Measuring the WW cross section using the Random Forest MVA

Thoth Gunter, Michael Schmitt

January 11, 2018

Abstract

The pp→WW process is an electro weak process that has historically shown discrepancies between predicted and measured cross section values, far greater than the other electro weak processes. Standard WW cross section measurements rely on strict jet multiplicity cuts, introducing additional hard to calculate log correction factors. We present the preliminary results for the measurement of the WW→2l2nu cross section using the Random Forest MVA technique using 13 TeV proton-proton collision at the LHC recorded by the CMS detector. With this technique we measure the pp→WW→2l2nu cross section.