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Particle Physics On the Cosmic Frontier: Higgs Inflation Revisited

Thursday 12 June 2025 16:30 (30 minutes)

Cosmic Inflation provides a window into the highest energy scales realized in the history of our universe. Higgs Inflation, wherein the Standard Model Higgs or a variant is identified as the inflaton, provides a minimal framework for incorporating cosmic inflation into the Standard Model. In this talk I will revisit particle production in Higgs Inflation, and present new idiosyncratic aspects which distinguish it from other inflation models, with implications for the production of dark matter, the baryon asymmetry of the universe, and particle physics experiments.

Keyword-1

dark matter

Keyword-2

Higgs

Keyword-3

cosmology

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