

ASTR 596

Fall 2024

Making a Color-magnitude diagram (50 points)

This assignment is due by November 18th at noon. It will be handed in on Canvas but will also involve using Github and Jupyter Notebooks. We will start this assignment in the 2076 computer lab. The assignment name in Canvas is “*Image Combination and Photometry*” and is in Module 8.

All commands that you need to type will be given **in red**. Anything written like this **<text>** implies that you need to write something unique to the situation in place of the **<>** statement.

I will be putting all file and directory names **in blue** to make it hopefully easier to see them

Read each step carefully in its entirety before attempting that step.

Note that problem 3 is currently pending a technical fix that I’m working with IT on. You can do the rest of the assignment and will have to come back to problem 3 when it is fixed. Stay tuned

1. activate your *stenv* micromamba environment
2. In a terminal change into the `~/ASTR596/Rudnick_repositories/ASTR596_F24` directory
3. In the terminal type **git pull** to get my version of the exercise, which will be installed into the *Reductionproject* directory
4. Copy the `cluster_photometry_student.ipynb` file from the *Reductionproject* directory into the *Reductionproject_student* directory
5. **cd ~/ASTR596/My_repositories/Reductionproject_student**
6. **jupyter lab cluster_photometry_student.ipynb**
7. Complete the exercise in the notebook. As you work your notebook should be automatically saved in the same location where it was originally stored. You can manually save by pushing the disk key in the upper left of the Jupyter window. Any time you finish a block of work, upload your activity back to the GitHub repository using the web interface and adding a comment about what you have changed. You do this by clicking on the “*Add File*” followed by the “*Upload file*” option. Make sure to enter a comment before you upload your file.
8. When you are done with the assignment, make sure to upload it one last time. I will grade the most recent version that is on GitHub.
9. Make sure to add me as a collaborator to your GitHub repository. Use **grudnick@ku.edu** as the address when adding me.
10. Submit the GitHub repository URL to the Canvas assignment.