## UEC Teleconference – June 22<sup>nd</sup>, 2017

**Attendees**: Mike Dunne, Richard Sandberg, Blaine Mooers, Petra Fromme, Daniel Rolles, Frank Rosmej, Klaus Sokolowski, Nora Berrah, Peter Weber, Ross Harder, Paul Jones (for LCLS User Office).

## Agenda Items

- Facility Update Mike Dunne
  - o <u>Run 15</u>
    - Run 15 is now underway, the beam turned on very well after an extended downtime. The first
      experiments went well. Construction work at NEH has a number of issues, but the Run 15 schedule
      was maintained largely intact.
    - During this downtime, the new HOMS (Hard X-Ray Offset) mirrors were installed and tested initial measurements show wonderfully round spot, still to confirm quantitative results but should give some significant improvements in performance, especially for FEH. New mirrors have also been installed to take the pink beam to XCS, and for the mirror multiplexing to MEC and MFX.
    - Soft x-ray systems went through cleaning & restriping; they were quite contaminated, early evidence is that performance is much improved.
    - Updates to the MEC long pulse laser are complete and exceed specifications (will likely be run at 60J on target in a 10ns/2w spot, compared to previous performance at 20J and a goal of 40J). This will be used in mid-July for first experiments. Work on improving the short pulse laser performance will proceed later in the year.
    - o <u>Run 16</u>
      - PRP Meeting 12-13 June 177 proposals submitted, similar balance to previous submission cycles with a slight reduction on CSD and an increase on AMO (possibly tied to XLEAP opportunities, with 10 proposals looking to use it. The other 'at risk' system (split & delay) will be tested this summer/fall, with scheduling of experiments to follow in Run 16. More details on PRP in a separate agenda item below.
    - o <u>LCLS II</u>
      - A major activity over the next few years will be instrument development for LCLS-II.
      - We want to work with the User Community to determine best first-use of LCLS-II, with recommendations for specific areas of focus to make best use of the new beam.
      - DoE have asked for a planning report by end of the fiscal year with details on LCLS-II development and plans for early science. Clearly, consultation with the user community over this period is critical. Already, there are "Instrument Advisory Panels" that have a direct input to each new instrument. There will also be a dedicated workshop at the Annual Users meeting. LCLS is asking for the help of the UEC to help develop these plans.
      - <u>ACTION</u>: Set up a specific meeting to discuss LCLS-II development and plans July/August.
    - Questions/Discussion
      - Nora Berrah: SLAC (SSRL/LCLS) are not members of SSURF, concerns about the lack of participation by national labs.
      - Mike Dunne: There is intent to become SSURF members, due process of approvals is taking a while.
      - Discussion about the proposed FY18 budget, and possible impact on LCLS.
- New User Office Liaison/Team members and update from user office.
  - User Office will soon be back to full strength.
    - Leilani Conradson (<u>Leilani@slac.stanford.edu</u>) has taken over as User Office manager (replacing Elizabeth Goodwin). You may already know her from her time at LANL.
    - Paul Jones (<u>pjones@slac.stanford.edu</u>) has joined the User Office team, background is customer service management with a focus on improving the user experience.
    - The remaining position on the User Office team (previously held by Brittany Lemesh who has transferred over to the SLAC VUE center as the first POC for incoming users) is currently being filled, with the new recruit scheduled to start at the end of July.
- Discussion on PRP Process and Member Selection

- Feedback from prior PRP output some concerns that feedback was vague and/or not relevant. This led to a broader discussion on PRP process and panel selection and suggestions that UEC could help with PRP selection.
- MD provided an overview of the PRP process:
  - During proposal submission, spokesperson nominates their preferred review Panel
  - LCLS management and PRP Chairs review these selections, and may adjust the panel allocation (e.g. if proposal is relevant to multiple areas, or to better reflect the expertise that would be needed to assess the proposal.
  - Proposals are considered independently by 3 reviewers (~20% reviewed by panelists from two panels)
  - PRP Meeting Reviews for all proposals allocated to the panel are shared with all sub-panel members. PRP Members debate all proposals within the group with input from all panelists (except where there is a Conflict of Interest). Discussion is led by Chair/Vice-chair. An LCLS Secretary (SRD staff member) is present to offer technical input on behalf of the facility if necessary and can also offer comments if they feel the panel has missed a fundamental point in the proposal.
  - Each sub-panel ranks proposals into 4 tiers, with each tier confined to a proportion of the overall beam time:
    - Tier 1: approx. 65% of total beam time. Proposals considered most outstanding by the Panel. Unless there is a technical reason for not allocating beam time, it's likely these experiments will be scheduled.
    - Tier 2: up to 150% of total beam time. These are generally excellent proposals with strong scientific merit, but due to the limited capacity it is inevitable that some of these proposals will miss out on beam time.
    - Tier 3: Good proposals that are considered by the panel to have less impact than the proposals ranked in Tier 2. Some of these proposals may still be given beam time if scheduling allows (e.g. they can be multiplexed with a Tier 1 or Tier 2 experiment).
    - Tier 4: The panel recommends that these experiments are not considered for beam time due to a fundamental scientific flaw.
      - As a subset of Tier 4 are proposals which the panel believes should complete PCS prior to being considered for beam time. These are for separate consideration alongside PCS proposal submissions.
  - The ranked proposals are presented to LCLS Management by panel Chairs/Vice-chairs. This includes a
    discussion as to the merits and subtleties of ranking proposals within and between tiers, to ensure
    that it's fully understood why each proposal was placed in that position.
  - The Panel Chair compiles a summary comment based on the 3 independent reviews and the discussion that took place during the PRP Meeting. This comment is reviewed by LCLS Management and provided as feedback to Spokespersons for all experiments.
  - For proposals that have a high chance of being fielded, the spokespersons are contacted and asked to fill out a detailed questionnaire on their technical requirements.
  - LCLS then begins the process of scheduling, with the proposals assigned time based on their ranking, technical feasibility, and their suitability for multiplexing. The final schedule is compiled to maximize the impact of experiments that are allocated beam time.
  - Appeals may be lodged with the LCLS Director. To overturn the scheduling decisions, it must be demonstrated that not only was the ranking inaccurate, but also that the proposal can be scheduled without adversely impacting proposals that were (and should remain) more highly ranked.
- One area that we are working to improve is the consistency and relevance of feedback from the PRP to Spokespersons. In the past, minor issues may have been presented as a reason for not getting beam time, when in reality they missed out because of scheduling limitations.
  - New guidelines have been given to the PRP to be more focused on constructive comments that can help the spokesperson improve their experiment in the future.
  - Ensure comments acknowledge proposals that are fundamentally excellent, but perhaps have one or two minor criticisms which dropped them below the threshold for beam time.

- In the past, the panel comments from a resubmission of a proposal which did not get beam time in a previous run cycle were not readily available to PRP Members this has been changed to ensure feedback reflects the changes made from a previous proposal submission and to ensure that it's clear why different reasons may have been given on a second submission if a proposal is still not granted beam time.
- Developing the role of the Secretary they are not present to provide scientific peer review, but we have instructed them to join the conversation to keep the discussions grounded in the most up to date information available in terms of facility performance, experimental progress, and suchlike. The panel Chair is ultimately responsible for leading the discussion.
- Questions/Discussion
  - Should users be able to see all of the original comments?
  - MD: This was discussed with the PRP and previously with the UEC. It's the longstanding view of LCLS Management and the panel members that releasing the individual thoughts is not the best way forward. The initial reviews are currently not written in a way that would not necessarily give the most applicable feedback to Spokespersons, and may undermine the anonymity of individual reviewers. However, we acknowledge that the summary statements have not always been extensive enough, and we are working to ensure that there is an in-depth statement that is sent to the Spokesperson wherever possible. LCLS management and secretaries can also help ensure the feedback is robust.
  - However, it's important to remember that due to the low acceptance rate there will continue to be very good proposals that miss out on beam time in some cases there will be very little criticism of the proposal, and yet it may still not be successful. Our challenge is to ensure we maintain balance in the PRP Membership, whilst also maintaining a degree of continuity and bringing in new members. Recommendations for new PRP Members are strongly encouraged, bearing in mind that members have to recuse themselves from any discussion in which they have a Conflict of Interest.
- Update on User meeting in September Richard Sandberg for Christoph Bostedt
  - Please see the attached and provide feedback/concerns to Christoph/Richard
  - One addition is an LCLS Young Investigator Award share nominations ASAP.
  - <u>ACTION</u> LCLS User Office to provide an invitation template to the Organizers so they can assess interest/availability from nominated speakers, with formal invites to follow from LCLS User Office.
  - RS to email User Community with an initial 'save the date' email LCLS/SSRL to send more communications over the coming months.
- Discussion on SSRL UEC effort to preserve budget for SSRL operations Blaine Mooers
  - ACTION Arianna Gleason to liaise with BM on efforts to advocate for SSRL / Light source community in general, consult with RS to ensure actions are consistent with SLAC position and constraints.
- New UEC member selection call for nominees
  - Members reaching the end of their term (3 years):
    - Daniel Rolles
    - Nora Berrah
    - Frank Rosmej
    - Peter Weber
  - Current bylaws require 12 members, but currently UEC is 12 including Blaine. With 5 areas of science, 12 members does not allow for equal representation.
  - Questions/Discussion
    - PF Could we extend the UEC numbers so each category has 3 representative? Would require a vote of the whole user organization. Motion passed to put this to Users.
    - So nominees invited from all areas of science, with vote to include the question of UEC size as well as candidates for vacant positions.

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ACTION ITEM	OWNER(S)	DEADLINE	STATUS
Schedule call in late July: LCLS-II development and plans – DOE is looking to get specifics on plan & timeline to launch.	LCLS User Office	7/30/17	
Send template Users Meeting invite to Organizers	LCLS User Office	6/23/17	
Lead advocacy for SSRL	Arianna Gleason/Blaine Mooers	Ongoing	