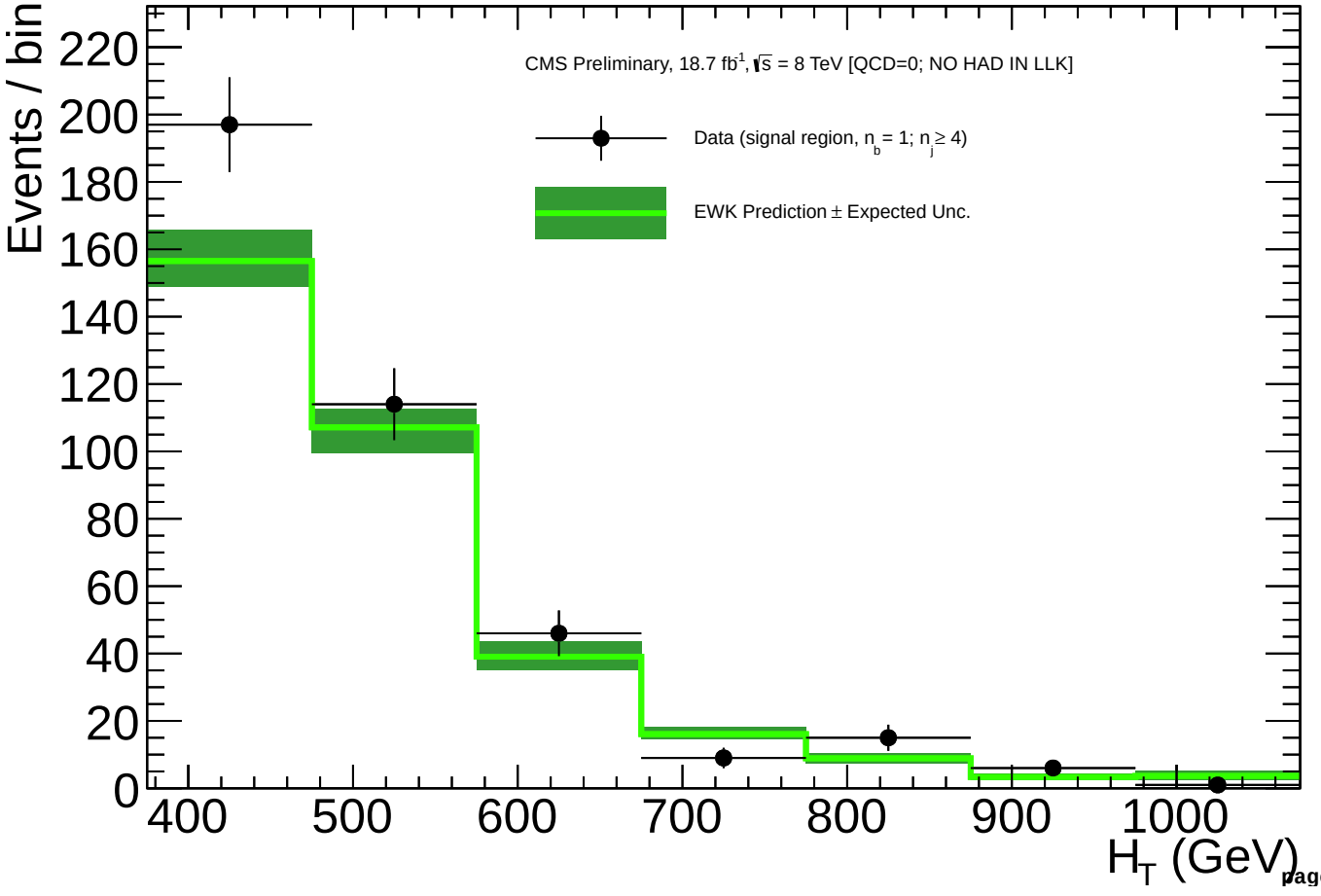
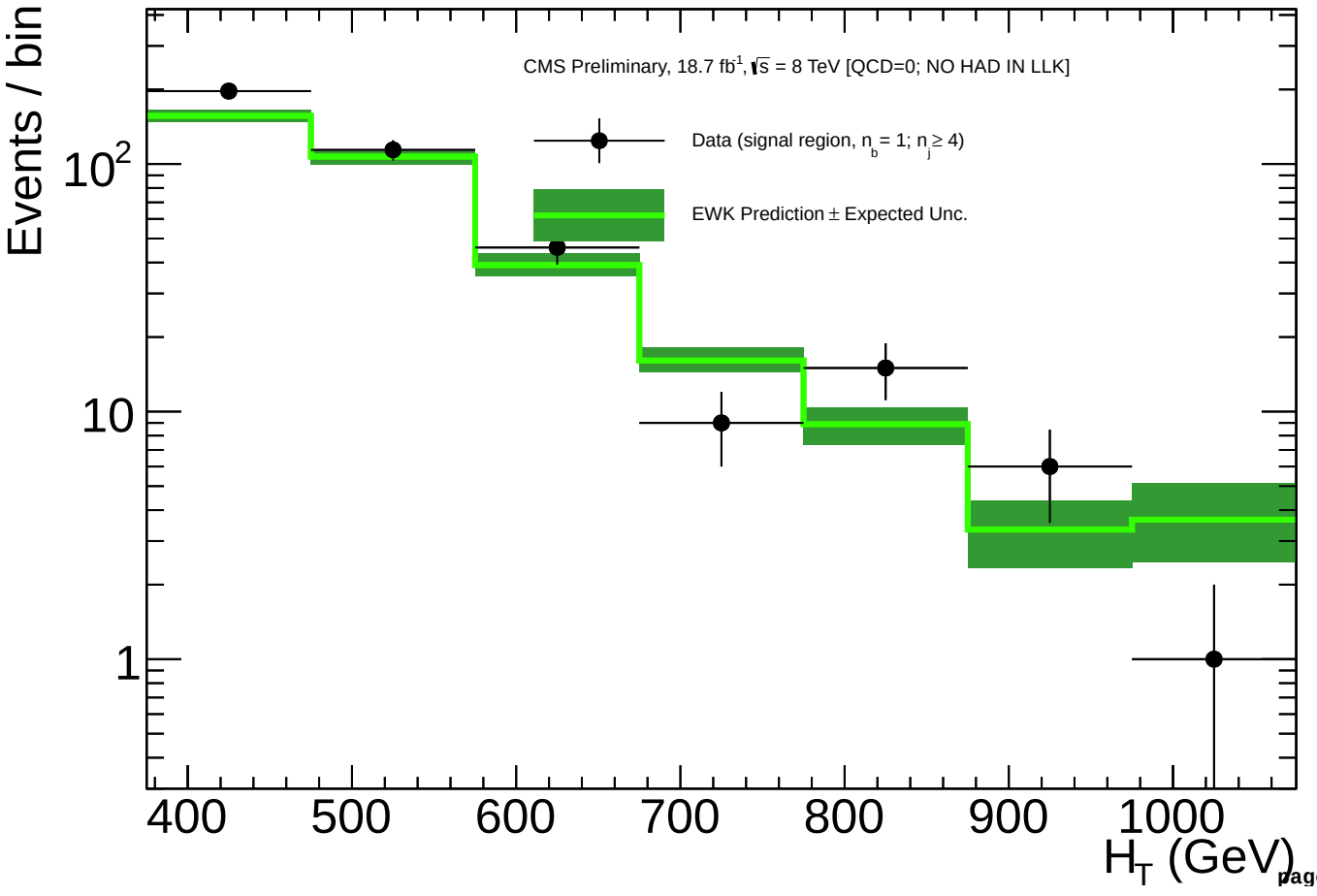
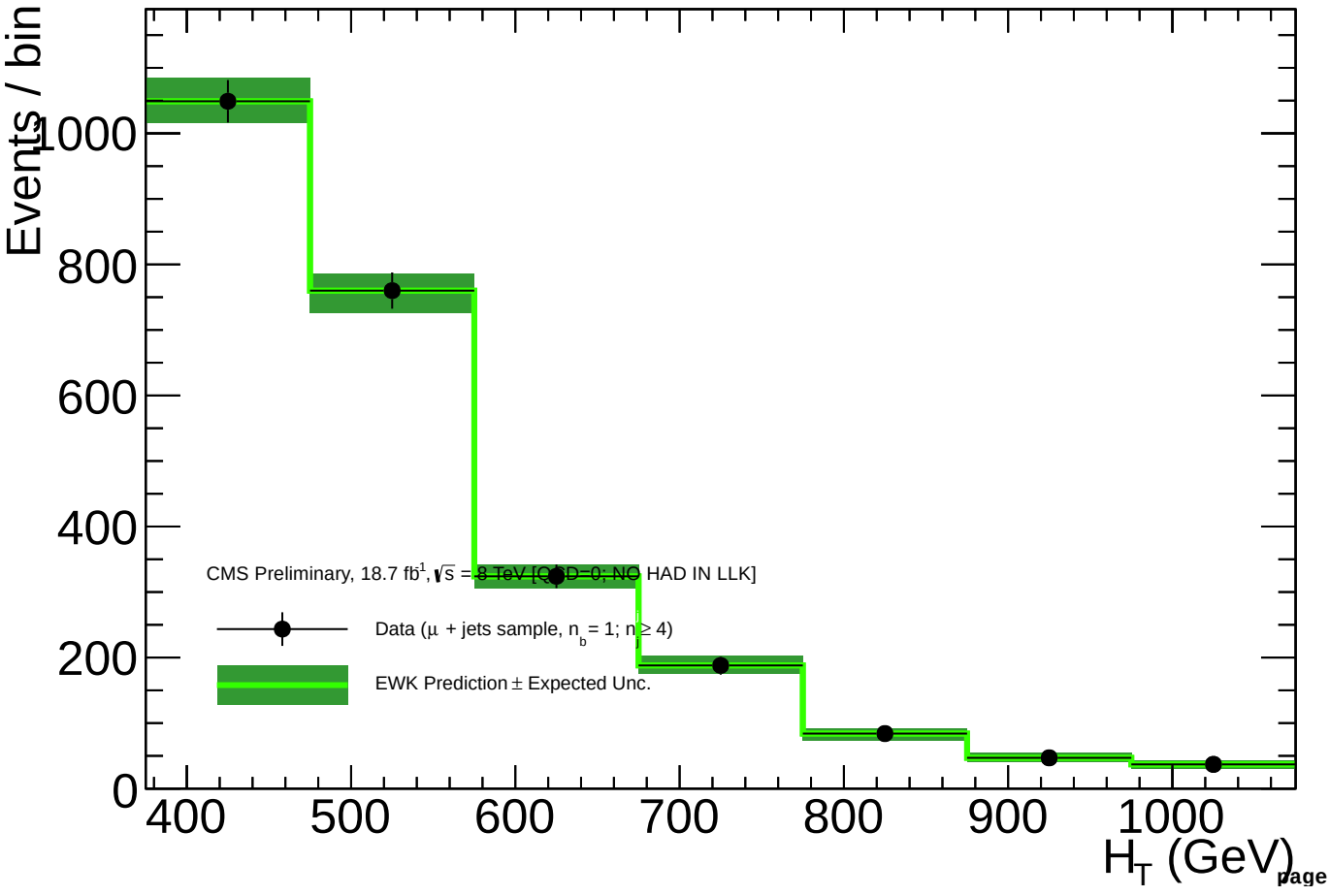
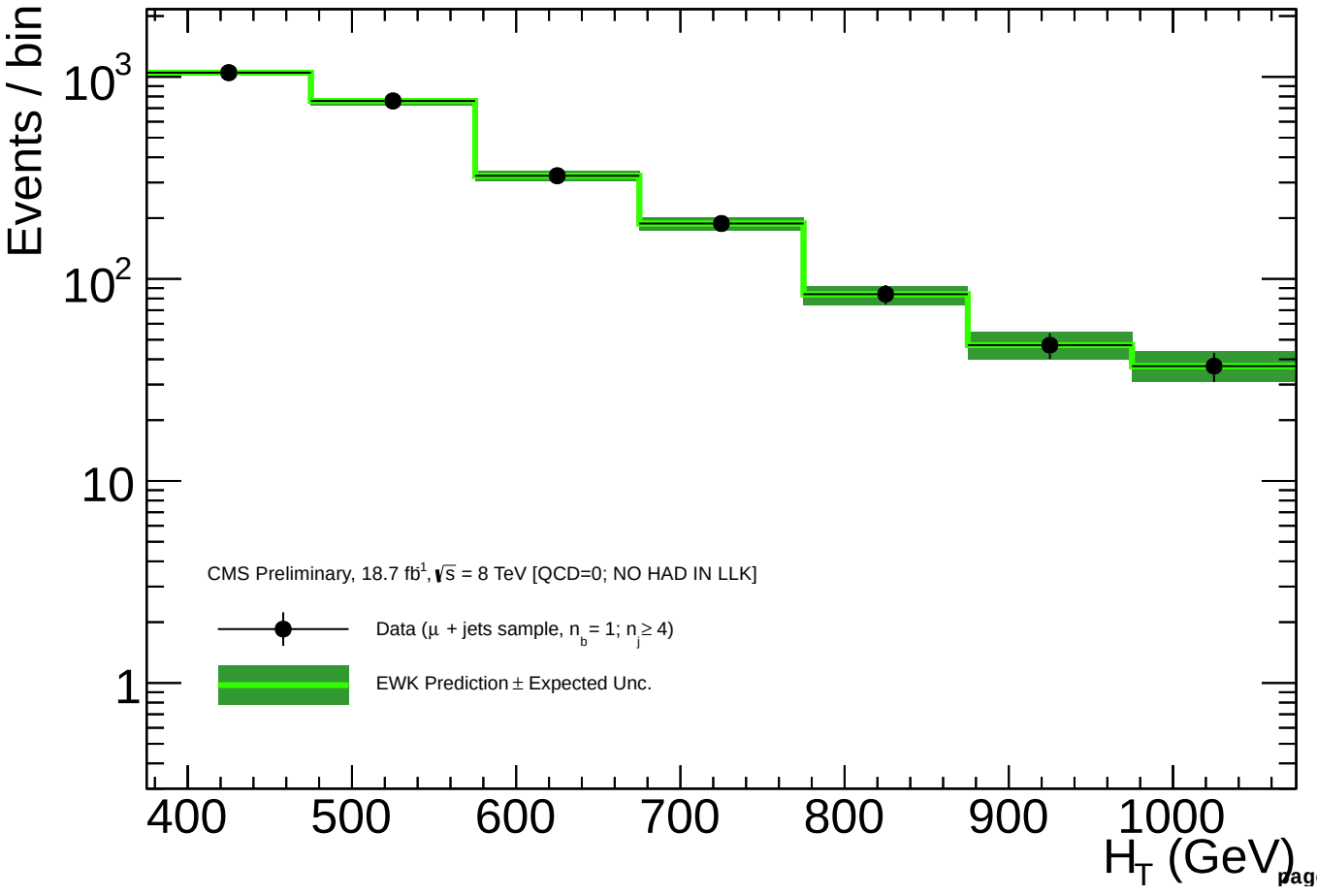
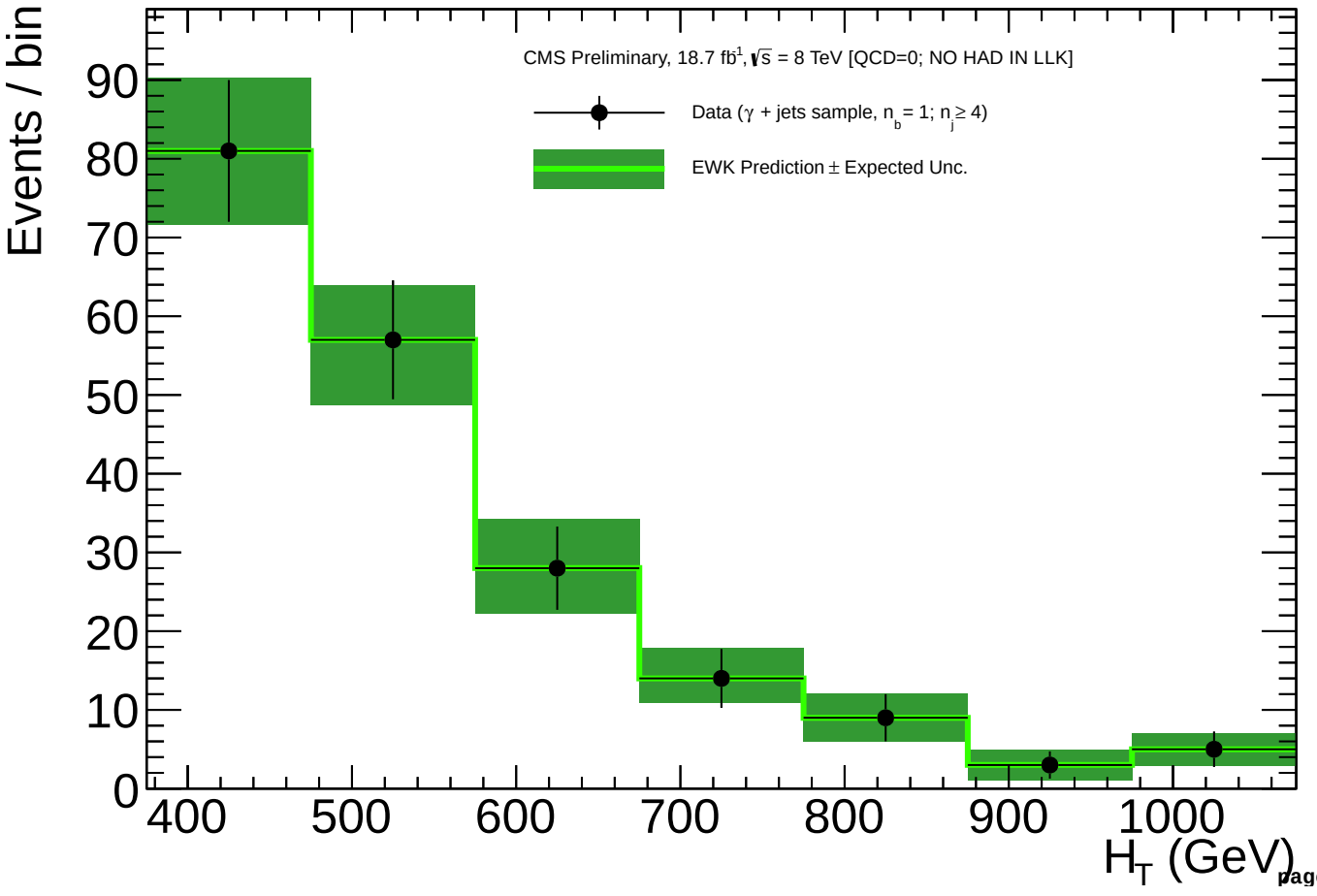
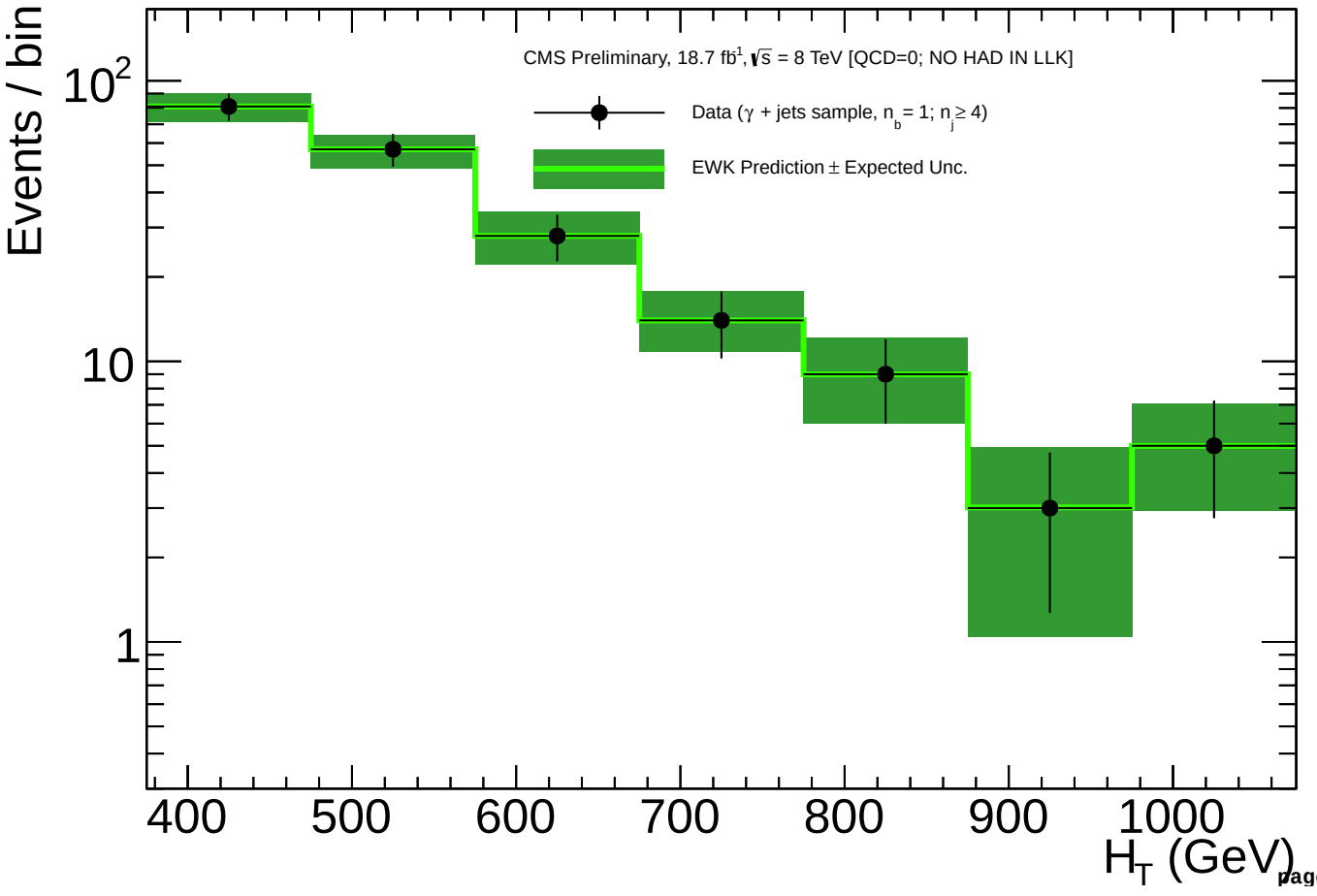

CMS Preliminary, 18.7 fb-1, √s = 8 TeV [QCD=0; NO HAD IN LLK]
Data (signal region, nb = 1; nj ≥ 4)
EWK Prediction ± Expected Unc.
Events / bin
0
20
40
60
80
100
120
140
160
180
200
220
400
500
600
700
800
900
1000
HT (GeV)


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

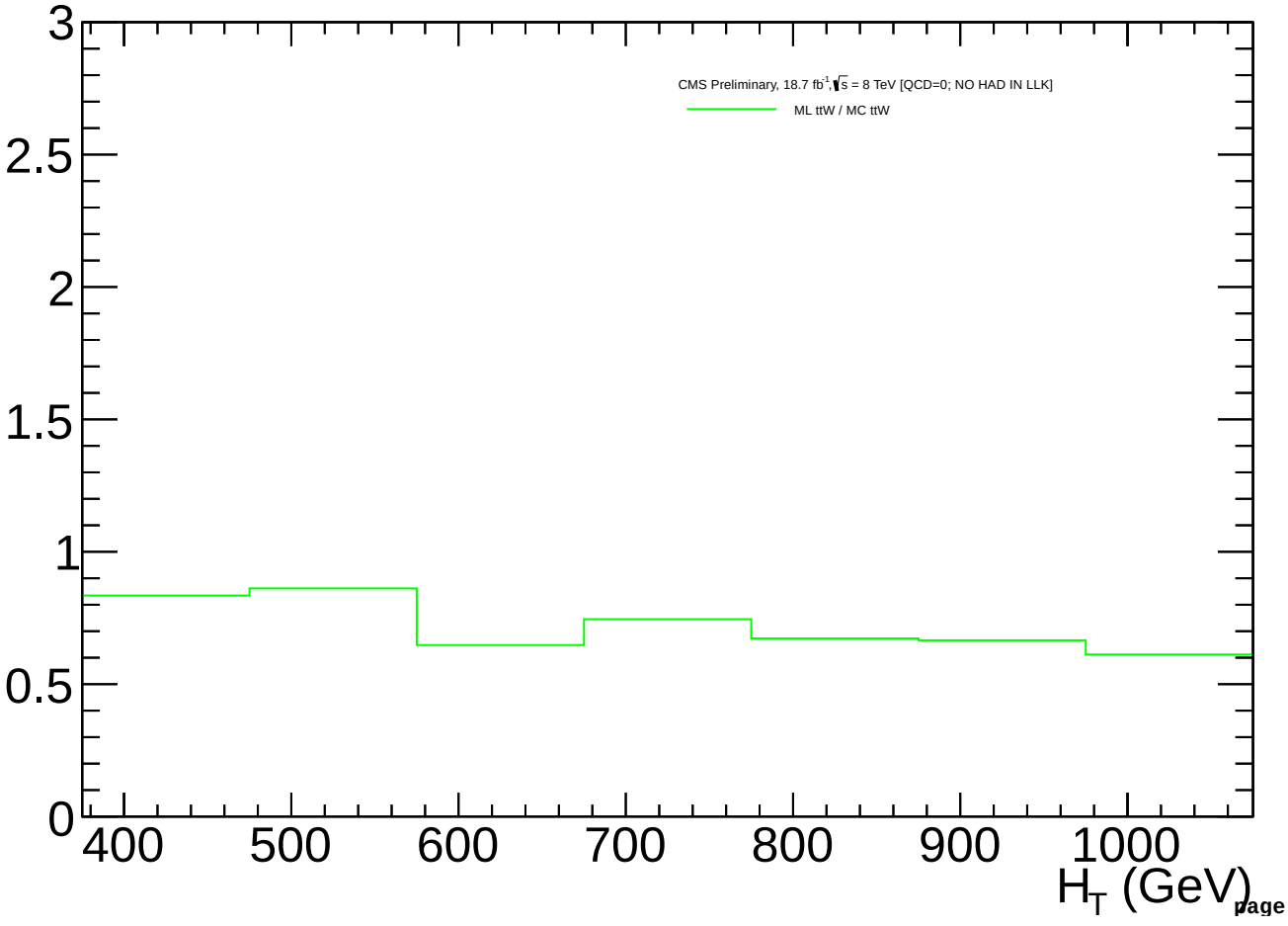

Events / bin
1000
800
600
400
200
0
400
500
600
700
800
900
1000
H_T (GeV)
CMS Preliminary, 18.7 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (μ + jets sample, n_b = 1; $n_j \geq 4$)
EWK Prediction ± Expected Unc.


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

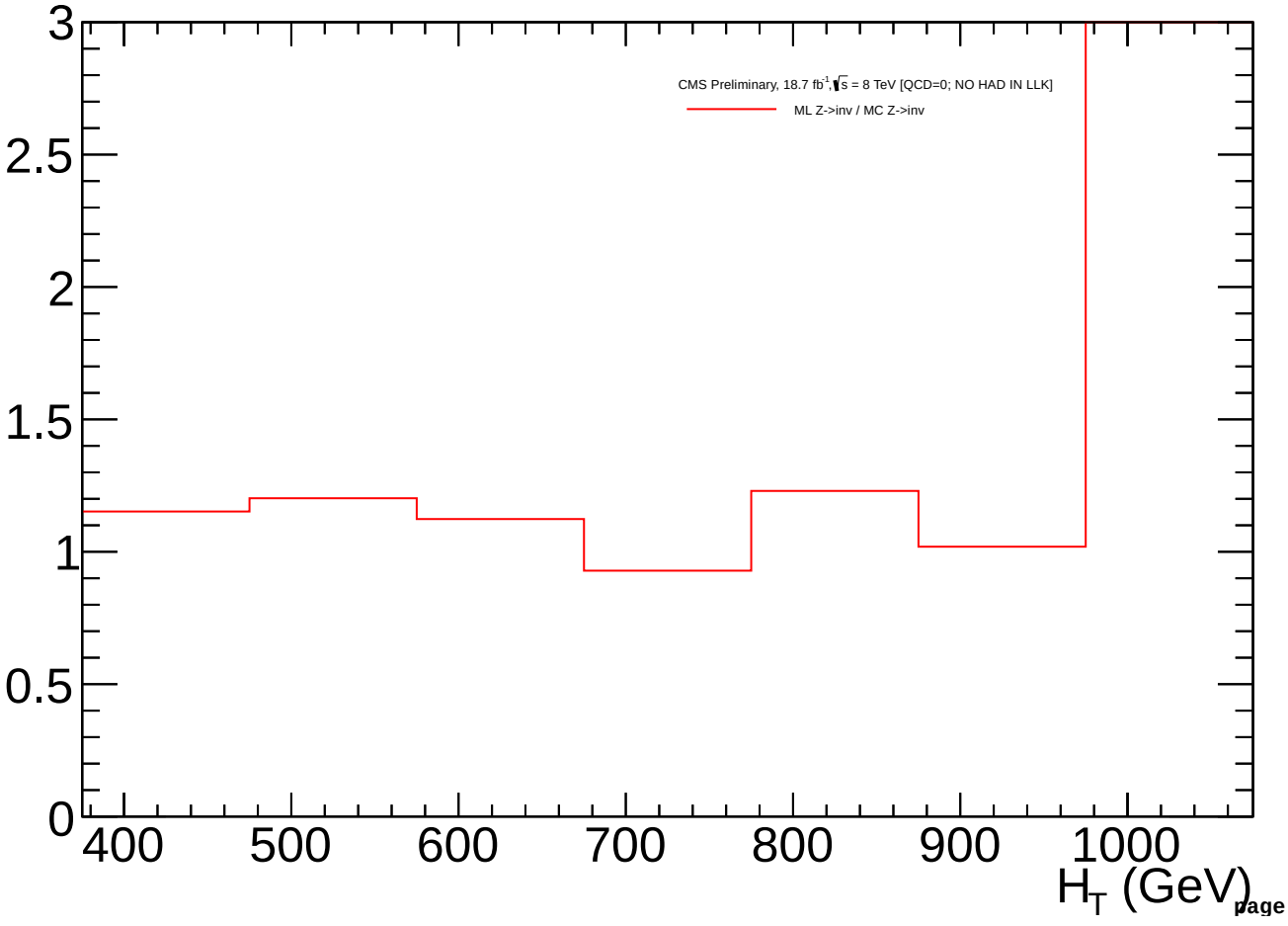

CMS Preliminary, 18.7 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (γ + jets sample, $n_b = 1$; $n_j \geq 4$)
EWK Prediction ± Expected Unc.
Events / bin
0
10
20
30
40
50
60
70
80
90
400
500
600
700
800
900
1000
H_T (GeV)


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

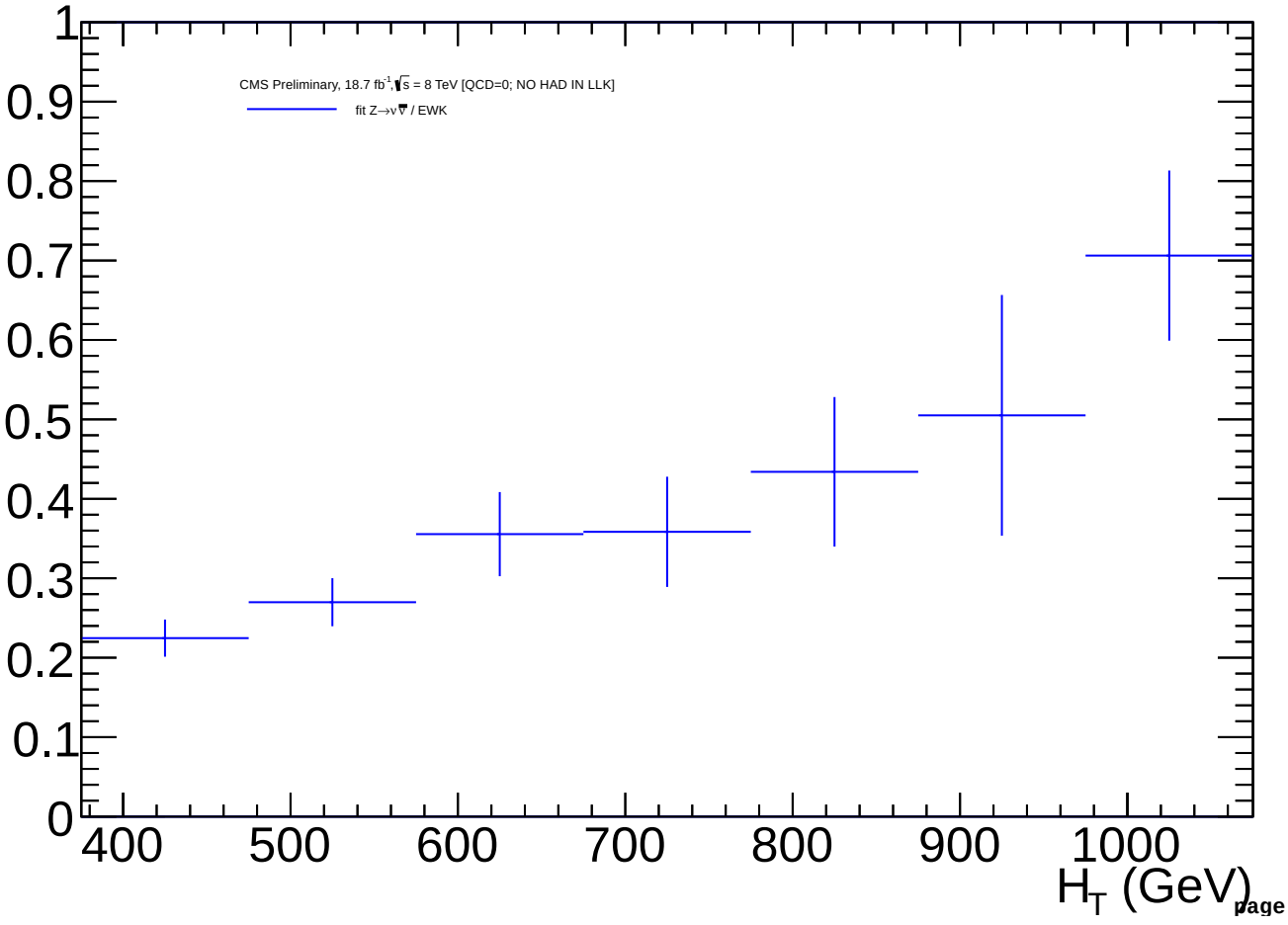
ttW scale factor (result of fit)

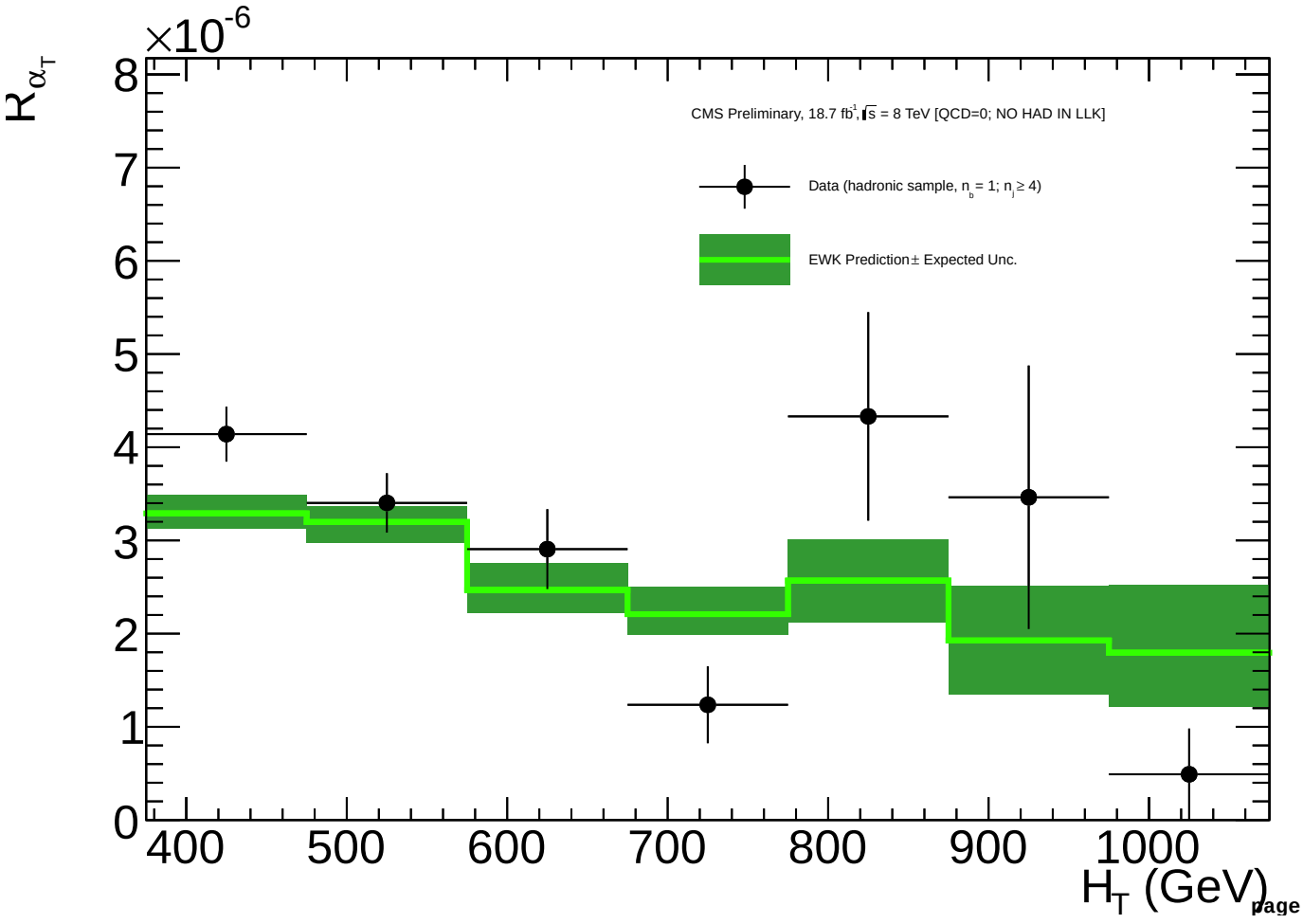


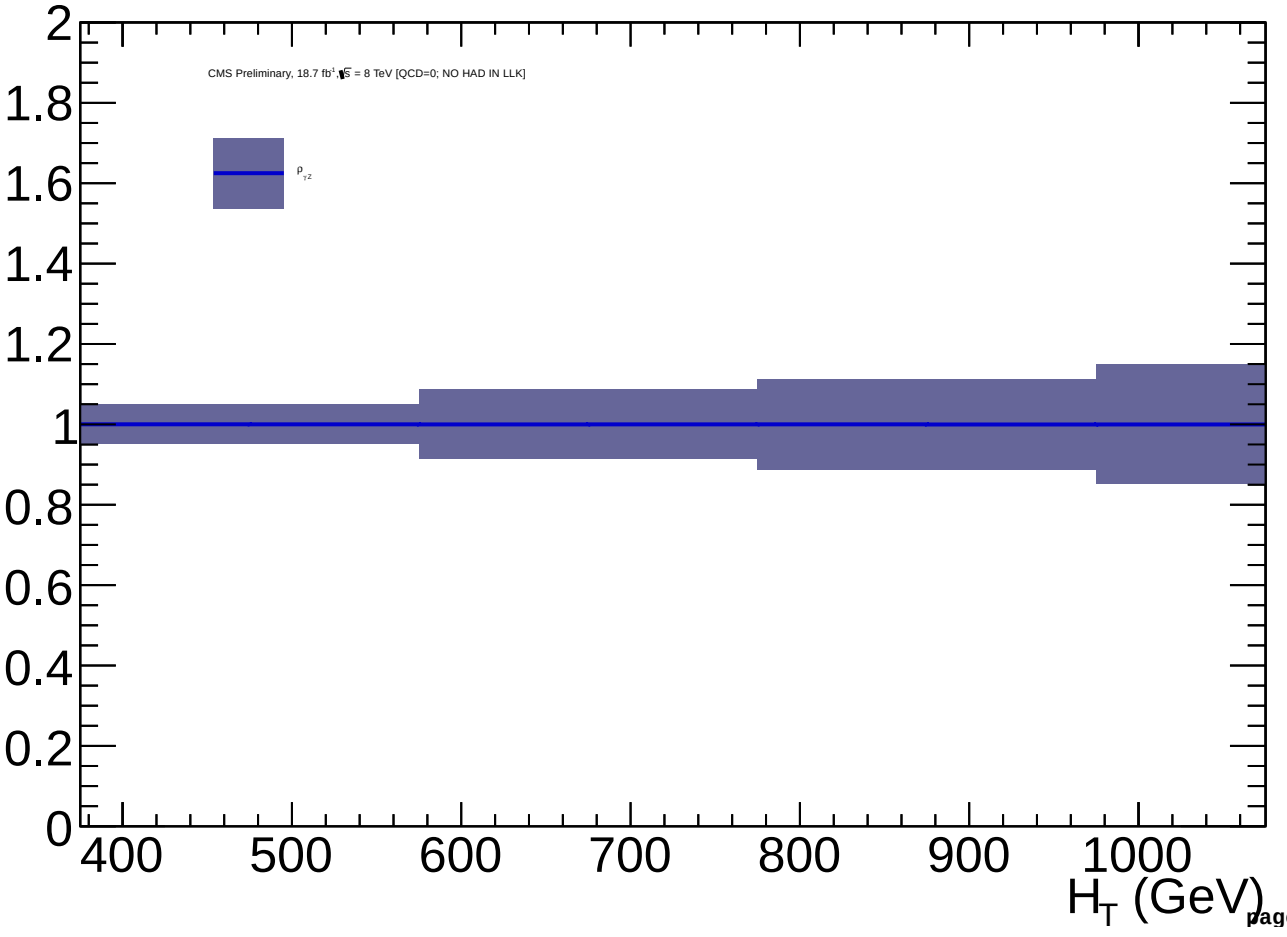
Zinv scale factor (result of fit)

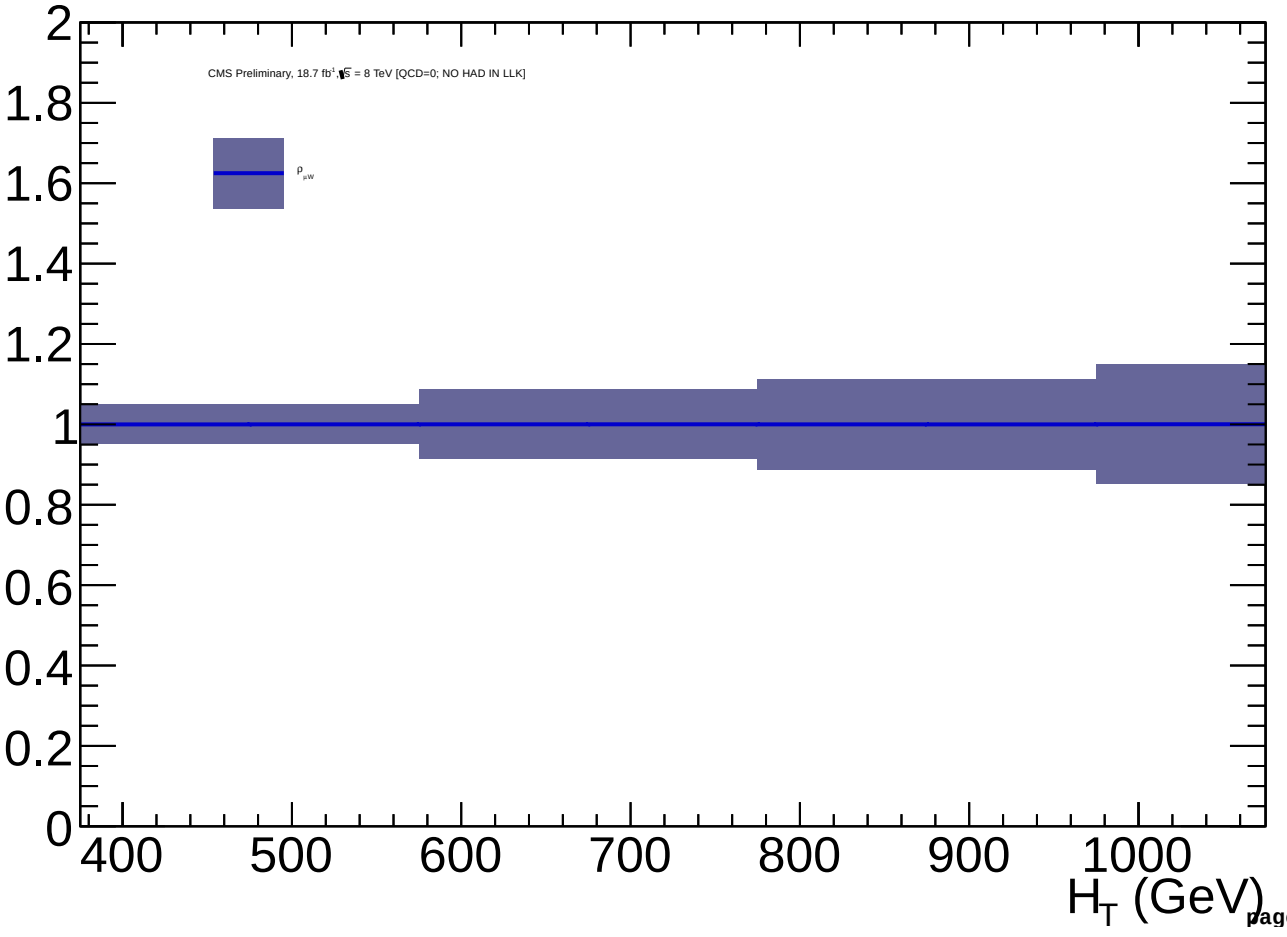


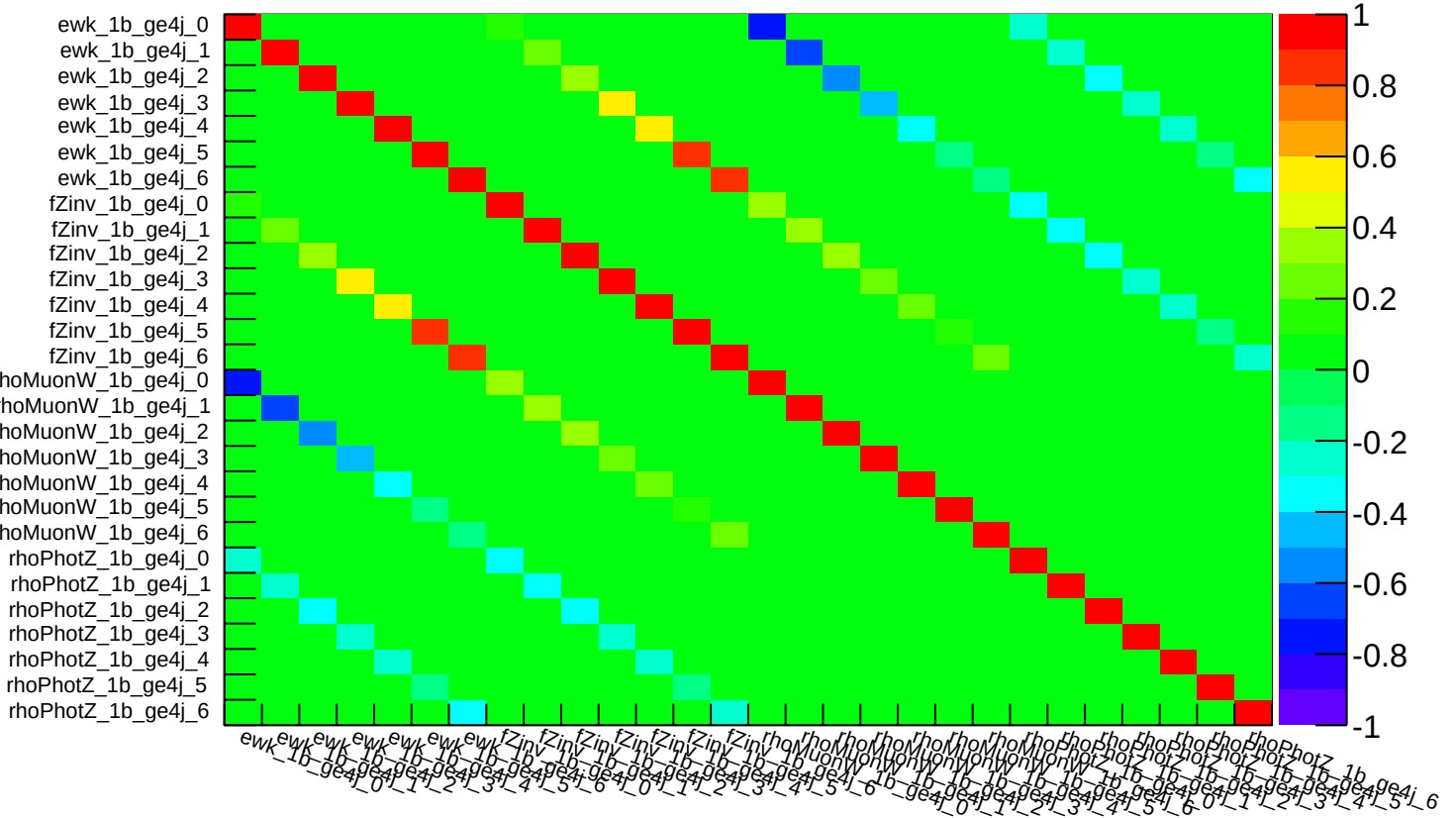
fraction of EWK background which is Zinv (result of fit)




R_{α_T}
$\times 10^{-6}$
CMS Preliminary, 18.7 fb^{-1}, $\sqrt{s}$ = 8 TeV [QCD=0; NO HAD IN LLK]
Data (hadronic sample, n_b = 1; $n_j \geq$ 4)
EWK Prediction ± Expected Unc.
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_1b_ge4j_0:	1.57e+02	+/- 8.2e+00	[0.0e+00 - 2.0e+03]
fZinv_1b_ge4j_0:	2.25e-01	+/- 2.3e-02	[0.0e+00 - 1.0e+00]
ewk_1b_ge4j_1:	1.07e+02	+/- 6.3e+00	[0.0e+00 - 1.1e+03]
fZinv_1b_ge4j_1:	2.70e-01	+/- 3.0e-02	[0.0e+00 - 1.0e+00]
ewk_1b_ge4j_2:	3.91e+01	+/- 3.9e+00	[0.0e+00 - 4.6e+02]
fZinv_1b_ge4j_2:	3.56e-01	+/- 5.3e-02	[0.0e+00 - 1.0e+00]
ewk_1b_ge4j_3:	1.61e+01	+/- 2.0e+00	[0.0e+00 - 9.0e+01]
fZinv_1b_ge4j_3:	3.58e-01	+/- 6.9e-02	[0.0e+00 - 1.0e+00]
ewk_1b_ge4j_4:	8.90e+00	+/- 1.6e+00	[0.0e+00 - 1.5e+02]
fZinv_1b_ge4j_4:	4.34e-01	+/- 9.4e-02	[0.0e+00 - 1.0e+00]
ewk_1b_ge4j_5:	3.34e+00	+/- 1.0e+00	[0.0e+00 - 6.0e+01]
fZinv_1b_ge4j_5:	5.05e-01	+/- 1.5e-01	[0.0e+00 - 1.0e+00]
ewk_1b_ge4j_6:	3.66e+00	+/- 1.2e+00	[0.0e+00 - 1.0e+01]
fZinv_1b_ge4j_6:	7.06e-01	+/- 1.1e-01	[0.0e+00 - 1.0e+00]
rhoPhotZ_1b_ge4j_0:	1.00e+00	+/- 4.9e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_1b_ge4j_1:	1.00e+00	+/- 4.9e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_1b_ge4j_2:	1.00e+00	+/- 8.6e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_1b_ge4j_3:	1.00e+00	+/- 8.6e-02	[0.0e+00 - 3.0e+00]
rhoPhotZ_1b_ge4j_4:	1.00e+00	+/- 1.1e-01	[0.0e+00 - 3.0e+00]
rhoPhotZ_1b_ge4j_5:	1.00e+00	+/- 1.1e-01	[0.0e+00 - 3.0e+00]
rhoPhotZ_1b_ge4j_6:	1.00e+00	+/- 1.5e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_1b_ge4j_0:	1.00e+00	+/- 4.9e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_1b_ge4j_1:	1.00e+00	+/- 4.9e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_1b_ge4j_2:	1.00e+00	+/- 8.6e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_1b_ge4j_3:	1.00e+00	+/- 8.6e-02	[0.0e+00 - 3.0e+00]
rhoMuonW_1b_ge4j_4:	1.00e+00	+/- 1.1e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_1b_ge4j_5:	1.00e+00	+/- 1.1e-01	[0.0e+00 - 3.0e+00]
rhoMuonW_1b_ge4j_6:	1.00e+00	+/- 1.5e-01	[0.0e+00 - 3.0e+00]

correlation_matrix