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The Signs of Mass

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See the Unified Absolute Relativity Theory at:

www.wbabin.net/saraiva/saraiva305.pdf
www.wbabin.net/saraiva/saraiva306.pdf
www.wbabin.net/saraiva/saraiva307.pdf

Mass is a vector that can be positive, negative and imaginary.
The macroscopic mass is imaginary (i).

$$\text{Force} \begin{cases} + \;..\text{Re}\; pulsion \\ - \;..Atraction \end{cases}$$

General formula of mass:

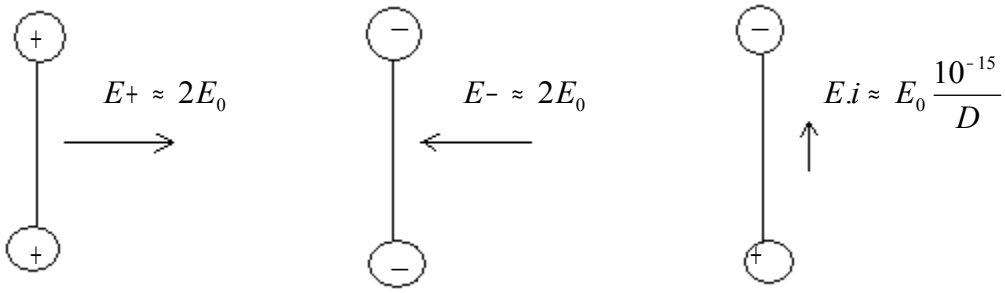
$$m = \frac{\sqrt{q_1}\sqrt{q_2}.k_B}{d}$$

m – Mass; q – Electric charge; k_B -- Boltzmann constant; d – Distance between poles.

q1	q2	m
+	+	+
-	-	-
+	-	i

Electric fields of the dipoles:

positive..dipole *negative..dipole* *neutral..dipole*



The neutral dipole has an electric field much lower than the positive and negative dipoles, what explains the weakness of gravity.

$E = q / L^3$; $m = E.q / a$; a – Acceleration

The forces:

$$F = G\frac{m_1.m_2}{D^2}$$

m1	m2	F
+	+	+
+	-	-
i	i	-
i	+	+ i
-	-	+

Imaginary forces are orthogonal.
A ship with positive or negative mass is not attracted by the earth.
A Cooper pair capacitor generates negative mass.

Magnetic charges also generate mass:

$$m = q_m^{\,2} \; ; \qquad m = \frac{q_e.q_m}{LV}$$

A possible wave equation

Magnetic field:

$$B = B_0 \sin\left(\frac{4\pi^{\,2}S}{x^2}\right) \qquad \text{and} \qquad S = (ct - x)(ct + x) = 1.9 \times 10^{-34} m^2$$

Electric field:

$$E = E_0 \cos\left(\frac{4\pi^{\,2}S}{x^2}\right)$$

$$\frac{dB}{dx} = B_0 \cos\left(\frac{4\pi^{\,2}S}{x^2}\right) 4\pi^{\,2}S\frac{-2}{x^3}$$

$$x^2 = c^2t^2 - S \qquad \Leftrightarrow$$

$$\Leftrightarrow \qquad B = B_0 \sin\left(\frac{4\pi^2 S}{c^2 t^2 - S} \right)$$

$$\frac{dB}{dt} = B_0 \cos\left(\frac{4\pi^2 S}{x^2} \right) 4\pi^2 S \frac{-2c^2 t}{x^4}$$

$$\Leftrightarrow \qquad \frac{dB}{dt} = \frac{c^2}{w} \frac{dB}{dx} \qquad \text{and} \qquad w = \frac{x}{t}$$

$$\frac{dE}{dt} = \frac{c^2}{w} \frac{dE}{dx} \qquad \text{and} \qquad \frac{c^2}{w} = \text{Group speed}$$