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Leptogenesis after Inflation in a Pati-Salam Model

Monday 22 May 2017 at 15:30 (00h30')

Content :

In this talk I discuss a supersymmetric Pati-Salam model of fermion masses and mixing angles which fits low energy data. The model is then extended to include an inflationary sector which is shown to be consistent with Bicep2-Keck-Planck data. The energy scale during inflation is associated with the PS symmetry breaking scale. Finally, the model is shown to be consistent with the observed baryon-to-entropy ratio necessary for Big Bang Nucleosynthesis.
It turns out that only the heaviest right-handed neutrino decays produce the correct sign of the baryon-to-entropy ratio.
Nevertheless, we obtain the observed value due to the process of instant reheating.

arXiv :

1612.04382

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