



Irfu

Institut de recherche
sur les lois fondamentales
de l'Univers

**Séminaire
DPhP**

Lundi 28/01/2019, 11h00

CEA-Saclay Bât. 141, salle André Berthelot

Elastic and Diffractive Scattering at the LHC

PAUL NEWMAN

The University of Birmingham

Whereas most LHC physics is concerned with very rare or exotic processes such as the production of Higgs bosons or new particles beyond the Standard Model, our understanding of what 'usually' happens in high energy proton-proton collisions is surprisingly poor. This talk will review LHC measurements of some of the most commonly occurring processes, which lead to final states with intact protons. These will include elastic scattering ($pp \rightarrow pp$), diffractive dissociation central exclusive production ($pp \rightarrow pXp$). The talk will also cover prospects for future studies with unprecedented high luminosities.

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