

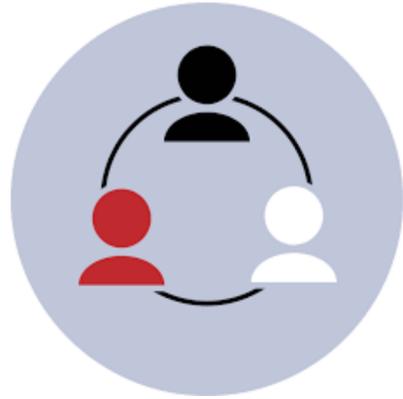


ALMA Cycle 10

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



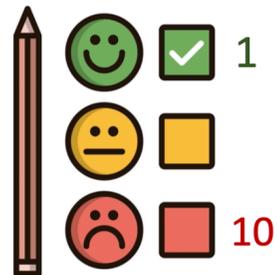
If you identify an additional conflict after you submitted your conflicts, contact the PHT to be assigned another proposal.

Stage 1: Review assigned proposals



May 24 - June 28
Stage 1

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

The Reviewer Tool



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

A screenshot of a web browser showing the ALMA Reviewer Tool page. The browser's address bar displays the URL. The page header includes the ALMA logo and navigation links. The main content area features a large circular logo for the ALMA Reviewer Tool with the instruction 'Click the logo to start'. Below this is a paragraph of text explaining the tool's purpose and providing a link to instructions. At the bottom, there is a link to the main proposal review page and a footer with site map and accessibility information.

Atacama Large Millimeter/submillimeter Array
In search of our Cosmic Origins

About Science **Proposing** Observing Data Processing Tools Documentation Help

ALMA Reviewer Tool



Click the logo to start

The Reviewer Tool is a web interface which is used by distributed peer review Reviewers to submit ranks and reviews during the proposal review process. It can be accessed by clicking the logo above; note that Reviewers will need to log in with their ALMA credentials. Reviewers will be notified when the process has been opened and the tool is available. A detailed set of instructions describing [How to Use the Reviewer Tool can be found here](#).

Return to the [main ALMA Proposal Review page](#)

Site Map Accessibility Contact Privacy Statement Region: EA EU NA

The Reviewer Tool



Reviewer Tool 2023.05 Help

36 d 20 h 11 m 18 s

Submit conflict decisions

- You have been assigned a "Proposal Set" corresponding to the submitted proposal for which you are serving as a Reviewer.
- Click on the Proposal Set to accept or reject each of your proposal assignments based on your perceived conflicts of interest by June 1, 2023.
- You must submit all conflict decisions before you may start reviewing individual proposals.

Pending

2023.T.10003.S
Do "dense gas tracers" really trace dense gas?

Proposal Set

ALMA Reviewer Tool

By clicking below, I acknowledge that:

- All of the review materials that I will see as part of the review process are strictly confidential.
- I will behave in an ethical manner and will rank the proposals assigned to me based solely on their scientific merits.
- I will declare any perceived conflicts of interest on my assigned proposals by 15 UT June 1, 2023 in order to ensure timely reassignments for all Reviewers.
- The proposal(s) for which I am serving as a Reviewer will be rejected if I do not submit my ranks and reviews by 15 UT June 28, 2023.

The review process is described in detail at <https://almascience.org/proposing/alma-proposal-review/distributed-peer-review>. In particular, Reviewers should review the guidelines describing:

- Review criteria
- Conflict criteria
- Unconscious bias
- Writing constructive comments to PIs

Accept

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



The screenshot shows the ALMA Science Portal website. At the top, there is a navigation bar with links for About, Science, Proposing, Observing, Data, Processing, Tools, Documentation, and Help. The main content area is divided into several sections:

- Science Highlight:** Features a large image of a galaxy cluster with a blue overlay representing hot gas. The text below reads: "This image shows the protocluster around the Spiderweb galaxy (PKS 1138-262) at z=2.156. The detected hot gas is depicted as an overlaid blue cloud. Using band 3 observations with both the 12-m and 7-m arrays of ALMA, Di Mascolo and collaborators discovered a large reservoir of hot gas (comprising the 'intracluster medium', or ICM for short) in the still-forming galaxy cluster around the Spiderweb galaxy (PKS 1138-262) at z=2.156 — the most distant detection of such hot gas yet. Despite being the most intensively studied protocluster, the presence of the ICM has remained elusive. This result, published in Nature, further reveals just how early these structures begin to form. Previously, the ICM had only been studied in fully-formed nearby galaxy clusters. Di Mascolo's team detected the ICM of the Spiderweb protocluster through what's known as the thermal Sunyaev-Zeldovich (SZ) effect. This effect happens when light from the cosmic..."
- Observatory News:** Contains three news items:
 - "Issue affecting some proposals requiring ACA observations" (Apr 26, 2023)
 - "Registration and abstract submission are open for the conference 'ALMA at 10-years: Past, Present, and Future'!" (Apr 24, 2023)
 - "Issue affecting Total Power data processed with Single Dish Pipeline version 2022.2.0.64" (Apr 17, 2023)
- NRAO Events:** Lists upcoming events:
 - "Radio Astronomy at AAS 242" (Jun 04, 2023)
 - "2023 Gordon Research Conference on Origins of Solar Systems: Chemical and Dynamical Constraints on Planet Formation" (Jun 10, 2023)
 - "19th Synthesis Imaging Workshop" (Jun 13, 2023)
 - "New Era of AGN Science with the Vera C. Rubin LSST" (Jul 24, 2023)
- ALMA Status:** Provides key metrics:
 - Configuration Schedule
 - Refereed publications: 3304
 - Last observed source: C106
 - Current configuration: C-6

At the bottom, there is a "Quick Links" section with a table of links:

ALMA Basics	Cycle 10 Call for Proposals
ALMA Science	Proposer's Guide
ALMA Primer	Proposing Guidance

The footer contains links for Site Map, Accessibility, Contact, Privacy Statement, and a region selector (Region: EA EU NA).



Questions?



Guidelines to reviewing proposals

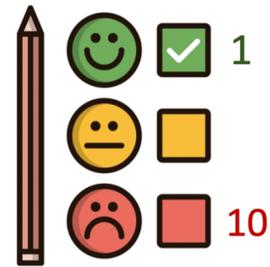
- ◆ Goals
- ◆ Review criteria
- ◆ Best practices for writing reviews



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

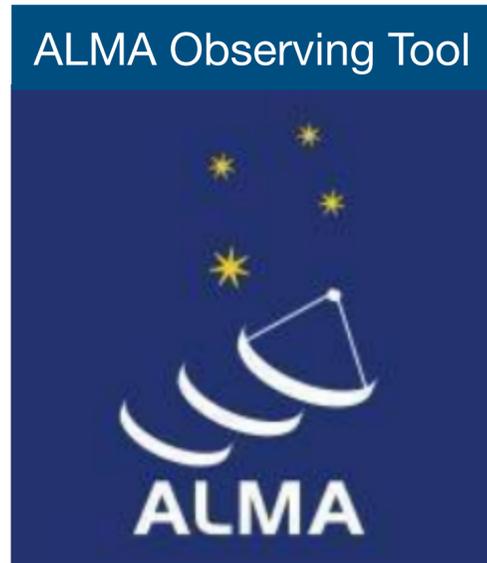
- Does the proposal clearly indicate which important, outstanding questions will be addressed?
- Will the proposed observations have a high scientific impact on this particular field and address the specific science goals of the proposal?
- Does the proposal clearly describe how the data will be analyzed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



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?

