

PID:PT2022_0174

Abstract:

Millisecond pulsars (MSPs) tend to be in binary systems. Finding new binary systems especially the ones challenging the current stellar evolution theory is always on the frontier of pulsar astrophysics. The FAST Galactic plane pulsar Snapshot survey (GPPS) has discovered 408 pulsars, including 92 MSPs. 24 of them have already been confirmed in close binary systems. In this proposal, we propose to time 35 MSPs that exhibit some evidence of binary nature. These observations will help us to obtain their rotational, astronomical and orbital parameters, to identify valuable binary systems.