

**Vendredi 11/04/2014, 11h00-12h00**

CEA-Saclay Bat 141, salle André Berthelot

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# **Dark Matter in the Black Hills : the LUX experiment**

**SIMON FIORUCCI**

Brown University

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The Large Underground Xenon experiment (LUX) is a 370 kg liquid xenon time projection chamber dedicated to the direct detection of dark matter interactions. It recently released the results from its first run and has placed the most stringent limits to date on the WIMP-nucleon cross-section in a broad range of dark matter particle masses. I will present the design, commissioning and results from LUX and give a few hints as to what to expect in the near future.

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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](mailto:martine.oger@cea.fr). (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).