

Abstract Submitted  
for the APR17 Meeting of  
The American Physical Society

**The Monster Next Door: Fermi-LAT Observations of Supernova Remnant N132D in the Large Magellanic Cloud** DANIEL CASTRO, ELIZABETH HAYS, NASA/GSFC, FABIO ACERO, Laboratoire AIM, CEA-IRFU/CNRS/Universit Paris Diderot, PATRICK SLANE, Harvard-Smithsonian Center for Astrophysics, JOHN HUGHES, Rutgers University, PAUL PLUCINSKY, Harvard-Smithsonian Center for Astrophysics, FERMI-LAT COLLABORATION COLLABORATION — Supernova remnant (SNR) N132D, located in the Large Magellanic Cloud, represents a unique opportunity for the study of  $\gamma$ -ray emission from shock accelerated cosmic rays (CRs) in another galaxy since it stands as the first and only extra-Galactic SNR detected in  $\gamma$ -rays. N132D is bright in the X-ray, infrared and radio bands, as well as being detected in TeV energy  $\gamma$ -rays, and hence, characterizing its emission in the Fermi-LAT band allows us to build a very complete picture of the properties of the system and its progenitor, and help us understand CR acceleration in SNRs.

Daniel Castro  
NASA/GSFC

Date submitted: 30 Sep 2016

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