



ESRF STATUS REPORT

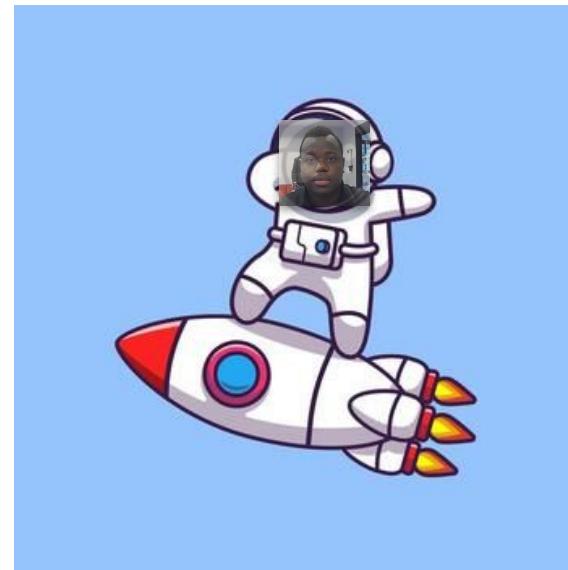
On behalf of the ESRF MXCuBE team:

Marcus Oskarsson, Daniele de Sanctis, Yan Walesch, Olof Svensson, Ludovic Broche, Axel Bocciarelli, Didier Nurizzo, Jean Baptiste Florial, Mathis Loussert, Antonia Beteva, Alejandro de Maria



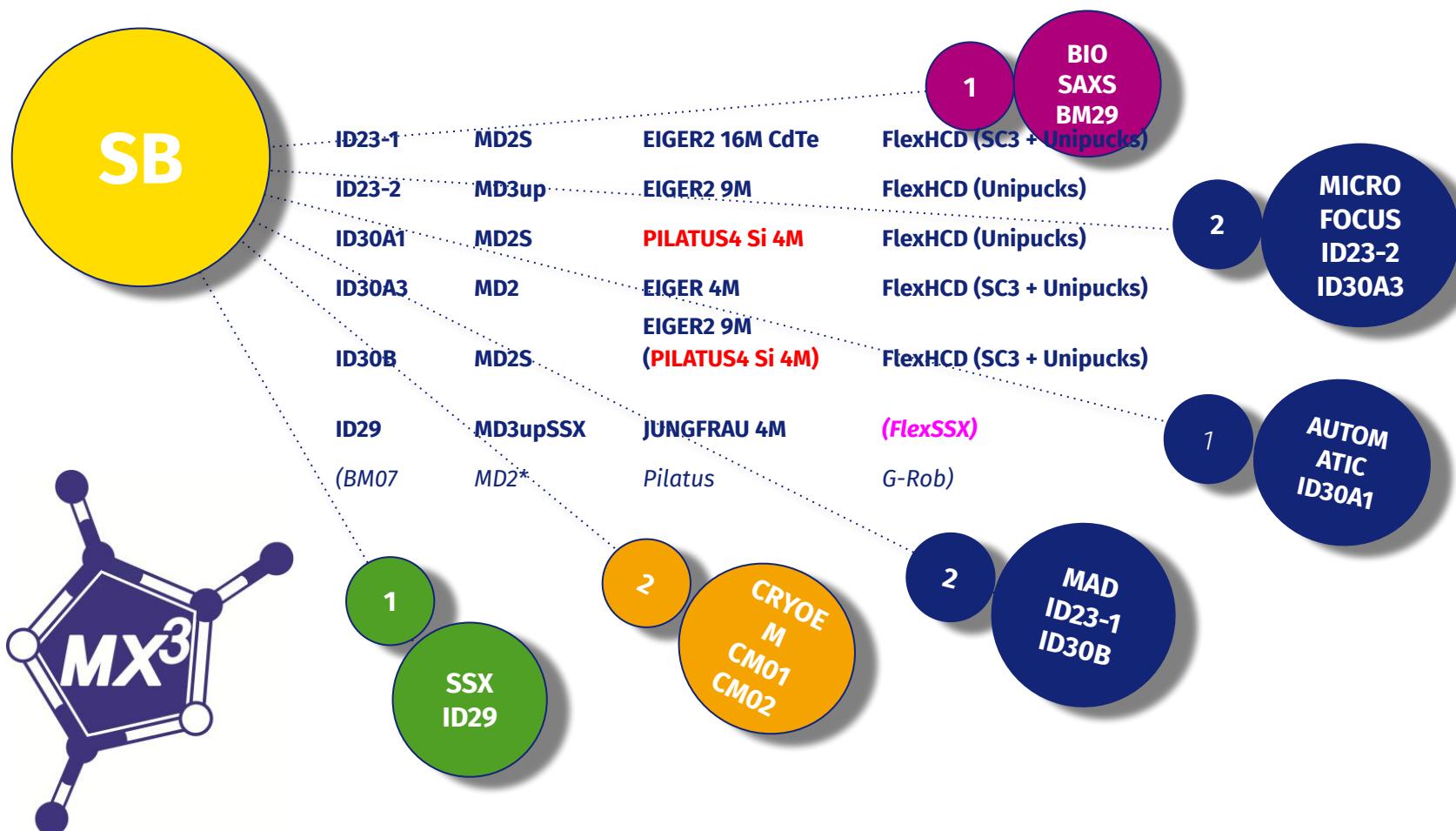
Jean Baptiste Florial (JB) contract is coming to an end and he is moving on to other adventures.

Big thanks JB !





BRIEF BEAMLINES SUMMARY



* ID30B detector change to Pilatus4 XE CdTe 4M November 2025

* BM07 New Diffractometer in development (Aerotech, b-zoom, Wago)



MXCuBE

- mxcubeweb 4.551.0 + ESRF
- mxcubecore 1.396.0 + ESRF

We are trying to keep up with the latest development with a two weeks delay, In May this year we were at:

- mxcubeweb 4.339.0
- mxcubecore 1.258.0

That's over 200 PRs on mxcubeweb and over 100 PRs on mxcubecore in roughly 6 months !

Congratulations and thank you to all of you that contribute to make this software and collaboration better !





Quick overview of ongoing development

- Commissioning of Bliss-LiMA2 integration with the Pilatus 4 on MASSIF-1
- Yaml compatible version on all beamlines
- Commissioning of AbstractDiffractometer on ID30A3
- Commissioning of Argus Sight and hutch camera streaming solution on MASSIF-1



Overview of ongoing development - Cybersecurity

- Security audit now done
 - No surprises but yes there is still work to be done for instance replacing the XMLRPCServer, we will make an “executive summary” for the collaboration.
 - Action plan to be defined with collaboration
- Network segmentation in place on all beamlines
- Work ongoing on improved testing environment using the MD, Flex, Lima simulation docker images. To be used in a penetration test.
- Improving internal CI/CD pipelines and deployment routines, still quite a manual procedure.



PLANS FOR THE NEXT SIX MONTHS

- Cybersecurity and maintenance
 - Continue to refactor and modernise front and back end code
 - Move to React 18 and 19
 - Create “executive summary” and action plan
- Lima2 and BLISS integration - Use Lima2 with Bliss on all MX beamlines
- Braggy is being integrated in the ESRF data portal via Hibou
- UX/UI Working group - Work on multi user automated data collection and overall improvements to the UX
- Implementation of the X-Ray Scan as decided in the Automation working group, part of the AbstractDiffractometer
- Argus Sight - Hutch cameras