Contribution ID: **117** Type: **not specified**

Limiting phase transition scenarios in NSs: challenges and opportunities

Friday, October 11, 2024 9:30 AM (50 minutes)

Since the discovery of a two-solar-mass pulsar back in 2010, the field of neutron-star physics has been revolutionized along with great progress in the theory and modeling of strongly-interacting matter at supra-nuclear densities. In this talk, I will focus on the implications for limiting viable scenarios of high-density hadron-to-quark phase transitions in the inner cores of neutron stars, with the aid of multi-messenger astronomy and theoretical calculations of the low-density matter. Future prospects with more advanced microphysics input as well as upgraded facilities with better sensitivity will be discussed.

Presenter: HAN, Sophia (Shanghai Jiao Tong University)