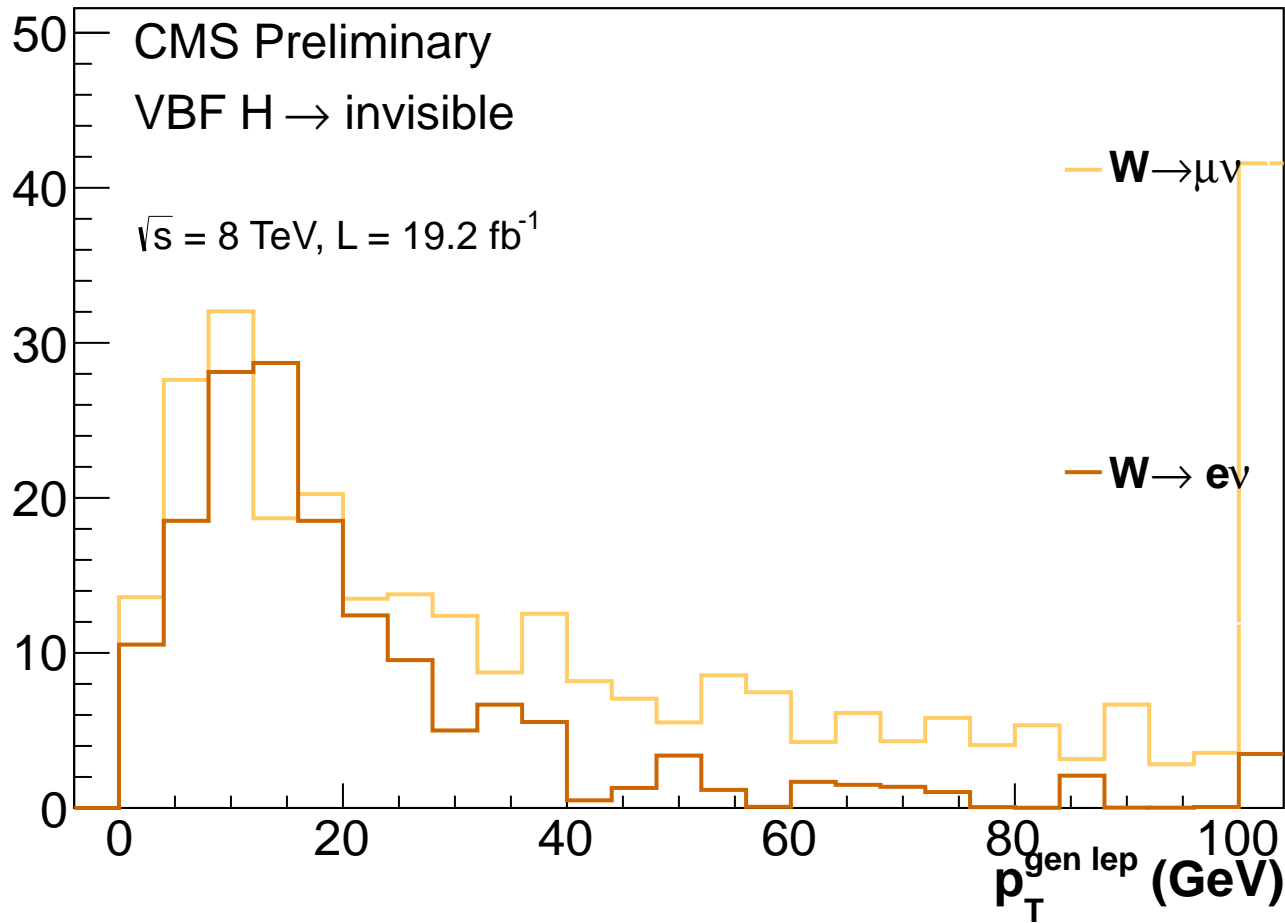


entries

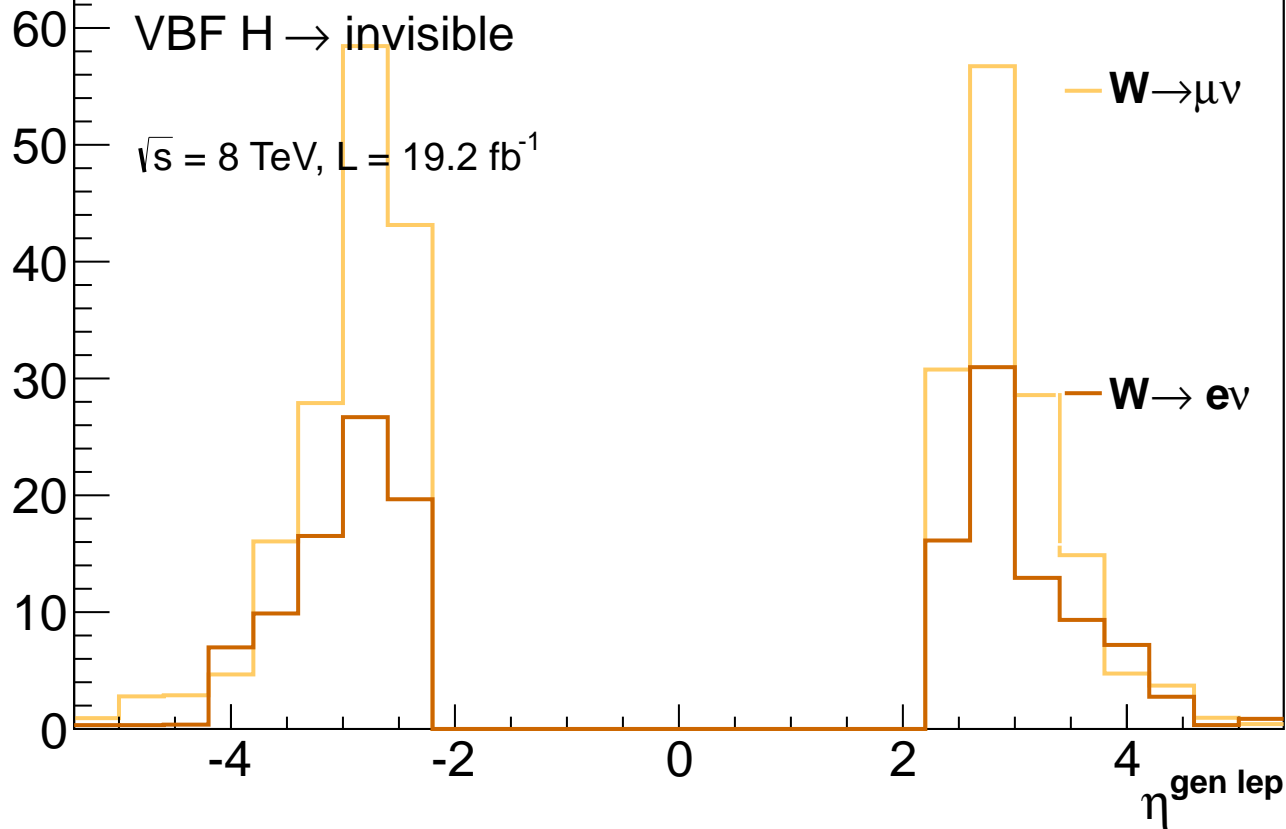


entries

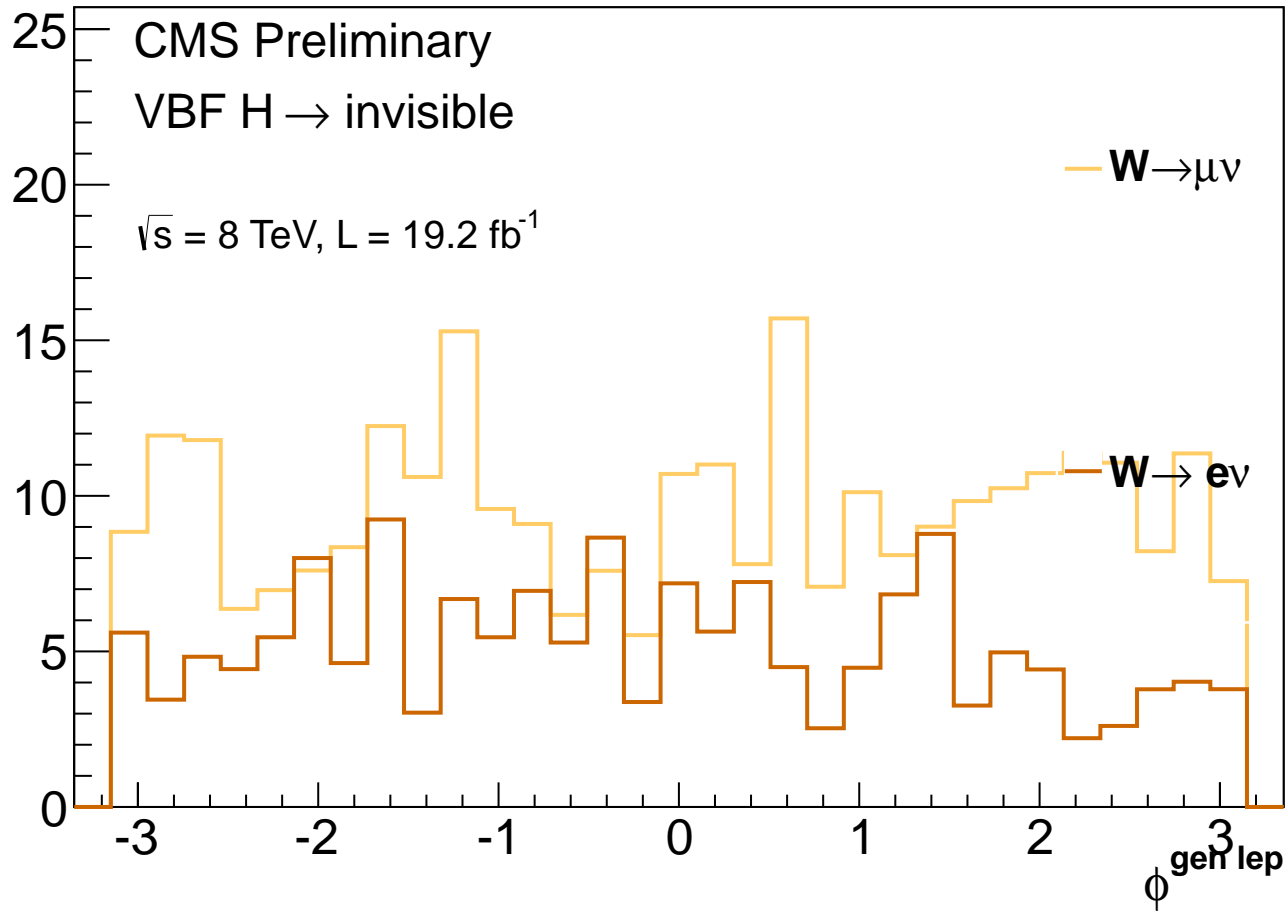
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

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



entries



entries

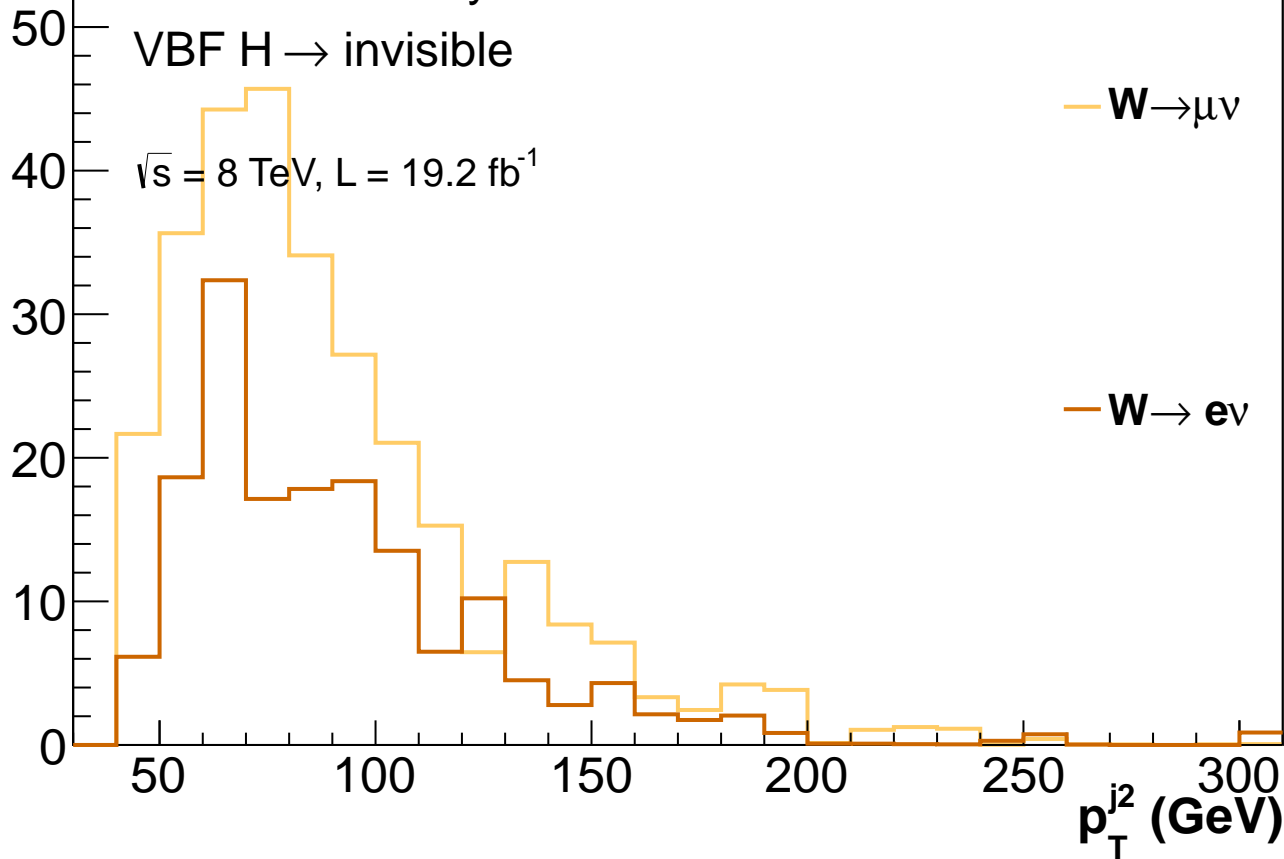
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

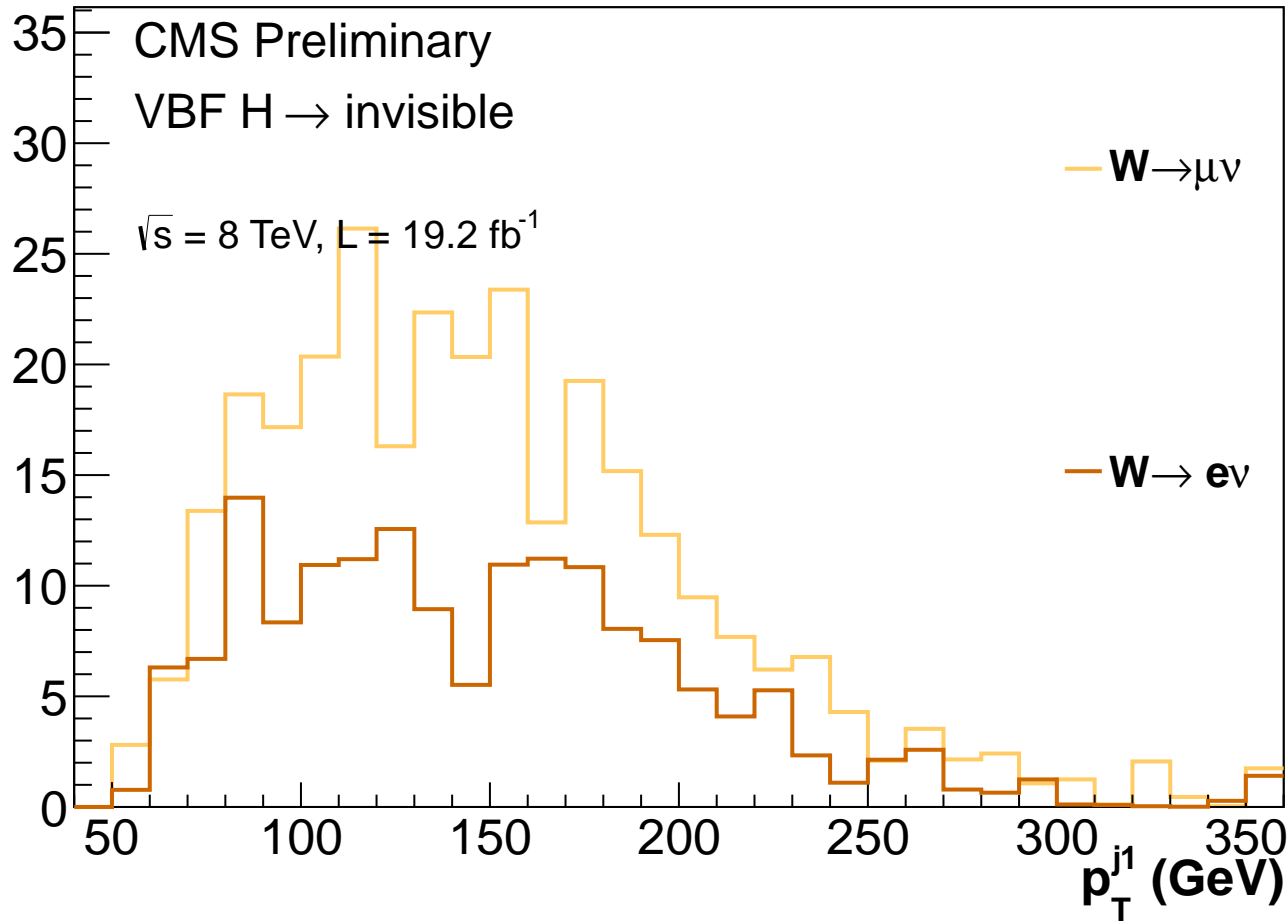
$\sqrt{s} = 8 \text{ TeV}, L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries



entries

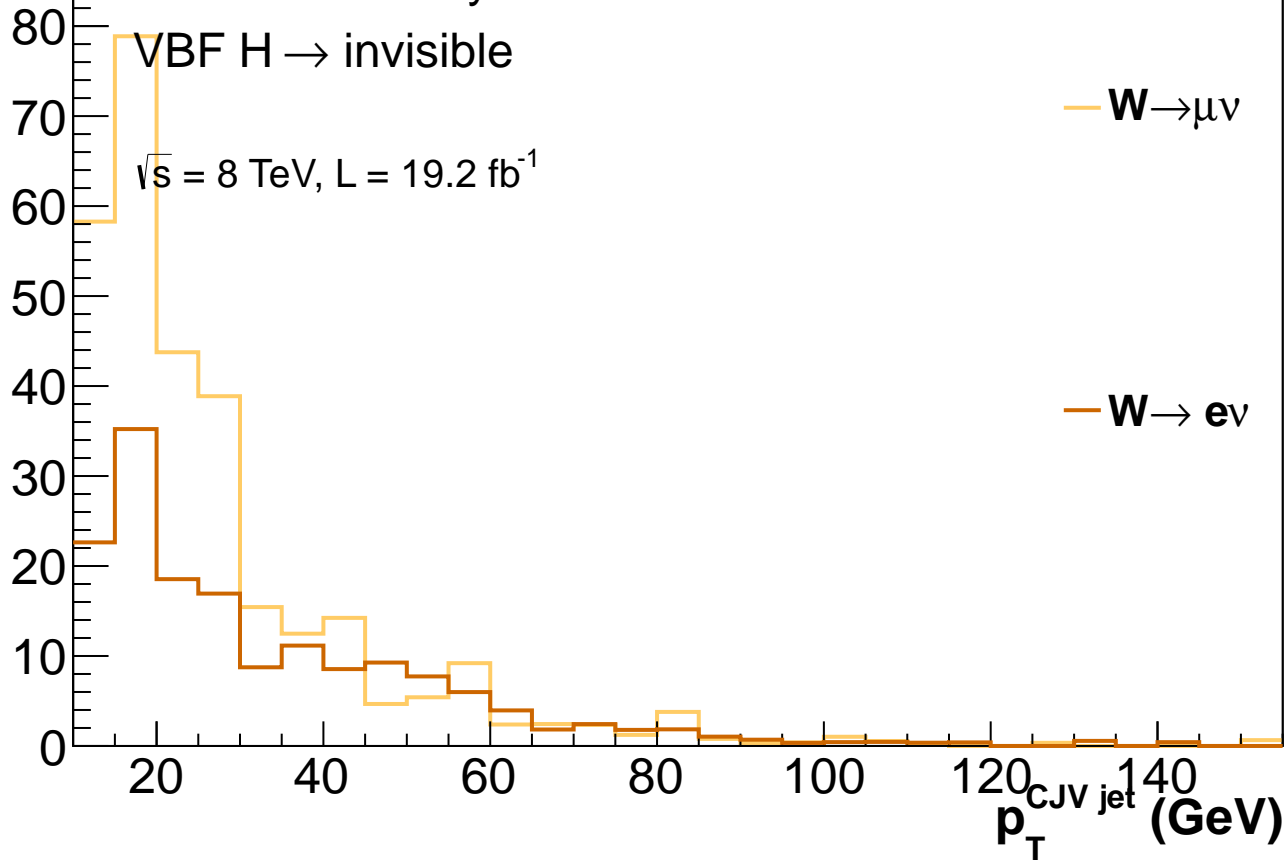
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries

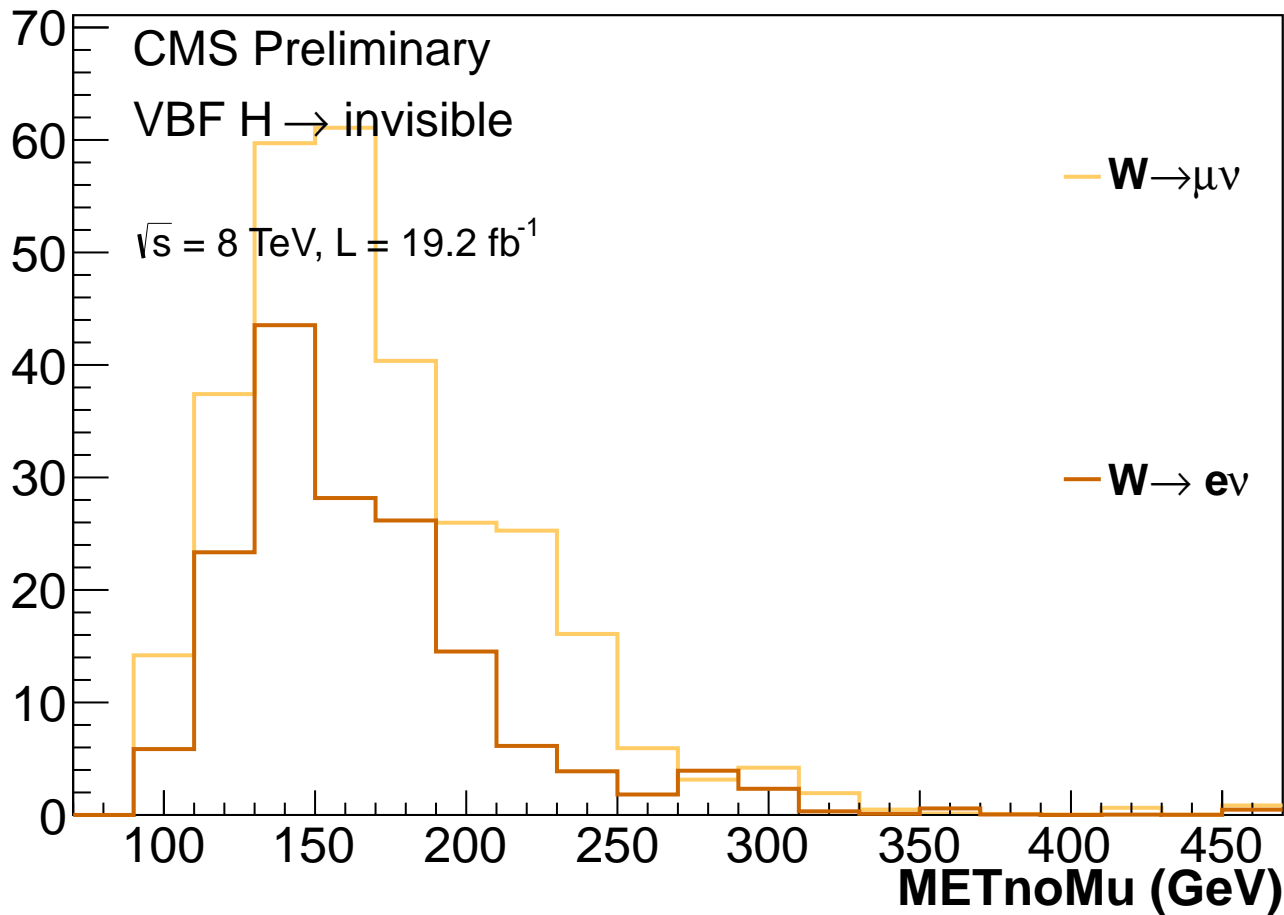
CMS Preliminary

VBF H  $\rightarrow$  invisible

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries

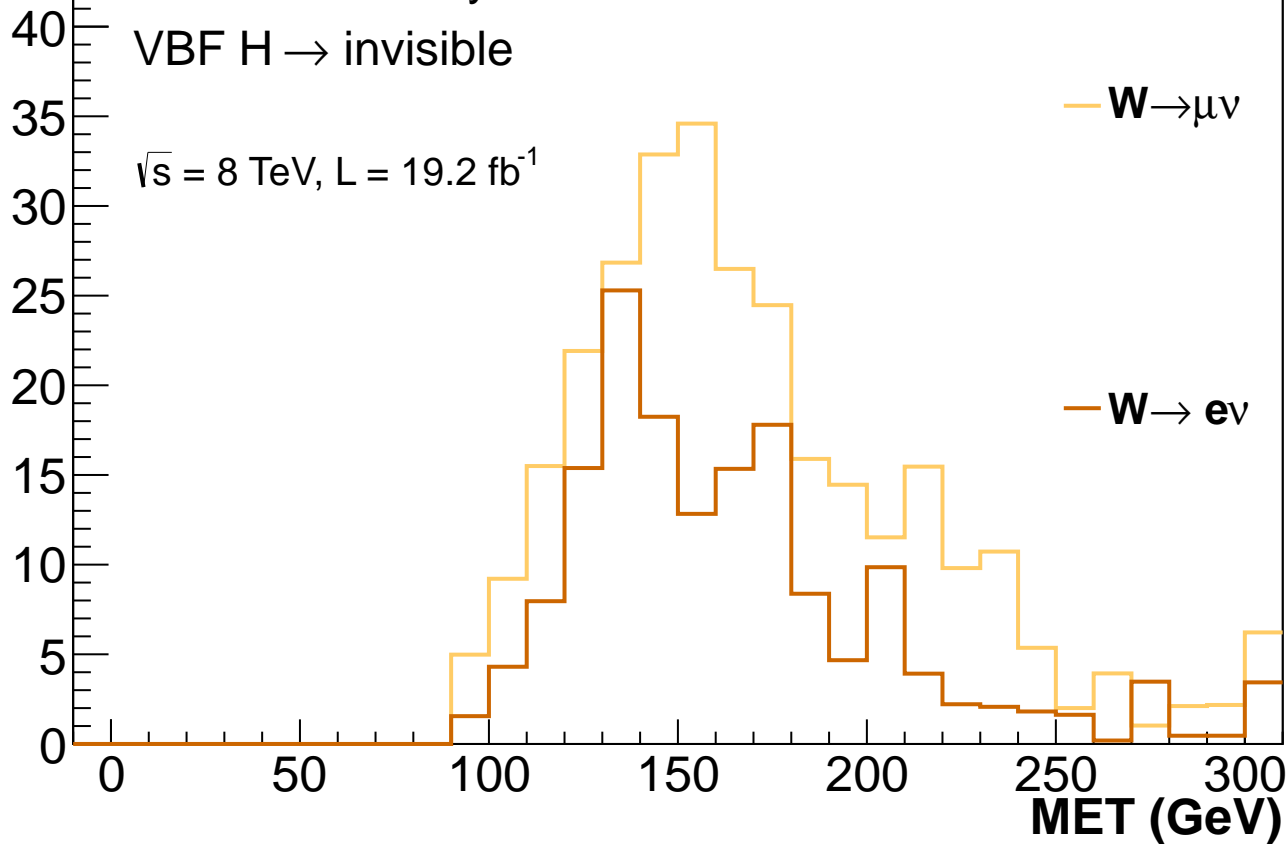
CMS Preliminary

VBF H  $\rightarrow$  invisible

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$





entries

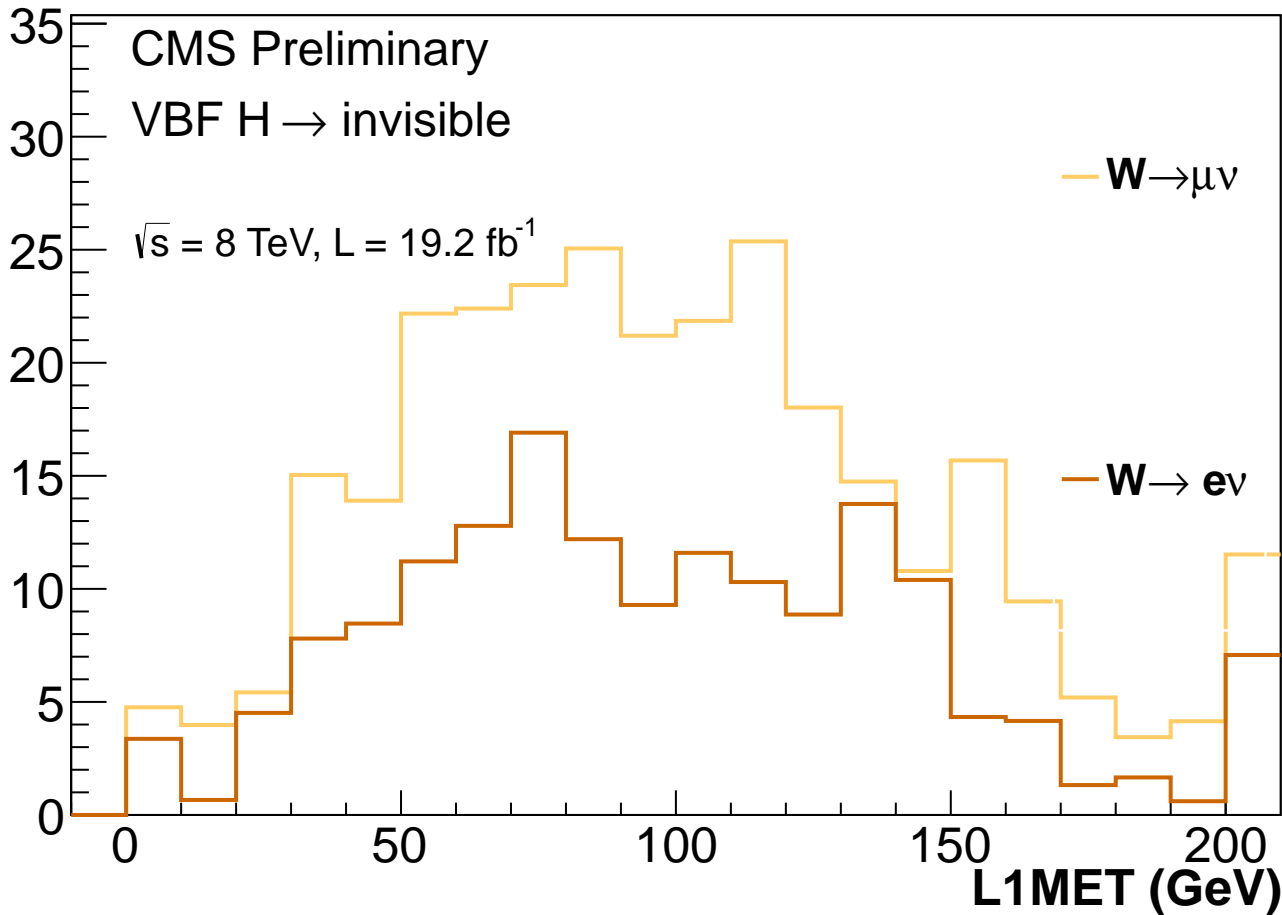
CMS Preliminary

VBF H  $\rightarrow$  invisible

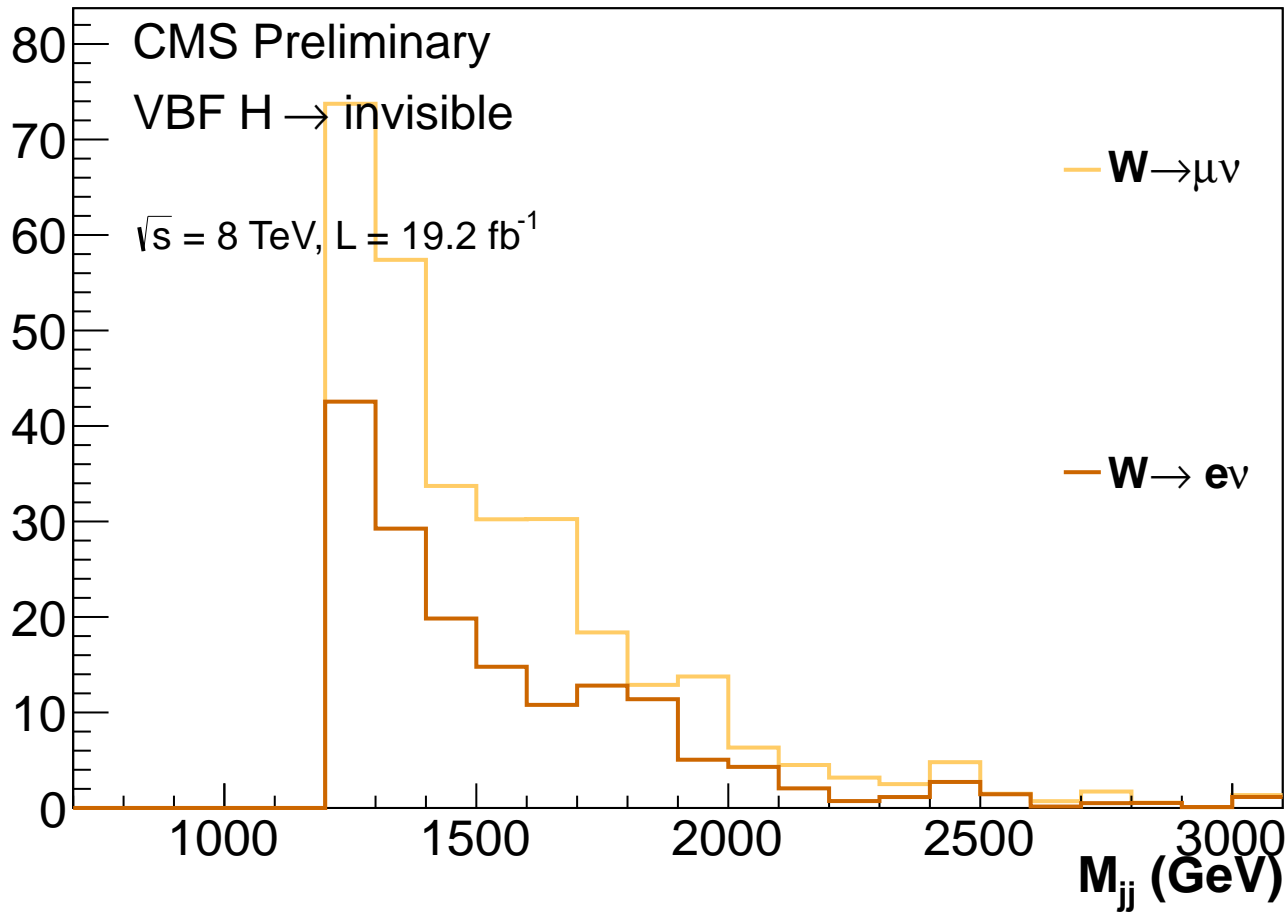
$\sqrt{s} = 8$  TeV,  $L = 19.2$  fb $^{-1}$

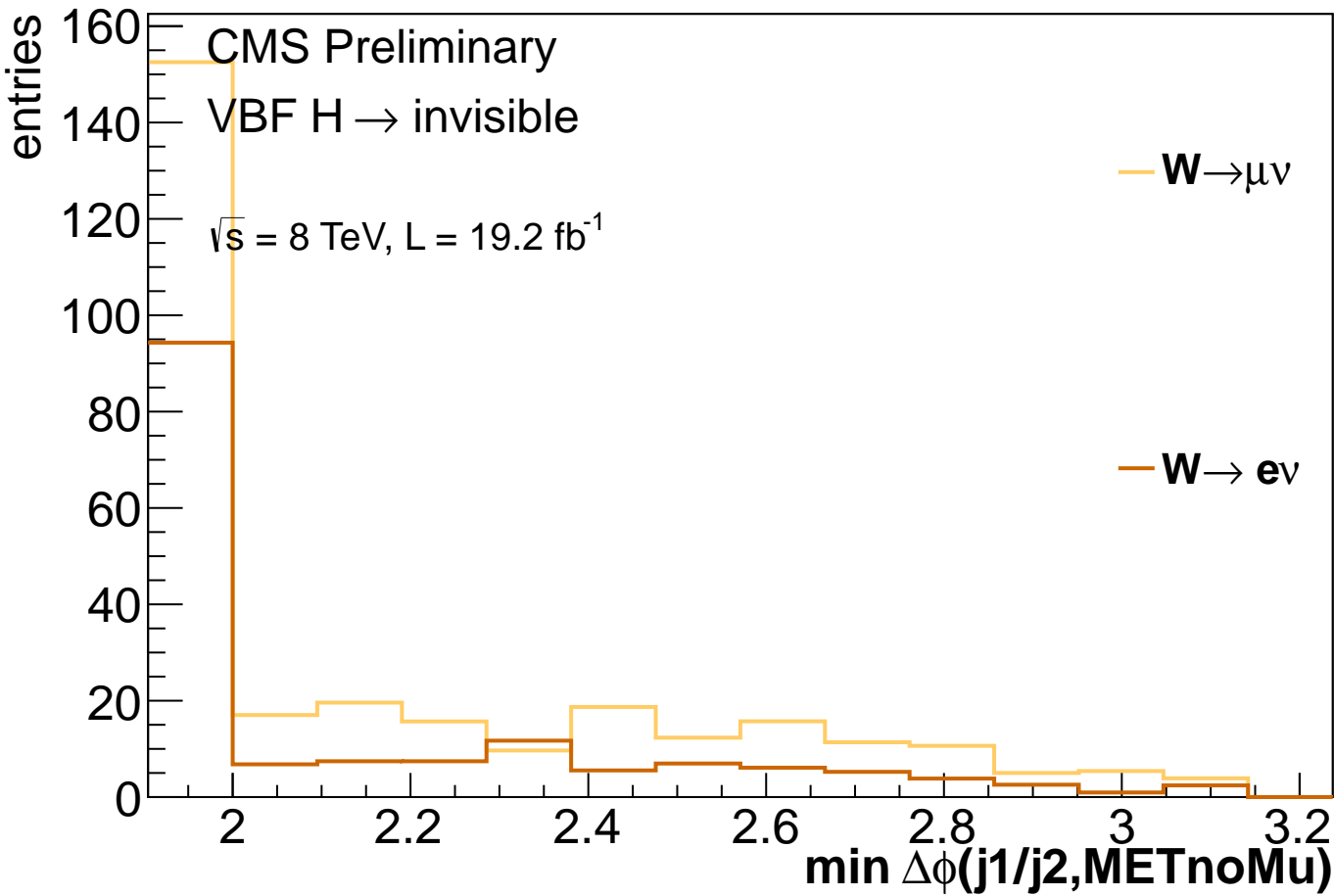
$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries





entries

CMS Preliminary  
VBF  $H \rightarrow \text{invisible}$

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

30  
25  
20  
15  
10  
5  
0

1

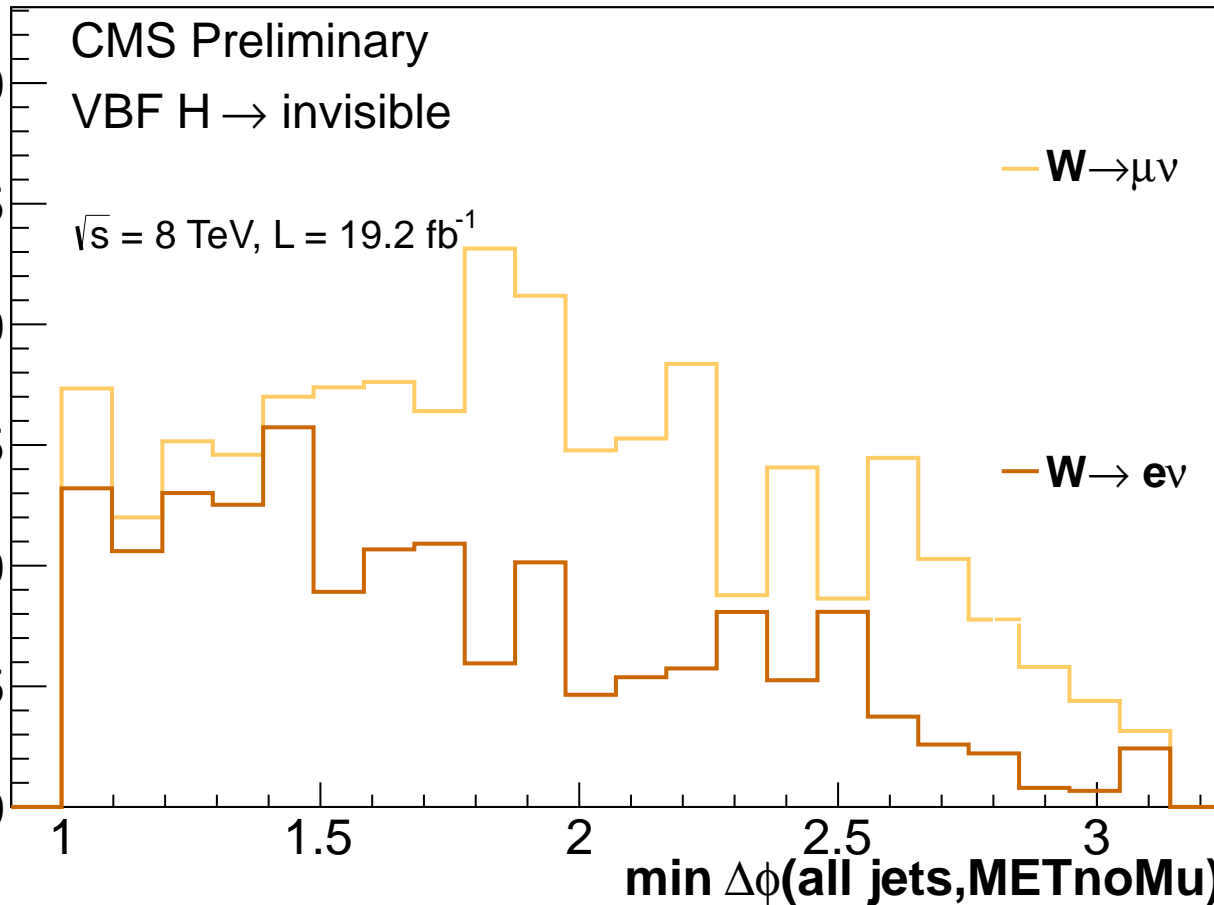
1.5

2

2.5

3

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



entries

CMS Preliminary

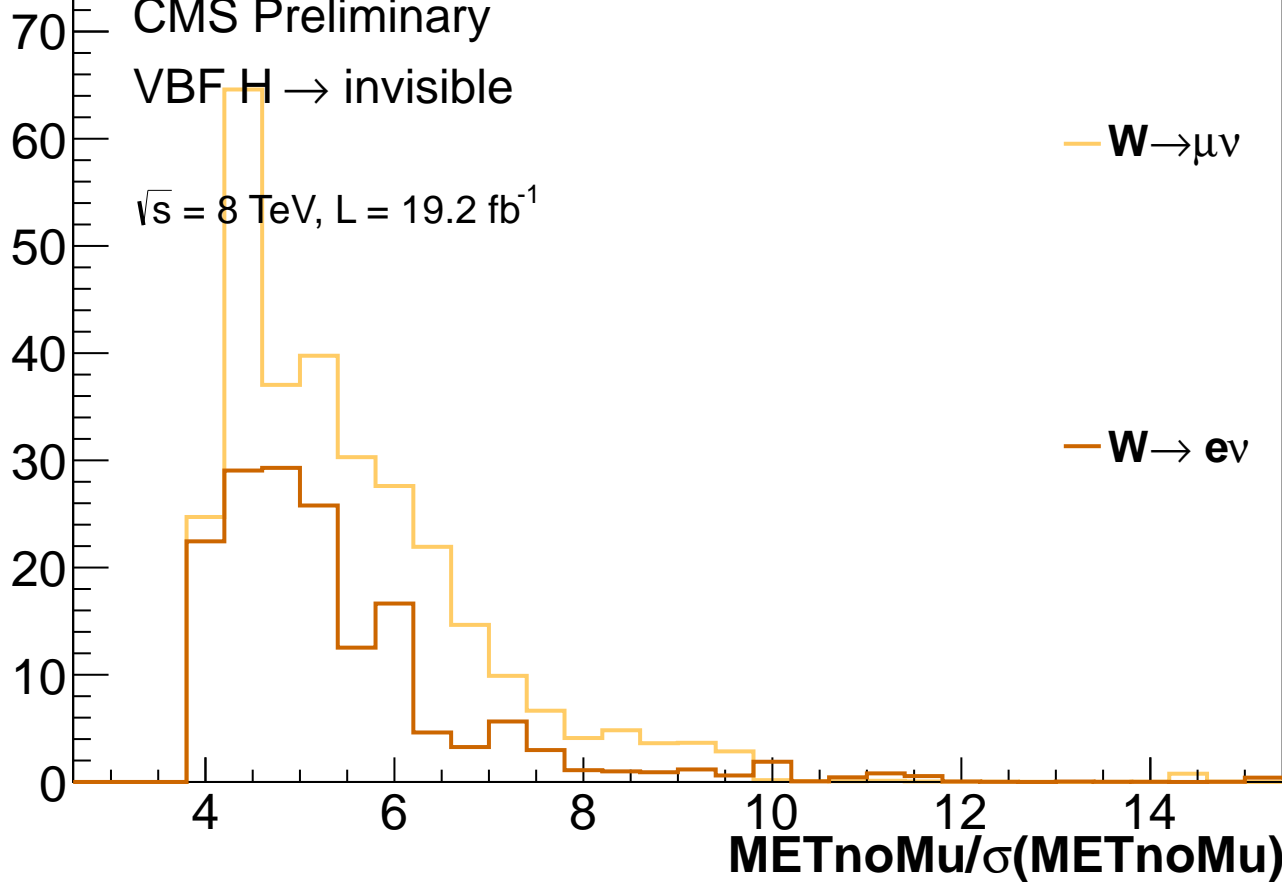
VBF  $H \rightarrow \text{invisible}$

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

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



entries

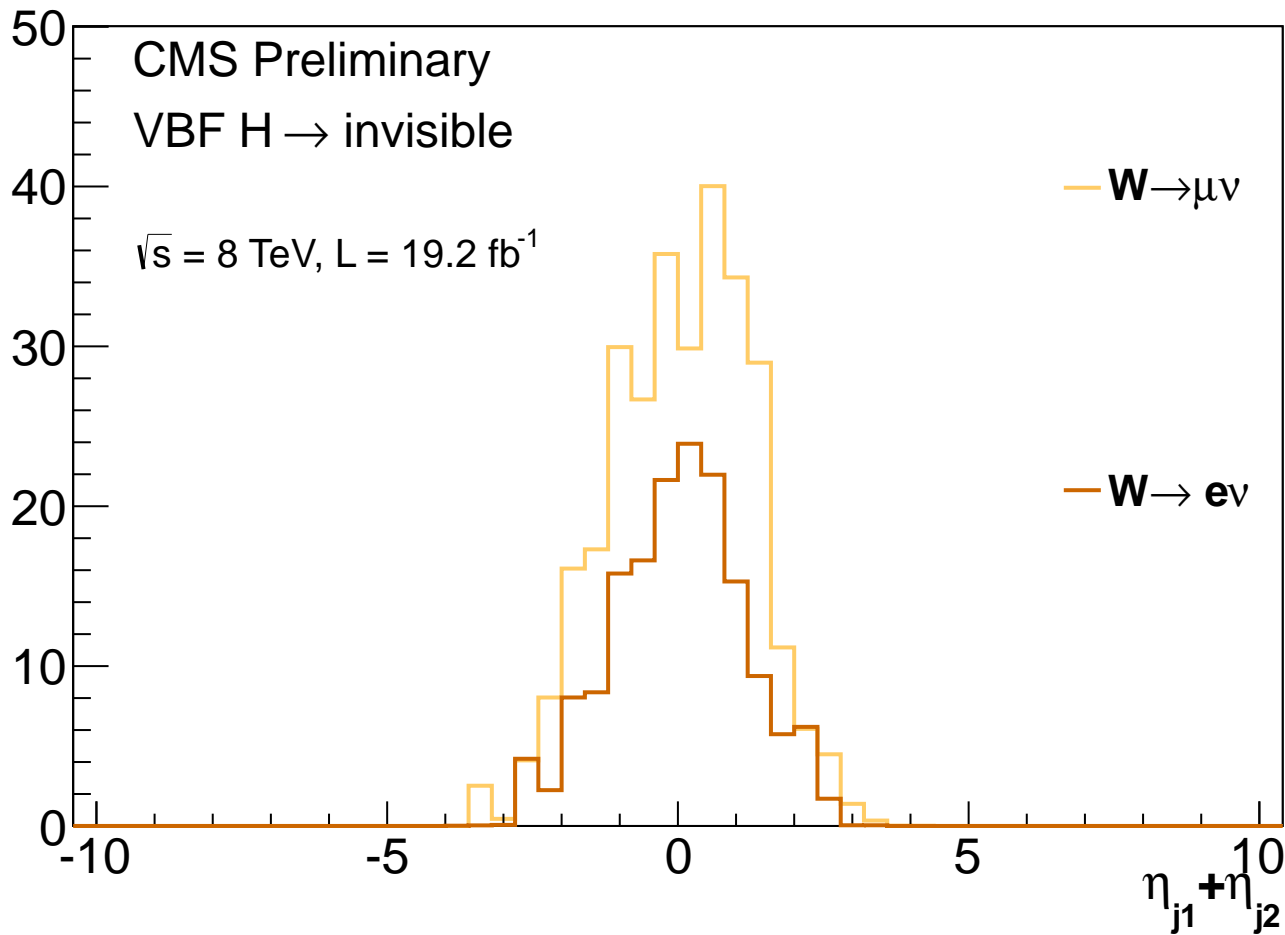
CMS Preliminary

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

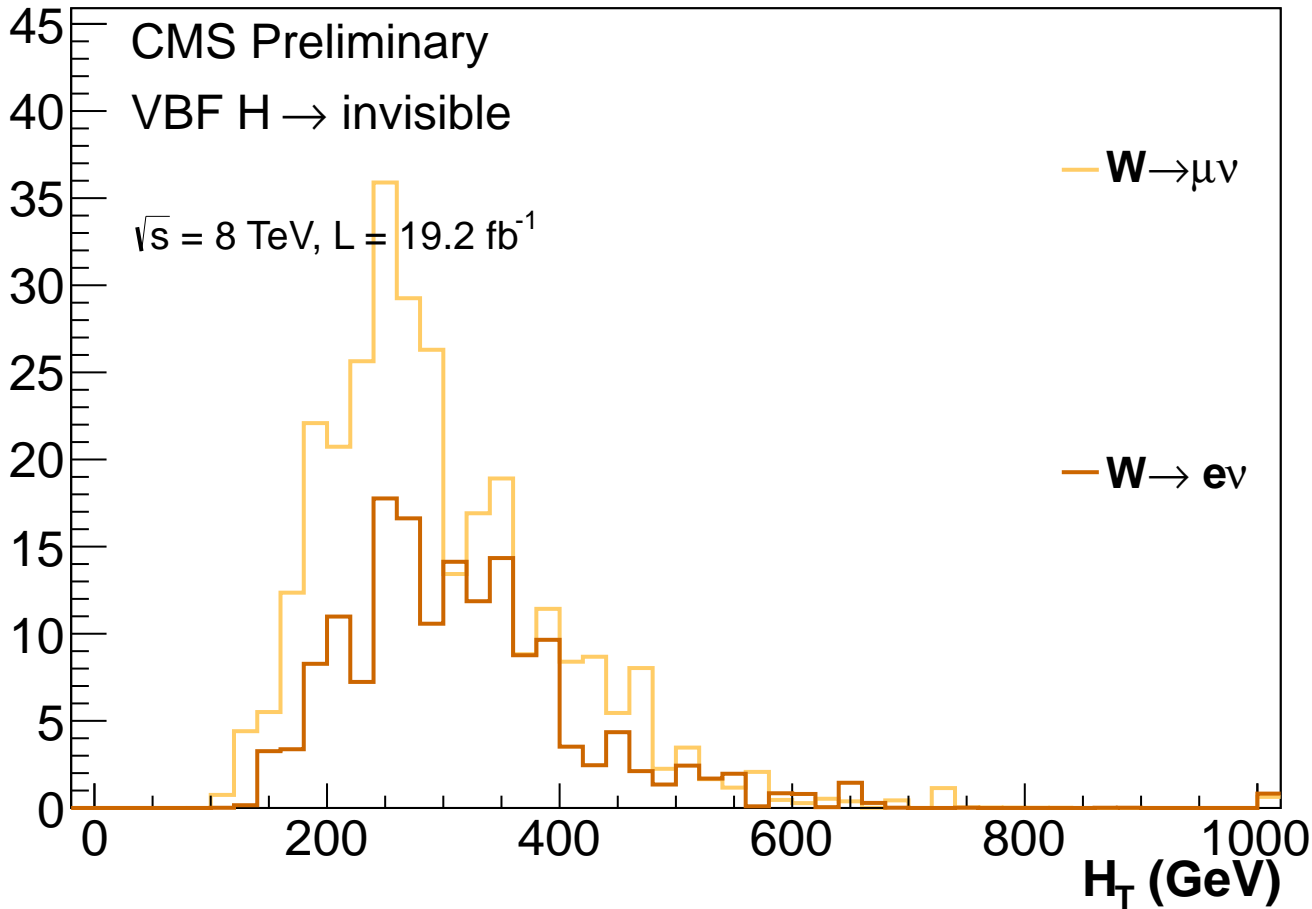
CMS Preliminary

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  $H \rightarrow \text{invisible}$

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

25

15

10

5

0

0

0.5

1

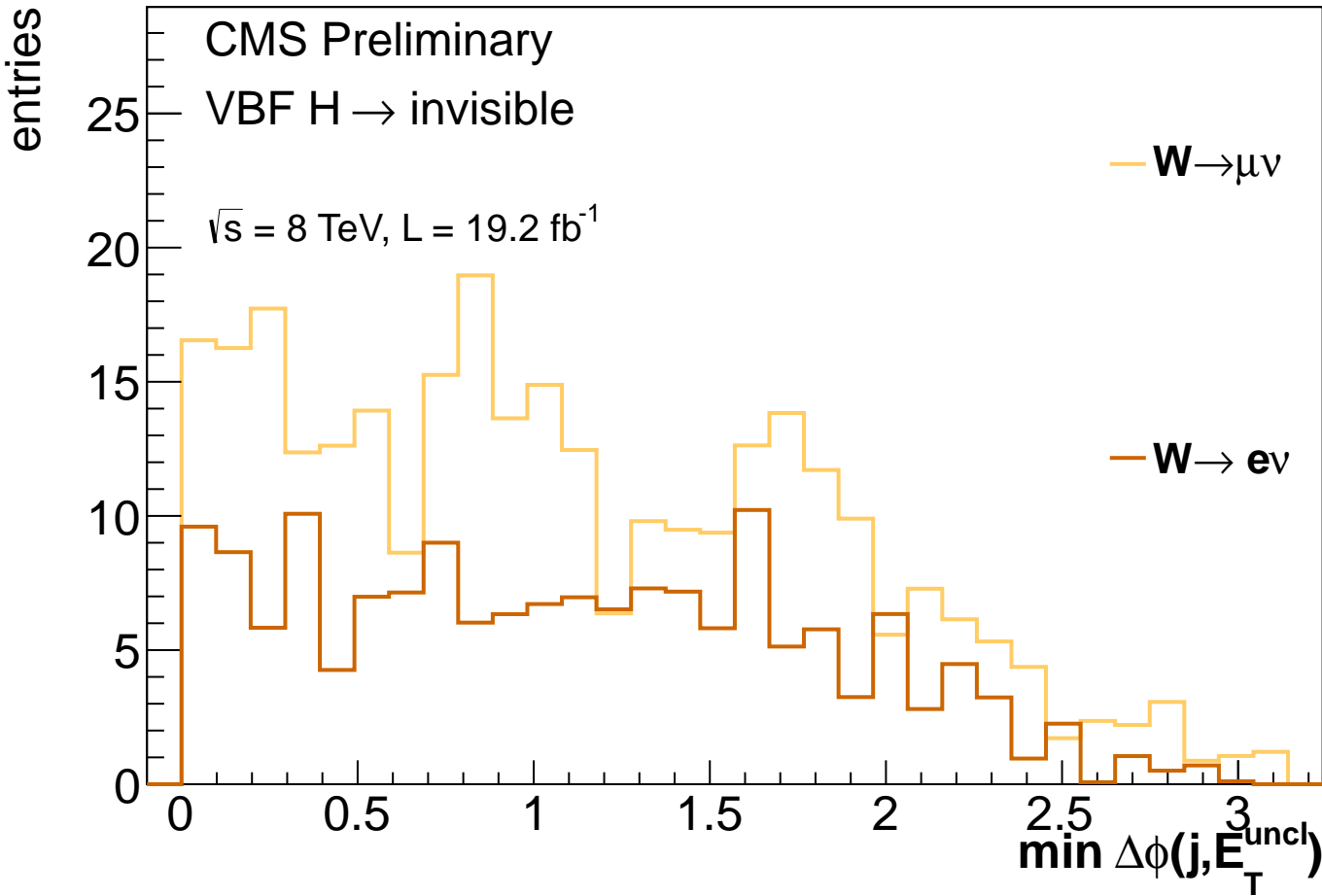
1.5

2

2.5

3

$\min \Delta\phi(j, E_T^{\text{uncl}})$





entries

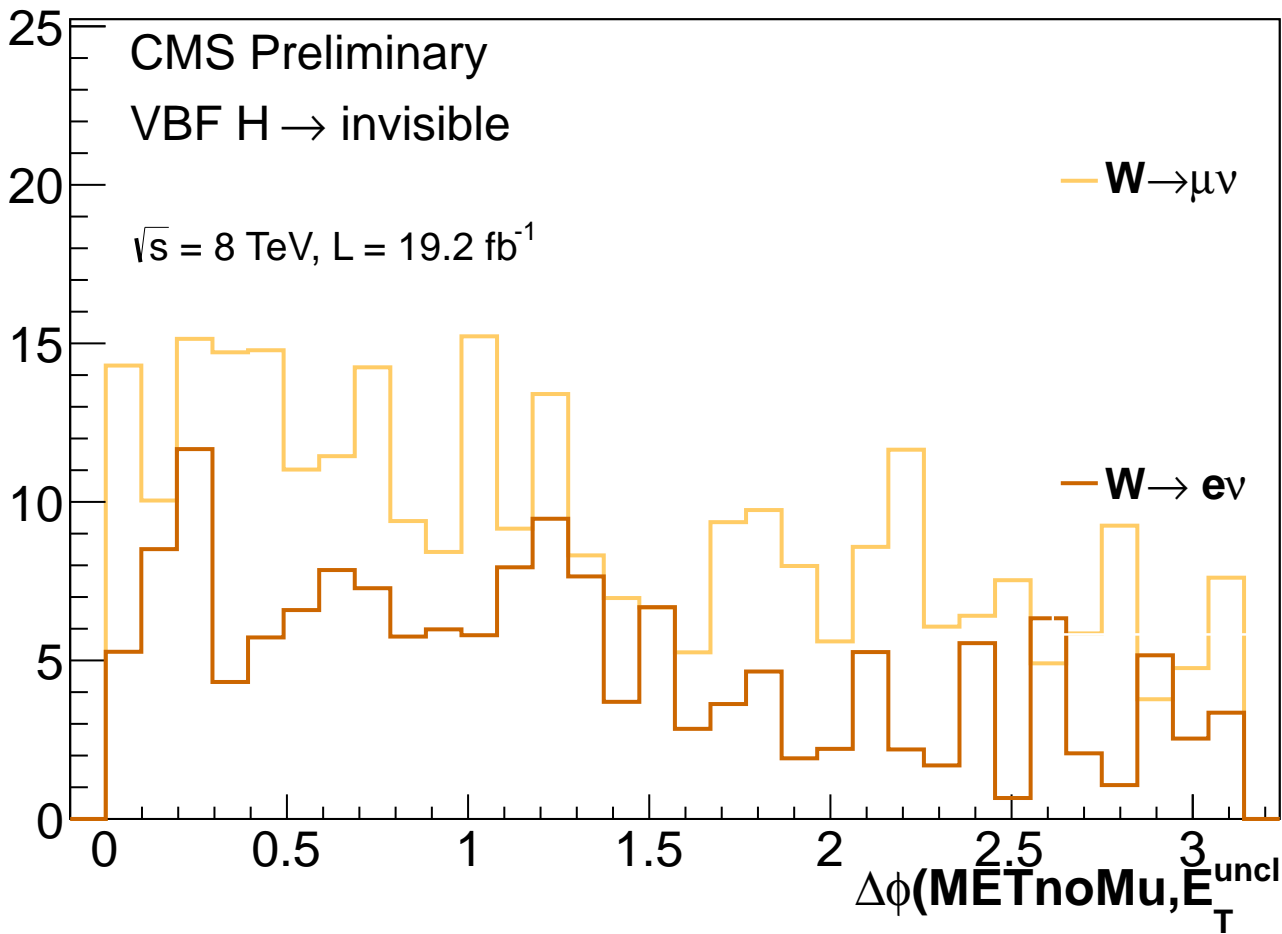
CMS Preliminary

VBF  $H \rightarrow$  invisible

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries

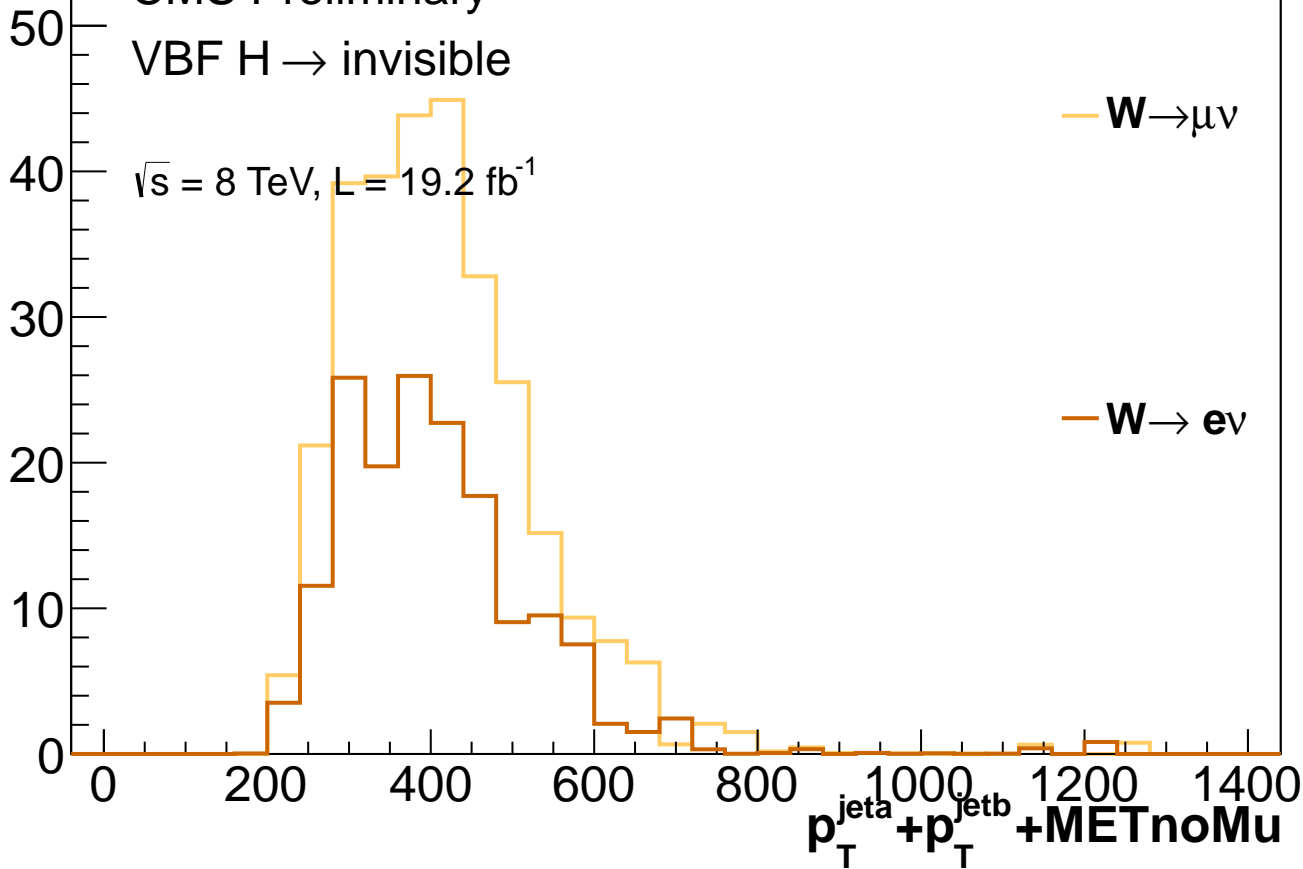
CMS Preliminary

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

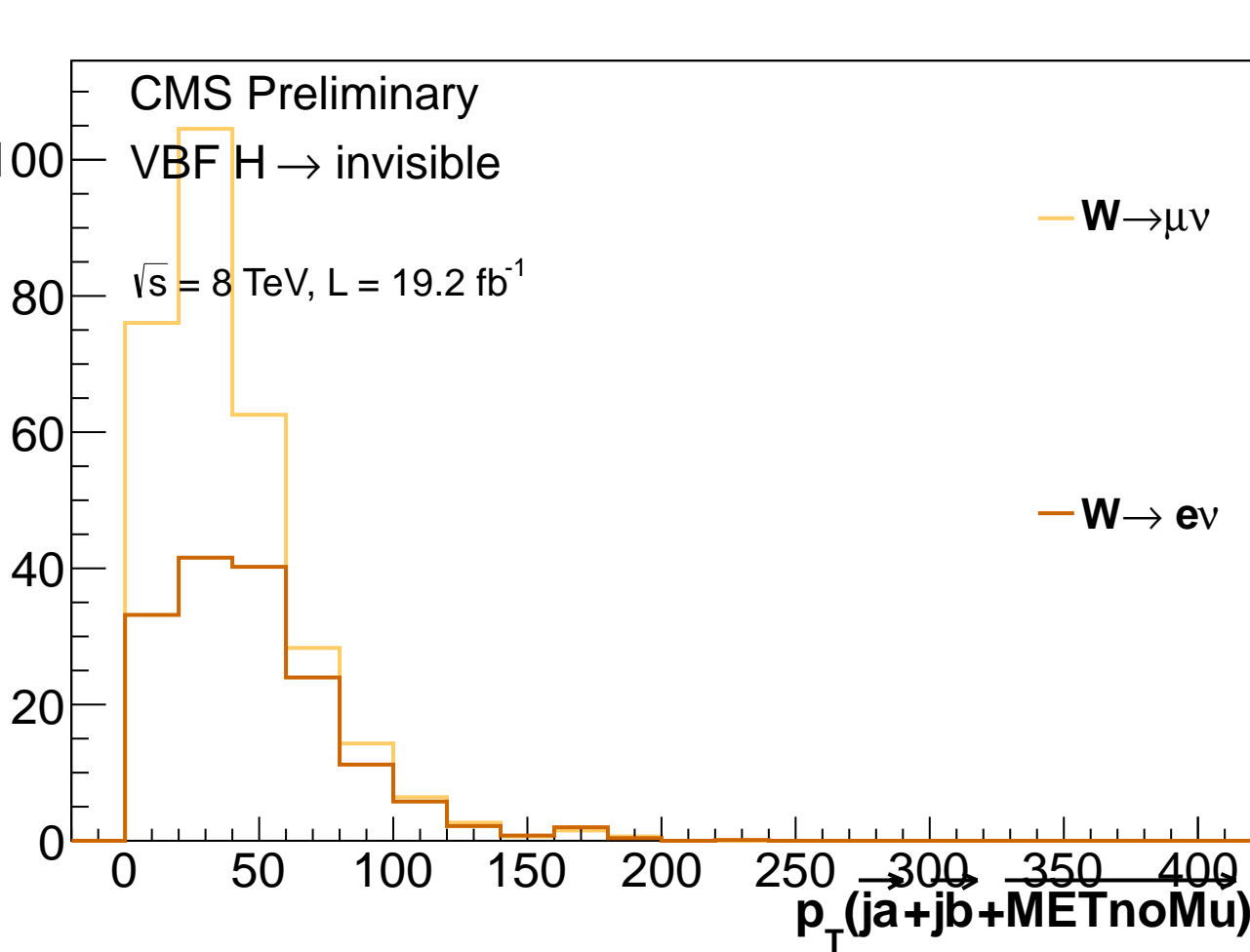
CMS Preliminary

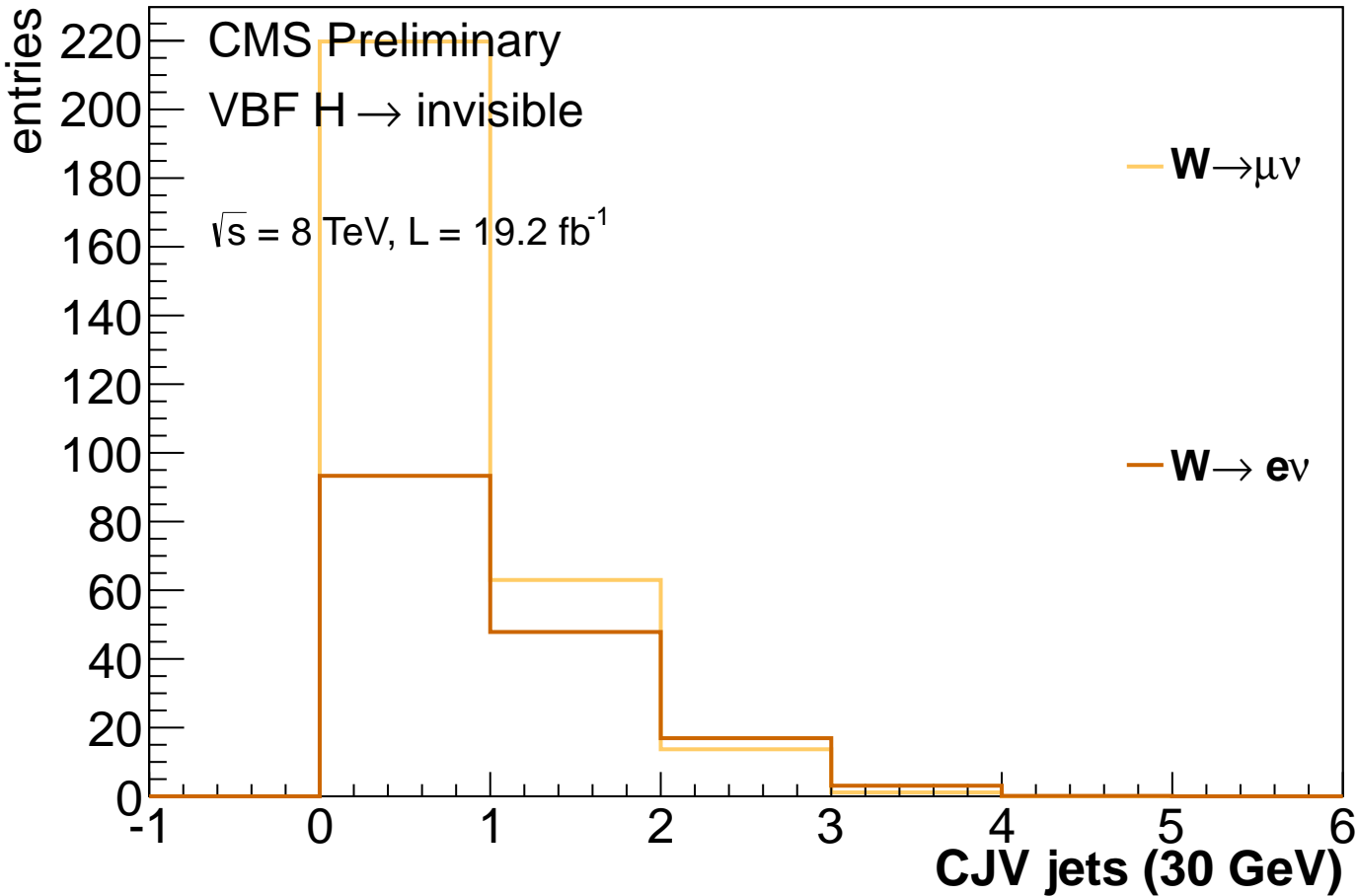
VBF  $H \rightarrow \text{invisible}$

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$





entries

CMS Preliminary

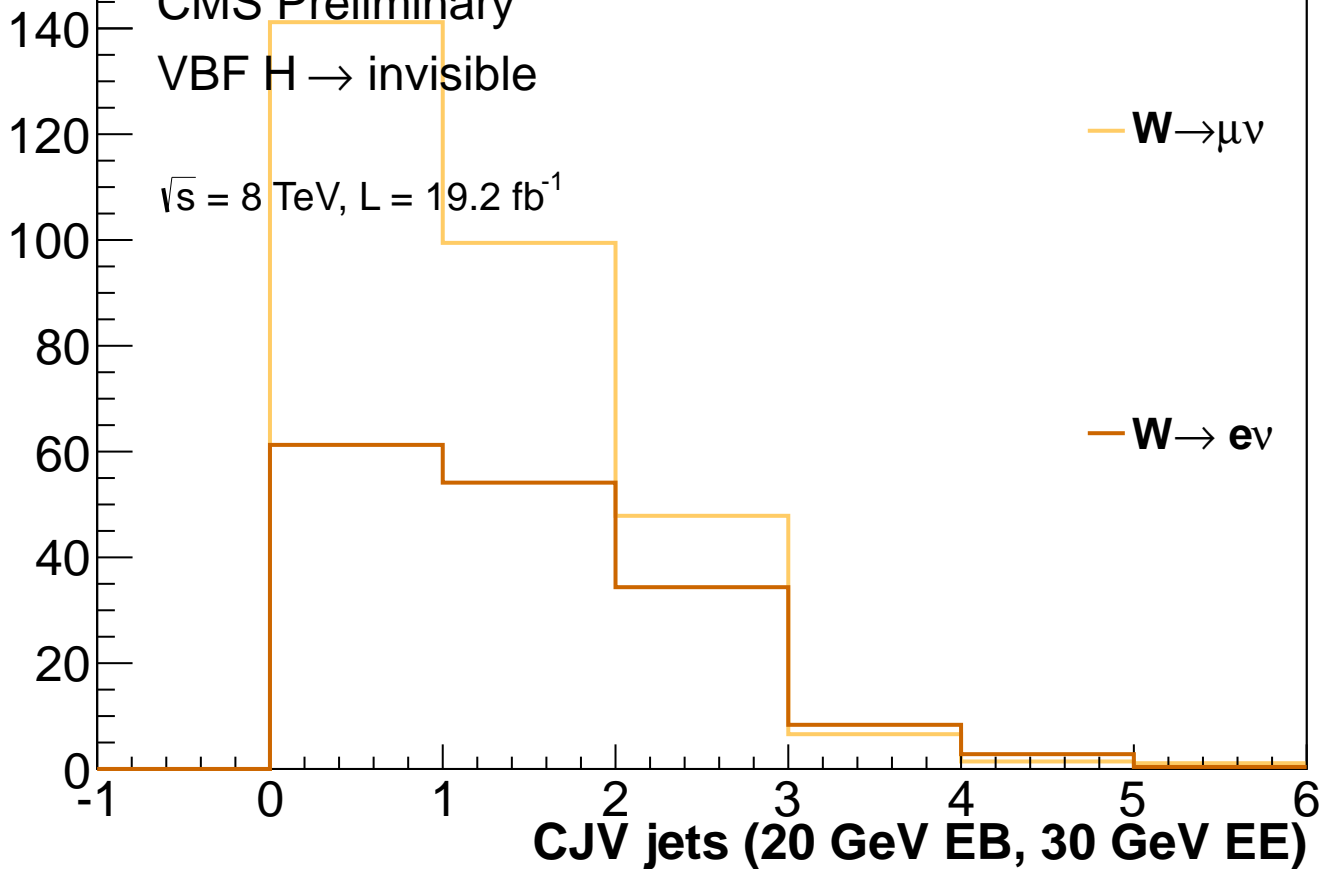
VBF  $H \rightarrow$  invisible

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

CJV jets (20 GeV EB, 30 GeV EE)



entries

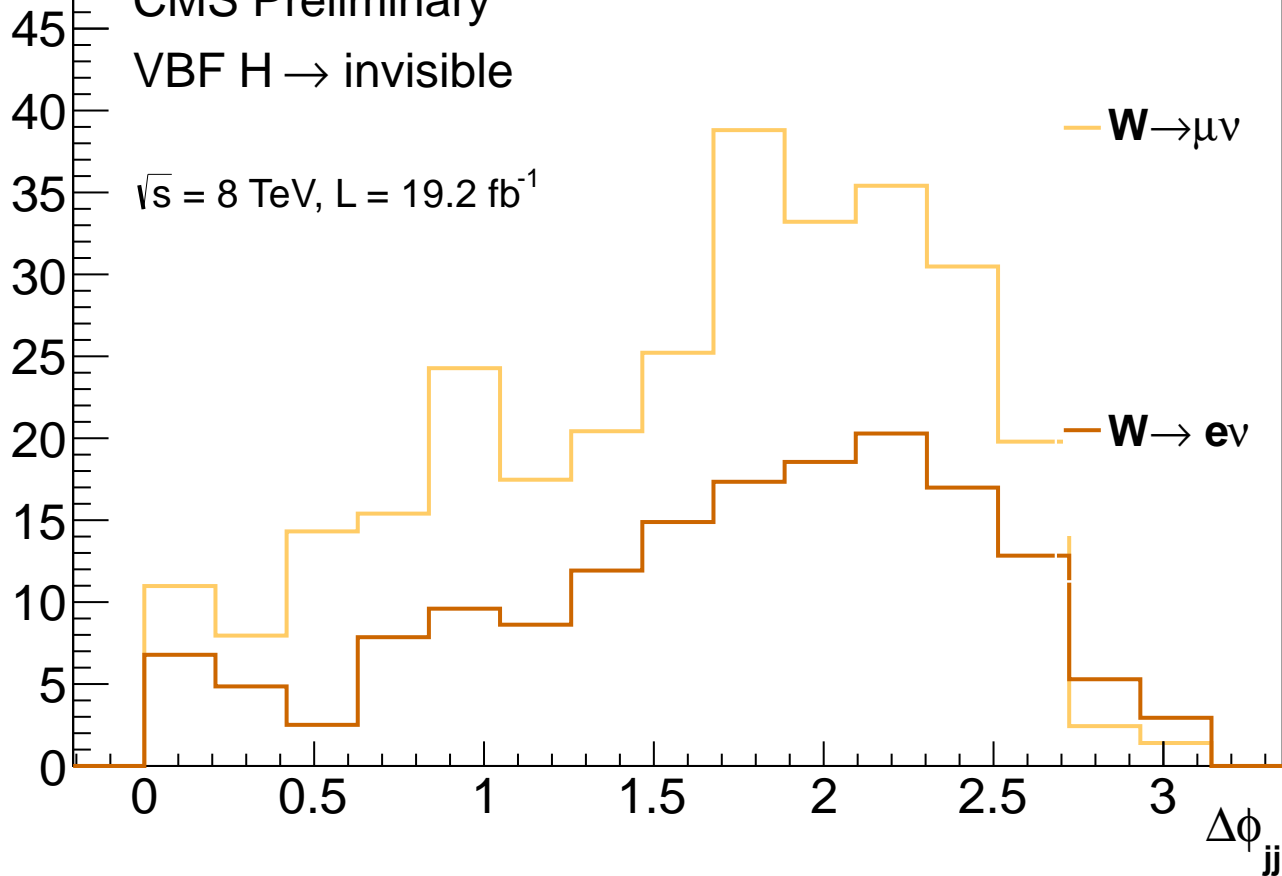
CMS Preliminary

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

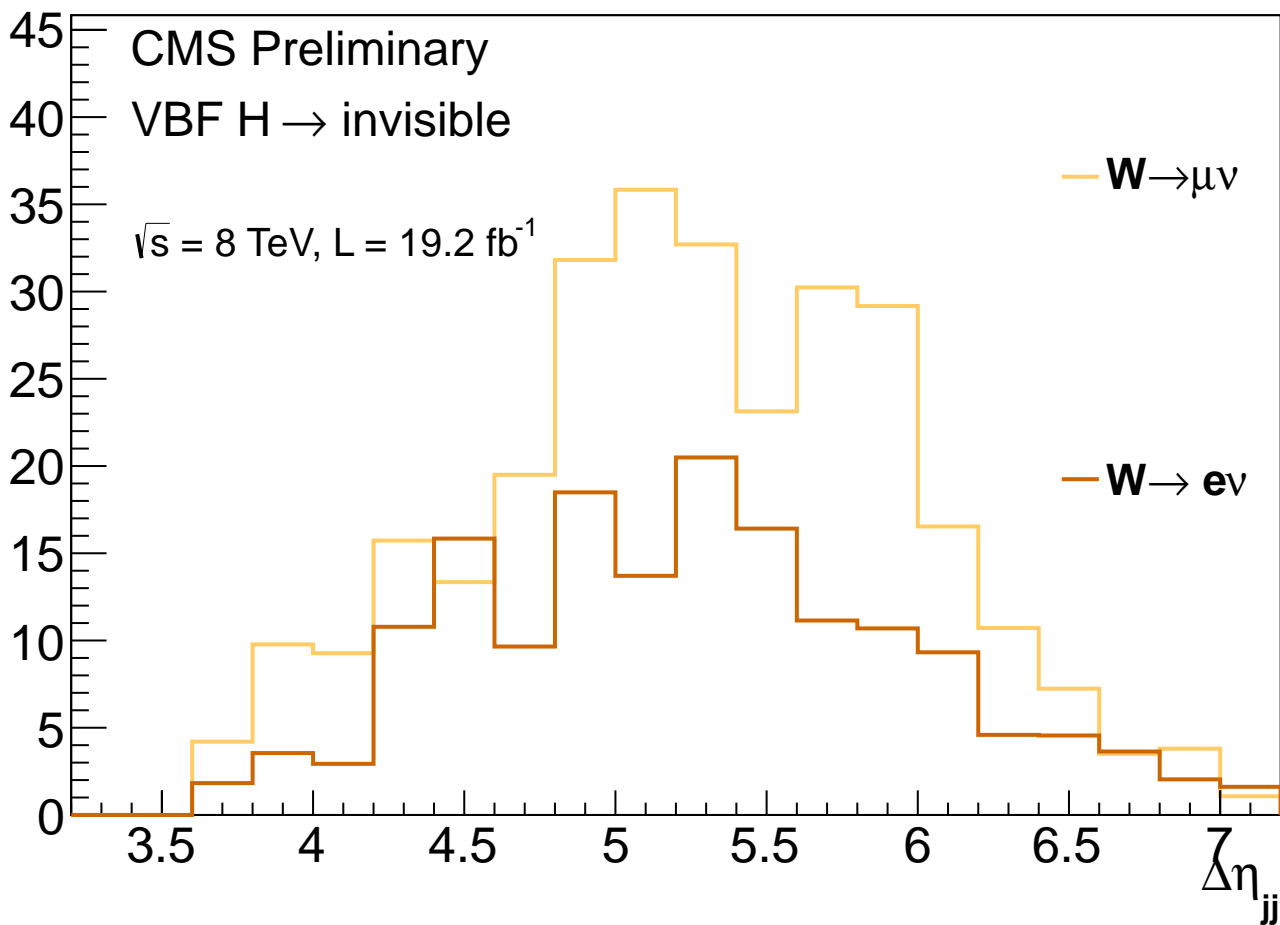
CMS Preliminary

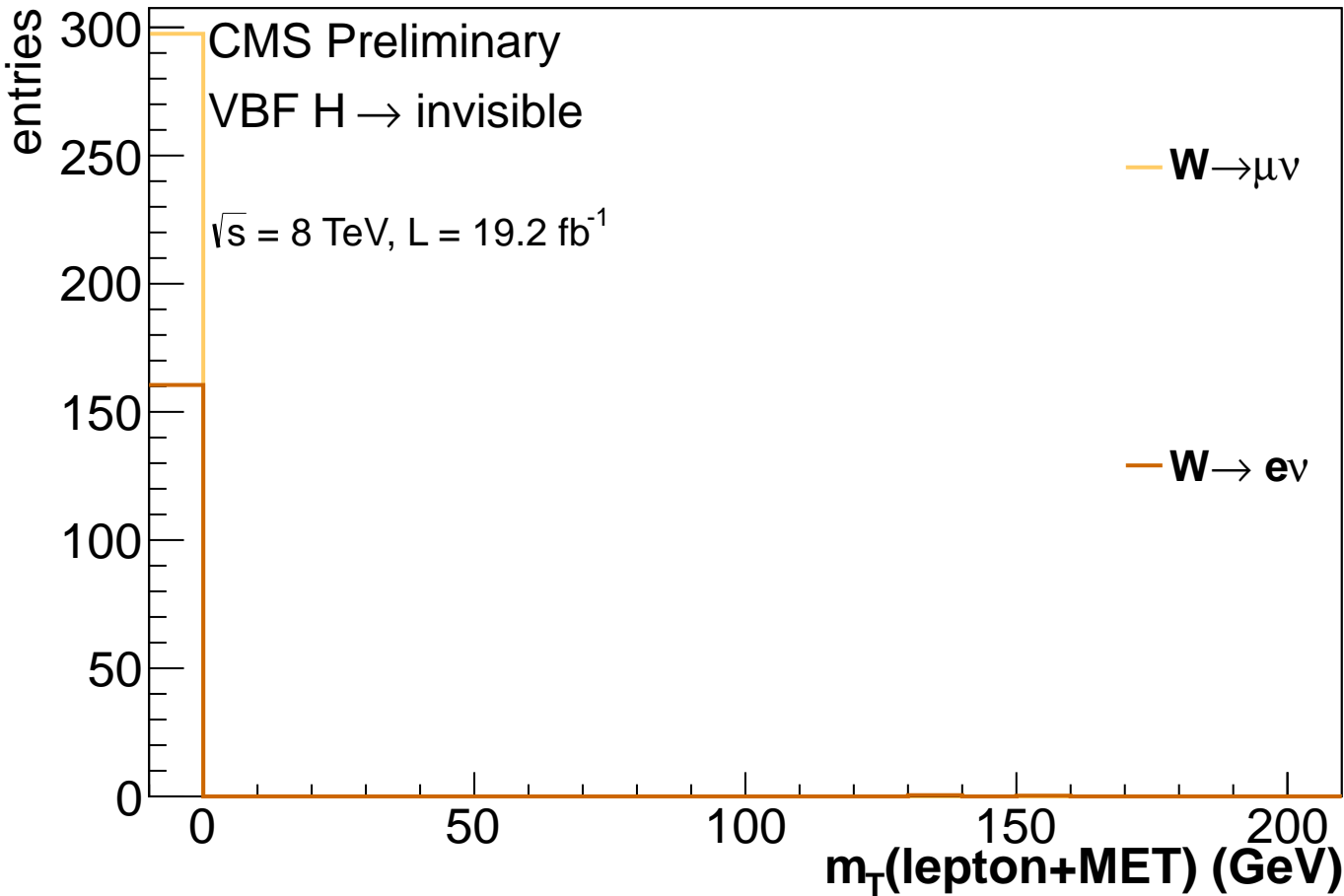
VBF  $H \rightarrow \text{invisible}$

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$







entries

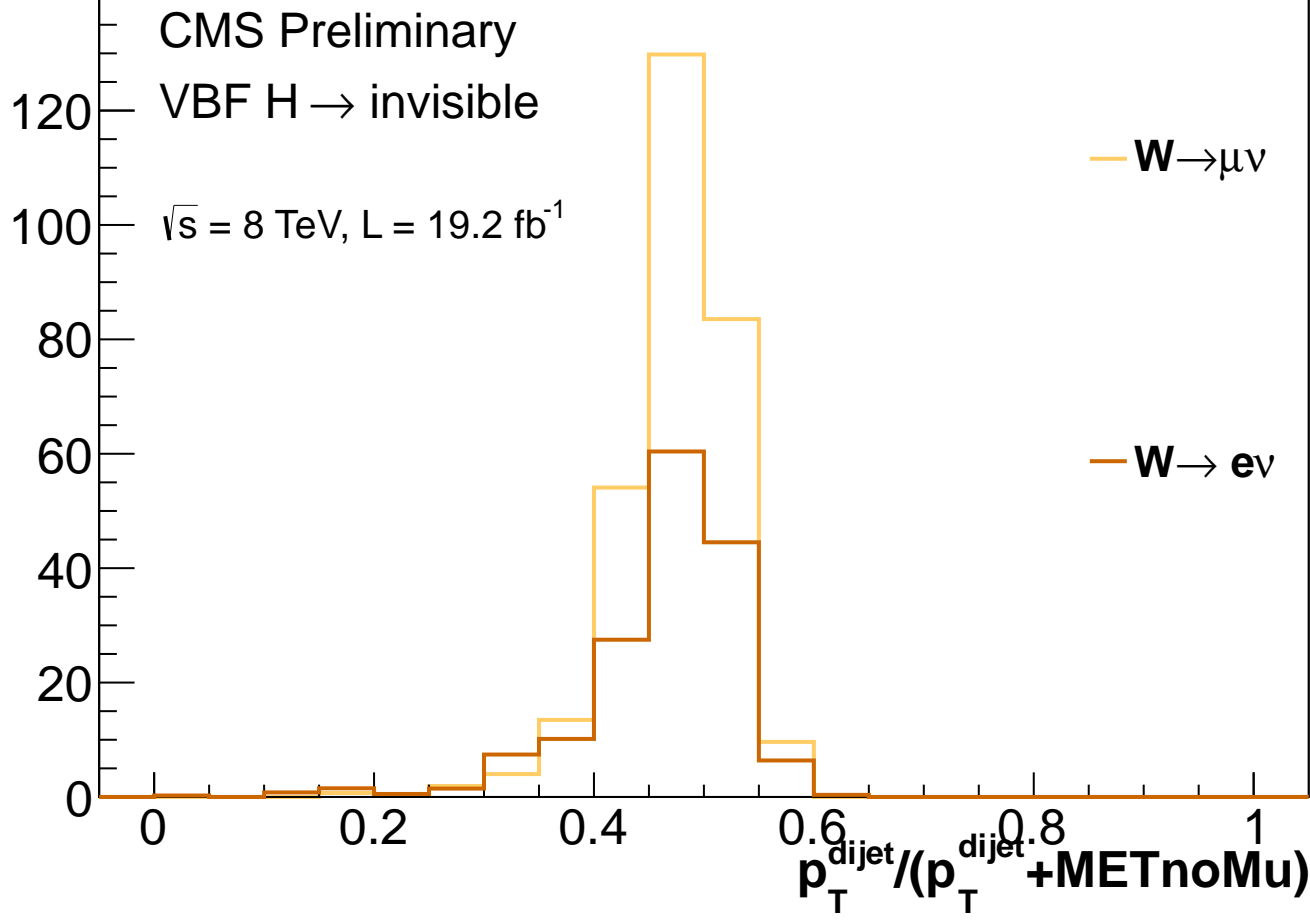
CMS Preliminary

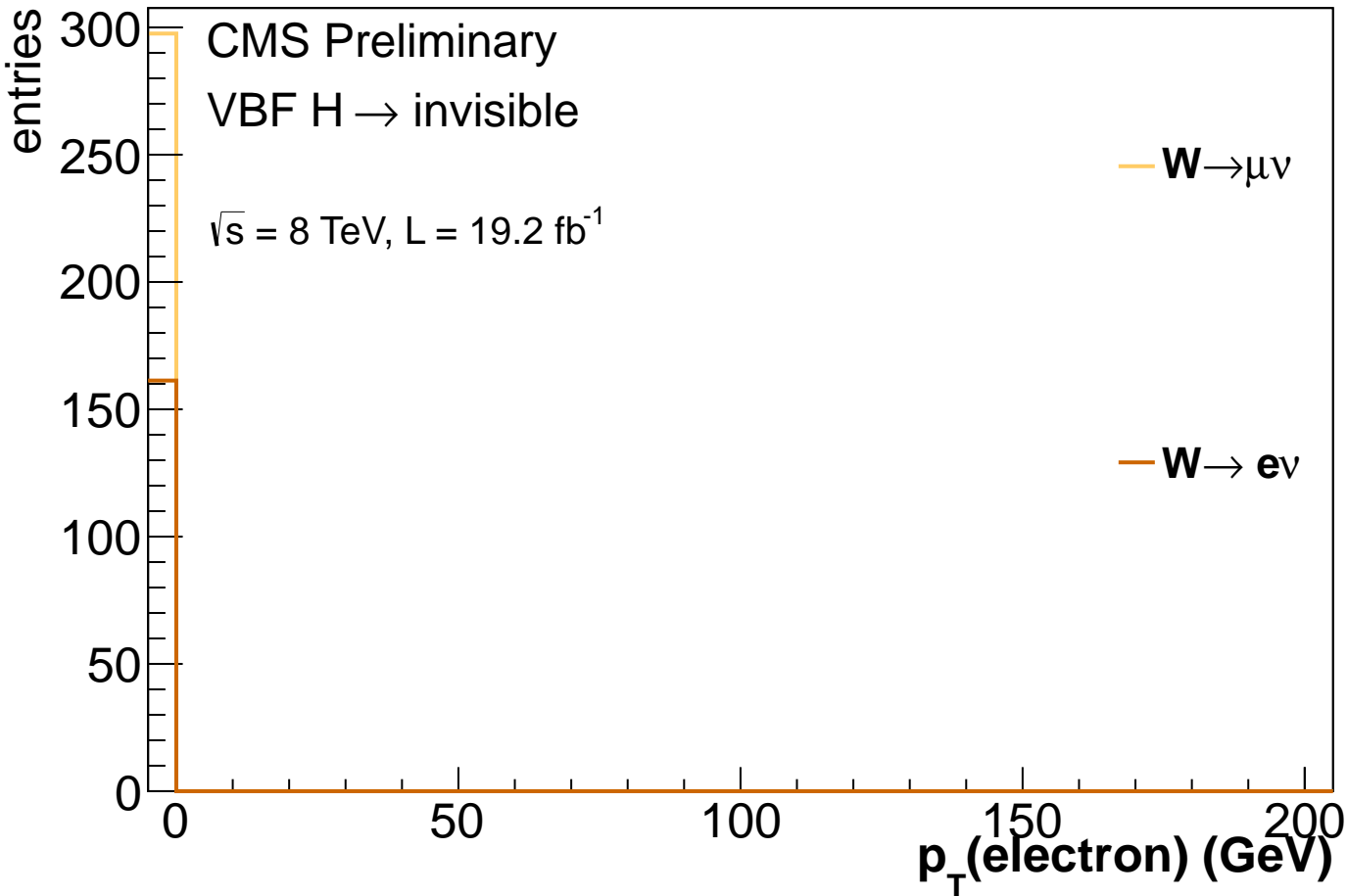
VBF  $H \rightarrow \text{invisible}$

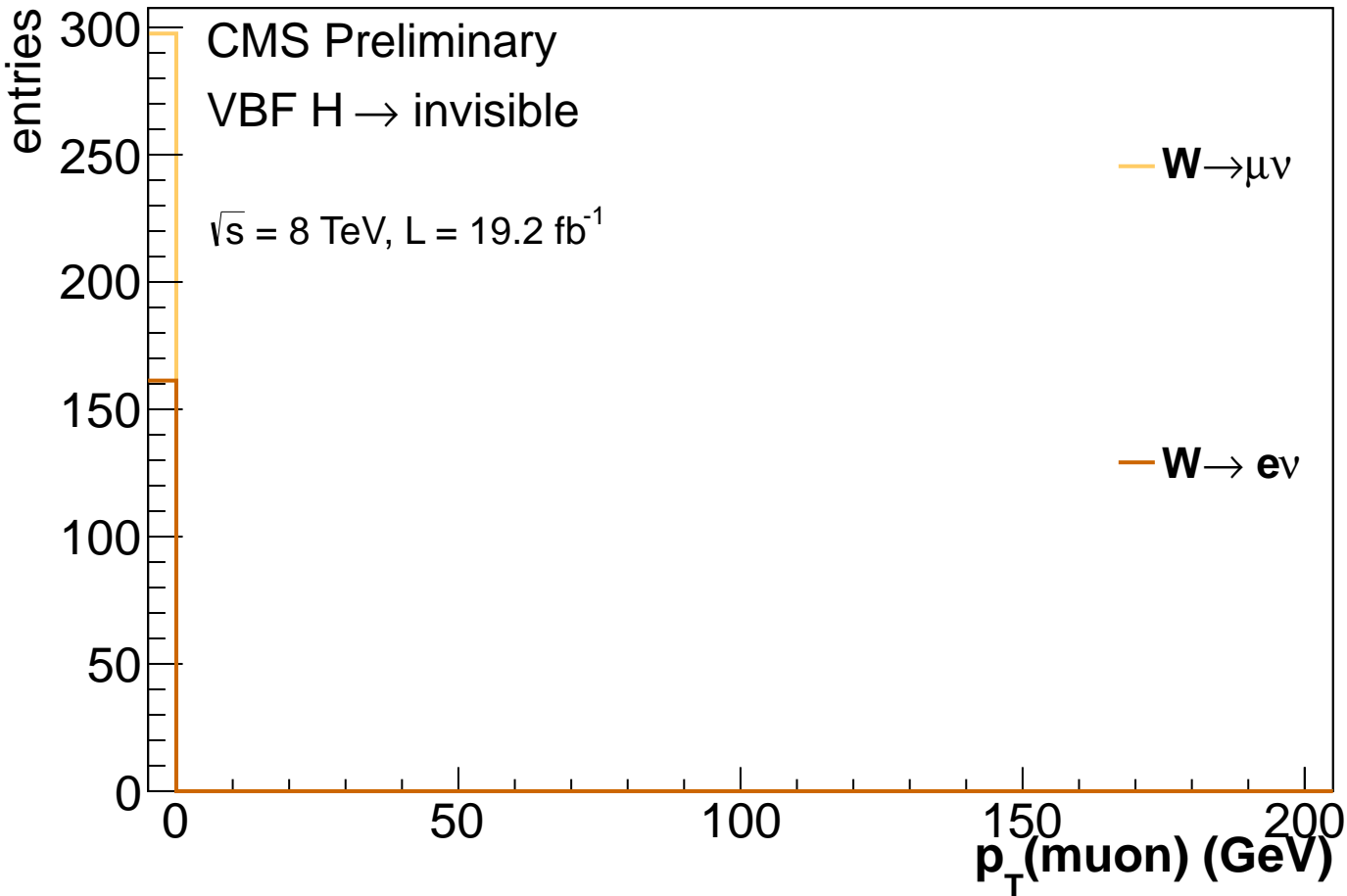
$\sqrt{s} = 8 \text{ TeV}$ ,  $L = 19.2 \text{ fb}^{-1}$

$W \rightarrow \mu\nu$

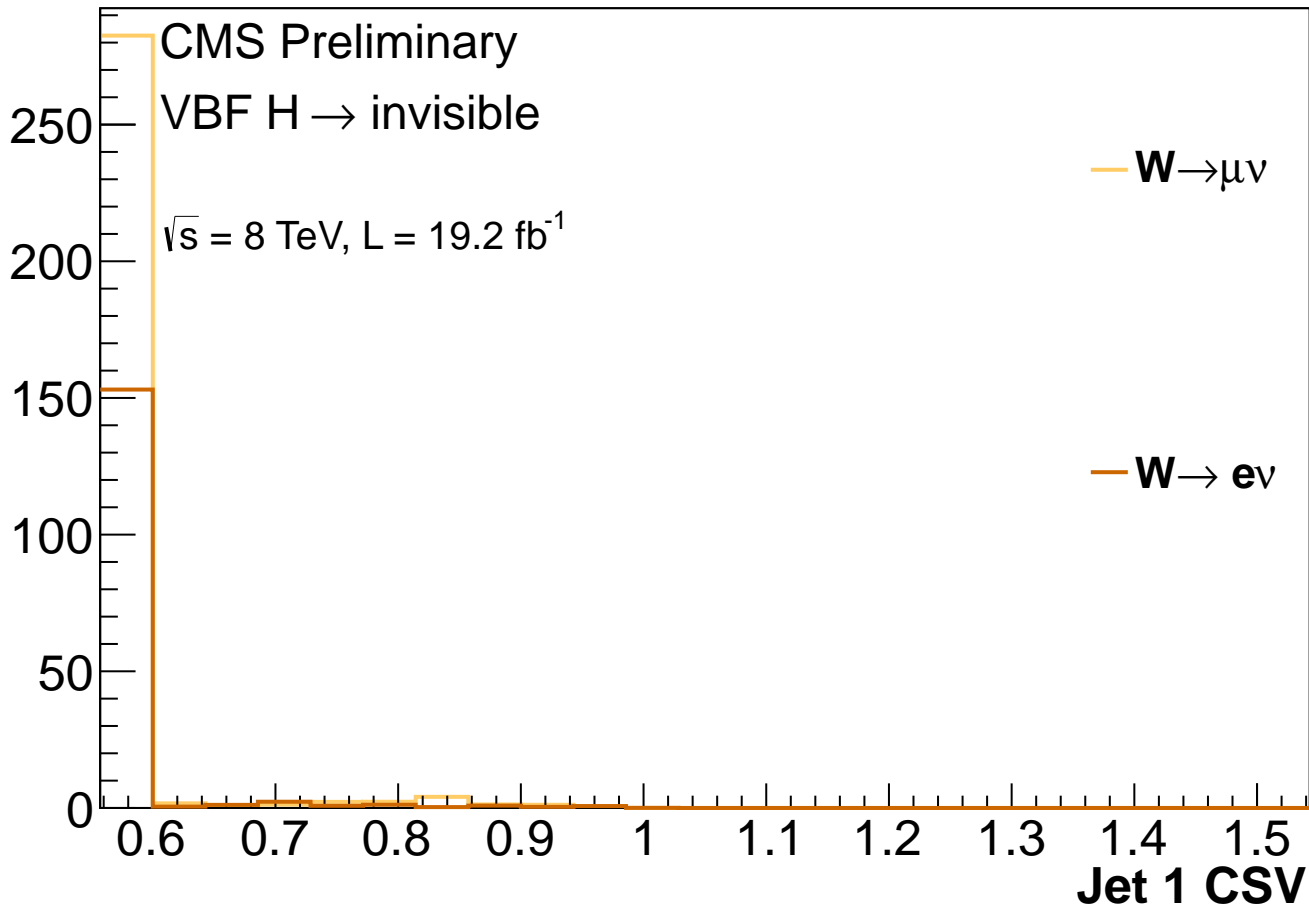
$W \rightarrow e\nu$

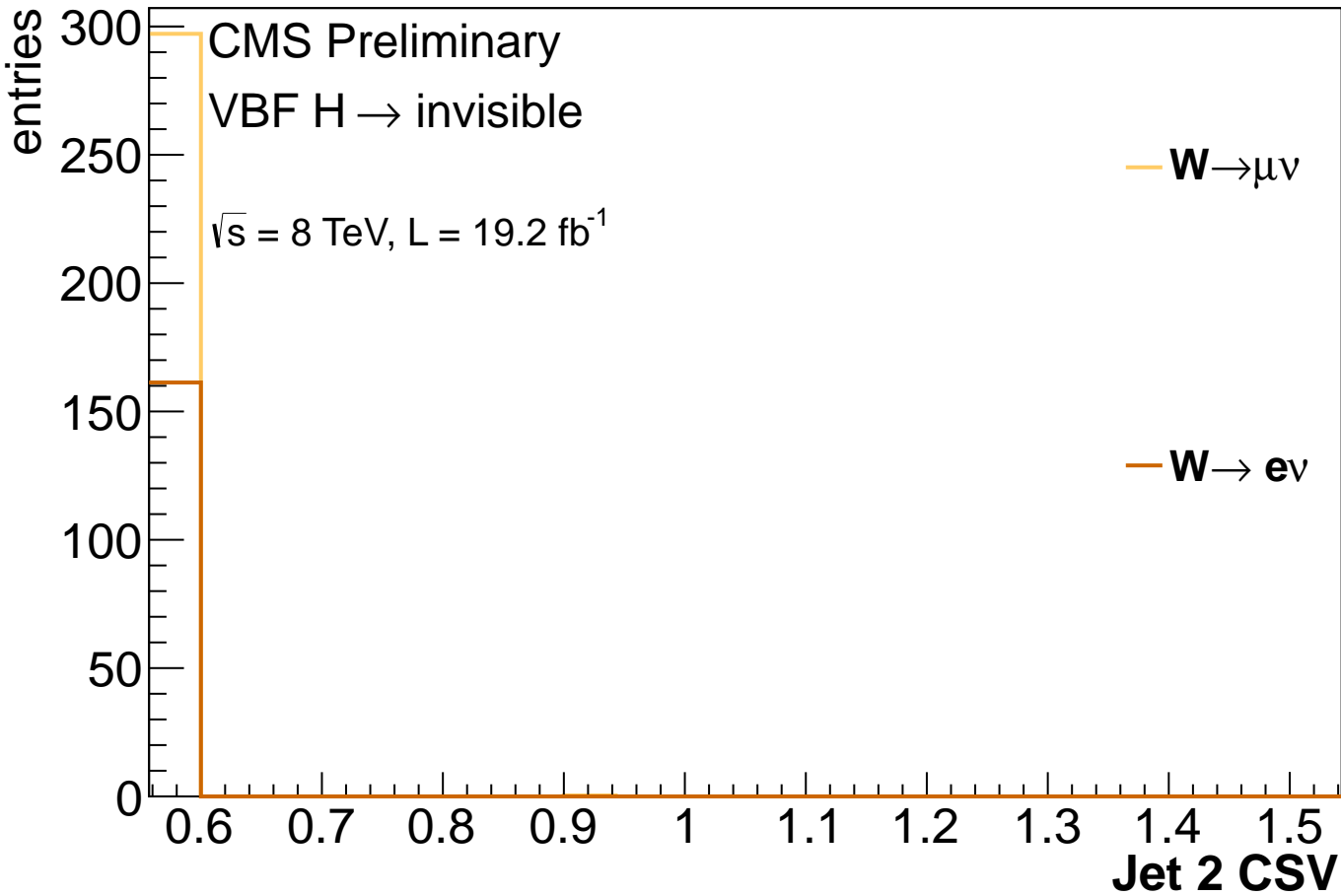




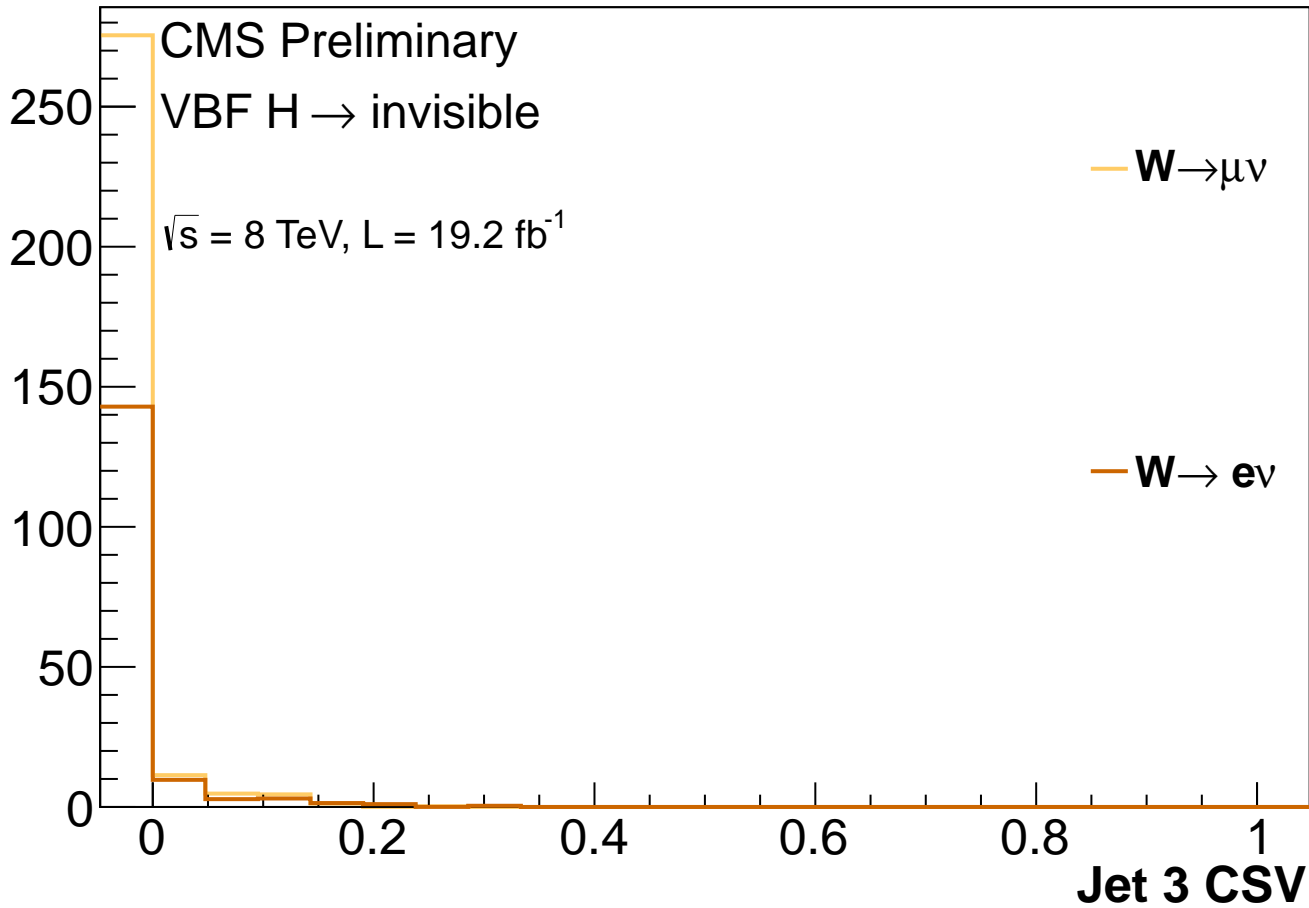


entries





entries



entries

200  
180  
160  
140  
120  
100  
80  
60  
40  
20  
0

CMS Preliminary

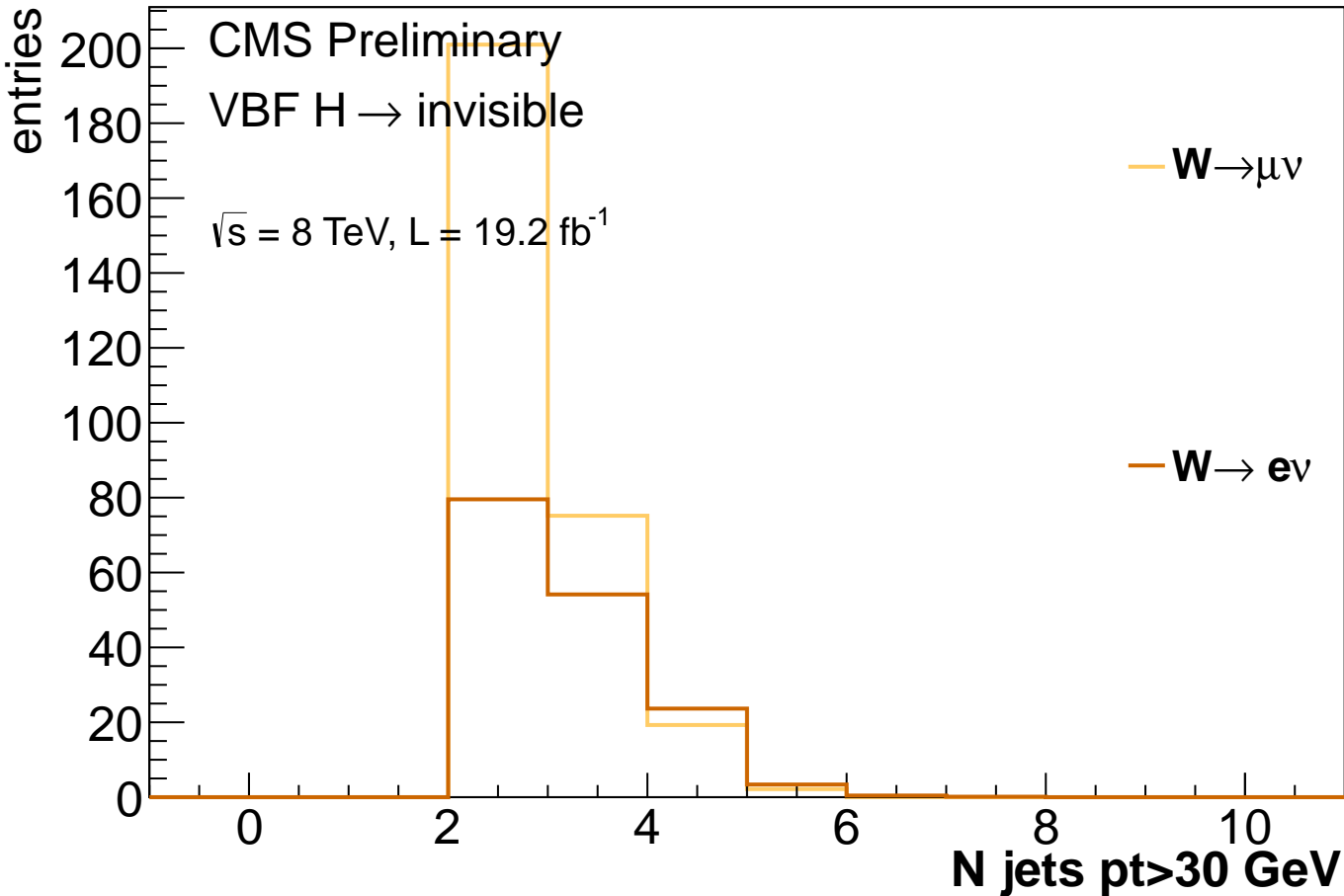
VBF H  $\rightarrow$  invisible

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$

N jets pt>30 GeV



entries

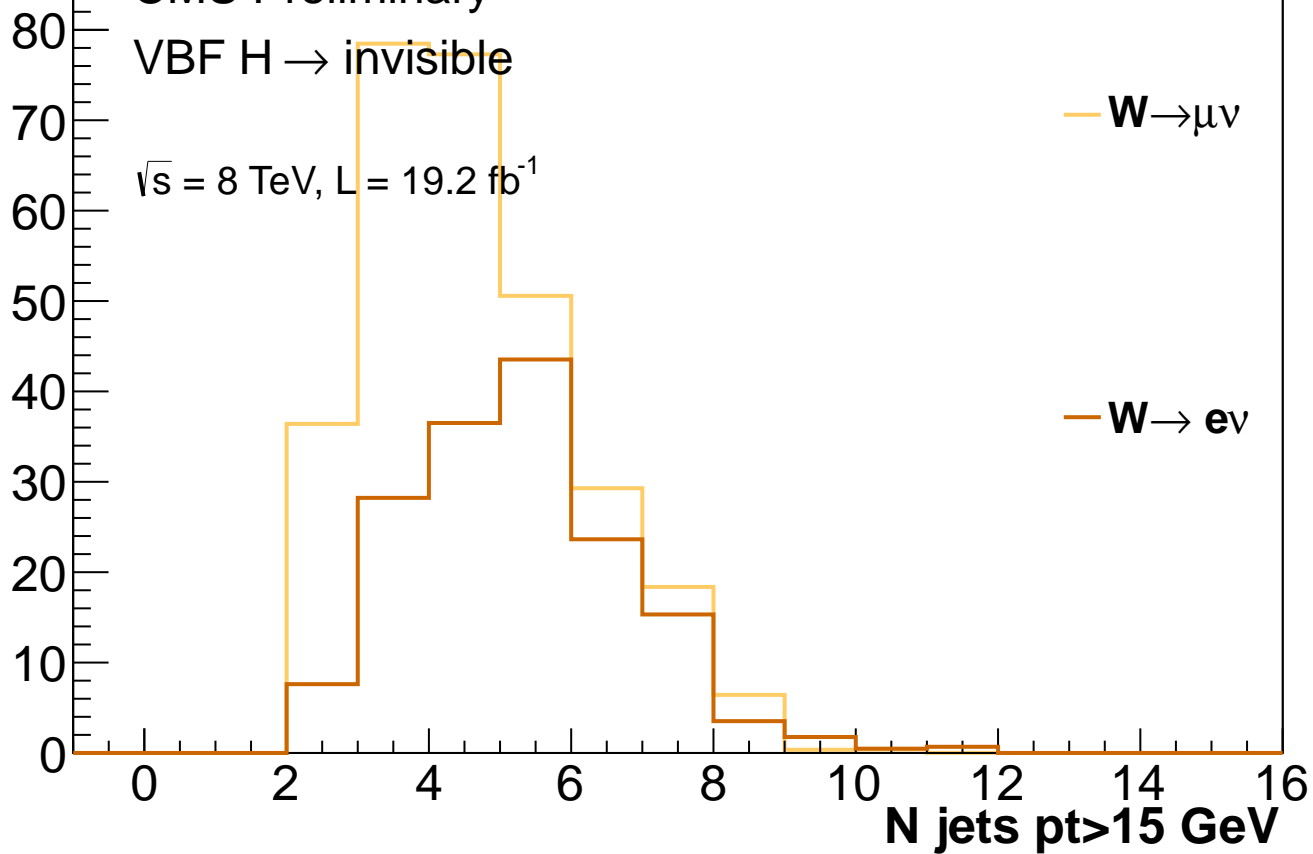
CMS Preliminary

VBF H  $\rightarrow$  invisible

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$





entries

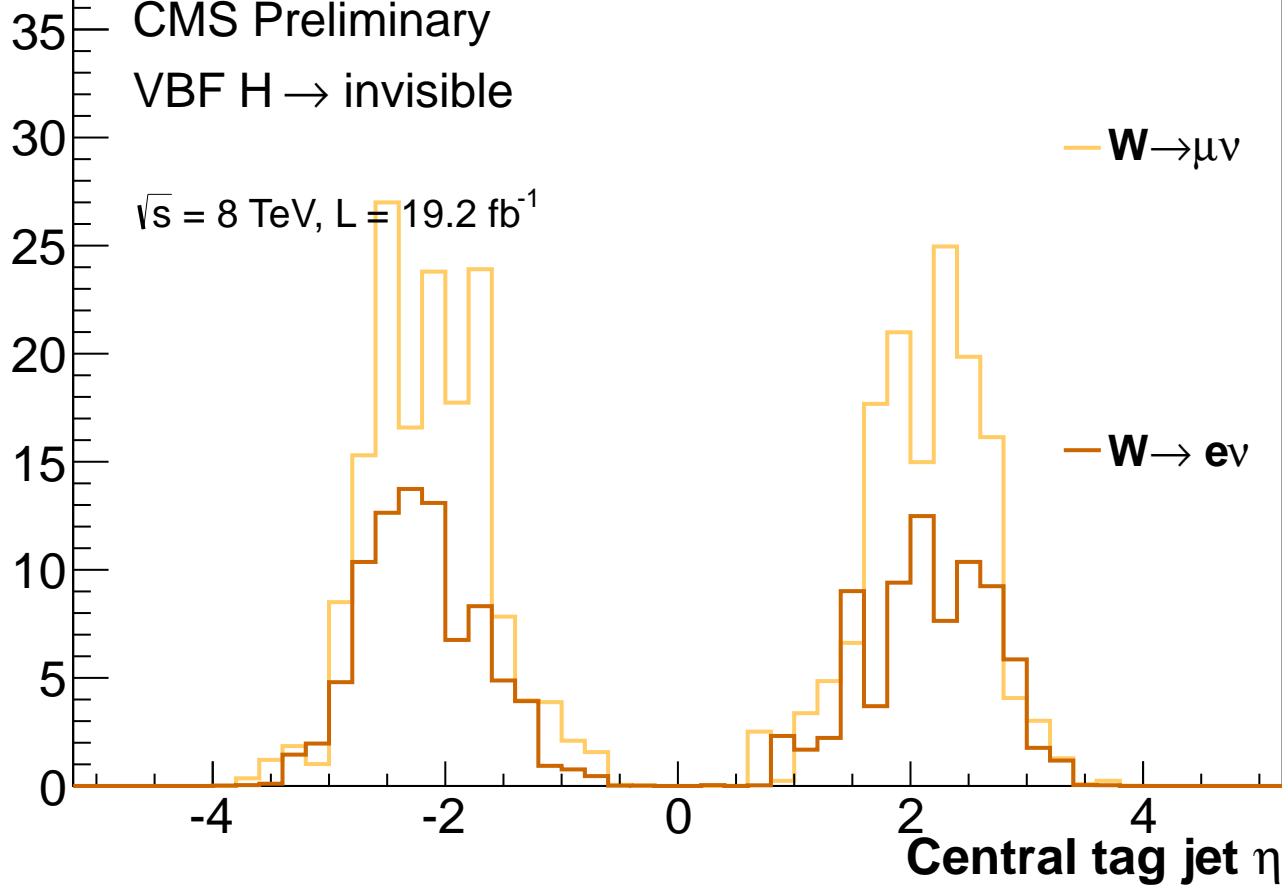
CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

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

$W \rightarrow \mu\nu$

$W \rightarrow e\nu$



entries

CMS Preliminary

VBF  $H \rightarrow \text{invisible}$

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

