CanTAC for LRP 2020

Dennis Crabtree (NRC Herzberg)

Introduction

CanTAC (Canadian Time Allocation Committee) currently handles Canadian proposals from CFHT and Gemini. CanTAC also handled JCMT proposals until Canada withdrew from JCMT. CanTAC is not directly involved with the Large Program proposals for CFHT and Gemini.

CanTAC Membership

CanTAC has two panels, Galactic and Extragalactic, which rank proposals based on scientific merit. Traditionally CanTAC panels have been made up of Canadian astronomers. In the last few years CanTAC has had difficulties finding enough panel members who had stellar astrophysics expertise and were not significantly conflicted (based on expected proposals from previous semesters). This was particularly true for the Galactic panel. To address this, CanTAC started adding members of the (mostly) expat Canadian community working the US. This approach has been very successful.

Each panel has Chair and there is also a SuperChair for CanTAC as a whole. The roles of the Chairs are:

- SuperChair: Assigns proposals to the panels; identifies conflicts; final review of feedback letters; interface with the ITACs to resolve any issues
- Chairs: Assign primary readers; identify conflicts; run the panel meetings; review feedback letters

The CanTAC membership for the 2020A semester (November meeting is) in the panel below. Adam Muzzing is the SuperChair, while Jason Rowe and Pat Cote are the panel Chairs.

Galactic Panel		Extragalactic Panel	
Brian Chaboyer	Dartmouth	Jo Bovy	Toronto
Nick Cowan	McGill	Pat Cote	Herzberg
Diana Dragomir	MIT	Maria Drout	Toronto
Viktor Khalack	Moncton	Carl Grillmair	IPAC
Hilding Neilson	Toronto	Rene Hlozek	Toronto
Jason Rowe	Bishops	Adam Muzzin	York

Frequently, individual CanTAC members may not be available for one or two semesters. This can occur because of sabbaticals, mat leave, etc. In these cases the member's term is put on hold and a temporary member is identified and fills in for the missing semester. This approach works very well.

CanTAC Meetings

Traditionally CanTAC has had two face-to-face meetings each year (May and November). The May meeting dealt with proposals for the "B" semester and the November meeting with proposals for the "A" semester. The November meeting always proved to be problematic as it fell in the middle of the teaching semester when travel is difficult for university members. In 2014 the November meeting was switched to be a "virtual" one using WebEx, Zoom or a simple telecom. This has proven to work quite

well except that the scheduling issues still remain. This approach also presents some problems for new members as they come up to speed on CanTAC processes.

Traditionally an effort has been made to ensure that CanTAC membership if spread geographically across Canada. Recently this has been a lower priority with gender diversity having high priority.

CFHT and Gemini Proposal and Time Demand

Figure 1 below shows the proposal demand for the two telescopes from semester 2011A to 2019B. Gemini usually receives more Canadian proposals than CFHT. In 2019B the reverse was true. The increase in demand for CFHT in 2019B was driven by the availability of a new instrument, Spirou.



Figure 1# of Proposals by Semester for CFHT and Gemini

Figure 2 shows the number of proposals for Gemini North and Gemini South. Canadians have systematically applied less for the Gemini South than for Gemini North. Factors include the available instrumentation, scientific synergy between Gemini North and CFHT (and other northern hemisphere facilities. As will be shown in the subscription rate plots, the demand for Gemini South has been critical at times. For several semesters the Canadian Gemini Office has worked with PIs to move their proposals to Gemini South from Gemini North (the GMOS spectrographs are available on both telescopes).



Figure 2# of Proposals by Semester for Gemini North and South

Figure 3 shows the subscription rates¹ for CFHT, Gemini North and Gemini South. From Semester 2011A to 2014B the subscription rates at all there telescopes were similar. Beginning in 2015B CFHT has generally been more subscribed than either Gemini telescope.

The CanTAC process is not the only way for Canadians to access telescope time at CFHT or Gemini. CFHT has had regular calls for large proposals ever since the CFHT Legacy Survey began in mid-2003. These large programs are allocated significant amounts of time and 'occupy' a chunk of the community's research capacity.

Gemini started Large and Long Programs (LLPs) in semester 2014B. As for the CFHT Large Programs, the LLPs are allocated large chunks of time and occupy the community's resources. In addition, Gemini offers the Fast Turnaround Program which allows PIs to subscribe for modest amounts of time on a monthly basis. These two alternative avenues to access telescope time on Gemini are undoubtedly having an impact on traditional subscription rates.

¹ A note on how subscription rates are calculated in the era of queue observing. A subscription rate is ratio of time demanded to the time available. In classical observing this is simply the # of nights requested divided by the # of nights available. In a queue system it is the expected # of hours of observing time delivered that is the denominator.



Figure 3Subscription rates for CFHT and Gemini