

Phenomenology 2023 Symposium



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Gravitational Wave and Parity Odd Signals at the Cosmological Collider

Monday 8 May 2023 17:30 (15 minutes)

- Introduce a Chern-Simons term that inflaton is coupled with a gauge boson and show that the gauge boson can be sufficiently produced during inflation.
- Constrain the mass and chemical potential of the gauge boson and the most stringent constraint is the non-Gaussianity of the equilateral bispectrum.
- Show three signals of the gauge boson: oscillation with respect to the mass in the squeezed bispectrum, parity violation in the trispectrum, and gravitational waves.

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