

Dark Energy

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Abstract Dark energy may be the energy of the unsynchronized pairs of points which are virtual pairs that were given a small impulse, I_{\min} , from the motion of an unpaired point which, suddenly, at the speed of light, springs up at a distance dx away in a time dt . (see my previous paper) I_{\min} knocks the synchronization out of a virtual pair (which usually lasts 10^{-44} s) which can no longer disappear together since its two points' timing are now different. USP's (unsynchronized pairs) last, and travel at the speed of light, until their energy is taken away. I showed, in my last paper, that these USP's carry the electric charge and produce the electric force through singly charged directed USP's, and gravitational force through two, or more, even number of neutral USP's (the probability of two USP's, one from a + charge and one from a - charge, acting in concert to cause this force is G).

[George Gerhab. **Dark Energy**. *Academ Arena* 2013;5(9):72-72] (ISSN 1553-992X).

<http://www.sciencepub.net/academia>. 12

Key words: Energy

Calculations: The dark energy should be:

(the fraction, e_{sc} , of USP's making it into deep space) x (the total number of USP's made per second) x (Energy of each USP, I_{\min}) x (age of the universe in seconds)

$(2/3)(M/m_0)$ = total # of charged particles (M = mass of the universe and m_0 = mass of a nucleon) $N = 1/dt = \#$ of USP's made per particle per second.

$$E_{\text{dark}} = e_{sc} ((2/3)(MN/m_0)(I_{\min}) t$$

$$I_{\min} = (5/3)^2 4(\pi) h dx$$

$Ndx = dx/dt = c$. This works out to be:

$$E_{\text{dark}}/Mc^2 \text{ (ratio of dark energy to the energy of the regular universe)} = e_{sc}((2/3)(5/3)^2(4(\pi)) x (h/(m_0c)) t =$$

$$(2/3)e_{sc}(4.6 x 10^{-14}) t$$

For an age of 13 billion years, $t \sim 4 x 10^{17}$ secs so that we have:

$$E_{\text{dark}}/Mc^2 = e_{sc} ((4/3) x 10^4)$$

As a PURE GUESS : $e_{sc} = (3/5) x (m_e/m_p) = (3/5) x (1836)^{-1}$

Putting this value in yields a ratio of dark energy to the energy of the observable universe is 4, meaning the dark energy is 80% of the total universe. This energy inflates space much like air inflates a balloon. Since the amount of this energy depends on the age of the universe, this energy keeps increasing and so does inflation.

8/12/2013