

Can the Big Bang be So Precise?

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ABSTRACT

Currently popular Big-Bang-Theory is based on Doppler-Shift-Interpretation of the ‘cosmological-red-shift’. But it is shown here that the value of Hubble-constant matches so perfectly with the strength-ratio of gravitational and electric forces, that such a coincidence is very un-likely; suggesting a need for considering alternative interpretations of the ‘cosmological-red-shift’.

1. Introduction:

If the universe were expanding due to the big bang, then the value of Hubble-constant could have been any. But the precisely measured value of Hubble-constant matches so perfectly, that we get the following relations:

$G m_p^2 / (h / m_p c) = h H_0$ Where m_p is mass of pi-meson, h is Planck’s constant, H_0 is Hubble constant, G is gravitational-constant, and c the speed-of-light. This relation is derived from the famous Steven Weinberg’s relation.

$$h H_0 / m_p c^2 = G m_e m_p / e^2$$

Energy lost by a cosmologically-red-shifted-photon at a distance $D = (G m_e m_p / e^2)$ electrostatic-potential-energy that an electron would loose at a distance D

The above relations strongly suggest that ‘cosmological-red-shift’ seems to be related to the gravitational-force; and there is little possibility that there occurred a big-bang causing expansion of the universe.