

$e\mu, \geq 2 \text{ jets}, \geq 1 \text{ btag}, \geq 1 \gamma$ $\sqrt{s}=8 \text{ TeV}, \text{ Ldt}=19.7 \text{ fb}^{-1}$

Number of Events

CMS Preliminary

 10^3
 10^2
 10
 1

2012 data
 $t\bar{t}+\gamma$
 $t\bar{t} \text{ 0l}$
 $t\bar{t} \text{ 1l}$
 $t\bar{t} \text{ 2l}$
Single Top
Z+Jets
WW/ZZ/WZ
W+Jets
QCD

-4 -3 -2 -1 0 1 2 3 4

lead lepton ϕ 