

**[KGC-24] Constraining the MBH- σ^* relation of the NLS1s using
a directly measured stellar velocity dispersion**

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With high accretion rate and low black hole mass, narrow line seyfert 1 galaxies (NLS1s) are an interesting sub-class of AGNs. To investigate whether NLS1s follow the same $M-\sigma^*$ relation as other AGNs, we selected a sample of 110 NLS1s at relatively low redshift $z < 0.1$ from SDSS DR7 by constraining the FWHM of Ha broad component, and determined their black hole masses. We measured stellar velocity dispersion of 65 objects which showed strong enough stellar lines in the SDSS spectra, while we adopted the σ^* measurements of 45 objects from Xiao et al. 2011. We find that NLS1s follow the $M-\sigma^*$ relation of active and inactive galaxies while there is a dependency due to the galaxy inclination, which probably cause rotational broadening of stellar absorption lines.

**[KGC-25] Environmental effect on the chemical properties of star
forming galaxies in the Virgo cluster**

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We utilize Sloan Digital Sky Survey DR7 spectroscopic data of ~ 380 star forming galaxies in the Virgo cluster to investigate their chemical properties depending on the environments. The chemical evolution of galaxies is linked to their star formation histories as well as to the gas interchange in different environments. We derived star formation rate (SFR) and gaseous metallicity (e.g., oxygen abundance) of star forming galaxies. Combining with GALEX ultraviolet photometry and ALFALFA HI 21 cm data, we examine the relations between SFRs, metallicity, and HI deficiency of galaxies in various regions of the Virgo cluster. We also quantify the degree of ram pressure around galaxy using the ROSAT X-ray surface brightness map. We discuss environmental effects on the chemical properties and evolution of star forming galaxies.