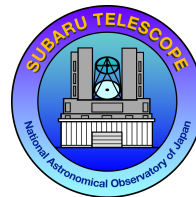


ULTIMATE-Subaru external review meeting 2016

2/24/2016, Subaru Telescope, Hilo, Hawaii



2016/1/13 ULTIMATE-Subaru WG

1. Introduction

ULTIMATE-Subaru external review meeting will be held on Feb 24 (2016), at the Subaru Telescope, Hilo, Hawaii. The ULTIMATE-Subaru Working Group has recently completed a document (Study Report), which summarizes our science cases, studies on Adaptive Optics and instruments performed so far, as well as our development plan. The completed version of the Study Report and two appendices are available on the following URL:

<http://www.naoj.org/Projects/newdev/ngao/20160113/>

The reviewers are expected to review these documents, and make the final report **by the end of March**. In order to have a fruitful discussion during the meeting, we would like to ask you to submit questions which you want to be answered by the working group in the review, **by Feb. 8**. The ULTIMATE-Subaru WG will try our best to make presentations to answer your questions in the review meeting. We note that the review items are listed in the next page (Section 5).

2. Review committee

- Mamoru Doi (IoA, Univ. of Tokyo)
- Markus Kissler-Patig (Gemini)
- Alvio Renzini (INAF)
- Kazuhiro Shimasaku (Univ. of Tokyo)
- Michitoshi Yoshida (Hiroshima Univ., Chair)

3. Agenda

Below is the schedule for the review meeting on Feb 24. In the morning sessions, the ULTIMATE-Subaru team will provide our science cases, current status, and future directions of the projects. The reviewers have discussion in the afternoon, and then provide their suggestions/comments/feedback at the end of the meeting.

- 9:00 - 9:10 Opening remarks
- 9:10 - 9:30 Overview of ULTIMATE-Subaru
- 9:30 - 10:10 Science with ULTIMATE-Subaru
 (Coffee Break)
- 10:30 - 11:10 Adaptive Optics
- 11:10 - 11:50 Instruments
- 11:50 - 12:30 Development Plan
 (Lunch)
- 14:00 - 16:00 Discussion within reviewers (closed session)
 (Coffee Break)
- 16:30 - 17:30 Comments from reviewers + Discussion
- 17:30 - 17:40 Concluding remarks
 (Social dinner)

4. Review items

We here list the review items by raising five key questions, as a guideline for the reviewers. In other words, these points are what we want to learn from the reviewers. Again, the reviewers are expected to answer these questions in the reviewers' final report (which will be completed by the end of March).

(1) Science cases

Q: Are the science cases proposed by ULTIMATE-Subaru team strong enough? We tried to assemble as wide variety of science cases as possible from Subaru community, but are there any science cases which are currently missing but which should be considered seriously? Similarly, considering the performance of ULTIMATE-Subaru, please point out if there are any future projects or teams to be more closely collaborated with which strong synergy is expected.

(2) Adaptive Optics - GLAO

Q: At the beginning of ULTIMATE-Subaru WG (2011-2012), we had an extensive discussion with Subaru community, and decided Ground Layer AO (GLAO) to be the best option as the Subaru Next-generation AO system. We believe that this is also well matched to the future direction of Subaru Telescope itself (i.e. wide-field, survey oriented telescope). Do you agree that the currently expected AO performance, i.e., $\sim 0.2''$ PSF size over $\sim 15'$ FoV - sounds appealing enough for the community? Please let us know if you have better ideas or suggestions on AO performance which can potentially enhance the powerfulness of Subaru in 2020s.

(3) Instruments on ULTIMATE

Q: In the study report, we mention three possible instruments on ULTIMATE-Subaru (i.e. wide-field imager, MOS spectrograph, multi-IFU instrument), according to the science requirements. It is of course true that we want to have everything, but considering the manpower and budget situation, we might need to prioritize these instruments. Which instrument do you think is the most important (or the most compelling instrument in 2020s)? This point will be closely related to your comments on science cases, but here we hope you to take into account the possible impacts on the instrumentation community in Japan as well.

(4) Development plan & Team organization

Q: Is the development plan (first light in 2023-2024) that we are proposing feasible enough? Please point out if there are any critical points that are currently missing. ULTIMATE-Subaru is not funded yet, and accordingly the manpower is very limited at this moment. We recognize that the development plan is still premature at this stage, but please provide us your comments on which parts of the project we should take care more closely. Your comments based on your experiences with big projects are highly appreciated.

(5) Final question

Q: Do you agree that the ULTIMATE-Subaru is ideally suited and best matched strategically to the direction of Subaru Telescope future? We hope to have your constructive suggestions and comments to realize ULTIMATE-Subaru from various aspects.

5. Contact address

The reviewers can always contact ngaowg@googlegroups.com for questions regarding the Study Report, either in English or Japanese, so that the relevant WG member can reply. The reviewers can also feel free to ask Ikuru Iwata (iwata@naoj.org) and Yusei Koyama (koyama@naoj.org) if you have small questions (such as about logistics) or if you need any assistance.