

Abstract Submitted
for the APR15 Meeting of
The American Physical Society

Surrogate waveform models¹ JONATHAN BLACKMAN, Caltech, SCOTT FIELD, Cornell University, CHAD GALLEY, MARK SCHEEL, Caltech, BELA SZILAGYI, Caltech, JPL, MANUEL TIGLIO, UCSD — With the advanced detector era just around the corner, there is a strong need for fast and accurate models of gravitational waveforms from compact binary coalescence. Fast surrogate models can be built out of an accurate but slow waveform model with minimal to no loss in accuracy, but may require a large number of evaluations of the underlying model. This may be prohibitively expensive if the underlying is extremely slow, for example if we wish to build a surrogate for numerical relativity. We examine alternate choices to building surrogate models which allow for a more sparse set of input waveforms.

¹Research supported in part by NSERC

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Date submitted: 07 Jan 2015

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