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Early dark energy from the dark energy-dark matter interaction

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Abstract

In this paper we propose a dark energy-dark matter interaction model in which an early dark energy phase emerges. This model is unique since the usual interacting dark matter-energy models affect the late time cosmology and not the early phase. Although it sounds to be a solution for Hubble tension, but CMB dataset prefers $H_0 = 67.4 \pm 1.5$, which is inconsistent with local measurements. We will discuss the reasons behind these results.

Keywords: early dark energy, dark energy-dark matter interaction, Hubble tension

For full article, refer to the Persian section