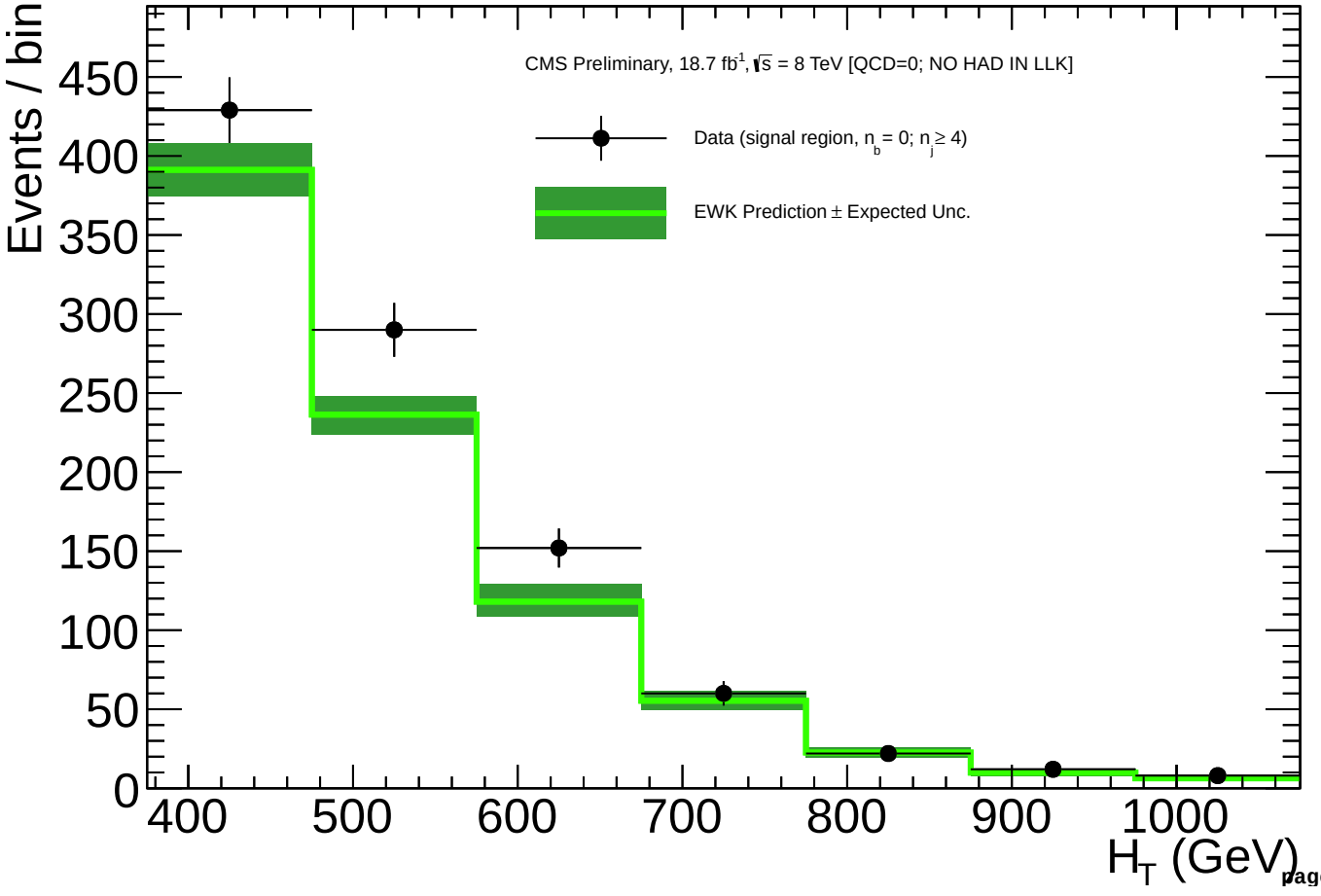
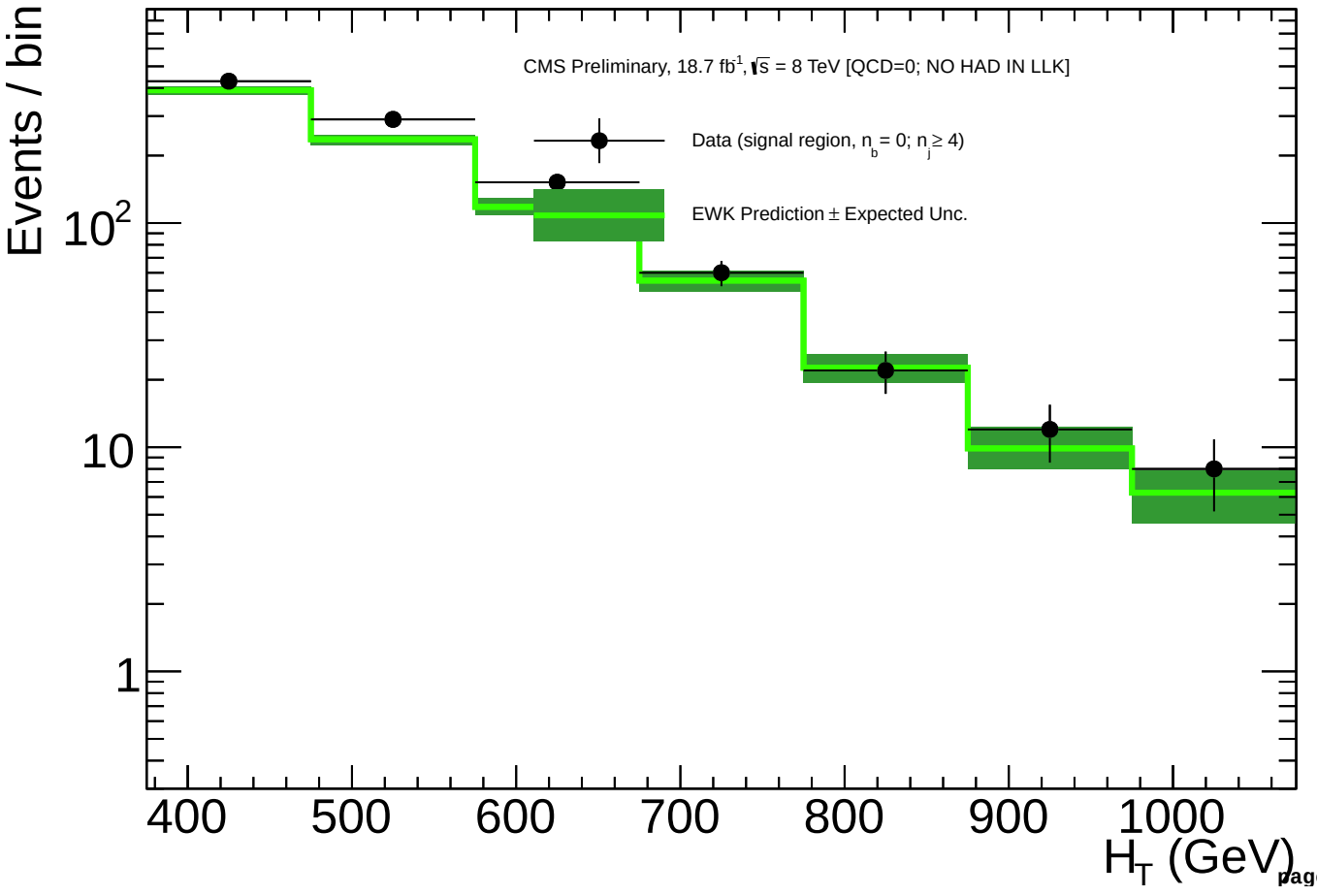
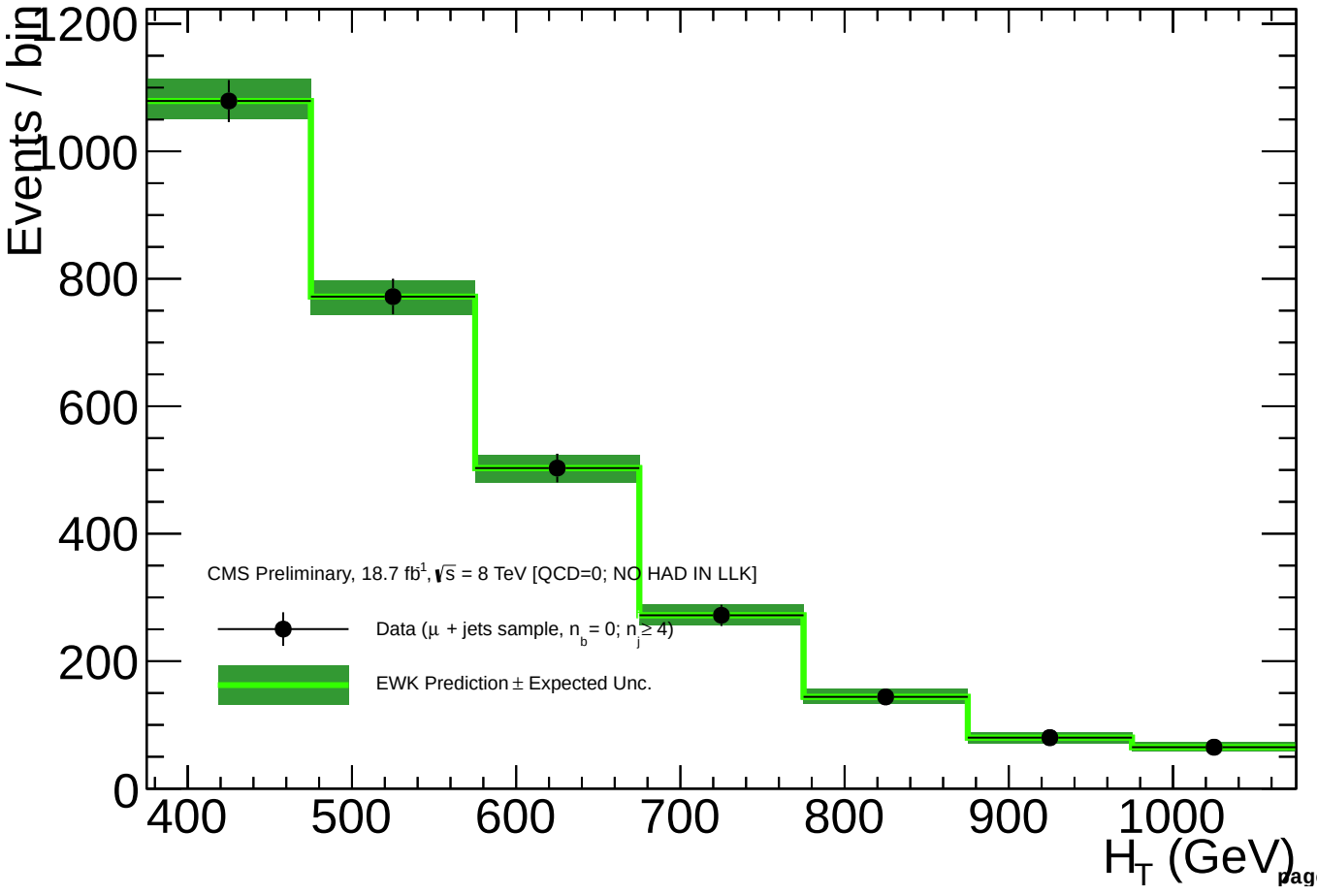
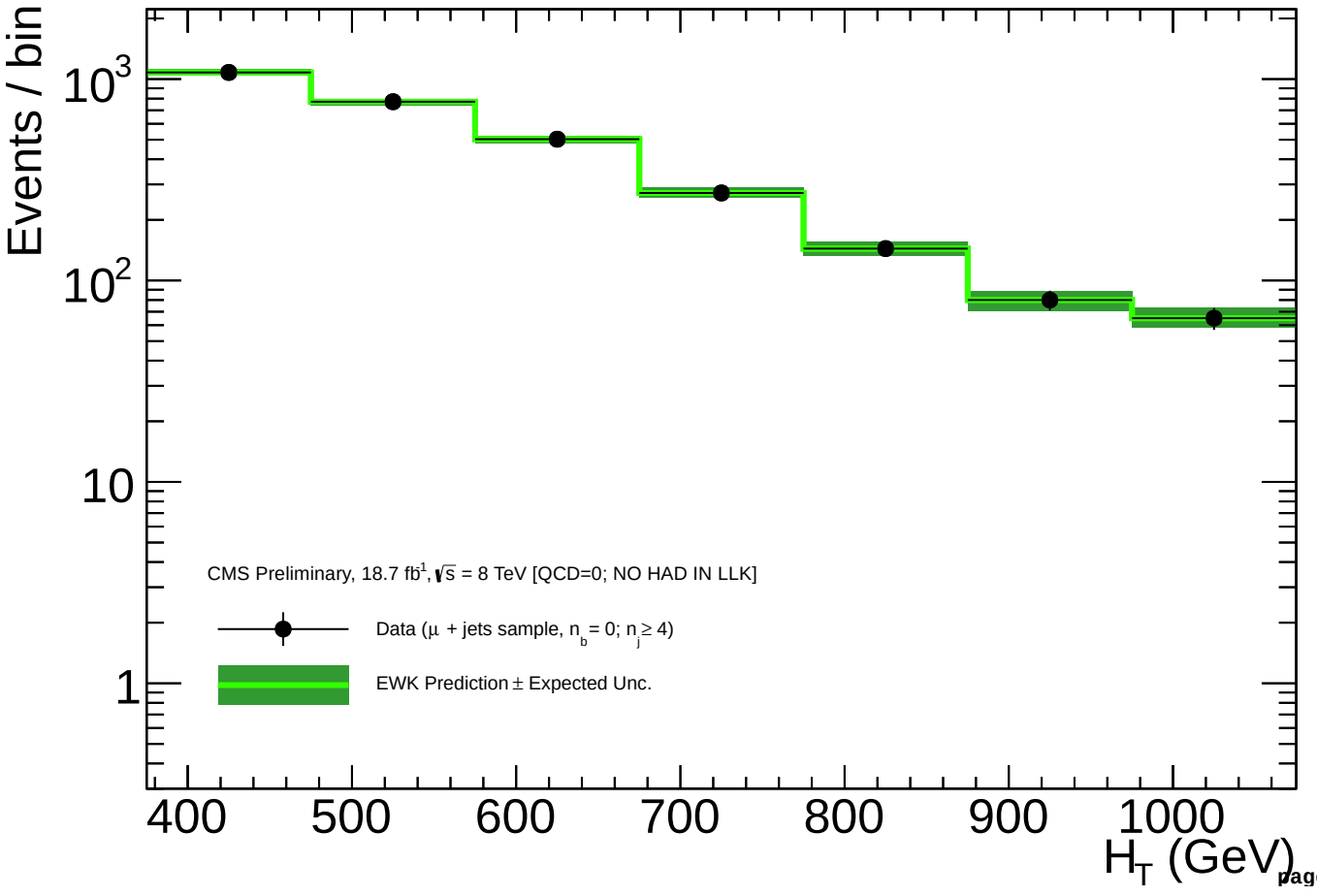
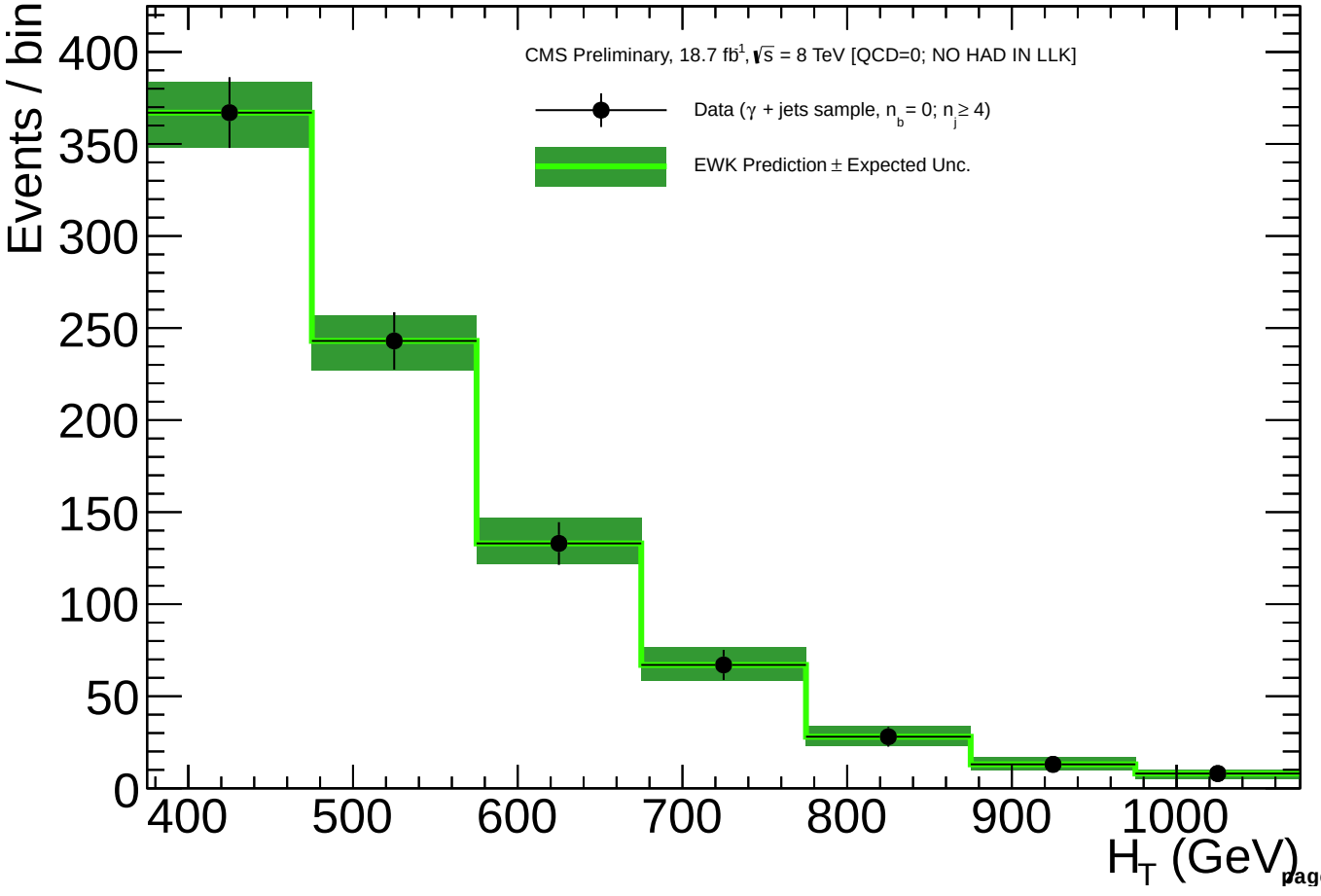
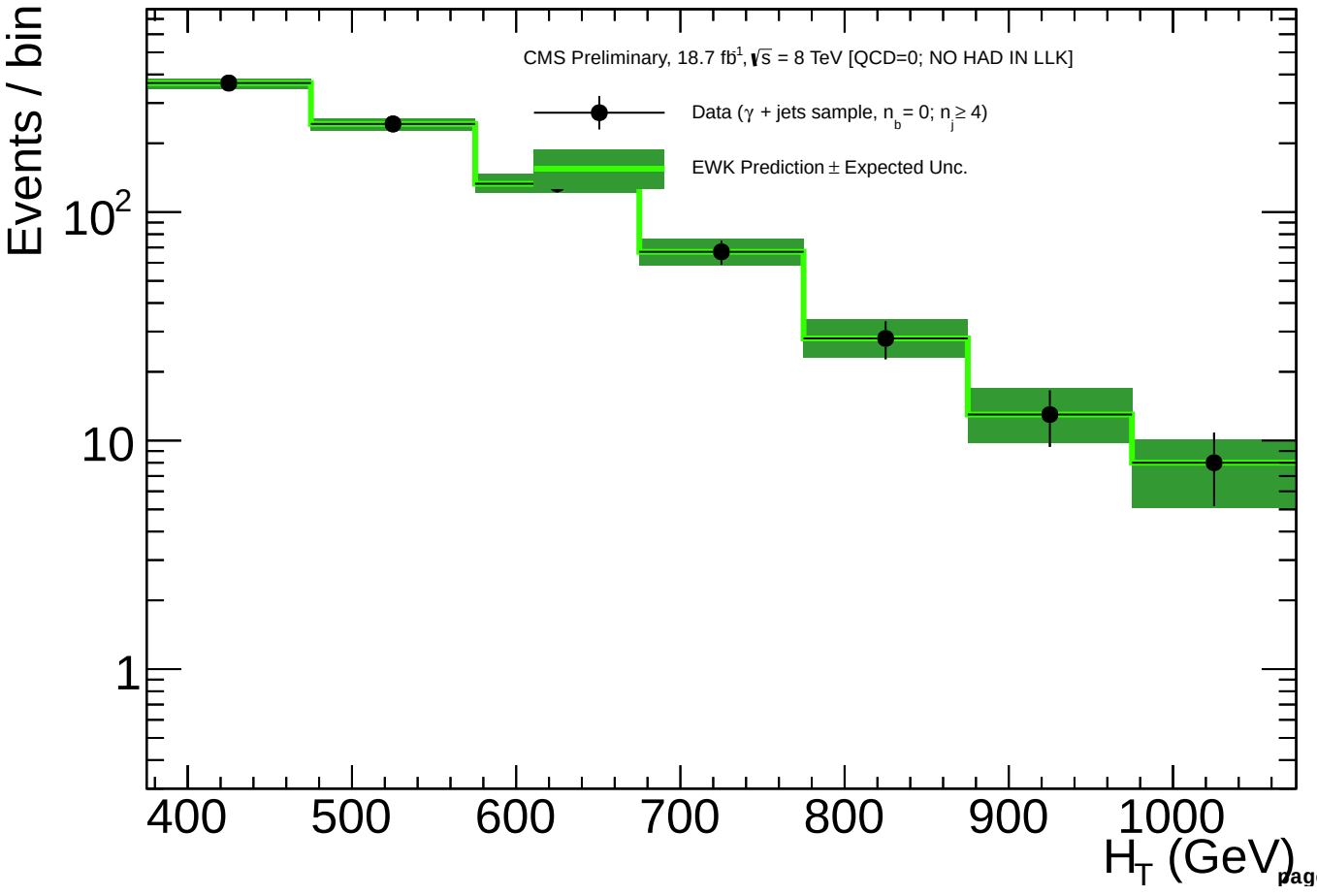

CMS Preliminary, 18.7 fb-1, √s = 8 TeV [QCD=0; NO HAD IN LLK]
Data (signal region, nb = 0; nj ≥ 4)
EWK Prediction ± Expected Unc.
Events / bin
0
50
100
150
200
250
300
350
400
450
400
500
600
700
800
900
1000
HT (GeV)


CMS Preliminary, 18.7 fb-1, √s = 8 TeV [QCD=0; NO HAD IN LLK]
Data (signal region, nb = 0; nj ≥ 4)
EWK Prediction ± Expected Unc.
Events / bin
10²
10
1
400
500
600
700
800
900
1000
HT (GeV)

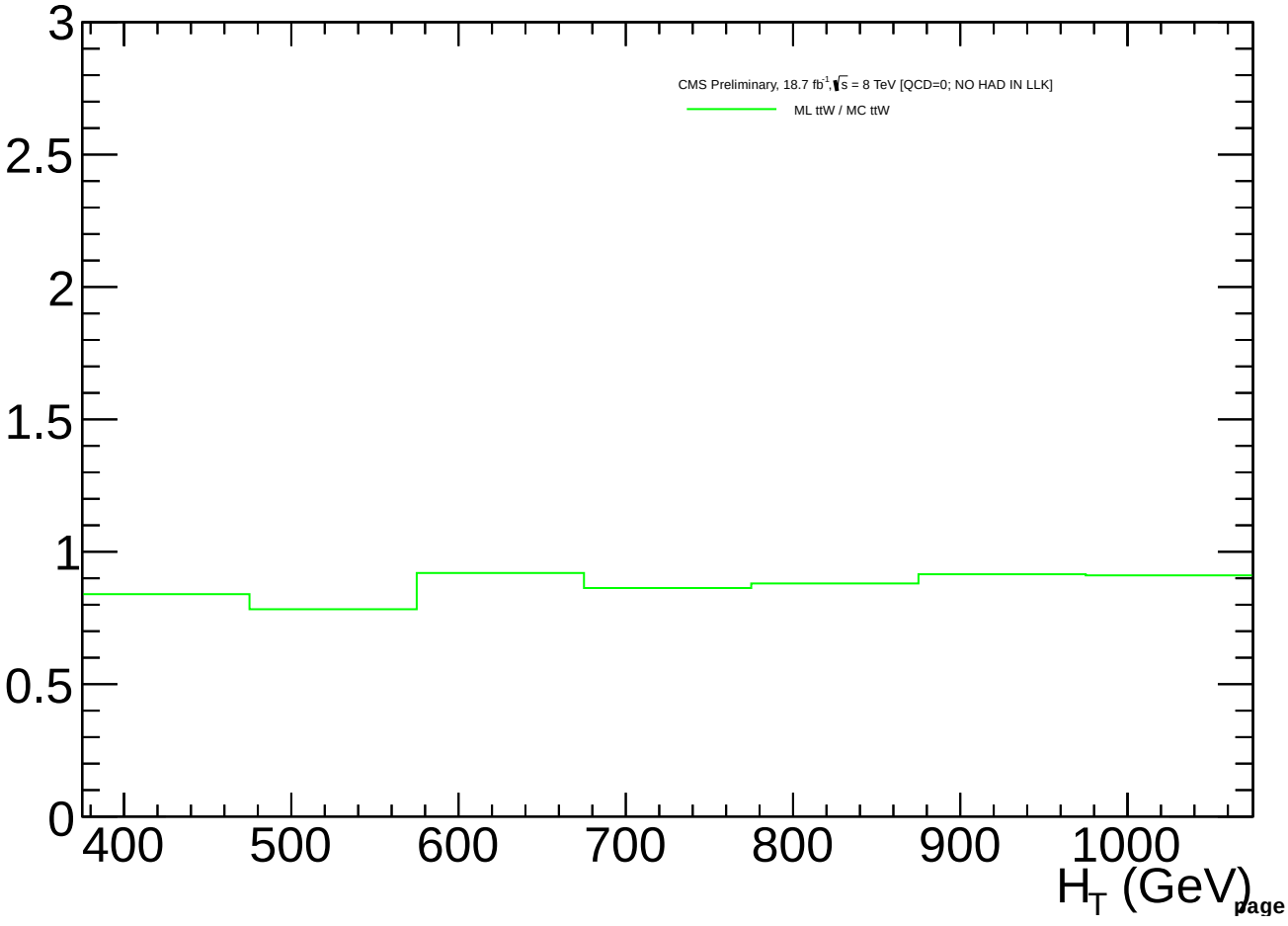

Events / bin
1200
1000
800
600
400
200
0
400
500
600
700
800
900
1000
H_T (GeV)
CMS Preliminary, 18.7 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (μ + jets sample, $n_b = 0$; $n_j \geq 4$)
EWK Prediction $\pm$ Expected Unc.


Events / bin
10^3
10^2
10
1
400
500
600
700
800
900
1000
H_T (GeV)
CMS Preliminary, 18.7 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (μ + jets sample, $n_b = 0$; $n_j \geq 4$)
EWK Prediction $\pm$ Expected Unc.

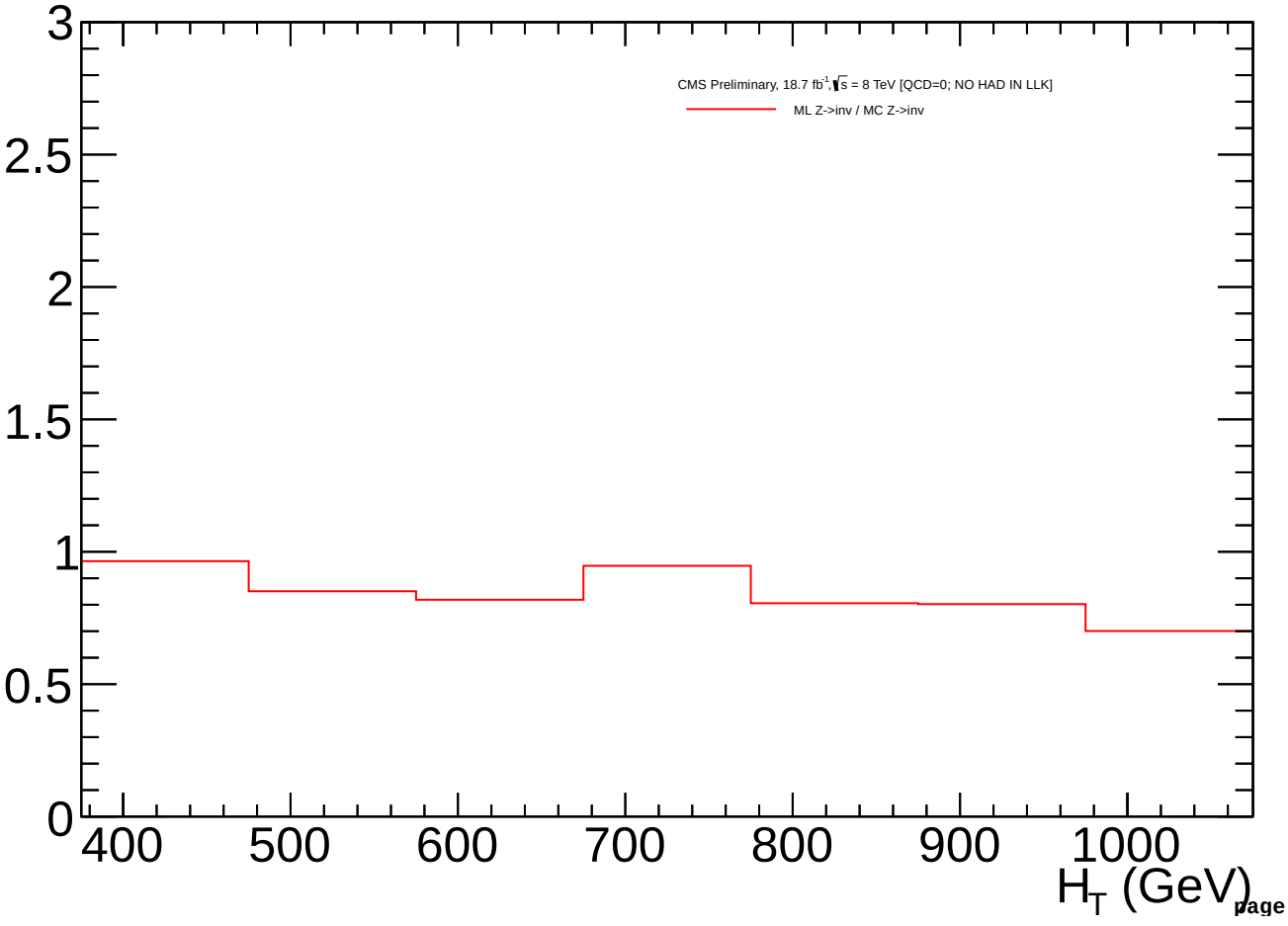

CMS Preliminary, 18.7 fb-1, √s = 8 TeV [QCD=0; NO HAD IN LLK]
Data (γ + jets sample, nb = 0; nj ≥ 4)
EWK Prediction ± Expected Unc.
Events / bin
0
50
100
150
200
250
300
350
400
400
500
600
700
800
900
1000
HT (GeV)


CMS Preliminary, 18.7 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (γ + jets sample, $n_b = 0$; $n_j \geq 4$)
EWK Prediction ± Expected Unc.
Events / bin
10^2
10
1
400
500
600
700
800
900
1000
H_T (GeV)

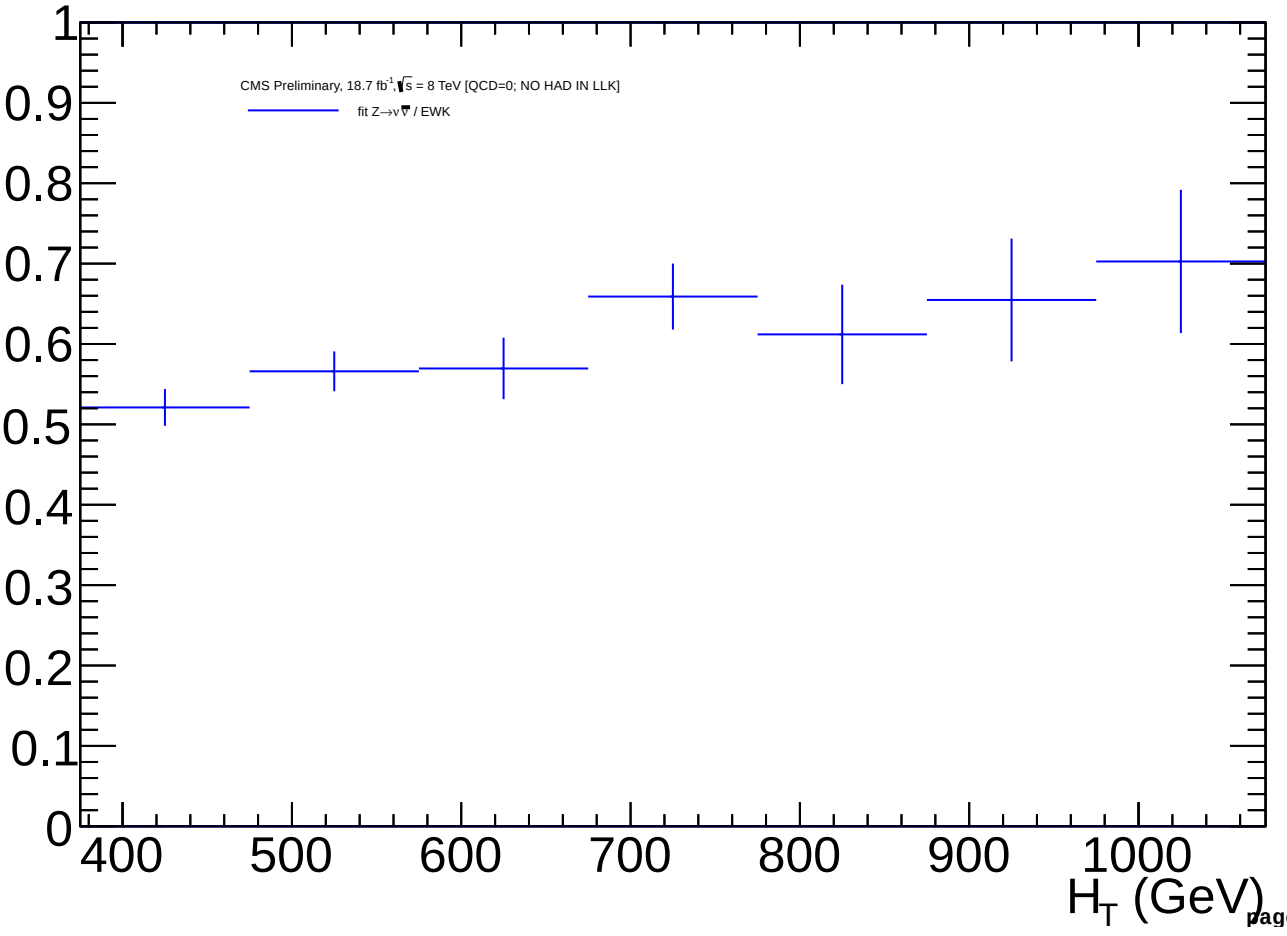
ttW scale factor (result of fit)

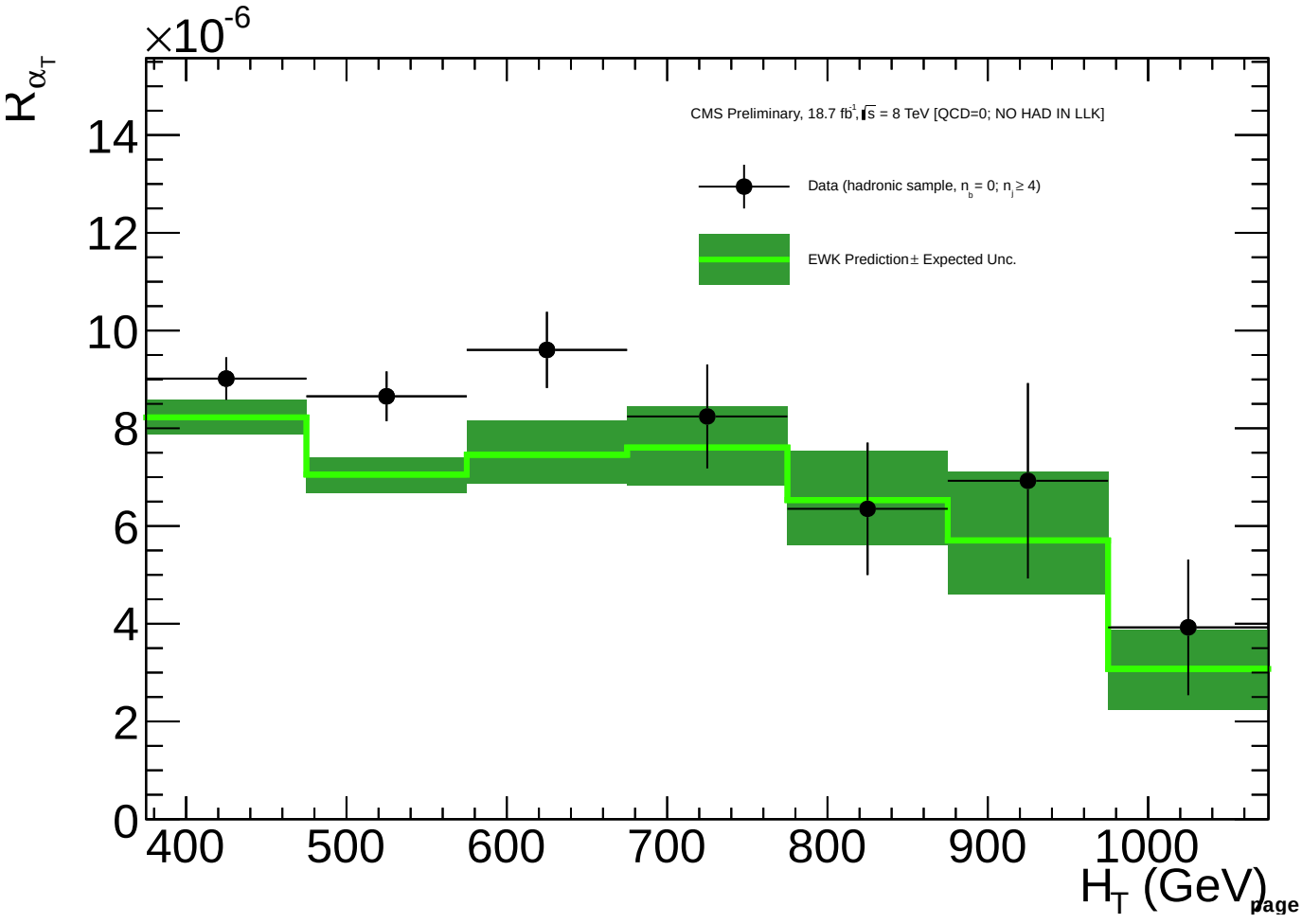


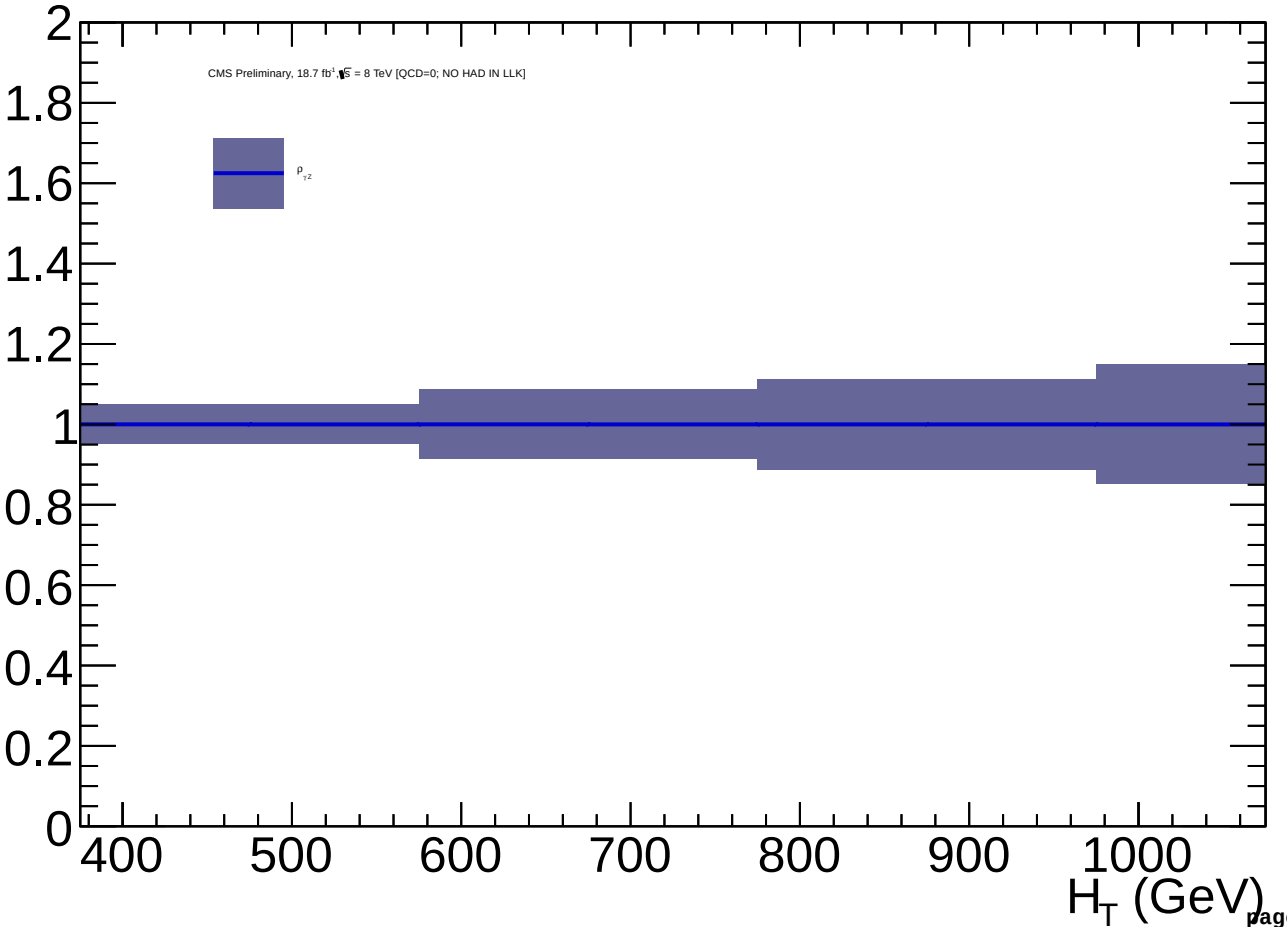
Zinv scale factor (result of fit)

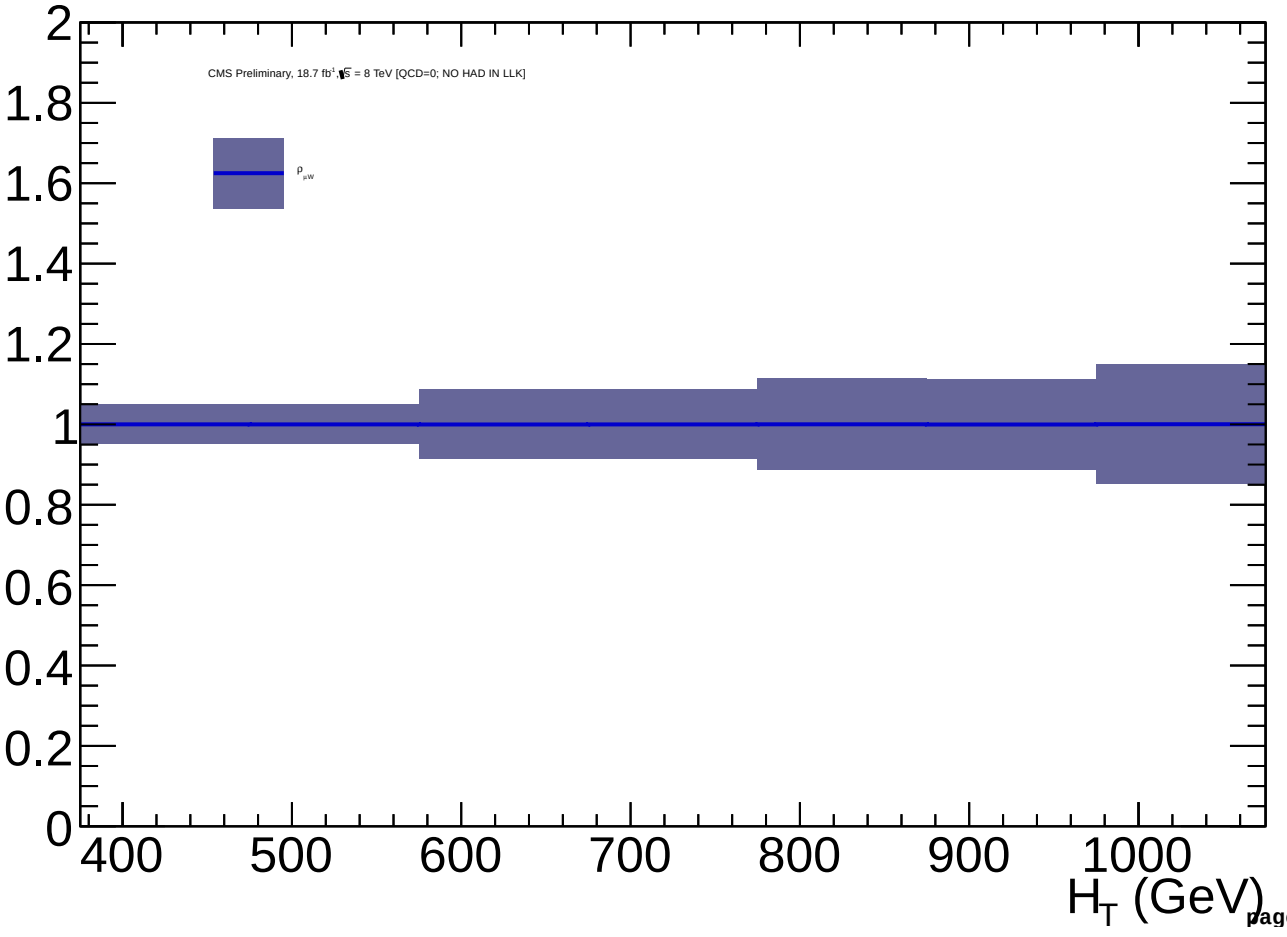


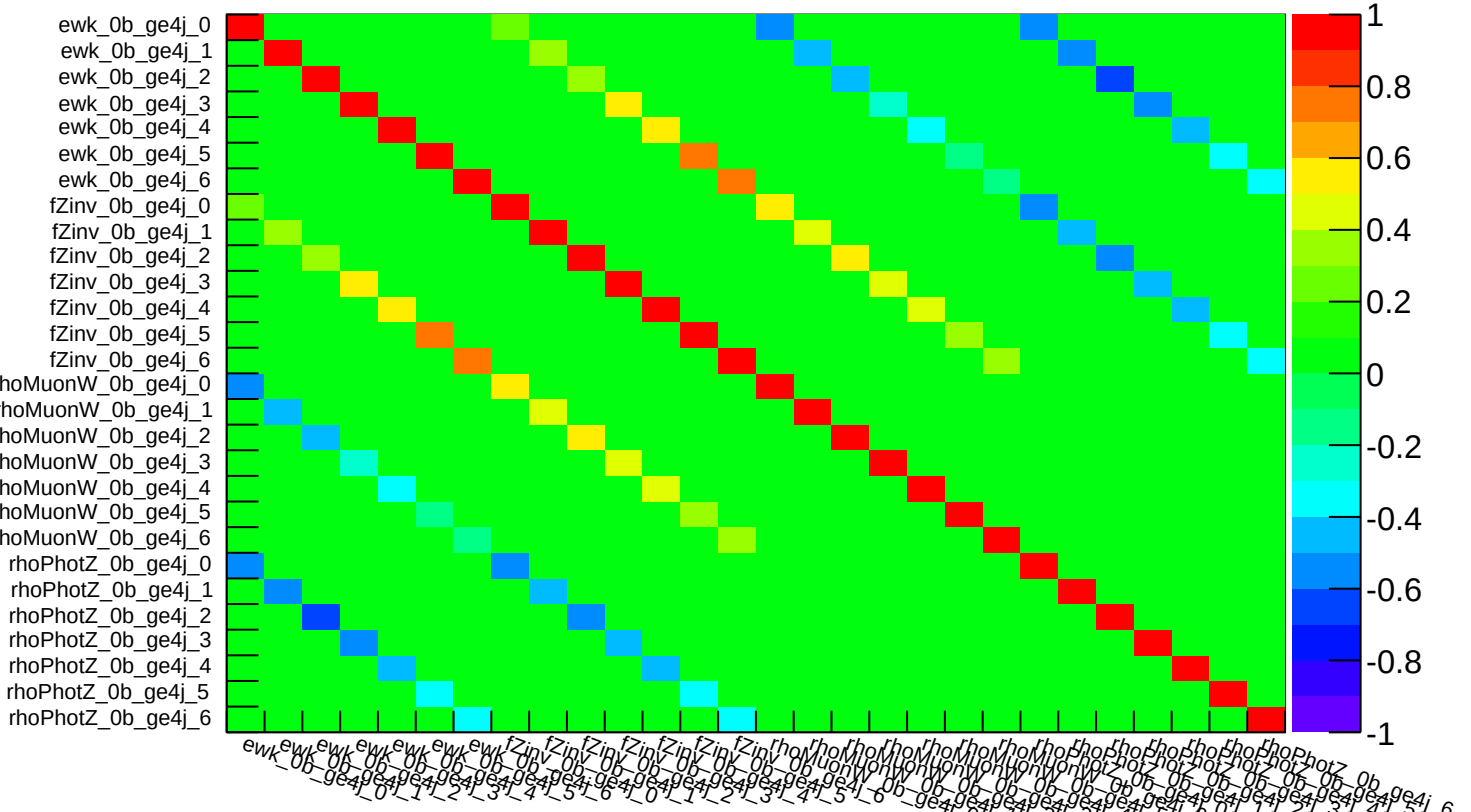
fraction of EWK background which is Zinv (result of fit)




$\times 10^{-6}$
R_{α_T}
CMS Preliminary, 18.7 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (hadronic sample, $n_b = 0$; $n_j \geq 4$)
EWK Prediction ± Expected Unc.
0
2
4
6
8
10
12
14
400
500
600
700
800
900
1000
H_T (GeV)


CMS Preliminary, 18.7 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
HT (GeV)


CMS Preliminary, 18.7 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
HT (GeV)

par name:	value	+/- error	[min - max]
ewk_0b_ge4j_0:	3.91e+02	+/- 1.8e+01	[0.0e+00 - 4.3e+03]
fZinv_0b_ge4j_0:	5.21e-01	+/- 2.3e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge4j_1:	2.36e+02	+/- 1.2e+01	[0.0e+00 - 2.9e+03]
fZinv_0b_ge4j_1:	5.66e-01	+/- 2.5e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge4j_2:	1.18e+02	+/- 9.6e+00	[0.0e+00 - 1.5e+03]
fZinv_0b_ge4j_2:	5.70e-01	+/- 3.8e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge4j_3:	5.54e+01	+/- 5.8e+00	[0.0e+00 - 6.0e+02]
fZinv_0b_ge4j_3:	6.59e-01	+/- 4.1e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge4j_4:	2.26e+01	+/- 3.3e+00	[0.0e+00 - 2.2e+02]
fZinv_0b_ge4j_4:	6.12e-01	+/- 6.2e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge4j_5:	9.88e+00	+/- 2.0e+00	[0.0e+00 - 1.2e+02]
fZinv_0b_ge4j_5:	6.55e-01	+/- 7.6e-02	[0.0e+00 - 1.0e+00]
ewk_0b_ge4j_6:	6.27e+00	+/- 1.7e+00	[0.0e+00 - 8.0e+01]
fZinv_0b_ge4j_6:	7.03e-01	+/- 8.9e-02	[0.0e+00 - 1.0e+00]
rhoPhotZ_0b_ge4j_0:	1.00e+00	+/- 4.9e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge4j_1:	1.00e+00	+/- 4.9e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge4j_2:	1.00e+00	+/- 8.6e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge4j_3:	1.00e+00	+/- 8.6e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge4j_4:	1.00e+00	+/- 1.1e-01	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge4j_5:	1.00e+00	+/- 1.1e-01	[0.0e+00 - 3.0e+00]
rhoPhotZ_0b_ge4j_6:	1.00e+00	+/- 1.5e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge4j_0:	1.00e+00	+/- 4.9e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge4j_1:	1.00e+00	+/- 4.9e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge4j_2:	1.00e+00	+/- 8.6e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge4j_3:	1.00e+00	+/- 8.6e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge4j_4:	1.00e+00	+/- 1.1e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge4j_5:	1.00e+00	+/- 1.1e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_0b_ge4j_6:	1.00e+00	+/- 1.5e-01	[0.0e+00 - 3.0e+00]

correlation_matrix