

## Technical Page

Proposal Type: Regular  
 General Category: Astronomy  
 Sub-Category: Spectroscopy  
 Observation Category: ALFA Precursor Shared Risk  
 Total Time Requested: 100 Hours

**Proposal Title:** E-ALFA Precursor Proposal: Deep Imaging of NGC 2903

*ABSTRACT:*

We propose deep observations of NGC 2903 and its immediate environment using the new ALFA receiver in shared-risk mode. The scientific objectives are to a) search for an extended HI disk and where it may truncate, b) investigate the possible association of such a disk to Ly limit systems, c) measure the outer HI rotation curve, d) search for and put limits on possible CDM satellites, constrain the HI mass function and HVCs in the presence of a massive galaxy, and e) search for evidence of outflows or other links between an isolated galaxy and its environment. The technical objectives are to investigate modes of observing, data reduction and analysis that can best utilize the new receiver. The scientific justification outlines these objectives in more detail.

Name	Institution	E-mail	Phone	Student
Judith A. Irwin	Queen's University	irwin@astro.queensu.ca	(613) 533-2717	no

**Service Observing Request**

**Remote Observing Request**

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

**Instrument Setup**

ALFA

**Atmospheric Observation Instruments:**

**Special Equipment or setup:** none

**RFI Considerations**

**Frequency Ranges Planned**