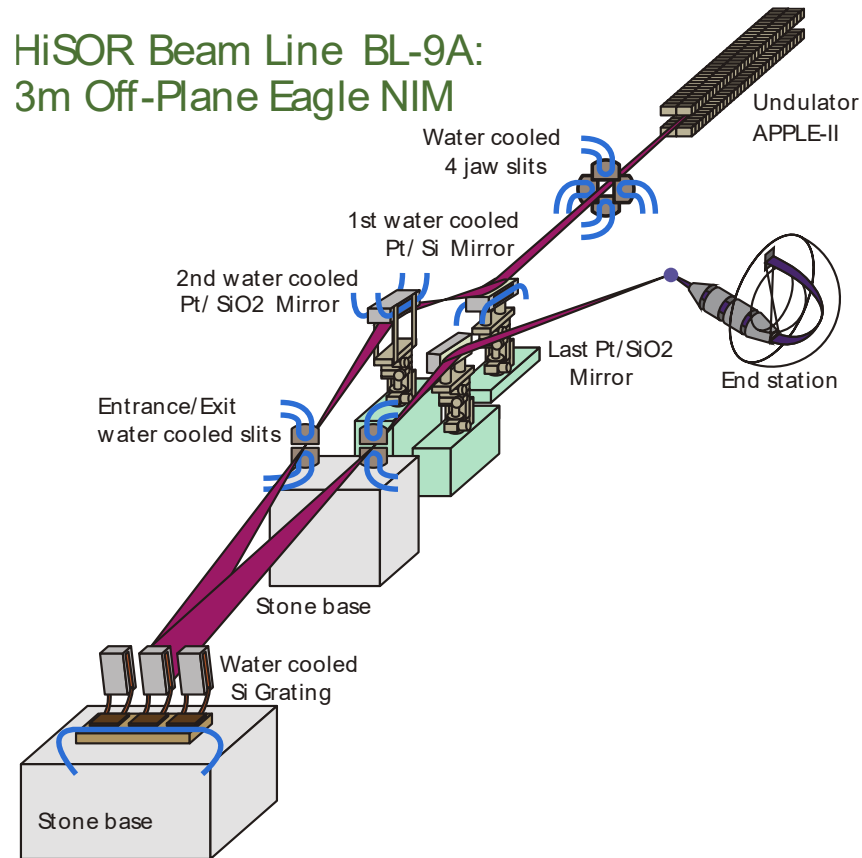


High-resolution angle-resolved photoemission spectroscopy Beamline 9 A (BL- 9 A)



HiSOR Beam Line BL-9A:
3m Off-Plane Eagle NIM



- ❑ Photon energy: $h\nu \sim 7 \text{ eV} - 40 \text{ eV}$
- ❑ Undulator: APPLE-II (S, P, C+, C- -pol.)
- ❑ Analyzer: SPECS ASTRAIOS 190
- ❑ Total ΔE : 3-10 meV ($h\nu = 10-30$)
- ❑ Beam spot: $\Phi \ 250 \ \mu\text{m}$
- ❑ Temperature: 10 K – 300 K
- ❑ Sample holder: Omicron type
- ❑ Surface treatment: Spattering, annealing etc.
- ❑ LEED/Auger is available

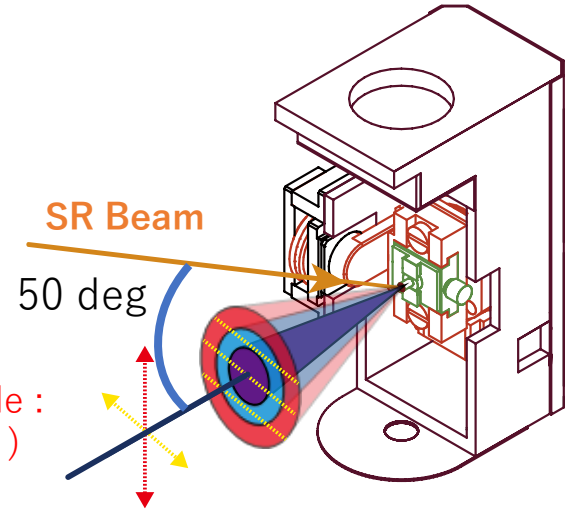
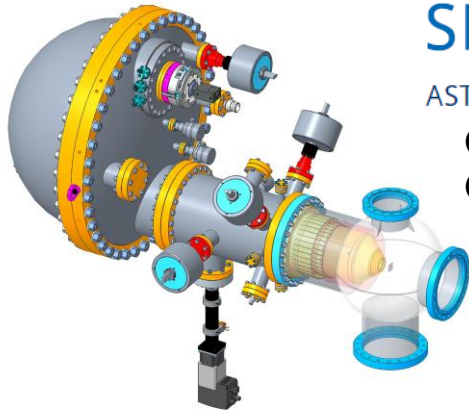
BL-9A SPECS Analyzer

SPECS™

ASTRAIOS 190

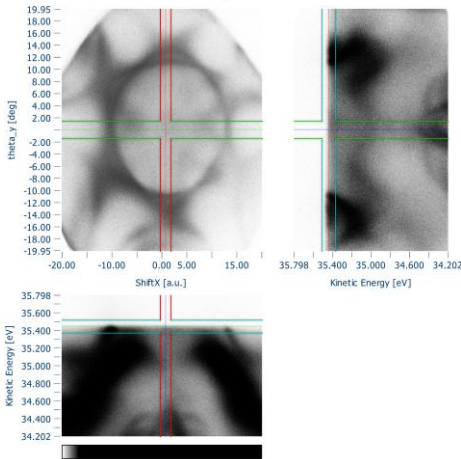
- 190mm Hemispherical analyzer
- $\theta_x - \theta_y$ Deflector mode scan.

- Deflector ARPES mode : $\pm 9^\circ, \pm 20^\circ, (\pm 30^\circ)$



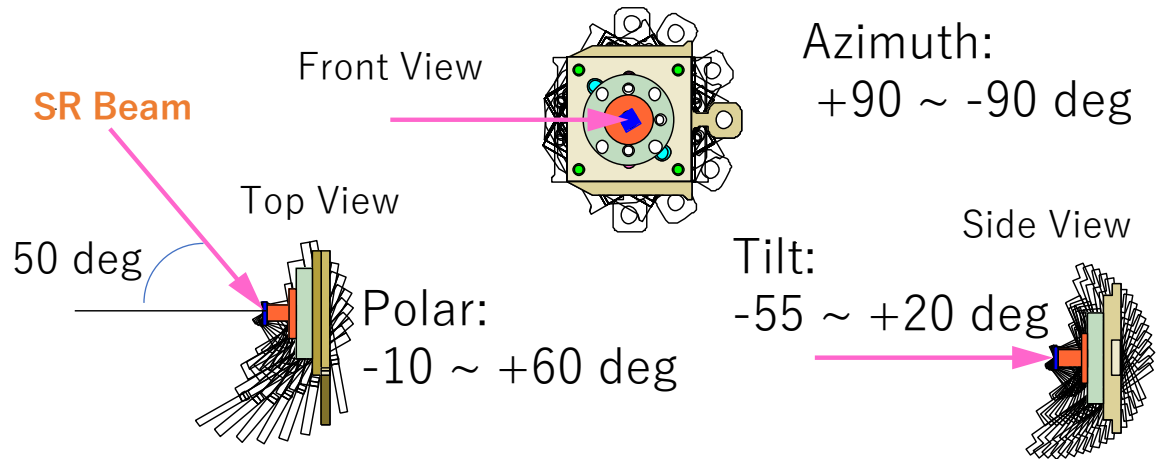
A 2D ARPES map can be measured using a deflector.

On the other hand, it is also possible to obtain a 2D ARPES map by rotating the sample in the conventional manner.

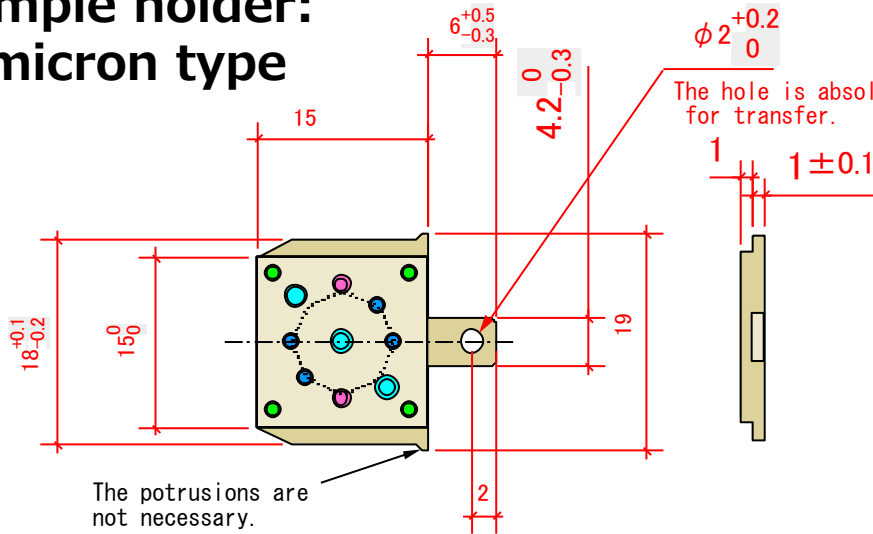


$h\nu = 40\text{eV}$
 $\pm 20^\circ$ mode

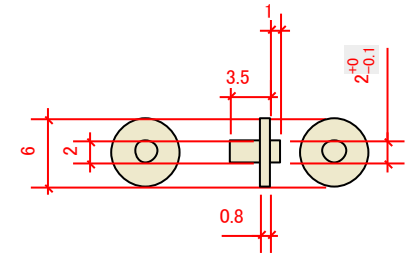
□ 6-axis sample manipulator



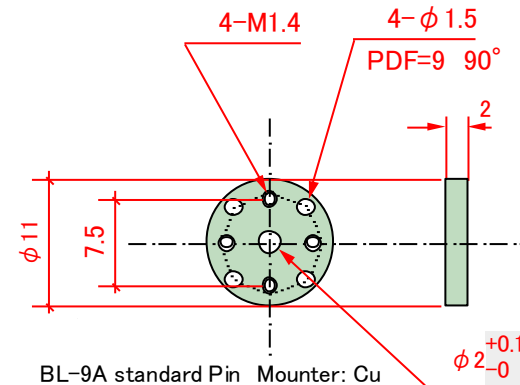
Sample holder: Omicron type



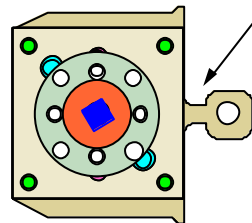
The protrusions are not necessary.



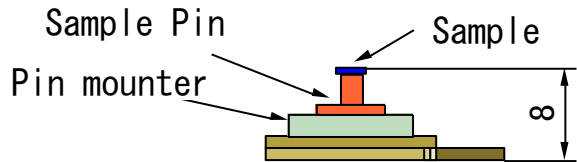
BL-9A standard Sample Pin : Al



How to mount a sample on the holder



The waist is not necessary.



Best sample height is 8 mm from the bottom.

Holders and mounters from other HiSOR beamlines are also available, unless a special type is required.

Attention

