

Gravitational wave lensing as a probe of small-scale structures in our universe

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Gravitational waves emitted from binary black hole mergers exhibit highly distinctive characteristics. When these waves undergo gravitational lensing, the resulting distortions in amplitude and phase can be identified. This phenomenon can thus be leveraged to probe small-scale dark matter structures that may have originated in the early universe. In this talk, I will discuss recent advances in this field, including measurements of the small-scale matter power spectrum through lensing.

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