

Yale *Department of Astronomy*

Telescope Time Allocation Process

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 viza-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 Keck access, the TAC will specifically look for projects with short-term, high impact for Yale.

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 Robyn Lisone) via grading form. The coordinator 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 via the grading form, who makes a new ranked list. The TAC meeting concludes with a discussion of this new list. The primary reader on each proposal will follow up with a few comments based on the criteria outlined above as to why the proposal was or was not awarded time.