

Lambda extraction summary

February 18, 2016

In this document we briefly summarise the results of the Higgs trilinear coupling extraction exercise, for the case of the 14TeV HL-LHC and the 100TeV FCC.

1 14 TeV

1.1 Cross-section variation with λ

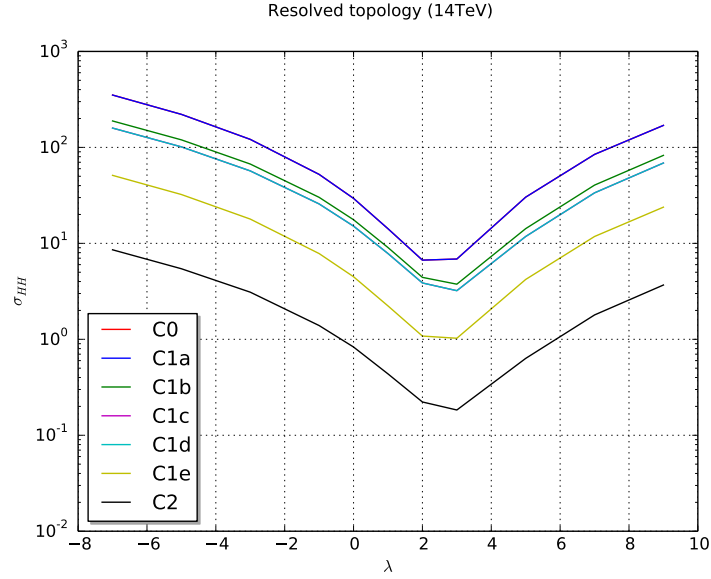


Figure 1: Pre-MVA cross-section variation with λ for resolved channel at 14TeV HL-LHC.

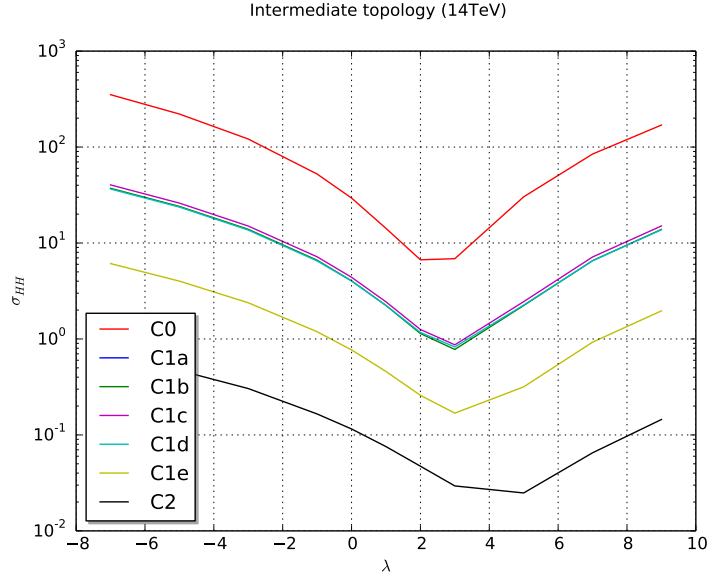


Figure 2: Pre-MVA cross-section variation with λ for intermediate channel at 14TeV HL-LHC.

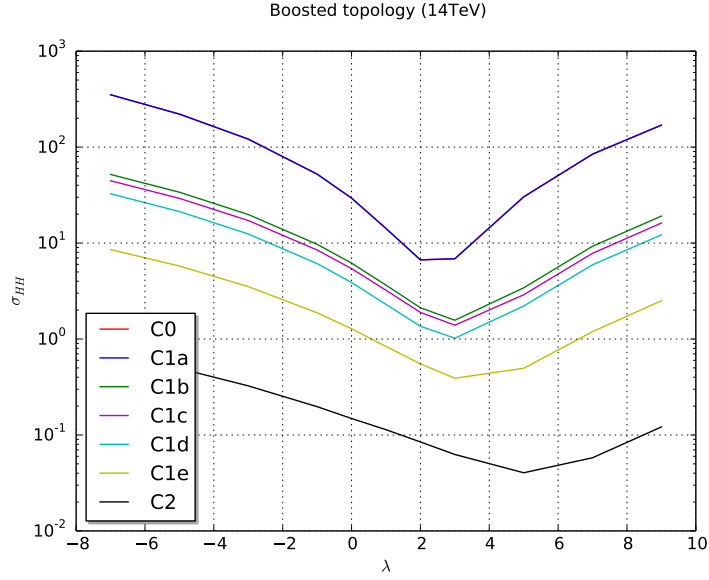


Figure 3: Pre-MVA cross-section variation with λ for boosted channel at 14TeV HL-LHC.

1.2 Extraction of lambda - χ^2 profiles

2 100 TeV

2.1 Cross-section variation with λ

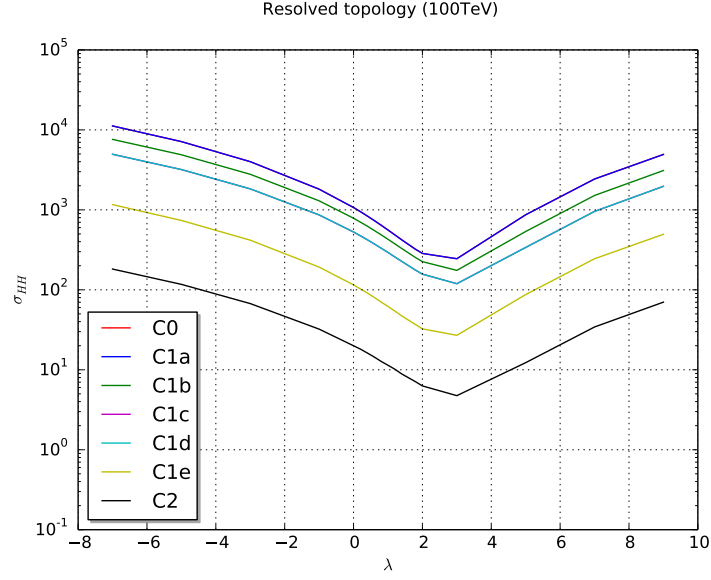


Figure 4: Pre-MVA cross-section variation with λ for resolved channel at 14TeV HL-LHC.

2.2 Extraction of lambda - χ^2 profiles

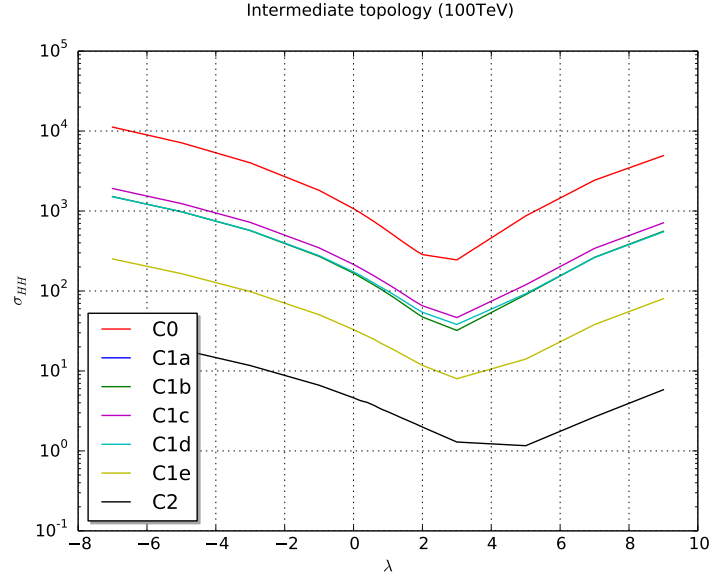


Figure 5: Pre-MVA cross-section variation with λ for intermediate channel at 14TeV HL-LHC.

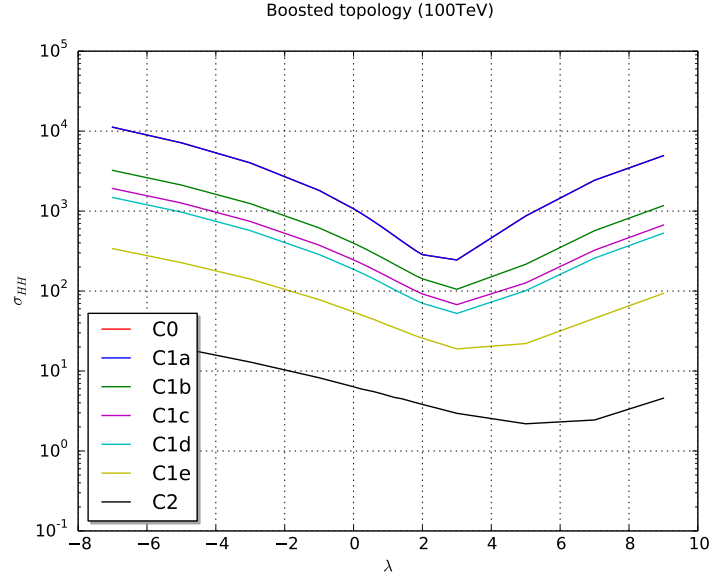


Figure 6: Pre-MVA cross-section variation with λ for boosted channel at 14TeV HL-LHC.