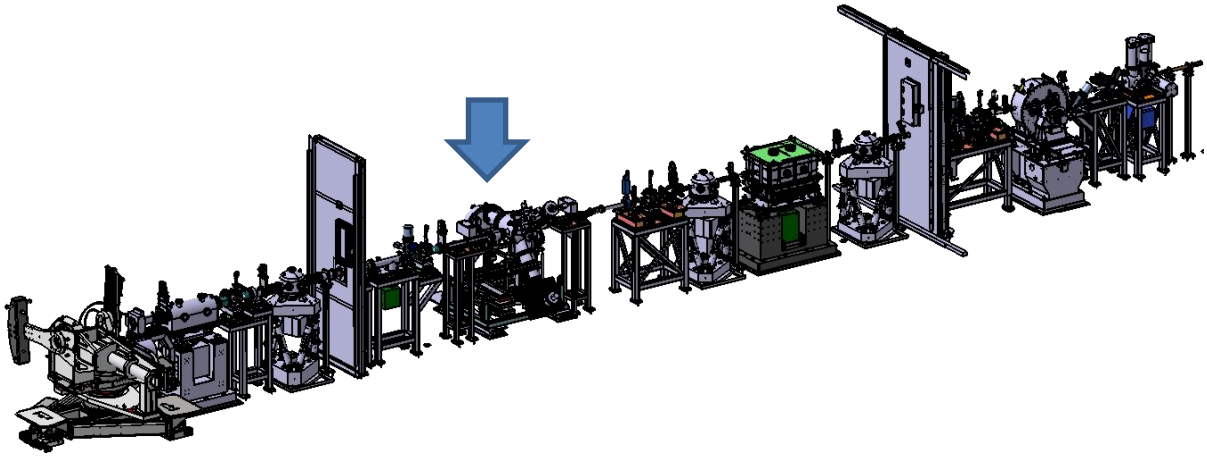
Hard X-ray photoelectron spectroscopy at the GALAXIES beamline



Location: Synchrotron SOLEIL / GALAXIES beamline / HAXPES station

Researcher in charge of the Trainees: D. Céolin

Maximum number of Trainees: 3

The GALAXIES beamline [1], covering the photon energy range 2.3-12keV, is equipped with two permanent endstations : (i) a photoelectron spectrometer dedicated to hard X-rays studies (marked by an arrow on the figure); (ii) a diffractometer dedicated to (resonant) inelastic X-ray scattering. In principle both equipments can be used for experiments on solids, gases and liquids, the idea being mostly to determine the electronic structure and possible photoinduced dynamics in the studied samples.

Schedule expected:

The Trainees will participate to experiments carried out on the HAXPES endstation [2]: (i) measurement of a PES spectrum (and eventually Auger spectrum) on a rare gas sample in the morning; (ii) data treatment of the collected spectra plus participation to measurements with possible control of the beamline during the afternoon.

[1] J.P. Rueff et al., “The GALAXIES beamline at the SOLEIL synchrotron: inelastic X-ray scattering and photoelectron spectroscopy in the hard X-ray range.” Journal of Synchrotron Radiation, 2015, 22 (1): 175-179

[2] D. Céolin et al., “Hard X-ray Photoelectron Spectroscopy on the GALAXIES beamline at the SOLEIL synchrotron.” Journal of Electron Spectroscopy and Related Phenomena, 2013, 190 part B: 188–192