



MXCuBE ALBA Status Report

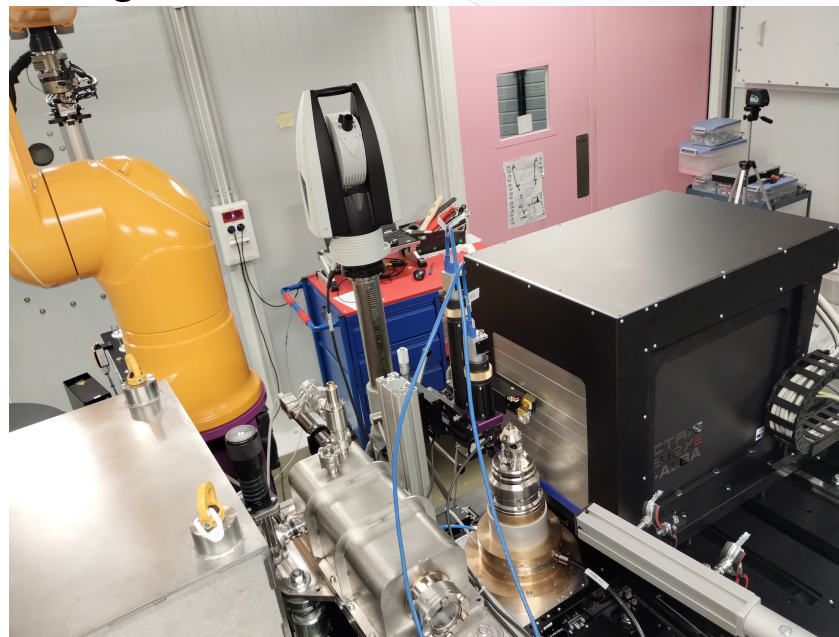
José G.C. Gabadinho

29.11.2023

@ALBA

How It Started

- New BL06 – XAIRA microfocus MX beamline, open to users in 2024
 - Inhouse diffractometer (Aerotech+Smaract), Dectris Eiger detector, IRELEC ISARA2 sample-changer



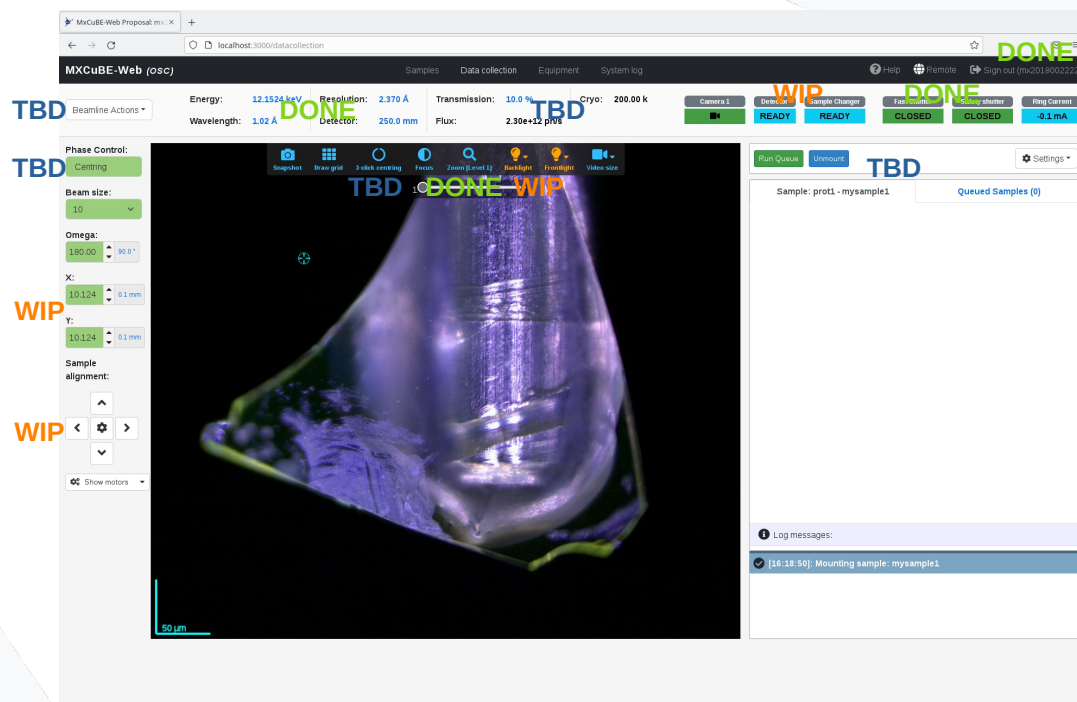
MXCuBE / ISPyB Meeting

How It's Going

- Device commissioning
- Device-server development
- MXCuBE-WEB integration



How It's Going



- Done
 - Login, sample-video with zoom, individual motors, machine-info, energy, shutters
- Work-in-progress
 - Diffractometer, lights, sample-changer
- To-be-done
 - Phase & actions, centring, queue, robot, transmission
- Yet to come
 - Cryo

Experiences

- Priceless: having a working mockup-version to start with
- Very positive: current state of control-systems integration (Tango & Sardana commands, channels, motors, etc.)
- To-be-improved: documentation for more complex features and hardware objects (GenericDiffractometer, Queue- Model and Manager)
- Challenging: React development (at least for non-web developers...)

Future Steps

- Implementation of:
 - ISARA2 sample-changer (Tango device-server + MXCuBE h.o.)
 - Helicoidal trajectories (Aerotech Aerobasic)
 - Integration with Scientific Data Management division
 - Grid-scan heat-map
 - Space-group, data-collection strategy, etc.
- XALOC beamline
 - Bring it up-to-date to mxcubecore and MXCuBE-WEB (summer 2024)

Thank You !