

Abstract: Consider the product $(4\pi)(4\pi - 1/\pi)(4\pi - 2/\pi)(\pi - 2/\pi)(4\pi - 4/\pi)$. The product of the first three terms is 1836.15. The product of the last two terms is 134.72. The mass ratio of the proton to the electron is 1836.15. We may sharpen the result by letting the last two terms be $(4\pi - 3/\pi)(4\pi - 4/\pi) = 131.13$.

Higgs Boson: A formula is developed for the *Higgs Boson*. It uses terms consistent with an earlier formula for the mass ratio of the Proton to the Electron. The Higgs Boson is about 133 times the mass of a Proton.

$$(4\pi) \left(4\pi - \frac{1}{\pi}\right) \left(4\pi - \frac{2}{\pi}\right) = 1836.1517 \approx \frac{m_p}{m_e} \quad (1)$$

Where m_e = Electron mass and m_p = Proton mass.

$$\left(4\pi - \frac{2}{\pi}\right) \left(4\pi - \frac{4}{\pi}\right) \left[(4\pi) \left(4\pi - \frac{1}{\pi}\right) \left(4\pi - \frac{2}{\pi}\right) \right] \quad (2)$$

$$= 247374.1421 \dots \approx 134.72 \times \frac{m_p}{m_e} \quad (3)$$

I personally like the extension to the formula:

$$\left(4\pi - \frac{3}{\pi}\right) \left(4\pi - \frac{4}{\pi}\right) \left[(4\pi) \left(4\pi - \frac{1}{\pi}\right) \left(4\pi - \frac{2}{\pi}\right) \right] \quad (4)$$

$$= 240773.7047 \dots \approx 131.13 \times \frac{m_p}{m_e} \quad (5)$$

$$m_p/m_e \approx \prod_{n=0}^2 \left(4\pi - \frac{n}{\pi}\right) \quad m_\Omega/m_e \approx \prod_{n=0}^4 \left(4\pi - \frac{n}{\pi}\right) \quad (6)$$

Here m_Ω stands for the mass of the Higgs Boson.