. 6. Quantum gravity (X + = Y-) a mass field.

The principle of equivalence of inert and gravitational weight is physical properties gravity (X + = Y-) a mass field. This equality of acceleration $a = v_Y * M(Y-)$ of mass trajectories and acceleration$g = G(X+)$of a field of gravitation$v_Y * M(Y-) = a = g = G(X+)$, in space of speeds

$$e_i(X-) = e_i(x^n = X, Y, Z) = v_X \left[\frac{K}{T}\right], e_k(Y-) = e_k(x^n = X, Y, Z) = v_Y \left[\frac{K}{T}\right]$$

Of local basic vectors. For example, in "the falling" lift acceleration $(g - a) = 0$ is absent, and the weight$P = m(g - a) = 0$, is equal to zero.

The point (2) is led by Euclidean to sphere space, where ($e_i \perp e_k$) and $e_i * e_k$=0. Therefore in a vicinity of a point (2) it is allocated parallel vectors ($e_л$) and ($e_п$) and we take average value

$\Delta e_{лп} = \frac{1}{2}(e_л + e_п)$. Accepting $(e_п = e_к)$ and $g_{ik}(1) - g_{ik}(2) \neq 0$. $\Delta e_{лп} = \frac{1}{2}(e_л + e_к) = \frac{1}{2} e_к (\frac{e_л}{e_к} + 1)$, we will receive: $g_{ik}(1)(X+) - g_{ik}(2)(X+) = кT_{ik}(Y-)$, $g_{ik}(1) - \frac{1}{2} e_i e_к \left(\frac{e_л}{e_к} + 1\right)(2) = кT_{ik}$, $\left(\frac{e_л}{e_к} = R\right)$.

From here, the equation of the General Theory of the Relativity in a full kind follows:

$$R_{ik} - \frac{1}{2} R g_{ik} - \frac{1}{2} g_{ik} = кT_{ik} .$$

Average value of a local basic vector Riemannian spaces ($\Delta e_{лп}$), is defined as a principle of uncertainty of mass $(Y-)$ trajectories, but for all length of a wave $KL = \lambda(X+)$ of a gravitational field. Here accelerations $G(X+) = v_Y M(Y-)$ of mass trajectories. This uncertainty in the form of a piece $(2 * OA = 2r)$, as wave function $2\psi_Y(Y-)r = \lambda(X+)$ of a mass $M(Y-)$ trajectory of quantum$(Y\pm)$ in $G(X+)$ the Interaction gravitational field. Here$2\psi_Y$, backs (↓↑) of a quantum field $\lambda(X+)$ of gravitation. The projection of a mass $(Y-)$ trajectory of quantum, to a circle plane (πr^2) gives the area of probability $(\psi_Y)^2$ of hit of a mass $M(Y-)$ trajectory of quantum $(Y\pm)$, in a quantum $G(X+)$gravitational field of mutual $(Y- = X+)$action. In the general case, the points V; N (Y-) mass (Fig. 6) or V; N (X-) charge trajectories are identical to each other in the line trajectory of a single beam of parallel straight lines. Each pair of points has its own wave function $\sqrt{(+\psi)(-\psi)} = i\psi$,in the interpretation of quantum entanglement. In this view, quantum entanglement is a fact of reality, which follows from the axioms of dynamic space-matter. The entropy of the quantum entanglement of the set gives a potential gradient, but here the Einstein equivalence principle for inert $v_Y M(Y-) = G(X+)$and gravitational mass is lost.

These are initial elements quantum $G(X+) = v_Y M(Y-)$mass gravity fields. They follow from the equation of the General Theory of the Relativity. We will allocate here dimensions of uniform Criteria of Evolution of space-matter in a kind. Speed$v_Y \left[\frac{K}{T}\right]$; potential$(\Pi = v_Y^2)\left[\frac{K^2}{T^2}\right]$; acceleration$G(X+)\left[\frac{K}{T^2}\right]$; mass $m = \Pi K(Y- = X+)$ fields, and charging $q = \Pi K(X- = Y+)$ fields, their density$\rho\left[\frac{\Pi K}{K^3}\right] = \left[\frac{1}{T^2}\right]$; force$F = \Pi^2$; Energy $\boldsymbol{\varepsilon} = \Pi^2 K$; an impulse $P = \Pi^2 T$; action $\hbar = \Pi^2 KT$ and so on. Let us designate $(\Delta e_{лп} = 2\psi e_k)$, $T_{ik} = \left(\frac{\varepsilon}{P}\right)_i \Delta \left(\frac{\varepsilon}{P}\right)_{лп} = \left(\frac{\varepsilon}{P}\right)_i 2\psi \left(\frac{\varepsilon}{P}\right)_к = 2\psi T_{ik}$ in a kind tensor energy $(\boldsymbol{\varepsilon})$ – (P) - an impulse with wave function (ψ). The equation from here follows:

$$R_{ik} - \frac{1}{2} R e_i \Delta e_{лп} = \kappa \left(\frac{\varepsilon}{P}\right)_i \Delta \left(\frac{\varepsilon}{P}\right)_{лп} \quad \text{or} R_{ik}(X+) = 2\psi\left(\frac{1}{2} R e_i e_k(X+) + \kappa T_{ik}(Y-)\right) \quad \text{and}$$

$$R_{ik}(X+) = 2\psi\left(\frac{1}{2} R g_{ik}(X+) + \kappa T_{ik}(Y-)\right).$$

This equation of quantum Gravitational potential with dimension $\left[\frac{K^2}{T^2}\right]$ of potential $(\Pi = v_Y^2)$ and spin(2ψ). In brackets of this equation, a member of equation of the General Theory of the Relativity in the form of a potential $\Pi(X+)$ field of gravitation.

In field theories (Smirnov, т.2, с.361), acceleration of mass $(Y-)$ trajectories $(X+)$in the field of gravitation of uniform $(Y-) = (X+)$ space-matter is presented divergence a vector field:

$$div R_{ik}(Y-)\left[\frac{K}{T^2}\right] = G(X+)\left[\frac{K}{T^2}\right] \quad \text{, With acceleration} G(X+)\left[\frac{K}{T^2}\right] \text{ and}$$

$$G(X+)\left[\frac{K}{T^2}\right] = grad_l \Pi(X+)\left[\frac{K}{T^2}\right] = grad_n \Pi(X+) * \cos\varphi_x \left[\frac{K}{T^2}\right].$$

The parity $G(X+) = grad_l \Pi(X+)$ is equivalent $G_x = \frac{\partial G}{\partial x}$; $G_Y = \frac{\partial G}{\partial y}$; $G_z = \frac{\partial G}{\partial z}$ to representation. Here full differential:$G_x dx + G_Y dy + G_z dz = d\Pi$. It has integrating multiplier of family of surfaces $\Pi(M) = C_{1,2,3\ldots}$, with a point of M, orthogonal to vector lines of a field of mass $(Y-)$ trajectories $(X+)$in the field of gravitation. Here $e_i(Y-) \perp e_k(X-)$.

The quasipotential field from here follows:

$$t_T(G_x dx + G_Y dy + G_z dz) = d\Pi\left[\frac{K^2}{T^2}\right], \qquad \text{and} \qquad G(X+) = \frac{1}{t_T} grad_l \Pi(X+)\left[\frac{K}{T^2}\right].$$

Here $t_T = n$ for a quasipotential field. Time$t = nT$, n -is quantity of the periods T of quantum dynamics. $n = t_T \neq 0$. From here follow by quasipotential surfaces of quantum gravitational fields with the period T and acceleration:$G(X+) = \frac{\psi}{t_T} grad_l \Pi(X+)\left[\frac{K}{T^2}\right]$.

$$G(X+)\left[\frac{K}{T^2}\right] = \frac{\psi}{t_T}\left(grad_n(R g_{ik})(\cos^2\varphi_{x_{MAX}} = G)\left[\frac{K}{T^2}\right] + (grad_l(T_{ik})\right) .$$

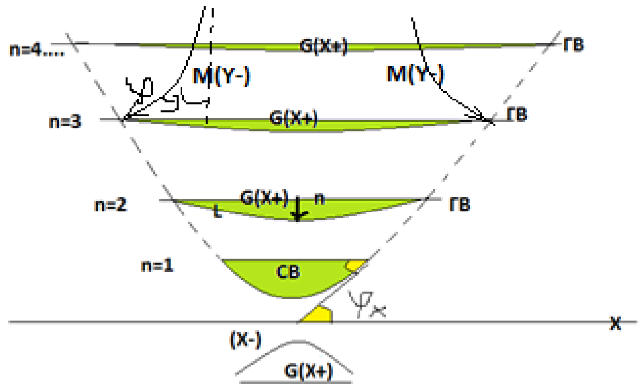


Fig. 7. Quantum gravitational fields.

This chosen direction of a normal fixed in section $n \perp l$. . In dynamical space-matter, it is a question of dynamics $rot_X G(X+)\left[\frac{K}{T^2}\right]$ of fields on the closed $rot_X M(Y-)$trajectories. Here l - a line along quasipotential surfaces Riemannian spaces, with normal $n \perp l$. The limiting corner of parallelism of mass $(Y-)$trajectories $(X+)$in the field of gravitation, gives a gravitational $(\cos^2\varphi(X-)_{MAX} = G = 6.67 * 10^{-8})$ constant. Here$t_T = \frac{t}{T} = n$, an order of quasipotential surfaces, and $(\cos\varphi(Y-)_{MAX} = \alpha = \frac{1}{137.036})$.

$$G(X+)\left[\frac{K}{T^2}\right] = \frac{\psi * T}{t}\left(G * grad_n R g_{ik}(X+) + \alpha * grad_n T_{ik}(Y-)\right)\left[\frac{K}{T^2}\right].$$

This general equation quantum gravity (X + = Y-) a mass field already **accelerations**$\left[\frac{K}{T^2}\right]$, and wave ψ-function, and also T - the period of dynamics of quantum$\lambda(X+)$, with a back $(\downarrow\uparrow)$, (2ψ).

Fields of accelerations, as it is known, it already force fields. In addition, this equation differs from the equation of gravitational **potentials** of the General Theory of the Relativity.

<u>For$n = 1$,</u> (fig. 2) the gravitational field $G(X+)\left[\frac{K}{T^2}\right] = \frac{\psi * T}{\Delta t} G * grad_n (R g_{ik})(X+)\left[\frac{K}{T^2}\right]$ of a source of gravitation, is $G(X+)$ field SI $(X+)$- Strong Interaction. Quantum dynamics in time Δtwithin dynamics period T is represented a parity:

$$G(X+) = \psi * T * G \frac{\partial}{\partial t} grad_n R g_{ik}(X+)$$

Where$T = \frac{\hbar}{\varepsilon = U^2\lambda}$, the period quantum dynamics. The formula for accelerations$\left[\frac{K}{T^2}\right]$ SI$(X+)$ of a field of Strong Interaction takes a form:

$$G(X+)\left[\frac{K}{T^2}\right] = \psi \frac{\hbar}{\Pi^2\lambda} G \frac{\partial}{\partial t} grad_n R g_{ik}(X+)\left[\frac{K}{T^2}\right], \quad grad_n = \frac{\partial}{\partial Y}.$$

Here$G = 6.67 * 10^{-8}$, $\hbar = \Pi^2\lambda T$ a stream of quantum energy $\varepsilon = \Pi^2\lambda = \Delta mc^2$ of a field of inductive weight (Δm) of exchange quantum$(Y- = \frac{p}{n})$ of Strong Interaction, and also $(Y- = 2n)$ nucleons $(p \approx n)$ of a atomic nuclei. The inductive weight $\Delta m(Y- = X+)$ is represented indissoluble quark models $\Delta m(Y-) = u$ and $\Delta m(X+) = d$ quarks. This one $(Y- = X+)$ indissoluble space-matter. Decisions of the equations of quantum fields of Strong Interaction, their presence indissoluble $(Y-= u)(X+= d)$ quarks models of uniform$(Y-= X+)$space-matter assumes. These are exchange quantum, inductive mass $(Y- = X+)$ field's mesons. Various structures of products of disintegration of elementary particles give various generations $(Y-= u)(X+= d)$ of quarks, as models. Here to quantum$(Y- = p/n)$, $(Y- = 2n)$ Strong Interaction of nucleons$(p \approx n)$ of a core. $(X+= p)(X+= p) = 2\psi p = (Y- = p/n)$. This implies
$2\psi p = \Delta m(Y-)$, $2\alpha * p = \Delta m(Y-)$. There corresponds the equation:

$$G(X+) = \psi \frac{\hbar\lambda}{\Delta m^2} G \frac{\partial}{\partial t} grad_n R g_{ik}(X+) .$$

Weight $m = p = 938.28\ MeV$ of a proton. These $(Y-)$ quanta are connected by inductive weight $\Delta m(Y-) = 2\alpha * p = 13{,}69\ MeV$, exchange quantum meson in quark its models. Here $\alpha = \cos\varphi(Y-)_{MAX} = \frac{1}{137.036}$with a minimum specific binding $\Delta E_N = 6{,}85\ MeV$ energy nucleons. For the maximum specific energies$\Delta E_N = 8{,}5\ MeV$, there is an exchange quantum of the Strong Interaction $\boldsymbol{\Delta m(Y-) = 17\ MeV}$

nucleons of the nucleus.In uniform$(Y- = X+)$quantum space-matter of a kernel, there are density equations$\left[\frac{1}{T^2}\right]$mass $(X+ = Y-)$ gravity and $(Y+ = X-)$electromagnetic field

$$\frac{1}{r}G(X+) = c * rot_x M(Y-) - \varepsilon_2 \frac{\partial G(X+)}{\partial t}, \quad \text{and} \quad \frac{1}{r}E(X+) = c * rot_x B(X-) - \varepsilon_2 \frac{\partial E(X+)}{\partial t}.$$

Such equations of quantum fields are considered in each specific case.

In the most general case, dynamics $rot_x M(Y-)$of inductive mass fields («the latent weights») is caused by dynamics of a source of gravitation.

$$c * rot_x M(Y-) = \frac{1}{r}G(X+) + \varepsilon_2 \frac{\partial G(X+)}{\partial t}.$$

For $n \neq 1$, and $n = 2,3,4 \ldots \to \infty$, we receive quasipotential $G(X+)$ fields of accelerations$G(X+)$ of a quantum gravitational field, as gravitation source$\frac{\psi}{t_T} G * grad_n \left(\frac{1}{2}Rg_{ik}\right)(X+)$, with limiting$(cos\varphi(X-)_{MAX} = G)$,a corner of parallelism of a quantum $G(X+)$ field of Strong Interaction in this case and the period $T = \frac{\lambda}{c}$ of quantum dynamics. Quasipotential $G(X+)$ fields of a quantum gravitational field of accelerations, on distances $(c * t = r)$ look like:

$$G(X+) = \frac{\psi * \lambda}{r}\left(G * grad_n \left(\frac{1}{2}Rg_{ik}\right)(X+) + \alpha * grad_n(T_{ik})(Y-)\right), \quad r \to \infty.$$

This equation of a quantum gravitational field **of accelerations**$G(X+) = v_Y M(Y-)$ mass trajectories with a principle of equivalence of inert and gravitational weight. It has a basic difference with the equation of gravitational **potentials** of the General Theory of the Relativity.

Component of a gravitational quasipotential$G(X+) = v_Y M(Y-)$, field, tensor energy - an impulse (T_{ik}) concern inductive mass fields in physical vacuum. In brackets, we have a gradient of potentials gravity$(X+= Y-)$a mass field.

$$G * grad_n \left(\frac{1}{2}Rg_{ik}\right)(X+) + \alpha * grad_n(T_{ik})(Y-) = G * \alpha * grad_\lambda \frac{1}{2}\Pi(X+= Y-).$$

From here follows $$G(X+) = \frac{\psi(\lambda=1)}{r} * G * \alpha * grad_\lambda(\frac{1}{2}\Pi(X+= Y-)).$$

The general gravitational potential $\Pi(X+= Y-)$in a general view includes also potential of a source of gravitation $(\frac{1}{2}Rg_{ik})(X+)$and quasi-potential $(T_{ik})(Y-)$fields of inductive weights. We write the same equation in other quantum parameters, namely:

$$G(X+) = \frac{\psi*(Tc=\lambda)}{(t=nT)c} G\alpha(\frac{1}{2\lambda}\Pi(X+= Y-)) \text{ , or } \quad G(X+) = \frac{\psi*\left(\frac{1}{T}=\nu=\frac{\mathcal{E}}{\hbar}\right)}{nc} G\alpha\left(\frac{1}{2}\Pi\right), \quad G(X+) = \frac{\psi*\mathcal{E}}{n\hbar c} G\alpha(\frac{1}{2}\Pi)$$

Here, the gradient of the total gravity-mass $\Pi(X+= Y-)$ potential is taken over the entire wavelength (λ). We are talking about the quantum levels of the mass trajectories of the orbital electrons of the atom, in the form: $\hbar = m_e V r$. And further: $\frac{mV^2}{r} = \frac{ke^2}{r^2}$. $\quad V = \sqrt{\frac{ke^2}{mr}}$, $\quad (m_e r\sqrt{\frac{ke^2}{r}} = n\hbar)$,

$n\hbar = \sqrt{m_e r k e^2}$, $r = \frac{n^2\hbar^2}{m_e k e^2}$, for energy, $\mathcal{E} = \frac{ke^2}{r} = \frac{m_e k^2 e^4}{n^2\hbar^2}$, at radiation, $\Delta\mathcal{E} = \frac{m_e k^2 e^4}{\hbar^2}\left(\frac{1}{n_1^2} - \frac{1}{n_2^2}\right) = \hbar\nu$, atom. These are mathematical trues of the uniform equations of uniform $(Y\mp = X\pm)$ space-matter.

Examples.

For angular speed$(\omega = \frac{2\pi^r}{T} = \frac{1^r}{t})\left[\frac{r}{s}\right]$ of inductive mass $M(Y-)$trajectories in orbits (r) round the Sun in its $G(X+)$ field of gravitation, is rotation this field.

$$rot_y G(X+) = -\mu_2 * \frac{\partial N(Y-)}{\partial t} = -\frac{\partial M(Y-)}{\partial t} \quad \text{or} rot_y G(X+) = \omega M(Y-).$$

For **Mercury**,perihelion $r_м = 4{,}6 * 10^{12}$см, at average rate $4{,}736 * 10^6 см/c$ there is a centrifugal acceleration$a_м = \frac{(v_м)^2}{r_м} = \frac{(4{,}736*10^6)^2}{4{,}6*10^{12}} = 4{,}876\ cm/s^2$. The weight of the Sun $M_s = 2 * 10^{33} g$, and Sun radius$r_0 = 7 * 10^{10} cm$, create acceleration $G(X+)$ a field of gravitation with $(\psi = 1)$in a kind.

$$g_м = G(X+) = \frac{1*(\lambda=1)}{r_м} * G * \frac{M_s}{2r_0} * \alpha\ , \ \text{or} g_м = \frac{6.67*10^{-8}*2*10^{33}}{2*4{,}6*10^{12}*7*10^{10}*137} = 1{,}511\ cm/s^2.$$

From the relation $R_{ik}(X+) = 2\psi\left(\frac{1}{2}Rg_{ik}(X+) + \kappa T_{ik}(Y-)\right)$, analogue parities in space of accelerations, inductive mass $M(Y-)$ trajectories round the Sun of the space-matter on average radius $r_м = 5{,}8 * 10^{12} cm$ in a kind follow. $a_м(X+) - g_м(X+) = \Delta(Y-) = 4{,}876 - 1{,}511 = 3{,}365\ cm/s^2$.From the equation $(X+= Y-)$mass gravity fields$rot_y G(X+) = \omega M(Y-)$, follows$\frac{\Delta(Y-)}{\sqrt{2}} = \frac{2\pi^r}{T} M(Y-)$, turn perihelion Mercurial in time(T). For $100 years = 6.51 * 10^{14} s$, this turn of mass $M(Y-)$ trajectories makes $\frac{\Delta\,(Y-)*6.51*10^{14}}{r_{м}*2\pi\sqrt{2}}(57{,}3^0) = 42{,}5''$. It is about the rotation of all space-matter around the Sun.

For **the Earth,** on distance of an orbit of the Earth and speed of the Earth $v_3 = 3 * 10^6 cm/$c in an orbit $r_з = 1.496 * 10^{13} cm$, centrifugal acceleration is equal

$$a_з = \frac{(v_3)^2}{r_3} = \frac{(3* 10^6)^2}{1.496*10^{13}} = 0{,}6\ cm/s^2\ .$$

Acceleration $G(\mathrm{X}+)$ a field of gravitation of the Sun $r_0 = 7 * 10^{10} cm$, , with weight (M_s) and $(\psi = 1)$, is available

$$g_3 = G(\mathrm{X}+) = \frac{1}{r_3} * G * \frac{M_S}{2r_0} * \alpha = \frac{6.67*10^{-8}*2*10^{33}}{2*1.496*10^{13}*7*10^{10}*137} = 0.465\ cm/s^2\ .$$

Similarly $a_з(\mathrm{X}+) - g_3(\mathrm{X}+) = \Delta\,(Y-) = 0{,}6 - 0{,}465 = 0{,}135$ см$/s^2$. From this acceleration of inductive mass $M(Y-)$ trajectories space-matter round the Sun, turn perihelion orbits of the Earth follows, by analogy and makes $\frac{\Delta\,(Y-)*6.51*10^{14}}{r_3*2\pi}(57{,}3^0) = 5{,}8''$.

For Venus, under the same scheme of calculation, turn perihelion $r_в = 1.08 * 10^{13} cm$, and speeds $v_в = 3{,}5 * 10^6 cm/s$, centrifugal acceleration of Venus in an orbit makes

$$a_в = \frac{(v_в)^2}{r_в} = \frac{(3{,}5* 10^6)^2}{1.08*10^{13}} = 1{,}134\ \ cm/s^2\ \ .$$

Similarly, the acceleration G (X +) of the solar gravitational field in the orbit of Venus is.

$$g_в = G(\mathrm{X}+) = \frac{1}{r_в} * G * \frac{M_S}{2r_0} * \alpha = \frac{6.67*10^{-8}*2*10^{33}}{2*1.08*10^{13}*7*10^{10}*137} = 0.644\ cm/s^2\quad .$$

Accelerations of inductive mass $M(Y-)$ trajectories of space-matter round the Sun,

$$a_в(\mathrm{X}+) - g_в(\mathrm{X}+) = \Delta\,(Y-) = 1{,}134 - 0.644 = 0{,}49\ cm/s^2\quad .$$

From here, turn perihelion Venus follows: $\frac{\Delta\,(Y-)*6.51*10^{14}}{r_3*\pi}(57{,}3^0) = 9{,}4''$ seconds for 100 years.

Such design values are close to observable values. Essentially that from Einstein's formula for displacement перигелия Mercurial,

$$\delta\varphi \approx \frac{6\pi GM}{c^2 A(1-\varepsilon^2)} = 42{,}98'', \text{ for 100 years,}$$

$$c^2 A(1-\varepsilon^2) * \delta\varphi \approx 6\pi GM, \quad (c^2 A - c^2 A\varepsilon^2)\delta\varphi \approx 6\pi GM.$$

No reason for this shift is visible, except for the curvature of space from the equation of the General Theory of Relativity. The idea is that the difference in the course of the relativistic time in the orbit causes its rotation and is proportional to the eccentricity. In fact, we are talking about the presence of inductive mass M (Y-) fields of space-matter, and their rotation around the Sun, as a cause, in accordance with the equations of dynamics. In other words, space itself revolves around the Sun.

For the same reasons, we will consider movement of the Sun round the Galaxy kernel. The initial data. Speed of the Sun in the Galaxy $v_s = 2{,}3 * 10^7 cm/s$, weight of a cores of the Galaxy $M_c = 4{,}3$ millions M_s, $M_c = 4{,}3 * 10^6 * 2 * 10^{33} g$), distance to the centre of the Galaxy 8,5 кпк or $r = 2{,}6 * 10^{22}$см. Centrifugal acceleration of the Sun in a galactic orbit:

$$\mathrm{a}_s = \frac{(v_s)^2}{r} = \frac{(2{,}3*10^7)^2 = 5{,}29*10^{14}}{2{,}6*10^{22}} = 2 * 10^{-8} cm/s^2\ \ .$$

Using this technology of calculation, we will estimate core radius of our Galaxy $r_я$. In exactly this formula of calculation, we will receive $(r_я.)$ Core radius of our Galaxy $g_s = G(\mathrm{X}+)$.

$$\mathrm{a}_s = G(\mathrm{X}+) = \frac{1}{r} * G * \alpha * \frac{M_c}{2r_c}, \qquad \text{whence}$$

$$r_c = \frac{1}{r} * G * \alpha * \frac{M_я}{2\mathrm{a}_s} = \frac{6.67*10^{-8}*4{,}3*10^6*2*10^{33}}{2*137*2{,}6*10^{22}*2*10^{-8}} = 4 * 10^{15} cm \approx 267\ \mathrm{a.e.},$$

$1\mathrm{a.e.} = r = 1{,}496 * 10^{13} cm$, or $1pc = 3 * 10^{18} cm$, , then $r_я \approx 1{,}3 * 10^{-3}\ pc$. Such radius in our Galaxy corresponds to a gradient of all mass fields of a source of gravitation,

$$G(\mathrm{X}+) = \frac{\psi(\lambda=1)}{r} * G * \alpha * grad_\lambda(\tfrac{1}{2}\Pi(\mathrm{X}{+}{=}\ \mathrm{Y}-)), \qquad \text{with radius } r_c \approx 1{,}3 * 10^{-3} pc.$$

Limits of the measured radius $r_{0c} \approx 10^{-4} pc$ their parity gives a parity of their weights.

$$\frac{r_{0c}}{r_c} * 100\% = \frac{10^{-4}}{1{,}3*10^{-3}} * 100\% = 7{,}69\ \%.$$

It means that the weight of a kernel of the Galaxy makes $7{,}69\ \%$ the latent mass $M(Y-)$ fields.

The parameters of the Moon. It is well known that in the position of the moon between the sun and the earth, according to Newton's law, the sun attracts the moon 2.2 times stronger than the earth. For $M_s = 2 * 10^{33} g$, $m_E = 5{,}97 * 10^{27} g$, $r_E = 6{,}371 * 10^{8} cm$, $m_M = 7{,}36 * 10^{25} g$,

$$r_M = 3{,}844 * 10^{10} cm,\quad G = 6{,}67 * 10^{-8},\quad \alpha = 1/137,$$

$$(\Delta A = 1{,}496 * 10^{13} - r_M = 1{,}49215 * 10^{13} cm),$$

$$F_1 = \frac{G M_S m_M}{(\Delta A)^2} = \frac{6{,}67*10^{-8}*2*10^{33}*7{,}36*10^{25}}{(1{,}49215*10^{13})^2} = 4{,}41 * 10^{25},$$

$$F_2 = \frac{G m_E m_M}{(r_M)^2} = \frac{6{,}67*10^{-8}*5{,}97*10^{27}*7{,}36*10^{25}}{(3{,}844*10^{10})^2} = 1{,}98 * 10^{25}\ ,\quad (F_1/F_2 = 2{,}2).$$

The difference in forces $(F_1 - F_2) = (\Delta F) = (4{,}41 - 1{,}98) * 10^{25} = 2{,}43 * 10^{25}$, is compensated by the gravity of the (“hidden”) mass fields of space around the Earth, with acceleration:

$$g_E(\mathrm{X}+) = \frac{\pi}{r_M} * G * \frac{M_E}{r_E} * \alpha = \frac{3{,}14*\sqrt{2}*6{,}67*10^{-8}*5{,}97*10^{27}}{137*3{,}844*10^{10}*6{,}371*10^{8}} = 0{,}372\ cm/s^2.$$

The gravitational force of the mass field corresponds within the limits of measurement accuracy.

$$(\Delta F) = m_M * g_E(\mathrm{X}+) = 7{,}36 * 10^{25} * 0{,}372 = 2{,}74 * 10^{25}.$$

Thus, decisions of the equations of quantum gravitational fields yield results within the measured.

Deviation of photons in the gravitational field of the Sun. The photon "falls" in the gravitational field of the Sun with acceleration: $g(X+) = \frac{2GM_S}{R_S^2}$. During the passage of the diameter of the Sun $t = \frac{2R_S}{c}$, along the tangent to the sphere of the Sun, the vertical speed of "fall" is:

$v = g * t$. Photon deflection angle, for $R_s = 6{,}963 * 10^{10} cm$, defined as:

$$\varphi = arc\ sin\frac{v}{c}\ , \text{or} \quad \frac{v}{c} = \frac{2GM_S}{R_S^2} * \frac{2R_S}{c} * \frac{1}{c} = \frac{4*6{,}67*10^{-8}*2*10^{33}}{6{,}963*10^{10}*(3*10^{10})^2} = 8{,}515 * 10^{-6},$$

$$\varphi = arc\,\sin(8{,}515 * 10^{-6}) = 0{,}000488^0 = 1{,}75''s \quad \text{Of arc.}$$

This angle corresponds to the calculations of the General Theory of Relativity of Einstein.

7.Dynamics of the Universe.

Consider the mathematical truths of the dynamics of the chosen Evolution Criteria. In other Criteria, this will be a different view. If $(R)$is the radius of the non-stationary Euclidean space of the sphere of the visible Universe, then from the classical Special Theory of Relativity, where $(b = \frac{K}{T^2})$ acceleration, $(c^4 = F)$ force, it follows:

$$R^2 - c^2t^2 = \frac{c^4}{b^2} = \bar{R}^2 - c^2\bar{t}^2,\ \text{or} \qquad b^2(R\uparrow)^2 - b^2c^2(t\uparrow)^2 = (c^4 = F),$$

force. In the unified Criteria, $\left(b = \frac{K}{T^2}\right)(R = K) = \frac{K^2}{T^2} = \Pi$, we talk about the potential in the velocity space $(\frac{K}{T} = \overrightarrow{e})$ vector space in any $\vec{e}(x^n)$ coordinate system, $\Pi = g_{ik}(x^n)$, is the fundamental tensor of the Riemannian space.

$$\Pi_1^2 - \Pi_2^2 = (\Pi_1(X+) - \Pi_2(Y-))(\Pi_1(X-) + \Pi_2 * (Y+)) = (\Delta\Pi_1(X+= Y-))\downarrow(\Delta\Pi_2(X-= Y+))\uparrow= F$$

This force on the entire radius $(R = K)$of the visible sphere of the single $(X\pm= Y\mp)$space-matter of the Universe, gives (dark) energy $(U = FK)$ to the dynamics of the entire Universe.

$$(\Pi_1^2 - \Pi_2^2)K = (\Pi_1 - \Pi_2)K(\Pi_1 + \Pi_2) = (\Delta\Pi_1)(X+= Y-)\downarrow K(\Delta\Pi_2)(X-= Y+)\uparrow= FK = U$$

What is its nature? At the radius (R = K) of the dynamic sphere of the Universe, there is a simultaneous dynamics of a single (X ± = Y∓) space-matter. Considering the dynamics of potentials in gravity $(X+= Y-)$ mass fields, as is known, $(\Pi_1 - \Pi_2) = g_{ik}(1) - g_{ik}(2) \neq 0$, we are talking about the equation $R_{ik} - \frac{1}{2}Rg_{ik} - \frac{1}{2}g_{ik} = kT_{ik}$ of the General Theory of Relativity in any system $(x^m \neq const)$ coordinates, and in various levels of singularity $ОЛ_j$, $ОЛ_i$, physical vacuum of the entire Universe. The gradient of such $(\Delta\Pi_1)$ potential, as is also known, gives the equations of quantum gravity with inductive $M(Y-)$ (hidden) mass fields in a gravitational field. We are talking about energy-momentum $(\Delta\Pi_1{\sim}T_{ik})\downarrow(X+= Y-)$ of the gravitational (X + = Y-) mass fields of the expanding Universe, with a decrease in density.

$$\Pi K = \frac{K^3}{T^2} = \left(\frac{1}{T^2} = \rho\downarrow\right)(K^3 = V\uparrow)(X+= Y-) = (\rho\downarrow V\uparrow)(X+= Y-), \qquad (R \to 10^{33}\text{см}), \qquad (\rho \to 0)$$

Consequently, at the same time, the density $(\rho\uparrow V\downarrow)(X-= Y+)$of electromagnetic fields increases in the Planck $(R \to 10^{-33}\text{см})$ limits of vacuum with limiting densities$(\rho \to \infty)$ in different depths of physical vacuum. These are mathematical truths.

2. Representation of model of the mechanism of Higgs in dynamic space matter.

Such mechanism gives a higgsovy boson in gravity (X+= Y−)mass fields and bosons $(W^{\pm}, Z^{0})$ Electro (Y+)=(X-) weak interaction. A mechanism essence just the same, as at scalar bosons of the invariant equation of Dirac.

$i\gamma_{\mu}\frac{\partial\psi}{\partial x_{\mu}} - m\psi(X) = 0$, and $i\gamma_{\mu}\frac{\partial\bar{\psi}}{\partial x_{\mu}} - m\bar{\psi}(X) = 0$, for $\psi(X) = e^{-ia}\bar{\psi}(X)$, transformations and $i\gamma_{\mu}\left[\frac{\partial}{\partial x_{\mu}} + iA_{\mu}(X)\right]\psi(X) - m\psi(X) = 0$, in conditions $A_{\mu}(X) = \bar{A}_{\mu}(X)$, $A_{\mu}(X) = \bar{A}_{\mu}(X) + i\frac{\partial a(X)}{\partial x_{\mu}}$, existence of a scalar boson $\left(\sqrt{(+a)(-a)} = ia\ (\Delta X \neq 0\right) = const$, within calibration $(\Delta X \neq 0)$ fields. This scalar boson $ia(\Delta X \neq 0) = const$, it is entered into the calibration field artificially, for elimination of shortcomings relativistic dynamics of the Theory of Relativity in quantum fields. Already in it, artificially created scalar field, at Spontaneous Violation of Symmetry the model of the mechanism of Higgs is represented. Let us consider the principles of such mechanism.

a) In gravity (X+= Y−) mass fields. Potential energy of the skalarny field is represented:

$U(X) = -kx^2 + ax^4$, has extremals in points $U'(X) = 0$, or $(x_0 = 0)$, and $x_{1,2} = \pm\sqrt{\frac{k}{2a}} = \pm L$.

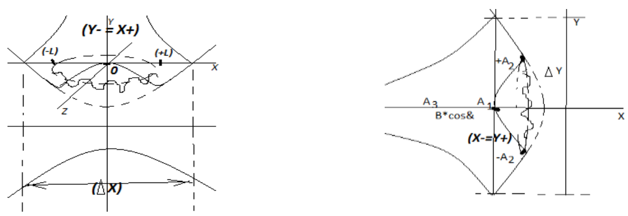


Fig.8. A scalar boson with Higgs's mechanism.

The turn (ZX) of the plane with points $(\pm L)$around an axis (Y), is carried out with small fluctuations in points $(\pm L)$ of balance. With turn: $= 2\pi(f = \frac{1}{T})$, around an axis (Y), it is harmonious fluctuations of the pruzhny environment: $(F = kx) = (F = m\omega^2 x)$ which "generates weight" $(k \equiv m\omega^2)$, (m) analogy of the oscillations of a “scalar” medium and mass. Carrying out replacement of variables at turn around an axis (Y), we will receive: $L + x = \phi$, $x = \phi - L$ and $(Z = \vartheta)$. Energy transformation

$$U(x,z) = -k(x^2 + z^2) + a(x^2 + z^2)^2 ,$$

After groups, it is represented invariant energy $U(\phi,\vartheta) = \tilde{k} * \phi^2 + 0 * \vartheta + \tilde{U}(\phi,\vartheta)$,

Under the terms of the nonzero mass$(\tilde{k} \equiv m\omega^2)$, a scalar boson and a goldstounovsky boson of zero weight. Thus, the scalar boson $ia(\Delta X) = const$ of the calibration field $(\Delta X \neq 0)$ finds weight. This is a scalar boson technology, as in the Dirac equation and a simple analogy of the oscillations of a “scalar” medium and mass.

b) In electro $(Y+ = e =)(X- = \nu)$ magnetic interaction of leptons, in uniform $(Y + = \text{X} -)$ space matter, just the same mechanism of Higs of an identification of fields in the conditions of local Invariances scalar Higgs boson, with calibration fields in each point of an equilibrium state

$(A1 = +L), (A2 = -L), (A3)$ $(Y +)$ of the scalar field and $B(X-)$ weeding.

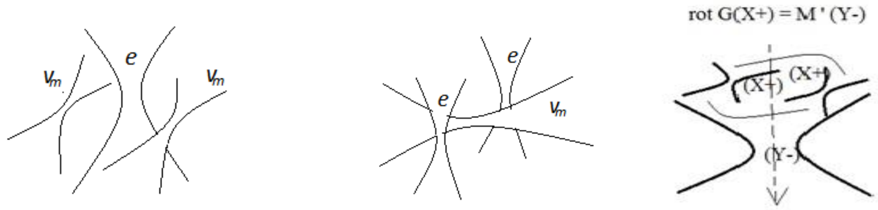
Mixing of this calibration field in uniform electro $(Y+ = -X)$ magnetic field in a look:

$\sqrt{(+A_2)(-A_2)} = iA_2$, bosons $W^{\pm} = \frac{1}{2}(A_1 + iA_2)$ and $Z^0(A_3, B, cos\theta)$

Electro $(Y+ = e =)(X- = \nu)$ weak interaction, which find masses: and $m_z = \frac{m_W}{cos\theta}$ goldstounovsky boson like a massless photon. Here, emergence of mass fields $(Y- = X +)$ bosons$(W^{\pm})$, $(Z^0)$of electroweak interaction in electro magnetic $(Y + = e =)(X- = \nu)$ the field, is a limit of Euclidean axiomatics.

In a dynamic space-matter, both theories of both electroweak interaction and the Higgs boson are presented in a unified way in ideas similar to the idea of Spontaneous Symmetry Breaking and the Higgs mechanism, but without a "scalar" environment.

Electroweak interaction. Higgs boson.



$W^{\pm}$ Z^0 Higgs boson.

Fig. 8.1.. Electroweak interaction and Higgs boson.

$(Y{+}{=}\,e^{\pm}) + 2\big(X{-}{=}\,\nu_{\mu}\big)$ and $\big(X{+}{=}\,\nu_{\mu}\big) + 2(Y{-}{=}\,e)$, $(X{+}{=}\,p^{+}) + (X{+}{=}\,p^{-}) = (Y\,-)$

$$W^{\pm} = \frac{\sqrt{m_e m_{\nu_\mu} * 2\alpha}}{G} = 81.3GeV,\quad Z^0 = \frac{\sqrt{exp1*(2m_e) m_{\nu_\mu} * \alpha}}{G} = 94.8GeV,\quad \frac{2p}{2\alpha}(1-2\alpha) = 126{,}7\ GeV$$

Here is an analogy of the same oscillations in the extremals of the Spontaneous Symmetry Breaking, with the same mass fields. However, mass fields are not born in a scalar field perturbed by vibrations. Mass fields are induced together with electromagnetic dynamics, in accordance with the unified equations of dynamics. Here, the field interaction constants are determined by the limiting angles of parallelism. It is impossible to imagine in the Euclidean axiomatic of the zero angle of parallelism.

Dynamics of the Universe.

Consider the mathematical truths of the dynamics of the chosen Evolution Criteria. In other Criteria, this will be a different view. If $(R)$is the radius of the non-stationary Euclidean space of the sphere of the visible Universe, then from the classical Special Theory of Relativity, where $(b = \frac{K}{T^2})$ acceleration, $(c^4 = F)$ force, it follows:

$$R^2 - c^2t^2 = \frac{c^4}{b^2} = \bar{R}^2 - c^2\bar{t}^2, \text{ or } \quad b^2(R\uparrow)^2 - b^2c^2(t\uparrow)^2 = (c^4 = F), \text{ force.}$$

In the unified Criteria, $\left(b = \frac{K}{T^2}\right)(R = K) = \frac{K^2}{T^2} = \Pi$, we talk about the potential in the velocity space $(\frac{K}{T} = \overrightarrow{e})$ vector space in any $\vec{e}(x^n)$ coordinate system, $\Pi = g_{ik}(x^n)$, is the fundamental tensor of the Riemannian space.

$$\Pi_1^2 - \Pi_2^2 = (\Pi_1(X+) - \Pi_2(Y-))(\Pi_1(X-) + \Pi_2 * (Y+)) = (\Delta\Pi_1(X{+}{=}\,Y-))\downarrow(\Delta\Pi_2(X{-}{=}\,Y+))\uparrow = F$$

This force on the entire radius $(R = K)$of the visible sphere of the single $(X{\pm}{=}\,Y{\mp})$space-matter of the Universe, gives (dark) energy $(U = FK)$ to the dynamics of the entire Universe.

$$(\Pi_1^2 - \Pi_2^2)K = (\Pi_1 - \Pi_2)K(\Pi_1 + \Pi_2) = (\Delta\Pi_1)(X{+}{=}\,Y-)\downarrow K(\Delta\Pi_2)(X{-}{=}\,Y+)\uparrow = FK = U$$

What is its nature? At the radius (R = K) of the dynamic sphere of the Universe, there is a simultaneous dynamics of a single (X ± = Y∓) space-matter. Considering the dynamics of potentials in gravity $(X{+}{=}\,Y-)$ mass fields, as is known, $(\Pi_1 - \Pi_2) = g_{ik}(1) - g_{ik}(2) \neq 0$, we are talking about the equation $R_{ik} - \frac{1}{2}Rg_{ik} - \frac{1}{2}g_{ik} = kT_{ik}$of the General Theory of Relativity. The gradient of such $(\Delta\Pi_1)$ potential, as is also known, gives the equations of quantum gravity with inductive $M(Y-)$ (hidden) mass fields in a gravitational field. We are talking about energy-momentum $(\Delta\Pi_1{\sim}T_{ik})\downarrow(X{+}{=}\,Y-)$ of the gravitational (X + = Y-) mass fields of the expanding Universe, with a decrease in density.

$$\Pi K = \frac{K^3}{T^2} = \left(\frac{1}{T^2} = \rho\downarrow\right)(K^3 = V\uparrow)(X{+}{=}\,Y-) = (\rho\downarrow V\uparrow)(X{+}{=}\,Y-),\qquad (R \to 10^{33}\text{см}),\qquad (\rho \to 0)$$

Consequently, at the same time, the density $(\rho\uparrow V\downarrow)(X{-}{=}\,Y+)$of electromagnetic fields increases in the Planck $(R \to 10^{-33}\text{см})$ limits of vacuum with limiting densities$(\rho \to \infty)$ in different depths of physical vacuum. These are mathematical truths.

6.Features of forms of dynamic space matter.

In atomic nuclei at K-capture, mass fields $(Y{-}{=}\,e^{-})$ of electrons, are included into $(Y{-}{=}\,X+)$ the field of Strong Interaction $(X{\pm}{=}\,p^{+})$ of a proton, forming a neutron in a look $(Y{\pm}{=}\,n) = (X{-}{=}\,p^{+})(Y{+}{=}\,e^{-})(X{-}{=}\,\nu_e^{-})$. Protons and neutrons in a cores, form the loaded $(Y{-}{=}\,p^{+}/n)$ and neutral $(Y{-}{=}\,2n)$ quanta of Strong Interaction. Their closed mass $(Y-)$ trajectories form the loaded and neutral structures of covers of a cores. Here the minimum specific $E_{УД.\min} = \alpha * m(p) = 938.28/137 \approx 6.85MeV$ binding energy of nucleons of a cores is defined in dynamic space matter.Settlement specific binding energy of nucleons of a cores, coincide with experimental data. At the same time in invariable structures of neutral $(Y- = 2n)$ quanta, the law of an increment $(\Delta E_{УД} = \Delta mc^2)$ of specific binding energyis strictly carried out. Binding energy of two quanta $(Y- = p^+/n)$ and $(Y- = 2n)$ Strong Interaction corresponds $E_{\min} = 2\alpha * m(p) = 13{,}7 MeV$ to "exchange" quantum as mass $(Y-)$ trajectory. In theories it is perceived as $E_{\min} = 2\pi^2\alpha * m(p) = 135{,}2 МэВ$ мезон Yukava. Its wavelength $\lambda = \frac{\hbar}{mc} = 1{,}44*10^{-12} см$. Two such waves of exchange quanta of a cores ${}^4_2He(2(Y- = p/n))$, give the radius $r = 4{,}6*10^{-13} см$ of such cores. The same calculations for "a heavy proton" $m(p_1) = 15{,}3\ TeV$ correspond to "exchange" quantum of a cores of uranium,

$E_{\min} = 2\alpha * m(p_1) = 238m(p) = 238U$ where $(\alpha \approx 1/137)$.

Follows from axioms of dynamic space matter:

$$M(m)M(n) = 1, \qquad M_{ЗЕМЛИ}(\frac{G}{4\exp 1})M(p_1) = 1, \qquad (5{,}977*10^{27})(\frac{6.672*10^{-8}}{4*2.72})(15.3*10^6 MeV*1.7826*10^{-27}) = 1,$$

Follows from these ratios that in the center of a cores of Earth quanta of Strong Interaction $(Y- = p_1^+/n_1)$, $(Y- = 2n_1)$ level, generate $2\alpha * m(p_1) = 238m(p) = 238U$ uranium coresquantum. And already uranium 238 breaks up in a range of atoms of the table of Mendeleyev.

Similarly for the Sun, there are ratios of its weight with $(X\pm = p_2)$ star coresquanta

$$GM_{СОЛНЦА}\alpha^2 4Gm(p_2) \approx 1,\ m(p_2) \approx m(n_2), \quad \text{where } (Y- = p_2^-/\bar{n}_2) \text{ и } (Y- = 2\bar{n}_2)$$

quanta of Strong Interaction of a cores of a star. Like atomic nuclei, they form various structures of a cores of various stars, and the generated quanta $2\alpha * m(p_2) = 290m(p_1)$, form "heavy atoms" of substance and their structural forms, over a cores of stars.The Galaxy cores model

$$\mathrm{M}_{я} * \left(\frac{G}{2}\right)^4 * \left(\frac{\alpha}{2}\right) * M(p_4) = 1, \text{ with a weight} \qquad \mathrm{M}_{я} \approx 4 * (10^6) * \mathrm{M}_s$$

corresponds to the observation fact. Maxwell's equations for electromagnetic fields and the equation of gravitmassovy fields, reflect real induction of vortex electric $(Y+)$ field variation magnetic $(X-)$ field and vice versa. Just the same, real induction of mass $(Y-)$ fields, as well as in relativistic dispersal with acceleration, variation $(X+)$ fields of "heavy" quanta $(Y- = p_1/n_1)$, $(Y- = 2n_1)$ Strong Interaction of a cores $ОЛ_2$ of level, with generation of quantagive. The same generation of mass $(Y- = X+)$ fields of a pulsar of the Crab Nebula with a frequency $(\nu = 30 Гц)$, gives $(G\Delta m')(\alpha c)^2 \hbar\nu = ch^2 1$, gives induction of masses $\Delta m' = 2{,}28*10^{16} г/c$, or $\Delta t = \frac{M_{СОЛНЦА}}{\Delta m} = 2{,}55 млрд.лет$, time of formation of mass of a protostar similar to the Sun.

Radiationphoton $(Y\pm = \gamma^+)$ antimatterelectron $(Y\pm = e^-)$ substance is the geometrical **fact**, according to the Lenz rule. Antimatter of products of annihilation of an indivisible electron as substances with symmetry of fields is the same geometrical **fact**: $(X- = \nu_e^-)(Y+ = \gamma^+)(X- = \nu_e^-) = (Y\pm = e^-)$ and $(Y- = \gamma_0^+)(X+ = \nu_e^-)(Y- = \gamma_0^+) = (X\pm = p^+)$ indivisible proton. Such properties have Indivisible Areas of Localization of quanta $(X\pm)$, $(Y\pm)$ spaces matters in all their range $ОЛ_{j-i}$ of levels. Thus, any substance consists of antimatter and vice versa, antimatter annihilates in substance.

Trajectories of quanta $(X\pm)$, $(Y\pm)$ spaces matters mutually $(X-) \perp (Y-)$ ortogonalna. Structural forms of levels and covers of a cores are defined by the closed magnetic $(X-)$ and mass $(Y-)$ fields, in whirlwinds $rot_Y E(Y+) = \partial B(X-)/\partial T$ electric and Strong water $rot_X G(X+) = \partial M(Y-)/\partial T$ interactions. The stream of whirlwinds $rot(E+)$ and $rot(X+)$ in the connected states $(Y+)(Y+) = (X-)$ or $(X+)(X+) = (Y-)$ generates in induction the mass $(Y- = p_1/n_1)$ density $(\rho = \nu^2)$ of matter of quanta of a cores of uranium:

$2\alpha * m(p_1) = 238m(p) = 238U$ with a frequency (ω). It concerns all quanta $(Y- = p_j / n_j)$ of Strong Interaction of "heavy" nucleons of a cores in all $ОЛ_j$ levels of physical vacuum.

From a ratio of speeds of quanta $ОЛ_j$ of a range, for example for $(Y\pm = e^-)$ an electron

$W_e(e^-) = \alpha * c = \frac{\alpha * \lambda_c}{T_e} = \frac{\lambda_e}{\alpha^{-1}T_c}$, similarly further $W(e_2^+) = \alpha * W_e = \alpha^2 c$, $W(e_4^-) = \alpha^3 c$,...

$W_j = \alpha^N c$ follows $W_J(e_J) = \frac{\lambda_J}{T_J} = \alpha^N c = \frac{\alpha^N \lambda_c}{T_e} = \frac{\lambda_e}{\alpha^{-N}T_c}$. For the fixed wavelength $\lambda_J = const$, there is own period of dynamics $T_J = \alpha^{-N}T_c \to \infty$, "heavy" electrons $ОЛ_j$ of levels, concerning $(\gamma = c)$ photons. Similarly in $ОЛ_i$ the level $V_i(\gamma_i) = \frac{\lambda_i}{T_i} = \alpha^{-N} c = \frac{\alpha^{-N}\lambda_c}{T_\gamma} = \frac{\lambda_\gamma}{\alpha^N T_c}$ of physical vacuum. For the fixed wavelength $\lambda_i = const$, own period $T_i = \alpha^N T_c \to 0$ of superlight photons in $ОЛ_i$ levels.

$\overline{W}(e_j) = \alpha^{+N} c$, heavy electrons		$V(\gamma_i) = \alpha^{-N} c$, superlight photons	
Own speed	Time	Own speed	Time
$W(e\ ) = \alpha\ c = 2{,}2*10^8 см/c$	$\Delta T_2 = \alpha^{-1} t_c$	$V(\gamma_2) = \alpha^{-1} c = 4{,}1*10^{12} см/c$	$t_2 = \alpha^1 t_c$
$W(e_2) = \alpha^{+2} c = 1{,}6*10^6 см/c$	$\Delta T_2 = \alpha^{-2} t_c$	$V(\gamma_4) = \alpha^{-2} c = 5{,}6*10^{14} см/c$	$t_4 = \alpha^2 t_c$
$W(e_4) = \alpha^{+3} c = 1{,}17*10^4 см/c$	$\Delta T_4 = \alpha^{-3} t_c$	$V(\gamma_6) = \alpha^{-3} c = 7{,}7*10^{16} см/c$	$t_6 = \alpha^3 t_c$
$W(e_6) = \alpha^{+4} c = 85\ см/c$	$\Delta T_6 = \alpha^{-4} t_c$	$V(\gamma_8) = \alpha^{-4} c = 1{,}1*10^{19} см/c$	$t_8 = \alpha^4 t_c$

For example, 1 second $(\Delta T_6 = 1c)$ of a "heavy" electron (e_6), is equal 11 years on Earth on which time is measured by an optical photon. Similarly further. For constants $G = 6.672*10^{-8}$ $\alpha = 1/137$, $1\ TeV = 1{,}78*10^{-21} г$, and formulas $p_j = 2(e_{j-1})/G)$, $e_j = 2(p_{j-2})/\alpha^2$, the range of mass $ОЛ_j$ of levelspays off.

Table 6.2

$ОЛ_2$	$p_3 = 2e_2/G = 1{,}057*10^9 TeV$ $p_2^- = 2e_1/G = 3{,}06*10^5 TeV$ $p_1 = 2e/G = 15{,}32\ TeV$	$e_3 = \alpha^{-2} p_1 = 5{,}75*10^5 TeV$ $e_2^+ = \alpha^{-2} p^+ = 35{,}24\ TeV$ $e_1 = \alpha^{-2} \nu_\mu = 10{,}216\ ГeV$
$ОЛ_1$	$p^+ = 938{,}28\ MeV$ $\nu_\mu = 0{,}272\ MeV$ $\nu_e^- = \alpha^2 e = 1.36*10^{-5} MeV$	$e^- = 0{,}511 MeV$ $\gamma_0 = Gp/2 = 3{,}13*10^{-5} MeV$ $\gamma^+ = G\nu_\mu/2 = 9{,}07*10^{-9} MeV$

Similar calculations of mass of Indivisible quanta $(X\pm)$, $(Y\pm)$ spaces matters in their $ОЛ_i$ levels of physical vacuum, on the same transformed formulas.

Table 6.3

	$\nu_i = (\alpha^2 \gamma_{i-2})/2$	$\gamma_i = (G\nu_{i-1})/2$
$ОЛ_0$	$\nu_1 = \alpha^2 \gamma_0/2 = 0{,}83*10^{-3}\ eV$ $\nu_2 = \alpha^2 \gamma/2 = 2{,}4*10^{-7}\ eV$ $\nu_3 = \alpha^2 \gamma_1/2 = 1{,}2*10^{-11}\ eV$	$\gamma_1 = G\nu_e/2 = 4{,}5*10^{-7}\ eV$ $\gamma_2 = G\nu_1/2 = 2{,}78*10^{-11}\ eV$ $\gamma_3 = G\nu_2/2 = 8{,}05*10^{-15}\ eV$

Charging $q(p^+) = q(e^-)$ isopotentials $ОЛ_1$ of level are similar to charging $q(\nu^-) = q(\gamma^+)$ isopotentials $ОЛ_1$ and further in $ОЛ_j : q(p_j^\pm) = q(e_j^\mp)$, $ОЛ_i$, $q(\nu_i^\pm) = q(\gamma_i^\mp)$ levels. Similarly mass $m(e) \approx m(\nu_\mu)$ and $m(\gamma_0) \approx m(\nu_e)$ isopotentials $ОЛ_1$ of level are similar in $ОЛ_j : m(e_j) \approx m(p_{j-1})$, $ОЛ_i$, $m(\gamma_i) \approx m(\nu_{i+1})$ levels to mass isopotentials. Such isopotentials form structures of usual atoms $ОЛ_1$ of level, and by analogy of "heavy" atoms of a cores of stars, $ОЛ_j$ levelgalaxies, or structures $ОЛ_1$ of physical vacuum. A complete calculation of the mass spectrum in $ОЛ_j$, $ОЛ_i$ levels of physical vacuum, is performed by a simple program in TP7, and has the form.

«heavy» $e_j = 2 * p_{j-2}/\alpha^2$, $p_j = 2 * e_{j-1}/G$,	«subparticles» $\nu_i = \alpha^2 * \gamma_{i-2}/2$, $\gamma_i = G * \nu_{i-1}/2$

program a1;
uses crt;
const a2=1/(137.036*137.036);
G=6.67e-8; n=12;
Var p,p1,p2,e1,e,e2:Real;
i,j,m:Integer;
begin clrscr;
p:=938.28; e:=0.511;
p1:=0.271;
e:=e; p:=p; p1:=p1;
for i:=1 to n do
begin
WriteLn('n=',i);
e1:=2*p1/a2;
WriteLn('e1=',e1);
p2:=2*e/G;
WriteLn('p=', p2);
e2:=2*p/a2;
WriteLn('e2=',e2);
p1:=2*e1/G;WriteLn('p1=',p1);
e:=2*p2/a2;
WriteLn('e=',e);
p:=2*e2/G;
WriteLn('p1=',p);
end ;
ReadLn;
end.
	program a1;
	uses crt;
	const a2=1/(137.036*137.036);
	G=6.67e-8; n=12;
	Var p,p1,p2,e1,e,e2:Real;
	i,j,m:Integer;
	begin clrscr;
	p:=938.28; e:=0.511;
	p1:=0.271;
	e:=e; p:=p; p1:=p1;
	for i:=1 to n do
	begin
	WriteLn('n=',i);
	e1:=G*p/2;
	WriteLn('e1=',e1);
	p2:=a2*e/2;
	WriteLn('p=', p2);
	e2:=G*p1/2;
	WriteLn('e2=',e2);
	p1:=a2*e1/2;WriteLn('p1=',p1);
	e:=G*p2/2;
	WriteLn('e=',e);
	p:=a2*e2/2;
	WriteLn('p1=',p);
	end ;
	ReadLn;
	end.

Each $ОЛ_j$, $ОЛ_i$ level contains two mass and three charge isopotentials.

Table 6.4

Cores quanta	$2\alpha * p_j = N * p_{j-1}$		N	(X±) = p_j (MeV)	(Y±) = e_j (MeV)
				p_{27} =2,7 E111	e_{27} =1,48 E108
Exa quasar	$2\alpha * p_{26}^- = 290 p_{25}^+$	○	14	p_{26}^- = 7,9 E107	e_{26}^+ = 9,1 E103
	$2\alpha * p_{25}^- = 238 p_{24}^+$			p_{25} = 3,96 E103	e_{25} = 2,6 E100
Superquasar Galaxies of the 1st kind	$2\alpha * p_{24}^+ = 25 p_{23}^-$	●	13	p_{24}^+ = 2,4 E99	e_{24}^- = 1,32 E96
black spheres	$2\alpha * p_{23}^+ = 290 p_{22}^-$			p_{23} = 7,04 E95	e_{23} =8,1 E91

1st kind					
Super quasars of the 1st kind	$2\alpha * p_{22}^{-} = 238 p_{21}^{+}$	○	12	p_{22}^{-} = 3,5 E91	e_{22}^{+} =2,35 E88
	$2\alpha * p_{21}^{-} = 25 p_{20}^{+}$			p_{21} = 2,16 E87	e_{21} = 1,17 E84
Superquasar Galaxies of the 2st kind	$2\alpha * p_{20}^{+} = 290 p_{19}^{-}$	● ●	11	p_{20}^{+} = 6,25 E83	e_{20}^{-} = 7,2 E79
black spheres 2st kind	$2\alpha * p_{19}^{+} = 238 p_{18}^{-}$			p_{19} = 3,13 E79	e_{19} = 2,08 E76
Super quasars of the 2st kind	$2\alpha * p_{18}^{-} = 25 p_{17}^{+}$	○ ○	10	p_{18}^{-} = 1,9 E75	e_{18}^{+} = 1,04 E72
	$2\alpha * p_{17}^{-} = 290 p_{16}^{+}$			p_{17} = 5,55 E71	e_{17} = 6,38 E67
megastar galaxies	$2\alpha * p_{16}^{+} = 238 p_{15}^{-}$	●	9	p_{16}^{+} = 2,77 E67	e_{16}^{-} = 1,85 E64
black spheres	$2\alpha * p_{15}^{+} = 25 p_{14}^{-}$			p_{15} = 1,7 E63	e_{15} = 9,26 E59
megastars	$2\alpha * p_{14}^{-} = 291 p_{13}^{+}$	○	8	p_{14}^{-} = 4,93 E59	e_{14}^{+} = 5,67 E55
superplanety	$2\alpha * p_{13}^{-} = 238 p_{12}^{+}$			p_{13} = 2,46 E55	e_{13} = 1,64 E52
quasar galaxies of 1 genus	$2\alpha * p_{12}^{+} = 25 p_{11}^{-}$	●	7	p_{12}^{+} = 1,12 E51	e_{12}^{-} = 8,22 E47
black spheres	$2\alpha * p_{11}^{+} = 290 p_{10}^{-}$			p_{11} = 4,4 E47	e_{11} = 5,03 E43
Quasars 1st kind	$2\alpha * p_{10}^{-} = 238 p_{9}^{+}$	○	6	p_{10}^{-} =2,19 E43	e_{10}^{+} =1,46 E40
	$2\alpha * p_{9}^{-} = 25 p_{8}^{+}$			p_{9} =1,34 E39	e_{9} = 7,3 E35
2 quasar galaxies	$2\alpha * p_{8}^{+} = 290 p_{7}^{-}$	● ●	5	p_{8}^{+} = 3,88 E35	e_{8}^{-} = 4,47 E31
black spheres	$2\alpha * p_{7}^{+} = 238 p_{6}^{-}$			p_{7} = 1,94 E31	e_{7} =1,3 E28
quasars of 2 kind	$2\alpha * p_{6}^{-} = 25 p_{5}^{+}$	○ ○	4	p_{6}^{-} = 1,19 E27	e_{6}^{+} = 6,48 E23
	$2\alpha * p_{5}^{-} = 290 p_{4}^{+}$			p_{5} = 3,45 E23	e_{5} = 3,97 E19
Star galaxies	$2\alpha * p_{4}^{+} = 238 p_{3}^{-}$	●	3	p_{4}^{+} = 1,7 E19	e_{4}^{-} = 1,15 E+16
Galactic black spheres	$2\alpha * p_{3}^{+} = 25 p_{2}^{-}$			p_{3} = 1,057 E15 MeV	e_{3} = 5,755 E11 MeV
the stars	$2\alpha * p_{2}^{-} = 290 p_{1}^{+}$	○	2	p_{2}^{-} = 3,05 E11 MeV	e_{2}^{+} = 3,524 E7 MeV
the planets	$2\alpha * p_{1}^{-} = 238 p^{+}$			p_{1} = 1,532 E7 MeV	e_{1} = 10216 MeV
ОЛ $_{+1}$ level	$2\alpha * p^{+} = 25 \nu_{\mu}^{-}$	238	1	p^{+} = 938,28 MeV	e^{-} =0,511 MeV
	$2\alpha * \nu_{\mu}^{+} = 292 \nu_{e}^{-}$			ν_{μ} =0,271 MeV	γ_{0} =3,13*10^{-5} MeV
			0	ν_{e} =1,36*10^{-5} M eV	$\gamma^{+} = 9.07*10^{-9} MeV$
Physical vacuum ОЛ $_{0}$ level				$\nu_i = \alpha^2 \gamma_{i-2}/2$ ν_1 = 8,3*10^{-10}M eV	$\gamma_i = G \nu_{i-1}/2$ γ_1 = 4,5*10^{-13}M eV
			-1	ν_2 = 2.4*10^{-13}M eV	γ_2 = 2.78*10^{-17}M eV
				ν_3 = 1.2*10^{-17}M eV	γ_3 = 8,05*10^{-21}M eV
Physical			-2	ν_4 = 7.4 *10^{-22} M eV	γ_4 = 4,03*10^{-25} M eV

vacuum ОЛ $_{-1}$ level				$\nu_5 = 2.14*10^{-25}$ M eV	$\gamma_5 = 2.47*10^{-29}$M eV
			-3	$\nu_6 = 1.07*10^{-29}$ M eV	$\gamma_6 = 7,05*10^{-33}$ M eV
Physical vacuum ОЛ $_{-2}$ level				$\nu_7 = 6.57*10^{-37}$ M eV	$\gamma_7 = 3,58*10^{-37}$ M eV
			-4	$\nu_8 = 1.9*10^{-37}$ M eV	$\gamma_8 = 2.2*10^{-41}$ M eV
				$\nu_9 = 9.53*10^{-42}$ M eV	$\gamma_9 = 6.35*10^{-45}$ M eV

Classical dynamics of a star cores with quanta of Strong Interaction, comes down to generation in these quanta of mass fields, to growth of forces of gravitation of a cores, K-capture, a cores collapse in a neutron cores, to falling of masses on this cores with their scattering as explosion of a supernew star. In the Areas of their Localization allocated in the table, similar K-captures, and generation corresponding $2\alpha * p_j = 290 p_{j-1}$ and $2\alpha * p_j = 238 p_{j-1}$ quantaare presented in a range of Indivisible quanta. Their distinction as the reason, leads to various investigations, their properties. Such various objects, are designated as sort objects 1 and 2. From the presented objects quasars and superquasars with own quasars and super quasars galaxies are allocated.

In axioms of dynamic space matter, $M_{MAX}(m)M_{MIN}(n) = 1$ on $(m-n)$ convergence $M^2 = 1$. It corresponds to ratios of Indivisible Area of Localization as large-scale quantum object, within $hc = \alpha * GM(m) * GM(n)$ interaction constants, or $M_{MAX}M(\gamma_i) = 1$, the maximum mass M_{MAX} of objects, correspond to their $M(\gamma_i)$ level of singularity in physical vacuum. Below such power levels, "heavy quanta" do not prove.

Table 6.5

$M(e_j)M(\gamma_i) = 1$	$M(p_j)m(v_i) = 1$	Atoms of matter and antimatter
$M(e_1)(k = 3{,}2)M(\gamma_0) = 1$	$\sqrt{G}p_1^-(1{,}8)v_\mu\sqrt{G} = 1$	$(Z[p_1^+ / n_1 + e_1^-] + N[2n_1])$
$M(e_2)(k = 3{,}15)M(\gamma\ ) = 1$	$\sqrt{G}p_2^-(1{,}7)v_e\sqrt{G} = 1$	$(Z[p_2^- / \bar{n}_2 + e_2^-] + N[2\bar{n}_2])$
$M(e_3)(k = 3{,}8)M(\gamma_1) = 1$	$\sqrt{G}p_3^+(17)v_1\sqrt{G} = 1$	$(Z[p_3 / n_3 + e_3^-] + N[2n_3])$
$M(e_4^-)(k = 3{,}15)M(\gamma_2) = 1$	$\sqrt{G}p_4^+(1{,}8)v_2\sqrt{G} = 1$	$(Z[p_4^+ / n_4 + e_4^-] + N[2n_4])$
$M(e_5)(k = 3{,}15)M(\gamma_3) = 1$	$\sqrt{G}p_5^-(1{,}8)v_3\sqrt{G} = 1$	$(Z[p_5 / n_5 + e_5] + N[2n_5])$
$M(e_6^+)(k = 3{,}9)M(\gamma_4) = 1$	$\sqrt{G}p_6^-(18{,}9)v_4\sqrt{G} = 1$	$(Z[p_6^- / \bar{n}_6 + e_6^-] + N[2\bar{n}_6])$

For transformations $A = 1MeV = 1{,}78*10^{-27}г$, there are ratios of masses.

- $M_{MAX} = 1/M(\gamma_0) = 1/(3{,}13*10^{-5}MeV * A) = 1{,}8*10^{31}г$, ($M_{MAX}$ = $M_{СОЛНЦА}/100$), the maximum mass of the planet with quanta of a cores $(Z[p_1 / n_1 + e_1])$, the mass fields generating in induction, $2\alpha * m(p_1) = 238U$ uraniumcores quantum, with disintegration in a range of atoms.

$M_{MAX} = \frac{1}{M(\gamma^+)} = \frac{1}{9.07*10^{-9}*A} = 6.2*10^{34} = 31 * M_{Солнца}$ the maximum mass of a star with quanta of a cores $(Z[p_2^- / \bar{n}_2 + e_2^+])$ of antimatter which radiate quanta $(...p_2^- \to p^+...)$; $(...e_2^+ \to e^-...)$ hydrogen or $M_{MAX} = \frac{1}{M(v_e)} = \frac{1}{8.3*10^{-10}*A} = 6.77*10^{35} = 338 * M_{Солнца}$ the maximum mass of a star with cores quanta (Y- $=e_3^+$) antimatters.

For the Sun there is a ratio $GM_{СОЛНЦА}\alpha^2 4GM(p_2) \approx 1$. Like speed: $W_C = \sqrt{\frac{(GM_C = M_Y)}{R_C \exp 1}} = 265.6\frac{км}{c}$, the movements of the Sun, each star of a galaxy has the same order of speeds, without everyones "the hidden masses". "The hidden masses" is caused by an invisible range of quanta $ОЛ_{j-i}$ of levels.

Similarly the speed of the Moon pays off: $W_Л = \sqrt{\frac{(GM_Л = M_Y)}{R_Л \exp 1}} = 1{,}019\frac{км}{c}$ where $R_Л = 1738км$, unlike Earth:

$$W_З = \frac{1}{e^2}\sqrt{\frac{(\alpha^2 M_З = M_X)}{R_з}} = 30\frac{км}{c}$$ for $M_3 = 5{,}976*10^{27}$g.

Above the extreme mass $310 * M_{Sun}$ of a star, the photon quantum $M(\gamma^+)$ does not exceed the limit of such masses any more. It enters their level of singularity. Such objects correspond to black "holes" with an extreme mass of the following $M(\gamma_1)$ level of singularity of physical vacuum, or

$$M_{MAX} = \frac{1}{M(\gamma_1)} = \frac{1}{4.5 * 10^{-13} * A} = 1.25 * 10^{39}\text{г} = 624220 * M_{Sun}$$

Here the level $M(\gamma_1)$ of photons in a range $...e_3 \to e_1 \to \underline{(\gamma_0)} \to \gamma_1 ...$, out of visible radiation.

$M_{MAX} = \frac{1}{M(\gamma_2)} = \frac{1}{2.78*10^{-17}*A} = 2 * 10^{43}\text{г} = 10^{10} * M_{\text{Солнца}}$, НОЛ=1, $M(e_4^-)(k=3{,}15)M(\gamma_2)=1$,

This $(3.15 * 10^{10} * M_{Sun})$ corresponds to the limiting mass of the galaxy Structures $(Z[p_3/n_3+e_3])$ "heavy" atoms of "a black hole" which mass $M(\gamma^+)$ photonsenter follow from these calculations.

$$M_{MAX} = \frac{1}{M(\gamma_3)} = \frac{1}{8 * 10^{-21} * A} = 7 * 10^{46}\text{г} = 3{,}5 * 10^{13} * M_{\text{Солнца}}$$

There correspond $(35000 * 10^9 * M_{Sun}$ to the extreme mass of the extragalactic "black sphere (hole)" and, the minimum mass of the following class of objects - a quasar. By analogy to stars,

$$M_{MAX} = \frac{1}{M(\gamma_4)} = \frac{1}{4 * 10^{-25} * A} = 1{,}4 * 10^{51}\text{г} = 7 * 10^{17} * M_{Sun}$$

this weightcorresponds to the extreme massof a cores of a quasar. Further

$$1/M(\gamma_5) = 1/(8{,}9*10^{-29}\,MeV*A) = 6.3*10^{54}\,г = M_{MAX}, \quad M_{MAX} = 18'000*M_{КВАЗАР}$$

corresponds to the extreme mass of "black (hole)", bigger quasars. And further,

$$1/M(\gamma_6^-) = 1/(5{,}67*10^{-32}\,MeV*A) = 9{,}9*10^{57}\,г = M_{MAX}, M_{MAX} = 28*10^6 M_{КВАЗАР}$$

By analogy with galaxies - it is the extreme mass of a cores of quasarsny galaxies.

Follows from these ratios that the more the mass of an object, the more its speed in physical vacuum $\rho_j W_j^2 = (p = const) = \rho_i V_i^2$ of the field of the Universe. These are large-scale quanta with singularity levels $hc = \alpha * GM(m) * GM(n)$, form Indivisible Area of Localization $((((НОЛ = M(m)*M(n)=1)*1)*1...*1)=1$, all Universe on $(m-n)$ convergence, in own levels of singularity of each quantum.

7. Space matter of a cores of planets, stars, galaxies.

The sun star, is represented in large-scale quantum: $GM_{СОЛНЦА}\alpha^2 4GM(p_2) \approx 1$ of space matter, with $(Y\pm = p_2^-/\overline{n}_2)$ trajectories of the indivisible quanta $(X\pm = p_2^-)$ of space matter radiated $(X\pm = p_4^+)$ by galaxy coresquanta Galaxies in turn form intergalactic quanta of space matter, with own level of singularity $M(e_4^-)(k=3{,}15)M(\gamma_2)=1$, in space of speeds of physical vacuum

$$V(\gamma_2) = \alpha^{-1}c = 4{,}1*10^{12}\,см/c\,.$$

Such $(Y-)$ trajectories of rotation $(Y\pm)$ of quanta of the Sun, correspond to mass $(Y-)$ trajectories, in space of speeds $W^2_{\Delta\max}$, at distance A. Mass $(Y-)$ trajectories of quantum of space matter of the Sun star, we will write down in a look: $W^2_{\Delta\max} * A = M_S = 1.989*10^{33}\,г$.

Taking for $W_X(X-) = W_{PL}$ the speed of quanta $(X\pm)$ of space matter of planets, on $(X-)$ circular trajectories of steady state $(Y+)$ in the field of interaction $(Y\pm)$ of the Sun stars at distance A from the Sun: $GM_S = W_{PL}^2 * A$, $G = 6.673*10^{-8}$ Substituting the known distances A of planets to the Sun, we will write down settlement and real space of their speeds in a look:

	Merk	Venus	Earth	Mars	Jupiter	Saturn	Uranium	Neptune	Pluto
$A*10^{13}$ cm	0.5791	1.082	1.496	2.28	7.783	14.3	28.75	45.04	59.12
Distances	2.58	1.38	1.0	1.52	5.2	9.56	19.2	30.1	39.5
estimated speed	48.87	35.02	29.785	24.13	13.06	9.63	6.79	5.43	4.74
fact speed W_{PL}	48.87	35.02	29.786	24.13	13.07	9.67	6.8	5.48	4.75

From this space of speeds of quantum $(Y\pm)$ of space matter of the Sun, in physical vacuum of a galaxy: $W_{PL}^2 = GW_{\Delta\max}^2$ ratios of forces for m - the mass of planets in circular orbits in the plane, perpendicular Y - axes, with a radius A from the Sun star in the form of Newton's lawfollow $m\ Y\ A$.

$$F = \frac{mW_{PL}^2}{A} = \frac{mGW_{\Delta\max}^2}{A}\frac{A}{A} = \frac{mG(W_{\Delta\max}^2 * A = M_S)}{A^2} = G\frac{mM}{A^2}\ , \qquad \frac{mW_{PL}^2}{A} = F = G\frac{mM}{A^2}\ .$$

In the conditions of Global Invariancy $(y = x_0)$ of the sphere of quantum $(Y\pm)$ of space matter of the Sun, mass $(Y-)$ trajectories of planets of solar system in a look ("Nuclear matter")take place:

$$\alpha^2 m_{PL}(X+=Y-) = (G/2)M_S(Y-)*e^{\pm S}(\sqrt{ch1}(1+\alpha))^N\ ,\quad S = 1,2,3...\ ,\quad N = 1,2,3...\ ,$$

For the mass of the Sun $M_S = 1.9929*10^{33}г$ (a little bit there is more real), in the period of its quantum relativistic dynamics $\overline{m} \leftrightarrow m_0$ in the field of $(X+=p_i)$ quantum, "dumping" of mass of planets of solar system in a look takes placecalculated and actual values.:

$$M_{.ЮПИТЕР} = \frac{(G/2)M_S}{\alpha^2}e^0(\sqrt{ch1}(1-\alpha))^2 = 1898.8*10^{27}г(1898.8*10^{27}г - реально)$$

$$M_{.САТУРН} = \frac{(G/2)M_S}{\alpha^2}e^{-1}(\sqrt{ch1}(1-\alpha)) = 566.5*10^{27}г(568.5*10^{27}г)$$

$$M_{НЕПТУН} = \frac{(G/2)M_S}{\alpha^2}e^{-2}(\frac{\sqrt{ch1}}{1-\alpha}) = 102.7*10^{27}г(102.78*10^{27}г)$$

$$M_{УРАН} = \frac{(G/2)M_S}{(\alpha\sqrt{2})^2}e^{-2}\frac{1}{(1-\alpha)^4} = 86.4*10^{27}г(86.6*10^{27}г)$$

$$M_{ЗЕМЛЯ} = (\alpha*M_{САТУРН})e^0\frac{\sqrt{2}}{(1-\alpha)^3} = 5.976*10^{27}г(5.974*10^{27}г)$$

$$M_{ВЕНЕРА} = (\alpha*M_{ЮПИТЕР})e^{-1}((1-\alpha)^2)^3 = 4.878*10^{27}г(4.87*10^{27}г)$$

$$M_{МАРС} = \frac{M_{ЗЕМЛЯ}}{\sqrt{ch1}}e^{-2} = 0.6416*10^{27}г(0.6419*10^{27}г)$$

$$M_{МЕРКУРИЙ} = \frac{M_{ВЕНЕРА}}{2}e^{-2} = 0.330*10^{27}г(0.3302*10^{27}г)$$

.

Such settlement masses corresponds to the facts real (in brackets) the mass of planets of solar system.

The quanta radiated by the Sun e_2, p_1 - spaces matters, correspond to quanta of a cores of planets (in brackets the valid values of mass of planets):

$$M_{МЕРКУРИЙ} = \frac{\sqrt{ch1}}{\sqrt{2}G(p_1)}e^0 = 0.336*10^{27}г = (0.3302*10^{27}г) = \frac{M_{ВЕНЕРА}}{2}e^{-2}(1-\alpha)^2$$

$$M_{ВЕНЕРА} = \frac{\sqrt{ch1}}{G(p_1)}e^2 = 4.9*10^{27}г = (4.869*10^{27}г) = \alpha*M_{ЮПИТЕРА}e^{-1}((1-\alpha)^2)^3$$

$$M_{ЗЕМЛИ} = \frac{2}{(G/2)(p_1)}e^1 = 5.977*10^{27}г = (5.974*10^{27}г) = \alpha\sqrt{2}*M_{САТУРН}e^0(1-\alpha)^{-3}$$

$$M_{МАРС} = \frac{2}{(G/2)\sqrt{ch1}(p_1)}e^{-1} = 0.64*10^{27}г = (0.642*10^{27}г) = \frac{M_{ЗЕМЛЯ}}{\sqrt{ch1}}e^{-2}(1-\alpha)^2$$

$$M_{ЮПИТЕР} = \frac{\sqrt{ch1}}{G\alpha*(p_1)}e^3 = 1858.8*10^{27}г = (1898.8*10^{27}г)$$

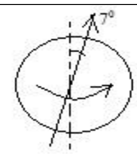
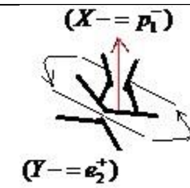
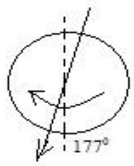
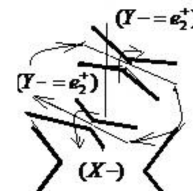
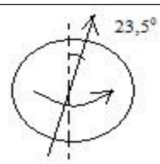
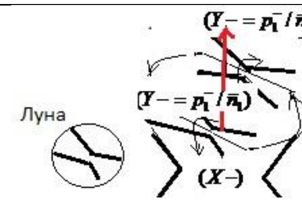
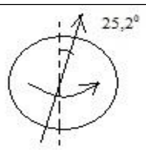
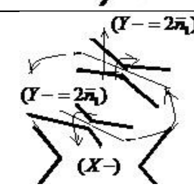
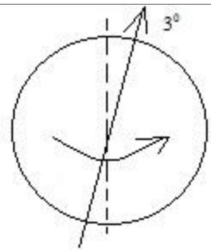
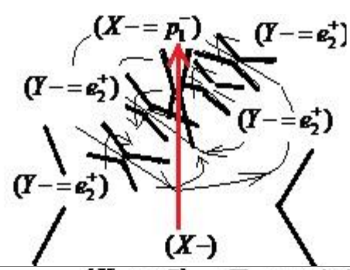
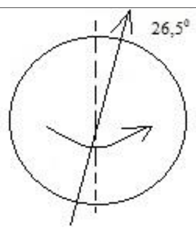
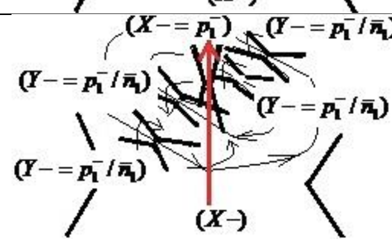
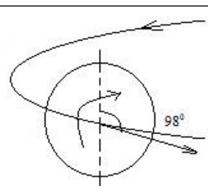
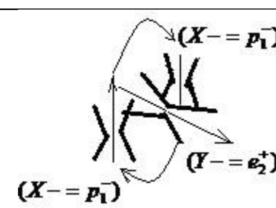
$$M_{САТУРН} = \frac{\sqrt{2}}{(G/2)\alpha*(p_1)}e^1 = 579*10^{27}г = (568,5*10^{27}г)$$

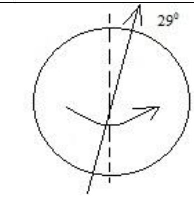
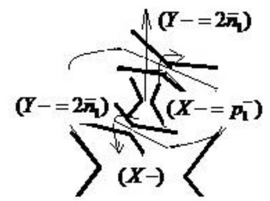
$$M_{УРАН} = \frac{\sqrt{ch1}}{G\alpha*(p_1)} e^0 = 92{,}9*10^{27}\,г = (86{,}63*10^{27}\,г)$$

$$M_{НЕПТУН} = \frac{\sqrt{2}}{G\alpha*(p_1)} e^0 = 106.5*10^{27}\,г = (106.5*10^{27}\,г).$$

Physically admissible there are models of structural forms of a cores of planets in a look:

Table 7.2

	Planet	calculation of masses	Model
1	 Mercury	$M_{МЕР} = \frac{\sqrt{ch1}}{\sqrt{2}G(p_1)} e^0 = \frac{M_B}{2*e^2}(1-\alpha)^2$ With weak magnetic field	
2	 Venus	$M_B = \frac{\sqrt{ch1}}{G(p_1)} e^2 = \frac{\alpha*M_{Ю}}{e}((1-\alpha)^2)^3$	
3	 Earth	$M_{ЗЕМЛИ} = \frac{4*e}{G(p_1)} = \alpha\sqrt{2}*M_{САТ}$ With magnetic field	
4	 Mars	$M_{МАР} = \frac{4*e^{-1}}{\sqrt{ch1}G(p_1)} = \frac{M_З*(1-\alpha)^2}{\sqrt{ch1}*e^2}$	
5	 Jupiter	$M_{ЮПИТЕР} = \frac{\sqrt{ch1}}{G\alpha*(p_1)} e^3$ With magnetic field	
6	 Saturn	$M_{САТУРН} = \frac{2\sqrt{2}*e}{G\alpha*(p_1)}$ With magnetic field	
7	 Uranium	$M_{УРАН} = \frac{\sqrt{ch1}}{G\alpha*(p_1)} e^0$	

8	 Neptune	$M_{НЕПТУН} = \frac{\sqrt{2}}{G\alpha*(p_1)}$	

Such models correspond to the specified rotations of planets in orbits, to their characteristics.

8. "Pulsation" of quanta of space matter.

Quantum relativistic dynamics $(\varphi \neq const)$ ("pulsation") of quanta $(X\pm)$, $(Y\pm)$, is caused by existence $m-n$ of convergence of quanta with space of speeds

$$W_J = \alpha^N c\,,\ V_i = \alpha^{-N} c\,,\ \text{where}\quad \alpha = 1/137{,}036 = \cos\varphi_Y$$

$$НОЛ = (hc = П^2 K^2)(\rho W^2 = b^2 = \frac{П^2}{K^2}) = (П^2 = F_j)(П^2 = F_i) = F_j F_i = 1\cdot$$

In mass $m(Y-)$ trajectories, $m-n$ convergence have potentials $\Pi(m)$ and $\Pi(n)$. $m(Y-) = \Pi(m)*K_Y = W_J^2 * K_Y$, $m(Y-) = \Pi(n)*K_Y = W_i^2 * K_Y$ Like Newton's law, for speeds $\frac{1}{2}W_C^2 W_3^2 = \Pi^2 = F_j = G\frac{M_C M_3}{R^2}$ and the mass of the Sun and Earth, they Π- potentials form force $F = \Pi(m)\Pi(n) = W_X^2 W_Y^2$ which is perpendicular cross-sectional areas of a trajectory $(Y+)(Y+) = (X-)$ or $(X+)(X+) = (Y-)$ the dynamic sphere $p = \frac{F}{S} = \frac{E}{V} \equiv \rho_J W_J^2 = \rho_i V_i^2 = b^2$ of quantum. For space matter quantum $НОЛ = (hc)(\rho W^2) = F_j F_i = 1$, under the influence of this force, matter of bigger density $\rho_J > \rho_i$ and smaller speed $W_J < V_i$, "falls" (like Newton's gravitation) along a mass $(Y-)$ trajectory of quantum in space of smaller density ρ_i with acceleration (b). Considering potentials $W_X^2 = W_J^2(\cos^2\varphi_X = G)$, $V_Y^2 = V_i^2(\cos^2\varphi_Y = \alpha^2)$, in corresponding $(X-)$, $(Y-)$ fields on n- convergence $(X\pm)$, $(Y\pm)$, $(X\pm)\ldots$, quanta, for force $F = \Pi(m)\Pi(n)$ ratios $F = W_J^2\cos^2\varphi_X V_i^2\cos^2\varphi_Y \neq 0$, from where a condition follow $\cos^2\varphi_X\cos^2\varphi_Y \neq 0$, gives limits , and $0 \le \varphi < \varphi_{MAX}$. In the course of dynamics $\varphi \neq const$, in interextreme values $G*1 = const$, and $1*\alpha^2 const$, disappearance of one constant $(G \to 1) \equiv \cos^2(\varphi_{X\,MAX} \to 0)$, is followed $\cos(0^0) = 1 = \frac{K_X^2}{K^2} = \frac{K_Y^2}{K^2}$ by emergence another $(1 \to \alpha^2) \equiv \cos^2(0^0 \to \varphi_{Y\,MAX})$. From here, the attracting force (F_j), alternates with a repellentforce. Such quantum relativistic dynamics corresponds to Local Invariancy, its Criteria $(\cos\varphi_Y * ch(Y/X_0) = 1)$, in each quantum $(X\pm)$, $(Y\pm)$ spaces matters.

9. Universe.

It is (НОЛ)- Indivisible Area of Localization of all its (CE) - Criteria Evolutions in uniform $(X+=Y-)$, $(X-=Y+)$ space matter. To everyone $(X\pm)$, $(Y\pm)$ to quantum $ОЛ_{J-i}$ of a range there correspond dynamics conditions $\cos^2\varphi_X\cos^2\varphi_Y \neq 0$, $0 \le \varphi < \varphi_{MAX}$, $\varphi \neq 90^0$, $(\cos\varphi_Y * ch(Y/X_0) = 1)$, $(\cos\varphi_X * ch(X/Y_0) = 1)$, with interaction constants $\cos^2\varphi_X = G = 6{,}672*10^{-8}$, и $\cos\varphi_Y = \alpha = 1/137{,}036$. It means that with reduction of corners of parallelism $\varphi(Y-) \to 0$ as disappearance of fields, fields appear, corners $\varphi(X-) \to \varphi_{MAX}(X-)$ and vice versaincrease. Matter at the same time, does not disappear, and passes from one look into another, in the form of change of prepotent fields.

Dynamics of matter $(\varphi \neq const)$, is fixed in Euclidean $(\varphi = 0)$, $(\varphi = const)$ axiomatics of the Criteria of Evolution created intimespace $(K^{\pm N})$ $(T^{\mp N})$ To each fixed $(\varphi = const)$ state, there corresponds own space time, and is equal also Criteria of Evolution, according to Theories of Relativity. Extreme Plankovsky values of length and time, concerning $ОЛ_1$ the level of physical vacuum $(p^+, e^-, \nu_\mu, \gamma_0, \nu_e, \gamma)$, correspond

$$l_{ПЛ} = \sqrt{\frac{Gh}{c^3}} = \sqrt{G} K_i = \sqrt{\frac{6,67*10^{-8}*6,62*10^{-27}}{(3*10^{10})^3}} = 4*10^{-33} см,$$

$$t_{ПЛ} = \sqrt{\frac{Gh}{c^5}} = \sqrt{G} T_i = \sqrt{\frac{6,67*10^{-8}*6,62*10^{-27}}{(3*10^{10})^5}} = 1,35*10^{-43} c, \qquad \sqrt{G} = \cos\varphi(X-).$$

These extreme values of length $(l_{ПЛ})$ and time $(t_{ПЛ})$ are calculated with a constant $\sqrt{G}$, and belong to limit quantum $(X\pm = \nu_i)$ of a range $ОЛ_{J-i}$ of indivisible quanta. From a ratio $t_{ПЛ} = \sqrt{G} T_i = 1,35*10^{-43} c$ for the period (T_i) of dynamics (ν_i) of quantum $(\sqrt{G})^N * 1 = 1,35*10^{-43} c$, $N = \log_{\sqrt{G}} t_{ПЛ}$, $N = -43\frac{\ln 10}{\ln \sqrt{G}} \approx 12$. In a range (fig. 4) $ОЛ_i$ of levels, $(N = 12)$ corresponds to subneutrino quantum (ν_{24}), with a subphoton quantum isopotential $(\gamma_{24}^+ = \alpha^{-12} * c)$.

In the Indivisible Area of Localization $НОЛ = m(e_{26}^+)(k = 3,14) m(\gamma_{24}^+) = 1$, to quantum $(Y\pm = e_{26}^+)$ of an eksaquasars there corresponds speed $W_J = \alpha^{14} * c = W_J(e_{26}^+)$. In system of coordinates of atomic (p^+ / e^-) structures $ОЛ_1$ of level of usual atoms where $(W_e = \alpha * c)$ electron speed, there is a ratio

$$НОЛ = W_J(e_{26}^+) * V_i(\gamma_{24}^+) = (\alpha^{13} W_e)(\alpha^{-13} W_e) = W_e^2 = \Pi_e = 1. \ (12.3)$$

From this ratio wavelength $\lambda(e_{26}^+)$, through electron wavelength

$\lambda(e^-) = \frac{h}{m_e \alpha * c} = 3,3*10^{-8} см.$, $2\pi\alpha^{13} W_e \equiv W_J = \frac{\alpha^{13}\lambda_e}{(T_J = 1)}$, from a ratio is calculated $\alpha^{13}\lambda_e = 2(\cos\varphi_Y = \alpha)\lambda(e_{26})$, and $\lambda(e_{26}) = 2\pi\alpha^{12}\lambda_e = 2*3,14*2,28*10^{-26}*3,3*10^{-8} см = 4,7*10^{-33} см$

If $l_{ПЛ} = \sqrt{G} K_i = 4*10^{-33} см$ it is calculated through a constant $\sqrt{G} = \cos\varphi(X-) = l_{ПЛ} / K_i$ for $(X\pm = \nu_i)$ subneutrinoquantum, then wavelength $\lambda(Y- = e_{26}) = 4,7*10^{-33} см$, is calculated through a constant $\alpha = \cos\varphi(Y-) = 1/137,036$, of quantum $(Y- = e_{26}^+)$ of an exa quasar. Both lengths identical also correspond $НОЛ = КЭ(m) КЭ(n) = \lambda(Y- = e_{26}^+) * \lambda(Y- = \gamma_{24}^+) = 1$, spaces matters.

From the experimental data, for the minimum $(\lambda_i \approx 10^{-16} см)$ distances measured $(Y\pm = \gamma)$ by quanta with dynamics period $t = \frac{\lambda_i}{c} \cong 10^{-26} cek = \alpha^N T_i$, value (N) for $(T_i = 1)$ dynamicsperiod, is calculated $10^{-26} cek = \alpha^N * 1$, $N = -26\frac{\ln 10}{\ln \alpha} \approx 12$, $N = 12$. This order $ОЛ_i$ of a range corresponds $(Y\pm = \gamma_{24}^+)$ to quantum of a sub photon.

Thus, $N = 12$ both for (ν_{24}), and for (γ_{24}^+) quanta, and from fixed G, α, h, c - constants, the fixed space matter limits, correspond $N_J = 14$ also $N_i = 12$ to levels $ОЛ_{J-i}$ of a range of physical vacuum, rather invariabl e c - velocity of light.

1). For Indivisible Area of Localization of the Universe, it means dynamics $(X\pm)$, $(Y\pm)$ rangequanta $ОЛ_{J-i}$ in the form of two limit conditions of dynamics. For the period $T_i = T(\gamma_{24}) = 1$, quantum $(Y- = \gamma_{24}^+)$ will make full turnover $\frac{2\pi R_1}{(T_i = 1)} = V_i(\gamma_{24})$ to the sphere of radius $R = \frac{\alpha^{-12} * c}{2\pi * 1} = \frac{4,3855*10^{25}*3*10^{10}}{6,28} = 2,1*10^{35} см$ or $(R \approx 2,2*10^{17})$ light years. For the sphere of the optical horizon of the Universe in 15 billion light years, such spheres the Universe fixed in constants has about 15 million. Proceeding from these calculations of Indivisible "heavy" quanta $\lambda(Y-=e_{26}^{+})=4{,}7*10^{-33}см$, $l_{ПЛ}=\lambda(X-=\nu_{24})=4*10^{-33}см$, with own period of dynamics $(X-)_j$ in the field of the Universe, that is $t_{ПЛ}=T(X-=\nu_{24})=1{,}35*10^{-43}c$.

The dynamics of the radii $(r_0 \to R)$ and parallelism angles of (X-) and (Y-) trajectories have the properties of dynamic space-matter.

$$(r_0^x(Y-)_i \to 0)*(\lambda_i(Y-)\to\infty)=1\,,\qquad (\rho_i(Y-)\to 0)*(\rho_i(Y+)\to\infty)=1\,,\qquad \rho=\left(\frac{1}{T}\right)^2.$$

In $(ОЛ_i)$levels of the Physical Vacuum$(T_i(Y-)\to\infty)*(t_i(Y-)\to 0)=НОЛ=1$, the mass $(Y-)$trajectories are slowed down (t_i)-time dynamics of mass fields $(Y\pm)_i$quanta of mass relative to the $(ОЛ_1)$-level of our atoms and molecules. The periods $(T_i(Y+)\to 0)$of the electro (Y + = X-) magnetic field give its accelerated dynamics. And the time $(t_i\to\infty)$ passes much more $(T_i(Y+)\to 0)*(t_i(Y+=X-)\to\infty)=НОЛ=1$, than our $(ОЛ_1)$- level of our atoms and molecules .Then $(X\pm)_i$quanta of the Physical Vacuum have synchronous dynamics in the unified $(X\pm=Y\mp)_i$ fields.

$$(r_0^Y(X-)_i\to\infty)*(\lambda_i(X-)\to 0)=1\,,\qquad (\rho_i(X-)\to\infty)*(\rho_i(X+)\to 0)=1\,,$$

"Elongated sphere" along the $(Y-=\gamma_i)$trajectory, "falls" into the space of zero $(\rho_i(Y-)\to 0)$ densities. There, at the $(ОЛ_i)$levels of the Physical Vacuum, about zero periods $(T_i(X-)\to 0)$of quanta give accelerated dynamics of electro $(Y+=X-)$magnetic fields and time $(t_i\to\infty)$passes much more. $(T_i(X-)\to 0)(t_i(X-=Y+)\to\infty)=НОЛ=1$, in a single dynamic $(X-=Y+)$ space-matter.

In $(ОЛ_j)$levels of the Macro world of the space-matter of the Universe, there are dynamics:

$$(R_0^x(Y-)_j\to\infty)*\big(\lambda_j(Y-)\to 0\big)=1\,,\qquad \big(\rho_j(Y-)\to\infty\big)*\big(\rho_j(Y+)\to 0\big)=1\,,\qquad \rho=\left(\frac{1}{T}\right)^2$$

mass (Y-) trajectories and electric (Y +) fields $(Y\pm)_j$quanta of space-matter.

The period $\big(T_j(Y-)\to 0\big)$ gives an instant ("Explosion") dynamics of them relative to our $(ОЛ_1)$level of atoms and molecules: $\big(T_j(Y-)\to 0\big)*\big(t_j(Y-)\to\infty\big)=НОЛ=1$, followed by an infinitely long $\big(t_j(Y-)\to\infty\big)$long time dynamics of mass (Y-) trajectories. For electro (Y + = X-) magnetic fields, their quanta $(Y\pm)_j$have periods $\big(T_j(Y-)\to\infty\big)$with about zero (it does not exist yet), $\big(t_j(Y+=X-)\to 0\big)$ own dynamics time, that is, with the beginning of the dynamics of space-matter of the Universe. This means that the dynamics near the zero radius of the sphere of the Universe $(R_0^Y(X-)_j\to 0)*\big(\lambda_j(X-)\to\infty\big)=1$, and near the zero density of electro (Y + = X-) magnetic fields: $\rho=\left(\frac{1}{T}\right)^2$ gives their relations in the $(X-)_j$field of the Universe:

$$\big(T_j(X-)\to\infty\big)*\big(t_j(X-)\to 0\big)=НОЛ=1,\qquad \big(\rho_j(X-)\to 0\big)*\big(\rho_j(X+=Y-)\to\infty\big)=1\,.$$

This means that the time $\big(t_j(X-)\to 0\big)$of the dynamics of the universe that we see in the $(X-)_j$ **field started from zero.** In the (φ) parallel angles, the models of (X ±) and (Y ±) quanta, on their (m-n) convergence, have the form:

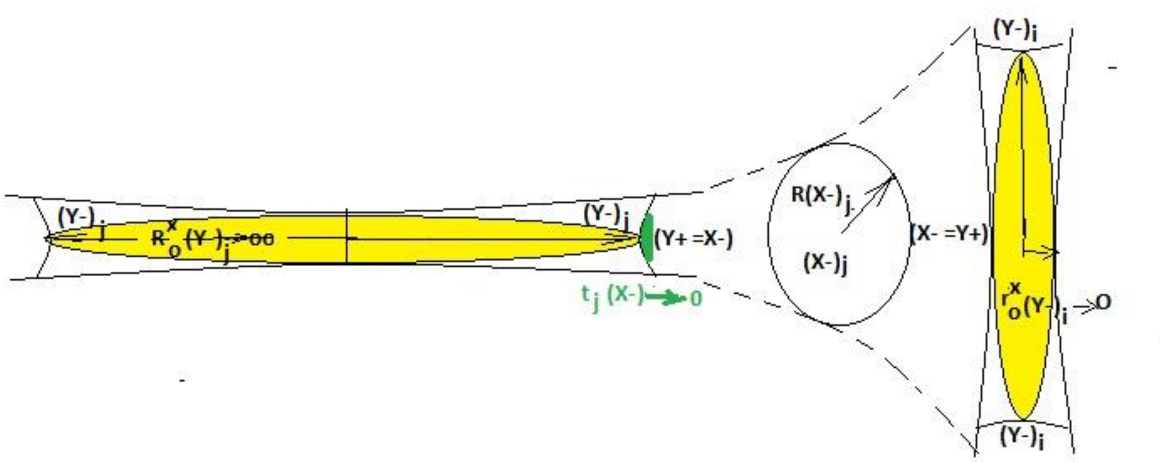


Fig. 9.1. dynamics of space matter of the Universe.

2). Here from quantum energy of level of singularity of Physical Vacuum of space matter of the Universe, $\hbar(\alpha^{-12}*c=V(\gamma_{24}))=E(\gamma_{24})R_2$, где $E(\gamma_{24})=m(\gamma_{24})*c^2$, calculations follow:

$m(e_{26})*k*m(\gamma_{24})=1$, $m(e_{26})=1{,}77*10^{95}TeV=3{,}15*10^{80}\,г$, $(k=3{,}14)$, where

$m(\gamma_{24})=1/m(e_{26})*k=10^{-81}\,г$, $E(\gamma_{24})=m(\gamma_{24})*c^2=9*10^{-61}\,эрг$,

$R_2=\dfrac{\hbar*\alpha^{-12}}{m(\gamma_{24})*c}=1{,}54*10^{69}\,см$. These ratios $2\pi R_1^2\equiv 2\pi R_2*2\pi(R=1)=НОЛ$ determine the single radius of all Universe, in the level of singularity of its vacuum. The quantum of the general condition of the Universe, extends as quantum $(Y+=X-)$ of an electromagnetic and gravitational and mass $(X+=Y-)$ wave, according to their equations.

Quantum dynamics of space matter during expansion of the Universe is caused by primary "failure" of density $\rho_J(Y-=e_J)$ in near-zero mass $(\downarrow\rho_i(Y-=\gamma_i)\approx 0)$ density of physical vacuum.

At "compression", grows $\varphi_Y\to\varphi_{Y\,MAX}$, there is a constant $\alpha(Y+)$, and gravitation $G(X+)$ of fields of interactiondisappears $\varphi_X\to 0$, and also $\lambda_J(X-=p_J)\to\infty\leftarrow\lambda_i(Y+=\gamma_i)$. At achievement of a limit corner $\varphi_{Y\,MAX}$, there is "pushing away" of all quanta $2(Y+)_j=(X-)$, to (X-) the field of the Universe, its "EXPLOSION". That is there is "scattering" of density $\rho_j(Y-=e_j)$ with "a brake radiation" $(e_j\to\gamma_i)$ disappearance of a constant $\alpha(Y+)$, and $\varphi(Y+)\to 0$ parallelismcorner, with the subsequent period of expansion and emergence of gravitational action $G(X+=\nu_i)$ of quanta. At the same time wavelength $\lambda_i(X-=\nu_i)\to 0$, around $\lambda_i(Y-=\gamma_i)\to\infty$ quantadecreases.

It corresponds to the general dynamics $\uparrow\varphi(X-)$ of the field (fig. 9) of the Universe, with dynamics of radius $(r\to R)$ of the sphere of the horizon of the Universe with the Euclidean isotropy. For the fixed levels of singularity $\varphi(X-)=const$, the sphere point of space matter, for example visible galaxies $M(e_4)*(k=3{,}15)*m(\gamma_2)=1$, with the level of singularity $(Y\pm=\gamma_2)$ of quanta of physical vacuum, have own $(W_{J=4}=\alpha^3*c)$ speeds $(X-)$ in the field ofthe Universe. The set of such spheres points of galaxies ("not having parts" in Euclidean axiomatics), on the chosen directions $(K=c*T)$ measured by light years is considered. Owing to the general dynamics $\uparrow\varphi(X-)$ of the field (fig. 9) of the Universe, radiuses of spheres points of galaxies increase, and equally and distances between centers of galactic spheres points on the chosen direction from any galaxy increase. It means that each galaxy is removed $(\Delta W_J>0)$, from the observer of any galaxy, in the directions $(K=c*T)$ of the isotropic sphere of the horizon of the Universe.

The set of spheres points of galaxies on the direction, gives the total speed $(\Delta W=\sum\Delta W_J)$ of subjects, radial from the observer,big, than it is more than a distance $(K=c*T)$.

Both increments of speed of spheres points (galaxies) $(\Delta W_J\approx\varphi(X-=c*T))$ and $(\Delta W=\sum\Delta W_J)$, give $(\partial^2 W_J/\partial t^2=\partial b/\partial t)>0$, an acceleration increment $(b\neq const)$, with increase in distance $(K=c*T)$. This effect of an increment of acceleration with distance is caused by dynamics of topology $(g_{ik}\neq const)$, (expansion) $\uparrow\varphi(X-)$ of the field of the Universe, and the increasing number of the extending spheres points (galaxies) with increase $(K=c*T)$ in distance on the chosen direction from any galaxy. Speeds $W_J=\alpha^N c$, of galaxies and extragalactic objects are invariable, as well as (c) velocity of light.

10. Intergalactic flights.

Physical reality is various space of speeds of the Sun and Earth. Without any fuel engines Earth flies in space of physical vacuum with a speed $30\,км/c$, and the Sun with an order speed $265\,км/c$. It is about the main property of space matter - the movement. The stream of mass $(Y-)_A$ of the device is created by fields $(Y-=\gamma_i)=(X+=p_j)(X+=p_j)$ of Strong and Gravitational Interaction of power quanta $(X\pm=p_1)$, $(X\pm=p_2)$ …, $ОП_2$

the level of the indivisible quanta of space matter of physical vacuum connected among themselves by the same $(X+)$fields on $(X-)$module trajectories without external power source.

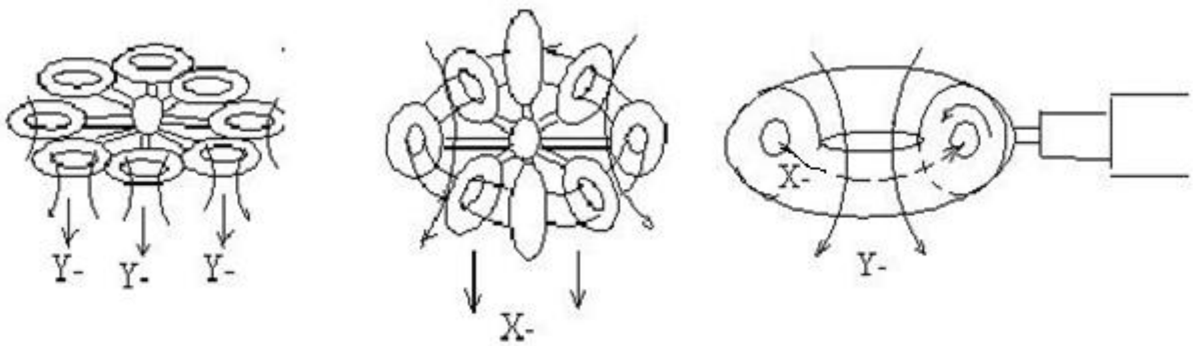


Fig. 10.1. The intergalactic device without fuel engines.

Consistently including space of speeds $(Y-)_A$, $(X-)_A$ the device in the level of singularity of physical vacuum, the device comes on a radial trajectory from the level of singularity of physical vacuum of quantum $(X\pm)$of space matter of the planet, $(Y\pm)$space matter of a star, $(X\pm)$space matter of a galaxy, $(Y\pm)$space matter of a congestion of galaxies, to other congestions and galaxies in the field of the Universe, with the return inclusions at return to the planet of the or other galaxy.

Thus, to create the full periods of quanta $(Y-=\gamma_i)_A$, spaces of speeds it is necessary fields $(X+=p_j)(X+=p_j)$of "heavy" quanta as "working substance", closed on (X-) a trajectory of "ring" of the device. From ratios for quanta $T_J(X-=p_J)\to\infty$, $\lambda_J(X-=p_J)\to\infty$, the more the mass $(X-=p_J)$ of quantum formed $(p_j=2(e_{j-1})/G)$ by quanta (e_{j-1}) the is more $\lambda_J(X-=p_J)$, the diameter D of "ring" of the deviceis more. For ratios $(E=\Pi^2K_X)(X-)(E=\Pi^2K_Y)(X+)=НОЛ(X\pm=p_J)$, take place of a ratio $\uparrow E(X-)\downarrow E(X+)=НОЛ(X\pm=p_J)$, or

$$\uparrow K_X(X-)K_Y\downarrow(X+)=НОЛ(X\pm=p_J),$$

as well as for masses $\uparrow(m=\Pi K_X)(X-)(m=\Pi K_Y)\downarrow(X+)=НОЛ(X\pm=p_J)$. All weight is concentrated $(X-=p_J)$ in the field, formed $(X-=p_J)=(Y+=e_{J-1})(Y+=e_{J-1})$by electric fields of mass $(Y-=e_{J-1})$ trajectories, in the form of mass fields $m(X-=p_j)=2m(Y-=e_{j-1})/G)$. Means enough in the created quanta $НОЛ=\lambda(Y+=e_{J-1})\lambda(Y-=e_{J-1})=1$, to know wavelength, $\lambda(Y+=e_{J-1})=\dfrac{1}{\lambda(Y-=e_{J-1})}$ to calculate an order of the quanta $N(e_J)$forming a trajectory of quanta $(X-=p_j)$ of "working substance".For example, if for $\lambda(X-=p_j)=\lambda(Y+=e_{j-1})$, diameter "ring" is necessary $D=\dfrac{2\lambda(X-=p_J)}{(\pi\approx3)}$, $D=10м$, then $\lambda(X-=p_J)=15м=\lambda(Y+=e_{J-1})$. That is, quantum length takes place $\lambda(Y-=e_{J-1})=\dfrac{1}{\lambda(Y+=e_{J-1})}=6{,}67*10^{-3}см$. It corresponds to ratios $\lambda(Y-=e_{J-1})=6{,}67*10^{-3}см=2\pi*\alpha^N(\lambda_e=3.3*10^{-8}см)$, $\alpha^N=2*10^{-5}$, from where,for $(J-1)$ gives $N=\log_\alpha 2*10^{-5}=\dfrac{\ln(2*10^{-5})}{\ln(\alpha=1/137)}=\dfrac{-10{,}82}{-4{,}92}=2.2\approx2$. Then $(N_j=3)$ corresponds to an order of quanta $(\alpha^3*c)=W(e_4)$ of working substance $(X-=p_4^+)$, in "ring" with a diameter of 10 m. Such "rings" give the intergalactic device. Speed of the intergalactic device with it $(X-=p_4^+)$ "working substance", in singularity level $НОЛ=m(e_4)*m(\gamma_2)=1$, makes $V(Y-=\gamma_2)=\alpha^{-1}*c\approx137*c$.

For terrestrial time in 10 years, it is possible to fly by $(r=10лет*\alpha^{-1}*c)км$ or $(r=10*365{,}25*24*3600*137*3*10^5=1{,}3*10^{16}км=8{,}8*10^7 а.е=425{,}8пк$. That is our galaxy (30 kilo parsec), the device will fly by approximately in 705 years. For crew of such device, own time makes $T=\alpha(705лет)=5{,}14лет$, singularity level time (γ_2).

The more mass of quantum (p_j), the more length of its "wave" $\lambda(X-=p_j)$. For $(N_J=4)$ $(X-=p_6^+)$ quasar coressubstance quanta, I take place $(N_{J-1}=3)$. Then from a ratio

$2\pi*\alpha^N(\lambda_e)=\lambda(Y-=e_{J-1=3})=6{,}28*(1/137)^3*3.3*10^{-9}\,см=8{,}14*10^{-15}\,см$, also we calculate

$\lambda(Y+=e_{J-1=5})=\dfrac{1}{\lambda(Y-=e_{J-1})}=\dfrac{1}{8{,}14*10^{-15}\,см}=1{,}23*10^{14}\,см=\lambda(X-=p_6^+)$. It makes $1{,}2*10^{14}\,см\approx10^9\,км=8{,}2$ $а.е.$ diameter of a cores of an extragalactic quasar with $(X-=p_6^+)$ coresquanta $(X-=p_6^+)$. Such $НОЛ=m(e_4)*m(\gamma_2)=1$, quanta flights already out of galaxies in the Universe give "Working substance" $НОЛ=m(e_4)*m(\gamma_2)=1$. In 10 years of terrestrial time it is possible to fly by in the Universe $(r=10лет*(V(\gamma_4)=\alpha^{-2}*c)=1{,}78*10^{18}\,км$, or 188000 light years. For own time in the device $t=\alpha^2(10лет)$ or 4 hours 40 minutes. This time for $(Y-=\gamma_4)$ quanta, in the intergalactic level of singularity of physical vacuum.

11. Quantum system of coordinates.

The isotropic Euclidean space of the Universe extends that is inadmissible in Euclidean axiomatics in which all theories are created. Light of far stars, galaxies, their congestions, point to such expansion of the space which does not have visible limits and existence in such space of black holes and dark energy, matter.

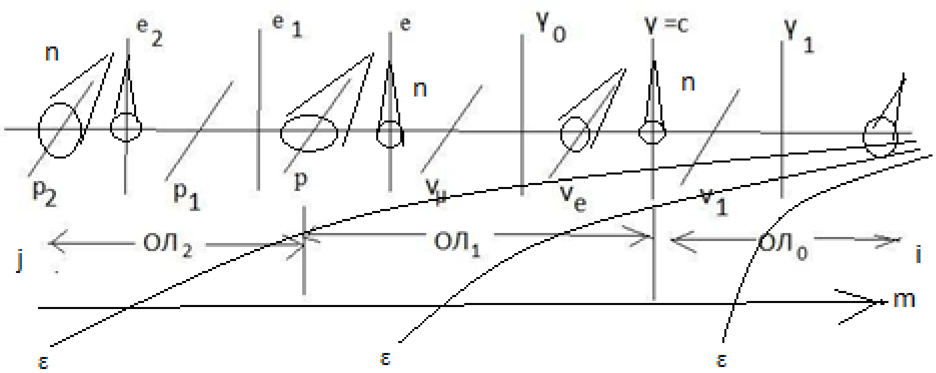


fig. 11.1. Indivisible quanta of space matter.

Physical vacuum of the Universe is presented by multilevel space as matter form. The dynamic space as matter form, is presented by axioms: All specified Universe objects, are considered in quantum system of coordinates in which reference points are Indivisible Quanta of space as matter forms.

In uniform $(X-=Y+)$, $(X+=Y-)$ space matter the first Area of Localization $(ОЛ_1)$ of indivisible quanta is formed three charging $(p-e,\ \nu_\mu-\gamma_0,\ \nu_e-\gamma)$ (fig. 1) and two mass $(e-\nu_\mu,\ \gamma_0-\nu_e)$ isopotentials. Similarly everything Areas of Localization $(ОЛ_{ji})$ of physical vacuum.

$$(ОЛ_2),(ОЛ_3)\ \dots\ (ОЛ_j)\ \text{и}\ (ОЛ_0),\ (ОЛ_{-1}),\ (ОЛ_{-2})\ \dots\ (ОЛ_i)$$

In this case, we are talking about (m)- convergence $(ОЛ_{ji})$ of Localization Areas. This (m) - convergence has an internal coordinate system on (n) - convergence of each quantum of dynamic space-matter, and external localization on (ε_i) - convergence.

Each power quantum, $(X\pm=p_j)$, $(Y\pm=e_j)$ in $(ОЛ_j)$ levels has the power level (singularity) $(X\pm=\nu_i)$, $(Y\pm=\gamma_i)$quanta of physical vacuum below which they do not prove. They form Indivisible Areas of space - matter of their settlement mass characteristics.

Table 11.1

$\sqrt{G}M(p_j)k\sqrt{G}M(e_i)=1$	$M(e_j)kM(\gamma_i)=1$
$\sqrt{G}M(p_1)(k=1{,}8)\sqrt{G}M(v_\mu)=1$	$M(e_1)(k=3{,}2)M(\gamma_0)=1$
$\sqrt{G}M(p_2)(k=1{,}7)\sqrt{G}M(v_e)=1$	$M(e_2)(k=3{,}15)M(\gamma\ )=1$
$\sqrt{G}M(p_3)(k=17)\sqrt{G}M(v_1)=1$	$M(e_3)(k=3{,}8)M(\gamma_1)=1$
$\sqrt{G}M(p_4)(k=1{,}83)\sqrt{G}M(v_2)=1$	$M(e_4^-)(k=3{,}15)M(\gamma_2)=1$
$\sqrt{G}M(p_5)(k=1{,}83)\sqrt{G}M(v_3)=1$	$M(e_5)(k=3{,}15)M(\gamma_3)=1$
$\sqrt{G}M(p_6)(k=18{,}9)\sqrt{G}M(v_4)=1$	$M(e_6^+)(k=3{,}9)M(\gamma_4)=1$
$\sqrt{G}M(p_7)(k=1{,}82)\sqrt{G}M(v_5)=1$	$M(e_7)(k=3{,}5)M(\gamma_5)=1$
$\sqrt{G}M(p_8)(k=1{,}83)\sqrt{G}M(v_6)=1$	$M(e_8^-)(k=3{,}17)M(\gamma_6)=1$
....	....

For example, quanta of a cores of "heavy" atom $({}^{p_2}/_{n_2} + e_2\ )$(a star cores) prove in physical vacuum at the level of an electronic neutrino (v_e) and a photon$(\gamma\ )$, according to the submitted table. Quanta $({}^{p_4}/_{n_4} + e_4)$of a cores of galaxies, prove at the level over light neutrinoes (v_2) and photons(γ_2), with speeds $(v = \alpha^{-1} * c = 137 *$ c). Quanta $({}^{p_6}/_{n_6} + e_6\ )$of a cores of quasars, prove in physical vacuum, at the level over light neutrinoes (v_4) and photons(γ_4), in space of speeds $(v = \alpha^{-2} * c = 137^2 *$ c). Besides there are quanta of galactic $({}^{p_3}/_{n_3} + e_3)$ and extragalactic $({}^{p_5}/_{n_5} + e_5)$ Black Holes, in the center of a congestion of stars and galaxies, respectively. Optical photons$(\gamma\ )$have the closed trajectories (Y-) in their structural forms and do not leave such objects. Such quantum system of coordinates$(ОЛ_{ji})$of levels of Indivisible Quanta, has mutually orthogonal points $r_0(X-) \perp r_0(Y-)$ and $(X-) \perp (Y-)$, in dynamic multilevel space of speeds, with local basic vectors:

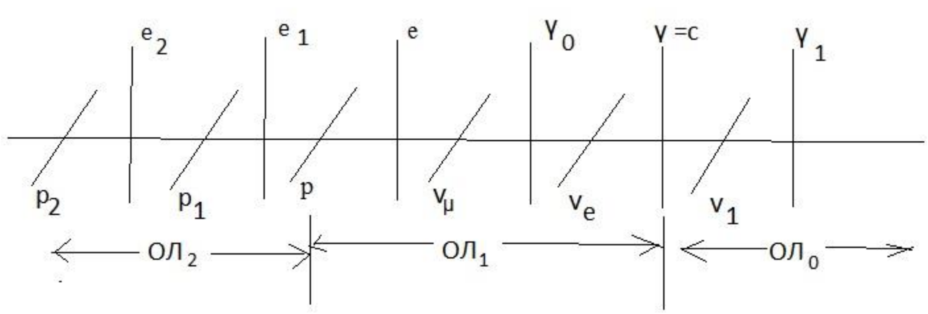
$$(X-) = e_X(x^n) * \cos(\omega\varphi)_X \quad \text{and} \quad (Y-) = e_Y(y^n) * \cos(\omega\varphi)_Y \qquad ,$$

where dynamic $\varphi(X-)$ and $\varphi(Y-)$ corners of parallelism of lines trajectories, with dynamic system of coordinates $(x^n) \neq const$and $(y^n) \neq const$, are real in the Universe, not stationary Euclidean space, ω - the angular speed$(X-)$или$(Y-)$of a trajectory.

For example, the speed of an electron and photon are connected by a ratio: $(v_e = \alpha * c)$, α=1/137=v_e/c=$\cos(\omega\varphi)_Y$, cosine of a limit corner of parallelism (Y-) of trajectories (fig. 1). Similar to proton speed $(v_p = \sqrt{G}*c_v)$, where G = 6.67^{-8} = $\cos(\omega\varphi)_X$.

12. Mathematical interpolation.

In system of coordinates $ОЛ_{ji}(m)$of convergence of quanta $(X\pm)$, $(Y\mp)$,$(X\pm)$,… dynamic space matter, $ОЛ_j$also $ОЛ_i$levels charging (X-= Y+) and mass (Y-= X +) isopotentialsare allocated. On an example $ОЛ_1$- the level of indivisible (НОЛ) of quanta of space matter



They have an appearance: three (X- = p)=(Y+ = e), (X- = ν_{μ}) = (Y+ = γ_0), (X- = ν_e) = (Y+ = $\gamma = c$) charging and two mass (Y- = e)=(X+ = ν_{μ}), (Y- = γ_0)=(X+ = ν_e) isopotentials. The reality facts are that. Therefore by analogy$ОЛ_2, ОЛ_3, ОЛ_4$ ... $ОЛ_j$levels of "heavy" quanta and $ОЛ_0, ОЛ_{-1}, ОЛ_{-2}$ ... $ОЛ_i$ levels of quanta of Physical Vacuum of all Universe within plankovsky scalesare defined by such isopotentials.
НОЛ=$10^{33}cm10^{-33}cm = 1$, , fundamental constants ($\hbar$, c, α, G) in $ОЛ_1$- the level of indivisible quanta and seen in the optical horizon of the Universe.

Thus, there is a sequence of OL-levels of Physical Vacuum in a look:

$$НОЛ = ОЛ_J \dots ОЛ_4 ОЛ_3 ОЛ_2 (ОЛ_1) ОЛ_0 ОЛ_{-1} ОЛ_{-2} .. .ОЛ_i = 1$$

According to space matter axioms, $НОЛ = КЭ(m)КЭ(n) = 1$,take place, or in this case (КЭ=ОЛ), in the form of НОЛ= $ОЛ_J ОЛ_i$=1. It means that in the chosen direction$z = g_{ii}$(x^n)=1 , spaces of speeds of НОЛ=$W_j v_i$=1,singularityobjects $R_{ji}(n)$, with a fundamental tensor $e_i e_k = g_{ik}(x^n)$ uniform space matter ($x^n \neq const$)= (X- = Y+)(X+ = Y-) the ratio takes place:

$$НОЛ= (ОЛ_J \dots (ОЛ_5\{ОЛ_4(ОЛ_3\{ОЛ_2(z)ОЛ_1\}ОЛ_0)ОЛ_{-1}\}ОЛ_{-2}) \dots ОЛ_i)=1.$$

Proceeding from ratios in levels of singularity mass (Y-= X +) fields:

$M(e_j)M(\gamma_i) = 1$	$M(p_j)m(v_i) = 1$
$M(e_1)(k = 3{,}2)M(\gamma_0) = 1$	$\sqrt{G}p_1^-(1{,}8)\nu_\mu\sqrt{G} = 1$
$M(e_2)(k = 3{,}15)M(\gamma\ ) = 1$	$\sqrt{G}p_2^-(1{,}7)\nu_e\sqrt{G} = 1$
$M(e_3)(k = 3{,}8)M(\gamma_1) = 1$	$\sqrt{G}p_3^+(17)\nu_1\sqrt{G} = 1$
$M(e_4^-)(k = 3{,}15)M(\gamma_2) = 1$	$\sqrt{G}p_4^+(1{,}8)\nu_2\sqrt{G} = 1$
$M(e_5)(k = 3{,}15)M(\gamma_3) = 1$	$\sqrt{G}p_5^-(1{,}8)\nu_3\sqrt{G} = 1$
$M(e_6^+)(k = 3{,}9)M(\gamma_4) = 1$	$\sqrt{G}p_6^-(18{,}9)\nu_4\sqrt{G} = 1$

all space matter, is represented podprostanstvo $ОЛ_j$… $ОЛ_i$ of indivisible quanta, with НОЛ={$ОЛ_2ОЛ_1$}=1, НОЛ=($ОЛ_3ОЛ_0$)=1, НОЛ={$ОЛ_4ОЛ_{-1}$}=1, … НОЛ={$ОЛ_jОЛ_i$}=1, levels of singularity. There is a question how to determine Criteria and funtsionalny properties Indivisible Kvantov НОЛ(X±) or НОЛ(Y±) and their field properties uniform (X- = Y+)(X+ = Y-) space matter in all НОЛ= $ОЛ_JОЛ_i$=1, subspaces and their combinations.

To define properties of each OLJ, OLI of a subspace and their combinations in system of coordinates of ОЛ(m-n) of convergence of dynamic space matter, we use mathematical interpolation of properties from the $ОЛ_1$-level of physical vacuum in$ОЛ_J$, subspace $ОЛ_i$ in the $ОЛ_{Ji}$(m) system of coordinates of indivisible quanta of НОЛ=1.

In such $ОЛ_{Ji}$(m) system of coordinates, transition from $ОЛ_J \dots ОЛ_4ОЛ_3ОЛ_2$- levels of physical vacuum in $ОЛ_0ОЛ_{-1}ОЛ_{-2} \dots ОЛ_i$- levels, is relative ($ОЛ_1$)- - level, has an appearance of a matrix of transformations to НОЛ={$ОЛ_jОЛ_i$}=1 condition of dynamic space matter, namely:

$$НОЛ = \begin{vmatrix} z & ОЛ_1 ОЛ_0 ОЛ_{-1} \dots ОЛ_i \\ ОЛ_2\ ОЛ_{2,1} & ОЛ_{2,0}\ ОЛ_{2,-1} \dots ОЛ_{2i} \\ ОЛ_3 ОЛ_{3,1} & ОЛ_{3,0}\ ОЛ_{3,-1} \dots ОЛ_{3i} \\ ОЛ_4 ОЛ_{4,1} & ОЛ_{4,0}\ ОЛ_{4,-1} \dots ОЛ_{4i} \\ \dots & \dots \\ ОЛ_J ОЛ_{J,1} & ОЛ_{J,0}\ ОЛ_{J,-1} \dots ОЛ_{Ji} \end{vmatrix} = 1,$$

Here diagonal elements $ОЛ_{2,1}$ =НОЛ={$ОЛ_2ОЛ_0$}=1, and $ОЛ_{3,0}$ =НОЛ=($ОЛ_3ОЛ_0$)=1, $ОЛ_{4,-1}$ =НОЛ={$ОЛ_4ОЛ_{-1}$}=1,$ОЛ_{Ji}$ =НОЛ={$ОЛ_jОЛ_i$}=1, is similar basic g_{ik}- to vectors, represent levels of singularity of physical vacuum as a reference system in the general space matter, with any(x^n) - system of coordinates. Their work gives a normalization:

$$НОЛ= (ОЛ_J \dots (ОЛ_5\{ОЛ_4(ОЛ_3\{ОЛ_2(z)ОЛ_1\}ОЛ_0)ОЛ_{-1}\}ОЛ_{-2}) \dots ОЛ_i) = 1 \cdot 1 \cdot 1 \cdot 1 \cdot 1 \dots \cdot 1 = 1,$$

in strict accordance with axioms of dynamic space matter.

Not diagonal elements of a matrix give "projections" of various ОЛ - levels on various levels of singularity of physical vacuum. For example the matrix element$ОЛ_{2,-1}$, this work ($ОЛ_2 \cdot ОЛ_{-1}$) levels of indivisible quanta, is more faithful than them Criteria in uniform fields (X- = Y+), (X+ = Y-) fields of uniform НОЛ = (X$\pm$)(Y$\mp$) = 1, spaces matters.

Minors of such matrix: НОЛ=$(z = g_{ik}) \begin{vmatrix} ОЛ_{2,1}\ ОЛ_{2,0}\ ОЛ_{2,-1}\ \dots ОЛ_{2i} \\ ОЛ_{3,1}\ ОЛ_{3,0}\ ОЛ_{3,-1}\ \dots ОЛ_{3i} \\ ОЛ_{4,1}\ ОЛ_{4,0}\ ОЛ_{4,-1}\ \dots ОЛ_{4i} \\ \dots\dots\dots\dots\dots\dots\dots\dots \\ ОЛ_{J,1}\ ОЛ_{J,0}\ ОЛ_{J,-1}\ \dots ОЛ_{Ji} \end{vmatrix} =+\dots$ can be represented or diagonal system of coordinates in levels of singularity of physical vacuum here, or in lines or columns of elements of the general matrix.

Each ОЛ- level is allocated with three charging and two mass isopotentials of indivisible quanta of НОЛ=1. Their vortex fields presented by the equations (Maxwell) for electro (Y + = X-) magnetic also gravit (X + = Y-) mass fields, with a matrix of transformations

$$НОЛ = \begin{vmatrix} z1 & a_{12}(Y+) & a_{13}(X+) \\ a_{21}(X-) & z2 & a_{23}(Y\pm) \\ a_{31}(Y-) & a_{32}(X\mp) & z3 \end{vmatrix} =$$

$$= z_1 \begin{vmatrix} z2 & a_{23}(Y\pm) \\ a_{32}(X\mp) & z3 \end{vmatrix} + z_2 \begin{vmatrix} z1 & a_{13}(X+) \\ a_{31}(Y-) & z3 \end{vmatrix} + z_3 \begin{vmatrix} z1 & a_{12}(Y+) \\ a_{21}(X-) & z2 \end{vmatrix};$$

also are represented by indivisible quanta in uniform fields of space matter.

For example, for $ОЛ_1$ - the level of indivisible quanta representation takes place:

$$ОЛ_1 = \begin{vmatrix} z_1(X\pm)_p(X\pm)_{\nu_\mu}(X\pm)_{\nu_e} \\ (Y\pm)_e z_2(e\cdot\nu_\mu) \quad (e\cdot\nu_e) \\ (Y\pm)_{\gamma_0}(\gamma_0\cdot p)z_3 \quad (\gamma_0\cdot\nu_e) \\ (Y\pm)_\gamma(\gamma\cdot p) \quad (\gamma\cdot\nu_\mu) \quad z_4 \end{vmatrix} \equiv 1$$

in uniform isopotential charging (Y + = X-) and mass (X + = Y-) fields. For example: $q_e(Y+= X-)q_p = q^2 = \hbar\alpha c$, or in mass fields: $(G\nu_\mu/\pi\sqrt{2})(X+= Y-)(Ge/\pi\sqrt{2}) = \hbar c$, similarly $(G\nu_e)(X+= Y-)(G\gamma_0) = \hbar c$.. Combinations$(\gamma_0\cdot p)$are known $G*m(p)/2 = m(\gamma_0)$ well as $(\gamma\cdot\nu_\mu)$ as $G*m(\nu_\mu)/2 = m(\gamma)$, annihilation products. By analogy all $ОЛ_J \dots ОЛ_i$. are presented. Changes only combinations of structural forms on (n) - convergence with limit $cos\varphi_x = \sqrt{G}$, and $cos\varphi_Y = \alpha$, constants. Then in the general matrix, not diagonal elements of a matrix $ОЛ_{2,-1}$, for example, it is represented the work: $ОЛ_{2,-1} = (ОЛ_2 \cdot ОЛ_{-1})$ of such matrixes, by standard rules of multiplication of the Criteria of Evolution (CE) of indivisible quanta, like OL1 matrix, already in uniform fields with space of speeds of space - to matter in which CE are formed all. Thus, mathematical representation of any subspace, any level of singularity, any indivisible quanta of space - matter and their structural forms in limits takes place: НОЛ = $10^{33}см 10^{-33}см = 1$, the plankovsky sizes measured in $ОЛ_1$- the level of particles known to us, in the field of the Universe.

The following mathematical truth is the fact that on infinite radiuses of all space matter of the Universe $(r_j(X-)\to\infty)$ with its mass $(\lambda_i(Y-)\to\infty)$ trajectories, matter density $(\rho_j(X-)\to 0)$, $(\rho_i(Y-)\to 0)$, disappears in zero. Own time of dynamics (t) comes down to zero in axioms НОЛ=$(t\longrightarrow 0)(T\longrightarrow\infty)$=1,dynamic space matter, as well as dynamics

$$(b=(r_j(X-)\to\infty)(\rho_j(X-)\to 0)\longrightarrow 0), \qquad (b=(\lambda_i(Y-)\to\infty)(\rho_i(Y-)\to 0)\to 0)$$

mass trajectories. In other words, disappearance in zero mass of dynamic space matter on infinity, with delay in zero time $(t\longrightarrow 0)$ its dynamics $(b\longrightarrow 0)$ is the mathematical truth. On the other hand, $(r_i(X-)\to 0)$ takes place $(\rho_i(X-)\to\infty)$, and $(\lambda_j(Y-)\to 0)$, $(\rho_j(Y-)\to\infty$, with the corresponding interpretations and laws conservation of energy.

Summary.
There is no space without matter and there is no matter outside of space. The main property of matter is movement. The paper considers the properties of dynamic space, which have the properties of matter. Dynamic space-matter follows from the properties of the Euclidean axiomatic. The geometric facts of dynamical space determine axioms that do not require proof. In the framework of the axioms of dynamic space, the physical properties of matter are determined. In a unified mathematical truth, Maxwell equations for the electromagnetic field and equations of the dynamics of the gravitational mass field are derived. Already from these equations, inductive mass fields follow, like inductive magnetic fields. These are two mathematical truths and two physical realities. Further. In a single mathematical truth, the equations of the Special Theory of Relativity and the equations of quantum relativistic dynamics are derived. Such equations are impossible in the Euclidean axiomatic. Einstein's tensor is also the mathematical truth of the difference in relativistic dynamics at two points in Riemannian space. The principle of equivalence of inert and gravitational masses is an axiom of the dynamic space of mass trajectories in a gravitational field. The complete equation of the General Theory of Relativity is deduced as the mathematical truth of a dynamic space-matter with elements of quantum gravity. Unlike the Einstein equation, in the complete equation of the General Theory of Relativity, the gravitational constant follows as mathematical truth. The acceleration equations of a quantum gravitational quasipotential field are derived in the framework of field theory. In the framework of this equation, the perihelion of Mercury, the nucleus, and the hidden masses of the Galaxy were calculated. In elementary particle, physics there are unsolvable contradictions. For example, the fractional charge of quarks that form the proton charge and just such a positron charge, but without quarks. In the properties of dynamic space-matter, the proton and electron charges are calculated in a single way. There are limits of applicability of the Euclidean axiomatic, which are determined by the uncertainty principle, the wave function. A scalar field is introduced into the calibration field to maintain relativistic invariance in quantum fields. There is no quantum relativistic dynamics. In turn, the Quantum Theory of Relativity is impossible in the Euclidean axiomatic. Already in an artificially created scalar field, in the model of Spontaneous Symmetry Breaking, the Higgs boson theory and the electroweak interaction theory are being constructed. In both cases, the masses of these bosons are calculated in the framework of a dynamic space-matter without artificially created scalar bosons. In general, Euclidean axiomatic is a special case of a fixed state of dynamic space-matter. This reflects the reality of the properties of dynamic space-matter recorded in experiments. This is the technology of modern theories. In the framework of the axioms of dynamic space-matter, a fundamentally new technology of theories themselves is considered.

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