

Synchrotron Infrared at the ALS and future ALS-U

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Amphithéâtre SOLEIL

Infrared beamlines at synchrotron facilities worldwide take advantage of the spectrally broad and bright source characteristics of synchrotron radiation to perform label-free spectroscopic imaging of a variety of natural and engineered materials obtained from locations ranging from the bottom of the ocean to the depths of space. The Advanced Light Source (ALS) at Lawrence Berkeley National Laboratory operates three infrared beamlines with micro-spectroscopic and nano-spectroscopic capabilities, in which the spatial resolution is determined by diffraction or by the radius of an AFM tip, respectively. In this talk, I will describe the technical aspects of these techniques and highlight several recent applications in which synchrotron infrared nano-spectroscopy (SINS) was used to measure strain at the nanoscale. Furthermore, I will discuss the current plans for infrared at ALS-U, which will upgrade the ALS storage ring to a multi-bend achromat lattice with diffraction-limited performance into the soft x-ray regime.



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

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