# Scientific Committtee meeting – Discussion summary

# MXCuBE project meeting, Trieste, September 2018

# DRAFT

The scientific committee revisited scientific topics that had been covered in previous meetings

* Serial crystallography. Work is in progress on several beamlines. Cactivities are coupled to detector technology, and are very much in R and D mode, with need for flexibility.
* Fragment screening. The main issue here is automation, processing, and metadata collection (which involves ISPyB).
* Sample characterisation and strategy design: Gleb Bourenkov thinks an overhaul of characterisation procedures is needed. Long, low-dose characterisation might be better in general, but is vulnerable to bad crystals, where such characterisation might fail. It is agreed that better strategies are required to maximise what a sample can deliver, and this is proposed as the topic for the next MXCuBE meeting. Part of the need would be for calculating dose budgets. There would be a need to determine the allowed dose, possibly automatically, possibly indirectly through choosing one of several standard situations. Particular points like spindle offsets might need to be considered.
* Complete automation: Related to previous point. The slow step might be sample changing and/or centring or mesh scan rather than the actual data collection, which would have I mplications for the time constraints on the data collection step.

*NOTE: This summary is based only on the summary given to the joint meeting with the Steering Committee. Additional input from participants in the meeting is highly welcome.*