

Abstract Submitted
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Reducing noise due to Scattered Light in Advanced LIGO detectors. SIDDHARTH SONI, Louisiana State University — Noise due to scattered light has been a frequent disturbance in the Advanced LIGO gravitational wave detectors, hindering the detection of gravitational waves. The non-stationary scatter noise caused by low-frequency motion can be recognized as arches in the time-frequency plane of the gravitational wave channel. During the third Observing run, we found two different populations of scattering noise. Here I present the methods used to characterize one of the population, investigate its multiple origins, and the technique used to mitigate the noise during the second half of the third Observing run.

Siddharth Soni
Louisiana State University

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