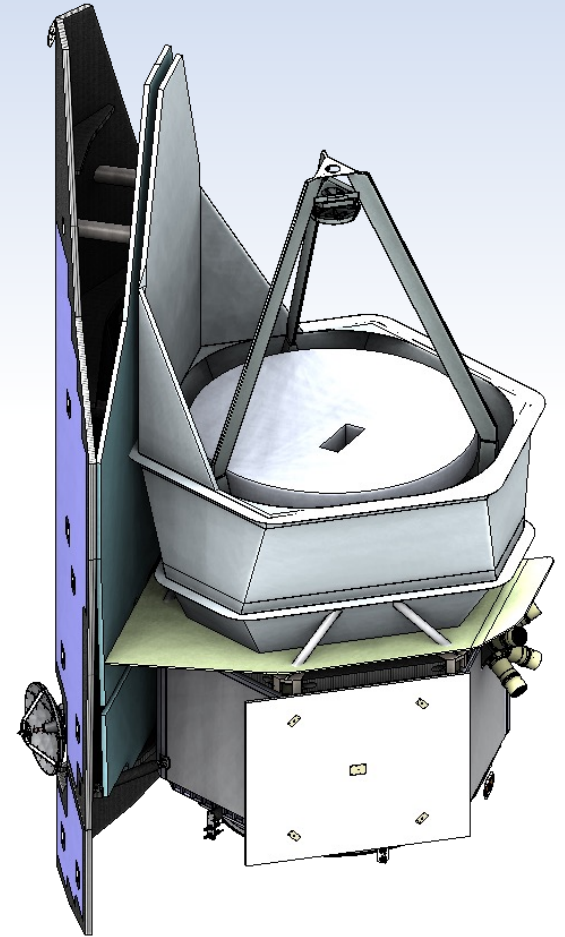


# PRIMA GO Science Book

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## General Observer Science is important for PRIMA

- Community-defined Guest Observer key projects and pointed observations comprise  $\geq 70\%$  of the PRIMA observing schedule
- We need your help to construct a GO science book which will inform and inspire GO Science for PRIMA
- Your submitted PRIMA cases will be included with authorship recognized in this GO Science book to to be released in the fall.
- Please fill out the General Observer template, your authorship and co-authors are recognized in the submission.
  - [https://prima.ipac.caltech.edu/system/media\\_files/binaries/34/original/PRIMA-General-Observer-template.docx?1679365875](https://prima.ipac.caltech.edu/system/media_files/binaries/34/original/PRIMA-General-Observer-template.docx?1679365875)
- **Deadline: Friday April 28 (extended from April 21)**

## PRIMA General Observer template contents

- **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*

## PRIMA General Observer template contents

- **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

## PRIMA General Observer template contents

**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 PRIMAgger 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.

## PRIMA General Observer template contents

- **Program size:**
  - ○ Small (<10 hrs)
  - ○ Medium (10-100 hrs)
  - ○ 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 page*  
 Narrative of observational strategy
- **References:**