The velocity of the photons

"Quantum foam"

It is well known that the most energetic photons moving to a slower than less energetic photons.

It is the search for an answer to why this article.

Introduction

Let's start with a syllogism.

Today we know that light, the photons of different energies propagate at different speeds.

We also know that the energy of matter depends on the speed C that is constant for all masses.

The speed of light, which is the photon, is not the same for all photons, so the speed of light is not constant.

If the speed of light is not constant for all photons, then the speed of light is not C because it is constant.

The velocity C

As we see below C is the speed of propagation of the radiation mass mC^2 and C is the speed involved in the energy of mass.

The light, or photons, by their nature twilight should travel at speeds slightly less than C, because if it were otherwise, they would only energy, and lose their crepuscular nature.

Experience has proved the different speeds at moving photons, a phenomenon known generically as "quantum foam".

Speed C is therefore the maximum speed allowed in the universe, in any direction.

Therefore, we are faced with a maximum universal escape potential.

As ρ_u- density potential energy at our local.

$$C^2 = 2\ G\ \rho_u$$

It is this potential that generates the energy of matter.

$$mC^2 = 2\ G\ m\ \rho_u$$

Photons

Photons we have the same principle.

On the surface the photon we find:

ρ_u - The density of potential energy of the local where the photon moves.

ρ_f - The energy density generated by photon.

The density of potential energy surface of the photon is given by:

$$\rho_o = \rho_u + \rho_f$$

$$mC^2 = 2\ G\ m\ \rho_o$$

But $\rho_o > \rho_u$, although it is possible that the reference of the photon, it is not possible in our framework that should be ρ_u.

$$mC^2 = 2\ G\ m\ (\rho_u + \rho_f)$$

As such we undertake a redistribution of changing frames of reference not to violate the principles of our reference:

$$\rho_u = (\rho_u + \rho_f)\frac{\rho_u}{\rho_u + \rho_f}$$

$$mC^2 = 2\ G\ m\ (\rho_u + \rho_f)\frac{\rho_u}{\rho_u + \rho_f}$$

$$C^2 = 2\ G\ \rho_u \frac{\rho_u}{\rho_u + \rho_f} + 2\ G\ \rho_f \frac{\rho_u}{\rho_u + \rho_f}$$

$$C^2 = C^2\ \frac{\rho_u}{\rho_u + \rho_f} + C^2\ \frac{\rho_f}{\rho_u + \rho_f}$$

There are therefore two parts of a different nature in the creation of photon energy.

$m\ C^2 \frac{\rho_u}{\rho_u + \rho_f}$ - The kinetic energy induced by the universal potential energy, causing the movement of photons, ie their energy of motion.

$m\ C^2 \frac{\rho_f}{\rho_u + \rho_f}$ – The intrinsic energy to photon energy density induced by the potential energy of the photon itself.

The motion of photons is generated solely by the density of potential energy in the universal local he goes through and not by its own potential energy.

We can then represent the photon energy in the form:

The kinetic energy of the photon is given by (mV^2).

$$mC^2 = m\ V^2 + 2\ G\ m\ \rho_f \frac{\rho_u}{\rho_u + \rho_f}$$

$$C^2 = C^2 \frac{\rho_u}{\rho_u + \rho_f} + C^2 \frac{\rho_f}{\rho_u + \rho_f}$$

$$C^2 = V^2 + C^2 \frac{\rho_f}{\rho_u + \rho_f}$$

The speed of displacement of the photon:

The speed of displacement of the photon is given by.

$$V^2 = C^2 - C^2 \frac{\rho_f}{\rho_u + \rho_f}$$

$$\mathrm{V} = C\sqrt{1 - \frac{\rho_f}{\rho_u + \rho_f}}$$

$$\mathrm{V} = C\sqrt{\frac{\rho_u}{\rho_u + \rho_f}}$$

The variation of the speed of photons for C (dV), is given by

$$dV^2 = C^2 – (C^2 - C^2 \frac{\rho_f}{\rho_u + \rho_f})$$

$$dV^2 = C\sqrt{\frac{\rho_f}{\rho_u + \rho_f}}$$

The value of the speed deviation of the photon for C is the escape potential of the photon itself.

$$C^2 = V^2 + dV^2$$

Now, we know the speed of photons.

Increased energy density of photons ($\frac{m}{\mathrm{r}}$), lead to a slower velocity photons.

Actually C is the speed of propagation of radiation mass ($\frac{m}{r}$) and not the speed of propagation of photons.

Photons of very low energy move very close to the speed C.

Energy of particles

As we said before the energy of particles, such as the photon, is given by:

ρ_m - Density of potential energy of matter.

$$mC^2 = 2\ G\ m\ \rho_u \frac{\rho_u}{\rho_u + \rho_m} + 2\ G\ m\ \rho_m \frac{\rho_u}{\rho_u + \rho_m}$$

$$mC^2 = mC^2 \frac{\rho_u}{\rho_u + \rho_m} + mC^2 \frac{\rho_m}{\rho_u + \rho_m}$$

That is the energy of matter is made up of two portions of different nature.

- $mC^2 \frac{\rho_u}{\rho_u + \rho_m}$ The potential kinetic energy given by the density of potential energy universal.

- $mC^2 \frac{\rho_m}{\rho_u + \rho_m}$ The intrinsic energy to matter itself

These are the readings on our referential.

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