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CFEL – Building 99, seminar room IV (first floor)

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Developing tools to enable time-resolved structural biology

Although time-resolved macromolecular crystallographic experiments with 100 ps time-resolution have been possible for > 15 years, and the recent free electron X-ray laser developments have pushed achievable time-resolution into the femtosecond regime, take up by the structural biology community remains low. This is due to a number of factors, but major contributors include the challenges associated with sample preparation and delivery, and the need to synchronise the reaction start across all molecules in the crystal. In addition, access to beamlines and infrastructure for time-resolved experiments remains limited. I will discuss the ongoing work in my group towards addressing these challenges.

