

Outline

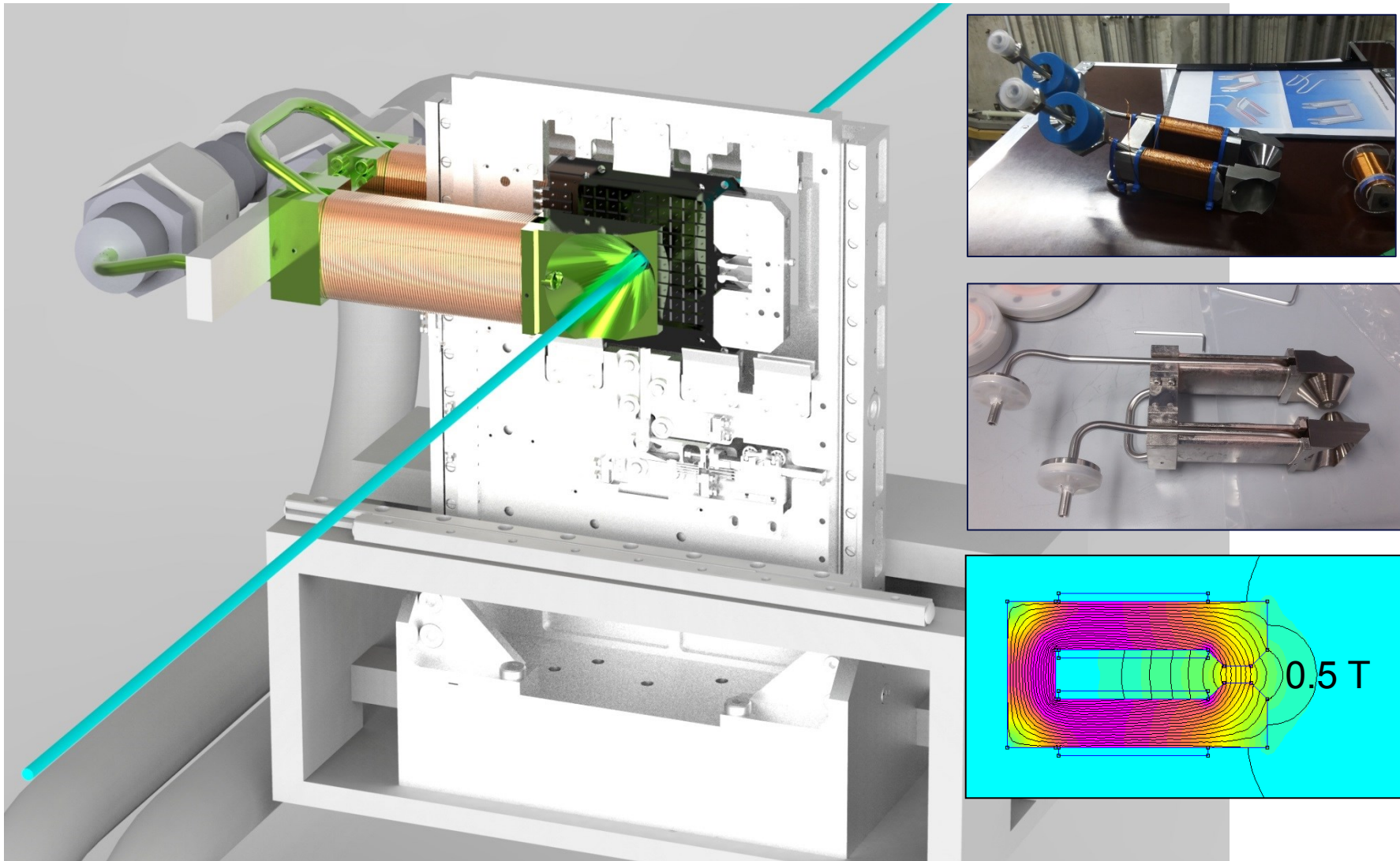
Magnetic field setups

- DC electromagnet environment
- Pulsed high magnetic field environment

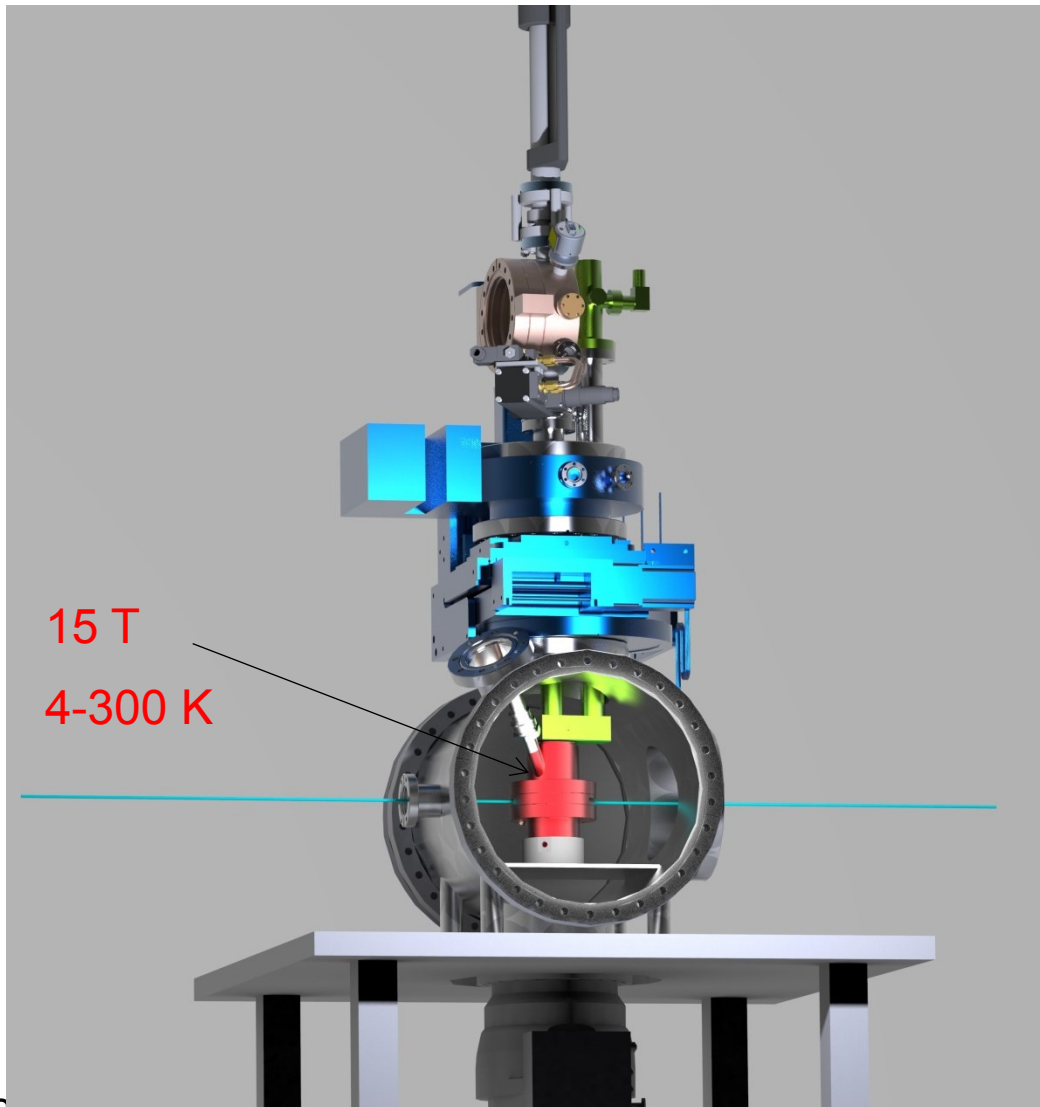
General sample characterization

- Electron/Ion microscopy user labs

DC electromagnet environment for Day-1



Pulsed high magnetic field environment



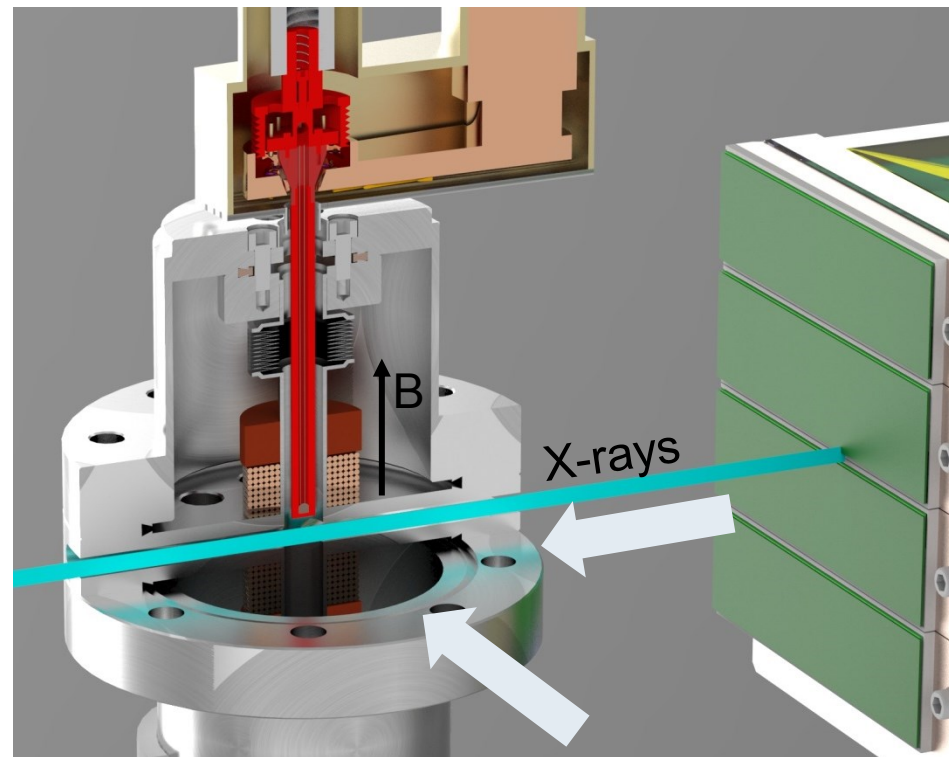
Planned for 2018

- Coil cryostat
- He-flow cryostat
- XYZ- θ manipulation
- Loadlock
- Transfer rod

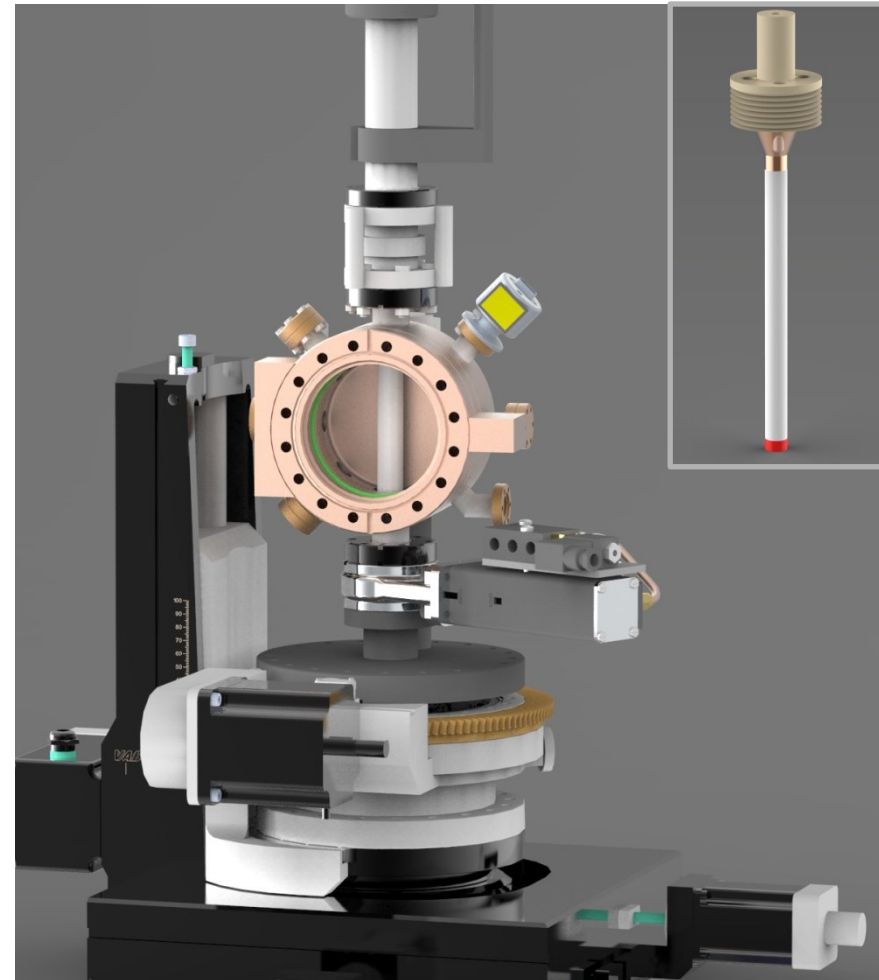
Coil cryostat / sample sticks

Coil cryostat (LN₂) and sample cryostat (LHe)

Sample loadlock

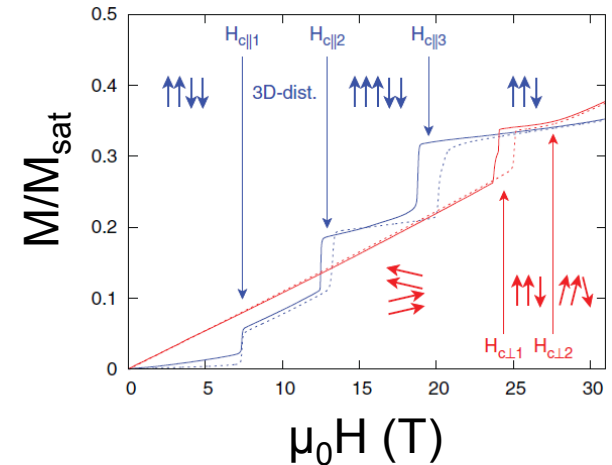
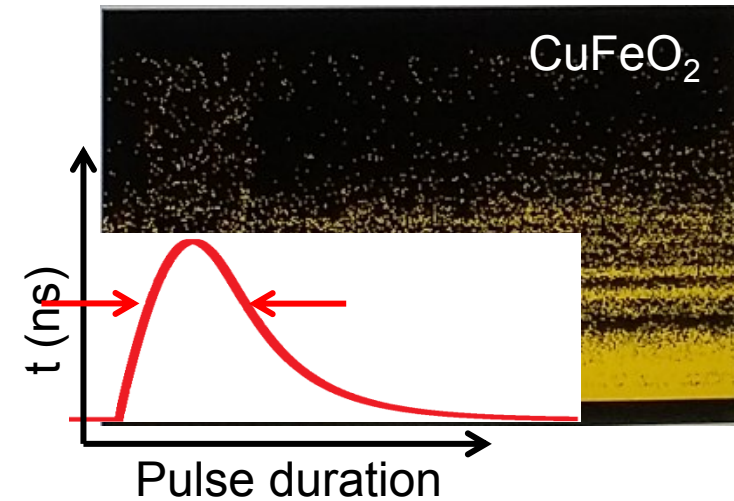
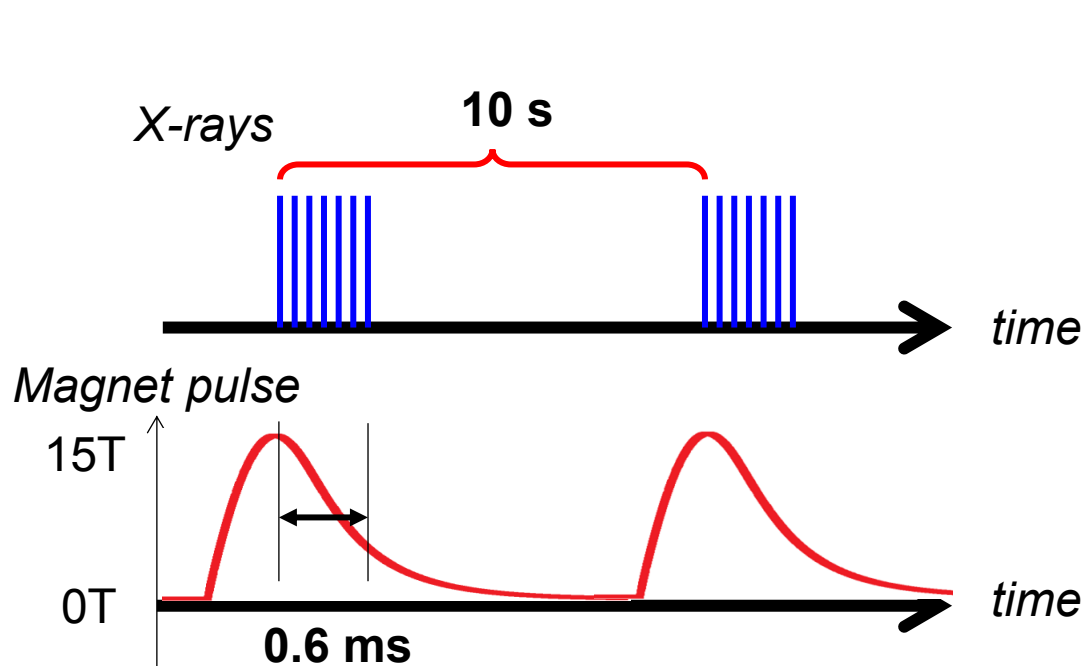


Flexible detector positions



Magnetic pulse and X-ray bunch train

Example: Nuclear Forward Scattering at Petra III, Nov 2016



Sample pre- and post-characterization

Environmental SEM

Dual beam FIB/SEM

■ Sample imaging, analysis (EDS, EBSD) and modification (electron lithography).

■ **Coffee break:** Let us know what typical samples you need characterized!

Summary

- FSSS setup: 0.5 T constant field (Day-1)
- Pulsed high-field setup: 15T / 4–300K (2018)
- Electron/Ion microscope labs (2017–2018)

- **Coffee break:** Let us know what typical samples you need characterized!