

Recent science highlights from the Fermi Large Area Telescope

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The Fermi Large Area Telescope has been surveying the gamma-ray sky for more than 13 years. With more than 5,000 detected gamma-ray sources, LAT observations have been instrumental to improve our understanding of particle acceleration and gamma-ray production in astrophysical sources. In this talk, I will review recent science highlights from the LAT. In particular, I will focus on transient phenomena seen with the LAT. This includes the first observation of a giant magnetar flare at GeV energies, as well as the on-going detection of gamma-ray flares of active galactic nuclei (AGN). Gamma-ray flares from AGN can reveal insights on the particle acceleration mechanisms at work. They also provide an essential tool for the search of neutrino counterparts. The new Fermi-LAT light curve repository will greatly simplify the multi-messenger counterpart search.

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