Wide and Deep Exploration of Radio-detected Active Galactic Nuclei with Subaru HSC (WERGS) Data Release 2 and beyond

○市川 幸平[1] 内山 久和[3] Kong Youwen[2] Zhong Yuxing[1] Chen Xiaoyang[1] 河野 孝太郎[2] 長尾 透[4] 小渕 紗希子[5] (1.東北大学 2.東京大学 3.法政大学 4.愛媛大学 5.早稲田大学)

The HSC Subaru Strategic Program (SSP) wide-area survey has opened a new window onto rare populations of AGN that were largely missed in previous studies. One such population is radio selected AGN, which constitute only ~10% of the whole AGN population and their optical and NIR counterparts have remained unidentified for a large fraction of sources. Thanks to its wide coverage of ~1200 deg^2 and deep optical imaging down to ~26 mag, HSC/SSP has enabled the robust identification of optical counterparts for these radio AGN. The survey is called Wide and Deep Exploration of Radio-detected Active Galactic Nuclei with Subaru HSC (WERGS). In this talk, we will introduce the data release 2 of the WERGS catalog and their radio properties of these newly identified radio AGN populations and present our ongoing efforts to extend the sample across the Euclid sky, supported by follow-up multi-object spectroscopy with the PFS.