Intro to Astro-2025

Assignments for week 1

1. Assignment1:

Learned Unix commands:

- **mkdir**: Creates a new directory (folder).
- **touch**: Creates a new empty file.
- **ls**: Lists the files and folders in the current directory.
- **echo**: Prints text or variables to the terminal.
- **cat**: Displays the content of a file.
- **cp**: Copies files or directories.
- **cd**: Changes the current directory.
- **wc**: Counts words, lines, and characters in a file.
- **nano**: Opens a simple text editor inside the terminal.
- **bash**: Starts a new Bash shell session or runs a script.
- **| (pipe)**: Passes the output of one command into another command.
- **$** : Access the value of a variable.
- **rm**: Deletes files or directories.
- **mv**: Moves files and directories.
- **man**: Shows the manual
- **clear**: Clears the terminal screen.

2. Assignment 2:

Which paper proposes a novel method that could be utilized to attract the attention of, and ultimately communicate with, extraterrestrial intelligence?

“Paper A” proposes a novel method that could be utilized to attract the attention of, and ultimately communicate with, extraterrestrial intelligence. The paper suggests an alternative SETI approach by detecting artificial, planet-sized objects with varied shapes that could be orbiting stars using the transit method. These artificial transits could serve as indicators of intelligent origin. The paper also proposes that, in the future, humanity could

use similar artificial transits to send intelligent signals as a means of inter-stellar communication.

3. Written assignment:

What are your goals for this course?
My goal for this course is to understand the basics of scientific research and how it is conducted. As a first-year physics student, I believe this course will not only help me develop essential research skills such as coding and data analysis, but also broaden my horizons in astronomy.

What topics in astronomy interest you?
Astronomy is overly captivating, but I've always found black holes to be the most intriguing topic and I can't wait to fully understand the physics behind them.
