Activities: List everything related to this course that you accomplished this week. Look over the goals that you have set. State what you achieved.

This week, I accomplished:

- 1. Finished the final
- 2. Learned about current research into dark matter and dark energy, as well as the many different speculations and theories surrounding them
- 3. Got a 10/10 on a quiz :)
- 4. Came up with a research topic, comparisons of the distribution of dark matter across different galaxy types, to work on with my partners (Abhiram and Pradyota)
- 5. Wrote a proposal for my research project using PTEX
- 6. Successfully gathered a significant amount of data on different types of galaxies
- 7. Working on the first paper with my partners; writing it in $E^{T}E^{X}$

Challenges: List any challenges that you faced or difficulties that you had to overcome.

We originally had one research topic we wanted to delve into, but we realized thanks to Dr. Gebhardt that the mass of dark matter halos were actually derived from the rotational velocity of galaxies, so we had to switch our research topic slightly to comparing the dark matter mass distributions throughout different galaxies.

Plans: List what you want to accomplish next week. Be realistic. You are setting your own goals.

I want to successfully finish the first two research papers and start practicing presenting with my partners as well as start writing the third and final research paper and preparing it for publication. I plan to work overtime if needed.

Comments: Let me know of any concerns, issues, observations, or opinions that you may have. This could also be the place where you reflect on your own study.

I'm a little sad that the program is almost over! We have just over one week remaining in the program.

Question: Would we be able to make a simple website instead of using Google Slides as our group's presentation slides?