

Technical Page

This proposal has not been submitted before.

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Galactic
 Total Time Requested: 1.5 Hours
 Minimum Useful Time: 1.5

Proposal Title: Confirming New Astrophysical Maser Transitions in the Massive Star Forming Region IRAS18566+0408

ABSTRACT:

We detected possible emission of CH₃OH at 6.85 and 7.28 GHz and CH at 7.34 GHz with the Arecibo Telescope. The lines were detected with a signal-to-noise between 3 and 5sigma and are likely masers. We propose a short (1.5 hours) observing run to confirm the detections. If confirmed, we would have discovered three new astrophysical maser transitions, which consequently can be exploited by subsequent high-spatial-resolution observations in the future.

Name	Institution	E-mail	Phone	Student
Esteban D. Araya	Western Illinois University	ed-araya@wiu.edu	309 318 9134	no

Remote Observing Request

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

Instrument Setup

C C-high

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

4590 - 4596
4657 - 4663
4747 - 4753
4762 - 4768
4826 - 4832
4913 - 4919
4951 - 4957
5002 - 5008
6665 - 6671
6742 - 6748
6851 - 6857
7272 - 7278
7280 - 7286
7322 - 7328
7345 - 7351
7395 - 7401

Other spectral windows we may observe depending on the amount of time left at the end of the run.

6013 - 6019
6027 - 6033
6032 - 6038
6046 - 6052
6103 - 6109
6275 - 6281
6673 - 6679