

Séminaire du Laboratoire de l'Accélérateur Linéaire

Fabrizio Caola

CERN

Vendredi 27 Mai 2016 à 11 :00

Precise predictions for Higgs physics at the LHC

The discovery of the Higgs boson at the CERN Large Hadron Collider (LHC) set a milestone in our understanding of fundamental interactions. Studying the properties of the new particle is now one of the major goals of the LHC program. These investigations require very precise theoretical predictions for signal and background processes, able to reliably model the complex experimental environment of hadronic collisions. In this talk, I will highlight some of the recent progress towards more accurate theoretical predictions by discussing two examples : Higgs boson production in association with a hard jet and off-shell Higgs production. After motivating their role in Higgs characterization, I will briefly review the theoretical advances which led to a better description of these processes and discuss their phenomenological implications for LHC analysis.

Salle 101 du LAL - Bât. 200, Orsay

Thé et café seront servis 5 m
n avant le séminaire

Responsables : N. Delerue et R. Tanaka (seminaires@lal.in2p3.fr)- http://www.lal.in2p3.fr