

Abstract Submitted
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The on-orbit calibration of the Fermi Large Area Telescope EDUARDO DO COUTO E SILVA, SLAC National Accelerator Laboratory-KIPAC, FERMI LAT COLLABORATION¹ — We will describe the calibrations of the Large Area Telescope (LAT) aboard the Fermi Gamma ray Space Telescope. The LAT began its on-orbit operations on June 23, 2008 using pre-launch calibration values as reference. Here we will describe on-orbit calibration results obtained using known astronomical sources, galactic cosmic rays, and charge injected onto the front-end electronics. Calibrations, defined in a generic sense, correspond to alignment in time of trigger signals, determination of detector thresholds and response, evaluation of the perimeter of the South Atlantic Anomaly (SAA), measurements of live time, of absolute time, and spatial alignment. We discuss the stability of calibration values and describe minor changes observed since the satellite launch. These calibration results are incorporated in the LAT datasets to be publicly released in Sep 2009. Work at the SLAC National Accelerator Laboratory is supported by Department of Energy contract DE-AC03-76SF00515.

¹Representing the Fermi-LAT Collaboration

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