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Overview of the Coherent WaveBurst Pipeline for the Laser Interferometer Gravitational-Wave Observatory SOPHIA SCHWALBE[1], Embry-Riddle Aeronautical University - Prescott, LIGO SUPERNOVA BURST GROUP TEAM[2] — With the herald of the second generation of the Laser Interferometer Gravitational-Wave Observatory (LIGO), this presentation aims to provide a brief overview of the coherent waveburst (cwb) pipeline for LIGO. This pipeline evaluates if the data collected contains a short burst gravitational wave (GW) and how it can be tuned to search for these waves from di?erent sources, such as binary star systems or, speci?cally for this presentation, supernovae. The pipeline itself ?rst processes the data, then converts the processed data into the time-frequency domain and determines potential candidates for GWs. The candidates are determined by the excess power correlated (coherent) between detectors around the world. The e?ciency of the pipeline for the particular emission model is tested through the injection of signals that model the GW of the source.

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