

Abstract Submitted
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Developing a Pass 8 Cosmic-Ray Proton Event Class DAVID M. GREEN, Univ of Maryland-College Park, ELIZABETH A. HAYS, NASA - GSFC, FERMI LARGE AREA TELESCOPE COLLABORATION — The Pass 8 improved gamma-ray simulation and reconstruction package for the Large Area Telescope (LAT) on the Fermi Gamma-ray Space Telescope has drastically enhanced the ability of the LAT to perform gamma-ray science. The Pass 8 improvements have also allowed for the development of a new cosmic-ray proton analysis. Using these new algorithms, we are able to create a proton event class which can be used for future studies, including spectral and anisotropy analyses. This developing event selection has a high acceptance with energies from 50 GeV to over 1 TeV and, with over 6 years of data, will give high statistics for future analyses. Currently, energy reconstruction and systematic errors in the acceptance are being investigated. A future anisotropy study is of interest because of less dependence on these factors than a spectral analysis. We present a detailed study of this new proton event class for the Pass 8 proton analysis.

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