

Abstract:

A prospective analysis for the search of the Standard Model Higgs boson with CMS experiment is presented. The analysis strategy for inclusive production of the Higgs boson decaying in WW^* pairs is discussed at 10 TeV and 7TeV. In this Channel one of the W decays to mu and the other decays to tau which tau decays hadronically. Signal and background datasets with a detailed Monte Carlo simulation of the detector response and complete reconstruction chain are used to obtain the results. Data corresponding to an integrated luminosity of up to 200 pb⁽⁻¹⁾ for 10TeV and 500 pb⁽⁻¹⁾ for 7TeV are analysed.