

LCLS UEC Meeting September 2, 2016

UEC: Petra Fromme, Richard Sandberg, Ross John Harder, Frank Rosmej

LCLS: Mike Dunne, Alan Fry, Elizabeth Goodwin, Leilani Conradson, Brittany Lemesh

1. LCLS/SSRL Users' Meeting

- The second LCLS plenary speaker (providing an overview of plans for LCLS-II-HE) will be Bob Schoenlein.
- The two UECs will not have a joint meeting on October 6th (since the DOE will not have a representative at the Users' Meeting due to federally imposed travel restrictions).
- Announcements to the user community were sent about the UEC election, registering for the meeting, poster awards, and submitting topics for the users' discussion.
- It was suggested that the UEC send users an online survey with 20-30 open-ended questions after the Users' meeting to generate feedback about what the users want from the UEC.
- At the meeting with LCLS management on October 7th, the UEC will discuss what the committee could do to assist management during the shutdown.

2. The UEC asked a question about the priorities during the upcoming shutdown. Mike responded with the following:

- Development of the conceptual designs of the instruments for LCLS-II (details of which are being continually updated on the LCLS website), along with the associated data systems, lasers, detectors, controls, optics, etc, to enable full exploitation of LCLS-II. Feedback from the user community is sought in all of these areas.
- Relocation of utilities in the Near Experimental Hall (NEH), to create significant additional lab-space on the "upper" floor (above the hutches). This will also allow the subsequent installation of 2 new hutches in this upper area for LCLS-II.
- Installation of new Hard X-ray distribution mirrors in the FEE and XRT, which will substantially improve the quality of the near-field and the overall transport efficiency to the hutches.
- Installation of a new periscope to allow pink beam transport to the XCS instrument (Hutch 4), providing XPP-like capability.
- Cleaning and/or replacement of soft-X-ray mirrors (addressing the substantial degradation in throughput)
- Preparation of new lab-space (as well as relocation of restrooms) in the tunnel of the Far Experimental Hall (FEH), to provide more space for sample preparation and characterization;
- Commissioning of enhancements to the lasers in MEC (specifically to increase the energy by 2x; enhance stability and pulseshape tailoring capabilities; and commission the 100TW short pulse laser)
- Development of plans for the new Photon Science Laboratory Building (PSLB), which will offer ~60,000 sq ft of lab-space in support of LCLS and other programs. This will come online in 2018/19 and encompass a suite of labs for

detector and sensor development; diffractive optics manufacture; reflective optics characterization; pump/probe laser development; bioscience labs for sample preparation and characterization. User community input into the details of this lab space is sought.

3. UEC election

- Richard Sandberg will become the new Chair of the UEC and the handover will occur on October 6th.
- The election for new members will close on October 7th.
- There was discussion about a possible addition of a student representative on the UEC with a one-year term. This will be announced during the Users' Meeting.
- During the November, 2016 teleconference, the UEC will discuss candidates for the Vice Chair.

4. LCLS access

- As of 5 October, the accelerator-area fence will be taken down from around the LCLS instrument halls, to allow direct access from the SLAC entrance/guest house to LCLS.
- A lighted and protected pathway from the Guest House to LCLS will be opened at the same time, as a result of the movement of this fence.
- Proximity card readers will be in operation 24/7 at the entrances to Building 950 (NEH), Building 999 (FEH) and Building 750. All users and staff will each have to swipe their badges to unlock the doors to these buildings. Visitors will need temporary badges for access. Access to the office building (901) will be open during the day.