An MHCE8S Flow Diagram Emphazising 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 emphazing 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 LElife energy BEbinding energy DMdark matter DEdark 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 = **95MeV**= 94+e_a, anti-e_a (see text) DM=-8Z | ^ TF $\mathbf{d_p}$ quark **2.3 MeV** x 2 = 4.6 (see text) | | ^ TF $\mathbf{u_p}$ 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 $\mathbf{d_n}$ quark **3.55 MeV** *(3 digits, see text)* | | ^ TF $\mathbf{u_n}$ quark **2.3** +0.00071-0.00511= 2.2956 + 7.10 | | ^= X100 = **939.56 MeV**. **Neutron = 939.56541MeV.** | | ^939.56541/**1.0000055** = 939.56024. Now | | QU ^939.56024/939.56 = **1.0000002.** *close to Neutron* @ @ @

^ TR Z(**4430**) large majorana neutrino (DM tetra @ @ @
^ TR tau neutrino 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=**1776.84MeV** 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< 932MeV 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 **33.81GeV** 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* (1.0000**199** 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 4.180212GeV |
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 x t(**171.7**) - 8 x 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 exisistence 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 initally 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 $\mathbf{d_p}$ = **2.3 MeV** quarks and one $\mathbf{u_p}$ = **4.8 MeV** quark, or **9.4 MeV** and X100 = **940MeV =** 940-8-0.511 = **931.489** x **1.0000055** = **931.49415 MeV.** Also the neutron is formed[3] from two $\mathbf{d_n}$ = **3.55 MeV (new 3-digit quark)** and one $\mathbf{u_n}$ = **2.3 MeV** + 0.00071-0.00511 = (**2.2956** + 7.10) X100 = **939.56 MeV.** neutron **= 939.56541MeV/1.0000055 = 939.56024/939.56 = 1.0000002** *(very close).* **2.2956 MeV (new 5-digit quark)**

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

If you annihilate 1000 TF Z tetraquarks/sec you get enough energy (1275 GeV) from the c, anti-c components alone (1275 x 2 = 2550 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 2.2956/3.55x2 = 323 neutrons and 7.1/9.4x2 = 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.

1. George R. Briggs, “Small corrections to the critical density calculation in MHCE8S theory produce full agreement with Planck collaboration data ”, ViXra 1901.0221, (2019)

2. George R. Briggs, "Calculating the mass of the proton in a better way with MHCE8S theory", ViXra 1808.0626, (2018)

3. George R. Briggs, "The most accurate method of neutron mass calculation", ViXra 1901.0301, (2019)