v1

ASTR 596

Fall 2023

Analyze real spectra

This assignment is due by December 6th 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 "*Analysis of Real Spectra*" 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 entirely before attempting that step.

1. activate your *env1* conda environment
2. In your environment type conda install -c conda-forge specutils
3. In a terminal change into the ~/ASTR596/Rudnick_repositories/ASTR596_F23 directory
4. In the terminal type git pull to get my version of the exercise, which will be installed into the *Analysis_real_spectra* directory
5. In your ~/ASTR596/My_repositories make a directory called *Analysis_real_spectra_student*
6. Copy the entire contents of my recently downloaded repository to your new repository by executing the following command: rsync -u -a -v ~/ASTR596/Rudnick_repositories/ASTR596_F23/Analysis_real_spectra/ ~/ASTR596/My_repositories/Analysis_real_spectra_student/
    • This will copy over a jupyter notebook, three fits files, a text spectrum, and these instructions.
7. cd ~/ASTR596/My_repositories/Analysis_real_spectra_student
8. jupyter lab analysis_real_spectra.student.ipynb
9. 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.
10. 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.
11. Submit the GitHub repository URL to the Canvas assignment.