# Minutes of the UCOAC Meeting 2016 March 18, SETI Institute

Attending in person: Aaron Barth (UCI, Chair), Claire Max (UCSC, UCO Director), Ben Mazin (UCSB), Gillian Wilson (UCR), Andy Skemer (UCSC), Ian McLean (UCLA), Graeme Smith (UCSC), Connie Rockosi (UCSC), Graseilah Coolidge (UCSC), Anna Korossy (UCSC)

Attending remotely: Tommaso Treu (UCLA), Chris Fassnacht (UCD), Andrea Ghez (UCLA), Alice Shapley (UCLA), Alex Filippenko (UCB), Tuan Do (UCLA), Crystal Martin (UCSB), Shelley Wright (UCSD)

**Introductions**. The UCOAC welcomed new member Andy Skemer, representing UCSC, and Graseilah Coolidge, who recently joined UCO as the Executive Assistant to the Director.

**Keck Observatory discussion**. Crystal Martin gave an overview of the most recent Keck SSC meeting notes from the Feb 23-24 meeting, which are posted on the SSC public site. The next meeting will be April 15 at Caltech. UCO has assembled a list of all Keck proposal PIs over the past 3 years and will email an announcement of the SSC meeting notes to this list. The SSC meeting notes contain a great deal of information about upcoming instruments and upgrades, which will not be summarized here as the SSC notes are public. Topics included the status of KCWI, NIRES, the upcoming NIRSPEC upgrade in 2017, and SHREK, which passed its system design review in February. The 2016 Keck Science Meeting will be held at Caltech.

There are two membership changes to the Keck SSC this year. James Graham has completed his term, and Director Max will appoint a new member. SSC Co-Chair Crystal Martin has also completed her term but will remain on the SSC through June for continuity as the Keck strategic planning process is completed, after which a new co-Chair will be appointed.

It is very important that UC observers report their Keck-based publications to WMKO so that the observatory will have a complete publication count. An email will be sent out to UC observers as a reminder.

Remote observing: Mainland observing is now used on about half of all nights, and a new site was recently commissioned in Maryland. A major problem for mainland sites is that it is very difficult to get new ISDN lines installed, and it will be important to examine other possible options for backup internet connections. ISDN is probably not a good long-term solution for the future.

The strategic planning process is being led by Hilton Lewis, Claire Max, and Shri Kulkarni with major involvement by Anne Kinney and a great deal of community input. UCOAC discussed how the recommendations from the various working groups should be integrated into the final strategic planning report. It was suggested that the integration team should send their draft to the panel chairs for comment

before releasing the strategic plan, to ensure that the final document accurately reflects the working group recommendations. Andrea Ghez emphasized the importance of future AO development in the strategic plan and the fact that this will be very important for discussion with foundations that may be interested in funding large and ambitious projects.

Shelley Wright and Tuan Do described some of the current problems with OSIRIS: the pipeline has not been correctly assigning flux to different lenslet spectra, impacting both S/N and spectral purity of extracted spectra. This problem has been ongoing and about 150 nights of OSIRIS observations are impacted by this problem. A working group is planning an OSIRIS hack week in early May to make progress on the solution, and has requested funding support from UCO. The goal is to fix the pipeline both for older data, and for new data after this spring's upgrade.

#### TMT:

Tommaso Treu described plans for the upcoming TMT Science Forum in Kyoto, which will include 2 days of plenary talks on science and instrumentation and 1 day of ISDT activities. Planning for second-generation instruments is beginning, and this will be an important venue for UC astronomers to interact with other TMT partners on future instrumentation plans.

Claire Max gave a summary of recent developments in Hawaii regarding TMT, and a brief update on WFOS planning. Interviews for the WFOS project manager are in progress. The position for WFOS PI is still open. An ad for an opto-mechanical engineer will be posted soon.

#### **Lick Observatory:**

The Shane mirror was aluminized successfully, and the steps were documented carefully for the future. The Kast upgrade will likely be postponed until August, instead of April as previously planned. ShaneAO is obtaining 80% strehl on good nights in NGS mode, but needs a laser upgrade for better sky coverage. A new fiber laser will be much more efficient, and installation of the new laser is planned for later this year. The new capability will be broadly advertised to UC observers.

APF is performing well, and will probably be converted to a semester allocation cycle rather than quarterly allocations. Breakthrough Listen is partnering for 36 nights/year of APF time, and discussions are underway for a partnership with NAOC for APF time.

The high-speed wireless internet link from Lick used to connect to a station at the UC extension building, but the building is being torn down. A new link was set up at the Santa Clara County Office of Education, and this is spurring the development of new E/PO partnerships as well. Bob Kibrick invested a great deal of effort into setting up the new wireless link, and Bob's work on this project was a major contribution of service to the Observatory.

Other E/PO efforts are expanding, including a collaboration with SSL at Berkeley to lead summer teacher workshops, and a new initiative to translate the visitor displays into Spanish and possibly other languages.

The 2015 grad student workshop was a success, and was fully funded by a generous donation from Virginia Trimble (UCI).

Claire Max expressed an interest in promoting opportunities for large projects at Lick. The Lick web site should be updated to include a list of LSAP projects including their duration and cadence, so that future LSAP proposers will know the timeline of ongoing programs and can plan their proposals accordingly.

#### **UCO updates**:

The deputy director search is ongoing, and a short list will be developed soon. Claire Max presented a summary of the current UCO budget, including the outcomes of the UCO mini-grant program. This year's budget includes a substantial amount for Lick vegetation control (fire safety) and road repair, supported by one-time funds from UCOP. UCOAC discussed the timeline for the next mini-grant proposal call and whether the proposal deadline should be in the summer for an early fall proposal review, or possibly a January deadline in 2017. One consideration is that the timing of the mini-grant program could be based on the need to have funding well in advance of NSF instrumentation proposal deadlines. A decision should be made soon so that the systemwide community can be notified as to the planned proposal submission timeline.

### 10+10 China Exchange Program.

The 10+10 Exchange Program is a proposed new exchange program designed to bring students, postdocs, and faculty from 10 Chinese universities for collaborative visits, fellowships, and graduate programs at 10 US universities including the 8 UC campuses with astrophysics programs as well as Caltech and U. of Hawaii. UCOAC members discussed the draft MOU for the 10+10 program in detail. There is great enthusiasm for the program and UCOAC members discussed a variety of implementation details including possible ways to identify matching funds to support fellowships, and how to structure the postdoctoral selection committee with reviewers from both the China and US universities. Feedback and comments on the MOU draft will be gathered by Doug Lin (UCSC), who is leading the UC effort along with Sandy Faber (UCSC).

## **UCSB MKIDS Lab presentation:**

Ben Mazin (UCSB) gave an overview of his work in developing MKID detectors for visible-wavelength astronomy, and the science cases for MKID-based instrumentation at Keck, TMT, and elsewhere. A goal is to set up an arrangement for long-term financial support from UCO to support engineering staff at UCSB, with matching funds from UCSB (similar to the UCLA IR lab arrangement).

#### **Keck TAC discussion:**

Barth presented a list of suggestions for improving the Keck TAC process, focused on improving the information flow between UCO and the TAC members, and ensuring efficiency and fairness during the TAC meetings. It is increasingly difficult for the Keck TAC to complete its work in a single day, particularly the extragalactic panel which has more proposals than the galactic panel. Possible solutions discussed included adding a 2nd day or half-day to the TAC meeting, or a post-meeting telecon to discuss proposal rankings. UCOAC members made a variety of very useful suggestions for improving the TAC

process, including suggestions for time management, TAC confidentiality, and meeting logistics such as having two groups (a northern and southern group) meeting via polycom rather than individual TAC members connecting from their own campuses. How TAC members recommend the number of nights assigned to proposals was also discussed, and a possible consensus view was that the "default" should be for TAC members to assign a proposal the full number of nights requested by the proposal, unless there is some very strong reason to do otherwise such as an obviously padded proposal. Another major topic was the role of the future UCO deputy director, who will be responsible for managing the logistics of the TAC process as well as telescope scheduling. It was also suggested that the UCO Director should not be a voting member of the TAC, since the Director's time is very valuable and highly constrained, and instead the Director could sit in on portions of the TAC meeting to provide guidance or advice. In this way, the Director's role in the process would be similar to the role of the STScI director in the HST time allocation process. Claire Max was generally amenable to most of the suggestions that were made, but full implementation of the new TAC guidelines will only happen once the UCO deputy director is hired. An important action item for the Director will be to prepare an information/instruction packet for TAC members listing the policies and procedures in full.

These minutes were prepared by UCOAC Chair Aaron Barth.