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# FMOS Progress Report

<http://www.kusastro.kyoto-u.ac.jp/~iwamuro/ FMOS/UM/>

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Iwamuro, F. (Kyoto Univ.)

Kimura, M. (NAOJ)

Akiyama, M. (NAOJ)

Eto, S. (Nikon Corp.)

Sakai, M. (Kyoto Univ.)

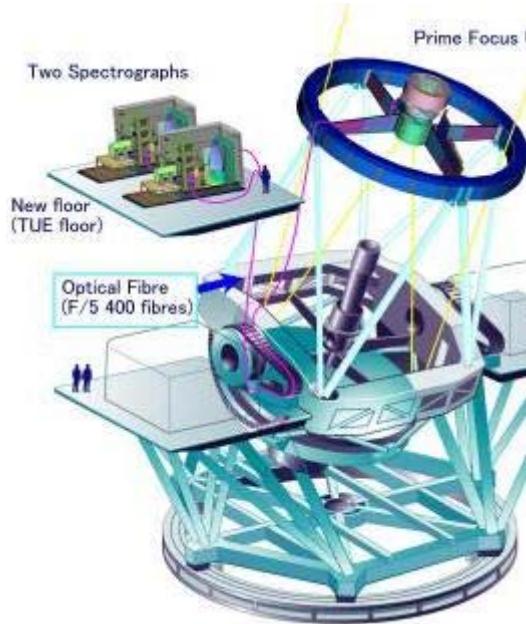
Tamura, N. (NAOJ)

Nakajima, Y. (中島分光)

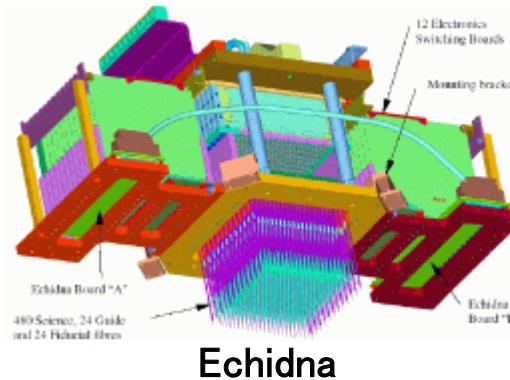
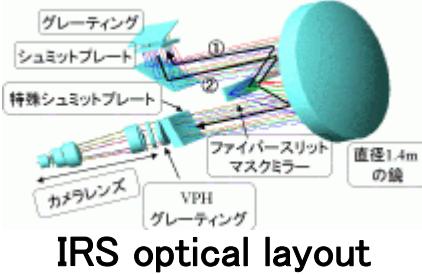
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## FMOS specifications

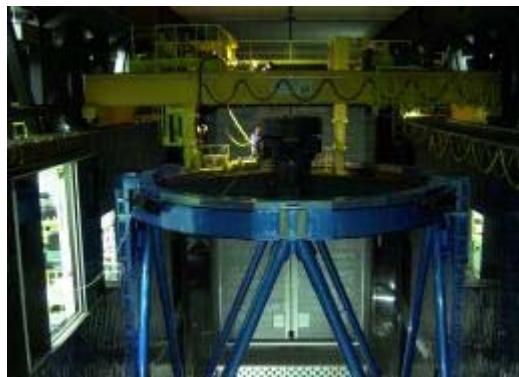
- Wavelength 0.9~1.8 $\mu$ m
- Field of view 30'φ
- Fiber diameter 1.2"φ
- 400 multiplicity
- OH-airglow suppression
- Spectral resolution  
High disp. mode:2200



- Low disp. mode : 500
- Limiting magnitude  
(1h integration, S/N=5)  
 $J$ -band 22.3mag  
 $H$ -band 20.9mag



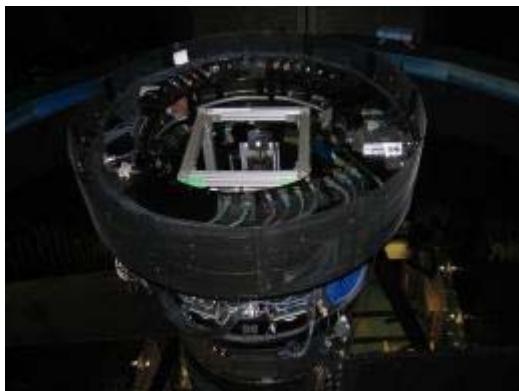
PFU and IRS have been transported from Kyoto to Mauna Kea. The broken cable wrapper of PFU will be replaced next spring. The optical adjustment of IRS in the ambient temperature has almost finished, and the cooling test is scheduled now.



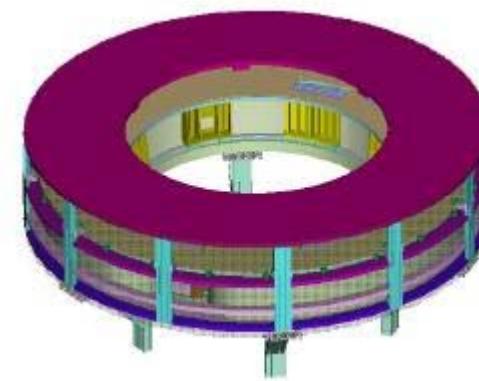
PFU



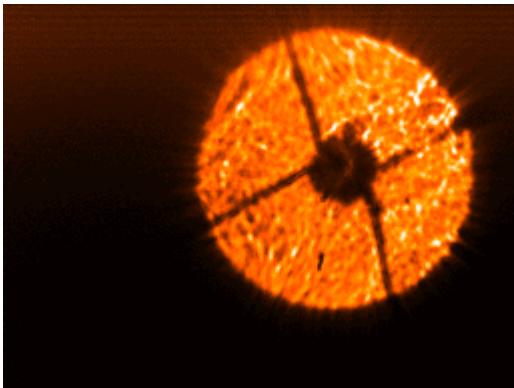
PFU



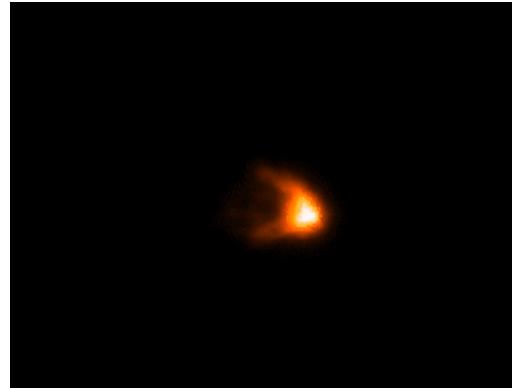
PFU



PFU Cable wrapper



Out-focus image



In-focus image



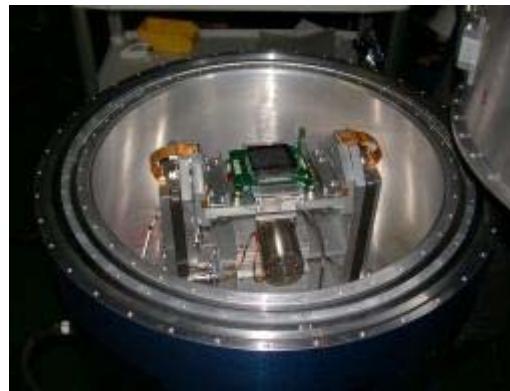
IRS Refrigerator



IRS Camera dewar



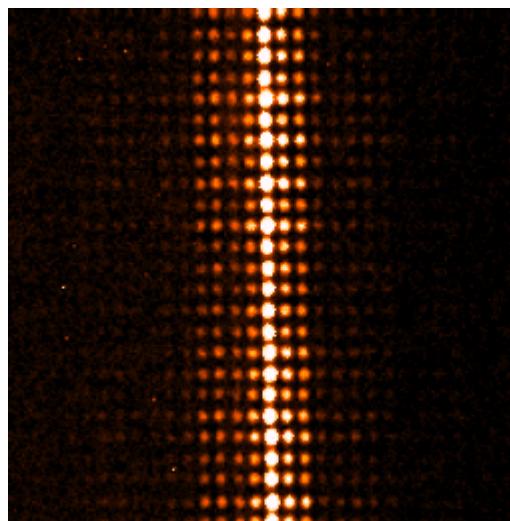
IRS Camera dewar



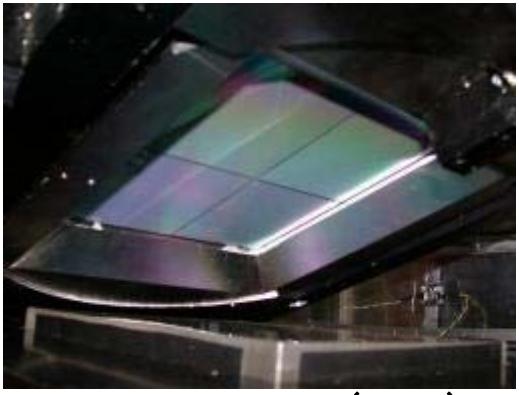
Detector Mount



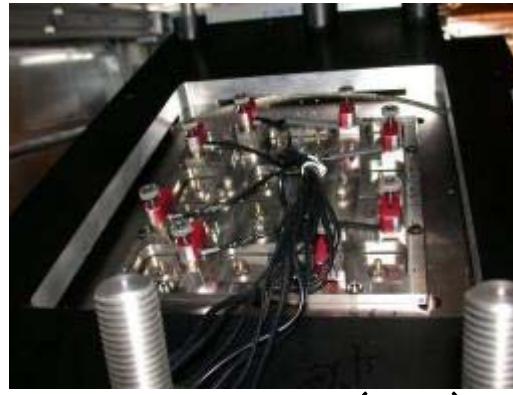
Flush light spectra



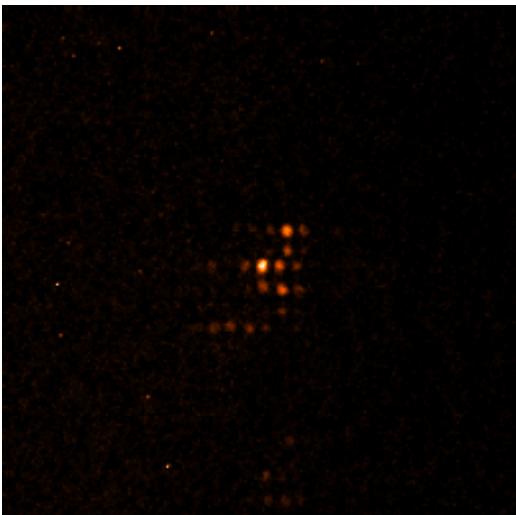
IR laser spectra



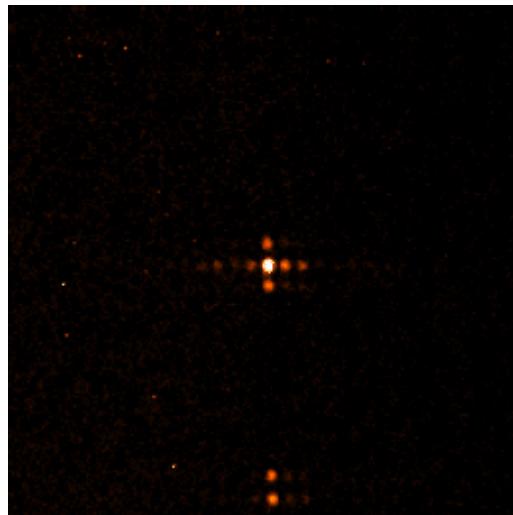
Mosaic gratings (front)



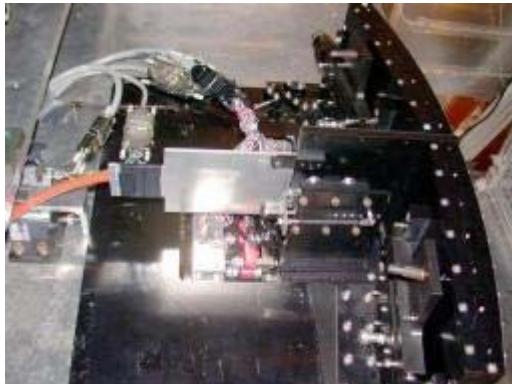
Mosaic gratings (back)



Before gratings adjustment



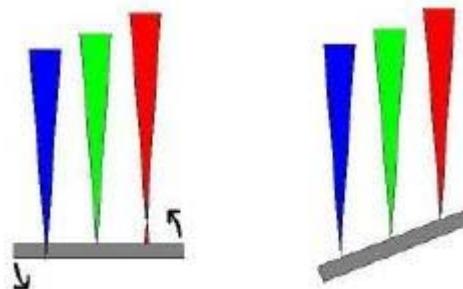
After gratings adjustment



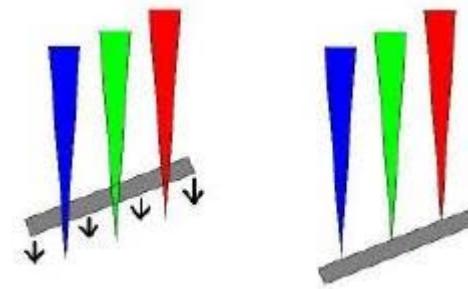
Fiber slit and Mask mirror



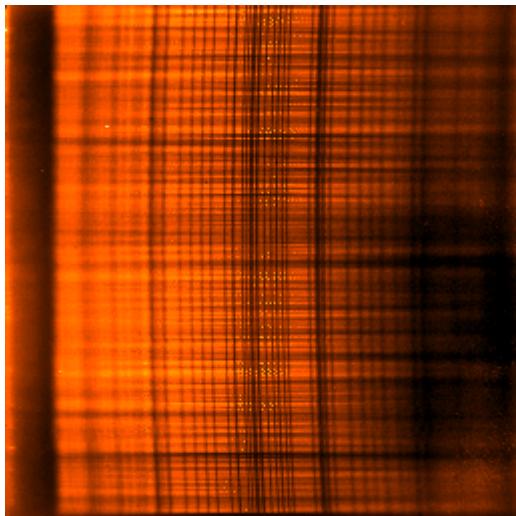
Optics in IRS



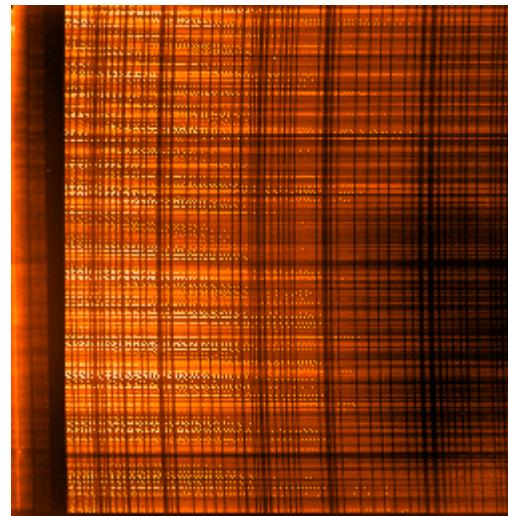
Detector tilt adjustment



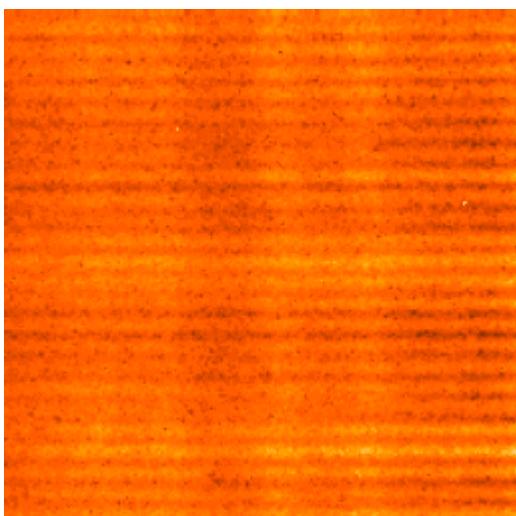
Detector focus adjustment



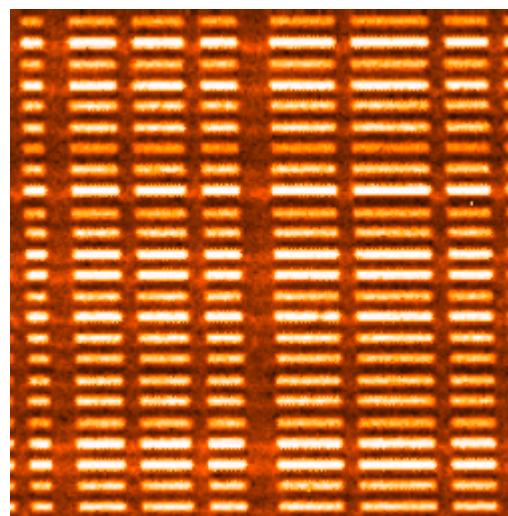
Before tilt adjustment



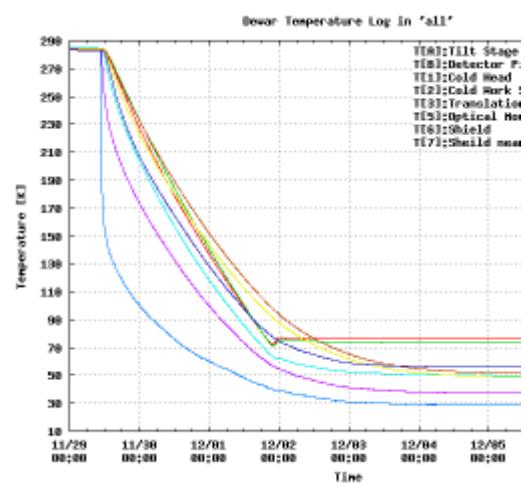
After tilt adjustment



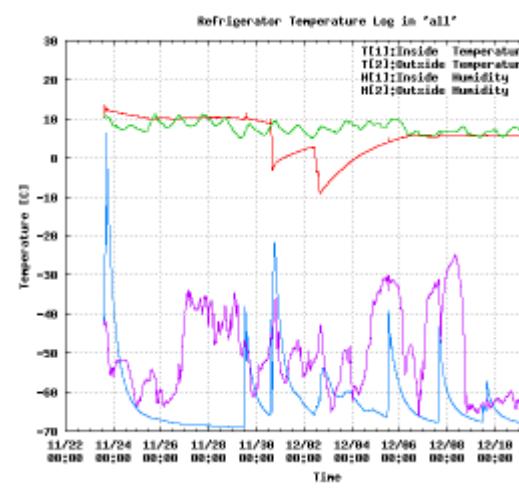
Before focus adjustment



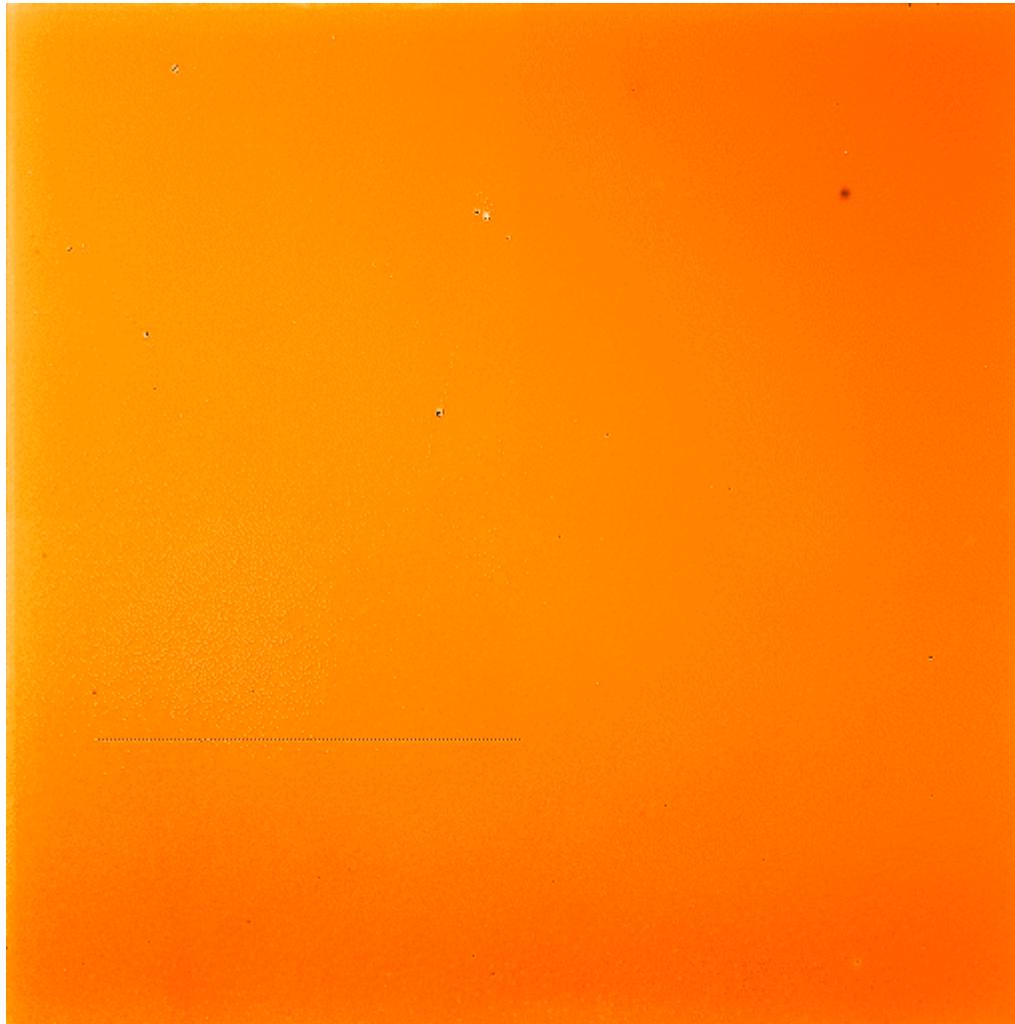
After focus adjustment



Dewar temp log



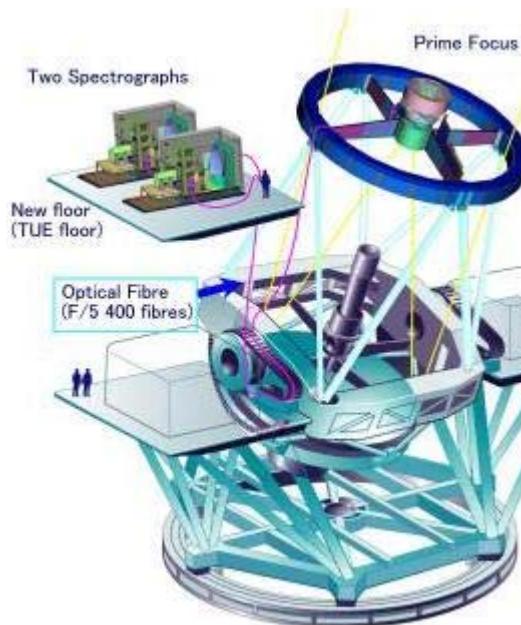
Refrigerator temp log



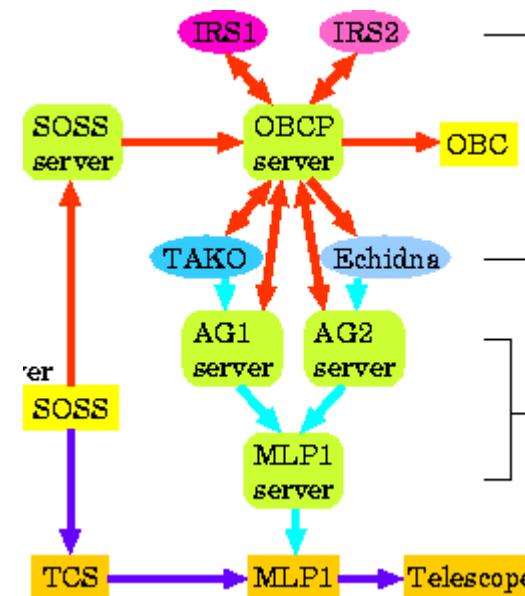
**Science chip**

The FMOS control system consists of five PCs.  
Socket / RPC communication is adopted.  
Communication between Kyoto and AAO/UK/MELCO/FUJITSU

system makes the source complicated.



FMOS hardware location



FMOS software network

**FMOS Commissioning Plan**  
**(Install, Test Runs, Engineering Runs, and GTO Runs)**

1. PFU	2005 6	2005 7	2005 10	2006 7(plan)	2005 8(plan)
*Corrector	Install	First Eng. Run	Second Eng. Run	Third Eng. Run	Fourth Eng. Run
*Cable Wrapper	"	First Eng. Run	Second Eng. Run	Third Eng. Run	Fourth Eng. Run
*AG/SH	"	First Eng. Run	Second Eng. Run	Third Eng. Run	Fourth Eng. Run
2. IRS1(Kyoto U.)	2005 8		2006 2-6(plan)(plan)		2005 8(plan)
*Spectrograph System	Install		Extra Eng. Run(Nasmyth)		Fourth Eng. Run
*Data Acquisition & Archive			Extra Eng. Run(Nasmyth)		Fourth Eng. Run
3. Echidna System(AAO)		2006 3	2006 6	2006 7(plan)	2005 8(plan)
*Echidna Fiber		Install		Third Eng. Run	Fourth Eng. Run
*Fiber positioner		Install		Third Eng. Run	Fourth Eng. Run
*Data Reduction Software			Install	Third Eng. Run	Fourth Eng. Run
4. IRS2(UK FMOS)			2006 6	2006 7(plan)	2005 8(plan)
*Fiber Bundle(Durham U.)			Install	Third Eng. Run	Fourth Eng. Run
*Spectrograph System(Oxford U.)			Install	Third Eng. Run	Fourth Eng. Run
*Data Acquisition & Archive(RAL)			Install	Third Eng. Run	Fourth Eng. Run
Necessary Nights	5(1x5)	2(1x2)	1(4x0.25)	5(1x5)	5+5(1x10)
(Note: Supposedly, after the "Fourth Eng. Run" in August, 2006, GTO will be conducted for say, one year.)					

# FMOS GTO ワークショップ

日時:2006年1月30日(月)午後～31日(火)夕方

場所:京大宇物

- FMOS GTO 計画作成のキックオフ
- Multiplicity を最大限に生かした複数プログラム同時遂行
- コンソーシアムを形成して共同で GTO を推進
- 観測ターゲットは具体的にして議論
- イギリスの計画とも最終的には merge する必要あり

参加希望の方は、

- お名前
- 所属
- mail address
- 電話
- 発表タイトル
- 概要
- 参加不能な日

を書いて

[ohta@kusastro.kyoto-u.ac.jp](mailto:ohta@kusastro.kyoto-u.ac.jp)  
までお送り下さい。

参加表明〆切: **12月23日**  
概要等〆切: もう少し後

参加したいが今回は都合が悪い  
という方はご相談下さい。

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