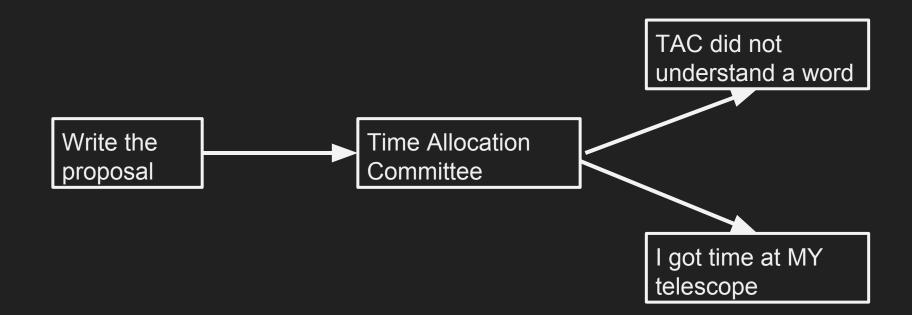
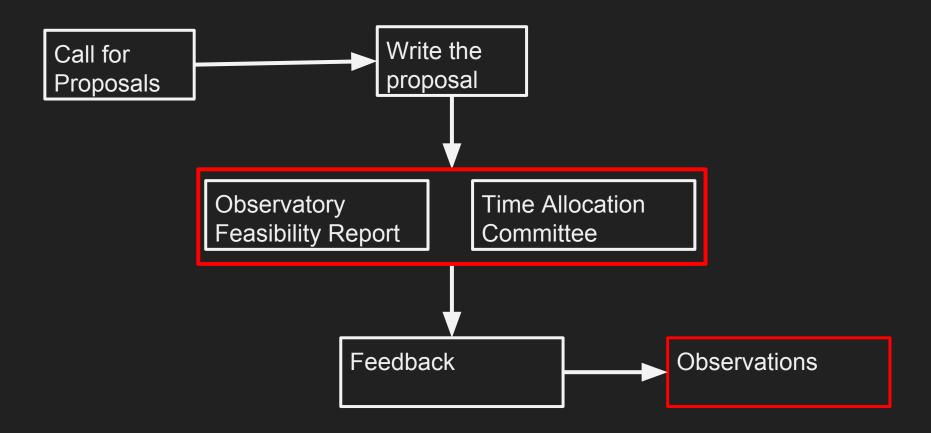
# AGA0414 Proposals

Prof. Alessandro Ederoclite





## Definitions

### DEFINITIONS: VISITOR vs. SERVICE

### VISITOR (or "TRADITIONAL")

- The observer goes to the observatory
- Required if observing strategy needs to be adjusted
- Only observing mode in some telescopes

SERVICE (or "QUEUE")

- The observatory executes "Observing Blocks"
- Ideal if one has many targets spread over the semester
- Only observing mode in some telescopes

"G" is not only a letter:

- GO Guest Observations => equivalent to "open time"
- GTO Guaranteed Time Observation => it is the time used by the team which built an instrument

LP - Large Programme

a program spanning several semesters; usually requires extra technical justification as well as demonstration of proper manpower

DDT - Director Discretionary Time (usually a ~XX% of total observing time is "at discretion" of the director)

 OAJ Director's Discretionary Time (OAJ-DDT), up to 40h/semester. OAJ-DDT proposals are reserved for testing the feasibility of potential future observing cases of great scientific impact, for the follow-up of objects in which a quick response is key for the scientific return, of for unexpected events. OAJ-DDT proposals are evaluated by an internal committee chaired by the Director of CEFCA.

ToO - Target of Opportunity

http://www.eso.org/sci/observing/policies/too\_policy.html

#### Target of Opportunity Proposals

One may consider two categories of Target of Opportunity Proposals (ToOs).

- Unpredictable ToOs are those concerning unpredictable sudden astronomical events which require urgent or immediate observations. Those should be submitted as DDT proposals, and are hence by definition DDT proposals and not ToOs in the ESO proposal terminology.
- 2. Genericly predictable ToOs are those concerning events predictable in a generic sense only. This is typically (but not limited to) transient phenomena, and follow-up or co-ordinated observations of targets of special interest. Such proposals are, in the ESO proposal terminology, ToO proposals.

#### **RRM - Rapid Response Mode**

ToO mode in which one must act within minutes from the trigger (e.g. GRBs)

ToO programs can often override other programs (be careful if you are a visitor astronomer)

http://www.ing.iac.es/astronomy/observing/overrides.html

			WHT						
Reference (PI) Programme "Title"	If triggered, it overrides					Allowed triggers and observations made			
	these programmes (see abbreviations)					Maximum	Triggers	Time observed / total	
	any of these instruments [1]	never	only at the discretion of the observer	always	Comments	Who can trigger	duration (incl. overheads) hh:mm	observed / total allowed	allowed (incl. overheads) hh:mm
P15 (Levan) W/2018A/15 "Rapid WHT observations of gamma- ray bursts"	ACAM ISIS LIRIS PAUCAM Default setup: ACAM ISIS LIRIS PAUCAM	0# DDT# DDT# N# OPT# P2 (Lutiso) P10 (Hooton) P13 (KeX) P13 (KeX) P13 (KeX) P15 (Bread) P16 (Bread) NG Service Programme: target-of-opportunity/ time-critical proposals graded <=1.5		S, S/D, D P#	P15 defers to P16 (Steeghs) inspective of which triggers first.	Andrew Lavan (a.) Jevan@warwick.ac.uk) Antorio De Ugarte (aug@aa.es) Johan Fynbo (fynbo@mbi.ku.dk) (Rhaana Staring (ricst@je ac.uk) Klaas Wersema (wn113@wiciesterac.uk) Raph Wjers (r.a.m.) wjere@uva.n)	02:00	0 / Any	00:00 / 10:00
P16 (Steeghs) W/2018A/16 "Spectroscopic follow-up of gravitational wave transients"	ACAM ISIS LIRIS PAUCAM Default setup: ACAM ISIS LIRIS PAUCAM	C# Nat OPT# P2 (Lusso) P17 (Notberg) P18 (Breed) NG Service Programme: target-of-opportunity/ time-critical proposals graded <=1.5	P10 (Hootan) P13 (Kirk)	S, S/D, D P#	P16 takes precedence over P15 (Levan) irrespective of which triggers first.	Danny Steeghs (D.T.H. Steeghs@warwick.ac.uk) Vik Dhillon (vik.dhillon@sheffield.ac.uk) Andrew Levan@warwick.ac.uk) Nail Tarvir (vnt3@ielcester.ac.uk) Krzystof Ulaczyk (k.p.ulaczyk@warwick.ac.uk)	02:00	0 / Any	00.00 / 11.0

#### Fillers (e.g. GTC)

**FILLER PROPOSALS:** In order to have an efficient queue-scheduled observations scheme for the GTC, it is useful to have a set of "filler" programs that can be executed under adverse observing conditions (bad seeing, poor sky transmission, etc.) and with targets spanning a wide range in right ascension (RA). Proposers may request filler status for their program, and during the proposal selection process CAT will evaluate their suitability for this category. Such proposals can request a large number of observing hours. In order to be considered as filler proposals they must fulfil the following requirements:

- Their observing requirements should be very relaxed, i.e. little or no restrictions on seeing or cloud coverage.
- The chosen observing mode should be a frequently used mode (MOS observations are not accepted for filler programs).
- There is a scientific gain even if only a small fraction of the requested observations are executed.
- A list of targets with a broad RA coverage is provided or, if only few targets are included, they must have good visibility during the semester.

Note that filler proposals have generally been highly successful in the last semesters.

## Which observatory?

### WHICH OBSERVATORY?



### WHICH OBSERVATORY?

### <u>Latitude</u>

• e.g. you do not apply at VLT to observe M31

#### Type of access

- only visitor mode available at CAHA if you have targets spread all across the sky, it may not be your first choice
- mostly service mode at GranTeCan if you may need to fine tune your observations, it may not be your best pick

#### Instrumentation available

• no high resolution spectroscopy available at OAJ

### Which Observatory?

MUSE/VLT

Get acquainted with an observatory/telescope/instrument

FEROS/ESO-MPG-2p2 FORS/VLT X-Shooter/VLT OSIRIS/GTC CAMELOT/IAC80

OSIRIS/GTC CAMELOT/IAC80 EFOSC/NTT CAIN/TCS PPAK/CAHA3p5 VIMOS/VLT

ACAM/WHT FIES/NOT ALFOSC/NOT

T80Cam/JAST

### Which Observing Mode?

### Which Observing Mode?

#### <u>Service</u>

- Natural in case of ToO or Filler
- Often the case for DDTs

#### <u>Visitor</u>

- If it is your only option
- If your target is variable
- If the brightness of your target is not well predictable

### How Much Time Can I Ask?

### How Much Time Can I Ask?

As much as you need

but only as much

Check how much time is offered

ESO http://archive.eso.org/wdb/wdb/eso/sched\_rep\_arc/form

OAJ http://oajweb.cefca.es/observingtime/telescope\_time\_allocation

IAC-CAT http://vivaldi.ll.iac.es/OOCC/night-cat/telescope-time-allocation/

### How Much Time Can I Ask?

Use Exposure Time Calculators

Compute overheads (a good rule of thumb is to add 20%)

some observatories offer tables of overheads

you can use "phase 2 tools"

### How To Be Successful

### Don't's

Submit too many proposals

Include collaborators without their agreement

Include targets which are not observable in the period

Hack the template

Submit at last minute.

### Do's

Read (and understand the CfP)

Study "your" instrument

Put your science in context => Keep it simple!

Explain the outcome of the proposal

Be as thorough as possible in describing your constraints

(In case it is a resubmission) read and follow the feedback you received

don't assume the same panel will read the proposal