

Z112a PFS AGN survey: science cases and observing strategy

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Understanding the birth and growth of supermassive black holes (SMBHs) is a key to unravelling the riddle of galaxy evolution across cosmic time. On the observational side, it requires a sufficiently complete sample of active galactic nuclei (AGNs), selected over a wide range of the electromagnetic spectrum. We aim to carry out such a comprehensive AGN survey, exploiting the exquisite survey ability of the Subaru Prime Focus Spectrograph. Our survey plan can be accomplished with only a few per cent of fiber-hour resources being considered in the Galaxy Evolution and Cosmology surveys, and yet it will provide crucial insight into the fundamental roles that SMBHs have played in galaxy evolution. In this talk, we will briefly review the science cases raised by the community so far, and our observing strategy, including target selection from existing multi-wavelength dataset.