

PID:PT2022_0049

Abstract:

The phenomenon of single-pulse modeling and the “bi-drifting” subpulses of PSR B1839-04 challenging all theories of pulsar emission. We propose to observe the polarization properties of pulse profile and single-pulse of this pulsar with the FAST to search the periodicity of single-pulse modeling, and to study the frequency and time behaviors of modeling and subpulse drifting. The observation will reveal the details of magnetosphere and radiation process. Using the FAST observation, the relevant radiation model of pulsar, such as the carousel model, will be further constrained and tested.