Abstract Submitted for the APR20 Meeting of The American Physical Society

Reducing Latency in LIGO Data Calibration EZRA MOGUEL, Kenyon College, LIGO COLLABORATION — My research for the The Laser Interferometer Gravitational Wave Observatory (LIGO) Collaboration takes place within the Calibration group, and is trying to minimize the delay associated with making the primary data product in order to bring us closer to the stage of instantaneous availability of LIGO data. The present delay associated with the calibration of LIGO data is about 5 seconds and our goal is to bring this down to less than 1 second, which I attempted to do through asymmetrical windowing. A reduction in latency through asymmetric filtering will allow us to do electromagnetic follow up on neutron star and black hole mergers quicker and more thoroughly.

> Ezra Moguel Kenyon Coll

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