Space -matter. Unified theory

Abstract

Keywords Unified theory

Chapters

Unified theory

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1. Introduction.

Modern physics has a lot of different problems and facts, which go out of the frame of its theoretical views. Theoretical models and fundamental views are extremely contradictory.

If (+) a proton charge (p^+), in quark ($p = uud$) models is presented by a 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, completely the same (+) charge (e^+) of positron does not have any quarks. Such model and view of(+) charge does not correspond to reality. These ones and a lot of other fundamental contradictions do not have any solutions in theories.

Math answers the question “How?”, and Physics answers the question “Why?”. Right now We will not answer the question “How” to describe results of experiments. We will answer the questions, why is it so…

2. Space-matter.

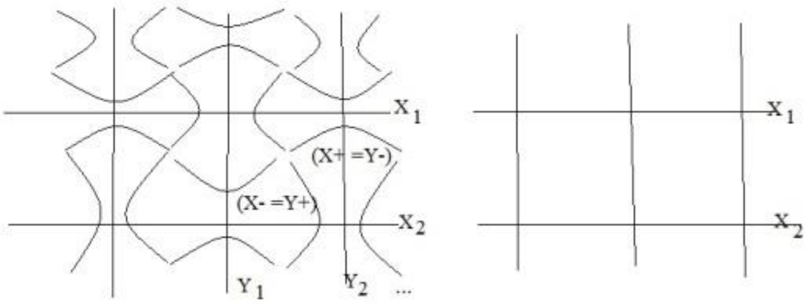
It is a fundamental fact, that there is no matter out of space and there is no space without matter. Space and matter is the same thing.

The main characteristic of matter – movement. It is presented by a dynamic space-matter with non-stationary Euclidean space. Straight lines of dynamic $(\varphi \neq const)$ beam, do not cross initial line $(AC \to \infty)$ on infinity (рис.1), it means that they are parallel.

Picture 1. Dynamic space-matter

It is impossible to stop an infinity. That is why a dynamic space-matter of beam of parallel straight lines always exists. Orthogonal beams of straight lines-trajectories have own outside $(X+)$, $(Y+)$ fields. They form Undivided Regions of Localization $(X\pm)$, $(Y\pm)$. In this case The Euclidean space, with non-zero and dynamic angle $(\varphi \neq const)$ of parallelism in each own (X, Y, Z) axis, loses the sense. But it is real (X-), along axis (X), space of a dynamic beam of straight lines, that we do not observe in Euclidean space.

In two-dimension space, zero angle of parallelism (φ=0) for (X-) и (Y-) lines, gives Euclidean straight lines. In a maximum case of zero angle of parallelism (φ = 0) in each axis, a dynamic space-matter goes into the Euclidean space, as particular case of a dynamic space-matter.



Picture 2. Dynamic (φ≠const) and Euclidean (φ=0)

It is profound and principal changes of technology of theoretical researches, which form our views about the natural world. As we see, in Euclidean view of space, we do not see everything.

Such dynamic $(\varphi \neq const)$ space-matter has its own geometrical facts, as axioms, that do not require any evidence.

3. Axioms of dynamic space-matter

1. Non-zero, dynamic angle of parallelism $(\varphi \neq 0) \neq const$, of a beam of parallel lines, determines orthogonal fields $(X-)\perp(Y-)$ of parallel lines - trajectories, as isotope characteristics of space-matter.

2. Zero angle of parallelism $(\varphi = 0)$, gives «length without width» with zero or non-zero Y_0 - radius of sphere-point «That does not have parts» in Euclidean axiomatics.

3. A beam of parallel lines with zero angle of parallelism $(\varphi = 0)$, «equally located to all its points», gives variety of straight lines in one «without width» Euclidean straight line.

4. Inside $(X-),(Y-)$ and outside $(X+),(Y+)$ fields of lines-trajectories non-zero $X_0 \neq 0$ or $Y_0 \neq 0$ of physical sphere-point, form Undivided Region of Localization $НОЛ(X\pm)$ or $НОЛ(Y\pm)$ of dynamic space-matter.

5. In single fields $(X- = Y+)$, $(Y- = X+)$ of orthogonal lines-trajectories $(X-)\perp(Y-)$ there are no two the same sphere-points and lines-trajectories.

6. Sequence of Undivided Regions of Localization $(X\pm)$, $(Y\pm)$, $(X\pm)\ldots$ on radius $X_0 \neq 0$ or $Y_0 \neq 0$ of sphere-point on one line-trajectory gives n convergence, and on different trajectories m convergence.

7. To each Undivided Region of Localization of space-matter corresponds the unit of all its Criterion of Evolution – КЭ, in single $(X- = Y+)$, $(Y- = X+)$ space-matter on $m-n$ convergences,

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

In the system of numbers that are equal by analogy of numbers 1.

8. Fixation of an angle $(\varphi \neq 0) = const$ or $(\varphi = 0)$ a beam of straight parallel lines, space-matter, gives 5th postulate of Euclid and an axiom of parallelism.

Any point of fixed lines-trajectories is presented by local basic vectors Rimanov's space:

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

With 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, Rimanov's space is fixed $((\varphi \neq 0) = const)$ state of dynamic $(\varphi \neq const)$ space-matter.

Particular case of negative curvature $(K = -\frac{Y^2}{Y_O} = \frac{(+Y)(-Y)}{Y_O})$ (Smirnov b.1,p.186) Rimanov's space is space of Lobachevsky's geometry (Math encyclopedia).

4.Electro (Y+ =X -) magnetic and gravity (X+=Y-) mass fields.

In single (X+=Y-) (Y+ =X -) =1, space-matter, we have Maxwell's equations[1] **for electro (Y+ =X -) magnetic field**. (Smirnov, b.2, p.234).

In conditions $\iint_{S_2} A_m dS_2 = 0 = \oint_{L_2} B(X-)dL_2$.

$$B = \mu_1 \mathrm{H}; \quad rot_x \mathrm{H}(X\ -) = \varepsilon_1 * \frac{\partial E\ (Y\ +)}{\partial T} + \lambda * E\ (Y\ +);$$

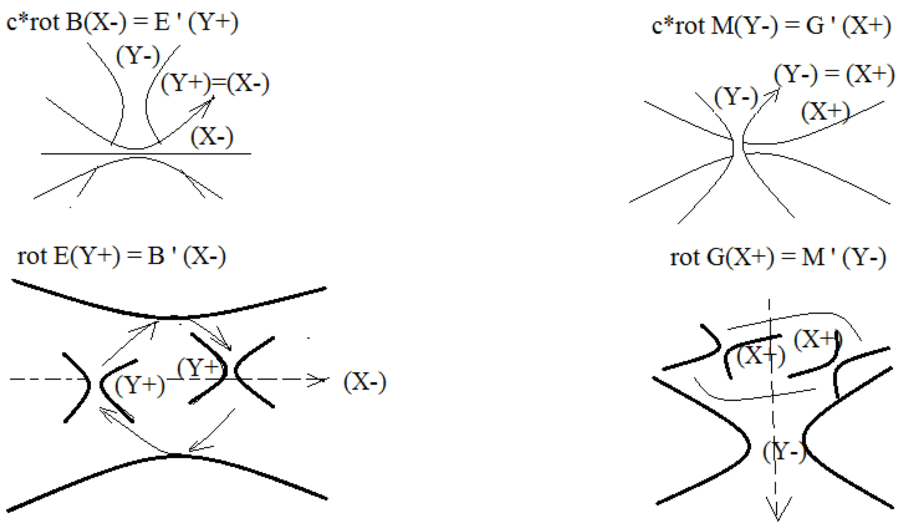
$$D = \varepsilon_1 * E; \qquad rot_x E(Y\ +) = -\mu_1 * \frac{\partial \mathrm{H}\ (X-)}{\partial T}$$

And gravity($X+ = Y-$)mass fields in conditions $\iint_{S_1} A_n (Y-) dS_1 = 0 = \oint_{L_1} M(Y-) dL_1$

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

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

It is a single math truth in a single dynamic space-matter. Induction of mass field derives from it, similar to induction of magnetic field.



Picture 3. Structural Forms of space-matter derives from these equations:

5. Transformations of relativistic dynamics.

a) Single math truth STR и QTR

Special Theory of Relativity (STR).

Classical view:

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

6). If to put initial values $Y = icT$, $\overline{Y} = ic\overline{T}$, we obtain:

$$\overline{X} = \frac{X-acT}{\sqrt{1-a^2}}, \qquad ic\overline{T} = \frac{icT-iaX}{\sqrt{1-a^2}},$$

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

Lorenz's transformations in classical relativistic dynamics.

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

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

Transition from QTR to STR.

Math truth of transition of QTR to transformation STR

For zero angle of parallelism in Euclidean axiomatics, with speeds less than speed of light $W_Y < c$, extreme cases of transition of quantum relativistic dynamics of vector component take place,

$a_{22} = (\cos(\alpha^0 = 0) = 1) = a_{11}$, $a_{22} = 1$,

$a_{11} = 1$, $Y = WT$,

$$(\overline{K}_Y = \overline{Y}) = \frac{(a_{11}=1)(K_Y = Y) \pm WT}{\sqrt{1-W^2(X-)/c^2}},$$

Quantum Theory of Relativity (QTR).

Special Theory of Relativity is invalid in conditions:

1). Non-uniformly accelerated $(a^2 \neq const)$ motion.

2). Due to uncertainty principle $\Delta Y = c\Delta T$, inability of fixation of points in space-time makes transformations of Lorenz hopeless.

3) Wave function of quant is set to initial state by input of calibration field (A_K), in case of absence of relativistic dynamics in the process of its dynamics, that is, in case of absence of quantum relativistic dynamics.

Relativistic dynamics in angle of parallelism in LI – Local – Invariant conditions of relativistic dynamics $a_{11} \neq a_{22}$, with outside conditions, takes place:

8) $\begin{matrix} \overline{K}_Y = b(a_{11}K_Y + K_X) \\ \overline{K}_X = b(K_Y + a_{22}K_X) \end{matrix}$, where: from $K_Y = \psi + Y_0$,

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

That is moment of truth of relativistic dynamics of quantum of space-matter, that is represented as calibration field (A_K) in modern theories.

Matrix of transformation has view:

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

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

$$\overline{W}_Y = \frac{\overline{K}_Y}{\overline{T}} = \frac{a_{11}K_Y + cT}{K_Y/c + a_{22}T}, \qquad \overline{W}_Y = \frac{a_{11}W_Y + c}{a_{22} + W_Y/c},$$

In conditions LI, $(a_{22} \neq a_{11}) \neq 1$,

10). Maximum speeds $W_Y = c$, in conditions

$a_{22} = a_{11} \neq 1$, дают $\overline{W}_Y = \frac{c(a_{11}+1)}{(a_{22}+1)} = c$, constant

$\bar{Y} = \frac{Y \pm WT}{\sqrt{1 - W^2 / c^2}}$, $\bar{T} = \frac{K_Y / c + (a_{22} = 1)T}{\sqrt{1 - W^2 (X -) / c^2}}$, $K_Y = K(\cos\alpha^0 = \frac{W}{c})$, $\bar{T} = \frac{T \pm KW / c^2}{\sqrt{1 - W^2 / c^2}}$, In transformations of Lorenz of classical relativistic dynamics.	speed of light $\overline{W}_Y = c = W_Y$, in any coordinate system.

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

6.General Theory of Relativity (GTR) of Einstein in space-matter.

The theory is characterized by tensor of Einstein (G. Korn, T. Korn), it is a math truth of difference of relativistic dynamics of two (1) and (2) points of Rimanov's space, as fixed ($g_{ik} = const$), state of dynamic ($g_{ik} \neq const$), space-matter. (Smirnov V.I. 1974. b.2).

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

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

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

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

For relativistic dynamics:

$$c^2 T^2 - X^2 = \frac{c_Y^4}{b_Y^2}, \qquad b_Y = \frac{F_Y}{M_Y}, \qquad c_Y^4 = F_Y, c^2 T^2 - X^2 = \frac{M_Y^2}{F_Y}, \qquad F_Y = \frac{M_Y^2}{c^2 T^2 (1 - W_X^2 / c^2)}$$

$$c^2 T^2 = R^2 = \frac{R_0^2}{(\cos^2 \alpha_X^0 = G)}, \qquad F_Y = G \frac{Mm}{R_0^2 (1 - W_X^2 / c^2)}.$$

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

$$W^2 = \frac{2GM}{R_3}, \qquad F_Y = G \frac{Mm}{R_0^2 (1 - 2GM / R_3 c^2)}$$

It is particular case of General Theory of Relativity.

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=8πG) 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 an energy $R_{Ji} - \frac{1}{2} R g_{Ji} - \frac{1}{2} \lambda g_{Ji} = kT_{Ji}$ of vacuum, does not change conditions of 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.

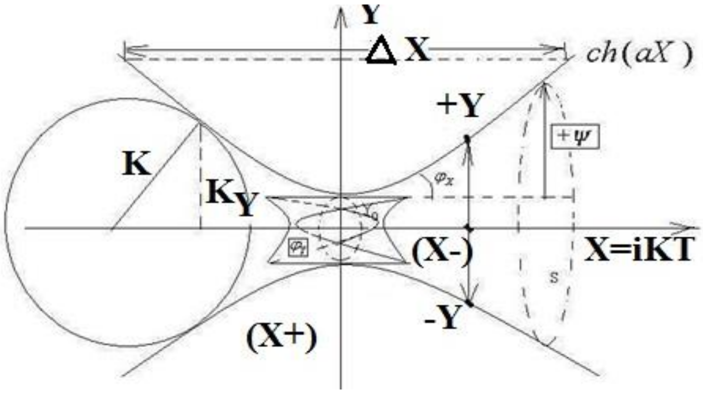
7. Scalar bosons .

It is impossible to fix an action of quantum $\hbar = \Delta p \Delta\lambda = F \Delta t \Delta\lambda$ in space $\Delta\lambda$ or in time Δt . It is connected with zero $(\varphi \neq const)$ angle of parallelism $(X -)$ or $(Y -)$ trajectory $(X \pm)$ or $(Y \pm)$ of quantum of space-matter. There is only certain probability of an action. The transformation of relativistic dynamics of wave ψ - function of quantum field with density of probability ($|\psi|^2$) of interaction in $(X +)$ field (picture 1), corresponds to Globally-Invariant $\psi(X) = e^{-ia} \overline{\psi}(X)$, $a = const$ Lorenz's group. These transformations correspond to turns in the space of circle S, and relativistic-invariant equation of Dirak.

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

Such invariance gives laws of preservation in equations of movement. For transformation of relativistic dynamics in hyperbaric movement.

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



Picture 4. Quantum $(X\pm)$ of dynamic space-matter.

Additional component appears in the equation of Dirak.

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

Invariance of preservation laws is broken. The calibration fields are imposed for their preservation. They compensate additional component in equation.

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

Now, substituting the value in such equation $\psi(X) = e^{a(X)}\overline{\psi}(X)$, $a(X) \neq const$ of wave function, we will obtain 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 is invariant to original equation

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

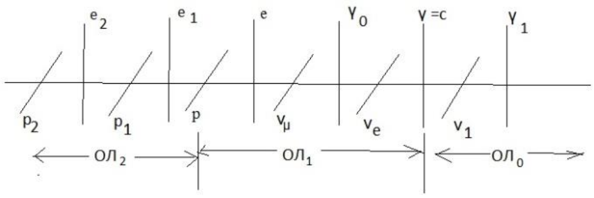
In conditions $A_\mu(X) = \overline{A}_\mu(X)$, и $\quad A_\mu(X) = \overline{A}_\mu(X) + i\frac{\partial a(X)}{\partial x_\mu}$,

Presence of scalar boson $(\sqrt{(+a)(-a)} = ia(\Delta X) \neq 0) = const$, in the limits of calibration $(\Delta X) \neq 0)$ field (picture. 3).

Thus, scalar bosons in calibration fields are produced artificially, to address deficiencies of Theory of Relativity in quantum fields.

8. Spectrum of undivided quantums of space-matter.

Undivided Regions of localization of quantums $(X\pm)$, $(Y\pm)$ of dynamic space-matter correlate with stable quantums of space-matter. In both cases, these are facts of reality. Stable $(Y\pm = e)$ electron radiates stable $(Y\pm = \gamma)$ photon, and interacts with stable $(X\pm = p)$ proton and $(X\pm = \nu_\mu)$, $(X\pm = \nu_e)$ neutrino. In single $(X- = Y+)$, $(X+ = Y-)$ space-matter they produce first $(OЛ_1)$ Localization region of undivided quantums on their $m-n$ convergences (picture).



Picture 5. Undivided quantums of space-matter.

For preservation of a continuity of single (X - = Y+) , (X + = Y-) space-matter, photon $(Y\pm=\gamma_0)$ is introduced, that is equivalent to $(Y\pm=\gamma)$ photon. It corresponds to analogy of an muon $(X\pm=\nu_\mu)$ and electronic $(X\pm=\nu_e)$ neutrino. In this case, both neutrinos (ν_μ), (ν_e) and photons (γ_0), (γ), can accelerate as proton or electron till speeds (γ_1), $(\gamma_{2...})$, via the same Lorenz's transformations. If we have standard, outside of any fields, speed of electron $(W_e=\alpha*c)$, radiating standard, outside of any field photon $V(\gamma)=c$, constant $\alpha=W_e/c=\cos\varphi_Y=1/137{,}036$ gives by analogy a calculation of speeds $V(c)=\alpha*V_2(\gamma_2)$ for FTL photons in the view: $V_2(\gamma_2)=\alpha^{-1}c$, $V_4(\gamma_4)=\alpha^{-2}c$ ...$V_i(\gamma_i)=\alpha^{-N}c$, in standard, outside of any fields, conditions. Orbital electron, with an angle of parallelism $\alpha=\frac{W_e}{c}=\frac{1}{137}=\cos\varphi_{MAX}(Y-)$, trajectory, does not radiate photon, as in rectilinear, without acceleration, movement. This **postulate of Bor is an axiom of dynamic space-matter.** Dynamics of mass fields in limits $\cos\varphi_Y=\alpha$, $\cos\varphi_x=\sqrt{G}$, of constants of interaction, gives charge isopotential of their masses, that are equal to one.

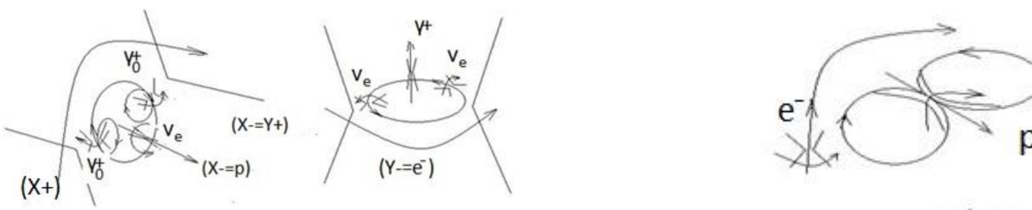
$(X+=\nu_e)(G*\sqrt{2})(X+=\nu_e)=(Y-=\gamma)$, or $\frac{(X+=\nu_e/2)(G*\sqrt{2})(X+=\nu_e/2)}{(Y-=\gamma)}=1$

$$q_e=\frac{(m(\nu_e)/2)(G*\sqrt{2})(m(\nu_e)/2)}{(m(\gamma))}=4{,}8*10^{-10}СГСЕ$$

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

$$q_p=\frac{(m(\gamma_0)/2)(\alpha^2/2)(m(\gamma_0)/2)}{(m(\nu_e))}=4{,}8*10^{-10}СГСЕ$$

These coincidences can not be random. The model of products of an annihilation of proton and electron corresponds to such calculations. Mass fields (Y- = e)=(X+ = p) of an atom.



Picture 6. Mass fields of an atom.

Presence of an antimatter in a matter of proton or electron is a geometric fact here. In this case, products of annihilation of proton

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

And products of annihilation of an electron $(Y\pm=e^-)=(X-=\nu_e^-)+(Y\pm=\gamma^+)+(X-=\nu_e^-)$.

By analogy, in single fields of space-matter Bosons of electroweak interaction:

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

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

9. New stable particles

On opposite beams of muon antineutrino (ν_μ^-) in magnetic fields:

$$\text{НОЛ}(Y=e_1^-)=(X-=\nu_\mu^-)(Y+=\gamma_0^+)(X-=\nu_\mu^-)=\frac{2\nu_\mu}{\alpha^2}=10.21GeV$$

On opposite beams of positrons (e^+), that accelerate in flow of quantums $(Y-=\gamma)$, of photons of **«white» laser** in a view:

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

On opposite beams of antiprotons (p^-), takes place:

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

For opposite $НОЛ(Y-)=(X+=p^+)(X+=p^-)$, Mass of quantum is calculated

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

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

This is elementary particle, that was discovered in collider of CERN.

Uniform representation (STR) and (GTR)

The Special Theory of the Relativity (STR) is created in space – time. $x^2-c^2t^2=\frac{c^4}{b^2}[К^2]$;

Dimensions $c^4=\frac{K^4}{T^4}=\left(\Pi=\frac{К^2}{Т^2}\right)^2=(\Pi^2=F)$ Forces, $\left(b=\frac{K}{T^2}\right)^2$ Accelerations.

The General Theory of the Relativity (GTR) is created in Rimanovom space of local basic vectors $e_i(X,Y,Z)$ с dimension $(e_i=\frac{K}{Т})$ Spaces of speeds. $e_i*e_i=R_{ik}(x^n)$ тензор.

$R_{ik}-\frac{1}{2}Rg_{ik}=kT_{ik}$ tensor $T_{ik}=\left(\begin{matrix}Е=\Pi^2K\\ Р=\Pi^2Т\end{matrix}\right)^2$, Energy ($Е=\Pi^2K$) – an impulse ($Р=\Pi^2Т$) in dimensions $\left(\frac{К^2}{Т^2}=\Pi\right)$ potentials.

Both equations (STR) and (GTR) are connected by matter density$(\rho=\frac{ПК}{К^3}=\frac{1}{Т^2})$, Mass fields $m=ПК\ (X+=Y-)$, or charging $q=ПК\ (Y+=X-)$, Fields in two various points.

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

$\rho_1x^2=\left(\frac{x}{T}=e\right)_i\left(\frac{x}{T}=e\right)_k=R_{ik};\ \ c^2=g_{ik};\qquad \frac{t^2}{T^2}=(cos45^0)^2R=\frac{1}{2}R;\quad (R=\frac{v^2}{c^2})$

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

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

Potentials of relativistic dynamics of uniform fields.

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

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

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

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

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

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

$x^2 rot_x E(Y\ +) - c^2 t^2 rot_x E(Y\ +) = \frac{c^4}{b^2} \mu_1 \frac{\partial \text{H}\ (X-)}{\partial T}$: 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.

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

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

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

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

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 $g_{ik}(x^n) = e_i e_k$.

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

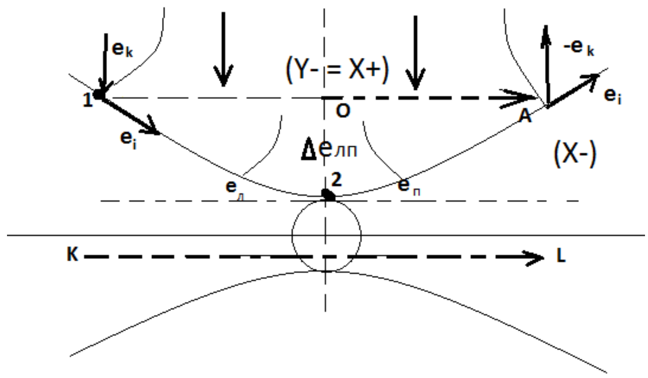


Рис1. Space-matter quantum

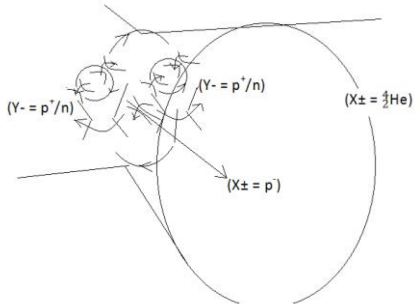
The point (2) is led by Euclidean to sphere space, where $(\text{e}_i \perp \text{e}_k)$ And $(\text{e}_i * \text{e}_k \mathbf{=0})$. Therefore in a point vicinity (2) we allocate vectors (e_L) And $(\text{e}_\text{п})$ Also we take average value $\Delta\text{e}_{\text{лп}} = \frac{1}{2}(\text{e}_L + \ \text{e}_\text{п})$. Accepting $(\text{e}_\text{п} = \ \text{e}_{To})$ and $\Delta\text{e}_{\text{лп}} = \frac{1}{2}(\text{e}_L + \ \text{e}_{To}) = \frac{1}{2}\text{e}_{To}(\frac{\text{e}_L}{\text{e}_{To}} + 1)$, We will receive: $g_{ik}(1) - \ g_{ik}(2) \ \neq 0, \quad g_{ik}(1) - \frac{1}{2}\text{e}_i \text{e}_{To}\left(\frac{\text{e}_L}{\text{e}_{To}} + 1\right)(2) \ = \text{кТ}_{ik}, \ \left(\frac{\text{e}_L}{\text{e}_{To}} = R\right)$.
In a full kind the equation of the General Theory of the Relativity:

$$R_{ik} - \frac{1}{2} R g_{ik} - \frac{1}{2} g_{ik} = \text{кТ}_{ik}$$

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± = $^{4}_{2}He$) 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.

10.CONCLUSIONS

Modern physical theory, with modern facts of reality, can not be created in Euclidean axiomatics. Physics of future can be and must be created in a new technology of theories. Namely, in axioms of dynamic space-matter, fixed by a particular case, in which there is the Euclidean axiomatic of a space-time. Here, in axioms of dynamic space-matter, the single theory of all math and physical theories is introduced, with a possibility of researches of energy levels of a singularity of plenty R_{ji}(n) of objects of a singularity, in a quantum system $ОЛ_{ji}$(m) of coordinates of a dynamic space-matter of whole Universe.

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