ALMA Proposal Guide

5. Proposal preparation, submission, and review
3. Joint Proposals

2023. 04. 18

ARC Korean-node ALMA Toenhall meeting

Proposal preparation, submission, and review

1. Dual-Anonymous proposal review

: the proposal team does not know the identity of the reviewers and the reviewers do not Know the identity of the proposal team

Proposals that do not follow the dual-anonymous guidelines may be subject to disqualification

General Guidelines pertaining to all Programs

(https://almascience.nao.ac.jp/proposing/alma-proposal-review/dual-anonymous)

•Do not identify the PI or any of the co-PIs or co-Is in the proposal. This includes the proposal cover sheet, Scientific Justification, and Technical Justification.

"In Smith et al. (2018), we demonstrated…"

proposers can include references in the following formats:

"As demonstrated in Smith et al. (2018),...." or

"As demonstrated in [1],..."

where in the latter case, [1] corresponds to the full citation in a reference list.

•Do not refer to software or data from ALMA or other observatories in a self-identifying fashion. Software and datasets that are available in a public repository (e.g., GitHub) or in a public paper can be referenced per normal practices. Software or datasets that are not public can be referenced as “obtained via private communications” or similar language, but a name should not be specified since it could strongly imply who may be an investigator on the proposal.

Example 1, instead of:
“Figure 1 shows the image from our Cycle 7 ALMA program (2019.1.02045.S, PI Smith).”
proposers can write
“Figure 1 shows the image from the Cycle 7 ALMA program 2019.1.02045.S.” or
“Figure 1 shows the data from an ALMA Cycle 7 program (private communication).”

Example 2, instead of:
“We will combine these ALMA observations with the HST program led by Chang et al.” or
“The proposed ALMA observations will be combined with our HST data…”

proposers can write
"We will combine these ALMA observations with the HST observations (HST code XXX)." or
"The proposed ALMA observations will be combined with available HST data
(private communication) ..."

•Do not list the name of the PI when listing a proposal project, even if the proposal is not your own.
•Do not list the name of the person when referencing "private communication".

For example, instead of:
"Figure 1 shows the CO image of the cloud from Chang et al. (in preparation)."
proposers can write
"Figure 1 shows the CO image of the cloud (private communication)."

•While proposers may note if they are resubmitting an ongoing proposal, they cannot indicate the proposal code, investigators' names, priority grade, and/or ranking of the previously accepted proposal.

For example, instead of
“This is a resubmission of our ongoing grade B program 2021.1.02045.S (PI: Smith). Half of our targets have been observed and we are resubmitting the proposal to obtain the remaining half.”
proposers can write
“This is a resubmission of our ongoing program. Half of the targets have been observed and we are resubmitting the proposal to observe the remaining half.”

2. Scientific Justification

- one single PDF, English, maximum file size is 20MB
  (including figures, tables, and references)

- Proposal Latex format
  (https://almascience.nrao.edu/proposing/proposal-template)

- Font size: no more than 15% of the text is smaller than 12 points.
  The proposal will be rejected
- 4 pages : Regular, ToO, Solar, VLBI, Phased Array and DDT
- 6 pages : Large Programs

- Large Program management plan (a separated 1-page PDF)
  - include the description of the computing resources available to the team to reduce and a
nalyze ALMA data

Science Case

- a brief justification of the requested sensitivity and angular resolution
  (full details in the Technical Justification)
- a knowledgeable but broad-based audience
  (since proposal reviewers are selected with expertise that covers the various topics within a proposal category)

Examples of Cycle 10 observing with ALMA (12-23 pages)

https://almascience.nao.ac.jp/documents-and-tools/cycle10/alma-science-primer

Large Program

- An assessment of the scheduling feasibility: it should be completed within one cycle. So the program must satisfy the configuration/LST restrction.
- A description of the data products (including any non-ALMA products) that will be delivered by the team for ingestion Into the ALMA archive
- A publication plan

3. Technical Justification

- Sensitivity – source brightness, the requested sensitivity and S/N ratio
- Imaging and correlator configuratuon – angular resolution, maximum recoverable scale
- Spectral setup

If a proposal does not conform to the advertised capability, it can be declared technically Infeasible either during the proposal review process or during the Phase 2.

Proposal validation, submission and withdrawal

- A proposal can be updated and submitted again to the ALMA Archive an many time as needed by the PI before the proposal deadline.
- DDT proposals are not overwritten, only be submitted once

4. Proposal evaluation

DPR (Distributed Peer Review)

- PI proposals
- Maximum number of Proposals sets : 5 (recommended 3)
- If the PI does not have a Ph.D. at the time of proposal submission, the PI can still be the reviewer, but a mentor must be identified at the time of the proposal submission

APRC (ALMA Proposal Review Committee)

- Large Program
- 16-18 members of the scientific community drawn from the five ALMA science categories
- External reviews

5. Proposal Selection (22.5% EA)

Grade A : 33 %

Grade B : 67%

Basic rules

1.All participants in the review process must behave in an ethical manner. If it is found that a reviewer has not behaved in an ethical manner or did not complete their reviews in good faith, the proposal(s) on which the reviewer is acting as the designated reviewer may be rejected.

All participants in the review process are expected to behave in an ethical manner.

- Reviewers will judge proposals solely on their scientific merit.
- Reviewers will be mindful of bias in all contexts.
- Reviewers will declare all major conflicts of interest.
- The proposal reviews will be constructive and avoid any inappropriate language.

All proposal materials related to the review process are strictly confidential.

- The assigned proposals may not be distributed or used in any manner not directly related to the review process.
- Any data, intellectual property, and non-public information shown in the proposals may be used only for the purpose of carrying out the requested proposal review.
- The assigned proposals and the reviews may not be discussed with anyone other than the Proposal Handling Team, the APRC, or the assigned mentor when applicable.
- **All electronic and paper copies of the proposal materials must be destroyed** as soon as a reviewer completes the proposal review process.

6. Proposal Confidentiality

Proposal tile, abstract, name and region of the PI, and the names of Co-Is

- Grade A & B : public soon after PI are informed of the outcome of the Proposal review process
- Grade C : public as soon as its first data are archived

Proposal metadata (source position, frequency, integration time)

- Grade A : public soon after the proposal review process is completed
- Grade B & C : public as soon as the first data are archived

Joint Proposal

Partner	Maximum time ALMA can allocate on partner observatory	Maximum time partner observatory can allocate on each ALMA array
JWST	115 hours	115 hours
VLA	5% of available time	50 hours
VLT	50 hours	50 hours

- **No difference in proposal format and review process between non-JPs and JPs**
- Accepted proposals (Grage A & B) will be excuted with the priority **quivalent to Grade A**. Accepted JPs will stay in the observing queue up to 2 years.
- PI s must submit their Joint Proposals to the observatory that requires the most observing time.
- In the case of ALMA, the relevant time will be the amount of time requested for the 12-m Array, or the 7-m Array in case of ACA stand-alone proposals
- Requested for ALMA Large Programs are not allowed for Joint Proposals when ALMA is a partner observatory

- Limits to the amount of time requested by a single proposal will be defined by each observatory
- Each observatory will follow their technical criteria for acceptance
- Joint Proposals where ALMA is the Main observatory will be rejected in their entirety if deemed technically infeasible by any of the partner observatories
- Joint Proposals accepted by ALMA will be assigned **Grade A**
- Projected IDs for the individual partner observatories will be generated only after accepance of a Joint Proposal

ALMA Proposals requesting JWST

- Standard JWST observing mode
- Disruptive ToO (observations within 21 days of notification)
- No Ultra-rapid JWST ToO (reaction time 2 days or less)
- STScI will perform final detailed feasibility checks
  (reject infeasible, impossible to schedule, and/or dangerous to the JWST instruments)

JWST Technical Justification

- Overall experimental design of the program
- Justify the selection of instruments, modes, exposure times and any constraints
- How the observations contribute to the goals described in the scientific justification
- Justify any special scheduling requirement
- Whether the parallel observations are essential
- Any duplication observations must be expicitly justified

ALMA proposals requesting VLA time

- Standard VLA observations

https://science.nrao.edu/facilities/vla/docs/manuals/propvla/referencemanual-all-pages

VLA Technical Justification

- Justfity the requested array configurations
- A description of the frequency selection
- A description of time request
- A description of the choice of smapler and the correlator set-up requested
- A description of the observing strategy, mosaicking, pointing, on-the-fly mapping, and etc

ALMA proposals requesting VLT time

- Service Mode observations

http://www.eso.org/sci/observing/phase2/SMGuidelines.html

- Upon acceptance of a Joint Proposal by ALMA, Pis will be requested **to submit the project with the ESO proposal submission tool.**

  - During the preparation of the Observing Blocks, result in a larger observing time than requested in the proposal VLT Technical Jusitifcation are subject to **rejection** on technical ground at ESO's discretion

- Approved joint Projects will be allocated time in the **A-rank** class

VLT Technical Justification

- The number and type of target
- The apparent magnitude of target in appropriate/relevant filter bands
- Inteument and mode requested
- Constraints on the observing conditions including, lunar phase, sky transparency, and seeing
- Any time critical aspects (like monitoring ?)
- Justify the total observing ime requested, including all overheads, and a description of the parameters used in the ETC
- Special calibration requests not covered by standard instrument calibration plans.