



Irfu
Institut de recherche
sur les lois fondamentales
de l'Univers

**Séminaire
DPhP**

Lundi 26/11/2018, 11h00

CEA-Saclay Bât. 141, salle André Berthelot

Monolithic CMOS Pixels for LHC Trackers

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Pixel detectors are essential parts of the LHC tracking devices providing track parameter and vertex measurements. The state of the art are so-called hybrid pixel detectors where the pixel sensor element and the readout chip are different entities mated by bonding and flip-chipping technologies. In recent years, depleted monolithic active pixels sensors (DMAPS) have been developed that combine the functionality of both parts. While severe issues of charge collection, cross coupling between sensor, and radiation tolerance impose challenges that had to be addressed, the developments have now reached a level of maturity that they can be considered in the LHC trackers. The talk will give an overview of the developments within ATLAS.

Le café sera servi 10 minutes avant.

NB : La présentation d'une pièce d'identité est exigée à l'entrée du centre. Tous les auditeurs extérieurs sont priés de prévenir à l'avance Martine Oger, tél. 01 69 08 23 50, e-mail : martine.oger@cea.fr. (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).