

Applying to Caltech Astro

An unofficial guide by grad students

2020-21 EDITION

Questions? Contact Mia de los Reyes at mdelosre@caltech.edu

What you need to apply to Caltech Astro

(and most other astro grad programs) in approximate order of importance:

- Online application form (*Caltech can waive the application fee*)
- 3 letters of recommendation
- CV/résumé
- Transcript(s) (*unofficial transcripts are fine for Caltech*)
- Personal statement

(Note: Neither General nor Physics GRE scores will be accepted this application cycle. Please do not include them anywhere in your application.)

IMPORTANT NOTE:

Although this list is in what we *grad students* think is roughly the order of most to least importance, remember that your application will be judged **as a whole**. Excellent parts of your application can help make up for other parts.

Application timeline: what to do and when to do it

This timeline is just a rough guideline, and you don't need to follow it exactly. Also, this process is stressful, so don't forget to take care of yourself!

Now: Start getting materials together

- Think about **where to apply**.
 - You might want to organize your thoughts in a [spreadsheet](#) that lists things like "Course requirements," "People to work with," etc.
 - Feel free to reach out to people!
 - You can also ask current grad students what it's like working with Prof. [insert name], what the culture of a department is like, etc.
 - You might also consider contacting faculty you're interested in working with: ask about their research, see if they're taking students, etc.
 - (Note that faculty are not always responsive, and it might be easier to contact their grad students.)

Now: Start getting materials together (*continued*)

- Start working on your **CV**.
 - Find [templates](#) online (we recommend making yours in LaTeX)
 - Caltech's grad office has a nice list of things that should go in a CV
- Figure out what **tests** you need to take:
 - The [regular GRE](#) and [physics GRE \(PGRE\) tests](#) are **NOT** accepted as part of the Caltech Astro application.
 - If your first or native language is not English and you don't have a degree from a US institution, you may need to demonstrate English proficiency with the [TOEFL](#). [Dates and locations](#) vary by country.



September-ish: Letters of recommendation

- Ask for **letters of recommendation**.
 - Who to ask?
 - **Best:** past research supervisors
 - **Good:** academic advisors or professors who know you well
 - **Not ideal:** professors who don't know you well (even if you got an A in a class they taught)
 - How to ask?
 - Ask early! They might be able to suggest places to apply
 - Explicitly ask if they can write you a "strong" letter
 - **Send your letter writers info:**
 - Once you've decided where to apply, give your writers a list of places and deadlines to send letters. Update it regularly!
 - Also send them your CV/résumé and a copy of your transcript, along with whatever extra information they ask for
- If you have the opportunity, consider attending the American Astronomical Society (AAS) [winter meeting](#) in early January.
 - This is **NOT** required, but it can be a very good chance to network. Some schools may use this as an opportunity to get to know you.
 - You can talk to a research advisor about presenting your work at the meeting. The abstract deadline for AAS is typically in **October**.
 - If needed, you can apply for [grants](#) to cover registration fees.

October-ish: Fellowships and essays

- Check out the [Astrobetter list](#) of **fellowships** and see if any might be right for you.
 - Don't think you'll get a fellowship? Apply anyway, if you can. It never hurts, and it's really useful when writing other applications.
 - For US citizens, the [National Science Foundation Graduate Research Fellowship Program](#) (NSF GRFP) is a great opportunity. The application is due **October 25** for physics and astronomy.
 - For more tips on applying for the NSF GRFP, check out [Alex Hunter Lang's website](#). Even if you don't apply, you might want to check out the great example essays hosted here.
- Work on your **essays / statements of purpose**.
 - DO try to:
 - Express your career goals & research interests
 - Briefly describe past research, emphasizing your contributions
 - Explain why a particular program is a good fit for you
 - Name 2-3 professors who you might want to work with
 - Ask people to look over your statement!
 - Especially ask grad students, postdocs, and/or profs
 - Get a friend to check for clarity and grammar
 - Send them to your letter writers once you have drafts
 - DON'T (or at least reconsider):
 - Be overly flowery—it's not an undergraduate application essay!
 - Use clichés (especially the "I fell in love with astronomy as a child" one)



November-ish: Work on applications

- Send your **transcripts**.
 - Fellowship and grad school applications both typically require transcripts. Depending on your university, it can take a long time to get official transcripts sent; get it done early and avoid rush charges.
 - Note that Caltech Astro will accept unofficial transcripts!
- Make sure your letter writers get recommendations in!
 - Caltech's **online form** will send you a notification when a letter has been submitted on your behalf. If they are not in yet, gently remind your letter writers; they're busy and might have forgotten.

December: Send in your applications

Application deadlines are usually in December-January (note that for some schools, deadlines for international students may be earlier than for US students). Caltech Astro's deadline is **December 15**.

After submitting applications: try not to stress!

January-March: Wait to hear back

- For some schools, you may be interviewed over video chat if you make it to the short list.
 - At Caltech Astro, committee members will ask you about your research experience. They will ask you to discuss your previous research (both details and broader context), and ask if you have any questions about Caltech.
- Decisions for astronomy graduate programs usually start coming in late January. Caltech will post all final decisions by **April 1**.

March-April: School visits

- If you are accepted, someone from the university will be in touch about visiting the department (all expenses will be paid for you).
- Astrobetter has a list of good resources for [visiting and choosing schools](#). Also check out Ryan Rubenzahl's list of [questions to ask](#).

For US schools, **April 15** is the deadline to decide on a grad school.

Before April 15, take your time to make a decision! But if you're sure that you want to reject an admission offer, please let the school know as quickly as possible. This lets them admit students off the waitlist and gives these students more time to consider their options.

FINALLY:

Remember that grad school admissions are often driven by factors you have no control over (funding, which professors are looking for students, etc.)! You are **not** defined by the schools you do or don't get into, and plenty of astronomers (including some of us) didn't go to grad school right away. You can be successful no matter what you decide to do.