

**Title**:

**General Scientific Area** (please choose at least one)

* *Growth of Galaxies and Black Holes Through Cosmic Time*
* *Galaxy Ecosystems and Interstellar Medium*
* *Rise of Metals and Dust*
* *Magnetic Fields*
* *Star Formation in the Milky Way*
* *Milky Way Stars and Stellar Evolution*
* *Milky Way Interstellar Medium*
* *Planet Formation*
* *Solar System*
* *Exoplanets*
* *Cosmology*
* *Time Domain*
* *Other (specify)*

**First author** (Affiliation):

**Co-authors** (Affiliations):

**Abstract** (science question and methodology summary): *0.5 page*

**Science Justification**: approximately *2 pages*

Content to address:

* Broader context
* Science question
* Need for PRIMA
* Interpretation methods
* Link to testable hypotheses (if applicable)

1 figure highlighting measurements or discovery space enabled by PRIMA

**Instruments used**: check or specify details

| PRIMA FIRESS Spectrometer | | | | |
| --- | --- | --- | --- | --- |
| Pointed  High-res  R~4400@ 112 micr. | Pointed Low-res R~130 | Small Map  Low-res R~130 | Medium Map  Low-res R~130 | Large Map  Low-res R~130 |
|  |  |  |  |  |

| PRIMAger: Hyperspectral Imaging and Polarimetry | | | |
| --- | --- | --- | --- |
| Small Map  (< 20’x20’) | Large Map  (> 20’x20’) | Hyperspectral band\*  (25-80 microns; 12 filters; R=10) | Polarimeter band\*  (96, 126, 172, 235 microns; R=4) |
|  |  |  |  |

\* The two PRIMAger bands will observe simultaneously, with all filters. However, knowing your interest is focused on one or the other band, or both, will help the instrument team in developing optimized mapping strategies.

**Program size**:

o Small (<10 hrs)

o Medium (10-100 hrs)

o Large (100 + hrs)

**Approximate integration time** (based on calculation from sensitivity curves):

**Special capabilities needed** (e.g.: non-sidereal tracking, monitoring over X timescale, )

**Synergies with other facilities**:

**Description of Observations**: *1 pages*

Narrative of observational strategy

**References:**