

Correction to the Energy Formula

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See Unified Absolute Relativity Theory at:

www.wbabin.net/saraiva/saraiva105.pdf
www.wbabin.net/saraiva/saraiva223.pdf
www.wbabin.net/saraiva/saraiva282.pdf

We have used this formula for the energy:

$$E = mcw = \frac{hcf}{w} \quad \Leftrightarrow \quad m = \frac{hf}{w^2}$$

But we have problems with the energies of the neutral particles.
To solve that problem we now must use this one:

$$E = mc^2 = \frac{hc^2 f}{w^2} \quad \Leftrightarrow \quad m = \frac{hf}{w^2}$$

The Einstein's formula is correct and universal.

E – Energy; m – Mass; c – Light speed; w – Wave speed;

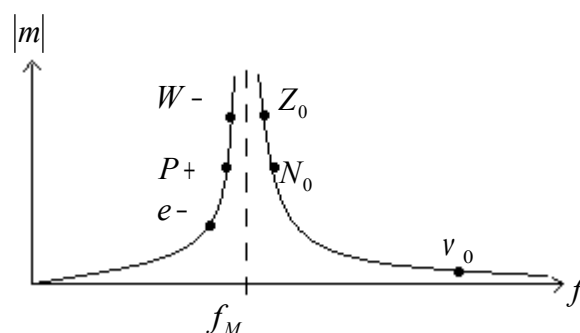
$$w = \sqrt{c^2 - Sf^2}$$

h – Planck's constant; f – Compton frequency;

S – Saraiva's constant; $S = 1.9 \times 10^{-34} m^2$

$i\sqrt{S}$ - Wavelength of the neutrino.

There are positive and negative frequencies and masses:



Compton frequency:

$$f = \frac{-h \pm \sqrt{h^2 + 4Sm^2c^2}}{2mS}$$

+ -- Charged particles; - -- Neutral particles.

Macro mass gravity

The Compton frequency of the matter is a constant:

$$f_M = \frac{c}{\sqrt{S}} = 2.1672 \times 10^{25} \text{ Hz}$$

Mass:

$$m = \frac{hf_M}{w^2} ; \quad w = 1 \quad \Leftrightarrow \quad \text{Planck mass}$$

Earth wave speed:

$$w_E = 4.9 \times 10^{-17} \text{ m/s}$$

Group speed:

$$V_E = \frac{c^2}{w_E} = 1.84 \times 10^{33} \text{ m/s}$$

Speed of the gravity:

$$V_G = 7.5 \times 10^{20} \sqrt{m}$$

For the universe:

$$m = 1 \times 10^{53} \text{ kg} \quad \Leftrightarrow \quad V_{GU} = 2.37 \times 10^{47} \text{ m/s}$$

We feel the centre of the universe with a delay of: $5.5 \times 10^{-22} \text{ s}$

Cross section of the Earth graviton (a photon):

$$x^2 = 5.1 \times 10^{-84} \text{ m}^2$$

It's almost impossible to stop gravity. But we can get matter with zero mass.

Geodetic effect calculation

Distance of the satellite from the centre of the earth:

$$R = 7.05 \times 10^6 m$$

Speed of rotation of the gravitational field:

$$v = \frac{2\pi R}{24h} = 512.7 m/s$$

The light speed is variable:

$$\frac{\Delta w}{\Delta w_0} = \frac{c + v}{c - v} = 1 + 3.42 \times 10^{-6}$$

$$\alpha_T = 2\pi + 2\pi \cdot 3.42 \times 10^{-6} / year$$

$$\Delta \alpha = 2.15 \times 10^{-5} rad / year \quad \Leftrightarrow \quad \Delta \alpha = \frac{4\pi \cdot v}{c}$$

Measured value from gravity probe B:

$$\Delta \alpha = 3.2 \times 10^{-5} rad / year$$