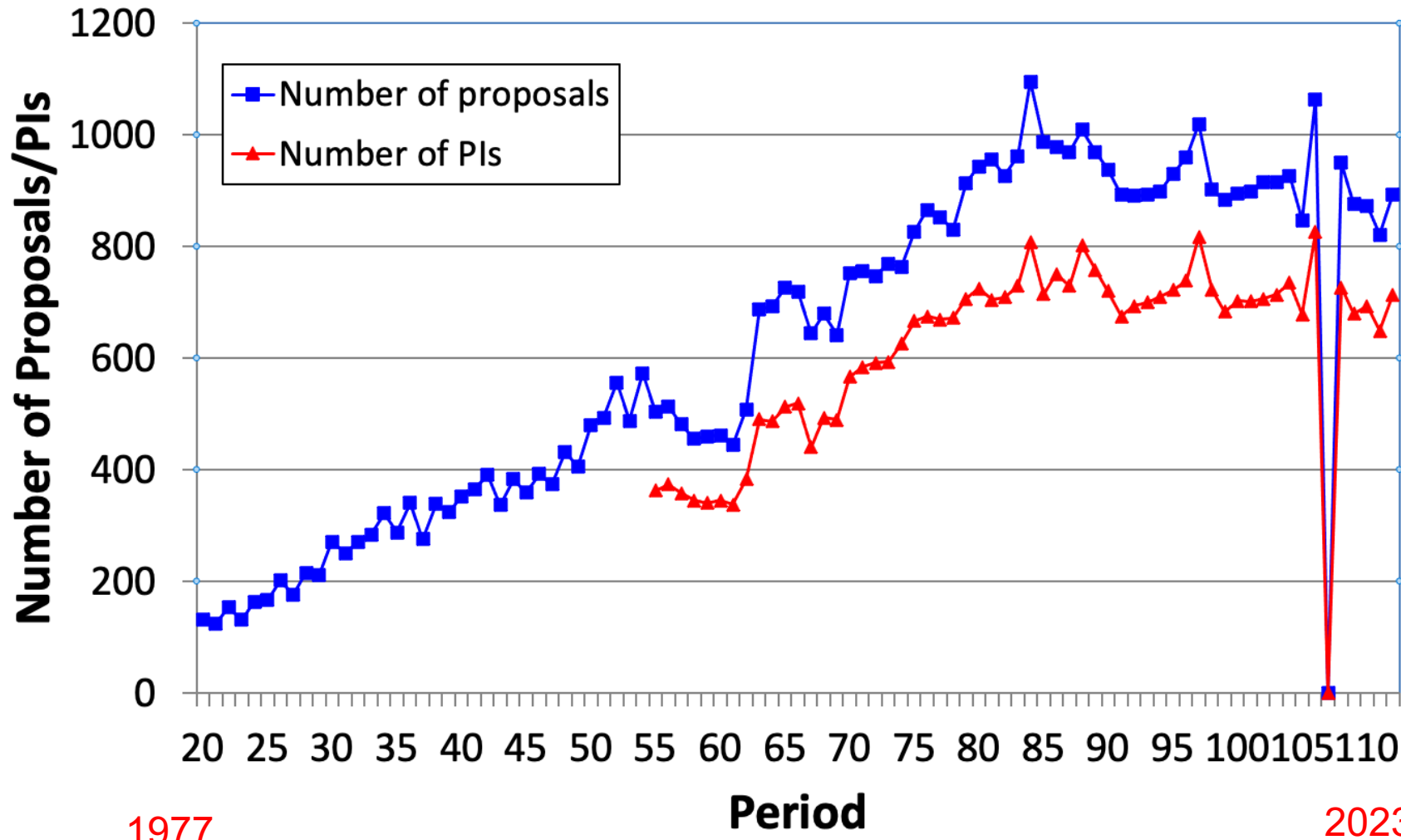


Dual Anonymisation at ESO

Nando Patat – Observing Programmes Office – ESO

Setting the stage

Number of Proposals/PIs



- ~900 proposals
- Twice a year
- 13 panels (6 members each)
- Distributed Peer Review in place as of P110 (50/50)

1977

2023

Dual Anonymisation at ESO

- Dual anonymisation was considered at ESO as a follow-up of the [Time Allocation Working Group](#) recommendations (2016).

Recommendation 9 – Gender issues should be considered and actions taken to mitigate them.

The study conducted in the framework of the TAWG activities (Patat 2016) has given a statistical overview on gender systematics at ESO. The analysis has shown that there is a strong, possibly dominating component related to the professional seniority of the applicants (the career level of male PIs is, on average, higher than those of their female counterparts). However, one cannot exclude the presence of conscious or unconscious effects in the review process itself (which is suggested by the different behavior seen for male and female referees). Although the TAWG is aware that implementing limitations on the level of information regarding the proposing team accessible to the reviewers is a very delicate matter (see for instance Reid, 2014), it recommends ESO addresses this topic, in coordination with other large scientific facilities world-wide. Possible actions are described in Section 4.

[\(Patat 2016\)](#)

~14,000 proposals
~3000 PIs
~8 years

A number of actions, including info in the User Portal (gender, year of PhD, expertise area, ...)

Single-Anonymous (SA)

- The PI does not know who the reviewers will be.
- The reviewers know who the PI is and the team composition.
- Once reviewers are provided with this info it is impossible to prevent them from processing it, one way or another.
- This is a possible source of un/conscious systematics (unknown vs. known teams, gender, country, ethnicity, ...).

First steps

- As a first counter-measure, ESO had initially:
 - Removed the PI name from the front page
 - Removed all the affiliations
 - Listed all cols on the last page, in alphabetical order
 - The reviewers know who the team is

- However, the information was still there. And one cannot expect that provided information is not used, consciously or unconsciously during the review.

Dual-Anonymous (DA)

■ This is not a new concept:

See e.g. Mulligan+ 2012

[Peer review in a changing world: An international study measuring the attitudes of researchers,](#)
Journal of the Am. Soc. for Information Science and Technology

This is a survey of 4000+ researchers. 75% of them said that:

[...] Double-blind peer review is considered the most effective form of peer review.[...]

[An extensive literature compilation can be found here.](#)

*It is very hard to argue that DA puts anybody in a disadvantaged position ([Johnson & Kirk 2020](#))
While the opposite is definitely true (and that is a factual aspect).*

Dual Anonymous Review at ESO

- Detailed [instructions/guidelines](#) were provided.
- First introduced in P106 as a dry run.
- Detailed guidelines for the PIs [were provided here](#).
- The reviewers [were properly instructed](#).
- In P106 ~75% of the PIs complied to the guidelines (according to the reports by the panellists).
- No actions were taken in the cases of violation.
- DAPR was deployed in full in P107 onwards.
- Typically 1-3 egregious violations per semester (few per mill of the total number of proposals)

Anonymisation issues/1

- The Proposal Evaluation Interface offers the reviewers (both for Panels and for the Distributed Peer Review) the possibility of flagging anonymisation issues [following the guidelines](#).


⚠ Anonymization issue declaration

Proposal ID: 106.21QK

Comment (cut-and-paste here the anonymization violations from the proposal)

The PI has not followed the anonymisation guidelines in this sentence in the scientific rationale:
 "As we have demonstrated (Galileo 1609) the Moon's surface is full of topological defects."

✓ Reset
✓ Confirm
✗ Cancel



Anonymisation issues/2

- ESO collects the reports and categorizes them (Major/Minor/No-issue)
- Each single case is analysed by ESO in details (some workload)
- Proposals are discussed irrespective of the presence of anonymisation issues.
- ESO takes action during the scheduling process.
- A final recommendation is made to the DG.

Major Violations

- When there clearly was no attempt on the applicants' side to conceal their identity, which can be unambiguously and directly deduced from the proposal:
 - As we have demonstrated (Galileo et al 1609)...
 - The model was computed using our SuperCode (Ptolemy 0150)...
 - This is the continuation of an approved proposal submitted by our team (0105.A-1234, PI: J. Kepler)...

- Major violations lead to disqualification.

Minor violations

- When the identity of the team can be indirectly(*) but unambiguously deduced from the information provided in the proposal, AND it was definitely possible for the applicants to conceal it:
 - This is the continuation of our programme 0105.1234
- These cases must be flagged to the users, stating that similar future violations may lead to disqualification.

(*) Meaning that the referees can deduce it from external sources (internet searches, ESO web pages, publications) as part of the review process.

No violations

- When it is objectively not possible to conceal the team's identity in spite of the strict application of the anonymization guidelines:
 - Very special/unique science cases submitted by widely known collaborations/teams

- All cases which require a proactive and deliberate research on the reviewer's side do not constitute a violation. They actually are a violation on the reviewer's side.

Example case: DA in P111

- In P111, 106 cases were reported (12.7%)
- 26 were a non-issue (~3.1%) (overzealous review)
- 49 were identified as minor (~5.9%)
- 31 were identified as major (~3.7%)
- Only 5 (0.6%) scheduled proposals were rejected.
- The cases were presented to the DG and DfS
- Personalised emails were sent to the PIs of the identified cases.

- In most of the cases the PIs replied that the violations originated from leftovers from previous submissions
- The PIs were explicitly told that similar violations in future semesters will lead to the proposal disqualification (major) or to proposal flagging (minor).
- No PI of rejected proposal replied.

Support and Feedback/1

- During the submissions phase OPO provided support to users asking advice.
- Significant signs of appreciation were expressed by the users.
- No significant concerns were expressed by the users.
- The panels were supported in their work both offline and online.
- The Scientific Assistants were instructed to check the discussions. No cases of team identity discussions were reported.

Support and feedback/2

- Although there still remain a few users (typically from well established teams) complaining about the anonymisation rules, the polls by the Users Committee show that the majority of the community is glad with the change.
- The reviewer are very glad with the change, as they all agree that this has simplified there work and removed lots of noise from the panel discussions. The number of conflicts went down significantly.
- Analysis on the change of systematics (gender, country, ...) are in progress. We do expect to see results similar to those [reported for the HST](#) (with possible differences due to the different communities).
- Stay tuned.

THANKS!

