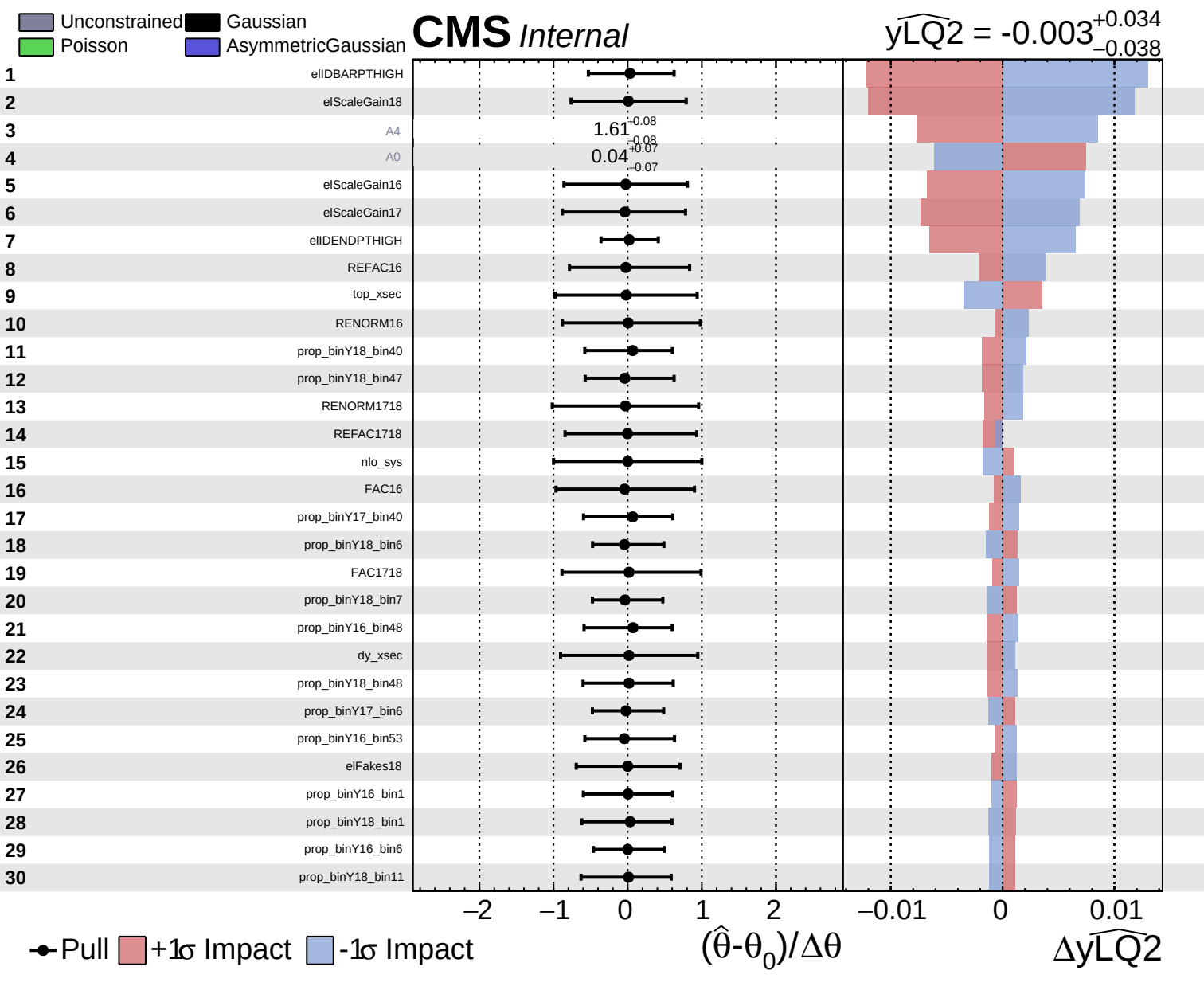
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Gaussian
Poisson
AsymmetricGaussian
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ŷLQ2 = -0.003 +0.034 −0.038
1 elIDBARPTHIGH
2 elScaleGain18
3 A4
4 A0
5 elScaleGain16
6 elScaleGain17
7 elIDENDPTHIGH
8 REFAC16
9 top_xsec
10 RENORM16
11 prop_binY18_bin40
12 prop_binY18_bin47
13 RENORM1718
14 REFAC1718
15 nlo_sys
16 FAC16
17 prop_binY17_bin40
18 prop_binY18_bin6
19 FAC1718
20 prop_binY18_bin7
21 prop_binY16_bin48
22 dy_xsec
23 prop_binY18_bin48
24 prop_binY17_bin6
25 prop_binY16_bin53
26 elFakes18
27 prop_binY16_bin1
28 prop_binY18_bin1
29 prop_binY16_bin6
30 prop_binY18_bin11
1.61 +0.08 −0.08
0.04 +0.07 −0.07
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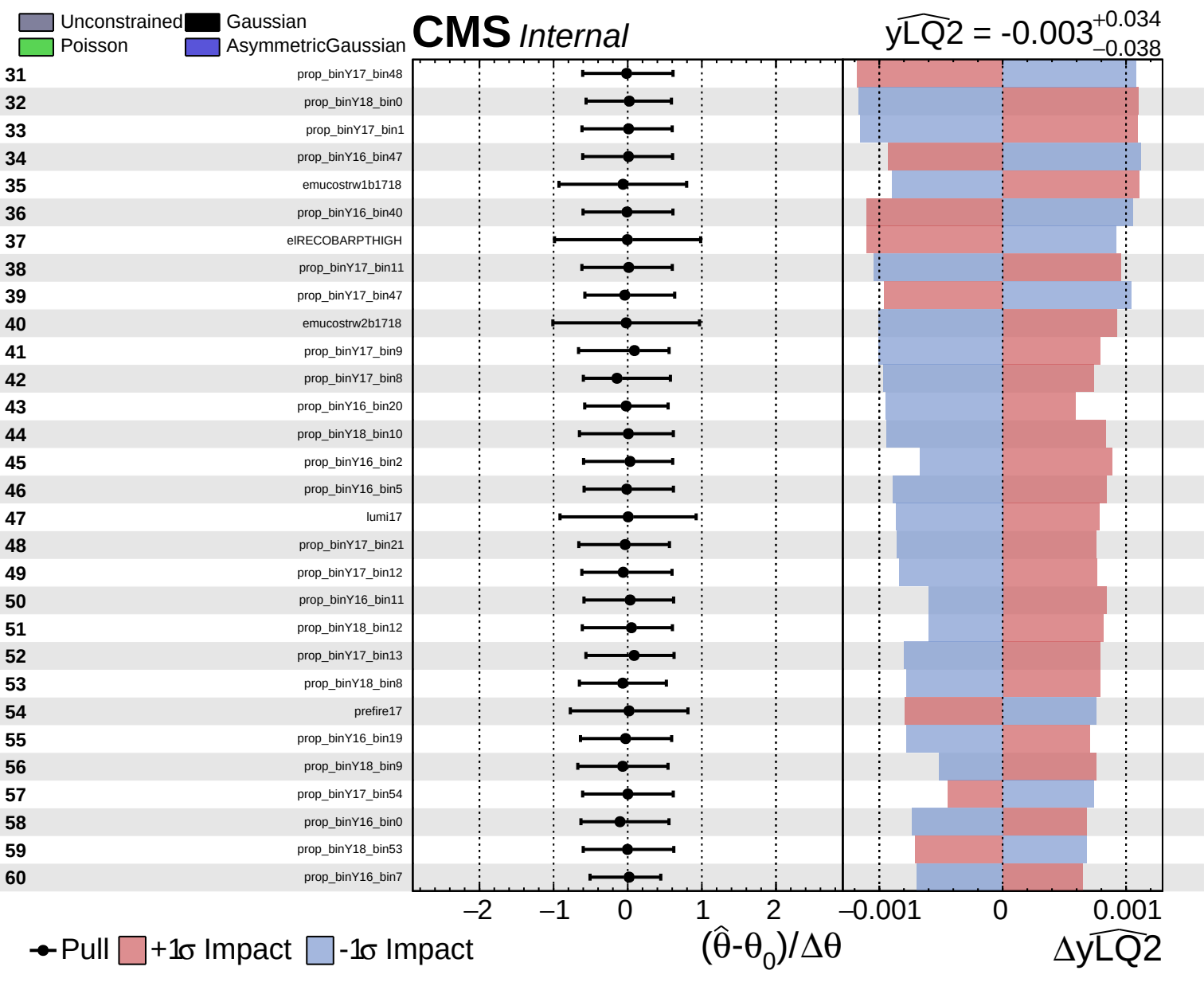
−0.01 0 0.01
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
ΔŷLQ2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AsymmetricGaussian
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32 prop_binY18_bin0
33 prop_binY17_bin1
34 prop_binY16_bin47
35 emucostrw1b1718
36 prop_binY16_bin40
37 elRECOBARPTHIGH
38 prop_binY17_bin11
39 prop_binY17_bin47
40 emucostrw2b1718
41 prop_binY17_bin9
42 prop_binY17_bin8
43 prop_binY16_bin20
44 prop_binY18_bin10
45 prop_binY16_bin2
46 prop_binY16_bin5
47 lumi17
48 prop_binY17_bin21
49 prop_binY17_bin12
50 prop_binY16_bin11
51 prop_binY18_bin12
52 prop_binY17_bin13
53 prop_binY18_bin8
54 prefire17
55 prop_binY16_bin19
56 prop_binY18_bin9
57 prop_binY17_bin54
58 prop_binY16_bin0
59 prop_binY18_bin53
60 prop_binY16_bin7
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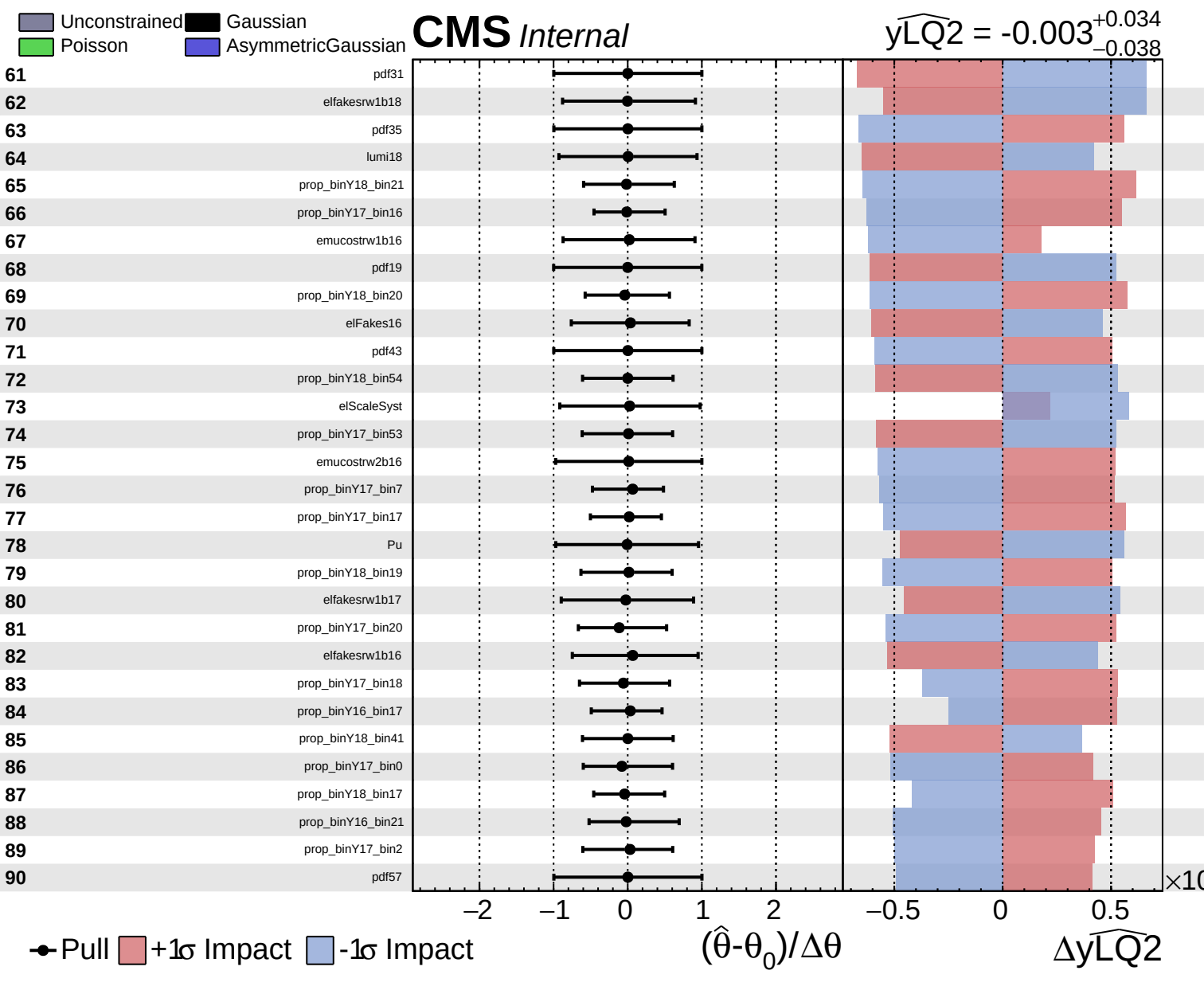
-1σ Impact
(θ̂-θ0)/Δθ
ΔŷLQ2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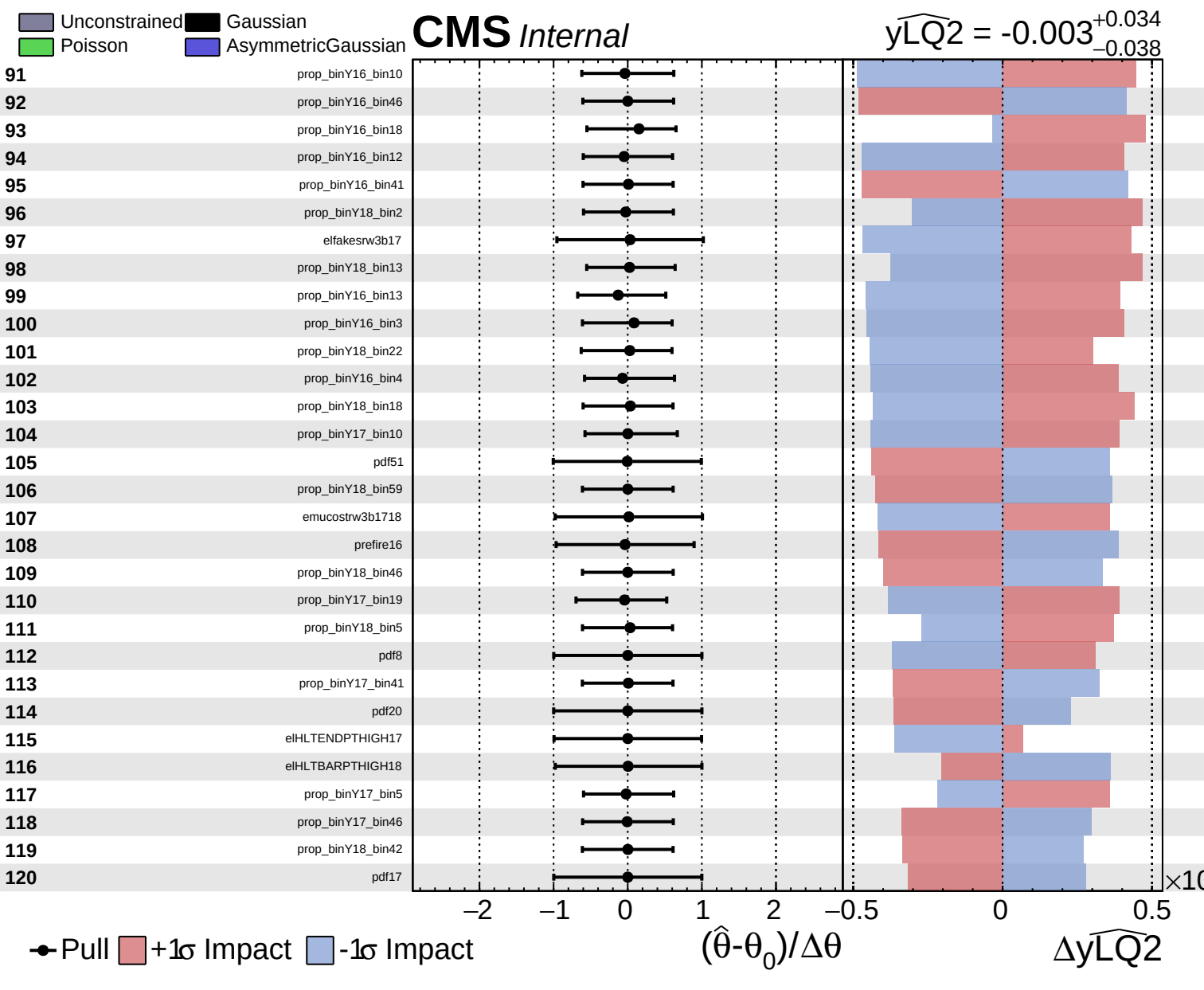
CMS Internal
ŷLQ2 = -0.003 +0.034 −0.038
61 pdf31
62 elfakesrw1b18
63 pdf35
64 lumi18
65 prop_binY18_bin21
66 prop_binY17_bin16
67 emucostrw1b16
68 pdf19
69 prop_binY18_bin20
70 elFakes16
71 pdf43
72 prop_binY18_bin54
73 elScaleSyst
74 prop_binY17_bin53
75 emucostrw2b16
76 prop_binY17_bin7
77 prop_binY17_bin17
78 Pu
79 prop_binY18_bin19
80 elfakesrw1b17
81 prop_binY17_bin20
82 elfakesrw1b16
83 prop_binY17_bin18
84 prop_binY16_bin17
85 prop_binY18_bin41
86 prop_binY17_bin0
87 prop_binY18_bin17
88 prop_binY16_bin21
89 prop_binY17_bin2
90 pdf57
−2
−1
0
1
2
−0.5
0
0.5
×10
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
ΔŷLQ2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Poisson
AsymmetricGaussian
CMS Internal
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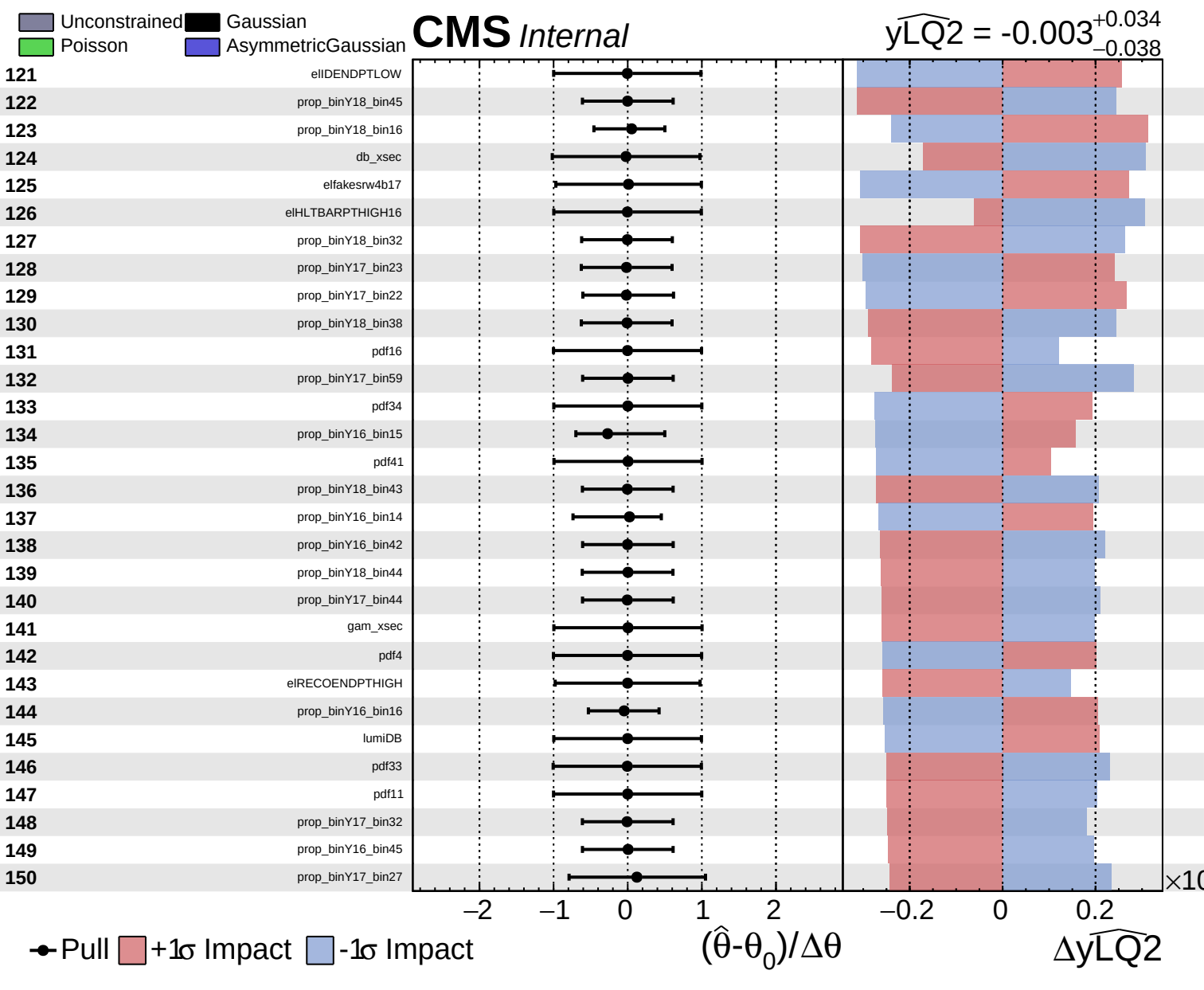
92 prop_binY16_bin46
93 prop_binY16_bin18
94 prop_binY16_bin12
95 prop_binY16_bin41
96 prop_binY18_bin2
97 elfakesrw3b17
98 prop_binY18_bin13
99 prop_binY16_bin13
100 prop_binY16_bin3
101 prop_binY18_bin22
102 prop_binY16_bin4
103 prop_binY18_bin18
104 prop_binY17_bin10
105 pdf51
106 prop_binY18_bin59
107 emucostrw3b1718
108 prefire16
109 prop_binY18_bin46
110 prop_binY17_bin19
111 prop_binY18_bin5
112 pdf8
113 prop_binY17_bin41
114 pdf20
115 elHLTENDPTHIGH17
116 elHLTBARPTHIGH18
117 prop_binY17_bin5
118 prop_binY17_bin46
119 prop_binY18_bin42
120 pdf17
−2 −1 0 1 2
−0.5 0 0.5
×10
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
ΔyLQ2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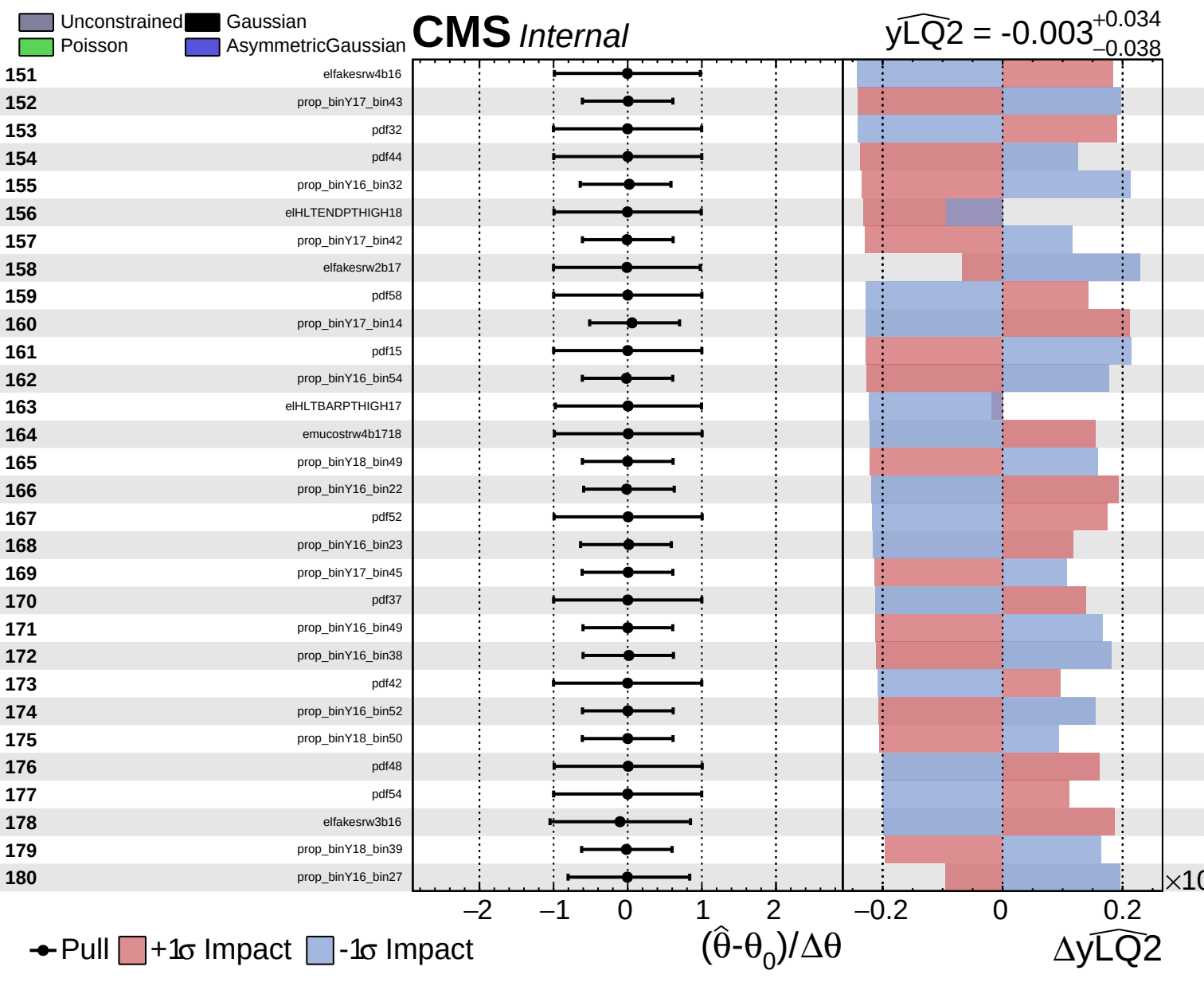
Poisson
AsymmetricGaussian
CMS Internal
yLQ2 = -0.003 +0.034 −0.038
121 elIDENDPTLOW
122 prop_binY18_bin45
123 prop_binY18_bin16
124 db_xsec
125 elfakesrw4b17
126 elHLTBARPTHIGH16
127 prop_binY18_bin32
128 prop_binY17_bin23
129 prop_binY17_bin22
130 prop_binY18_bin38
131 pdf16
132 prop_binY17_bin59
133 pdf34
134 prop_binY16_bin15
135 pdf41
136 prop_binY18_bin43
137 prop_binY16_bin14
138 prop_binY16_bin42
139 prop_binY18_bin44
140 prop_binY17_bin44
141 gam_xsec
142 pdf4
143 elRECOENDPTHIGH
144 prop_binY16_bin16
145 lumiDB
146 pdf33
147 pdf11
148 prop_binY17_bin32
149 prop_binY16_bin45
150 prop_binY17_bin27
−2 −1 0 1 2
−0.2 0 0.2
×10
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
ΔyLQ2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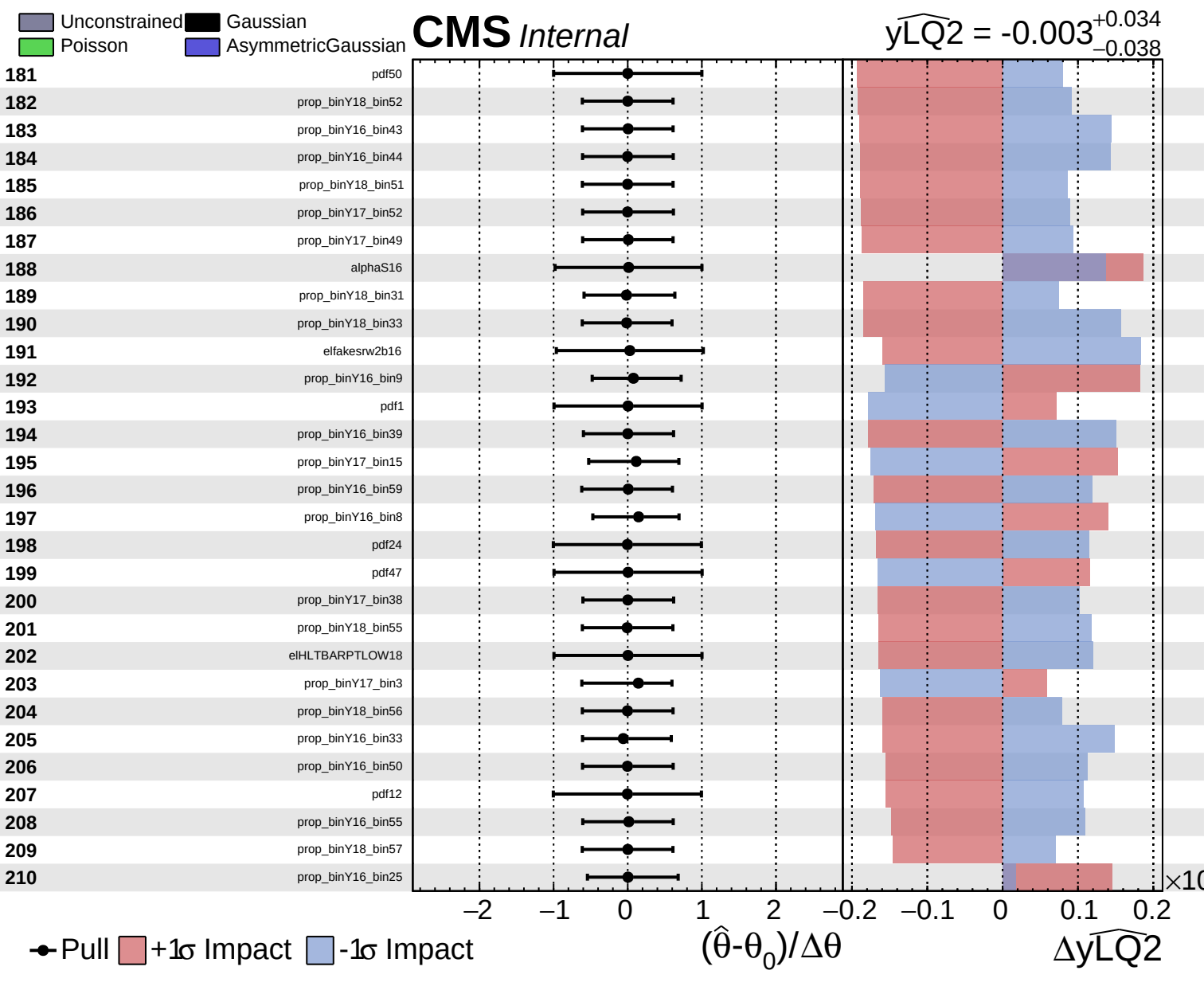
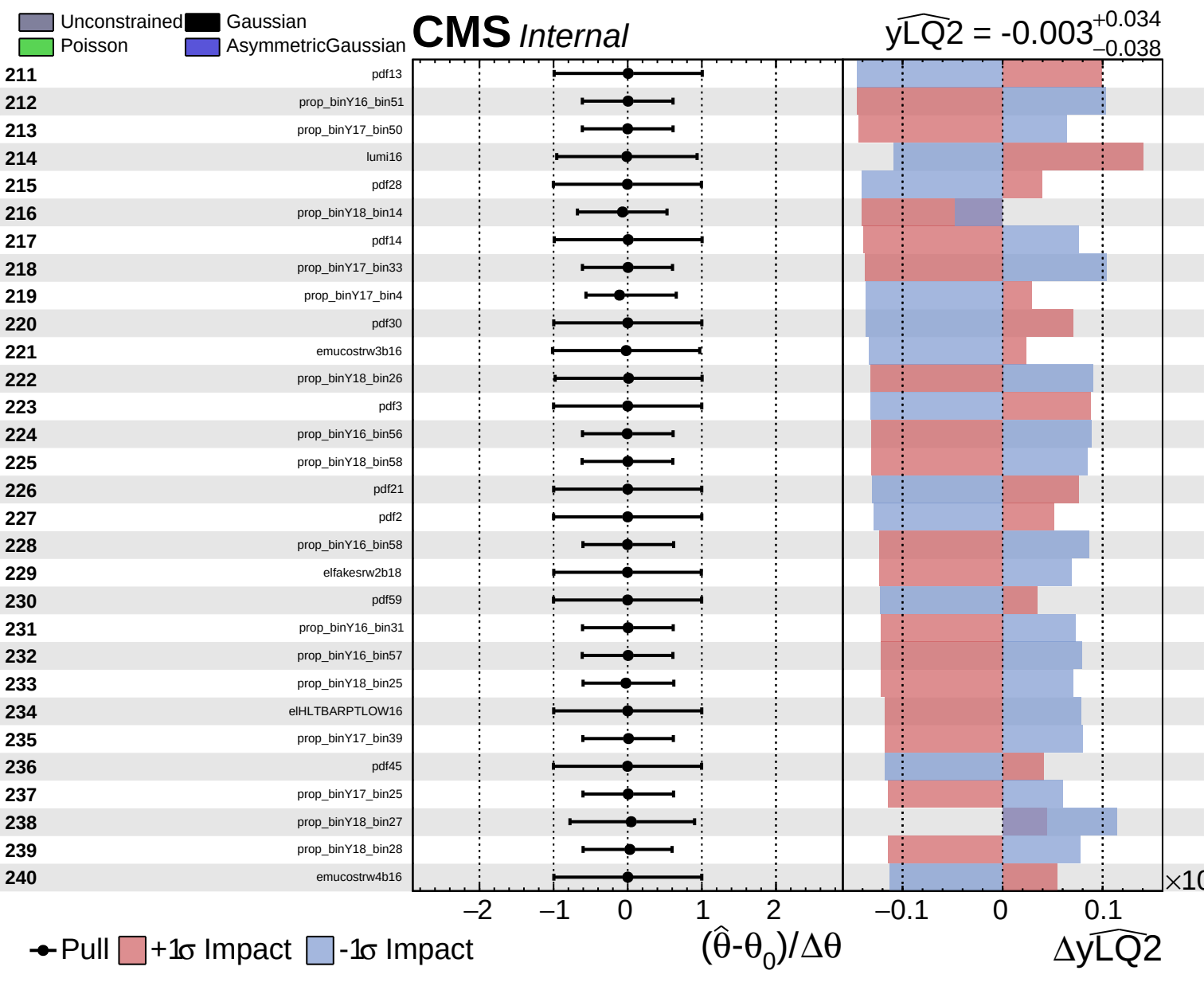
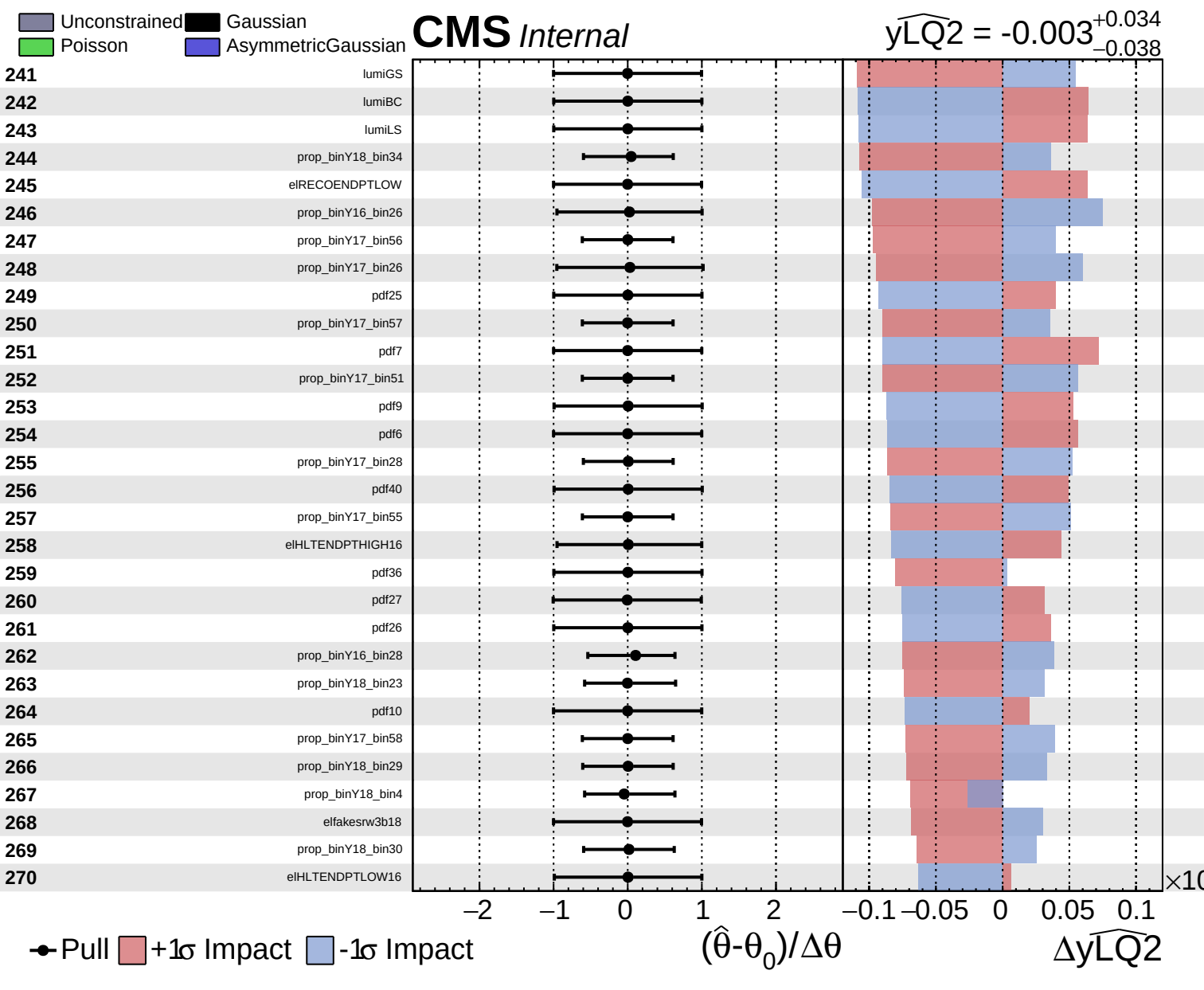
Poisson
AsymmetricGaussian
CMS Internal
yLQ2 = -0.003 +0.034 −0.038
151 elfakesrw4b16
152 prop_binY17_bin43
153 pdf32
154 pdf44
155 prop_binY16_bin32
156 elHLTENDPTHIGH18
157 prop_binY17_bin42
158 elfakesrw2b17
159 pdf58
160 prop_binY17_bin14
161 pdf15
162 prop_binY16_bin54
163 elHLTBARPTHIGH17
164 emucostrw4b1718
165 prop_binY18_bin49
166 prop_binY16_bin22
167 pdf52
168 prop_binY16_bin23
169 prop_binY17_bin45
170 pdf37
171 prop_binY16_bin49
172 prop_binY16_bin38
173 pdf42
174 prop_binY16_bin52
175 prop_binY18_bin50
176 pdf48
177 pdf54
178 elfakesrw3b16
179 prop_binY18_bin39
180 prop_binY16_bin27
−2 −1 0 1 2
−0.2 0 0.2
×10
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
ΔyLQ2


Unconstrained
Gaussian
Poisson
AsymmetricGaussian
CMS Internal
ŷLQ2 = -0.003 +0.034 −0.038
181 pdf50
182 prop_binY18_bin52
183 prop_binY16_bin43
184 prop_binY16_bin44
185 prop_binY18_bin51
186 prop_binY17_bin52
187 prop_binY17_bin49
188 alphaS16
189 prop_binY18_bin31
190 prop_binY18_bin33
191 elfakesrw2b16
192 prop_binY16_bin9
193 pdf1
194 prop_binY16_bin39
195 prop_binY17_bin15
196 prop_binY16_bin59
197 prop_binY16_bin8
198 pdf24
199 pdf47
200 prop_binY17_bin38
201 prop_binY18_bin55
202 elHLTBARPTLOW18
203 prop_binY17_bin3
204 prop_binY18_bin56
205 prop_binY16_bin33
206 prop_binY16_bin50
207 pdf12
208 prop_binY16_bin55
209 prop_binY18_bin57
210 prop_binY16_bin25
−2 −1 0 1 2
−0.2 −0.1 0 0.1 0.2
×10
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
ΔŷLQ2


Unconstrained
Gaussian
Poisson
AsymmetricGaussian
CMS Internal
yLQ2 = -0.003 +0.034 −0.038
211 pdf13
212 prop_binY16_bin51
213 prop_binY17_bin50
214 lumi16
215 pdf28
216 prop_binY18_bin14
217 pdf14
218 prop_binY17_bin33
219 prop_binY17_bin4
220 pdf30
221 emucostrw3b16
222 prop_binY18_bin26
223 pdf3
224 prop_binY16_bin56
225 prop_binY18_bin58
226 pdf21
227 pdf2
228 prop_binY16_bin58
229 elfakesrw2b18
230 pdf59
231 prop_binY16_bin31
232 prop_binY16_bin57
233 prop_binY18_bin25
234 elHLTBARPTLOW16
235 prop_binY17_bin39
236 pdf45
237 prop_binY17_bin25
238 prop_binY18_bin27
239 prop_binY18_bin28
240 emucostrw4b16
−2 −1 0 1 2
−0.1 0 0.1
×10
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
ΔyLQ2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Poisson
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CMS Internal
yLQ2 = -0.003 +0.034 −0.038
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242 lumiBC
243 lumiLS
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245 elRECOENDPTLOW
246 prop_binY16_bin26
247 prop_binY17_bin56
248 prop_binY17_bin26
249 pdf25
250 prop_binY17_bin57
251 pdf7
252 prop_binY17_bin51
253 pdf9
254 pdf6
255 prop_binY17_bin28
256 pdf40
257 prop_binY17_bin55
258 elHLTENDPTHIGH16
259 pdf36
260 pdf27
261 pdf26
262 prop_binY16_bin28
263 prop_binY18_bin23
264 pdf10
265 prop_binY17_bin58
266 prop_binY18_bin29
267 prop_binY18_bin4
268 elfakesrw3b18
269 prop_binY18_bin30
270 elHLTENDPTLOW16
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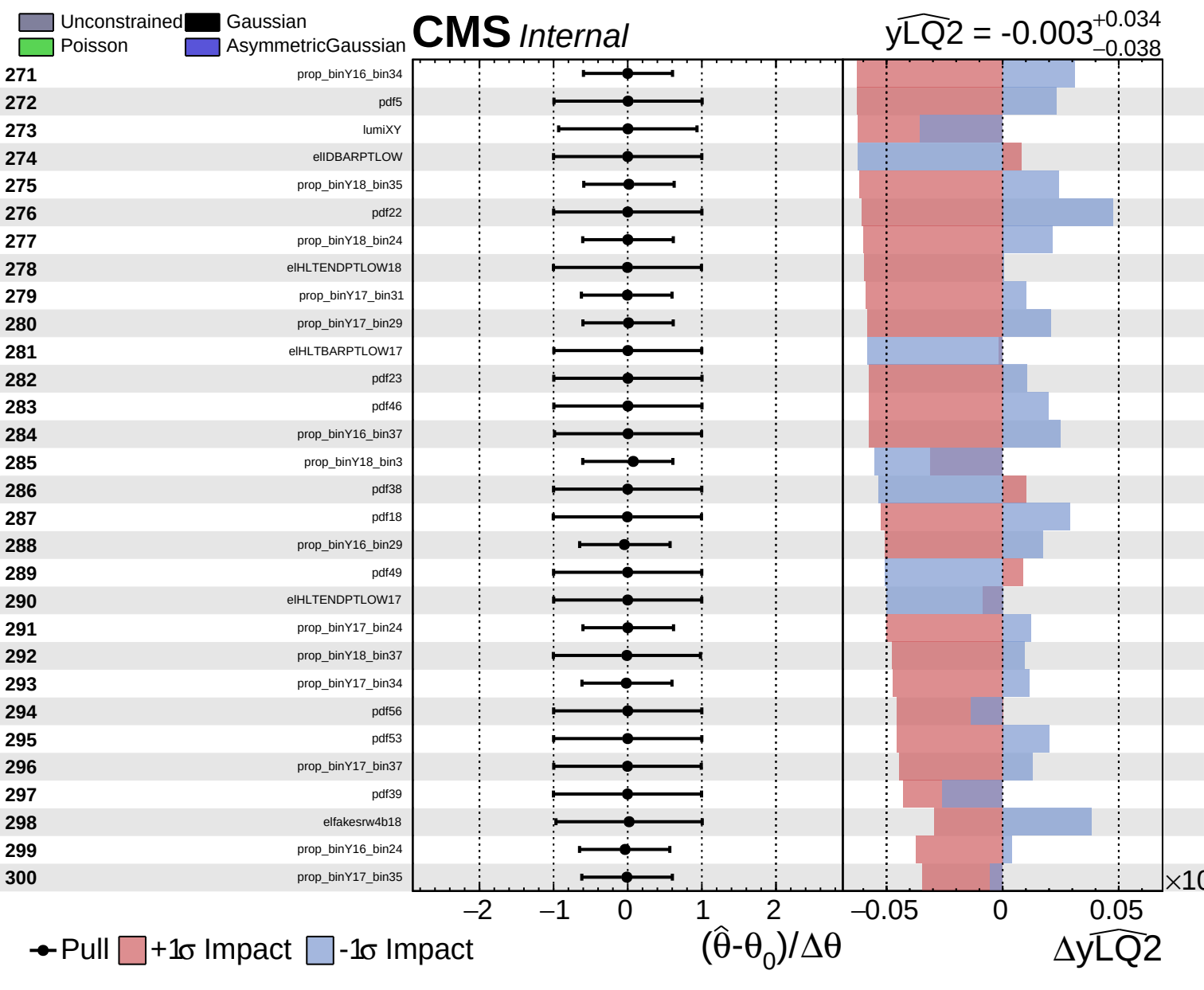
−0.1 −0.05 0 0.05 0.1
×10
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
ΔyLQ2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Poisson
AsymmetricGaussian
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272 pdf5
273 lumiXY
274 elIDBARPTLOW
275 prop_binY18_bin35
276 pdf22
277 prop_binY18_bin24
278 elHLTENDPTLOW18
279 prop_binY17_bin31
280 prop_binY17_bin29
281 elHLTBARPTLOW17
282 pdf23
283 pdf46
284 prop_binY16_bin37
285 prop_binY18_bin3
286 pdf38
287 pdf18
288 prop_binY16_bin29
289 pdf49
290 elHLTENDPTLOW17
291 prop_binY17_bin24
292 prop_binY18_bin37
293 prop_binY17_bin34
294 pdf56
295 pdf53
296 prop_binY17_bin37
297 pdf39
298 elfakesrw4b18
299 prop_binY16_bin24
300 prop_binY17_bin35
×10
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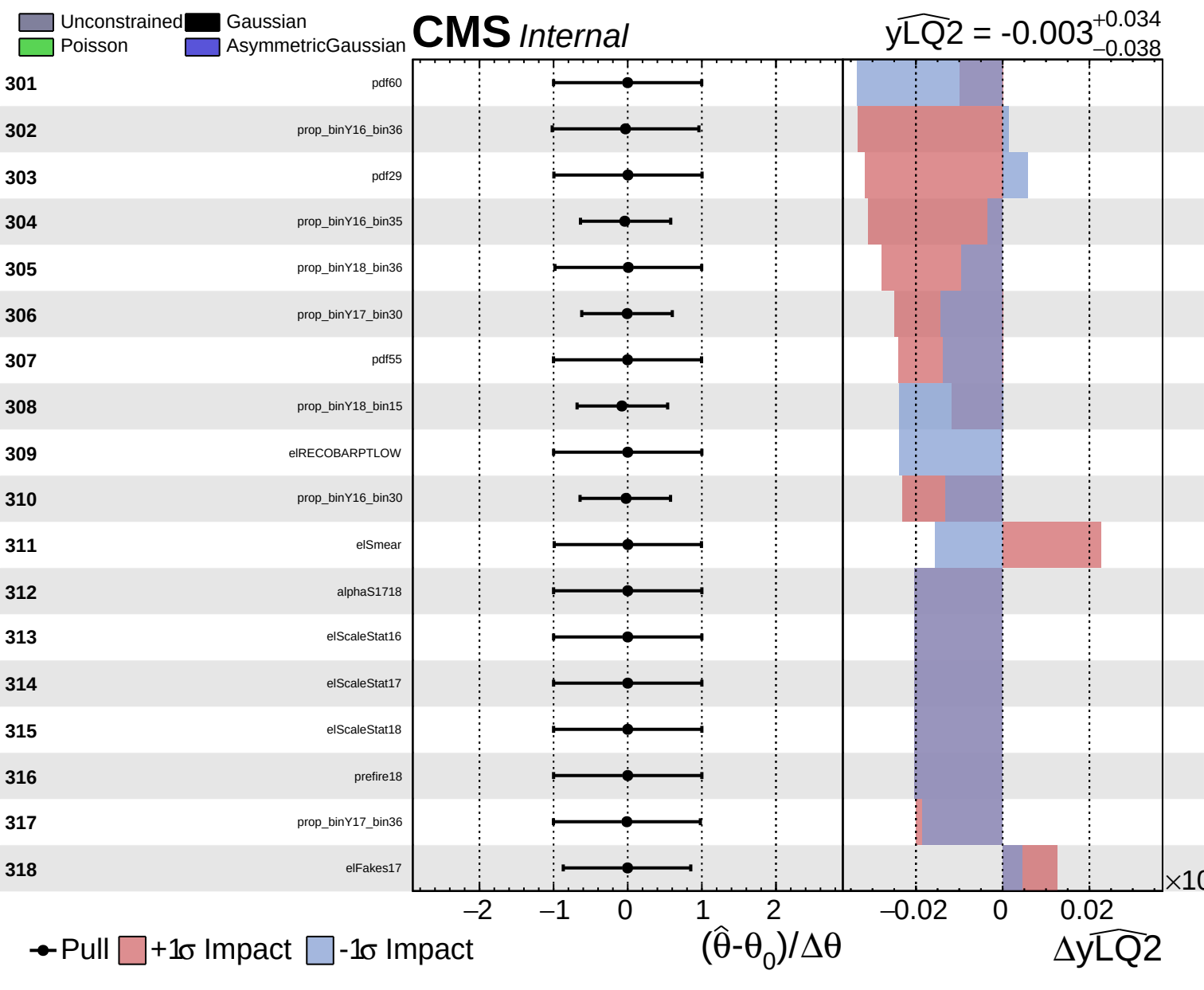
−0.05 0 0.05
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
ΔyLQ2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304 prop_binY16_bin35
305 prop_binY18_bin36
306 prop_binY17_bin30
307 pdf55
308 prop_binY18_bin15
309 elRECOBARPTLOW
310 prop_binY16_bin30
311 elSmear
312 alphaS1718
313 elScaleStat16
314 elScaleStat17
315 elScaleStat18
316 prefire18
317 prop_binY17_bin36
318 elFakes17
−2 −1 0 1 2
−0.02 0 0.02
×10
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
ΔyLQ2