Observing with the JCMT: How to Submit a proposal



Harriet Parsons JCMT-LLAMA Community talk March 2023

JCMT

JCMT-LLAMA community talks

Observing with the JCMT I)

- Capabilities and the operational model
- March 2nd 2023

Observing with the JCMT II)

- How to submit a proposals
- March 3rd 2023
- "Open door" call for proposal question time
 - March 13th 2023
 - Aim to answer any questions on your proposals or direct you to a specific staff member



Homework

- Start thinking about PI Science for 23B Decline March 15th - the LLAMA (Brazil/Argentina) community qualifies for JCMT time under Expanding partner Program (guaranteed time*).
- Sign up for Hedwig account: <u>https://</u> proposals.eaobservatory.org/jcmt/
- Sign up to JCMT_Users email list by sending an e-mail to jcmt_users+subscribe@eaobservatory.org
- For information or assistance, please contact helpdesk@eaobservatory.org



Proposal process - Observatory

23B: Call closes March 16th 2023 01:00 UT

23B: Data taken August 1st 2023 - January 31st 2024 +

Single TAC

- Representatives spanning science disciplines and representing EAO regions and partners.
- TAC chair assigns primary and secondary reviewer to all programs. But all TAC members read all proposals.
- Two external reviewers are also sought for each proposal.**
- Write report and give ranking based on science.
- An observatory staff member provides a technical review
- TAC meeting held two months after deadline (mid May)



Hedwig



Be smart: be mindful of oversubscription factors



Technical Justification

Ensure what and why is discussed for each of these points:

- pointed observations? or mapping?
 - is the mapped area appropriate? Why chosen?
- desired sensitivity/noise levels
 - Why rms used? What sigma detection?
 - Where does the estimate come from observations of another line? Similar study?
 - Are efficiencies taken into account e.g. e.g. want to get Tmb of X so will need TA* of Y using an efficiency of Z for this instrument.
 - Can the same be achieved in poorer weather?
 - Show all calculations and where all assumptions and numbers come from.
- expected integration time
 - Time required for target RMS SCUBA-2
 - <u>Time required for target RMS Heterodyne</u>
- Is the .pdf version the correct size, ready for upload?

Writing a good proposal

Ciska Kemper, chair JCMT Time Allocation Committee ASIAA

The proposal evaluation process (2016B)

- Deadline: 16 March 2016: 77 proposals
- All TAC members read and grade all 77 proposals
- Each proposal is reviewed by two TAC members in greater detail (1st and 2nd assessor)
- Technical reviews by JCMT staff within 4 weeks
- External reviews by experts are solicited by first assessor
- TAC meeting: 19/20 May 2016 (Taipei)
- First assessor writes feedback to proposers

The proposal evaluation process

Note that:

- Due to sheer numbers, TAC members typically spend only 15 minutes with your proposal
- TAC members are not experts on your topic
- JCMT TAC is allowed to give partial allocation
- JCMT TAC awards 30% more time than is available in the semester, to have flexibility with the weather and instrument availability

Scientific justification

Remember: The TAC has only 15 minutes!

- Background; why is this subject important or interesting for the broader astronomy community?
- Explain the exact question you want to address
- Explain exactly how the proposed observations will address this question
- Justify in detail the sample size, the map size, and the integration times needed. Why exactly this amount, and not more, or less?

More tips and tricks (1)

A good approach is writing the proposal in such a way that the observation will distinguish between two (or more) competing scenarios, models or theories.

Constraining parameter space of an existing model can also be a good approach.

More tips and tricks (2)

Avoid vague and overambitious statements such as "these observations will further our understanding of star formation", or "these measurement will shed light on the theory of galaxy evolution".

Instead, be specific about the analysis steps that follow the observations, and what results you hope to obtain.

More tips and tricks (3)

- Some well chosen figures say more than a thousand words
- Use boldface to highlight key statements, to help the TAC. Other typographic tools, such as bullets, may be helpful too.
- Keep the description as simple as possible, and get to the point quickly (remember: 15 minutes)
- TAC members do not have time to follow references, include all necessary information in the proposal