

Subject : Stellar evolution and supernovae

Title : Deaths of stars uncovered through supernovae

Lecturer : Takashi Moriya (Division of Science)

Outline :

Supernovae are explosions of stars. Supernova explosions occur at the end of stellar lives and they are important tools to investigate our understanding of how stars evolve and die. In this lecture, we introduce the basics of stellar evolution towards supernova explosions. We discuss how stars explode and how supernovae are observed. We show the latest observational and theoretical results in supernova studies and discuss the current issues.

Learning objectives :

- Stellar evolution
- Supernova explosion mechanisms
- Recent progress in stellar evolution and supernova research

Textbooks and references :

An introduction to the theory of stellar structure and evolution (D. Prialnik, Cambridge University Press, 2009)