

Abstract Submitted
for the APR12 Meeting of
The American Physical Society

Gamma-Ray burst triggered searches for gravitational wave inspiral signals in LIGO/Virgo data ALEXANDER DIETZ, University of Mississippi, LIGO SCIENTIFIC COLLABORATION, VIRGO COLLABORATION — Short Gamma Ray Bursts are widely believed to be created from the merger of either two neutron stars or a neutron star and a black hole. As such systems are expected to produce gravitational waves, they are one of the primary targets of gravitational wave detectors, such as LIGO and Virgo. Because the time and the location of such an event is known, the data can be analyzed with a lower threshold compared to untriggered searches. In this talk I will detail the advantages of a triggered search, and present the status of current and past GRB-triggered search in LIGO and Virgo data. Finally, I will give an outlook to detection prospects with advanced detectors which will start taking data around 2015.

Alexander Dietz
University of Mississippi

Date submitted: 10 Jan 2012

Electronic form version 1.4