

Technical Page

Proposal Type: Urgent
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 4 Hours
 Minimum Useful Time:

Proposal Title: Radio Line Observations: An Educational Project using the Arecibo 305m Telescope

ABSTRACT:

The increased remote observing capabilities of astronomical observatories allow their use in higher education. This is important for general high level education of science students as well as for early training of a future generation of radio astronomers. With the goal of introducing a group of New Mexico Tech students currently enrolled in the Advanced Radio Astronomy course at NMT (PHYS- 566) to the techniques of professional radio astronomy, we propose spectral line observations with the Arecibo telescope. We propose to observe the HI line at 21cm for a small sample of spiral galaxies in order to recreate the Tully-Fisher relation. The students will be able to plan, conduct, reduce and analyze radio observations. In 2006 we have carried out a similar educational project using the Arecibo telescope with great success. The PI is familiar with the remote use of the telescope, and here we request 2 í 2 hour slots for educational observing with the Arecibo telescope.

| Name | Institution | E-mail | Phone | Student |
|--------------|-----------------|------------------|--------------|---------|
| Peter Hofner | New Mexico Tech | phofner@nrao.edu | 575 835 5233 | no |

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