

Events/ 0.033 $\times 10^3$

160

140

120

100

80

60

40

20

Data (JetHT)

ggZHcc

ZHcc

ggZHbb

ZHbb

ZZ

WZ

WW

W + jets

Z + jets

tt

Single top

QCD

MC unc. (stat.)

Data/MC

1.5

1

0.5

0

0.5

1

1.5

2

2.5

3

3.5

4

 $\Delta\phi(c,c)$ 