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## Evidence for the 125GeV Higgs boson decaying to a pair of tau leptons at CMS

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A search for the standard model Higgs boson decaying into a pair of tau leptons is presented, using data recorded by the CMS experiment in 2011 and 2012. The analysis includes all 6 possible final states of the two taus, each of which decays either hadronically or leptonically into an electron or muon. An excess of events over the expected contribution from backgrounds is observed, corresponding to a local significance of larger than 3 sigma for Higgs masses between 110 and 130 GeV. The excess is consistent with standard model predictions and provides evidence for the 125 GeV Higgs boson decaying into a pair of tau leptons.

**Primary author:** LANE, Rebecca Charlotte (Imperial College Sci., Tech. & Med. (GB))

**Presenter:** LANE, Rebecca Charlotte (Imperial College Sci., Tech. & Med. (GB))

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