Numerology: The Size of the Cosmological Constant

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Introduction.
The Cosmological Constant, λ, if it indeed exists, has a non-zero size. Its size today seems to be of the order of $9 \text{x} 10^{-36}$ s^{-2} [1]. Understanding why it is so small yet not zero is one of the concerns of cosmologists today, see for example, [2].

In this paper there is no physics and virtually no mathematics either, just numerology.

Model of the Cosmological Constant.

Propose that the cosmological constant is a function of time from the Big Bang, t, $\lambda(t)$.

$\lambda(t) = \dfrac{c^2}{s(t)}$ where $s(t)$ is the surface area of the universe at time t

and c is the speed of light.

$s(t) = 4\pi R(t)^2$ where $R(t)$ is the radius of the universe at time t

$$\Rightarrow \lambda(t) = \frac{c^2}{4\pi R(t)^2}$$

now let $R(t) = ct$

$$\Rightarrow \lambda(t) = \frac{c^2}{4\pi c^2 t^2}$$

$$\Rightarrow \lambda(t) = \frac{1}{4\pi t^2} \text{ seconds}^{-2}$$

Present Day
Age of universe 13.7 Billion years so t= $4.32 \text{x} 10^{17}$ seconds
therefore

$$\lambda(t) = \frac{1}{4\pi(4.32\text{x}10^{-17})^2} = 4.26\text{x}10^{-37} \text{ s}^{-2}$$

compares to today's estimate [1]of $9 \text{x} 10^{-36}$ s^{-2}

At Inflation Start
Age of universe was t= $1\text{x}10^{-36}$ seconds
therefore

$$\lambda(t) = \frac{1}{4\pi(1\text{x}10^{-36})^2} = 7.96\text{x}10^{+70} \text{ s}^{-2}$$

At Inflation Stop
Age of universe was t= $1\text{x}10^{-32}$ seconds
therefore

$$\lambda(t) = \frac{1}{4\pi(1\text{x}10^{-32})^2} = 7.96\text{x}10^{+62} \text{ s}^{-2}$$

Published data [2] gives $\lambda(\text{inflation})$ of the order of 10^{68} to 10^{76} s^{-2}

[1] Collaboration, Planck, PAR Ade, N Aghanim, C Armitage-Caplan, M Arnaud, et al., Planck 2015 results. XIII. Cosmological parameters. arXiv preprint 1502.1589v2 6 Feb 2015.
[2] Jung-Jeng Huang, "Evaluation of the Cosmological Constant in Inflation with a Massive Nonminimal Scalar Field," Advances in High Energy Physics, vol. 2015, Article ID 569789, 7 pages, 2015. doi:10.1155/2015/569789