

Equation of state of dense matter for application to binary neutron star mergers

Wednesday, 11 October 2023 16:50 (35 minutes)

I will review the various ways of deriving an equation of state (EOS) of dense matter both at zero and finite temperature, according to the possible presence of exotic degrees of freedom like hyperons and deconfined quarks. I will then discuss the need for an accurate knowledge of such EOS in order to describe astrophysical systems of actual interest like binary neutron star mergers and supernova explosions.

Presenter: LOGOTETA, Domenico

Session Classification: Compact stars