

**Lundi 25 mai 11h00**

CEA-Saclay Bât 141, salle André Berthelot

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# Noble Liquid Detectors for Dark Matter Searches - Depleted Argon and Xenon

CRISTIANO GALBIATI

PRINCETON

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Evidence for the existence of dark matter is now compelling, but its nature remains a fundamental mystery. Particularly intriguing is the possibility that dark matter is made of Weakly Interacting Massive Particles (WIMPs). WIMPs may be detectable by their collisions with nuclei on Earth, but the low expected rate of such collisions and low energy of the recoil nuclei requires massive detectors with extremely low background rates, located in a deep underground laboratory.

I will discuss and review plans to search for WIMPs with depleted argon and xenon detectors.

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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 Emilie Chancrin, tél. 01 69 08 23 50, e-mail : [emilie.chancrin@cea.fr](mailto:emilie.chancrin@cea.fr). (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).