APR21-2021-000235

Abstract for an Invited Paper for the APR21 Meeting of the American Physical Society

Neutron Star Mass Limits and the Equation of State KATERINA CHATZIIOANNOU, Caltech

Gravitational wave observations of compact binary mergers can yield accurate measurements of the component masses. However, the nature of the merging compact bodies (black holes or neutron stars) can be difficult to determine, and interpretation of the observations sometimes hinges on input from astrophysics and nuclear physics. In this talk, I will discuss the recent LIGO/Virgo observations and their interpretation in relation to the high-density matter properties. I will also discuss how they relate to the possible existence of a low mass gap and future prospects for empirically characterizing it.