Abstract Submitted
for the APR09 Meeting of
The American Physical Society

Sky Localization of Gravitational Wave Signals Using Time of Arrival LARRY PRICE, PATRICK BRADY, University of Wisconsin – Milwaukee — An important feature of low-latency searches for gravitational waves is the ability to quickly identify the sky location of possible sources. This then allows for rapid searches for possible electromagnetic signatures by pointing more conventional telescopes. Here we will discuss a method of localizing inspiral sources using time of arrival data from both LIGO detectors and Virgo and how well we can expect this method to perform based on the analysis of simulated signals. Particular focus will be placed on how many pointings will be required for each signal and its dependence on the signal to noise ratio.

Larry Price
University of Wisconsin – Milwaukee

Date submitted: 09 Jan 2009 Electronic form version 1.4