

2022-11-04: LCLS UEC Meeting Minutes

Present: Uwe Bergmann, Elisa Biasin, Yue Cao, Leilani Conradson, Gilles Doumy, Margaret Doyle, Mike Dunne, Taisia Gorkhover, Nicholas Hartley, Cathy Knotts, Agostino Marinelli, Matteo Mitrano, Blaine Mooers, Dominik Oberthuer, Chitra Rajendran, Daniel Rolles, Marius Schmidt, Sam Teitelbaum, Mariano Trigo

Absent: Jackson Williams, Natalia Power-Riggs, Emma McBride

Vice-Chair Announcement (MM): MM announced Nicholas Hartley as new vice-chair and thanked everyone who ran and voted for their involvement in the process.

LCLS Update (MD):

The LCLS-II machine is back on after downtime, and the beam has been propagated as far as the beam switchyard. They have successfully performed a fast cooldown, and are now tuning up to nominal electron beam performance (3.5 GeV) over the next month, while also bringing online beam and personnel safety systems. First light and subsequent handing over to operations is expected in mid-Feb to mid-March, which is approximately 2 weeks later than expected at the last meeting. Sebastien Boutet will let run 21 PIs know what effect this will have on beamtime scheduling.

SAC Meeting (MD): The Scientific Advisory Committee met two weeks ago, now including MM *ex officio*. MD ran through various issues that were raised, both for the facility in general and for specific scientific communities. Two particular issues (see below) were discussed in more detail, and it was suggested that both would benefit from meetings between the SAC and wider UEC, rather than just the chair.

Scientific Impact Assessment (MD): An “Assessment of Scientific Impact” of LCLS will be carried out over December-January. This aims to cover what LCLS has achieved over its history, both in terms of papers and citations, the fact that multiple other XFELs are now built or in progress, but also broader public impact, however we wish to define a measure of impact. Various possible things to address in this were raised, including the challenges of apportioning time and highlighting the need for funding from more agencies, but Mike emphasized that this report will be mostly retrospective. He will request further input from the UEC as the report is being written.

Broadening the User Base (MD): An ongoing concern of the SAC, and also raised by the science policy committee (SPC), is that the user base of LCLS continues to be as broad as possible, especially as new instruments come online and allow new scientific areas to be studied at LCLS. As the UEC, we need to see what we can do to help address this issue, and make sure that LCLS does not become a closed circle of the same groups and PIs. Part of this hinges on reducing the barrier to entry, such that groups without XFEL experience can perform successful experiments.

It was suggested that this is partly a question for the PIs of scientific campaigns. They have been asked to present posters at the next SAC meeting, and it would be good to include how they see their work bringing in more users.

It was suggested that experienced users should or could bring in collaborators from underrepresented institutions, with jobs like data analysis being possible remotely, allowing people to see how XFEL time works without needing to propose their own experiments. It was also suggested that cross-fertilization between beamlines would allow the user base of different endstations to broaden.

MM will circulate a google document in order to define the questions that need answering, and solicit answers and steps forward from the UEC. This will be used to write a document to share before the next SAC meeting in April.

Agenda topics (MM): MM asked that members of the UEC suggest topics to be discussed over the course of the year, and vote for which topics are highest priority to them and the users they represent