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The Electric Charge is Not an Invariant

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See Unified Absolute Relativity Theory at:

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

Its possible that the mass deficit of the deuterium is an error of measurement, because we ignore the variation of the electric charge with speed.

Proton mass: $m_P = 1.6727 \times 10^{-27}$

Neutron mass: $m_N = 1.6750 \times 10^{-27}$

Deuterium mass: $m_D = 3.3445 \times 10^{-27}$

$$\Delta m = 3.2 \times 10^{-30}$$

Wrong mass formula:

$$m_W = \frac{m_0}{\sqrt{1 - v^2 / c^2}}$$

Correct mass formula:

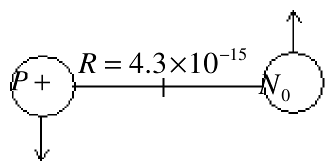
$$m_C = \frac{m_0}{(1 - v^2 / c^2)^{3/2}}$$

$$\Delta m = m_C - m_W = m_0 \frac{v^2}{c^2}$$

$$v^2 = c^2 \frac{\Delta m}{m_0} \quad \Leftrightarrow \quad v = 9.3 \times 10^6$$

Calculation of the same speed of the deuterium particles:

$$v = 9.3 \times 10^6$$



Electric and unified forces:

$$\frac{q^2}{4\pi\varepsilon_0 (R/2)^2} = \frac{khf^4}{c^3} \qquad \Leftrightarrow \qquad f = 3.2\times 10^{23}$$

Acceleration:

$$\frac{v^2}{R} = \frac{kf^3}{c} \qquad \Leftrightarrow \qquad v = 9.5\times 10^{6}$$

So, there's no mass deficit. The measurement in a mass spectrometer is done as the charge is an invariant, but that is wrong.

Charge variation with speed:

$$q = \frac{q_0}{1 - v^2/c^2}$$

True mass variation (Einstein's formula):

$$m = \frac{m_0}{(1 - v^2/c^2)^{3/2}}$$

Mass to charge ratio:

$$\frac{m}{q} = \frac{m_0}{q_0}\frac{1}{\sqrt{1 - v^2/c^2}}$$