



Irfu

Institut de recherche
sur les lois fondamentales
de l'Univers

**Séminaire
SPP**

Lundi 13/05/2013, 11h00

CEA-Saclay Bat 141, salle André Berthelot

$H \rightarrow \tau\tau$ in CMS : a particle flow analysis

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This winter, CMS presented in Moriond the first strong hint for the decay of the new boson into a pair of taus. The analysis is based on a variety of final states corresponding to the decay modes of the two taus, containing 0 to two leptons. Several event categories are defined to increase the signal over background ratio, for example using the characteristic di-jet signature of the vector-boson fusion Higgs production process. All the physics observables used in the analysis (taus, lepton identification and isolation, MET, jets) and interesting analysis tricks are based on the particle-flow event reconstruction, which will be described in details.

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).