

Abstract Submitted  
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**Calibration Uncertainty of Advanced LIGO and its Effect on  
the Sensitivity of the gstlal compact binary coalescence Search Pipeline<sup>1</sup>**

MADLINE STOVER, MADLINE WADE, Kenyon College, LIGO COLLABORATION COLLABORATION — Gravitational waves are ripples in spacetime that the LIGO (Laser Interferometer Gravitational-wave Observatory) Scientific Collaboration works to detect. Calibrating the data from these detectors is essential for the identification of gravitational-wave signals in the data. Once the data is calibrated, it needs to be searched for gravitational-wave signals. There is both statistical and systematic uncertainty introduced into LIGO's data during the calibration process. I have investigated the impact of calibration uncertainty on the spacetime volume sensitivity statistic of a gravitational-wave search for compact binary systems. In this talk, I will present my findings from this study.

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