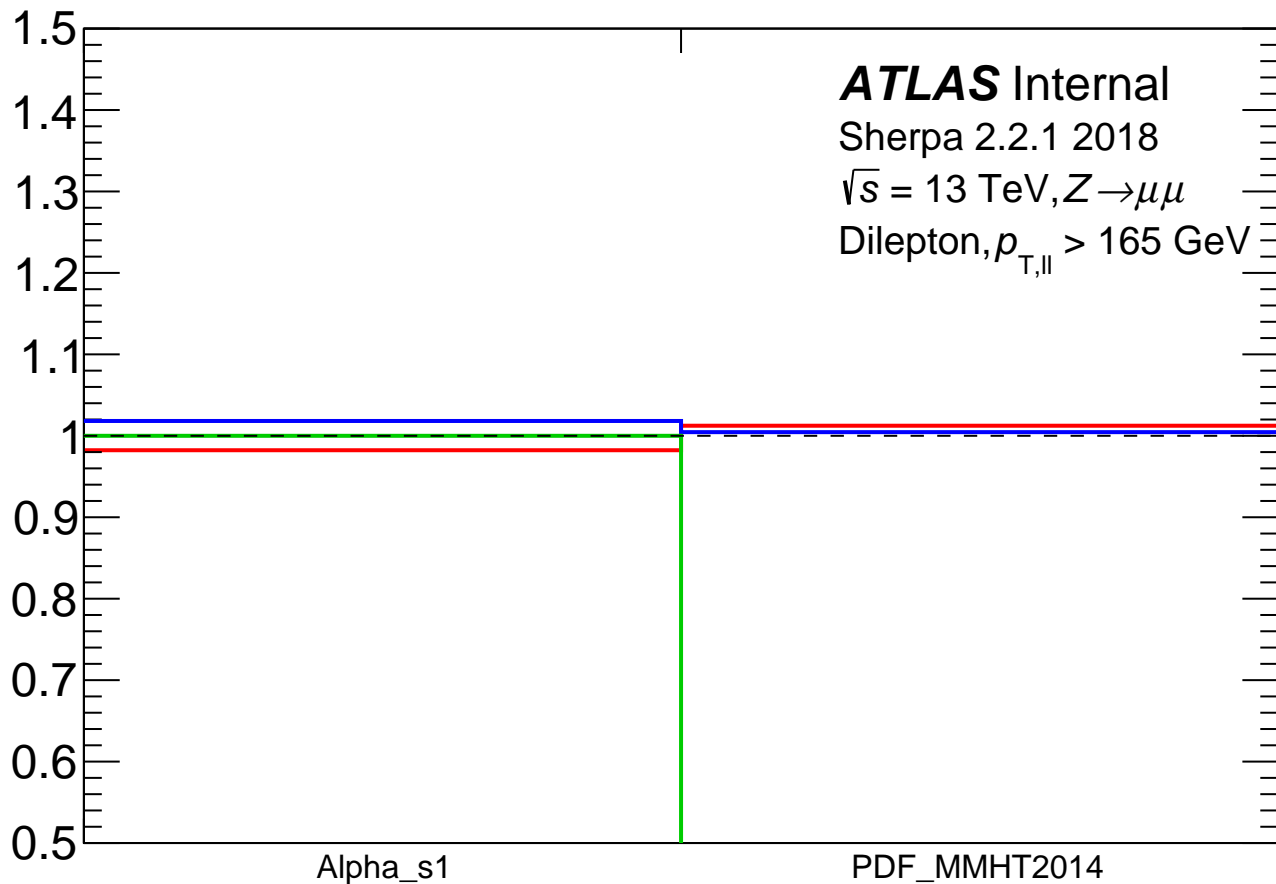


Relative Events



Fractional systematic impact

1.15

**ATLAS Internal**  
Sherpa 2.2.1 2018  
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$   
Dilepton,  $p_{T,\ell\ell} > 165 \text{ GeV}$

$\alpha_s^{Up}$   
 $\alpha_s^{Down}$   
PDF\_MMHT2014  
PDF\_CT14

1.1

1.05

1

0.95

0.9

200

400

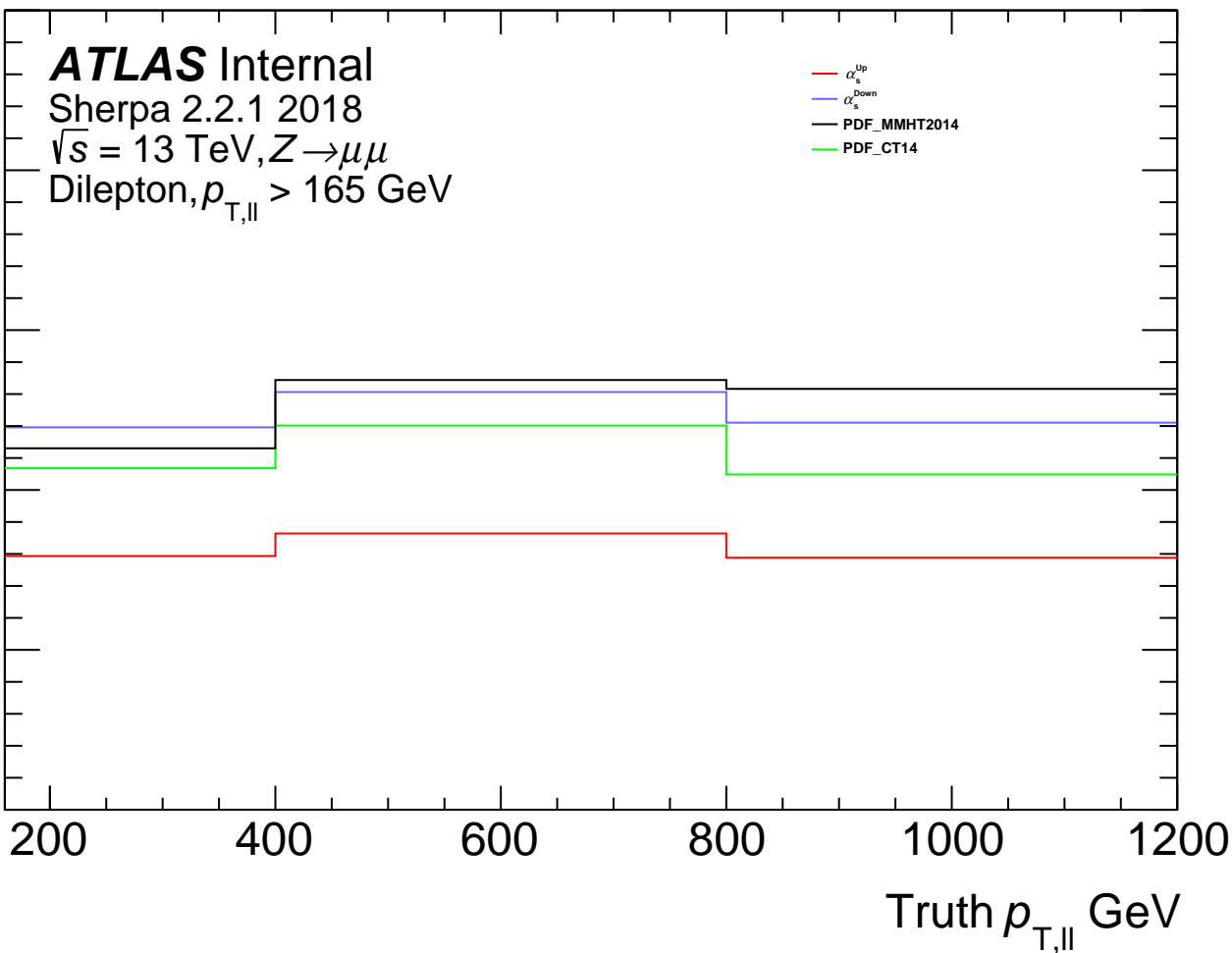
600

800

1000

1200

Truth  $p_{T,\ell\ell}$  GeV



Fractional systematic impact

1.15

**ATLAS** Internal  
Sherpa 2.2.1 Run2  
 $\sqrt{s} = 13$  TeV,  $Z \rightarrow \mu\mu$   
Dilepton,  $p_{T,\ell} > 165$  GeV

$\alpha_s^{Up}$   
 $\alpha_s^{Down}$   
PDF\_MMHT2014  
PDF\_CT14

1.1

1.05

1

0.95

0.9

200

400

600

800

1000

1200

Truth  $p_{T,\ell}$  GeV

