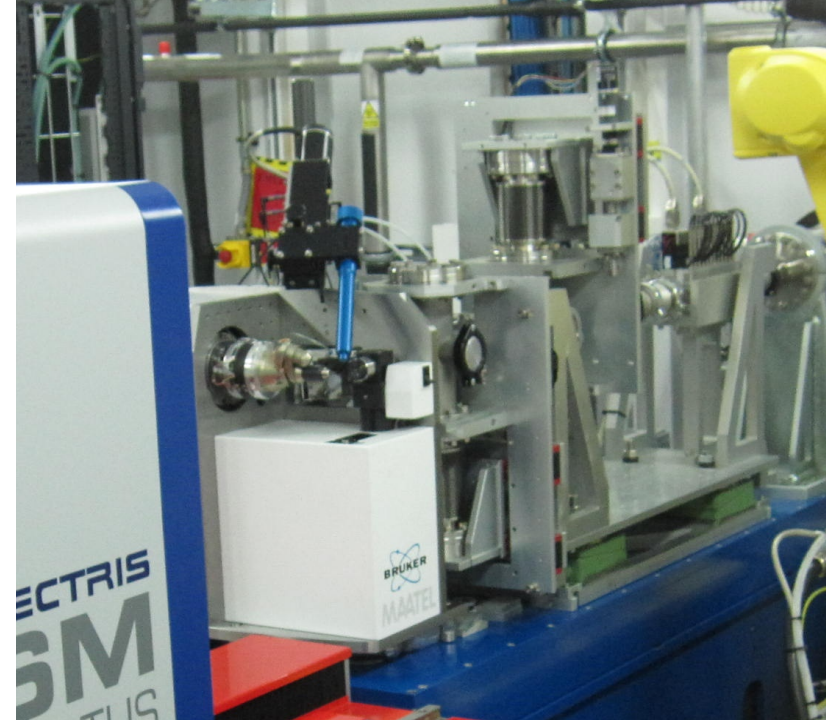
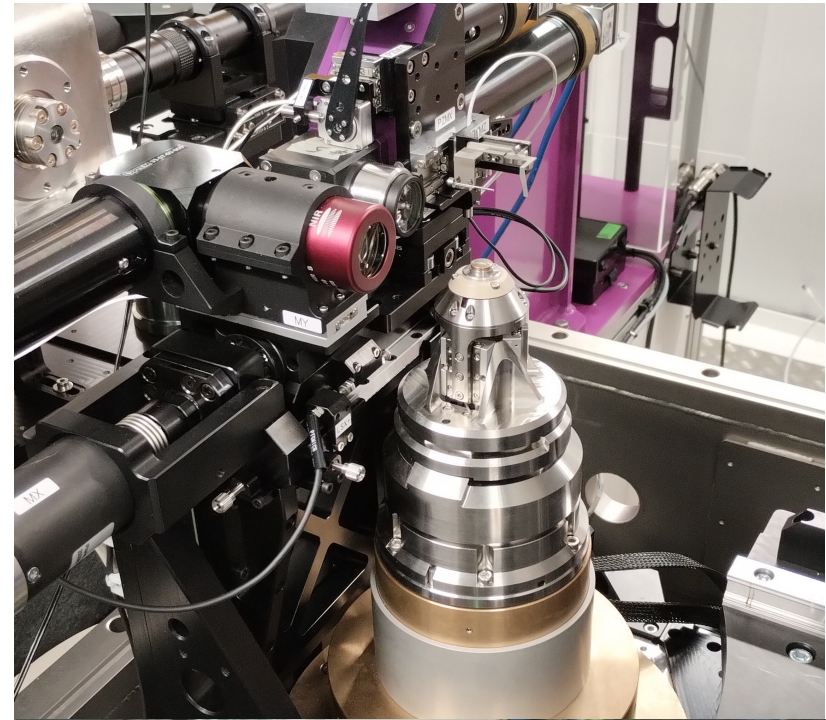


# MXCuBE site report

ALBA 29.05.2024



# ALBA MX beamlines

- 2 beamlines: XALOC in production, XAIRA in development
- XALOC BL13:
  - High-throughput tunable beamline
  - Arinax MiniDiff MD2M; Dectris Pilatus 3X 6M; IRELEC CATS robot
- XAIRA BL06:
  - Microfocus beamline
  - In-house diffractometer (Aerotech+Smaract); Dectris Eiger 9M; IRELEC ISARA2 robot
- Controls software stack:
  - Tango and Sardana, Taurus GUIs
  - LImA for cameras and detectors

# MXCuBE status

- **XALOC beamline:**
  - Python 3.9 Qt5
- **XAIRA beamline:**
  - Python 3.10 Web-version, 6-month old mxcubecore
- **LIMS:**
  - XALOC: ISPyB with EXI
  - XAIRA: ICAT with Data Portal
- **Cybersecurity:** mostly “delegated” to our IT Systems Department...

# Developments since last meeting

- XALOC beamline:
  - Migration to Python 3.9 Qt5 (from Python 2 Qt4)
- XAIRA beamline:
  - Done: control of diffractometer, sample camera, endstation hutch
  - In tests: manual 3-click centring
  - In development: queue's simple oscillation, online data processing

# Plans for the next six months

- XALOC beamline:
  - Replacement of CATS sample-changer robot with ISARA2 model
  - Having also a working Web version
- XAIRA beamline:
  - Production-ready!
  - Implementation of x-ray centring
  - Offline data processing