

Proposal Abstract:

PSR J0205+6449 is a young spin-down power pulsar, who is a multi-bands pulsar and weak in radio band. The pulse profiles of PSR J0205+6449 are typical double-peak structure in high energy band, with a phase separation of around 0.5 and no bridge radiation. However, its radio pulse is a single narrow peak, making it suitable for studying the radiation geometry of high energy by determining the geometry information through radio polarization measurements. Based on timing results in gamma-ray band. Spin-up glitches has been occurring frequently and a potential state change exists as well, we also found special F1 structure in the strong timing noise. combining analysis through the consistency of TOA obtained from different radiation bands, the origin and underlying physical reasons of timing noise can be study. Furthermore, we found a radiation state change of high energy follows a glitch. Through study the post-glitch radio radiation state and its correlation with changes in the high-energy radiation state. The structure of the pulsar magnetosphere and how glitch impact the pulsar magnetosphere can be deeper understood combining the radiation model of pulsars.