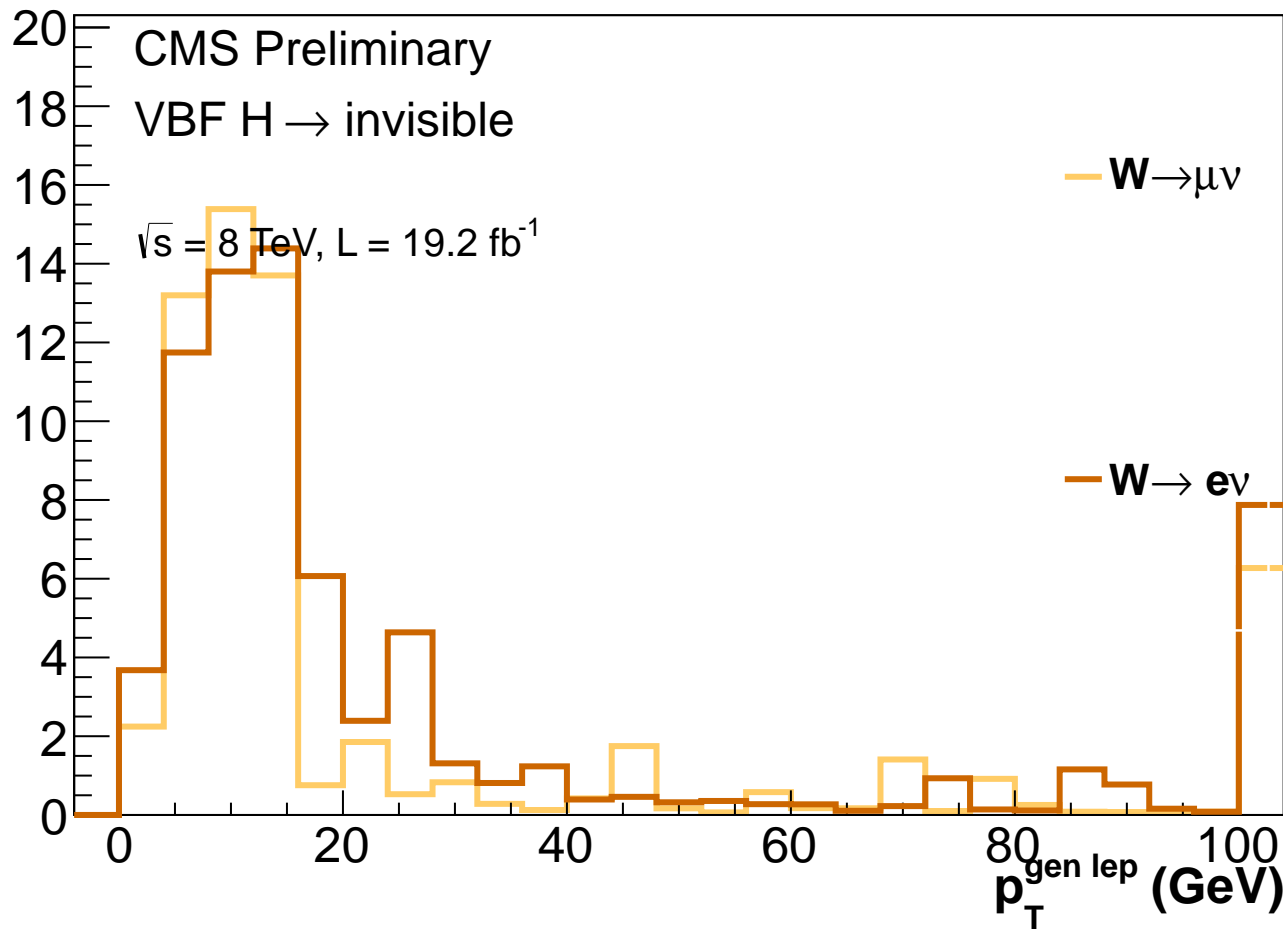
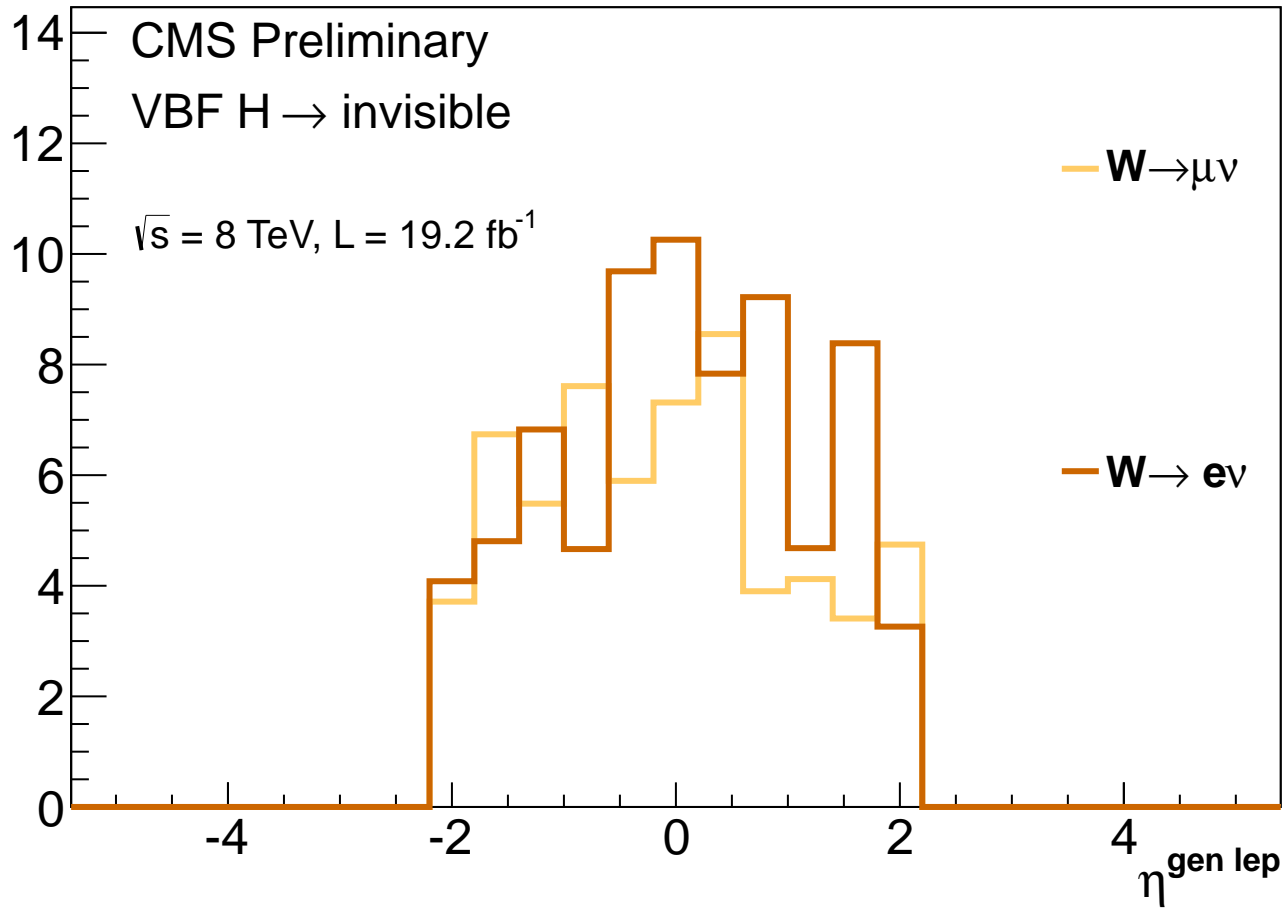


entries



entries



entries

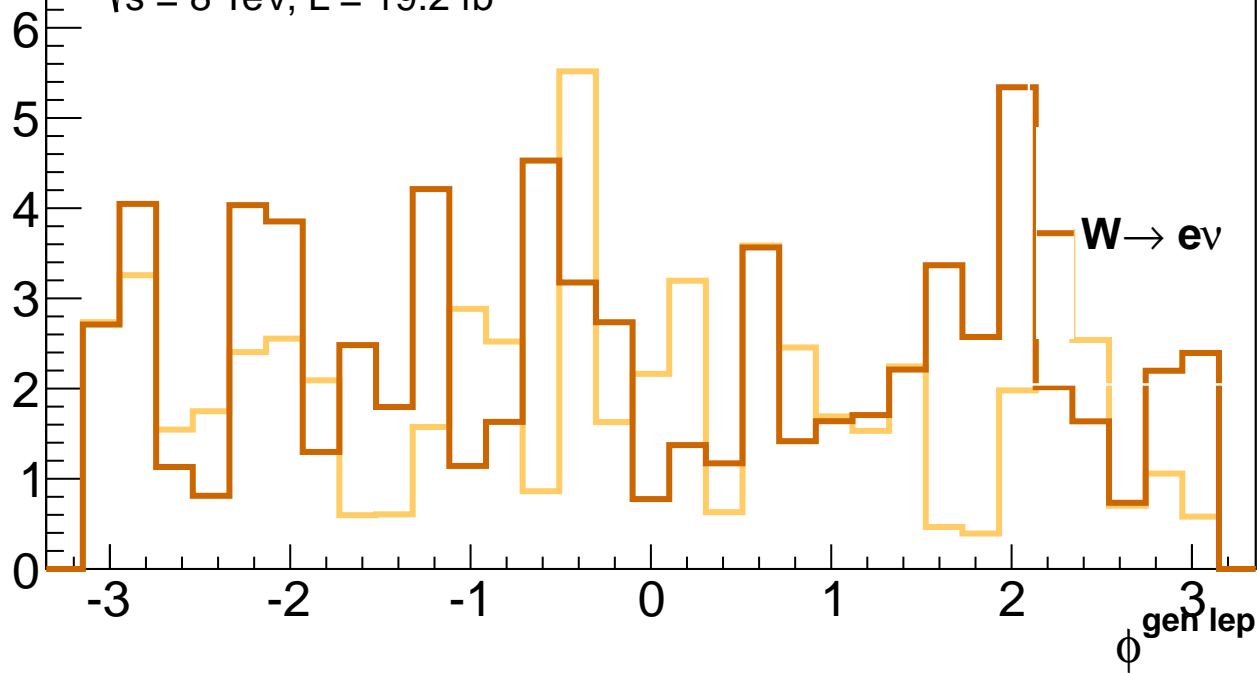
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

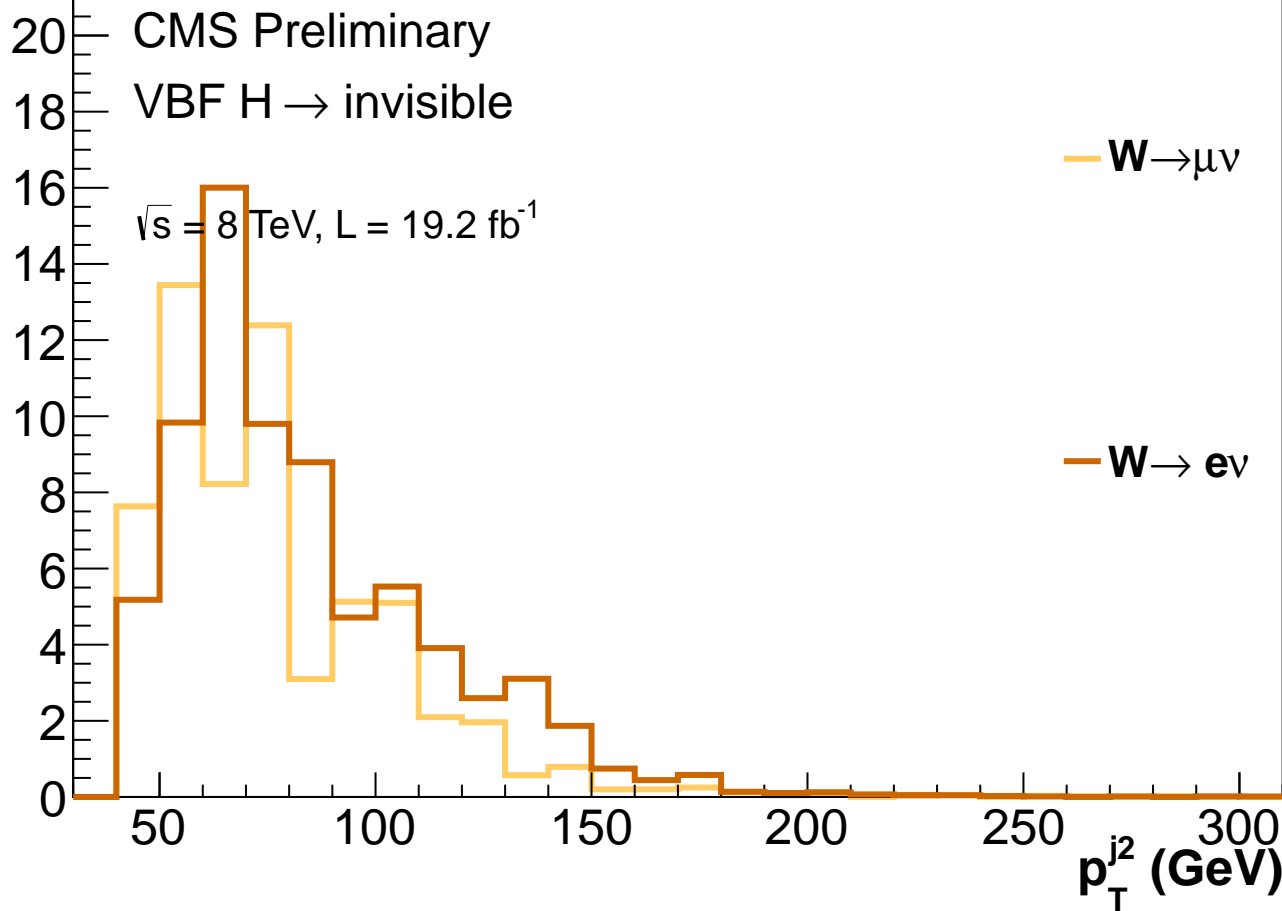
$\sqrt{s} = 8 \text{ TeV}$ ,  $L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries



entries

CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

$\sqrt{s} = 8 \text{ TeV}, L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

8

6

4

2

0

50

100

150

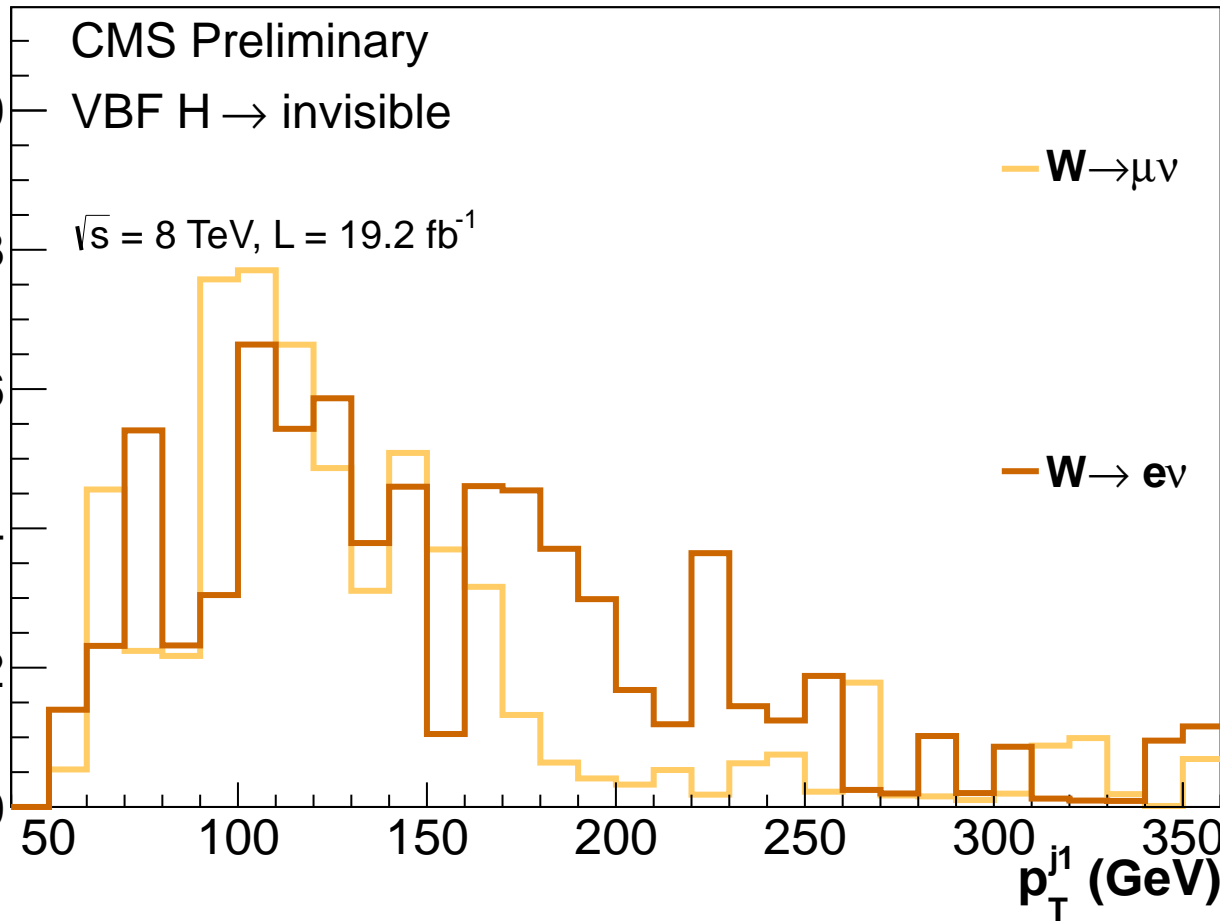
200

250

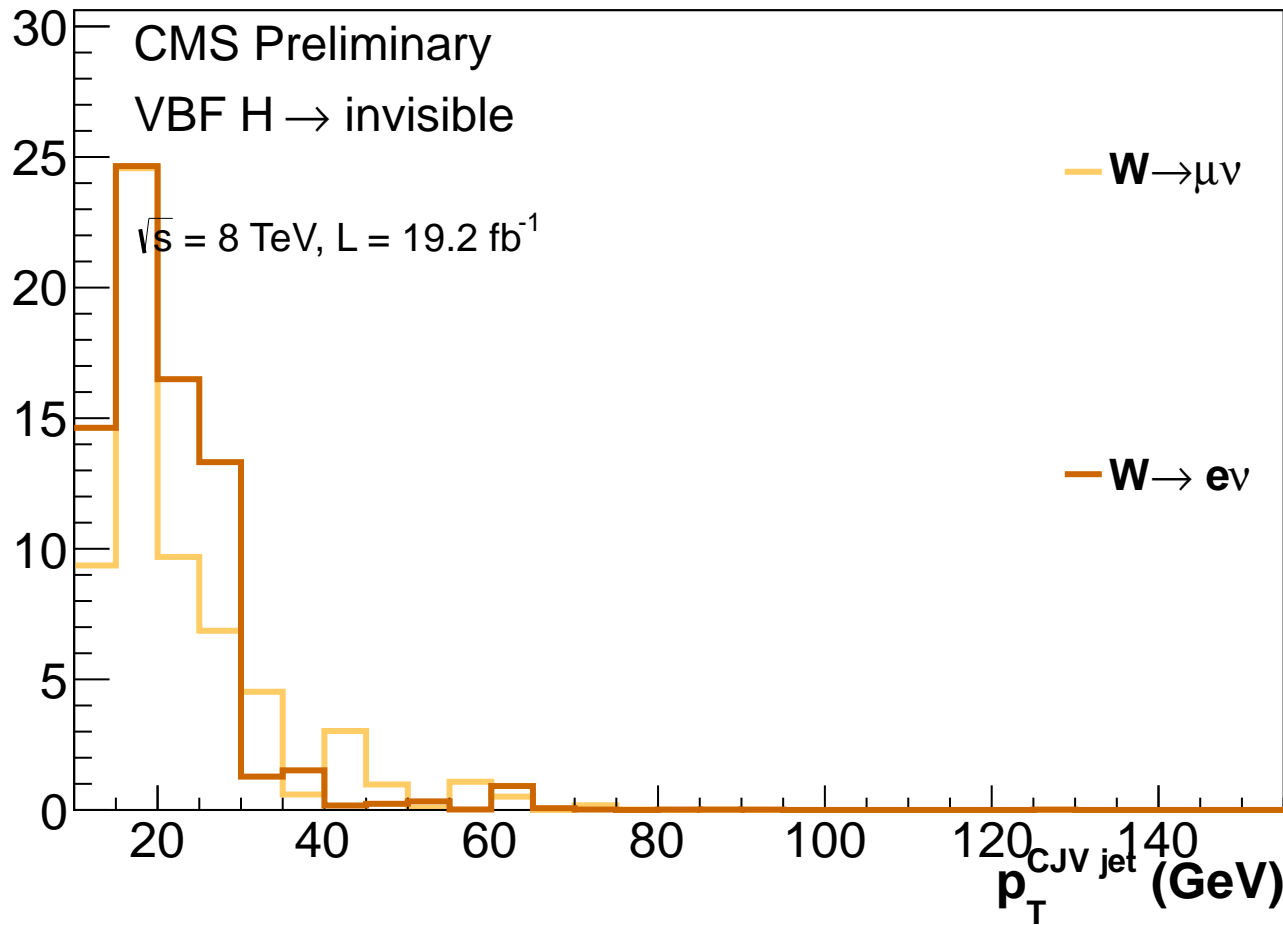
300

350

$p_T^{j1} \text{ (GeV)}$



entries



entries

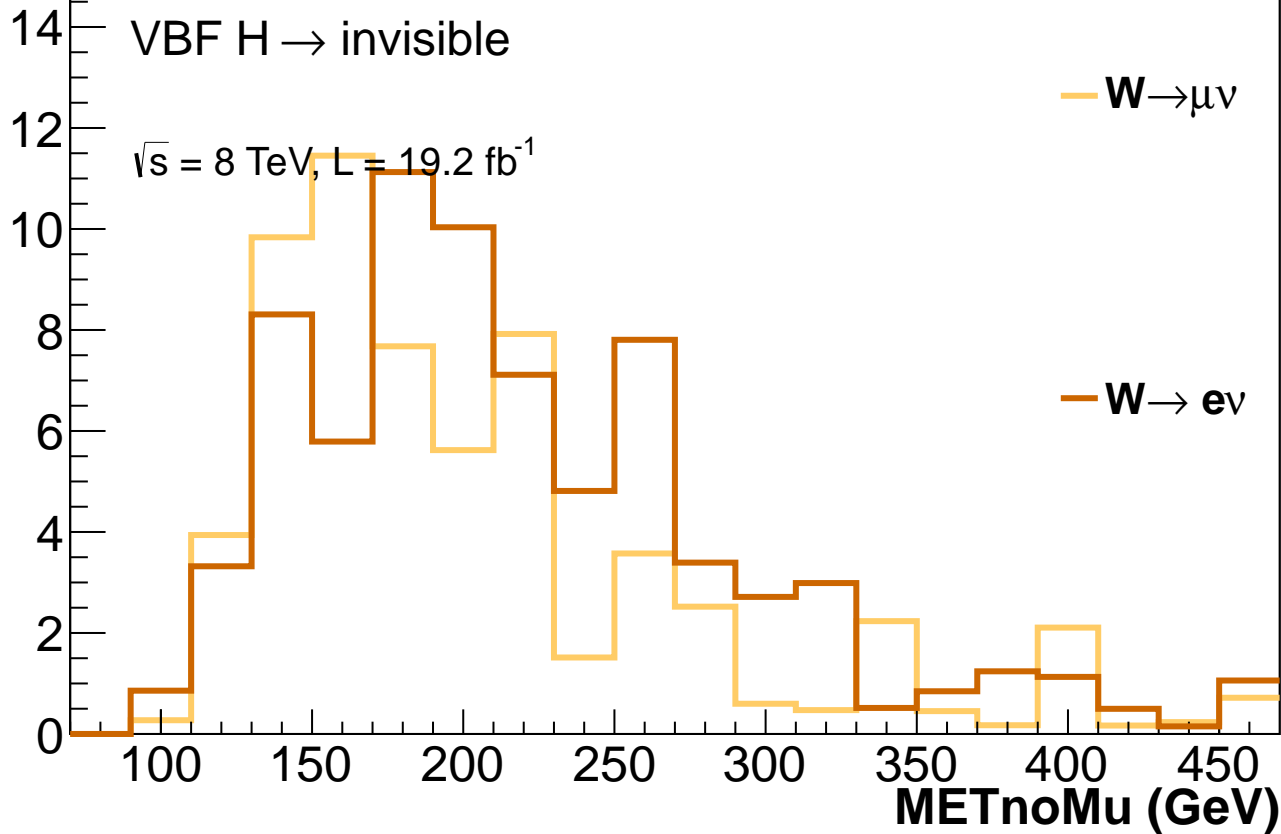
CMS Preliminary

VBF  $H \rightarrow$  invisible

$\sqrt{s} = 8$  TeV,  $L = 19.2$  fb $^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries

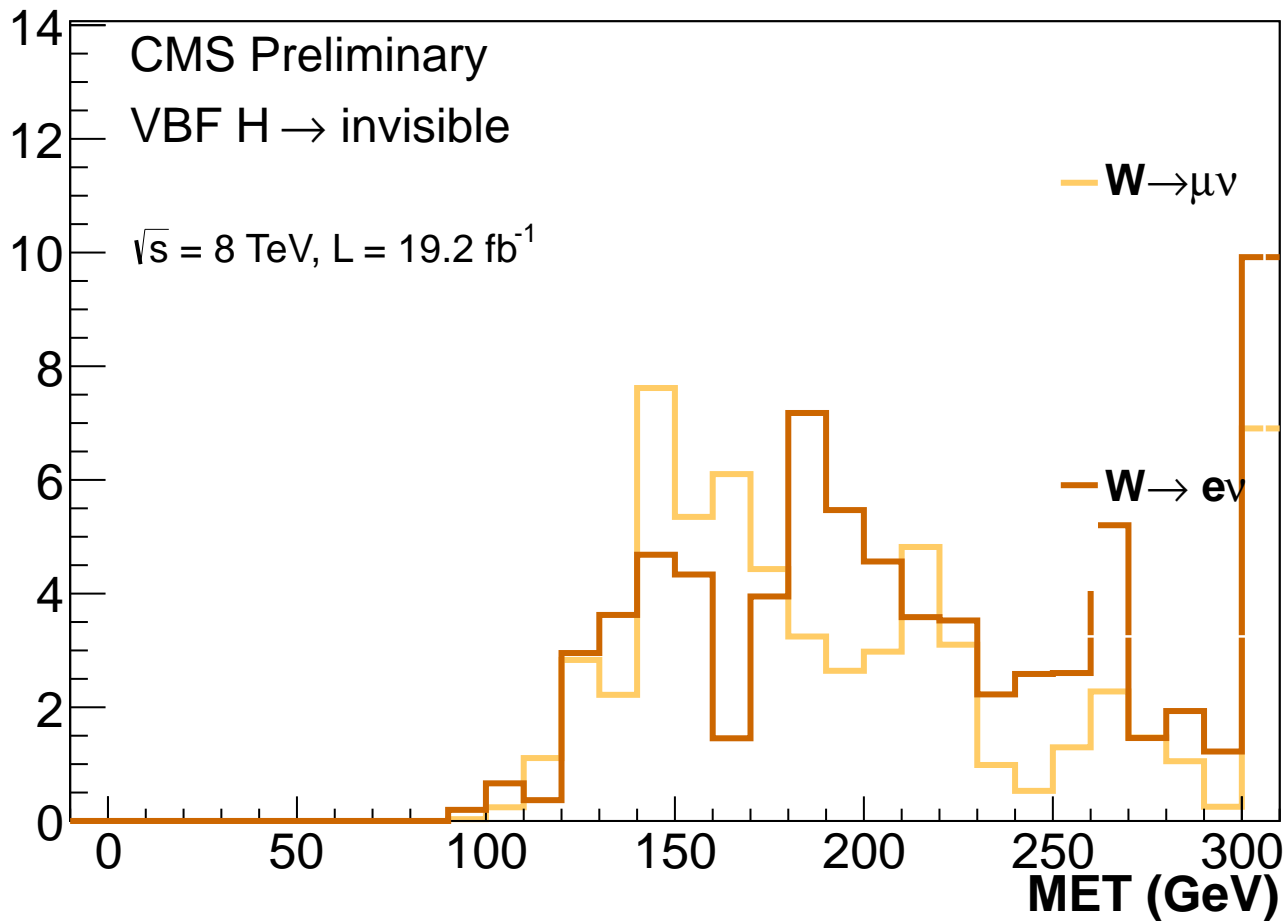
CMS Preliminary

VBF  $H \rightarrow$  invisible

$\sqrt{s} = 8$  TeV,  $L = 19.2$  fb $^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$





entries

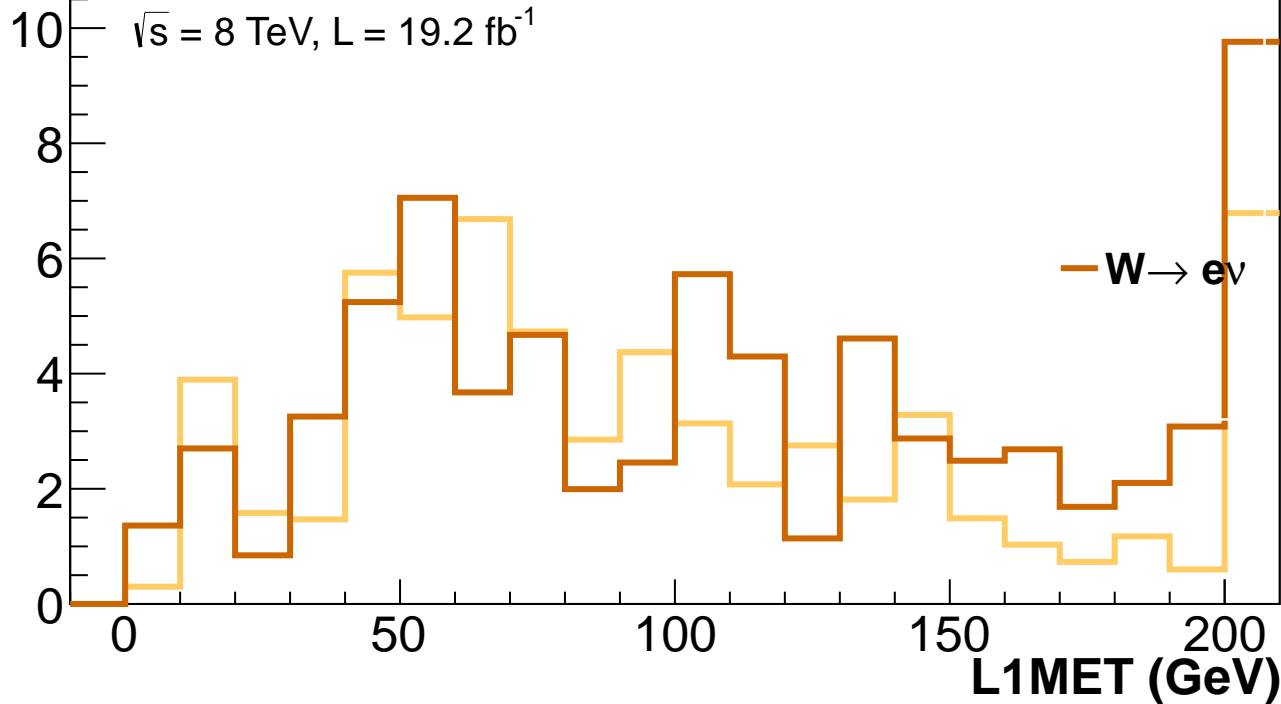
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

$\sqrt{s} = 8 \text{ TeV}$ ,  $L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries

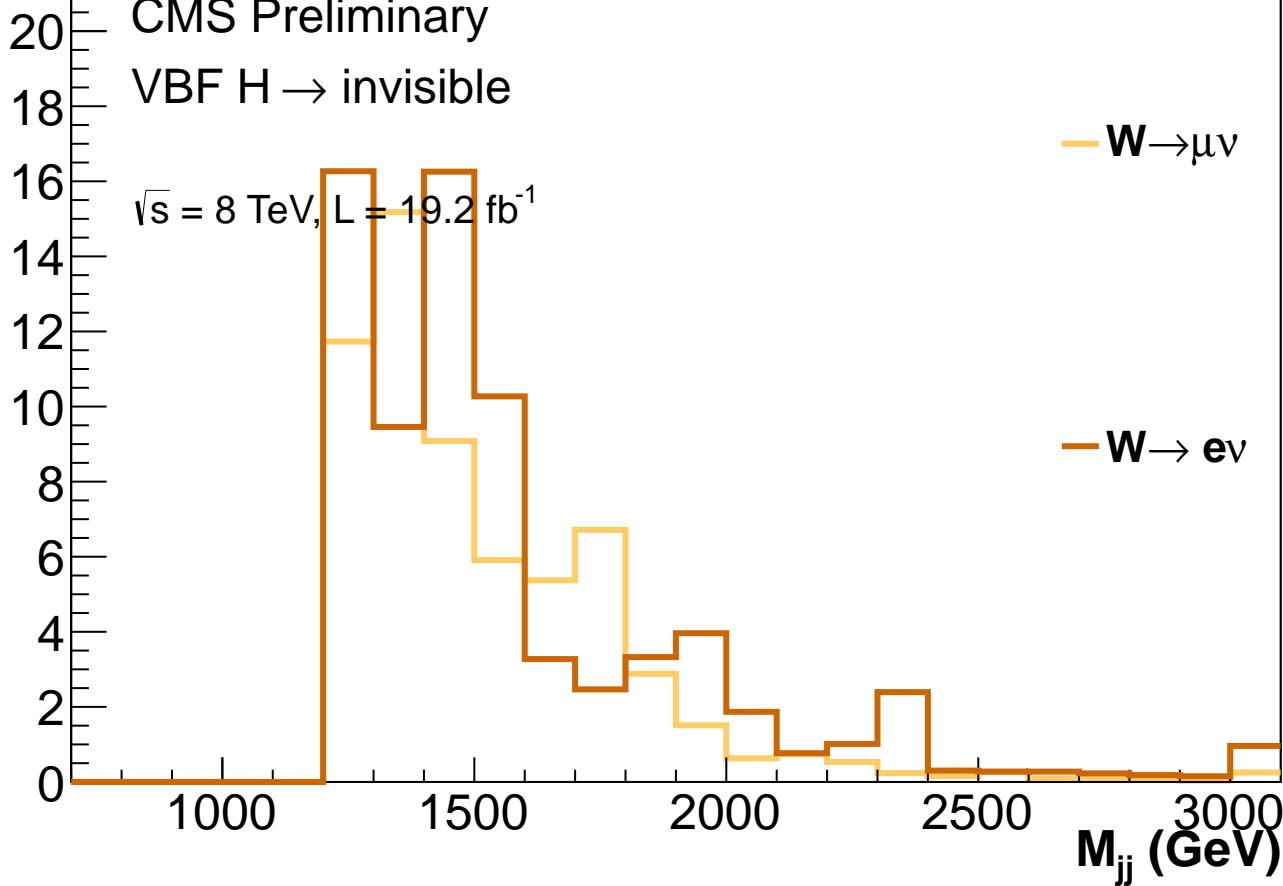
CMS Preliminary

VBF  $H \rightarrow$  invisible

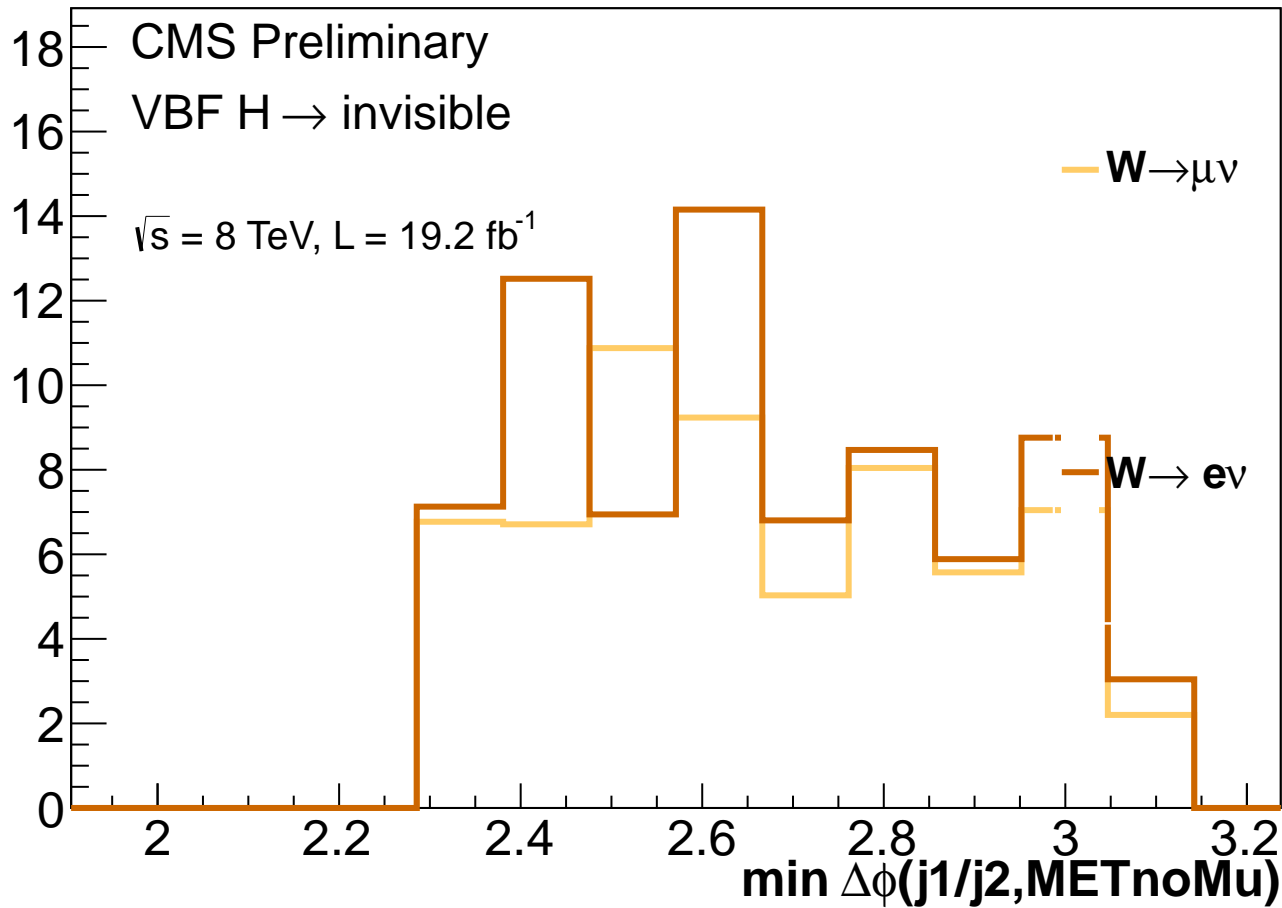
$\sqrt{s} = 8$  TeV,  $L = 19.2$  fb $^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries



entries

CMS Preliminary

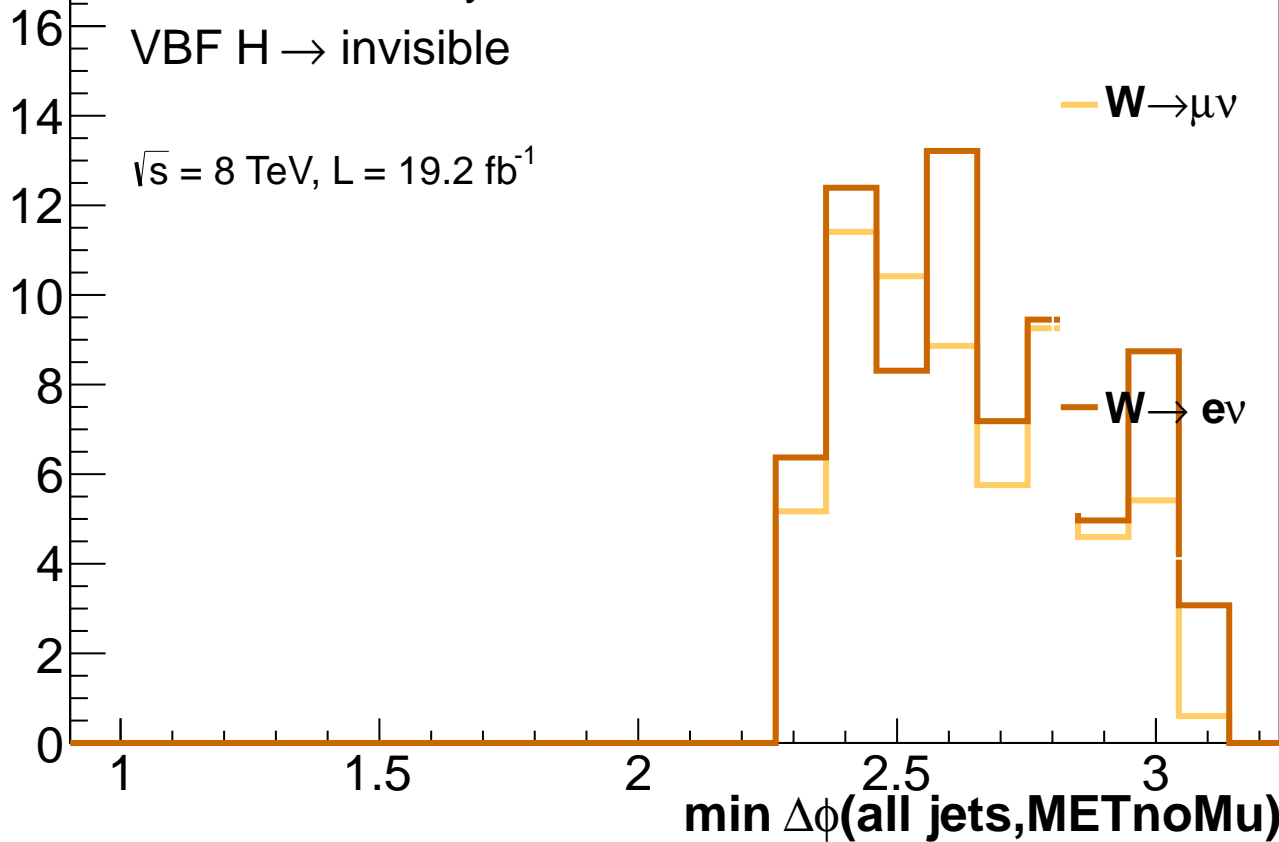
VBF  $H \rightarrow \text{invisible}$

$\sqrt{s} = 8 \text{ TeV}$ ,  $L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

$\min \Delta\phi(\text{all jets, MET no Mu})$



entries

CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

$\sqrt{s} = 8 \text{ TeV}$ ,  $L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

$\text{METnoMu}/\sigma(\text{METnoMu})$

12  
10  
8  
6  
4  
2  
0

4

6

8

10

12

14

entries

CMS Preliminary

VBF  $H \rightarrow$  invisible

$\sqrt{s} = 8 \text{ TeV}$ ,  $L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

-10

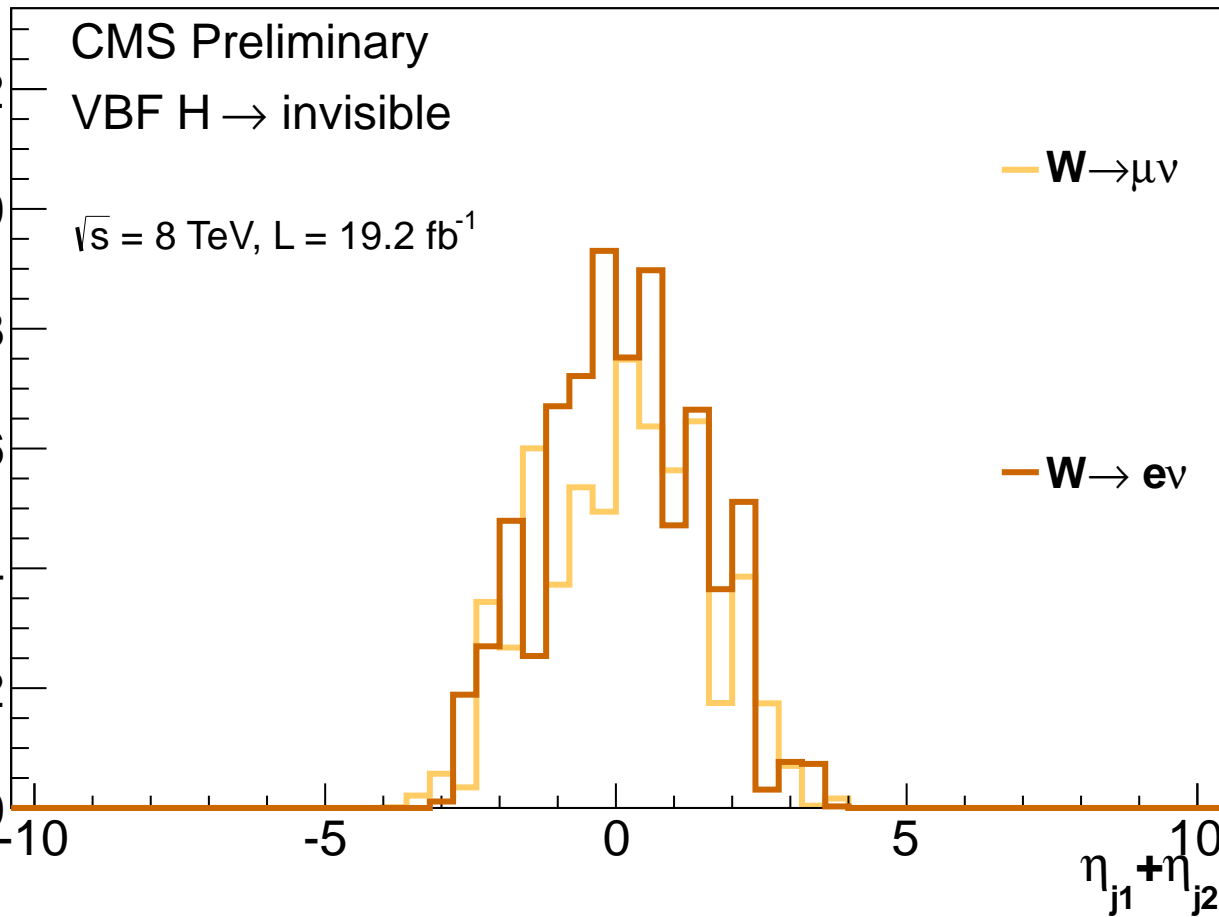
-5

0

5

10

$\eta_{j1} + \eta_{j2}$



entries

CMS Preliminary

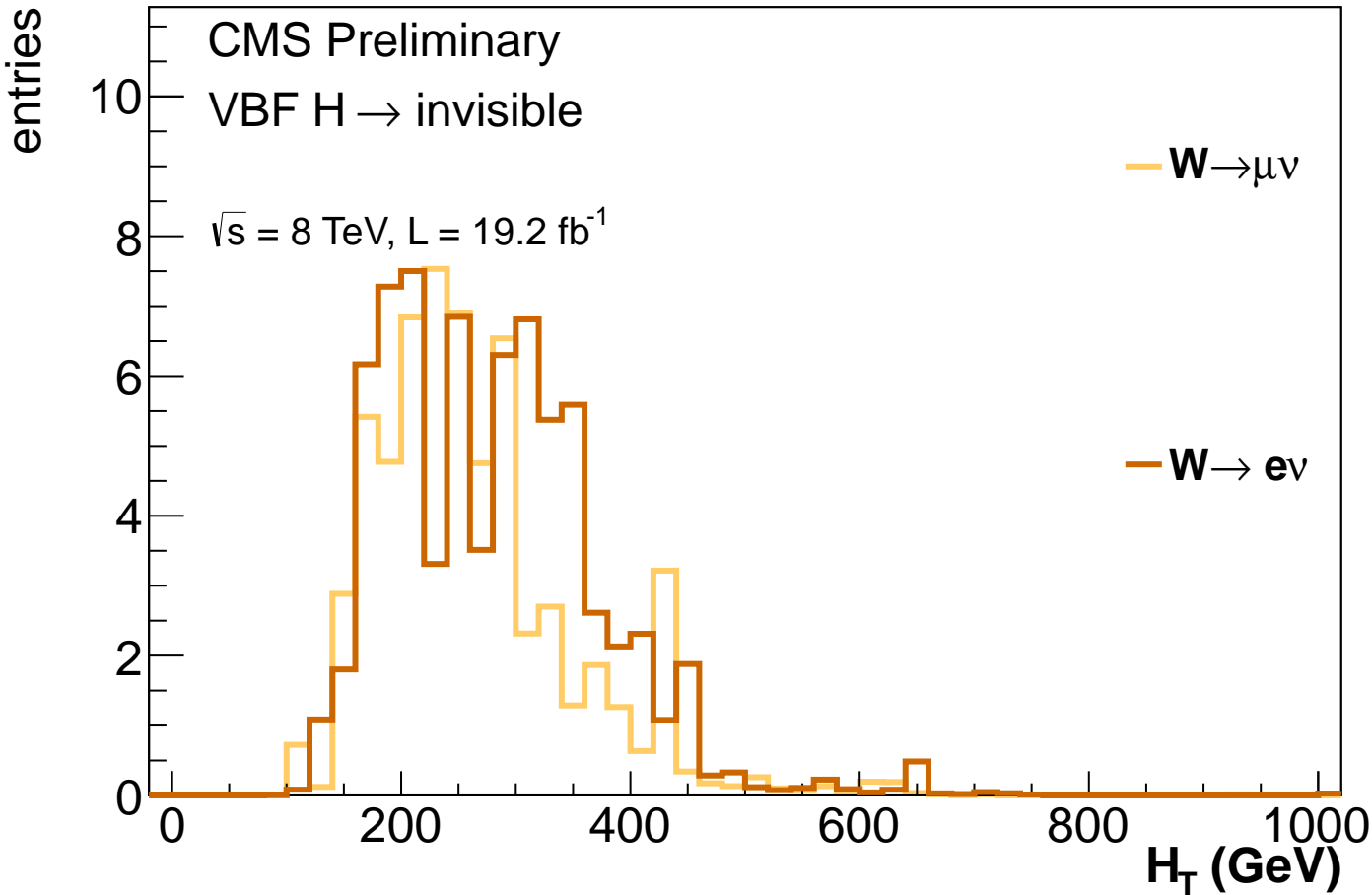
VBF  $H \rightarrow \text{invisible}$

$\sqrt{s} = 8 \text{ TeV}$ ,  $L = 19.2 \text{ fb}^{-1}$

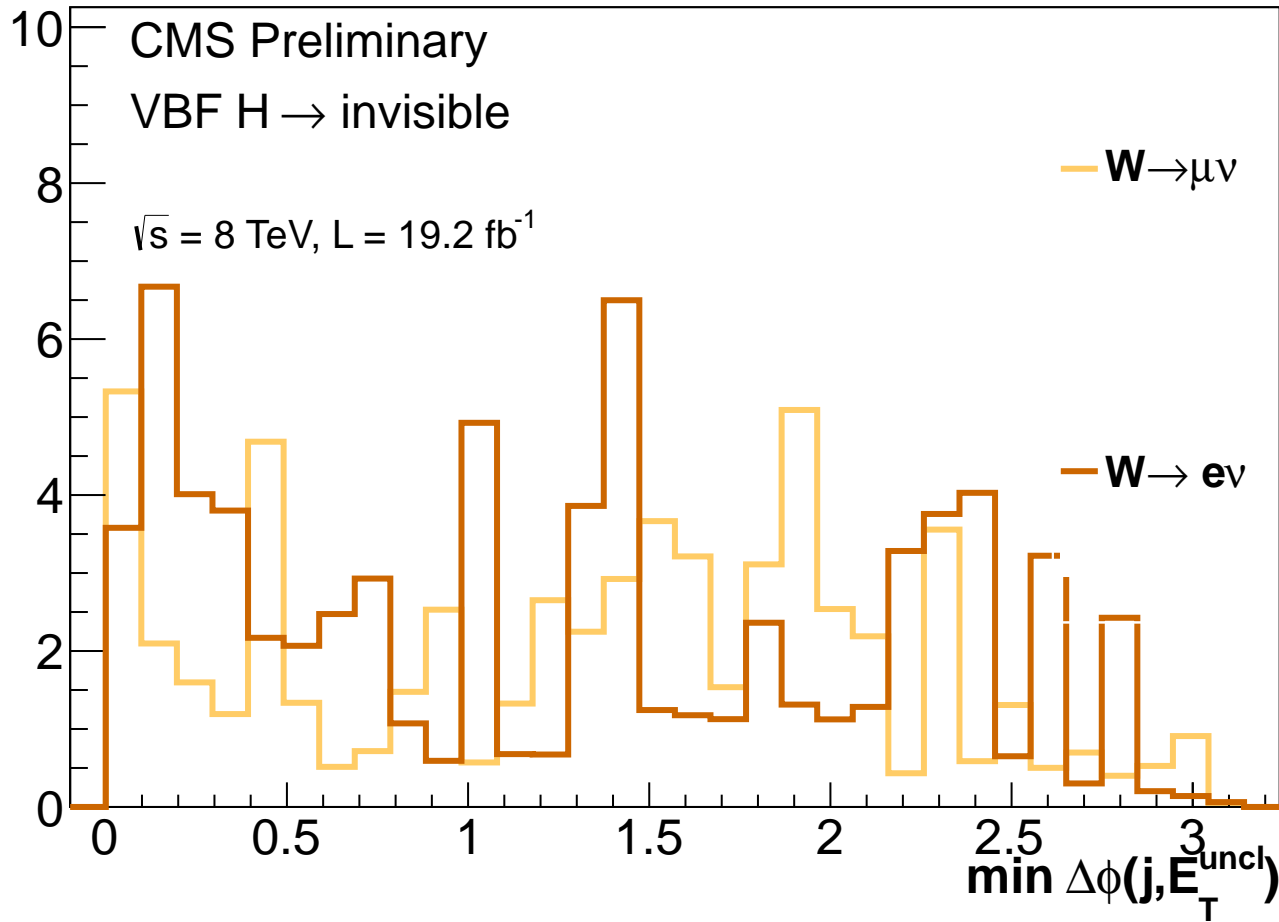
$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

$H_T \text{ (GeV)}$



entries





entries

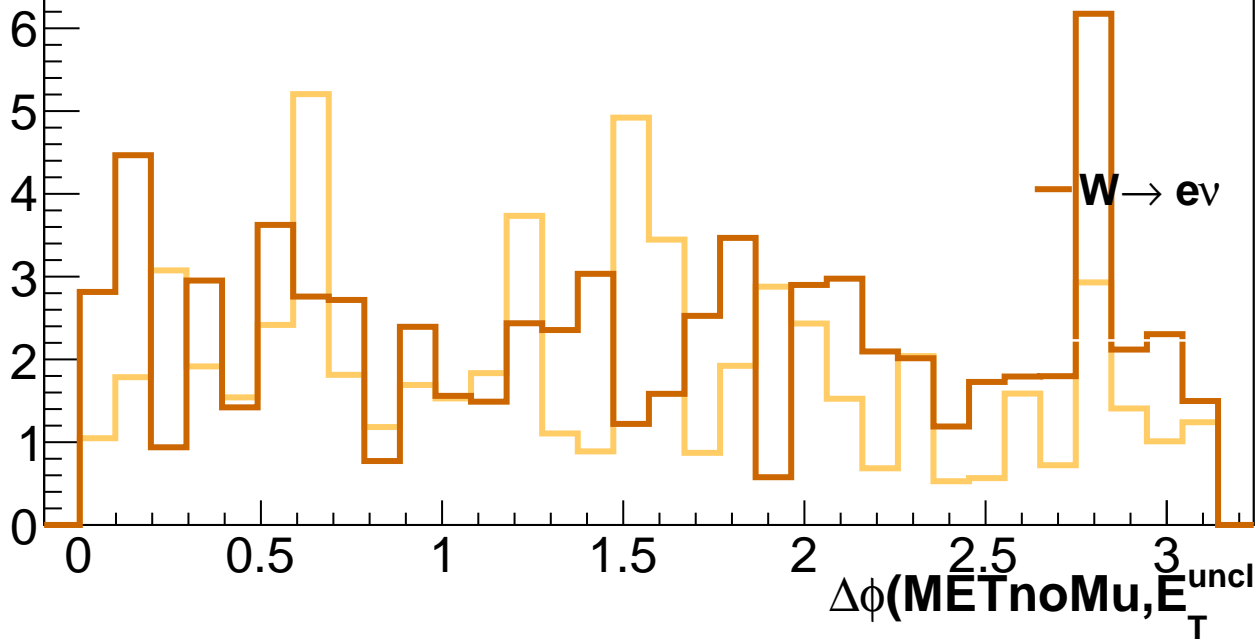
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

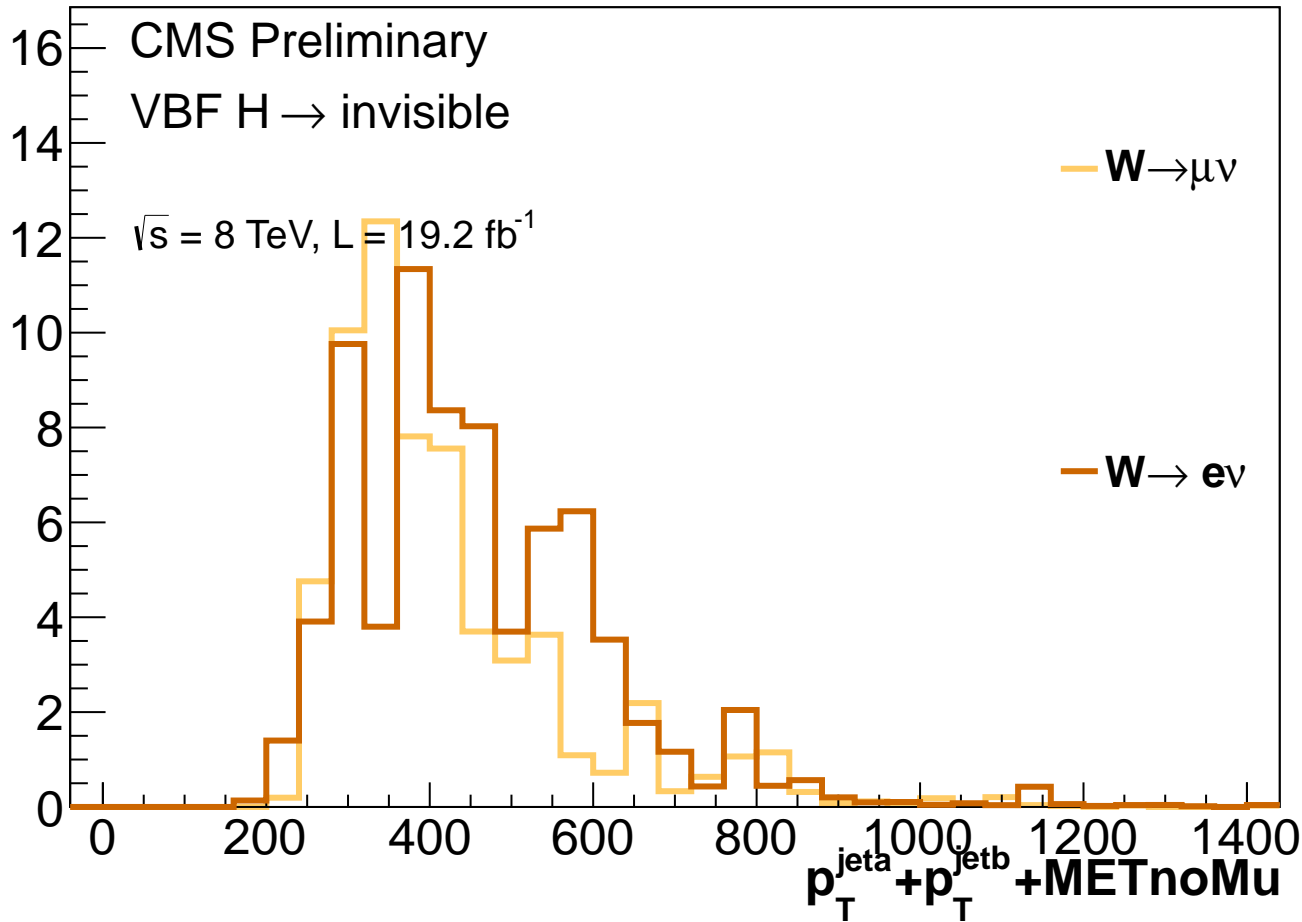
$\sqrt{s} = 8 \text{ TeV}, L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

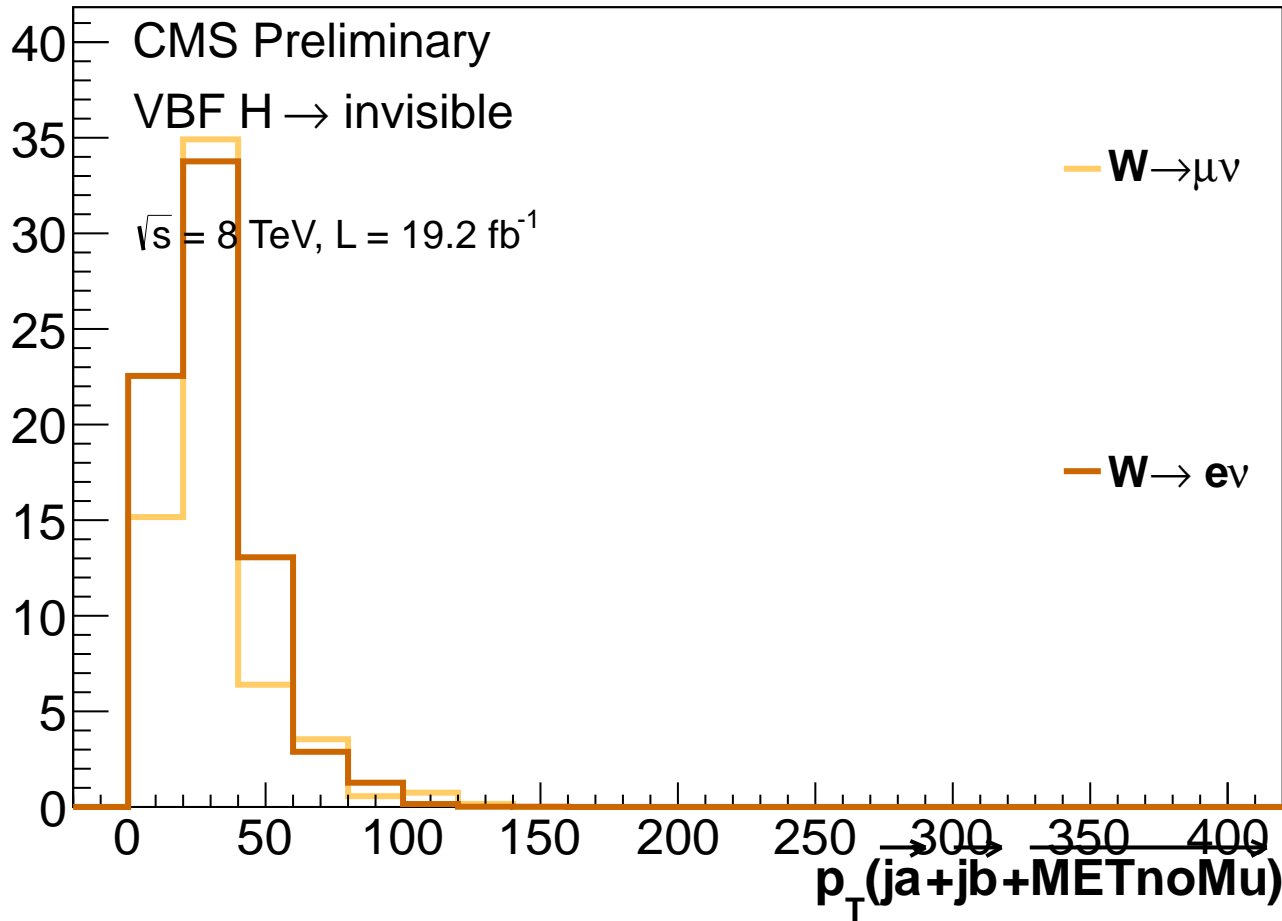
$W \rightarrow e\nu$



entries



entries



entries

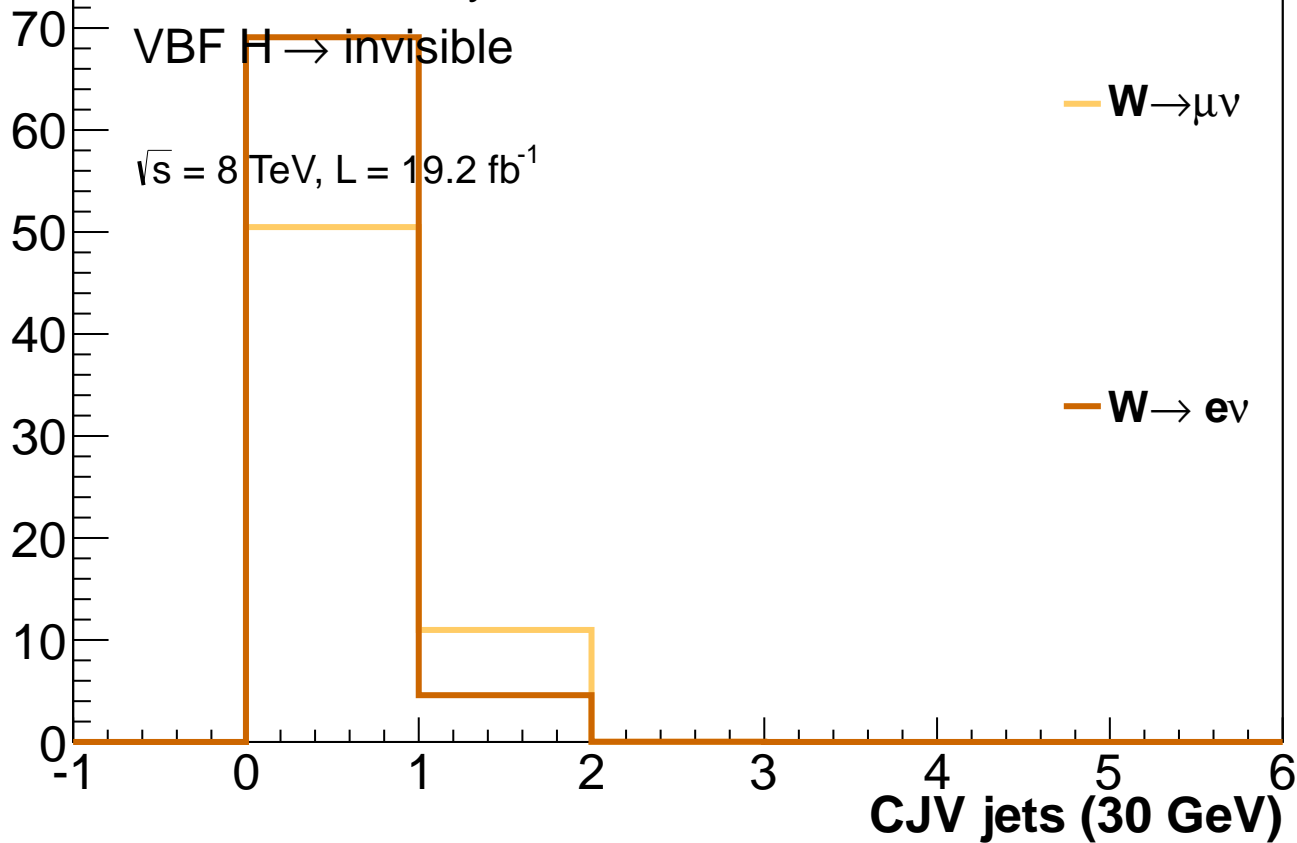
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

$\sqrt{s} = 8 \text{ TeV}, L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries

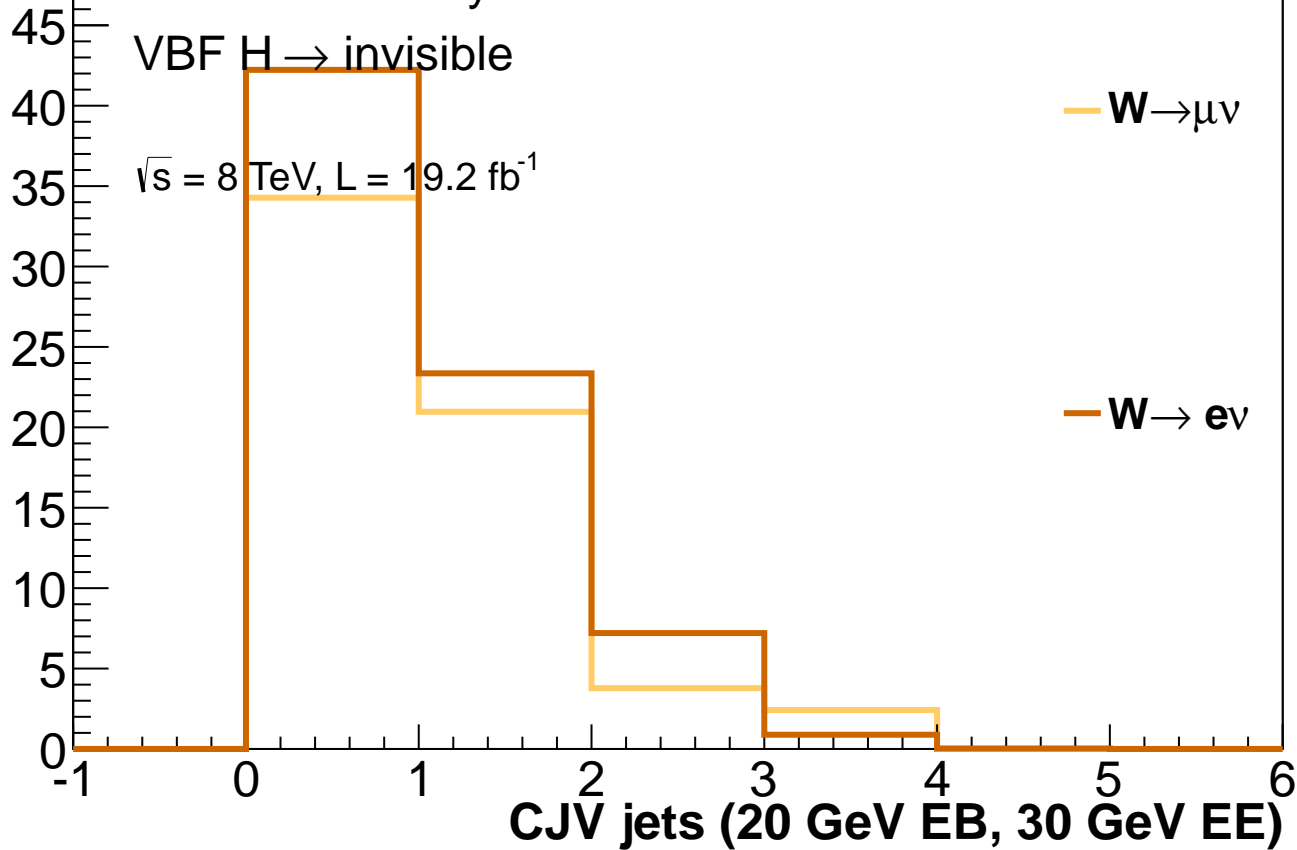
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

$\sqrt{s} = 8 \text{ TeV}$ ,  $L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries

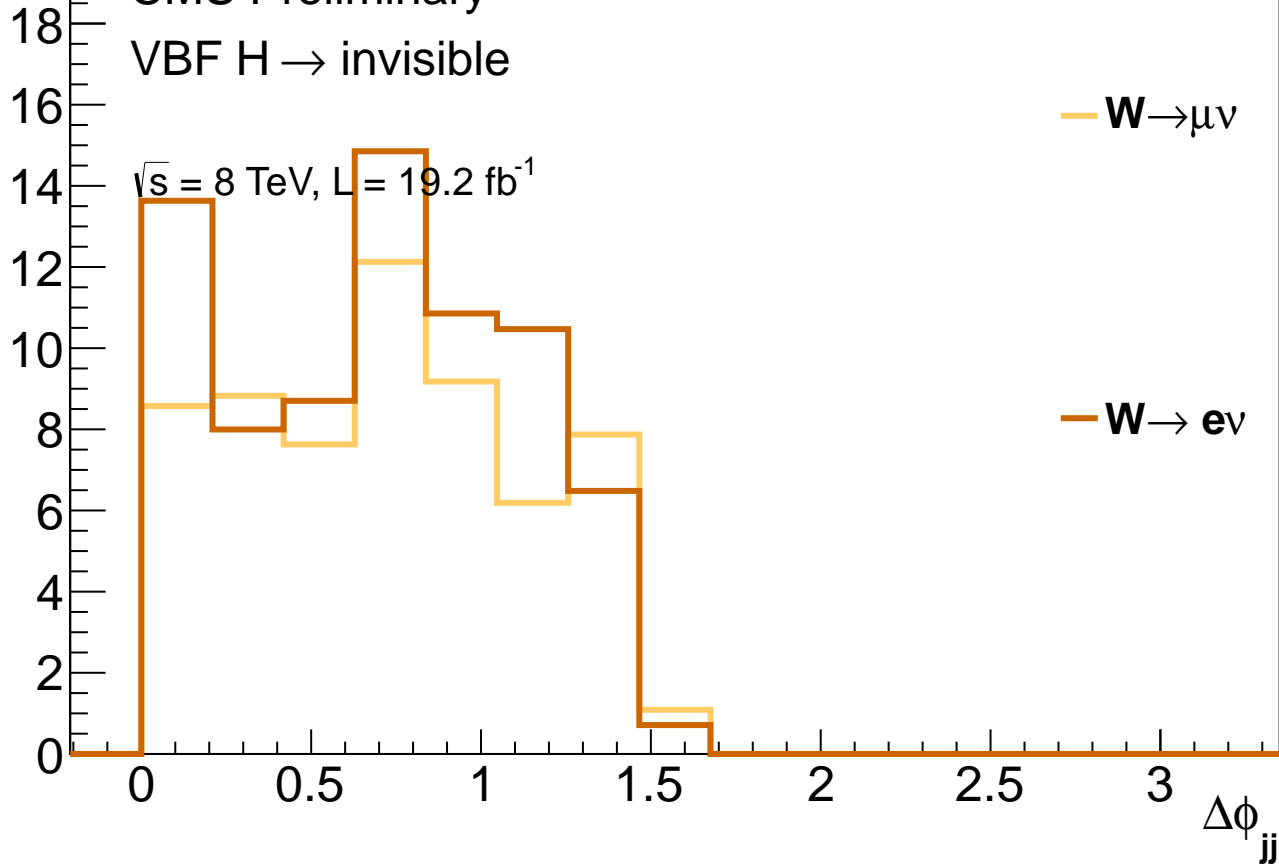
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

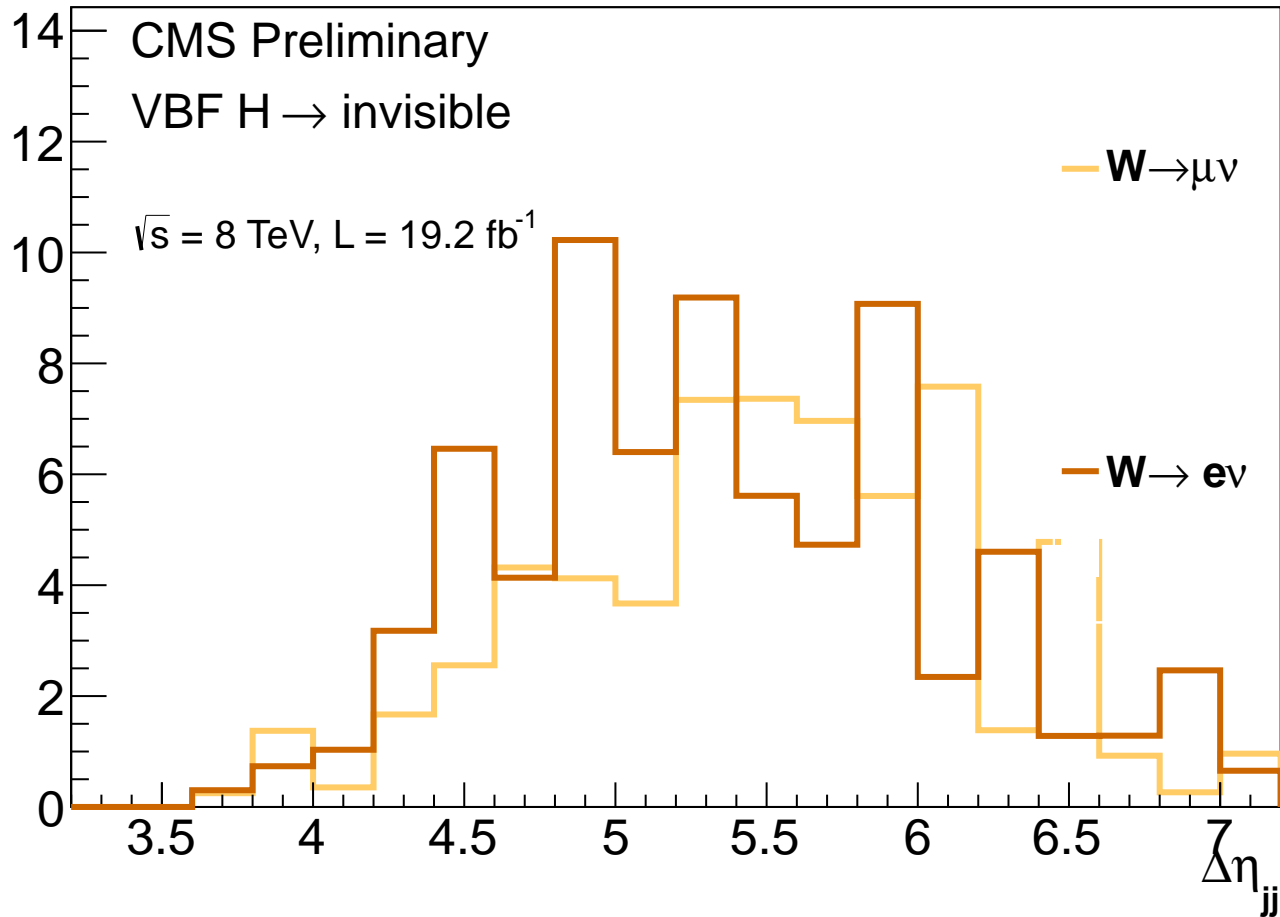
$\sqrt{s} = 8 \text{ TeV}$ ,  $L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

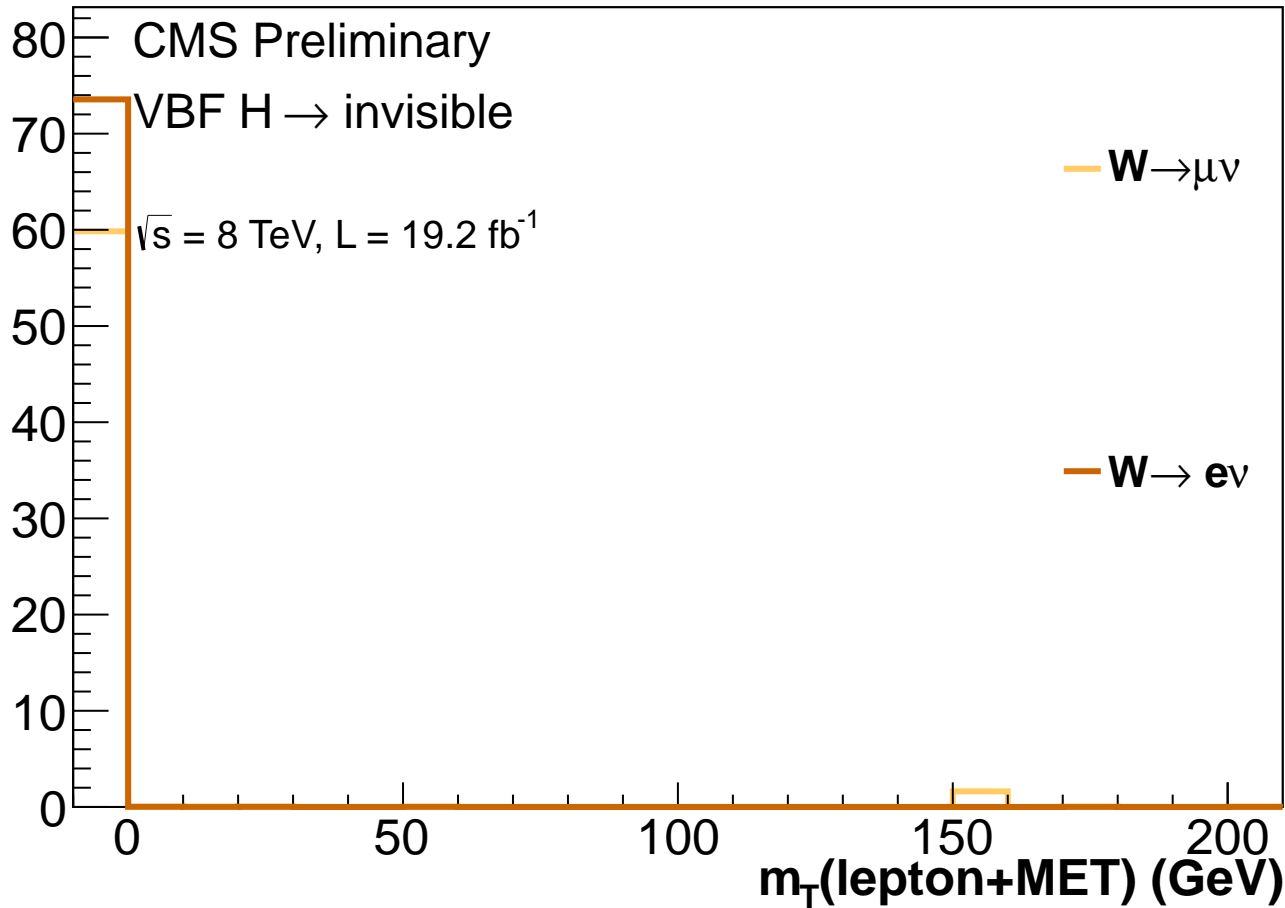
$W \rightarrow e\nu$



entries



entries





entries

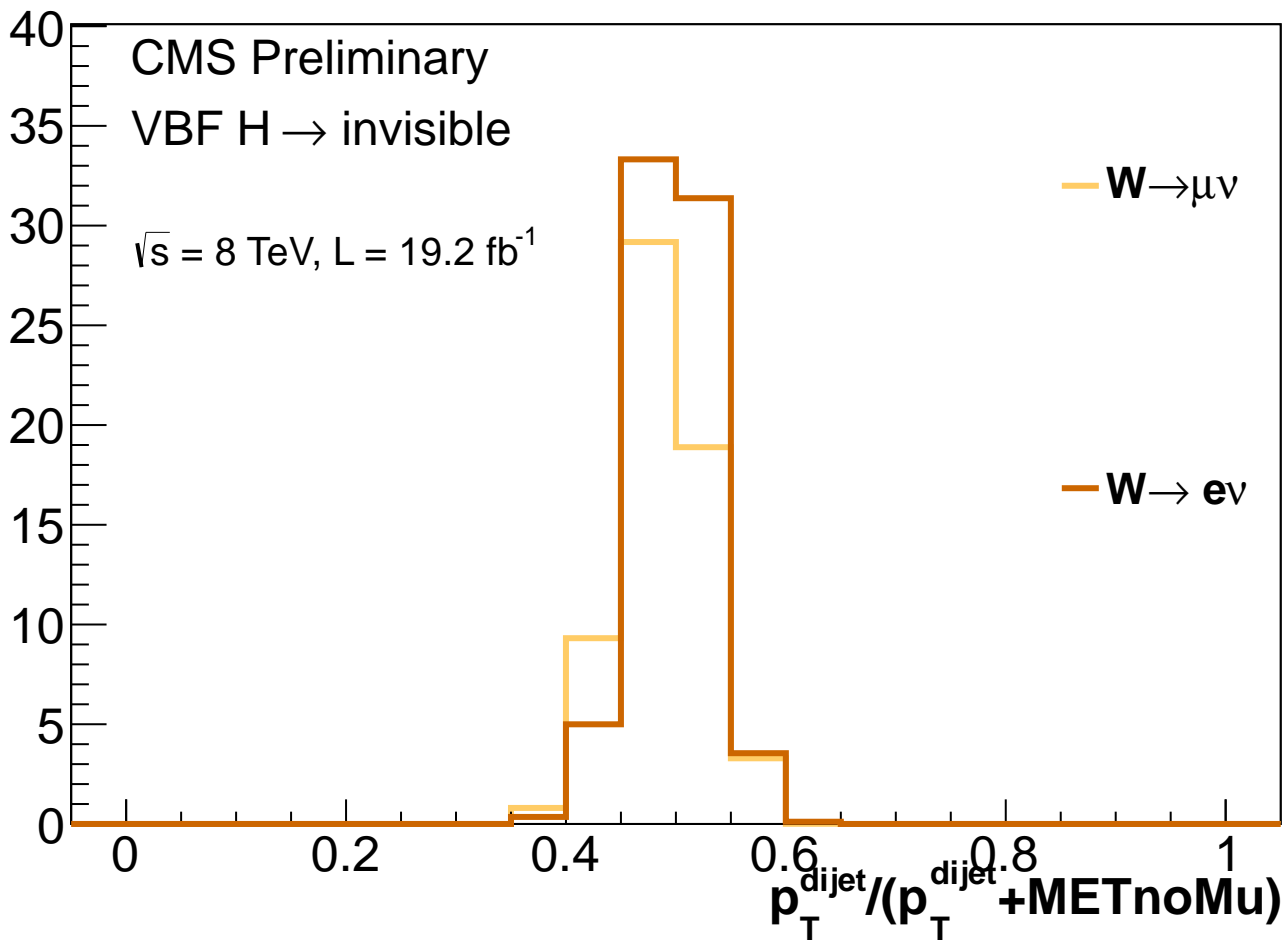
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

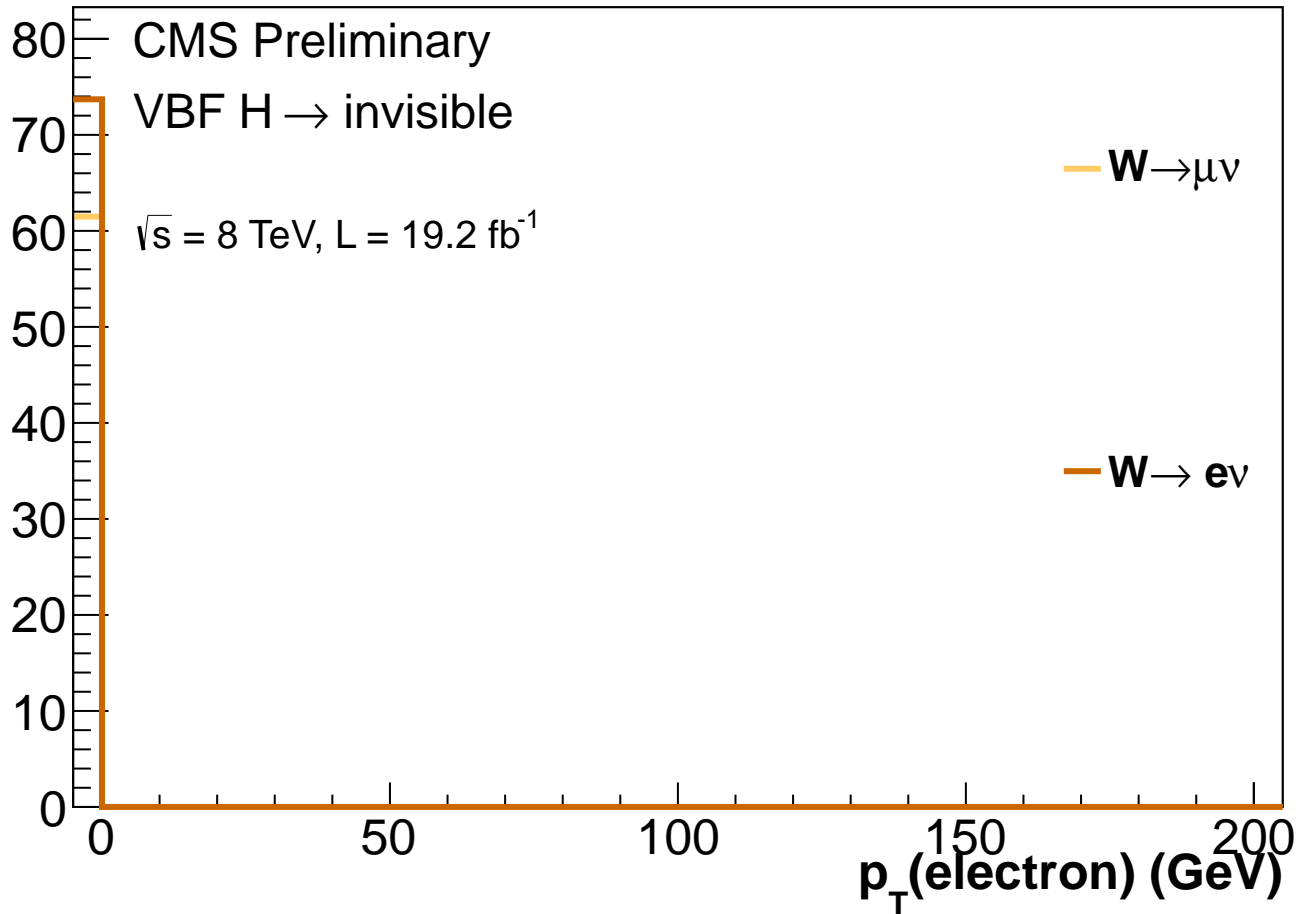
$\sqrt{s} = 8 \text{ TeV}$ ,  $L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

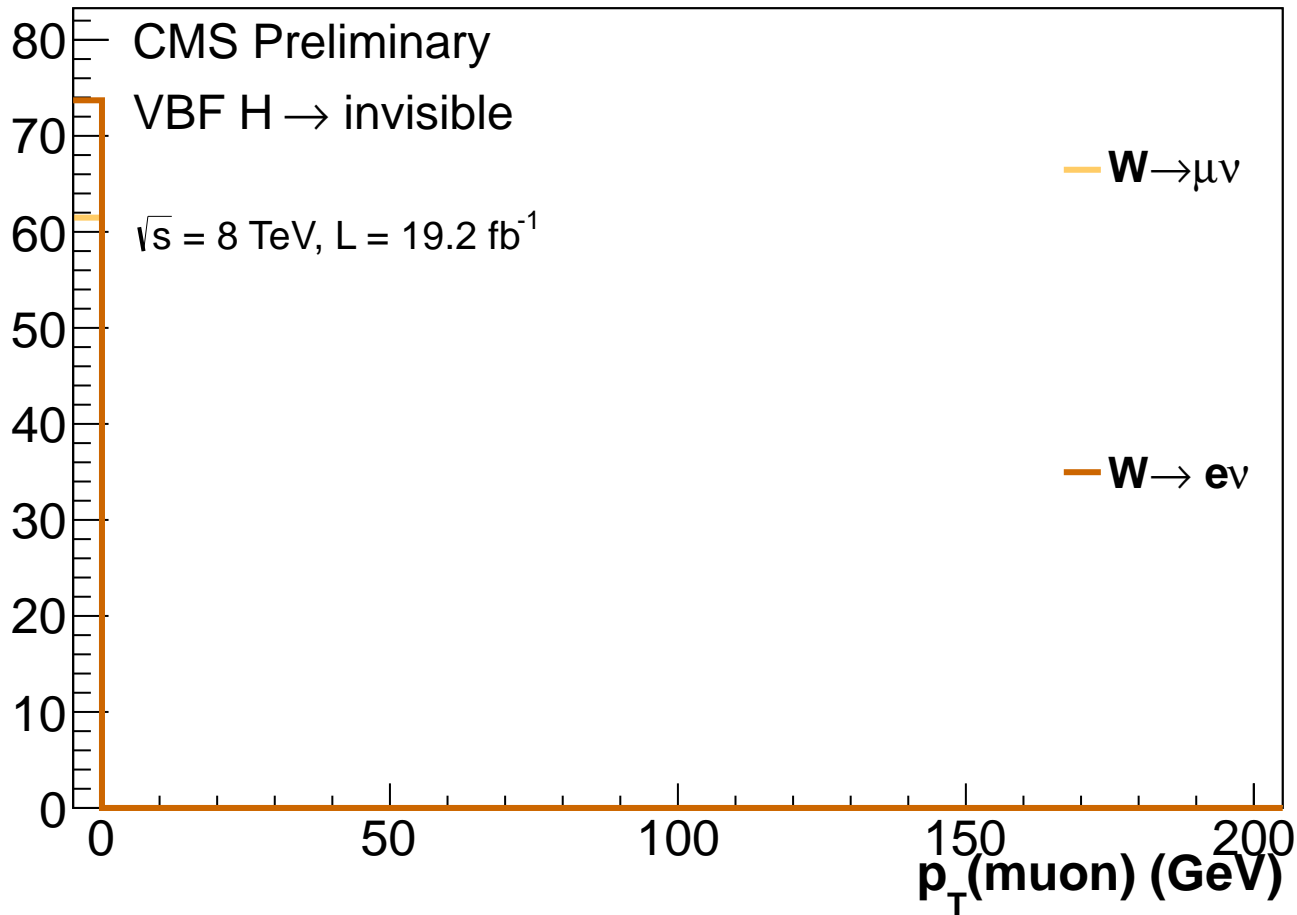
$W \rightarrow e\nu$



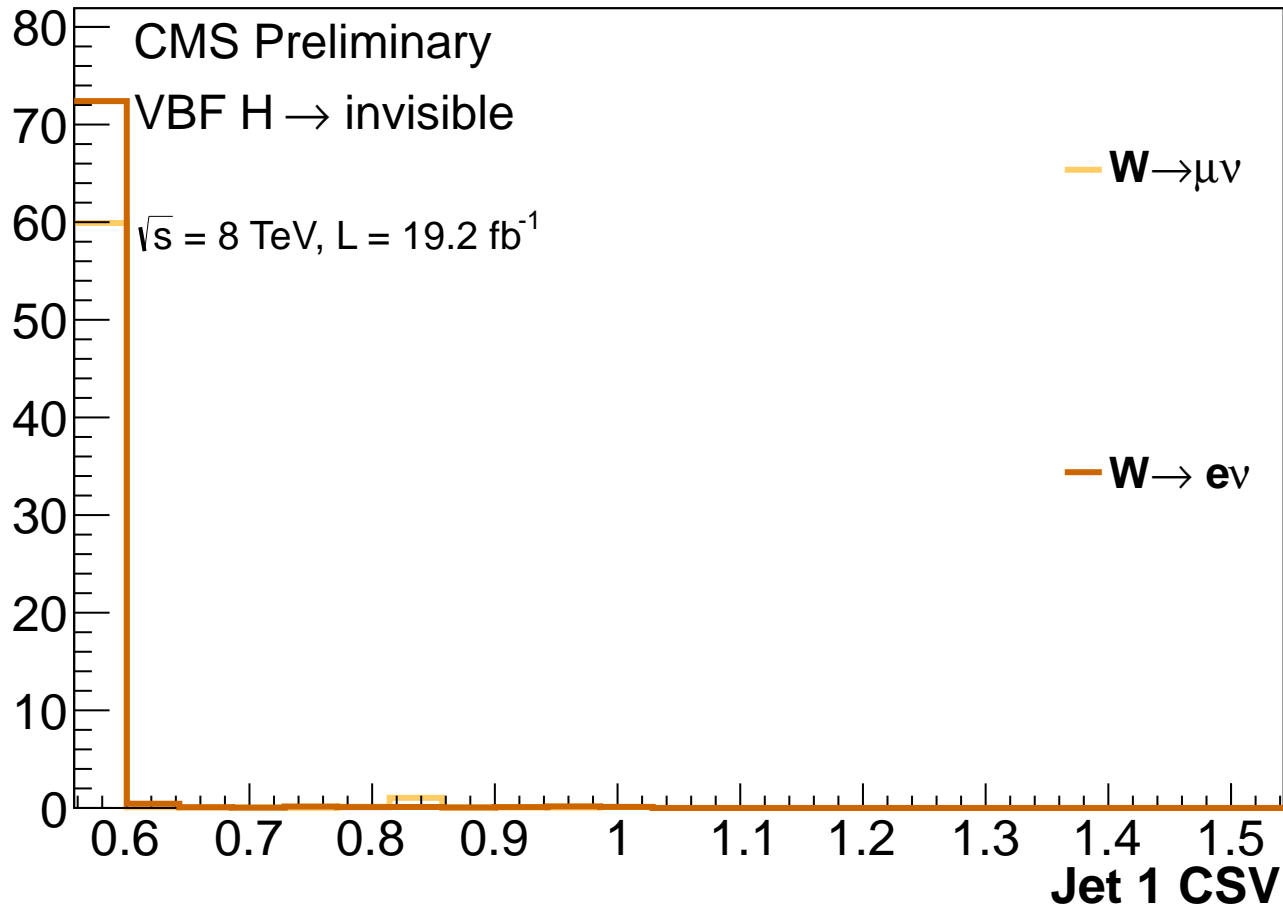
entries



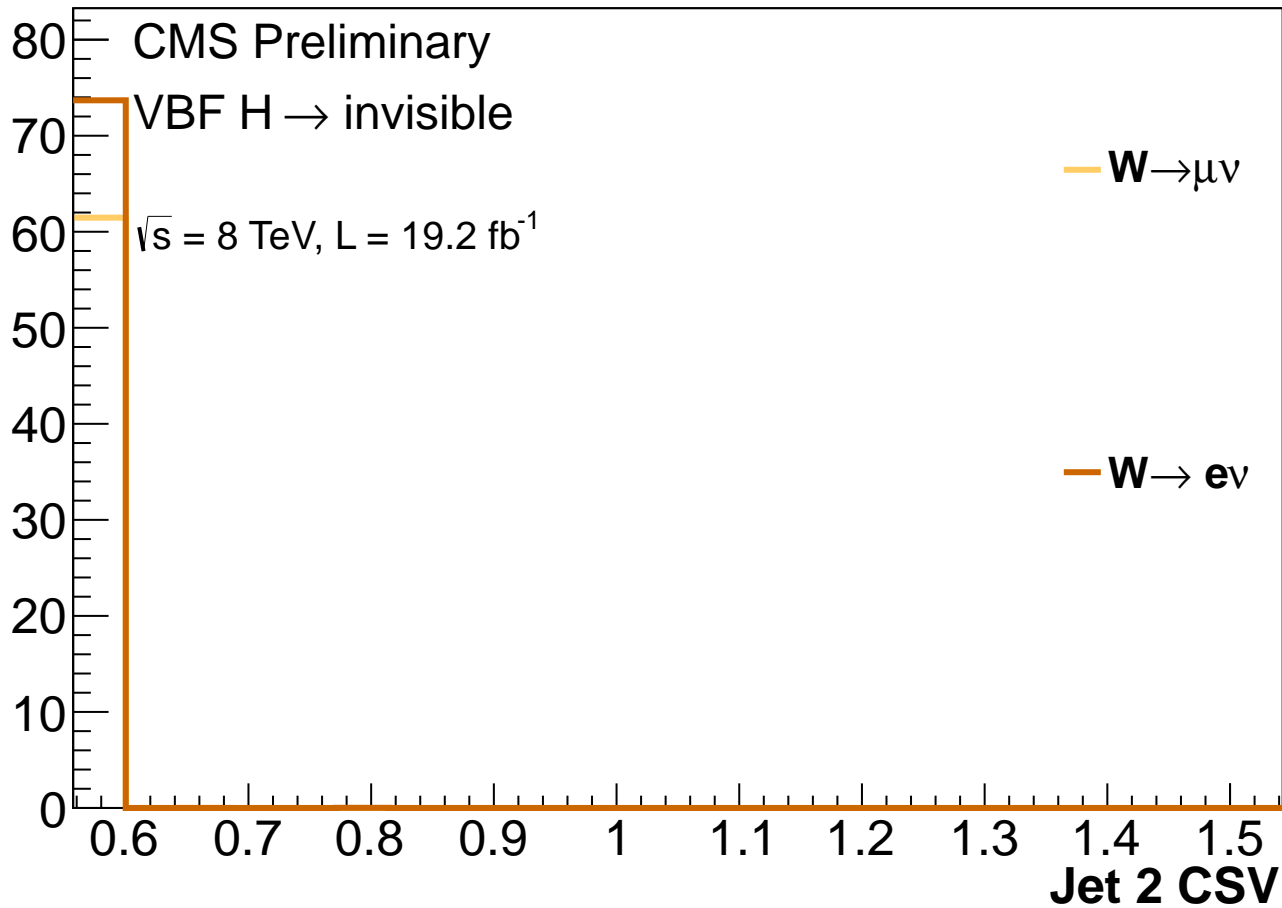
entries



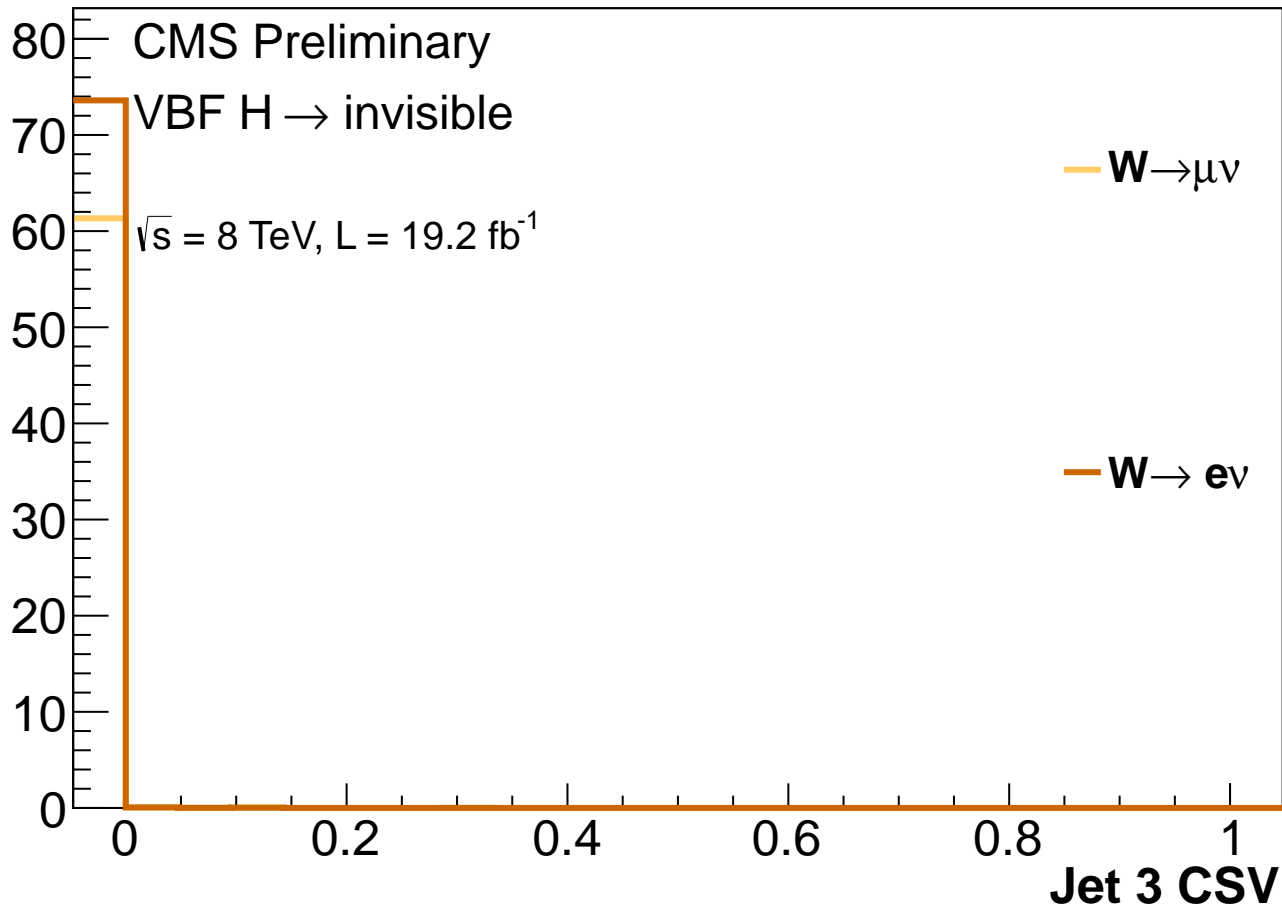
entries



entries



entries



entries

CMS Preliminary

VBF H  $\rightarrow$  invisible

$\sqrt{s} = 8$  TeV,  $L = 19.2$  fb $^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

70  
60  
50  
40  
30  
20  
10  
0

0

2

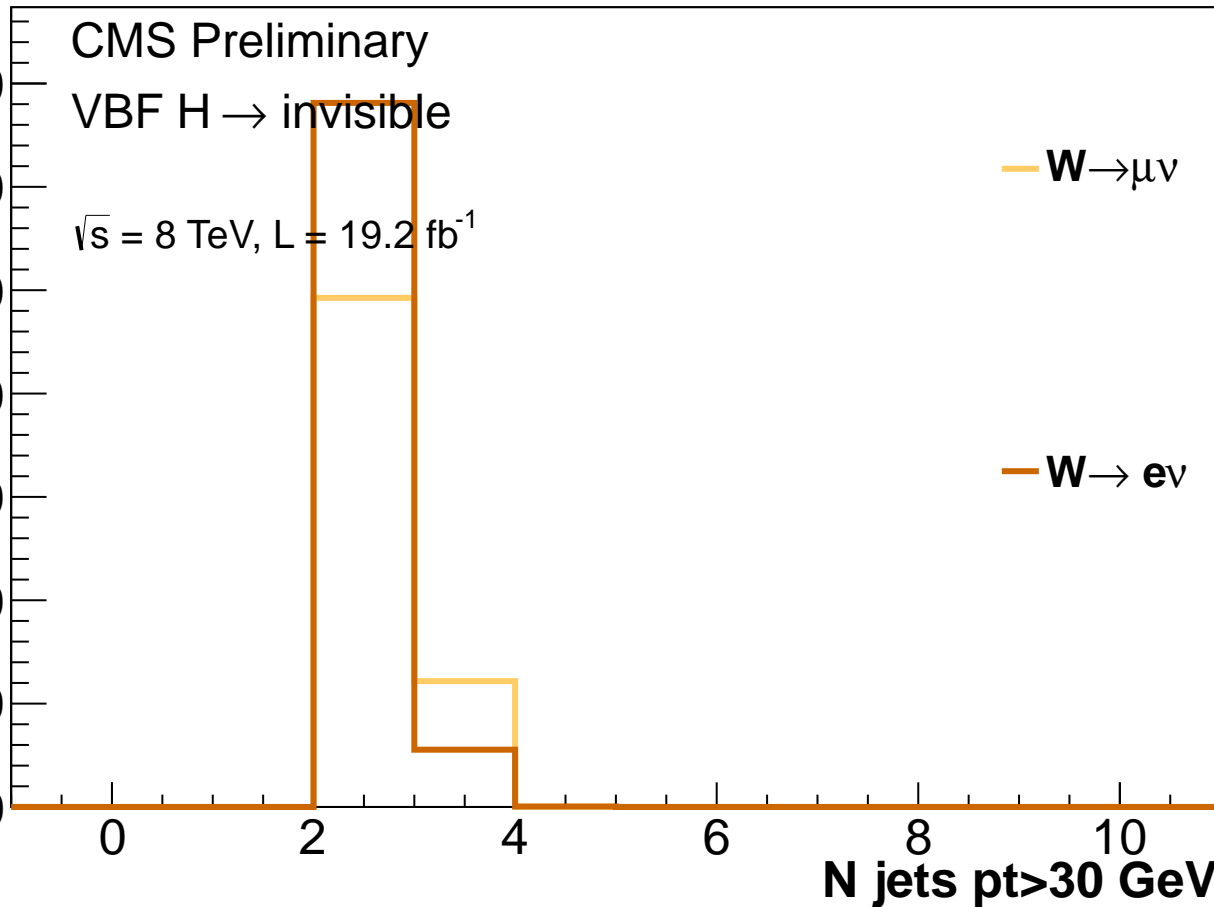
4

6

8

10

N jets pt>30 GeV



entries

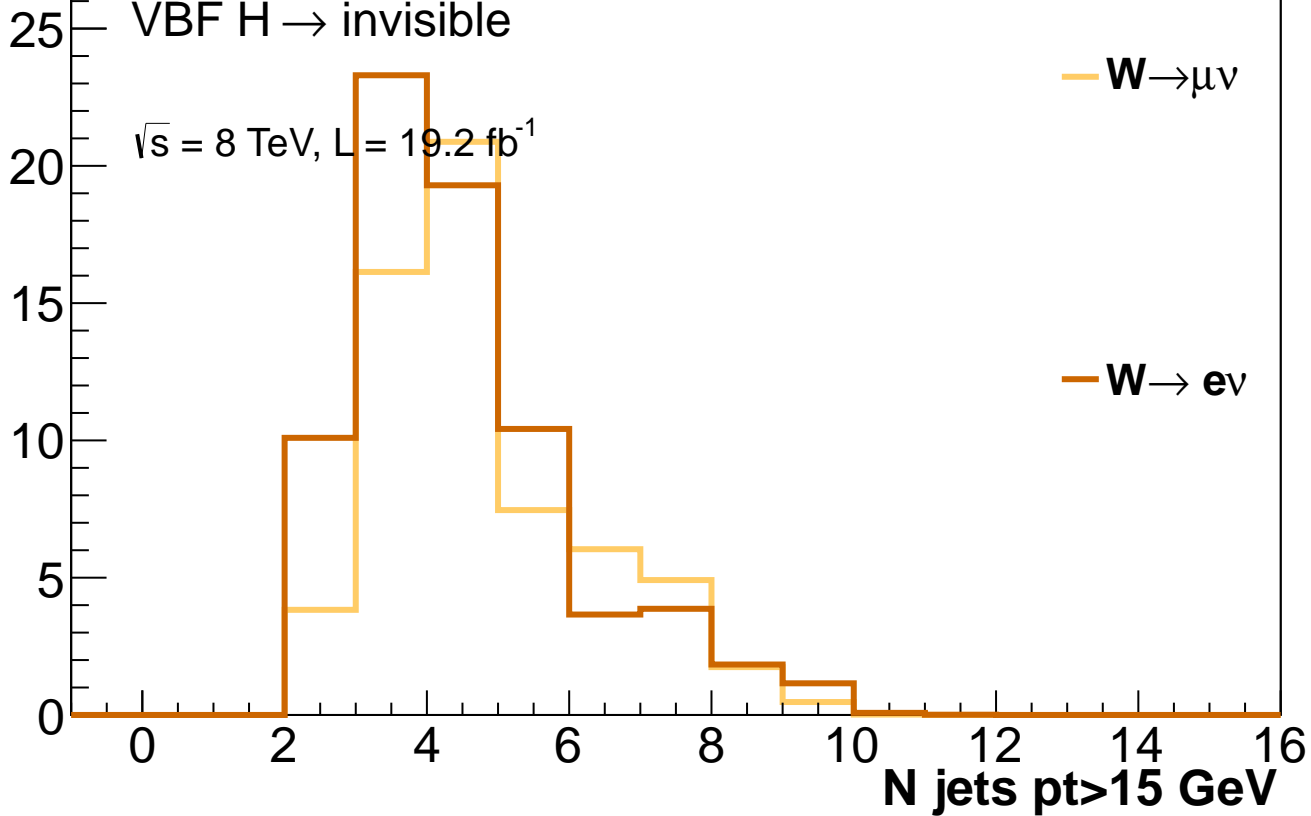
CMS Preliminary

VBF H  $\rightarrow$  invisible

$\sqrt{s} = 8$  TeV,  $L = 19.2$  fb $^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$





entries

CMS Preliminary

VBF  $H \rightarrow$  invisible

$\sqrt{s} = 8 \text{ TeV}, L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

10  
8  
6  
4  
2  
0

-4

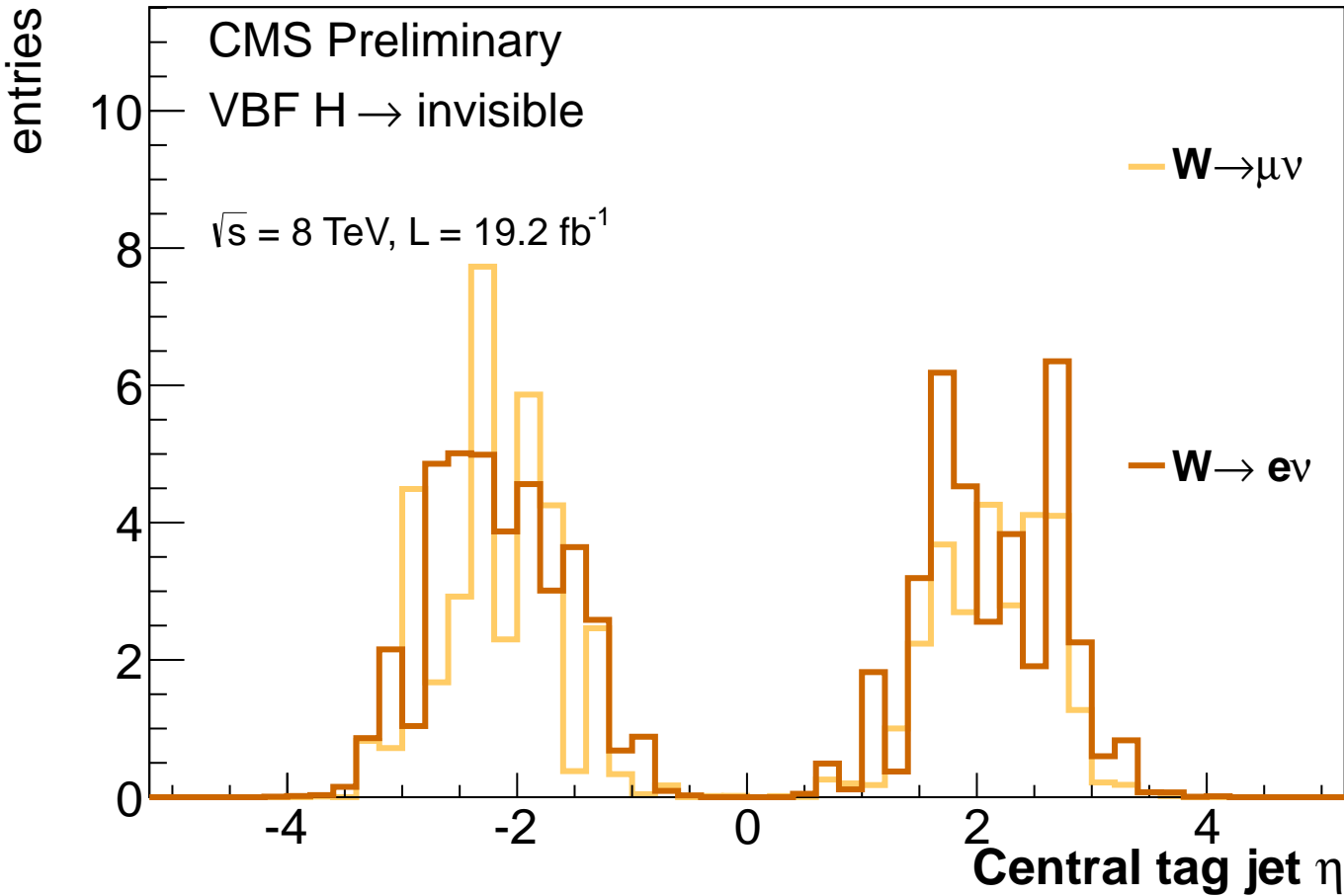
-2

0

2

4

Central tag jet  $\eta$



entries

CMS Preliminary

VBF  $H \rightarrow$  invisible

$\sqrt{s} = 8$  TeV,  $L = 19.2$  fb $^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

