

- (1) Singer, L. on the LIGO/Virgo EM follow-up program, partner facilities, and observations carried out during O1;
- (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 (this talk);
- (4) Cho, M. on low-latency GW candidate selection, data validation, and alerts.

If possible, could these talks appear in the same session? In the above order, they would proceed in a top-down manner, so we suggest either this order or its reverse.

for the APR16 Meeting of
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Never Ignore a Coincidence: Rapid Identification of Advanced LIGO Sources with Electromagnetic Transients¹ ALEX URBAN, University of Wisconsin-Milwaukee, LIGO-VIRGO COLLABORATION — When two ultra-compact objects inspiral and merge it is a rare cosmic event, resulting in “luminous” gravitational wave emission. It is also fleeting, staying in Advanced LIGO’s current sensitive band only for at most a few minutes. But when there is at least one neutron star, disk formation during the merger may power a slew of bright electromagnetic counterparts, including short gamma-ray bursts (GRBs) and their afterglows. Here we present efforts to localize LIGO signal candidates on the sky in under a minute after detection, and to identify coincidences in time with GRBs from the *Swift* and *Fermi* satellites on a similar timescale. We also report on the population of *Swift* and *Fermi* GRBs that occurred during Advanced LIGO’s first Observing Run, and discuss follow-up observations of GRB 150906B, a short-duration burst discovered by the InterPlanetary Network of satellite observatories, which may have occurred in a galaxy within LIGO’s sensitive volume.

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