

Contribution ID: 584

Type: Poster

Constraints on the Proton in the Pulsar Wind Nebula

The knee-like structure of cosmic rays spectrum still need to be understood. The Klein-Nishina effect of the inverse Compton scattering results in lower efficiency for energy loss of electrons, which gives the probability for proton dominate PeV. Based on the fact that lots of very-high-energy and ultra-high-energy sources are associated with pulsar wind nebula, we consider the contribution from pulsar wind nebula to explain cosmic rays from TeV to PeV. The ratio of electron and proton is assumed to obtain both leptonic and hadronic spectrum.

Collaboration(s)

Author: OU, Ziwei (Tsung-Dao Lee Institute, Shanghai Jiao Tong University)
Co-author: ZHOU, Hao
Presenter: OU, Ziwei (Tsung-Dao Lee Institute, Shanghai Jiao Tong University)
Session Classification: PO-2

Track Classification: Gamma-Ray Astrophysics