



**UNIVERSITÉ
DE GENÈVE**

FACULTÉ DES SCIENCES
Département de physique
nucléaire et corpusculaire

SÉMINAIRE DE PHYSIQUE CORPUSCULAIRE

SUJET: Pixel detectors for experiments with high rate and radiation

PAR: Dr Maurice Garcia-Scieveres
LBNL, USA

DATE: Mercredi 20 septembre 2017, 11h15

LIEU: Science III, Auditoire 1S081
Boulevard d'Yvoy, 1211 Genève 4

RÉSUMÉ:

I will review advances that enable hybrid pixel detector designs for the HL-LHC, with emphasis on readout integrated circuits. Compared to the original ATLAS and CMS pixel detectors, the HL-LHC generation will have 8 times smaller pixels, 10 times higher hit rate and radiation tolerance, 10 times higher trigger rate, and 30 times higher data output bandwidth, all with half the mass per layer.

I will give examples of ongoing development, remaining challenges, interesting new ways to think about old problems, and lessons learned.

INFORMATION : <http://dpnc.unige.ch/seminaire/annonce.html>
ORGANISATEURS: Anna.Sfyrla@unige.ch & Domenico.Dellavolpe@unige.ch