



Contribution ID: 17

Type: **not specified**

Study of charged cosmic rays with the Fermi Large Area Telescope

Monday, 14 September 2015 09:40 (25 minutes)

The Fermi Large Area Telescope (LAT) is a space-based observatory conceived to study high-energy gamma rays, but also capable to detect charged cosmic-ray electrons and positrons. It is operating in low Earth orbit since June 2008 and thanks to its large acceptance, has collected the largest high-energy cosmic-ray electron sample to date, with more than 10k events above 1 TeV. The new Pass 8 event-level analysis, recently released by the Fermi-LAT Collaboration, provides several improvements, from the instrument simulation to the reconstruction algorithms, and opens new opportunity for cosmic-ray studies. In this talk we describe the instrument capabilities as a cosmic-ray detector and review its previous results. Recent new measurements and future prospects will also be discussed.

Primary author: SGRO', Carmelo (PI)

Presenter: SGRO', Carmelo (PI)

Session Classification: Cosmic Ray and Astrophysical Neutrino Detection

Track Classification: Cosmic Ray and Astrophysical Neutrino Detection