

Illuminating Biomolecular Complexity: X-ray Free Electron Lasers and Vibrational Spectroscopies for Protein, Aggregates, and Cellular Architectures



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Serial macromolecular crystallography: developments for high throughput measurements over large parameter spaces

Monday, June 30, 2025 12:10 PM (35 minutes)

Serial macromolecular crystallography (SMX) has emerged as a transformative technique enabling measurements across expansive parameter spaces in structural biology. Here I will talk about the evolution of serial crystallography techniques, particularly focusing on developments for time-resolved, pH-responsive, and temperature-controlled experiments and their application in unraveling dynamic structural changes within macromolecules. Highlighting recent results from X-ray Free Electron Laser (XFEL) and synchrotron sources, this presentation explores how serial crystallography in combination with cutting edge sample delivery and triggering methods can be used to advance our understanding of biological processes.

Scholarship eligibility

no

Primary author: Dr OBERTHÜR, Dominik (Center for Free-electron Laser Science)

Presenter: Dr OBERTHÜR, Dominik (Center for Free-electron Laser Science)

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