



Contribution ID: 47

Type: oral

Latest applications and results with the GALPROP cosmic-ray propagation code

Thursday, 8 September 2016 11:15 (15 minutes)

The interest on cosmic-ray (CR) propagation models has increased in the recent years, thanks to their fundamental role in analyzing and interpreting data from a broad spectrum of observatories. More and more precise observations and particular studies require detailed and sophisticated modeling, such as GALPROP. This code has been of fundamental support of many observatories. We have used GALPROP not only to describe CR measurements, including latest AMS-02 and Voyager 02 data, but also to model and interpret the interstellar emission produced by CRs at high energy from EGRET, COMPTEL, INTEGRAL, Fermi-LAT, and in radio and microwaves from radio surveys, WMAP and Planck. Our multi-messenger approach is providing important information on CRs and the interstellar medium.

We review our latest studies and results in these topics, addressing also future applications.

Primary author: Dr ORLANDO, Elena (Stanford University)

Co-authors: Dr STRONG, Andrew (MPE); Dr JOHANNESSEN, Gudlaugur (University of Iceland); Dr MOSKALENKO, Igor (Stanford University); Dr PORTER, Troy (Stanford University)

Presenter: Dr ORLANDO, Elena (Stanford University)

Session Classification: Parallel