

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: SETI
 Total Time Requested: 24 Hours

Proposal Title: Reinvestigation of the top SETI@home candidate signals

ABSTRACT:

The SETI@home project is a piggyback search for narrow band signals which may indicate extraterrestrial intelligence. The SETI@home project has been recording at 2.5 MHz wide band from the 1420 MHz feed at Arecibo since December 1998. These data, which cover the bulk of the sky visible to the Arecibo telescope, have been distributed to 3.5 million volunteers in over 200 countries for analysis with the SETI@home client. This analysis has produced many candidates which meet the criteria of beam shape matching, persistence, and barycentric frequency stability which could indicate extraterrestrial origin. We propose to observe these top candidates in order to determine whether any are a sign of extraterrestrial intelligence.

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Service Observing Request

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

Remote Observing Request

- No
- Maybe
- Yes

Instrument Setup

L-narrow

Atmospheric Observation Instruments:

Description of Observer Equipment: We intend to use the SERENDIP IV instrument which is currently installed on the carriage house 1420 MHz receiver. This instrument provides the current data

for SETI@home. We intend to feed the SETI@home receiver from the Gregorian receivers for maximum sensitivity.

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1370-1470