



Contribution ID: 10

Type: **not specified**

Unfaithfulness of tidal gravitational-wave approximants and equation of state constraints from binary neutron star signals

Tuesday, 22 September 2020 13:15 (30 minutes)

Gravitational-wave signals from binary neutron star coalescences carry information about the star's equation of state in their tidal signatures. A major issue in the inference of the tidal parameters (or directly of the equation of state) is the systematic error introduced by waveform approximants. In this talk I will discuss their impact on the loud, high signal to noise ratio events that will be observed by advanced and third generation detectors, and show how current state of the art waveform models are insufficient to unequivocally infer equation of state constraints from GW PE.

Presenter: GAMBA, Rossella (Jena)