

Lundi 18 juin 11h00

CEA-Saclay Bat 141, salle André Berthelot

Searches for Dark Matter in Monojet and Monophoton Events at CMS

STEEVEN WORM

CERN / RAL

The existence of "Dark Matter", as inferred from astronomical observations such as the rotation of galaxies and gravitational lensing, seems a pretty safe bet. There seems also to be a good chance that a new, invisible (dark!) particle is responsible. Dark Matter may constitute the majority of matter in our universe, but so far there have been few dedicated searches in the data collected from the LHC. This has changed recently, as CMS has searched for hints of these illusive particles in "monojet" and "monophoton" data, within the framework of an effective theory for their production. I will present the results of a search for Dark Matter, performed using data collected by the CMS experiment at the LHC in proton-proton collisions at a center-of-mass energy of 7 TeV.

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. (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).