

W. M. KECK OBSERVATORY
Observing Proposal Coversheet for Semester 2005A

Allocating Institution: **UC**

No. of nights requested: **4**

No. of nights estimated to complete program in addition to those requested here: **None**

Is this the first application for this program? **No**

Institutional use:	Proposal #
LRIS	_____
LRIS	
LRIS	
LRIS	

CIT Proposals Only

CIT Priority: ToO Interrupts? **Yes**

INVESTIGATOR INFORMATION

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OBSERVING TEAM AND LOCATION

Observers projected to be present in Hawaii: **Greg Aldering, Saul Perlmutter, Lifan Wang**

Observer location: **Waimea-HQ**

PROGRAM

Title: **Cosmology with SNe Ia: the Second Generation**

Summary of Program (less than 100 words, for general distribution):

The current Type Ia supernovae Hubble diagram and CMB observations argue for a flat universe with some form of “dark energy”. Supernovae can probe the expansion history of the universe, making them the best current method to study the amount and nature of such dark energy. Keck spectroscopy to obtain the redshifts and types for a large sample of intermediate redshift SNe can help constrain the properties of the dark energy. In particular, it will be possible to discriminate against a cosmological constant as the form of dark energy with an accuracy on the equation of state of +/-0.07.

Observing Time Preference & Instrument Selection								
		Moon	G-DE	D	G-DL	B	G-DE	D
		From Date	01 Feb	03 Feb	12 Feb	17 Feb	01 Mar	04 Mar
		To Date	02 Feb	11 Feb	16 Feb	28 Feb	03 Mar	13 Mar
Instrument	No. nights	~ LST @midnite	08:30	08:55	09:20	09:55	10:25	10:50
LRIS	1	Request 1		P				
LRIS	1	Request 2						P
LRIS	1	Request 3						
LRIS	1	Request 4						

Moon	G-DL	B	G-DE	D	G-DL	B	G-DE	D	G-DL	B
From Date	14 Mar	18 Mar	30 Mar	02 Apr	12 Apr	16 Apr	28 Apr	02 May	12 May	17 May
To Date	17 Mar	29 Mar	01 Apr	11 Apr	15 Apr	27 Apr	01 May	11 May	16 May	26 May
~ LST @midnite	11:15	11:50	12:20	12:45	13:10	13:40	14:15	14:40	15:10	15:40
Request 1										
Request 2										
Request 3				P						
Request 4								P		

Moon	G-DE	D	G-DL	B	G-DE	D	G-DL	B	G-DE	D
From Date	27 May	01 Jun	10 Jun	16 Jun	26 Jun	01 Jul	11 Jul	17 Jul	26 Jul	31 Jul
To Date	31 May	09 Jun	15 Jun	25 Jun	30 Jun	10 Jul	16 Jul	25 Jul	30 Jul	31 Jul
~ LST @midnite	16:10	16:40	17:05	17:40	18:10	18:40	19:10	19:40	20:05	20:20
Request 1		P								
Request 2										
Request 3										
Request 4										

Additional information on Observing Time Preferences and Instrument Needs

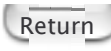
Specific dates needed: **None**

Dates to avoid: **None**

Details or special requests: **This program is synchronized with the CFHT-LS. We request dark time in 4 consecutive months (Feb-May or Mar-Jun). Please contact us prior to scheduling.**

RA range of objects: **12h-16h, with emphasis on the 14h18m+52d field**

Special instrument needs: **None**

 to your input form

WMKO Coversheet Processor by Gregory D. Wirth (WMKO)

Please direct comments on this form to bschaefer@keck.hawaii.edu

Last revision of this form: v1.12, 10-Aug-2004