V204a SuMIRe-PFS[35]: Second spectrograph module installation and test at Subaru telescope

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PFS (Prime Focus Spectrograph) is an ultra-wide-field, multi-object spectrograph currently being commissioned at Subaru telescope. The focal plane is made of ~ 2400 science fibers and fiber positioners at the telescope prime focus, covering a field of view of 1.38 deg in diameter. The science fibers will be connected to 4 identical spectrograph modules, each receiving ~ 600 fibers. Every spectrograph module will host 3 cameras, covering the blue (380-650 nm), red (630-970 nm) and near-infrared (940-1260 nm) wavelengths.

In late 2022, the second spectrograph module was successfully installed and commissioned at Subaru, including the blue and red channel cameras, which brings the total number of usable science fibers to ~ 1200 .

In this presentation we will focus on the spectrograph module installation and testing process at Subaru, its image quality and performance, and the prospect for the installation of the 2 remaining spectrograph modules and the near-infrared cameras.