

Technical Page

This proposal has been submitted before.

The previous proposal number is 3268.

Proposal Type: Long-term
 General Category: Pulsars
 Sub-Category: Spectroscopy
 Observation Category: Galactic
 Total Time Requested: 17 Hours
 Minimum Useful Time: 2 hrs

Proposal Title: Long-term monitoring of the precessing pulsar PSR B2127+11C

ABSTRACT:

We propose to continue a long-term monitoring programme of PSR B2127+11C (or M15C), a relativistic pulsar in a double neutron star system in the globular cluster M15. Over the last few years, the pulsar has showed significant variations in its brightness and polarimetric properties. These effects can be ascribed to geodetic precession, a relativistic effect that causes the orientation of pulsar spin axis (and hence, of the emission beam) to change over time. The pulsar beam is slowly moving away from our line of sight, and may become undetectable very soon. The proposed observations aim at keeping track of the profile changes over the next months, before this is no longer possible because of geodetic precession.

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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.