Homework Set 00

ASTR 5900, Computational Physics & Astrophysics

Due 2026 January 29, 11:59pm

The purpose of this homework is to ensure that you have your computing environment and tools set up to be able to complete and turn in the remaining homeworks/projects. Specifically, for each class homework/project, you must turn in *a single pdf file*, containing your report that you have ***written using LaTeX*** (e.g., using Overleaf, https://overleaf.com). The code file(s) you write for the homeworks should be hosted in your own GitHub repository (https://github.com), and your codelinked in your pdf-file report. Each code file on GitHub must have at least 3 git-commits (and more is better).

Task: Prepare a document in LaTeX, generate a pdf file/report, and upload to Canvas. This just a "skeleton" report, very short, with any random content you want, for the sole purpose of demonstrating your capability of making a report with the required elements.

Requirement for pdf report:

Your pdf document must have:
- Been made using any reasonably well formatted LaTeX template
- A title (e.g., "Homework 00: LaTeX & GitHub Demonstration")
- Your name
- Brief description and link to a file hosted in your own repository on GitHub (e.g., https://github.com/spmatt/ASTR5900_OU/blob/main/randomNames.py)
- At least one sentence of text
- A figure (e.g., showing a pdf image/plot of your choosing) with a caption
- A description of, and reference to, that figure in the text
- An equation (typeset in LaTeX math mode/environment) of your choosing

Requirement for linked GitHub file/code:

The file(s) you link to on GitHub must:
- Be any new file you created for this homework, with any content you want (but not be the "recipes" work from the git tutorial we did in class).
- Have *at least five (5) git-commits* with reasonably descriptive commit messages. The purpose of this is to get in the habit of committing frequently, each time you finish a small task, rather than developing all at once locally and just doing one "final commit" at the end (defeating the purpose of version control).

Suggestion for managing your GitHub repositories for this class: You could create one GitHub repository to use for all work in class, and then simply link in your report to the specific file(s)/code(s) you wrote for each project. Or you could create a new GitHub repository for each individual homework/project. Either should work fine.