

Département de Physique Nucléaire  
SÉMINAIRE

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Vendredi 24/05/2019, 11:00-12:00

CEA Saclay, Orme des Merisiers Bat 703, p 45

Photon-photon physics at the LHC

**Laurent Schoeffel**

Under certain trigger requirements, LHC can be considered as a photon-photon collider. Indeed, in proton-proton, proton-ion, ion-ion collisions, when incoming particles pass very close to each other in peripheral collisions, the incoming protons or ions remain almost intact and continue their path along the beam axis. Then, only the EM fields of these ultra-relativistic charged particles (protons or ions) interact to leave a signature in the central detectors of the LHC experiments. The interest is that the EM+EM or photon-photon interaction happens at unprecedented energies where the theory can be tested in extreme conditions. Also new phenomena could be probed in very clean and simple final states. We propose to review the results that have been obtained at the LHC in those domains, and give some lines of perspective for the future.

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Le cafe sera servi 10 minutes avant

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