

# MadGraph5 + Delphes

pp  $\sqrt{s} = 14$  TeV L = 1 ab<sup>-1</sup>

**Selection: 1B1S**

$\chi^2/\text{ndf}=1.03$  KS=1.00

**Sig. signif.: 15.5**

-1 •

Pseudo-data

- $Z' \rightarrow t\bar{t}$ ,  $m_{Z'} = 1$  TeV ( $\times 37500 \times 2^{2.0}$ )
- $t\bar{t}$ ,  $p_T^{j1} \geq 200$  GeV  $p_T^{j2} \in (60, 200)$  GeV
- $t\bar{t}$ ,  $p_T^{j1, j2} \geq 200$  GeV
- $t\bar{t}$ ,  $p_T^{j1, j2} \in (60, 200)$  GeV
- WWbb,  $p_T^{j1, j2} > 60$  GeV
- Wbbjj,  $p_T^{j1, j2} > 60$  GeV
- bbjj,  $p_T^{j1} \geq 200$  GeV  $p_T^{j2} \in (60, 200)$  GeV
- bbjj,  $p_T^{j1, j2} \geq 200$  GeV
- bbjj,  $p_T^{j1, j2} \in (60, 200)$  GeV

10000

8000

6000

4000

2000

ratio

signif.

1.3

1.2

1.1

1.0

0.9

0.8

0.7

8

6

4

2

0

-2

600

800

1000

1200

1400

1600

1800

2000

detector  $m^{t\bar{t}}$  [GeV]

