

UCO Advisory Committee

Meeting October 9, 2012

Infrared Lab Status Report

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Status of Current Programs

- **MOSFIRE:** a 0.97-2.41 micron camera/multi-object spectrograph for the Keck Observatory; PI: Ian McLean.
 - **Delivered:** *First Light was April 4, 2012. Project ended Sept 30.*
- **GPI/IFS:** a 1-2.5 micron extreme AO camera and integral field spectrograph (IFS) for Gemini South 8-m telescope; James Larkin (UCLA) is PI for the infrared spectrograph.
 - **Delivered to UCSC Dec 2011:** *I & T in progress. Ship to Chile early 2013.*
- **FLITECAM:** a 1-5 micron camera/grism spectrometer for NASA's Stratospheric Observatory for Infrared Astronomy (SOFIA); PI: Ian McLean.
 - **Delivered to NASA:** *Four test flights in Oct 2011; Cycle 1 flights begin in March 2013. Now in post-delivery support phase.*
- **IRIS:** a 1-2.5 micron AO camera and integral field spectrograph for TMT; PI: James Larkin (co-PI Anna Moore, Caltech).
 - **Partial-PDR** or prototyping; *anticipating funding for 2013 to mid-2014*

Status of Current Programs

- **OSIRIS:** Larkin worked with WMKO to coordinate transfer of OSIRIS to Keck 1. Now working on grating/detector upgrade.
 - *Move complete Jan 2012; new grating 2.5x better at J, ready to install.*
- **IRCAL:** NSF-funded Shane AO project, upgrade to an H2RG detector similar to MOSFIRE; UCLA is providing Jason Weiss for software support. Co-PIs: Ian McLean & Mike Fitzgerald.
 - *In progress; will complete within two months.*
- **NIRSPEC upgrade study:** feasibility of detector and other upgrades; PI: Ian McLean, co-PI Mike Fitzgerald.
 - *Initial funding \$35K; additional \$8K pending. Report due Nov 7, 2012*
- **NIRC2 polarimeter proposal:** PI: Mike Fitzgerald.
 - *Proposal to NSF ATI program to fund construction and installation of a dual-channel polarimeter for NIRC2; not funded this year.*
- ***Looking for additional work to meet payroll (~\$750K/year)***

Summary & Conclusions

- **Three big projects are finishing**
 - MOSFIRE, GPI, and FLITECAM are all winding down
- **Next big project is slow to ramp up**
 - IRIS is in prototyping phase until TMT gets going
- **Another potential big project**
 - DAVINCI (Keck Next Gen AO); discussing Lab role with WMKO. We propose Mike Fitzgerald as PI, with major co-PI supporting roles from James Larkin, Ian McLean and Sean Adkins.
- **Smaller projects and studies:** appropriate for UCO support?
 - OSIRIS detector upgrade
 - NIRSPEC upgrade
 - DAVINCI study?
- **Our staff is at the minimum viable base of 8 people**
 - Current support is mainly IRIS (TMT) and FLITECAM (NASA)
 - Normally we get \$300K (3%) from UCO; but so far we have only received \$150K, because UCO budget outlook is very uncertain
 - We will review our staffing situation in December