



**UNIVERSITÉ
DE GENÈVE**

FACULTÉ DES SCIENCES
Département de physique
nucléaire et corpusculaire

SÉMINAIRE DE PHYSIQUE CORPUSCULAIRE

SUJET: **Looking for a hidden sector in exotic Higgs boson decays with the ATLAS experiment**

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RÉSUMÉ:

The nature of dark matter is one of the most intriguing questions in particle physics. Dark matter can be postulated to be part of a hidden sector whose interactions with the visible matter are not completely decoupled. The discovery of a fundamental scalar particle compatible with the Higgs boson predicted by the Standard Model paves the way for looking for dark matter with novel methods. An overview of the searches looking for a hidden sector in exotic Higgs decays within the ATLAS experiment is presented. Prospects for searches with LHC data at a center-of-mass energy of 13 TeV are summarised .

INFORMATION : <http://dpnc.unige.ch/seminaire/annonce.html>

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