

# The new permeability of vacuum variable.

A new vision of the Universe

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José Luís Pereira Rebelo Fernandes

<http://rebelofernandes.com>

[Rebelofernandes@sapo.pt](mailto:Rebelofernandes@sapo.pt)

To my dearest mother.

To the sweet memory of my father.

When creating a new theory of universal gravitation, where the universal constant gravitation is substituted by the variable universal gravitation variable, I felt me obliged to look at for the electromagnetic field, to analyze it to the light of new concepts, its nature.

It is in this direction that I elaborate this study.

## Intro:

### 1-The arousal of the gravitational variable and its implications.

The new concept of gravitational variable, raise new questions about the structure of the universe and its development. Some of the issues raised in the previous article “The new gravitational variable. A new vision of the Universe”, will now be examined, taking into account the new model of the universe and even quantum mechanics. <br>These issues will now be reviewed against the new concept of variable gravity, ie a factor inversely proportional to the energy density universal potential at the site.

$$\frac{G_1}{G_0} = \frac{\rho_0}{\rho_1}$$

If a reference 1, is moving at speed V, in relation to the reference:

$$\frac{G_1}{G_0} = \frac{\rho_0}{\rho_1} \frac{C^2 - V^2}{C^2}$$

$$\frac{G_1}{G_0} = \frac{\rho_0}{\rho_1} \frac{t_1^2}{t_0^2}$$

$$\frac{G_1}{G_0} = \frac{\rho_0}{\rho_1} \frac{1}{\frac{t_0^2}{t_1^2}}$$

$$\frac{G_1}{G_0} = \frac{\rho_{00}}{\rho_{1V}}$$

The variable is inversely proportional to the density of potential energy across the frame.

### **The magnetic permeability of vacuum.**

The radiation mass of the universal matter, generating universal density of potential energy, should have electromagnetic characteristic, because we know that the radiation in nature, crepuscular, and electromagnetic?

As the universal density of potential energy controls the local pure radiation of matters, through the gravitational permeability of vacuum, is this universal density of potential energy that will control the radiation of pure radiation of the electric charges. The transport capacity of the electrical radiation by the universal density of potential energy, the magnetic permeability of vacuum, should be dependent on that energy density potential.

As a higher universal density of potential energy, has a lower transport capacity of gravitational radiation, a higher universal density of potential energy it will also have a lower carrying capacity of electrical radiation, because we always speak of energy transport.

$$U_o = F(G)$$

The magnetic permeability of vacuum should be based on the gravitational variable.

$$U_o = F(Gk)$$

The magnetic permeability of vacuum should be a function of gravitational permeability of vacuum.

The lower the universal density of potential energy at local, the greater will be G and the magnetic permeability of vacuum.

The potential is given by:

$$U = \frac{C^2 U_o Q}{4 \pi R}$$

As G is given by:

$$G = \frac{C^2}{2 \frac{Mu}{Ru}}$$

$$U_o = K \frac{C^2}{2 \rho_u}$$

As G is inversely proportional to the universal radius:

$$U_{e_1} = U_{e_o} \frac{R_1}{R_o} - \text{Locally and generally.}$$

### **The impact of the universal density of potential energy in the magnetic permeability of vacuum variable value.**

As seen previously, the magnetic permeability of vacuum increases with the increase of the universe's radius which implies, that the increase of the magnetic permeability of vacuum happens with the growth of the universe.

The energy that varies linearly with the radius of the universe is the universal density of potential energy.

Because universal density of potential energy decreases with the increase of the universe's radius, only one entity inversely proportional to that potential will increase the value of the magnetic permeability of vacuum.

Because the universal density of potential energy, is not equal in all points of the universe, then magnetic permeability of vacuum will not be as well.

**Now, the new fundamental lines of the new theory are defined.**

José Luís Pereira Rebelo Fernandes

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