

**Subject :** Black Holes and Active Galactic Nuclei

**Title :** Observational Studies on Black Holes and Active Galactic Nuclei

**Lecturer :** Seiji Kamenno

**Outline :** Active galactic nuclei (AGNs) are powerful engines which are considered to be powered by mass accretion onto a super-massive black hole in the center of galaxies. They are crucial astrophysical objects where we can observe relativistic phenomena such as space-time in the vicinity of black holes, accretion disks, high-energy radiation, and relativistic jets. In this lecture, I will introduce the frontier of AGN studies (mostly observational) and will address unanswered questions.

**Learning objectives :** Have a fun in knowledge on AGNs. Learn about pursuits on AGNs. Understand basic physics underlying AGN phenomena.

**Textbooks and references :**

Black-Hole Accretion Disks : Towards a New Paradigm, Shoji Kato, Shin Mineshige, and Jun Fukue, Kyoto University Press

An Introduction to Active Galactic Nuclei, Bradley M. Peterson, Cambridge University Press

Active Galactic Nuclei, Ian Robson, John Wiley & Sons