

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 96 Hours

Proposal Title: FORMALDEHYDE EMISSION IN GALAXIES

ABSTRACT:

H₂CO megamasers are a productive area of research that was started with the Mini-Gregorian at Arecibo. Many questions remain about the pumping and the nature of the H₂CO emission regions. Mapping studies of Arp 220 suggest extended as well as concentrated emission regions that follow the NIR emission structure. We propose three areas of work on H₂CO sources: 1) Confirm published detections and particularly the tentative detections from Baan et al (1993). 2. Search other superluminous FIR galaxies that are known to have OH megamaser emission but also the OH absorption sources. 3. Enlarge the sample of nearby FIR galaxies by changing the FIR color selection criteria used for the OH searches. In particular, search nearby spiral galaxies for weak formaldehyde emission.

Name	Institution	E-mail	Phone	Student
Willem A. Baan	NFRA, Westerbork Observatory	willem@nfra.nl	+31 (521) 595 128	N

Service Observing Request

Remote Observing Request

- | | |
|---|--|
| <input checked="" type="checkbox"/> None
<input type="checkbox"/> All of the observing run.
<input type="checkbox"/> Part of the observing run.
<input type="checkbox"/> Queue Observing | <input checked="" type="checkbox"/> No
<input type="checkbox"/> Maybe
<input type="checkbox"/> Yes |
|---|--|

Instrument Setup

C-band

Atmospheric Observation Instruments:

Description of Observer Equipment:

Special Equipment or setup: Special setup: Software needs: Media needs:

RFI Considerations

Frequency Ranges Planned

see proposal