Mass of Tau electron = 1776.99 + 0.29 / - 0.26 MeV

Yablon formula for Tau mass:

Mass = $v \cdot a$ = 1796.75 MeV,

using

v = 246.220 MeV

a = 0.007297352568 = 1/137.035999108 = Fine Structure Constant

This is over by 1.011%.

Devries formula for Fine Structure Constant:

$$\alpha^{1/2} \equiv Ae^{-\pi^2/4}$$

$$A = 1 + \frac{\alpha}{(2\pi)^0}(1 + \frac{\alpha}{(2\pi)^1}(1 + \frac{\alpha}{(2\pi)^2}(1 + ...$$

The seed term $\alpha^{1/2} \equiv Ae^{-\pi^2/4}$ gives a = 0.0071918833558268 = 1/139.045632752

This is then brought to precise agreement with the Fine Structure Constant because the higher order terms of the DeVries series raise this value by 1.466%.

If we use the unaltered Fine Structure Constant from DeVries seed term, the tau mass is then predicted by the Yablon formula to be:

1770.79 MeV.

This is under by 0.35%, or a total of 5.95 MeV.