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The Q Pipeline search for gravitational-wave bursts with LIGO SHOUROV CHATTERJI, Caltech LIGO Laboratory, LIGO SCIENTIFIC COLLABORATION — The Q Pipeline is a multiresolution time-frequency search for gravitational-wave bursts of a priori unknown waveform. The method coherently searches data from multiple interferometric detectors for signal content within a well-defined region of time, frequency, and Q space. Here Q is the dimensionless quality factor of a signal as well as the approximate number of oscillations of its time-domain waveform. This talk briefly reviews the motivation for such a search, outlines its essential components, and sets forth a complete analysis pipeline. We then present the current status of the method applied to recent data from the LIGO detectors.

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