

PID:PT2022\_0178

Abstract:

Seven binary millisecond pulsars (MSP) discovered in FAST Galactic Plane Pulsar Snapshot (GPPS) survey have either strong relativistic effects or small time of arrival errors, so it's more likely that their post-Keplerian (PK) parameters are measurable. However, due to the lack of observations, the PK parameters of these GPPS binary MSPs are still unknown. We apply FAST following-up observations to find phase coherent timing solutions for these systems and determine their PK parameters, which are essential to further study of these systems. And these results can also tell us if their timing residuals have reached 100ns level so that they can improve the sensitivity of IPTA.