An MHCE8S Flow Diagram Emphasizing the Existence of Two New Quarks and Older Holography

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Abstract: A forward-time, reverse-time cycle of the 4th cycle of an MHCE8S universe emphasizing 2 new neutron quarks and holography extending back to at least the 3rd cyclic universe.

TR time reverse QU quantum of the universe TF time forward Unbroken E8 symmetry Broken, Holographic E8 symmetry LEL life energy BEl binding energy DM dark matter DE dark energy ttH +ttZ +tH +tZ fermibosons = 12 x t(171.7) 8 x Z(91.1975)

(see text) = 1330.82 GeV /galaxy-sec 4(H-Z)QU 1332.10–1330. 82=1.28 GeV (12,800 yrs old y-d extinction) |

* TF energy in > {1332.10 GeV/sec-galaxy } > TF energy out |

^ = 1.0447865 x 1275 = 1332.10 GeV. DM =-4H DM=-4Z DE |

^ (13.799/13.5) = (1.022148)^2 GeV super- | 12t |

^ >13.799 billion yrs holographic age | massive | |

^ TF (c + anti-c) annihilate = 1275 GeV | black hole |

^* 1000 Z(4430) tetraquarks (see text) | Higgs cancel |

c/s (1275/95) = 13.42 billion years + 4^H |

80 million yrs hot epoch =13.5 x 10^9 yrs |

4th universe which did not collapse 4(H-Z)=4xQU < | < | |

^ TR s quark = 95 MeV= 94+e_a, anti-e_a (see text) | DM=-8Z |

^ TF d_p quark 2.3 MeV x 2 = 4.6 (see text) |

^ TF u_p quark 4.8 MeV =4.8 + 4.6 = 9.4 X100 = 940.0 |

^ (940-8-electron)=932-0.511=931.489 x 1.0000055 |

^ TF = 931.49412 close to Proton: 931.49415 MeV |

^ TF d_n quark 3.55 MeV (3 digits, see text) |

^ TF u_n quark 2.3 +0.00071-0.00511= 2.2956 + 7.10 |

^= X100 = 939.56 MeV. Neutron = 939.56541 MeV. |

^939.56541/1.0000055 = 939.56024. Now |

^939.56024/939.56 = 1.0000002. close to Neutron @ @
^ TR Z(4430) large majorana neutrino (DM tetra quark) DM -8Z DE QU
^ 15.5 MeV (1.55-billion year cyclic universe age | 12t |
^ difference) >> >> * |
^ TR muon neutrino X100 = 1550 MeV TF |
^ 0.17 MeV TFx(1.022148)^2=1.0447865 |
^ TR electron neutrino TF=1619.42+157.42MeV LE |
^ 2.2 x 10^-6 MeV TF=1776.84 MeV tau lepton |
^ (1.022 electron declaration of independence |
^ mass factor) TF +BE 87.16 MeV |
2Z doubled E8 broken symmetry TF =1864 MeV |
star < atom < proton-antiproton pair < 932 MeV each |
^ << << << << << << * |
TR 12X(numeric) top quark DE 171.7 GeV << << * |
Big Bang, broken E8 symmetry starts; -Z DM now visible |
DE ~ 10X(num.) 171.7 GeV DE ~ 2X(num.) 171.7 GeV |
*TF Metric space expansion TF space communication |
| TF 33.81 GeV QU < |
  4 QU/1000 black only 1/32 = 1.0565625 GeV |
  4 QU/1000 color (QCD type) x 1/100 = muon lepton |
*TF universe cosmophoton = 105.658366 MeV = |
105.66 signals 66 myr old k-t extinction (1.0000199 ratio) |
t /b = 171.72424/4.180 = TF 33.81 GeV x 1/8 x QU < |
41.082355 (c/alpha) = 4.22625/(1.022148)^0.5 = |
TR b = 4.180 GeV (4 digits) TR 4.180212 GeV |
TR t = 171.7 GeV (4 digits) TF 270.48 GeV = 33.81 x 8 QU * |
TF (LE + BE + (e-e_a) + anti(e-e_a)+50 electrons) = 157.42 + 87.16 |
+ 0.02 + (50 x 0.511) = 270.15 MeV. Now 270.48-270.15 =0.33 |
~ 1/3 (holography signal; 270.48 GeV/1000 = another signal) |
Proton: d_p 2.3 MeV, u_p 4.8 MeV, Neutron: u_n 3.55 MeV(new), |
d_n =2.2956 MeV(new); 2 new neutron quarks, of 3 and 5 digits, |
muon:105.66/105.658366=(1.0000155) 66myr k-t extinction. |
1.0000199 signals muon lepton’s 200X larger electron status. |
holographic critical fermion density = 8.62 x 10^-27 Kg/M^3.
It is first noticed that if you change the Z boson from 91.18762 to 91.1975 (to honor the landing on the moon), we change the value of \(12 \times t(171.7) - 8 \times Z(91.1975)\) by enough that 1332.10 - 1330.82 = 1.28 MeV marks the actual 12,800 year age of the y-d extinction. I conclude there must have been 4 versions of Z mass available, 15.5/0.17 = 91.17647 (earliest date - Ben Franklin), measured mass of Z boson = 91.18762 MeV (date of Little Big Horn), correct dating of 12,800 yr old y-d extinction, 91.1975 date of completion of Apollo program, 91.19 four digits date 19 - -.

It is also noticed that from my recent work in holography\(^1\) I now have a better knowledge when holography came into use in the universe (it was at least the starting age of the 4th universe age of 13.5 billion years). I have now also realized that the very hot, collapsed epoch in the universe's existance lasted 80 million years, not 40 million as I had thought.

Continuing on, I need to explain why the s quark is 95 MeV rather than the more natural 94 MeV I initially expected. Aparently nature needs (or just wants as a signal) two archaic electrons as an archaic electron-antielectron pair (= 1 MeV). If the particles are needed we don't why at present.

Now QU x 8 = 33.81 GeV x 8 = 270.48 GeV. This is 1000X the amount of energy needed for packets of energy and electron matter (LE + BE + (e-e\(_a\)) + anti(e-e\(_a\)) + 50 electrons) = 270.15 MeV each in our universe (e = 0.511 MeV, e\(_a\) = 0.500 MeV). It is interesting to note that 50 electrons are supplied in every packet to aid mankind with its electricity needs. Also we note that 270.48-270.15 = 0.33 ~ 1/3. This is a signal that holography is involved (as is the just-used factor 10\(^3\)) in our universe.
Continuing on, returning to the proton; it is formed\(^2\) from 2 \(d_p = 2.3 \text{ MeV}\) quarks and one \(u_p = 4.8 \text{ MeV}\) quark, or \(9.4 \text{ MeV}\) and \(X100 = 940 \text{ MeV} = 940\times0.511 = 931.489 \times 1.0000055 = 931.49415 \text{ MeV}\). Also the neutron is formed\(^3\) from two \(d_n = 3.55 \text{ MeV (new 3-digit quark)}\) and one \(u_n = 2.3 \text{ MeV} + 0.00071 - 0.00511 = (2.2956 + 7.10) \times 100 = 939.56 \text{ MeV}\). 

\[
\text{neutron} = 939.56541 \text{MeV}/1.0000055 = 939.56024/939.56 = 1.0000002 \text{ (very close). 2.2956 MeV (new 5-digit quark)}
\]

The 8 types of quark indicated for our universe means that \textbf{E8 symmetry} prevails: this also means because we have only 7 types of leptons the 4430 MeV heavy neutrino is truly \textbf{Majoranic}.

If you annihilate 1000 TF Z tetraquarks/sec you get enough energy (1275 GeV) from the c, anti-c components alone \((1275 \times 2 = 2550 \text{ GeV energy cost})\) to satisfy the TF per galaxy-sec energy requirements of an active galaxy. You have 1000 \(d\) and anti-\(u\) quarks and an equal number of Majoranic \(u\) and anti-\(d\) quarks: after hadronization \(2.2956/3.55 \times 2 = 323\) neutrons and \(7.1/9.4 \times 2 = 378\) protons remain as Matter and an equal number as DM of the universe. The antiparticles form dark matter fermions which then add to the 8Z negative \(mc^2\) particle dark matter boson count.


