

Cosmological collider signatures of massive gauge bosons

Tuesday 7 June 2022 17:00 (15 minutes)

The inflationary universe could be an interesting testbed of beyond the Standard Model theories at energies far above the reach of terrestrial colliders. In this talk, I will discuss the production of massive $U(1)$ gauge bosons during inflation and show that it leaves characteristic signatures in CMB spectrum and creates gravitational waves detectable at LIGO/LISA interferometers. I will also talk about the prospect of detecting nongaussianity and parity violation in these signals.

Author: RAHAT, Moinul

Presenter: RAHAT, Moinul

Session Classification: Parallel