

# Design and Construction of Advanced Spectroscopy Beamline

## BL 15-2 at SSRL

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Abstract:

We present the design of highly integrated and new advanced spectroscopy beamline BL 15-2 end station at Stanford Synchrotron Radiation Light Source (SSRL). This beamline will begin user operation in early 2018. This experimental station is designed in-house to meet the challenging requirements resulting from small beam size of  $5\mu\text{m}$  and short working distance from the exit window to the focal spot which should also include several devices like Raman spectrometer, 7 crystal analyzer, newly built Von Hamos spectrometer, Johann spectrometer, 40-crystal spectrometer and ultra-high rep rate pump laser system for time resolved x-ray spectroscopy related experiments. We designed this experimental station with high modularity for future upgrades and extensions.

