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The Signature of Black Hole-Neutron Star Binaries STEVEN LIEBLING, Long Island University, MATTHEW ANDERSON, Louisiana State University, ERIC HIRSCHMANN, Brigham Young University, LUIS LEHNER, Perimeter Institute/University of Guelph, PATRICK MOTL, Indiana University Kokomo, DAVID NEILSEN, Brigham Young University, CARLOS PALENZUELA, Canadian Institute for Theoretical Astrophysics — Black hole-neutron star (BHNS) binaries are key gravitational wave sources, merging in the frequency band to which Earth-based GW detectors are most sensitive. Furthermore, as possible candidates for short-hard gamma ray bursts, combined observations in both gravitational and electromagnetic bands of BHNS mergers is thus an exciting possibility. This talk will discuss results from simulations that account for gravitational and magnetic effects as well as connections with processes capable of explaining key features of gamma ray bursts.

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