Contribution ID: **27** Type: **not specified**

The origin of the cosmic ray positron/electron excess and beyond

Friday, 28 October 2011 17:40 (20 minutes)

The spectra of cosmic electrons and positrons should have contributions from known sources such as particles accelerated in supernova remnants and from interactions of cosmic and interstellar protons. Any evidence for an additional component, as reported by PAMELA, Fermi and HESS experiments, may carry hints of a new phenomenon. I will examine the implications of the recent detection of extended, multi-TeV gamma-ray emission from Geminga pulsar wind nebula by Milagro experiment, which reveals the existence of an ancient/nearby cosmic ray accelerator that can also plausibly account for all these observations.

Presenter: Dr YUKSEL, Hasan (LANL)

Session Classification: Anisotropy measurements and astrophysical models