

Abstract Submitted  
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**Detectability of equation of state parameters from black hole-neutron star inspiral** BENJAMIN LACKEY, University of Wisconsin-Milwaukee, KOUTAROU KYUTOKU, MASARU SHIBATA, Kyoto University, PATRICK BRADY, JOHN FRIEDMAN, University of Wisconsin-Milwaukee — Gravitational waves from compact binaries containing neutron stars may provide an important source of information regarding the neutron star equation of state. In contrast to binary neutron star inspirals where finite size effects are observed from tidal interactions and post-merger oscillations, the main finite size effect in black hole-neutron star systems is tidal disruption of the neutron star and its effect on the black hole ringdown. Recently Shibata et al. performed a set of black hole-neutron star simulations where two equation of state parameters were systematically varied. Using these simulations, we discuss the accuracy to which equation of state parameters can be measured with Advanced LIGO and the proposed Einstein Telescope.

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