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NEWTON’S ETHER AS ORIGIN OF  
QUANTUM PHYSIC LAWS  
IN THE MIDST OF LORENTC ETHER

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1. Density of Newton’s ether

Device of Eric Layzewait is also a devise like gyroscope.

The second heuristic statement (hypothesis), discovered by you, is that air-balloon lifts up in air (up to definite height) under influence of gravity. Role of air in antigravity phenomena make gravity ether, as component of spectral density Universe .The formula of the low of gravity, written for two mass, evidence it is since:

$$F_G = G \times (m / r)^2 \text{ dyn} \quad (1)$$

Determining gravity constant from this formula and knowing its size,

we can get a formula, in which there will be a density  $\rho_G$  of gravity matter:

$$\begin{aligned} \rho_G &= s^2 \cdot G^{-1} = \\ &= 1.4985763 \times 10^7 \text{ g} \cdot \text{cm}^{-3} \end{aligned} \quad (2)$$

Fundamental constant

$$\begin{aligned} G &= F_G \cdot r^2 \cdot m^{-2} = \\ &= \rho_G^{-1} \cdot s^{-2} = \\ &= 6.673 \cdot 10^{-8} \text{ cm}^3 \cdot \text{g}^{-1} \cdot \text{s}^{-2} \end{aligned} \quad (3)$$

contains density  $\rho_G$  and fundamental invariant [1]:

$$\mathbf{F} = \mathbf{x}^2 - \mathbf{c}^2 \mathbf{t}^2 \quad (4)$$

in following form :

$$\mathbf{s}^2 = (\mathbf{r}^2 - \mathbf{F}) / \mathbf{c}^2 = \mathbf{t}^2 \quad (5)$$

If length  $\mathbf{x} = \mathbf{r}$  , and time  $\mathbf{t} = 1 \mathbf{s}$  then :

$$\mathbf{F} = \mathbf{r}^2 - \mathbf{c}^2 \mathbf{t}^2 \quad (6)$$

And

$$\mathbf{t}^2 = (\mathbf{r}^2 - \mathbf{F}) / \mathbf{c}^2 = \mathbf{s}^2 \quad (7)$$

Consequently:

$$\begin{aligned} \rho_G &= \mathbf{s}^2 \cdot \mathbf{G}^{-1} = \\ &= 1.4985763 \cdot 10^7 \text{ g} \cdot \text{cm}^{-3} \end{aligned} \quad (8)$$

From this formula comes definition of property of density  
for gravity

matter (gravity ether):

If

$$\mathbf{V}_{\text{nuc}} \approx 10^{-38} \text{ cm}^3 \quad (9)$$

volume of nucleon and

$$\rho_{\text{nuc}} \approx 10^{14} \text{ g} / \text{cm}^3 \quad (10)$$

density of nucleon, then :

$$(\mathbf{V}_{\text{nuc}} \cdot \rho_{\text{nuc}}) \gg (\mathbf{V}_{\text{nuc}} \cdot \rho_G) \quad (11)$$

Masse of nucleon

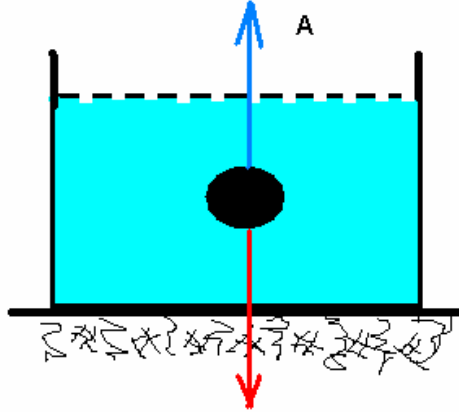
$$\mathbf{m}_{\text{nuc}} = (\mathbf{V}_{\text{nuc}} \cdot \rho_{\text{nuc}}) \quad (12)$$

in ether freely go down !!

If

$$A = V_{\text{nuc}} \cdot \rho_G \approx 1.5 \times 10^{-31} \text{ dyn} \quad (13)$$

of Arhimed force , then



Here:

$$F_g = m \cdot g \approx$$

$$\approx 1.67 \cdot 10^{-24} \text{ g} \cdot 981 \text{ cm} \cdot \text{s}^{-2} \approx$$

$$\approx 1.6 \cdot 10^{-21} \text{ dyn} \quad (14)$$

$$\left[ F_g \gg A \right] \quad (15)$$

**IT IS LAW OF ARHYMED**

## 2. Spectrum quantum density vacuum of Universe (Hypothesis)

Academikal Seldovich Y.B. [3] determined density vacuum  
of Universe as:

$$|\rho_{\text{vac}}| < 10^{-29} \text{ g} \cdot \text{cm}^{-3} \quad (16)$$

$$\text{and as : } \rho_{\text{vac}} = m_p \cdot \left( \frac{m_p c}{h} \right)^3 = 7.2491653 \cdot 10^{14} \text{ g} \cdot \text{cm}^{-3} \quad (17)$$

$$\text{Here } m = 1.6726485 \cdot 10^{-24} \text{ g proton's masse and} \quad (17)$$

$$h / m_p c = 1.321414 \cdot 10^{-13} \text{ cm} \quad (18)$$

proton's radius.

Be on hand remarkable, but uncertainty fact sent Seldovich.  
This remarkable, but uncertainty fact have corroboration in astrophysics

Author [4] sent: density nuclear matter have following quantity:

$$\rho_{\text{nucl}} \approx 3.7 \cdot 10^{14} \text{ g} \cdot \text{cm}^{-3} \quad (19)$$

According [3] it is density of vacuum space, Fred Hoyle [5] set a question: Why quantity all forms of energy – cosmic rays, starlight and magnetic field of Universe– state in space:

$$\tilde{\omega}_{\text{br}} = 10^{-12} \text{ erg} \cdot \text{cm}^{-3} \quad (20)$$

according:

$$\tilde{\rho}_{\text{br}} = \tilde{\omega}_{\text{br}} \cdot c^{-2} \approx 1.11 \cdot 10^{-33} \text{ g} \cdot \text{cm}^{-3} \quad (21)$$

It is remarkable, but uncertainty fact  
According [6] density of Metagalaxi:

$$\rho_{\text{G}} = 7 \cdot 10^{-30} \text{ g} \cdot \text{cm}^{-3} \quad (22)$$

According [3] it is about density vacuum of Universe.  
At last, Penzias Arno A. [7], and Wilson Robert W. [8], Authors [7] and [8] discover The Cosmic Microwave Background Radiation which have density of thermal energy for  $T_{\text{br}} = 3.2 \pm 1 \text{ K}$  :

$$\begin{aligned} U_{\text{br}} &= 4 \cdot \frac{\sigma}{c} \cdot T_{\text{br}}^4 \cdot n^3 \approx \\ &\approx (2.35 \cdot 10^{-12} \div 1.47 \cdot 10^{-13}) \text{ erg} \cdot \text{cm}^{-3} \end{aligned} \quad (23)$$

according density of quasigas structure rays:

$$\rho_{\text{br}} = \frac{U_{\text{br}}}{c^2} \approx (2.618 \cdot 10^{-33} \div 1.636 \cdot 10^{-34}) \text{ g} \cdot \text{cm}^{-3} \quad (24)$$

and quasiparticles rays :

$$\mu_{\text{br}} \approx \rho_{\text{br}} / L \approx (9.746 \cdot 10^{-53} \div 6.091 \cdot 10^{-54}) \text{ g} \quad (25)$$

according – mols of quasigas structure rays as ideal gas :

$$m_{\text{br}} \approx \mu_{\text{br}} \cdot N_{\text{A}} \approx (5.891 \cdot 10^{-29} \div 3.682 \cdot 10^{-30}) \text{ g} \cdot \text{mol}^{-1} \quad (26)$$

Here:  $L = 2.687 \cdot 10^{19} \text{ cm}^{-3}$  Loshmidt's number and

$$\begin{aligned} N_{\text{A}} &= (2 \cdot X \cdot Y \cdot Z)^{16} / 2 = \\ &= 2^{79} = 6.0446291 \cdot 10^{23} \text{ mol}^{-1} \end{aligned} \quad (27)$$

fundamental Avogadro's number, if

$$x = 32 / 18 = 1.77777777 \quad (28)$$

$$y = 18 / 8 = 2.25 \quad (29)$$

$$z = 8 / 2 = 4 \quad (30)$$

relation of quantity electrons:

$$32m_e, 18m_e, 8m_e, 2m_e \quad (31)$$

in electrons layer N,M,L,K of complicated atoms.  
A new remarkable, but uncertainty fact, see (21) and (24):

$$\rho_{br} \approx 2 \tilde{\rho}_{br} \approx \text{Const} \quad (32)$$

Author [9] Louis Michel sent:

«For readers - mathematical.

We shall study the quantum phenomena in atoms physics,  
in nuclear physics and in physics of elementary particles.

The key number which has come from macroarea,  
here will be Avogadro number  $N_A$  .»

We increase all diapason density of vacuum as spectrum Sp based  
on stretch number  $N_A$  and on Planck's density.

$$\text{Sp } \rho^* = \rho^* \cdot \lambda \quad (33)$$

Here, according [10]:

$$\rho^* = M^* \cdot L^{*-3} = c^5 \cdot \hbar^{-1} \cdot G^{-2} = 5.157 \cdot 10^{93} \text{ g} \cdot \text{cm}^{-3} \quad (34)$$

Planck's density and

$$\lambda = 1/2^0 + 1/2^1 + 1/2^2 + \dots + 1/2^\alpha + \dots + 1/2^{N_A} + \dots \quad (35)$$

spectrum invariant. It is series of rational numbers. Number 2 serve as  
a criterion for evenness and twoness to all object micro- and macrocosm.

### Example №1.

$$\text{If } 2^{262} = 7.4106937 \cdot 10^{78}, \text{ then} \quad (36)$$

$$\rho_{262} = \rho^* / 2^{262} = 6.9588627 \cdot 10^{14} \text{ g} \cdot \text{cm}^{-3} \quad (37)$$

It is analogue for (13):

$$\rho_{\text{vac}} = m_p \cdot \left( \frac{m_p c}{h} \right)^3 = 7.2491653 \cdot 10^{14} \text{ g} \cdot \text{cm}^{-3} \approx \quad (38)$$

$$\approx \rho_{262} = 6.9588627 \cdot 10^{14} \text{ g} \cdot \text{cm}^{-3}$$

### Example № 2:

$$\text{if } 2^{424} = 2^{212} \cdot 2^{212} \text{ then} \quad (39)$$

$$\rho_{424} = \rho^* / 2^{424} = 1.1903618 \cdot 10^{-34} \text{ g} \cdot \text{cm}^{-3} \quad (40)$$

It is component (19) :

$$\rho_{\text{br}} = \frac{U_{\text{br}}}{c^2} =$$

$$= \rho_{424} = \rho^* / 2^{424} = 1.1903618 \cdot 10^{-34} \text{ g} \cdot \text{cm}^{-3} \quad (41)$$

### Example № 3

Density of Newton's ether  
as fragment spectral density of Universe

$$\rho'_G = \rho^* \cdot 2\pi \cdot 2^{-290} =$$

$$= c^5 \cdot h^{-1} \cdot G^{-2} \cdot 2^{-290} =$$

$$= 1.6286739 \cdot 10^7 \text{ g} \cdot \text{cm}^{-3} \quad (42)$$

mistake relative to determination (2) :

$$\Delta = \frac{\rho'_G - \rho_G}{\rho_G} \cdot 100 = 8.666... \% \quad (43)$$

## FORMULA OF DISCOVERY # OT – 11 681

By means of analysis and generalization of theoretical and experimental data on radiations oscillators and matter oscillators the unknown phenomenon of formation of mass-energies of quiescent photons was stated:

$$\begin{aligned}\mu_o &= 3 \cdot \mu_{\text{оя}} \approx 7.84 \cdot 10^{-48} \text{ g} \\ 7.2 \cdot 10^{-49} \text{ g} &\leq \mu_{\text{оя}} \leq 10^{-47} \text{ g} \\ \text{when} \quad 2.1 \text{ K} &\leq T_{\text{br}} \leq 4.1 \text{ K}\end{aligned}$$

consists in the fact that at extreme temperature conditions of the star photo-spheres at the peaks of spectral density, when  $h\nu \approx 5 kT_{\otimes}$ , waves-particles (radiations oscillators) are transformed into particles-waves (matter oscillators) with mass-energy:

$$\mu_o^* \approx 5 kT_{\otimes} / c^2 \approx 5.9 \cdot 10^{-33} \text{ g}$$

reducing up to mass-energy of relative quiescent state:

$$\mu_o = 3 \mu_{\text{оя}} = 7.84 \cdot 10^{-48} \text{ g}$$

in the result of aero-hydrodynamic inhibition in background material environment of the universe and reduction of the absolute temperature of the thermostat from

$$T_{\otimes} \approx 6000 \text{ K} \quad \text{star photo-spheres up to} \quad T_{\text{br}} \approx 3 \text{ K}$$

of the background material environment of the space microwave background radiation, in the view of which the cold gas with isotropic density is formed in the universe:

$$\rho = \mu_{\text{оя}} \cdot L \approx 7 \cdot 10^{-29} \text{ g/cm}^3$$

forming the dominating component of the concealed mass of the Universe.

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