

# New Generation of Fast Hybrid Pixel Detectors Operating in Single Photon Counting Mode

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**Amphithéâtre SOLEIL**

Hybrid pixel detectors working in a single photon counting mode process photon by photon in each pixel independently. Their development is strongly connected to the instrumentation for particle physics, synchrotron experiments and other X-ray imaging applications. Stringent and growing requirements on smaller pixel size, higher data throughput and more sophisticated functionality are imposed for such detection systems. During this seminar a new generation of hybrid pixel detectors based on UFXC32k integrated circuit will be presented. The small pixel pitch of 75  $\mu\text{m}$ , very good matching from pixel to pixel (both in offset and gain), energy window, low noise performance, high count rate per pixel and high frame rate per chip makes UFXC32k very attractive solution for building ultra fast detection systems for different synchrotron applications.



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)

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