A Better 6-Fold Symmetry Standard Model of Elementary Particles Compared to the 8-Fold Symmetry MHCE8S Model

George R. Briggs

Abstract: The Up neutron quark is in a 2- quark format to allow its birth in the 2nd cyclic universe in 2-digit form. No Wigner, Feynman, heavy neutrino, dark neutrino, cosmophoton, archaic electron, graviton or 7th quark exists with 6-fold symmetry.

All masses are MeV/c^2 = 1/8.987= 0.11127 five digits: signals 11(Apollo)+125(Higgs) + 2(sex, homosex) and 4 digits or less except 5 digits for Higgs bosons and muon and tauon leptons

6 Quarks:

Up$_{prot.,}$ Down$_{neut.}$ = 2.2 (2.3 my #133) 2Up$_{neut.}$=7.1, 7th qk

Down $_{proton}$ = 4.7 (4.8 my #133) no 7th qk. in 6-fold model

Charm = 1280 (1275 my #133) No Wigner quark in 6-fold model either

Strange = 96 (95 my #133)

Top = 173.1 x 10^3 (My last paper had same top quark)

Bottom = 4.180 x 10^3 (same) vs. 4.108 x 10^(2 x 13 = 26) M radius of the observable universe.

6 Bosons: 3 Massless gauge type:

No Feynman boson is in 6-fold model Photon

Higgs = 124.97 x 10^3 (5 digits) Gluon

Z_{weak} = 91.19 x 10^3 (compare wiith No cosmophoton 1.19 x 10^- (4x13=52) M-2 Cosmological constant) Graviton?

W+,- = 80.39 x 10^3 (W Majorana type, element 93 (unstable), 80 = 4 x 20, Wigner's magic number **20**).

6 Leptons:

Electron = 0.511 Electron neutrino < 1 x 10^-3

Muon = 105.66 (5 digits) Muon neutrino = 0.17

Tauon = 1.7768 x 10^3 (5 digits). Tau neutrino=15.5+2.7 = 18.2: The 2.7 alerts us to the 10^27 galaxies of our universe.

Planck's constant/Quantum of the universe = 4.135667 x 10^-15/33.91 x 10^3 sec.= 0.1219601 x 10^-12 = 1.219601 x 10^-13 sec is not part of the 6-fold standard model. No dark Majorana neutrino is in the 6-fold standard model either.. Also note that we have 3 exponent signals -4 x 13 = - 52 (cosmological constant), 2 x 13 = 26 (Meter radius of the observable universe), and - 1 x 13 = - 13 (Planck's constant/quantum of the universe = 1.219 x 10^-13) sec. For the 8-fold symmetry group we have found an additional +13 signal (exponent = 1; see my viXra #114 of 1-31-2020: "The unlucky connection between the number 13 and 173.0 GeV/c^2 measured mass of the top quark"). Note that this paper was written ~ 4-27-2020 before the top quark measured mass became 0.1 GeV heavier ~ 4-27-2020. The fact that we (8- fold symmetry now prevailing) have 4 signals involving multiples of 13 (+2, -4, -1, 1), whereas we (6-fold symmetry prevailing) had 3 signals invoving multiples of 13 (+2, -4, -1) is significant.

Also significent are 1.219 = 12 and 19 both important signals, the 1st for the 1st 2 digits of the Higgs boson and the 2nd for **Wigner's magic number 20 minus 1** and the **1.19** cosmological constant.

The 4430 MeV/c^2 heavy neutrino is not included in the 6-fold model. Neither is the archaic electron. This latter omisson upsets my rule that the first cyclic universe produce a 1-digit mass particle. The 4430 MeV heavy neutrino omission is consistent with a 6 lepton 6-fold symmetry.

Charm and strange quarks are heavier in the 6-fold symmetry model to provide more unbroken symmetry time in this model. The mass was not used to increase the Wigner quark 1400 MeV/c^2 provided. This error was in my #134

paper and should be noted. Instead the energy went to the charm and strange particles to provide more unbroken symmetry time 1280/96 = 13.33 - 13.5 (see my #62 paper) = 0.17 billlion years vs. 1275/95 = 13.42 - 13.5 = 0.08 billion years.

Planck's constant = 4.1356 (5 digits) x 10^-15 = true (41356- 1) x 10^-19 = 41355 (41+ 355) x 10^-19 = (0.41 + 3.55) x 10^-17 = 0.1 Planck's constant + 3.55 ($Up_{neutron.}$quark). Planck's constant also alerts us to the speed of the cosmophoton, 4.108 x 10^3 cm/s and 4.108 x 10^(2 x 13) M radius of the universe.

We also notice that we have another alerting signal 52 = 4 x 13 appearing in the mass 5285 of the dark Majorana neutrino of the 8-fold symmetry universe. We also have 80 and 5 signals The 1st 52 alerts us to the correctness of the 1.19 x 10^-52 cosmological constant. The 2nd 52 alerts us to the correctness of the dark Majorana neutrino mass. Also 80 = 4 x 20 (Wigner's magic number **20**) and 5 (Wigner's magic number **50**) alert us to the correctness of the mass of the W+,- Majorana boson (80.38 GeV/c^2) and the Higgs boson (125.0 GeV/c^2).

I have also noticed we have had 3 different values of the Higgs boson mass make their appearance; 125.0, (8-fold symmetry), 124.97 (6 -fold symmetry), and Wigner's magic number **126** (3-digits). We next review my viXra #118 paper of 4 - 27-2020: "The recent increase of Higgs measured mass by 0.09 GeV/c^2 has an important consequence". If we take 124.97 GeV/c^2 (6-fold symmetry Higgs mass + 0.09 GeV/c^2 =125.06=125.0 GeV/c^2 (4 digits). We note that 125.1 GeV/c^2 for the Higgs boson is thus shown to be wrong. However Wigner's 126 was actually the true discovery average mass of the Higgs (125-127 GeV/c^2).

I have also noticed that the 6-fold model lacks a 2.2 x 10^-6 MeV/c^2 electron neutrino and if it has any electron neutrino at all it is lighter than 1 x 10^-6 MeV/c^2, whereas the 8-fold model shows a definite 2.2 x 10^-6 MeV/c^2 mass.

lastly, I noticed that the electron, although being a lepton, was **not** listed in mass in the 6-fold model to 5 digits like the muon (105.6583755 known Wikipedia, 105.66 **rounded up** to 5 digits) and tauon (1776.86 known Wikipedia, 1776.8 **truncated** to 5 digits in the model). Despite the electron's known value of 0.510998950 (Wikipedia), it is **rounded up** to 3 digits, **nature's way of indicating that this is enough for the electron and rounded up to 5 digits to be enough for the muon**. For the tauon we only know its mass to 6 digits instead of 10 digits like the electron and muon. For the 4 neutrons all have had masses 4 digits or less from the start. For the boson masses the W+,-, Z_{weak}, Higgs and Feynman all were either 4 digits or 2 digits (Feynman) from the start. For the quarks all 8 were 4 digits or less from the start. And for the archaic electron (a 4th lepton) the mass was 1 digit from the start.

The fact that **nature** has indicated we need 10 digits for the tauon's 1776.86 MeV/c^2 6-digit MeV mass is important; (see my ViXra #74). The tau lepton mass (1776.84 MeV/c^2) signals the nov. 7th completion date of signing of the Declaration of Independence. We note that since #74 (2018), better data has increased the mass of the tauon to 1776.86 MeV/c^2. This has raised the date of Matthew Thornton's signing to nov. 10, 1776 which is historically more reasonable and is also a signal for the 10 digits needed (4 more for the present 1776.86) for the tauon.