



# ALMA proposal review process

## EA community meeting

Proposal Handling Team  
April 17, 2023

# Goal of presentation



ALMA distributed peer review



Large Programs review

# 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 10



**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**

Stage 2

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

# 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.

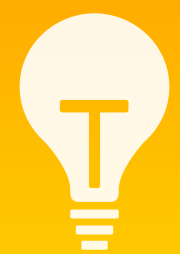
Reviewers are requested to update their user profiles with combinations of scientific categories and keywords which describe their area(s) of expertise using the new 'Expertise' tab in <https://asa.alma.cl/UserRegistration/secure/updateAccount.jsp>. Available expertise information will be used in the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

Reviewer has a PhD?  No  Yes

Select Mentor

Mentor name

Mentor has a PhD?  No  Yes



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.

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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  |
| <input type="checkbox"/> Outflows, jets and ionized winds                             |
| <input checked="" type="checkbox"/> High-mass star formation                          |
| <input checked="" type="checkbox"/> Intermediate-mass star formation                  |
| <input checked="" type="checkbox"/> Low-mass star formation                           |
| <input checked="" type="checkbox"/> Pre-stellar cores, Infra-Red Dark Clouds (IRDC)   |
| <input checked="" type="checkbox"/> Astrochemistry                                    |
| <input checked="" type="checkbox"/> Inter-Stellar Medium (ISM)/Molecular clouds       |
| <input type="checkbox"/> Photon-Dominated Regions (PDR)/X-Ray Dominated Regions (XDR) |
| <input type="checkbox"/> HII regions  |
| <input type="checkbox"/> 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 same keyword as the reviewer's selected keywords.

## Priority #2

Assign proposals in the same scientific category 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

# Time to select new reviewer, if necessary



**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

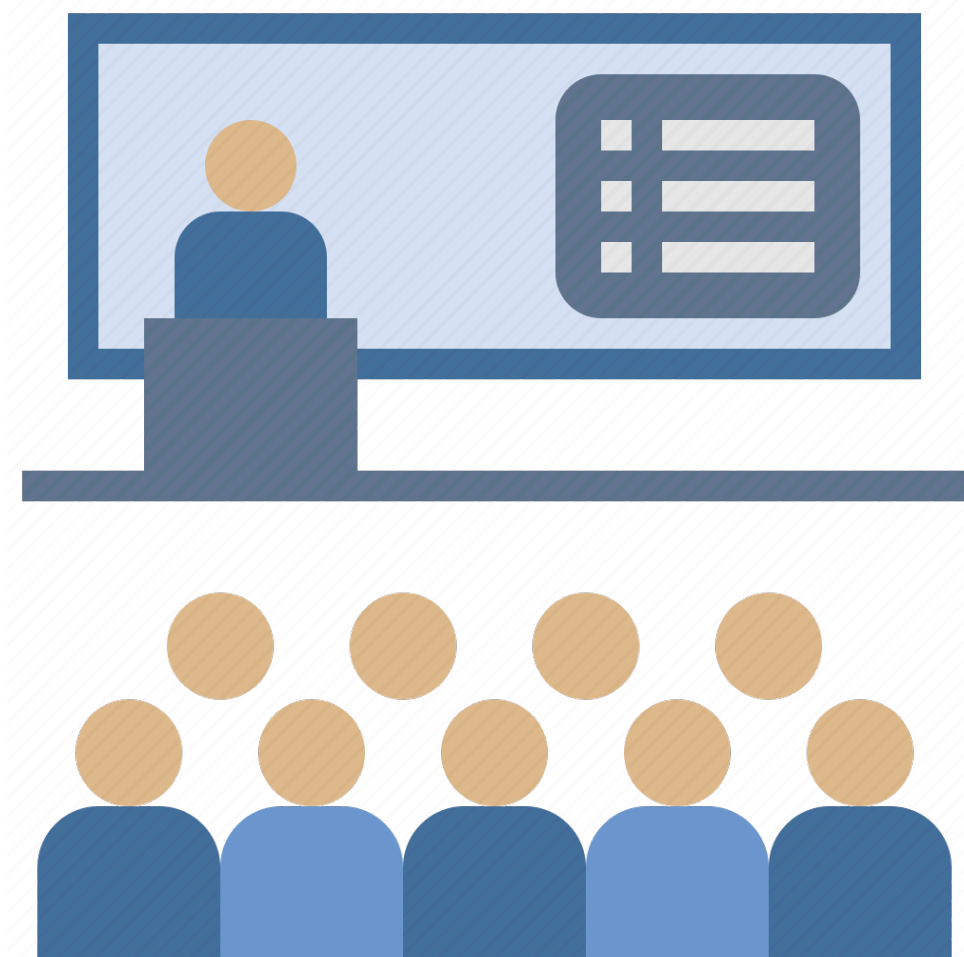
- After the proposal deadline, the PHT will contact those reviewers who were selected to receive more than five Proposal Sets
- It is expected that for these cases, the reviewer identifies a new reviewer among the proposal co-Is
- If no alternative has been identified by the deadline, the PHT will cancel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

# DPR plenary session



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 PHT will host three Webinars:
  - Thursday May 25, 17:00 UTC
  - Friday May 26, 13:00 UTC
  - Wednesday May 31, 02:00 UTC
- 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

# Stage 1: Review assigned proposals



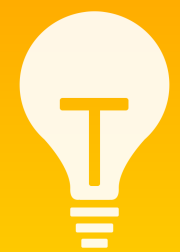
May 24 - June 28  
Stage 1

- 1) Plenary session (optional, but highly recommended)
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Declare any additional conflicts in your assigned proposals

- for example: observing the same object(s) with the same goals



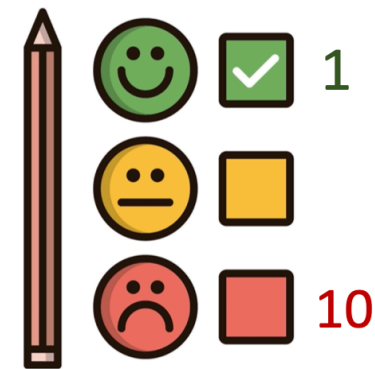
If you identify a conflict after you submitted your conflicts, contact the PHT to be assigned another proposal.

# 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.

# Review criteria



## Overall scientific merit

- Does the proposal clearly indicate which important, outstanding questions will be addressed?
- Will the proposed observations have a high scientific impact on this particular field and address the specific science goals of the proposal?
- Does the proposal clearly describe how the data will be analyzed in order to achieve the science goals?



## Suitability of the observations to achieve the scientific goals

- Is the choice of target (or targets) clearly described and well justified?
- Are the requested signal-to-noise ratio, angular resolution, largest angular scale, and spectral setup sufficient to achieve the science goals?
- Does the proposal justify why new observations are needed to achieve the goals?
- For Joint Proposals, does the proposal clearly describe why observations from multiple observatories are required to achieve the science goals?

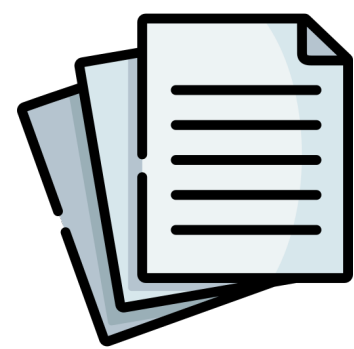


# Stage 2: Finalize the ranks and reviews



**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.

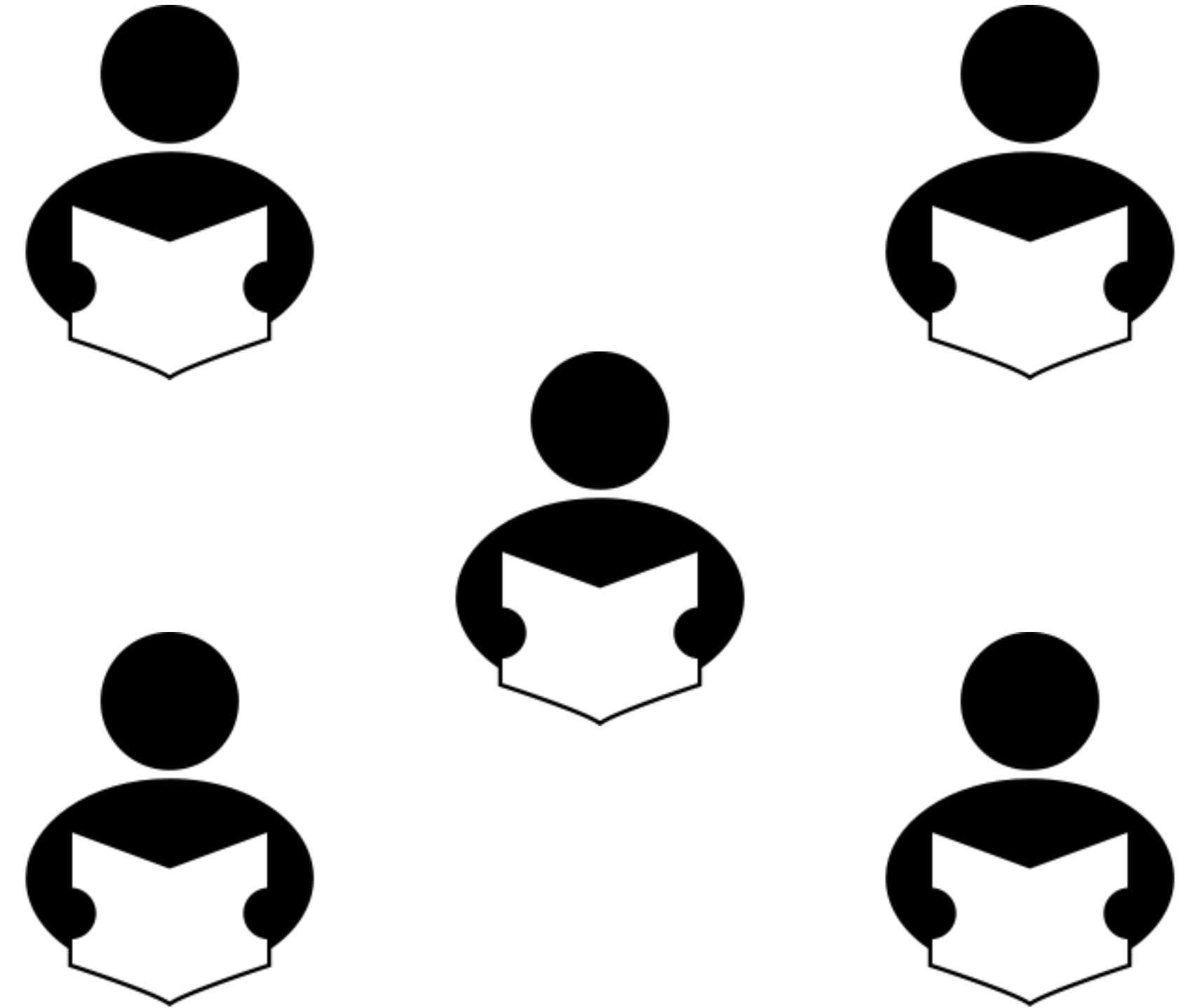
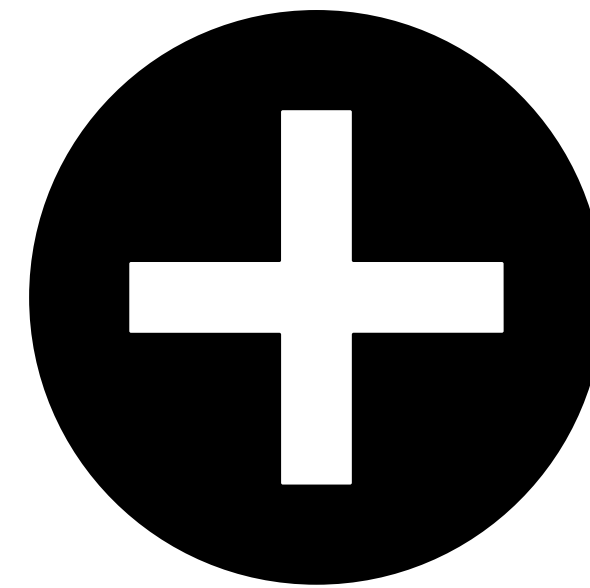


Stage 2 is optional. If a reviewer does not complete Stage 2, the Stage 1 ranks/comments are considered final.

# Cycle 10 Large Programs review



ALMA Proposal Review  
Committee (APRC)



External Science Assessors



# Review criteria Large Programs



**Overall scientific merit**

**Suitability of the observations to achieve the scientific goals**

**Specific for Large Programs (LP)**

- Does the LP address a strategic scientific issue and have the potential to lead to a major advancement or breakthrough in the field that cannot be achieved by combining regular proposals?
- Are the data products that will be delivered by the proposal team given the scope of the proposal and will the products be of value to the community?
- Is the publication plan appropriate for the scope of the proposal?

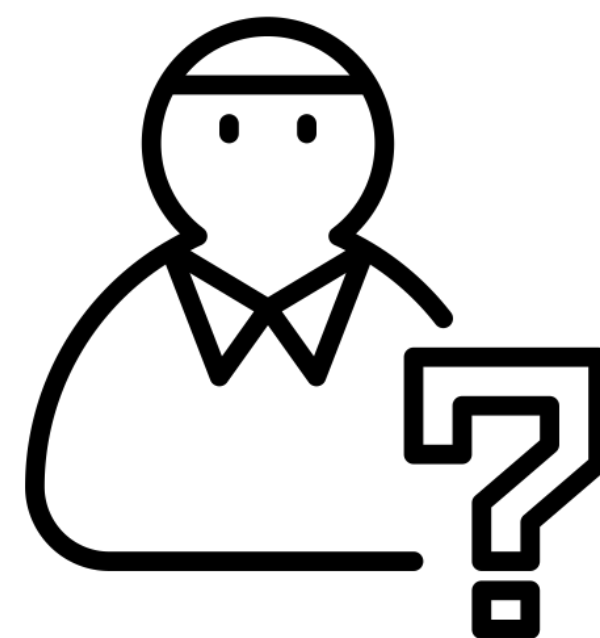


## More information



[almascience.org/proposing/alma-proposal-review](https://almascience.org/proposing/alma-proposal-review)

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



## Contact the PHT

ALMA Helpdesk ([help.almascience.org](https://help.almascience.org)) → Department: "Proposal Review Support"



# Thank you!

## Questions?

