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Proof of the Existence of the Constant S

António Saraiva – 2009-12-30
ajps2@hotmail.com

See Unified Absolute Relativity Theory at:

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

$$S = c^2t^2 - x^2 \quad ; \qquad S = \frac{\pi . x_e^{\,2}}{2\alpha^{-5}} = 1.9 \times 10^{-34} m^2$$

x_e - Electron's Compton wavelength; α - Fine structure constant

$i\sqrt{S}$ = Compton wavelength of the neutrino

Magnetic dipole moment of the neutrino:

$$MDM = q_m \sqrt{S} = 3 \times 10^{-9} \mu_B$$

$q_m = \frac{h}{2q_e}$ = Magnetic charge (magnetic flux quantum); μ_B = Bohr magneton

Experimental value:

$$MDM = (2 \pm 4.8) \times 10^{-10} \mu_B$$

Charge radius:

$$R = \frac{\sqrt{S}}{2\pi} = 2.2 \times 10^{-18} m$$

Experimental value:

$$R = (1 \pm 1.6) \times 10^{-18} m$$

Force between a monopole (a neutrino) and a magnetic field:

$$F = \frac{B.q_m}{\mu_0} = m_\nu a$$

F – Force; B – Magnetic field; q_m - Magnetic charge of the neutrino
μ_0 - Vacuum permeability; m_ν - Neutrino mass; a – Acceleration

$$q_m = 2.068 \times 10^{-15} Weber\,; \qquad m_\nu = 2.2 \times 10^{-36} kg$$