Scientific conferences

ASTR 2910 ⋆ Week 13

Why are conferences important?

Science is a collaborative discipline!

- We build off of each other's work, so it's good to keep up with what others are doing (and it's hard to do that just by reading papers)
- Conferences are places for the community to come together, discuss ideas, and form new collaborations

What do you do at a conference?

1. Travel to cool places
2. Present your work
    a. Talk
        i. An oral presentation with slides
        ii. Ranges in length from 5 (AAS) to 20+ minutes, with time for questions at the end
    b. Poster
        i. A more informal presentation
        ii. You create a physical or electronic poster to serve as a visual aid
        iii. You stand by your poster during a designated session and speak to whoever comes by
3. Attend other talks and learn new things relevant to your science
4. Network **A LOT!!**

Types of conferences

Type of conference	Description	Example
Large conferences	Intended to bring together the entire astronomical community	AAS meetings (winter and summer), APS meetings, etc.
Workshops/ smaller conferences	Focused on a specific topic; for experts/students working on that topic	CCA binary mass transfer workshop, Cool Stars conference
Collaboration meetings	Like large conferences, but limited to members of a certain collaboration	SDSS-V collaboration meeting
Summer/winter schools	Student-focused workshops intended to teach new skills	MESA workshop Canary Islands Winter School
Unconferences/ hack days	Range from unscripted to organized; focused on developing new tools	AstroCodex @ Yale, Gaia DR3 hack days

Attending AAS

Attending AAS

Applying to attend

1. Discuss with your advisor!
2. Write and submit an abstract describing your science
    a. Winter deadline: end of September to early October
    b. Summer deadline: mid-March to mid-April
3. Wait to hear if you're accepted (usually about a month before the meeting)
4. Plan your travel
5. Prepare your iPoster/talk

Attending AAS

Format of the meeting

- Saturday – Thursday, 8 AM – 6 PM (you don't have to attend the whole time)
- Main program starts on Monday (weekend is more for workshops)

While you're there

- Types of sessions
  - Plenary talks: Keynote presentations by AAS prize winners or invited speakers
  - Contributed sessions: Blocks of talks (you'll present in one of these if you ask to give a talk)
  - Poster sessions: Dedicated times for iPoster presenters to be at their posters in exhibition hall
  - Press conferences: Plain-language presentations to news media (but open to everyone!)
  - Workshops: Focused on teaching attendees how to use different research tools
- Example block schedule (AAS 245)

Attending AAS

Example iPosters

iPoster gallery from AAS 245 (when you publish your poster, it goes up here)

iPoster example from Alex's in-progress project at AAS 241

Attending AAS

Dedicated opportunities for undergrads

- Dedicated welcome reception
- Grad school fair
- Sessions on careers and networking (sometimes)
- Chambliss Astronomy Achievement Student Awards

FAQ

Who pays for me to go?

NOT YOU! Normally your supervisor (funds are included for this in many REU programs). Other options = AAS FAMOUS grant, Columbia Dean's Travel Fund

Can you attend a conference without presenting?

Yes, BUT… presenting is a valuable opportunity to connect with other attendees, so you should if you can (even if you're nervous). Your work can be in progress!

Should I give a talk or a poster?

Undergrads normally give posters.
In general: work in early stages = poster, work that's finished/almost finished = talk. Talks give you more visibility at most conferences.

FAQ

As an undergrad, what should I take away from this?

- Conferences are really important for scientists, but they also take a lot of time to prepare for and attend
- Go to AAS if you can (preferably once you have something to present)
- Don’t worry too much about seeking out other conference opportunities! Look forward to traveling more in grad school :)

Anything else?