



Séminaire du Laboratoire de l'Accélérateur Linéaire

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Vendredi 29 Mars 2013 à 11 :00

Search for the Standard Model Higgs boson in $H \rightarrow \tau\tau$ decays with the ATLAS detector

In this seminar, a search for the Standard Model (SM) Higgs boson decaying into a pair of tau leptons will be reported. The analysis is based on data samples of p-p collisions collected by the ATLAS experiment at the LHC and corresponding to integrated luminosities of 4.6 fb and 13.0 fb at centre-of-mass energies of $\sqrt{s}=7$ TeV and 8 TeV, respectively. The observed (expected) upper limit at 95 % CL on the cross-section times the branching ratio for SM $H \rightarrow \tau\tau$; is found to be 1.9 (1.2) times the SM prediction for a Higgs boson with mass $m_H=125$ GeV. For this mass, the observed (expected) deviation from the background-only hypothesis corresponds to a local significance of 1.1 (1.7) standard deviations.

Auditorium Pierre Lehmann du LAL - Bât. 200, Orsay

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



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