



**UNIVERSITÉ
DE GENÈVE**

FACULTÉ DES SCIENCES
Département de physique
nucléaire et corpusculaire

! ATTENTION, CHANGEMENT D'AUDITOIRE !

SÉMINAIRE DE PHYSIQUE CORPUSCULAIRE

SUJET : Dark matter searches with liquid xenon

PAR: Prof. Laura Baudis (University of Zurich)
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DATE: Mercredi 6 février, 11h15

LIEU: **Auditoire Stückelberg, Ecole de physique
24, quai Ernest-Ansermet, 1211 Genève 4**

RÉSUMÉ:

We have strong evidence that about 80% of matter in our Universe is dark, revealing its presence only by its gravitational attraction. If the dark matter is made of Weakly Interacting Massive Particles (WIMPs), it can be directly detected via elastic scattering from nuclei in ultra-low background, deep underground detectors. After a brief introduction to the direct detection method, I will review current techniques based on liquid xenon as target material to search for these hypothetical particles. The focus will be on recent results, including those of XENON100, and on the most promising ideas for the near future.

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

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