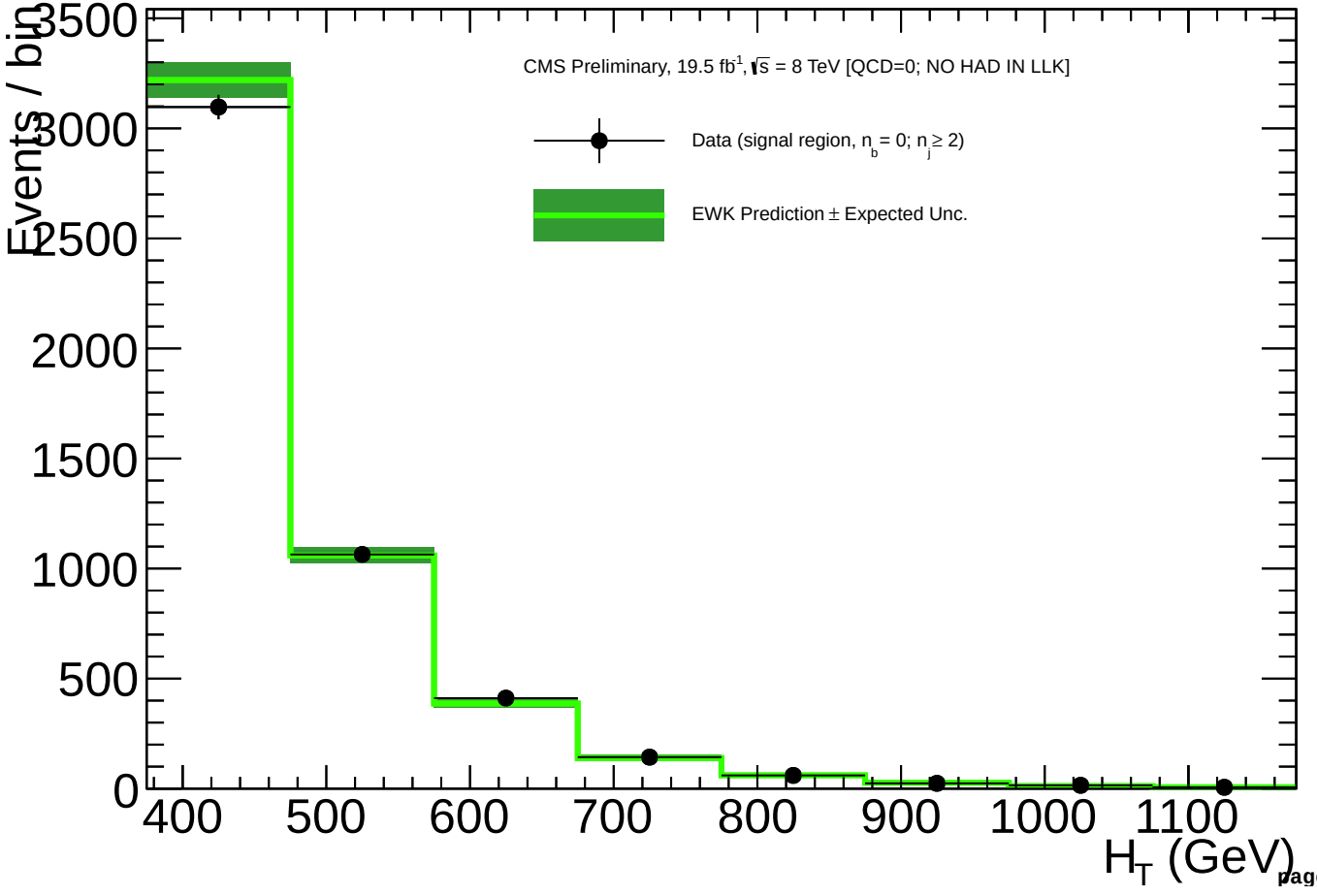
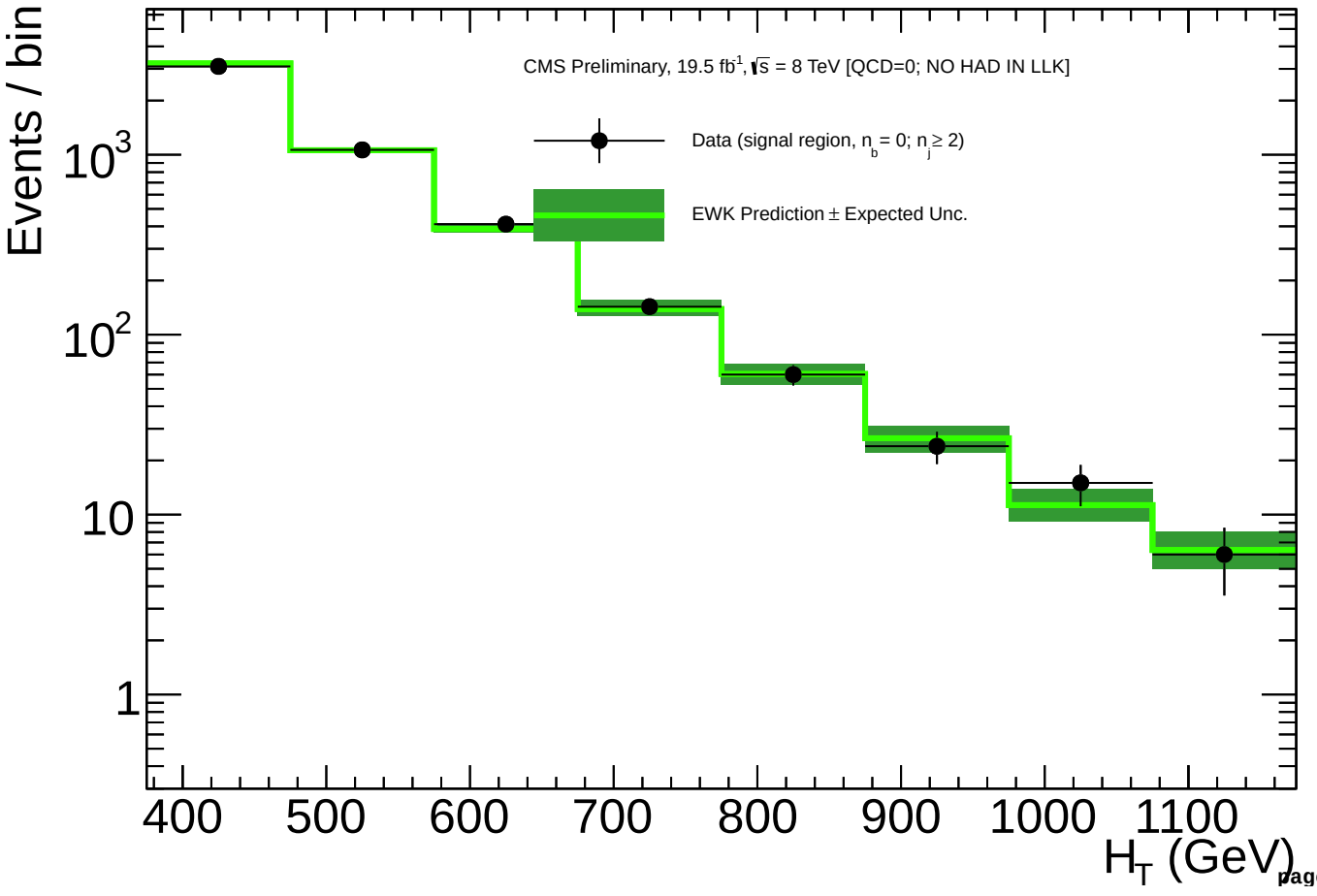
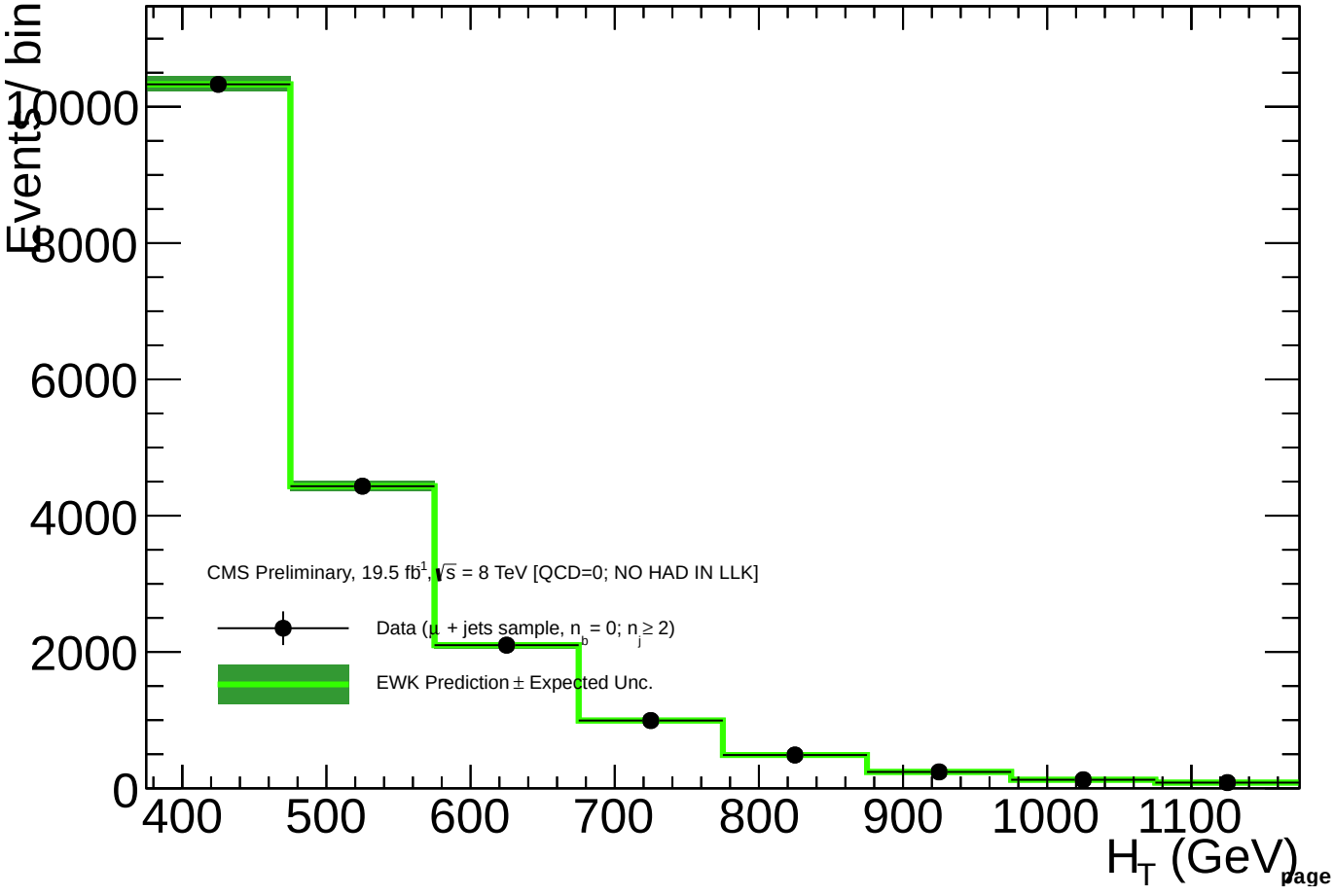
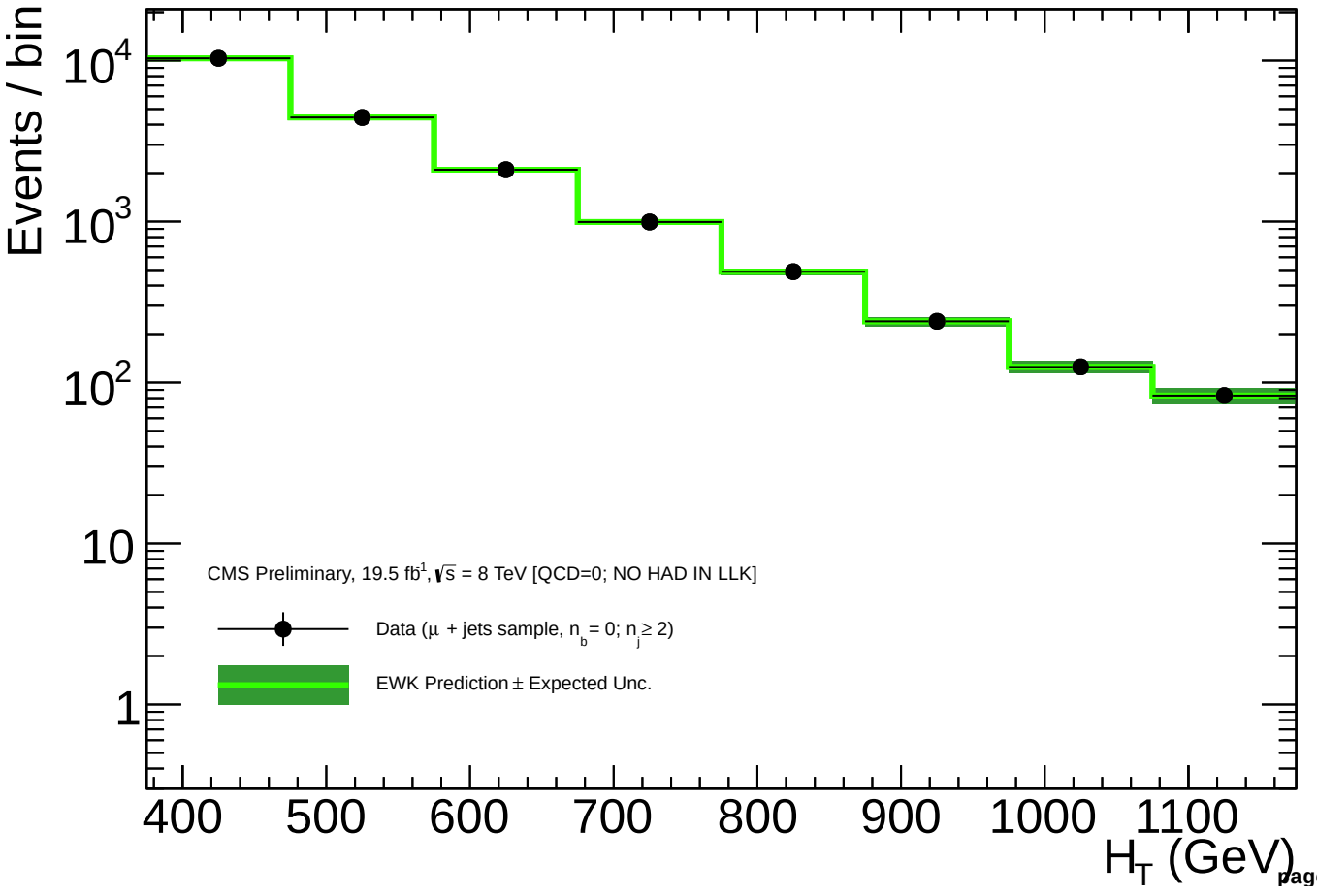
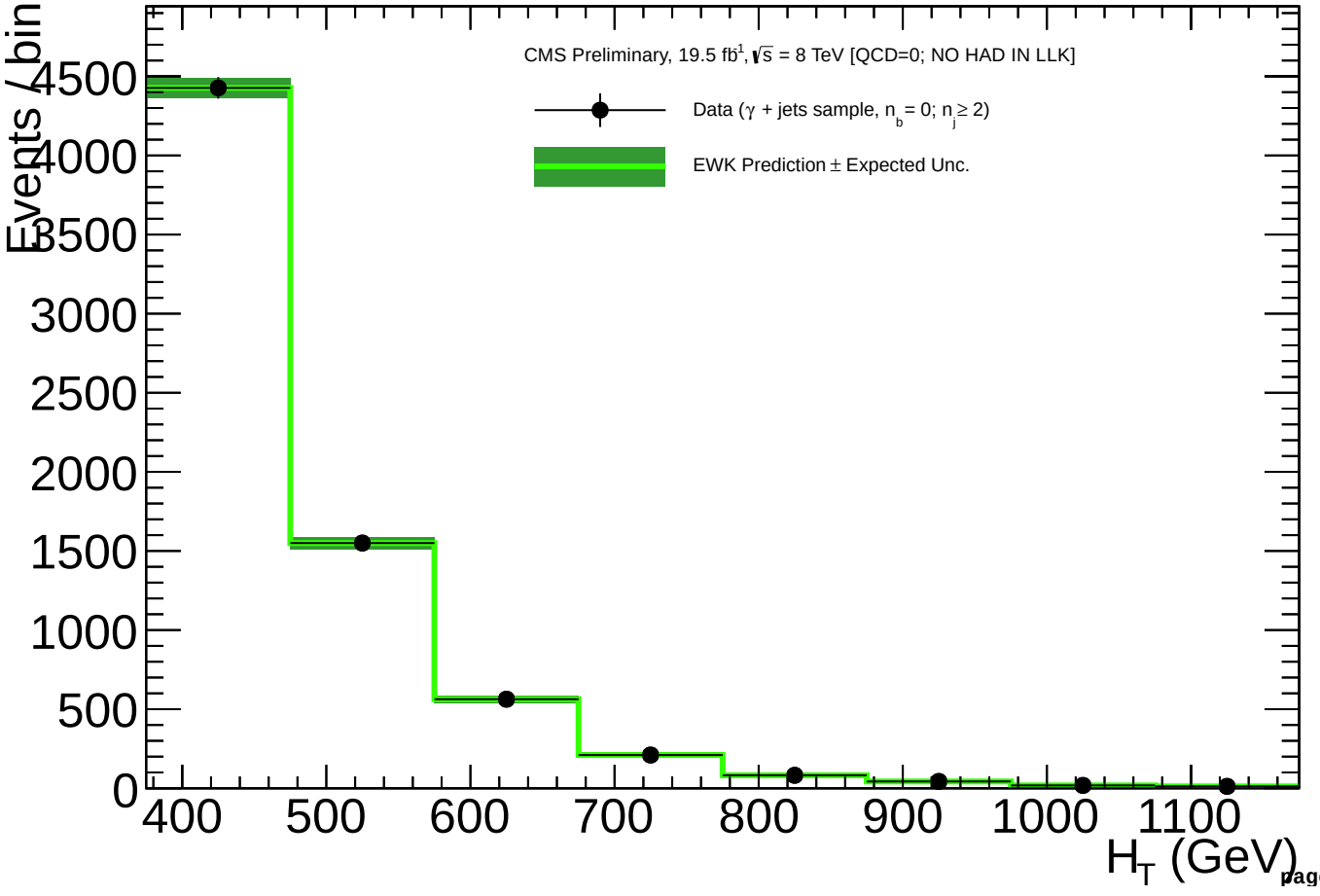
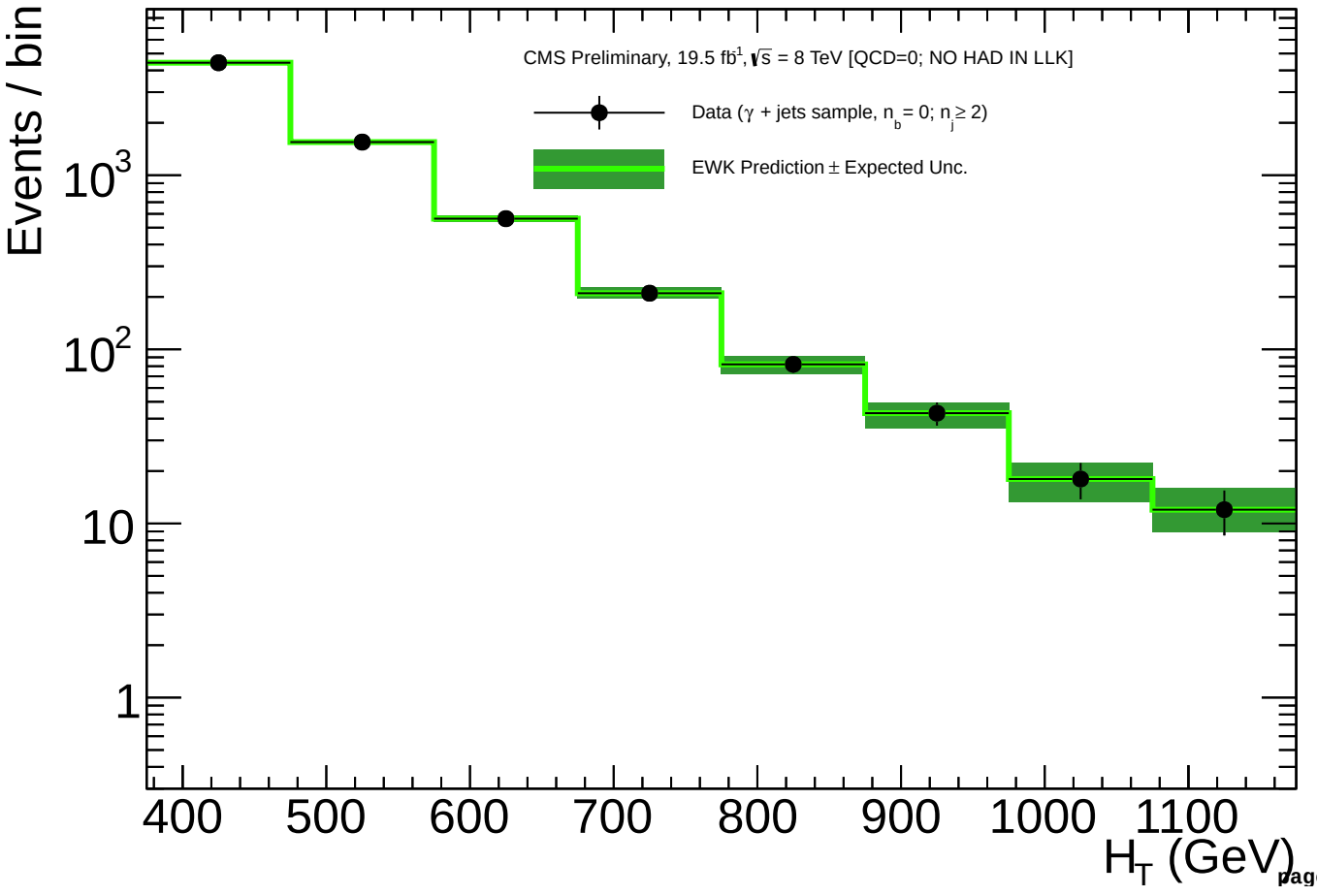

CMS Preliminary, 19.5 fb-1, √s = 8 TeV [QCD=0; NO HAD IN LLK]
Data (signal region, nb = 0; nj ≥ 2)
EWK Prediction ± Expected Unc.
Events / bin
HT (GeV)
0
500
1000
1500
2000
2500
3000
3500
400
500
600
700
800
900
1000
1100


CMS Preliminary, 19.5 fb-1, √s = 8 TeV [QCD=0; NO HAD IN LLK]
Data (signal region, nb = 0; nj ≥ 2)
EWK Prediction ± Expected Unc.
Events / bin
10^3
10^2
10
1
400
500
600
700
800
900
1000
1100
HT (GeV)

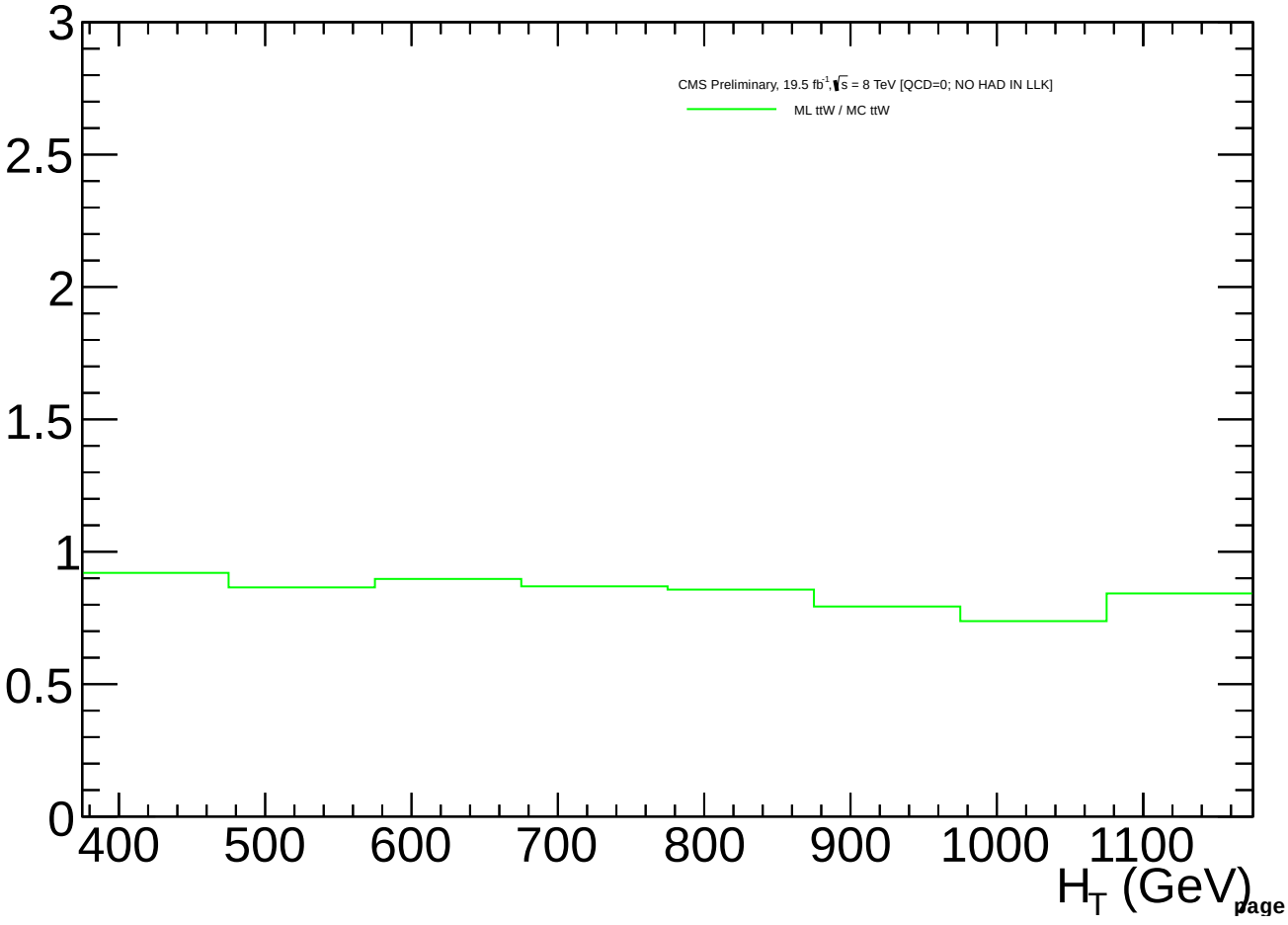

Events / bin
10000
8000
6000
4000
2000
0
400
500
600
700
800
900
1000
1100
H_T (GeV)
CMS Preliminary, 19.5 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (μ + jets sample, $n_b = 0$; $n_j \geq 2$)
EWK Prediction ± Expected Unc.


Events / bin
10^4
10^3
10^2
10
1
CMS Preliminary, 19.5 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (μ + jets sample, $n_b = 0$; $n_j \geq 2$)
EWK Prediction $\pm$ Expected Unc.
400
500
600
700
800
900
1000
1100
H_T (GeV)

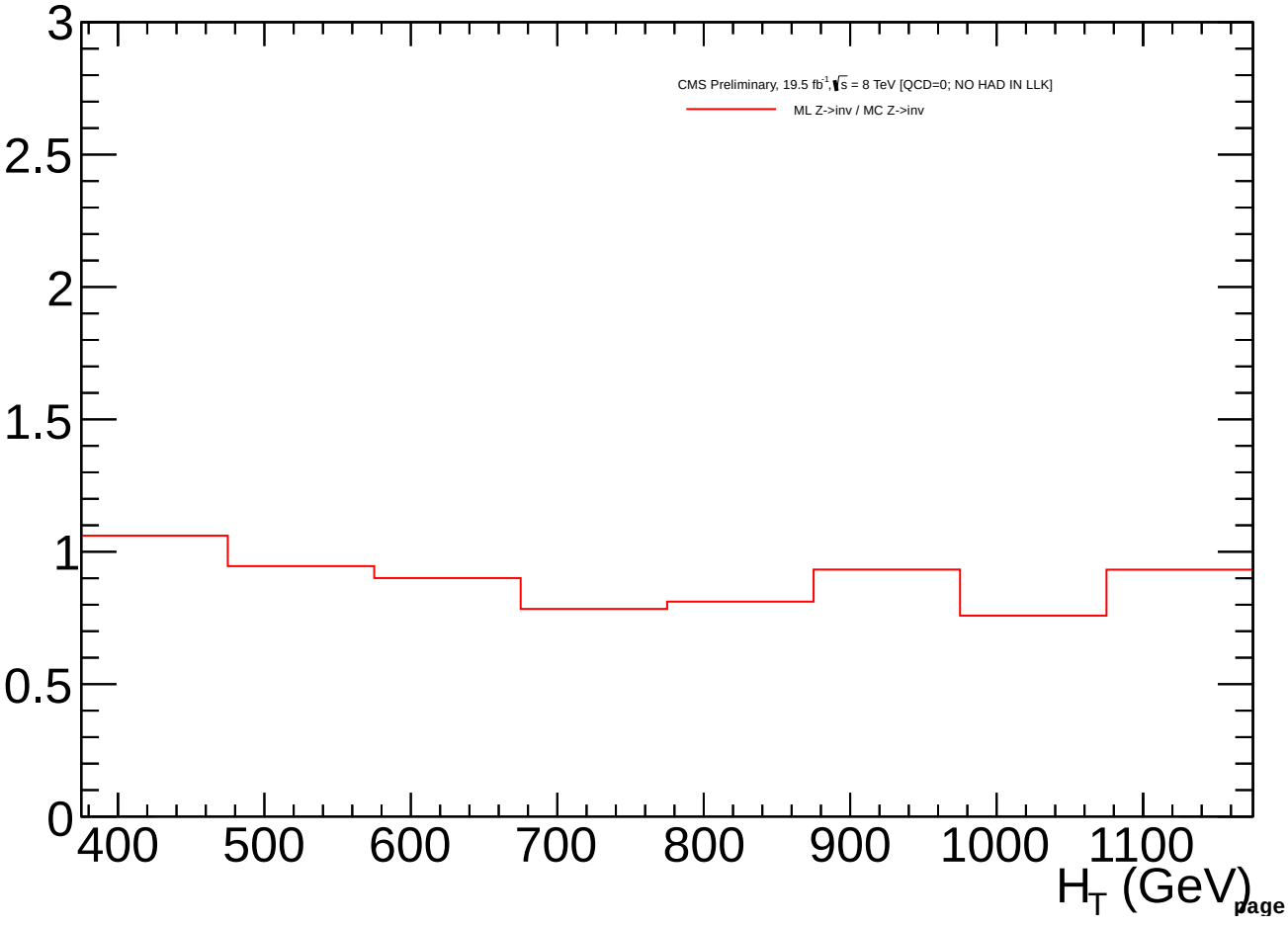

CMS Preliminary, 19.5 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (γ + jets sample, $n_b = 0$; $n_j \geq 2$)
EWK Prediction ± Expected Unc.
Events / bin
H_T (GeV)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
400
500
600
700
800
900
1000
1100


CMS Preliminary, 19.5 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (γ + jets sample, $n_b = 0$; $n_j \geq 2$)
EWK Prediction ± Expected Unc.
Events / bin
10^3
10^2
10
1
400
500
600
700
800
900
1000
1100
H_T (GeV)

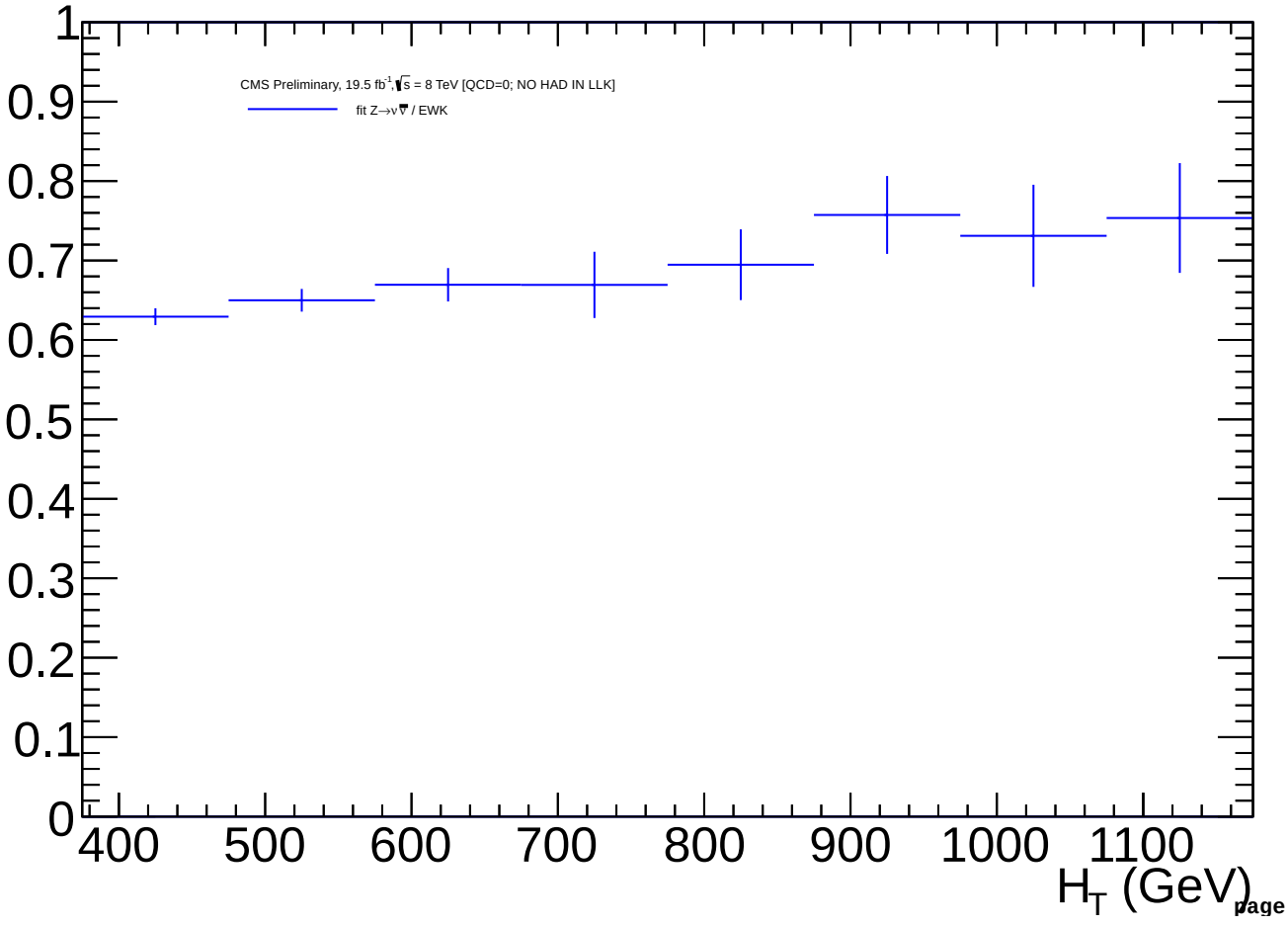
ttW scale factor (result of fit)

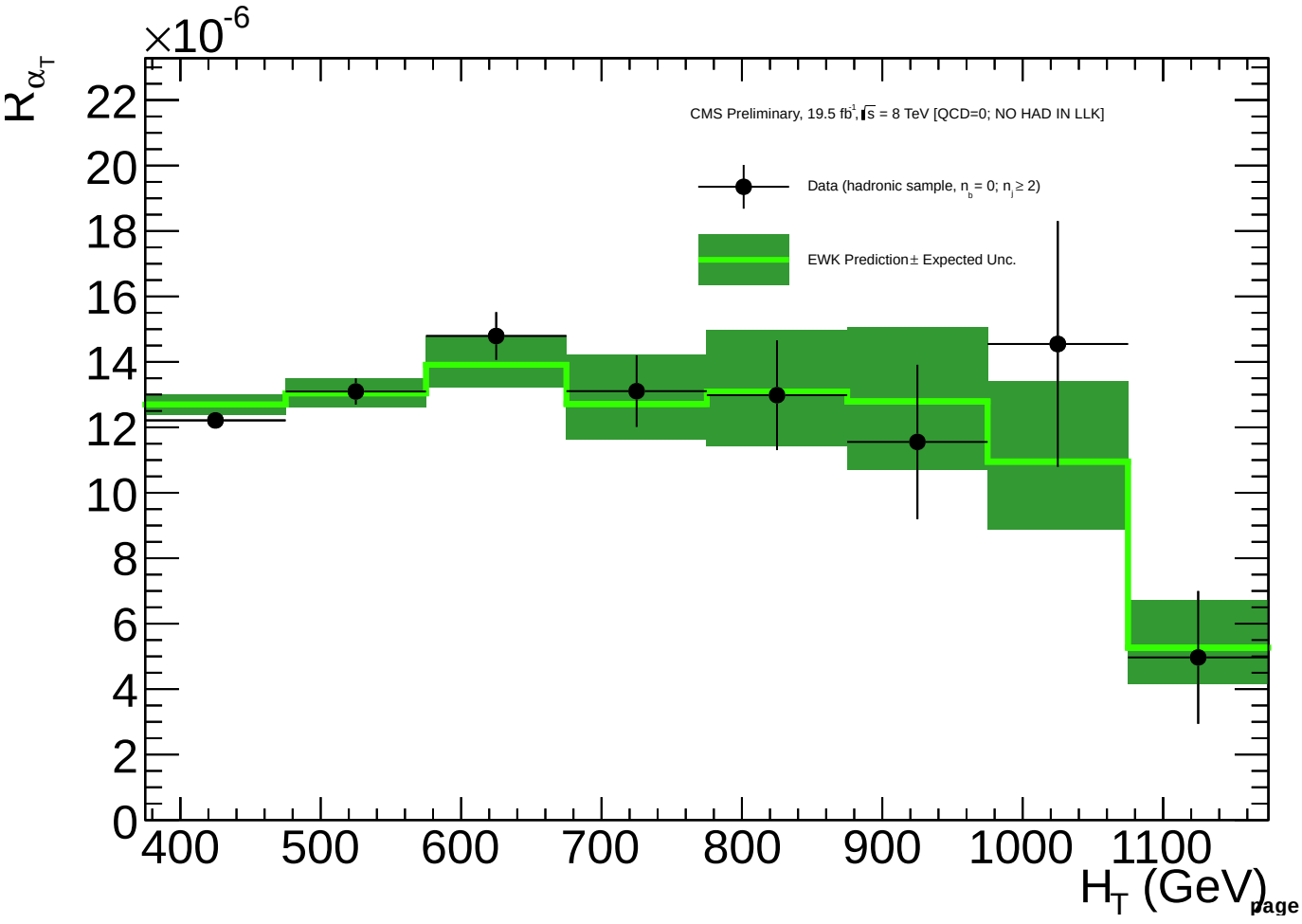


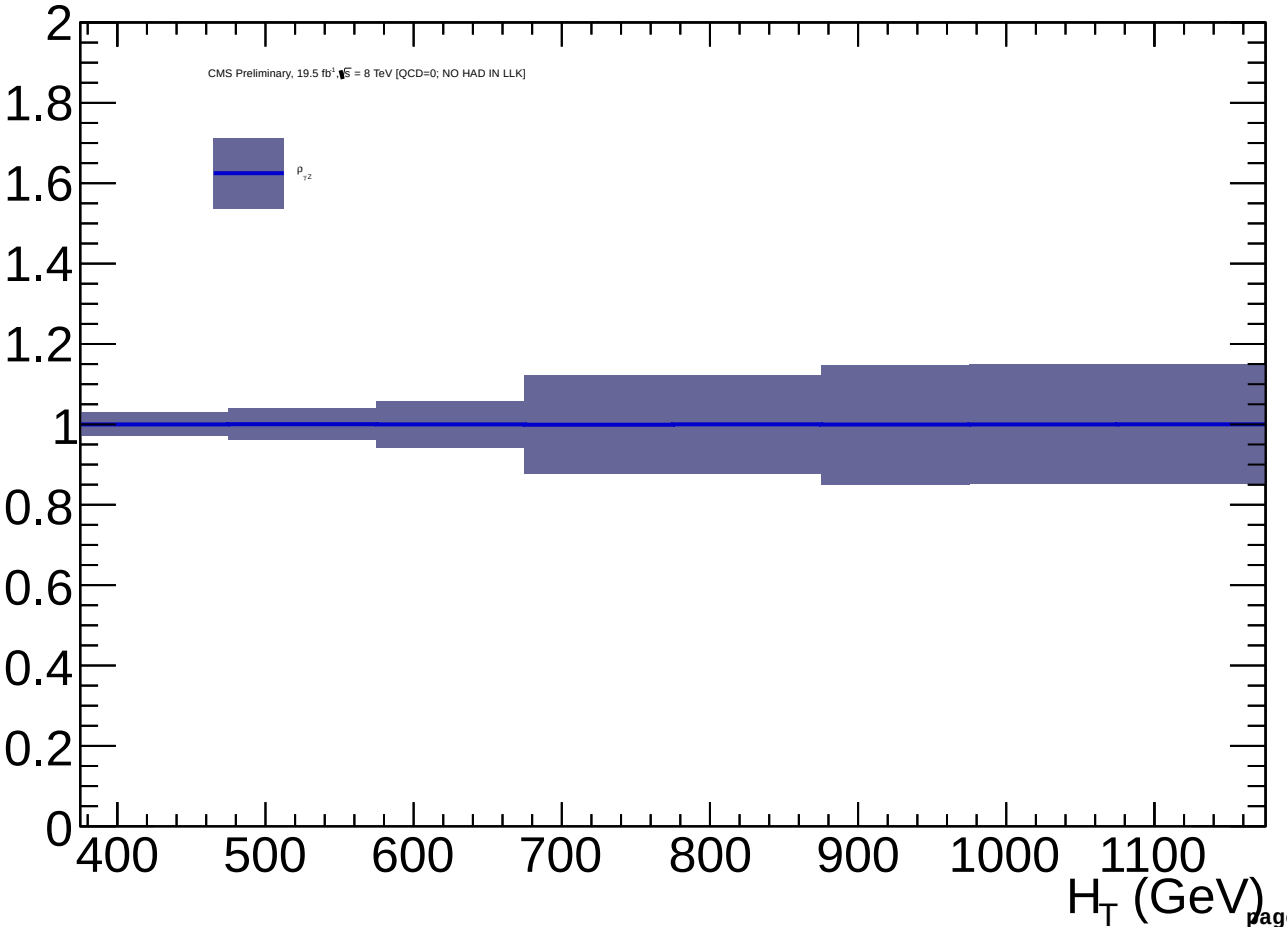
Zinv scale factor (result of fit)

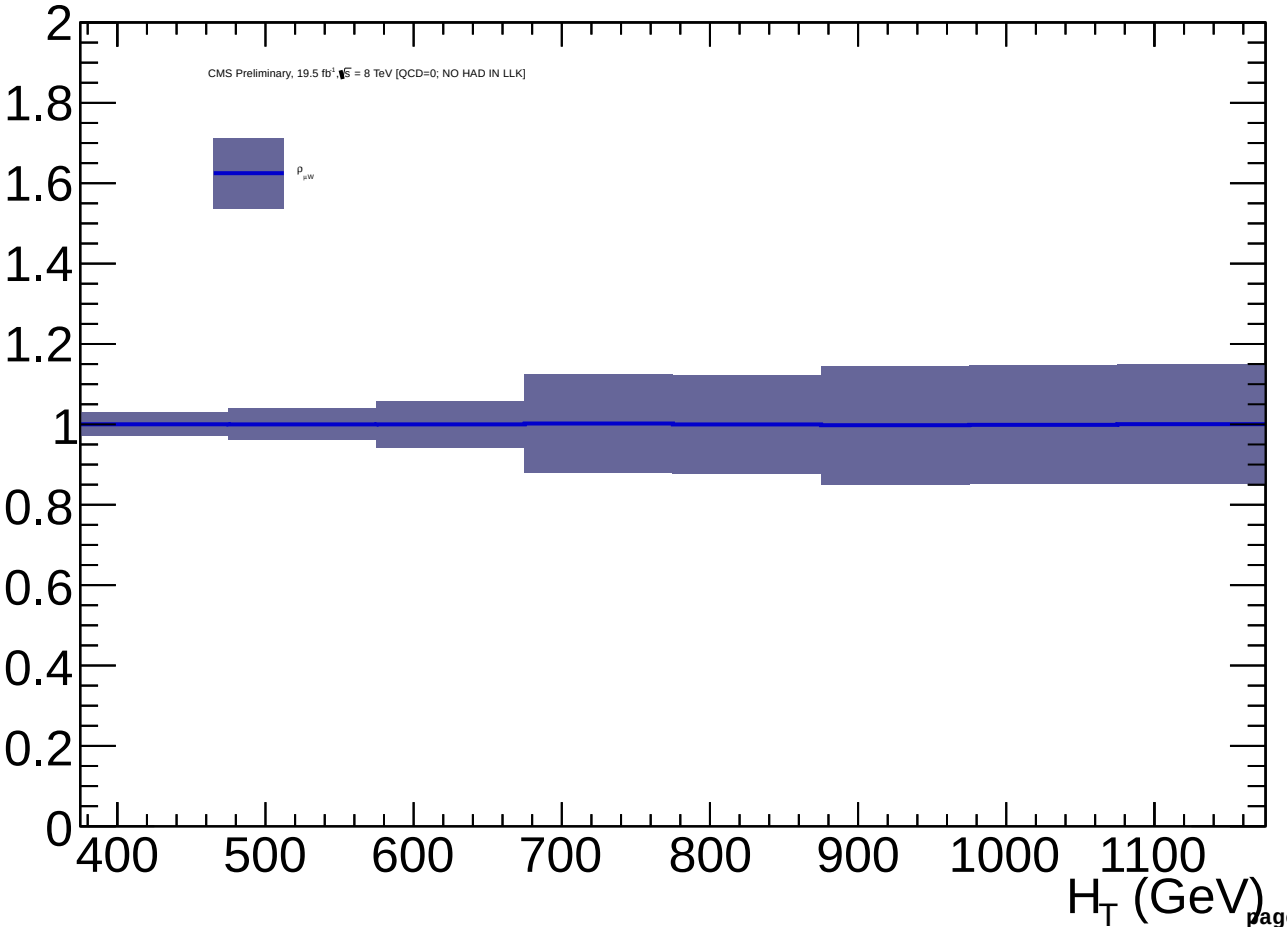


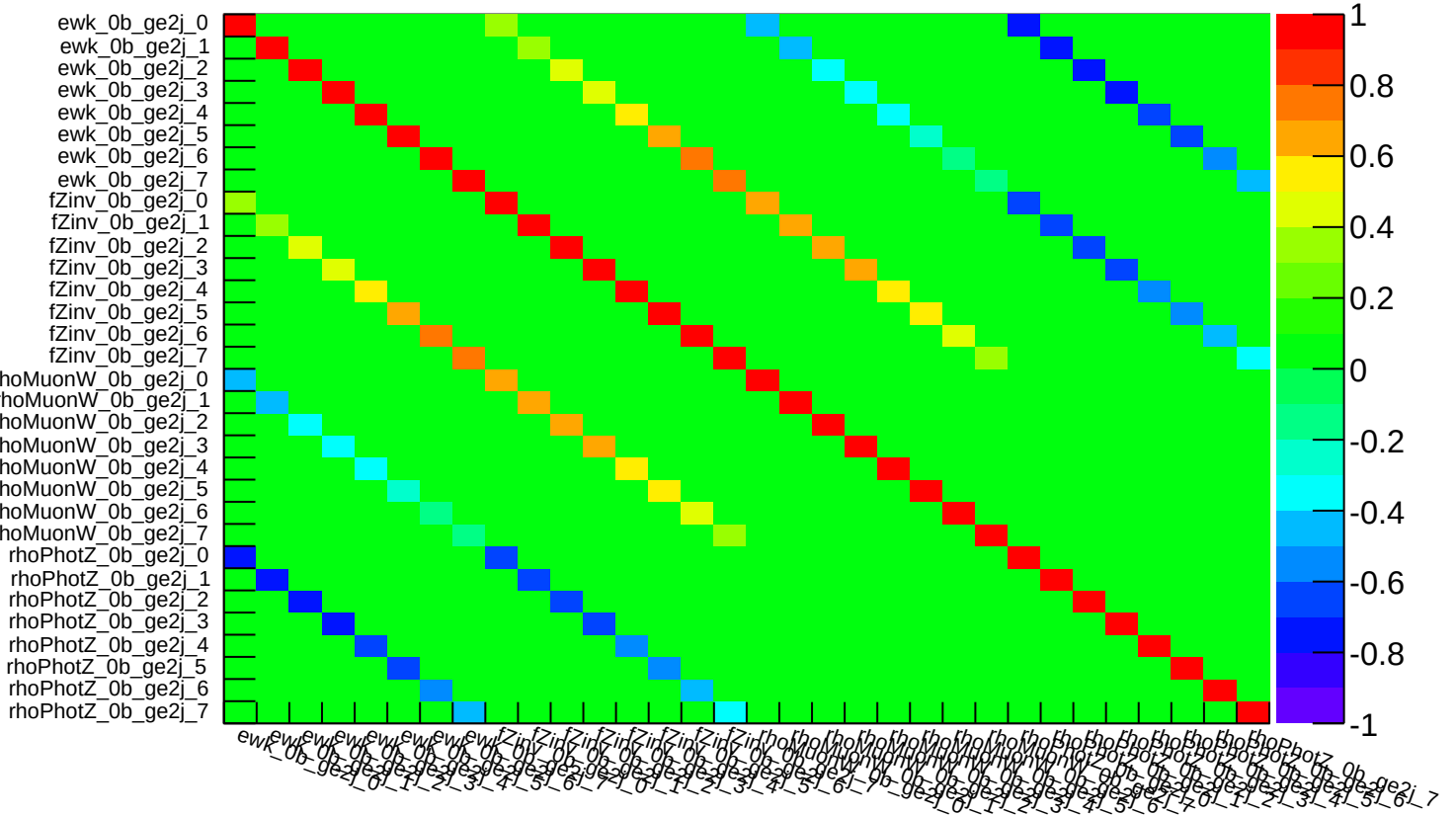
fraction of EWK background which is Zinv (result of fit)




$\times 10^{-6}$
R_{α_T}
CMS Preliminary, 19.5 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (hadronic sample, $n_b = 0$; $n_j \geq 2$)
EWK Prediction ± Expected Unc.
H_T (GeV)


CMS Preliminary, 19.5 fb-1, √s = 8 TeV [QCD=0; NO HAD IN LLK]
ρT,Z
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
400
500
600
700
800
900
1000
1100
HT (GeV)


CMS Preliminary, 19.5 fb-1, √s = 8 TeV [QCD=0; NO HAD IN LLK]
ρμw
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
400
500
600
700
800
900
1000
1100
HT (GeV)

par name:	value	+/- error	[min - max]
ewk_0b_ge2j_0:	3.22e+03	+/- 7.7e+01	[0.0e+00 - 3.1e+04]
fZinv_0b_ge2j_0:	6.29e-01	+/- 1.1e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge2j_1:	1.06e+03	+/- 3.6e+01	[0.0e+00 - 1.1e+04]
fZinv_0b_ge2j_1:	6.50e-01	+/- 1.4e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge2j_2:	3.87e+02	+/- 2.0e+01	[0.0e+00 - 4.1e+03]
fZinv_0b_ge2j_2:	6.69e-01	+/- 2.1e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge2j_3:	1.39e+02	+/- 1.4e+01	[0.0e+00 - 1.4e+03]
fZinv_0b_ge2j_3:	6.69e-01	+/- 4.2e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge2j_4:	6.05e+01	+/- 7.3e+00	[0.0e+00 - 6.0e+02]
fZinv_0b_ge2j_4:	6.95e-01	+/- 4.5e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge2j_5:	2.66e+01	+/- 4.4e+00	[0.0e+00 - 2.4e+02]
fZinv_0b_ge2j_5:	7.57e-01	+/- 4.9e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge2j_6:	1.13e+01	+/- 2.4e+00	[0.0e+00 - 1.5e+02]
fZinv_0b_ge2j_6:	7.31e-01	+/- 6.4e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge2j_7:	6.36e+00	+/- 1.6e+00	[0.0e+00 - 6.0e+01]
fZinv_0b_ge2j_7:	7.54e-01	+/- 6.9e-02	[0.0e+00 - 1.0e+00]
rhoPhotZ_0b_ge2j_0:	1.00e+00	+/- 3.0e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge2j_1:	1.00e+00	+/- 3.9e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge2j_2:	1.00e+00	+/- 5.8e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge2j_3:	9.99e-01	+/- 1.2e-01	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge2j_4:	1.00e+00	+/- 1.2e-01	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge2j_5:	1.00e+00	+/- 1.5e-01	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge2j_6:	1.00e+00	+/- 1.5e-01	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge2j_7:	1.00e+00	+/- 1.5e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge2j_0:	1.00e+00	+/- 3.0e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge2j_1:	1.00e+00	+/- 3.9e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge2j_2:	1.00e+00	+/- 5.8e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge2j_3:	1.00e+00	+/- 1.2e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge2j_4:	1.00e+00	+/- 1.2e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge2j_5:	9.98e-01	+/- 1.5e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge2j_6:	9.99e-01	+/- 1.5e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge2j_7:	1.00e+00	+/- 1.5e-01	[0.0e+00 - 3.0e+00]

correlation_matrix