

Abstract Submitted  
for the APR17 Meeting of  
The American Physical Society

**A Search for Cosmic-ray Proton Anisotropies with Fermi LAT**

MATTHEW MEEHAN, JUSTIN VANDENBROUCKE, University of Wisconsin-Madison, FERMI-LAT COLLABORATION — In eight years of operation, the Fermi Large Area Telescope (LAT) has detected a large sample of cosmic-ray protons. The LAT's wide field of view and full-sky coverage make it an excellent instrument for studying anisotropies in the arrival directions of protons at all angular scales. These capabilities enable the LAT to make a full-sky 2D measurement of cosmic-ray proton anisotropy complementary to many recent TeV measurements, which are performed by projecting onto right ascension. Any detected anisotropies probe the structure of the local interstellar magnetic field and could indicate the presence of a nearby source

Matthew Meehan  
University of Wisconsin-Madison

Date submitted: 30 Sep 2016

Electronic form version 1.4