R02a **Submillimeter Observations of Dense Molecular Gas in the Nearby Active Galaxies for a Robust Energy Diagnostics**

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We present the 100 pc scale views of dense molecular gas in the central kpc regions of nearby active galaxies traced by HCN(4-3), HCO^+(4-3), CS(7-6), and CO(3-2) lines, based on our ALMA cycle 0/1 observations and literatures. We confirmed enhanced intensity ratios of HCN(4-3)/HCO^+(4-3) and/or HCN(4-3)/CS(7-6) in active galactic nuclei (AGNs), compared to starburst galaxies, which can be used as a new diagnostic method of galactic energy sources. Although several mechanisms can lead to different line ratios, our interferometric non-LTE analysis of NGC 1097 (AGN) revealed a high [HCN]/[HCO^+] abundance ratio in the nucleus. Interestingly, these line ratios do not differ significantly between NGC 1097 and NGC 7469 despite the orders of magnitude higher AGN luminosity of NGC 7469 than NGC 1097. Taking the spatial distribution of the HCN(4-3)/HCO^+(4-3) ratio recently revealed in the nuclear region of NGC 1068 (García-Burillo et al. 2014) into account, which does not precisely peak at the nucleus, we discuss multiple chemistry (AGN vs. starburst) likely being responsible for the high line ratios AGNs, where a high X-ray flux and a high gas temperature can be expected.