

Science at the FXE instrument of European XFEL

Monday, November 4, 2024 2:00 PM (30 minutes)

The FXE instrument enables ultrafast pump–probe experiments on timescales below 100 femtoseconds, catering to a broad scientific user community. FXE features two independent secondary X-ray emission spectrometers alongside a 1-Mpx detector for scattering studies. Its primary research focuses on the dynamic studies of chemical and biochemical reactions in liquids, as well as various solid-state applications. Utilizing a powerful laser as the pump source, FXE facilitates femtosecond time-resolution studies, leveraging a suite of hard X-ray tools to observe different phenomena.

This presentation provides a basic introduction to the techniques available at FXE, detailing their implementation and the types of information they can reveal about the studied systems. Additionally, we will present examples of recent measurements. Several selected showcase experiments will be discussed to demonstrate how the infrastructure at FXE can be employed to address various scientific challenges.

Type of presence

Presence online

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