

Phenomenology 2025 Symposium



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Possible imprints of non-thermal leptogenesis on the CMB observables

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I will discuss the possible imprints of high-scale non-thermal leptogenesis on cosmic microwave background (CMB) from the measurements of inflationary observables such as spectral index (n_s) and tensor-to-scalar (r) ratio, which otherwise is inaccessible to the conventional laboratory experiments. I will argue that non-thermal production of baryon (lepton) asymmetry from subsequent decays of inflaton to heavy right-handed neutrinos (RHN) and RHN to SM leptons is sensitive to the reheating dynamics in the early Universe after the end of inflation. Such dependence provides detectable imprints on the $n_s - r$ plane which is well constrained by the Planck experiment.

Mini Symposia (Invited Talks Only)

Plenary (Invited talks only)

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