

Non-invasive three-dimensional imaging of biological tissue on the nanoscale by X-ray ptychographic tomography

Ana DIAZ

(Coherent Small-Angle X-ray Scattering cSAXS beamline, Coherent X-ray Scattering Group (CXS), Paul Scherrer Institute, Villigen - PSI, Switzerland)

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Amphithéâtre SOLEIL

Using coherent X-rays in the multi-keV energy regime, ptychographic tomography provides 3D electron density maps of specimens with tens of microns thickness without having to physically cut them and with an isotropic spatial resolution down to tens of nanometers. Although biological tissue offers very low contrast at these energies, some examples have demonstrated the feasibility of the technique for unstained cryogenically preserved samples. In this presentation I will present recent results of biological imaging with ptychographic tomography and I will give an outlook towards the improvements expected with 4th generation synchrotron sources.



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)

SYNCHROTRON SOLEIL
L'Orme des merisiers - Saint-Aubin - BP48 - 91192 GIF S/YVETTE cedex
<https://www.synchrotron-soleil.fr/fr/evenements>
CONTACT : sandrine.vasseur@synchrotron-soleil.fr