

Dark Energy/Fermion Ratio Matches E8 Symmetry, Cyclic Universe Within 2% if Annihilation Gamma Emission Energy is Included

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Abstract: The 68.3%/26.8% dark energy/fermion ratio matches cyclic universe, E8 symmetry theory within 2% if experimental dark matter annihilation gamma radiation energy of 36 GEV is included. This finding determines the correct theory of the origin of the universe in the author's opinion: at present this very plausible theory is completely ignored.

My last two notes¹ have concentrated on the remarkable connection between the masses of the H and Z bosons and top quark fermion and the observed mass ratio of the dark energy/dark matter (=fermion mass) for the universe. These connections are completely predicted by E8 symmetry, cyclic universe theory, yet are still entirely ignored by the physics community. I apologize for the brash action on the part of my predominately right brain², caused by a stroke but that seems to be the way it is.

I wish to report on a further finding: no account has been taken of the approximately 40 GEV annihilation radiation³ of dark matter. This energy must be added to the 6 top quarks of mc^2 energy set free in annihilating $2(ttH + tH + ttZ + tZ)$ fermibosons (process particles). The energy cannot come from the $2(H + Z)$ dark bosons because they have negative energy which we cannot detect in our epoch. We must calculate $1040.04 \text{ GEV} + 40 \text{ GEV}$ and $2(H + Z) = 432.38 \text{ GEV}$ and find the ratio, which is 2.489: this remarkably matches the ratio within 2% of that⁴ measured of 2.5485. Note also that the

spin 0 and spin 1 bosons annihilate in H+Z pairs of unequal mass: this seems to be necessary to generate $\frac{1}{2}$ spin dark energy entities from dark matter bosonic starting material.

The reason dark energy requires so much energy is because the ttZ and ttH entities each have so much fermionic content: the reason is unclear at this stage of knowledge.

1. viXra: 1603.0179 and 1603.0039,(2016)
2. Darold A. Treffert, "accidental genius", p. 52-57, Scientific American, August 2014
3. Dan Hooper, Francis Reddy, "Fermi telescope data tantalize with new clues to dark matter", Uchicago, 2014/04/03
4. "Dark energy", Wikipedia, (2016)