Dark Matter and Stars: Multi-Messenger Probes of Dark Matter and Modified Gravity

Contribution ID: 88 Type: not specified

Neutron stars in theories beyond GR - from theory to astrophysical constraints

Friday, 5 May 2023 09:00 (40 minutes)

Even though often underestimated as probes of the strong field regime of gravity because of the matter uncertainties, neutron stars still provide the best up-to-date constraints in a number of GR modifications. In the present talk, we will review the most important models of neutron stars in such theories focusing primarily on the astrophysically viable candidates. Their dynamics and the related astrophysical implications will be also discussed. Special attention will be paid to scenarios that offer clear qualitative different signatures of beyond GR physics.

Primary author: Dr DONEVA, Daniela (University of Tuebingen)

Presenter: Dr DONEVA, Daniela (University of Tuebingen)