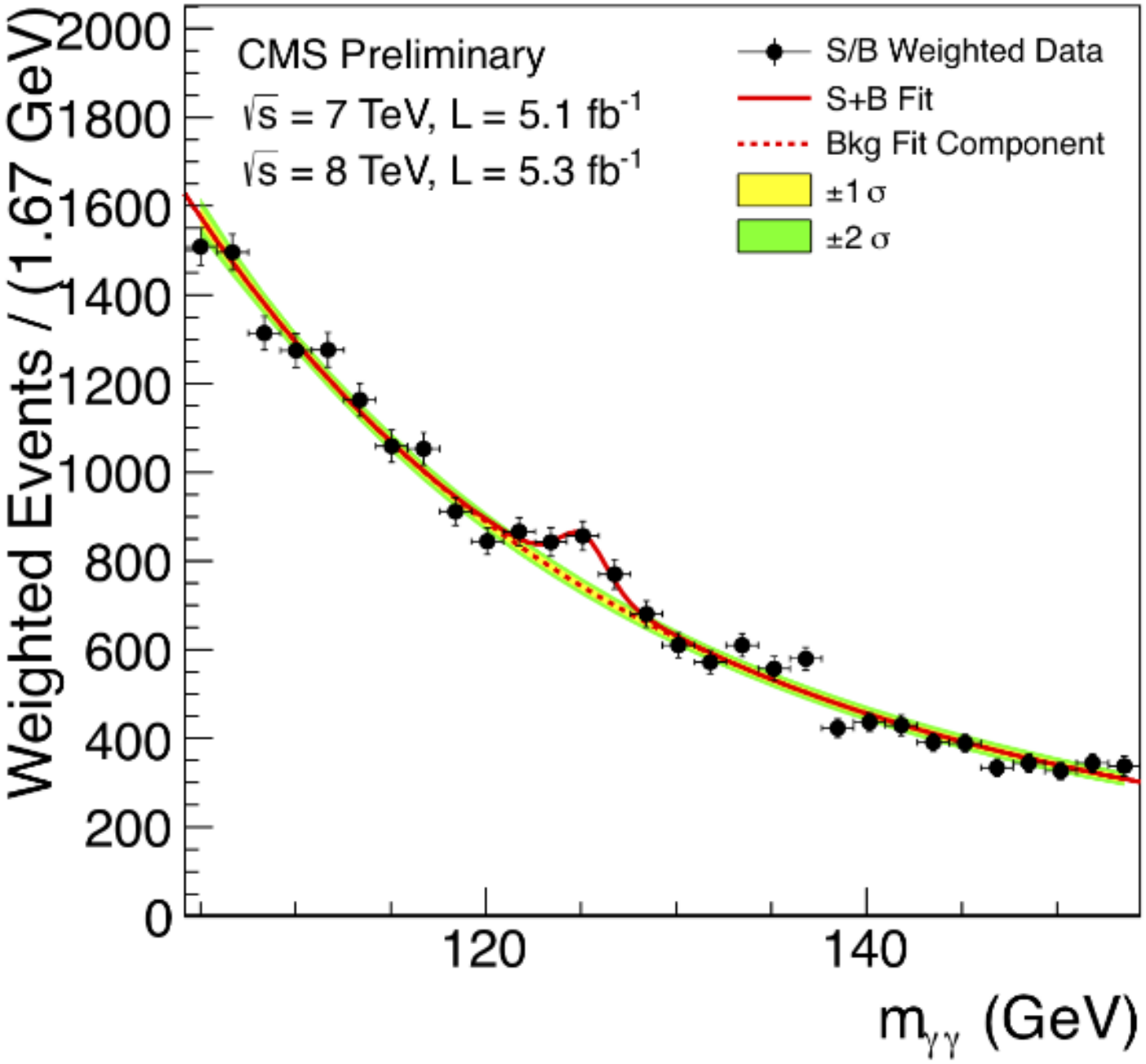
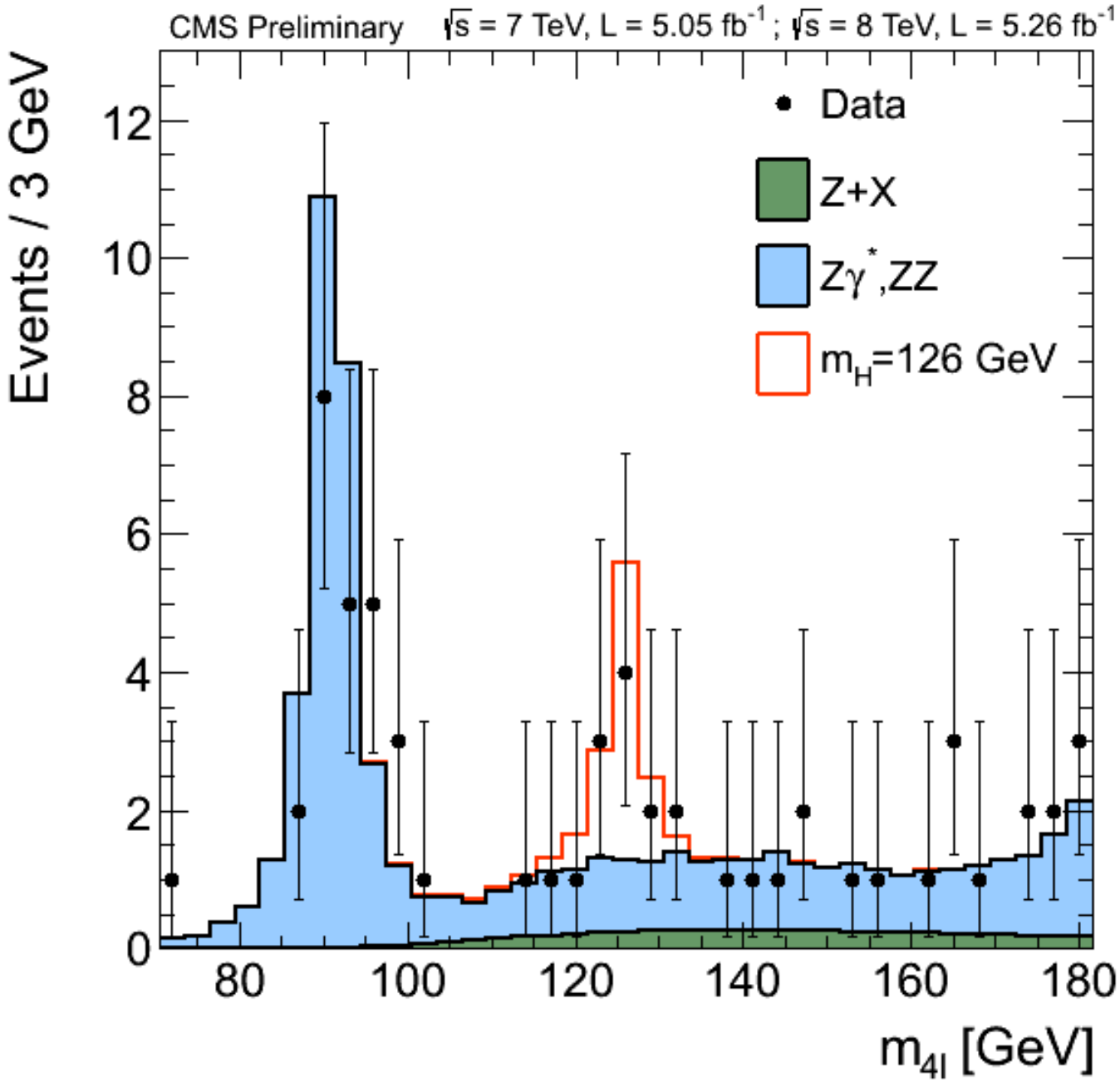
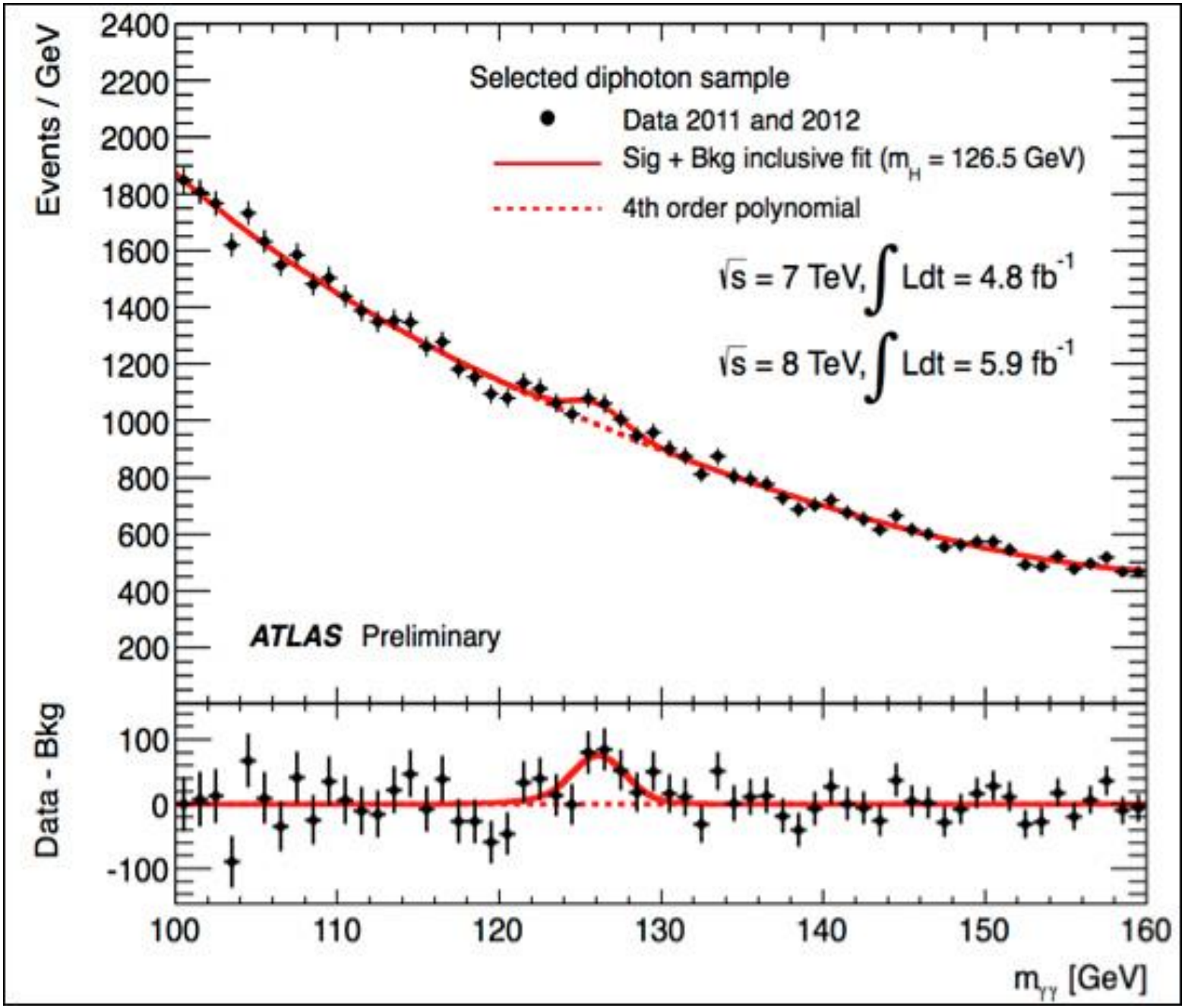
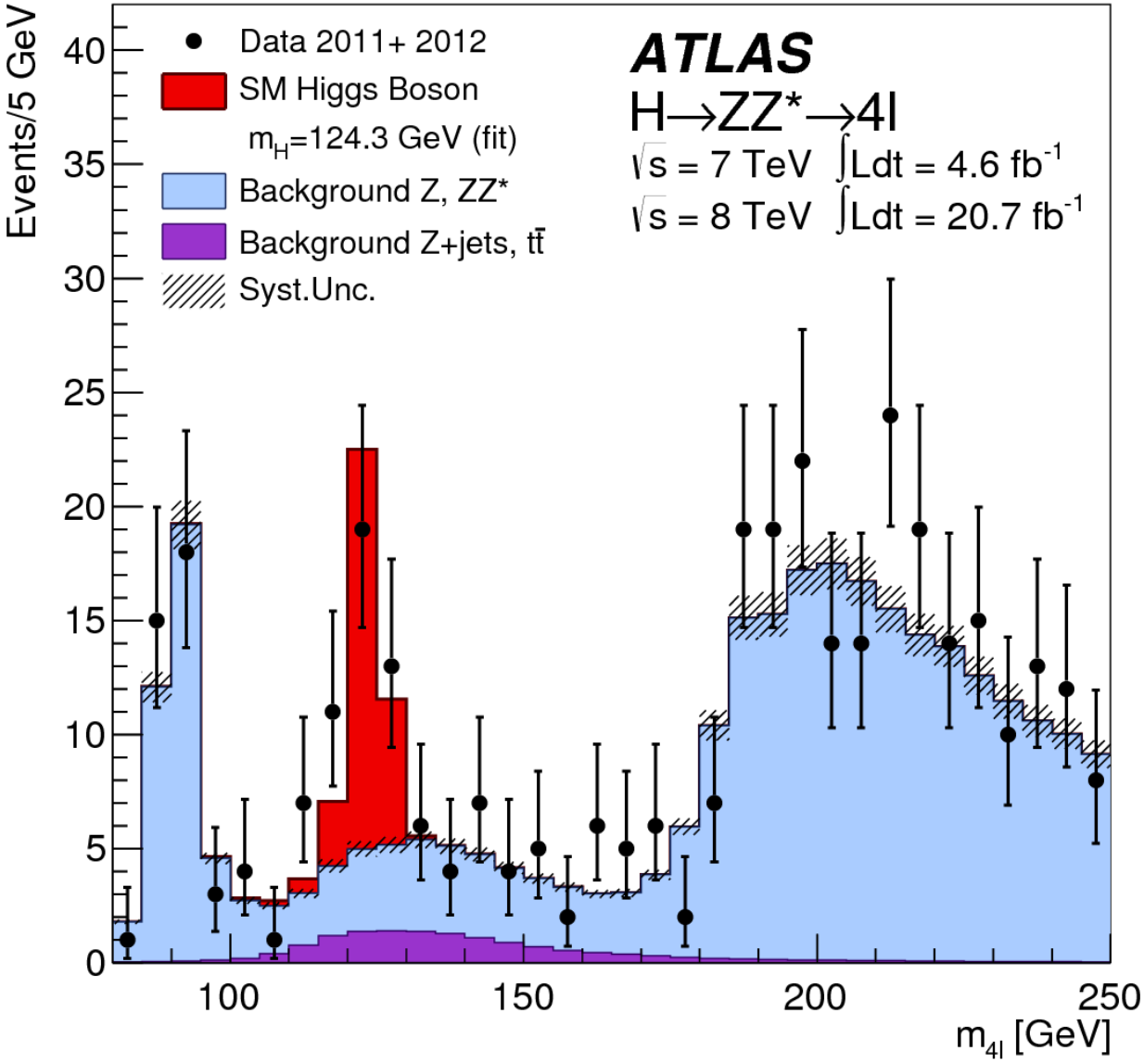
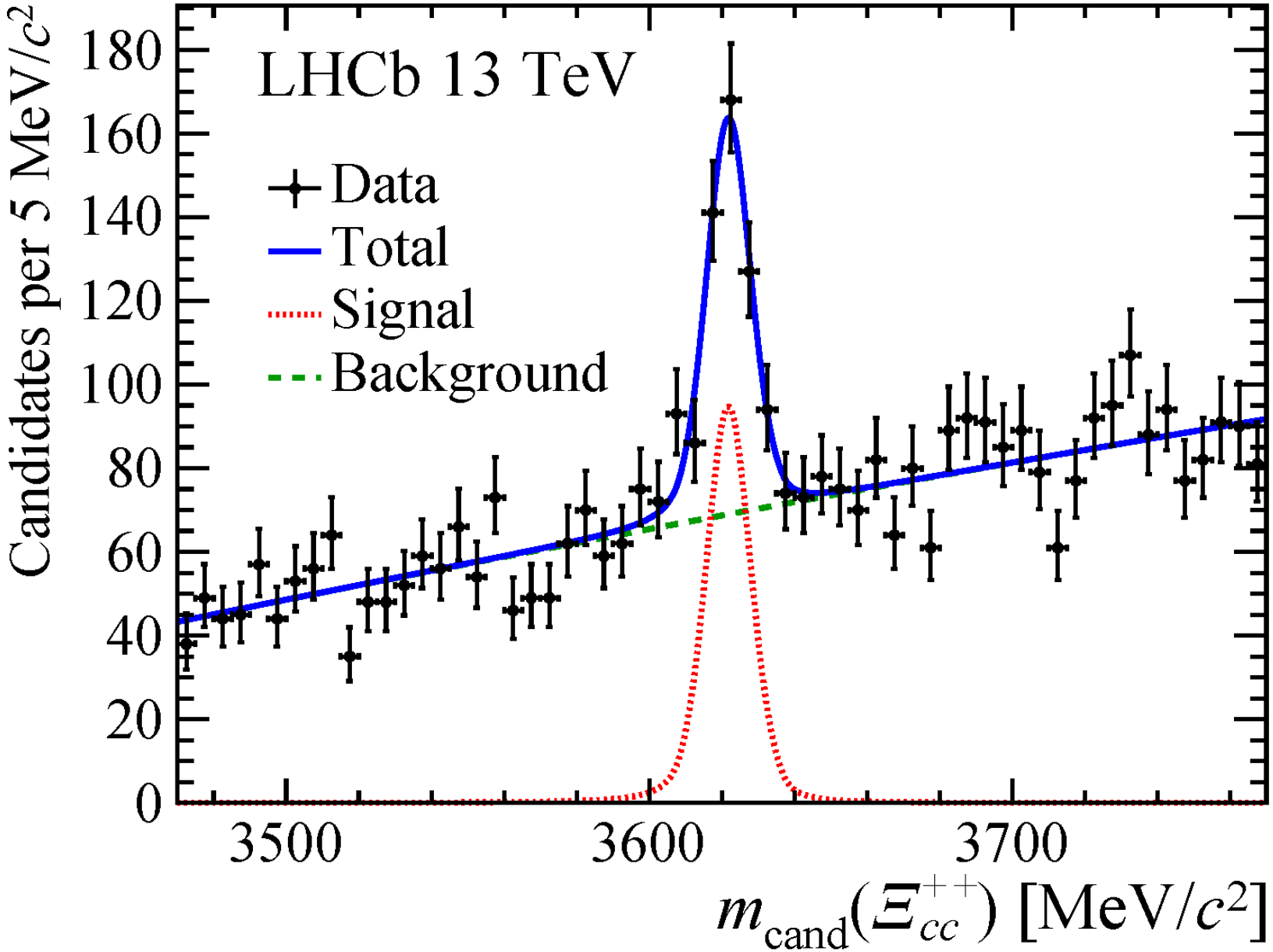

CMS Preliminary
√s = 7 TeV, L = 5.1 fb-1
√s = 8 TeV, L = 5.3 fb-1
S/B Weighted Data
S+B Fit
Bkg Fit Component
±1 σ
±2 σ
Weighted Events / (1.67 GeV)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
120
140
mγγ (GeV)


CMS Preliminary √s = 7 TeV, L = 5.05 fb-1 ; √s = 8 TeV, L = 5.26 fb-1
Data
Z+X
Zγ*,ZZ
mH=126 GeV
Events / 3 GeV
m4l [GeV]
0
2
4
6
8
10
12
80
100
120
140
160
180


Selected diphoton sample
Data 2011 and 2012
Sig + Bkg inclusive fit (m_H = 126.5 GeV)
4th order polynomial
√s = 7 TeV, ∫ Ldt = 4.8 fb^-1
√s = 8 TeV, ∫ Ldt = 5.9 fb^-1
ATLAS Preliminary
Events / GeV
Data - Bkg
m_γγ [GeV]


ATLAS
H→ZZ*→4l
√s = 7 TeV ∫Ldt = 4.6 fb-1
√s = 8 TeV ∫Ldt = 20.7 fb-1
Data 2011+ 2012
SM Higgs Boson
mH=124.3 GeV (fit)
Background Z, ZZ*
Background Z+jets, tt̄
Syst.Unc.
Events/5 GeV
m4l [GeV]
0
5
10
15
20
25
30
35
40
100
150
200
250


LHCb 13 TeV
Data
Total
Signal
Background
Candidates per 5 MeV/c^2
0
20
40
60
80
100
120
140
160
180
3500
3600
3700
$m_{\text{cand}}(\Xi_{cc}^{++})$ [MeV/c^2]