

Z109a **PFS Galaxy Evolution Survey. I: Galaxy formation and evolution at $0.7 < z < 7$ with Subaru Prime Focus Spectrograph**

John Silverman on behalf of the PFS Galaxy Evolution Survey Team

We will review the primary science goals and design of a spectroscopic survey of close to 350,000 galaxies over 15 square degrees of the HSC SSP Deep layer. Key science topics include the star formation history and mass assembly of galaxies as a function of environment, chemical enrichment, outflows, connection of galaxies/AGN to the larger-scale gas reservoirs, and the physics of the epoch of reionization. A broad overview will be presented with more detailed presentations on tomographic mapping of the HI gas distribution, reionization, and supporting simulations to follow. Furthermore, we will briefly touch upon synergy with other facilities such as VLT/MOONS and WFIRST.