

Abstract Submitted  
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**Fermi-LAT observations of transient and flaring systems in the Galaxy** ELIZABETH HAYS, NASA/GSFC, THE FERMI LAT COLLABORATION — The Fermi Large Area Telescope (LAT) views the entire gamma-ray sky ( $\sim 20$  MeV to  $>300$  GeV) every three hours. The all-sky coverage provides an excellent opportunity for the discovery of new types of gamma-ray transients. Ongoing survey observations over more than two years have been successful in revealing gamma-ray flares from several notable Galactic objects. The LAT has detected the nova V407 Cygni, a first in gamma rays. The LAT has also found two short flares from the Crab Nebula in the 100 MeV to 1 GeV range. I will discuss what this activity reveals about particle acceleration in astrophysical sources and consider the prospects for future transient discoveries with the LAT.

Elizabeth Hays  
NASA/GSFC

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