

Technical Page

This proposal has not been submitted before.

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 12 Hours
 Minimum Useful Time: 1 hour

Proposal Title: Gas Consumption in Post-Merger Galaxies

ABSTRACT:

Galaxy-galaxy interactions are a crucial part of galaxy evolution, with studies of these interactions showing changes in star formation rates, metallicity, AGN contribution, colours, morphologies, neutral gas content and IR emission. However, what happens post-coalescence has yet to be measured as part of a statistical study. We have therefore recently embarked on a study of the properties of post-mergers, using SDSS data to show that the SFR peaks in this final coalescence stage. What is currently unknown, however, is how much gas is left in the galaxy once the interaction is complete; is the majority of the gas reservoir depleted (either through consumption or stripping), or is there sufficient HI left for star formation to continue post-merger? We will tackle this question by combining our existing measurements of gas depletion in pairs of galaxies (that trace the early part of the interaction) with proposed L-wide observations of 55 post-mergers.

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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

1230-1470

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

This proposal requires coordination with GPS L3 at 1381 MHz.