

Abstract Submitted
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Fermi-LAT Observations of Gravitational Wave Sources JUDITH RACUSIN, NASA/GSFC, FERMI LARGE AREA TELESCOPE COLLABORATION — The wide energy range and all-sky survey operations of the Fermi Large Area Telescope (LAT) make it an important asset in the search for electromagnetic counterparts to gravitational wave sources. LAT regularly detects long-lasting high-energy gamma-ray emission from short gamma-ray bursts, which are commonly associated with compact binary mergers that include neutron stars. As demonstrated by the recent upper bounds set on LAT emission from GW150914, LVT151012, and GW151226, LAT provides sensitive observations of the large gravitational wave localization regions in normal survey operations. Over the coming years, as LIGO and Virgo approach design sensitivity and will soon be able to detect these mergers, LAT will continue to provide a unique capability to potentially localize and characterize gravitational wave events.

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