Contribution ID: 1071 Type: Talk

Measurement of the diffuse gamma-ray emission from Galactic plane with LHAASO-KM2A

Monday 19 July 2021 19:18 (12 minutes)

Galactic diffuse gamma ray emission (GDE) is introduced by the galactic cosmic rays interacting with the interstellar medium and/or radiation fields. We report the measurements of the GDE in several regions of the Galactic plane with energies ranging from 10 to 100TeV by the half-array of LHAASO-KM2A. A modified equal-zenith angle method is employed for background estimation, in which the known gamma-ray sources have been carefully extracted. The energy spectrum of GDE is obtained by using the forward-folding method. The LHAASO results will help to understand the propagation of cosmic rays in the Galaxy.

Keywords

diffuse gamma ray; lhaaso

Collaboration

Lhaaso

other Collaboration

Subcategory

Experimental Results

Primary author: ZHAO, shiping

Co-authors: Ms ZHANG, rui; Prof. ZHANG, yi; Prof. YUAN, qiang

Presenter: ZHAO, shiping

Session Classification: Discussion

Track Classification: Scientific Field: GAI | Gamma Ray Indirect