

1. Singer, L. on the LIGO/Virgo EM follow-up program, partner facilities, and observations carried out during O1 (this talk).
2. Essick, R. on the LIGO/Virgo low-latency analyses and impacts of analysis methods and assumptions on GW localization.
3. Urban, A. on joint time and spatial coincidence analysis with GRBs.
4. Cho, M. on low-latency GW candidate selection, data validation, and alerts.

Could these talks appear in the same session? In the above order, they will proceed in a top-down manner, so we suggest either the order above or its reverse.

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Broadband Electromagnetic Follow-up of Advanced LIGO Sources LEO SINGER, NASA Goddard Space Flight Center, LIGO SCIENTIFIC COLLABORATION, VIRGO COLLABORATION — Advanced LIGO began observing in September 2015 with over 3 times the distance reach (27 times the sensitive volume) of its previous configuration. Some gravitational-wave sources, particularly neutron star binary mergers, are expected to produce broadband electromagnetic transients which may be crucial to understanding the astrophysical context of these events. We have assembled a consortium of over 60 ground- and space-based gamma-ray, x-ray, optical, infrared, and radio facilities collaborating to search for broadband electromagnetic counterparts of gravitational-wave sources. In this talk, we describe the LIGO/Virgo EM follow-up program and the astronomical facilities that participated during this first LIGO observing run. Then, we survey the multi-wavelength observing campaigns embarked upon for specific gravitational-wave events. Finally, we discuss lessons learned and the way forward for joint GW-EM observations in an era of increasingly sensitive GW detectors.

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