Abstract Submitted
for the APR09 Meeting of
The American Physical Society

Low-latency search for gravitational-wave transients with electromagnetic follow-up: plans and progress JOSHUA SMITH, Syracuse University, LIGO SCIENTIFIC COLLABORATION, VIRGO COLLABORATION — In the coming months the LIGO and Virgo laser interferometric gravitational wave detectors will recommence their coordinated search for gravitational waves with increased astrophysical range. We present plans and progress towards implementing a low-latency search for gravitational-wave transients during the upcoming run. A goal of this search will be to identify candidate events and corresponding sky locations within tens of minutes. In the Advanced LIGO era (starting around 2014), when detections should be commonplace, prompt electromagnetic follow-up of burst signals will be extremely valuable for extracting the maximum astrophysical information from detections. To lay the foundations of this type of multi-messenger gravitational-wave astronomy, we are now arranging to carry out a pilot program of electromagnetic follow-ups, in collaboration with other astronomers.

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Date submitted: 13 Jan 2009 Electronic form version 1.4