S36a Discovery of Fading AGNs in ULIRGs with Kpc-scale Fast Winds

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Large-scale outflows are generally considered as a possible evidence that active galactic nuclei (AGNs) can severely affect their host galaxies. Recently several ultraluminous IR galaxy (ULIRG) selected from AKARI FIR catalog was found to have galaxy-scale [OIII] 5007 outflows with extremely high energy-ejection rates compared to active galaxies at $z < 1.6$. However, the NuSTAR hard X-ray follow-up observations identified that these ULIRGs have the most extreme cases of X-ray deficit among local AGNs and ULIRGs, suggesting that the primary radiation from the AGN accretion disk is currently in a fading status. With this presentation, we would like to show the latest NuSTAR, Gemini, and ALMA follow-ups of these galaxies, which could indicate a limited cumulative effect on star formation in host galaxies with the powerful but short-term AGN feedback winds.