

**The Neutrino is the Monopole**

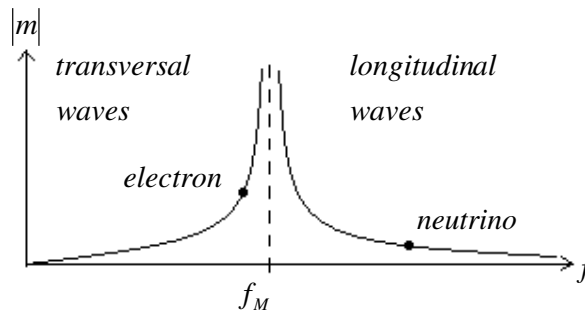
António Saraiva – 2000-08-07  
[ajps2@hotmail.com](mailto:ajps2@hotmail.com)

See Unified Absolute Relativity Theory at:

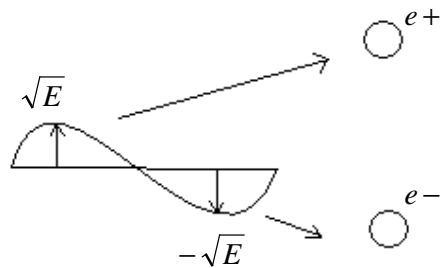
<http://www.wbabin.net/saraiva/saraiva105.pdf>

<http://www.wbabin.net/saraiva/saraiva223.pdf>

Mass of the waves:



Electron and positron:



Energy:

$$E_0 = \frac{hf}{2} = \frac{1}{2}mc^2 \quad ( E_0 = \frac{hcf}{2w} = \frac{1}{2}mcw \dots; \dots w = \sqrt{c^2 - Sf^2} )$$

Total energy:

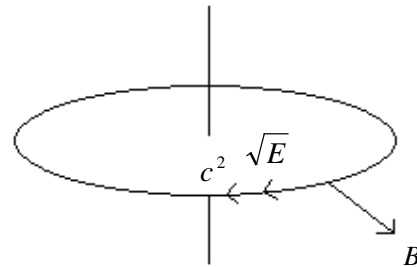
$$E = E_{kinetic} + E_{potential}$$

$$E = \frac{1}{2}mc^2 + \frac{m}{2}Ra \quad ; \quad R = \frac{x}{2\pi} \quad ; \quad a = \frac{c^2}{R}$$

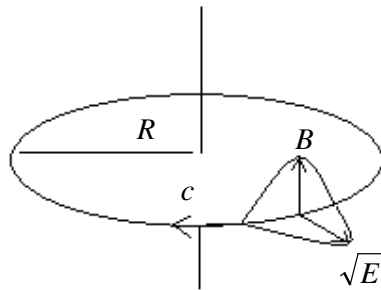
The wave has only kinetic energy  
The particles have also potential energy.

A particle is a rotating half wave.

*Neutrino = monopole*



*Electron*



Magnetic and unified forces:

$$F = \frac{q_m^2}{\mu_0 R^2} = \frac{Shf4}{c^2 w} \quad \Leftrightarrow \quad \frac{h\pi^2}{q_e^2 \mu_0} = \frac{Scx}{(S+x^2)^{3/2}}$$

$$\Leftrightarrow \quad x = i\sqrt{S} = i1.38 \times 10^{-17} m$$

True magnetic dipole moment of the neutrino

$$MDM = q_m \sqrt{S} = 2.86 \times 10^{-32} \text{ Weber-meter}$$

Electric dipole moment of the neutrino

$$EDM = 5.33 \times 10^{-34} kg$$

The electron and the neutrino are made of light. All matter is made of light.

Neutrino wave speed:

$$w = c^2$$

Neutrino frequency:

$$f = \frac{c^2}{\sqrt{S}} = 6.5 \times 10^{33} \text{ Hz}$$

Mass:

$$m = \frac{h}{\sqrt{S}c^2} = 5.33 \times 10^{-34} \text{ kg}$$

Rest energy:

$$E = \frac{hc}{\sqrt{S}} = 89.6 \text{ GeV}$$

Electric and magnetic fields of the vacuum

$$E_0 \approx c^3 ; \quad B_0 \approx c^2$$

Magnetic charge of the neutrino:

$$q_m = \frac{h}{2q_e} \text{ -- The magnetic flux quantum (Weber)}$$

Magnetic current – The magnetic current is made of neutrinos.

$$I_M = \frac{\Delta Q_m}{\Delta t} \text{ ( Weber per second )}$$

$$I_M = V_E \text{ -- The magnetic current is an electric voltage}$$

Magnetic voltage:

$$V_M = I_E \text{ -- The magnetic voltage is equal to an electric current}$$

Electric and magnetic resistance

$$R_M = \frac{1}{R_E} = \text{Magnetic..vector..potential}$$

A superconductor has infinite magnetic resistance as we know.  
So in a superconductor the magnetic vector potential is also infinite.

## Lorentz's equations without light speed

Light speed is a local constant, it is variable in the universe. And the same for S.

$$c^2 = \frac{S + x_0^2}{t_0^2} = \frac{S + x^2}{t^2}$$

$$\begin{cases} x = \sqrt{S + x_0^2} \frac{x_0 + vt_0}{\sqrt{S + x_0^2 - v^2 t_0^2}} \\ t = \frac{t_0}{\sqrt{S + x_0^2}} \frac{S + x_0^2 + vx_0 t_0}{\sqrt{S + x_0^2 - v^2 t_0^2}} \end{cases}$$

$$x_0 = 0 \quad \Leftrightarrow$$

$$\Leftrightarrow \begin{cases} x = \frac{v\sqrt{S}}{\sqrt{c^2 - v^2}} \\ t = \frac{\sqrt{S}}{\sqrt{c^2 - v^2}} \end{cases}$$