

Abstract Submitted  
for the APR08 Meeting of  
The American Physical Society

**A High Frequency Search for Gravitational Wave Bursts** BRENNAN HUGHEY, MIT, LIGO SCIENTIFIC COLLABORATION — We present a first look at an all-sky gravitational wave burst search in the frequency range 1 to 6.5 kHz using LIGO data. Previous burst searches with ground-based interferometers have been limited to frequencies below 2 kHz. However, various models predict gravitational wave emission in the several kiloHertz range from astrophysical phenomena including gravitational collapse, neutron star modes and low mass black hole mergers. This shot-noise dominated frequency regime can be analyzed with the same tools as lower frequency analyses.

Brennan Hughey  
MIT

Date submitted: 15 Jan 2008

Electronic form version 1.4