maps, which are spatially integrated to reproduce the measurements of SDSS AGNs. By comparing the distribution of the measured velocity and velocity dispersion of OIII, with the model grids, we constrain the intrinsic outflow velocities. The outflow velocity ranges from a few hundreds to a thousand km/s, implying a strong feedback to ISM.

[구 GC-04] A NEW TYPE 1 AGN POPULATION AND ITS IMPLICATION ON THE AGN UNIFIED MODEL

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We have discovered an unexplored population of galaxies featuring weak broad-line regions (BLRs) at z < 0.2 from detailed analysis of galaxy spectra in the Sloan Digital Sky Survey Data Release 7. These objects predominantly show a stellar continuum but also a broad Hα emission line, indicating the presence of a low-luminosity active galactic nucleus (AGN) oriented so that we are viewing the central engine directly without significant obscuration. These accreting black holes have previously eluded detection due to their weak nature. The new BLR AGNs we found increased the number of known type 1 AGNs by 49%. Some of these new BLR AGNs were detected at the Chandra X-ray Observatory, and their X-ray properties confirm that they are indeed type 1 AGN. Based on our new and more complete catalogue of type 1 AGNs, we derived the type 1 fraction of AGNs as a function of [OIII] λ5007 emission luminosity and explored the possible dilution effect on the obscured AGN due to star-formation. The new type 1 AGN fraction shows much more complex behavior with respect to black hole mass and bolometric luminosity than suggested by the existing receding torus model. The type 1 AGN fraction is sensitive to both of these factors, and there seems to be a sweet spot (ridge) in the diagram of black hole mass and bolometric luminosity. Furthermore, we present a hint that the Eddington ratio plays a role in determining the opening angles.
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[박 GC-05] Distant Quasars: Black hole mass growth and dust emission

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The massive limit of black holes (BHs) is observed as present day ten billion solar masses. We search for observational signatures of BHs that become extremely massive (EMBHs, 1-10 billion solar masses). I will report on the evolution of active galactic nuclei (AGNs) through the growth of BH mass and their dust emission strength. First, we measured 26 EMBH masses of quasars at 1<z<2 from rest-frame optical spectroscopy, to better define the massive limit of BH masses of AGNs from rest-UV spectroscopy, and to test for additional uncertainties in the measurements. Next, using a sample of 155 luminous quasars at 3<z<6 observed with the AKARI, we measured the BH masses from rest-frame optical spectra, extending the scaling relations between AGN continuum and line luminosities to luminous, high redshift quasars. We also investigated the BH mass estimator scaling relations of H-alpha, MgII, and CIV compared to the H-beta BH mass estimator, providing constraints on the massive end of BH mass growth at high redshift. Lastly, we identified and characterized a population of luminous dust-poor quasars at z<5 - quasars showing little IR emission from the AGN dusty structure. Compiling a rest-frame UV to IR library of 41,000 optically selected type-1 quasars, we fitted the broad-band spectral energy distributions (SEDs) with accretion disk and dust model components. We find that 0.6% of the sample is hot-dust-poor, and present their observed properties.

[구 GC-06] Cosmological Tests using Redshift Space Clustering in BOSS DR11

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We analyze the clustering of large scale structure in the Universe in a model independent method, accounting for anisotropic effects along