

LCLS UEC Meeting January 27th 2023

Present: M. Mitrano, N. Hartley, E. McBride, U. Bergmann, Y. Cao, G. Doumy, M. Dunne, M. Doyle, T. Gorkhover, D. Oberthür, N. Powers-Riggs, D. Rolles, M. Schmidt, M. Trigo, G. J. Williams, B. Mooers, C. Knotts

SLAC Director Search

The UEC Chair informed the UEC that the Search Committee for the new SLAC Director had contacted him asking for input from the UEC on the search.

Suggested priorities to highlight included: experience at LCLS and/or other user facilities, experience in managing large upgrade projects, a vision of SLAC where Photon Science plays an important role, an interest in directly engaging with users, and experience talking to politicians dealing with the DOE complex.

The UEC Chair was encouraged to emphasize the importance of the user facilities, and to keep an open dialogue with the Committee in order to potentially give more feedback, or for them to meet with the UEC.

Director's Updates

Mike Dunne describes the ongoing response to the December safety incident. All Control of Hazardous Energy and associated Lock-Out-Tag-Out processes are paused, which prevents the accelerator being brought back online. The DOE-led accident investigation is concluded, and a corrective action plan is expected next week. A new schedule for Run 21 and LCLS-II first light will follow, bearing in mind that the leadership does not want to add undue time pressure on staff.

The start of Run 21 has already been pushed back, and Sebastien Boutet is in contact with PIs about possible dates for rescheduled experiments. The summer downtime will not be moved, as there is an important number of technical interventions scheduled during that pause. Therefore, run 21 will straddle this break, with at last 6 weeks in July/August/September. A shorter April downtime, which was scheduled for postponed accelerator safety certification, is potentially more flexible. Since Run 22 will now start later (1st October at the earliest), the proposal deadline will be pushed to the end of March.

We continued to discuss possible new modes of access in Run 22, including how it will be scheduled and how best to take advantage of standard configuration. One idea for consideration is holding open 'contingency shifts' for additional standard configuration shots to complete a dataset, with the tradeoff that fewer experiments would be scheduled. It was pointed out that these might be more useful after a longer delay, once teams have started analysis. Related to this, LCLS currently has the option of Rapid Access and Data Collection Shift proposals, where the former can be submitted at any time with justification of urgency. Many groups were not aware of this, and Mike encouraged more users to take advantage of these options.

The external review of the scientific impact of LCLS is ongoing, chaired by Toni Taylor of LANL. A 100 page report was submitted, and additional information on the methodological impact was requested – both documents will be circulated to the UEC, and feedback is welcomed.

The UEC Chair asked about the current status of operating costs and funding for LCLS, in particular with reported challenges for facilities in Europe, and rising energy costs. Mike said that LCLS is in a good position in the immediate term, with the funding for FY23 including the largest budget increase in his time as director (~10% average across all light sources). This is largely thanks to the concerted efforts of many communities advocating for the needs of the facilities. There will still need to be a major step in funding for FY24 to take account of LCLS-II coming online; this is not yet determined. While energy prices are concerning, the situation is not as bad as Europe. At SLAC, any change in electricity rates is overshadowed by the effect of the new LCLS-II systems (new cryo plant, etc), which doubles the energy needs of the lab and adds an entirely new accelerator infrastructure; this is the primary reason for increased budget needs going forwards.