

Exploring cosmological gravitational wave backgrounds through the synergy of LISA and ET

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The Gravitational Wave (GW) interferometers LISA and ET are expected to be functional in the next decade(s). In this talk, I shall discuss about possible synergies between these two detectors, with the aim of a multi-band detection of a cosmological stochastic GW background. I shall illustrate that LISA and ET operating together will have the opportunity to effectively assess the characteristics of the GW spectrum produced by a cosmological source, but at separate frequency scales. The two experiments in tandem can be sensitive to features of the early-universe cosmic expansion that might not be possible to detect otherwise. I shall also discuss several examples of early-universe scenarios to explain the advantages of such a synergy.

Track type

Cosmology

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