[초GC-11] Observational studies on AGN properties: mass, Eddington ratio, and feedback

Jong-Hak Woo

Seoul National University

From my personal perspective, I will review the current status of observational studies on the fundamental properties of AGN and the role of supermassive black holes in galaxy evolution.

[구GC-12] Estimating Black Hole Mass in Active Galactic Nuclei with Hydrogen Brackett lines.

김도형, 임명신

서울대학교

Red dusty Active Galactic Nuclei (AGNs) are suspected to mid-stage between ULIRG and AGN phase. As well as, they are suspected that they have more than 50% of AGN population. To understand character of red AGN, Black Hole (BH) mass of red AGN is a key property and haven't measured by existing method such as reverberation mapping and single epoch method. So we still don't know their character and properties clearly. To estimate properties of red AGNs escape from effect of dust-obscuration, we have obtained Near InfraRed (NIR) spectra of 31 reverberation mapped AGNs and 49 Palomar-Green(PG) Quasi-Stellar Object (QSO) using the infrared camera (IRC) for AKARI with unique wavelength range 2.5-5.0 μm. From this spectra, we measured the FWHM and luminosity of brackett α, β at 4.0, 2.6 micron meter for deriving new BH mass estimators based on the properties of Brackett line emission.