ALMA Proposal Review

Distributed Peer Review + Dual Anonymous

Presenter: Emily Moravec
Slides by: Andrea Corvillón and the Proposal Handling Team

Goals of presentation

Basics of ALMA distributed peer review

Cycle 9 distributed peer review

How to write proposals in dual anonymous format

Review Process

- ALMA has adopted distributed peer review for scientific review of most proposals. DPR will be used for proposals requesting less than 50 hours on the 12-m Array and ACA standalone proposals requesting less than 150 hours on the 7-m Array. For each proposal submitted, the PI or a delegated co-I will review up to 10 other submitted proposals
  - New!! ALMA will restrict the number of proposals on which any user can be selected as the designated reviewer (see the Cycle 10 proposers guide for details)

- Large proposals and proposals not included in DPR will be panel-reviewed

- All proposals will be reviewed using a dual-anonymous procedure. Proposers will enter their names and affiliations in the Observing Tool but their identities will be concealed from reviewers. It is the proposers' responsibility to write proposals in such a way that anonymity is preserved.
- Guidelines on preparing anonymous proposals will be made available prior to the Call for Proposals

- A FAQ on the proposal process is available at https://almascience.nrao.edu/images/frequently-asked-questions

Basics of distributed peer review

One member of each proposer team* commits to participate in the review process

Each reviewer reviews 10 proposals (Proposal Set) for each submitted proposal

The process
- Stage 1
  - Reviewers identify conflicts of interest
  - Reviewers rank the proposals from 1 to 10 (best to weakest) and provide a comment
- Stage 2
  - Access to anonymized reviews
  - Ranks and comments can be modified

* Excluding Large Programs

Reviewer timeline for Cycle 9

May 10
Proposal deadline
1) Proposal PI designates the reviewer in Observing Tool (OT)

May 15
Expertise & conflicts
1) Reviewer specify scientific expertise in User Profile
2) Reviewer provide list of conflicts of interest in User Profile
3) Deadline to provide alternative reviewer, if necessary

May 24 - June 28
Stage 1
1) Plenary session (optional, but highly recommended)
2) Declare any conflicts of interest in assigned proposals by June 1
3) Complete reviews by June 28 @ 15 UT   **(MANDATORY!)**

June 29 - July 13
1) Read reviews from other reviewers (optional)
2) Modify your ranks and comments as needed (optional)

PI designates the reviewer

1) Proposal PI designates the reviewer in Observing Tool (OT)

Reviewer Information

Please designate a reviewer who will participate in the distributed review process. The reviewer may be the PI of the proposal or one of the other investigators.
A student (without a PhD) may serve as the reviewer only if they are the PI of the proposal and a mentor (with a PhD) is identified.
The mentor does not need to be an investigator on the proposal.

Reviewers are requested to update their user profiles with combinations of scientific categories and keywords which describe
their area(s) of expertise using the new 'Expertise' tab in https://asa.alma.cl/UserRegistration/secure/updateAccount.jsp.
Available expertise information will be used in the distribution of proposal assignments.

Reviewer has a PhD? ● No ○ Yes

Select Mentor

Mentor name [   ]

Mentor has a PhD? ● No ○ Yes

Student PIs can be reviewers, but need to specify a mentor who will assist in the review.

PI designates the reviewer

- **May 10**
  Proposal deadline

1) Proposal PI designates the reviewer in Observing Tool (OT)

Reviewer Information

Please designate a reviewer who will participate in the distributed review process. The reviewer may be the PI of the proposal or one of the other investigators.
A student (without a PhD) may serve as the reviewer only if they are the PI of the proposal and a mentor (with a PhD) is identified.
The mentor does not need to be an investigator on the proposal.

Reviewers are requested to update their user profiles with combinations of scientific categories and keywords which describe
their area(s) of expertise using the new 'Expertise' tab in https://asa.alma.cl/UserRegistration/secure/updateAccount.jsp.
Available expertise information will be used in the distribution of proposal assignments.

Reviewer has a PhD? ● No ○ Yes

Select Mentor

Mentor name

Mentor has a PhD? ● No ○ Yes

A single reviewer can be assigned a maximum of **FIVE** Proposal Sets

Reviewer expertise

May 15
Expertise & conflicts

1) Reviewer specify **scientific expertise** in User Profile
2) Reviewer provide list of conflicts of interest in User Profile
3) Deadline to provide alternative reviewer, if necessary

| Account info | Project delegation | Demographics | **Expertise** | Confirm |

Expertise

← Previous   ⇒ Next

Please select at least 3 category/keyword pairs that best match your scientific expertise. You may select keywords in more than one category.
If you are a reviewer for Distributed Peer Review (DPR) you will preferentially be assigned proposals that match your selected keywords.

> Cosmology and the High Redshift Universe

> Galaxies and Galactic Nuclei

⌄ ISM, star formation and astrochemistry

☐ Outflows, jets and ionized winds

☑ High-mass star formation

☑ Intermediate-mass star formation

☑ Low-mass star formation

☑ Pre-stellar cores, Infra-Red Dark Clouds (IRDC)

☑ Astrochemistry

☑ Inter-Stellar Medium (ISM)/Molecular clouds

☐ Photon-Dominated Regions (PDR)/X-Ray Dominated Regions (XDR)

☐ HII regions

☐ Magellanic Clouds

> Circumstellar disks, exoplanets and the solar system

> Stellar Evolution and the Sun

1) Log in to the ALMA Science Portal

2) Edit your User Profile

3) Go to the **Expertise** tab

4) Select keywords that match your scientific expertise

5) Go to the **Confirm** tab to save

How the PHT uses keywords to assign proposals

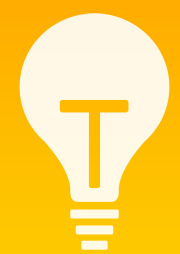- **Priority #1** Assign proposals with the <u>same keyword</u> as the reviewer's selected keywords.

- **Priority #2** Assign proposals in the <u>same scientific category</u> as the reviewer's expertise.

- **Priority #3** Assign proposals in other scientific categories.

If a reviewer does not specify their expertise, the keywords of their proposal will be used.

Reviewers can specify their conflicts of interest

May 15
Expertise & conflicts

1) Reviewer specify scientific expertise in User Profile
2) Reviewer provide list of **conflicts of interest** in User Profile
3) Deadline to provide alternative reviewer, if necessary

| Account info | Project delegation | Demographics | Expertise | **Conflicts of interest** | Confirm |

Conflicts of interest

⇐ Previous   ⇒ Next

If you are a reviewer for Distributed Peer Review or the Panel Review, please provide a list of your conflicts of interest. Consult the conflicts of interest criteria for guidance on what is considered a conflict. You will not be assigned to review a proposal in which the PI, a coPI, or a col is in your list of conflicts of interest.

Reviewers only need to identify conflicts of interest that are registered ALMA users since all reviewers must be registered. If a close collaborator is not in the ALMA user registry below, they do not need to be listed.

Providing this information is optional. If you do not provide a list of conflicts and do not check the box below, the JAO will identify potential conflicts based on your past ALMA collaborations.

I have no conflicts of interest to declare ☐

⊕ Add collaborator   ⊖ Remove collaborators   ☐ Clear selection

1) Log in to the ALMA Science Portal

2) Edit your User Profile

3) Go to the **Conflicts of Interest** tab

4) Identify ALMA users for which you have a conflict

5) Go to the **Confirm** tab to save

What is considered a conflict of interest?

- In general, a reviewer has a major conflict of interest when their personal or work interests would benefit if the proposal under review is accepted or rejected.
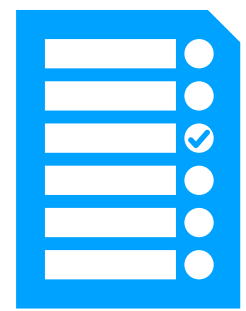
- Close collaborators, which are defined as a <u>substantial</u> collaboration on three or more papers within the past three years or an <u>active</u>, <u>substantial</u> collaboration on a current project. Co-membership in a large team on its own does not constitute a conflict of interest.
- Students and postdocs under supervision of the reviewer within the past three years
- A reviewer's supervisor (for student and postdoc reviewers)
- Close personal ties (e.g., family member, partner) that are ALMA users
- Any other reason in which a reviewer believes a major conflict of interest exists
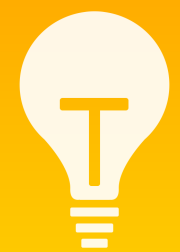
If a reviewer does not provide their conflicts, the PHT will determine conflicts based on the reviewer's proposal history for the past three cycles.

Reviewers can specify their conflicts of interest

May 15
Expertise & conflicts

1) Reviewer specify scientific expertise in User Profile
2) Reviewer provide list of conflicts of interest in User Profile
3) Deadline to provide alternative reviewer, if necessary

A single reviewer can be assigned a maximum of **FIVE** Proposal Sets

- After the proposal deadline, the PHT will contact those reviewers who were selected to receive more than five Proposal Sets
- It is expected that for these cases, the reviewer identifies a new reviewer among the proposal co-Is
- If no alternative has been identified by the deadline, the PHT will cancel the reviewer's extra proposals

Stage 1: Review assigned proposals

May 24 - June 28 Stage 1	1) **Plenary session** (optional, but highly recommended) 2) Declare any conflicts of interest in assigned proposals by June 1 3) Complete reviews by June 28 @ 15 UT **(MANDATORY!)**
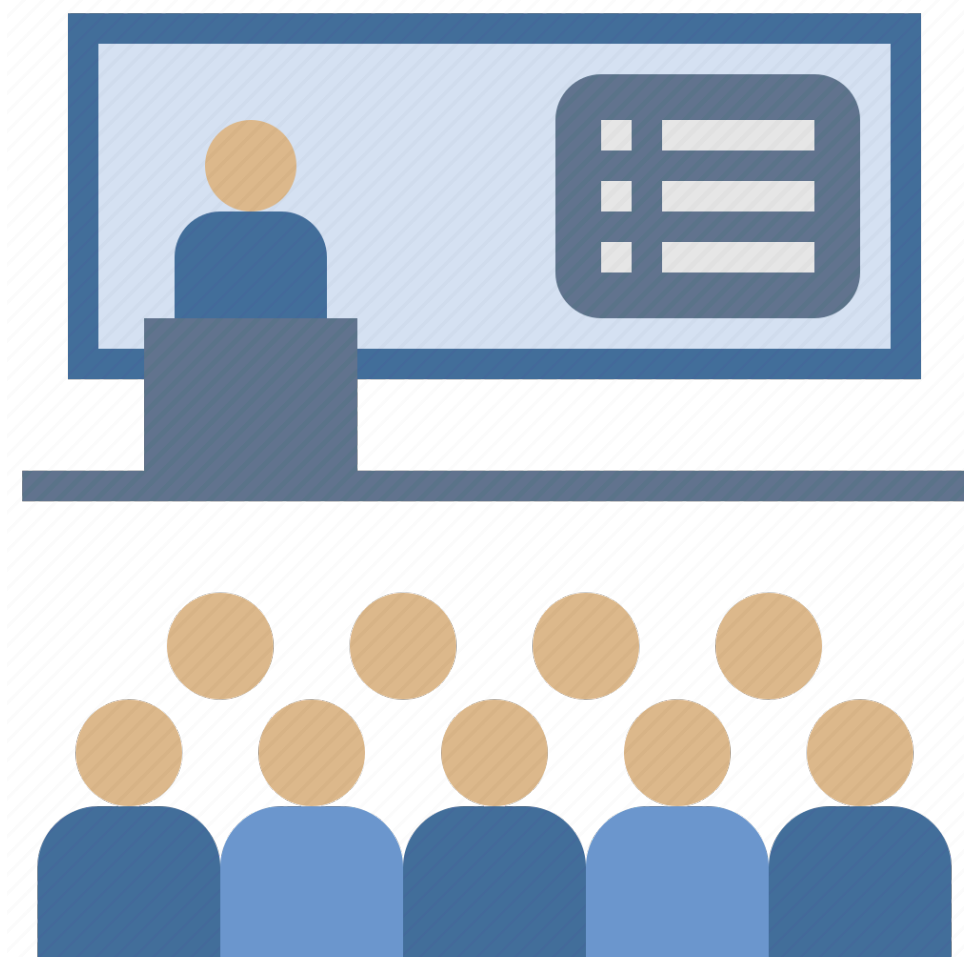
- The proposal handling team (PHT) will host Webinars*
- During this sessions, the PHT will explain the different aspects of distributed peer review, and will be available to answer questions
- The presentation and slides will be posted in the ALMA Science Portal before the Webinars
- Attending to one of the sessions is not mandatory, but it is highly recommended

*Dates to be confirmed

Stage 1: Review assigned proposals

May 24 - June 28
Stage 1

1) Plenary session (optional, but highly recommended)
2) **Declare** any conflicts of interest in assigned proposals by June 1
3) Complete reviews by June 28 @ 15 UT **(MANDATORY!)**

Declare any additional conflicts in your assigned proposals
- for example: observing the same object(s) with the same goals

If you identify a conflict after you submitted your conflicts, contact the PHT to be assigned another proposal.

Stage 1: Review assigned proposals

May 24 - June 28
Stage 1

1) Plenary session (optional, but highly recommended)
2) Declare any conflicts of interest in assigned proposals by June 1
3) **Complete** reviews by June 28 @ 15 UT **(MANDATORY!)**
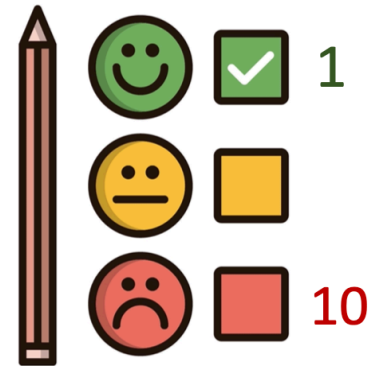
- Rank the proposals from 1 (strongest) to 10 (weakest) based on scientific merit.

- Write comments that summarize the strengths and weaknesses of the proposal
- Comments will be sent to the PI verbatim.

- **Reviewer's proposal will be canceled if the reviews are not submitted on time!**
- Extensions will not be granted since Stage 2 starts on June 29.
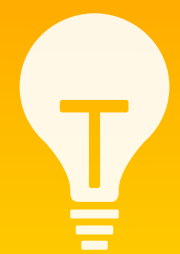
The reviewer can be changed after the proposal deadline in exceptional circumstances by having the proposal PI contact the PHT. The Stage 1 deadline though will remain the same.

Stage 2: Finalize the ranks and reviews
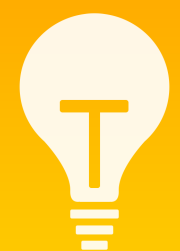
June 29 - July 13
Stage 2

1) Read reviews from other reviewers (optional)
2) Modify your ranks and comments as needed (optional)
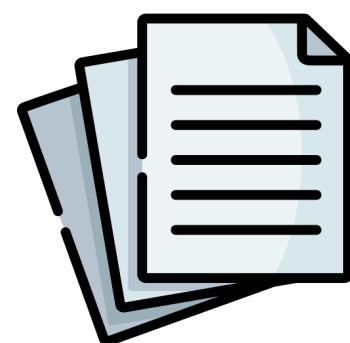
Read comments from the other reviewers to see if you overlooked any critical strengths or weaknesses.

Update your ranks and comments as needed.

Stage 2 is optional. If a reviewer does not complete Stage 2, the Stage 1 ranks/comments are considered final.

How to write proposals in dual anonymous format

Dual anonymous: overview

Proposals must be written following the dual anonymous review guidelines

Basic principle is that the proposal should not reveal the proposal team

Reviewers should focus on the proposed science, and not the proposal team

Guidelines provided on the ALMA Science Portal (Proposing => ALMA Proposal Review).

Do not reveal the PI!

- Do not list the PI, co-PIs, or coIs anywhere in the proposal

- Includes abstract, Scientific Justification, and Technical Justification

Use third person phrasing

- Reference your own work in the third person
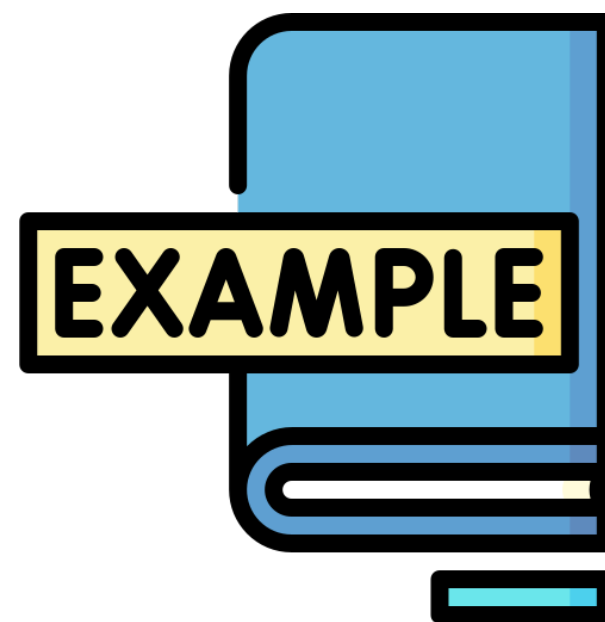
❌ *In Smith et al. (2018), we demonstrated …*

Our study (Hayashi et al. 2021) showed that …

✅ *As demonstrated in Smith et al. (2018), …*

Hayashi et al. (2021) showed that …

EXAMPLE

Referencing data and software anonymously

- Do not refer to software or data from ALMA or other observatories in a self-identifying fashion

  - If software or datasets are available in a public repository (e.g., GitHub) or in a public paper, they can be referenced per normal practices

  - If software or datasets are not public reference them as "obtained via private communication" or similar language

❌

Figure 1 shows the image from our Cycle 7 ALMA program (2019.1.01045.S, PI Smith)...

*The proposed ALMA observations will be combined with our HST data ...*

We use our group's line identification package STAR ...

✅

Figure 1 shows the image from the Cycle 7 ALMA program (private communication)

The proposed ALMA observations will be combined with available HST data (private communication) ...

We use the line identification package STAR (obtained via private communication) ...
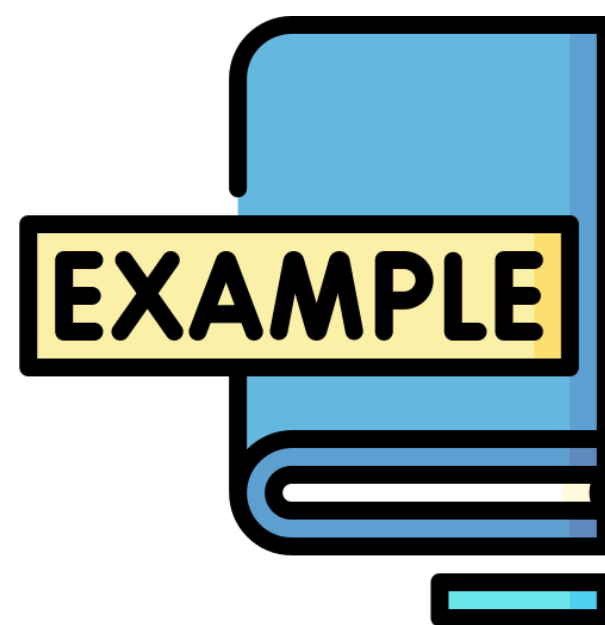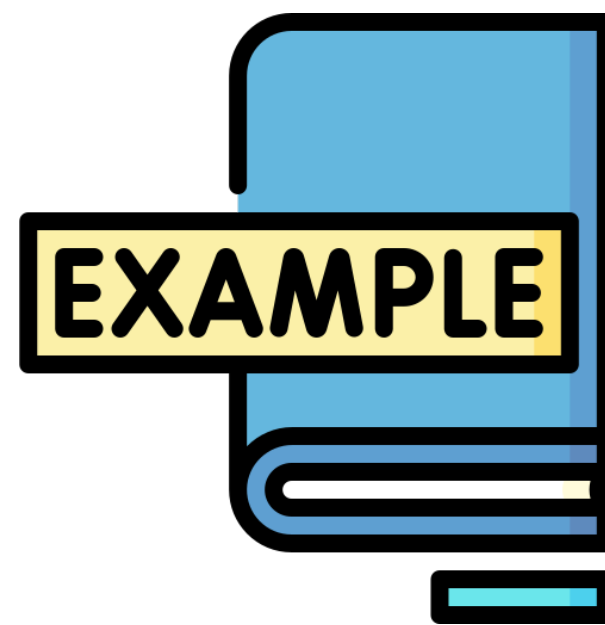
Do not list PIs of other proposals

- Do not name the PI when listing a project code, even if it is not your own project

❌ *Figure 1 shows the image from the Cycle 7 program (2091.1.02045.S, PI Pérez).*

✅ *Figure 1 shows the image from the Cycle 7 program (2019.1.02045.S)*

EXAMPLE

Referencing papers in preparation

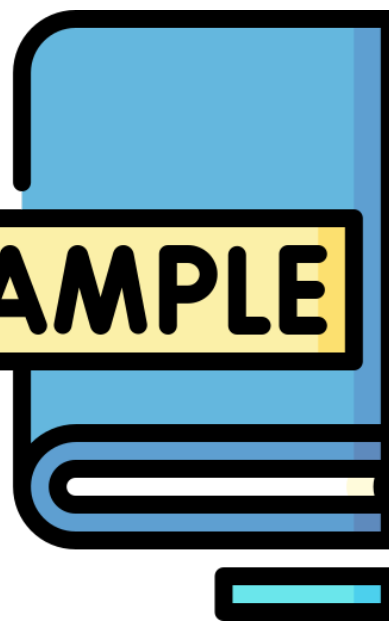- Papers in preparation need to be referenced as private communication without an associated name.

❌ *Figure 1 shows the CO image from Gómez et al. (in preparation)*

✅ *Figure 1 shows the CO image (private communication)*
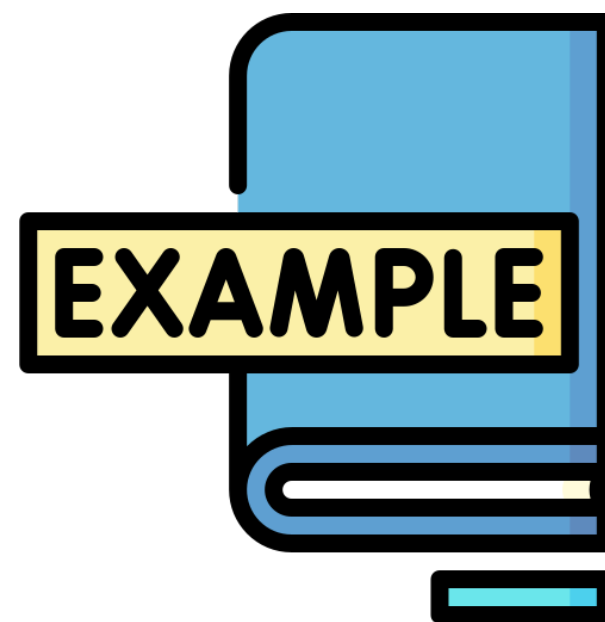
Referencing submitted papers

- References to submitted papers are not permitted (use "private communication")

- If a submitted paper has been posted on the archive (e.g, arXiv), the archive paper can be referenced per usual practices

*Our sample was obtained from a recent survey (Chang et al. submitted).*

Our sample was obtained from a recent survey (private communication).

Resubmissions

- Proposers may note if they are resubmitting an ongoing proposal. This is usually done in the "duplication" box on the cover sheet.

- Do not list the proposal code, ranking, priority grade, or the PI of the previous proposal in the resubmission statement.

- If data from the previous proposal are presented in the Scientific Justification, it must be presented in a dual anonymous fashion.
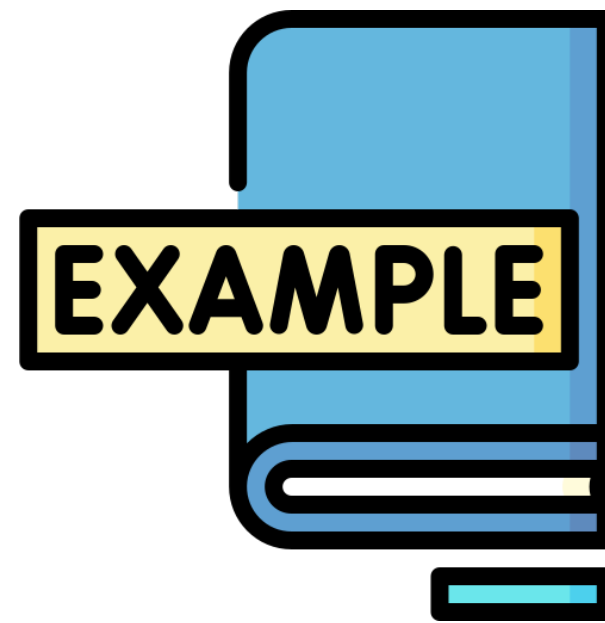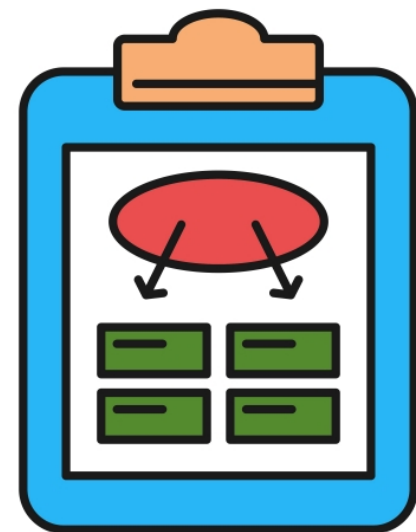
❌ *This is a resubmission of our ongoing program 2021.1.02045.S (PI: Smith). Half of the targets have been observed and we are resubmitting the proposal to observe the remaining half.*

✅ *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.*

Special note for Large Programs

- Proposals for Large Programs are required to submit a management plan

- This document is separate from the Scientific Justification

- The management plan is allowed to include names and institutions

- The ALMA Proposal Review Committee (APRC) will read the management plan only after completing the scientific ranking of the proposals.

More information

🔗 https://almascience.nrao.edu/proposing/alma-proposal-review

- Dual-anonymous guidelines
- Description of the distributed peer review
- Detailed guidelines for the reviewers
- FAQ

Questions?