

## X04a Properties of Blue Radio Galaxies found by Subaru HSC-SSP

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Radio galaxies (RGs) are one of the most important AGN population for understanding galaxy evolution and its co-evolution with central massive black holes. RGs could regulate star formation in galaxies through energy injection to interstellar and intergalactic medium via inherent powerful radio jets. Large statistical samples has been limited at  $z < 0.5$  due to the shallow SDSS sensitivity. WERGS (Wide and Deep Exploration of Radio Galaxies with Subaru HSC) is an on-going project to investigate high- $z$  RGs using Subaru HSC-SSP and radio archive catalogs. Yamashita et al. (2018) has reported HSC counterparts of 3579 VLA FIRST radio sources in 154 deg<sup>2</sup>. Among them, optically-faint ( $i > 21$ ) RGs that have not been detected in SDSS are located at  $z \sim 1$  and have high radio-loudness ( $R \gtrsim 3$ ).

In this presentation, we will report on optically-blue color RGs whose colors can not be explained by classical elliptical galaxies but consistent with relatively young ( $\sim 4$  Gyr) passive galaxies. Thus these blue colors might come from recent star formation, although we can not rule out contributions from AGN light. The number fractions of the blue RGs increase with increasing redshifts from 0.3 to 1.1 and decreasing optical luminosities from  $M_i = -25$  to  $-17$ . The large fraction of the blue RGs with low luminosities is consistent with star-forming less-massive host galaxies.