

Subject : Galactic Archaeology

Lecturer : Sakurako Okamoto (Subaru Telescope)

Outline :

Galactic Archaeology is the study of reconstructing the stellar contents of the Milky Way and nearby galaxies from the detailed properties of the resolved stellar population in these systems. Over the last decade, it has come into being with the developments of sensitive wide-field instruments on large optical telescopes as well as the satellite missions such as Gaia.

This lecture introduces the basics of the Milky Way and nearby galaxies, then discusses their formation histories based on the fossil record preserved in the old stellar populations. The latest observational results and ongoing/future projects are also overviewed.

Learning objectives :

- Galactic components
- Formation of Galactic structure
- Resolved stellar populations and chemical evolution
- Latest observational studies

Textbooks and references :

N/A