

Subject : The Sun

(Title : The Sun)

Lecturer : Ryohko Ishikawa (Solar Science Observatory)

Outline :

The Sun is our nearest star, and we can observe its dynamic activities in temporal and spatial domains in greater detail. The recent unprecedented observations revealed various fundamental phenomena that are critical to understanding the remaining issues in solar physics and are the common processes in space plasma. In this lecture, first I will introduce some basic concepts of the MHD (magneto-hydrodynamics) and show several spectacular observations where the magnetic fields play an important role, focusing on the unresolved issues in solar physics. Finally, I will also introduce several space missions that we have been working on to conduct new and pioneering scientific observations.

Learning objectives :

Solar surface and convection

Magnetic fields

Issues in solar physics

Space missions and instrumentations

Textbooks and references :

N/A