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Detection confidence tests for Inspiral Candidate Events[1] SARAH CAUDILL, Louisiana State University, LIGO SCIENTIFIC COLLABORATION, VIRGO COLLABORATION — In order to detect gravitational-wave signals from compact binary inspiral, the LSC-Virgo Compact Binary Coalescence group is using an analysis pipeline which aims to reduce the false alarm rate without rejecting gravitational-wave signals. However, because of the non-Gaussian, non-stationary noise exhibited by the LIGO detectors, a large number of false alarms are found at the end of the pipeline. The Compact Binary Coalescence group has been developing a detection checklist for the validation of candidate-events. This detection checklist consists of a series of further tests including data quality checks, analysis of the candidate appearance, parameter consistency studies, coherent analysis, which aim to corroborate a detection or to eliminate a false alarm. In this talk, the methodology used for candidate validation will be presented and illustrated with interesting examples of candidates.

[1]LSC/VIRGO Collaboration

[X] Prefer Oral Session
[ ] Prefer Poster Session

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