OPC terms of reference

It is the function of the OPC to

- review, evaluate on scientific merit
- rank all proposals
- advise the Director General on the distribution of observing time

taking account of ESO's scientific policy.

Observing Programms Committee

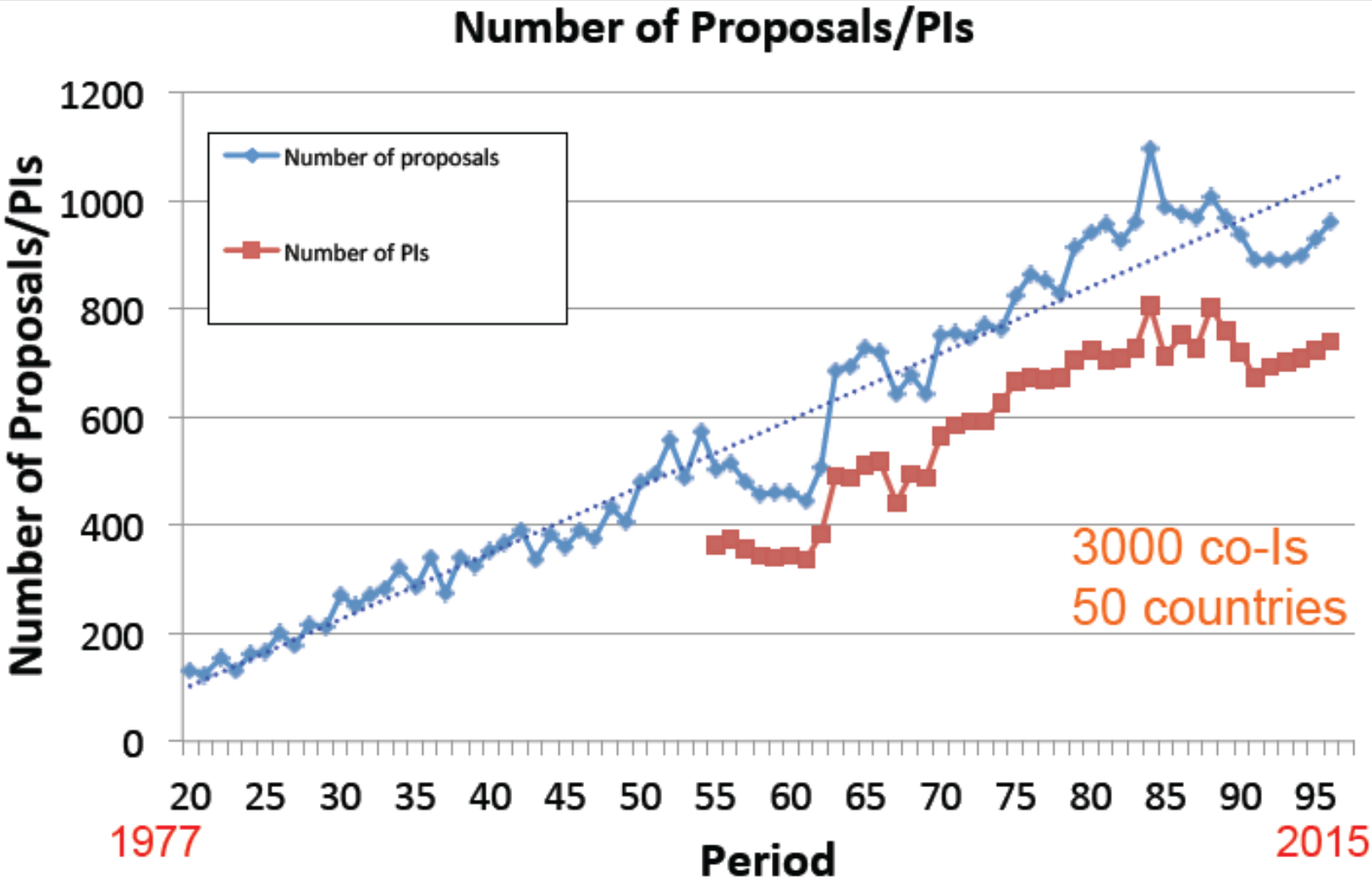
Different types of proposals

- Normal
- Monitoring
- Target of Opportunity (ToO)
- Filler programmes
- Large Programmes (t > 100h)
- Guaranteed Time Observations (GTO)
- Director's Discretionary Time (DDT)

Different queues

- A, B, and C
- Priority ranked after grading
- Your proposal have to reach a grade better than 3.0 to be scheduled
- Exception: filler programmes, see later
- Even if you have a good grade, it does not mean that the observations will be done!
- P95: grading of 1.45 was not observed

Proposal submission Stats



BREAKDOWN OF TOTAL TELESCOPE TIME IN PERIOD 96 (NIGHTS)

	UT1	UT2	UT3	UT4	V_UT	V_AT	VISTA	VST	APEX*	3.6m	NTT
Nights per semester	183	183	183	183	6	177	183	183	31	183	183
Non-Science Time	31.7	31.5	38.1	60.2	0	98	30	14	0	13	15
Science Time	**151.3**	**151.5**	**144.9**	**122.8**	**6**	**79**	**153**	**169**	**31**	**170**	**168**
LP/PS commitments	0	38.9	71	0	0	0	122.4	100.7	0	61	94
VLTI	6	6	6	6	0	0	0	0	0	0	0
GTO+SV/SDT	38.5	0	39.5	31.2	0	0.0	0	57.1	0	15	0
DDT (5%)	7.5	7.5	7.0	6	0.5	4	0	0	3.8	0	0
Sub-total	52	52.4	123.5	43.2	0.5	4.0	122.4	157.8	3.8	76	94
Available to OPC	**99.5**	**99**	**21.5**	**79.5**	**5.5**	**75**	**30.5**	**11**	**27**	**94**	**74**

Last updated: 14.05.2015

(*) One APEX night is equivalent to 22 hours
Carry-over from previous periods is NOT included.

TIME REQUEST PER TELESCOPE IN PERIOD 96

Telescope	UT1	UT2	UT3	UT4	V_UT	V_AT	VISTA	VST	APEX	3.6	NTT
Available	99.5	99.0	21.5	79.5	5.5	75.0	30.5	11.0	27.0	94.0	74.0
GTO	38.5	0.0	39.5	31.2	0.0	0.0	0.0	57.1	0.0	15.0	0.0
REQUEST	469.0	445.7	353.4	393.1	18.2	125.4	31.4	97.8	88.1	218.1	210.0
PRESSURE	4.33	4.50	14.60	4.55	3.31	1.67	1.03	3.70	3.26	2.16	2.84

Last updated: 14.05.2015

Note: the time request refers to proposals submitted in the current period only. The pressure is computed as (REQUEST-GTO)/AVAILABLE (the available time already takes into account the predicted GTO allocation, while the requested time includes the GTO request).

As a user, you have no a-priori information of the pressure factor of the current semester

OPC – Categories

Panels	Categories	Code	Subcategories
A	Cosmology	A1	Surveys of AGNs and high-z galaxies;
		A2	Identification studies of extragalactic surveys;
		A3	Large scale structure and evolution;
		A4	Distance scale;
		A5	Groups and clusters of galaxies;
		A6	Gravitational lensing;
		A7	Intervening absorption line systems;
		A8	High-redshift galaxies (star formation and ISM).
B	Galaxies and galactic nuclei	B1	Morphology and galactic structure;
		B2	Unresolved and resolved stellar populations;
		B3	Chemical evolution;
		B4	Galaxy dynamics;
		B5	Peculiar/interacting galaxies;
		B6	Non-thermal processes in galactic nuclei (incl. QSRs, QSOs, blazars, Seyfert galaxies, BALs, radio galaxies, and LINERS);
		B7	Thermal processes in galactic nuclei and starburst galaxies (incl. ultraluminous IR galaxies, outflows, emission lines, and spectral energy distributions);
		B8	Central supermassive objects;
		B9	AGN host galaxies.

3 panels

2

OPC – Categories

C	ISM, star formation and planetary systems	C1	Gas and dust, giant molecular clouds, cool and hot gas, diffuse and translucent clouds;
		C2	Chemical processes in the interstellar medium;
		C3	Star forming regions, globules, protostars, HII regions;
		C4	Pre-main-sequence stars (massive PMS stars, Herbig Ae/Be stars and T Tauri stars);
		C5	Outflows, stellar jets, HH objects;
		C6	Main-sequence stars with circumstellar matter, early evolution;
		C7	Young binaries, brown dwarfs, exosolar planet searches;
		C8	Solar system (planets, comets, small bodies).
D	Stellar evolution	D1	Main-sequence stars;
		D2	Post-main-sequence stars, giants, supergiants, AGB stars, post-AGB stars;
		D3	Pulsating stars and stellar activity;
		D4	Mass loss and winds;
		D5	Supernovae, pulsars;
		D6	Planetary nebulae, nova remnants and supernova remnants;
		D7	Pre-white dwarfs and white dwarfs, neutron stars;
		D8	Evolved binaries, black-hole candidates, novae, X-ray binaries, CVs;
		D9	Gamma-ray and X-ray bursters;
		D10	OB associations, open and globular clusters, extragalactic star clusters;
		D11	Individual stars in external galaxies, resolved stellar populations;
		D12	Distance scale – stars.

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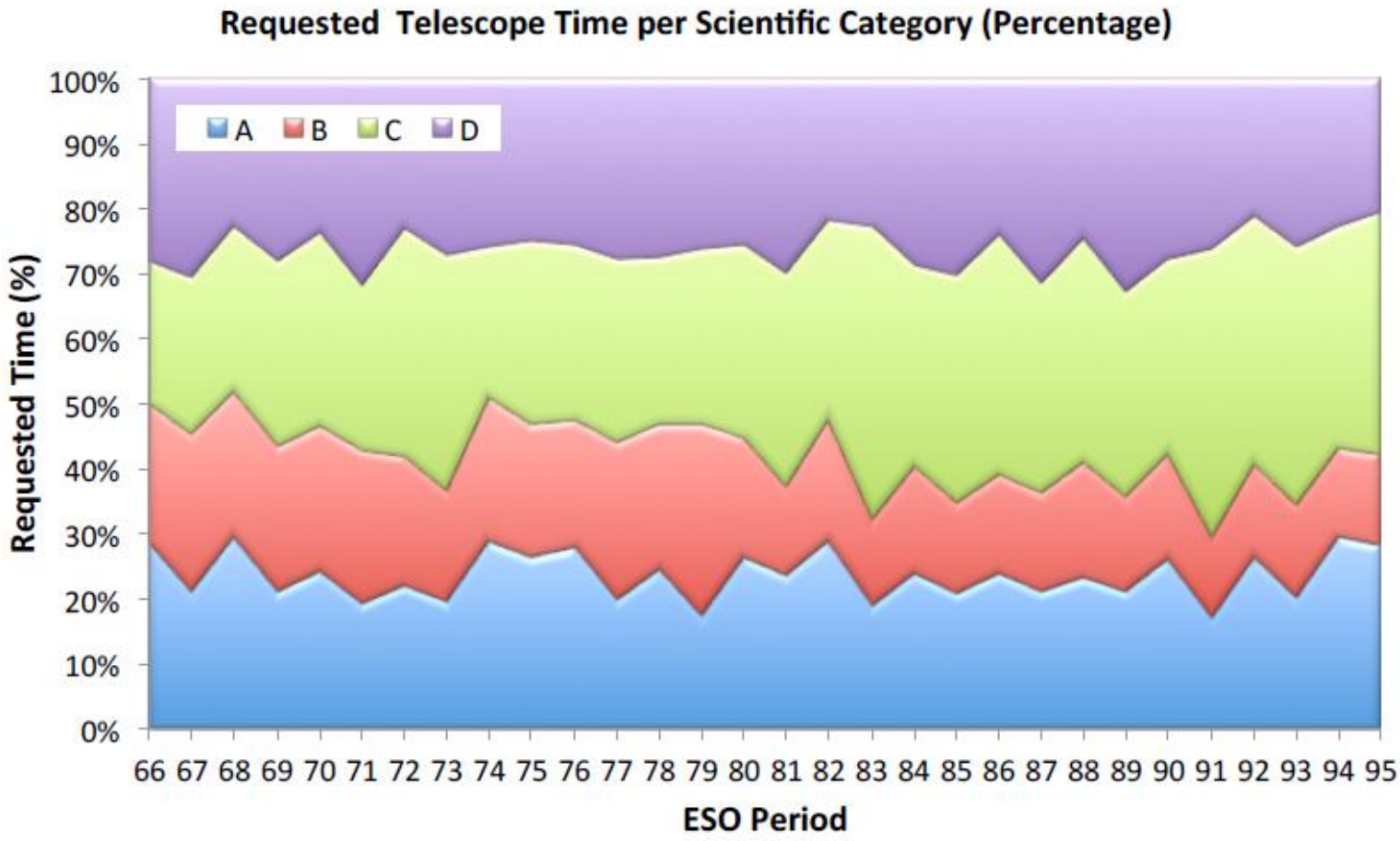
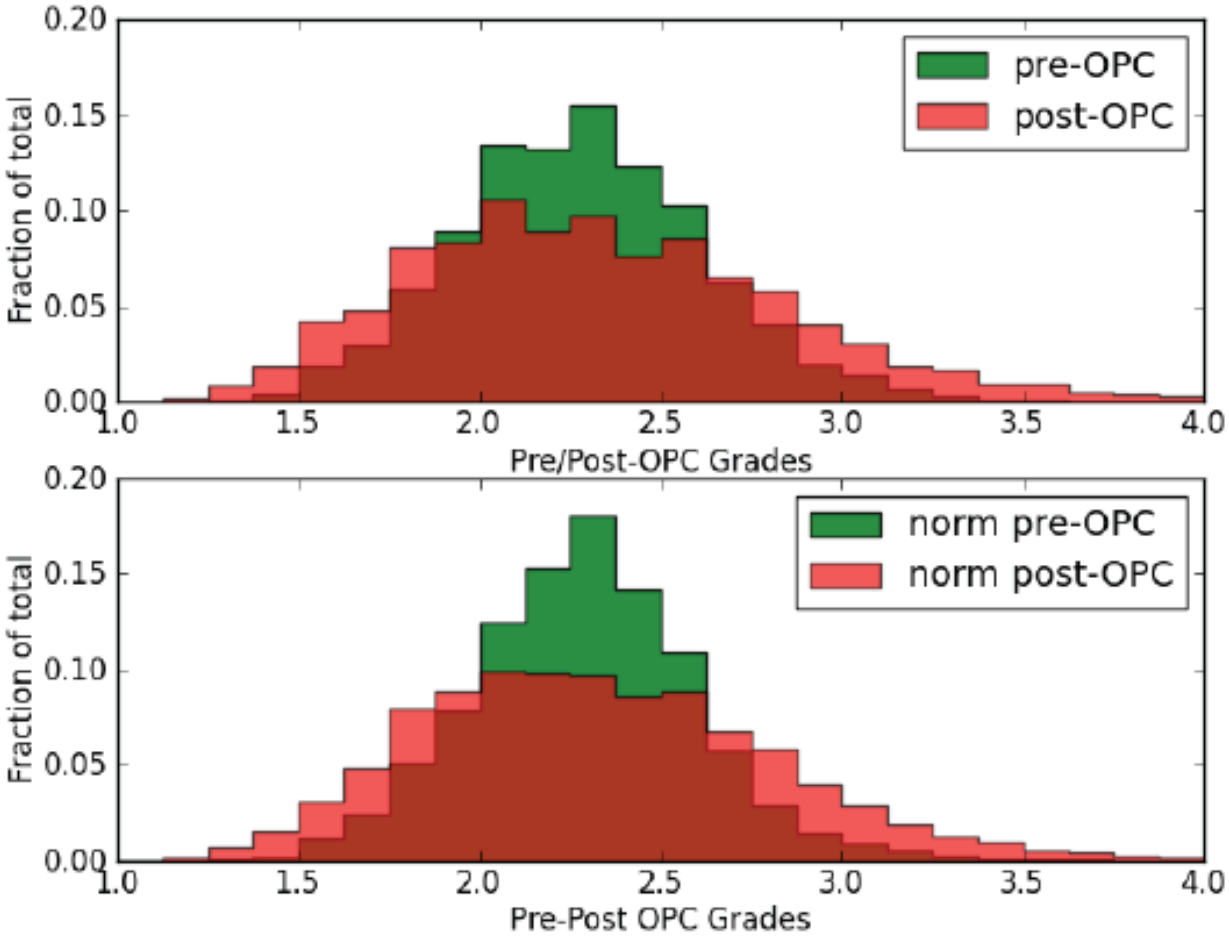
Requested time per Category (%)



How does it work?

- Before the meeting
  1. Grade the proposals (1 to 5)
  2. Send short report cards with strengths and weaknesses
- Mean of all (six) ranks
- Triage = 30% of the worst ranked will be not sorted out, but can be reactivated
- Meeting
  1. Discuss the proposals
  2. Grade the proposals again
  3. Final rank
- Final report cards

Grade distributions



A Timeline of OPC activities for P96

⊕ Step 1: Distribution of the observing proposals to the referees (p. 4)
Deadline: 08 April 2015

☞ Step 2: Feedback of the referees regarding category changes and conflicts of interest (p. 5)
Deadline: 13 April 2015

⊕ Step 3: Release of the report cards to be completed by the referees (p. 6)
Deadline: 15 April 2015

☞ Step 4: Submission of the report cards by the referees (p. 6)
Deadline: 8 May 2015

⊕ Step 5: Distribution of OPC working documents to the referees (p. 7)
Deadline: 13 May 2015

Step 6: Panel and OPC meetings (Sects. 5 and 6)
19 and 20 May 2015: Panel meetings
21 May 2015: OPC meeting

⊕ Step 7: Release of the comment cards to be completed by the primary referees (p. 11)
Deadline: 19 May 2015

☞ Step 8: Submission of the comment cards by the primary referees (p. 11)
Deadline: 29 May 2015

☞ : Referees actions
⊕: OPO actions

How does it work?

- Panel: six members, one of them chair (more duties)
- All but 30% of the worst ranked proposals will be discussed in the meeting. The prime referee introduces each proposal
- As a panel member read through all the proposals of the panel, 74 for me
- For 12, I was primary referee

C Grading guidelines

The grade scale to be used is defined as follows:

1.0	outstanding: breakthrough science
1.5	excellent: definitely above average
2.0	very good: no significant weaknesses
2.5	good: minor deficiencies do not detract from strong scientific case
3.0	fair: good scientific case, but with definite weaknesses
3.5	rather weak: limited science return prospects
4.0	weak: little scientific value and/or questionable scientific strategy
4.5	very weak: deficiencies outweigh strengths
5.0	rejected

The full grade scale should be used so as to ensure that the resulting ranking of the proposals is as meaningful as possible. Grades assigned by individual referees can and should be specified with one decimal digit (e.g. 2.7).

The following questions should be considered for the grading:

- Is there sufficient background/context for the non-expert (i.e., someone not specialized in this particular sub-field)?
- Are previous results (either by proposers themselves or in the published literature) clearly presented?
- Are the proposed observations and the Immediate Objectives pertinent to the background description?
- Is the sample selection clearly described, or, if a single target, is its choice justified?
- Are the instrument modes, and target location(s) (e.g., cosmology fields) specified clearly?
- Will the proposed observations add significantly to the knowledge of this particular field?

Proposals for period 96A (P4D) - Normal

Panel: D2 - Stellar Evolution

No	Run	AVG	σ	Mode	Prog ID / Title	Names	Month/Moon	Instrument	Nights/Hrs Req.	Nights/Hrs Avg.
1							oct - G	UT4 - MUSE		
	1	2.87	0.69	s	*A MUSE view of multiple stellar populations in 47 Tucanae*				8.3h	8.3

TSY: The main aim of this proposal is to test a novel technique of discrimination of multiple populations in globular clusters using MUSE Spectrograph. Particularly, stars of 1st and 2nd generation will be discriminated based mainly on the properties of specific spectral feature (Na 818 doublet). The verification of this method is proposed to be done with observations of well studied globular cluster 47 Tuc (NGC 104). While the statistical significance of the proposed observations of 47 Tuc are shown to be high enough, the future applicability of the method is not discussed.
Grade: 2.60

IZZ: The idea of using filters to class stars as first or second generation in the cluster is interesting and if it works worthy of support. I have a question regarding how these 1st or 2nd filters differentiate between stars which are in a continuum of varying sodium (and oxygen)? There's no cut-off which says a star is first or second generation, there's actually a well-populated curve in Na-O space. That said, this is one of the better globular cluster proposals (I can at least read the labels on the plots!). I also like the way they plan to probe all the way down to K-type on the main sequence rather than just focus on a few giant-branch stars (as is usually the case).
Grade: 2.00

JON: To test the method the data of Dreizler can be used. Furthermore, in my opinion the proposers do not show convinsingly that th elikely improvement in statistics is *the* way to solve the questions on the nature of multiple populations in GCs.
Grade: 3.00

LAN: Interesting problem, good description, strong team. Interesting and intriguing new technique proposed. However, insufficient/unconvincing description of the feasibility, excessive time request for a pilot program, doubts about the applicability to other GCs. The available MUSE data could be the starting point to demonstrate the feasibility.
Grade: 4.20

PAU: Aims: Determination of elemental abundances of multiple stellar populations in 47 Tucanae. Strength: Clear concept. Weakness: What is new, better or innovative in comparison to all the other efforts to solve the proposed topic?
Grade: 3.00

VDB: -
Grade: 2.40

Panel meeting

- Group proposals by topic.
- For each proposal:
  - Primary referee gives a short presentation of the proposal and presents her/his evaluation.
  - All other (non-conflicted) panel members present their assessment of the proposal.
  - After a general discussion, vote takes place.
- Voting procedure:
  - Different runs of a proposal may be assigned the same grade or different grades.
    - Prior to the vote, the panel members agree if they want to have a single vote for the whole proposal, or separate votes for individual runs or groups of runs.
  - Each panel member fills a voting slip with her/his acronym, the proposal or run id, and a grade.
  - The scientific assistant collects the voting slips and enters the votes in the ESO database.
    - The average and standard deviation of the individual votes are computed by the PanelTool and assigned to the proposal/group of runs/run.

Proposal evaluation tips

- Evaluate the proposals as written
  - Do not interpret them or second-guess what the proposers mean
  - Proposals must be self-contained!
- Focus on scientific aspects
  - Technical feasibility evaluation is performed by the La Silla Paranal Observatory experts
- As a rule, the requested amount of time should be allocated
  - Exceptions must have a compelling scientific justification (e.g., proof of concept)
    - Requests for exceptions should be sent to OPO by email (opo@eso.org) by the Panel Chair with the following information:
      - Scientific justification
      - Recommended time allocation
      - How should the reduction be achieved (less targets? which?)
  - Reduction in the number of targets/triggers of ToO proposals is acceptable

Final report card, an example

Following the hypothesis that fast rotation could cause the different sequences in star clusters, the applicants propose to derive abundances of light elements of members of different populations within one cluster. For sure, this is an interesting and new hypothesis. The OPC panel thinks that there are some important points not discussed within the proposal. For example, what about other possible explanations like CN or alpha enhancements, binary stars (e.g. mergers)? Can those be ruled out by the proposed observations? Because the problem is not limited to clusters (massive stars in the Tarantula nebula, for example) why not observe bright massive stars? There is no information about the expected accuracy of the abundances listed. In addition, the provided SNR is calculated for an integration time (3600s) different than the actually listed one (2700s).

Filler runs (1)

- There is no specific "filler" programmes channel for loose constraints (definition under way).
- Fillers are selected(*) at the end of the scheduling process among the non-rejected runs (non-triaged, grades<3.0).
- The number of "surviving" filler candidates is always small, creating potential idle time problems for "bad" conditions (~2% at the UTs).
- **Modified procedure introduced in P95.**

(*) Seeing ≥1.2", THN or worse, no moon constraints, no time constraints, standard modes

Filler runs (2)

- Filler candidates (FC) are identified by OPO. A list was distributed to each Panel.
- The Panels should re-consider the triaged FCs and grade them(*):
  - 1.00-2.99: run will be scheduled in the corresponding rank class (A, B, C);
  - 3.00-4.99: run will be scheduled ONLY in the C-rank class (fillers proper, no priority);
  - 5.00: run will be rejected.
- Final FCs will be selected taking into account the IS assessment and only if grade<5.0

(*) Even confirming the pre-OPC grade.