

Abstract Submitted
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Observing Massive Black Hole Binary Coalescences with LISA

JOHN BAKER, JOAN CENTRELLA, NASA-GSFC — Massive black hole binary coalescences are among the most important astrophysical sources of gravitational waves to be observed by LISA. The ability to observe and characterize such sources with masses $\sim 10^5 M_\odot$ and larger at high redshifts is strongly dependent on the sensitivity of LISA in the low frequency (0.1 mHz and below) regime. We examine LISA's ability to observe these systems at redshifts up to $z \sim 10$ for various proposed values of the low frequency sensitivity, under current assumptions about the merger rates. The discussion will focus on the astrophysical information that can be gained by these observations.

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