

Séminaire SOLEIL

"Silicon Pixel and Strip Detectors : Synchrotron and Laboratory Applications"

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Invité par Michel van der REST

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Grand Amphi SOLEIL**

A new generation of single-photon counting x-ray detectors, pioneered by several groups including the Swiss Light Source (SLS), is enabling novel measurements with synchrotron radiation as well as improving the efficiency of traditional applications. These detectors feature high speed, wide dynamic range and noise-free room temperature operation. Principle applications include macromolecular crystallography, small-angle scattering, surface diffraction and phase-contrast imaging.

Exciting improvements of this technology are already in the laboratory. The new EIGER chip recently tested at the SLS can capture x-ray images at 10 kHz. And CdTe sensors promise to extend the operating range of pixel detectors to much higher energy.

Complementing the 2-dimensional pixel detectors are the 1-dimensional strip detectors. The large strip detector at SLS is used for time resolved powder diffraction as well as rapid characterization of stable samples. Smaller strip detector systems are finding wide application in laboratories.

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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