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Accurate Phenomenological Waveform Models for Black Hole Coalescence in the Frequency Domain

Wednesday 16 December 2015 17:35 (20 minutes)

This talk will discuss the current state of the phenomenological waveform approach for non-precessing black hole binaries, and recent numerical relativity simulations used in the modelling and performed with the BAM code. Using these simulations, we have extended the calibration range of our inspiral-merger-ringdown model to mass ratio 18. The talk will in particular also discuss the anatomy of the merger-ringdown waveform in the frequency domain, and the construction of hybrid post-Newtonian-numerical relativity waveforms.

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