

Detecting Muons in Neutron Stars with Neutrinos and Gravitational Waves

Wednesday, 3 March 2021 11:00 (1 hour)

A large abundance of stable muons is an inescapable consequence of high-mass neutron stars. In this talk I will firstly discuss the role of muon diffusion in neutron stars. This can lead to out-of-equilibrium muon decays yielding MeV-scale neutrinos as well as contribution to the neutron star cooling rate. In the second part I will turn to BSM scenarios in which muonic forces play a role in neutron star binaries and their subsequent mergers through gravitational wave measurements.

Join Zoom Meeting

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Meeting ID: 987 8839 7051

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