



#### Séminaire du Laboratoire de l'Accélérateur Linéaire

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# Jour inhabituel

Lundi 4 Avril 2011 à 11:00

## Studies on Higgs searches and sensitivity in CMS

We present the results of searches for the Higgs boson performed using data collected in 2010 by the CMS experiment at the LHC in pp-collisions at a centre-of-mass energy of 7 TeV. Limits are set on the production of the Higgs boson in the context of the SM, an extended SM in the presence of a sequential fourth family of fermions and extended Higgs sector of SUSY theories. We overview the prospects for Higgs boson searches with a data sample of 1 fb $^{-1}$  to be collected in 2011 pp-collisions at a centre-of-mass energy of 7 TeV. We present sensitivity projections for SM-like decay modes and the MSSM-like signature and also discuss a few other possible models/searches.

#### Salle 101 du LAL - Bât. 200, Orsay

Thé et café seront servis 1/4 h avant le séminaire

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