

MHCE8S Theory Indicates That the Energetic Neutrino Observed in Antarctica is a Heavy (4430 MeV) Majorana Neutrino

George R. Briggs

Abstract: MHCE8S theory strongly indicates that a 4th massive neutrino exists, of 4430 MeV mc^2 mass and Majoranic in Nature (the particle is its own antiparticle with no spin). As such it is a candidate for the energetic neutrino observed in Antarctica. It has the same mass as the Z(4430) tetraquark and therefore cannot be derived directly from the lighter stau slepton supersymmetric particle presently proposed

In a number of previous notes^{1-6,9} I considered the possible role of a Z(4430) tetraquark particle in MHCE8S universe theory. I concluded that this particle acts like a heavy (4430 MeV mc^2) mass majorana neutrino particle in the theory and plays a role in determining the mass of the neutron and also to a smaller extent the proton. Its mass also signals that 4 bouncing cyclic universes have occurred and for how long in total the E8 broken symmetry universes lasted (44.30 billion years). This knowledge in turn enabled me to determine the total length of time the 4 universes spent having unbroken E8 symmetry (0.4 billion years): this amount of time is by no means negligible and indicates that the unbroken E8 symmetry intervals, which would have been seen as dark with dark matter and dark energy only evolving, would have had a lasting influence on our own evolving, final universe.

The importance of neutrinos in evolving HCE8S theory was first studied in my 55th publication⁷ (noted by ? with the key numbers 1.0000055, 1.55 billion years universe age difference and 15.5 MeV tau neutrino mc^2 energy) and pursued in my

56th publication⁸. In my 55th publication I assumed (erronously it later turned out) that Majorana neutrinos are unnecessary and that neutrinos are divided tau leptons decaying conventionly into lighter and lighter neutrinos. Later it became evident that neutrinos decayed into heavier neutrinos (because reversed time conditions prevailed). By my 56th publication I also became aware that spinless neutrinos (Majorana neutrinos) were a strong possibility (albeit dark). The net result of all the bad information coming in and new directions beckoning started me developing an energy flow diagram for a probable HCE8S theory (starting with pub. 58 and followed by 61, then 63 and 66 and 68 (theory first called MHCE8S) and finally 69).

The evolving energy flow diagrams and later Z(4430) tetraquark studies led to more accuracy in first the neutron and then the proton mass calculations (accurate calculations before MHCE8S theory were not possible). The peculiarities required for these calculations led me to extend the methods learned to the masses of the tau lepton (1776.84 MeV), mu lepton (105.658366 MeV), W boson (80.385 MeV) and Z boson (91.18762 MeV). Strangely these 4 masses yielded 4 historically important dates very closely (nov. 4, 1776 date of last signature on the Declaration of Independence, 66 million year age of the dinosaur extinction, 385 AD age when Epiphanius of Salamis mentioned that the Wisdom of Solomon was of disputed canonicity and date of the battle of the little bighorn (1876.2 = march 1876, date troops set out to attack the indians).

This calling attention to historically importance events has even extended to my publisher: I note that the publication ViXra 1810.0155, (containing one of my key numbers, 155) draws attention to yekaterinburg, russia, where the czar and

his whole family were murdered, one of the historically most important events of modern times.

The mc^2 masses of other than Z type tetraquarks are also of great interest. I.e. the Y(4140) tetraquark may signal that the bottom quark (4.180 MEV) is of broken E8 symmetry. Many faint tetraquarks with known masses have been found.

1. George R. Briggs, "Calculating the mass of the neutron in a better way with HCE8S theory", ViXra 1808.0168, (2018)

2. George R. Briggs, "The Z(4430) tetraquark acts like a heavy Majorana neutino having no electric charge", ViXra 1807.0709, (2018).

3. George R. Briggs, "Improvement of the accuracy of HCE8S theory thanks to the Z(4430) tetraquark", ViXra 1807.0147, (2018).

4. George R. Briggs, "An 8th HCE8S flow diagram improving the Z(4430) tetraquark connection", ViXra 1806.0465, (2018)

5. George R. Briggs, "An HCE8S flow diagram including the Z(422430) tetraquark", ViXra 1806.0324", (2018)

6. George R. Briggs, "The connection between HCE8S theory and the Z(4430) tetraquark", ViXra 1806.0135, (2018)

7. George R. Briggs, "Holographic cyclic universe E8 symmetry theory indicates that Majorana neutrinos are unnecessary and that neutrinos are divided tau leptons" ViXra 1711.0325, (2017)

8. George R. Briggs, "HCE8S theory indicates that dark neutrinos exist and are derived from dark matter tau-antitau spinless, chargeless composite particles", ViXra 1711.0455, (2017)

9. George R. Briggs, "Copious tetraquarks: no true hexaquarks - indicators of E8 symmetry in the universe", ViXra 1408.0147, (2014)