

Subject : Galaxies

Title : Galaxy evolution across cosmic time

Lecturer : Masayuki Tanaka

Outline :

Astronomical observations are the primary method to understand the nature of the Universe. I will first briefly describe astronomical observations at modern observatories. I will then move on to discuss insights into galaxies in the Universe that we have collected thus far through observations. As the speed of light is finite, the Universe is a time-machine; light from the distant Universe shows us the Universe in the distant past. Using this principle, astronomers have revealed how galaxies evolve over the cosmic time. Galaxies exhibit various shapes and colors, and I also discuss how this diversity emerged in the history of the Universe.

Learning objectives :

- Obtain top-level understanding of galaxies in the Universe.
- Discuss what drives the diversity of galaxies that we see today.

Textbooks and references :

None