

Gravitational Potential

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See Unified Absolute Relativity Theory at:

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

The gravitational potential is a squared orbital speed and is the same as an electric field.

$$\text{Electric field} = \text{Gravitational potential} = V^2$$

Electric field at the earth surface:

$$E = -\frac{GM}{R} = -6.67 \times 10^7$$

We don't feel the field because: $\frac{dE}{dx} \approx 0$

Schrodinger Equation

The wave function is a magnetic vector potential.

The waves of magnetic potential oscillate between two orthogonal fields of magnetic potential.

$$A = A_0 e^{-i(kx - \omega t)} ; \quad A_0 = \frac{x_e c}{2} = 3.6365 \times 10^{-4}$$

The reference magnetic potential is the quantum of circulation.

x_e -- Electron Compton wavelength; c -- Light speed.

Magnetic field:

$$B = \frac{dA}{dx}$$

Electric field:

$$E = -\frac{dA}{dt} ; \quad E = -\frac{dV_e}{dx}$$

V_e -- Electric potential

Static magnetic potential of an electric current:

$$A = \frac{\mu_0 I l}{4\pi R}$$

l – length; R – Distance; μ_0 -- Magnetic permeability; I – Electric current.

The magnetic potential has the direction of the electric current.