

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 86 Hours

Proposal Title: HI observations of low surface brightness 2MASS galaxies

ABSTRACT:

We propose to obtain 21cm HI line spectra at Arecibo of a unique sample of low surface brightness (LSB) galaxies discovered in the 2MASS near-infrared survey. The present proposal concerns the 250 selected 2MASS objects in the RA range 20h45m-09h30m. HI line observations of the sample at declinations outside the Arecibo range are being obtained at Nançay as part of a DENIS/2MASS Key Project, a proposal for UBVR CCD photometry has been submitted, and we have access to all complementary DENIS I-band survey data. These data of infrared-selected LSBs will allow further investigation of the properties of the class of red, extremely gas-rich (with M_{HI}/L_B up to $50 M_{\odot}/L_{\odot}$) LSB galaxies and the strong deviation from the 'standard' Tully-Fisher relation found by O'Neil et al. (2000). These data will be used for the Ph.D. Thesis project of the PI.

Name	Institution	E-mail	Phone	Student
Delphine M. Monnier-Ragaine	Paris Observatory	delphine.ragaine@obspm.fr	+33-145077407	G

I NA want to do remote observing.

Instrument Setup

L-wide L-narrow

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations**Frequency Ranges Planned**