

Abstract Submitted  
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**Inferring the physical properties of gravitational wave sources from multi-wavelet waveform reconstructions** TYSON LITTENBERG, University of Alabama Huntsville and Universities Space Research Association, LIGO SCIENTIFIC COLLABORATION — The BayesWave burst detection and characterization algorithm was used during the first Advanced LIGO observing run as a follow-up analysis to candidate transient gravitational wave events. Among the BayesWave data products are robust reconstructed waveforms and probability density functions for metrics such as duration, bandwidth, etc. used to characterize the waveforms. We will demonstrate how the waveform metrics can be used to infer the astrophysical nature of a gravitational wave source, and present the status of BayesWave studies from the first advanced LIGO observing run.

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