Technical Page

This proposal has been submitted before.

The previous proposal number is 3357.

Proposal Type:	Regular
General Category:	Pulsars
Observation Category:	Galactic
Total Time Requested:	16.5 Hours
Minimum Useful Time:	1.5 hour

Proposal Title: Timing millisecond pulsars discovered by FAST

ABSTRACT:

This is the continuation of a proposal that was granted full requested time in the last round. We propose to use the Arecibo 305-m telescope to perform timing observations for new millisecond pulsars (MSPs) discovered by Five-hundred-meter Aperture Spherical Telescope (FAST). Last round we proposed 5 MSPs and the observation have just been began and data is being proceeded. This round, we propose to follow up 3 new MSP s that was recently discovered. The MSPs are high value discoveries from FAST and could lead to important scientific discoveries. We intend to time each pulsar for 11 sessions spanning six months in the September 2019 semester phase obtain their initial timing ephemerides and identify any interesting binaries. This pulsar timing campaign would also enable the FAST pulsar search team to timely release these discoveries to colleagues in the Chinese and International Pulsar Timing Array community, facilitating further collaborations and contributing to the future detection

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Remote Observing Request

☐	Observer will travel to AO
☒	Remote Observing
☐	In Absentia (instructions to operator)

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

This proposal requires Iridium RFI protection at 1612 MHz between 10pm and 6am EST.

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz..

This proposal requires coordination with GPS L3 at 1381 MHz.