UNIVERSITÉ DE GENÈVE
FACULTÉ DES SCIENCES

Colloques de Physique des Particules

dans le cadre de la procédure de nomination d'un-e professeur-e associé-e ou assistant-e au DPNC

SUJET: **The Quest for Bottom and Top squarks: past, present and future at the ATLAS experiment**

PAR: **Dr Monica D'Onofrio**

DATE: Mardi 26 novembre 2013, 11h00

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

RÉSUMÉ:

Naturalness arguments for weak-scale supersymmetry favour supersymmetric partners of the third generation quarks with masses not too far from those of their Standard Model counterparts. Real and virtual production of bottom and top squarks via decay of a gluino can be significant if the mass of the gluino does not exceed the TeV scale. Third generation squarks with masses less than a few hundred GeV can also give rise to direct pair production rates that can be observed at the LHC. In this seminar I shall illustrate how searches for top and bottom squarks have been conducted in ATLAS during Run I, report on recent results and discuss prospects for Run II.

Les membres du corps enseignants et les étudiants sont invités aux colloques et peuvent faire part de leurs commentaires au Doyen de la Faculté