

Proposal Abstract:

Scintillation phenomena of pulsars provide an important tool for studying interstellar scattering screens and their properties. In this proposal, we propose to conduct long-tracking single observations for 34 CPTA pulsars so as to acquire high SNR scintillation arcs. The aims for this proposal are as follows: 1) detecting the temporal correlation between arclets to study the longitudinal spectrum of turbulence. 2) investigating the high precision timing correction method for scattering. 3) measuring the geometry of binary pulsars.