

A Virtual Bootcamp for Astronomy Graduate Students

WEEK 1 EXERCISES

Version 3.0 (2022-09-09)

This Week's Exercises

- Write down one SMART goal for the coming semester (e.g., submit my AST 1501 proposal by September 25)
- Identify a few specific projects that you can tackle linked to the SMART goals (Write the literature review/introduction, write the methods section, write the proposed results section)
- Identify all the tasks related to those projects (bullet points the literature review, read papers X,Y,Z, write section on analysis of X,Y,Z, make some schematic plots etc.)
- Make a Trello board for your life
- Set up an overleaf document with AAS, MNRAS, etc. template
- Create an ADS library and cite it within your LaTeX document

Overleaf/Latex

In this exercise, you'll be creating a basic latex document, and adding a few citations.

- 1. Create a LaTeX document on Overleaf with the AASTex Style
- 2. Find your favourite PNG graphic/picture and add it to the document, with a caption as to why this is your favourite.
- 3. Typeset your favourite equation using LaTeX. Tell us why it's your favourite equation.

Stretch Goals:

- 4. Have a play changing settings (e.g. one column, two column etc.) and bibliography style
- 5. Head over to https://www.overleaf.com/3591538747zbwxpqjsryfm and leave a few comments using the 'Review' tools

Project Management/Trello

In this exercise you'll start your grad projects off right with some project management tools.

- 1. Make an account at trello.com and start a project board. If you want an intro into how to get around, check out this demo: https://www.youtube.com/watch?v=xky48zyL9iA
- 2. Think of how you might want to go about organising your 'cards' and spaces
- 3. Practice using labels talk to some of your fellow Starfishes about what scheme you'll use: colour for projects, color for research/TA-ing/courses?

Stretch Goals:

- Add a to-do list to one of your cards
- Add some deadlines to your cards

Researching and Citing the Literature

In this exercise, you are going to start working with ADS

- 1. Sign up for an ADS account (If you haven't already)
- 2. In your ADS account, create a library on a topic that interests you (e.g. black holes, gravitational waves, etc)
- 3. Find at least five papers on that topic (maybe choose highly cited ones? Recent ones?) and add them to the appropriate library in your account
- 4. Pick a paper from your library, get the bibtex code, put into the .bib file on your overleaf document, and make a citation to the paper in the .tex file. Make sure the overleaf compiles properly
- 5. Export entire library to bibtex file and add it to your Overleaf document .bib file
- 6. Find a friend from Starfish School, and add them as a collaborator to your library under "Manage Access"

Stretch Goals:

- Create another library on your ADS account for a different topic, and add 5 papers. In the library you just created, use the "Citation Helper" to find other relevant papers and add them to your library too!
- Check out other features for libraries under the "explore" option
- Set up Google Scholar so you can see the "Get it @ UofT" link
- Set up an ADS weekly reminder for papers that are relevant to you