[P-045/GC-1] An Evolutionary Connection between Active Galactic Nuclei and GALEX UV-excess Early-type Galaxies

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The interplay between active galactic nuclei (AGNs) and their host galaxies' star-formation activities is one of the central topics pursuing an understanding of galaxy evolution. With the advent of Galaxy Evolution Explorer (GALEX), we have much more accurate information than ever about recent star formation (RSF) histories of early-type galaxies in the local universe ($z < 0.2$). We take advantage of the GALEX UV data of ~ 30,000 morphologically-selected SDSS early-type galaxies to identify three RSF modes of early-types: Galaxies (a) in a quiescent mode (no UV, no H_alpha emission), (b) in a post-SF mode (UV, no H_alpha), and (c) in an ongoing starburst mode (UV, strong H_alpha). Using a subset of ~ 5,000 GALEX/SDSS AGN-hosting early-type galaxies, we explore how AGNs affect RSF histories of host early-types and vice versa. In this poster, we present a preliminary yet interesting result on the intimate connection between the AGN activities and the RSF histories of early-type galaxies, and discuss its implications for galaxy evolution theories.

[P-046/GC-2] Surface Brightness Fluctuation Measurements for NGC 1399 with CTIO Multi-band Imaging Data

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As is well known, the surface brightness fluctuation (SBF) method is a powerful tool applied to estimate distances and probe stellar population properties of unresolved star clusters and early-type galaxies. We hereby present SBFs and integrated colors of the elliptical galaxy NGC 1399, the central galaxy in the Fornax cluster. The SBF and galaxy color measurements are performed in multi-wavelength bandpass filters－U, B, V, and I－of the CTIO Blanco 4-m telescope. We describe our data reduction and analysis procedures for the measurements. Then, we compare our SBF properties in B- and I-band both with other ground-based data in the literature and with recent ACS Fornax Cluster Survey data. Finally, we discuss the feasibility of SBF measurements using ground-based U-band CCD images.