

Mass of the Monopole and the Graviton II

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Introduction -- This paper is a correction to the paper “ Masses of the graviton, monopole and neutrino “.

Mass and Charge of the Monopole

According to the first paper:

$$q_m \cdot q_e = 5.47155683 \times 10^{-34} \quad (h = 6.6260693 \times 10^{-34})$$

q_m -- magnetic charge ; q_e -- electric charge ; h -- Planck's constant

As we know the magnetic flux quantum is given by:

$$\Phi_0 = \frac{h}{2 \cdot q_e}$$

So we tried to find solutions to the constants k and ν for $q_m = \Phi_0$ and $q_m = 2\Phi_0$ (note that the magnetic charge has the unities Wb – Weber, the same as the magnetic flux)

After a long process of judgement of the consequences of the several solutions we found one with a ν less than the light speed (that solves a lot of problems with our theory). We have used as reference the electric force between electrons and the adopt formula $q_m = 2\Phi_0$:

$$\Leftrightarrow \quad k = 6.708145 \times 10^{-27} m^2 \quad ; \quad \nu = -1.640834 \times 10^6$$

As we expected the strong force appears with a value a little different from the force between two protons, because the strong force is an average force between several particles including neutrons:

$$\text{Strong force -- } F_s = 1.81012106 \times 10^4$$

$$\text{Force between two protons -- } F_{pp} = 1.61811935 \times 10^4$$

We have a problem with the weak force that appears much greater than the classical value. But the truth is that no one knows the value of that force. According to our calculations the weak force has almost the same strength of the magnetic force between

monopoles and the mass of the monopole is almost equal to the mass of the neutral boson Z_0 .

Mass of the monopole -- $m_0 = 3.00316443 \times 10^{-25} \text{ kg}$

Wavelength “ -- $x_0 = 7.76370337 \times 10^{-16} \text{ m}$

Real reference speed -- $V_0 = 2.84189435 \times 10^6 \text{ ms}^{-1}$

Mass of the Z_0 boson -- $m_0 \approx 1.4 \times 10^{-25} \text{ kg}$

Mass of the Graviton

$$m_0 = 7.88287342 \times 10^{-13} ; \quad w_0 = 1.75406407$$

Speed of the Gravitational Force

$$V = c^2 / w_0 \quad \Leftrightarrow \quad V = 5.124 \times 10^{16} \text{ ms}^{-1}$$

$$V = 1.7 \times 10^8 . c \quad (\text{c} - \text{light speed})$$