

Time Variability of Active Galactic Nuclei

The research interests of our group are mainly on the study of merging galaxies and active galactic nuclei (AGNs). Interacting and merging galaxies play an essential role in galaxy formation and evolution; according to the hierarchical scenario of galaxy formation, large galaxies are built-up by mergers of small galaxies. Merging galaxies are also related to the formation of starburst galaxies and AGNs. AGNs show variability in a wide range of time-scales and in almost all wavelengths. It is generally believed that AGNs are powered by a massive black hole with an accretion disk.

Possible projects for summer students of this year include (but not limited to) the study of the time variability of different types of AGNs, such as red QSOs and non-hidden broad line region (non-HBLR) Seyfert 2 galaxies. Students in our group are expected to learn different types of astronomical observing tools such as ALMA and Pan-STARRS to investigate the connection between merging galaxies and AGNs.