

MXCuBE | LIMS

site report

P11, DESY (Hamburg, Germany)

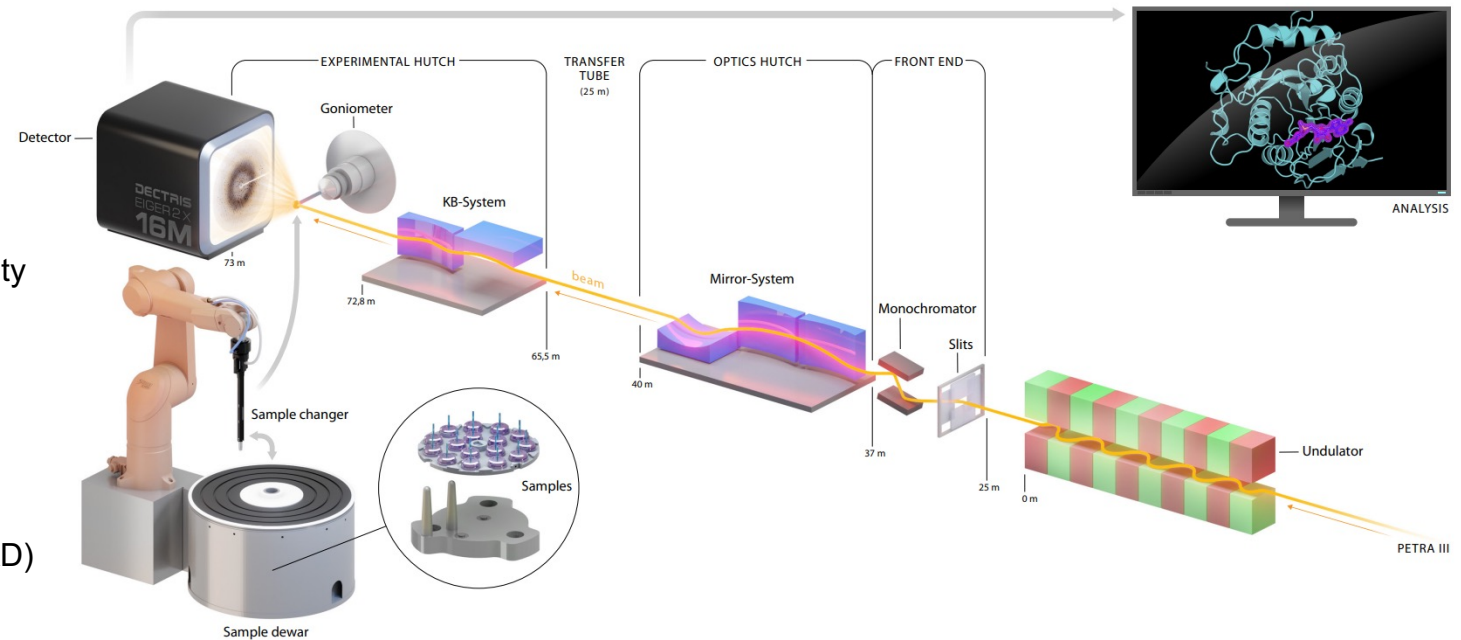
Brief beamlines summary

The High-throughput Macromolecular Crystallography Beamline P11



Crystallography Experiments

- In user operation since 2013
- Broad energy range: 5.5 - 28 keV
- High-speed sample changer with capacity (23 unipucks = 368 samples)
- High precision single axis goniometer: 0.0001° at $120^\circ/\text{s}$
- Eiger2 X 16M
- XRF for experimental phasing (SAD/MAD) and element analysis



MXCuBE | LIMS status

- Latest mxcubeqt (develop branch), PR#460 submitted
- Latest mxcubeqtcore **1.193.0** (develop branch)
- **Upgraded** to Python 3.11.9, PyQt 5.15.10.
- Cybersecurity: mxcubeqt is running on a separate VM (Kiosk mode), TFA

Developments since last meeting

- Qt upgrade is still pending. PR#460 submitted – WIP
- Large PR#966 was reviewed and merged – thanks to everyone!
- Code refactoring and testing of the custom components (pinhole, diode/YAG, collimator and beamstop) – now uses Nstate class

Plans for the next six months

- Roll-out to the users
- Interaction with ISPyB
- EDNA Characterization + processing – needs testing after cluster update
- X-Ray centering + mesh-scans
- Optimize usage of *murko*-centering
- ~~Code cleanup~~
- ~~Move installation to Debian 12~~
- ~~Aligning temporary *murko* setup with local IT infrastructure~~