Physics 441/541 Spring 2022: Group Projects

The project groups, assigned topics, and schedule are given below.

You will prepare and deliver an in-class lecture about the topic (10–15 minutes long if your group has two people; 15–20 minutes long if your group has three people). The presentation should include the basic physics behind the topic, relevant equations/derivations, and examples. I encourage you to use Google Slides (and save a PDF version as backup) for ease of presentation. Make sure your slides have citations or source links to any material that is not your own creation.

Schedule

Lecture Date	Group	Members: Topic
Apr 22 (Fri)	1	Haonan Cheng, Yoon Choi, Matthew Wang: Stellar Initial Mass Function
Apr 22 (Fri)	2	Frank Genty, Anthony Pizzarelli, Khovesh Ramdin: Brown Dwarfs
Apr 22 (Fri)	3	Barbara Benda, Avery Kiihne, Harshill Patel: First Stars and Reionization
Apr 26 (Tue)	4	George Kharchilava, Geet Purohit, Anish Seth: Exoplanet Host Stars
Apr 26 (Tue)	5	Ava Marie Friedrich, Seung Hee Sung: Helioseismology
Apr 26 (Tue)	6	Rujuta Mokal, Michael Wozniak, Orion Yeung: Standard Candles
Apr 29 (Fri)	7	Aidan Boyce, Kailash Raman: MESA code
Apr 29 (Fri)	8	Arya Lakshmanan, Ina Park, Brandon Shane: Magnetars
Apr 28 (Fri)	9	Bradley Butler, Christine Carvajal, Connor Lane: LIGO Black Holes

What To Turn In

1. **One week before your presentation:** submit a draft of your lecture slides and any additional lecture notes. I will give you feedback. This is *required*, not optional, and will count for 20% of the assignment grade.

2. **On the day of your presentation:** submit the final copy of your presentation slides (and lecture notes if you use them).

You should submit all of these parts on Canvas under the "Group Project" assignment (just one member of the group needs to do this). It's fine to just give the URL for the presentation if you are using Google Slides.