

[UGC-40] Chemical Properties of Star Forming Galaxies in the Cluster Environment

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We utilize Sloan Digital Sky Survey DR7 spectroscopic data of ~ 340 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 (SFHs), as well as to the gas interchange in different environments. In this sense, galaxy metallicity could be an observable parameter providing information on the impact of the environment on the galaxy SFH and/or the galaxy gas content. Thus, we derived gaseous metallicity (e.g., oxygen abundance) of star forming galaxies located in different regions of the Virgo cluster using well-known empirical calibrations. We also estimated their star formation rate (SFR) using H alpha luminosity. In order to investigate the chemical properties of these galaxies, we examined relations between various parameters: metallicity vs. luminosity, SFR vs. luminosity, and metallicity vs. cluster-centric radius. From our results, we discuss environmental effects of cluster to the chemical properties of star forming galaxies.

[UGC-41] The extended narrow-line region kinematics of 3 Type-2 QSOs revealed by the VLT/VIMOS IFU spectra

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We present kinematic properties of the narrow-line region in three type-2 QSOs at $z \sim 0.35$, using 2-D spectra obtained with the VIMOS integral field unit spectrograph at the Very Large Telescope. One of the objects shows a line-of-sight velocity shift of the [OIII] and H β lines up to 40 km/s on a 15 kpc scale, which can be interpreted as either outflow or rotation. The outflow scenario is supported by the presence of blue wings and a radio structure showing lobes in the same direction. Another object features double-peaked emission lines which can be decomposed into two velocity components. Its Hubble Space Telescope image shows two nuclei separated by $\sim 0.2''$ (~ 1 kpc), implying this may be a binary AGN.