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Exact Value of k

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Equalling the forces of the electron:

$$F = \frac{khf_e^{\,4}}{c^3} = \frac{q^2}{4\pi\varepsilon_0 R_e^{\,2}} \qquad \text{and} \qquad R_e = \frac{137^2 x_e}{\pi}$$

$$\Leftrightarrow \qquad k = \frac{q^2 x_e^{\,2}\pi}{4\varepsilon_0 hc137^4} \qquad \Leftrightarrow \qquad k = 1.91555918\times10^{-34}\, m^2$$

Exact mass of the proton:

Energy: $E = 1.50327736\times10^{-10}\, J$

$$m = \frac{E}{hc^3}\sqrt{kE^2 + h^2c^2} = 1.67271338\times10^{-27}\, kg$$

The Unified Absolute Relativity Theory predicts the mass of the electron:

$$m_e = \frac{hq}{2\times137^2}\sqrt{\frac{\pi}{\varepsilon_0 hc^3 k}}$$

Another formula for k:

$$k = \sqrt{\frac{\mu_0 h137^3 x_e^{\,3}}{8\pi^4 c^3 (137x_e + \varepsilon_0)^3}}$$

Electron wavelength:

$$x_e (137x_e + \varepsilon_0)^3 = \frac{2\mu_0 h^3 137^{11}\varepsilon_0^{\,2}}{c\pi^6 q^4}$$