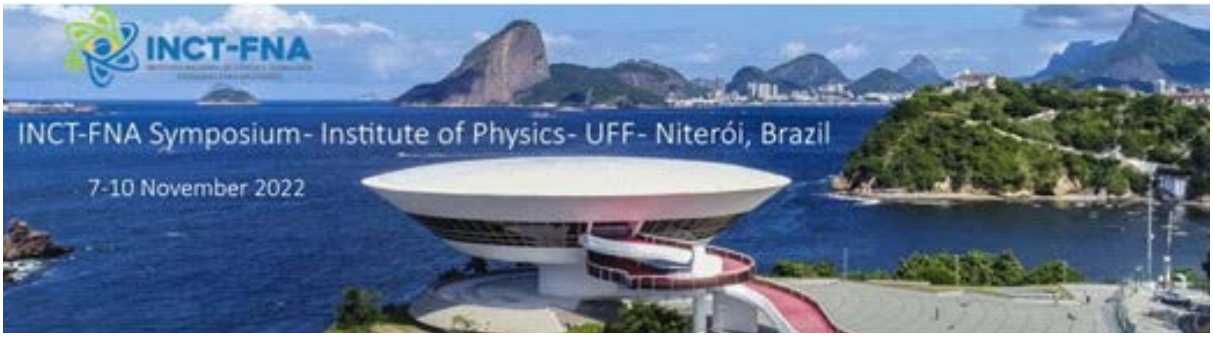

Quarkyonic models for the EoS of dense matter

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In recent years our understanding of the equation of state (EoS) of dense nuclear matter has been significantly improved by the analysis of multimessenger data from gravitational wave and radio and X-ray pulsars. The interpretation of such data established important constraints for physical observables as maximum mass, radius, and tidal deformability of a neutron star inspiral: to describe dense matter the EoS must be stiff enough to support a state with mass greater than 2 solar masses and, at the same time, its stiffness must be moderated to correspond to radius smaller than ~13.4 km with the canonical masses. In this talk, I will show why quarkyonic matter is a good candidate to take into account the behavior of the EoS of dense matter, and how to construct a simple quarkyonic effective field theory.

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