ALMA Cycle 10
Distributed Peer Review

Proposal Handling Team
May 2023

Goal of presentation

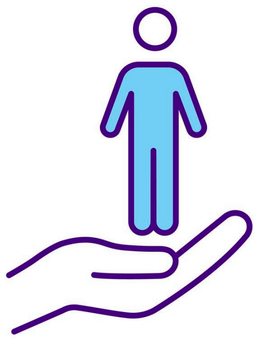
Logistics of distributed peer review

Guidelines to reviewing proposals

Logistics of distributed peer review

- Code of conduct
- Timeline of the process
- The Reviewer Tool
- Where do I find relevant information?

Code of conduct



Reviewers and mentors are expected to behave in an ethical manner

- Will judge the proposals solely on their scientific merit
- Will be mindful of bias in all contexts
- Will declare 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, 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

Basics of distributed peer review

Every* proposal team nominates one person to be a reviewer

Proposal Handling Team (PHT) assigns 10 proposals to the reviewer

Reviewer ranks and write comments for each proposal

* 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) Declare any conflicts of interest in assigned proposals by June 1
2) 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)

Stage 1: Review assigned proposals

May 24 - June 28
Stage 1

1) Declare any conflicts of interest in assigned proposals by June 1
2) Complete reviews by June 28 @ 15 UT **(MANDATORY!)**

Proposal set

- Group of 10 proposals to review
- Assigned to the reviewer based on the reviewer selected expertise or the keywords of the reviewer's submitted proposal
- One Proposal Set is assigned for each submitted proposal on which someone was selected as the reviewer

Stage 1: Review assigned proposals

May 24 - June 28
Stage 1

1) Declare any conflicts of interest in assigned proposals by June 1
2) 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

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.

Before assigning the proposals, the PHT will identify major conflicts of interest based on:

- The PI, reviewer, or mentor of the submitted proposal is a PI or co-I of the proposal to be reviewed
- The PI, or one of the co-Is of the proposal to be reviewed is in the conflicts-of-interest list provided by the reviewer or mentor of the submitted proposal
- If the list is not provided by the reviewer, or mentor, then the assignment algorithm constructs a list of conflicts based on the submission history of the reviewer, or the mentor.

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.

Potential conflicts that are not identified automatically by the PHT:

- The reviewer is proposing to observe the same object with similar science objective.
- The reviewer had provided significant advice to the proposal team on the proposal even through they are not listed as and investigator
- Other reasons the reviewer believes there is a strong conflict of interest

In general, lack of expertise is not a reason to declare a conflict of interest.

Stage 1: Review assigned proposals

May 24 - June 28
Stage 1

1) Declare any conflicts of interest in assigned proposals by June 1
2) 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 an additional 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) Declare any conflicts of interest in assigned proposals by June 1
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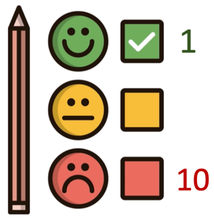


- Rank the proposals from 1 (strongest) to 10 (weakest) based on scientific merit.

- 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)

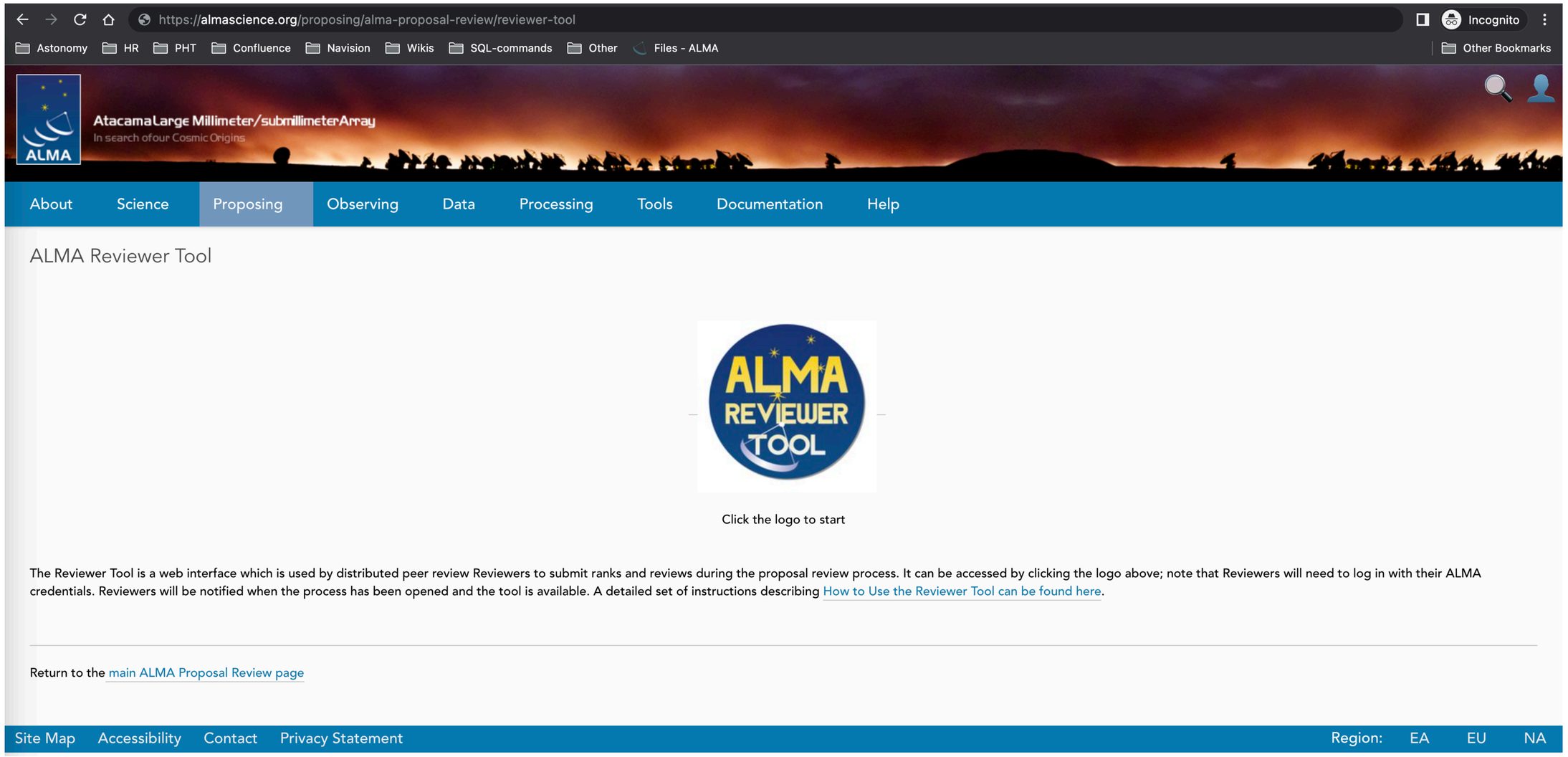
Read comments from the other reviewers to see if you overlooked any critical strengths or weaknesses.

Update your ranks and comments as needed.

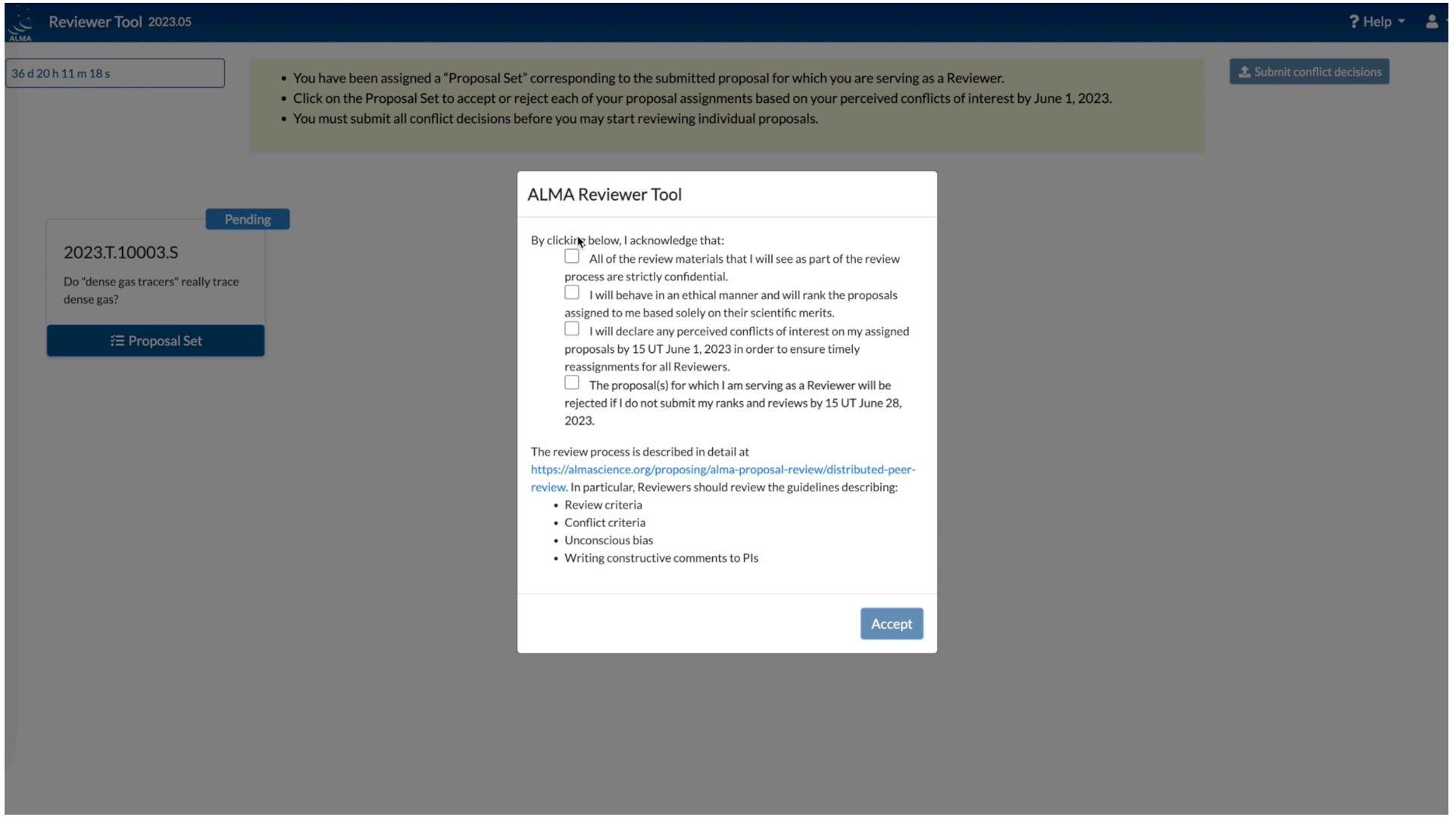
Stage 2 is optional. If a reviewer does not complete Stage 2, the Stage 1 ranks/comments are considered final.

The Reviewer Tool

https://almascience.org/proposing/alma-proposal-review/reviewer-tool



The Reviewer Tool



The Reviewer Tool

Proposal 2022.T.10145.S

Assessment | Proposal Information

Rank:

Comments to the PI (click here for guidelines) (0 / 4000)

Indicate the proposal's strengths and weaknesses.

Comments to the JAO (optional and confidential)

Reviewers can use "Comments to the JAO" to provide confidential comments to the JAO. For example:

- Possible violations to the dual-anonymous guidelines
- Possible violations to the PDF format and/or minimum font size
- Concerns about the observational setup
- Other topics that you would like to share with the PHT

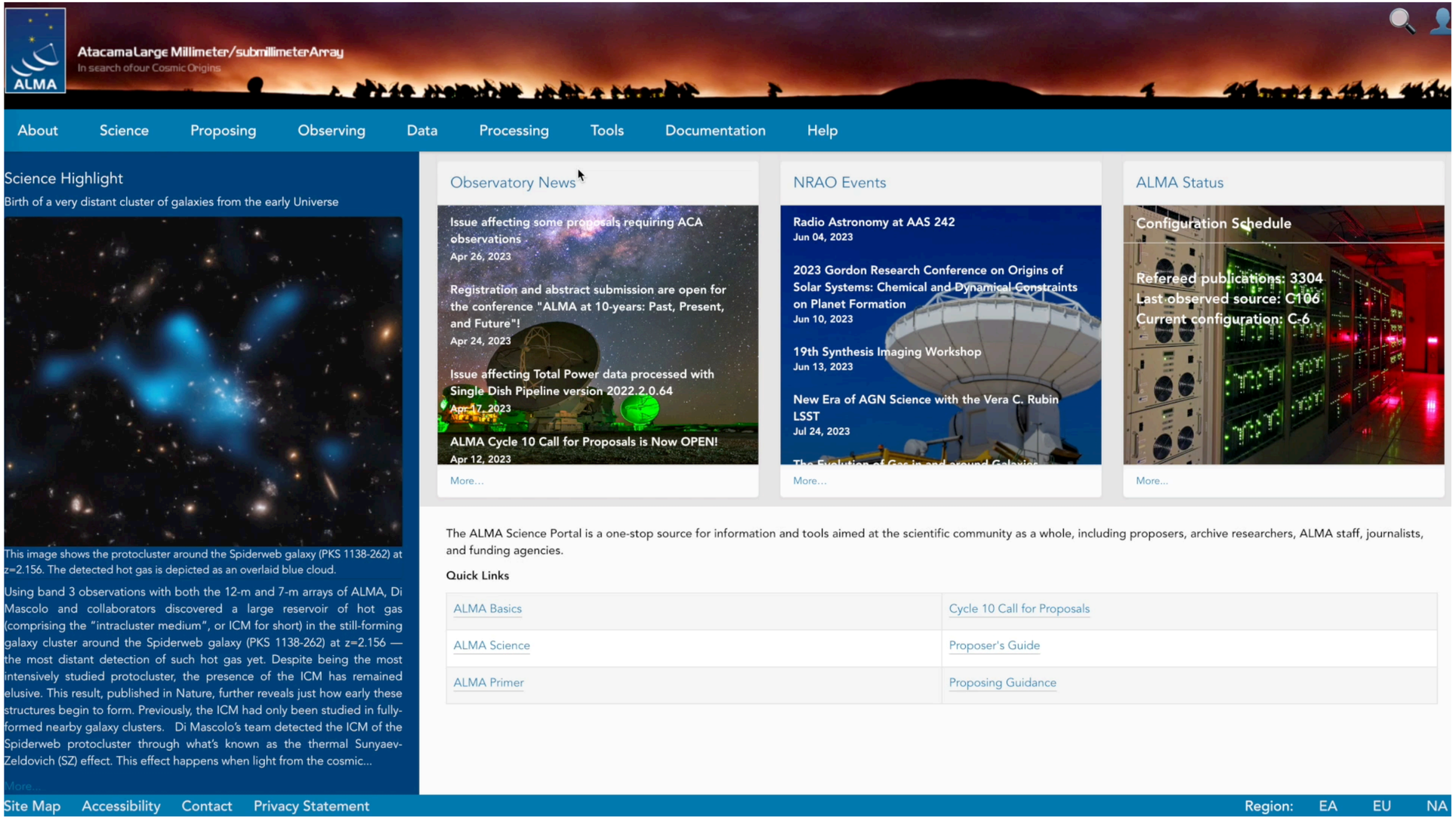
Close

Relevant information

https://almascience.org/proposing/alma-proposal-review

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

Relevant information



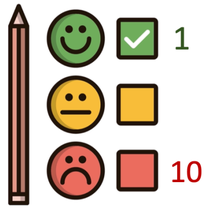
Questions?

Guidelines to reviewing proposals

- Goals
- Review criteria
- Best practices for writing reviews

Goals

Goals of the proposal review



- Establish a ranked list for all assignments within a Proposal Set

- Provide a comment to the PI with the strengths and weaknesses for each assigned proposal in a Proposal Set

How long will this take?

- You should plan to spend about 1-2 working days to review one Proposal Set

Proposal components

Abstract

Scientific Justification

Technical Justification

All three components are important and should be read by reviewers.

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?

Technical Justification

ALMA Observing Tool

Observing Tool performs (most) technical validations

➡ reviewers can assume requested sensitivity, angular resolution, largest angular scale, and correlator setup are valid and can be achieved technically.

Reviewers should evaluate if setup is sufficient to achieve science goals.

- Sensitivity
- Correlator setup
- Largest angular scale
- Angular resolution

The proposal should clearly justifying the setup with references as appropriate.

Special cases

Reviewers should review **all proposals** following the same review criteria

- Resubmissions

If the proposal is accepted any science goals which have already been observed will be descoped

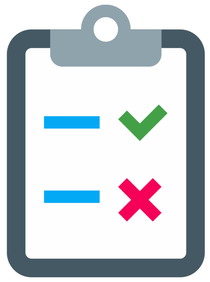
- High-risk/high-impact

Reviewers are encouraged to give full consideration to well-designed high-risk/high-impact proposals even if there is no guarantee of a positive outcome or definite detection

- Proposal size

A proposal should not be down/up graded solely based on the amount of requested observing time

Best practices for writing reviews



- Summarize both strengths and weaknesses
- Avoid giving the impression a minor weakness was the cause of a poor ranking
- Take care to ensure strengths and weaknesses do not contradict each other

- Do not ask questions in your review
- Questions usually indicate a proposal weakness - state the weakness directly

- A proposal review is NOT just a summary of the proposal
- While the reviewer may include a BRIEF (~ 1 sentence) summary, the bulk of the contents need to discuss the strengths and weaknesses of the proposal

Best practices for writing reviews

- Be as specific as possible when writing reviews
- Avoid generic statements that could apply to most proposals
- Critique the proposal and not the PI or the proposal team

- Use complete sentences when writing the comments
- Be concise, it is not necessary to write a lengthy review, but avoid writing a single sentence

- Be professional and constructive
- Do not use sarcasm or any insulting language

Best practices for writing reviews

- Do not include statements about scheduling feasibility
- Do not include explicit references to other proposals that you are reviewing, such as project codes
- Maintain anonymity
- Proof-read your reviews

Dual-anonymous

Remember the role of reviewers is to evaluate the scientific merit of the proposal:

- Review the proposal based on the scientific merit
- Do not try to guess the identity of the PI or the proposer team
- If a proposal does not follow the dual-anonymous guidelines:
  - Review it solely by its scientific merit
  - Inform the PHT using the box "Comment to JAO" via the Reviewer Tool

Example review

Jets and outflows have been shown to be a common phenomenon during the protostellar phase, but details about the exact mechanism in the type of source proposed here are not fully known. The proposed target is very well justified and given its proximity, will provide excellent spatial resolution to study the structure of the outflow. The observations and analysis described will shed light on the physics of jet launching and accretion, leading to a better understanding of the evolution of this type of source.

However, the proposal did not adequately explain how the proposed observations will test whether the observed phenomenon is a result of the particular outflow launching mechanism or other scenarios discussed in the proposal. Also, the proposal did not adequately explain why the requested number of molecular transitions are needed for the proposed excitation analysis, compared with the pros and cons of instead observing fewer or different transitions.

Brief summary of proposal

Strengths specific to the proposal

Weaknesses specific to the proposal

Comments should indicate the strengths/weaknesses of the proposal, not the PI or the proposal team.

We appreciate you share your expertise and your time with us!

Your are contributing to the observatory's quest to study the universe in the millimeter/ submillimeter wavelength range!

Questions?