

Abstract Submitted  
for the APR16 Meeting of  
The American Physical Society

**Advanced LIGO searches for gravitational waves associated with gamma-ray bursts** DIPONGKAR TALUKDER, Univ of Oregon, LIGO SCIENTIFIC COLLABORATION AND VIRGO COLLABORATION COLLABORATION — Gamma-ray bursts (GRBs) are the most luminous, cataclysmic events observed in our universe. The progenitor scenarios of GRBs include mergers of binary systems composed of neutron stars or a neutron star and a stellar-mass black hole, core collapse of massive stars, and perturbed neutron stars. Gravitational-wave emission is expected to accompany such events. The first observing run of Advanced LIGO began in September 2015. We are currently searching data for gravitational waves associated with these events. We present the status of the searches for gravitational waves associated with GRBs detected by gamma-ray satellites during Advanced LIGO's first observing run.

Dipongkar Talukder  
Univ of Oregon

Date submitted: 07 Jan 2016

Electronic form version 1.4