

Abstract Submitted
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On Coincidence of Gravitational Waves and Meter-Wavelength Radio CREGG YANCEY, University of Maryland, College Park — A case can be built for performing multi-messenger astronomy using gravitational waves and radio for the study of high-energy astrophysical transients. Of key interest are transient events produced by binary neutron star mergers (the primary target), supernovae, and gamma-ray bursts. To this end, this talk will briefly discuss motivations and a proposed method for performing and analyzing coincidence of gravitational-wave and meter-wavelength radio observations to enable multi-messenger astronomy. Additionally, brief discussion is given to the improvement of detection capability for both gravitational-wave and meter-wavelength radio observational instruments through relaxation of detection requirements as a result of coincidence. These improvements are eminently applicable to the near-term target instruments, the Advanced LIGO gravitational-wave detector and the Long-Wavelength Array radio telescope, as well as future observational instruments used in joint observations.

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