

Time-resolved X-ray capabilities at the advanced photon source post upgrade

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Amphithéâtre SOLEIL

After 25 years of successful operation, the advanced photon source (APS) is undergoing a major upgrade. The user operation will be paused for about one year while the entire storage ring is replaced and many new feature beamlines are built. The APS upgrade will deliver X-ray beams with substantially improved brightness and coherence. In the first part of the presentation, I'll give general introductions of APS upgrade projects including new and enhanced X-ray science opportunities.

APS is unique among synchrotron light sources in offering high brightness per bunch and large inter-bunch spacing, which is advantageous for time-resolved studies. The second part of the presentation will be focused on the recent development of time-resolved capabilities that leverage APS-U beam characteristics: (1) Time-resolved multi-modal nano-imaging & -diffraction; (2) Time-resolved high energy X-ray total scattering and microscopy with atomic pair distribution function analysis; and (3) Asynchronously X-ray transient absorption spectroscopy.



Ce séminaire sera suivi d'une pause café

SEMINAIRE

Formalités d'entrée : accès libre dans l'amphi du pavillon d'Accueil.

Si la manifestation a lieu dans le Grand Amphi SOLEIL du Bâtiment Central merci de vous munir d'une pièce d'identité (à échanger à l'accueil contre un badge d'accès).

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