UEC Meeting Minutes – 2025-04-25

Attendance: R. Boll, M. Centurion, M. Dunne, J.-S. Lee, S.-C. Lin, M. Mitrano, S. Pandolfi, N. Powers-Riggs, D. Oberthuer, B. Ofori-Okai, B. Tan, S. Teitelbaum, V. Tiwari, A. Zong, C. Rajendran, Leilani Conradson, Marius Schmidt, Uwe Bergmann

Absent : A. Follmer, N. Hartley, P. Jones, A. Rudenko

Invitee : Sebastian Boutet

Mike's Updates:

- **Updates on SC beam**
  Delivery of SC beam continues to be shared between the user program and improvement of performance, including readiness for the transition to the LCLS-II-HE long downtime.

  Beam delivery is now typically at 33kHz. Initial tests have been performend to demonstrate the ability to simultaneously feed the hard and soft x-ray beamlines with independent CW beams (as will be needed for LCLS-HE operations). These early tests demobstrated 1 kHz to the hard X-ray line alongside 8.2 kHz to the soft X-ray line. Further tests will seek to demonstrate 16 kHz / 16 kHz.

  The repetition-rate of the beam is currently limited by beam safety considerations, consistent with deliberate ramp-up of performance. The rate will likely stay at 33 kHz for the rest of the year, with potentially the option to ramp to 100 kHz in the October timeframe.

- **Run 25 shift allocation (September - December 2025):**

  There will be 133 shifts total, to be split between user scienceand readiness for LCLS-II-HE.

  The priority for use of the beam between now and the start of the Long Downtime (December 2025) is the scientific exploitation of existing endstations (TMO-IP1, ChemRIXS and qRIXS), plus early use of the TMO-IP2 (DREAM) endstation. The LCLS PRP will determine the scientific priority, as usual.

  This means that some new endstations will not be fielded. In particular: (i) the Surface Science endstation will be deferred to the Long Downtime period, as it can effectively use the NC 120 Hz beam, (ii) the TXI "tender spectroscopy" endstation will also be deferred to the Long Downtime period, (iii) the k-Microscope endstation (which has been developed by a consortium involving Stanford, DESY, Mainz, ETH, Kiel and SUNY) will not be able to be fielded until the LCLS-II-HE era,

- **LCLS SAC April 2025 update – charge areas**
  The following topics were addressed by the LCLS Scientific Advisory Committee:

- Facility status: Approach to prioritization of instrument science for CY2025
- Campaigns: Proposed evolution of existing and new campaigns
- Science delivery: Optimizing scientific output, and plans for SXR science in CY2026
- Bioscience: Approaches to enhance engagement of the bio-community
- Quadrennial Review: Preparation for the SAC
- X-ray detectors: Alignment with scientific priorities
- UED Instrument: Scientific and technical direction, and plans for UED2
- DXS instrument: Scientific and technical case for HEXIS-2 MIE
- R&D: Plans for X-ray and FEL R&D
- Scientific health: Early Career poster session and talks

- **The DOE's "Quadrennial Review" of the LCLS facility will now be held be on 9-11 September. The UEC will be asked to provide their perspective in a session at 8.30 am Sep 11**

- **Uncertainities with federal budget:** The allocation of funding for LCLS for both FY25 and FY26 is still being determined.

User meeting (UM) updates (Silvia Pandolfi and Leilani Conradson)

Next week, the organisers are meeting to finalise the workshops

UEC members will propose plenary speakers, and help rationalize the submitted workshops

The duration and structure of the UM was discussed. The need to avoid parallel sessions from the same community was discussed

Young Investigator award – discussion how to choose YI awardees, suggestions to invite the YI candidates before the UM for a talk and finalise the awardee before the user meeting. The UEC need to define and communicate clear eligibility criteria for this Award, including date of PhD defense and employment status.

Next steps:

Finalizing user meeting workshops (first week in May)