Abstract Submitted
for the APR18 Meeting of
The American Physical Society

**A Phenomenological Frequency-Domain Waveform Model for Black Hole Kicks** KATIE CHAMBERLAIN, Montana State University, DAVIDE GEROSA, California Institute of Technology, CHRISTOPHER MOORE, IST-CENTRA, NICOLAS YUNES, Montana State University — Generic black hole binaries emit gravitational waves anisotropically and carry linear momentum away from the binary in some preferential direction that results in its recoil. Black hole recoils (or kicks) occur largely during the late inspiral and merger phases of evolution and result in Doppler shifted gravitational wave emission. In this talk, I will discuss a new analytic kicked gravitational waveform model that extends existing waveform approximants. This model could be used to measure black hole kicks with future gravitational wave detections.

Katie Chamberlain
Montana State Univ

Date submitted: 02 Jan 2018 Electronic form version 1.4