Stochastic Gravitational-Wave Background from Coalescences of Primordial Black Hole

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We will introduce the mechanism for forming the binary primordial black holes, and then investigate the stochastic gravitational wave background from coalescences of primordial black holes with monochromatic [1] and extended mass function [2,3], respectively. In particular, we will also discussion the implications for LISA.

References:

[1] S. Wang, Y.F. Wang, Qing-Guo Huang, T. Li, Phys.Rev.Lett 120(2018)191102

[2] Z.C. Chen, Qing-Guo Huang, ApJ 864(2018)61

[3] Z.C. Chen, F. Huang, Qing-Guo Huang, arXiv:1809.10360 (to appear in ApJ)