Simplicity of cyclic universe E8 symmetry theory: H, Z, and t particles supplied all the dark matter and dark energy mass needed to rebuild the cyclic universe immediately after the big bang

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Abstract: The 8 Ht, Zt, Htt, and Ztt fermibosonic entities and anti-entities seen at the LHC played a crucial role in bringing fermibosonic matter from the previous universe into our present universe, where it could form new fermionic matter at no energy cost or loss of universe flatness. The used H particles are later swallowed in the large black holes at the centers of spiral galaxies, (these holes had survived the big bang). The Z components are used again, as food for growing stars in the spiral arms of the same galaxies.

The simplicity of 8-fold E8 symmetry (indicative of life) in cyclic universe theory was demonstrated at the LHC with the discovery of 4 new entities and their 4 anti-process particles. Fermibosonic entities had been predicted by the predominately right-brained author (caused by a hemmoragic stroke) as early as October, 2013. The author named these entities Briggs fermibosons at that time but this name for the entities is still unrecognized by the physics community. The author is now 92 years old, and cannot wait much longer. My most important paper, "Dark energy/fermion ratio matches E8 symmetry, cyclic universe within ½% if dark matter annihilation gamma emission energy is 2(H-Z)", viXra, (1605.0223) was published for a while on arXiv but has now been withdrawn. My name goes well with Higgs I think, so this is a shame!

If one calculates the masses of the fermions and bosons of tH +ttH +tZ +ttZ fundamental fermibosons, one gets 6t = 6 x 173.34 =1040.04 GEV for the fermions and 2 x (H+Z) = 2 x (125+91.19) = 432.38 GEV for the bosons. In cyclic universe E8 symmetry theory

the boson mass is matched by fermionic spin ½ ordinary matter from the previous universe. At the time of the big bang all of this matter was in the form of dark matter. The larger dark energy component could only be accounted for by the 6t = 1040.04 GEV fermionic mass. The ratio was 1040.04 / 432.38 = 2.40538. This ratio was compared with the measured ratio of 2.5485 (68.3% dark energy/26.8% dark matter=fermionic matter), and found to be only (by cosmic standards) 5.9% low. Additional sources of dark matter/ energy were sought and one was soon found (see ref. 1). This source indicated that two dark energy annihilation gamma rays of 31 GEV each are entirely consistent with those emitted near the center of our galaxy. Adding this energy to the mc^2 energy of the 6 top quarks gave 1040.04+62 =1102.04/432.38= 2.5488, which is an almost perfect fit. This agreement convinced the author that dark energy was really positive energy top quark mass particles when first formed, (in the epoch before the big bang) but these probably had a short lifetime. Negative energy H and Z bosons (dark matter) were also formed in this epoch of unbroken E8 symmetry. Note, however, that the briggs fermibosons formed at the LHC were entirely of positive energy components, since they were manufactured in our epoch of broken E8 symmetry which prohibits new negative energy bosons (but allows those made in the previous epoch to continue to exist).

The large amount of dark energy supplied by the 6 top quark particle component and its probable constant nature over time (at least in the epoch before the big bang when E8 symmetry was unbroken) makes me consider that this is the constant (2.4054) associated with E8 symmetry (noether's theorem). The dark energy/dark matter ratio in our epoch of broken symmetry might well have increased but will be restored when the E8 symmetry becomes unbroken again at the start of the next universe cycle. The value of about 2.4 for noether's E8 symmetry constant meant that even very early over-population by life forms was recognized as a

potential problem! Note that since we are always dealing with mass/energy ratios, the actual size of the universe, for example, cannot be determined, only important ratios related to the 8-fold nature of life.

Let us next consider the 2(H-Z)=125-91.19=2 x 33.81 GEV dark matter annihilation energy I first considered in viXra 1605.0223. This is actually 2 x 31 GEV now, or 10% too low to sustain an active galaxy. This indicates that dark energy is today 10% lower than it was some time earlier in our epoch when it did support a growing galaxy but will return to its original value at the start of the next universe, due to Noether's theorem. The dark energy % and dark matter % corresponding to the ratio 2.4054 are :

Total mass = 1040.04+432.38 = 1472.42
Dark energy % = 1040.04/1472.42 = 70.63 %
Dark matter % = 432.38/ 1472.42 = 29.37%
Dark energy % +dark matter % = 100 % (no ordinary matter at the start and end of the present universe).

At the present time the accelerating universe is increasing Noether's constant again and staving off the day of collapse. How long this can last depends on the strength of E8 symmetry to survive.

1. Dan Hooper, Francis Reddy, "Fermi telescope data tantalize with new clues to dark matter", Uchicago, 2014/04/03