



## SEMINAIRE ISMO

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### **TEMPO beamline: From time resolved to near ambient pressure photoemission spectroscopy**

TEMPO, a soft X ray beamline dedicated to time resolved experiments, is optimized to perform pump-probe experiments ranging from seconds to sub-picoseconds time scales. Two Apple II undulators provide photons in the energy range 50-1500 eV with a variable polarization (linear to circular). Highly sensitive to organic chemistry (C, N, O), semiconductors (Si, Ge), transition metals and rare earth species, the energy range is well suited for studies on organic molecular systems on a large range of semiconductor and metal substrates. Two end stations provide a state of the art apparatus to investigate the electronic properties of surfaces under various environment and excitation.

On the main branch, the high photon flux is coupled to the excellent energy resolution of the SCIENTA SES 2002 electron energy analyzer. A new time resolved detector allows us to investigate the dynamic behavior of excited states using photoelectron spectroscopy by measuring the evolution of electronic properties under laser excitation of selected chemical species at the surface.

On the second branch, a new near ambient pressure photoemission experiment permits to investigate the chemistry and the electronic properties of surfaces exposed to various gases at pressures up to 25mbars. I will present the main results obtained and the perspectives on the main scientific subjects studied on the beamline.

**Mardi 12 janvier 2016 à 11h**

**Bât. 210 – Amphi 1 (2<sup>ème</sup> étage)**

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