

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Observation Category:
 Total Time Requested: 2.5 Hours
 Minimum Useful Time:

Proposal Title: Searching for a radio pulsar around an extremely low-mass white dwarf

ABSTRACT:

Low-mass white dwarfs are the prototypical companions of highly recycled millisecond pulsars. Both are the result of a low-mass X-ray binary phase in which much of the white-dwarf envelope is transferred to the neutron star, spinning up the latter. We here request a total of 2.5 hours to search for radio pulsations from the companion of a newly discovered extremely low-mass white dwarf. The discovery of a pulsar companion would be interesting for constraining neutron-star masses, binary evolution models and binary formation rates.

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Remote Observing Request

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

Instrument Setup

430 G L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

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

This proposal requires coordination with GPS L3 at 1381 MHz.