

## Technical Page

Proposal Type: Regular  
 General Category: Astronomy  
 Sub-Category: Spectroscopy  
 Observation Category: Extragalactic  
 Total Time Requested: 300 Hours

**Proposal Title:** The HI Environment of NGC2903 – a Pilot Study for ALFA

**ABSTRACT:**

This proposal seeks to conduct a pilot survey of NGC 2903, a nearby massive, isolated spiral galaxy in order to: 1. observe the outer HI disk of the galaxy to measure the level at which the column density may truncate, relate this to the metagalactic radiation field, observe weak extended HI if present, trace the rotation curve as far as possible, and investigate the relation between this emission and the Lyman alpha absorbers, 2. probe the distribution function of CDM and lambda CDM satellites, and HVCs, if they are present, 3. study the nearby environment of an isolated galaxy for evidence of disk-halo or disk-IGM inflows and outflows, and 4. do the above to a sensitivity and coverage not yet achieved by earlier surveys. The information gleaned from this survey can be used to set benchmarks for future ALFA projects.

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**Service Observing Request**

**Remote Observing Request**

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

- No
- Maybe
- Yes

**Instrument Setup**

L-narrow

**Atmospheric Observation Instruments:**

**Special Equipment or setup:** The observing run should be standard.

**RFI Considerations**

## Frequency Ranges Planned

1414.7 - 1420.9