

Note of the 10th Meeting of the Physical Sciences & Engineering Advisory Panel held on 13 January 2022

- The Panel Chair gave an update on panel activities over the last year, including providing input to the 2021 Infrastructure Prioritisation exercise.
- The Chair had produced slides that could be used by panel members to explain the role of the panel at external meetings
- STFC provided an update on the international facilities (ESRF, ILL, European XFEL, ESS)
 - The ESRF Director General would be visiting STFC in March 2022
 - European XFEL would be changing its cost model in 2024. The European XFEL Council working group set up to consider possible mitigations for high or low using shareholders was expected to present its proposals in June 2022
- John Collier, the Director of the CLF, gave a presentation on the Extreme Photonics Application Centre (EPAC), currently under construction at the Rutherford Appleton Laboratory, explaining the transformative science it would enable. As EPAC capabilities would support science across multiple domains, the Panel hoped that UKRI's support for cross-disciplinary science will ensure the full benefits of EPAC can be realised.
- The Panel discussed the continued impact of Covid-19 on science and experiments at the large facilities.
 - The impacts of Covid-19 are now long-term, not just the short-term delay anticipated when the pandemic began. The panel believed an entire generation of students and other early career researchers has now been harmed due to the lack of facility access. The panel was concerned about training, from undergraduates to early career researchers.
 - The lack of in-person facility access and community interaction had impacted on the community's creativity and morale. The panel suggested one, low-cost solution would be for STFC to fund some workshops. Instead of the traditional science meetings focussing on current research, they could pump-prime creativity by focussing on new, ambitious ideas.
 - The burden on beamline scientists had been intense and the panel was concerned this was not sustainable.

- Andrew Beale, one of the four Science Board members who act as links between Science Board and the advisory panel, gave the panel an introduction to the work of Science Board. Areas where the panel could contribute included input to community consultations, providing feedback on the facilities, and horizon scanning.
- STFC's Strategy, Planning and Communications Directorate gave an update covering:
 - o Government priorities for science
 - o Current reviews of the UK research landscape
 - UKRI strategy and funding and STFC strategy developments
 - Infrastructure prioritisation exercise, and how the panel would be involved in future exercises.
- The Panel Chair would report to the February 2022 meeting of Science Board.