

**Subject :** Exoplanets

**Title :** Exoplanets

**Lecturer :** Masahiro Ikoma

**Outline :**

This lecture offers an overview of exoplanetary science, a rapidly evolving field focused on the discovery and study of planets beyond our Solar System. It will cover the methods used to detect exoplanets and highlight key discoveries that have enhanced our understanding of planetary systems. We will explore the diversity of exoplanets and discuss how diverse planetary systems form. Additionally, the lecture will examine statistical analyses related to the occurrence of exoplanets, providing insights into planetary formation and evolution. The goal of this lecture is to equip students with foundational knowledge of exoplanetary science and its implications for broader questions about habitable worlds beyond our Solar System.

**Learning objectives :**

- Understand the diversity of planets and planetary systems.
- Explore the factors driving the diversity of planetary systems.
- Gain insights into recent advances in exoplanetary research.

**Textbooks and references :**

None