

Leptons Now Number 4 not 3 : This Requires a 4th Neutrino Also

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Abstract: A new 4th (bottom) lepton particle is assured to exist by the recently observed increase in Higgs mass of 90 MeV

The fact¹ that the Higgs boson recently suddenly increased in mass by 90 MeV is a sure signal that a new particle has been recognized in the universe. This particle must be the bottom lepton a.k.a. archaic electron of 0.5000 MeV which I recognized as an existing particle with ViXra note² # 103 (7/28/2019).

The 4 leptons are now the top lepton (1776 MeV, was tau), muon 105.6 MeV, electron 0.511 MeV, and bottom lepton 0.500 MeV. We note that four Z(4430) tetraquarks + 40 MeV (80 bottom leptons) = $10 \times 1776 \text{ MeV} = 10 \text{ top leptons}$, a possibly useful way to manufacture top leptons.

We also note that Higgs bosons of 125.0 GeV are now 125.1 GeV, and H-Z, the quantum of the universe is now 33.91 GeV leading to a ratio quantum of the universe/Planck's constant = 0.8200×10^{22} 4-digit accuracy (see note #119, 2004.0707).

1. George R. Briggs, "The recent increase of Higgs measured mass by 0.09 GeV has an important consequence", ViXra 2004.0614, (2020)

2. George R. Briggs, "The modern electron is slightly heavier than its archaic version: why is this so", ViXra 1907.0559, (2019)