

Technical Page

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

Proposal Title: Formaldehyde Emission in Galaxies

ABSTRACT:

Formaldehyde megamasers are a potentially productive area of research that was started with the Mini-Gregorian at Arecibo. Mapping studies of H₂CO emission in ARP220 suggests extended as well as compact emission regions that follow the NIR. Many questions remain about the pumping and the nature of the H₂CO emission regions. We propose to continue our earlier studies of extra-galactic H₂CO among three groups of sources: 1) The published tentative detections of Baan et al. (1993) require confirmation. 2) We propose to search additional super-luminous FIR galaxies among the 90+ OH megamaser sources and prominent OH absorbers. 3) We propose to enlarge the sample by changing the FIR color criterion, and also extend the search to nearby gas-rich spirals.

Name	Institution	E-mail	Phone	Student
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I do NOT want to do remote observing.

Instrument Setup

C

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

4000 - 4829 MHz