

Seeing highly anisotropic gravitational wave backgrounds from the early universe

Saturday, 4 May 2024 16:30 (20 minutes)

A stochastic gravitational wave background (GWB) produced in the early universe would necessarily exhibit anisotropies analogous to the CMB. In multi-field inflationary scenarios, anisotropies in GWB could differ significantly from those of the CMB if sourced by a quantum field different from the one sourcing CMB. In these scenarios, however, the more interesting case of highly anisotropic GWB typically comes at the cost of suppressed isotropic part. In this talk, I will present models of modified post-inflationary cosmology in which this tradeoff can be made less severe. Such models significantly improve the detection prospect of these novel GWB anisotropy maps at future GW detectors.

Are you willing to consider presenting a poster instead?

No

Primary author: BODAS, Arushi (University of Chicago and Fermilab)

Presenter: BODAS, Arushi (University of Chicago and Fermilab)

Session Classification: Talks