Analytical Templates for Generically Spin-Precessing Compact Binaries[1] KATERINA CHATZIIOANNOU, Montana State Univ, ANTOINE KLEIN, University of Mississippi, NICOLAS YUNES, NEIL CORNISH, Montana State Univ — Template based searches for gravitational waves from compact binaries are limited by the accuracy of the templates used. One of the main sources of error are precessional effects arising from the interactions of the spins of the two binary components, an efficient modeling of which can be important for detection and crucial for parameter estimation. In this talk, I will describe how the equations describing these precessional effects can be solved analytically. The resulting gravitational waveform can model spinning binaries of arbitrary spin magnitudes and orientations, and masses.

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