

Minutes of the UCOAC Meeting 2016 May 13, UCLA

Attending in person: Aaron Barth (UCI; UCOAC Chair), Claire Max (UCSC; UCO Director), Andrew Skemer (UCSC), Tommaso Treu (UCLA), Ian McLean (UCLA), Chris Fassnacht (UCD), Gillian Wilson (UCR)

Attending remotely: Shelley Wright (UCSD), Anna Korossy (UCSC), Mike Bolte (UCSC), Crystal Martin (UCSB), Ben Mazin (UCSB), Garth Illingworth (UCSC), Graeme Smith (UCSC), Connie Rockosi (UCSC), Alex Filippenko (UCB)

Non-UCOAC attendees: Mike Rich (UCLA), James Larkin (UCLA), Bahram Mobasher (UCR), Doug Lin (UCSC, remotely), Mike Liu (UH, remotely)

Keck Observatory Discussion:

Crystal Martin presented a summary of the April Keck SSC meeting; topics are covered in the SSC public meeting notes on the SSC web site. A major focus is completion of the Keck strategic plan, including discussion of key desired capabilities for the future, near-term proposals for instrumentation and upgrades, and instrumentation balance on Keck 1 and 2. The strategic plan will be finalized at the next SSC and CARA board meeting in June.

WMKO issued a call for white papers, to be due in June before the SSC meeting. The call is very broad and can include proposals for work on instruments, operations, technologies, software, etc. Cross-institution collaborations are encouraged. UCOAC members noted that the final strategic plan is not yet available, but a draft is available as part of the white paper call. One new area of interest for Keck is ground-layer AO, and there is interest in studying the cost and reliability of adaptive secondaries, and determining how existing instruments might interface with GLAO. Another news item is that the SHREK instrument project received a significant grant from the Heising-Simons foundation.

The Keck Science Meeting will be held on September 15-16 at Caltech. In the same week, there will be a Keck/JWST workshop (September 12/13 at Caltech) and a memorial symposium in honor of Mike Jura at UCLA on September 14. UCOAC members felt that the Keck/JWST meeting needed broader exposure and advertising at the national level, and also expressed an interest in having some UCO funding available to support travel for UC speakers at the Keck/JWST meeting.

Cross-institution ToO interrupts between UC and Caltech have recently been approved, and the first cross-institution ToO observation has taken place. The SSC will be having further discussions of ToO and cadence observing and possible expansion of the cross-institution program to other Keck partners. Keck now has software designed to help the observers switch over to ToO or cadence observations during a night (the "PIG"). UCOAC members brought up a concern of how time-sensitive projects could be

protected against interrupts, and it was suggested that the proposal cover sheet could include a box to check for projects that are intrinsically time-sensitive. UC is now scheduling cadence observing programs that enable fractional-night allocations for time-domain projects with observations planned well in advance (in contrast to ToO interrupts), but Caltech has not implemented cadence observing.

UCOAC also discussed future needs for instrumentation funding at Keck (for new instruments and upgrades), and anticipated changes in 2018 and beyond as the Keck operating funding transition occurs.

Gillian Wilson described current planning for the FOBOS fiber-fed optical spectrograph, led by David Schlegel at LBNL. Earlier this year, UCO provided a small amount of funding through the mini-grant program for feasibility studies and to run a workshop to assess the science case and build community involvement. The workshop is to take place in early June.

James Larkin presented an overview of the OSIRIS detector upgrade. The earlier spectroscopic detector had issues including crosstalk, image persistence, glitches, and low QE at short wavelengths, and was at some risk of failure by delamination. With NSF funding, a Hawaii 2RG detector similar to the MOSFIRE detector was recently installed, along with new computers, controllers, a focus stage, and motor controller. In early observing runs, the new detector is demonstrating significantly better performance than the old detector. A major effort has also gone into upgrading and improving the OSIRIS software pipeline. A new pipeline is ready for release, designed to handle all past OSIRIS data from all epochs. There are still issues to fix in the pipeline related to PSF deconvolution and extraction, and the OSIRIS team will be requesting funding to support further software development. UCOAC members thanked James and everyone on the OSIRIS team for their efforts.

TMT Discussion

Mike Bolte gave a summary of recent developments related to TMT in Hawaii. Tommaso Treu described plans for the TMT Science Forum to be held in Japan in May. There will be a full day of ISDT activities, and a key priority will be discussing 2nd generation instruments. There was a supplemental call for large program proposals to serve as models for future instrumentation planning and time allocation planning.

Kevin Bundy was recently hired to be the WFOS PI, based at UCSC, and the process is under way to recruit a WFOS project manager at UCSC. Also, UCO will be supporting the work of Lisa Hunter, who serves on the TMT workforce education and outreach committee.

Bahram Mobasher gave a status report on the IRMS spectrograph, focusing on science planning and key science cases for IRMS. Major questions remain open, including who the instrument PI will be, and where the instrument will be built.

UCLA IR Lab Report

Ian McLean presented the annual status report on the IR Lab. Highlights of the past year include (a) commissioning of FLITECAM for SOFIA, (b) completion of the OSIRIS spectrograph detector upgrade, (c) critical design review for the OSIRIS imager upgrade, (d) ongoing design work for IRIS, (e) ongoing

work on KCWI including software support and some mechanical/electrical fabrication, (f) successful award of NSF funds for the NIRSPEC detector upgrade, and ongoing work on the NIRSPEC upgrade and redesign of the slit-viewing camera. The IR lab currently includes 3 faculty, 9 professional staff, and 4 grad students.

Lick Observatory

UCSC recently had a major fund-raising day. For Lick, the proposed project was signage for a walking tour of the observatory, and the event was successful at raising funds for this. Alex Filippenko discussed other recent fund-raising developments, and priorities for current use of the funding donated by Google. A major priority for future fund-raising will be fixing the dome floor of the 36" refractor, and it will take some effort to determine what the repair will cost.

10+10 Exchange Program

UCOAC discussed the current status of negotiations and planning for the 10+10 exchange program, a proposed program to be funded by the China Scholarship Council to support students and postdocs from China studying and carrying out research at UC and UH. Doug Lin (UCSC) and Mike Liu (UH) joined the meeting remotely for this discussion. UCOAC members discussed issues including who the signing authority would be at each campus, and what information was needed on student and postdoc salary and benefits costs.

UCO Business

Claire Max described the current status and timeline of the search for the new UCO Deputy Director. UCOAC discussed the timeline for the next mini-grant call for proposals. It was decided that the next mini-grant call should be distributed before the Keck Science Meeting, with a due date later in the fall, and with a goal of having UCOAC evaluate the proposals in the fall. UCOAC members discussed whether there should be an opportunity for "director's discretionary" funding proposals for very timely or urgent projects that do not fit into the normal annual cycle of whitepaper funding.

At the previous UCOAC meeting, new Keck TAC policies were discussed and adopted. These policies were partially implemented for the Spring TAC meeting, with positive benefits for the organization and productivity of the TAC meetings. Full implementation of the new policies will await the hiring of the new Deputy Director, who will manage the logistics of the TAC process.

Committee Assignments

This meeting marks the end of Aaron Barth's term as UCOAC Chair (actually a 4-year double term). Claire Max announced that Gillian Wilson (UCR) has agreed to serve as the next UCOAC Chair. UCOAC members discussed the importance of succession planning for future committee appointments, and the importance of placing junior faculty on committees including the Keck SSC so they can build knowledge and experience needed for future leadership.

These minutes were prepared by UCOAC Chair Aaron Barth.