Proposal Abstract:

Studying the polarization emission characteristics of weak emission regions and single pulse of radio pulsars provides an opportunity to better understand the radio emission beam and magnetospheric geometry. In this proposal, we apply for 3 objects , PSR B0329+54 displays a complex multi-components structure, and it is usually used to understand the radio emission beam, the polarization emission characteristics of these multi-components structure provides further insight into emission properties of this pulsar. PSR B0823+26 also exhibits a large number of radiation behaviours over timescale of seconds to hours such as drifting sub-pulse, nulling and mode changing. Studying the polarization emission characteristics of this pulsar in detailed provides an opportunity to understand the relationship between these various emission phenomena and magnetospheric geometry. And PSR B2020+28 is a narrow pulse longitudes radiative pulsar with a duty cycle ~10%, this pulsar displays a well longitude-resolved double pulse profile . The emission intensity of its double pulse profile varies with time . We can better understand the radiation mechanism of this pulsar through studying the polarization emission characteristics of this behaviour and single pulse in detailed.