

The dark side of neutron stars

Wednesday, 19 December 2018 14:30 (1 hour)

I will try here to convince you that neutron stars can be used as a laboratory to test dark matter candidates that deviate from the standard WIMP scenario. After introducing toy models that lead to the formation of dark structures bounded to neutron stars, I will show how the presence of dark matter affects typical neutron stars observables such as the mass-radius relation, tidal deformability and the gravitational wave spectrum emitted by neutron stars mergers.

Presenter: MARZOLA, Luca (NICPB Tallin)