STAP: Materials Science and Physics Support (MSPS)

Panel members: Stefan Carlson (MAX IV, chair), Bianca Haberl (ORNL), Michael Hofmann (FRM II, Munich), Klaus Kiefer (HZB, Berlin), Richard Down (ISIS), Robert Pederson (Univ. West).

Praise

- Very positive that Hanna Wacklin-Knecht now is head of the Scientific Support Division. She will enable further development of the CLS and MSPS groups.
- Good progress for the sample environment projects, integration, and tests.
- Opportunities for networking and training were taken by the MSPS staff.
- We highlight the IUCr workshop arranged by Damian Paliwoda, as well as the collaboration with MAX IV in organising the ISSE 2024 workshop. Both workshops were well attended and very successful.
- A reasonable selection of sample environments for "first science" have been acquired or is in procurement.
- We see a positive expansion of Octopy to other groups and facilities (more resources should be allocated to this development).

Concerns

- A subject-matter expert for high temperature sample environments is needed. Please try again to find a suitable applicant.
- MSPS is too low on technicians. Lauritz Saxtrup now has to give technical support to high pressure, low temperature, magnets, and high temperatures.
- The contact with LLB on the high-temperature furnaces is not working well. Both status updates and LLB-ESS transfer plan is missing.

MSPS charge question

Should MSPS take the technical risk of buying a very high field magnet (14 T) for spectroscopy or go for a more standard lower field one?

Our STAP strongly believes that the highest fields possible are needed in the long run. but as a start a lightweight, easy to handle, medium-field system may be procured. In user operation, both these type of systems will be needed.