

GEMINI PLANET IMAGER (GPI)

CALL FOR CAMPAIGN SCIENCE PROPOSALS

The Gemini Observatory is pleased to announce a Call for Proposals for GPI Campaign Science. GPI is a technologically advanced instrument designed specifically for obtaining images and low-resolution spectra of faint objects and/or features very near to bright objects. While GPI's primary science goal is the detection and characterization of exoplanets, its high contrast capabilities will allow significant scientific advances in the areas such as circumstellar disks, stellar evolution (mass transfer), fundamental stellar astrophysics (binaries) and solar system objects.

GPI is expected to be available for science use in Semester **2012B**.

Proposals

GPI Campaign proposals should embrace a large, scientifically compelling, and statistically significant investigation in the chosen science area that cannot be achieved through the standard proposal mechanism. Gemini will choose the most scientifically compelling proposal or proposals for scheduling.

As GPI will require median or better observing conditions to operate effectively, all successful programs will be executed in queue mode. However, the Observatory encourages successful science teams to plan on spending time a significant time in Chile during the commissioning and early science period so that they can gain a full understanding of GPI's performance.

We will consider programs that request from 200 to 1000 queue hours of telescope time, spread over a maximum of six semesters. (The GSC has recommended that the total allocation for GPI Campaign Science programs not exceed 1400 hours; the Board will approve the final allocation following proposal review.) A maximum of 180 campaign hours per semester will be scheduled as science ranking band 1. Proposers may request time to be scheduled in band 2.

The standard proprietary period for data is 18 months after acquisition of individual observations. Proposals may request and justify a longer proprietary period for specific campaign observations.

Proposals should address any necessary precursor or followup observations needed to accomplish the science goals of the program and describe how these observations will be obtained. Allocation through the Campaign will be for use of GPI alone.

Collaboration of teams from across the Gemini partnership is encouraged, and partner participation is a criterion by which campaign proposals will be evaluated.

Proposals must include:

- a. a discussion of the primary scientific goals of the project;
- b. a description of the experimental design, including sample selection, use of GPI, scheduling requirements, calibration, etc.;
- c. a statement of the time requested by semester and by science ranking band;

- d. a description of data products compatible with the international virtual observatory to be delivered, and the timeline for their delivery;
- e. a management plan that describes staffing and resources available to complete the science program. The management plan must also describe
 - i. the expected contributions of each participant;
 - ii. data management procedures, including access to data within the team;
 - iii. who is responsible for submitting progress reports and final reports;
 - iv. the process for redirecting the research agenda as discoveries are made;
 - v. the mechanism for routine communication among research team members.

The scientific justification of the proposal, including relevant figures and captions, is limited to 5 pages. The experimental design, including figures and captions, is limited to 6 pages. The required management plan is limited to 3 pages. There is no page limit on references or target lists.

Proposals should be submitted via email to Gemini Deputy Director/Head of Science, Nancy Levenson, nlevenson@gemini.edu by 5:00PM HST on March 31, 2011 (03:00 GMT on April 1, 2011).

The Instrument

Details about the instrument and its expected performance are available in a separate document, and on the Gemini website. Please see the instruments section of the Gemini website, <http://www.gemini.edu/sciops/instruments/GPI>, and current updates on GPI can be found at www.planetimager.org. Successful campaign proposers will be allowed to request minor adjustments to target lists and exposure times in light of actual on-sky performance of GPI. Gemini will be responsible for evaluating and approving these requested changes.

Research Collaboration Agreement

Each successful GPI Campaign Project will require a “Research Collaboration Agreement” signed by all members of the team before the campaign starts and submitted to the Gemini Deputy Director/Head of Science. The requirements of this agreement are described in the separate document: “Policies for GPI Campaign Projects.” The agreement should not be submitted with campaign proposals.

Program Review

Each successful GPI Campaign Project is to submit annual progress reports to the Gemini Director. These reports should contain (at a minimum) a summary of the observing time used thus far, comments on the quality of the data and whether the data quality is sufficient to meet the scientific goals of the program, a summary of the activities of each team member, the status of reduction of the data, and detailed plans for the next year of the project. The report should also indicate any preliminary science results arising from the project. Gemini and the GSC will assess these reports to determine if continuing campaign observations are warranted.