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Viktor Dyachenko,
Engineer,
Odessa, Ukraine

Model of the Black Hole of the Elementary Particles

Key words: Black hole of the elementary particles, identity of the geometry hyperspace-energy black hole,main equation of the mechanics of the black hole, radius – vector hyperspace – energy of our universe, wave radius-vector of the black hole.

Annotation: The model of a black hole of elementary particles is based on not the classical cosmological theory the general interpretation of the Universe and our Universe and the theory of elementary particles. In a basis the principal postulate of the theory the Microcosm and the Universe - a substance structure, i.e. elementary particles, atoms, a piece of a substance and planets, stars, galaxies, megagalaxies is included, to our Universe and the Universe is identical i.e. in the centre or the kernel of these plants the black hole is arranged. Black holes possess extreme sizes of characteristic space-energy, energy and gravitational force of extremely large magnitude. From this model we can calculate all parameters of black holes of all groups of elementary particles.

Main trigonometric identity of the geometry hyperspace-energy black hole of the elementary particles: $\rightarrow$ $\mathbf{(\cos\alpha)^{5/4}} = \sqrt{\mathbf{\cos\alpha_{\gamma\Psi}}}$;

Main equation of the mechanics of the black hole of the elementary particle:

$$\mathbf{(E_\Psi)\cdot(\cos\alpha)^{5/4} = E_{\mu\Psi}}\ ;\quad \text{где}\ \ (E_\Psi) = \beta_\Psi\cdot\frac{C_\star^2}{C_0^2} = \beta_\Psi\cdot\frac{C_0^2}{C_0^2}\cdot\frac{1}{\beta_\gamma^{10}}\ ;\rightarrow$$

energy of the elementary particle in own hyperspace - energy;

$E_{\mu\Psi}$ → energy of the black hole of the elementary particle, which shall define as:

$$\boxed{\mathbf{E_{\mu\Psi} = \frac{2\pi F_\Psi\cdot\beta_\Psi}{2\pi_\gamma\cdot r_\gamma}\cdot E_\mu}}\ ;\quad \text{где}\ \ E_\mu = \frac{1}{\beta_\gamma^{51/5}}\ ;\rightarrow \left|\begin{array}{c}\text{energy of the black hole hyperspace – energy of}\\ \text{our Universe;}\end{array}\right|$$

F_Ψ → factor of the geometry for corresponding to groups of the elementary particles;

$$F_\Psi = \left\{1\ ;\ \alpha\ ;\ \gamma\ ;\ \sigma\ ;\ \alpha_\mu = \frac{\pi_\gamma}{\pi}\right\}\ ;\quad r_\gamma = \frac{1}{\beta_\gamma}\ ;$$

→ radius – vector hyperspace – energy of our universe ;

$$\boxed{\mathbf{E_{\mu\Psi} = \frac{F_\Psi\cdot\beta_\Psi}{\alpha_\mu\cdot\beta_\gamma^{46/5}} = F_\Psi\cdot\beta_\Psi\cdot 10^{350.2688602}}\ \text{erg}}$$

From main equation mechanics of the black hole we shall define $r_\mu \to$ radius of the black hole of the elementary particles. For beginning we shall define geometry hyperspace-energy of the black hole of the elementary particles that is to say we shall solve equation: $\to (\cos\alpha)^{5/4} = \sqrt{\cos\alpha_{\gamma\Psi}}$;

$$\beta_{\gamma\Psi} = (E_\Psi)\cdot\frac{V_{\text{эф}}^2}{\text{Ç}_\gamma^2};\quad V_{\text{эф}}T_{\text{эф}} = 2\pi\cdot\alpha^{5/11}\cdot\gamma^{6/11}\cdot r_\mu;\quad \text{Ç}_\gamma T_{\gamma\Psi} = \frac{2\pi F_\Psi}{\beta_{\gamma\Psi}};\quad \beta_{\gamma\Psi} = \frac{1}{\beta_X \mathbb{N}_{\gamma\Psi}};\to$$

energy of eta-muon of the interaction in hyperspace-energy of the elementary particle;

$$\beta_{\gamma\Psi} = (E_\Psi)\cdot\frac{\left(\dfrac{2\pi\alpha^{5/11}\cdot\gamma^{6/11}\cdot r_\mu}{T_{\text{эф}}}\right)^2}{\left(\dfrac{2\pi F_\Psi}{\beta_{\gamma\Psi}\cdot T_{\gamma\Psi}}\right)^2} = (E_\Psi)\cdot\left(\frac{\alpha^{5/11}\cdot\gamma^{6/11}}{F_\Psi}\right)^2\cdot\beta_{\gamma\Psi}^2\cdot r_\mu^2\cdot\frac{T_{\gamma\Psi}^2}{T_{\text{эф}}^2};\quad \frac{T_{\gamma\Psi}^2}{T_{\text{эф}}^2} = \frac{\left(\dfrac{F_\Psi}{\alpha^{5/11}\cdot\gamma^{6/11}}\right)^2}{(E_\Psi)\cdot\beta_{\gamma\Psi}\cdot r_\mu^2};$$

$$\sqrt{\frac{T_{\gamma\Psi}}{T_{\text{эф}}}} = \frac{\sqrt{\dfrac{F_\Psi}{\alpha^{5/11}\cdot\gamma^{6/11}}}}{\sqrt{r_\mu}\cdot(E_\Psi)^{1/4}\cdot\beta_{\gamma\Psi}^{1/4}};\quad \text{где: } \sqrt{\frac{F_\Psi}{\alpha^{5/11}\cdot\gamma^{6/11}}} = F_{\gamma\alpha};\to \sqrt{\frac{T_{\gamma\Psi}}{T_{\text{эф}}}} = \frac{F_{\gamma\alpha}}{\sqrt{r_\mu}\cdot(E_\Psi)^{1/4}\cdot\beta_{\gamma\Psi}^{1/4}};$$

$$\frac{T_{\text{эф}}}{T_{\gamma\Psi}} = \tan\alpha_{\gamma\Psi};\quad \sqrt{\cos\alpha_{\gamma\Psi}} = \frac{1}{1+\sqrt{\tan\alpha_{\gamma\Psi}}} \sim \frac{1}{\sqrt{\tan\alpha_{\gamma\Psi}}} = \sqrt{\frac{T_{\gamma\Psi}}{T_{\text{эф}}}} == \frac{F_{\gamma\alpha}}{\sqrt{r_\mu}\cdot(E_\Psi)^{1/4}\cdot\beta_{\gamma\Psi}^{1/4}};$$

$$\text{т. к. } \tan\alpha_{\gamma\Psi} = \frac{T_{\text{эф}}}{T_{\gamma\Psi}} \gg 1;$$

$$(\cos\alpha)^{5/4} = F_{\gamma\Psi}\cdot\frac{\left(\Upsilon_{nops}^2\right)^{5/8}\cdot(e\cdot\beta_y)^{3/8}\cdot r_\lambda^{5/8}\cdot r_{nop}^{3/8}}{\beta_\Psi\cdot r_\lambda^2}\cdot\left(\frac{r_\mu}{\sqrt{\dfrac{r_\lambda}{\beta_{\gamma\Psi}}}}\right)^{1/4};$$

$$\text{где: } F_{\gamma\Psi} = \frac{\alpha^{5/8}\cdot\gamma^{3/8}\cdot F_\Psi^{5/4}}{\alpha^{5/11}\cdot\gamma^{6/11}\cdot\sigma^{4/5}\cdot\left(\sigma^{5/8}\cdot\gamma^{3/8}\right)^{1/8}\cdot\left(\gamma^{31/33}\right)^{1/8}} = \frac{\alpha^{15/88}\cdot F_\Psi^{5/4}}{\gamma^{\frac{707}{2112}}\cdot\sigma^{\frac{281}{320}}};$$

$$\left(\Upsilon_{nops}^2\right)^{5/8}\cdot(e\cdot\beta_y)^{3/8} \to \left|\begin{array}{c}\text{electro} - \text{gravitational moment of the energy hyperspace} - \text{energy}\\ \text{of the el. particle}\end{array}\right|$$

$r_\lambda \to$ own wave radius – vector of the elementary particle.

$$(\cos\alpha)^{5/4} = \sqrt{\cos\alpha_{\gamma\Psi}}\ ;\ F_{\gamma\Psi}\cdot\frac{\left(\Upsilon_{nops}^{2}\right)^{5/8}\cdot(\mathrm{e}\cdot\beta_{y})^{3/8}\cdot r_{\lambda}^{5/8}\cdot r_{nop}^{3/8}}{\beta_{\Psi}\cdot r_{\lambda}^{2}}$$

$$\cdot\left(\frac{r_{\mu}}{\sqrt{\frac{r_{\lambda}}{\beta_{\gamma\Psi}}}}\right)^{1/4} \sim \frac{F_{\gamma\alpha}}{\sqrt{r_{\mu}}\cdot(E_{\Psi})^{1/4}\cdot\beta_{\gamma\Psi}^{1/4}}\ ;$$

$$(\cos\alpha)^{5/4} = \sqrt{\cos\alpha_{\gamma\Psi}} \sim F_{\gamma\alpha}^{1/3}\cdot F_{\gamma\Psi}^{2/3}\cdot\frac{\left(\Upsilon_{nops}^{2}\right)^{5/12}\cdot(\mathrm{e}\cdot\beta_{y}\cdot r_{nop})^{1/4}}{(E_{\Psi})^{1/12}\cdot\beta_{\Psi}^{2/3}\cdot r_{\lambda}}\ ;$$

From main equation of the mechanics of the black hole we shall define own wave radius-vector of the elementary particle → $\mathbf{r_{\lambda}}$:

$$(E_{\Psi})\cdot\sqrt{\cos\alpha_{\gamma\Psi}} = E_{\mu\Psi}\ ;\rightarrow (E_{\Psi})\cdot F_{\gamma\alpha}^{1/3}\cdot F_{\gamma\Psi}^{2/3}\cdot\frac{\left(\Upsilon_{nops}^{2}\right)^{5/12}\cdot(\mathrm{e}\cdot\beta_{y}\cdot r_{nop})^{1/4}}{(E_{\Psi})^{1/12}\cdot\beta_{\Psi}^{2/3}\cdot r_{\lambda}} = \frac{F_{\Psi}\cdot\beta_{\Psi}}{\alpha_{\mu}\cdot\beta_{\gamma}^{46/5}}\ ;\rightarrow$$

$$\beta_{\Psi}^{1/4}\cdot\left(\frac{\text{Ç}_{0}^{2}}{C_{0}^{2}}\cdot\frac{1}{\beta_{\gamma}^{10}}\right)^{11/12}\cdot\frac{F_{\gamma\alpha}^{1/3}\cdot F_{\gamma\Psi}^{2/3}\cdot\left(\Upsilon_{nops}^{2}\right)^{5/12}\cdot(\mathrm{e}\cdot\beta_{y}\cdot r_{nop})^{1/4}}{r_{\lambda}} = \frac{F_{\Psi}\cdot\beta_{\Psi}}{\alpha_{\mu}\cdot\beta_{\gamma}^{46/5}}\ ;\rightarrow$$

$$r_{\lambda}\cdot\beta_{\Psi}^{3/4} = \frac{F_{\gamma\alpha}^{1/3}\cdot F_{\gamma\Psi}^{2/3}}{F_{\Psi}}\cdot\alpha_{\mu}\cdot\beta_{\gamma}^{1/30}\cdot\left(\frac{\text{Ç}_{0}}{C_{0}}\right)^{11/6}\cdot\left(\Upsilon_{nops}^{2}\right)^{5/12}\cdot(\mathrm{e}\cdot\beta_{y}\cdot r_{nop})^{1/4}\ ;$$

$$\frac{F_{\gamma\alpha}^{1/3}\cdot F_{\gamma\Psi}^{2/3}}{F_{\Psi}} = \frac{1}{F_{\Psi}}\cdot\frac{F_{\Psi}^{1/6}}{\alpha^{5/66}\cdot\gamma^{1/11}}\cdot\frac{\alpha^{5/44}\cdot F_{\Psi}^{5/6}}{\gamma^{\frac{707}{3168}}\cdot\sigma^{\frac{281}{480}}} = \frac{\alpha^{5/132}}{\sigma^{\frac{281}{480}}\cdot\gamma^{\frac{995}{3168}}} = 0.465111781 = const\ ;$$

$$r_{\lambda}\cdot\beta_{\Psi}^{3/4} = \frac{\alpha^{5/132}\cdot\alpha_{\mu}}{\sigma^{\frac{281}{480}}\cdot\gamma^{\frac{995}{3168}}}\cdot\beta_{\gamma}^{1/30}\cdot\left(\frac{\text{Ç}_{0}}{C_{0}}\right)^{11/6}\cdot\left(\Upsilon_{nops}^{2}\right)^{5/12}\cdot\left(\frac{\mathrm{e}\cdot\beta_{y}}{\beta_{\gamma}\mathbb{N}_{op}}\right)^{1/4} = \left|\sqrt{\Psi_{\lambda}}\right|$$
$$= 4.99331168\cdot 10^{-17};$$

$r_{\lambda}\cdot\beta_{\Psi}^{3/4} = \left|\sqrt{\Psi_{\lambda}}\right|$;→ module of the field square of the square moment of the energy ″*psi*″- world constant elementary particles.

$$r_{\lambda} = \frac{\left|\sqrt{\Psi_{\lambda}}\right|}{\beta_{\Psi}^{3/4}} = \sqrt{\frac{\Psi_{\beta_{\Psi}}}{\beta_{\Psi}}} = \Psi_{\sqrt{\beta_{\Psi}}}^{2}\cdot\beta_{\Psi}\ ;\rightarrow \text{own wave radius – vector of the elementary particle.}$$

where: $\Psi_{\beta_{\Psi}}$ и $\Psi_{\sqrt{\beta_{\Psi}}}$

→ not field and field square moments of the energy of the elementary particles

From main equation of the mechanics of the black hole we shall define wave radius-vector of the black hole of the elementary particle:

$$(E_{\Psi})\cdot\sqrt{\cos\alpha_{\gamma\Psi}} = E_{\mu\Psi}\ ;\rightarrow (E_{\Psi})\cdot\frac{F_{\gamma\alpha}}{(E_{\Psi})^{1/4}\cdot\beta_{\gamma\Psi}^{1/4}\cdot\sqrt{r_{\mu}}} = \frac{F_{\Psi}\cdot\beta_{\Psi}}{\alpha_{\mu}\cdot\beta_{\gamma}^{46/5}}\ ;$$

$$\frac{(E_\Psi)^{3/4}\cdot F_{\gamma\alpha}}{\beta_{\gamma\Psi}^{1/4}\cdot\sqrt{r_\mu}} = \left(\beta_\Psi\cdot\frac{\c{C}_0^2}{C_0^2}\cdot\frac{1}{\beta_\gamma^{10}}\right)^{3/4}\cdot\frac{F_{\gamma\alpha}}{\beta_{\gamma\Psi}^{1/4}\cdot\sqrt{r_\mu}} = \frac{F_\Psi\cdot\beta_\Psi}{\alpha_\mu\cdot\beta_\gamma^{46/5}};$$

$$\boxed{\mathbf{r_\mu} = \left(\frac{\mathbf{F_{\gamma\alpha}}}{\mathbf{F_\Psi}}\right)^{2}\cdot\boldsymbol{\alpha}_\mu^2\cdot\left(\frac{\c{C}_0}{\mathbf{C_0}}\right)^{3}\cdot\frac{\boldsymbol{\beta}_\gamma^{17/5}}{\sqrt{\boldsymbol{\beta}_{\gamma\Psi}\cdot\boldsymbol{\beta}_\Psi}} = \left(\frac{\mathbf{F_{\gamma\alpha}}}{\mathbf{F_\Psi}}\right)^{2}\cdot\sqrt{\frac{\mathbb{N}_{\gamma\Psi}}{\boldsymbol{\beta}_\Psi}}\cdot\mathbf{1.941992982\cdot10^{-97}}\,\text{см}}$$

We shall define energy and radius of the black hole for all five groups of the elementary particles from system of two equations:

$$(2\pi F_\Psi\cdot\beta_\Psi)\begin{cases} r_{\mu\Psi} = \left(\frac{F_{\gamma\alpha}}{F_\Psi}\right)^{2}\cdot\sqrt{\frac{\mathbb{N}_{\gamma\Psi}}{\beta_\Psi}}\cdot 1.941992982\cdot10^{-97}\,\text{см};\ \text{где: } F_{\gamma\alpha}^2 = \frac{F_\Psi}{\alpha^{5/11}\cdot\gamma^{6/11}}; \\ E_{\mu\Psi} = \frac{F_\Psi\cdot\beta_\Psi}{\alpha_\mu\cdot\beta_\gamma^{46/5}} = F_\Psi\cdot\beta_\Psi\cdot10^{350.2688602}\,\text{erg}; \end{cases}$$

$\mathbf{2\pi\cdot\beta_\Psi}$ → elementary particles: $F_\Psi = 1$; $\beta_\Psi = \frac{0.019549483}{\mathbb{N}_{\gamma\Psi}^{284/305}}$; $\mathbb{N}_{\gamma\Psi} = \{1 \div 26\}$;

$$\mathbf{r_\mu = 8.407509174\cdot10^{-97}\cdot\mathbb{N}_{\gamma\Psi}^{589/610}}\,\text{см};\quad \mathbf{E_{\mu\Psi}} = \frac{\mathbf{3.630742927\cdot10^{348}}}{\mathbb{N}_{\gamma\Psi}^{284/305}}\,\text{erg};$$

$\mathbf{2\pi\gamma\cdot\beta_\Psi}$ → elementary particles: $F_\Psi = \gamma$; $\beta_\Psi = \frac{9.588602675}{\mathbb{N}_{\gamma\Psi}^{284/145}}$; $\mathbb{N}_{\gamma\Psi} = \{24 \div 112\}$;

$$\mathbf{r_\mu = 3.683218042\cdot10^{-98}\cdot\mathbb{N}_{\gamma\Psi}^{429/290}}\,\text{см};\quad \boldsymbol{E_{\mu\Psi}} = \frac{\mathbf{1.83546201\cdot10^{351}}}{\mathbb{N}_{\gamma\Psi}^{284/145}}\,\text{erg};$$

$\mathbf{2\pi\alpha\cdot\beta_\Psi}$ → elementary particles: $F_\Psi = \alpha$; $\beta_\Psi = \frac{2.243536006}{\mathbb{N}_{\gamma\Psi}^{284/145}}$; $\mathbb{N}_{\gamma\Psi} = \{88 \div 3100\}$;

$$\mathbf{r_\mu = 2.697096429\cdot10^{-98}\cdot\mathbb{N}_{\gamma\Psi}^{429/290}}\,\text{см};\quad \mathbf{E_{\mu\Psi}} = \frac{\mathbf{1.212453803\cdot10^{351}}}{\mathbb{N}_{\gamma\Psi}^{284/145}}\,\text{erg};$$

$\mathbf{2\pi\sigma\cdot\beta_\Psi}$ → elementary particles: $F_\Psi = \sigma$; $\beta_\Psi = \frac{0.157090337}{\mathbb{N}_{\gamma\Psi}^{101/40}}$; $\mathbb{N}_{\gamma\Psi} = \{179 \div 3100\}$;

$$\mathbf{r_\mu = 7.60880662\cdot10^{-98}\cdot\mathbb{N}_{\gamma\Psi}^{141/80}}\,\text{см};\quad \mathbf{E_{\mu\Psi}} = \frac{\mathbf{1.137243334\cdot10^{350}}}{\mathbb{N}_{\gamma\Psi}^{101/40}}\,\text{erg};$$

$\mathbf{2\pi_\gamma\beta_\Psi}$ → elementary particles: $F_\Psi = \alpha_\mu = \frac{\pi_\gamma}{\pi}$; $\beta_\Psi = \frac{4.293016746 \cdot 10^{-4}}{\mathbb{N}_{\gamma\Psi}^{101/40}}$; $\mathbb{N}_{\gamma\Psi} = \{300 \div 3100\}$

$$\mathbf{r_\mu = 3.660666767 \cdot 10^{-91} \cdot \mathbb{N}_{\gamma\Psi}^{141/80}}\ \text{см}\ ; \quad \mathbf{E_{\mu\Psi} = \frac{1.235709257 \cdot 10^{342}}{\mathbb{N}_{\gamma\Psi}^{101/40}}}\ \text{erg}\ ;$$