

Higgs to WW measurements with CMS

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The latest set of results on Higgs decay to a W boson pair is presented. With a statistics of 36/fb collected by the CMS experiment at the LHC at 13 TeV center of mass energy, the Higgs to WW decay has been observed at CMS with more than 5 sigma for the first time, providing a significant contribution to the current fit of the Higgs boson couplings to fermions and vector bosons. Exploiting the large cross section times branching ratio of this channel, and using 78/fb of data, differential distributions as a function of the Higgs boson transverse momentum and as a function of the number of jets produced in association have been measured. Finally a search for high mass scalar resonances decaying to W boson pairs is performed ranging up to 3 TeV of mass.

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