

Séminaire de physique des particules et de cosmologie

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Mardi 05/02/2019, 16h00-17h00

Orme des Merisiers Salle Claude Itzykson, Bât. 774

Anisotropies of the astrophysical gravitational background

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The astrophysical background of gravitational waves (AGWB) is made up by the incoherent superposition of gravitational wave signals emitted by a large number of resolved and unresolved astrophysical sources from the onset of stellar activity until today. I present a theoretical framework to fully characterize the AGWB in terms of energy density anisotropies which is based on the resolution of Olbers' paradox. I also discuss how these results can be recovered from a Boltzmann approach with an ad-hoc GW emissivity. It is found that the predictions of the signal angular statistics depend on the astrophysical modelling, hence this observable opens a new window on the history of compact objects populations.

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