

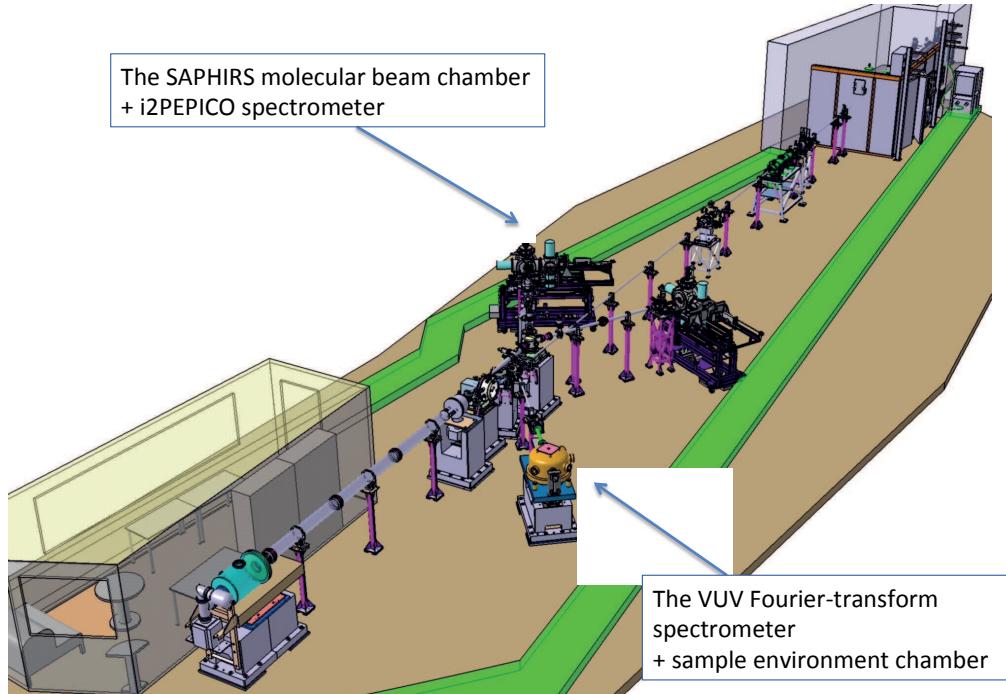
VUV spectroscopy and chiral photoionization with the DESIRS synchrotron beamline @ SOLEIL

Location: Synchrotron SOLEIL / DESIRS beamline

Researcher in charge of the Trainees: N. de Oliveira / G. Garcia / L. Nahon

Maximum number of Trainees: 3

The VUV high resolution variable polarization beamline DESIRS



The DESIRS beamline [1], mainly devoted to studies on dilute matter, is equipped with two permanent endstations : (i) a unique wavefront division Fourier-transform spectrometer (FTS) for ultra-high resolution absorption spectroscopy in the VUV range [2,3]; (ii) the SAPHIRS versatile molecular beam chamber[4] equipped with a double imaging electron/ion spectrometer (i^2 PEPICO) [5] for molecular photodynamics (ionization and/or fragmentation).

Schedule expected:

The Trainees will participate be involved on experiments carried out on the two branches (1/2-day each): (i) measurement of a VUV absorption spectrum of stable or transient species with the FTS; (ii) measurement of photoelectron circular dichroism (see review in [6]) on chiral species with SAPHIRS.

- [1] <http://www.synchrotron-soleil.fr/portal/page/portal/Recherche/LignesLumiere/DESIRS>
- [2] N. de Oliveira, M. Roudjane, D. Joyeux, D. Phalippou, J. Rodier, and L. Nahon, *Nature Photon.* **5**, 149 (2011).
- [3] N. de Oliveira, D. Joyeux, M. Roudjane, J.-F. Gil, B. Pilette, L. Archer, K. Ito, and L. Nahon, *J. Synchrot. Radiat.* **23**, 887 (2016).
- [4] X. Tang, G. Garcia, J.-F. Gil, and L. Nahon, *Rev. Sci. Inst.* **86**, 123108 (2015).
- [5] G. Garcia, B. Cunha de Miranda, M. Tia, S. Daly, and L. Nahon, *Rev. Sci. Inst.* **84**, 053112 (2013).
- [6] L. Nahon, G. A. Garcia, and I. Powis, *J. Elec. Spec. Rel. Phen.* **204**, 322 (2015).