

Proposal Abstract:

Pulsars have featured prominently in the gamma-ray sky since the birth of gamma-ray astronomy. The discovery of radio-loud gamma-ray pulsars provide a unique opportunity to study pulsar geometry at two different wavelengths. At radio wavelength, the accurate measurements pulsar geometry depend on high quality polarization profiles of pulsars. With extremely high quality of pulsar polarization observations, FAST is an ideal facility to study the polarization of radio-loud gamma-ray pulsars. In this proposal, we propose to observe radio-loud gamma-ray pulsars using FAST. The number of radio-loud gamma-ray pulsars with polarization properties will be significantly improved. We will measure the radio emission origins of radio-loud gamma-ray pulsars by RVM fitting, and constrain the gamma-ray emission origins by combining the data of FAST and the archive data of Fermi satellite. Our study will provides more constraints on the emission region of pulsar.