

Abstract Submitted
for the APR12 Meeting of
The American Physical Society

Validation and Calibration of the Fermi Large Area Telescope Instrument Performance ERIC CHARLES, SLAC, FERMI-LAT COLLABORATION — We describe the *Fermi*-LAT instrument performance, for an updated event selection the LAT team developed in light of experience gained from on-orbit observations. Furthermore, we also describe both the Instrument Response Functions (IRFs) derived solely from Monte Carlo simulations of γ -rays interactions with the LAT as well as corrections to those IRFs which were motivated by discrepancies we observed between flight and simulated data. We also give details of the numerous validations we have performed using flight data and quantify the residual uncertainties in the IRFs. Finally, we describe some techniques the LAT team has developed to propagate those uncertainties into estimates of the systematic errors on high level science measurements such as fluxes and spectral indices.

Eric Charles
SLAC

Date submitted: 06 Jan 2012

Electronic form version 1.4