

Proposal Abstract:

Timing is a basic procedure after a pulsar is discovered. Furthermore, pulsars are excellent probes for investigating the ionized interstellar medium, reflecting on the dispersion measure (DM) delay, Galactic Faraday rotation (RM) and ionized interstellar medium (IISM) scattering. We would like to constrain the density fluctuations of the Galactic electrons, from pulse broadening due to ISM scattering. However, profiles of the highly scattered FAST-GPPS discovered pulsars have low signal-to-noise ratio (S/N). We propose to accumulate the integration time for enhancing the the pulsar signal to show the scattering effect and derive scattering parameters, and to do timing observations for those scattered pulsars. The RMs and polarization profiles will also be obtained from the accumulated high S/N observations.