

Topic: Solar System and Exoplanets (5 lectures)

Lecturer: Jane Luu

Description: An overview of our solar system, its contents, and its formation. After that we will discuss the general attributes of the known exoplanets, and how they compare to our planets.

Syllabus:

Lecture 1: The Solar System

- The structure of the solar system
- Planets and their satellites
- Small bodies: comets, asteroids, meteorites
- Orbits in the solar system
- Formation of the solar system

Lecture 2: The planets

- Terrestrial planets
- Gas planets
- Ice planets
- Formation of the planets

Lecture 3: Small bodies in the inner solar system

- Asteroids: Properties, orbits
- Meteorites

Lecture 4: Small bodies in the outer solar system

- Comets: Properties, orbits
- Kuiper Belt objects, origin of comets

Lecture 5: Exoplanets

- Search for exoplanets
- The known exoplanets
- Similarities and differences between exoplanets and our own planets

Bibliography:

“Physical Processes in the Solar System,” by John Landstreet