

Updated KM2A results of Geminga and Monogem

In this study, We analyzed the data from KM2A to study the gamma-ray halos surrounding the nearby pulsars, Geminga and Monogem. We have precisely measured the morphologies and spectra of the gamma-ray halos, extending beyond the energy of 100 TeV. We report the first detection of significant asymmetry in the morphologies of the two halos, which has substantial implications for the properties of the interstellar medium. Moreover, our data reveals a distinct exponential cutoff in the gamma-ray spectrum of the Geminga and Monogem.

Primary author: CHEN, Ensheng (IHEP)

Co-authors: FANG, Kun; YUAN, Qiang (Purple Mountain Observatory); LIU, Siming (Southwest Jiaotong University); BI, Xiaojun (IHEP, CAS); ZHANG, Yi; GUO, Yingying; HU HONGBO, hongbo (IHEP)

Presenter: CHEN, Ensheng (IHEP)