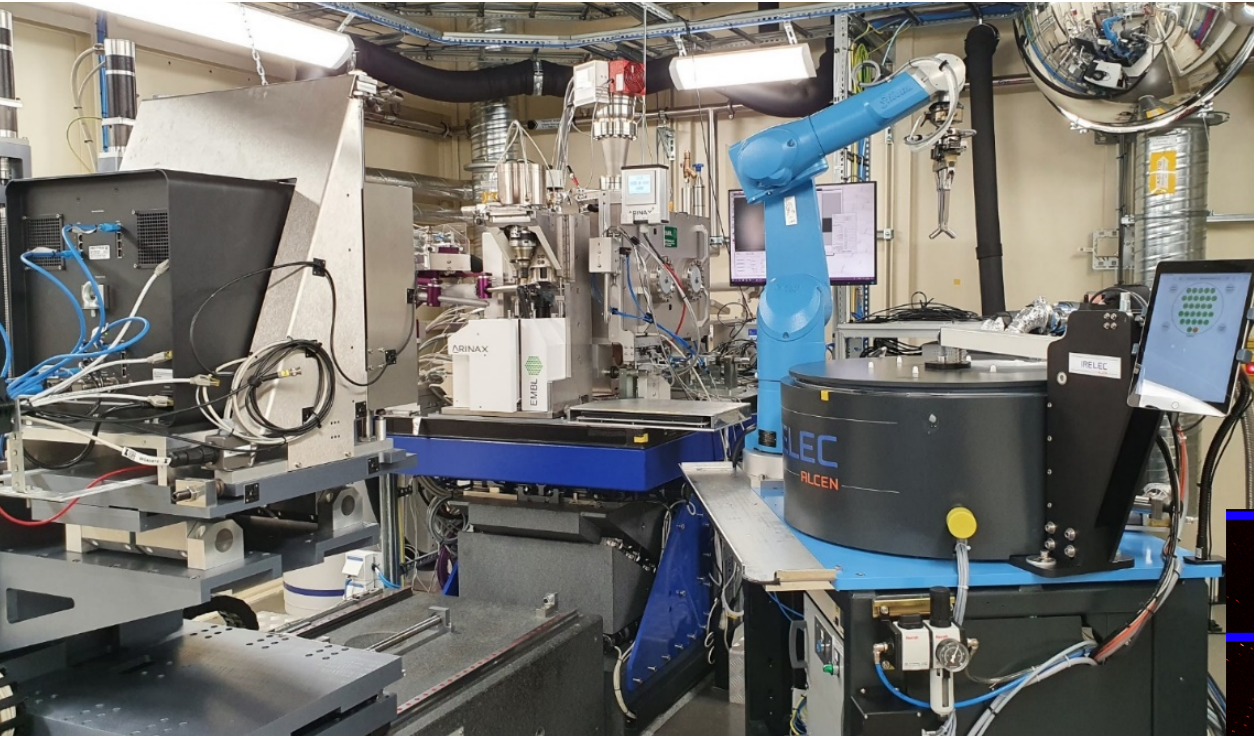# Taranta and MAX IV MX beamlines

Mikel Eguiraun
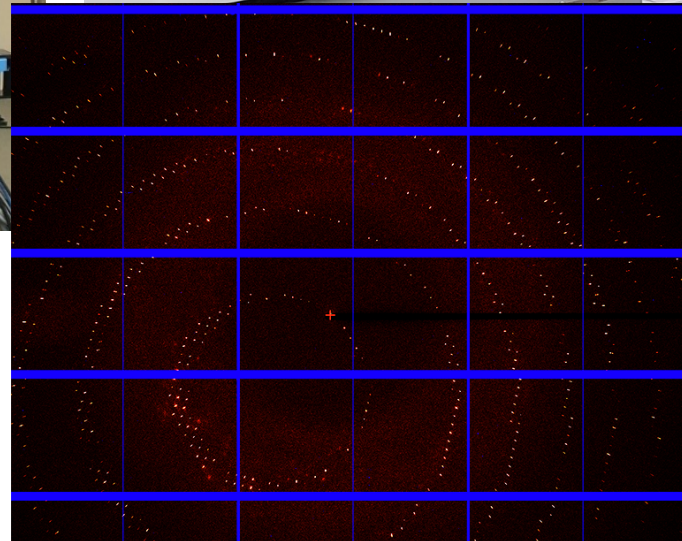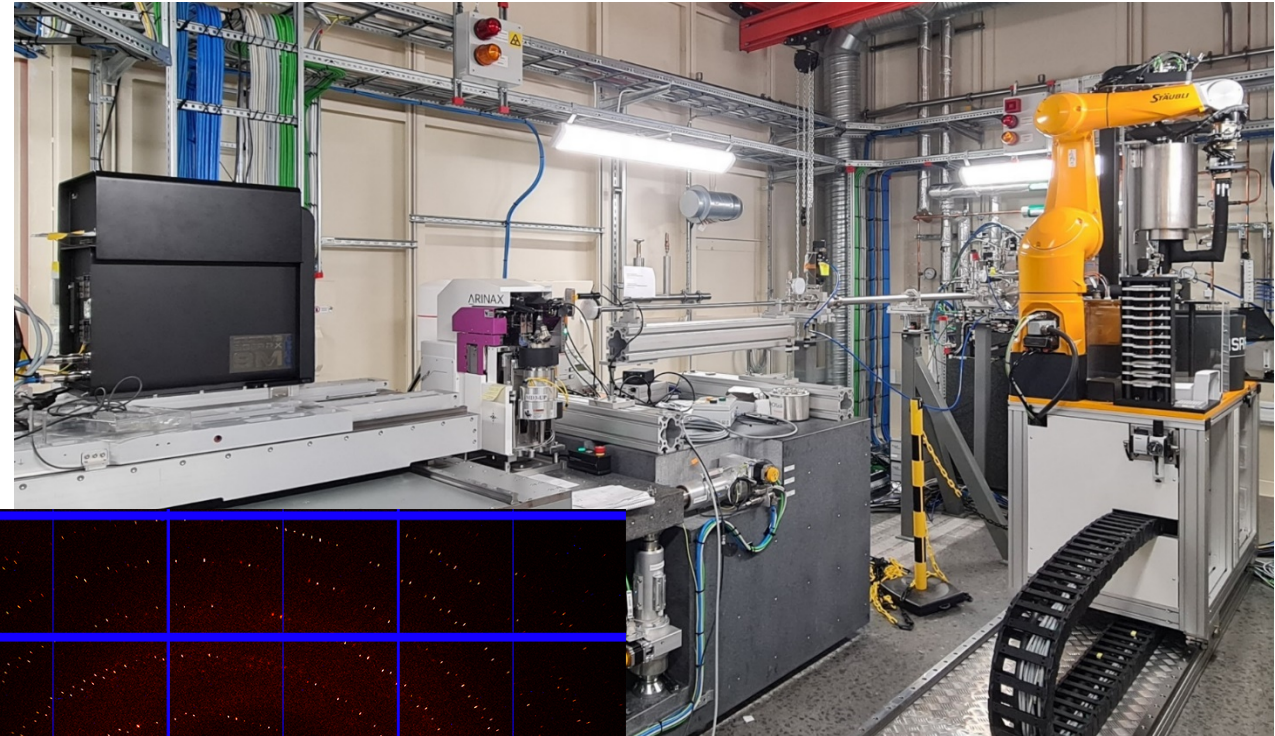
May. 29, 2023

MX beamlines at MAX IV

BioMAX *in operation*

MicroMAX *under commissioning*

MXCuBE

- Experiment Control
- Web App
- React
- Python
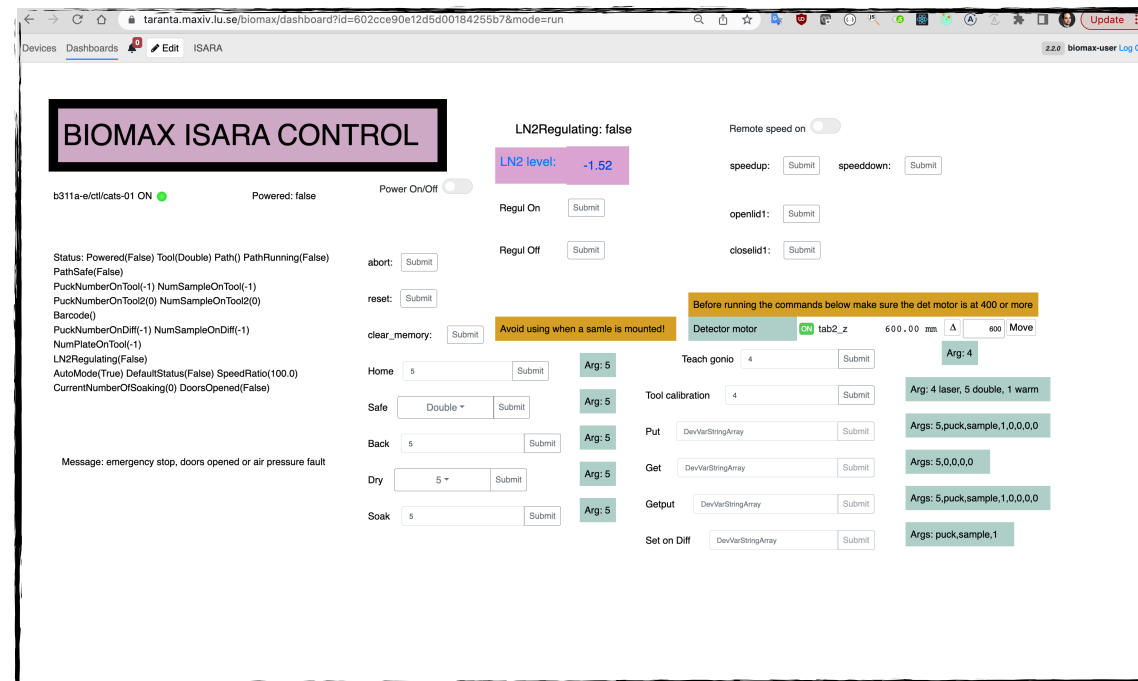
MX beamlines at MAX IV

- Early adopters of all new stuff

  - that improves UX, reliability, support, maintenance

- Perfomance (in a broad sense) oriented

  - Users' shift of few hours

- Web, web, web

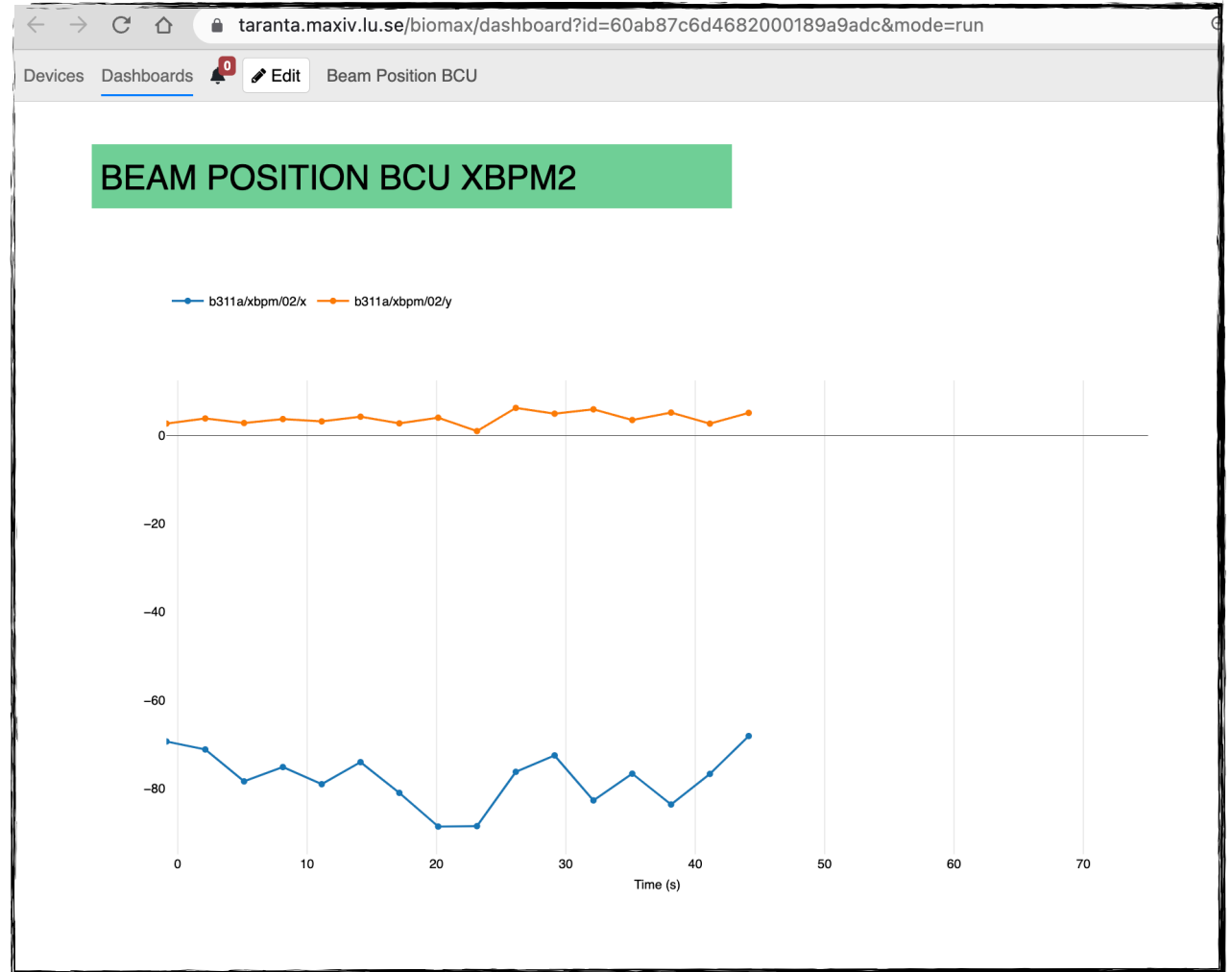- One tool for all is better than many

- Infinite wishlist 😃

ISARA Sample Changer

- User operation via mxcube

- Maintenance via jive&taranta (Staff only)
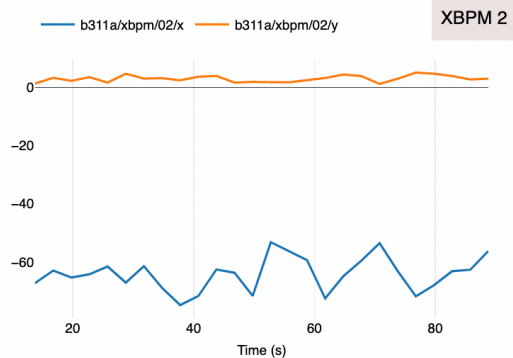
  - Recovery can be complex

https://taranta.maxiv.lu.se/biomax/dashboard?id=602cce90e12d5d00184255b7

Beam Position

- Neck pain during commissioning

- Reference view during operation

  - Users can also use this tool

https://taranta.maxiv.lu.se/biomax/dashboard?id=60ab87c6d4682000189a9adc

Beamline UI

https://taranta.maxiv.lu.se/biomax/dashboard?id=64520e903769310012fb7d35

Script Launcher 😱

- Beamline scripts into web interface

  - Complex sequence of actions

- *Prototype…* ahem ahem

  - No auth, local logs only, no output

Questions

- How do you use dashboards on a beamline. Are they personal? Or shared between all users of the beamline?

- Do you have something like a status overview of the whole beamline, with icons for all the equipment and its status?

- If so, can you launch sub-screens for each piece of equipment to "drill down" into details?

Questions

- Can you reuse these sub-screens between different beamlines, parameterising with the name of the tango device?

- Do you launch any native applications (like a Qt GUI) from a dashboard?

- Do you have any data visualization (e.g. server reading from HDF file and GUI plotting it)

- Do you launch experiments from Taranta?