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## Current status and upgrades of the MX beamline XALOC

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XALOC is a tunable MX beamline, in user operation since 2012, located at the 3rd generation synchrotron ALBA (Barcelona). It has been designed to deal with automatable X-ray diffraction experiments of micrometer-sized crystals, including a variety of crystal sizes, unit-cell dimensions and crystals with high mosaic spread and/or poor diffraction. The aim for a reliable all-in-one beamline is equaled by the aim to maximize ease-of-use and automatization. Mail-in data collection is in routine operation. A double gripper mounted at the CATS sample changer allows sample interchange in less than 20 seconds. Unipucks and EMBL/ESRF pucks are acceptable with a capacity of up to 6 Unipucks and 3 ESRF pucks. In addition, MXCube allows new features like loop autocentering, helical data collection and mesh scan showing the results in a heat map. ISPyB is fully operative for sample tracking/experiment reporting used through a web browser (<https://ispyb.cells.es/>). Automatic data processing with autoPROC, EDNA and XIA2/DIALS is carried out through the ALBA HPC. Furthermore, automatic data processing for small molecule users has recently been implemented. Other software like Dimple, PanDDA or Archimboldo is also available. The beamline allows "in-situ" diffraction and serial crystallography experiments have been carried out successfully. Drug discovery is already feasible although with some limitations. Several options of user access are available including a continuous call, open to new proposals throughout the year, providing beamtime within a few weeks. Spanish and Portuguese users are fully funded while dewar transport expenses are covered for the rest of the EU users. Current possibilities and important upgrades that will become available during 2022-2023 will be presented.

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