

## Changes to the Yale telescope time allocation process

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Yale's Keck access requires us to reconsider our policies for allocating telescope time. In the past we only had to deal with SMARTS and WIYN, and the oversubscription for both the SMARTS telescopes and WIYN was typically a factor of 1 - 1.5. With Keck we can expect this to change; furthermore, given the large investment that Yale has made we need to ensure that the Keck access has maximal impact on the visibility and output of the department. The following procedures will be in effect for 2009B and 2010A. Prior to the 2010B semester we will review the process and make changes where needed.

### **1) SMARTS, WIYN and Keck proposals will be considered by the same TAC**

The main advantage is that the TAC can consider proposals for each facility in the context of work on other facilities that the PI is doing or proposing to do. An example is Keck follow-up of targets found with WIYN. There will be a single call for proposals for all three facilities, and we will use a unified proposal form (based on the standard NOAO form). Among the hoped-for effects is more transparency in the proposal process, and as a result of that transparency, increased proposal pressure.

For SMARTS, proposals have not been evaluated by a TAC before, largely because the oversubscription did not warrant it. However, given that the SMARTS telescopes are mostly queue scheduled, a TAC ranking will be useful even if the oversubscription is small or non-existent. Some SMARTS programs have particular priorities (largely having to do with funding), and the final allocation will be the responsibility of the SMARTS scheduler.

### **2) Criteria for ranking proposals**

We are a small department with a large range of science interests. A pure science-based ranking will be difficult, as we cannot simultaneously implement the two standard tools to ensure a fair process: sufficient representation on the TAC of experts in the proposers' field, and a strict avoidance of conflicts of interest. However we decide to constitute the TAC, it will be very difficult to compare proposals in different fields without implicitly judging those fields along with the proposals.

The overarching criterion will therefore not be scientific merit in isolation, but "impact for Yale astrophysics". This criterion can be characterized by the following, equally ranked, subcriteria:

- a) The "Yaleness" of the proposal. Will the data analysis and paper lead be based at Yale? Does the project involve students? What is the role of the PI and Yale co-Is viz-a-viz other, non-Yale, researchers?

- b) Scientific merit and impact. Will the observations address an important question? Will the paper have significant impact on the field? Will it add to a large existing database or break new ground?
- c) Resources. Are the resources in place to analyze the data and come to a timely publication? Does the project have external funding? Is there no large pool of unreduced data from previous allocations?

The idea here is that we promote projects that enhance the overall standing of Yale astrophysics. This can be done through projects whose practical and/or intellectual center-of-mass is at Yale, but also through small contributions to very high impact projects that are based elsewhere. In the early days of Yale's Keck access, the TAC will specifically look for projects with short-term, high impact for Yale.

### **3) TAC constitution and process**

The Chairs of the Astronomy and Physics departments will appoint the TAC members, with advice from the Director of Yale Research Observatories (DYRO). The DYRO serves as Chair of the TAC. The TAC has six members, and includes representation from the Physics department, from the postdoctoral community, and from the graduate students. The members have staggered terms, so that there is sufficient "memory" built into the TAC.

TAC members provide initial grades to the administrative coordinator of the TAC (currently Victoria Gardner), who provides ranked lists for all telescopes prior to the TAC meeting. TAC members do not grade their own proposals and leave the room when their proposals (and other proposals with a significant conflict of interest) are discussed. At the meeting each proposal is discussed and regraded after the discussion. The grading is confidential: each TAC member gives his/her grades to the coordinator, who makes a new ranked list. The TAC meeting concludes with a discussion of this new list.