

ICHEP2012



Contribution ID: 694

Type: **Poster Sessions**

Search for SM Higgs boson in $2l2\tau$ final state

Saturday, 7 July 2012 18:00 (1 hour)

Results are presented on the search for the standard model Higgs boson decaying into two Z bosons, with one boson decaying into a pair of charged leptons, either muons or electrons, and the other boson decaying into a pair of taus which taus decay both hadronically and leptonically. This analysis is mainly sensitive for Higgs masses higher than 180 GeV where both Z's are on-shell. For low mass Higgs boson with the same final state, the Z associated Higgs production with Higgs decay into tau tau and WW have been investigated. The full data sample of 4.7 fb⁻¹ of pp collisions collected in 2011 at a CM energy of 7 TeV with the CMS experiment have been analyzed, as well as a significant fraction of the 2012 luminosity delivered so far at the new energy of 8 TeV.

Primary author: Prof. MAJUMDER, Gobinda (Tata Inst. of Fundamental Research (IN))

Presenter: Prof. MAJUMDER, Gobinda (Tata Inst. of Fundamental Research (IN))

Session Classification: Poster Session

Track Classification: Track 1 - The Standard Model and EW Symmetry Breaking - Higgs Searches