Sixteenth Marcel Grossmann Meeting



Contribution ID: 1094

Type: Invited talk in the parallel session

Primordial Black-Hole Mergers: Formation and Properties

Friday, 9 July 2021 09:00 (25 minutes)

Primordial black holes are black holes that may have formed in the early Universe. Their masses potentially span a range from as low as the Planck mass up to many orders of magnitude above the solar mass. This, in particular, includes black holes with mass (and spin) comparable to those recently discovered by LIGO/Virgo. These may well be primordial in nature, which may also be true for those in the planetary-mass range as well as those providing the seeds for the super-massive black holes in galactic centres. I will give an overview on formation scenarios for primordial black holes, elaborate on their abundance constraints as well as discuss gravitational-wave signatures from their mergers.

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Session Classification: Explosive Events Associated with Compact-Object Binary Mergers

Track Classification: Binaries: Explosive events associated with compact-object binary mergers