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Estimating parameters of BH-NS binaries with gravitational waves RICHARD O'SHAUGHNESSY, University of Wisconsin, Milwaukee, BEN FARR, Northwestern University, EVAN OCHSNER, University of Wisconsin, Milwaukee, CHUNGLEE KIM, Seoul National University, Korea, VIVIEN RAYMOND, California Institute of Technology, HEE-SUK CHO, Pusan National University, Korea — Ground-based gravitational wave detectors will soon identify the gravitational wave signal from merging stellar-mass compact binaries, including black hole-neutron star (BH-NS) binaries. With their mass ratio and spin, BH-NS binaries produce an intrinsically complicated multimodal signal. In this talk, we examine how well gravitational wave detectors can estimate the parameters of fiducial non-precessing and precessing binaries. We compare our detailed Markov-chain Monte Carlo simulations against analytic (Fisher matrix) calculations.

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