Contribution ID: **57** Type: **not specified**

Can primordial black holes explain LIGO/Virgo observations?

Tuesday, 18 June 2024 09:30 (30 minutes)

The current merger rate prescriptions for primordial black holes (PBHs) only apply to peaked mass distributions. For an extended mass distribution that includes features from the QCD epoch, additional effects must be taken into account that can importantly change these rates. Based on new estimations of the merger rates of early and late PBH binaries, I will present an update of the status of PBHs to explain the LIGO/Virgo observations of compact binary coalescences, and of the allowed dark matter fraction made of stellar-mass PBHs based on gravitational-wave observations.

Primary author: CLESSE, Sébastien (University of Brussels (ULB))

Presenter: CLESSE, Sébastien (University of Brussels (ULB))

Session Classification: Session 5