

# Chan1

MET  $\geq$  200 GeV

MET/HT  $\geq$  0.2

njet(pT>50 GeV)  $\geq$  4

njet(pT>200 GeV)  $>$  0

HT  $>$  600 GeV

Tot SM events: 214185

Tot lum: 7.8 fb<sup>-1</sup>

Signals (38666 total):

- \* Z'+monojet (1130)
- \* stop stop RPV decay (8889)
- \* qDM (1581)
- \* gluino-gluino (4096, 10755)
- \* squark-squark (4111, 2822)
- \* stop stop (5282)

← In separate signal files!

## Note:

Weights (w) in *background* are 1

(such that  $w \cdot N_{\text{lines}} / \text{Lum} = \text{xsec}$ )

Weights in *signal* are  $\text{xsec} / N_{\text{lines}}$

(such that  $\text{Lum} = N_{\text{lines}} / \text{xsec} = 1/w$ )

## Chan2a

MET  $\geq$  50 GeV  
nlep(pT>15 GeV)  $\geq$  3

Tot SM events: 20005  
Tot lum: 309.6 fb<sup>-1</sup>

Signals (5868 total):

- \*  $\tilde{l}\mu$ - $\tilde{l}\tau$  Z' decay to leptons (968, 3781)
- \* chargino + neutralino production (222,226,311, 360)

## Chan2b

MET  $\geq$  50 GeV  
nlep(pT>15 GeV)  $\geq$  2  
HT  $\geq$  50 GeV

Tot SM events: 340268  
Tot lum: 7.8 fb<sup>-1</sup>

Signals (89676 total):

- \*  $\tilde{l}\mu$ - $\tilde{l}\tau$  Z' decay to leptons (3402, 8499)
- \* stop stop RPV decay (13626)
- \* chargino-chargino (665,849,1205)
- \* chargino-neutralino (1316,1513)
- \* gluino-gluino (58541)

# Chan3

MET  $\geq$  100 GeV

HT  $\geq$  600 GeV

Tot SM events: 8544111

Tot lum: 8.0 fb<sup>-1</sup>

Signals (1023320 total):

- \* Z'(2TeV)+monojet (6399)
- \* Z'(2TeV)+monoV (6120)
- \* qDM (6120)
- \* stop stop RPV decay (33397)
- \* gluino-gluino (8679, 17484, 918180)
- \* squark-squark (8881, 7632)
- \* stop-stop (9287)

If you find out that something  
is wrong with the dataset,  
please tell me!

(preferably by email:  
[mcbeekveld@gmail.com](mailto:mcbeekveld@gmail.com))