

Abstract Submitted
for the SES10 Meeting of
The American Physical Society

Data quality and vetoes in searches for gravitational waves in LIGO data JACOB SLUTSKY, LIGO-VIRGO SCIENTIFIC COLLABORATION
— Searches for gravitational waves with LIGO are hindered by the presence of transient detector noises not of astrophysical origin. Interferometric gravitational wave detectors are sensitive to a wide variety of these transients, originating both within the detector and from the surrounding environment. The LIGO-Virgo Collaboration has identified a variety of data quality issues that induce false alarms in searches for compact binary coalescences in LIGO data. We define time intervals effected by these artifacts, and use them as vetoes. These vetoes reduce the false coincidence rate of the searches.

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Date submitted: 16 Aug 2010

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