

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 120 Hours

Proposal Title: Study of the Evolution of the Mass-to-light Ratio of Galaxies to $z \sim 0.25$

ABSTRACT:

The objective of this program is to study the evolution of the zero point of the Tully-Fisher relation for galaxies at intermediate redshifts, $0.18 < z < 0.25$. Galaxies in this redshift interval have already been successfully detected in our A1803 program, whose purpose was to test the cross-calibration of the $H\alpha$ line widths measured by the Sloan Digital Sky Survey (SDSS). The targets will be extracted from the SDSS database, using the same selection criteria used for the A1803 observations. Together with the A1803 detections, the new observations will allow us to measure luminosity evolution of galaxies to $z \sim 0.25$, an issue hotly debated due to the conflicting results obtained by means of optical spectroscopy.

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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-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1140-1200

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