

## **CFHT Large Programs for 2017A and beyond**

CFHT will be accepting proposals for new Large Programs to start observing in semester 2017A and continue through at least the end of semester 2019B. The instruments available for this call are MegaCam, WIRCam, ESPaDOnS, and SITELLE. A total of 429 nights is available for this proposal call, taken from the Canada and France agency time, with up to 143 nights available every year. The total of 429 nights is a hard limit based on time commitment by the Canadian and French Agencies only; however, additional time may be allocated by other CFHT partners although is not confirmed at present. It is anticipated that the Large Program(s) selected in this call will be completed in six semesters (2017A-2019B) but it is possible that they may be required to proceed for longer at a reduced data acquisition rate; this flexibility is necessary to accommodate the start of a subsequent round of Large Programs whose start date will be correlated with the delivery of the SPIRou instrument. The proposals submitted in response to the present call must explain how they would handle this longer, lower data-rate situation, as explained below.

### **Large Program definition:**

A Large Program proposal must request at least 100 nights of observing time on CFHT and may request up to the maximum total of 429 nights from Canada and France (plus potential contributions by other partners). Proposals led by UH-based PIs that request 50% of their total time from the UH Agency can request a minimum of 50 nights. Within the total time requested, the observing plan must be able to obtain all the requested data in no more than six semesters, but must also be robust enough to allow a reduced data acquisition rate and a simultaneous extension beyond six semesters. The proposals should specifically discuss their robustness to such changes, for example by presenting several data acquisition timelines.

### **Selection Criteria:**

The Large Program evaluation committee will consider the scientific merit of the proposals, the feasibility of the observations at CFHT, the robustness of the proposed program to changes in data acquisition rate and a resulting extension beyond six semesters, the data and project management plans, and the capability of the team to handle the data reduction and scientific analysis. Other factors which will be taken into account in the selection process and that need to be addressed in the proposal include the risks associated with incomplete data collection (potentially linked to overloading an instrument or requesting too large a fraction of some observing conditions), the willingness of the LP team to provide immediate data access to the CFHT community, the potential use for the data beyond the main scientific goals of the LP, the potential legacy value of the

data acquired, and the inter-Agency nature of the LP team. All necessary calibration data should be requested as part of the original LP allocation. Proposing teams should seek the advice of CFHT on the evaluation of risk.

### **Additional points:**

For scheduling purposes, Large Programs are considered a separate Agency at CFHT. The amount of time allocated each semester is split into A (higher) and B (lower) priority time along the ratio 40%(A) and 60%(B), and LP observations will be carried out with the same A/B observing priority policy as is applied to all other Agencies. This arrangement spreads the risk associated with weather and telescope problems equally between regular and Large Programs. Additionally, the proposed LPs should consider spreading their target RAs throughout the year and requesting observing conditions that are not overly constraining. Historically, the average completion fraction for Large Programs at CFHT is above 80%, but some programs - particularly those with stringent requirements - have had lower completion fractions. LP time allocations are not carried forward from one semester to the next.

Approved LPs will be subject to periodic review of satisfactory progress. Specifically, progress reports will be submitted by the LP teams to the CFHT SAC every semester, while a more comprehensive review will be held mid-way through the Large Program period (nominally in mid-2018).

### **Application and evaluation procedures:**

Letters of Intent (LOIs), of ~1-page length, are to be submitted to CFHT by 2015 September 7. These letters are an important step in developing the LP Proposal Evaluation Panel and should provide sufficient science detail to inform that process. The LOIs are non-binding, but they should contain an abstract, list of expected co-Is, and rough estimate of the number of nights to be requested.

Full proposals are to be submitted to CFHT by 2016 January 31. The full Large Program proposals will be evaluated and ranked by an LP Proposal Evaluation Panel that may seek advice from experts in the world astronomical community. The CFHT SAC will consider the Panel's rankings and comments to select Large Programs for approval by the CFHT partner Agencies and Board.