

Probing the Primordial Universe: Insights from Astroparticle Physics

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Abstract: *Astroparticle physics is an interdisciplinary field bridging particle physics, astrophysics, and cosmology to uncover the fundamental properties of the universe. By probing the primordial universe, scientists aim to understand the physical processes that governed the early stages of cosmic evolution. This paper explores the key areas where astroparticle physics provides insights into the origin and evolution of the universe, including cosmic inflation, the role of dark matter and dark energy, and the formation of large-scale structures*

Keywords: Primordial Universe, Astroparticle Physics, Cosmic Inflation