

Multiple Timescale, *In-Situ/Operando* X-ray Spectroscopy and Scattering

Xiaoyi ZHANG

(X-ray Science Division, Argonne National Laboratory, Argonne, IL, USA)

Lundi 3 septembre 2018 – 14h00
Amphithéâtre SOLEIL

Multiple-Timescale, Pump-Probe X-ray Spectroscopy and Scattering (MTX) uses pulsed laser as excitation source, interrogates with stroboscopic X-ray pulse snapshots. The beamline 11-ID-D of advanced photon source (APS) provides various MTX tools to investigate structural dynamics underlying energy conversion processes in chemistry and materials sciences across a time-domain that spans from the X-ray single-bunch pulse width (80 picosecond) through the microseconds timescale. Several examples that used MTX to track photo-induced electronic and structural changes will be presented, representing applications in different research fields.

The coherent, high-energy X-ray beam characteristics of the upcoming APS upgrade opens doors to new, previously inaccessible time-resolved X-ray capabilities. This presentation will also discuss the future opportunities, impacts and challenges in time-resolved X-ray sciences utilizing the fourth-generation synchrotron source.



Ce séminaire sera suivi d'une pause café

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)

SYNCHROTRON SOLEIL

L'Orme des merisiers - Saint-Aubin - BP48 - 91192 GIF S/YVETTE cedex

www.synchrotron-soleil.fr/fr/evenements

CONTACT : sandrine.vasseur@synchrotron-soleil.fr

SEMINAIRE