

Circumnuclear region HST images of Nearby Seyfert Galaxies

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According to the unified hypothesis, the viewing direction causes the difference between Seyfert 1s and Seyfert 2s, while the statistical result contradicts this popular scheme. The other possibility would be that the excess galactic dust may absorb the BLR emission of Seyfert 2s. With a number of HST archive images of nearby Seyfert galaxies, we try to find the nature and location of the absorbers in Seyfert 2s. We also try to find the connection between the morphologies of circumnuclear region and host galaxy. We investigated the HST WFPC2 (gaseous) and NICMOS (dust) imagings of nuclear regions to see whether the strong barred potentials exist, whose presence may indicate a primary mechanism of driving gas into the nuclear region. Since the gas easily transfers angular momentum to stars in strong bars, inner bars are likely candidates. We also investigate whether spiral arms which can be traced to the nucleus up to the limit of a few 10 pc ($<0.1''$) can be a possible fueling mechanism. The velocity field of the ionized gas secured with the adoptive optic imaging spectrograph, e.g. CFHT/OASIS, may provide a clue on the accretion flows or outflows of Seyfert AGNs.