PID:PT2022 0168

Abstract:

In our latest observation by FAST, we found that there were quasi-period micropulses with the narrowest pulse width (90 us) and the smallest quasi-period (180 us) even seen in PSR J0034-0721. This phenomena give us a new clue to the geometry of the radio emission region, especially for the fine structures in the emission region. More details of microstructure were limited by the time sample. To study this phenomena carefully, we propose to observe this pulsar for 4 hours, about 1000 subpulses with quasi-period micropulses, and we hope record the baseband data using 19-beam receiver in FAST.