



# EUROPEAN SOUTHERN OBSERVATORY

Organisation Européenne pour des Recherches Astronomiques dans l'Hémisphère Austral  
 Europäische Organisation für astronomische Forschung in der südlichen Hemisphäre

OBSERVING PROGRAMMES OFFICE • Karl-Schwarzschild-Straße 2 • D-85748 Garching bei München • e-mail: opo@eso.org • Tel. : +49-89-32 00 64 73

APPLICATION FOR OBSERVING TIME

PERIOD: **83A**

**Important Notice:**

By submitting this proposal, the PI takes full responsibility for the content of the proposal, in particular with regard to the names of CoIs and the agreement to act according to the ESO policy and regulations, should observing time be granted

<p>1. Title          This Is The Proposal Title This Is The Proposal Title</p>	<p>Category: <b>X-0</b></p>																																																																								
<p>2. Abstract / Total Time Requested          Total Amount of Time:          This is a concise abstract of the proposal which may have up to 9 lines.</p>																																																																									
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<p>5. Special remarks:          Take advantage of this box to provide any special remark using up to three lines</p>																																																																									
<p>6. Principal Investigator: insert username here          Col(s): H. Cerny (1321), S. Bailer-Brown (1154), K.L. Giorgi (1339), S. Lichtman (1119)</p>																																																																									
<p>7. Is this proposal linked to a PhD thesis preparation? State role of PhD student in this project          Yes / A. Student. Data important for PhD thesis and student will lead the project / mid-course</p>																																																																									

## 8. Description of the proposed programme

A) **Scientific Rationale:** Scientific rationale: scientific background of the project, pertinent references; previous work plus justification for present proposal.

B) **Immediate Objective:** Immediate objective of the proposal: state what is actually going to be observed and what shall be extracted from the observations, so that the feasibility becomes clear.

C) **Telescope Justification:** Justification for the use of the selected telescope (e.g., VLT, NTT, etc...) with respect to other available alternatives.

D) **Observing Mode Justification (visitor or service):** Justification for the observing mode requested (visitor or service).

E) **Strategy for Data Reduction and Analysis:** Brief explanation of the strategy for data reduction and analysis with description of available hardware, software, and manpower.

8. Attachments (Figures)



Fig. 1: A caption for your figure can be inserted here.

9. Justification of requested observing time and lunar phase

Lunar Phase Justification: Provide here a careful justification of the requested lunar phase.

Time Justification: (including seeing overhead) Provide here a careful justification of the requested number of nights or hours. ESO Exposure Time Calculators exist for all Paranal and La Silla instruments and are available at the following web address: <http://www.eso.org/observing/etc>.

Calibration Request: Special Calibration - Adopt a special calibration

10. Report on the use of ESO facilities during the last 2 years

Report on the use of the ESO facilities during the last 2 years (4 observing periods). Describe the status of the data obtained and the scientific output generated.

11. Applicant's publications related to the subject of this application during the last 2 years

Name1 A., Name2 B., 2001, ApJ, 518, 567: Title of article1

Name3 A., Name4 B., 2002, A&A, 388, 17: Title of article2

Name5 A. et al., 2002, AJ, 118, 1567: Title of article3

12. List of targets proposed in this programme

Run	Target/Field	$\alpha$ (J2000)	$\delta$ (J2000)	ToT	Mag.	Diam.	Additional info	Reference star
ABC	Cen A	13 25 27.61	-43 01 08.8	8.0	7.9	20 min	NGC 5128	
A	NGC 5139	13 26.8	-47 29	5.0	6.12	1 deg	Omega Cen	
B	M 5	15 18 33	+02 04 58	8.0	7		glob. cluster	
BC	NGC 6058	15 12 51.0	-38 07 33	15.0	11.6		plan. neb.	
C	M 6	17 40.1	-32 13	10.0	2.0	4.3	Butterfly cl.	
C	M 8	18 03 37	-24 23.2	1.0	3.8	30 min	Lagoon neb.	
C	NGC 6822	19 44 57.8	-14 48 11	20.0	18		Barnard's gal.	
D	NGC 7793	23 57 49.9	-32 35 20	20.0	18		Sd gal.	S322120026
E	Alpha Ori	06 45 08.9	-16 42 58	1	-1.4	6 mas	Sirius	
F	Alpha Ori	06 45 08.9	-16 42 58	1	-1.4	6 mas	Sirius	

Target Notes: A note about the targets and/or strategy of selecting the targets during the run.

12b. ESO Archive - Are the data requested by this proposal in the ESO Archive (<http://archive.eso.org>)? If yes, explain why the need for new data.

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### 13. Scheduling requirements

This proposal involves time-critical observations, or observations to be performed at specific time intervals.

#### 1. Run Splitting

Run	splitting
B	2,10s,2,20w,2
C	2,10s,2,20w,2,15s,4H2

#### 4. Link for coordinated observation

Run 1		Run 2	delay
B	after	A	10
C	after	B	
E	simultaneous	F	

#### 2. Specific date(s) for time critical observations:

Run	from	to	reason
A	12-may-09	14-may-09	Insert reason for time-critical observations.
B	12-may-09	14-may-09	Insert reason for time-critical observations.

#### 3. Unsuitable period(s) of time

Run	from	to	reason
A	15-jul-09	18-jul-09	Insert explanation of unsuitable time here.
B	15-jul-09	18-jul-09	Insert explanation of unsuitable time here.
C	20-jul-09	23-jul-09	Insert explanation of unsuitable time here.

### 14. Instrument configuration

Period	Instrument	Run ID	Parameter	Value or list
83	FORS2	A	IMG	ESO filters: provide HERE list
83	VIMOS	B	IFU 0.33"/fibre	LR-Blue
83	EFOSC2	C	Imaging-filters	EFOSC2 filters: provide list here
83	NACO	D	IMG 54 mas/px IR-WFS	provide HERE list of filters
83	AMBER	E	LR-HK	2.2
83	MIDI	F	PRISM	HIGH-SENS

15. List of interferometry targets proposed in this programme

Run	Name	Vmag	mag( $\lambda$ )	$\lambda_{\text{obs}}$	size( $\lambda$ )	Baseline	Vis.	mag_c	Tot
E	Alpha Ori	-1.4	-1.4	2.2	6	UT1-UT2-UT3	0.45/0.60/0.10	0.3/-0.2/4.0	2
F	Alpha Ori	-1.4	-1.4	10.6	6	G0-H0-32m	0.80	-0.9	1

VLT Target Notes: Note about the VLT targets, e.g., Run E can also be carried out using UT1-UT3-UT4.