

### Technical Page

Proposal Type: Regular  
 General Category: Astronomy  
 Sub-Category: Spectroscopy  
 Observation Category: Extragalactic  
 Total Time Requested: 30 Hours

**Proposal Title:** HI observations of low-redshift galaxies that have hosted a supernova  
*ABSTRACT:*

By 1997 there were 86 catalogued type Ia supernovae with recession velocities  $\leq 10000$  km s<sup>-1</sup> in the Arecibo sky. 75% occur in spiral or irregular galaxies. We propose to obtain high signal-to-noise-ratio HI profiles for the 42 best-known as an initial study, with the intention that all will have a S/N >50, so that the 50% velocity widths have a sigma <1 km/sec. These will be used to check the variance in the peak magnitudes of the SN: They will be maintained on the www.

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**Service Observing Request**

**Remote Observing Request**

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

**Instrument Setup**

L-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