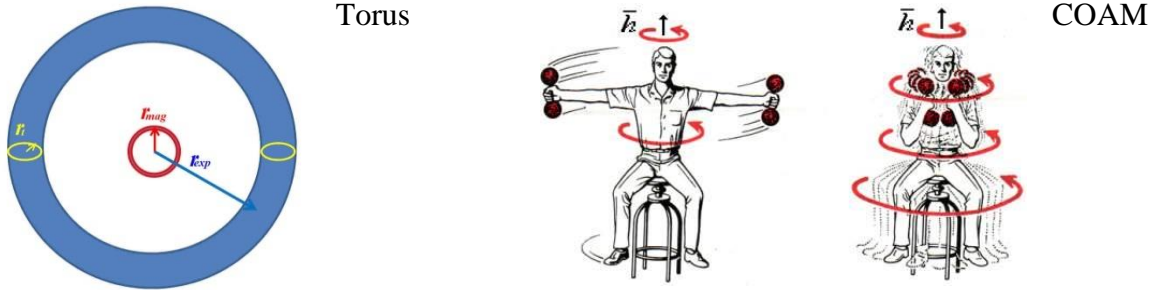


Fine Structure Constant!

Using Professor P.M. Kanarev's Electron Model and Theory

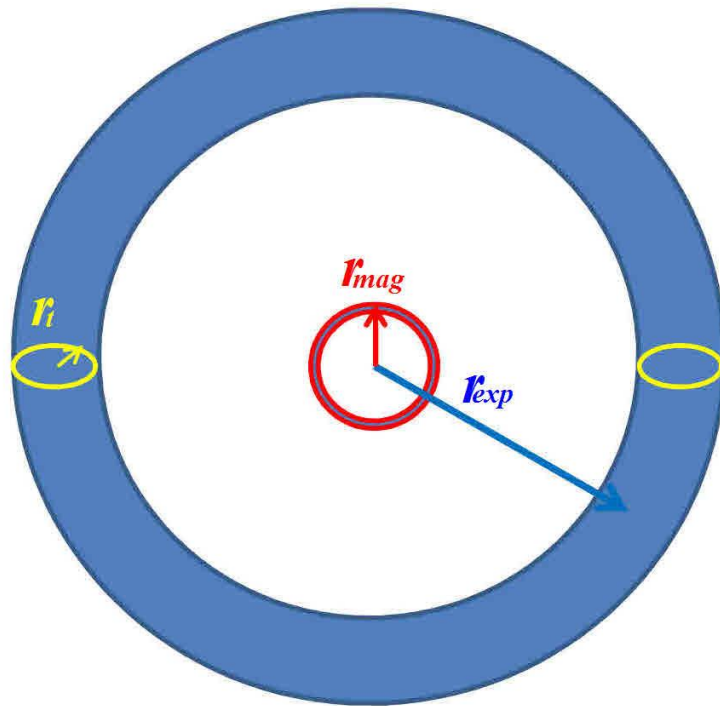
Jack Kuykendall English Translation and Rewrite with his interpretation of Professor Kanarev's Theories.

Professor Kanarev's model is based on the electron being a torus. The basic principle that governs an electron's behavior is the conservation of angular momentum (COAM).

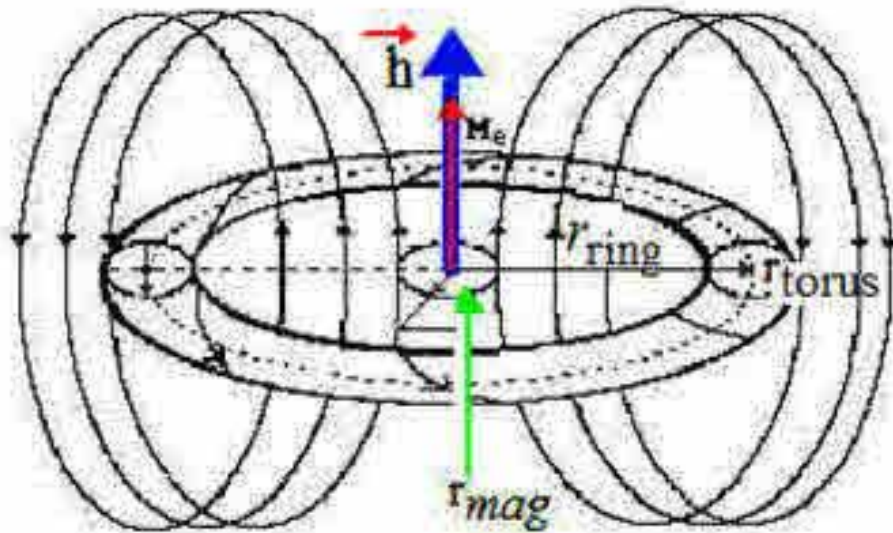
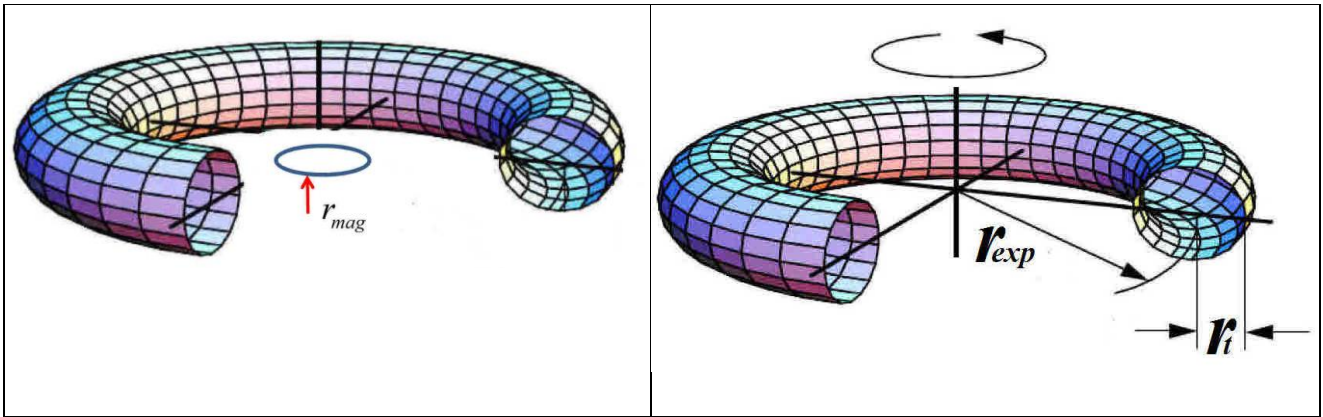


The only thing that exists is matter in motion relative to other matter in motion. A substance labeled **energy** does not exist and, therefore, cannot convert to mass. Anything that is measurable has mass. Photons have mass. Photons have been experimentally shown to be able to convert their mass into the mass of electrons and positrons. Photons with enough mass can convert to any particle with a lower mass.

$$E = mc^2 \quad (0.1)$$



Electron Torus Model



r_{mag} is the closest approach of the magnetic lines at the center of the torus

The circumference of (r_{mag}) divided by the radius of the electron is equal to the

FINE STRUCTURE CONSTANT

$$\left[\frac{2\pi r_{mag}}{r_{exp}} = \frac{(2)(3.142)(2.817 < 15m)}{2.426 < 12m} = 0.007297352568 = \alpha = \frac{1}{137.0359991} \approx \frac{1}{137.036} \right]$$

$$\frac{r_{exp}}{r_{mag}} = (2\pi)(137.036) \quad r_{exp} = (6.283185307)(137.0359991)(r_{mag}) = (861.0225761)(r_{mag})$$

$$\left[r_{exp} \approx 861 r_{mag} \quad r_{mag} \approx 0.00116 r_{exp} \right]$$

$$\left[r_{mag} = r_{classical} = 2.8179403227 < 15m \right] \text{codata}$$

Fine Structure Constant

The "classical radius of the electron:

$$\begin{array}{l}
 \text{HBCP 86}^{\text{th}} \text{ Edition} \\
 \text{Codata 2014}
 \end{array}
 \left[\begin{array}{l}
 r_{\text{classical}} = r_{\text{mag}} = 2.817940325(28) < 15m \\
 \alpha = 0.0072973525664(17) \\
 1/\alpha = 1/0.007297353 = 137.035999139(31) \approx 137.036
 \end{array} \right]$$

Kanarev's Questions and Answers:

308. Is there experimental evidences that an electron has the so-called classic radius of an electron?

A. No, experiments do not exist.

Page 95 Electrons-Protons-Neutrons JK ET and Rewrite

The handbook of Chemistry and Physics shows the "classical radius of the electron" as $(2.817 < 15m)$ Kanarev's theory shows this to be the radius of approach of the magnetic force lines around the torus ring of the electron (r_{mag}). This is confirmed by calculating the dimensionless fine structure constant (α) (which is equal to the circumference of the inner circle ($2\pi r_{\text{mag}}$) divided by the experimentally measured radius of the electron (R_{exp}).

$$\left[\frac{2\pi r_{\text{mag}}}{r_{\text{exp}}} = \frac{(2)(3.14)(2.817 < 15m)}{2.426 < 12m} = 0.007297352568 = \alpha = \frac{1}{137.036} \right] \quad (191)$$

$$\left[\begin{array}{l}
 r_{\text{exp}} = (2\pi)(137.036)(r_{\text{mag}}) = (2)(3.14)(137.036)(2.817 < 15m) \\
 = \underbrace{(2\pi)(\frac{1}{\alpha})}_{(861.0225818)} \underbrace{r_{\text{mag}}}_{(2.817 < 15m)} = \underbrace{r_{\text{exp}}}_{2.426 < 12m}
 \end{array} \right]$$

$$\left[\vec{h} = (M)(r_{\text{exp}}^2)(f) \right] \text{ Kanarev}$$

$$\left[r_{\text{exp}} = (2\pi)(137.036)r_{\text{mag}} \right]$$

$$\left[\frac{r_{\text{exp}}}{r_{\text{mag}}} = (2\pi)(137.036) \right]$$

$$\left[\alpha = \frac{e^2}{(4\pi)\epsilon_0 \hbar c} = \frac{\overbrace{e^2}^{\cancel{kg}}}{\underbrace{(\cancel{kg})}_{\epsilon_0} \underbrace{(\cancel{m^2})}_{\hbar} \underbrace{(1/\cancel{kg})}_{c} \underbrace{(\cancel{kg})}_{c}} = \text{all units cancel} \right]$$