

35.9 fb<sup>-1</sup> (13 TeV)

Events / 7 GeV

$\times 10^3$

**CMS**

$450 < p_T(\text{AK8}) < 1000 \text{ GeV}$

Failing region

- Data
- W
- Z
- $t\bar{t}$
- Multijet
- H( $b\bar{b}$ )
- ▨ Total background
- $\Phi(b\bar{b}), m_\Phi = 140 \text{ GeV}$   
 $g_{q\Phi} = 4.7$

500

400

300

200

100

0

$\frac{\text{Data} - (\text{Multijet} + t\bar{t})}{\sigma_{\text{Data}}}$

$\sigma_{\text{Data}}$

40

20

0

$m_{\text{SD}} \text{ (GeV)}$

