



Contribution ID: 969 Contribution code: MOPG55

Type: **Poster Presentation**

The UK XFEL conceptual design and options analysis - mid-term update

Monday, 20 May 2024 16:00 (2 hours)

The UK XFEL project is now mid-way through its three-year Conceptual Design and Options Analysis (CDOA) phase. The purpose of this phase is to develop concepts to meet the required 'next-generation' XFEL capabilities identified in the project's comprehensive, peer-reviewed, Science Case, which was developed by UK academia. The envisaged next-generation features are a step-change in both the number of simultaneous experiments and in their capability –through multiple, combinable FEL sources delivering transform limited pulses across a wide range of photon energies and pulse durations, together with a comprehensive array of synchronized sources including high power lasers and particle beams. The project is assessing options to achieve this either via a new UK-based facility or by investment at existing XFELs, based on criteria including performance, cost, and environmental sustainability. The project is holding a series of Townhalls and other workshops around the UK (see <https://xfel.ac.uk>) and is building collaborations nationally and internationally. This talk will give an overview of progress to date and future plans.

Footnotes

Funding Agency

Paper preparation format

LaTeX

Region represented

Europe

Primary authors: DUNNING, David (Science and Technology Facilities Council); MATHISEN, Storm (Science and Technology Facilities Council)

Presenter: MATHISEN, Storm (Science and Technology Facilities Council)

Session Classification: Monday Poster Session

Track Classification: MC2: Photon Sources and Electron Accelerators: MC2.A06 Free Electron Lasers