

Abstract Submitted
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What Waveforms do Data Analysts Want?, or the dangers of systematic errors in parameter estimation ILYA MANDEL, University of Birmingham — The measurement of astrophysical parameters of coalescing binaries, encoded in their gravitational-wave signature, is a crucial step for enabling gravitational-wave astronomy. However, our ability to make such measurements may be jeopardized by unknown systematic uncertainties in the waveform templates used for parameter estimation. I express my personal views on what waveform features are most crucial to maximize the astrophysical potential of advanced ground-based gravitational-wave detectors. I also discuss ongoing work on determining whether one particular source – neutron-star binaries – may be largely immune to systematic waveform uncertainties.

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