

Abstract Submitted  
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**Binary Neutron Star Mergers: Prospects for Multimessenger Observations** STEVEN LIEBLING, C W Post Campus -Long Island Univ, MATTHEW ANDERSON, Indiana University, LUIS LEHNER, Perimeter Institute for Theoretical Physics, PATRICK MOTL, Indiana University Kokomo, DAVID NEILSEN, Brigham Young University, CARLOS PALENZUELA, Universitat de les Illes Balears, MARCELO PONCE, University of Guelph — We evolve a binary system of two, equal-mass neutron stars in a quasi-circular orbit through and past merger. We consider different nuclear equations of state, which vary from soft to quite stiff, and allow for magnetization of the system and neutrino cooling via a leakage scheme. Here, I focus on potential observables, other than gravitational waves, produced mainly by the hot, strongly magnetized matter resulting from the merger and study their dependence on both the equation of state and the initial magnetic field strength.

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