Elettra
Sincrotrone
Trieste

ISPyB/MXCuBE Meeting 30.01.2018

Updates and Status Reports form
Members [and apprentices]

MXCuBE status at ELETTRA

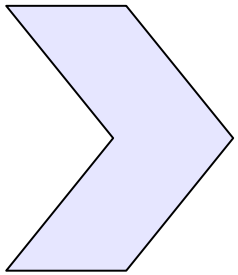
Maurizio Polentarutti

MX Facilities at ELETTRA

XRD1 – a general-purpose hard X-rays beamline (50 % for MX) Since 1997	XRD2 – dedicated to MX (Elettra – IISc joint project) Since 2017	Small Crystallization Lab (2 hotels, 570 SBS plates, Explora Nova) remotely accessible

50% of future users from India:

Sample logistics
Capability of Data [re]processing
Web-based data collection



MXCuBE 3
ISPyB

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XRD2 status and features

- SCW as a source, 10**12 ph/sec – Commissioning phase
- Well-known instrumentation (MD2s, Pilatus 6M)
- SC with 12 slots for UNIPUCK or ESRF-like pucks, still to be integrated (tango device missing)
- SBS Crystallization plates screening (to be tested)

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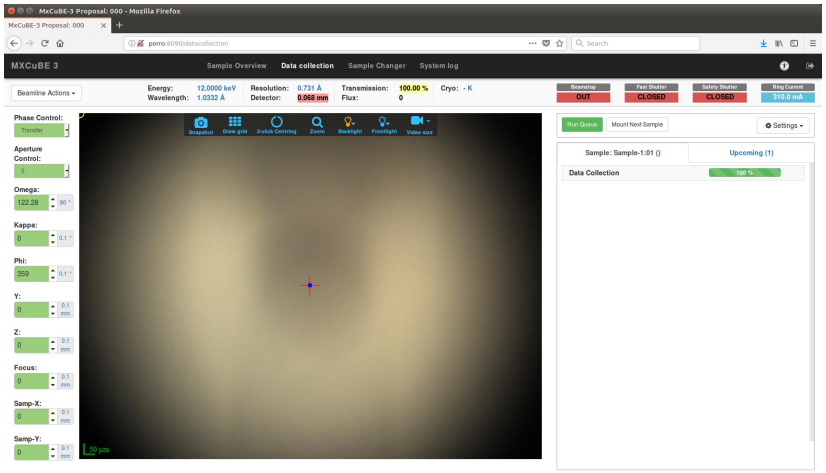
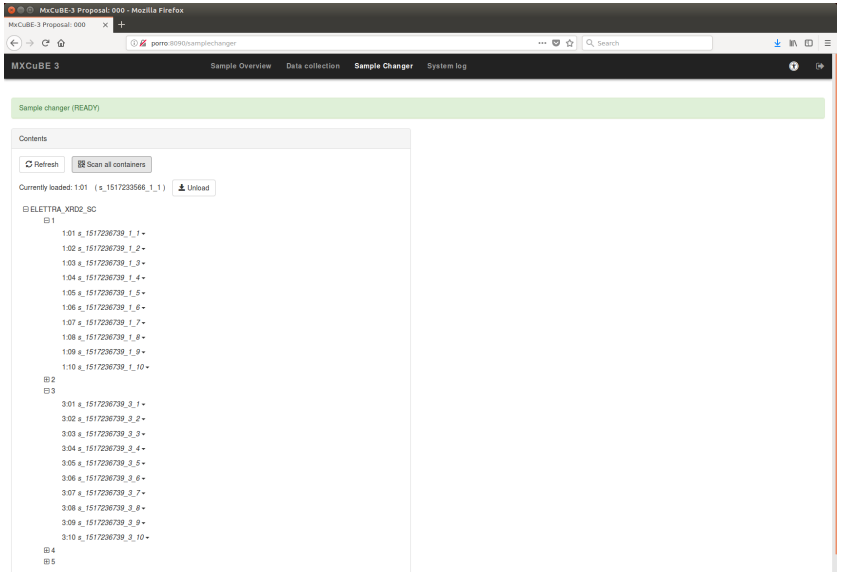
MXCuBE 3 installation

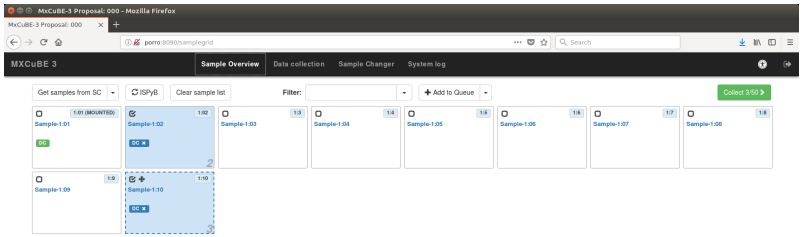
MxCube3 current status:

- **Login :**
  still **mockup** with test proposal;
- **Data Collection Tab:**
  - Machine Status: controlled via **Tango**
  - Beamline Valves and shutters: controlled via **Tango**
  - Detector Distance: controlled via Tango
  - Beamline Actions: still **mockup**
  - Energy, Wavelength, Resolution, Transmission, Cryo, Flux: still **mockup**
  - Diffractomer (MD2):
    - Motors: controlled via **Tango**
    - Phase Control: still **mockup**
    - Aperture Control: still **mockup**
    - Lights: controlled via **Tango**
    - Zoom: controlled via **Tango**
    - Camera: using MD2 JPG via **Tango**
    - 3 Click centring: using MD2 command via **Tango**
    - Automatic centring: **not** yet implemented
- **Sample Changer Tab:**
  - XRD2 sample changer under test
  - **created** SampleChangerElettra Hardware Object for simulation
- **Sample Overview Tab:**
  - ISPyB: **not** yet installed
  - Tab content **correctly** synchronized with SampleChanger Tab Info
  - Implemented only Data Collection Task
  - MultiCollectTangoMD2 hw object **communicates** with MD2 and Pilatus Tango devices
  - First tests of **queued** data collections

MXCuBE 3 installation







Installation Environment:

S.O. CentOS7 x64
Python 2.7
Web Interface

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Resources

Beamlines



Software



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Thank you!

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