

[ㄹGC-17] Newly discovered Footprints of Galaxy Interaction around Seyfert 2 galaxy NGC 7743

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It has been suggested that only the most luminous AGNs ($L \geq [10]^{45} L_{\odot}$) are triggered by galaxy mergers, while less luminous AGNs ($L \sim [10]^{43} L_{\odot}$) are driven by other internal processes. Lack of merging features in low luminosity AGN host galaxies has been a main argument against the idea of merger triggering of low luminosity AGNs, but merging, especially a rather minor one, might still have played an important role in low luminosity AGNs since minor merging features in low luminosity are more difficult to identify than major merging features. Using SNUCAM on the 1.5m telescope at Madanak observatory, we obtained deep images of NGC 7743 which is a barred spiral galaxy classified as a Seyfert 2 AGN with a low bolometric luminosity of $5 \times [10]^{42} L_{\odot}$. Surprisingly, we newly discovered merging features around the galaxy, which indicate past merging activity on the galaxy. This example indicates the merging fraction of low luminosity AGNs may be much higher than previously thought, hinting the importance of galaxy merger even in low luminosity AGN.

[ㄹGC-18] Revealing ionized gas kinematics at the center of nearby Seyfert galaxies

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We investigate the ionized gas kinematics at the center of 6 nearby Seyfert galaxies, using the integral field spectroscopy data from the Calar Alto Legacy Integral Field spectroscopy Area survey Data Release 1. To understand the kinematic nature of the ionized gas in the narrow-line regions (NLRs), we measured the flux, velocity, and velocity dispersion of the [OIII] 5007Å and Ha 6563Å emission lines, after subtracting a best-fit stellar population model representing the stellar features. At the same time, we measured stellar velocity as a reference for the systemic velocity, and stellar velocity dispersion. We spatially resolved the velocity structure of the ionized gas using each emission line and compared it to that of stars. In this poster we present the flux, velocity, and velocity dispersion maps of the ionized gas and stars, and discuss the nature of the ionized gas outflows in the central kiloparsec scale.