

Abstract Submitted  
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**Global Noise Subtraction in LIGO Interferometers** RYAN DEROSA, Louisiana State University, LIGO COLLABORATION — In order to provide local seismic isolation and reduce the feedback control signals in the 4 km LIGO detectors an active feed forward system has been in use since 2004. As a modification to this scheme a network of seismometers has been used to create global feed forward signals, resulting in increased seismic isolation below 3 Hz. This additional isolation has provided increased duty cycle and sensitivity. The force applied to each optic to maintain cavity resonance has also been reduced, producing less transient noise in the data stream.

Ryan DeRosa  
Louisiana State University

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