PHY517 / AST443: Observational Techniques

Tutorial 1: uhura, bash, awk and sed, topcat, LaTeX

1. Log into uhura or vulcan.
2. Edit your .bashrc file as described under the "bash" tab on the class wiki page. (Remember to source your .bashrc file afterwards.)
3. Confirm that your set-up works by launching `ds9`.
4. Write a `bash` script that prints "Hello, world!". The command to print to standard out is "echo".
5. Go through the examples on the "awk and sed" tab on the wiki page. Use `awk` and `sed` to print out the objects that are observable from Stony Brook, and change their name to "Obj" instead of "Object".
6. Download the exoplanet catalog (see Lab 1 / HW 2), in the VOTable format. Open it in topcat. Familiarize yourself with topcat's buttons by hovering your cursor over them. Make a log-log plot of planet mass vs. the orbit's semi-major axis.
7. Download the `example.tex` file linked from the "LaTeX" tab, along with the references file and example image. Compile the example LaTeX file.
8. (Not on uhura:) Sign up for a github account if you don't have one. Start "watching" the class github repo.