

# Inelastic x-ray scattering and electron spectroscopy

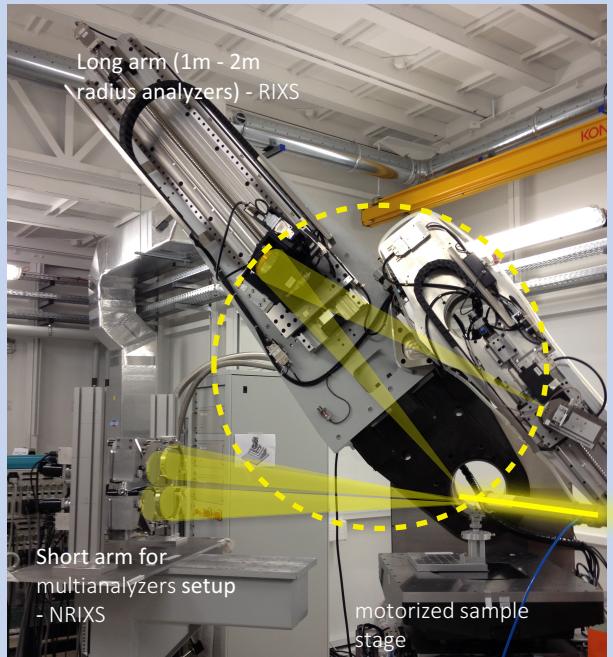


## MAIN FEATURES

RIXS – HAXPES endstations  
U20 in-vacuum undulator  
2.3 keV – 12 keV  
High flux / high resolution  
30 x 100  $\mu\text{m}$  focused spot

## RIXS

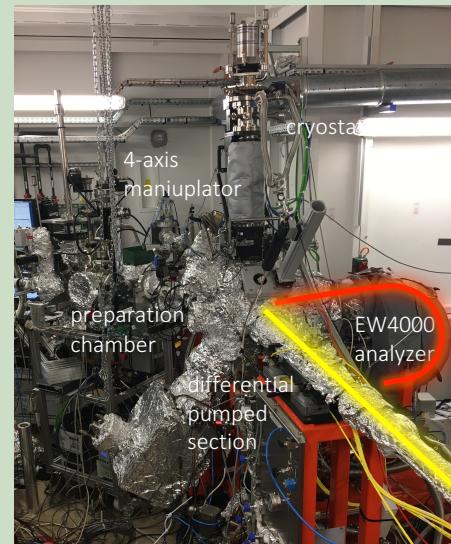
Versatile spectrometer  
Rotating long arm  
Multianalyzer setup  
  
Rowland circle geometry  
- non dispersive analyzers  
radius from 0.5 m to 2 m  
  
Various sample environments  
  
Continuous scanning mode  
  
RIXS, NRIXS, XES, HERFD



▷ Extreme conditions / Correlated materials / Chemistry, Catalysis / Imaging, ancient materials

## HAXPES

High kinetic energy  
 $E_{\text{c}} < 12 \text{ keV}$   
  
High flux / high resolution spectrometer / wide opening angle (up to 60°)  
  
Multiple sample environments  
- solid sample  
- gas phase  
- Liquid phase  
  
Preparation chamber  
  
XPS, AES, XAS, HARPES



▷ Novel materials, oxydes / Applied science, batteries / Diluted phases, liquids

## DCM + HRM

DCM  
Si 111,  
LN<sub>2</sub> cooled  
  
HRM  
4 bounce  
Hybrid rotary stage  
2 sets :  
Si 111 asymmetric  
Si 220 symmetric

