Abstract Submitted for the MAS14 Meeting of The American Physical Society

Near Real-Time Compact Binary Merger Gravitational Wave Searches with Advanced LIGO CODY MESSICK, Penn State University, KIPP CANNON, Canadian Institute for Theoretical Astrophysics, RYAN EVERETT, MIGUEL FERNANDEZ, CHAD HANNA, Penn State University, LIGO SCIEN-TIFIC COLLABORATION — With Advanced LIGO nearly ready for a science run in late 2015, the Compact Binary Coalescence(CBC) group within the LIGO Scientific Collaboration (LSC) is planning near real-time searches for compact binary mergers with plans to partner with astronomers for rapid follow-up of candidate signals. I will discuss a new low latency analysis pipeline which decreases the latency of compact binary merger detection from O(1) hour to O(1) minute. In addition, the current status of development and prospects for the next few years of time-domain gravitational wave astronomy and astrophysics will be provided.

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