

Proposal Abstract:

The FAST Galactic Plane Pulsar Snapshot (GPPS) survey has discovered more than 660 pulsars. It is a challenge for timing so many newly discovered pulsars because of the limited operation time. We take the advantage of FAST multi-beam receiver, tracking three or more GPPS pulsars by different FAST beams in one observation. The feasibility of this timing strategy has been confirmed in last year by the project PT2023_0195. We got 2 TOAs for each of 41 GPPS pulsars in 11.6 hours. The obtained TOAs from this project will be combined with the other timing projects, contributing to different pulsar aspects, such as pulsar binary, young/old pulsars or pulsar glitch etc. In this cycle, we timing 90 GPPS-discovered pulsars by designed 29 "arc-trackings".