

Neutron stars and Constraints for the Equation of State of Dense Matter

Monday, October 7, 2024 9:50 AM (20 minutes)

In this talk I review our current understanding of the interior of neutron stars and modern constraints relevant for dense matter. This includes theoretical first-principle results from lattice and perturbative QCD, as well as chiral effective field theory results. From the experimental side, it includes heavy-ion collision and low-energy nuclear physics results, as well as observations from neutron stars and their mergers. I also discuss the relevance of isospin, strangeness, and magnetic fields on the dense and hot equation of state.

Presenter: DEXHEIMER, Veronica (Kent State University)