



Contribution ID: 39

Type: Talk

Multimessenger astrophysics of compact stars with exotic cores

Monday 26 August 2024 09:30 (30 minutes)

Relativistic density functionals based on baryon-meson Lagrangians can be used to describe effectively dense matter in compact stars including hyperonic and Delta-resonance degrees of freedom. These can be supplemented with a first-order phase transition to quark matter at high densities to describe hybrid compact stars. I will discuss how the mass-radius and tidal deformability inferences from electromagnetic and gravitational wave observations constrain the current models of hypernuclear and hybrid stars. I will briefly review recent results on the bulk viscosity of dense nucleonic matter in hot compact stars, which emerged in recent years as the leading dissipative channel in binary-neutron star merger simulations.

Internet talk

No

Is this an abstract from experimental collaboration?

No

Name of experiment and experimental site

Not an experiment

Is the speaker for that presentation defined?

Yes

Details

I am the speaker

Author: Prof. SEDRAKIAN, Armen

Presenter: Prof. SEDRAKIAN, Armen

Session Classification: Workshop on Astro-Cosmo-Gravity

Track Classification: Workshops & Special Sessions: Workshop on Astro-Cosmo-Gravity