

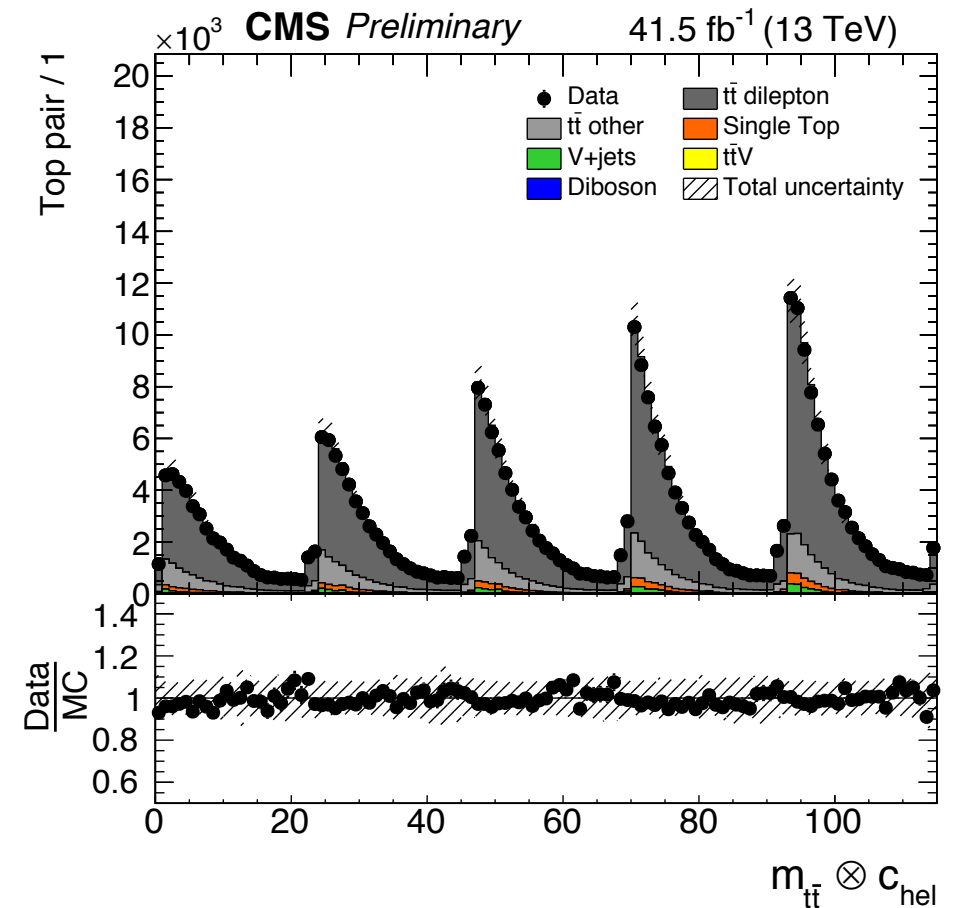
Heavy Higgs Limit

Samuel Baxter

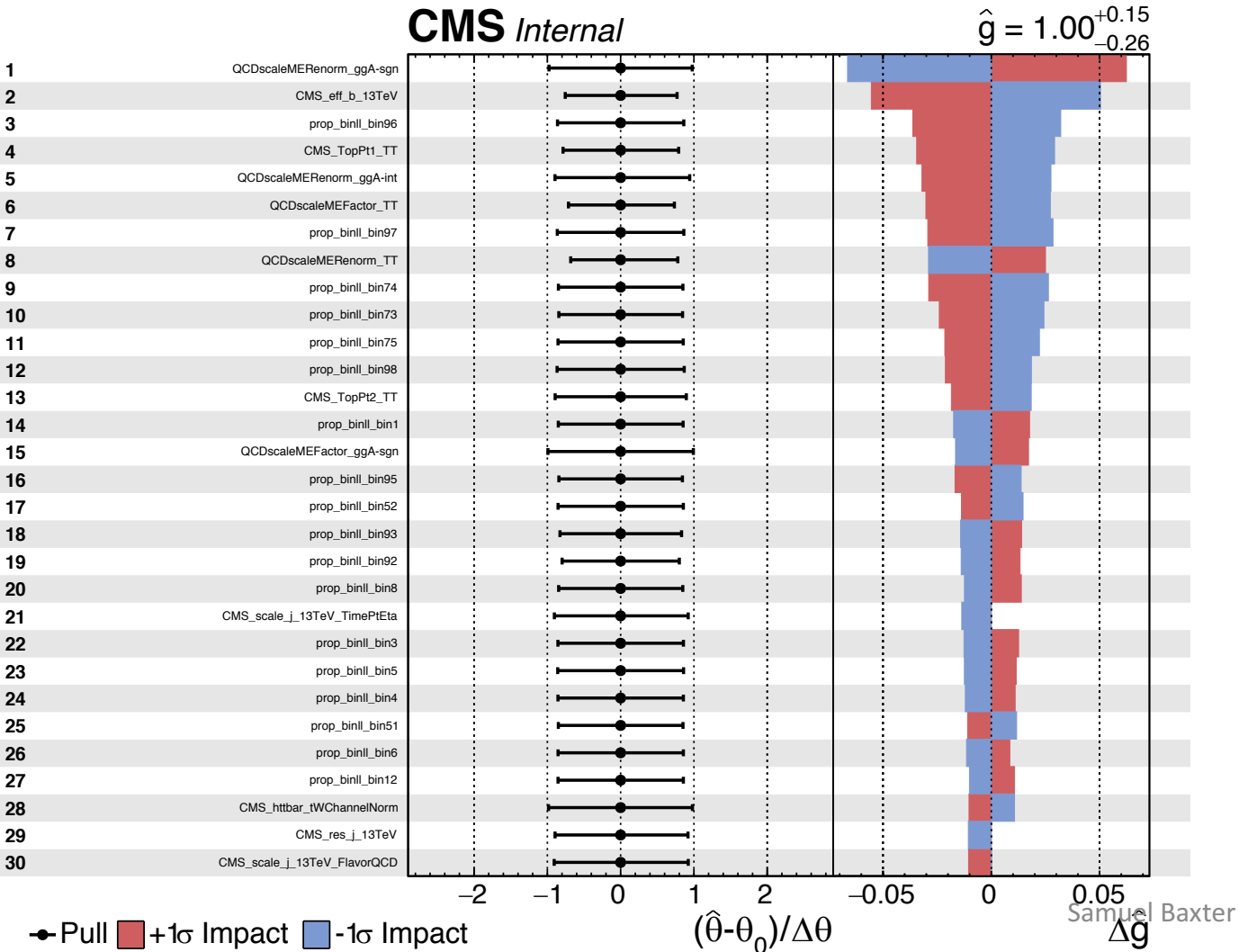
Analysis

Limit has been set including the following systematics:
Btag, Btag_Ljet, DYNorm, Ele, JER, JES (and all subcategories), Mass, Match, MEfacscale, MErenscale, Muon, PDF_alphas, PDF_env, PSfsrcscale, PSisrcscale, PU, Top_pt_fitparam0, Top_pt_fitparam1, Trig, Unclustered, Xsec_TTV, Xsec_TT, Xsec_T, Xsec_VV, Frac_TTHF, Frac_TTOther, Lept, Lumi, NormPDFGG, NormPDFGQ, NormPDFQQ, NormPDFTTH

So far, smoothing and K-factors have not been applied

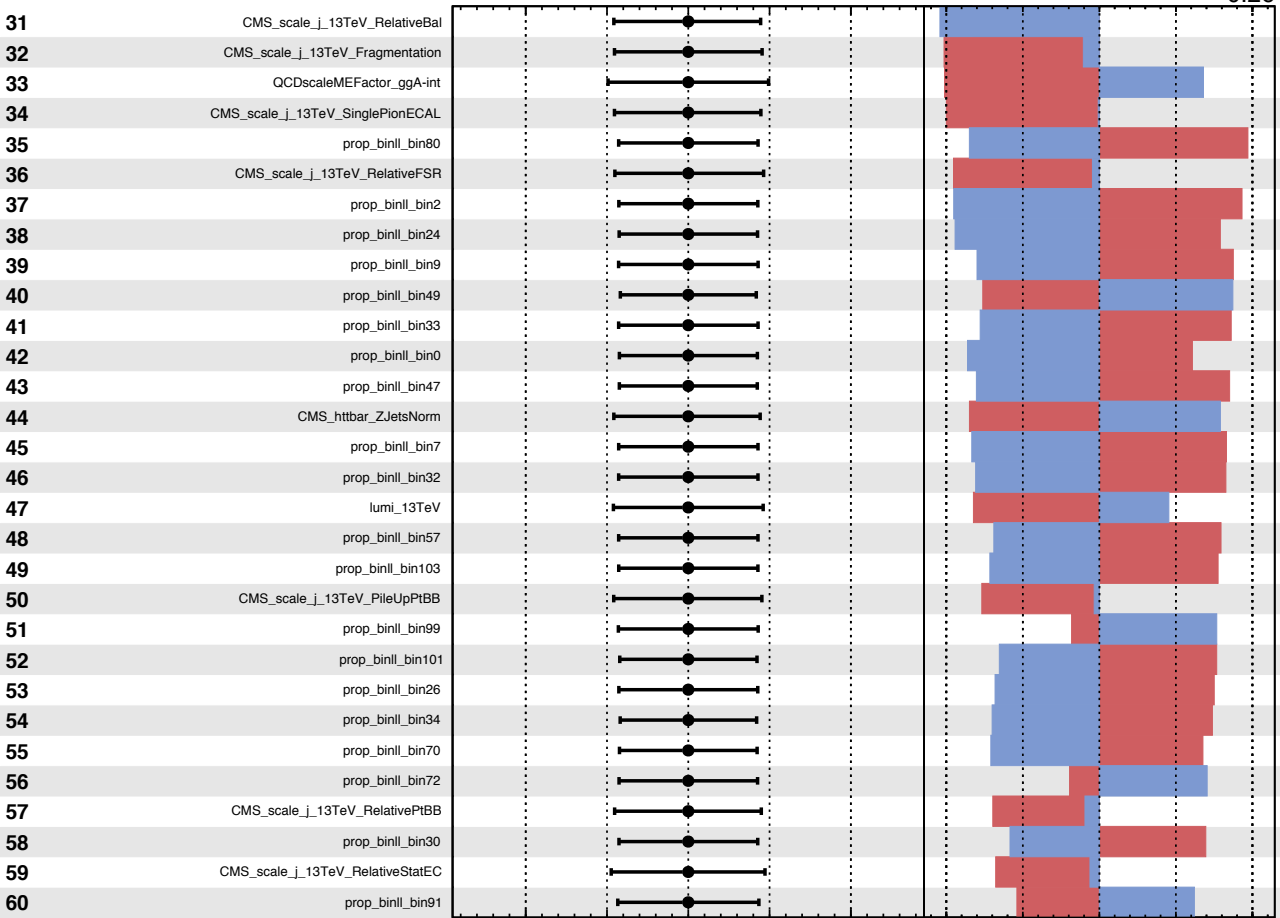


Impacts – expected only



CMS Internal

$$\hat{g} = 1.00^{+0.15}_{-0.26}$$



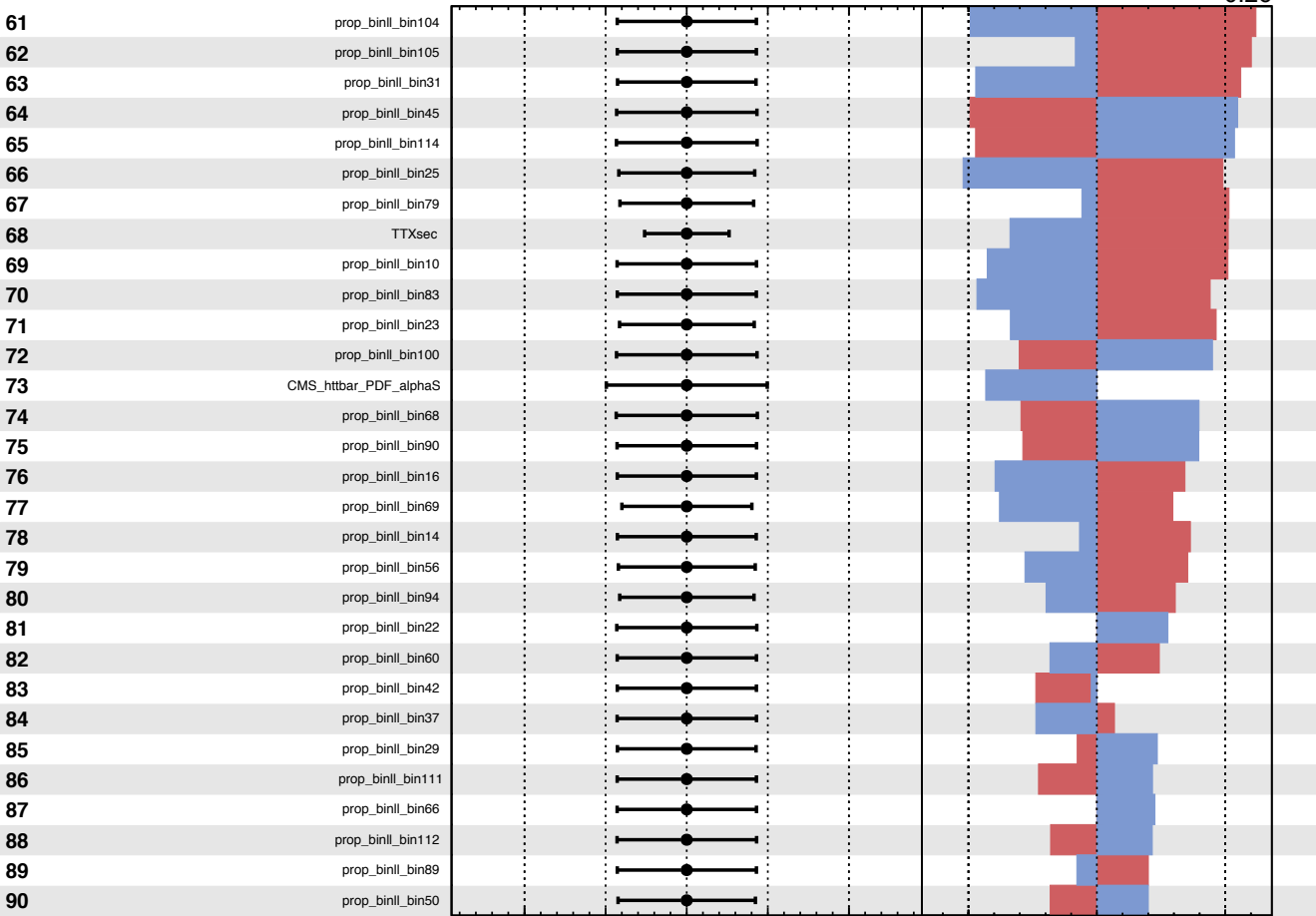
● Pull ■ +1σ Impact ■ -1σ Impact

$(\hat{\theta} - \theta_0) / \Delta\theta$

Samuel Baxter

CMS Internal

$$\hat{g} = 1.00^{+0.15}_{-0.26}$$



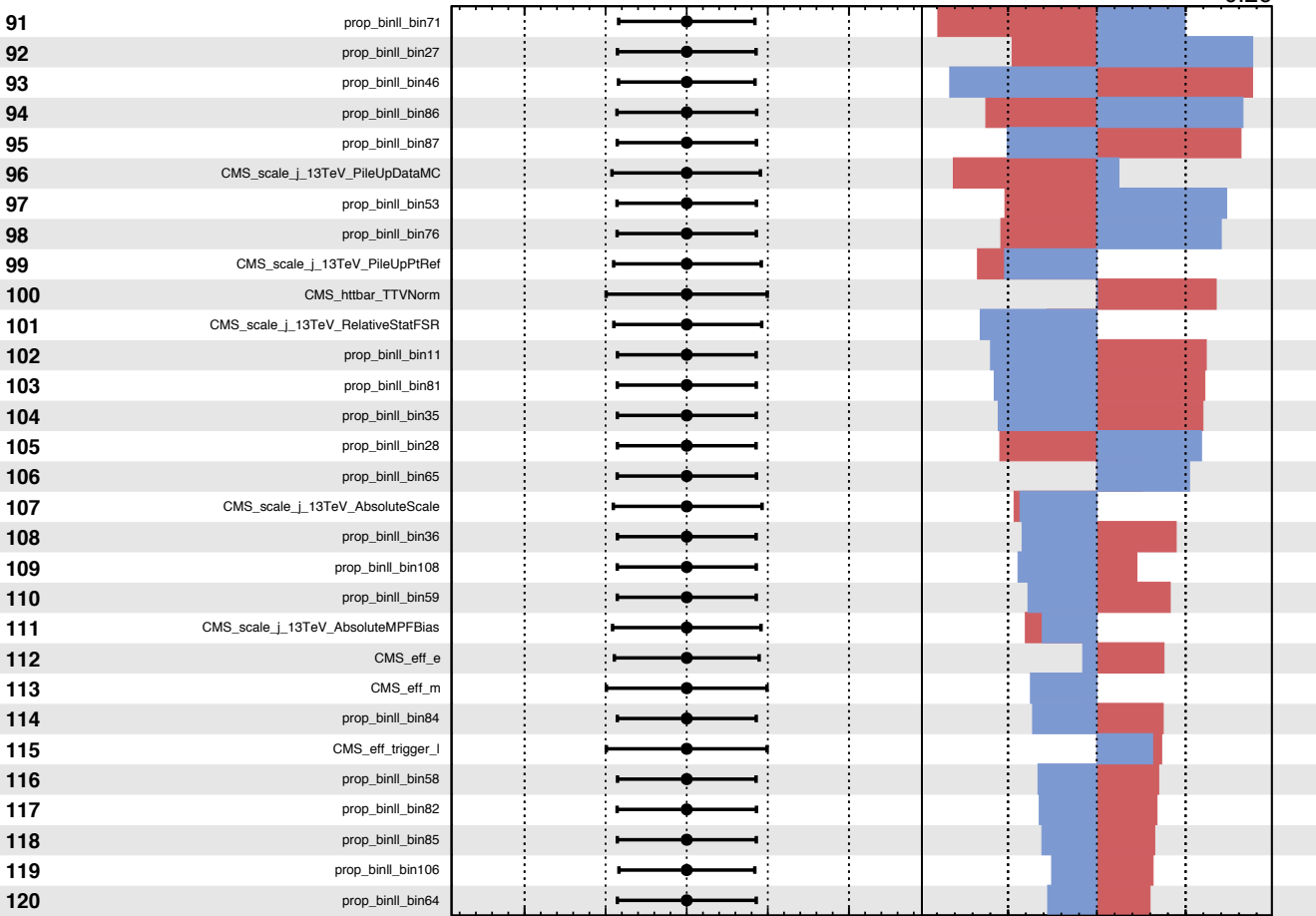
● Pull ■ +1 σ Impact ■ -1 σ Impact

$(\hat{\theta} - \theta_0) / \Delta\theta$ Δg

Samuel Baxter

CMS Internal

$\hat{g} = 1.00^{+0.15}_{-0.26}$



● Pull ■ +1 σ Impact ■ -1 σ Impact

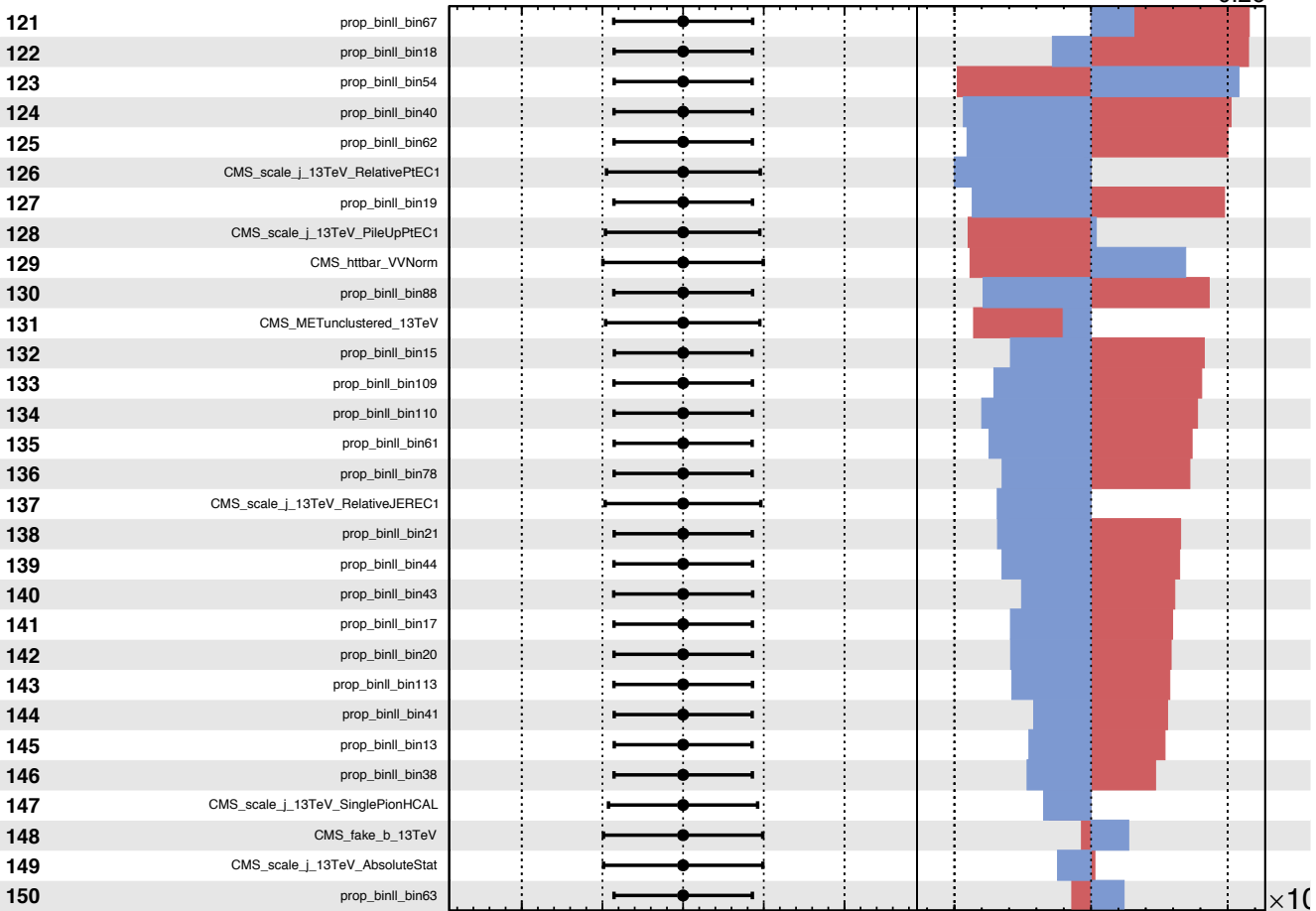
$(\hat{\theta} - \theta_0) / \Delta\theta$

Δg

Samuel Baxter

CMS Internal

$$\hat{g} = 1.00^{+0.15}_{-0.26}$$

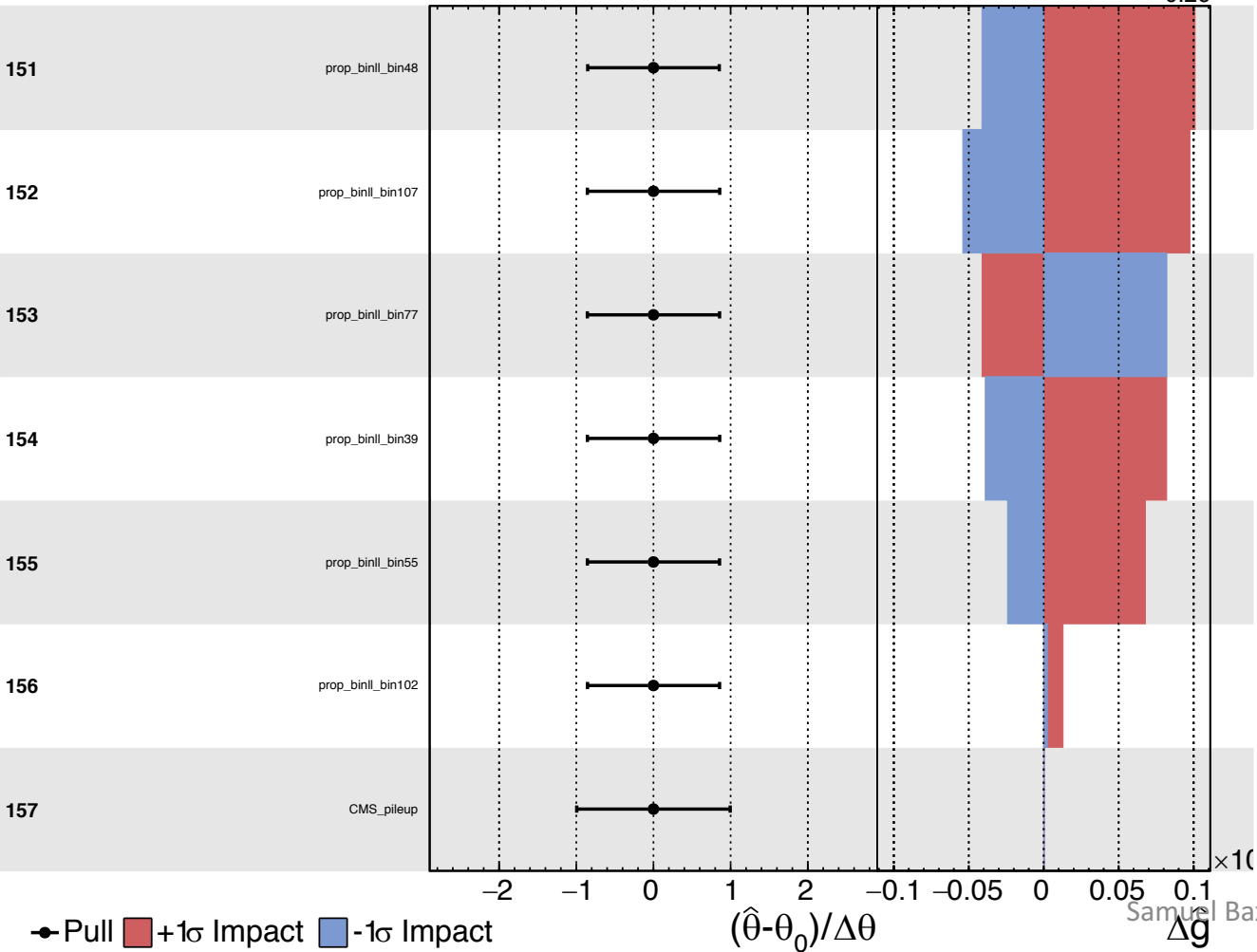


● Pull ■ +1 σ Impact ■ -1 σ Impact

Samuel Baxter
 Δg

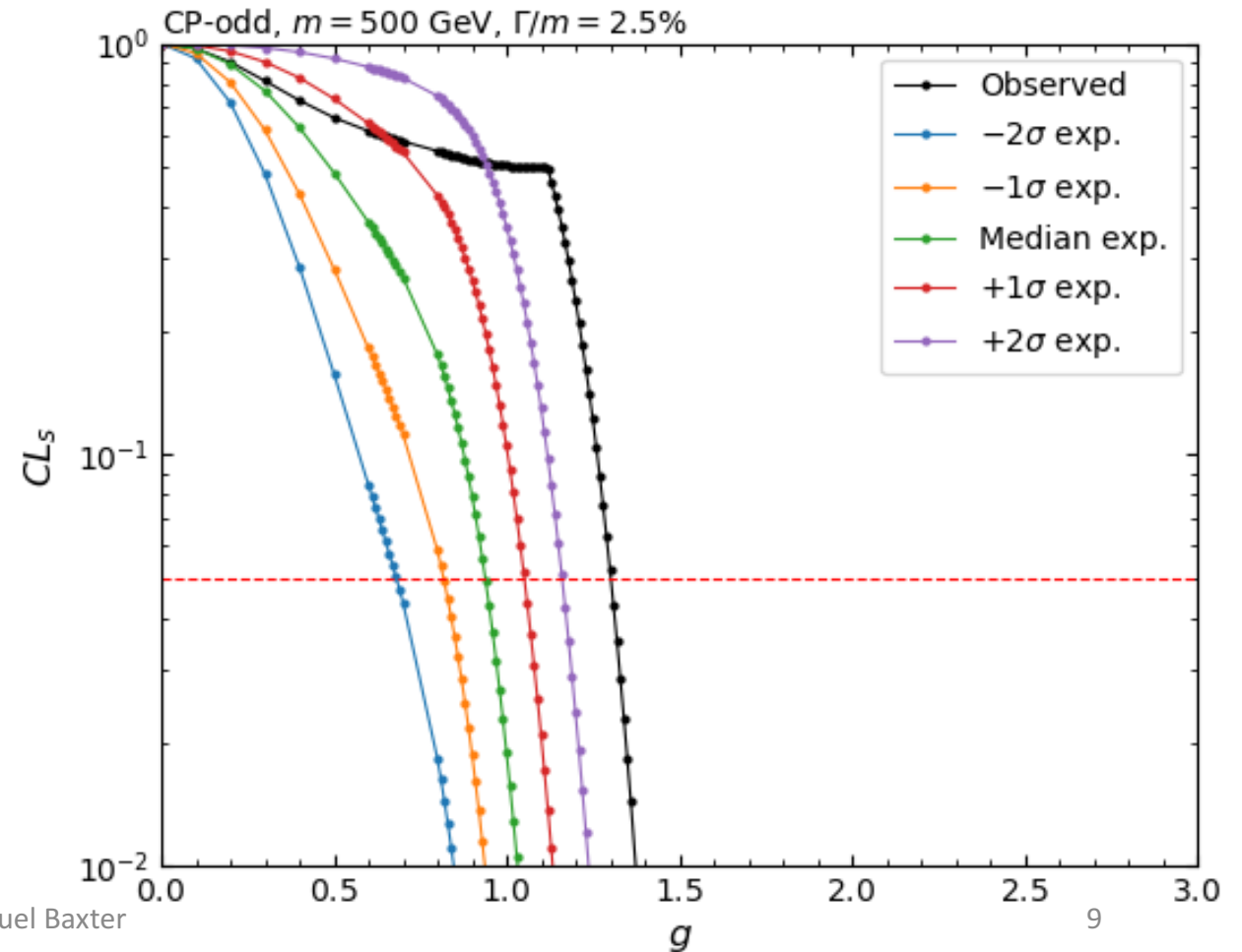
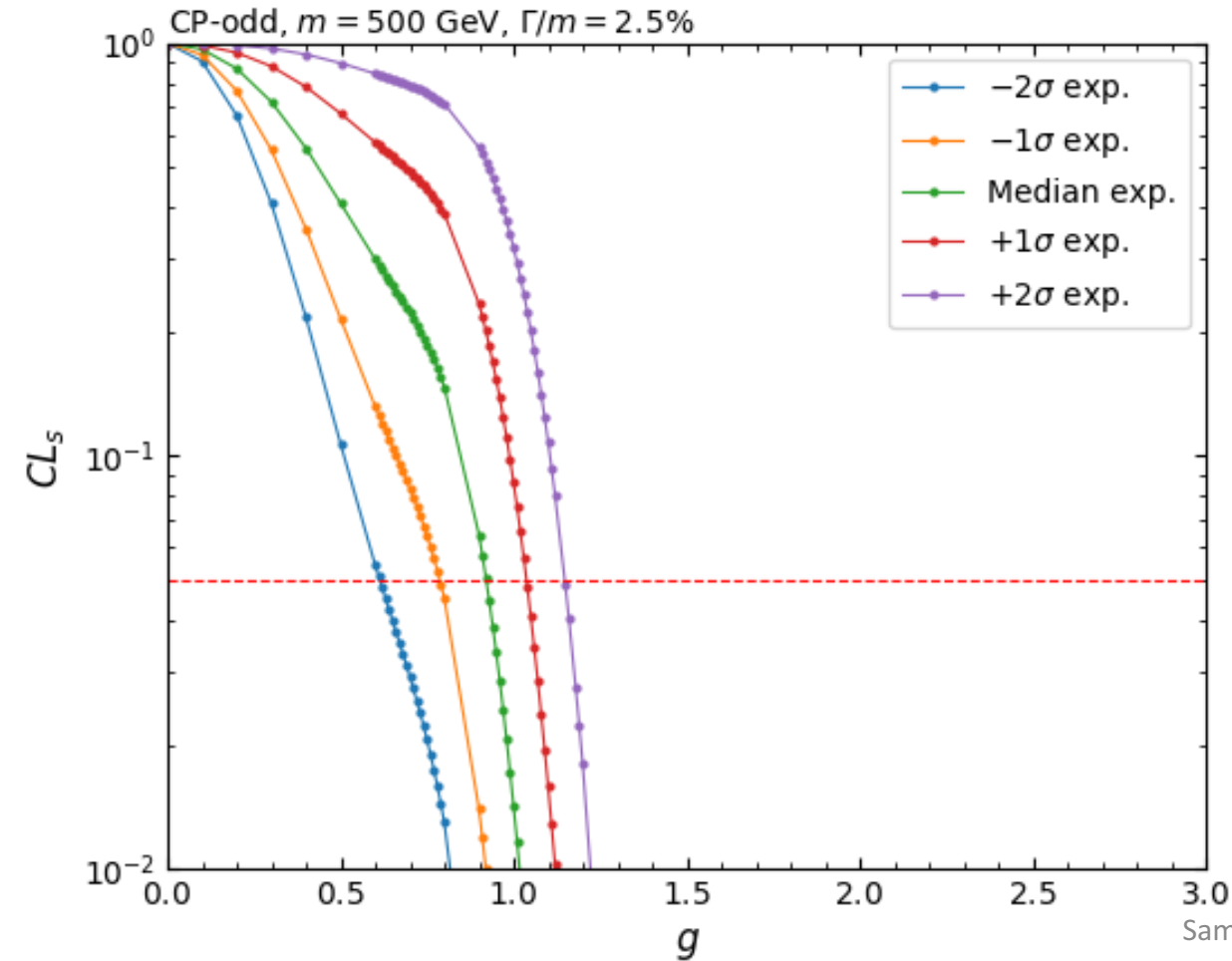
CMS Internal

$\hat{g} = 1.00^{+0.15}_{-0.26}$



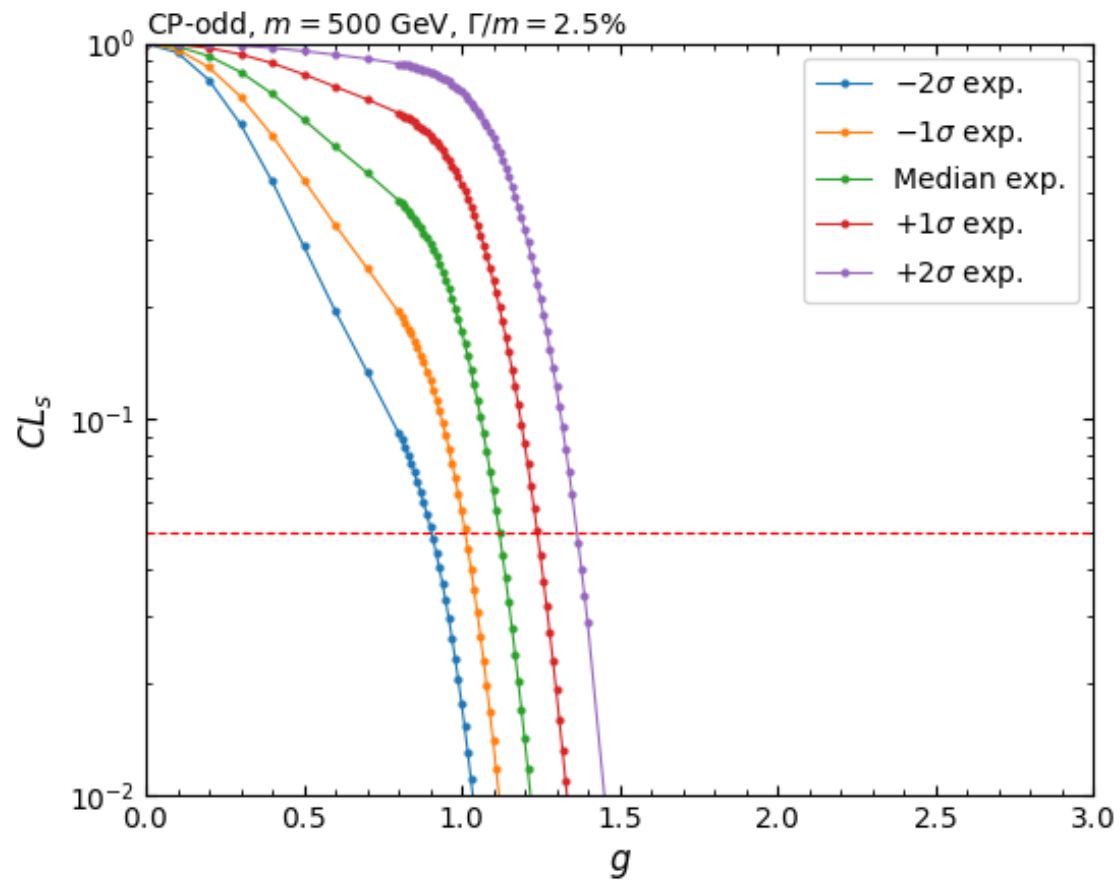
Samuel Baxter

Limit – expected, K-factor applied, no smoothing



Limit – expected, no K-factor, no smoothing

2017 Limit



2016 Limit

