

The Primordial Black Holes Variations

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In the age of gravitational wave astronomy and direct black hole imaging, the possibility that some of the black holes in the universe have a primordial, rather than stellar, origin, and that they might be a non-negligible fraction of the cosmological dark matter, is quite intriguing. I will review the status of the field, describe search strategies and future prospects for detection across many decades in black hole mass, discuss how light primordial black holes could seed both baryonic and particle dark matter in the very early universe, and comment on how the search for primordial black holes may lead to a deeper understanding of the elusive Galactic “rogue planets”.

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