[포GC-10] A Study on the Star-forming Dusty Elliptical Galaxy, NGC 855

Sung-Joon Park[1], Woong-Seob Jeong[1,2], Kwang-il Seon[1,2], Minjin Kim[1], Jongwan Ko[1], Pamela Marcum[3]
[1]*Korea Astronomy and Space Science Institute, Korea,* [2]*University of Science and Technology, Korea,* [3]*NASA Ames Research Center, USA*

We study the dust and star-formation characteristics of a nearby dwarf elliptical galaxy, NGC 855. With various archival data from ultraviolet to far-infrared, we build up the spectral energy distribution (SED) that can give us constraints on stellar populations, dust characteristics, star-formation history, etc. From GALEX and SDSS data, slightly de-centered bluer central core is confirmed, where star formation might take place. This regions is coincident with seemingly dis-integrated cores detected by Spitzer IRAC data and with bright Hα feature observed at ground-based telescope. The PACS and SPIRE data by Herschel Space Observatory show the dominant dust features at the center. Lastly, we propose necessary follow-up observations with ground-based telescopes to investigate spectral properties of NGC 855.

[포GC-11] Classifying and analyzing galaxy pairs by their interacting features

Tae-yang Bang[1,2], Myeong-Gu Park[1,2] and Changbom Park[3]
[1]*Dept. of Astronomy and Atmospheric Sciences, Kyungpook National University*
[2]*Research and Training Team for Future Creative Astrophysicists and Cosmologists (BK21 PLUS)*
[3]*Korea Institute for Advanced Study, Dongdaemun-gu, Seoul 130-722, Korea;*

Interacting galaxy pairs are important for study of galaxy evolution. We selected 8,542 interacting galaxy pairs out of 593,514 KIAS-VAGC galaxy sample with $0.02 < z < 0.047$ and r_mag <17.6. We then classified by their interacting features into 6 types by visual inspection. We focused on two types whose spiral tidal features extend to the center of early type galaxy (ETG) or to the edge of ETG. We compared galactic parameters of these two types with those of entire 8,542 pairs as well as between the two types. Preliminary result shows both types are very close pairs (projected distance ~ 20 kpc). Spiral galaxies in the center type are more massive but less bright than those in edge type. ETGs in the edge type are brighter but not more massive than those in the center type. The center type has a mass ratio 3.4 times greater than the edge type, but the edge type has a higher angular momentum than the center type.