XVI International Symposium on Very High Energy Cosmic Ray Interactions (ISVHECRI 2010)



Contribution ID: 107 Type: Contributed

Sibyll with Charm

Wednesday, 30 June 2010 09:30 (15 minutes)

The cosmic ray interaction event generator Sibyll is widely used in extensive air shower simulations for cosmic ray and neutrino experiments. Charm particle production has been added to the Monte Carlo with a phenomenological, non-perturbative model that properly accounts for charm production in the forward direction. As prompt decays of charm can become a significant background for neutrino detection, proper simulation of charm particles is very important. We compare charm meson and baryon production to accelerator data.

If this is a contributed presentation, please indicate preference for Oral (O) or Poster (P):

O

Primary author: Dr AHN, Eun-Joo (Fermilab)

Co-authors: LIPARI, Paolo (University of Rome); ENGEL, Ralph (Karlsruhe Institute of Technology); GAISSER,

Thomas (University of Delaware); STANEV, Todor (University of Delaware)

Presenter: Dr AHN, Eun-Joo (Fermilab)

Session Classification: Sensitivity of Monte Carlo models to data

Track Classification: Monte Carlo models