

Abstract Submitted
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Modelling multiple modes of spinning merger waveforms

BERNARD KELLY, JOHN BAKER, WILLIAM D. BOGGS, JAMES VAN METER, NASA Goddard Space Flight Center — The Implicit Rotating Source (IRS) ansatz provides a coherent model of the dominant modes of gravitational radiation from a merging black-hole binary. Building on work with unequal-mass nonspinning binaries [Baker et al. Phys. Rev. D vol. 78, 044046 (2008)], we have applied the IRS to mergers of aligned and anti-aligned spinning binaries to form useful multi-mode waveform templates. We also discuss issues of parameter selection and spin and mass measurement with the Goddard Hahndol code.

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