

Primordial Black Holes: gravitational-wave signatures and possible contribution to the dark matter

mercredi 19 mai 2021 15:00 (30 minutes)

The detection of gravitational-waves from binary black hole mergers has rekindled the idea that primordial black holes may have formed in the early Universe. I will review some recent developments in the field of primordial black holes: formation mechanisms, mass function, astrophysical limits, possible contribution to the Dark Matter and links to the Baryogenesis. I will particularly focus on their gravitational-wave signatures: merging rates, explanation of recent LIGO/Virgo events (GW190521, GW190815, GW190425), subsolar black hole searches, stochastic gravitational-wave backgrounds and continuous waves or high-frequency GW detectors as a probe of planetary-mass primordial black holes.

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