An MHCE8S Flow Diagram Emphazising Peculiar Z-Boson Phenomena and the Existence of One New Quark

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Abstract: A forward-time, reverse-time cycle of the 4th cycle of an MHCE8S universe emphazing peculiar Z- boson dating phenomena and one new neutron quark making 7 in all.

 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 (+,-energy Higgs cancel)
$$4(\textbf{H-Z}) \text{ QU}$$
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 DE12t |
 ^(13.799/13.5) = (1.022148)^2 GeV | super- | | |
 ^(13.799-13.5) **billion yrs holographic |** 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* +   **^+4H** | | |
 80 million yrs hot epoch =13.5 x 10^9 yr collapse age **| | |**
 of 4th universe which did not happen 4(**H-Z**)=4xQU< | < | < *
 ^ TR s quark = **95MeV**= 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 **u_n** quark **3.55 x 2** = **7.1** + 0.00488 = 7.10488 | |
 ^ TF **d_n** quark **2.3** - 0.00976 = 2.29024 + 7.10488 | |
 ^=9.39512=X100=**939.5**.**Neutron939.56541/939.5 | |** QU
 ^=1.0000696+0.0000004.*Signal that 7 quarks exist* @   @   @

^ TR Z(**4430**) large majorana neutrino (DM tetra   @   @   @
^ TR tau neutrino   quark) DM -8Z 12t QU
^ **15.5 MeV**   (1.55-billion year cyclic universe age | | |
^ 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 pair   <<   932 MeV each | | |
   ^   <<   <<   <<   <<   <<   * | |
TR 12X(numeric) top quark DE **171.7 GeV**   <<   << * |
Big Bang, broken E8 symmetry starts; DM is now visible |
10X(num.) 171.7 GeV   2X(num.) 171.7 GeV |
TF Metric space expansion   TF space communication |
                                | TF **33.81GeV** QU < |
         6 QU/1000 black only   1/32 = 1.0565625 GeV |
     1 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/alpa**)   = 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*). Note also 270.48 MeV = QU/1000
(*more holography signal*)
proton: **d_p 2.3 , u_p 4.8 ,** neutron: **u_n 7.1 MeV (new), d_n 2.3 MeV**
*muon:*105.66/**105.658366**=(**1.0000155)** *66myr k-t extinction*.
1.0000199 *signals muon leptom* 200X **l**arger 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 the knowledge to know when holography came into use in the universe (it was at the 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)* one archaic electron and one archaic antielectron (pair = 1 MeV) at this point. If the two 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 MeV** quarks and one 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 neutrino is formed[3] from (two u_n) = **7.1MeV (new single 2-digit quark)** + 0.00976 and one d_n = **2.3 MeV (old 2-digit quark)** + 0.00488 = **9.39570 MeV** X100 = **939.570 MeV/1.0000055 = 939.56483 x 1.0000006** *(signal that 6 quarks is wrong)* = 939.56539 = 939.5654 MeV*.*

The 7 types of quark now *signaled* for our universe could mean a 7th type of lepton also exists: the newly postulated 4430 MeV heavy majorana neutrino!

If you TF annihilate 1000 Z tetraquarks/sec you get enough energy (1275 GeV) from the c, anti-c components alone to satisfy the TF per galaxy-sec energy requirements of an active galaxy. In addition you have 1000 x (d and anti-u quarks and (you must assume Majorana type for neutrinos: 1000 Z tetraquarks of type c, anti- c, u, anti-d exist as DM) and are left over. The u and d quarks will be swept up to form the protons and neutrons and ultimately the matter and DM of the universe (the strong force enters the picture only at this late stage). 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, "Calculating the mass of the neutron in a better way with MHCE8S theory", ViXra 1808.0168, (2018)