

**Lundi 12/02/2018, 11h00**

CEA-Saclay Bât. 141, salle André Berthelot

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## **Indirect dark matter searches at ATLAS**

**WILLIAM KALDERON**

Lund University

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Collider-based searches are an important component of the wider search for Dark Matter across particle physics, astrophysics and cosmology. Being a hadron collider, the LHC is only sensitive to Dark Matter that couples (directly or via mediators) to quarks, in which case the search for a quark - Dark Matter mediator can be easier than for Dark Matter particles themselves. I provide an overview of these searches and their complementarity to others in the hunt for Dark Matter, and focus on their limitations and the new methods being developed to overcome them in the current, high-luminosity, LHC era, with examples from recent ATLAS results in the field.

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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).