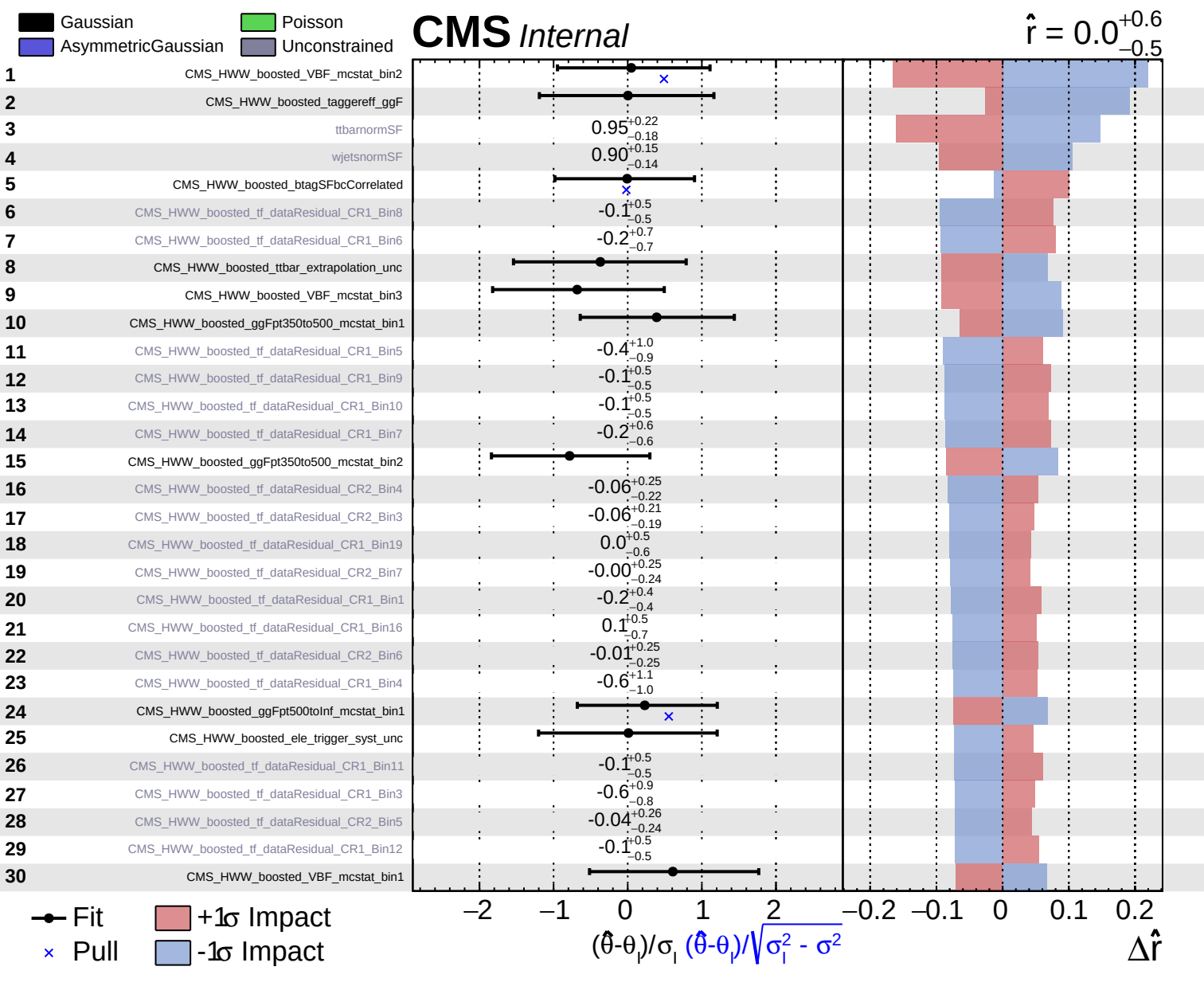
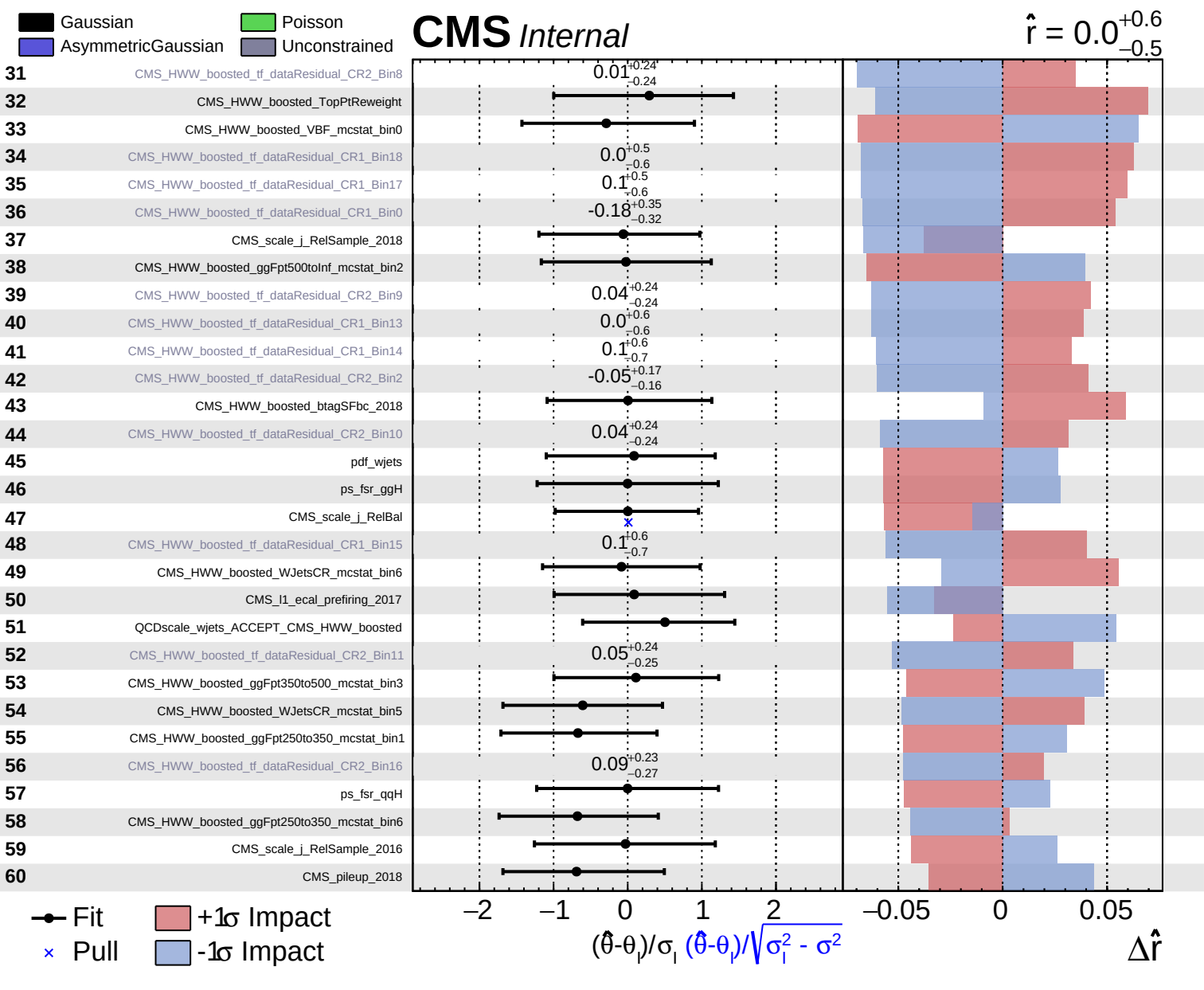
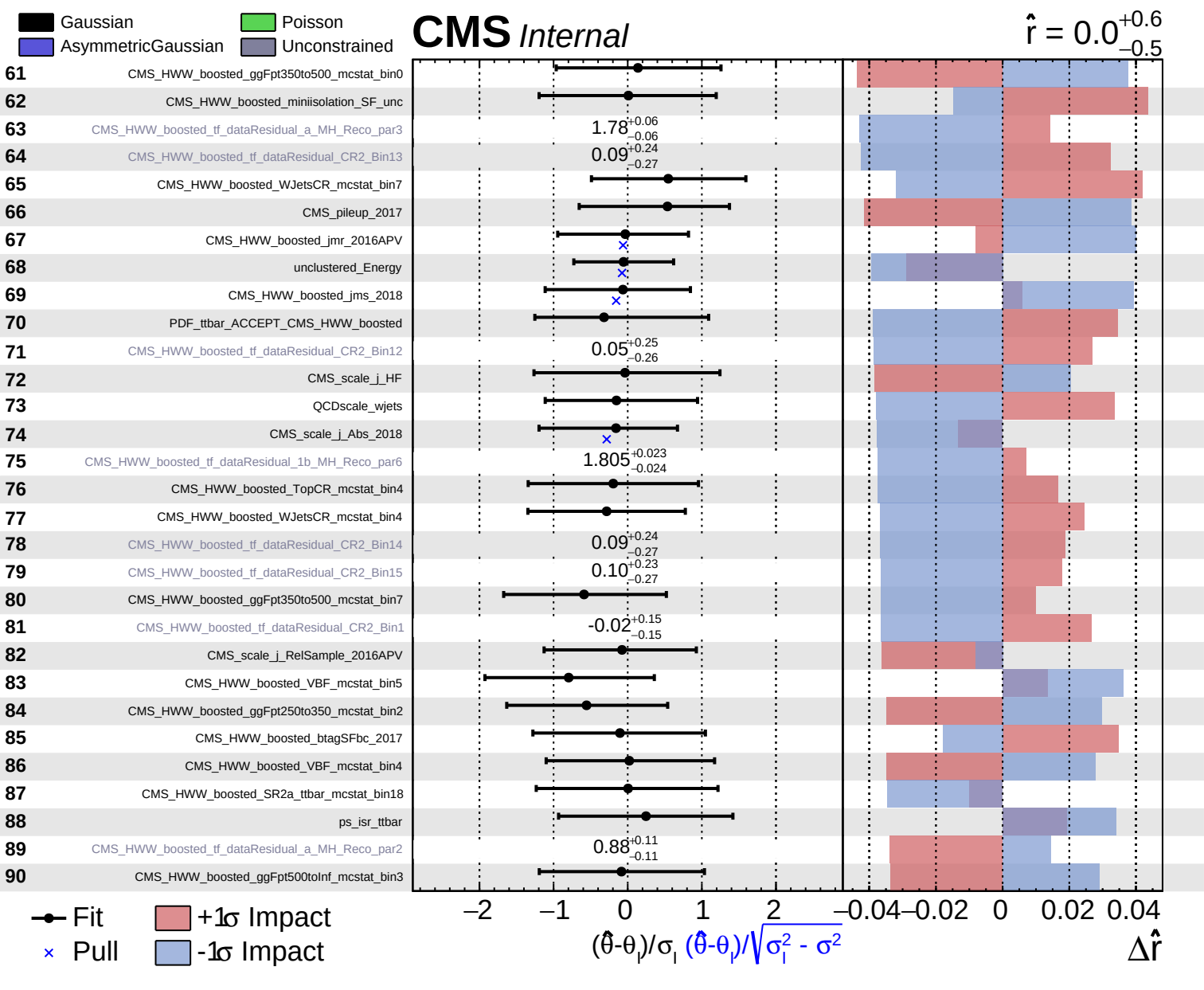
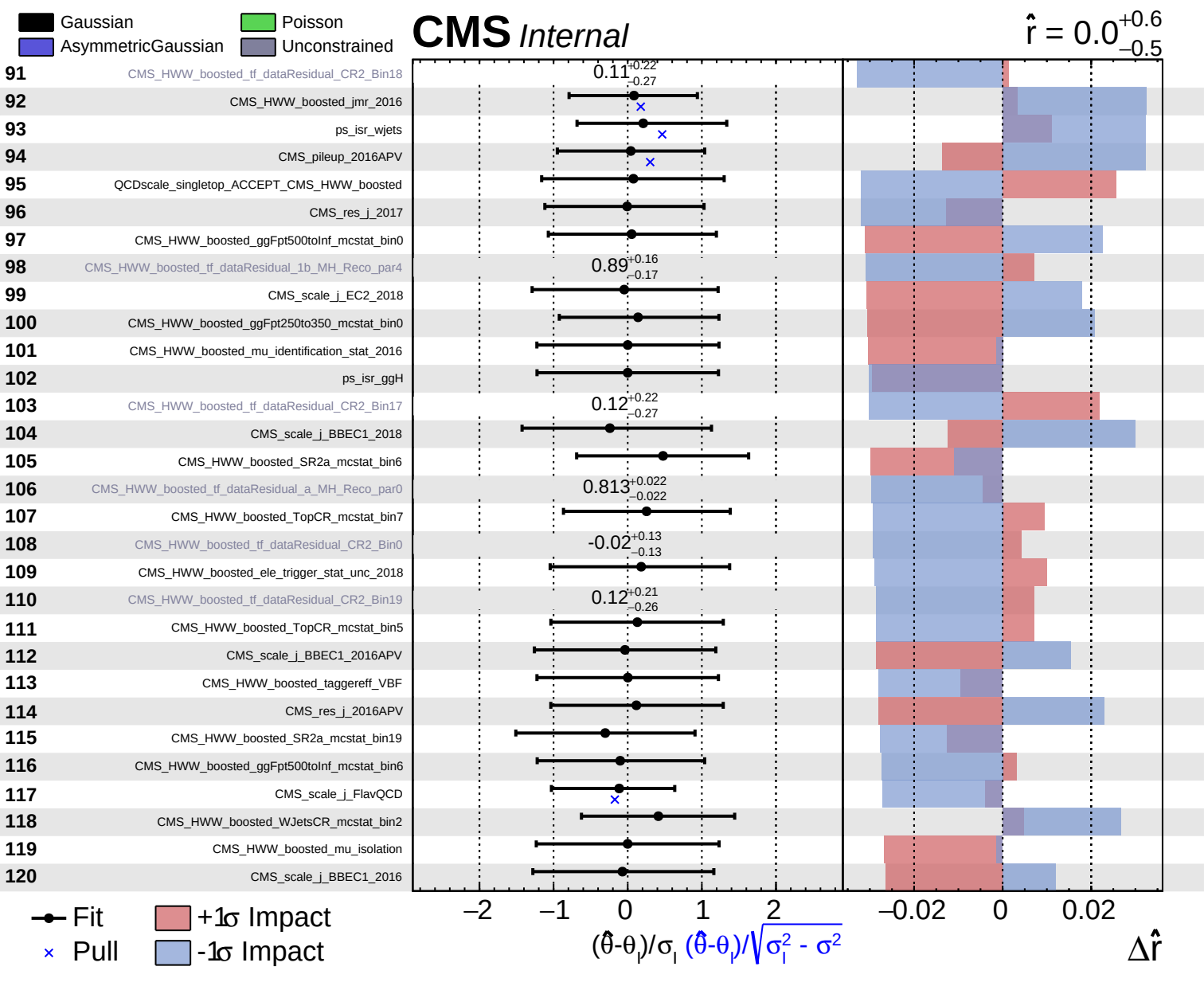
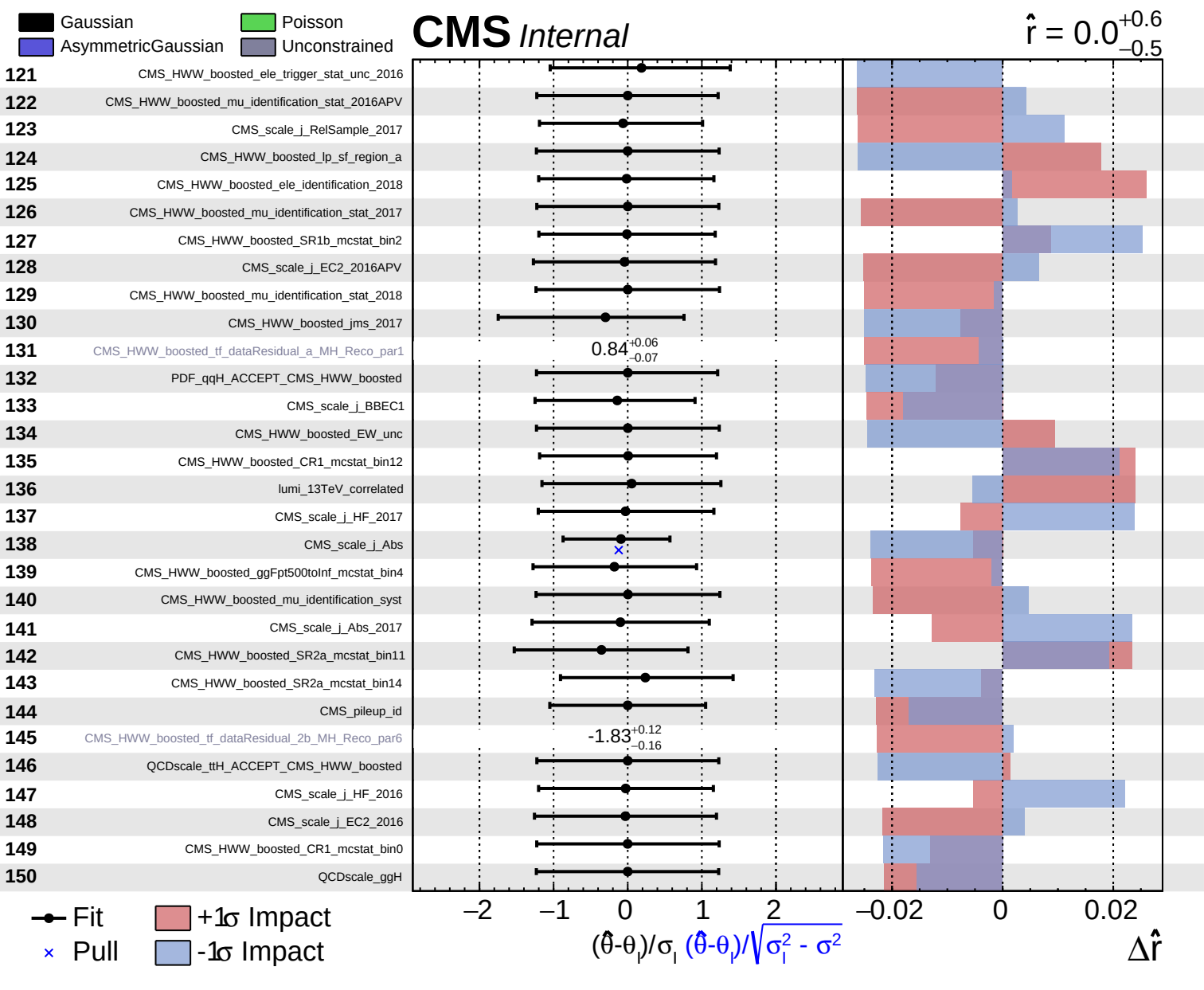
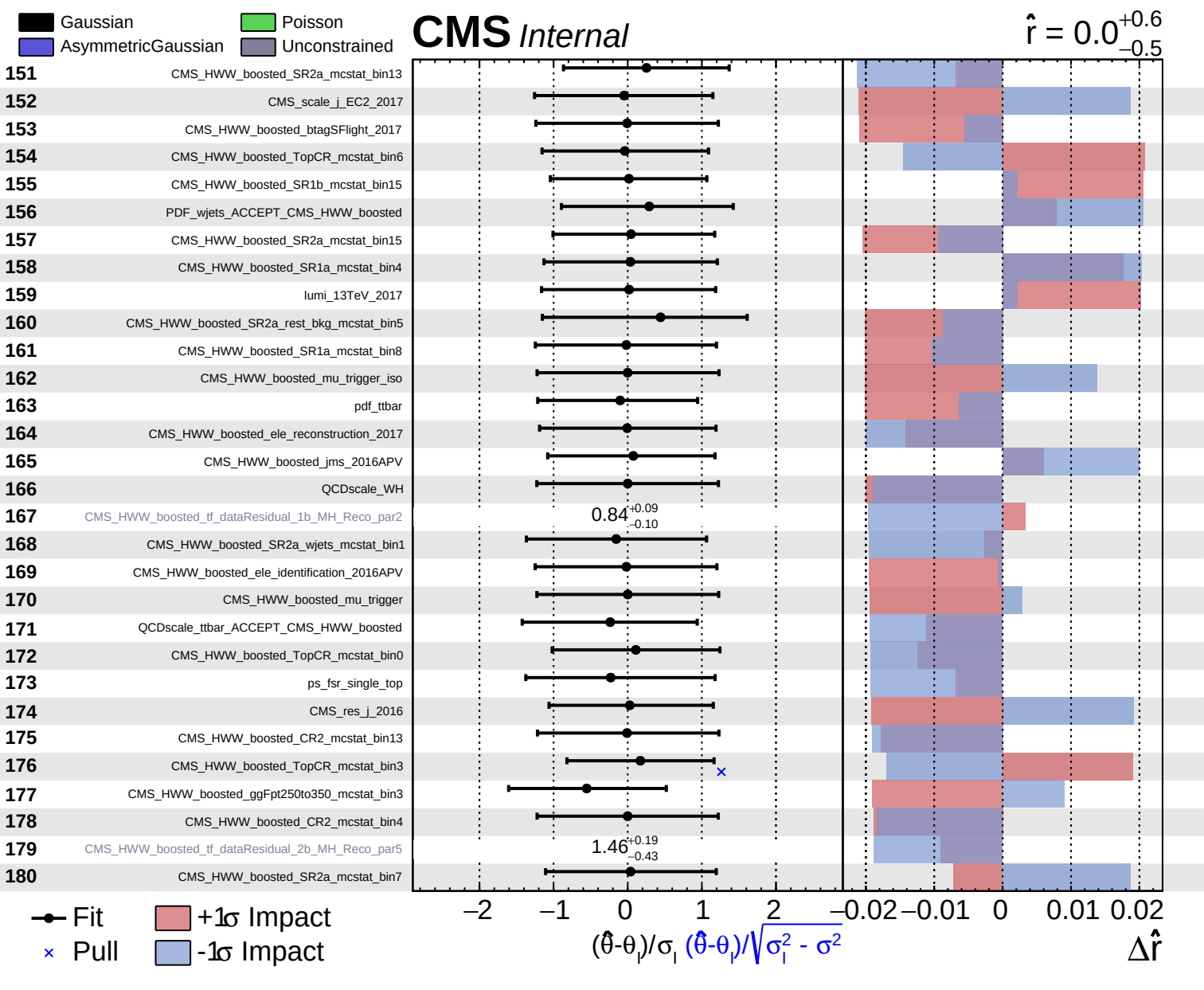

Gaussian
AsymmetricGaussian
Poisson
Unconstrained
CMS Internal
$\hat{r} = 0.0^{+0.6}_{-0.5}$
1 CMS_HWW_boosted_VBF_mcstat_bin2
2 CMS_HWW_boosted_taggereff_ggF
3 ttbarnormSF
4 wjetsnormSF
5 CMS_HWW_boosted_btagSFbcCorrelated
6 CMS_HWW_boosted_tf_dataResidual_CR1_Bin8
7 CMS_HWW_boosted_tf_dataResidual_CR1_Bin6
8 CMS_HWW_boosted_ttbar_extrapolation_unc
9 CMS_HWW_boosted_VBF_mcstat_bin3
10 CMS_HWW_boosted_ggFpt350to500_mcstat_bin1
11 CMS_HWW_boosted_tf_dataResidual_CR1_Bin5
12 CMS_HWW_boosted_tf_dataResidual_CR1_Bin9
13 CMS_HWW_boosted_tf_dataResidual_CR1_Bin10
14 CMS_HWW_boosted_tf_dataResidual_CR1_Bin7
15 CMS_HWW_boosted_ggFpt350to500_mcstat_bin2
16 CMS_HWW_boosted_tf_dataResidual_CR2_Bin4
17 CMS_HWW_boosted_tf_dataResidual_CR2_Bin3
18 CMS_HWW_boosted_tf_dataResidual_CR1_Bin19
19 CMS_HWW_boosted_tf_dataResidual_CR2_Bin7
20 CMS_HWW_boosted_tf_dataResidual_CR1_Bin1
21 CMS_HWW_boosted_tf_dataResidual_CR1_Bin16
22 CMS_HWW_boosted_tf_dataResidual_CR2_Bin6
23 CMS_HWW_boosted_tf_dataResidual_CR1_Bin4
24 CMS_HWW_boosted_ggFpt500toInf_mcstat_bin1
25 CMS_HWW_boosted_ele_trigger_syst_unc
26 CMS_HWW_boosted_tf_dataResidual_CR1_Bin11
27 CMS_HWW_boosted_tf_dataResidual_CR1_Bin3
28 CMS_HWW_boosted_tf_dataResidual_CR2_Bin5
29 CMS_HWW_boosted_tf_dataResidual_CR1_Bin12
30 CMS_HWW_boosted_VBF_mcstat_bin1
$0.95^{+0.22}_{-0.18}$
$0.90^{+0.15}_{-0.14}$
$-0.1^{+0.5}_{-0.5}$
$-0.2^{+0.7}_{-0.7}$
$-0.4^{+1.0}_{-0.9}$
$-0.1^{+0.5}_{-0.5}$
$-0.1^{+0.5}_{-0.5}$
$-0.2^{+0.6}_{-0.6}$
$-0.06^{+0.25}_{-0.22}$
$-0.06^{+0.21}_{-0.19}$
$0.0^{+0.5}_{-0.6}$
$-0.00^{+0.25}_{-0.24}$
$-0.2^{+0.4}_{-0.4}$
$0.1^{+0.5}_{-0.7}$
$-0.01^{+0.25}_{-0.25}$
$-0.6^{+1.1}_{-1.0}$
$-0.1^{+0.5}_{-0.5}$
$-0.6^{+0.9}_{-0.8}$
$-0.04^{+0.26}_{-0.24}$
$-0.1^{+0.5}_{-0.5}$
−2 −1 0 1 2
−0.2 −0.1 0 0.1 0.2
Fit
Pull
+1σ Impact
-1σ Impact
$(\hat{\theta}-\theta_I)/\sigma_I$
$(\hat{\theta}-\theta_I)/\sqrt{\sigma_I^2 - \sigma^2}$
$\Delta\hat{r}$

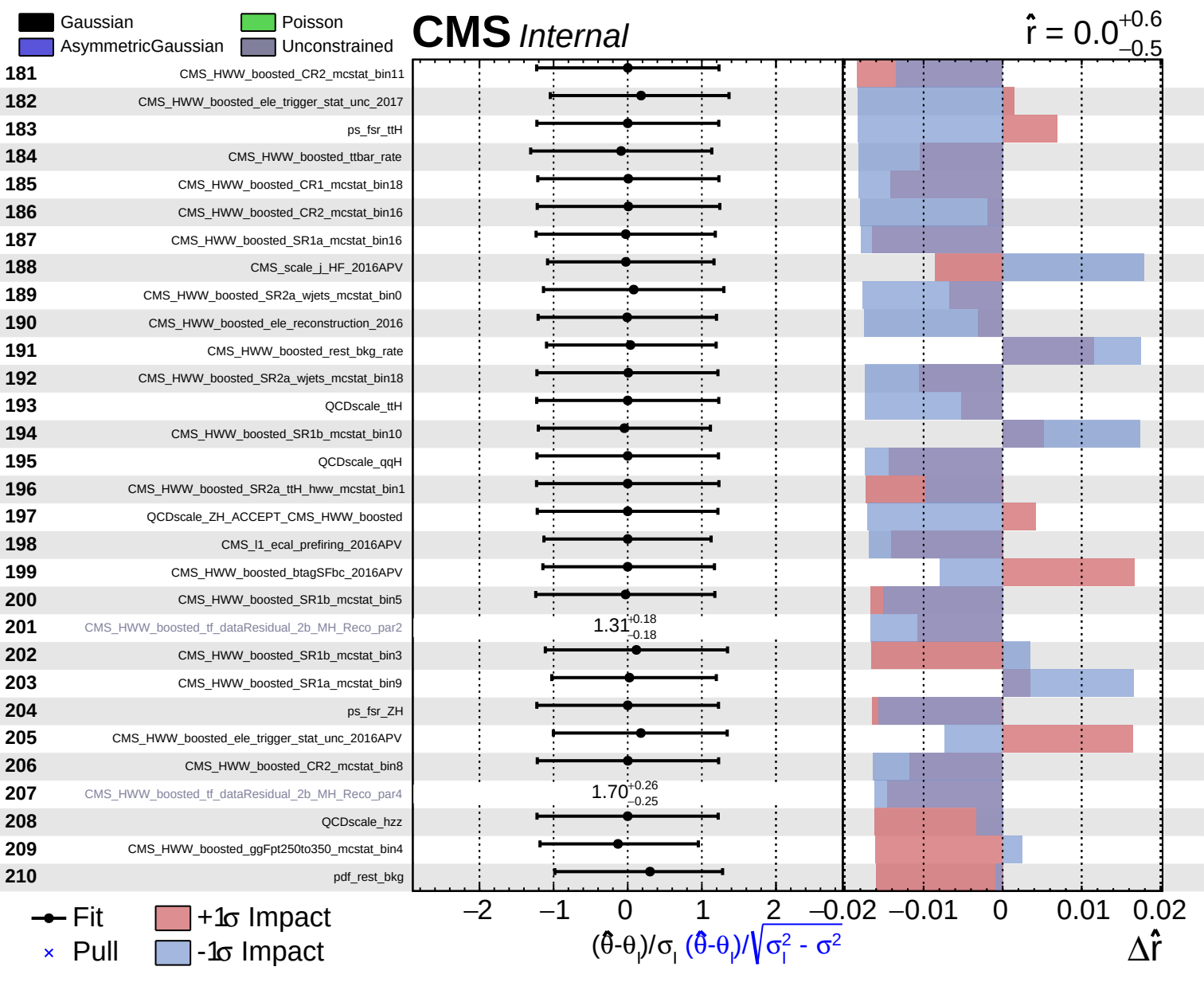

Gaussian
Poisson
AsymmetricGaussian
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
31 CMS_HWW_boosted_tf_dataResidual_CR2_Bin8
32 CMS_HWW_boosted_TopPtReweight
33 CMS_HWW_boosted_VBF_mcstat_bin0
34 CMS_HWW_boosted_tf_dataResidual_CR1_Bin18
35 CMS_HWW_boosted_tf_dataResidual_CR1_Bin17
36 CMS_HWW_boosted_tf_dataResidual_CR1_Bin0
37 CMS_scale_j_RelSample_2018
38 CMS_HWW_boosted_ggFpt500toInf_mcstat_bin2
39 CMS_HWW_boosted_tf_dataResidual_CR2_Bin9
40 CMS_HWW_boosted_tf_dataResidual_CR1_Bin13
41 CMS_HWW_boosted_tf_dataResidual_CR1_Bin14
42 CMS_HWW_boosted_tf_dataResidual_CR2_Bin2
43 CMS_HWW_boosted_btagSFbc_2018
44 CMS_HWW_boosted_tf_dataResidual_CR2_Bin10
45 pdf_wjets
46 ps_fsr_ggH
47 CMS_scale_j_RelBal
48 CMS_HWW_boosted_tf_dataResidual_CR1_Bin15
49 CMS_HWW_boosted_WJetsCR_mcstat_bin6
50 CMS_l1_ecal_prefiring_2017
51 QCDscale_wjets_ACCEPT_CMS_HWW_boosted
52 CMS_HWW_boosted_tf_dataResidual_CR2_Bin11
53 CMS_HWW_boosted_ggFpt350to500_mcstat_bin3
54 CMS_HWW_boosted_WJetsCR_mcstat_bin5
55 CMS_HWW_boosted_ggFpt250to350_mcstat_bin1
56 CMS_HWW_boosted_tf_dataResidual_CR2_Bin16
57 ps_fsr_qqH
58 CMS_HWW_boosted_ggFpt250to350_mcstat_bin6
59 CMS_scale_j_RelSample_2016
60 CMS_pileup_2018
0.01 +0.24 −0.24
0.0 +0.5 −0.6
0.1 +0.5 −0.6
-0.18 +0.35 −0.32
0.04 +0.24 −0.24
0.0 +0.6 −0.6
0.1 +0.6 −0.7
-0.05 +0.17 −0.16
0.04 +0.24 −0.24
0.1 +0.6 −0.7
0.05 +0.24 −0.25
0.09 +0.23 −0.27
−2
−1
0
1
2
−0.05
0
0.05
(θ̂-θ_I)/σ_I
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂
Fit
Pull
+1σ Impact
-1σ Impact

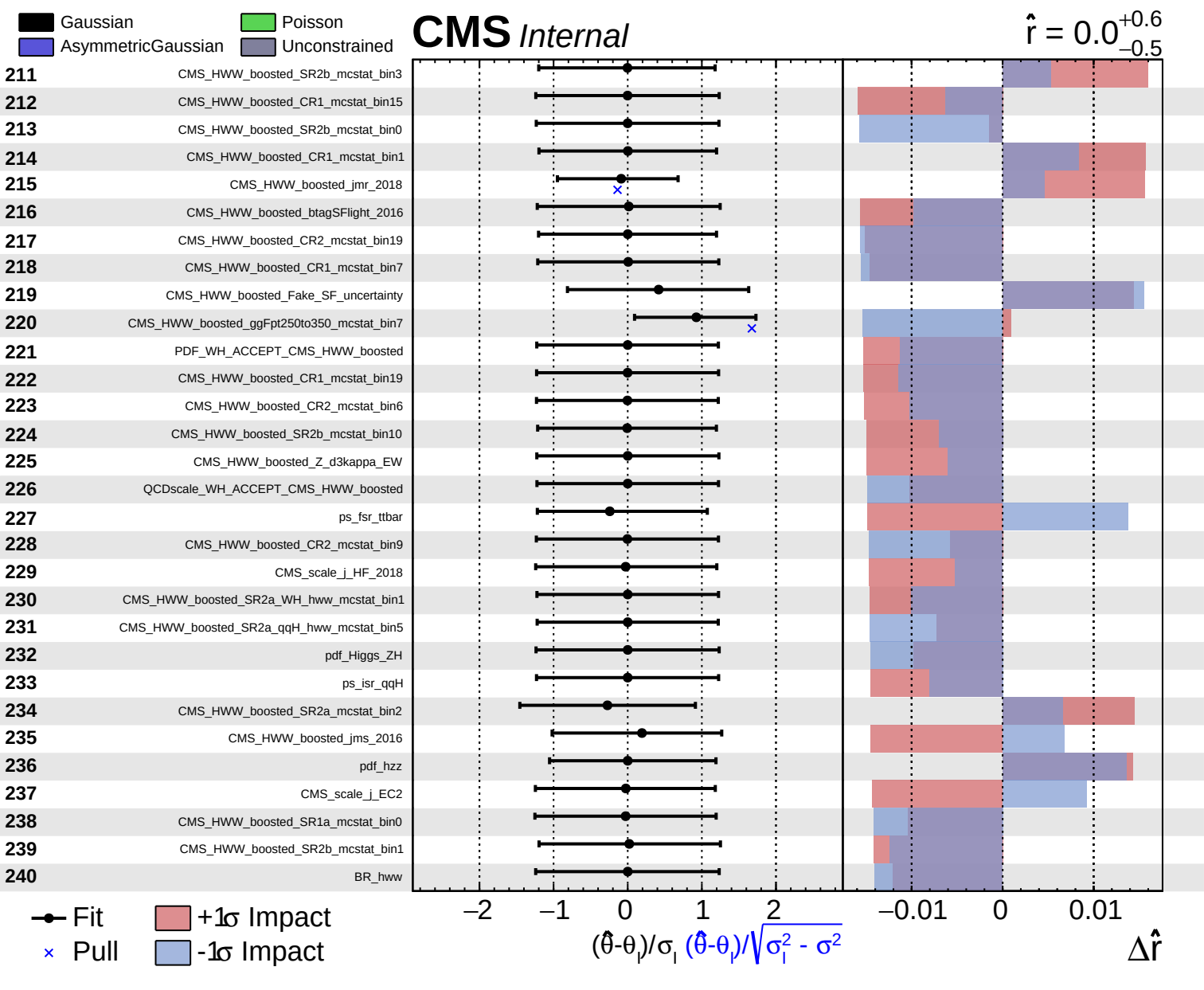

Gaussian
AsymmetricGaussian
Poisson
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
61 CMS_HWW_boosted_ggFpt350to500_mcstat_bin0
62 CMS_HWW_boosted_miniisolation_SF_unc
63 CMS_HWW_boosted_tf_dataResidual_a_MH_Reco_par3
64 CMS_HWW_boosted_tf_dataResidual_CR2_Bin13
65 CMS_HWW_boosted_WJetsCR_mcstat_bin7
66 CMS_pileup_2017
67 CMS_HWW_boosted_jmr_2016APV
68 unclustered_Energy
69 CMS_HWW_boosted_jms_2018
70 PDF_ttbar_ACCEPT_CMS_HWW_boosted
71 CMS_HWW_boosted_tf_dataResidual_CR2_Bin12
72 CMS_scale_j_HF
73 QCDscale_wjets
74 CMS_scale_j_Abs_2018
75 CMS_HWW_boosted_tf_dataResidual_1b_MH_Reco_par6
76 CMS_HWW_boosted_TopCR_mcstat_bin4
77 CMS_HWW_boosted_WJetsCR_mcstat_bin4
78 CMS_HWW_boosted_tf_dataResidual_CR2_Bin14
79 CMS_HWW_boosted_tf_dataResidual_CR2_Bin15
80 CMS_HWW_boosted_ggFpt350to500_mcstat_bin7
81 CMS_HWW_boosted_tf_dataResidual_CR2_Bin1
82 CMS_scale_j_RelSample_2016APV
83 CMS_HWW_boosted_VBF_mcstat_bin5
84 CMS_HWW_boosted_ggFpt250to350_mcstat_bin2
85 CMS_HWW_boosted_btagSFbc_2017
86 CMS_HWW_boosted_VBF_mcstat_bin4
87 CMS_HWW_boosted_SR2a_ttbar_mcstat_bin18
88 ps_isr_ttbar
89 CMS_HWW_boosted_tf_dataResidual_a_MH_Reco_par2
90 CMS_HWW_boosted_ggFpt500toInf_mcstat_bin3
1.78 +0.06 −0.06
0.09 +0.24 −0.27
0.05 +0.25 −0.26
1.805 +0.023 −0.024
0.09 +0.24 −0.27
0.10 +0.23 −0.27
-0.02 +0.15 −0.15
0.88 +0.11 −0.11
Fit
Pull
+1σ Impact
-1σ Impact
−2 −1 0 1 2
(θ̂-θ_I)/σ_I
−0.04 −0.02 0 0.02 0.04
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂

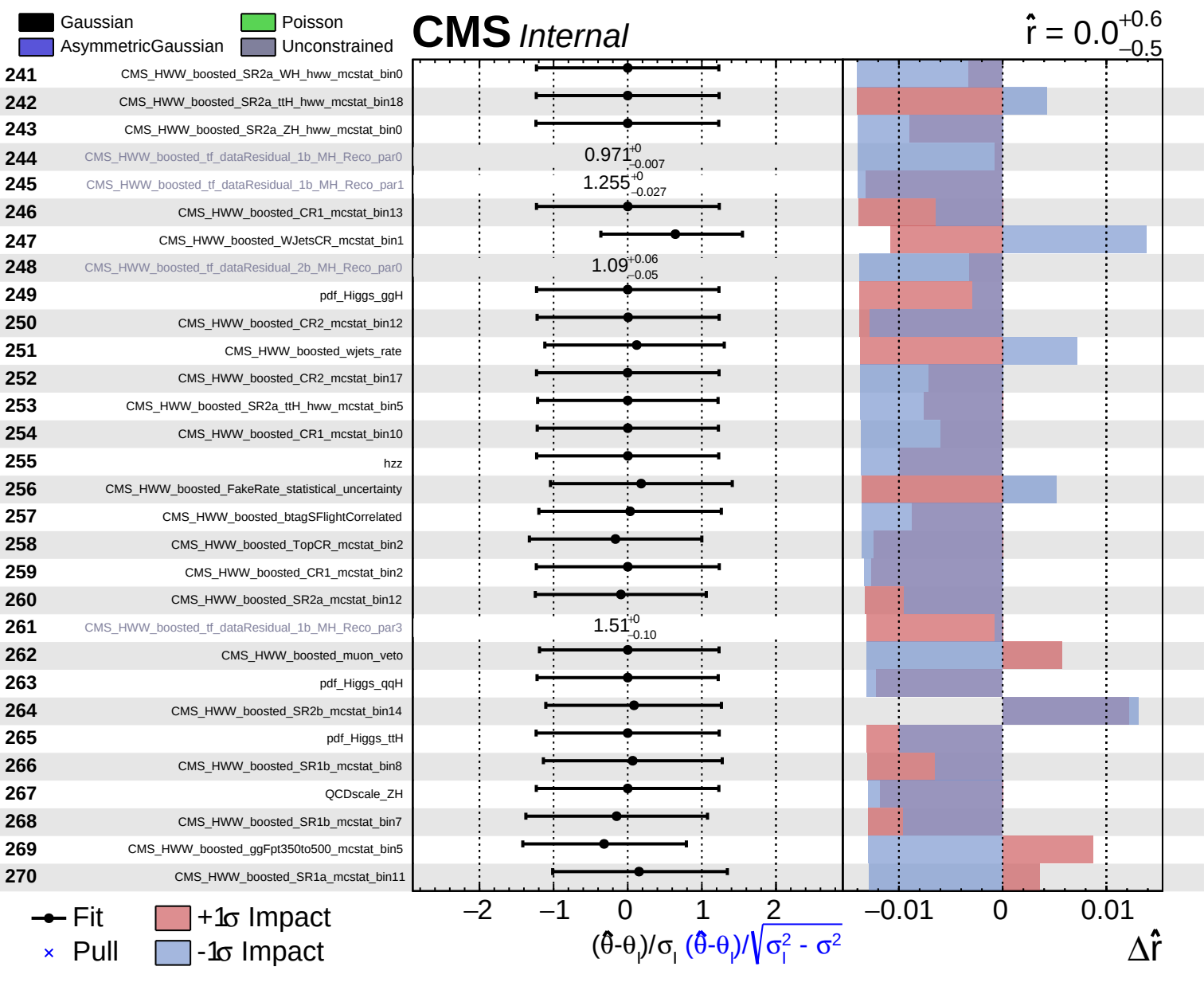

Gaussian
AsymmetricGaussian
Poisson
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
91 CMS_HWW_boosted_tf_dataResidual_CR2_Bin18
92 CMS_HWW_boosted_jmr_2016
93 ps_isr_wjets
94 CMS_pileup_2016APV
95 QCDscale_singletop_ACCEPT_CMS_HWW_boosted
96 CMS_res_j_2017
97 CMS_HWW_boosted_ggFpt500toInf_mcstat_bin0
98 CMS_HWW_boosted_tf_dataResidual_1b_MH_Reco_par4
99 CMS_scale_j_EC2_2018
100 CMS_HWW_boosted_ggFpt250to350_mcstat_bin0
101 CMS_HWW_boosted_mu_identification_stat_2016
102 ps_isr_ggH
103 CMS_HWW_boosted_tf_dataResidual_CR2_Bin17
104 CMS_scale_j_BBEC1_2018
105 CMS_HWW_boosted_SR2a_mcstat_bin6
106 CMS_HWW_boosted_tf_dataResidual_a_MH_Reco_par0
107 CMS_HWW_boosted_TopCR_mcstat_bin7
108 CMS_HWW_boosted_tf_dataResidual_CR2_Bin0
109 CMS_HWW_boosted_ele_trigger_stat_unc_2018
110 CMS_HWW_boosted_tf_dataResidual_CR2_Bin19
111 CMS_HWW_boosted_TopCR_mcstat_bin5
112 CMS_scale_j_BBEC1_2016APV
113 CMS_HWW_boosted_taggereff_VBF
114 CMS_res_j_2016APV
115 CMS_HWW_boosted_SR2a_mcstat_bin19
116 CMS_HWW_boosted_ggFpt500toInf_mcstat_bin6
117 CMS_scale_j_FlavQCD
118 CMS_HWW_boosted_WJetsCR_mcstat_bin2
119 CMS_HWW_boosted_mu_isolation
120 CMS_scale_j_BBEC1_2016
0.11 +0.22 −0.27
0.89 +0.16 −0.17
0.12 +0.22 −0.27
0.813 +0.022 −0.022
-0.02 +0.13 −0.13
0.12 +0.21 −0.26
Fit
Pull
+1σ Impact
-1σ Impact
−2
−1
0
1
2
(θ̂-θ_I)/σ_I
−0.02
0
0.02
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂

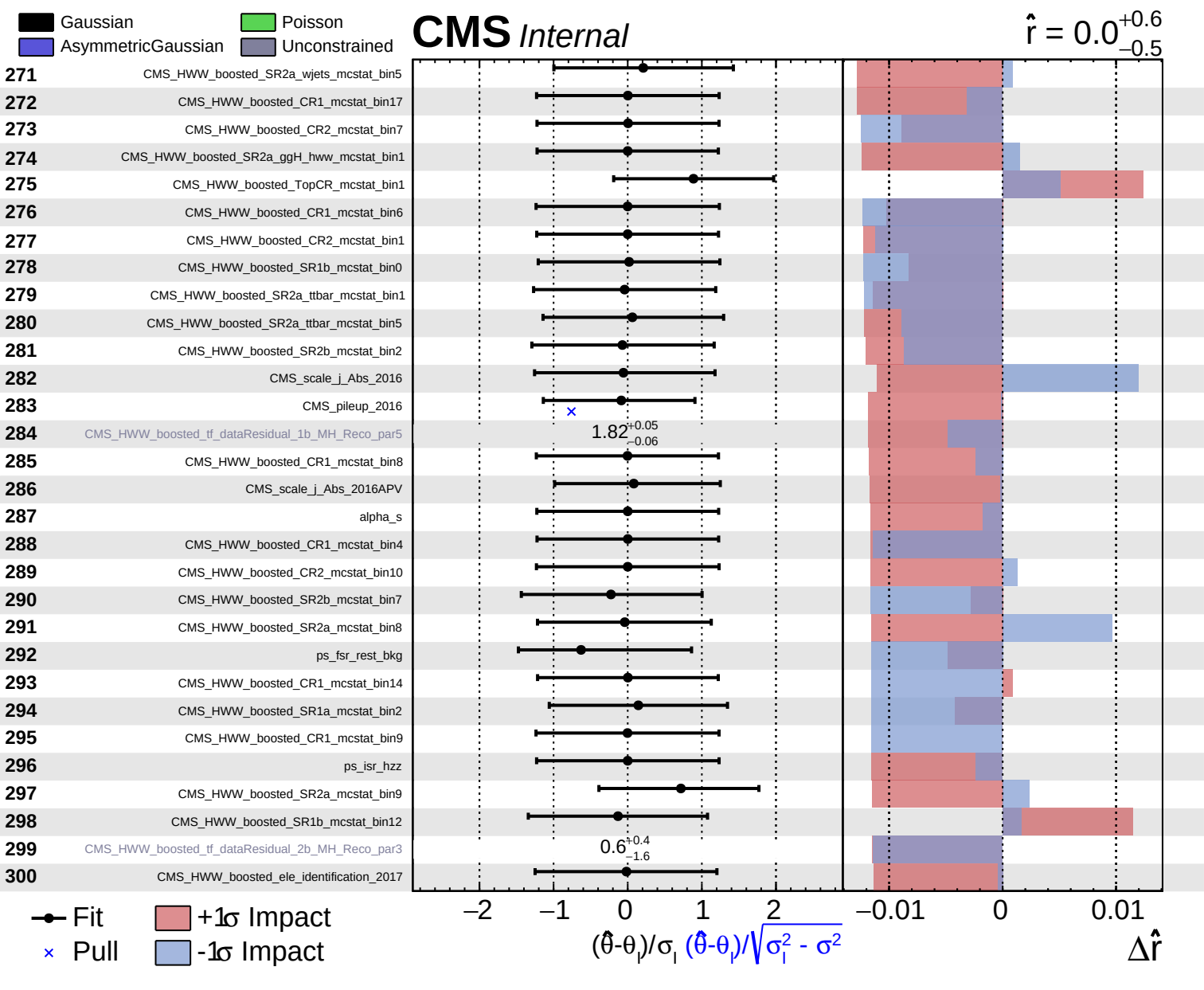

Gaussian
Poisson
AsymmetricGaussian
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
121 CMS_HWW_boosted_ele_trigger_stat_unc_2016
122 CMS_HWW_boosted_mu_identification_stat_2016APV
123 CMS_scale_j_RelSample_2017
124 CMS_HWW_boosted_lp_sf_region_a
125 CMS_HWW_boosted_ele_identification_2018
126 CMS_HWW_boosted_mu_identification_stat_2017
127 CMS_HWW_boosted_SR1b_mcstat_bin2
128 CMS_scale_j_EC2_2016APV
129 CMS_HWW_boosted_mu_identification_stat_2018
130 CMS_HWW_boosted_jms_2017
131 CMS_HWW_boosted_tf_dataResidual_a_MH_Reco_par1
0.84 +0.06 −0.07
132 PDF_qqH_ACCEPT_CMS_HWW_boosted
133 CMS_scale_j_BBEC1
134 CMS_HWW_boosted_EW_unc
135 CMS_HWW_boosted_CR1_mcstat_bin12
136 lumi_13TeV_correlated
137 CMS_scale_j_HF_2017
138 CMS_scale_j_Abs
139 CMS_HWW_boosted_ggFpt500toInf_mcstat_bin4
140 CMS_HWW_boosted_mu_identification_syst
141 CMS_scale_j_Abs_2017
142 CMS_HWW_boosted_SR2a_mcstat_bin11
143 CMS_HWW_boosted_SR2a_mcstat_bin14
144 CMS_pileup_id
145 CMS_HWW_boosted_tf_dataResidual_2b_MH_Reco_par6
-1.83 +0.12 −0.16
146 QCDscale_ttH_ACCEPT_CMS_HWW_boosted
147 CMS_scale_j_HF_2016
148 CMS_scale_j_EC2_2016
149 CMS_HWW_boosted_CR1_mcstat_bin0
150 QCDscale_ggH
−2 −1 0 1 2
(θ̂-θ_I)/σ_I
−0.02 0 0.02
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂
Fit
Pull
+1σ Impact
-1σ Impact

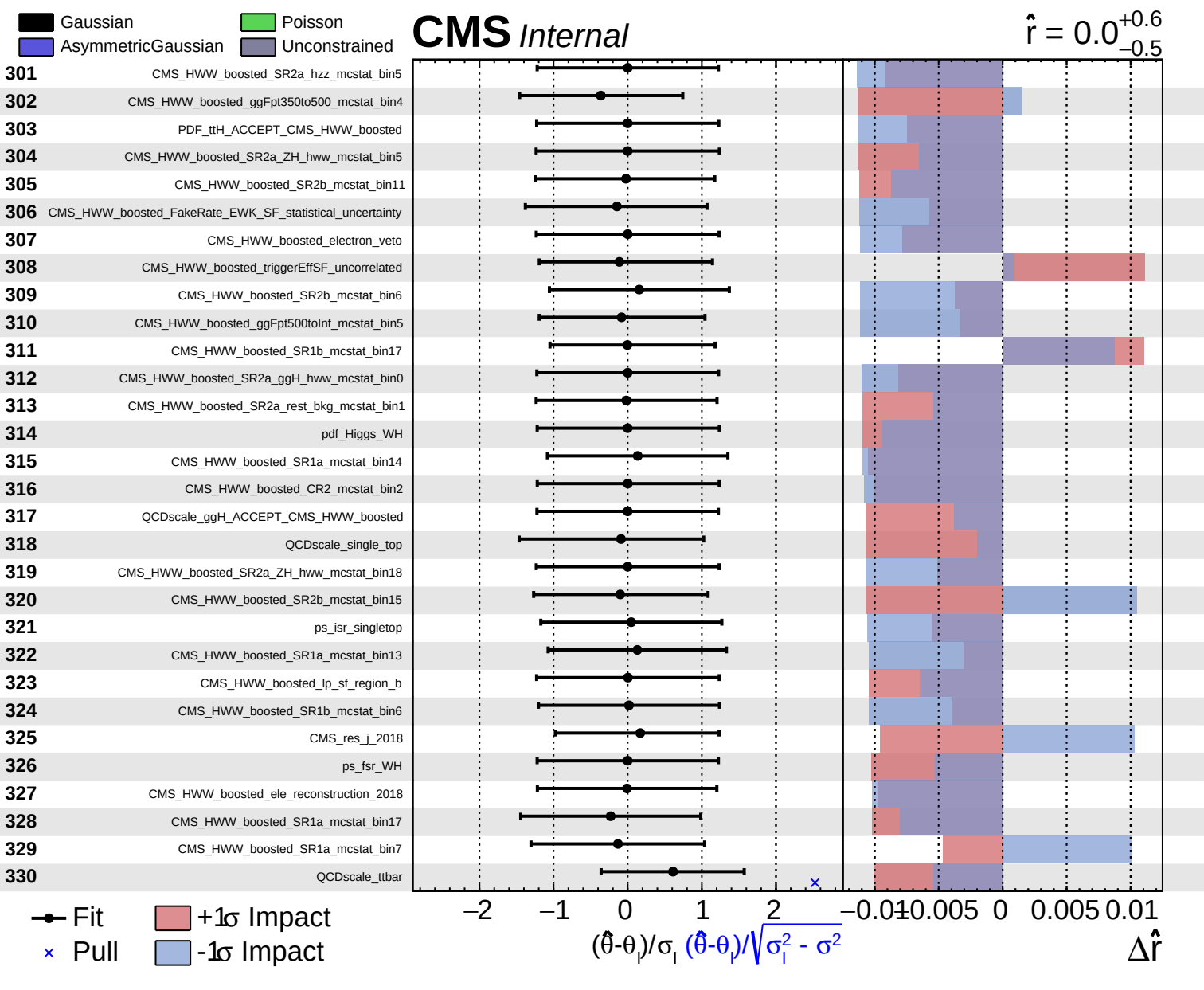

Gaussian
AsymmetricGaussian
Poisson
Unconstrained
CMS Internal
$\hat{r} = 0.0^{+0.6}_{-0.5}$
151 CMS_HWW_boosted_SR2a_mcstat_bin13
152 CMS_scale_j_EC2_2017
153 CMS_HWW_boosted_btagSFlight_2017
154 CMS_HWW_boosted_TopCR_mcstat_bin6
155 CMS_HWW_boosted_SR1b_mcstat_bin15
156 PDF_wjets_ACCEPT_CMS_HWW_boosted
157 CMS_HWW_boosted_SR2a_mcstat_bin15
158 CMS_HWW_boosted_SR1a_mcstat_bin4
159 lumi_13TeV_2017
160 CMS_HWW_boosted_SR2a_rest_bkg_mcstat_bin5
161 CMS_HWW_boosted_SR1a_mcstat_bin8
162 CMS_HWW_boosted_mu_trigger_iso
163 pdf_ttbar
164 CMS_HWW_boosted_ele_reconstruction_2017
165 CMS_HWW_boosted_jms_2016APV
166 QCDscale_WH
167 CMS_HWW_boosted_tf_dataResidual_1b_MH_Reco_par2
$0.84^{+0.09}_{-0.10}$
168 CMS_HWW_boosted_SR2a_wjets_mcstat_bin1
169 CMS_HWW_boosted_ele_identification_2016APV
170 CMS_HWW_boosted_mu_trigger
171 QCDscale_ttbar_ACCEPT_CMS_HWW_boosted
172 CMS_HWW_boosted_TopCR_mcstat_bin0
173 ps_fsr_single_top
174 CMS_res_j_2016
175 CMS_HWW_boosted_CR2_mcstat_bin13
176 CMS_HWW_boosted_TopCR_mcstat_bin3
177 CMS_HWW_boosted_ggFpt250to350_mcstat_bin3
178 CMS_HWW_boosted_CR2_mcstat_bin4
179 CMS_HWW_boosted_tf_dataResidual_2b_MH_Reco_par5
$1.46^{+0.19}_{-0.43}$
180 CMS_HWW_boosted_SR2a_mcstat_bin7
−2 −1 0 1 2
$(\hat{\theta}-\theta_I)/\sigma_I$
Fit
Pull
+1σ Impact
-1σ Impact
−0.02 −0.01 0 0.01 0.02
$(\hat{\theta}-\theta_I)/\sqrt{\sigma_I^2 - \sigma^2}$
$\Delta\hat{r}$

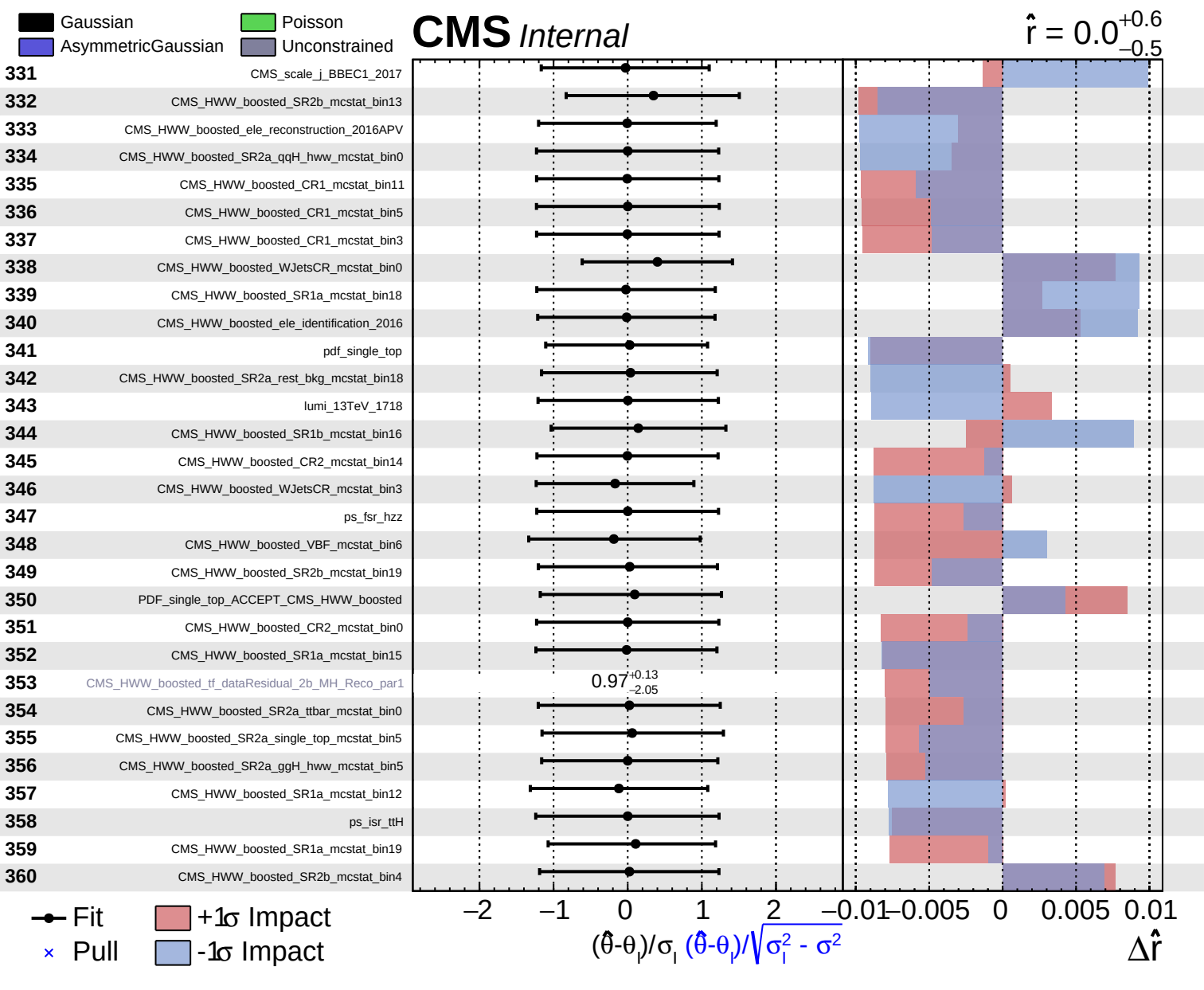

Gaussian
AsymmetricGaussian
Poisson
Unconstrained
CMS Internal
$\hat{r} = 0.0^{+0.6}_{-0.5}$
181 CMS_HWW_boosted_CR2_mcstat_bin11
182 CMS_HWW_boosted_ele_trigger_stat_unc_2017
183 ps_fsr_ttH
184 CMS_HWW_boosted_ttbar_rate
185 CMS_HWW_boosted_CR1_mcstat_bin18
186 CMS_HWW_boosted_CR2_mcstat_bin16
187 CMS_HWW_boosted_SR1a_mcstat_bin16
188 CMS_scale_j_HF_2016APV
189 CMS_HWW_boosted_SR2a_wjets_mcstat_bin0
190 CMS_HWW_boosted_ele_reconstruction_2016
191 CMS_HWW_boosted_rest_bkg_rate
192 CMS_HWW_boosted_SR2a_wjets_mcstat_bin18
193 QCDscale_ttH
194 CMS_HWW_boosted_SR1b_mcstat_bin10
195 QCDscale_qqH
196 CMS_HWW_boosted_SR2a_ttH_hww_mcstat_bin1
197 QCDscale_ZH_ACCEPT_CMS_HWW_boosted
198 CMS_l1_ecal_prefiring_2016APV
199 CMS_HWW_boosted_btagSFbc_2016APV
200 CMS_HWW_boosted_SR1b_mcstat_bin5
201 CMS_HWW_boosted_tf_dataResidual_2b_MH_Reco_par2
$1.31^{+0.18}_{-0.18}$
202 CMS_HWW_boosted_SR1b_mcstat_bin3
203 CMS_HWW_boosted_SR1a_mcstat_bin9
204 ps_fsr_ZH
205 CMS_HWW_boosted_ele_trigger_stat_unc_2016APV
206 CMS_HWW_boosted_CR2_mcstat_bin8
207 CMS_HWW_boosted_tf_dataResidual_2b_MH_Reco_par4
$1.70^{+0.26}_{-0.25}$
208 QCDscale_hzz
209 CMS_HWW_boosted_ggFpt250to350_mcstat_bin4
210 pdf_rest_bkg
Fit
Pull
+1σ Impact
-1σ Impact
−2 −1 0 1 2
$(\hat{\theta}-\theta_I)/\sigma_I$
−0.02 −0.01 0 0.01 0.02
$(\hat{\theta}-\theta_I)/\sqrt{\sigma_I^2 - \sigma^2}$
$\Delta\hat{r}$

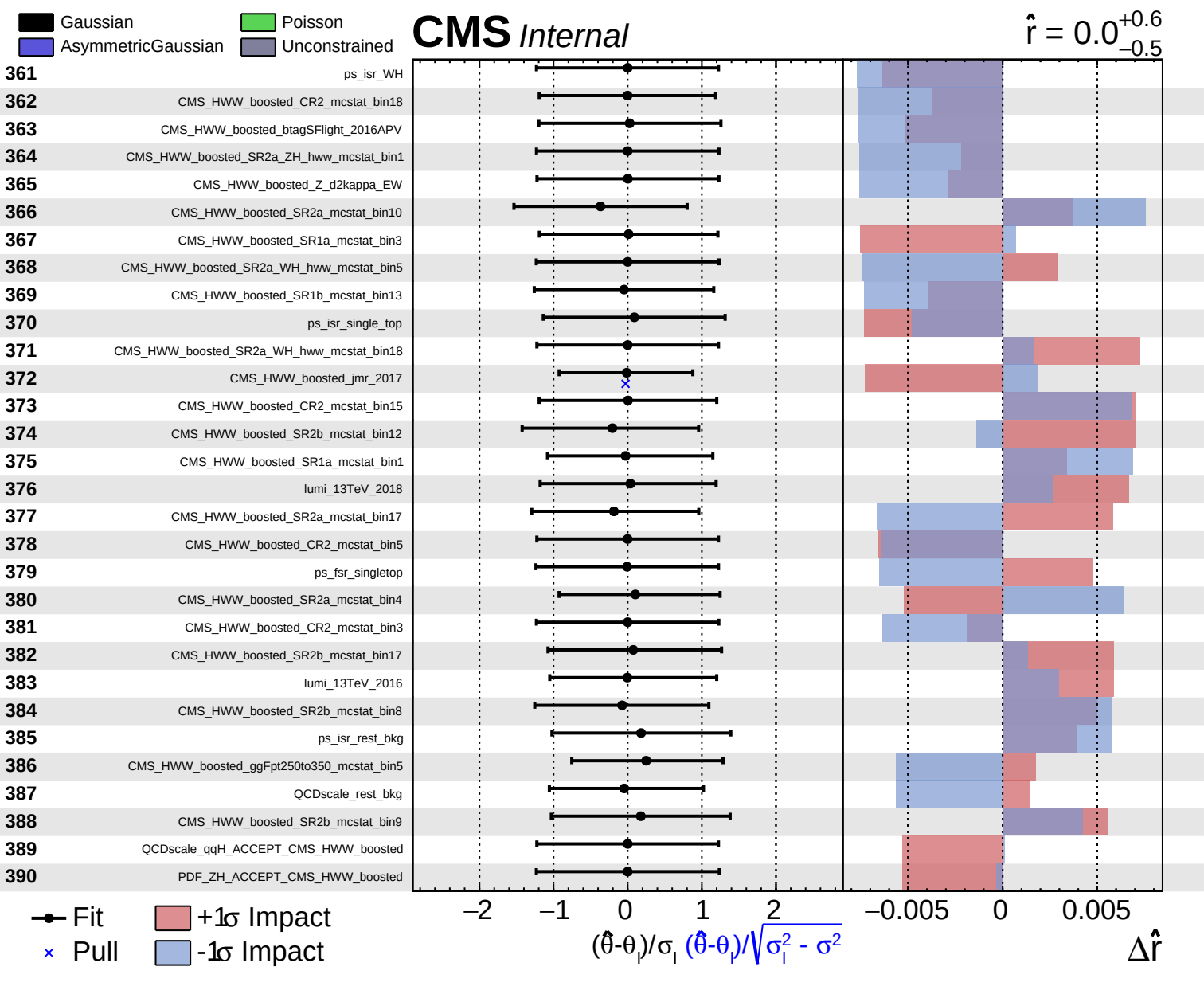

Gaussian
AsymmetricGaussian
Poisson
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
211 CMS_HWW_boosted_SR2b_mcstat_bin3
212 CMS_HWW_boosted_CR1_mcstat_bin15
213 CMS_HWW_boosted_SR2b_mcstat_bin0
214 CMS_HWW_boosted_CR1_mcstat_bin1
215 CMS_HWW_boosted_jmr_2018
216 CMS_HWW_boosted_btagSFlight_2016
217 CMS_HWW_boosted_CR2_mcstat_bin19
218 CMS_HWW_boosted_CR1_mcstat_bin7
219 CMS_HWW_boosted_Fake_SF_uncertainty
220 CMS_HWW_boosted_ggFpt250to350_mcstat_bin7
221 PDF_WH_ACCEPT_CMS_HWW_boosted
222 CMS_HWW_boosted_CR1_mcstat_bin19
223 CMS_HWW_boosted_CR2_mcstat_bin6
224 CMS_HWW_boosted_SR2b_mcstat_bin10
225 CMS_HWW_boosted_Z_d3kappa_EW
226 QCDscale_WH_ACCEPT_CMS_HWW_boosted
227 ps_fsr_ttbar
228 CMS_HWW_boosted_CR2_mcstat_bin9
229 CMS_scale_j_HF_2018
230 CMS_HWW_boosted_SR2a_WH_hww_mcstat_bin1
231 CMS_HWW_boosted_SR2a_qqH_hww_mcstat_bin5
232 pdf_Higgs_ZH
233 ps_isr_qqH
234 CMS_HWW_boosted_SR2a_mcstat_bin2
235 CMS_HWW_boosted_jms_2016
236 pdf_hzz
237 CMS_scale_j_EC2
238 CMS_HWW_boosted_SR1a_mcstat_bin0
239 CMS_HWW_boosted_SR2b_mcstat_bin1
240 BR_hww
−2
−1
0
1
2
(θ̂-θ_I)/σ_I
−0.01
0
0.01
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂
Fit
Pull
+1σ Impact
-1σ Impact

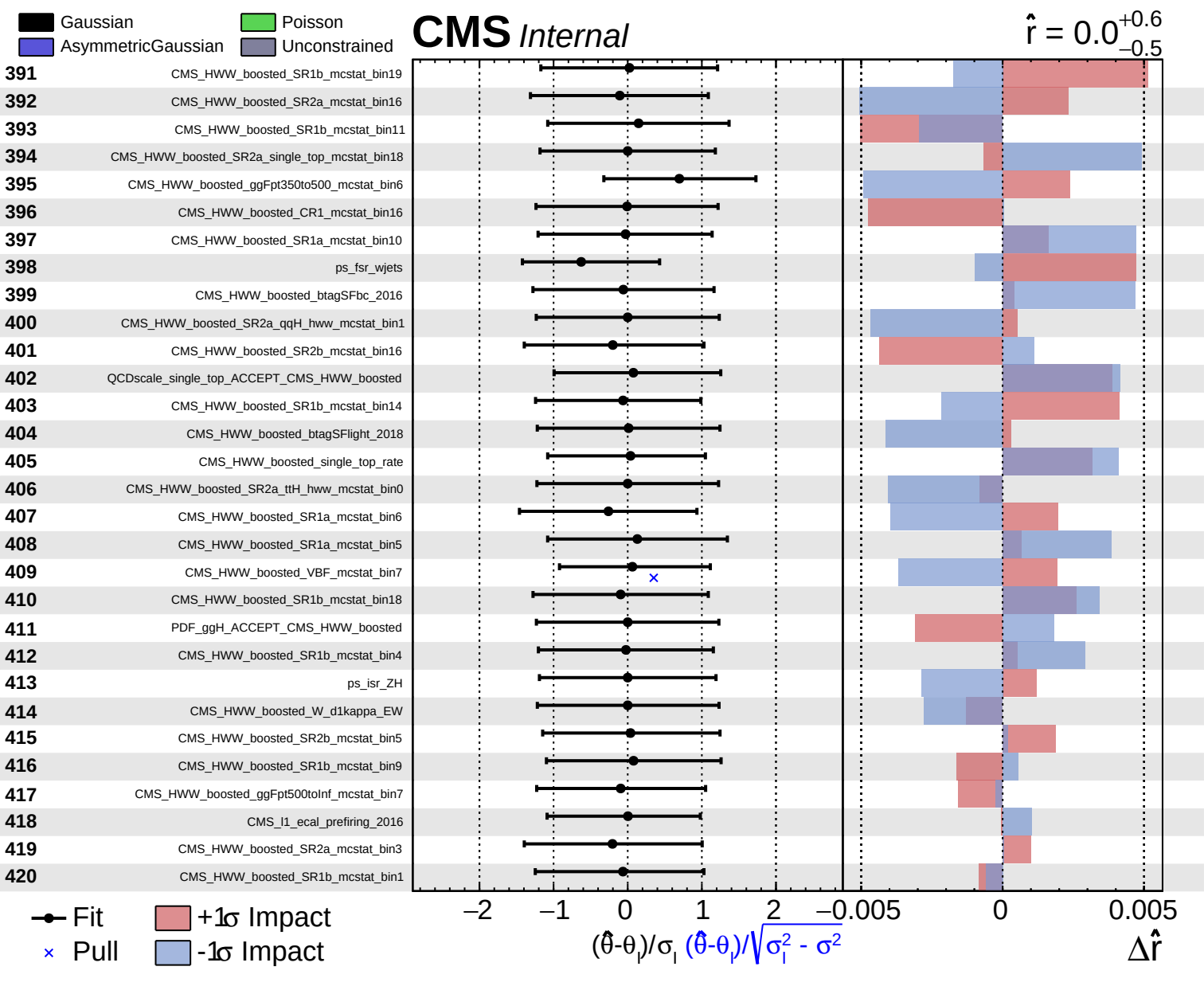

Gaussian
AsymmetricGaussian
Poisson
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
241 CMS_HWW_boosted_SR2a_WH_hww_mcstat_bin0
242 CMS_HWW_boosted_SR2a_ttH_hww_mcstat_bin18
243 CMS_HWW_boosted_SR2a_ZH_hww_mcstat_bin0
244 CMS_HWW_boosted_tf_dataResidual_1b_MH_Reco_par0
245 CMS_HWW_boosted_tf_dataResidual_1b_MH_Reco_par1
246 CMS_HWW_boosted_CR1_mcstat_bin13
247 CMS_HWW_boosted_WJetsCR_mcstat_bin1
248 CMS_HWW_boosted_tf_dataResidual_2b_MH_Reco_par0
249 pdf_Higgs_ggH
250 CMS_HWW_boosted_CR2_mcstat_bin12
251 CMS_HWW_boosted_wjets_rate
252 CMS_HWW_boosted_CR2_mcstat_bin17
253 CMS_HWW_boosted_SR2a_ttH_hww_mcstat_bin5
254 CMS_HWW_boosted_CR1_mcstat_bin10
255 hzz
256 CMS_HWW_boosted_FakeRate_statistical_uncertainty
257 CMS_HWW_boosted_btagSFlightCorrelated
258 CMS_HWW_boosted_TopCR_mcstat_bin2
259 CMS_HWW_boosted_CR1_mcstat_bin2
260 CMS_HWW_boosted_SR2a_mcstat_bin12
261 CMS_HWW_boosted_tf_dataResidual_1b_MH_Reco_par3
262 CMS_HWW_boosted_muon_veto
263 pdf_Higgs_qqH
264 CMS_HWW_boosted_SR2b_mcstat_bin14
265 pdf_Higgs_ttH
266 CMS_HWW_boosted_SR1b_mcstat_bin8
267 QCDscale_ZH
268 CMS_HWW_boosted_SR1b_mcstat_bin7
269 CMS_HWW_boosted_ggFpt350to500_mcstat_bin5
270 CMS_HWW_boosted_SR1a_mcstat_bin11
0.971 +0 −0.007
1.255 +0 −0.027
1.09 +0.06 −0.05
1.51 +0 −0.10
−2
−1
0
1
2
(θ̂-θ_I)/σ_I
−0.01
0
0.01
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂
Fit
Pull
+1σ Impact
-1σ Impact


Gaussian
Poisson
AsymmetricGaussian
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
271 CMS_HWW_boosted_SR2a_wjets_mcstat_bin5
272 CMS_HWW_boosted_CR1_mcstat_bin17
273 CMS_HWW_boosted_CR2_mcstat_bin7
274 CMS_HWW_boosted_SR2a_ggH_hww_mcstat_bin1
275 CMS_HWW_boosted_TopCR_mcstat_bin1
276 CMS_HWW_boosted_CR1_mcstat_bin6
277 CMS_HWW_boosted_CR2_mcstat_bin1
278 CMS_HWW_boosted_SR1b_mcstat_bin0
279 CMS_HWW_boosted_SR2a_ttbar_mcstat_bin1
280 CMS_HWW_boosted_SR2a_ttbar_mcstat_bin5
281 CMS_HWW_boosted_SR2b_mcstat_bin2
282 CMS_scale_j_Abs_2016
283 CMS_pileup_2016
284 CMS_HWW_boosted_tf_dataResidual_1b_MH_Reco_par5
1.82 +0.05 −0.06
285 CMS_HWW_boosted_CR1_mcstat_bin8
286 CMS_scale_j_Abs_2016APV
287 alpha_s
288 CMS_HWW_boosted_CR1_mcstat_bin4
289 CMS_HWW_boosted_CR2_mcstat_bin10
290 CMS_HWW_boosted_SR2b_mcstat_bin7
291 CMS_HWW_boosted_SR2a_mcstat_bin8
292 ps_fsr_rest_bkg
293 CMS_HWW_boosted_CR1_mcstat_bin14
294 CMS_HWW_boosted_SR1a_mcstat_bin2
295 CMS_HWW_boosted_CR1_mcstat_bin9
296 ps_isr_hzz
297 CMS_HWW_boosted_SR2a_mcstat_bin9
298 CMS_HWW_boosted_SR1b_mcstat_bin12
299 CMS_HWW_boosted_tf_dataResidual_2b_MH_Reco_par3
0.6 +0.4 −1.6
300 CMS_HWW_boosted_ele_identification_2017
Fit
Pull
+1σ Impact
-1σ Impact
−2
−1
0
1
2
(θ̂-θ_I)/σ_I
−0.01
0
0.01
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂


Gaussian
Poisson
AsymmetricGaussian
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
301 CMS_HWW_boosted_SR2a_hzz_mcstat_bin5
302 CMS_HWW_boosted_ggFpt350to500_mcstat_bin4
303 PDF_ttH_ACCEPT_CMS_HWW_boosted
304 CMS_HWW_boosted_SR2a_ZH_hww_mcstat_bin5
305 CMS_HWW_boosted_SR2b_mcstat_bin11
306 CMS_HWW_boosted_FakeRate_EWK_SF_statistical_uncertainty
307 CMS_HWW_boosted_electron_veto
308 CMS_HWW_boosted_triggerEffSF_uncorrelated
309 CMS_HWW_boosted_SR2b_mcstat_bin6
310 CMS_HWW_boosted_ggFpt500toInf_mcstat_bin5
311 CMS_HWW_boosted_SR1b_mcstat_bin17
312 CMS_HWW_boosted_SR2a_ggH_hww_mcstat_bin0
313 CMS_HWW_boosted_SR2a_rest_bkg_mcstat_bin1
314 pdf_Higgs_WH
315 CMS_HWW_boosted_SR1a_mcstat_bin14
316 CMS_HWW_boosted_CR2_mcstat_bin2
317 QCDscale_ggH_ACCEPT_CMS_HWW_boosted
318 QCDscale_single_top
319 CMS_HWW_boosted_SR2a_ZH_hww_mcstat_bin18
320 CMS_HWW_boosted_SR2b_mcstat_bin15
321 ps_isr_singletop
322 CMS_HWW_boosted_SR1a_mcstat_bin13
323 CMS_HWW_boosted_lp_sf_region_b
324 CMS_HWW_boosted_SR1b_mcstat_bin6
325 CMS_res_j_2018
326 ps_fsr_WH
327 CMS_HWW_boosted_ele_reconstruction_2018
328 CMS_HWW_boosted_SR1a_mcstat_bin17
329 CMS_HWW_boosted_SR1a_mcstat_bin7
330 QCDscale_ttbar
−2 −1 0 1 2
−0.01 −0.005 0 0.005 0.01
(θ̂-θ_I)/σ_I
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂
Fit
Pull
+1σ Impact
-1σ Impact


Gaussian
AsymmetricGaussian
Poisson
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
331 CMS_scale_j_BBEC1_2017
332 CMS_HWW_boosted_SR2b_mcstat_bin13
333 CMS_HWW_boosted_ele_reconstruction_2016APV
334 CMS_HWW_boosted_SR2a_qqH_hww_mcstat_bin0
335 CMS_HWW_boosted_CR1_mcstat_bin11
336 CMS_HWW_boosted_CR1_mcstat_bin5
337 CMS_HWW_boosted_CR1_mcstat_bin3
338 CMS_HWW_boosted_WJetsCR_mcstat_bin0
339 CMS_HWW_boosted_SR1a_mcstat_bin18
340 CMS_HWW_boosted_ele_identification_2016
341 pdf_single_top
342 CMS_HWW_boosted_SR2a_rest_bkg_mcstat_bin18
343 lumi_13TeV_1718
344 CMS_HWW_boosted_SR1b_mcstat_bin16
345 CMS_HWW_boosted_CR2_mcstat_bin14
346 CMS_HWW_boosted_WJetsCR_mcstat_bin3
347 ps_fsr_hzz
348 CMS_HWW_boosted_VBF_mcstat_bin6
349 CMS_HWW_boosted_SR2b_mcstat_bin19
350 PDF_single_top_ACCEPT_CMS_HWW_boosted
351 CMS_HWW_boosted_CR2_mcstat_bin0
352 CMS_HWW_boosted_SR1a_mcstat_bin15
353 CMS_HWW_boosted_tf_dataResidual_2b_MH_Reco_par1
0.97 +0.13 −2.05
354 CMS_HWW_boosted_SR2a_ttbar_mcstat_bin0
355 CMS_HWW_boosted_SR2a_single_top_mcstat_bin5
356 CMS_HWW_boosted_SR2a_ggH_hww_mcstat_bin5
357 CMS_HWW_boosted_SR1a_mcstat_bin12
358 ps_isr_ttH
359 CMS_HWW_boosted_SR1a_mcstat_bin19
360 CMS_HWW_boosted_SR2b_mcstat_bin4
Fit
Pull
+1σ Impact
-1σ Impact
−2 −1 0 1 2
(θ̂-θ_I)/σ_I
−0.01 −0.005 0 0.005 0.01
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂


Gaussian
AsymmetricGaussian
Poisson
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
361 ps_isr_WH
362 CMS_HWW_boosted_CR2_mcstat_bin18
363 CMS_HWW_boosted_btagSFlight_2016APV
364 CMS_HWW_boosted_SR2a_ZH_hww_mcstat_bin1
365 CMS_HWW_boosted_Z_d2kappa_EW
366 CMS_HWW_boosted_SR2a_mcstat_bin10
367 CMS_HWW_boosted_SR1a_mcstat_bin3
368 CMS_HWW_boosted_SR2a_WH_hww_mcstat_bin5
369 CMS_HWW_boosted_SR1b_mcstat_bin13
370 ps_isr_single_top
371 CMS_HWW_boosted_SR2a_WH_hww_mcstat_bin18
372 CMS_HWW_boosted_jmr_2017
373 CMS_HWW_boosted_CR2_mcstat_bin15
374 CMS_HWW_boosted_SR2b_mcstat_bin12
375 CMS_HWW_boosted_SR1a_mcstat_bin1
376 lumi_13TeV_2018
377 CMS_HWW_boosted_SR2a_mcstat_bin17
378 CMS_HWW_boosted_CR2_mcstat_bin5
379 ps_fsr_singletop
380 CMS_HWW_boosted_SR2a_mcstat_bin4
381 CMS_HWW_boosted_CR2_mcstat_bin3
382 CMS_HWW_boosted_SR2b_mcstat_bin17
383 lumi_13TeV_2016
384 CMS_HWW_boosted_SR2b_mcstat_bin8
385 ps_isr_rest_bkg
386 CMS_HWW_boosted_ggFpt250to350_mcstat_bin5
387 QCDscale_rest_bkg
388 CMS_HWW_boosted_SR2b_mcstat_bin9
389 QCDscale_qqH_ACCEPT_CMS_HWW_boosted
390 PDF_ZH_ACCEPT_CMS_HWW_boosted
−2
−1
0
1
2
−0.005
0
0.005
(θ̂-θ_I)/σ_I
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂
Fit
Pull
+1σ Impact
-1σ Impact


Gaussian
Poisson
AsymmetricGaussian
Unconstrained
CMS Internal
r̂ = 0.0 +0.6 −0.5
391 CMS_HWW_boosted_SR1b_mcstat_bin19
392 CMS_HWW_boosted_SR2a_mcstat_bin16
393 CMS_HWW_boosted_SR1b_mcstat_bin11
394 CMS_HWW_boosted_SR2a_single_top_mcstat_bin18
395 CMS_HWW_boosted_ggFpt350to500_mcstat_bin6
396 CMS_HWW_boosted_CR1_mcstat_bin16
397 CMS_HWW_boosted_SR1a_mcstat_bin10
398 ps_fsr_wjets
399 CMS_HWW_boosted_btagSFbc_2016
400 CMS_HWW_boosted_SR2a_qqH_hww_mcstat_bin1
401 CMS_HWW_boosted_SR2b_mcstat_bin16
402 QCDscale_single_top_ACCEPT_CMS_HWW_boosted
403 CMS_HWW_boosted_SR1b_mcstat_bin14
404 CMS_HWW_boosted_btagSFlight_2018
405 CMS_HWW_boosted_single_top_rate
406 CMS_HWW_boosted_SR2a_ttH_hww_mcstat_bin0
407 CMS_HWW_boosted_SR1a_mcstat_bin6
408 CMS_HWW_boosted_SR1a_mcstat_bin5
409 CMS_HWW_boosted_VBF_mcstat_bin7
410 CMS_HWW_boosted_SR1b_mcstat_bin18
411 PDF_ggH_ACCEPT_CMS_HWW_boosted
412 CMS_HWW_boosted_SR1b_mcstat_bin4
413 ps_isr_ZH
414 CMS_HWW_boosted_W_d1kappa_EW
415 CMS_HWW_boosted_SR2b_mcstat_bin5
416 CMS_HWW_boosted_SR1b_mcstat_bin9
417 CMS_HWW_boosted_ggFpt500toInf_mcstat_bin7
418 CMS_l1_ecal_prefiring_2016
419 CMS_HWW_boosted_SR2a_mcstat_bin3
420 CMS_HWW_boosted_SR1b_mcstat_bin1
Fit
Pull
+1σ Impact
-1σ Impact
−2
−1
0
1
2
(θ̂-θ_I)/σ_I
−0.005
0
0.005
(θ̂-θ_I)/√(σ_I² - σ²)
Δr̂