

Rangel Lemos, Luis Juracy

Position: PhD student

Period covered: 2006 - present



I Scientific Work

During this year I mainly studied the production of gamma rays in hadronic interactions. During the time spent at the University of Rome I collaborated with Prof. Ru±ni on the interpretation of the high energy gamma ray emission from Gamma Ray Bursts (GRBs) arising from hadronic interactions of GRB protons with the Circum Burst Medium (CBM). This work was presented at the // Kolkata Conference on `Observational Evidence for Black Holes in the Universe', held in Kolkata-India.

II Conferences and educational activities

Conferences and Other External Scientific Work

July 2007 - Fermi's approach to the study of hadronic interactions,

Italian-Sino Workshop on Relativistic Astrophysics, Pescara--Italy

II Kolkata Conference on `Observational Evidence for Black Holes in the Universe', 2008, February 10-16, Kolkata, India. In this conference I presented the talk `Fermi's approach to the study of hadronic interactions", which will be published in the proceedings series of the American Institute of Physics.

2008 Nanjing GRB Conference, 2008, June 23-27, Nanjing, Chine. In this conference I presented the poster `GRB 060714 in the Fireshell Model".

XIII Brazilian School of Cosmology and Gravitation, 2008, July 25-August 2, Mangaratiba/Rio de Janeiro, Brazil.

III Stueckelberg Workshop on Relativistic Field Theories, 2008, July 8-18, Pescara, Italy. In this workshop I presented the talk `Threshold energies of pions from pp interactions".

X Italian School of Astrophysics - `Probing Stellar Populations out to the Distant Universe', 2008, September 7-19, Cefalu-Sicily, Italy.

III 2007-2008 List of Publications

Fermi's approach to the study of hadronic interactions, Rangel Lemos, L.J., Casanova, S., Kelner, S. R., Ruñi, R., RELATIVISTIC ASTROPHYSICS: 4th Italian-Sino Workshop. AIP Conference Proceedings, Volume 966, 2008, pp. 325-330.

Spatial and observational homogeneities of the galaxy distribution in standard cosmologies, Rangel Lemos, L. J.; Ribeiro, M. B. Astronomy and Astrophysics, Volume 488, Issue 1, 2008, pp.55-66.