

Revised Standard MHCE8S Model of Elementary Particles

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Abstract: The W^+ , W^- particle pair becomes $W^{+,-}$ single Majorana type to accommodate the new 90 MeV boson.. A new quark is introduced which we have named the Wigner

8 Quarks: all masses are MeV and 4 digits or less.

$Up_{prot.}, Down_{neut.} = 2.2$ (previous 2.3) = - 0.1 $Up_{neut.} = 3.55$

$Down_{prot.} = 4.7$ (previous 4.8) = - 0.1 Wigner = 1406

Charm = 1280 (previous 1275) = 5 (4 digits)

Strange = 96 (previous 95) = 1

Top = 173.1×10^3 (previous 171.7) = 1400

Bottom = 4.180×10^3 (vs. 4.108×10^3 cm/s speed of the cosmophoton and 4.108×10^{26} M radius of the universe)

8 Bosons:

4 Massless gauge type:

Feynman = 90

Photon

Higgs = 125.0×10^3

Graviton

$Z_{weak} = 91.19 \times 10^3$ (compare with $1.19 \times$

Gluon

10^{-52} M⁻² Cosmological constant)

Cosmophoton

$W^{+,-} = 80.38 \times 10^3$ (W Majorana type, 83 psuedo-stable element bismuth, $80 = 4 \times 20$, Wigner's magic number 20)

8 Leptons:

Electron = 0.511 (holo-

Electron neutrino = 2.2×10^{-6}

Muon = 105.6 graphic)

Muon neutrino = 0.17

Tau = 1776

Tau neutrino = 15.5

Archaic electron = 0.5 (pre-holographic)

Majorana neutrino = 4430

1 "Quantum of the Universe" = 33.91×10^3 MeV energy only (energy-second quantum of QM is not included in this Model but this 4-digit quantum of energy comes in its place).

1 dark composite spinless Majorana neutrino = 5285.

We notice we now have 8 quarks instead of 6: this indicates 8-fold symmetry (E8) is prevailing. We further notice we have 8 bosons but only if we replace the 2 W^+ , W^- particles by a single Majorana type particle $W^{+,-}$: 4 massless gauge type bosons remain massless. We also notice we have 8 leptons, but only if we include the 4430 mass Majorana neutrino and the 0.5 mass archaic electron. We have also increased the masses of 3 quarks (top, strange, charm) moderately to accommodate the mass requirement of the new Wigner quark. We notice also that we do not reduce the mass of the $u_{\text{neut.}}$ quark but do the other 3 up and down quarks by 0.1 MeV each, or 0.3 MeV total and $0.9 \text{ MeV} \times 10^3 = 90 \text{ MeV}$ after holography. This energy almost certainly supplies that needed to form the Feynman boson in the 2nd cyclic universe'

Inclusion of the 4430 MeV heavy neutrino awaits the final experimental value for H_0 obtained for Hubble's constant. Inclusion of the archaic electron is required because otherwise the first cyclic universe would not have produced any mass particle at all, which would have made it redundant.

We also notice that we have an error on page 5 of the #133 previous paper: 0.01/4% should be 1/4% - this is important to correct, since other physicists have noticed this important 1/4% signal. We also have noticed an important 1/2% signal, (see viXra #34). We also notice a new 1/2% signal which we will now describe: taking the new -found constant 1.355 (p. 5 of previous viXra #133), we calculate $1.355 \times 3552 \times 1.044 = 5024$ forward time mass of the dark Majorana neutrino, then $5285/5024 = 1.0519506$ and $105.658366 \text{ measured mass of the muon} / 105.19506 = 1.0044041 \sim 1/2$. This $\sim 1/2\%$ (0.44) points to the muon (200 X heavier electron).

This lepton is almost certainly involved with the faster cosmophoton like the electron is involved with the slower photon. We have published (viXra #82) on the speed we could expect the cosmophoton to be able to travel in our holographic universe ($c = 29.979245 \text{ cm/s} \times 1/\alpha = 137.05999 = 4108 \text{ cm/s} = 4.108 \times 10^3 \text{ cm/s}$ (compare with $4.180 \times 10^3 \text{ MeV}$ mass of the bottom quark).

We notice another peculiar thing; if you consider Eugene Wigner's magic number **126** which clearly signals Higgs boson 125.0 GeV (and its 1st discovery mass 125 - 127 GeV) and the cosmological constant 1.19 signalled by another of Wigner's magic numbers, **20**, you quickly see the minus one connection; both Wigner's "magic numbers" are higher by one than the true values 125.0 and 19 (1.19): also **20** $\times 4 = 80$ and 80.38 (reversed last psuedo-stable element bismuth 83). Clearly the W boson is meant mainly as a signal including the big bang and has no other function.

The minus one connection also extends to Wigner's magic number **28**: The true number meant is 27 in this case. I have already noted that there are 10^{27} galaxies in the universe (see my viXra #84) and the universe cannot hold many more according to my calculations (see my viXra #85).

As for the magic number **82**, (reverse of 28) the true number meant should be 81. Now this atomic number indicates the element thallium which is about the most poisonous element there is and well worth our attention.

We have also noticed peculiar reversed digit pairs for the bottom quark ($4.180 \times 10^3 \text{ MeV}$ vs. $4.108 \times 10^3 \text{ cm/s}$ speed of the fast cosmophoton and $4.108 \times 10^{26} \text{ M}$ universe radius), and the W (80.38 vs. 83 psuedo stable element). We think

these are alerting signals only. That is why we do not include the Z_{weak} particle in this 2-particle group: instead for this particle's more important uses we only use its 1.19 cosmological constant signal as an alerting side effect.

Let us next consider the 4-digit mass of the new quark Wigner = 1406 MeV: reversing the 14 gives us 4106. Now the number 6 draws our attention to the 3 quarks (top, strange, charm) which have reduced mass to enable the Wigner to exist. The 4100 remaining, or 41.00×10^2 alerts us immediately to Planck's constant 41.356 (true value one less, or $41.355 = 41 + 3.55 = 4100 + \text{up}_{\text{neut.}}$). It also alerts us to the speed of the cosmophoton, 4.108×10^3 cm/s and 4.108×10^{26} M radius of the universe.

We next consider the new charm and strange quark values to determine if they are consistent with a reasonable value for the unbroken symmetry time epoch of the universe. This epoch (see viXra #62) is = 13.5 billion years - charm quark mass/strange quark mass = $13.5 - 1280/96 = 13.5 - 13.33 = 0.16$ billion years or twice the 0.08 billion years considered sufficient previously.

Another way we can look at the mass of the new quark Wigner = 1406 MeV: the true mass meant by **nature** is one less, or 1405, and this in reversed digit form is 4105. Now 41 alerts us to Planck's constant so important to QM and 5 alerts us to Wigner's magic number 50 (and the metal bronze so important to the rise of civilization).

I next propose Paul Steinhardt be named for the 4 cyclic universes that have occurred and Neil Turok for the 10^{27} galaxy count of the last universe of the four. Also Dan Hooper, whose book "Dark Cosmos" alerted me to the possibility of negative energy.