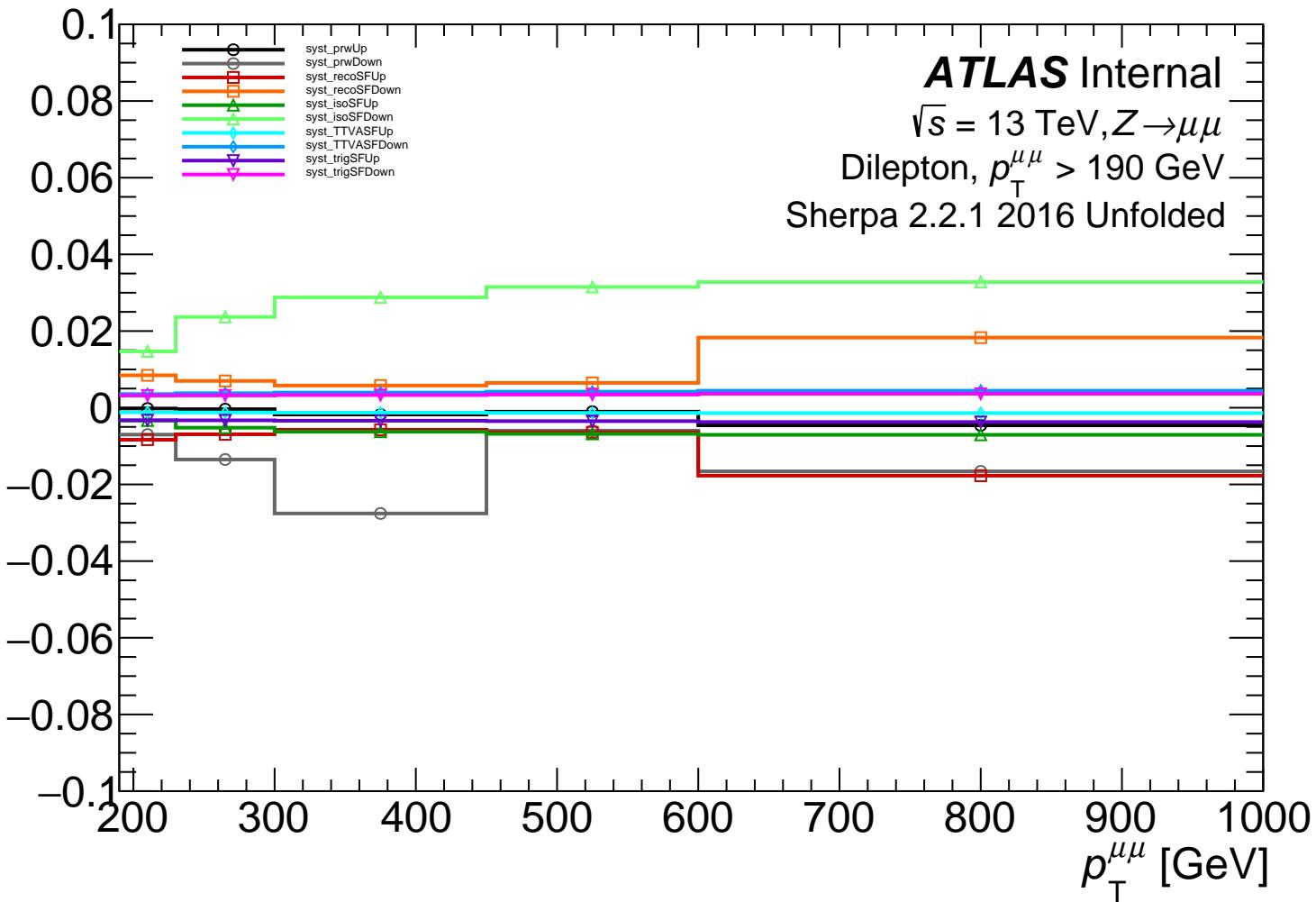


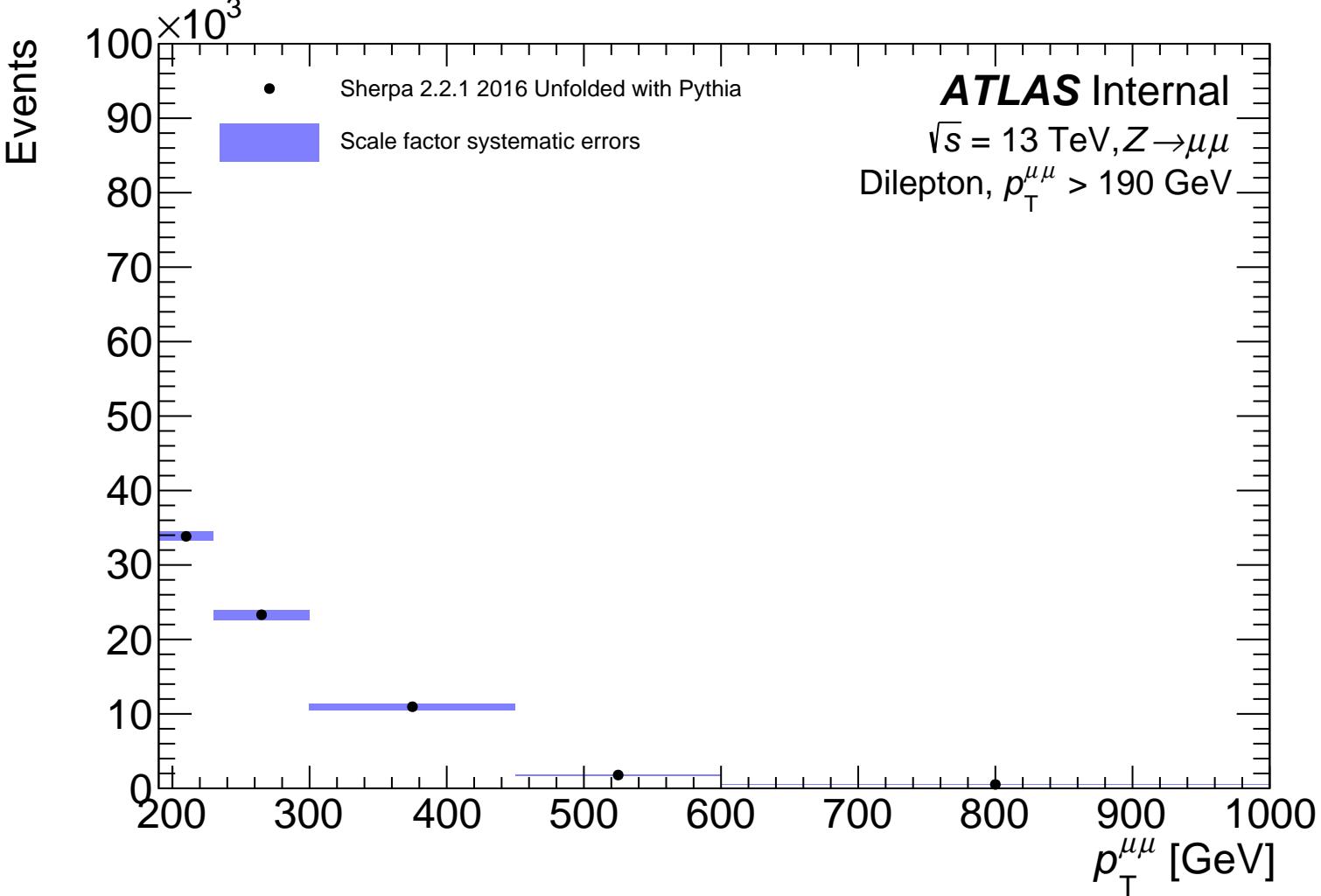
**ATLAS Internal**

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

Sherpa 2.2.1 2016 Unfolded



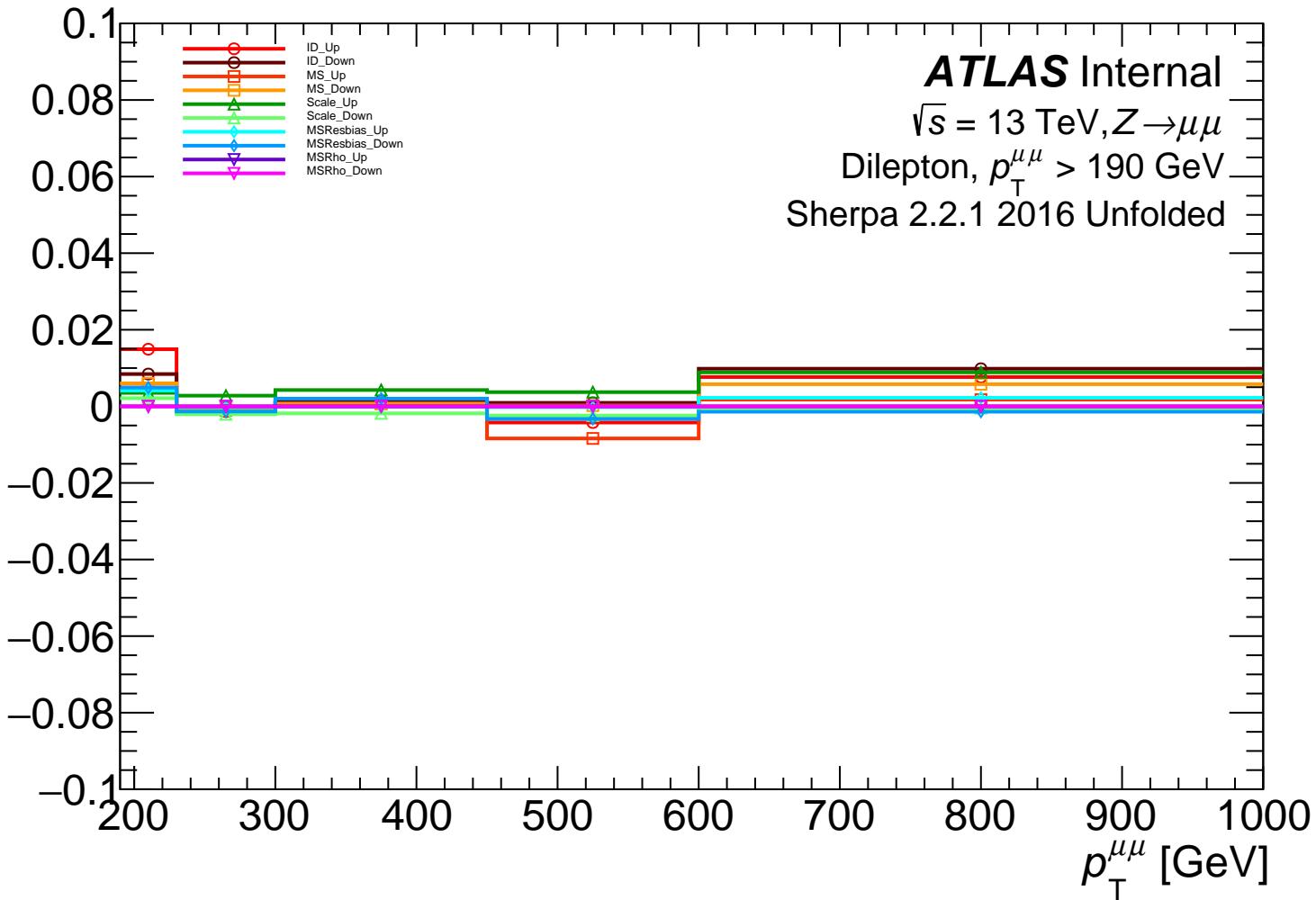


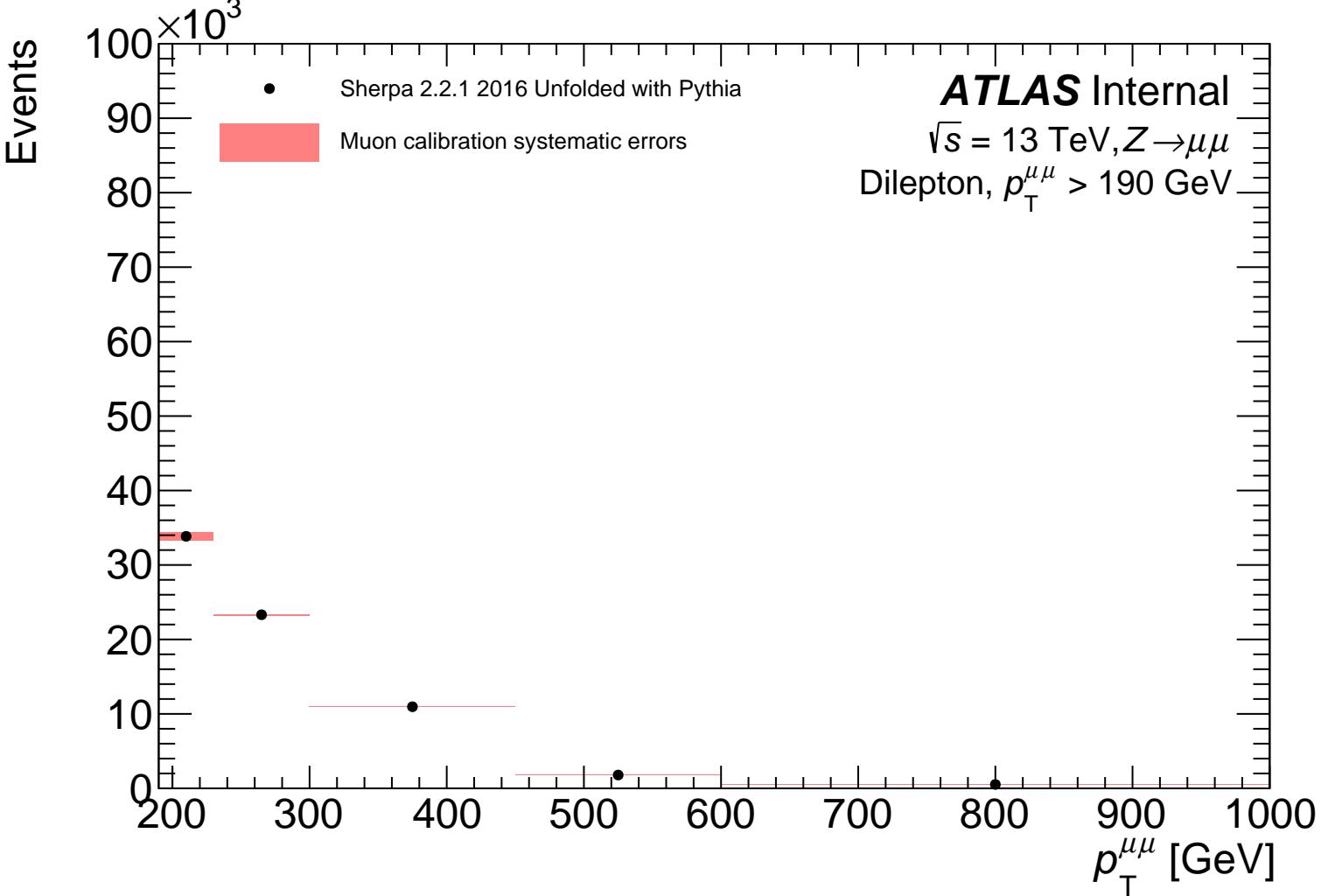
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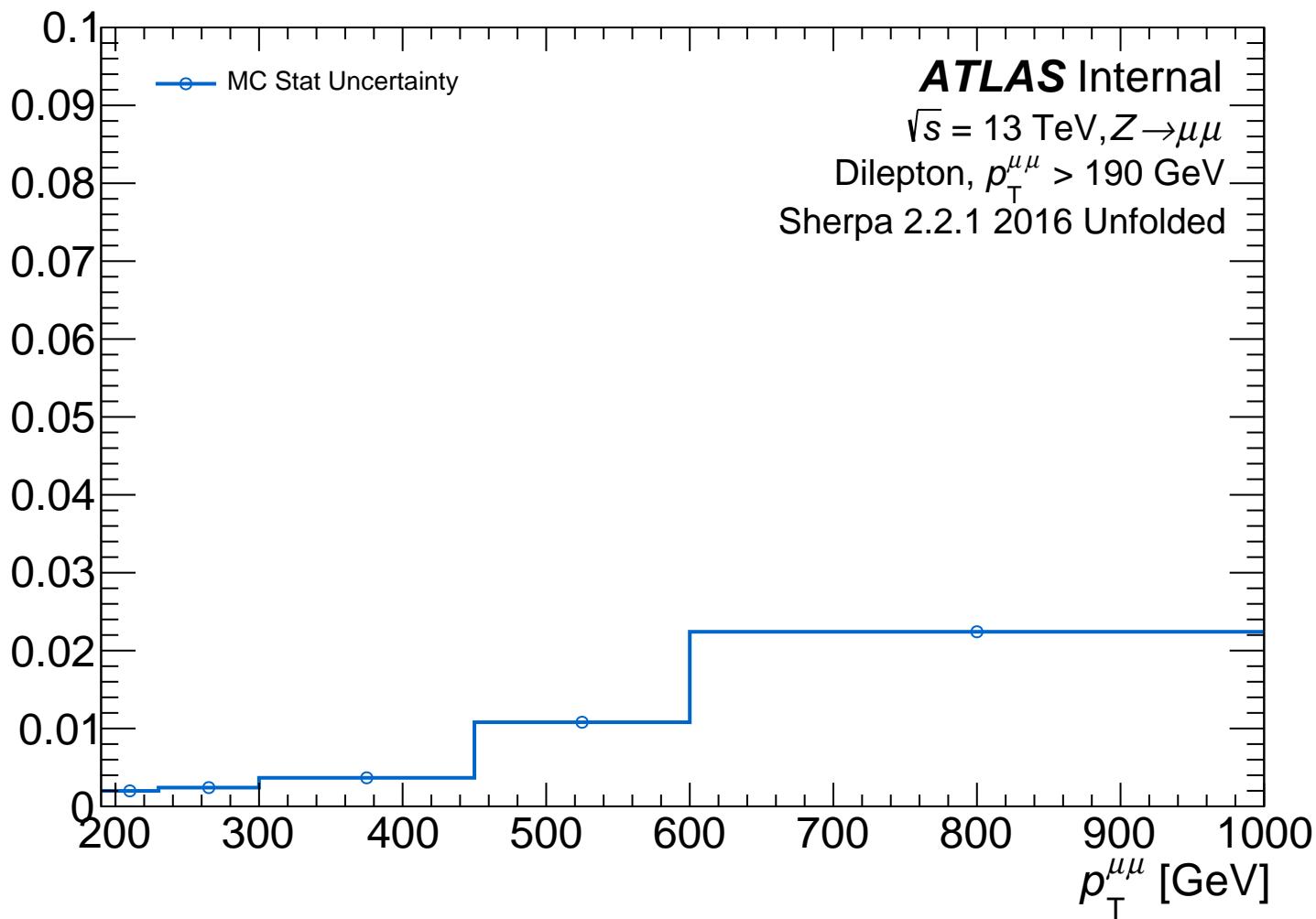
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

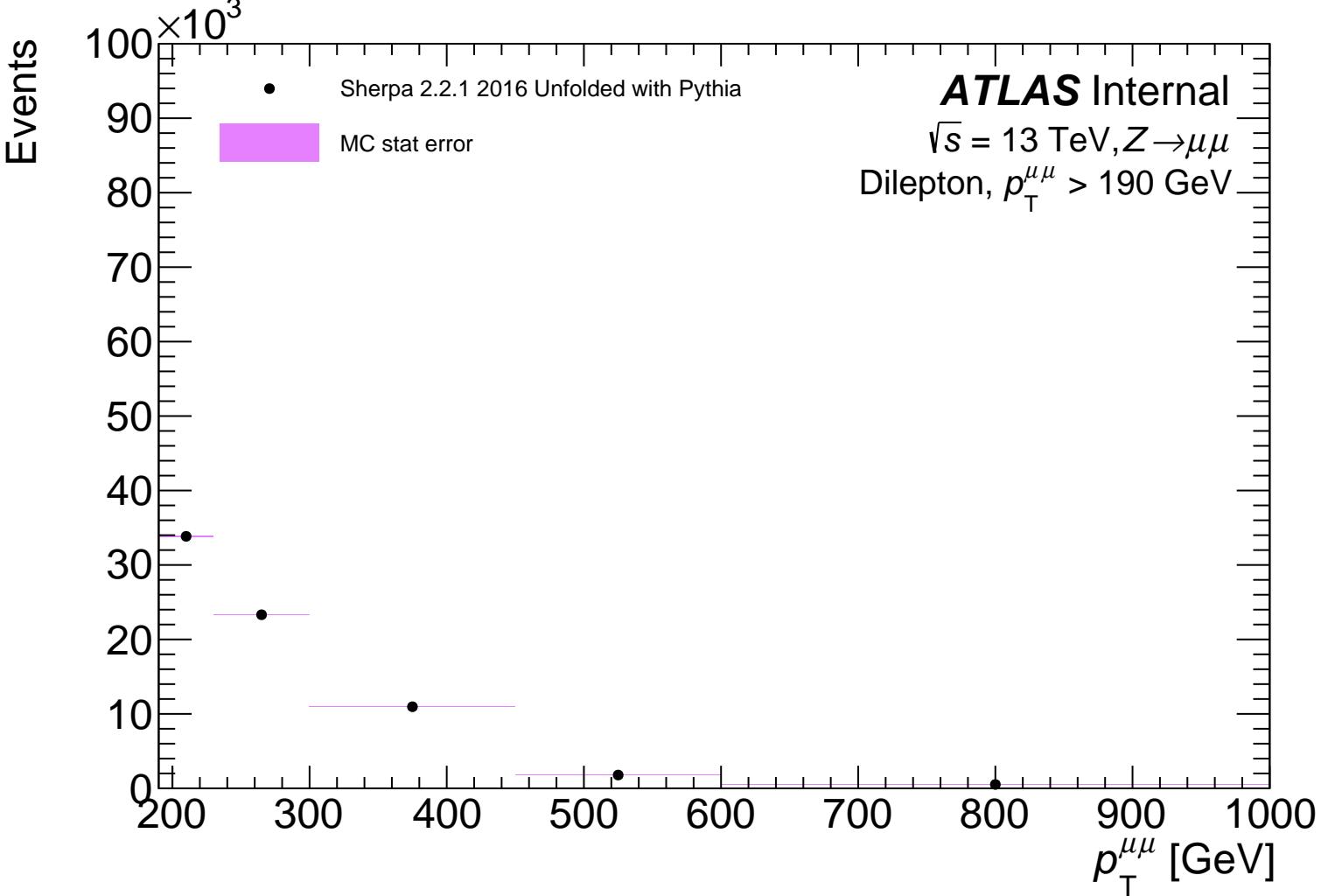
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

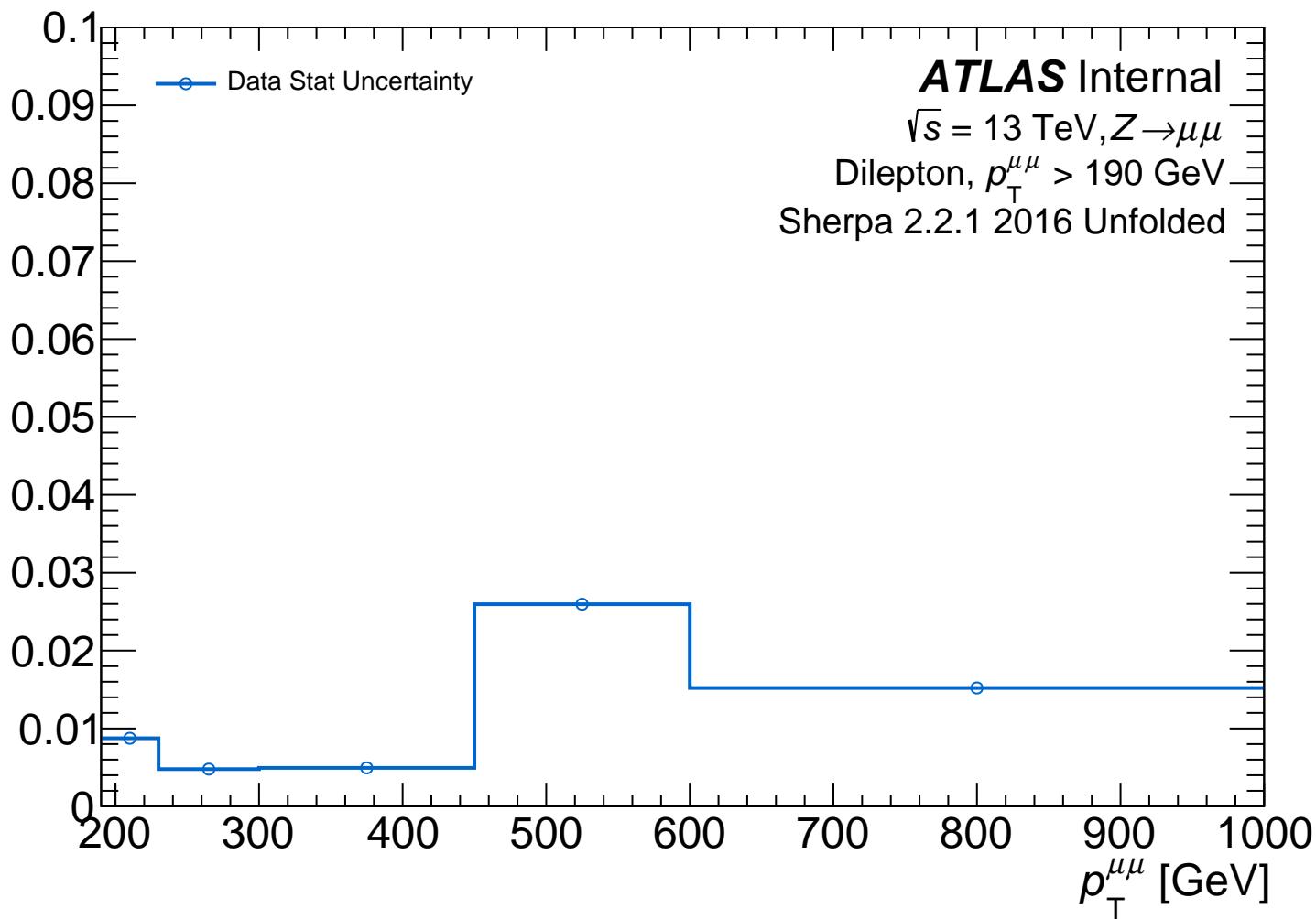
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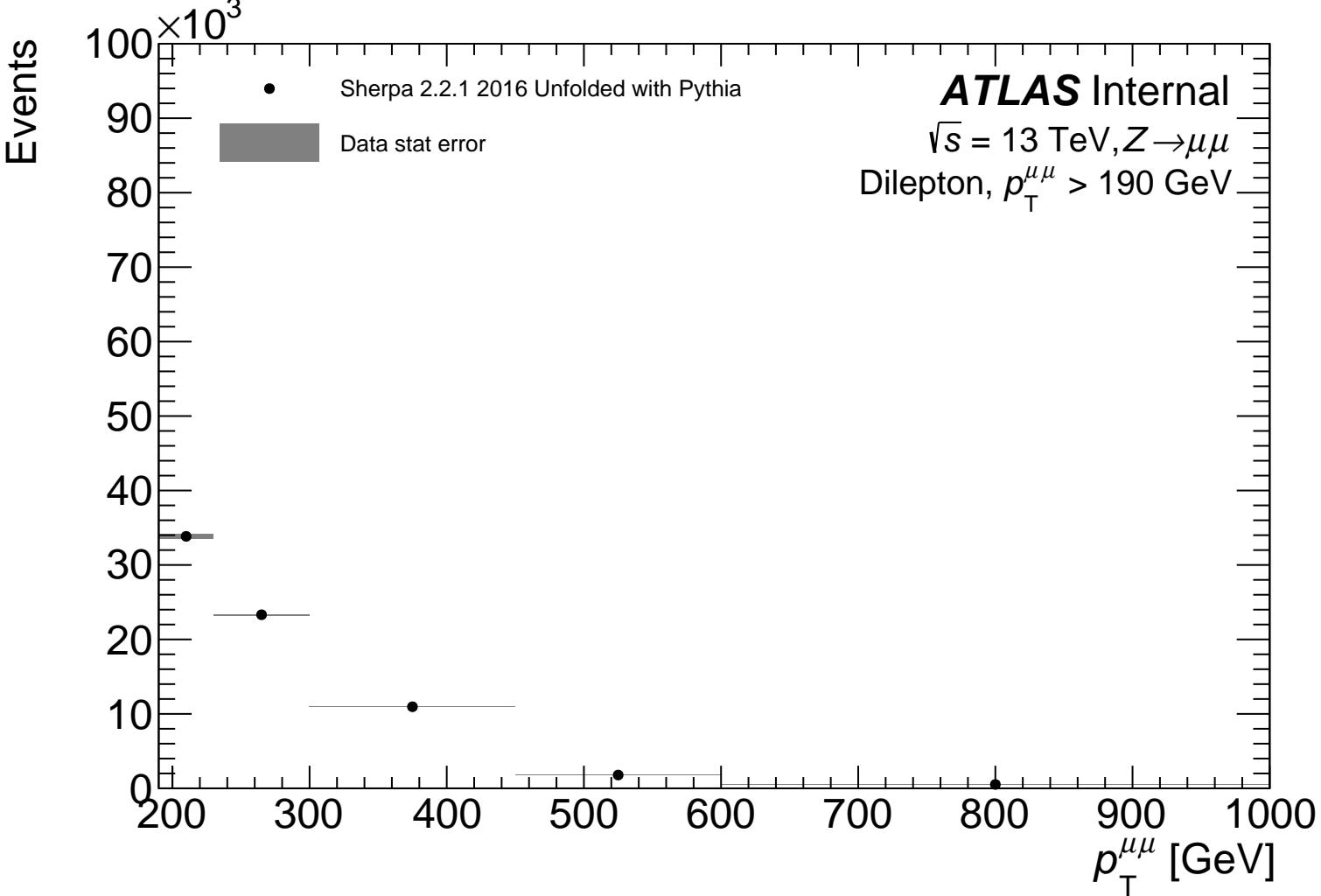


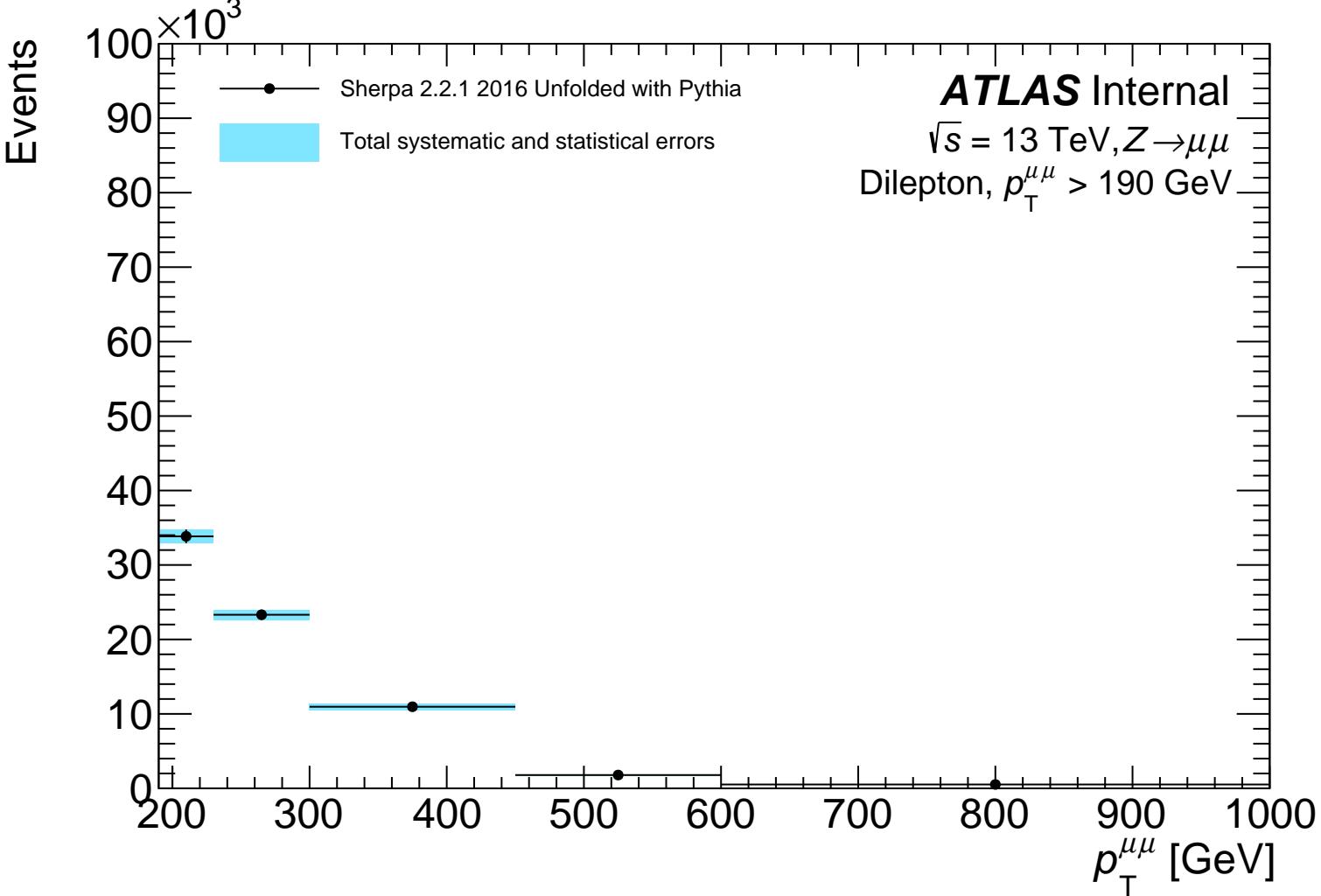


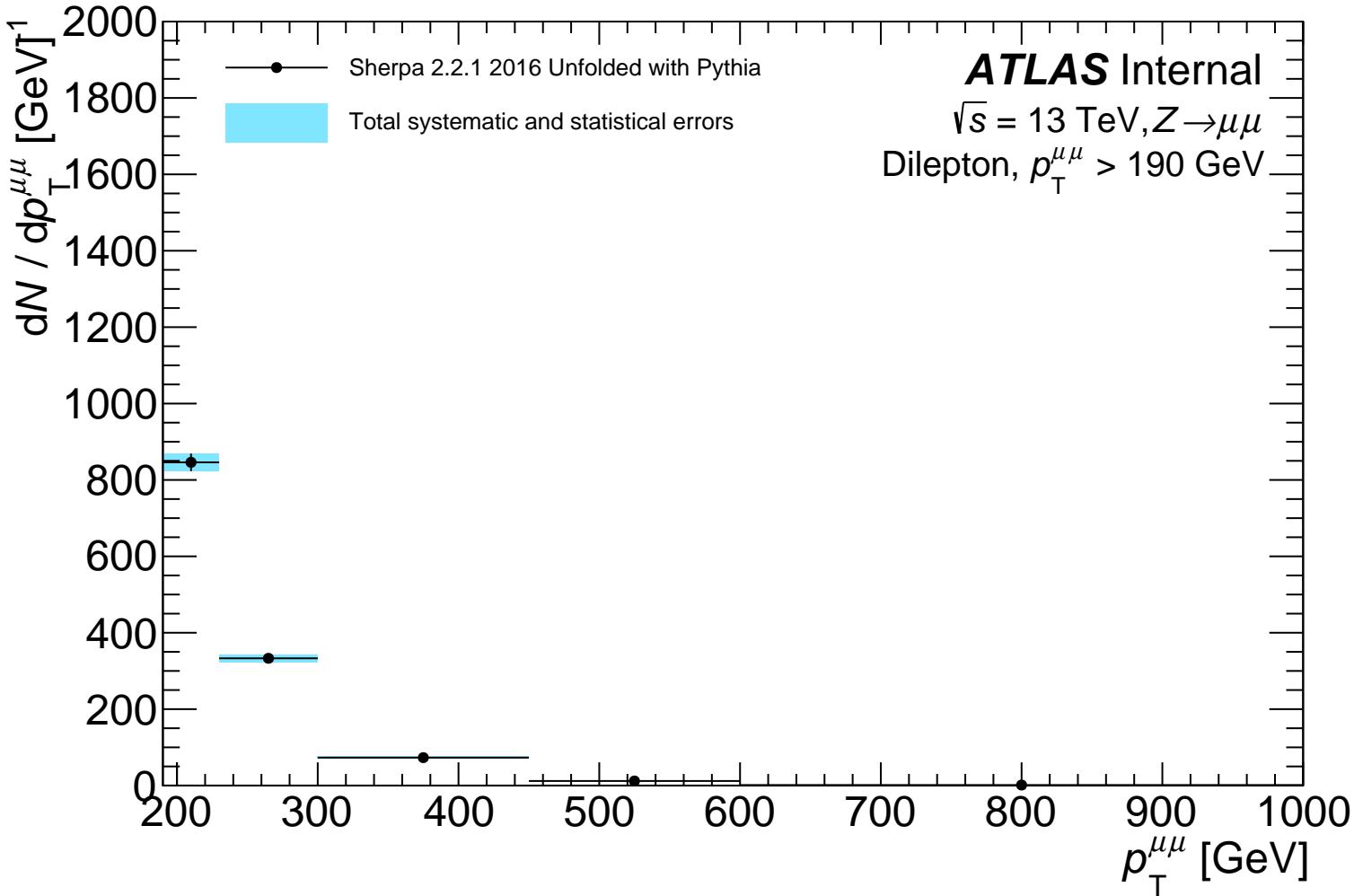


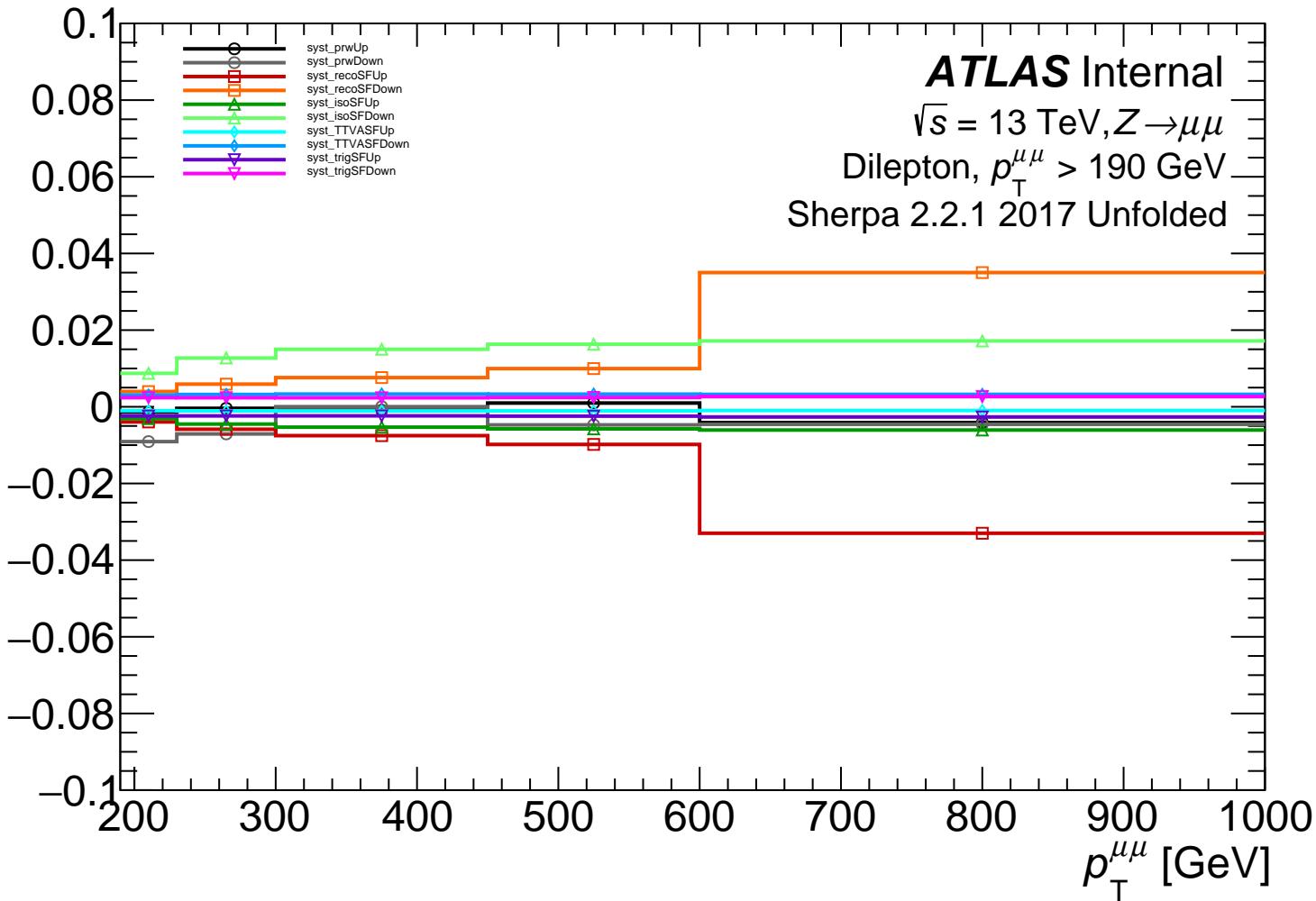


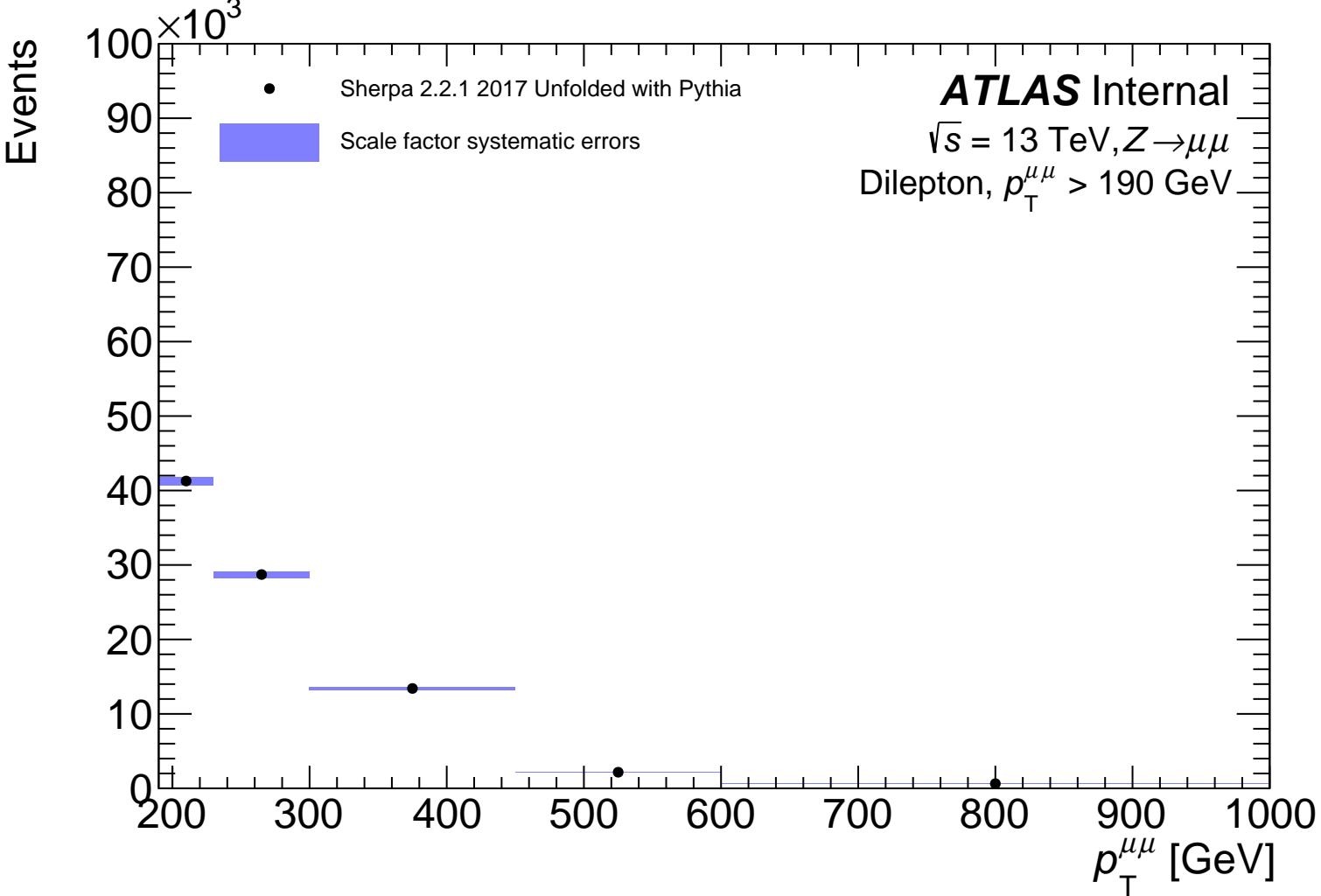










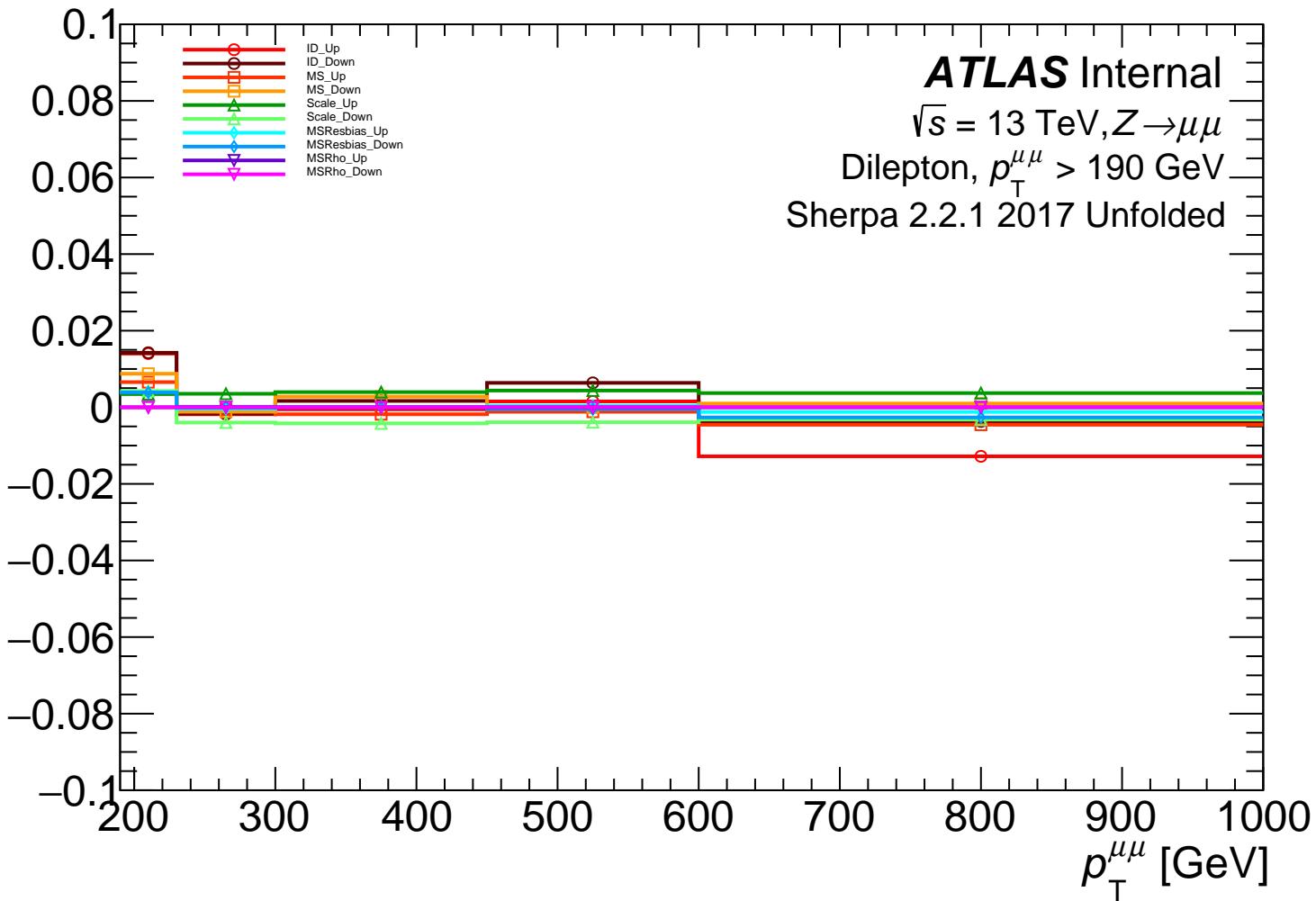


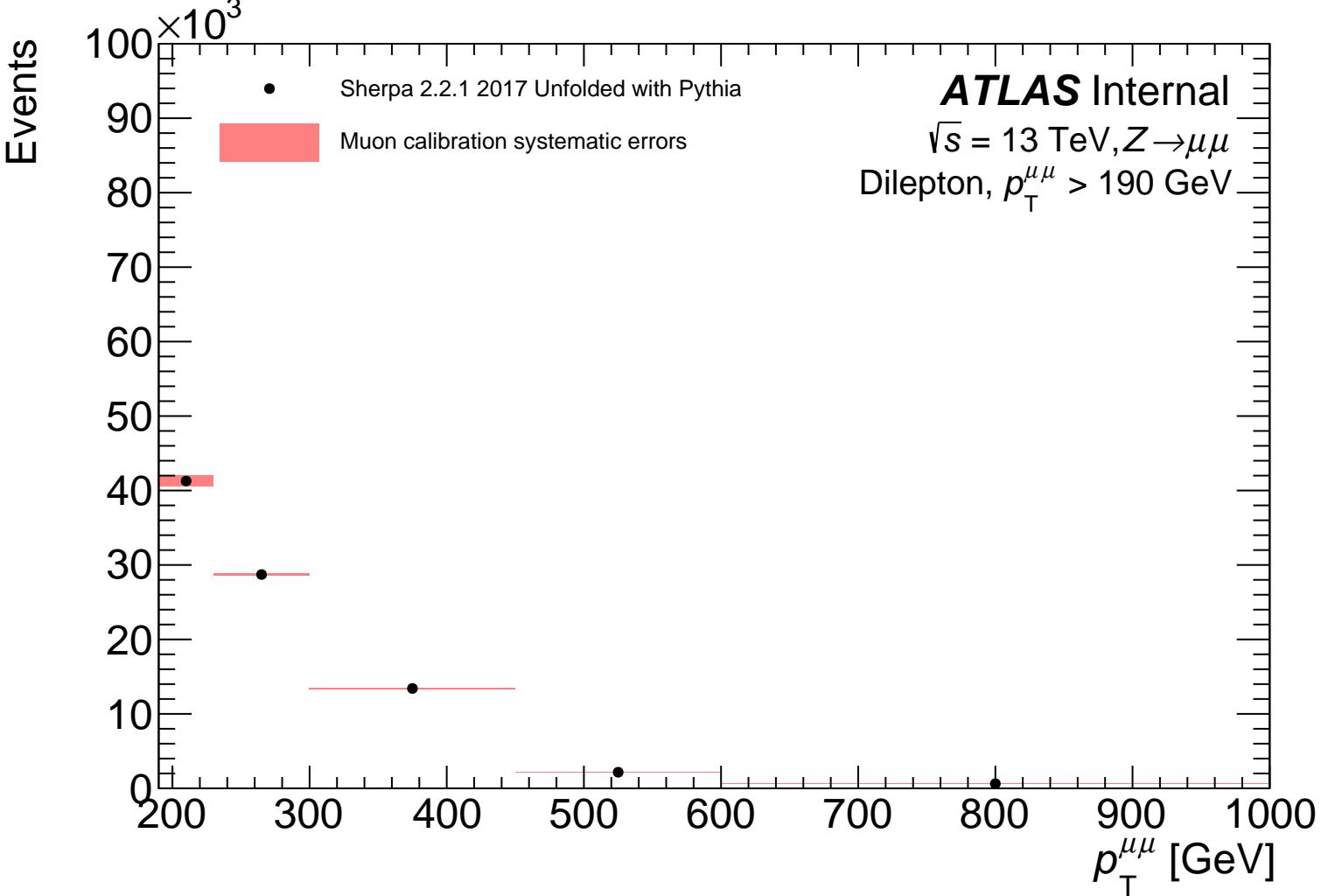
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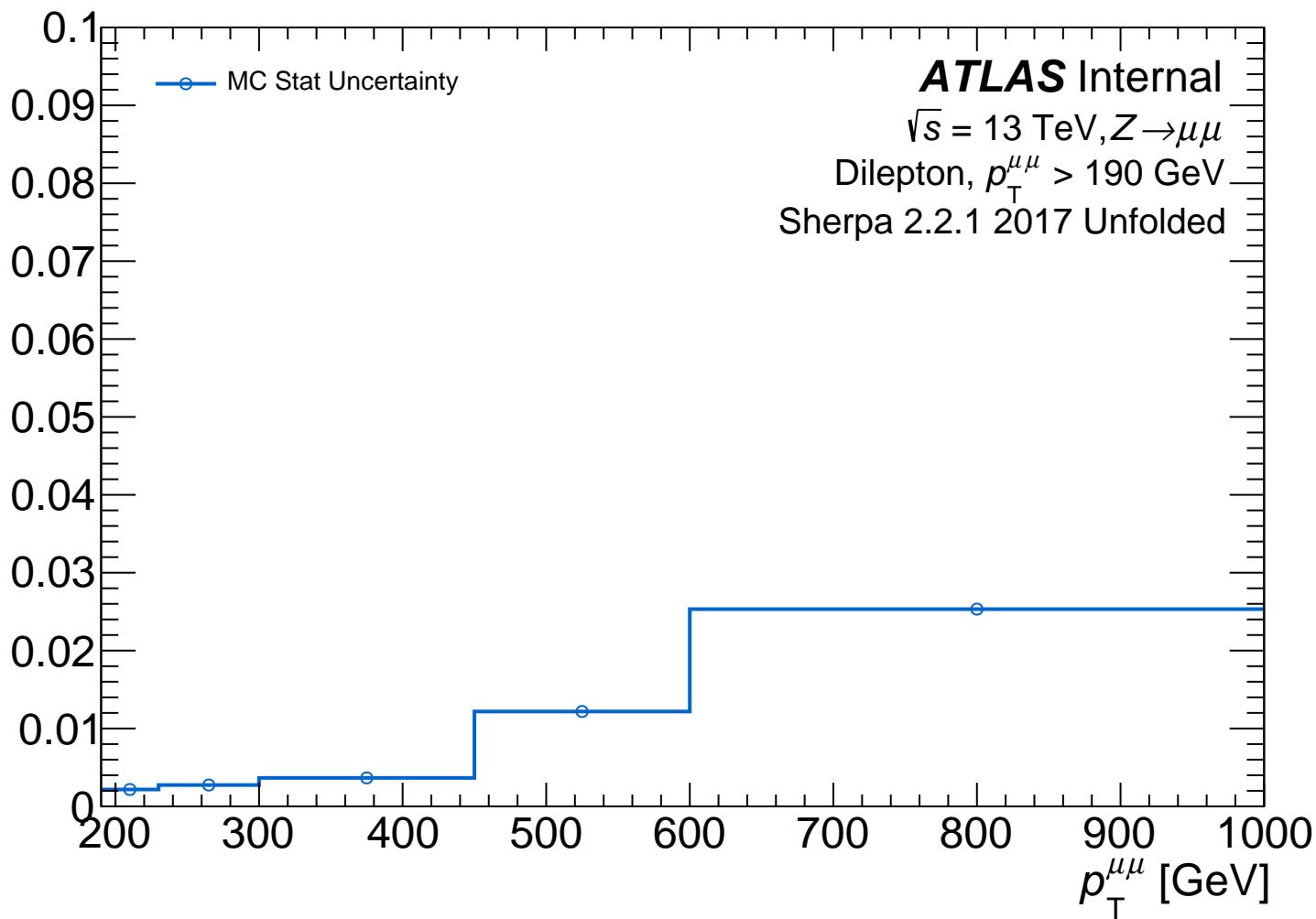
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

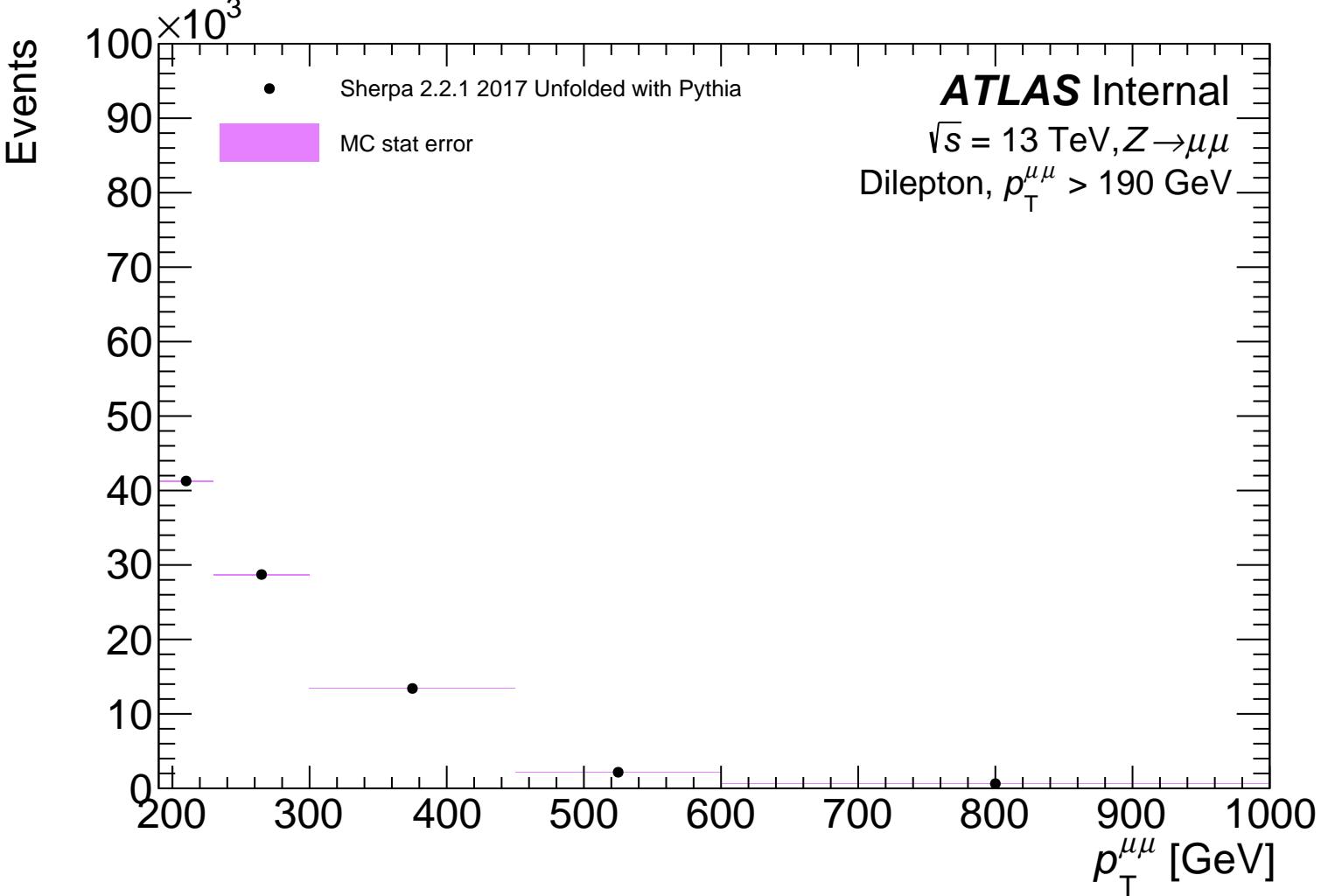
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

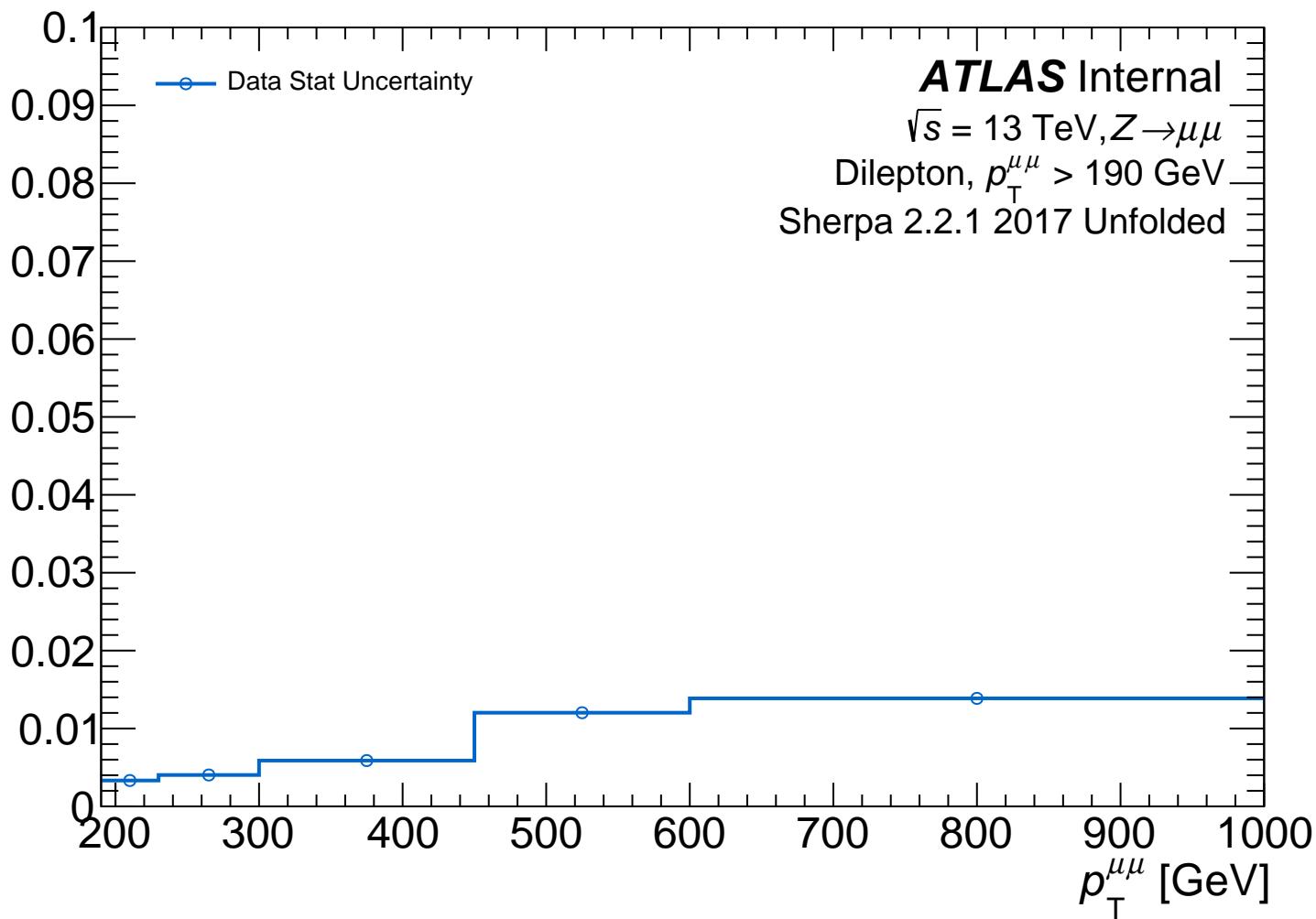
Sherpa 2.2.1 2017 Unfolded

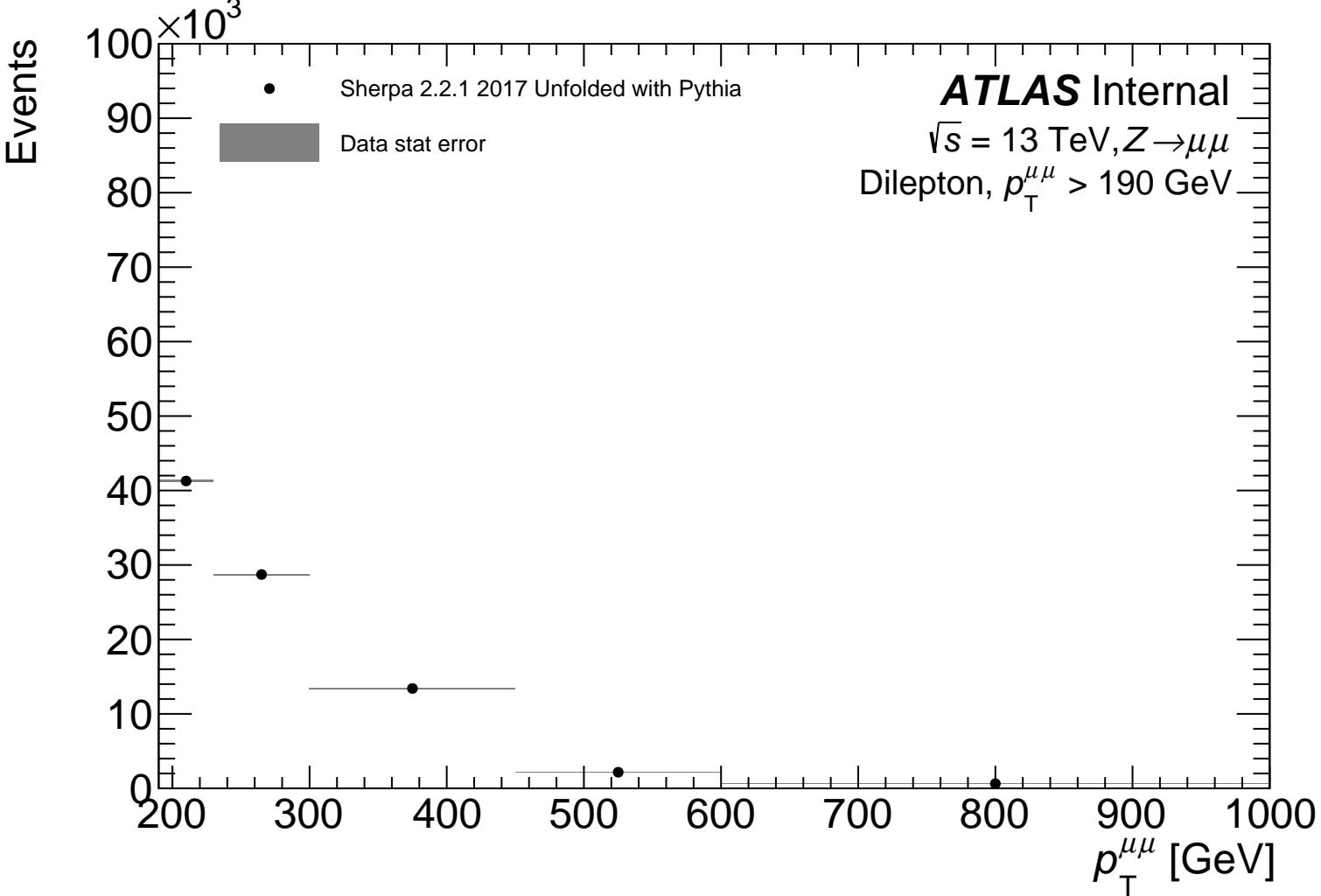


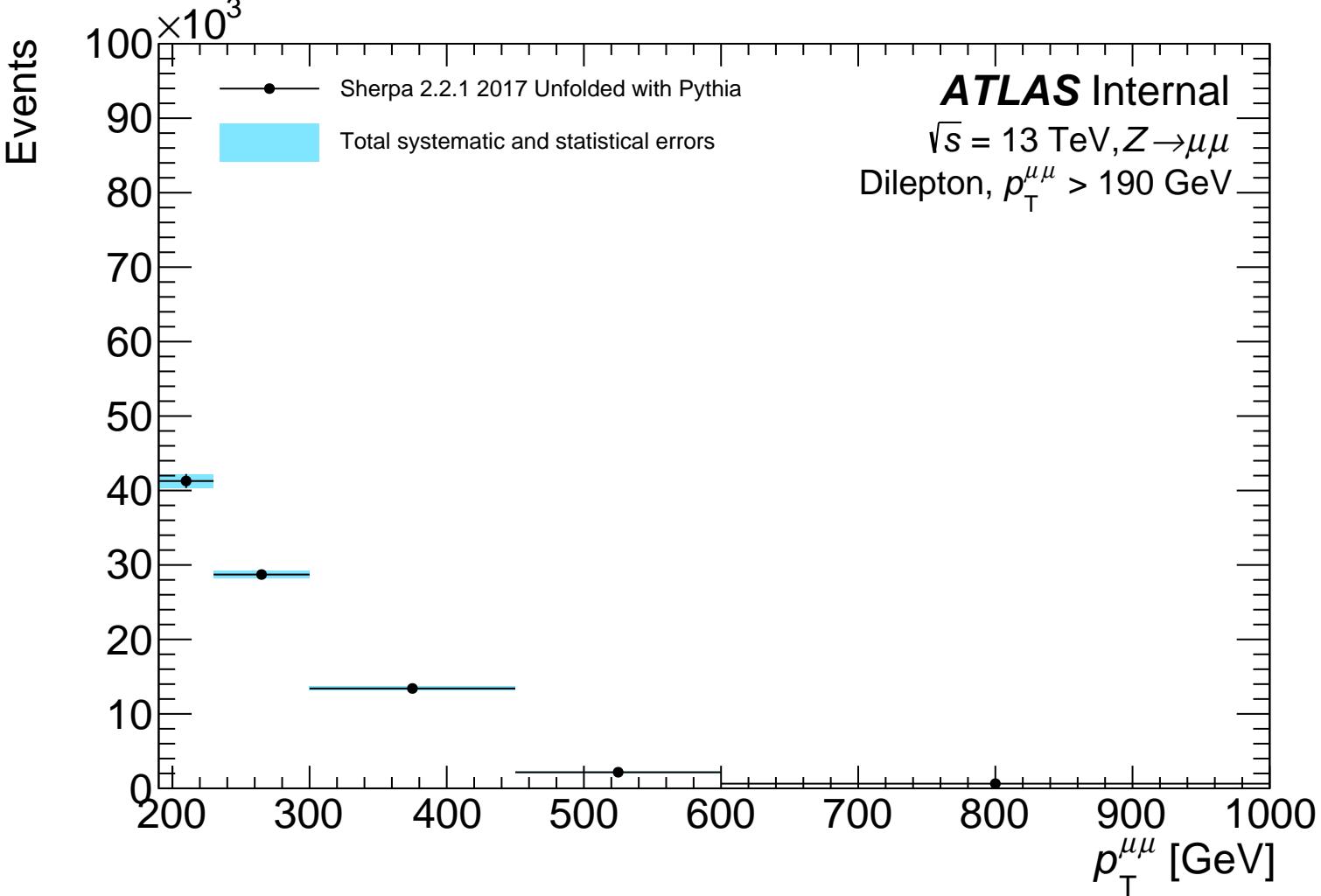


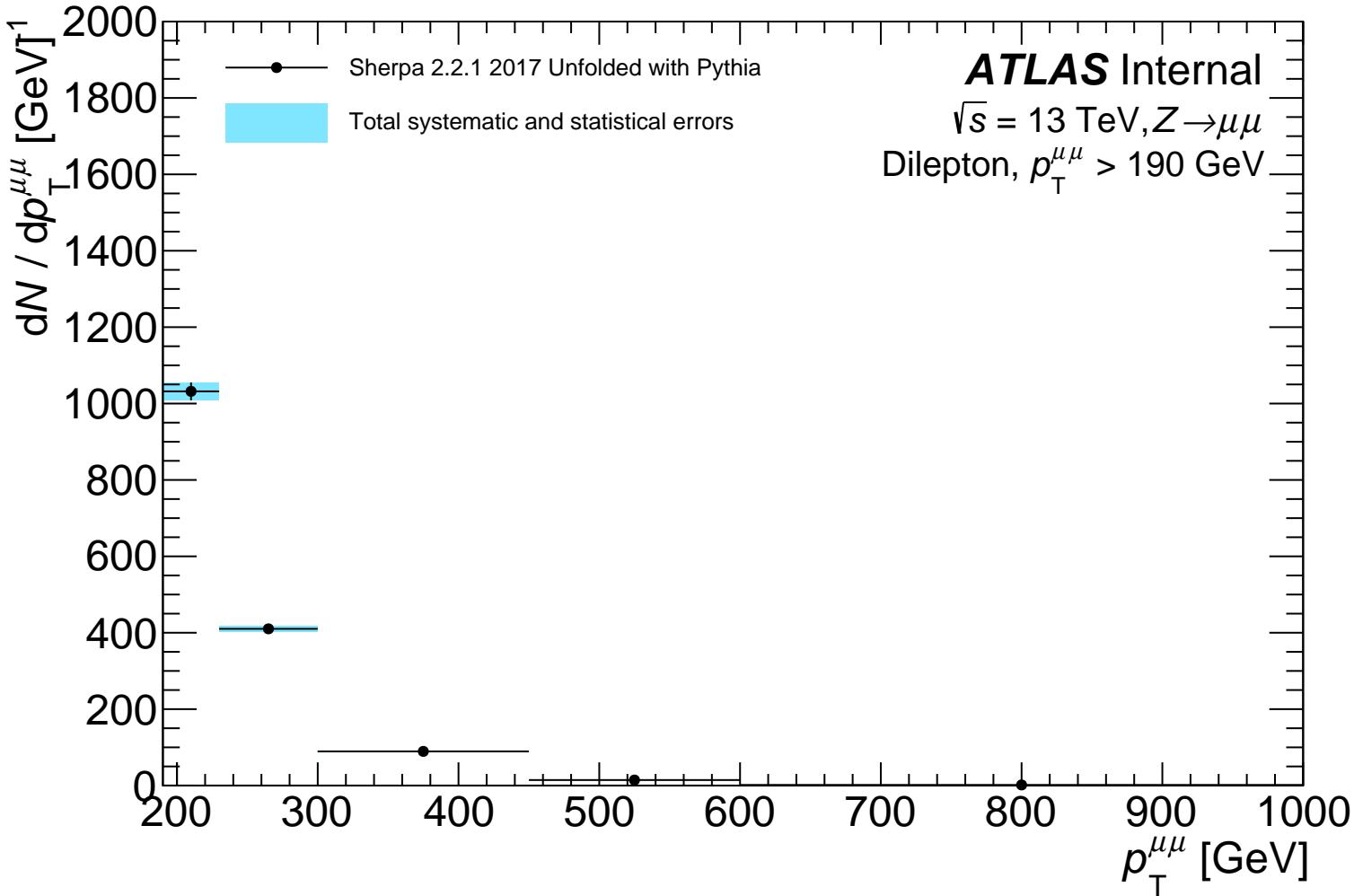










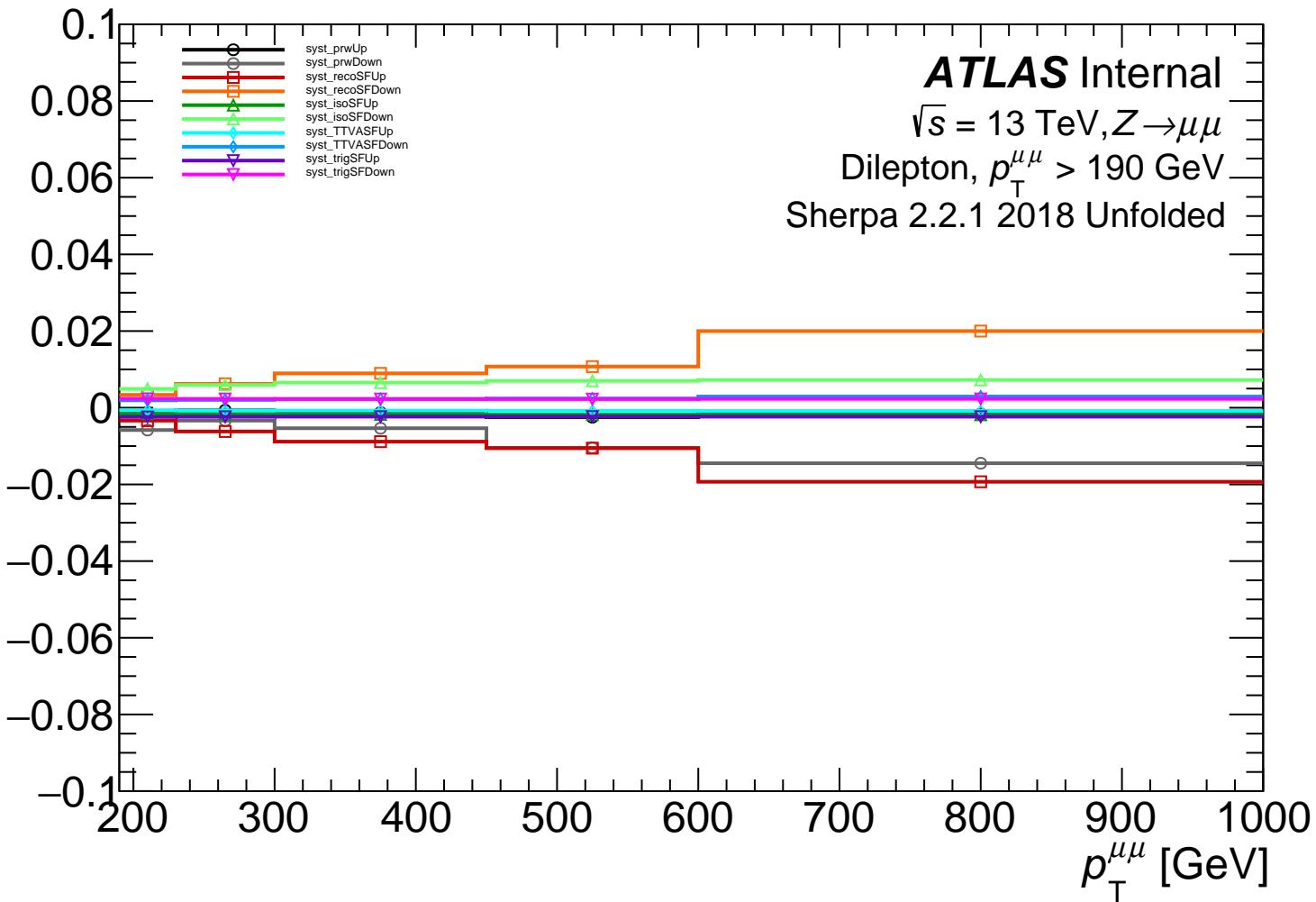


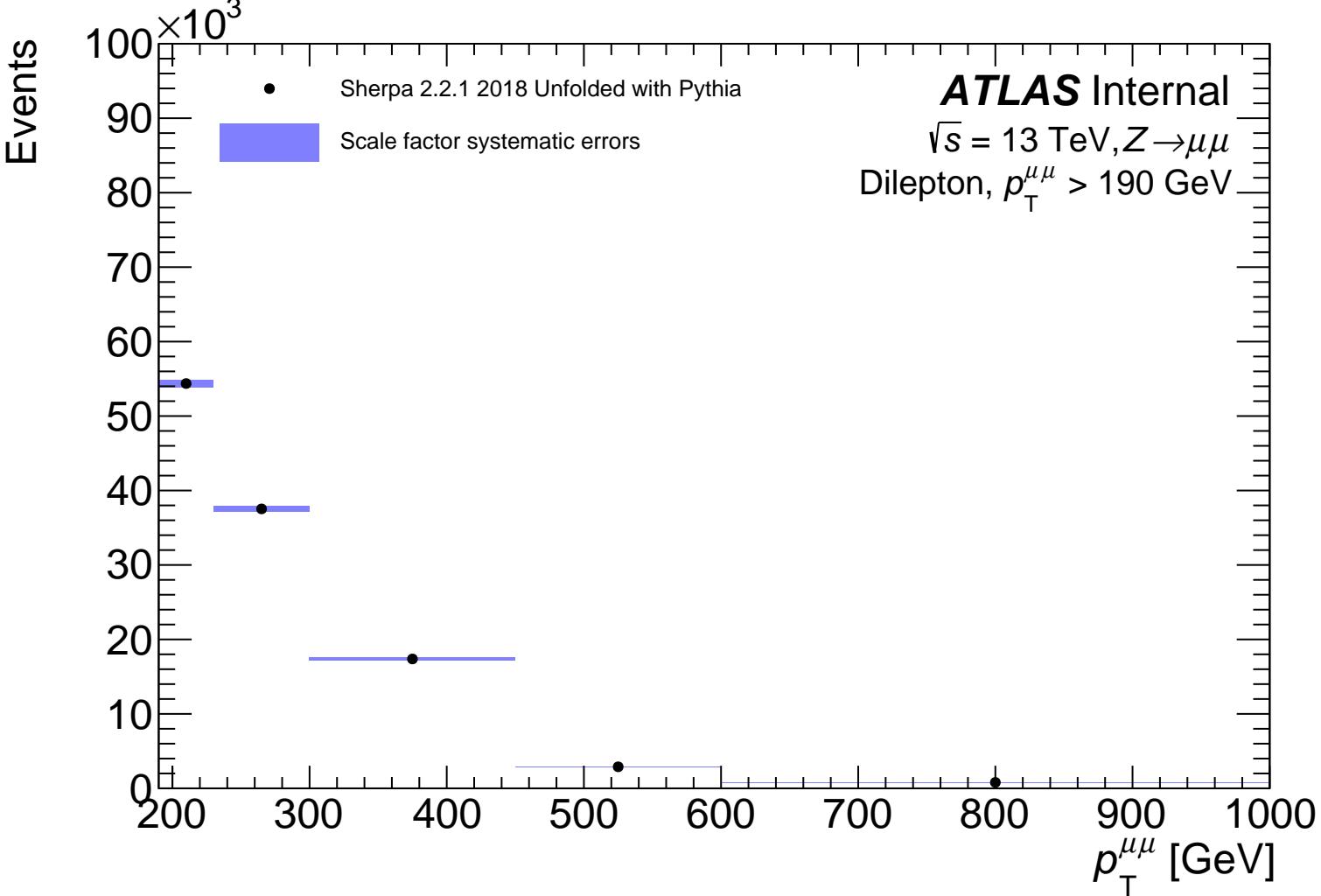
**ATLAS Internal**

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

Sherpa 2.2.1 2018 Unfolded



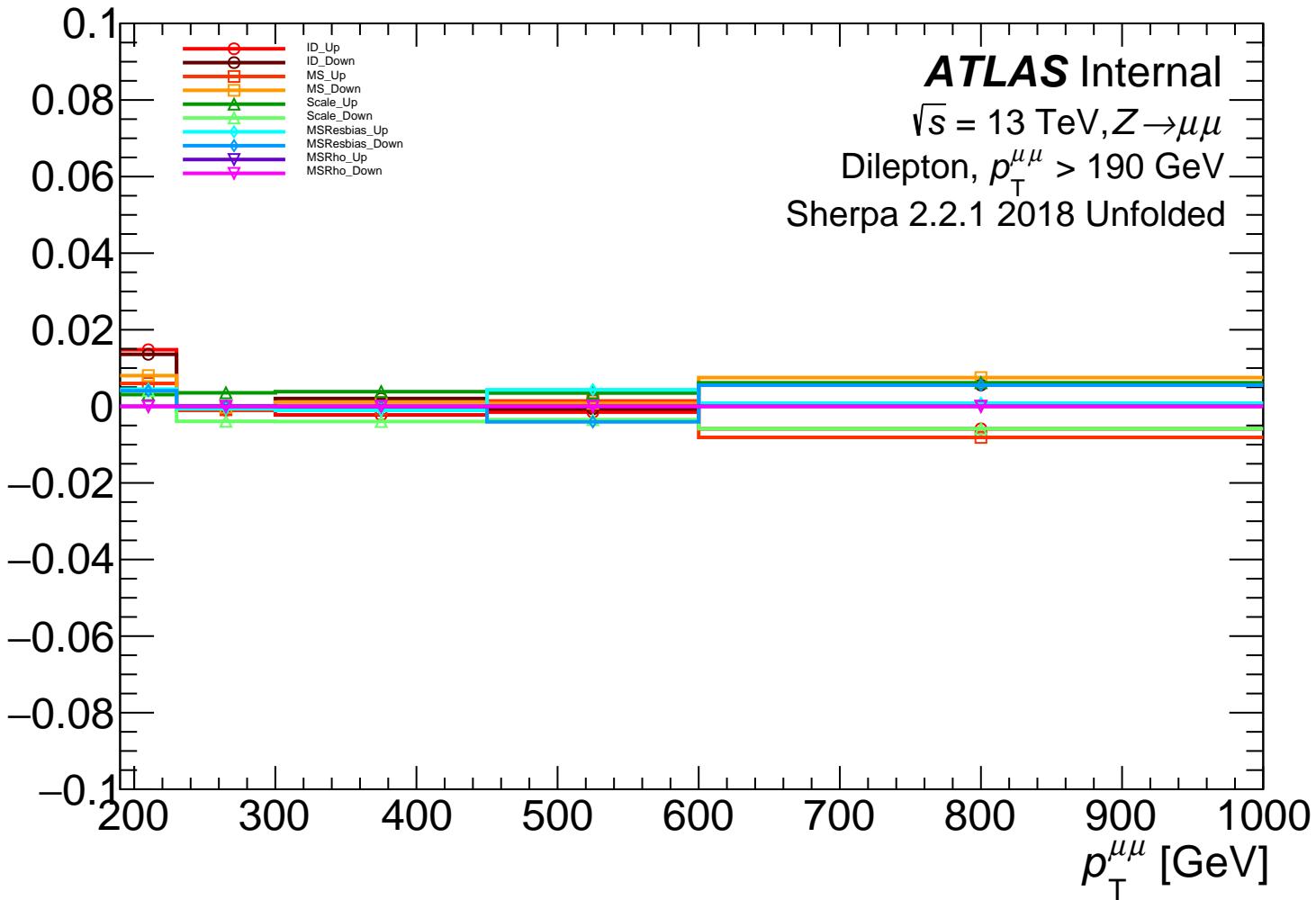


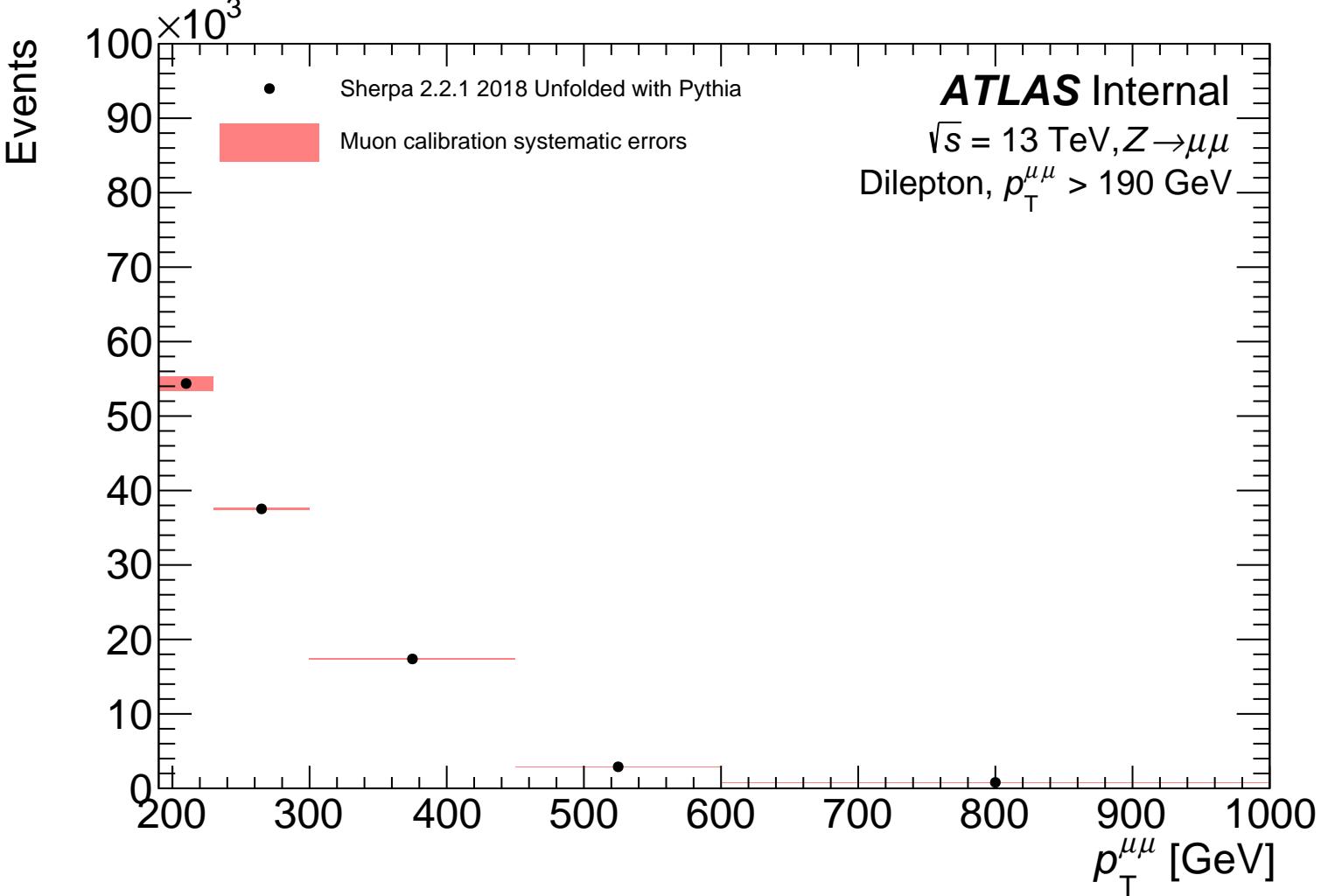
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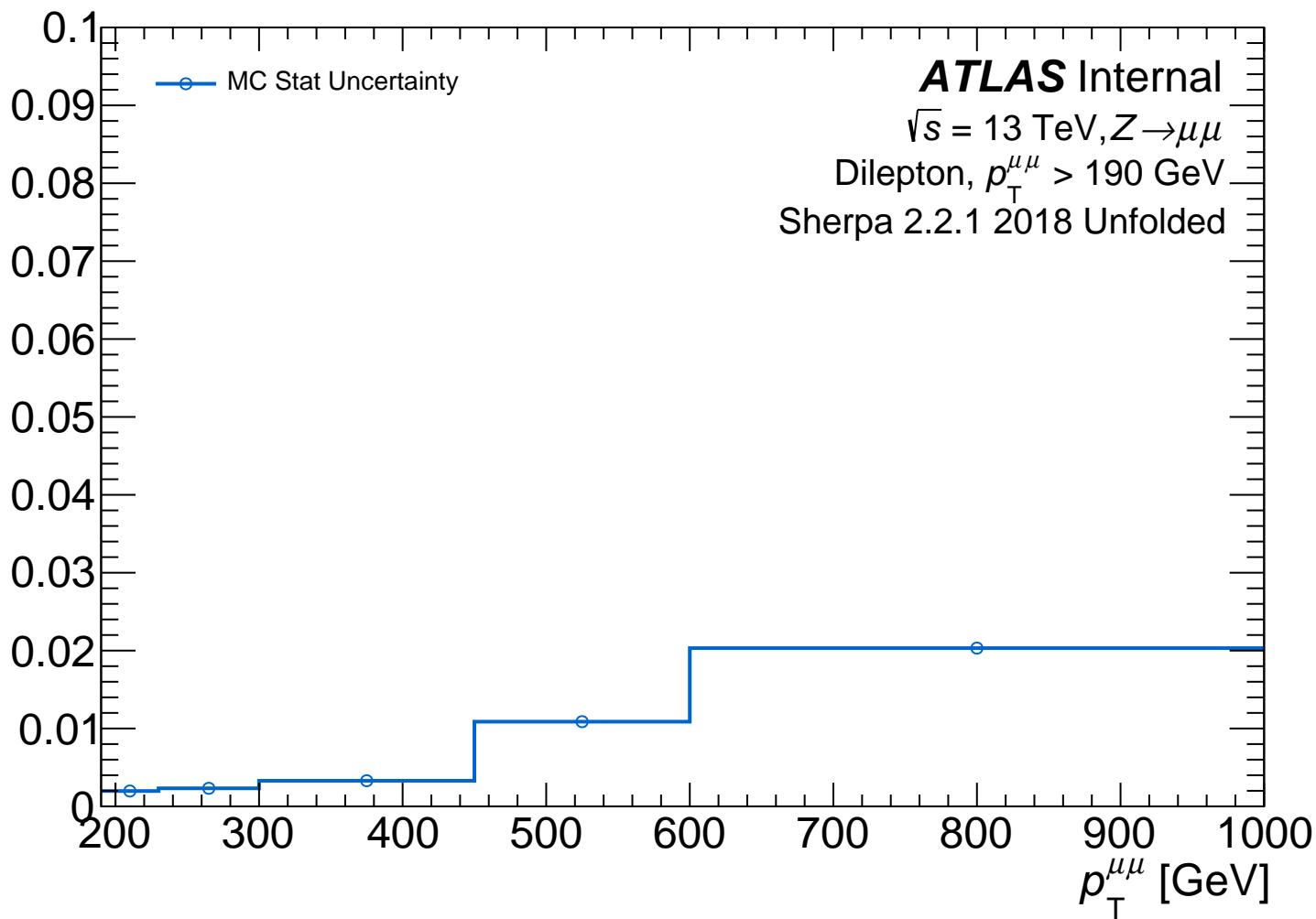
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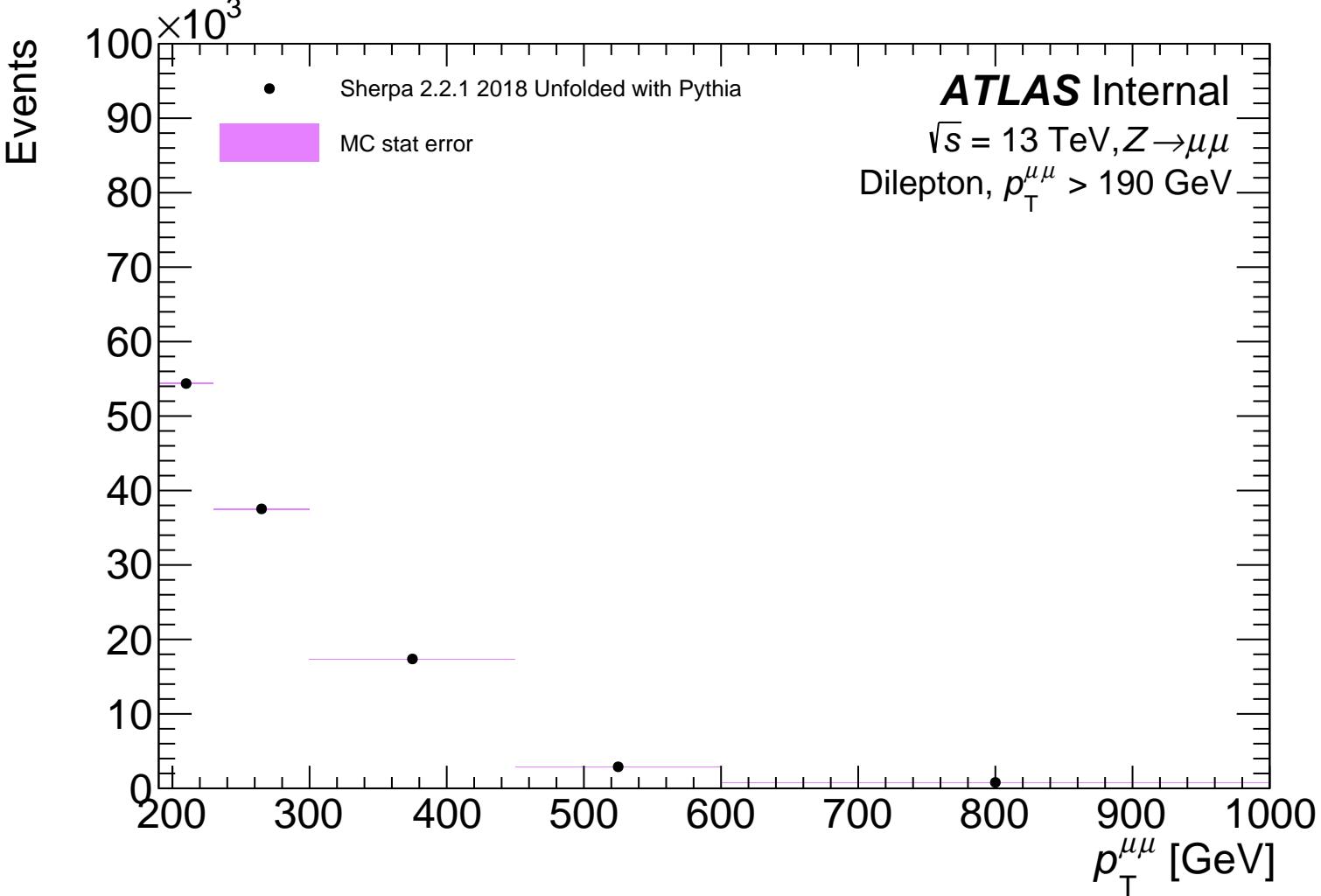
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

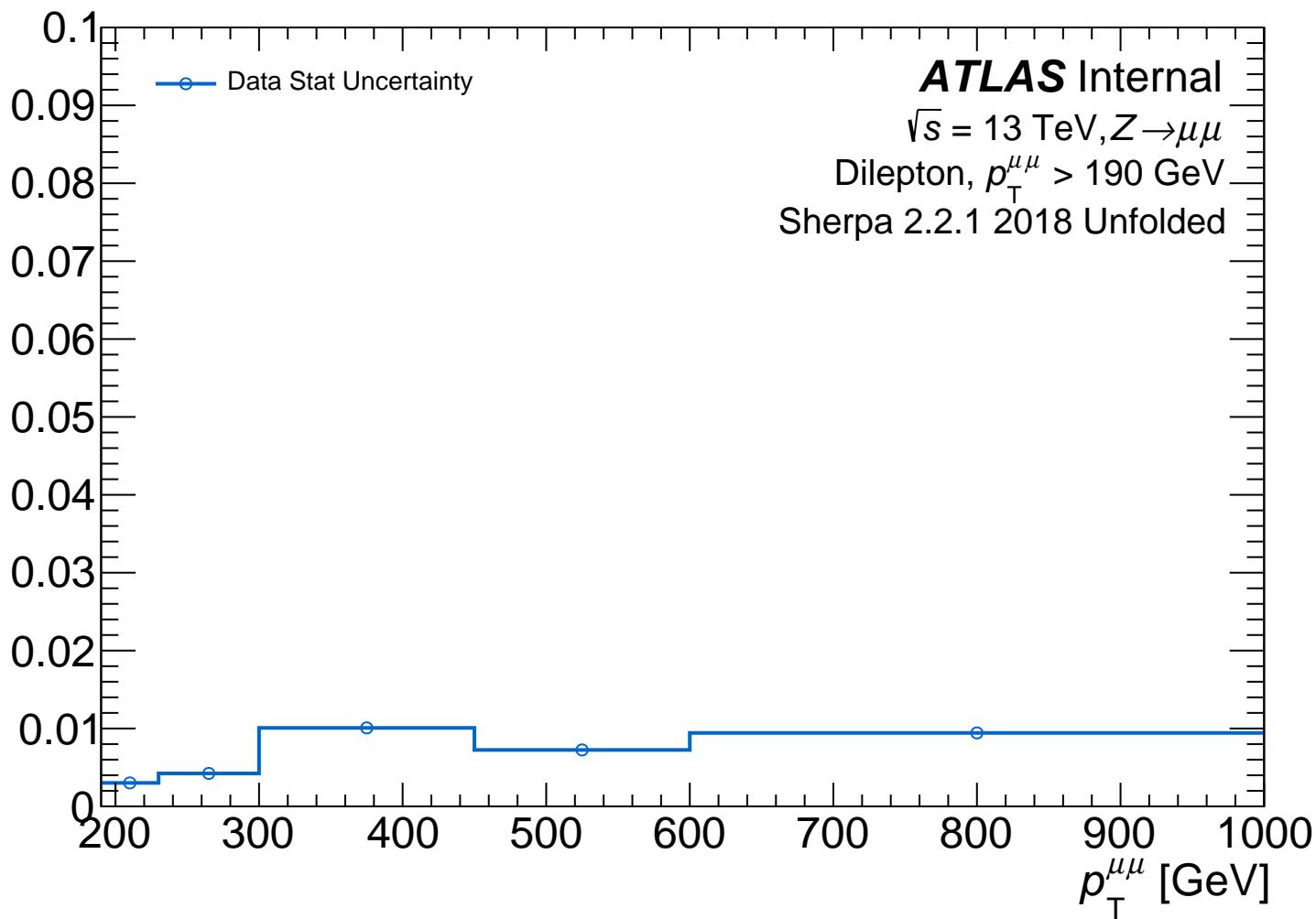
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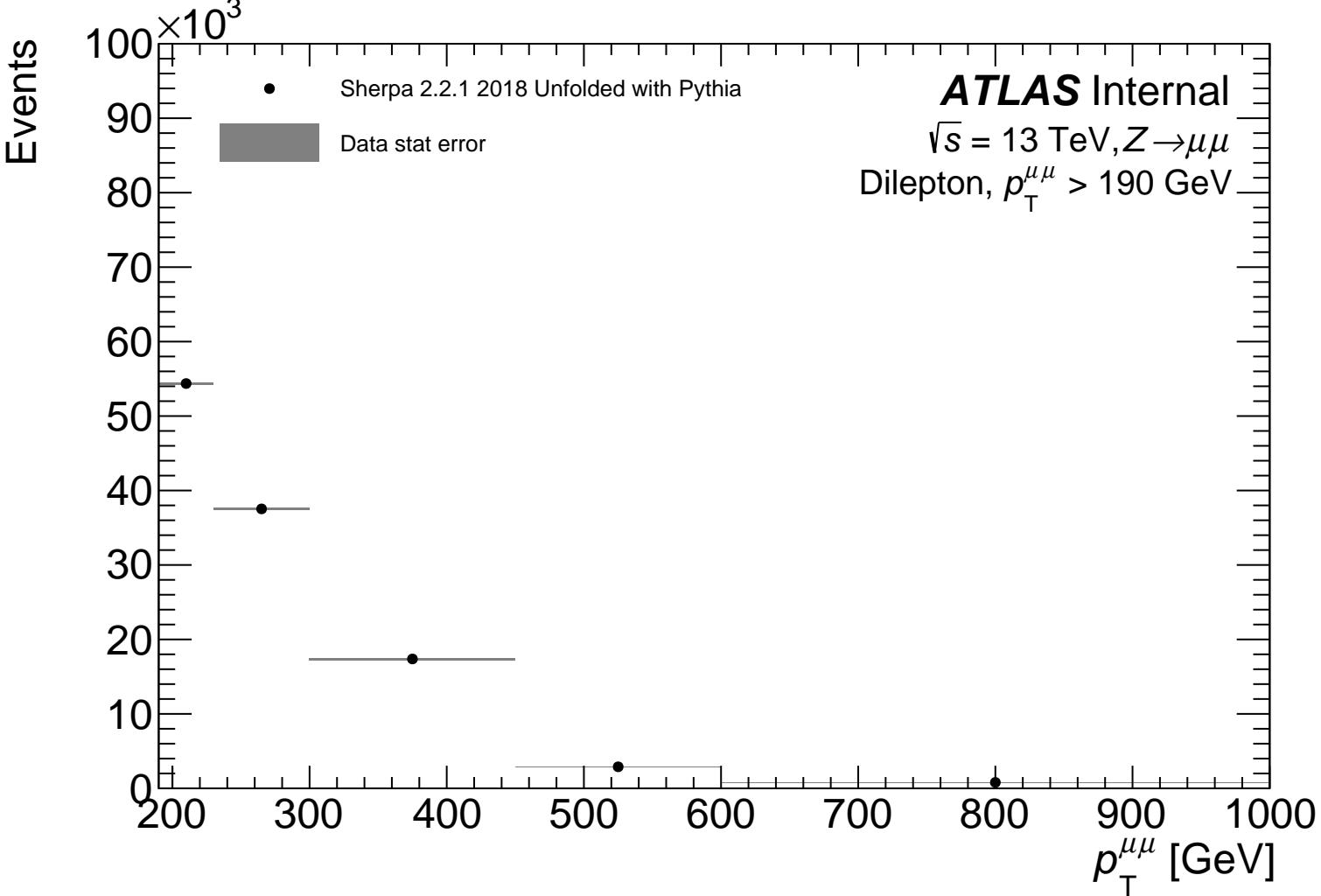


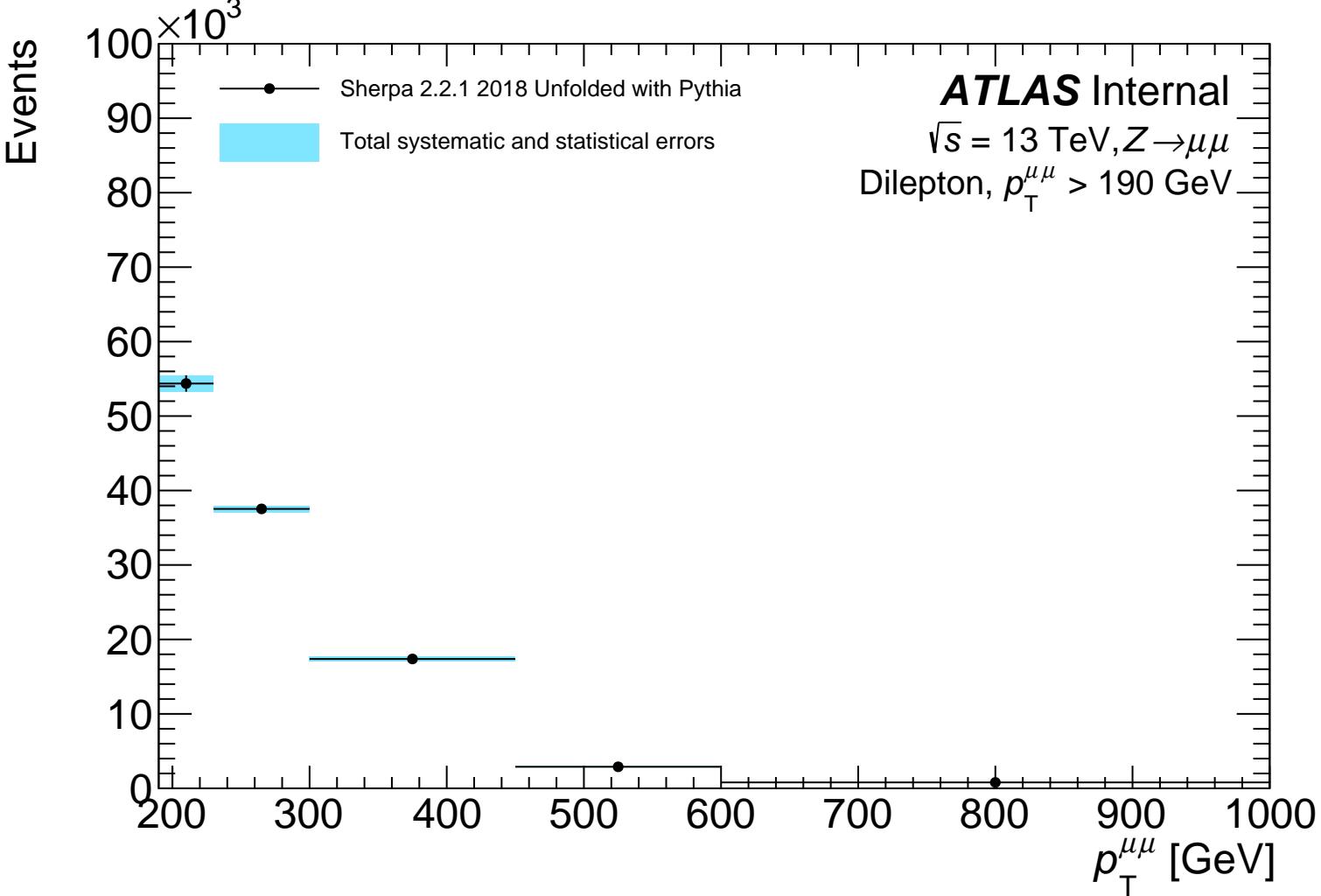


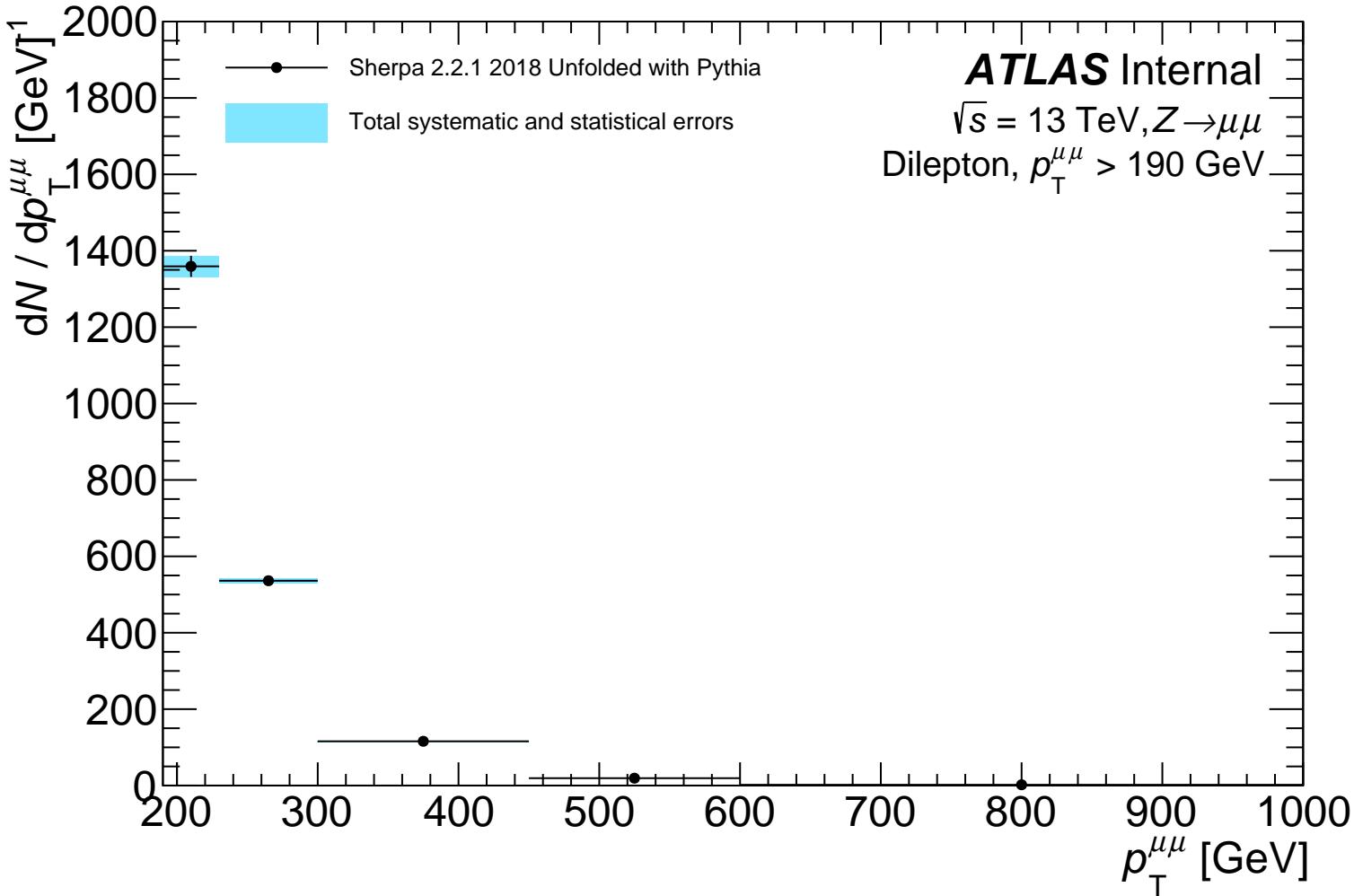










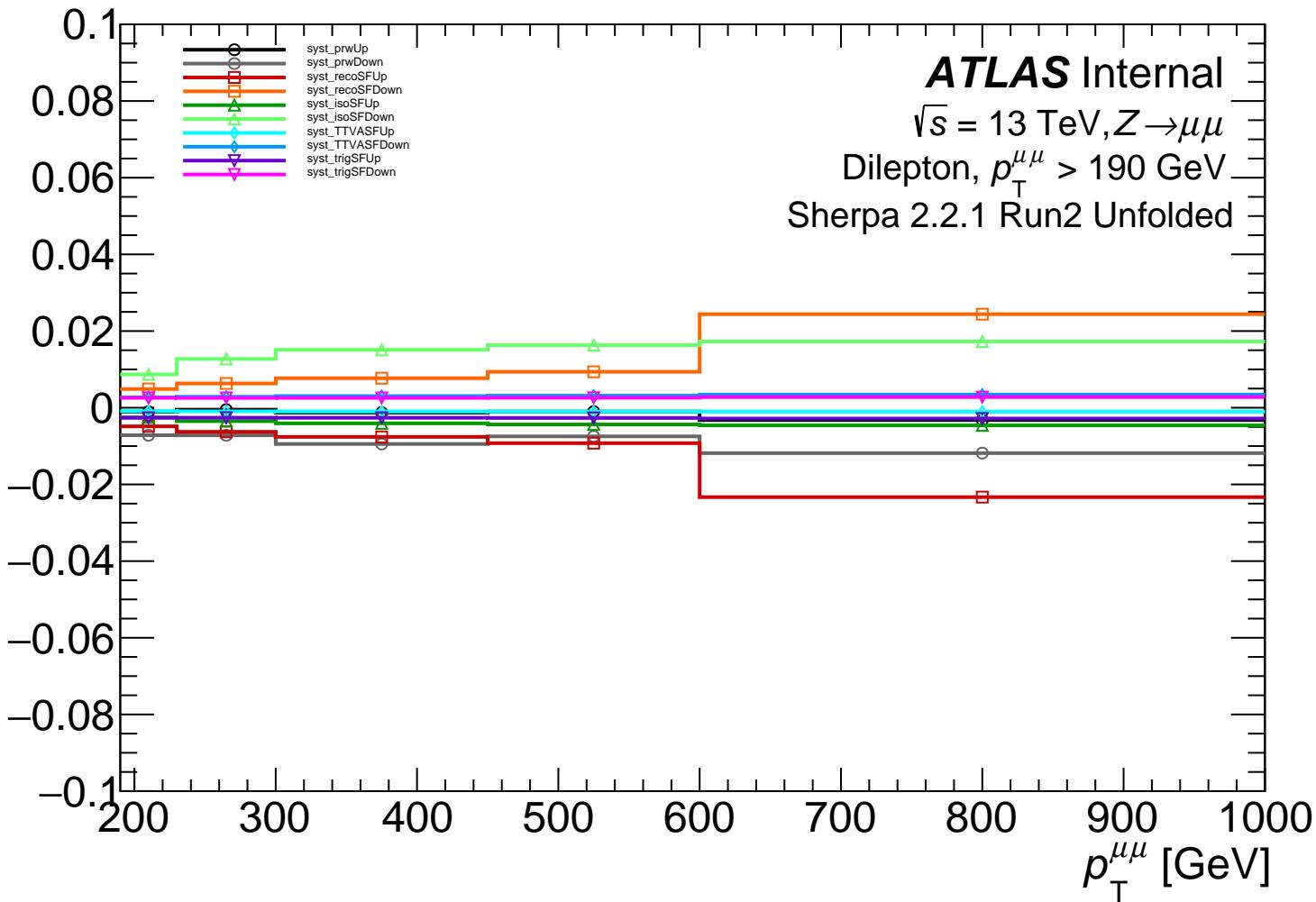


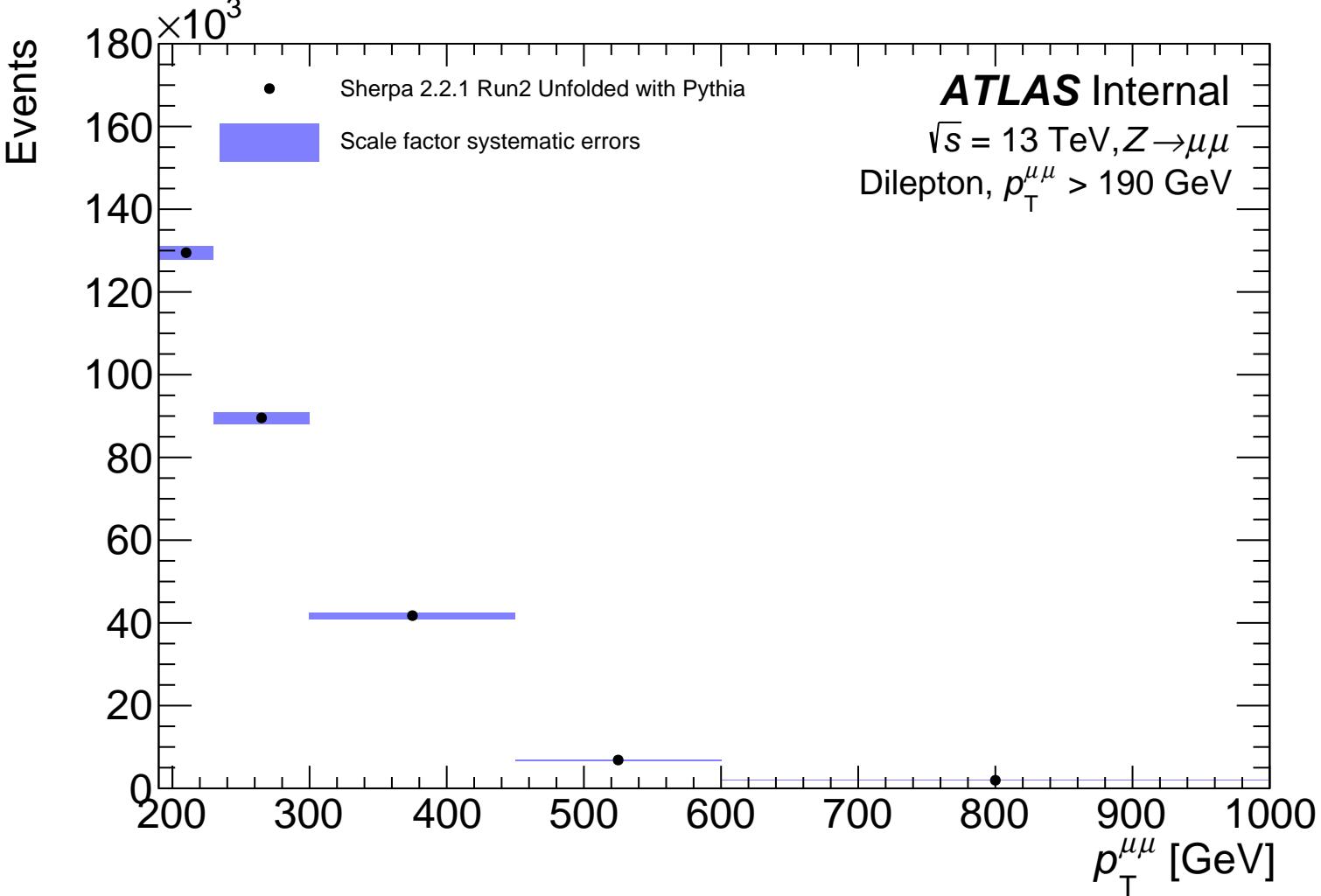
**ATLAS Internal**

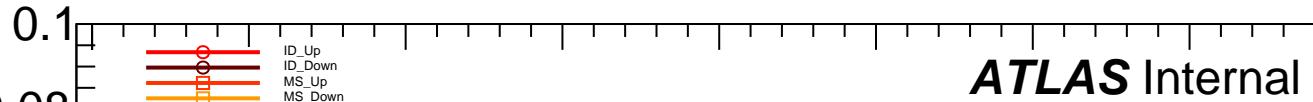
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

Sherpa 2.2.1 Run2 Unfolded



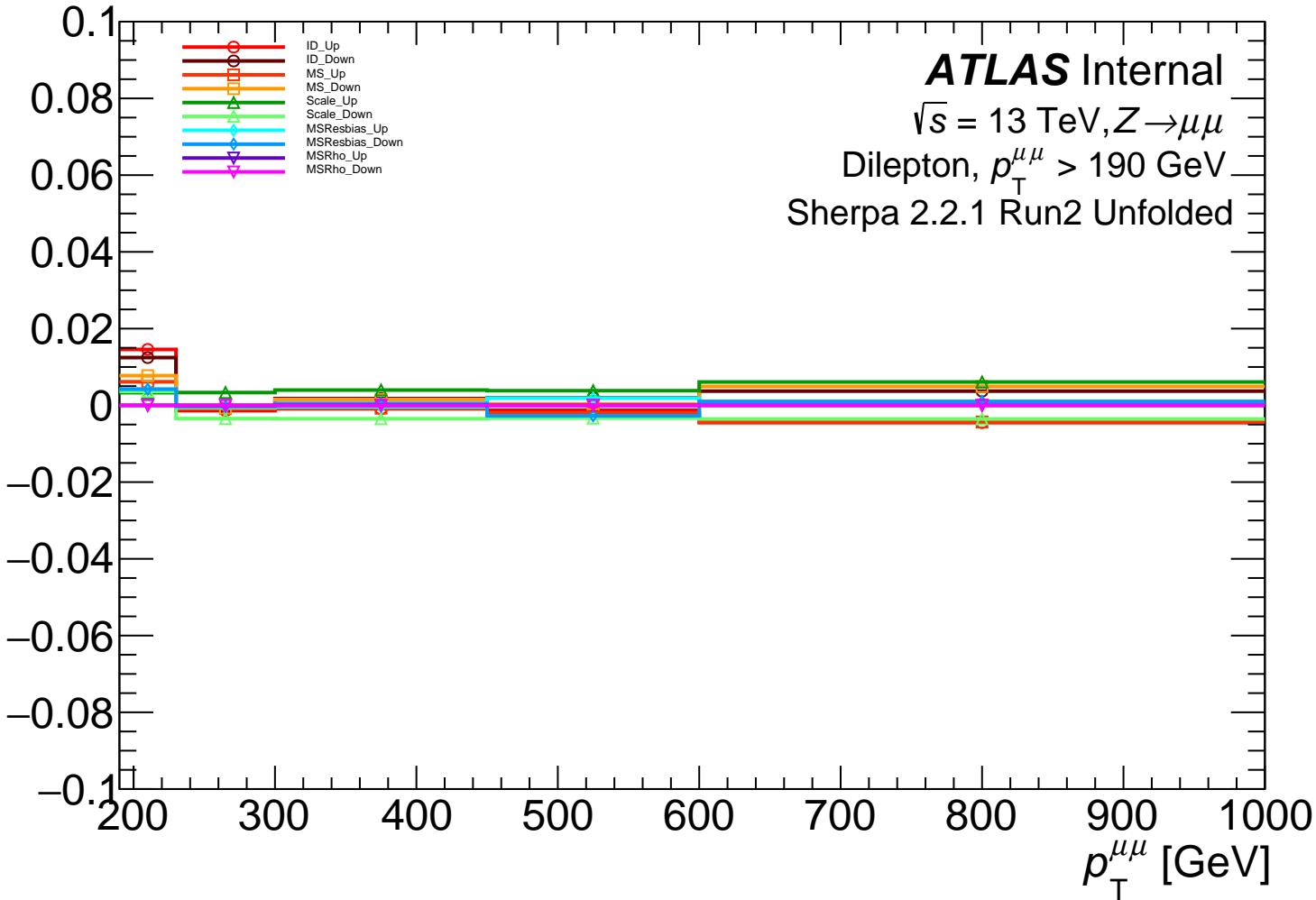


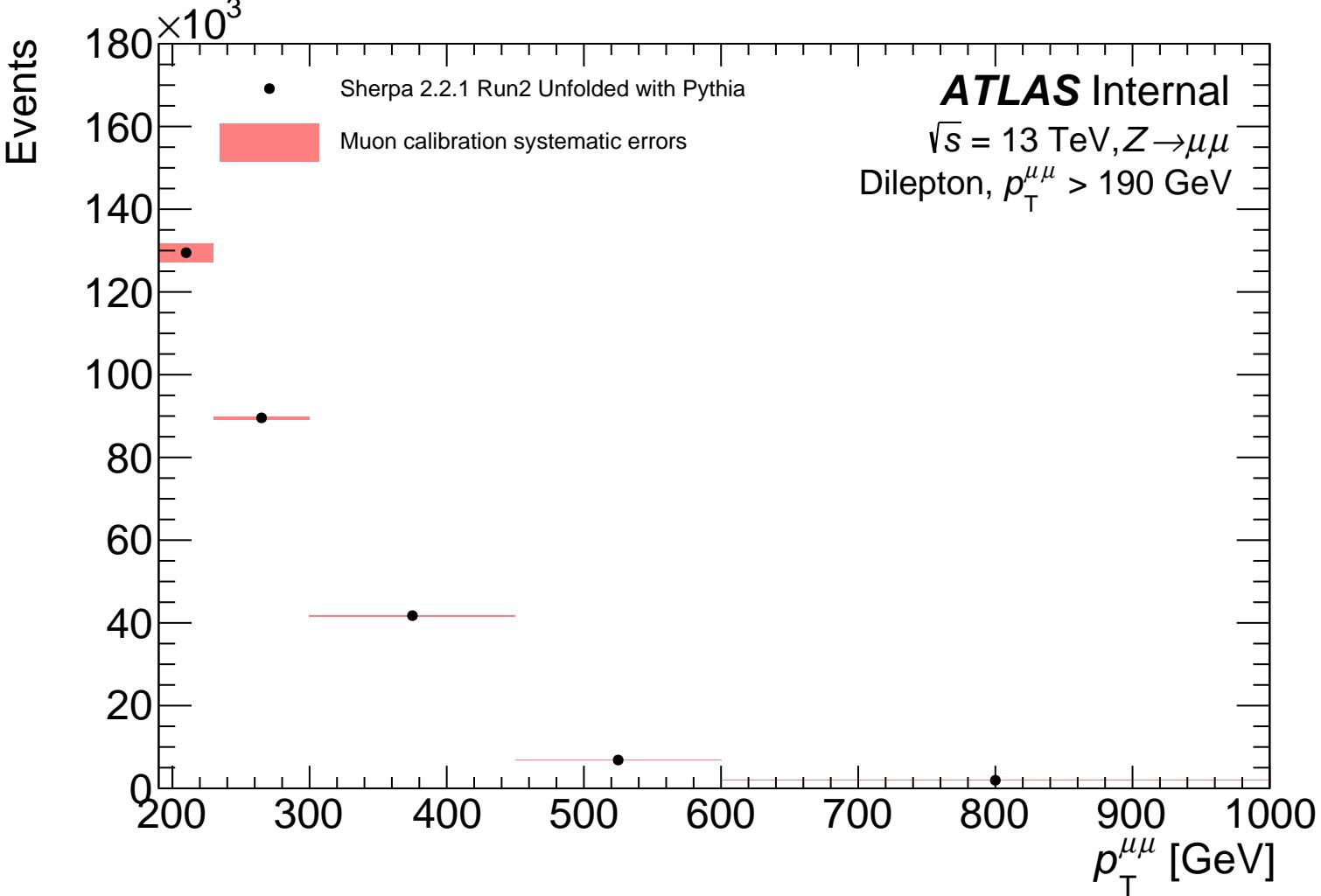


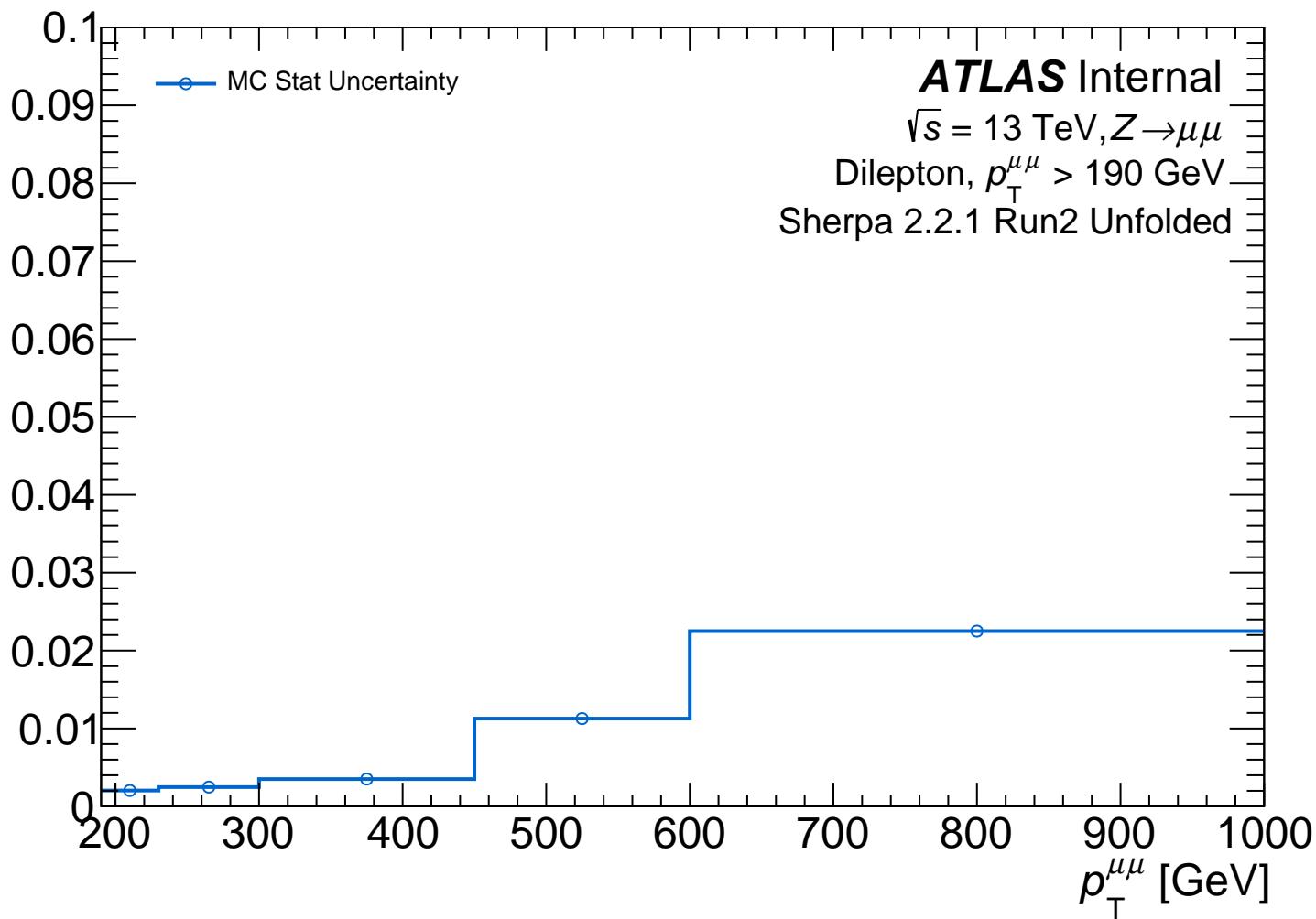
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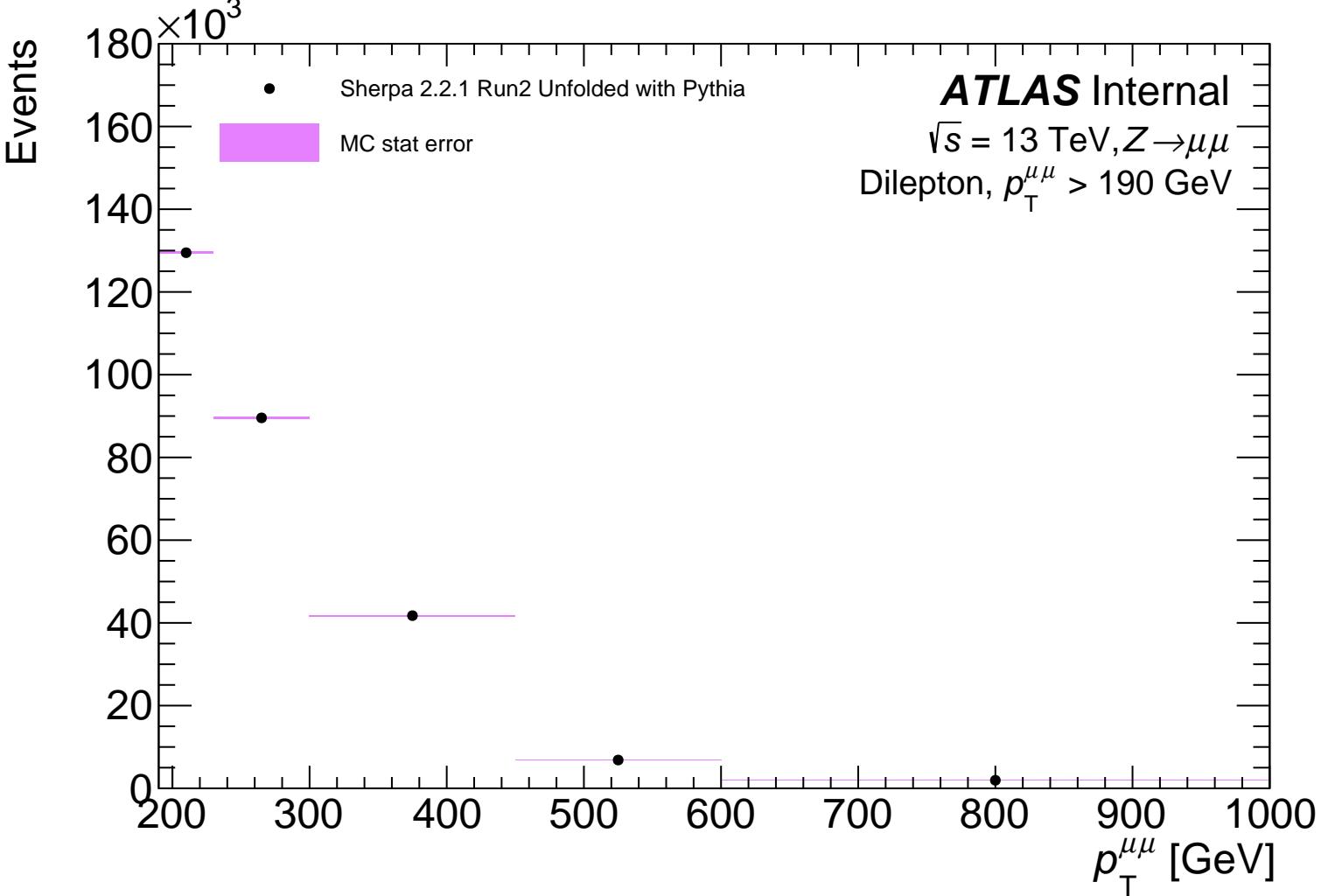
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

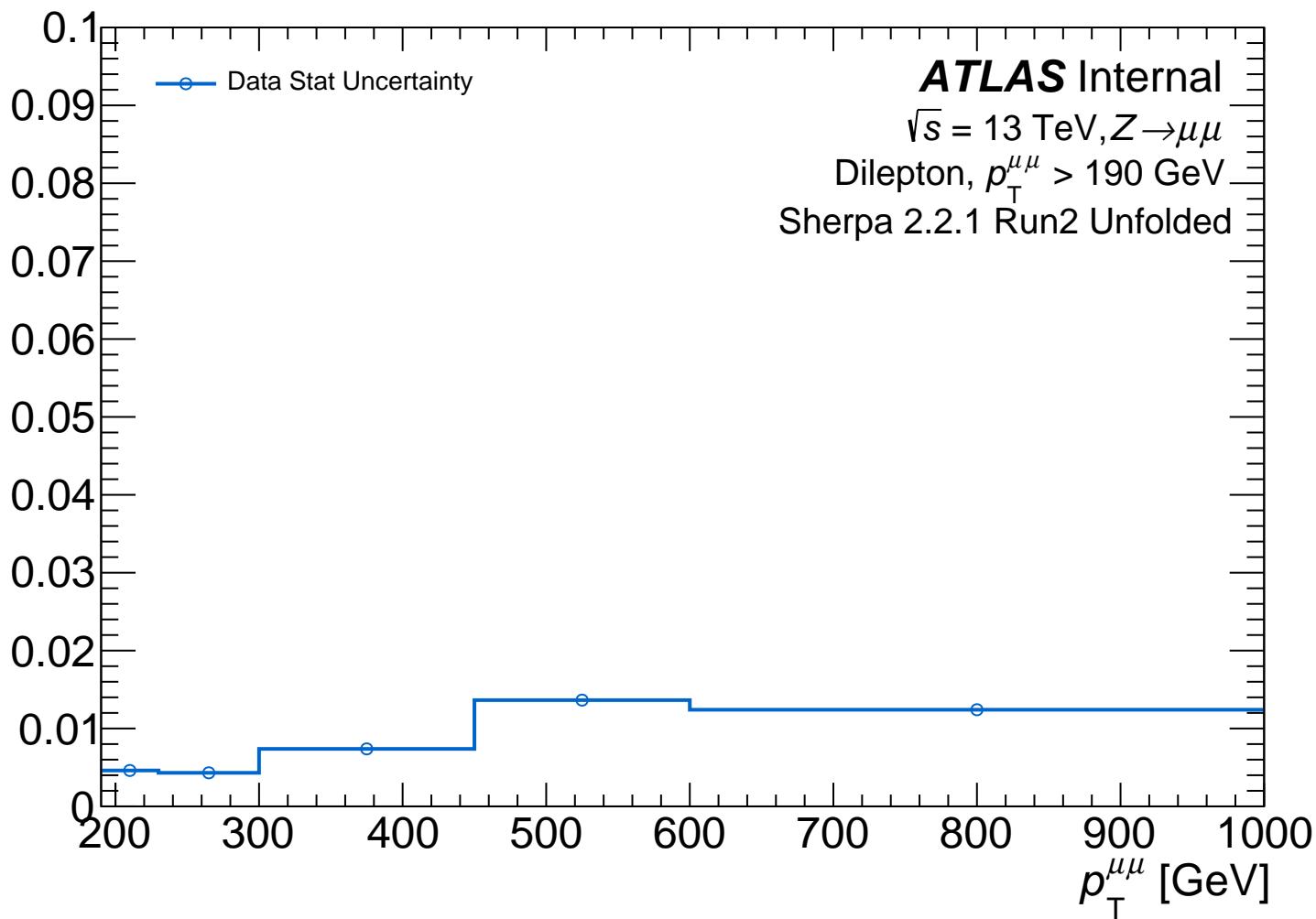
Sherpa 2.2.1 Run2 Unfolded

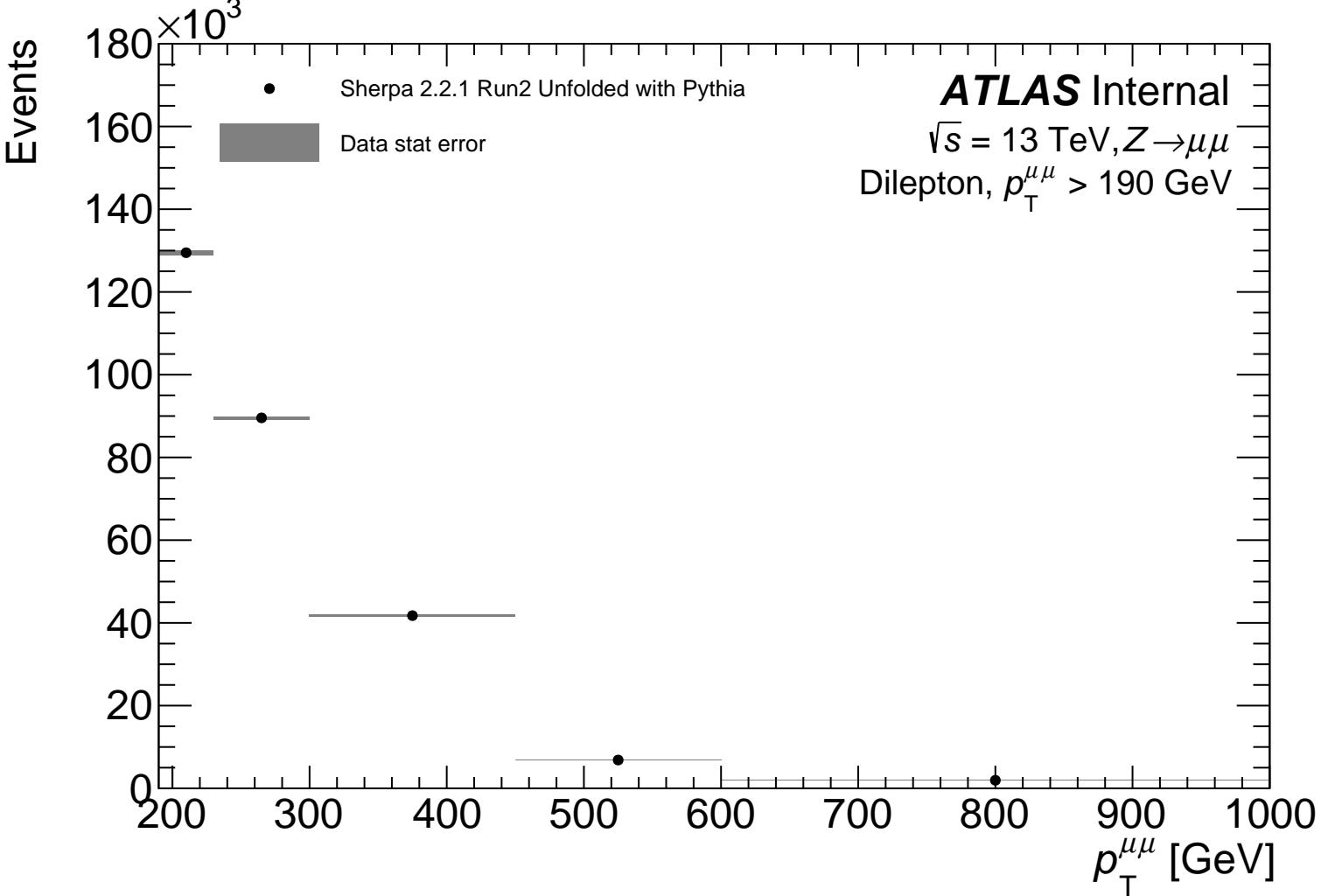


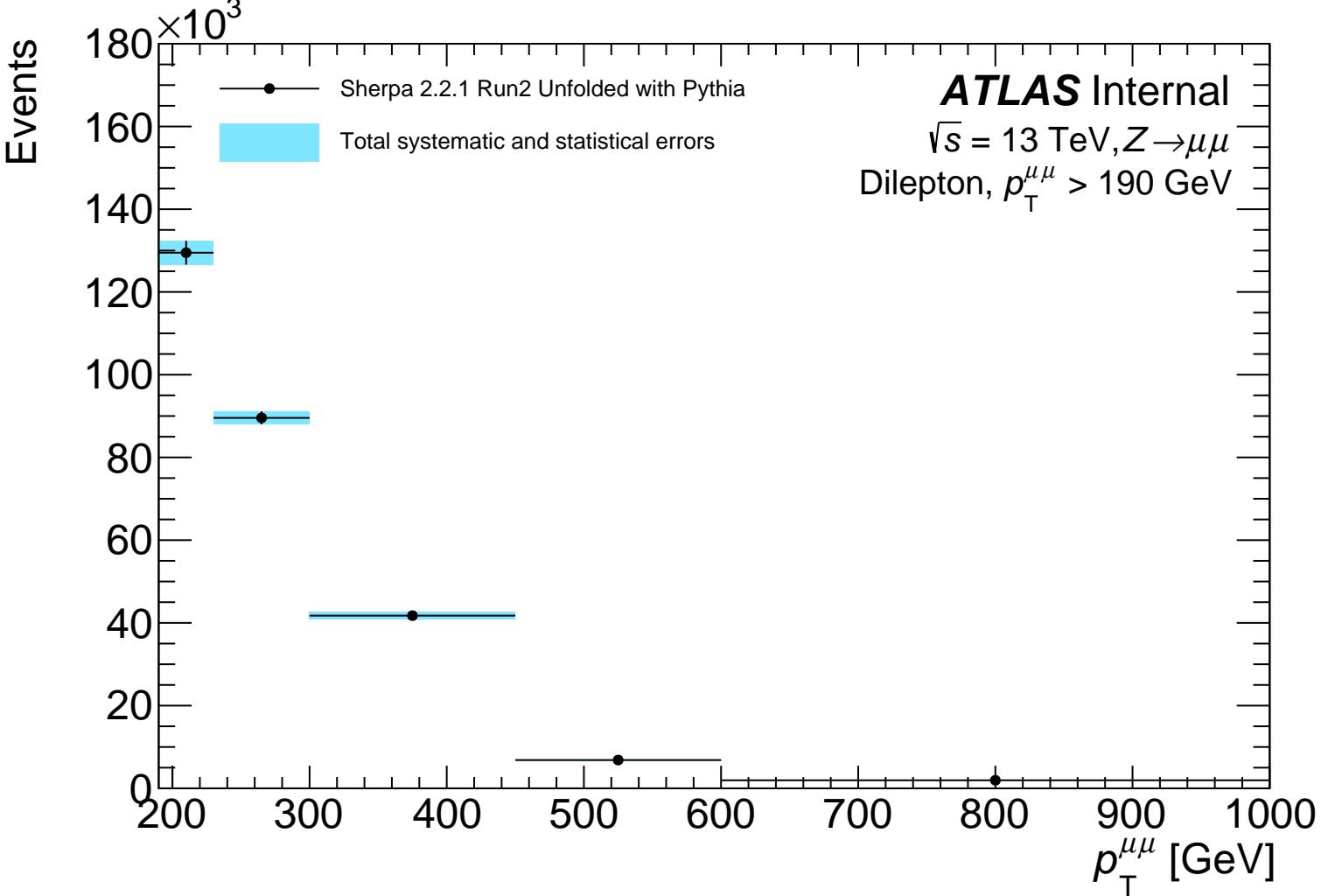


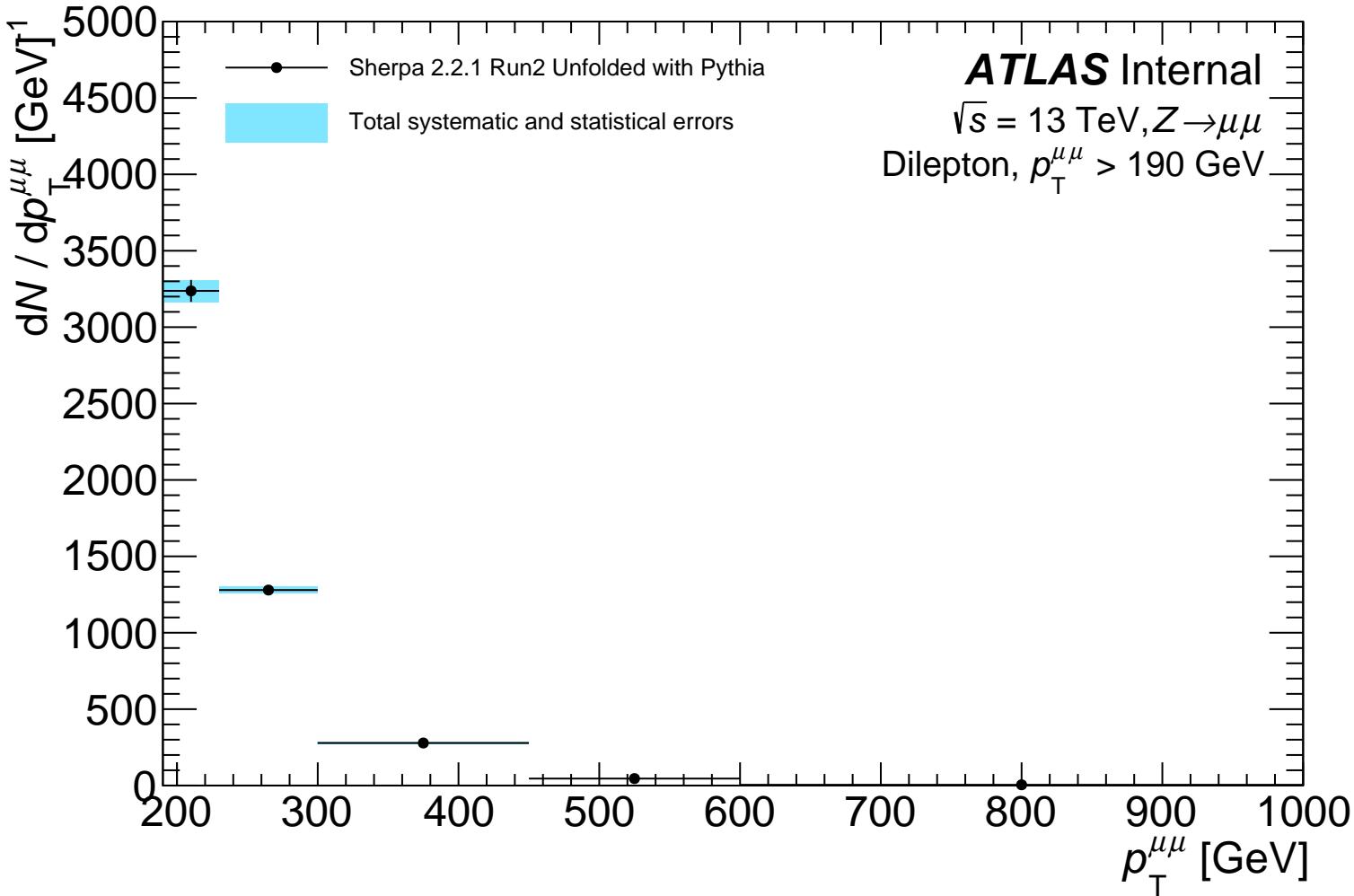










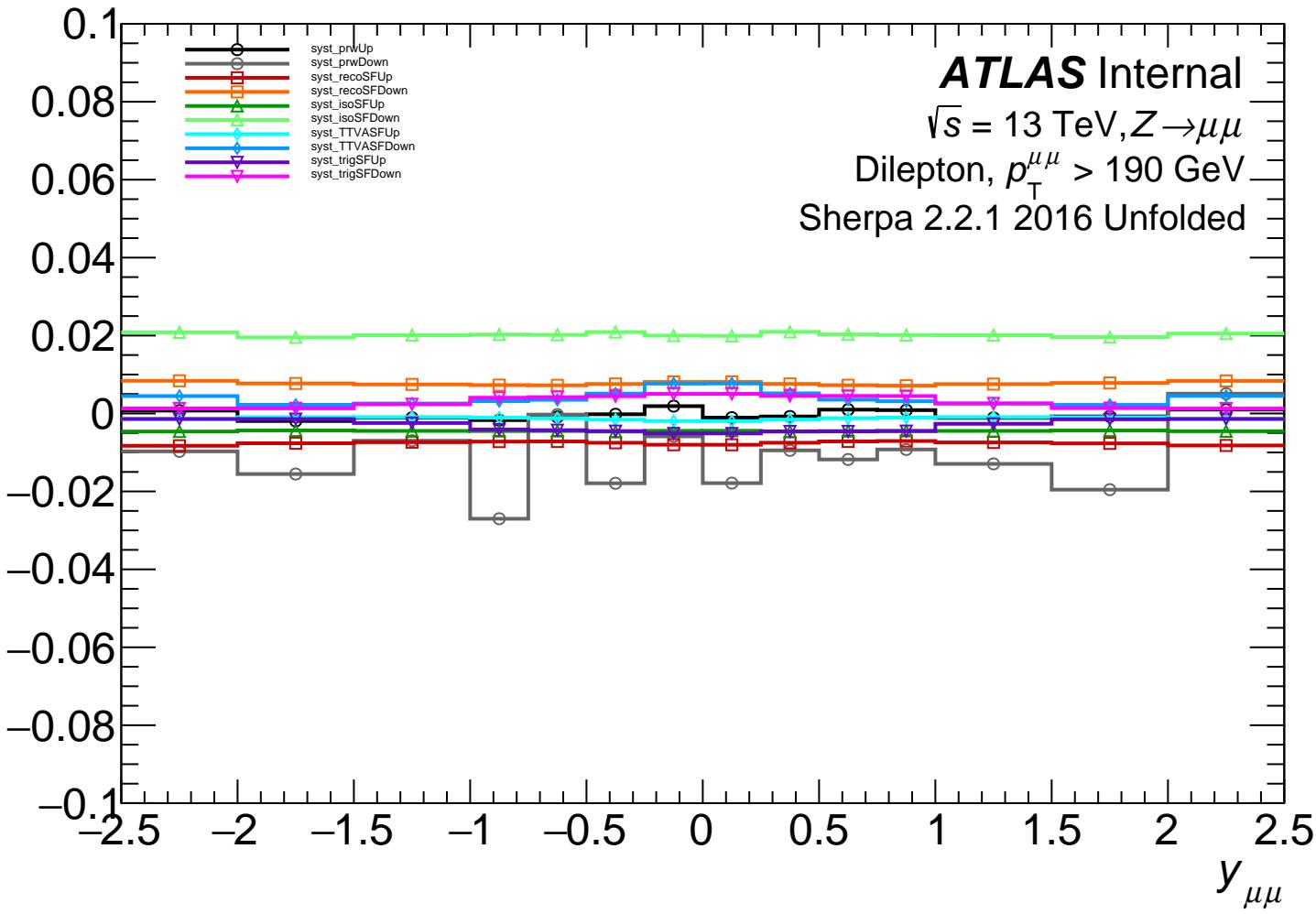


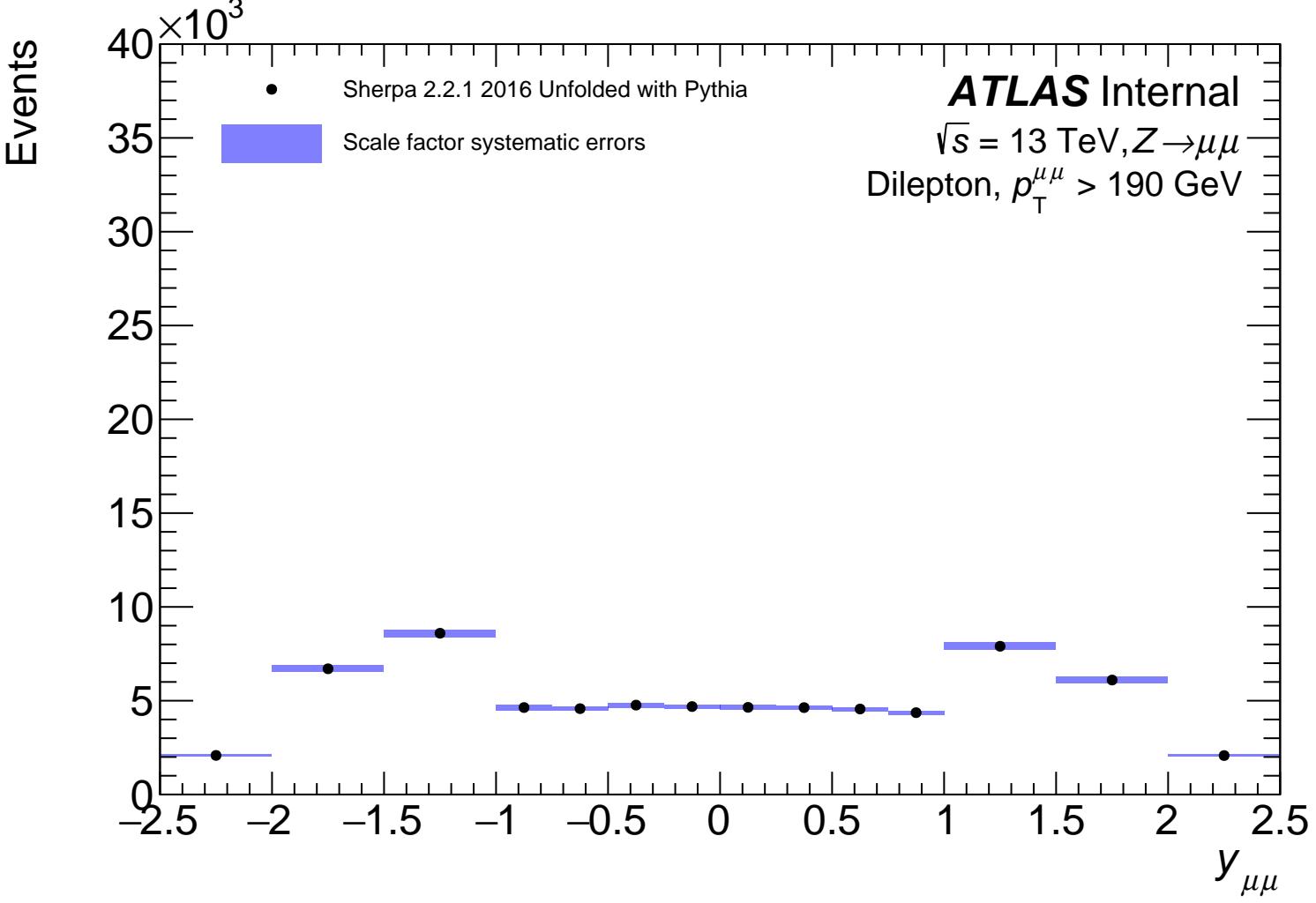
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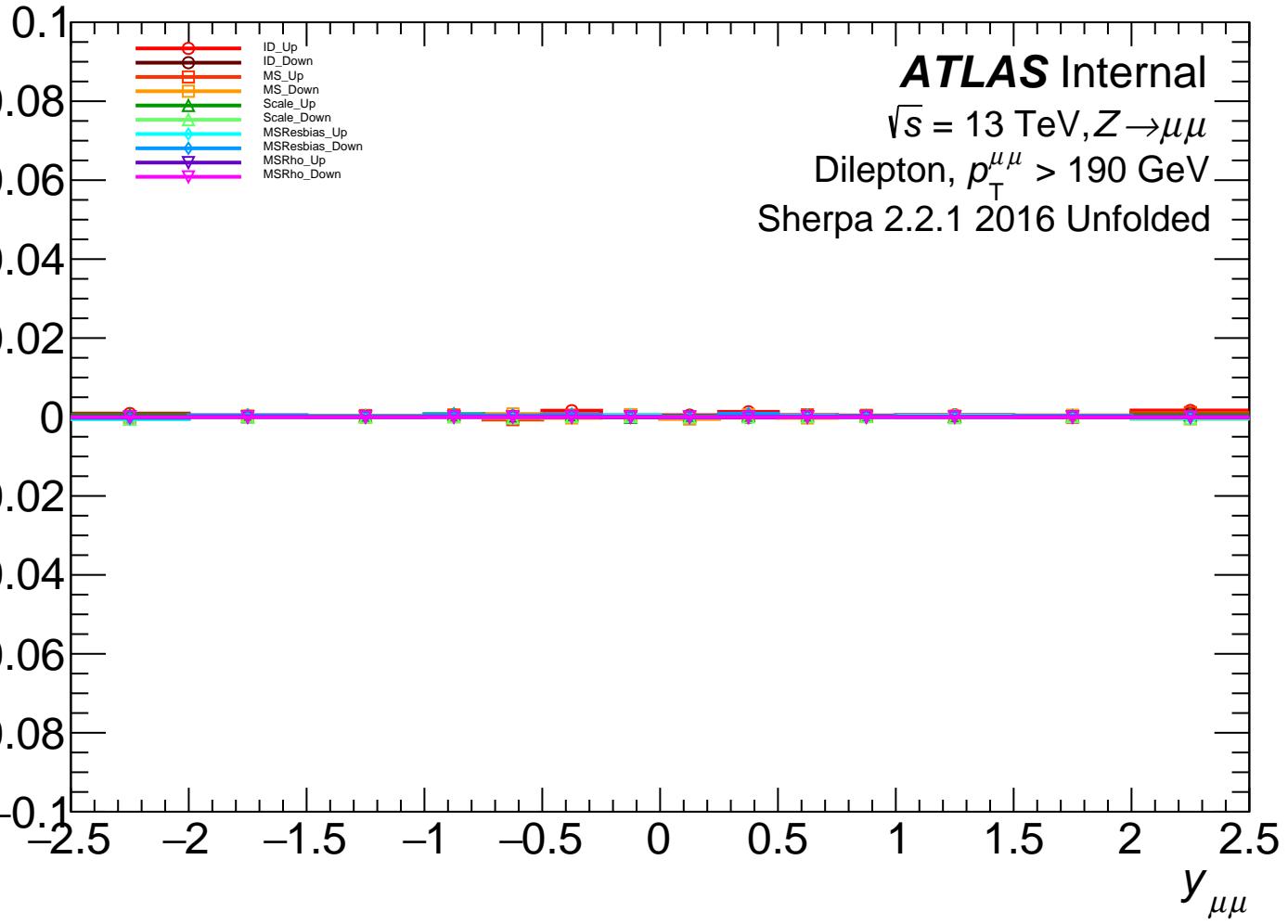
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

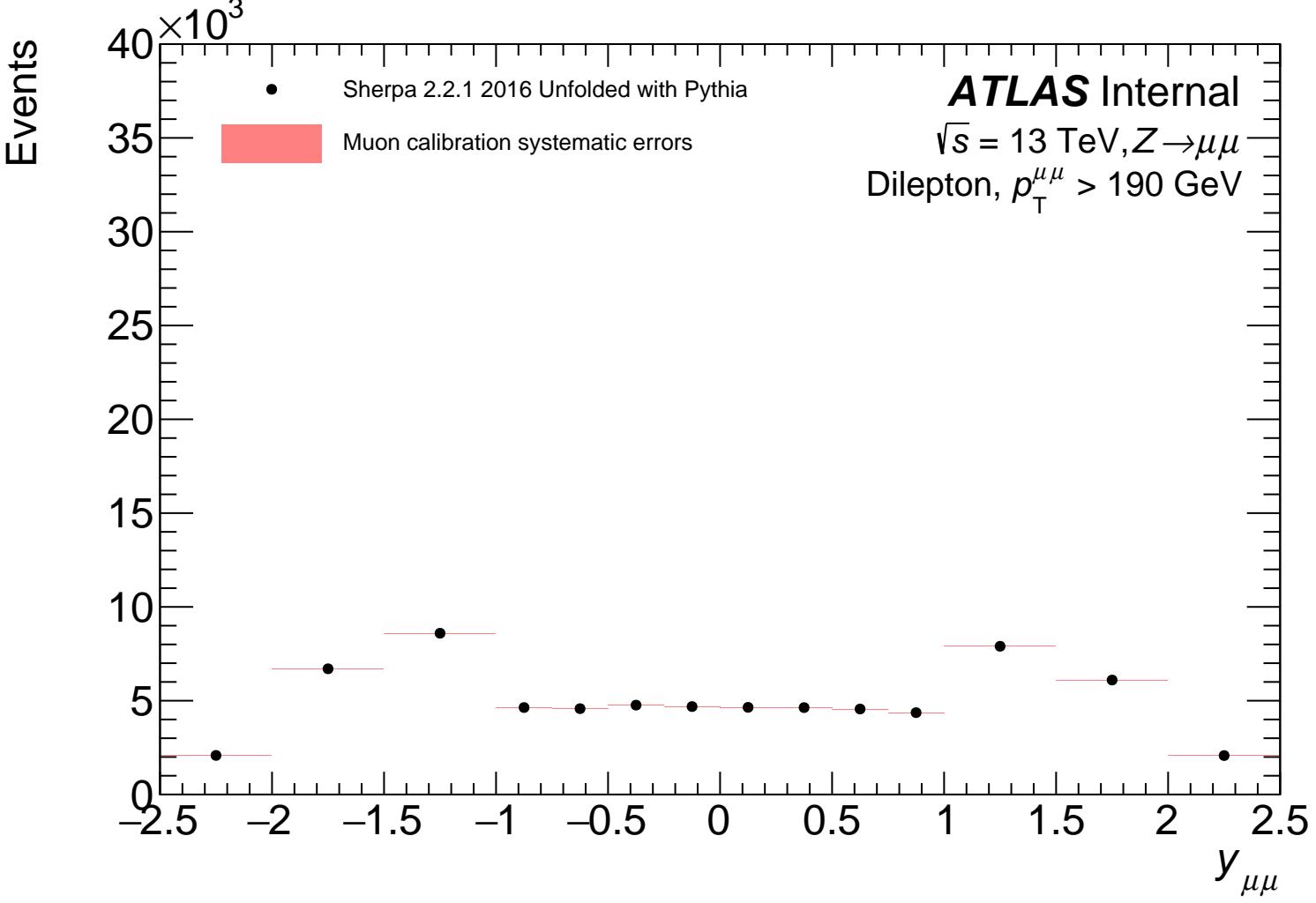
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

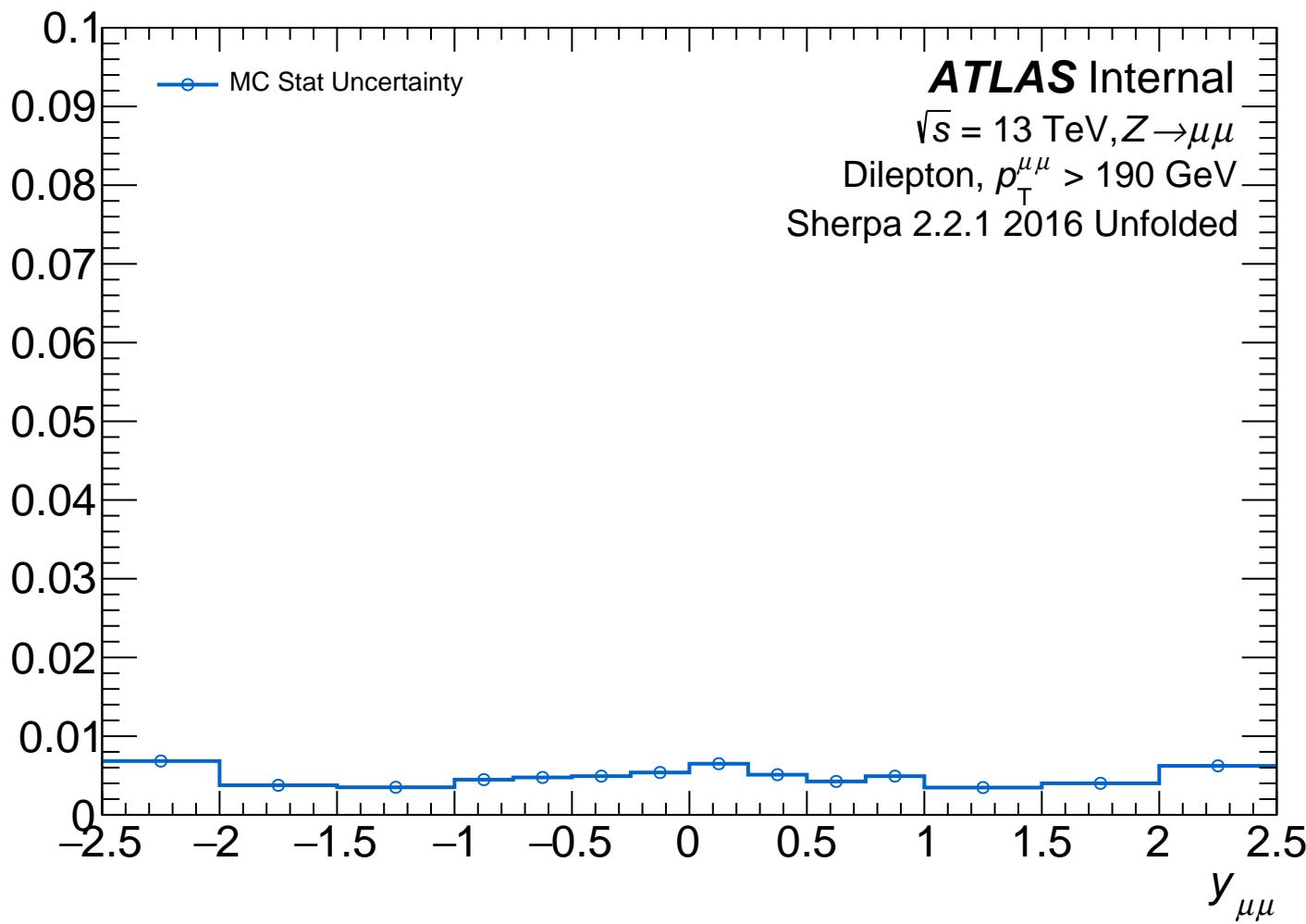
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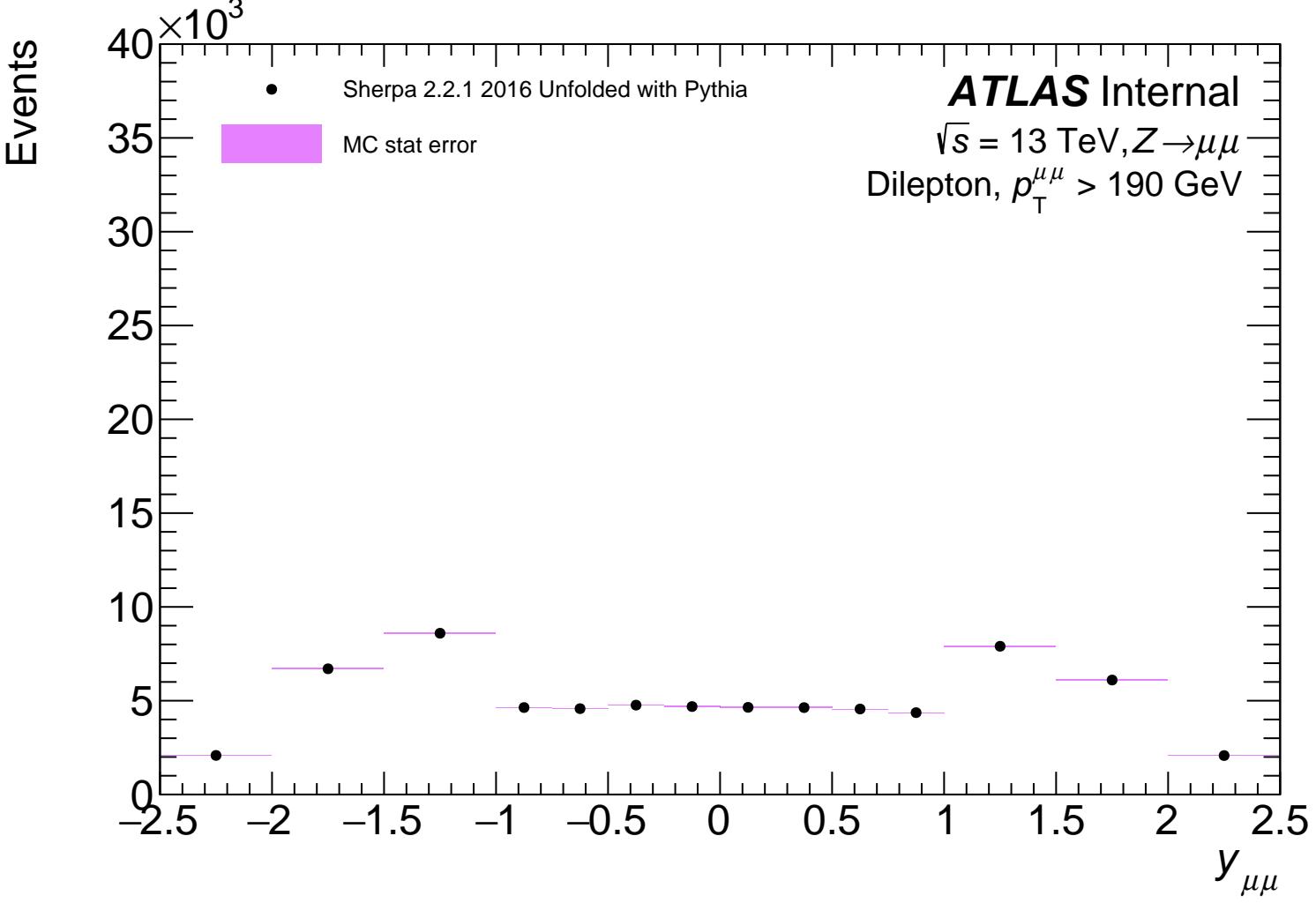


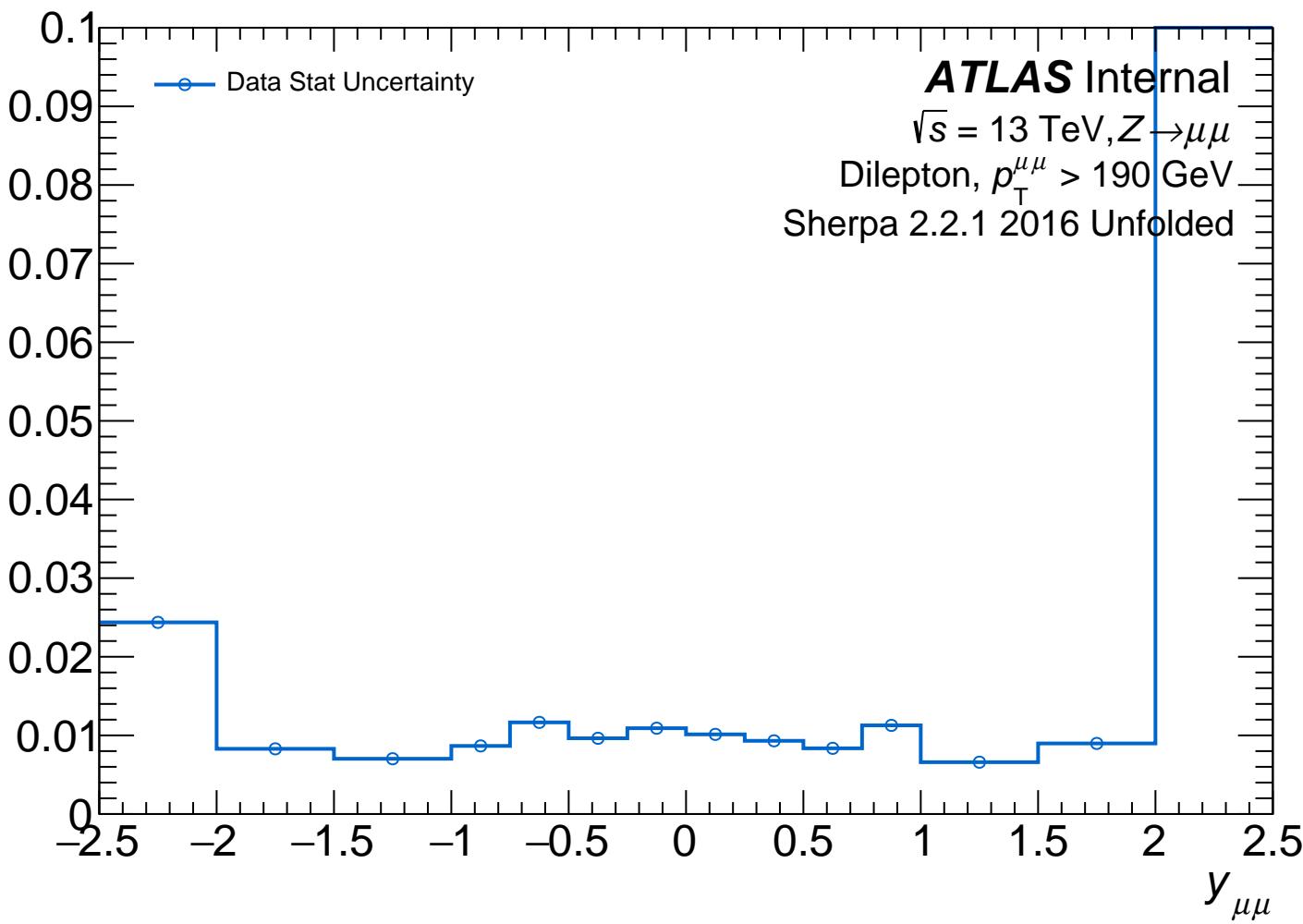


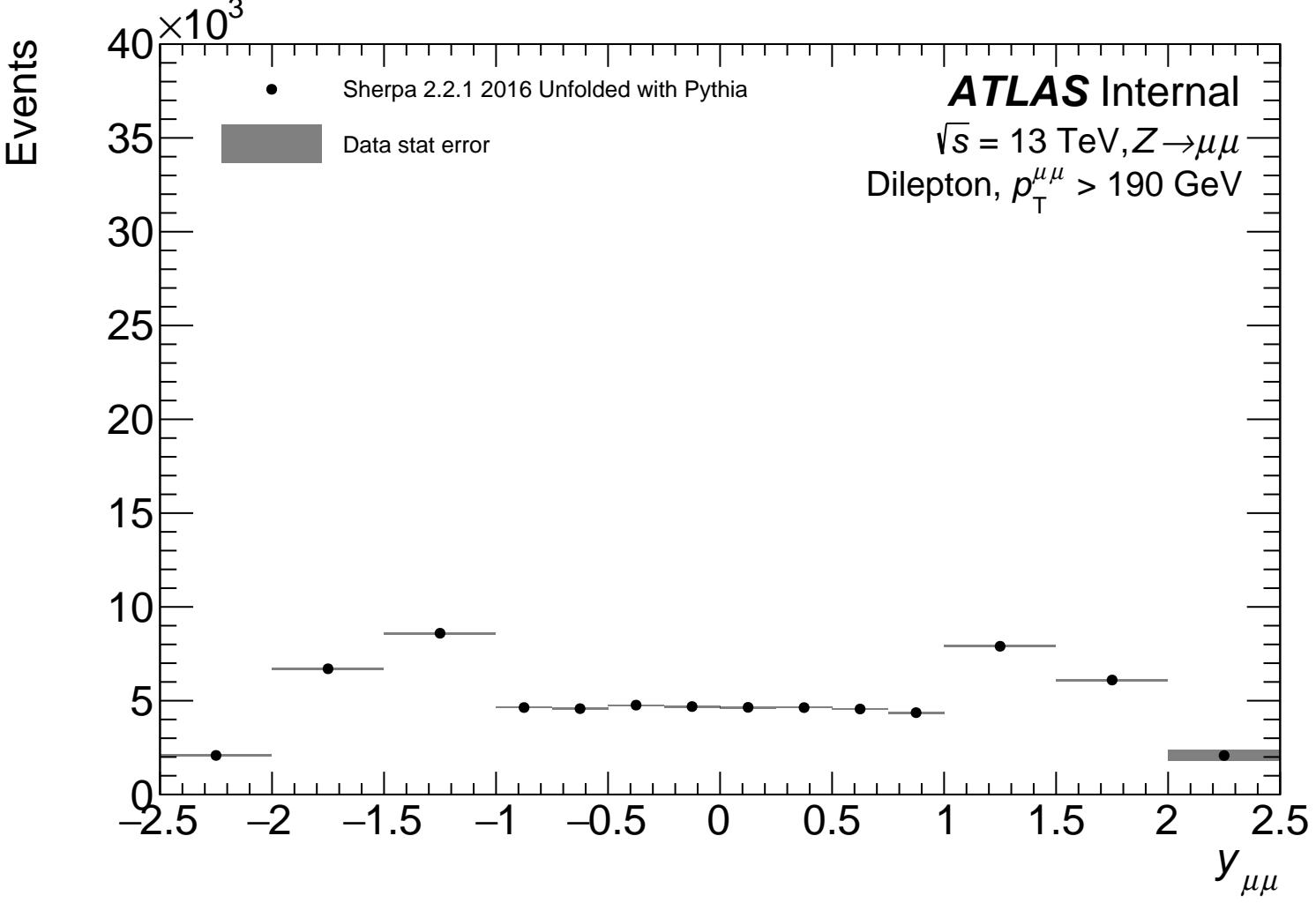


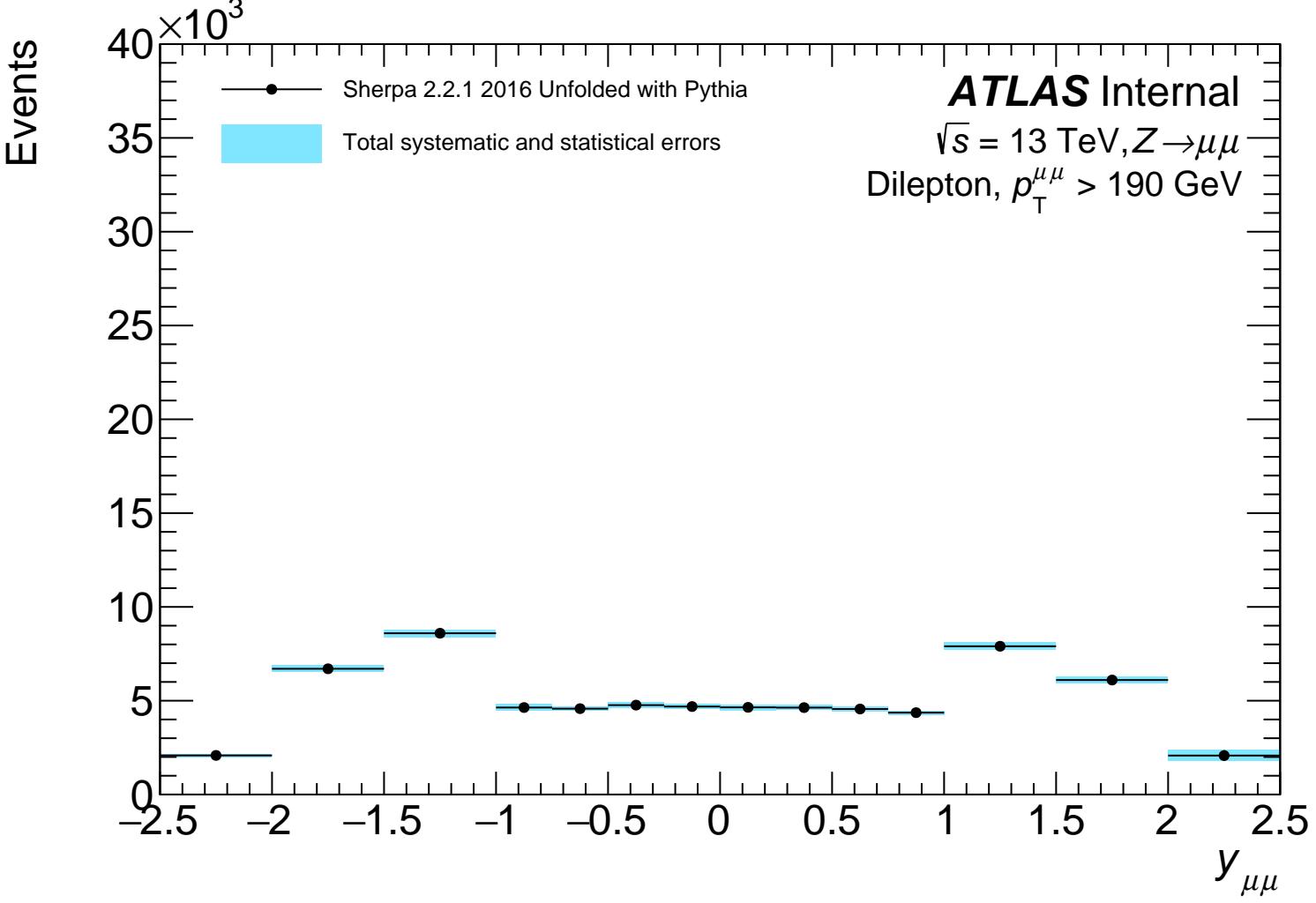


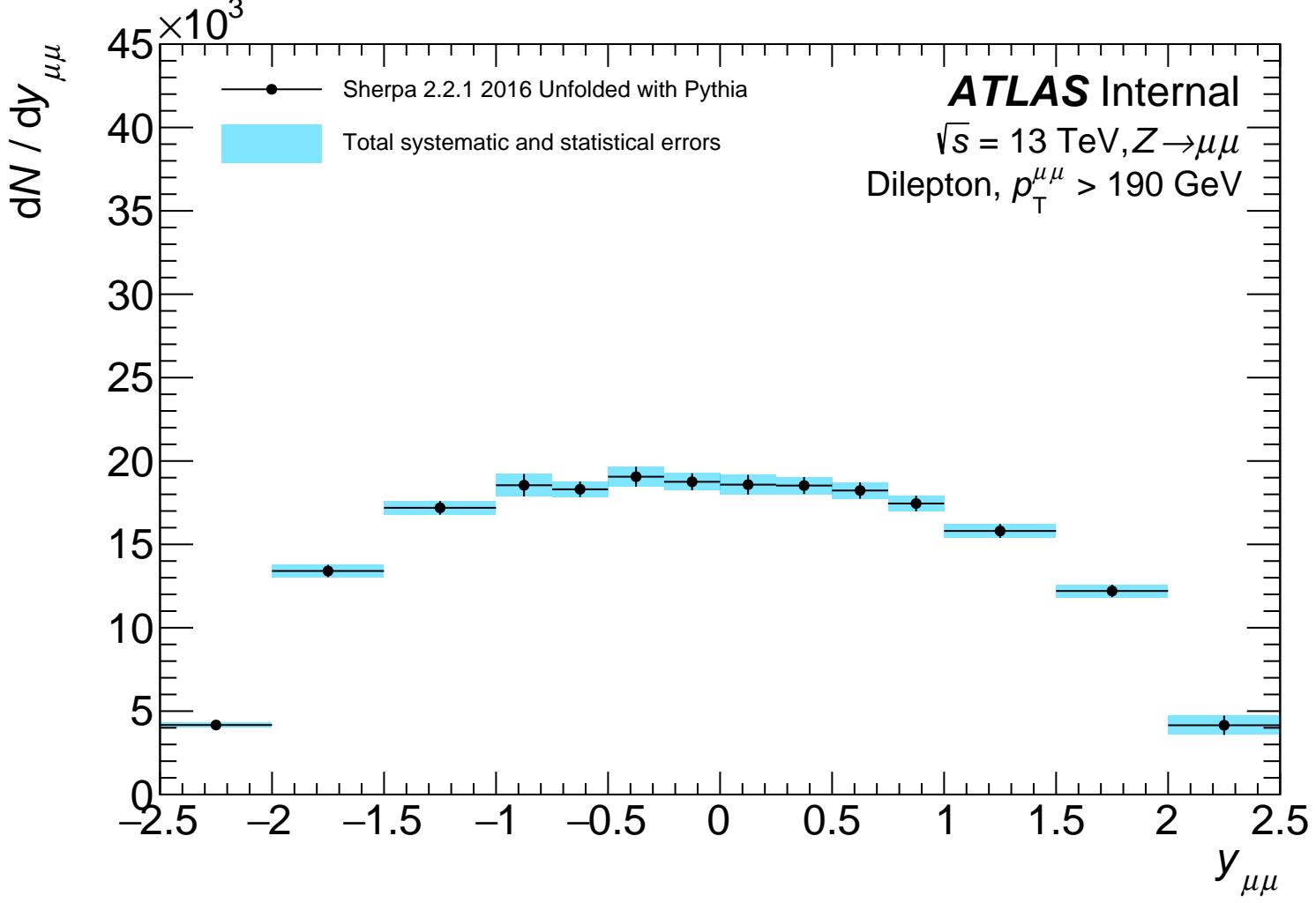


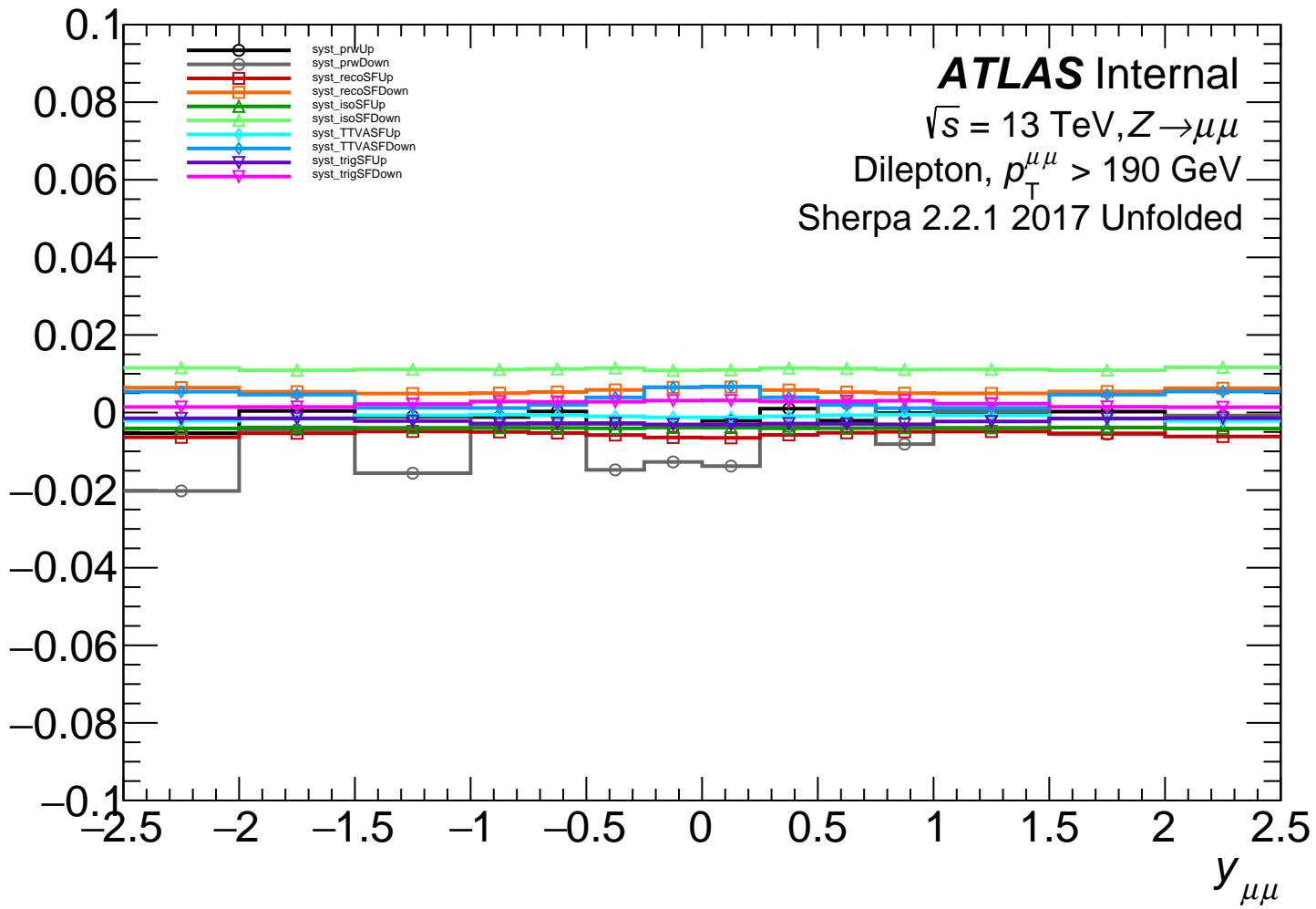


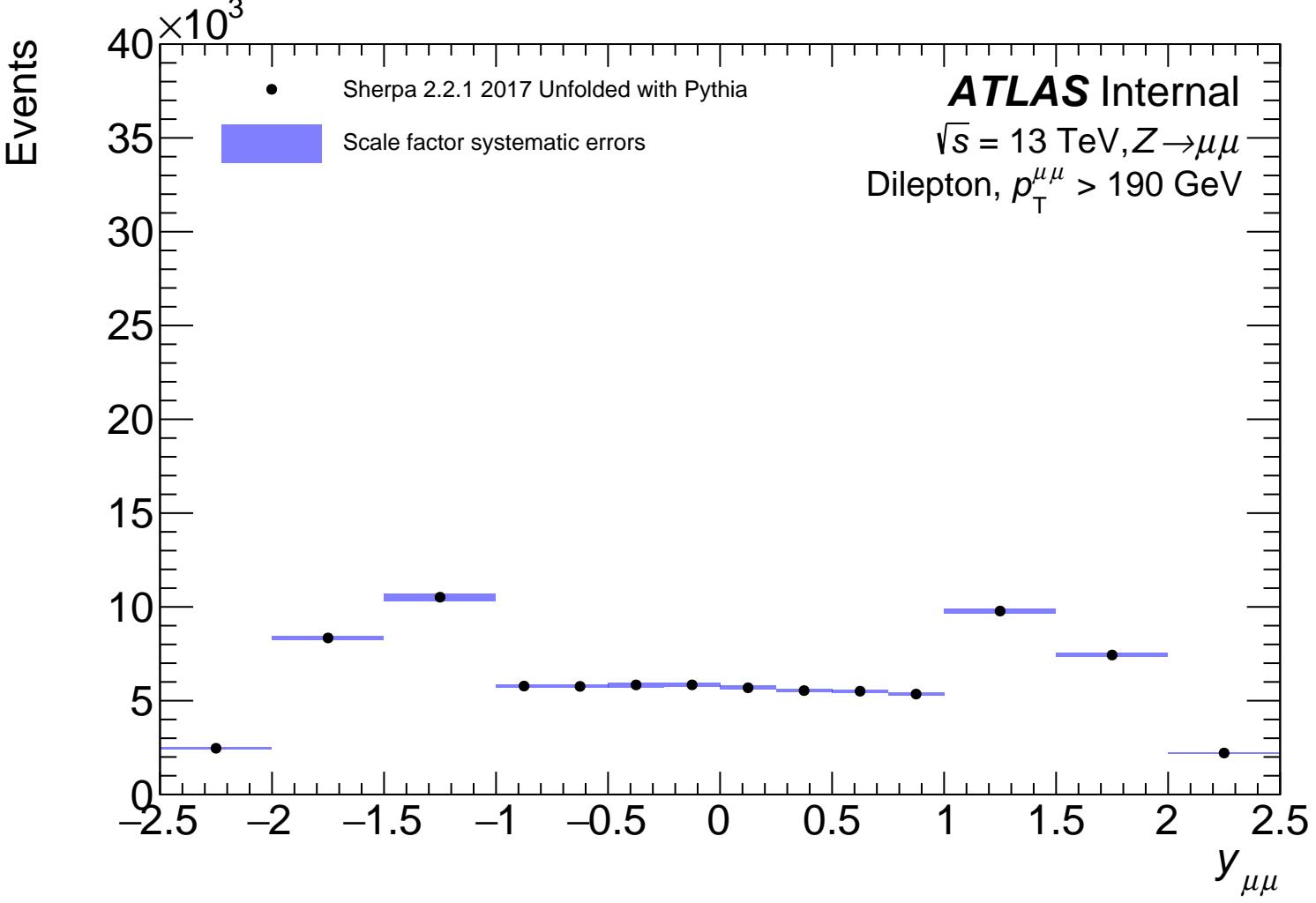


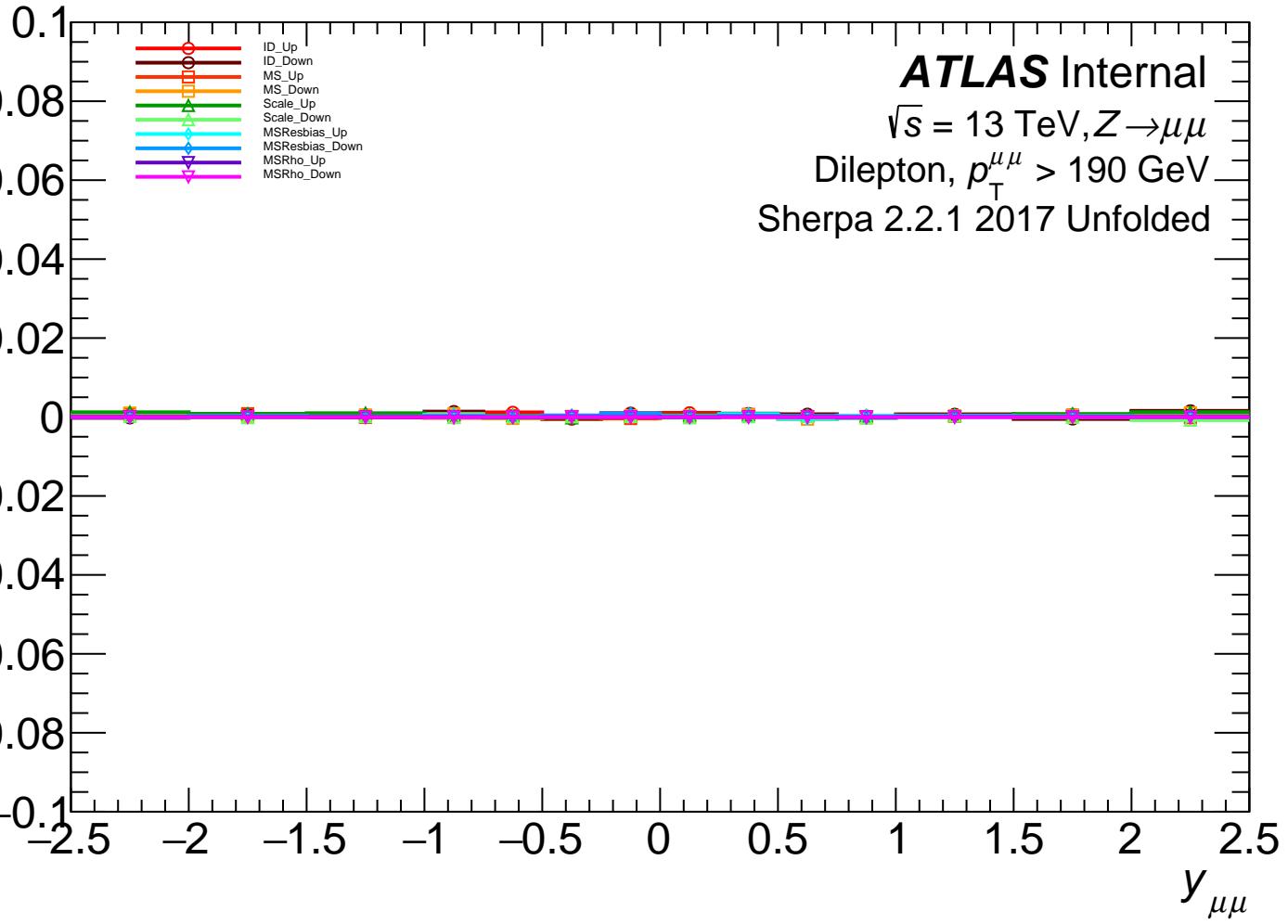


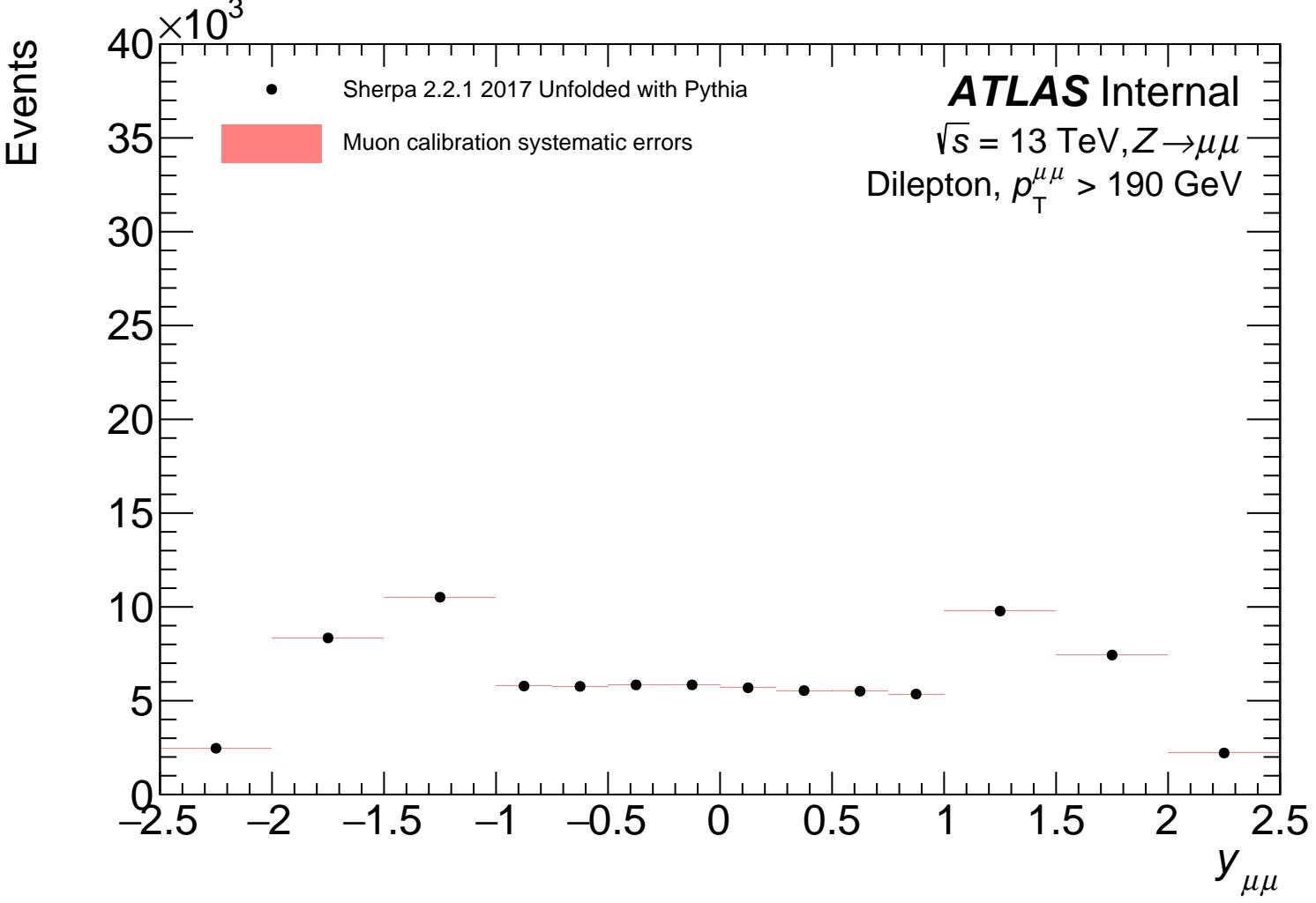


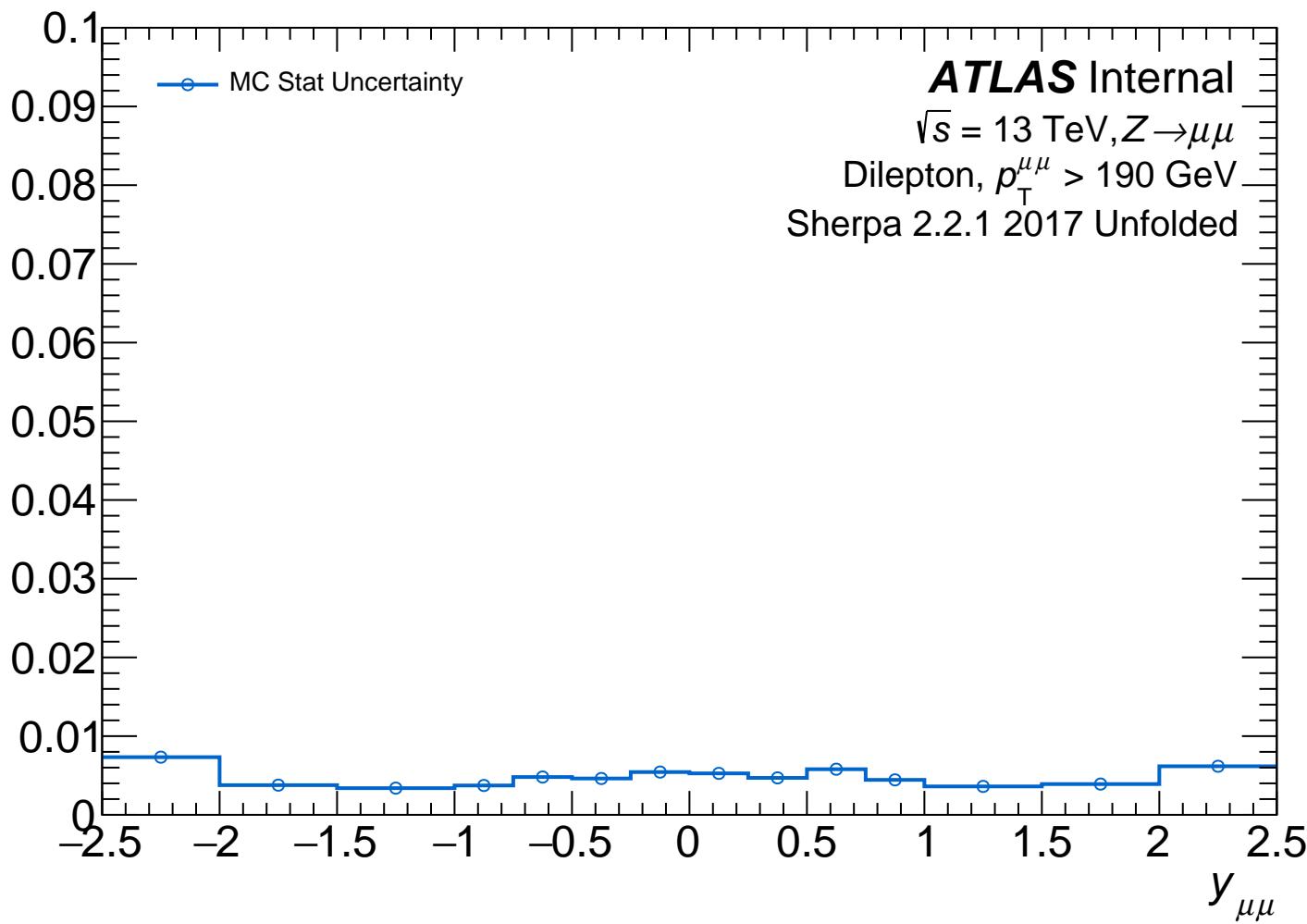


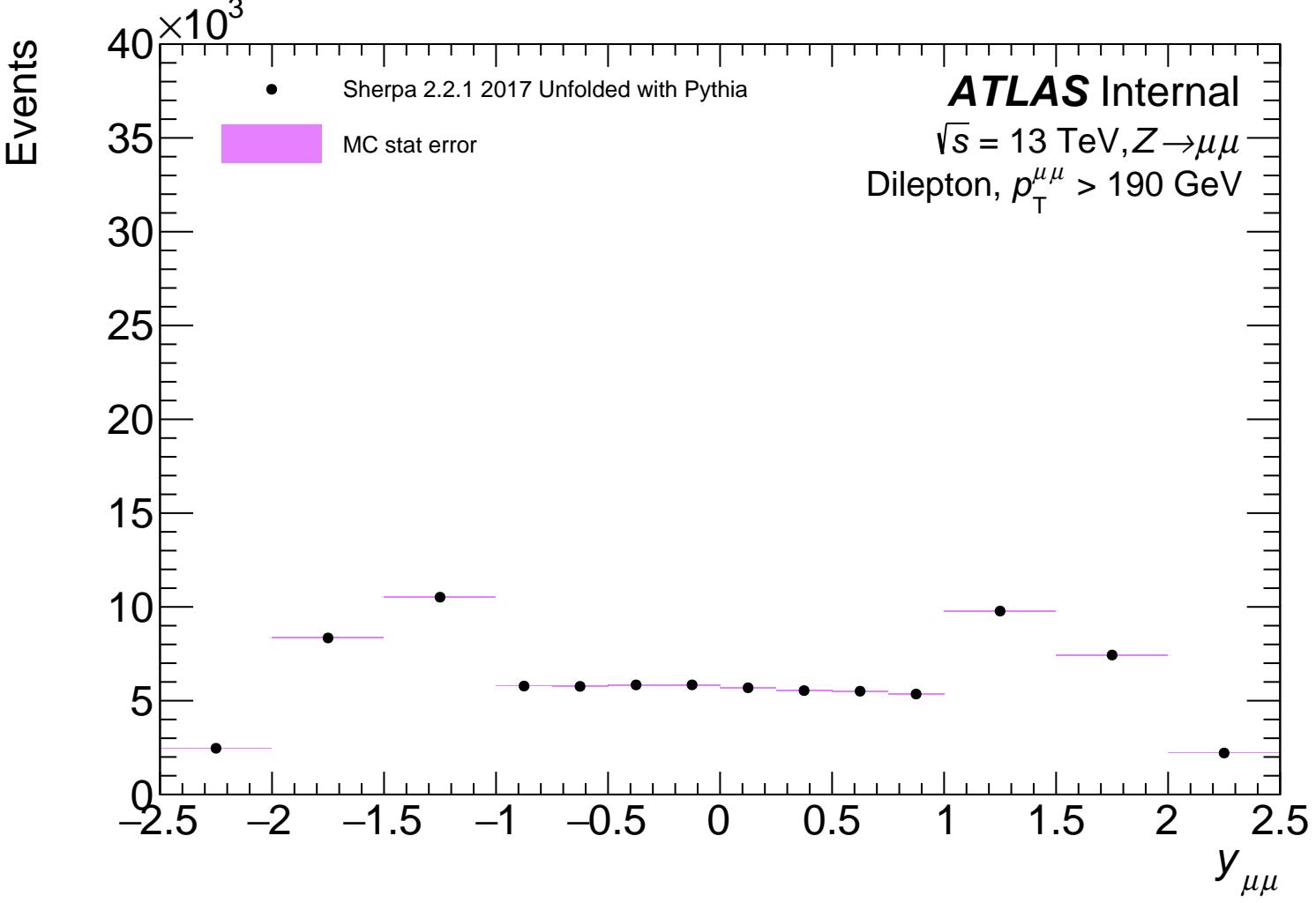


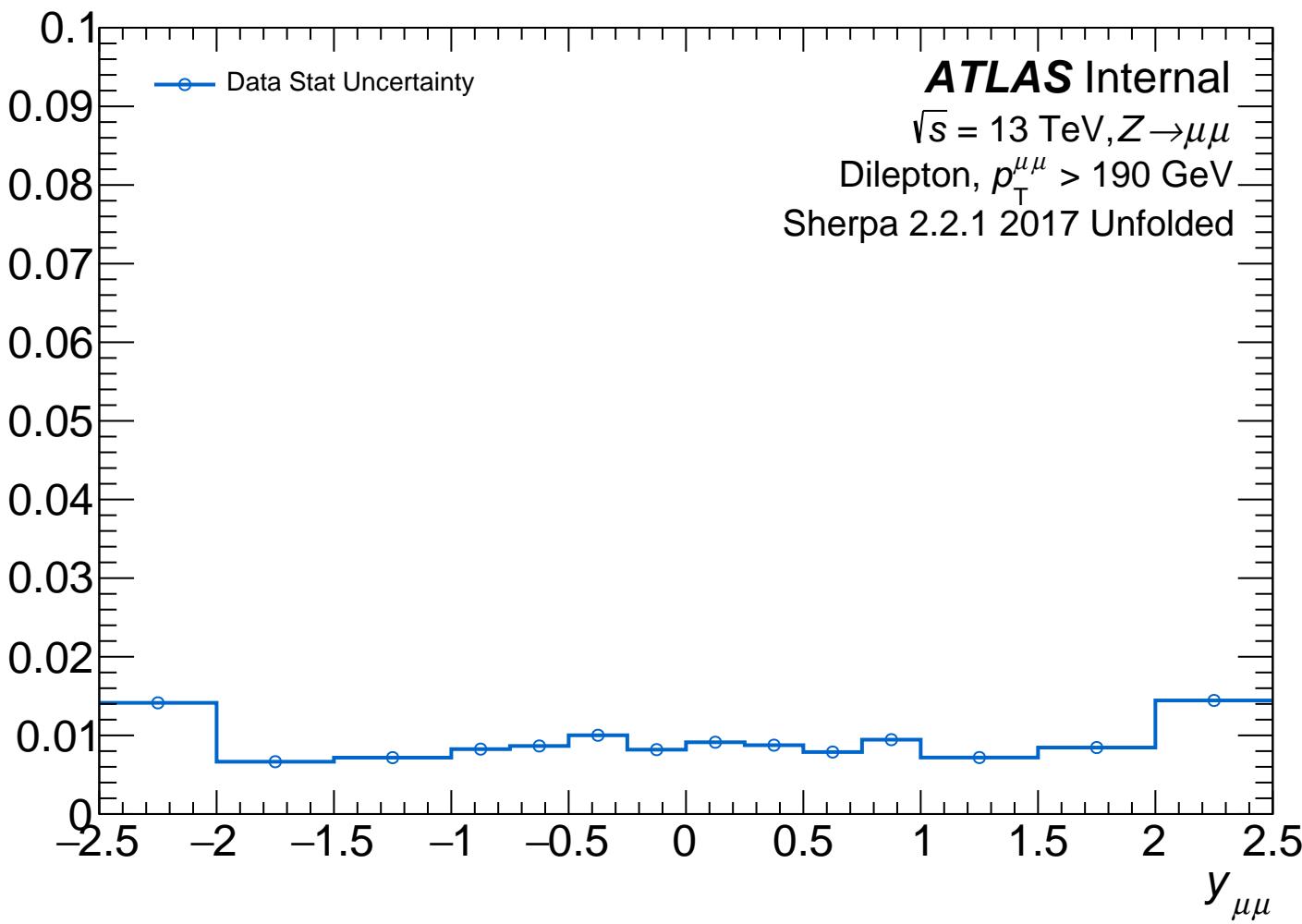


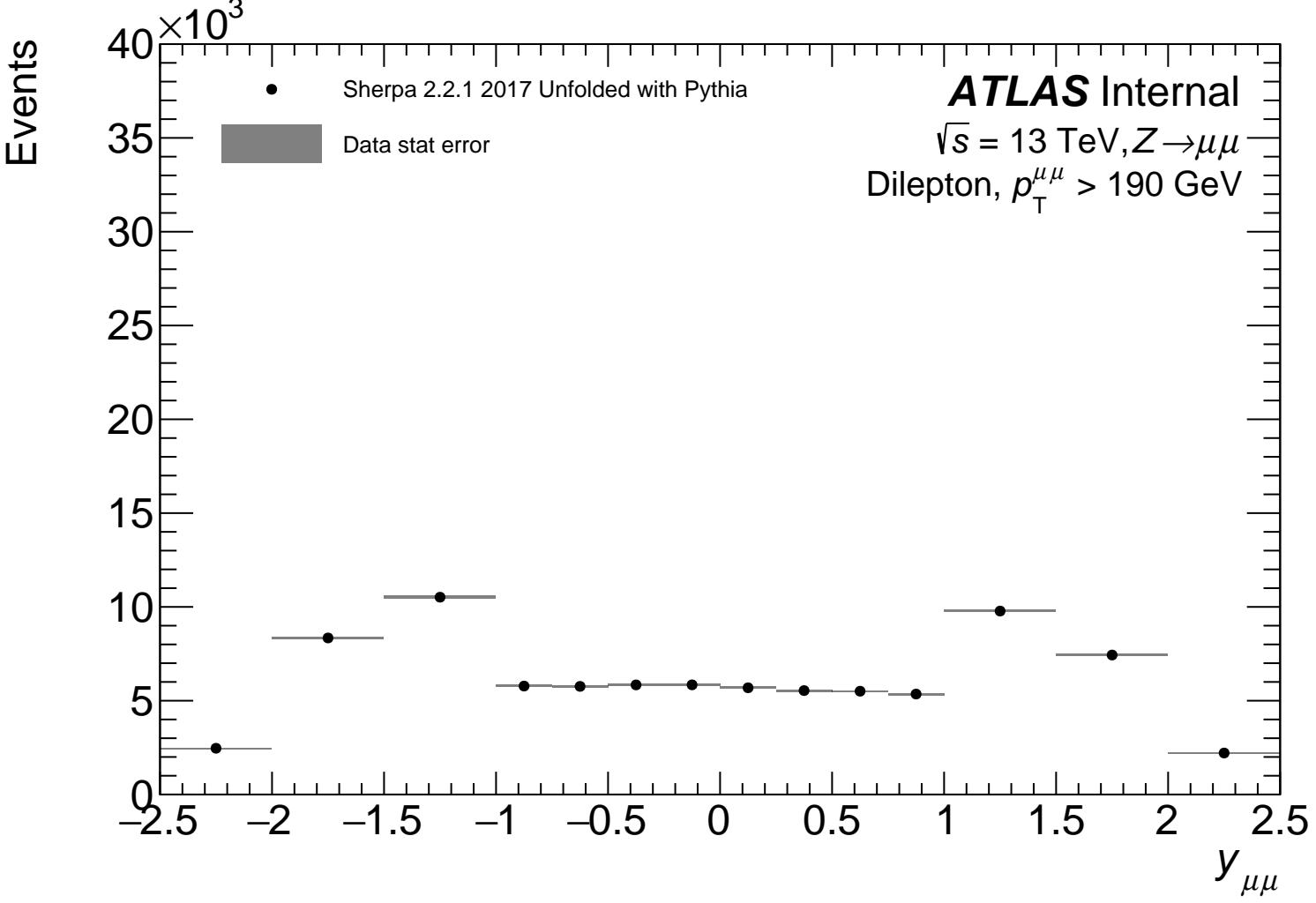


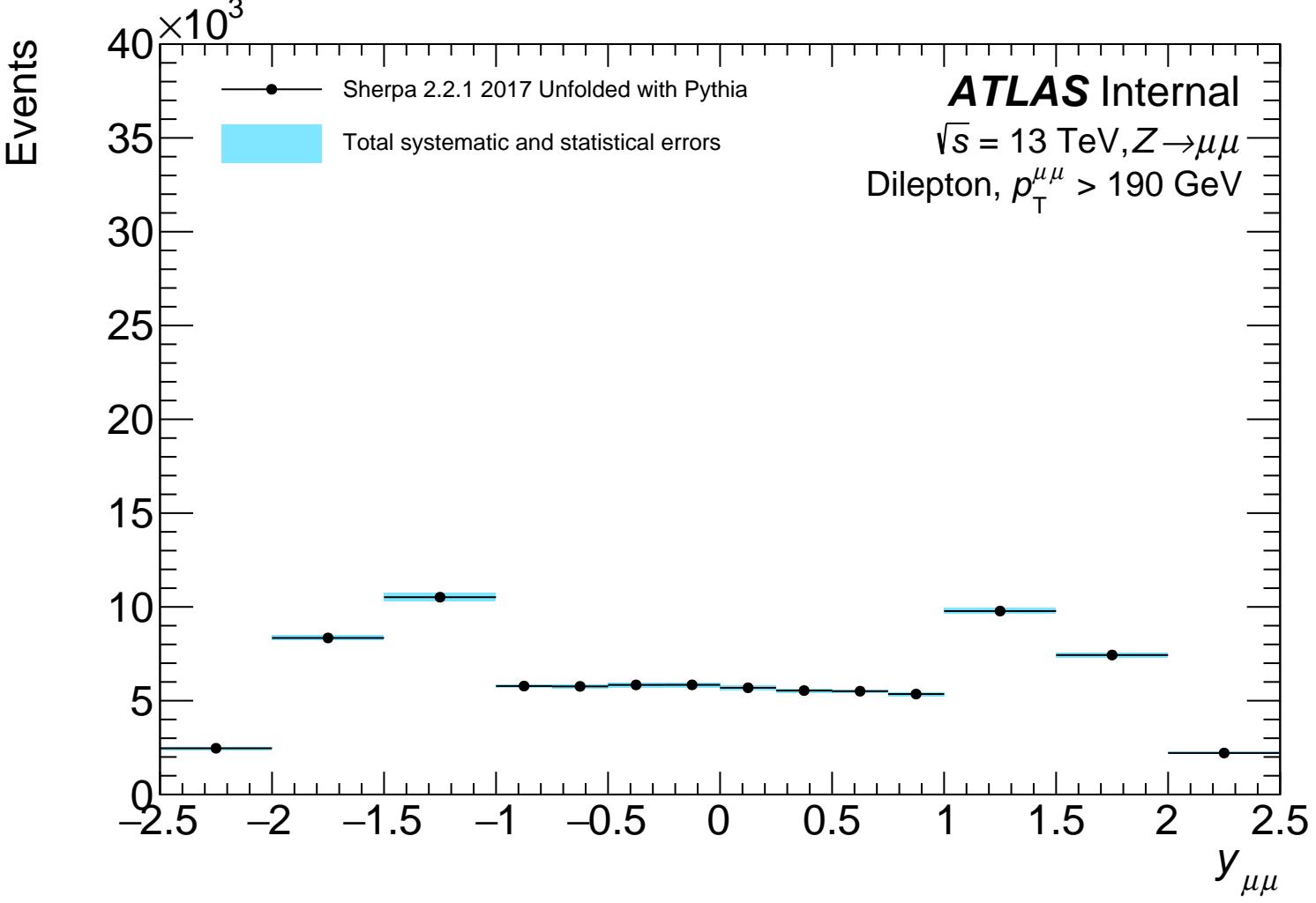


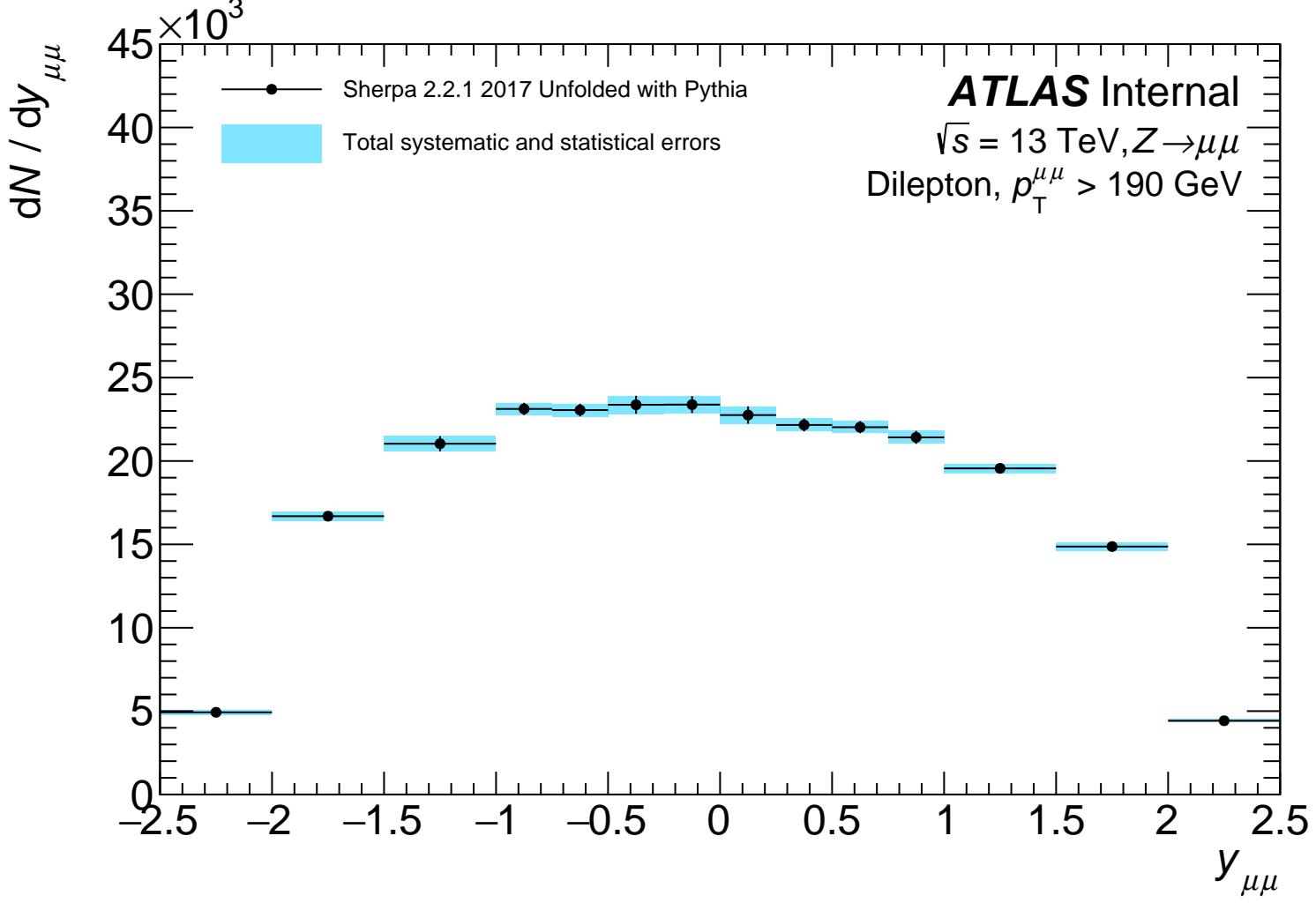










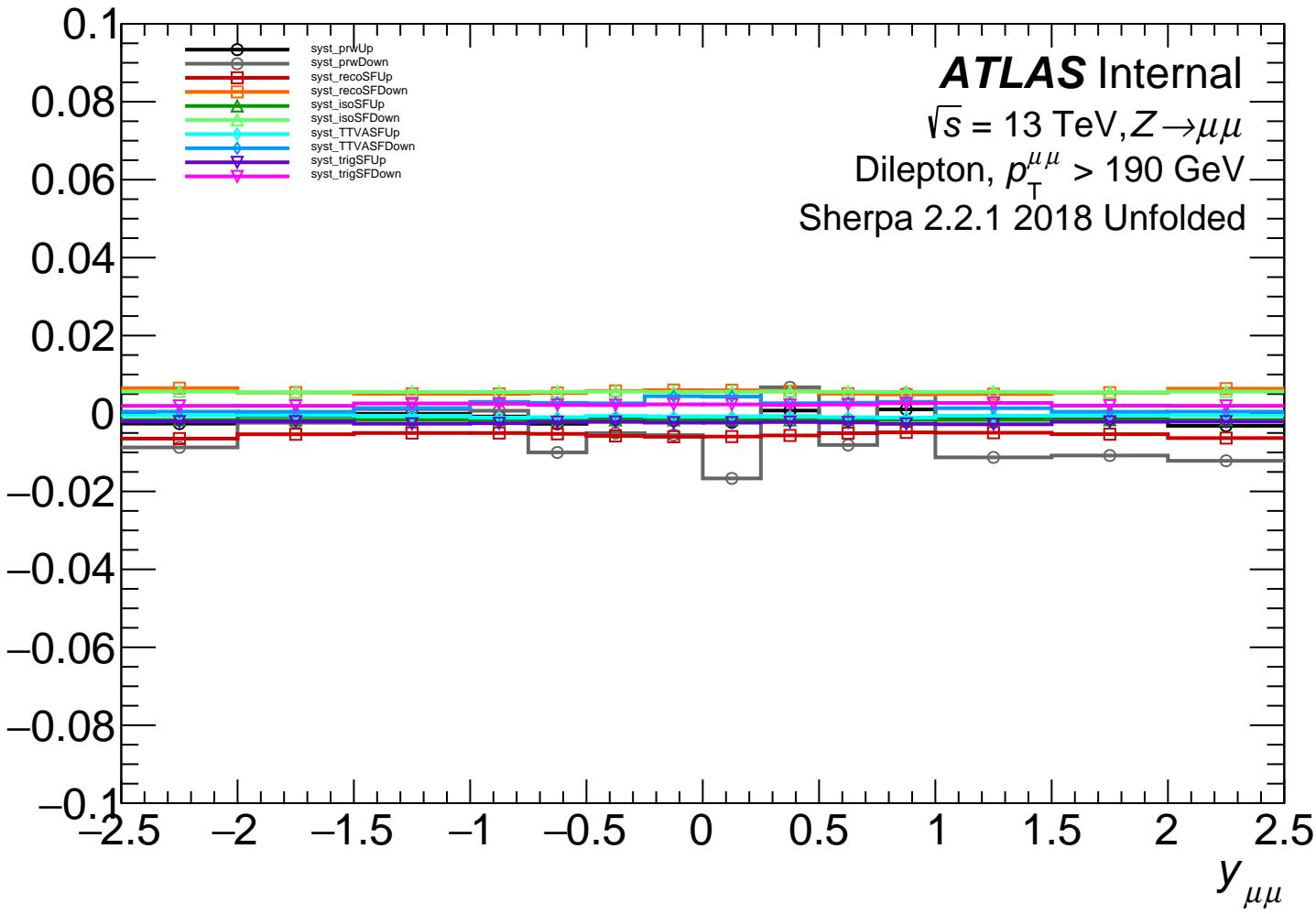


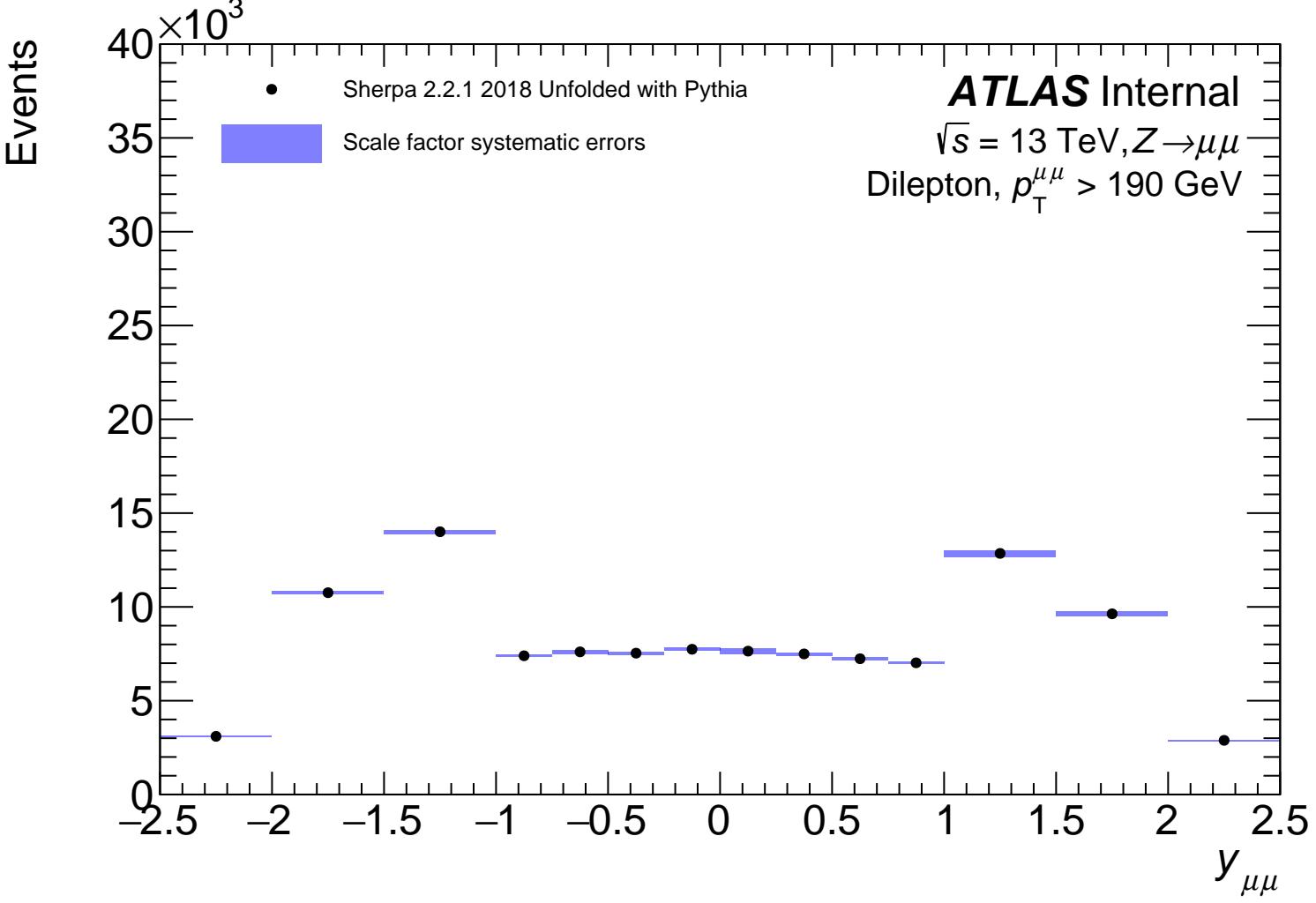
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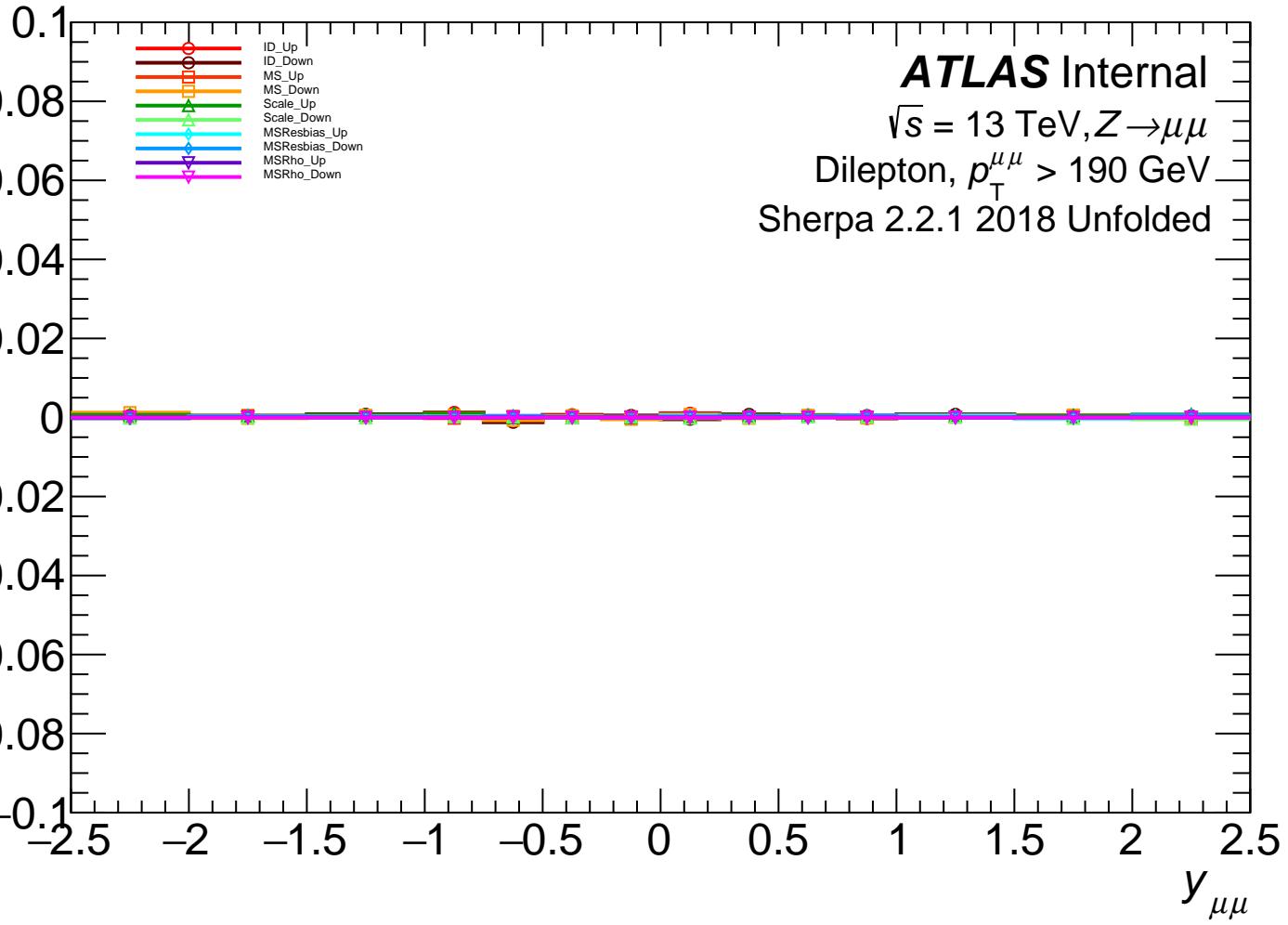
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

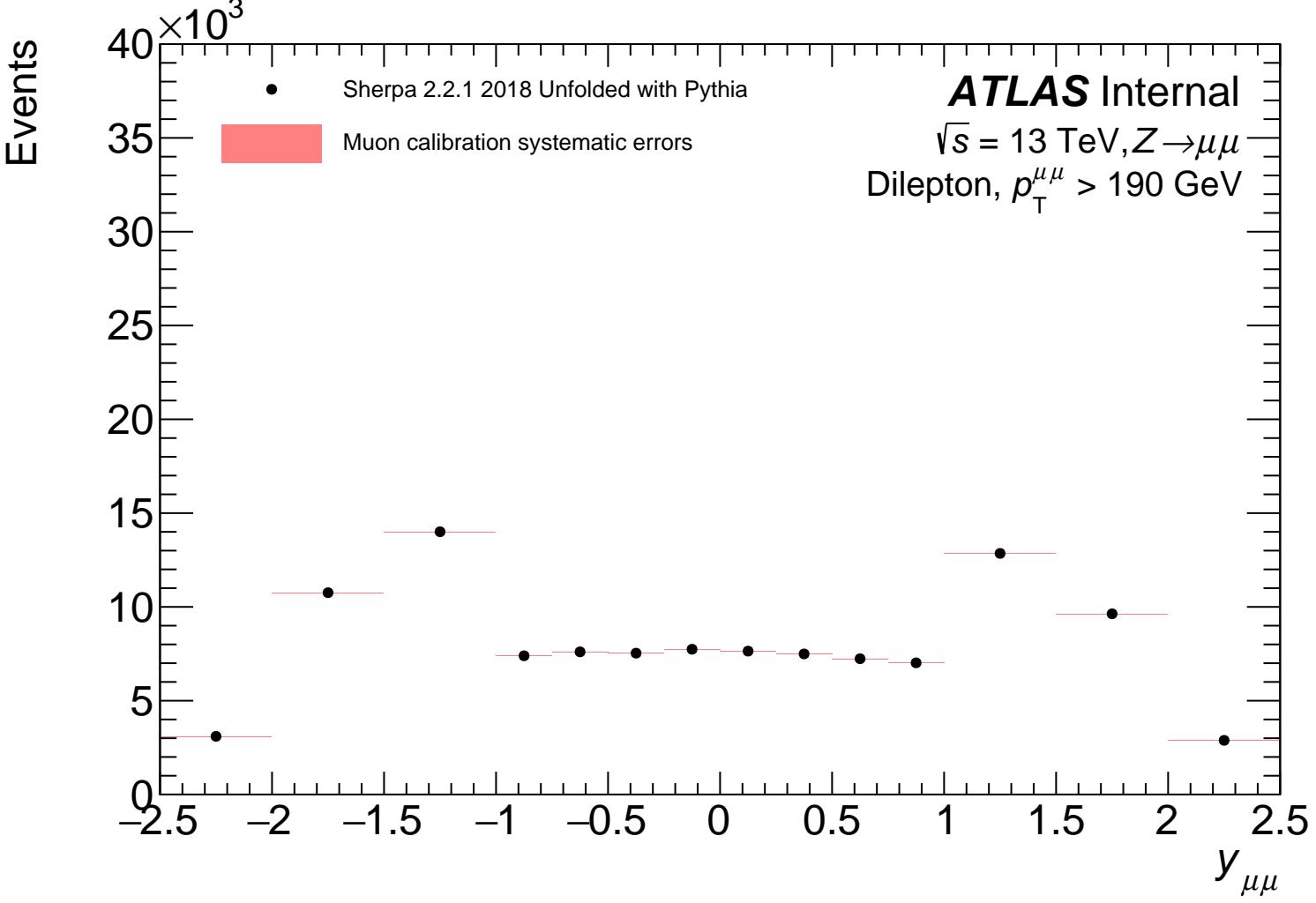
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

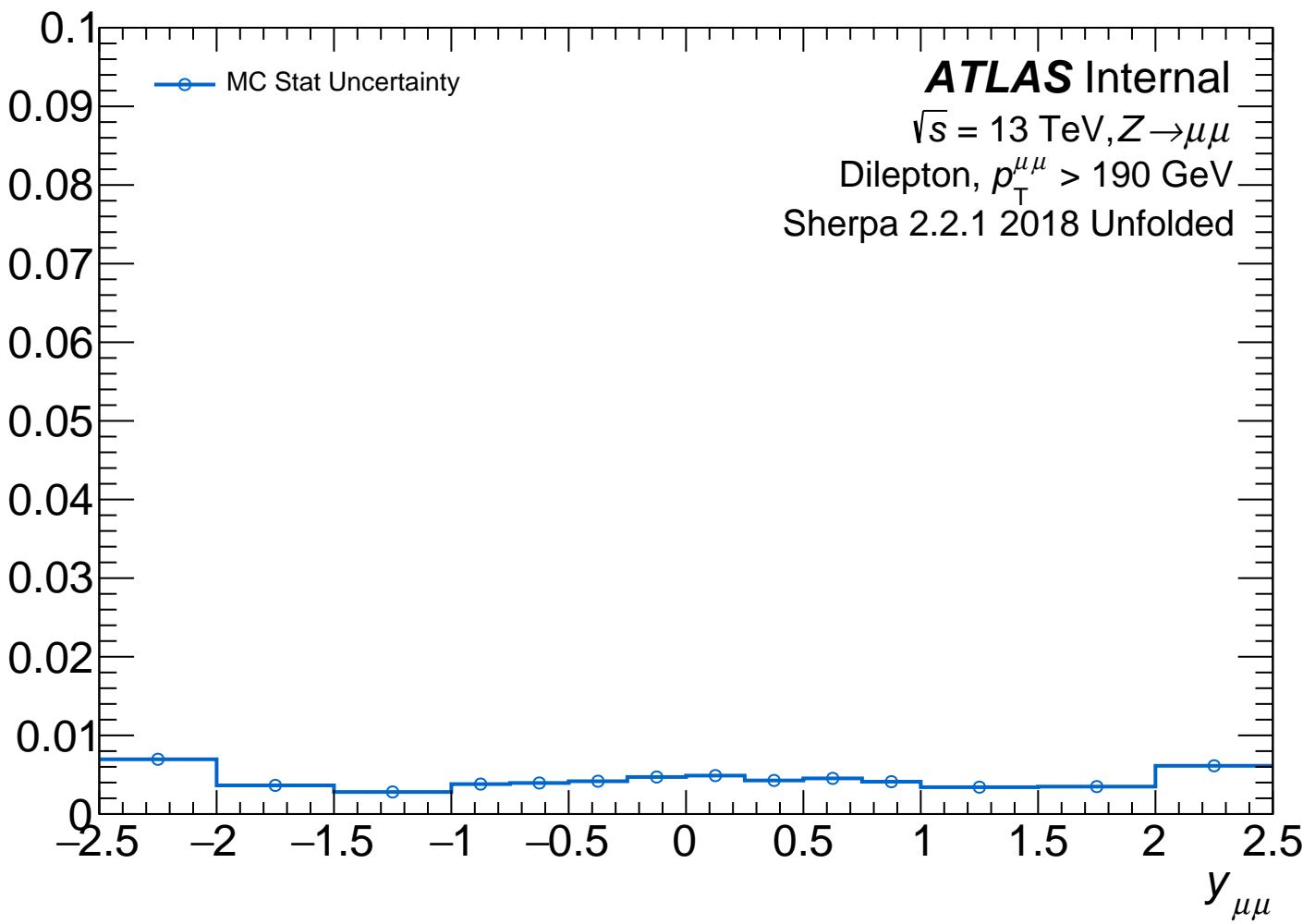
Sherpa 2.2.1 2018 Unfolded

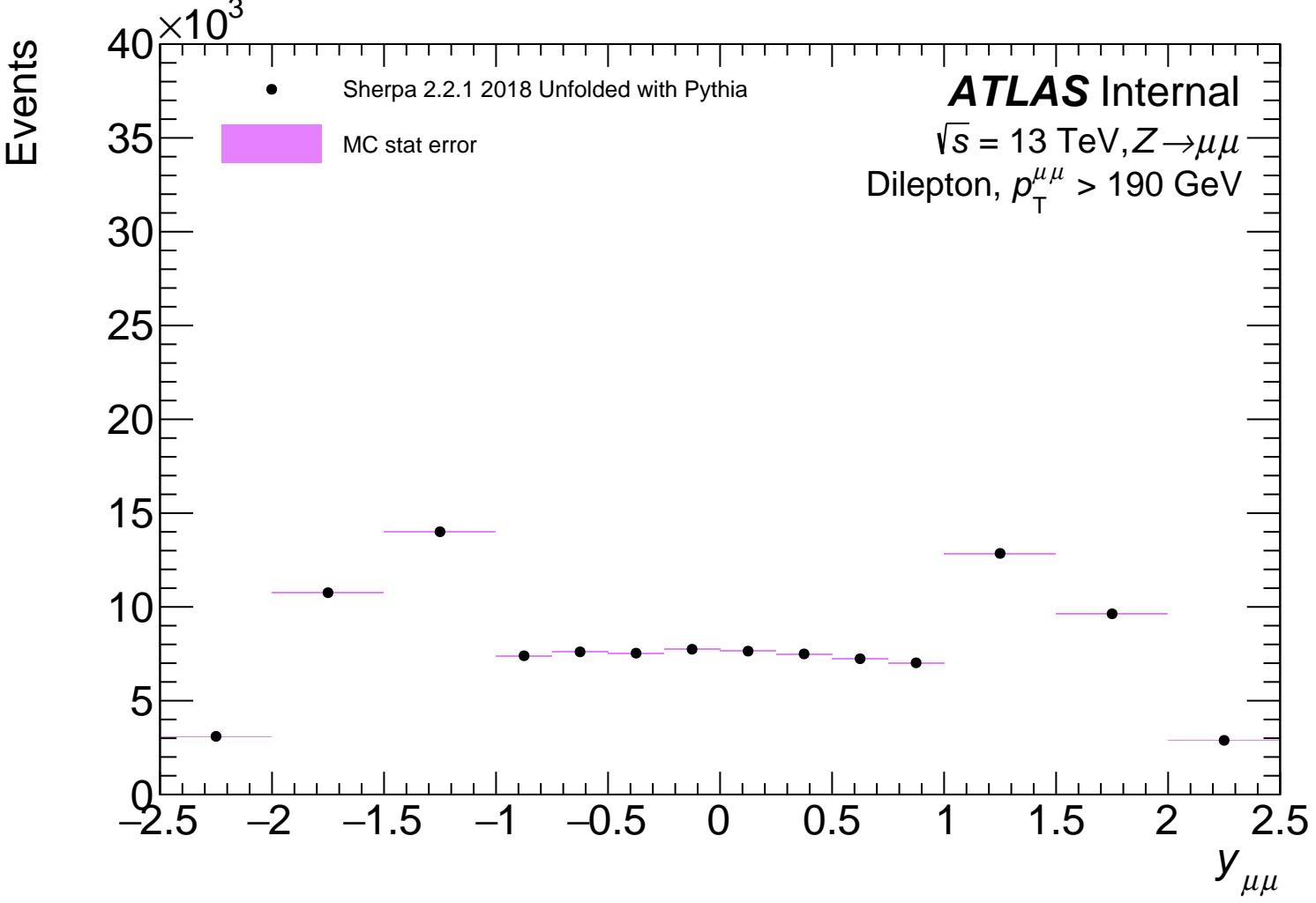


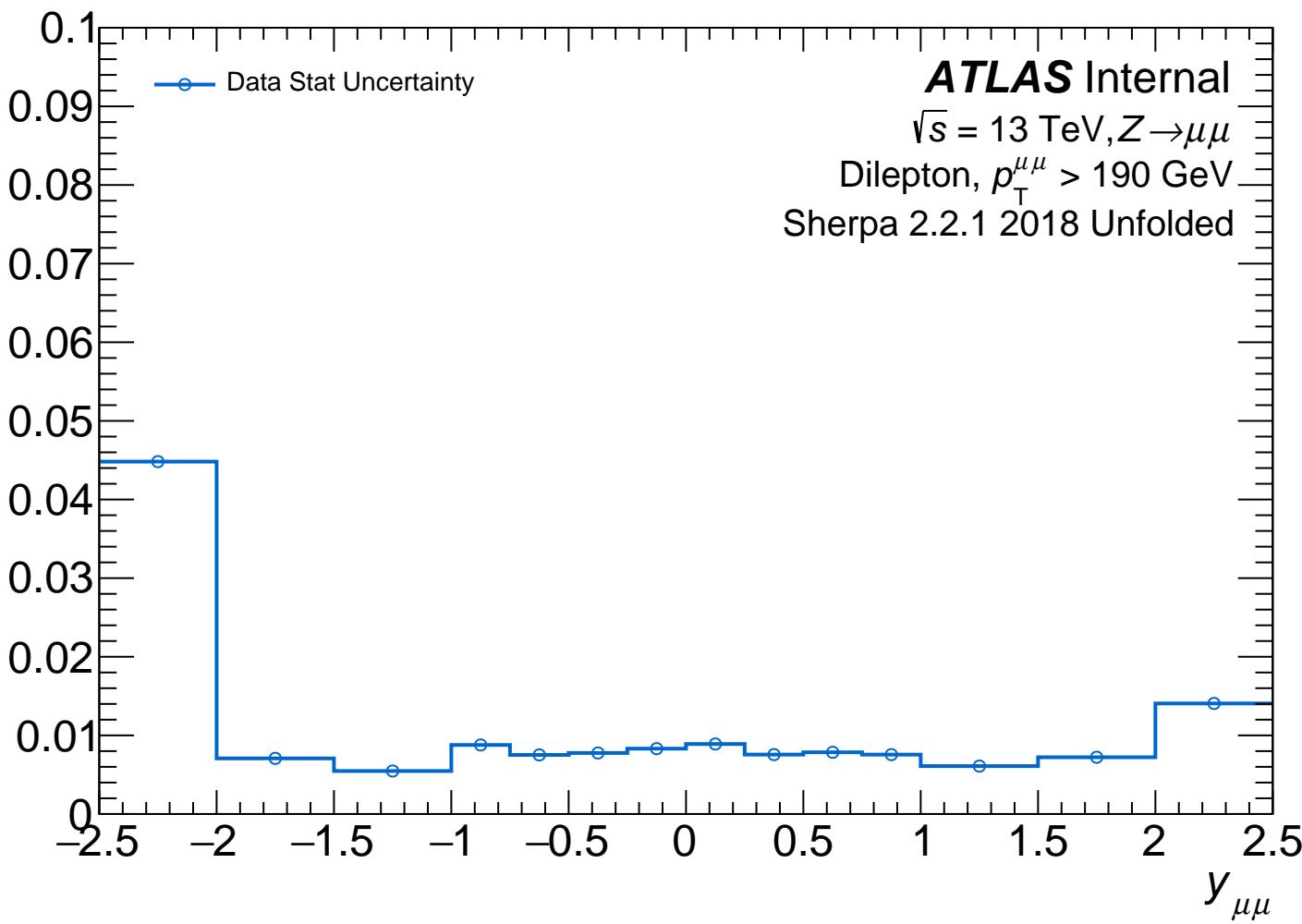


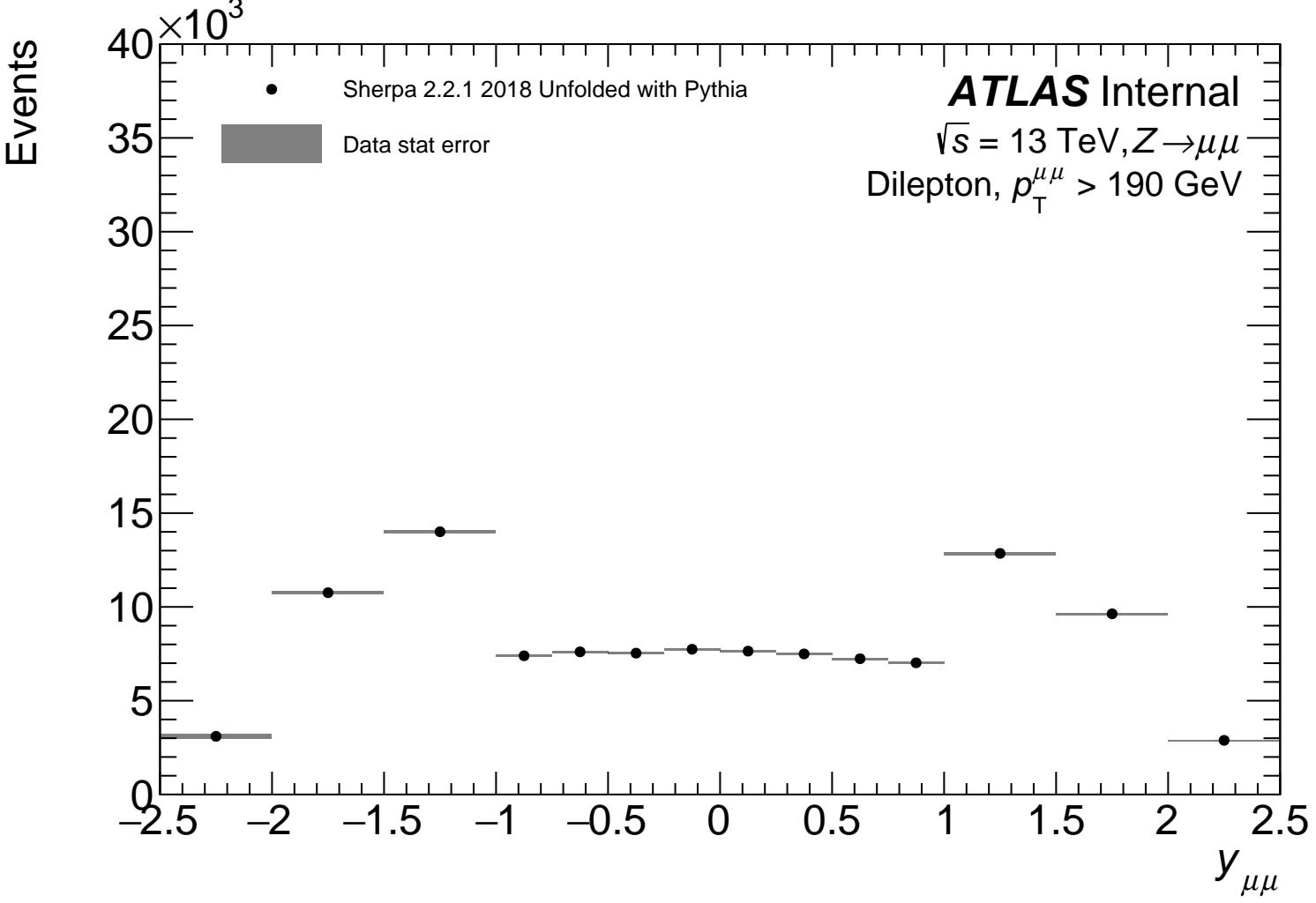


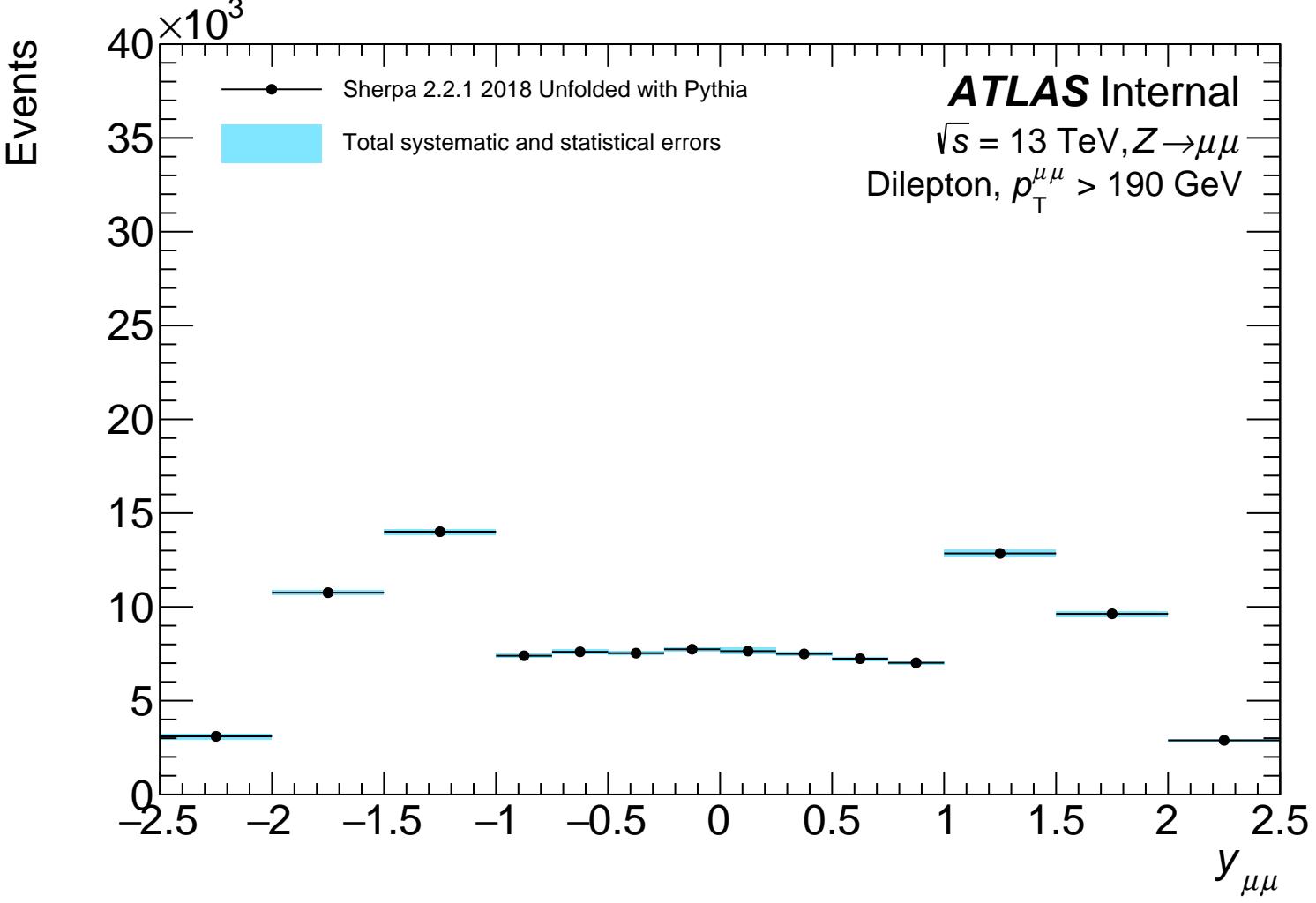


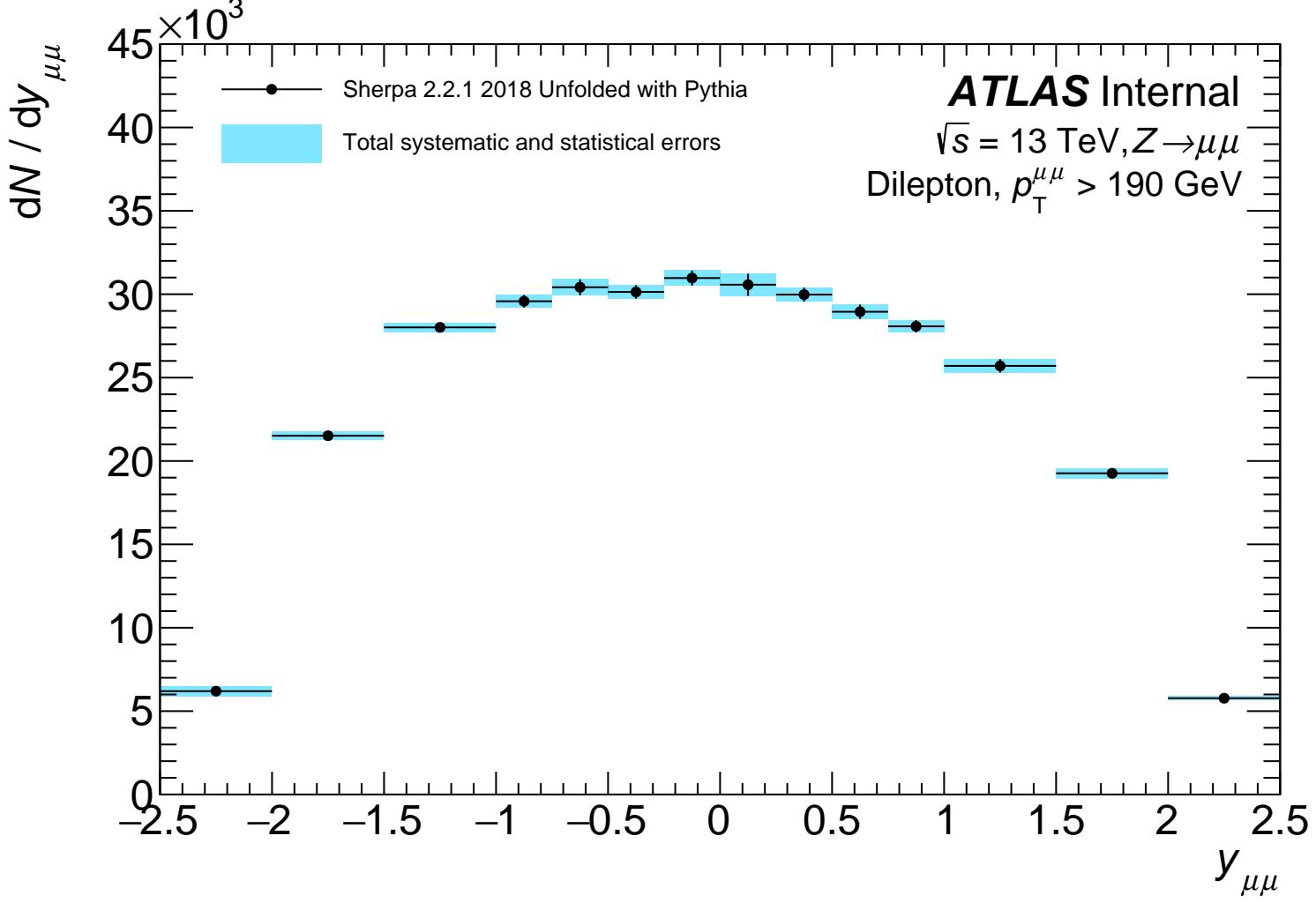










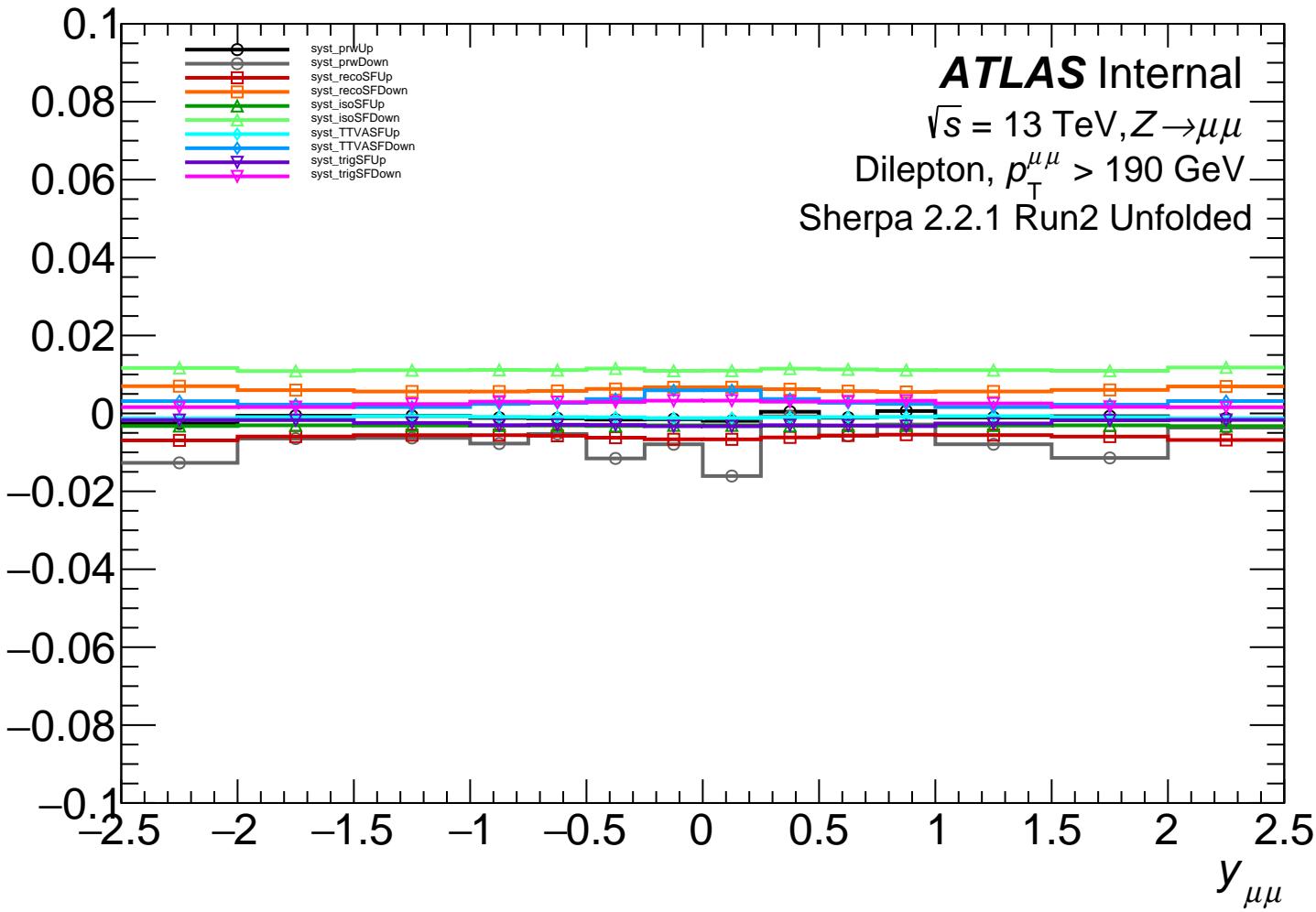


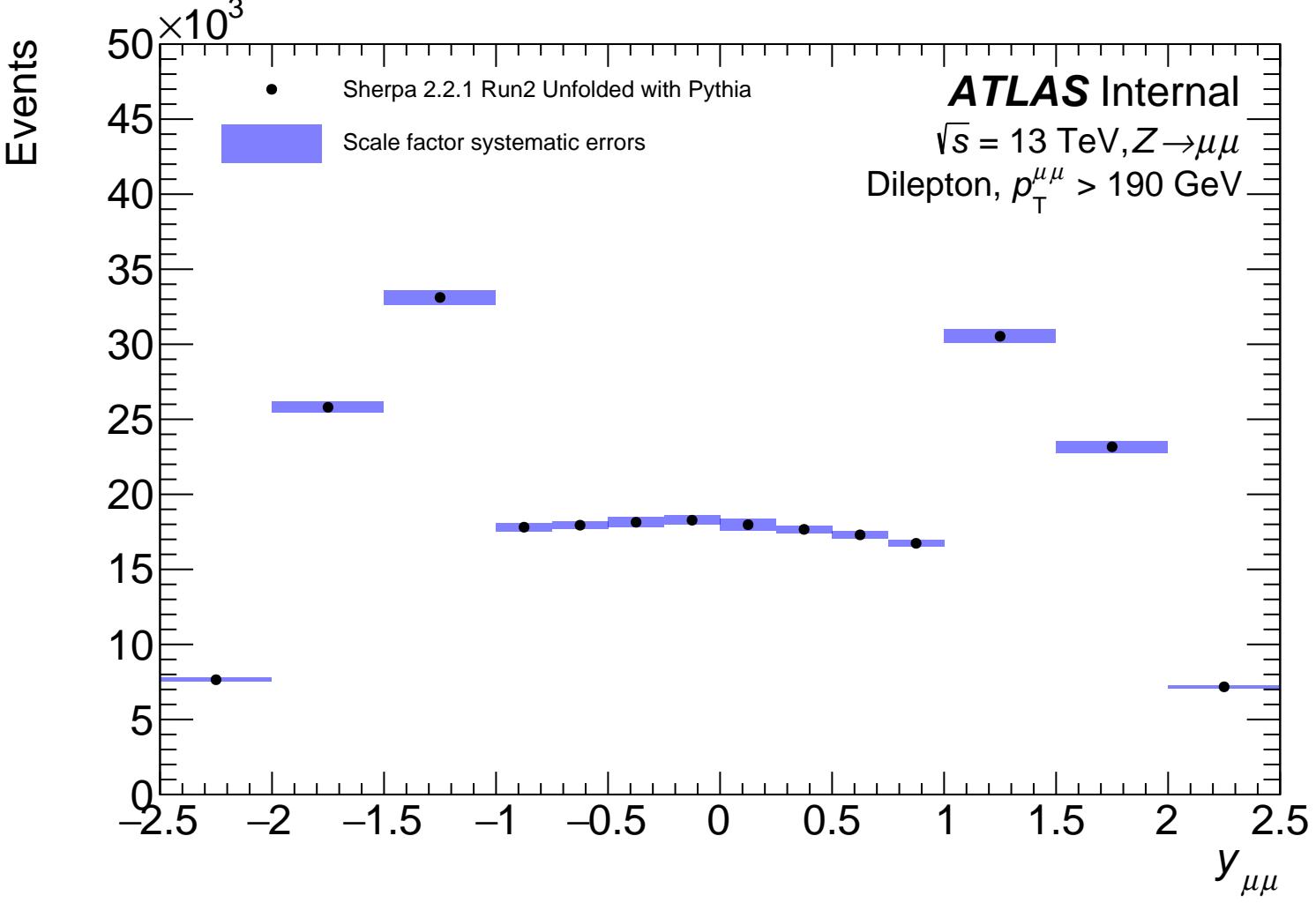
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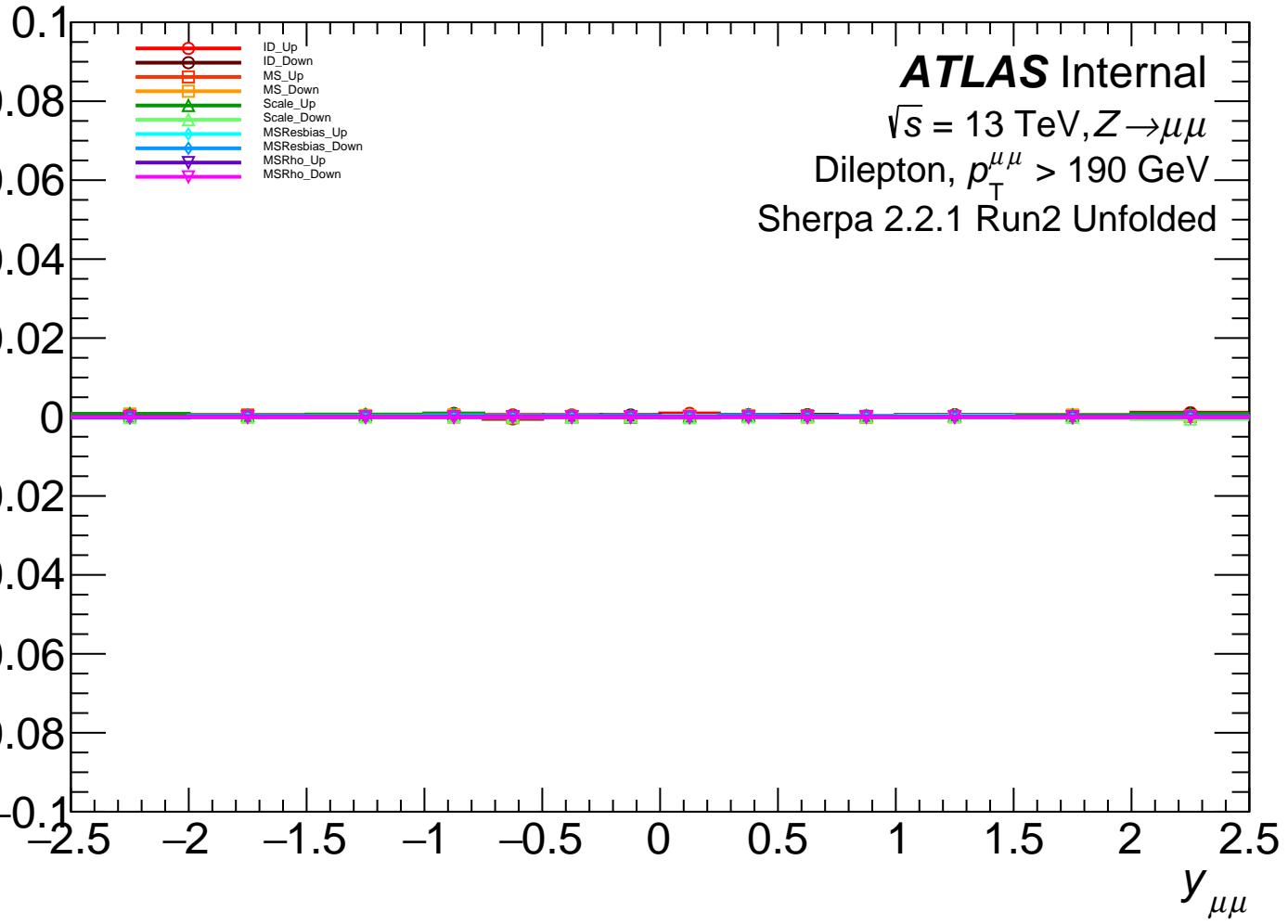
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

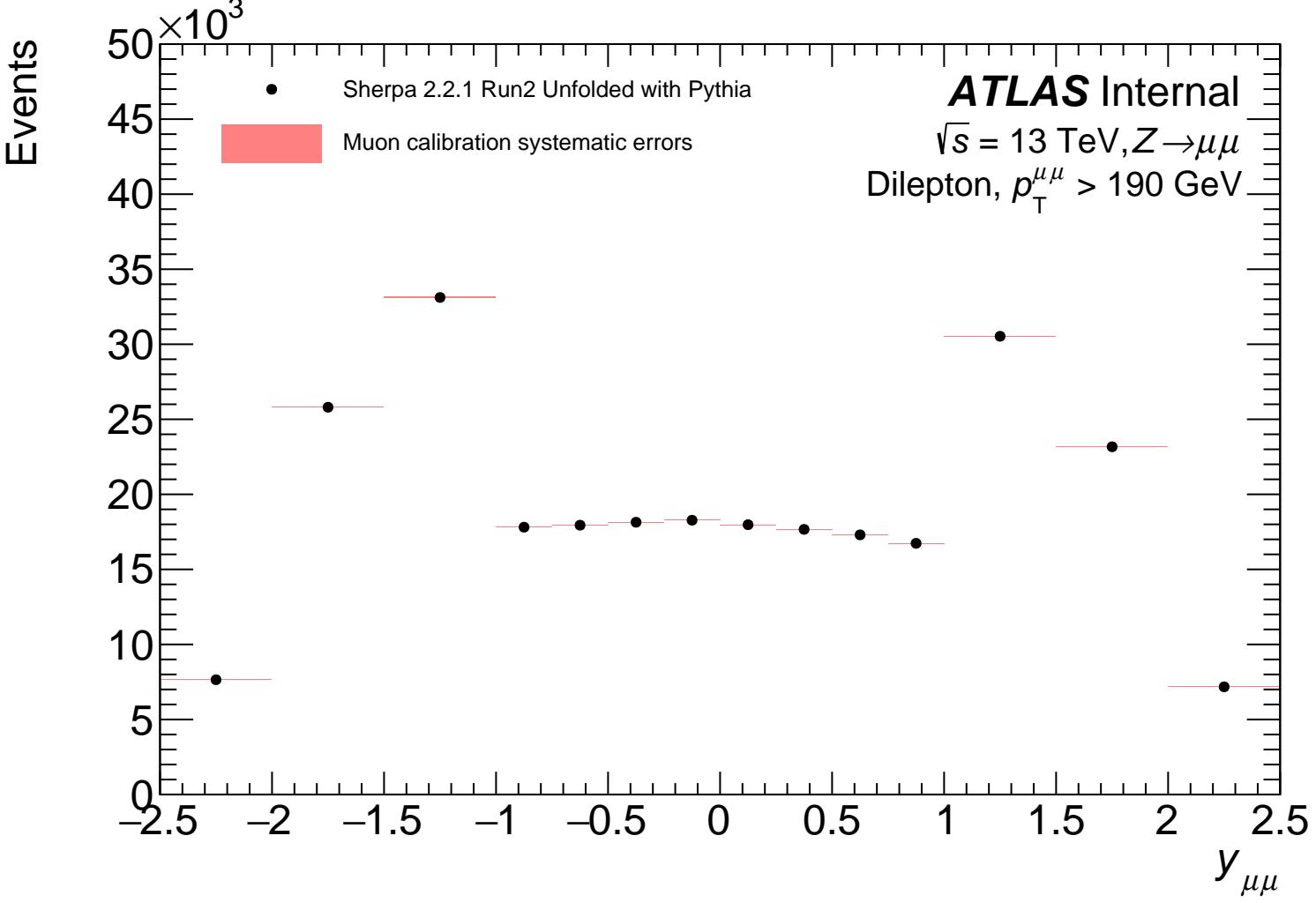
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

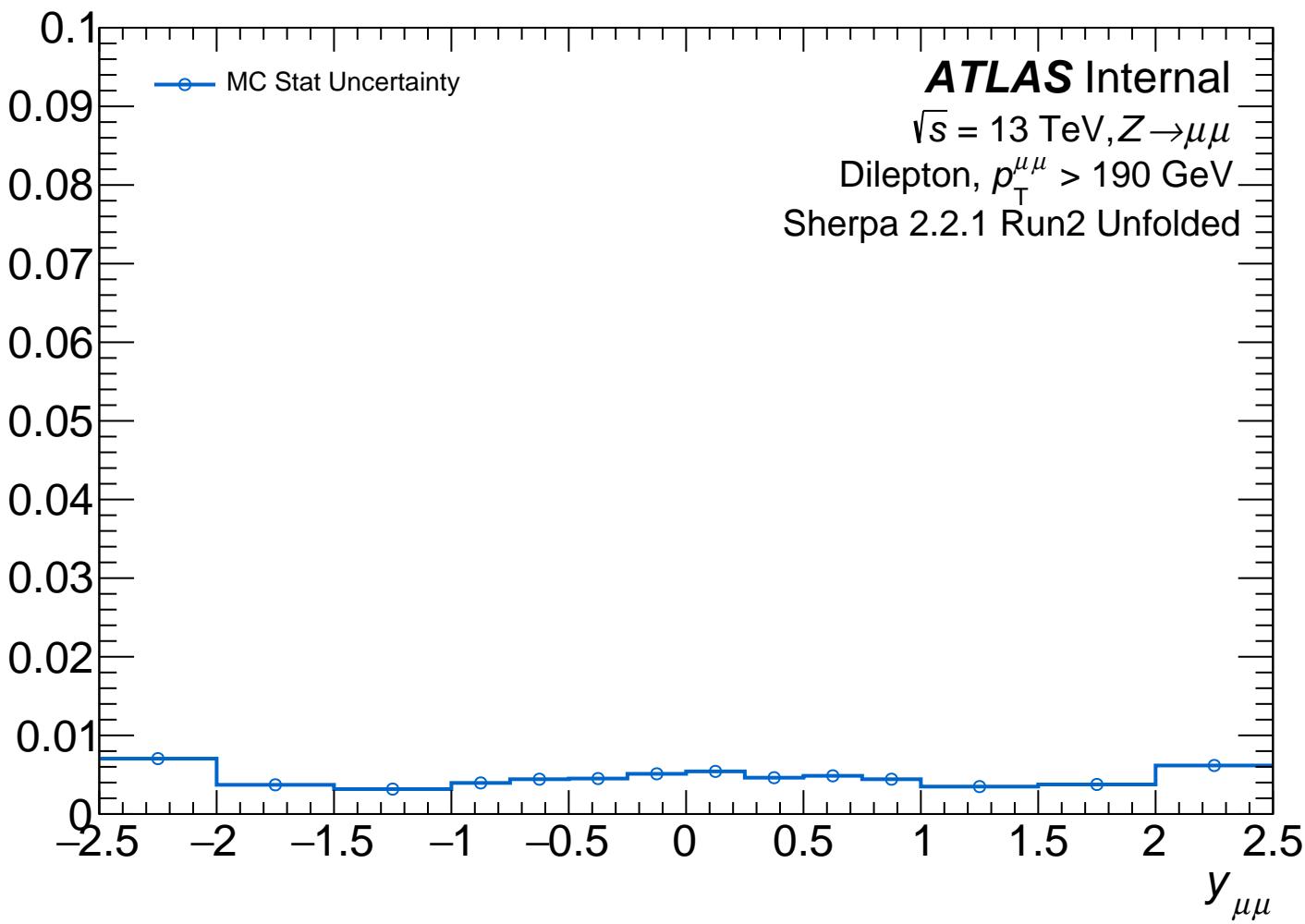
Sherpa 2.2.1 Run2 Unfolded

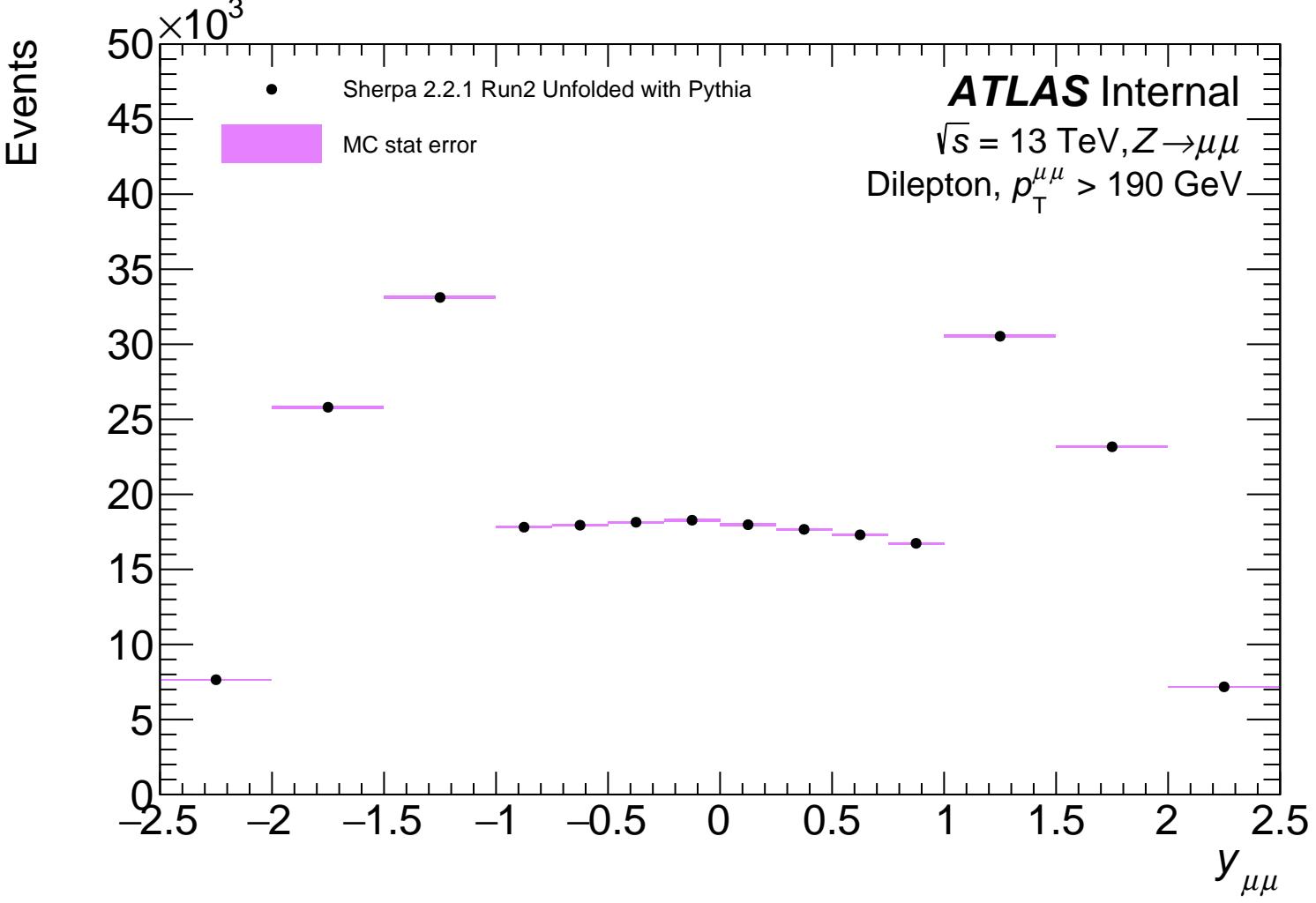


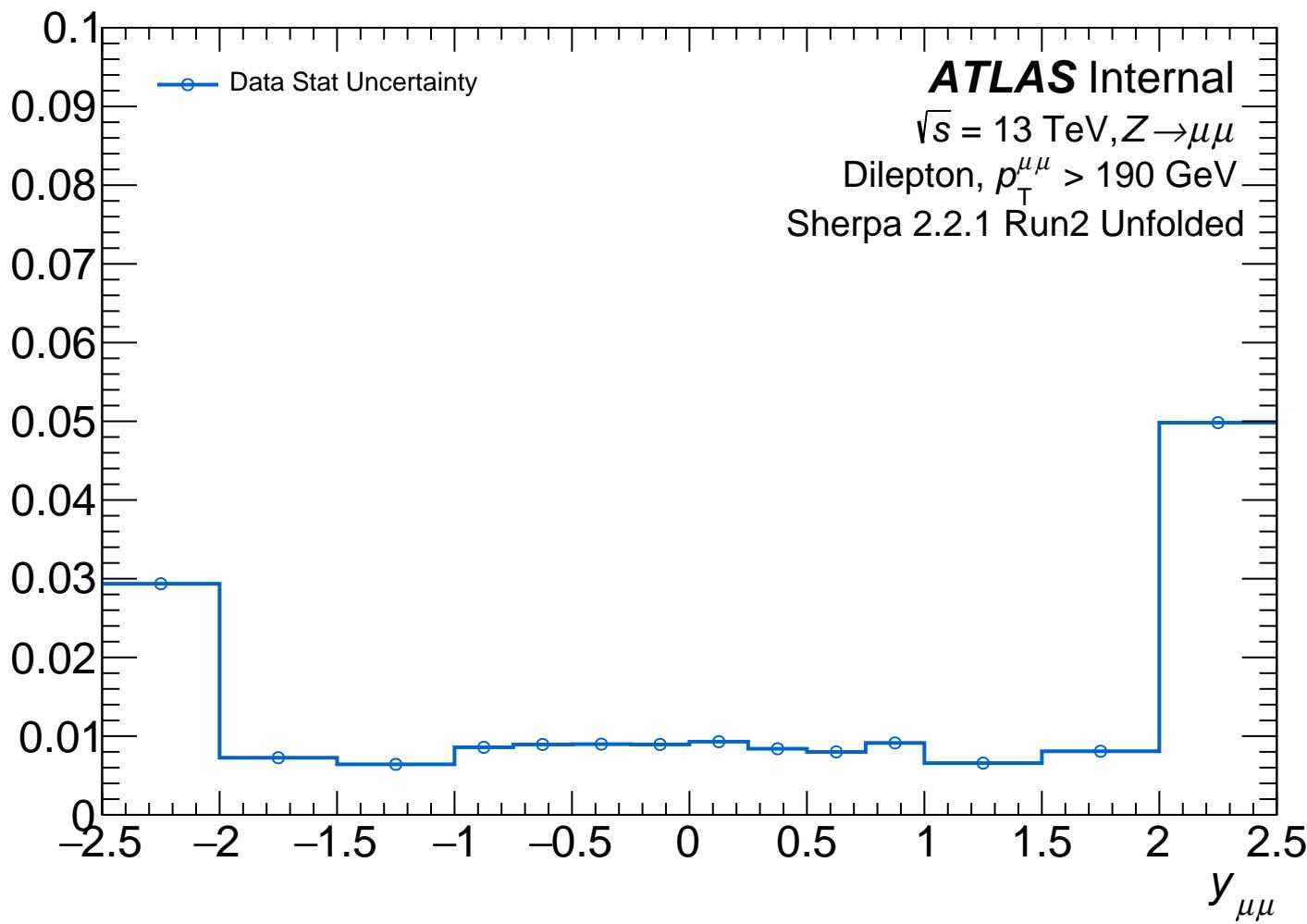


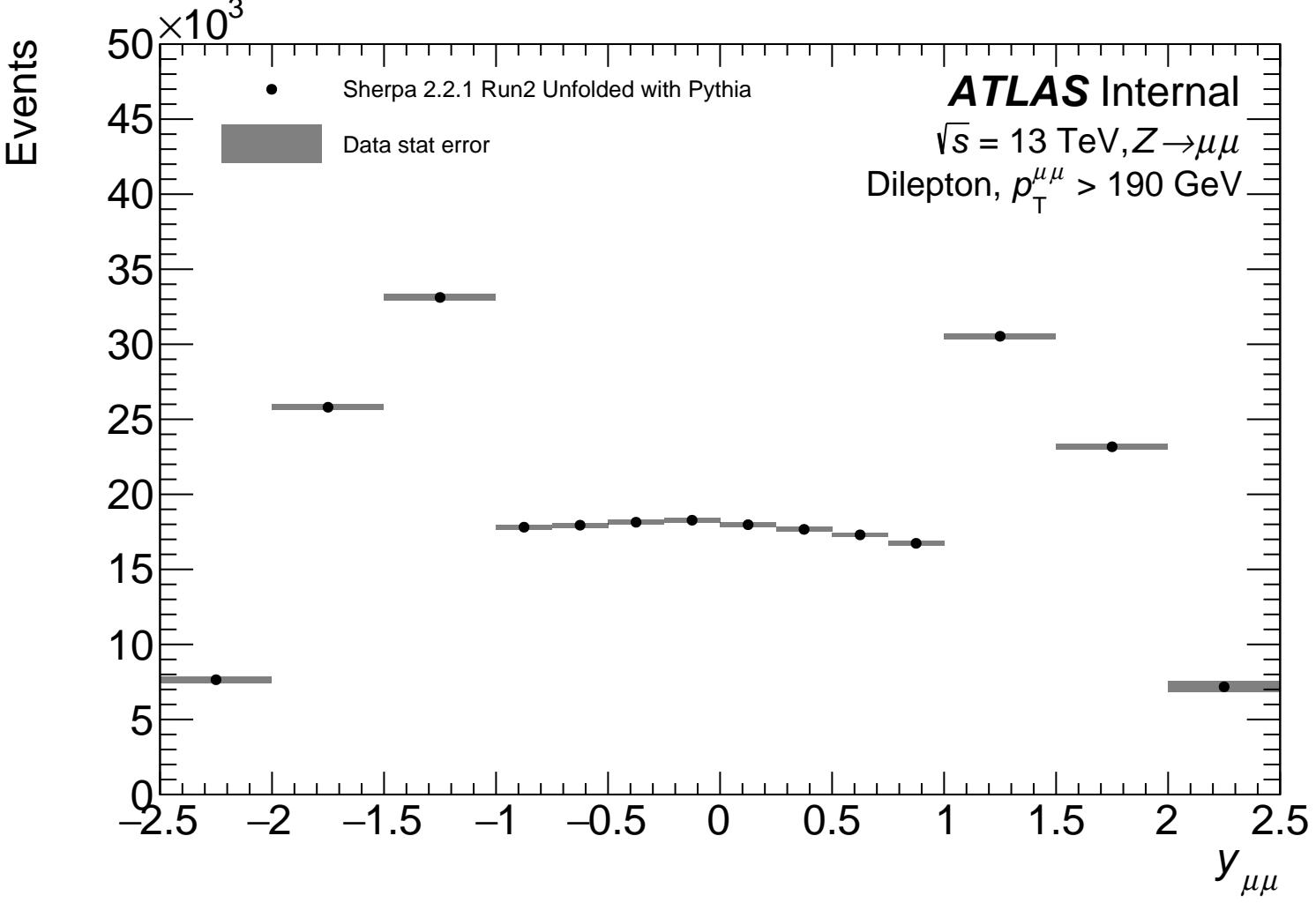


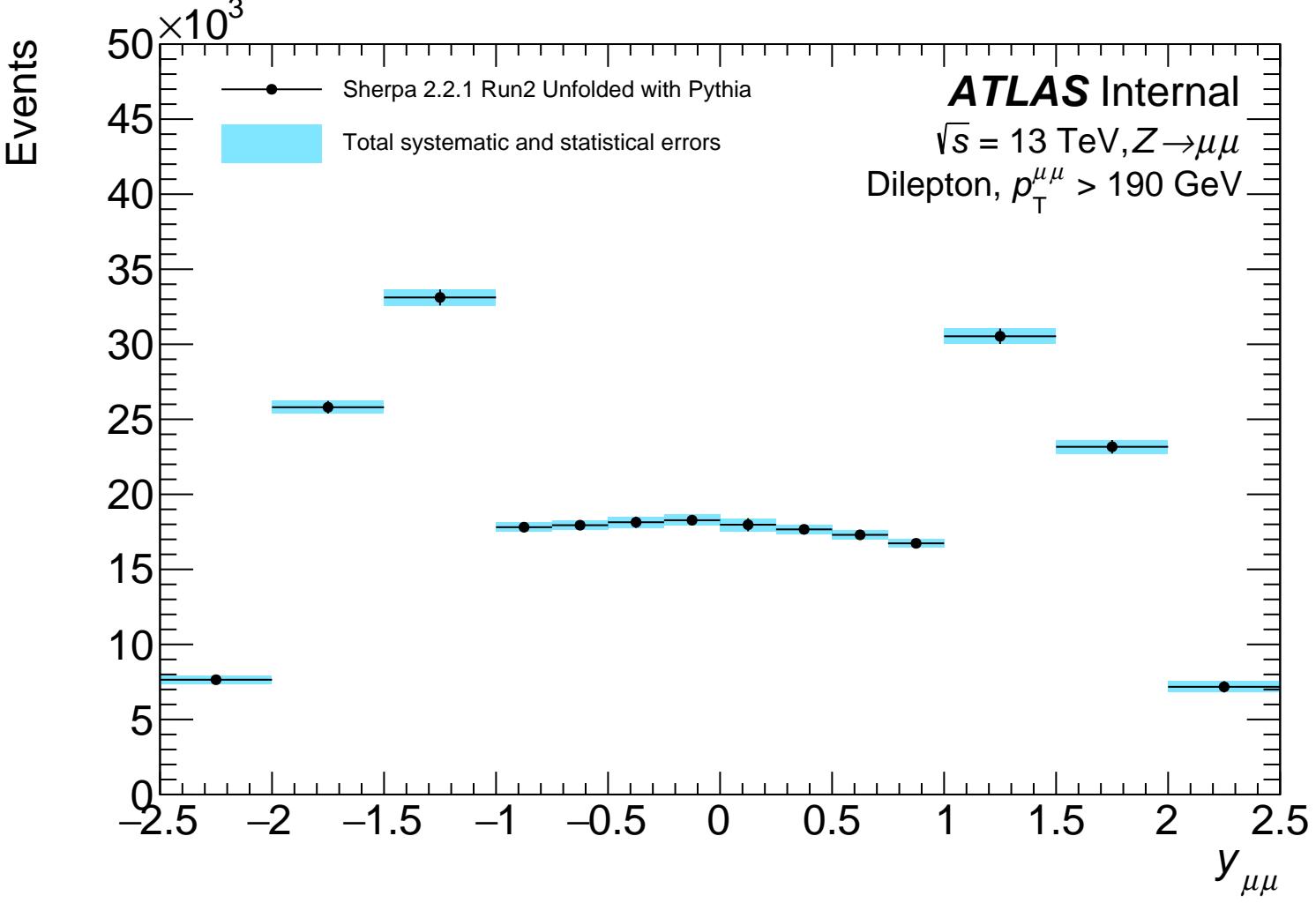


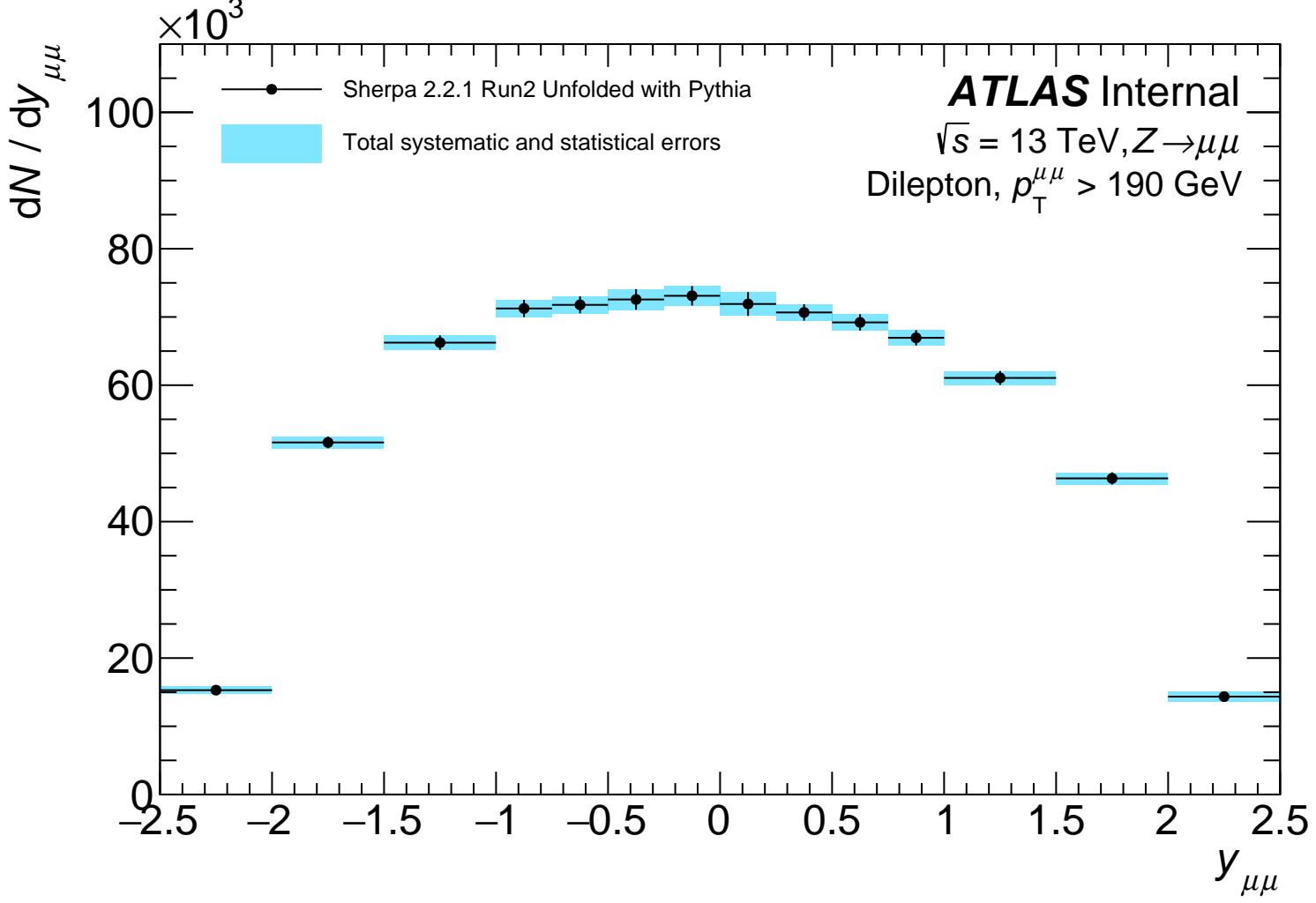










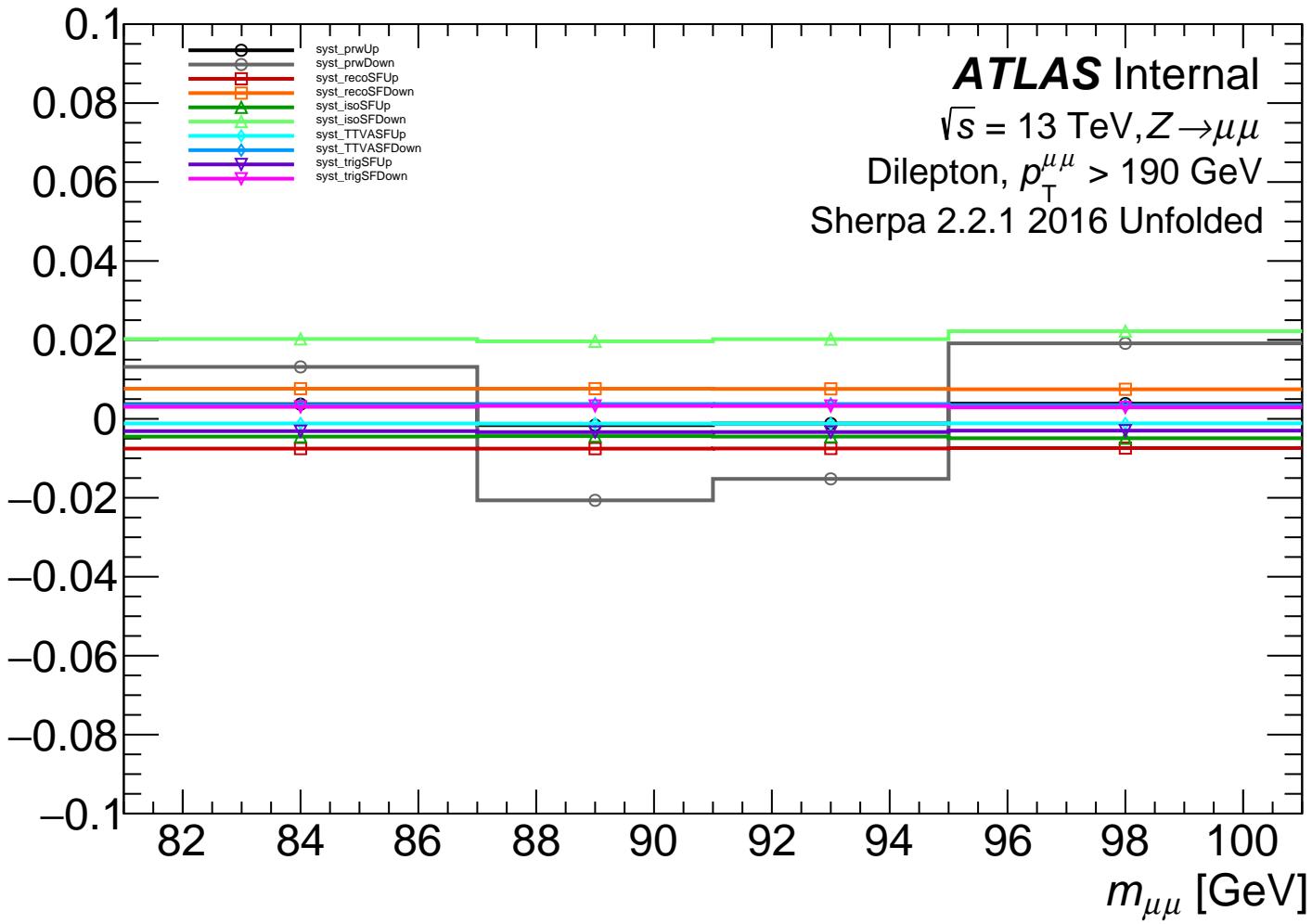


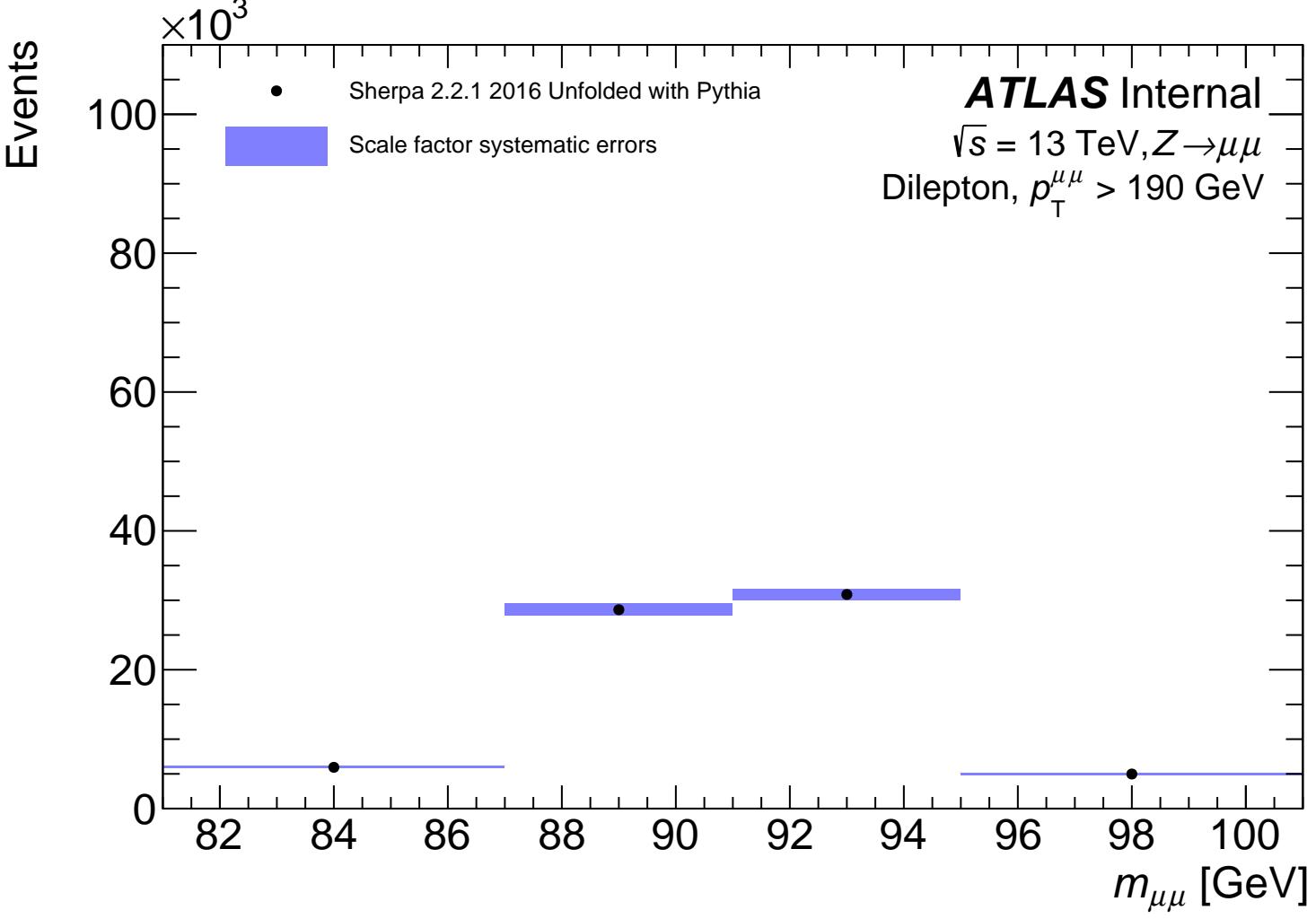
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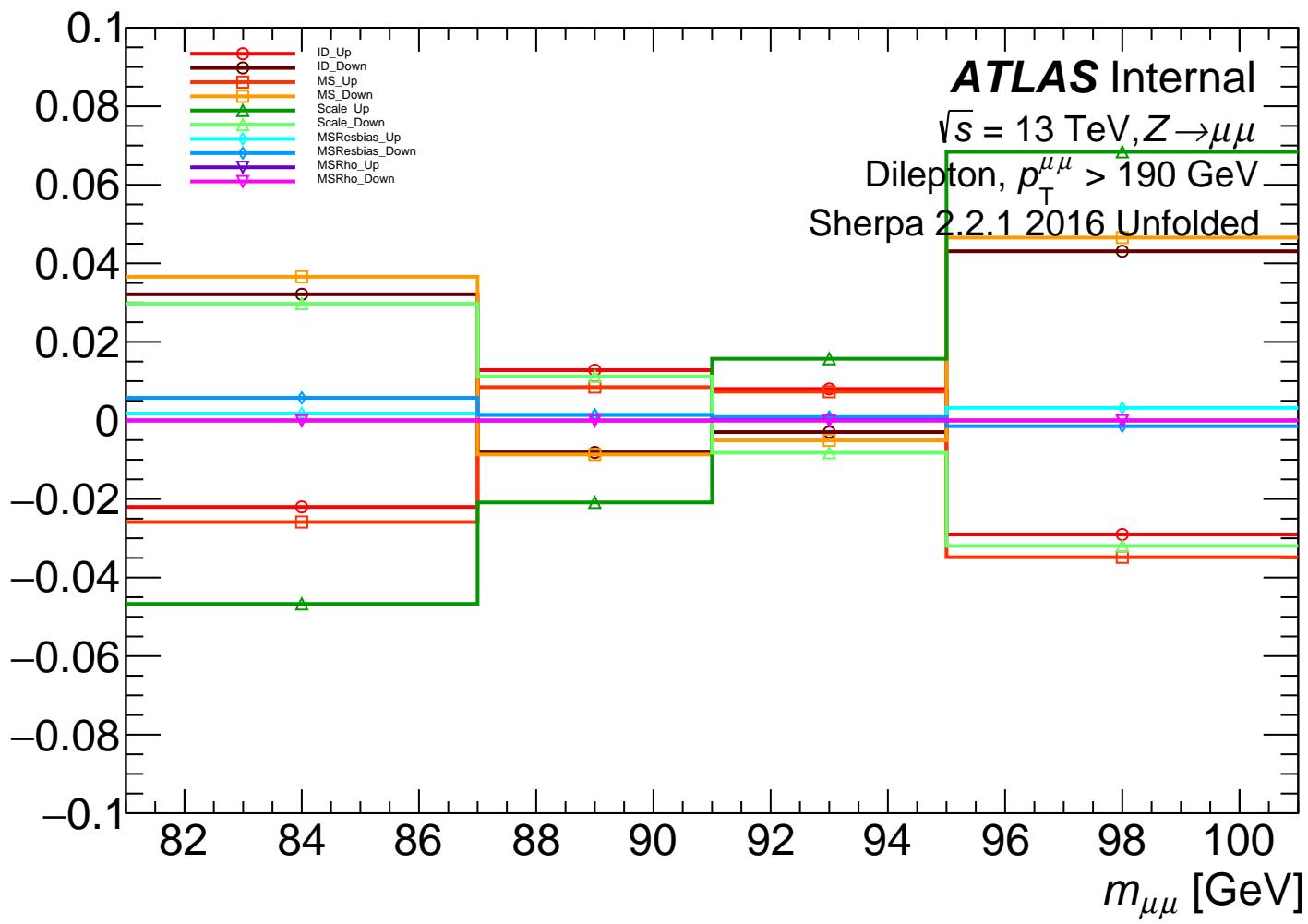
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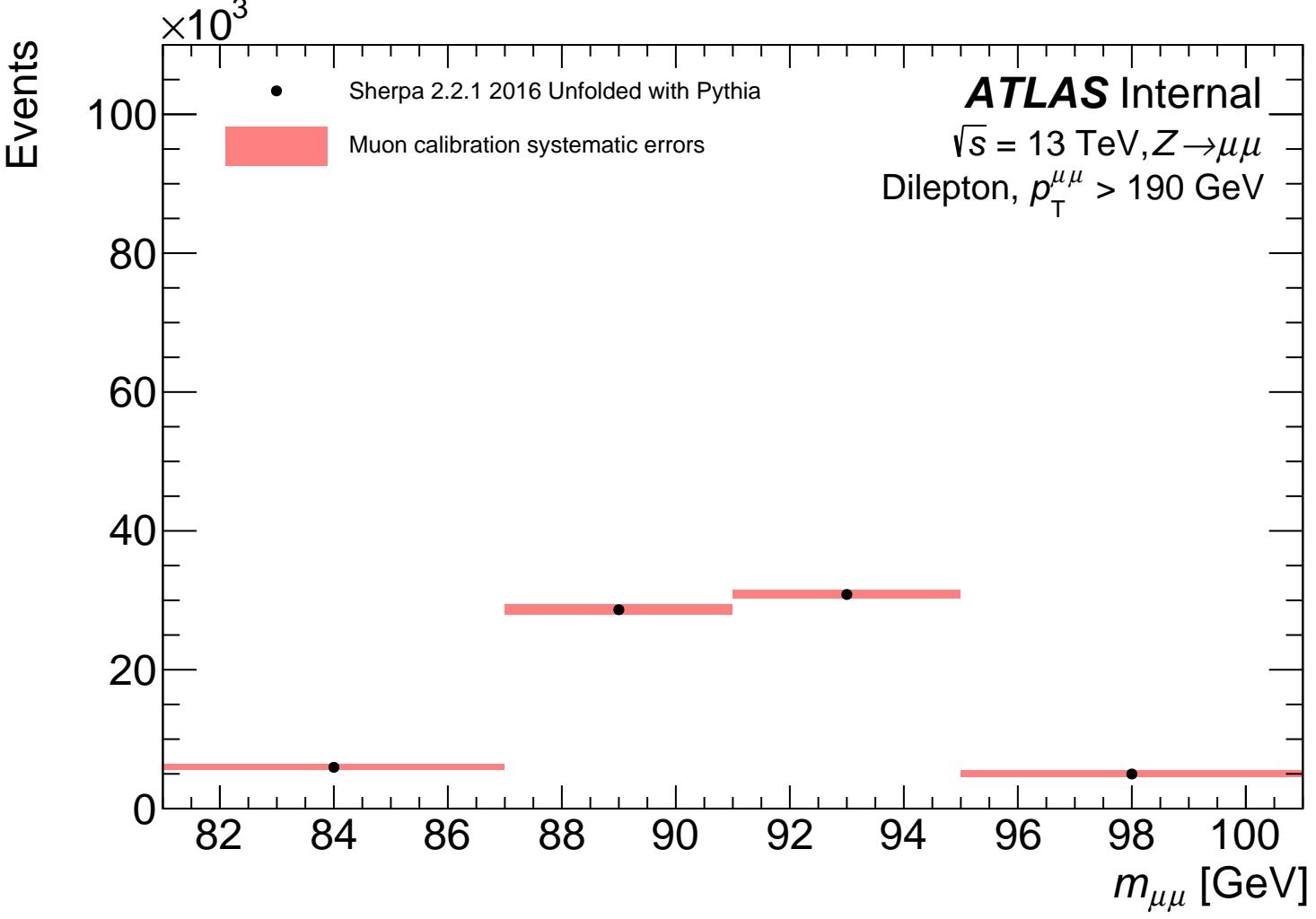
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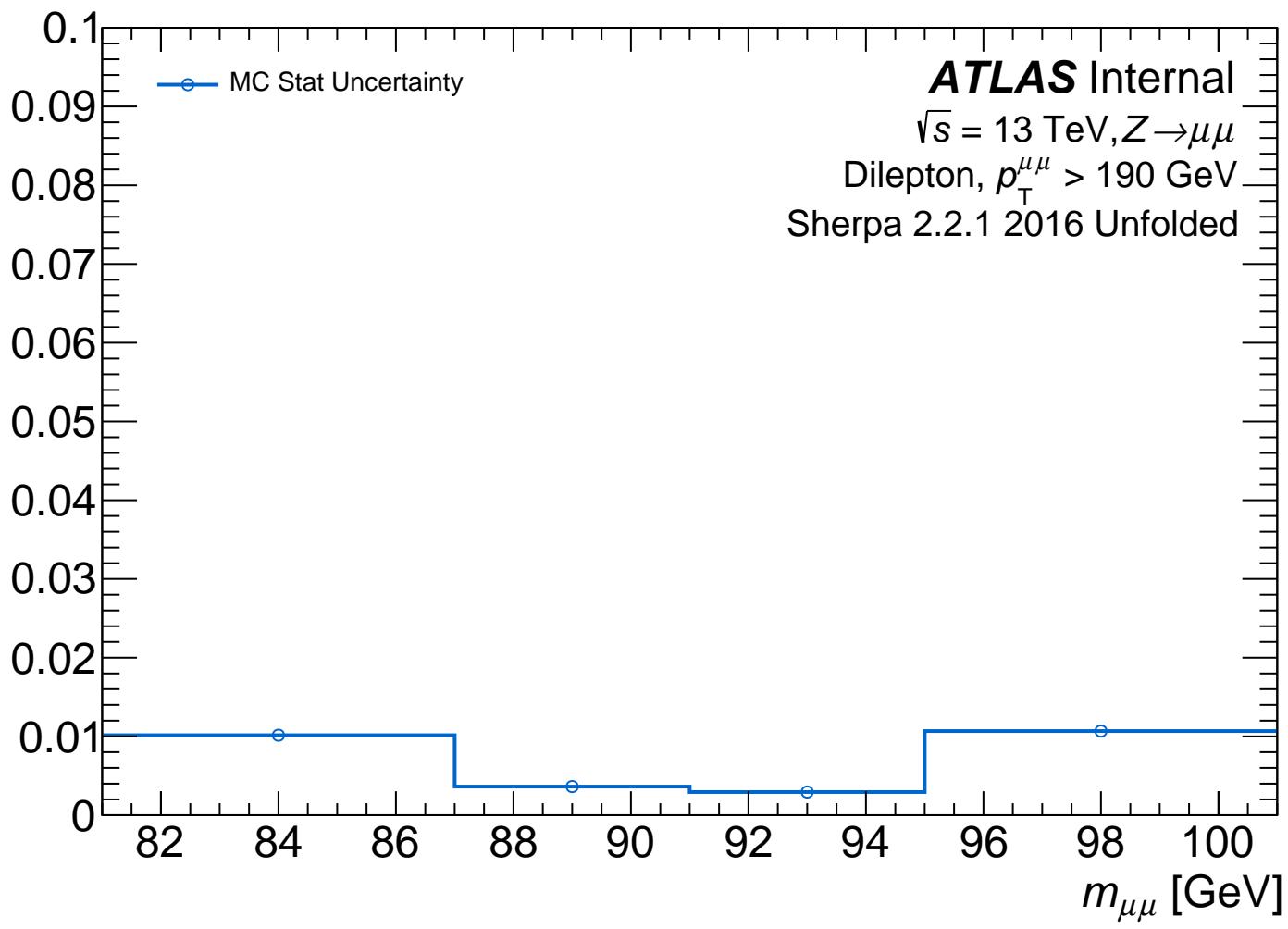
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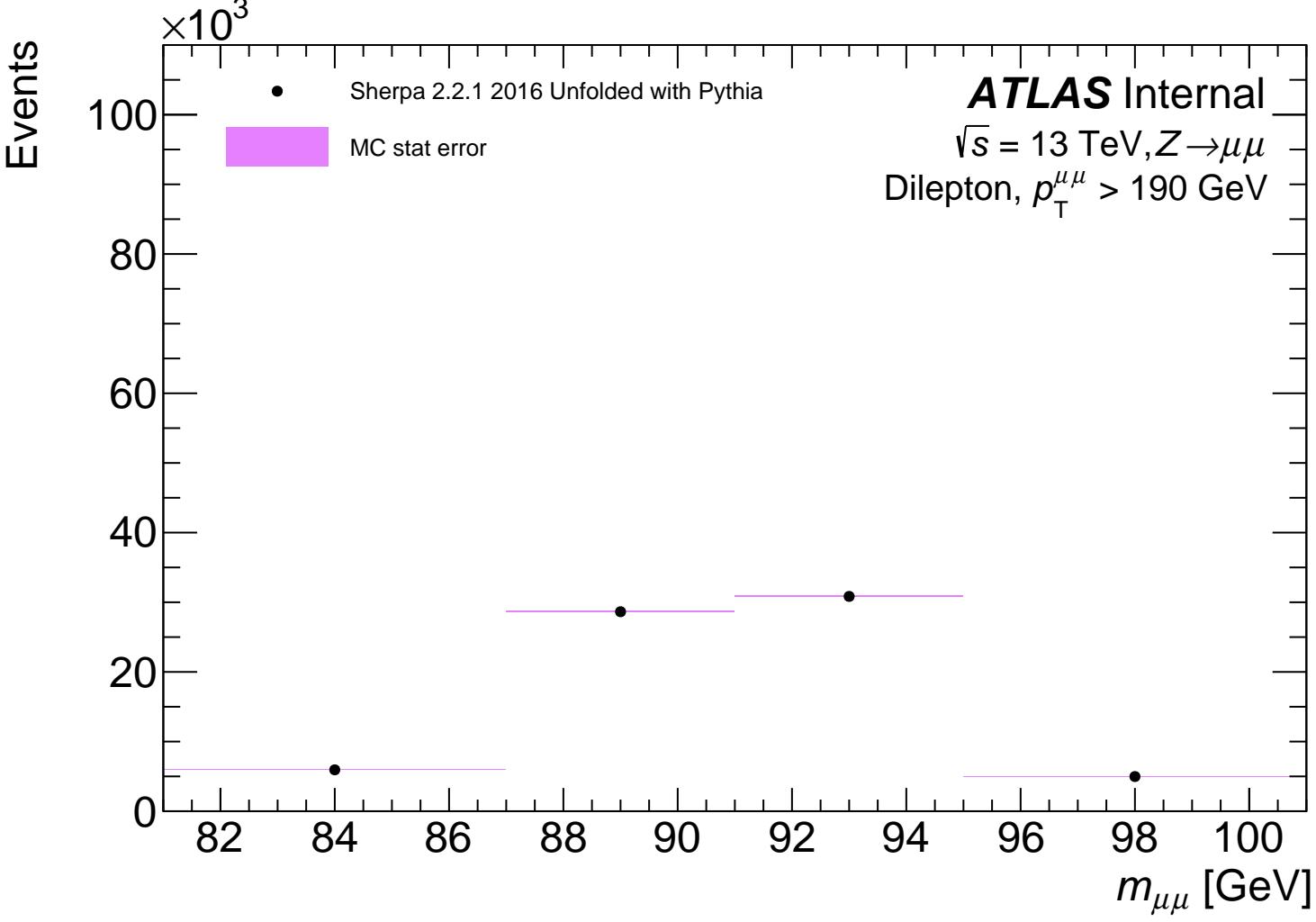


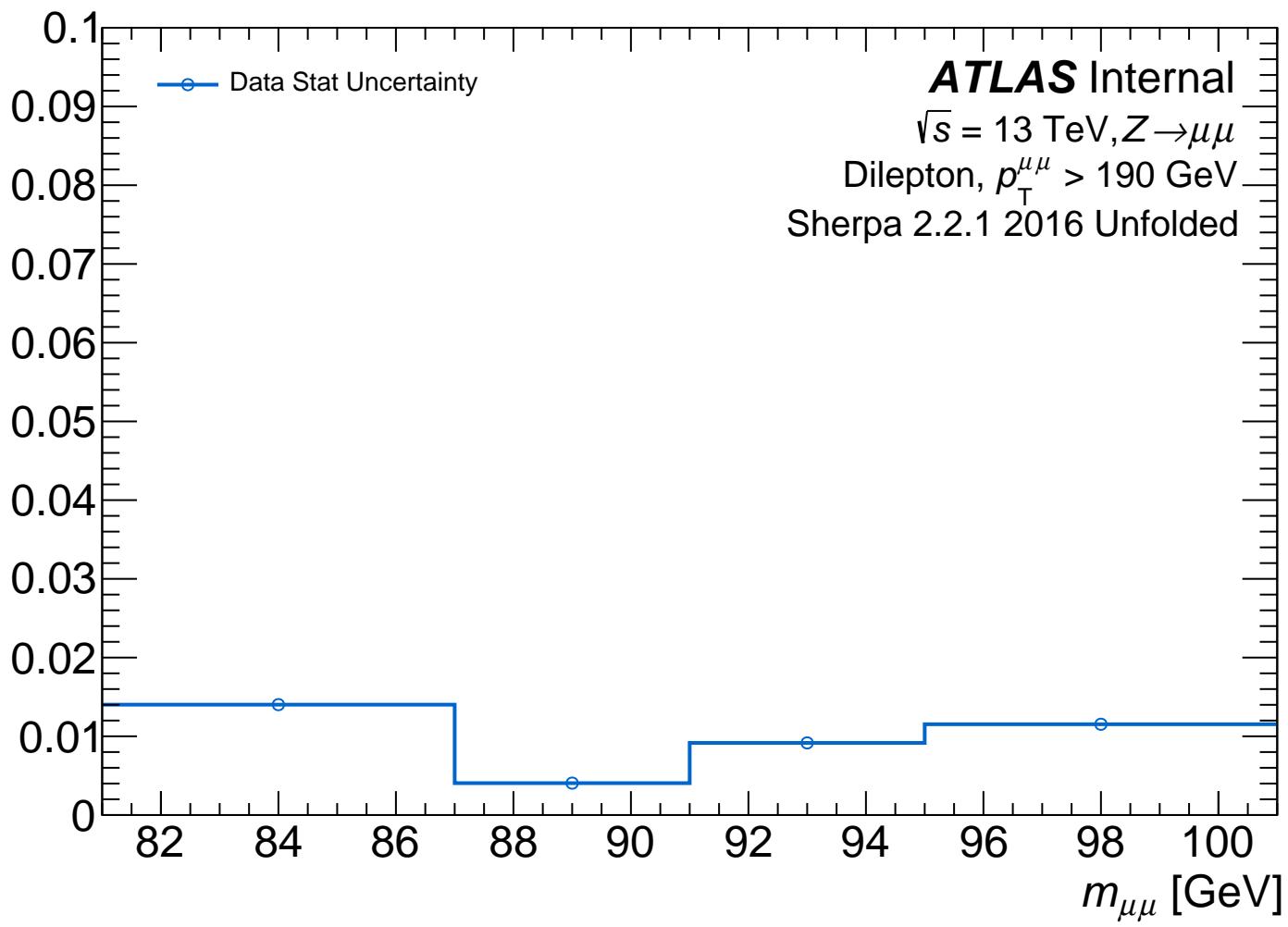


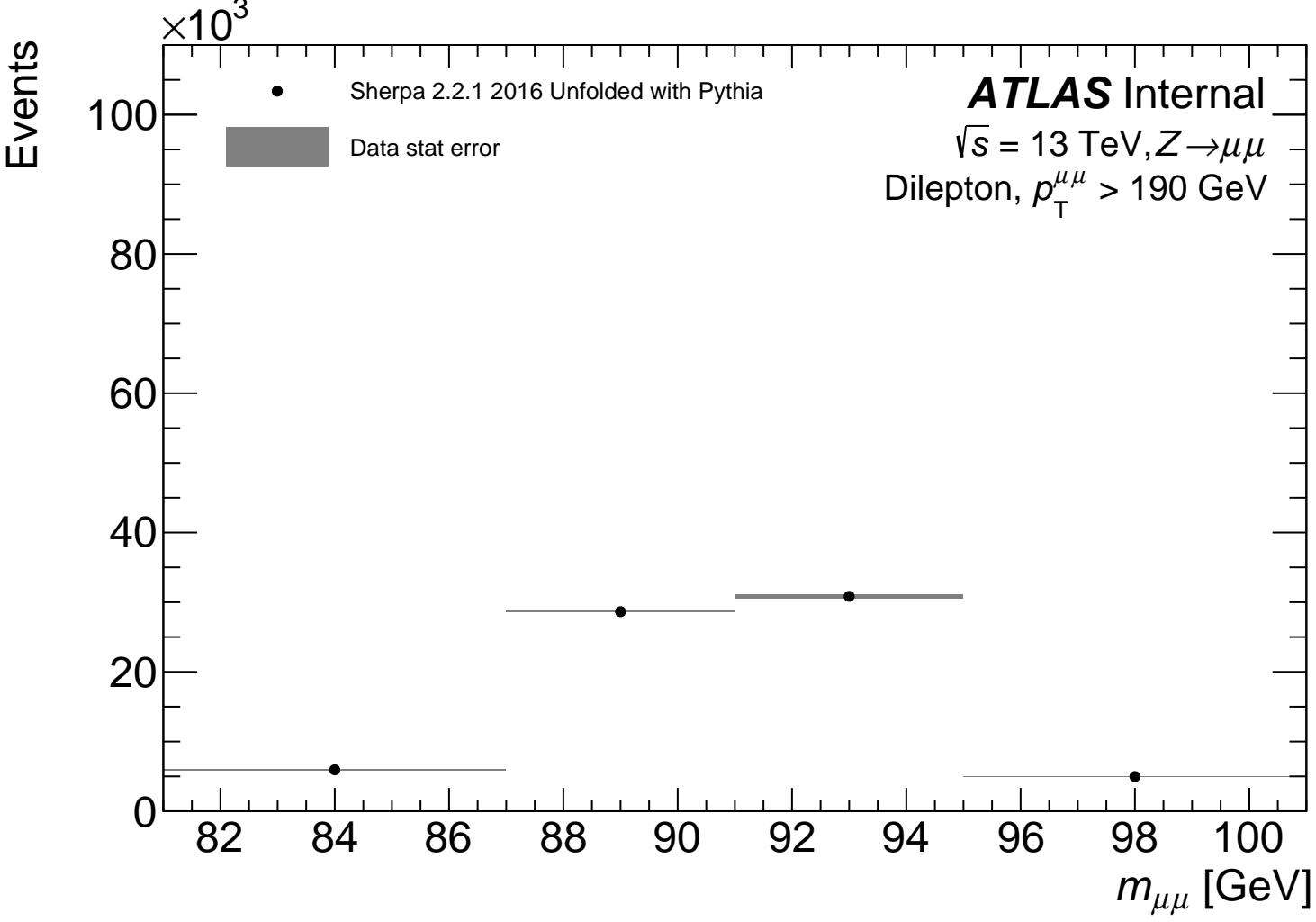


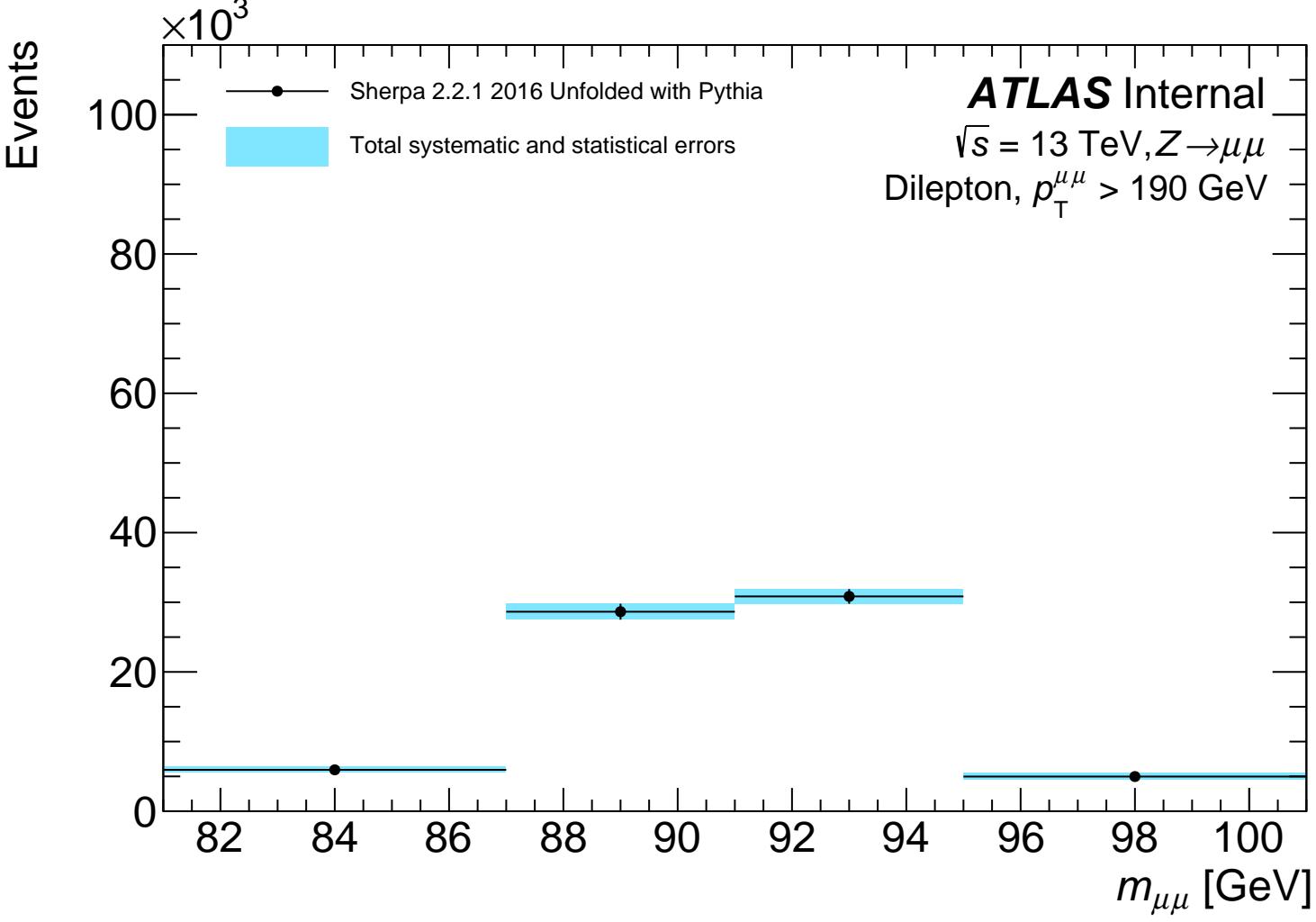


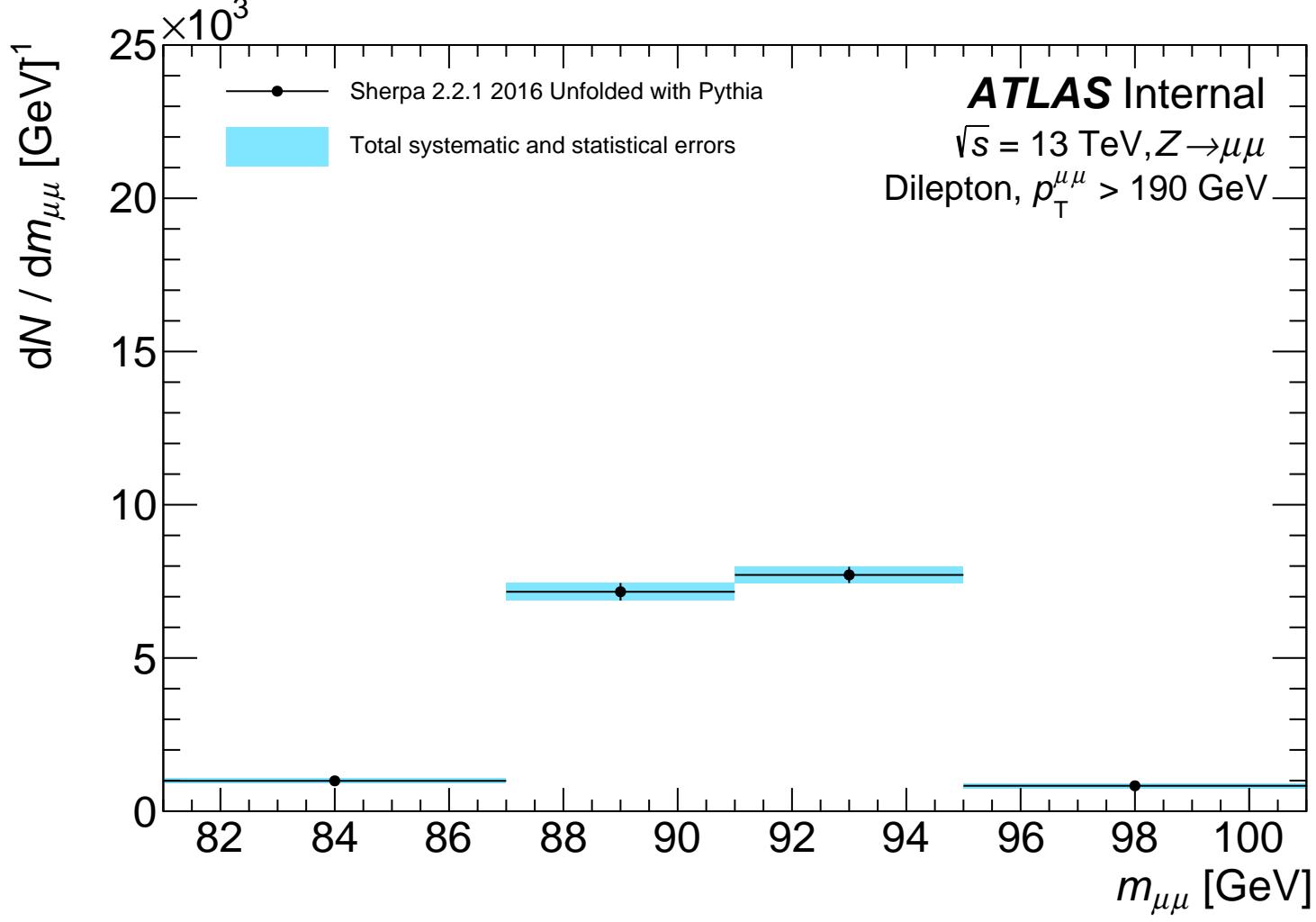










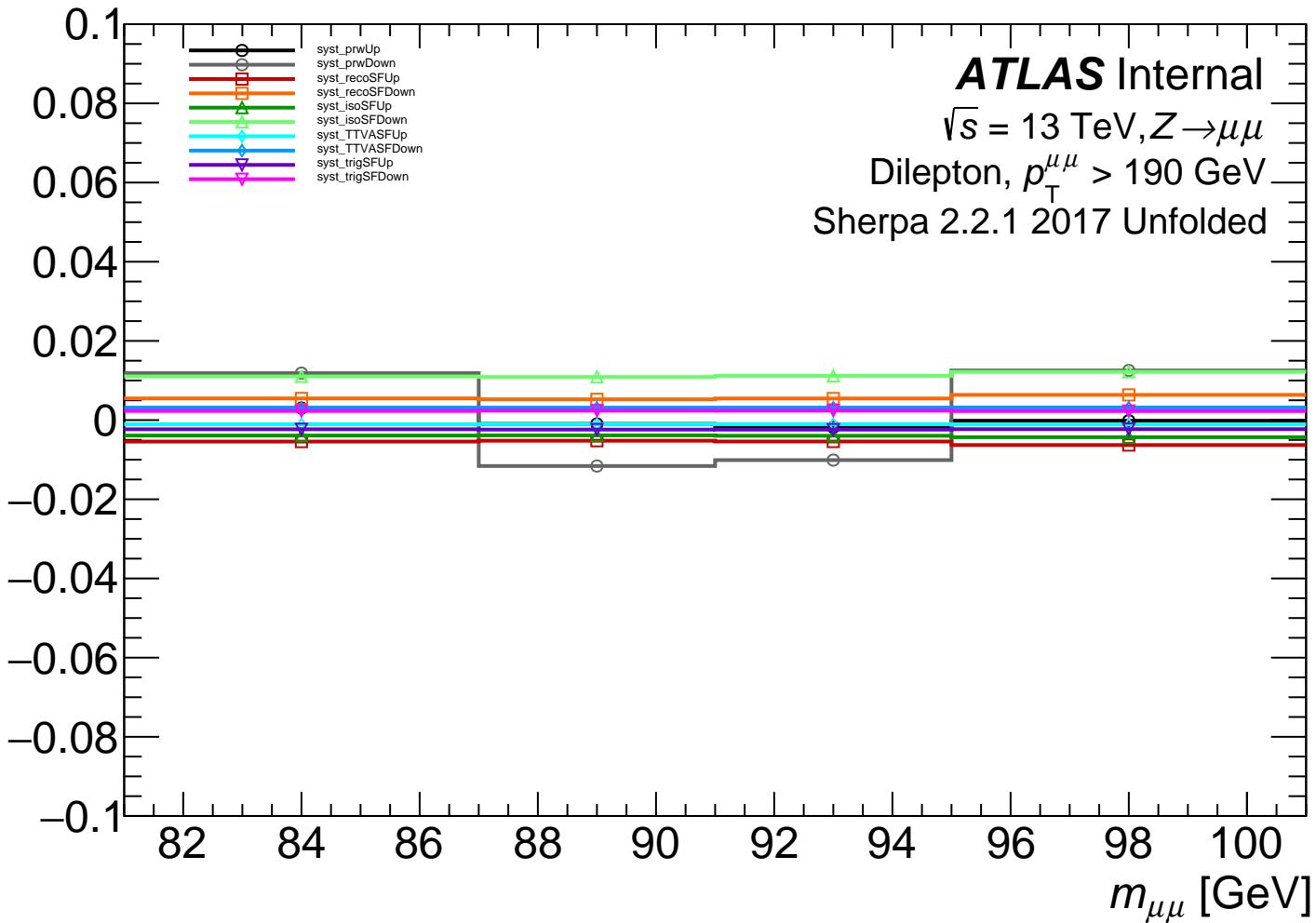


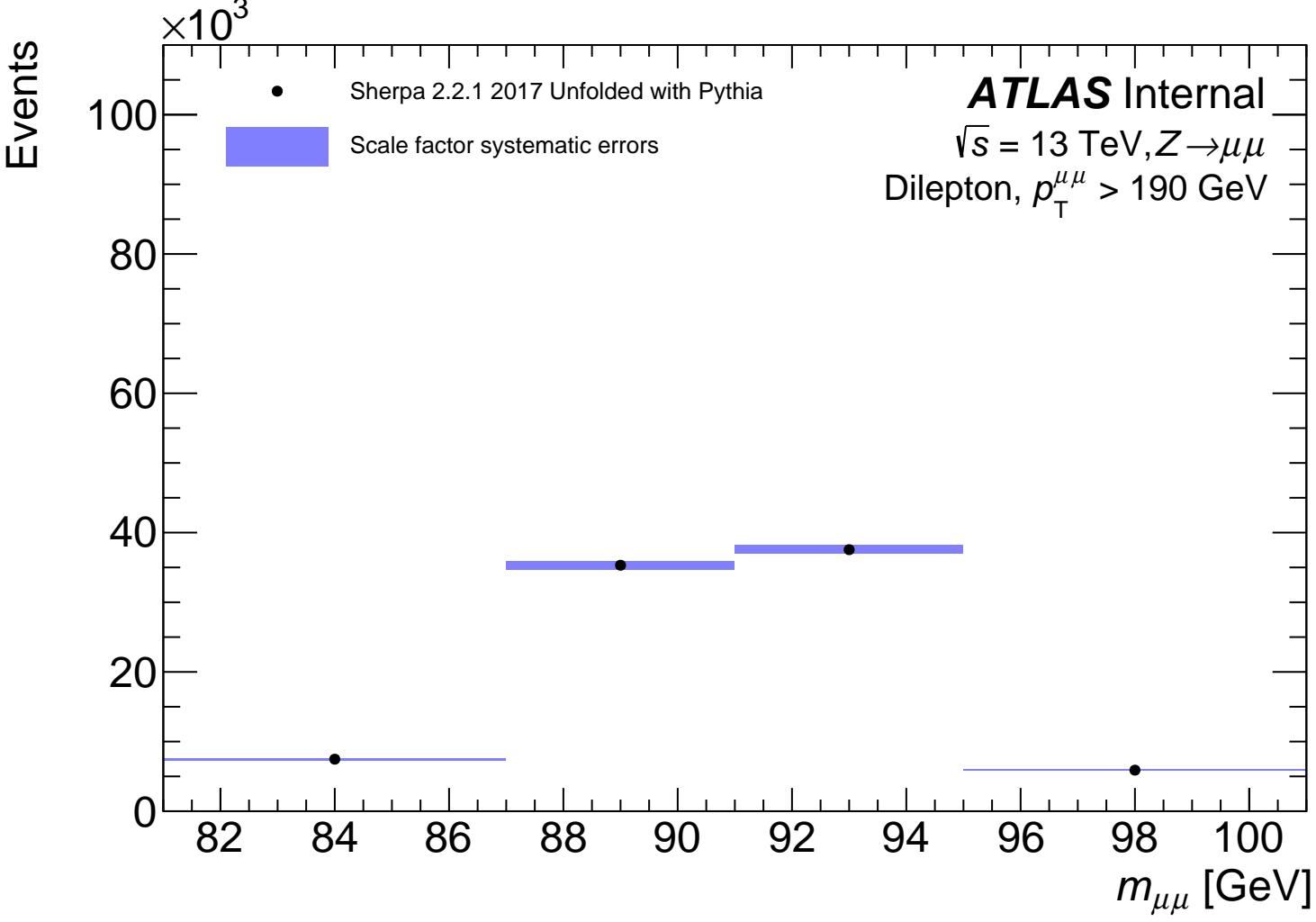
**ATLAS Internal**

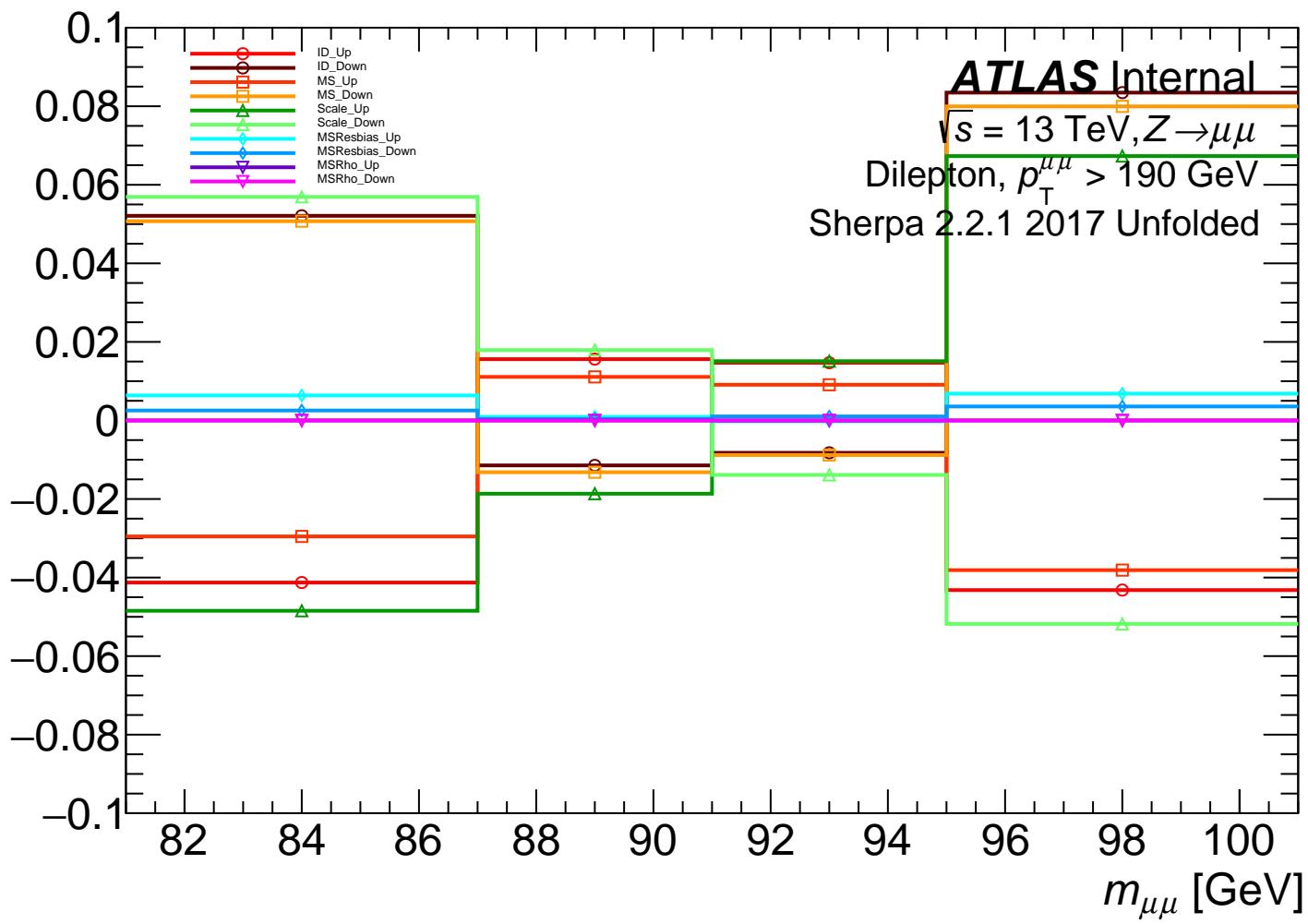
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

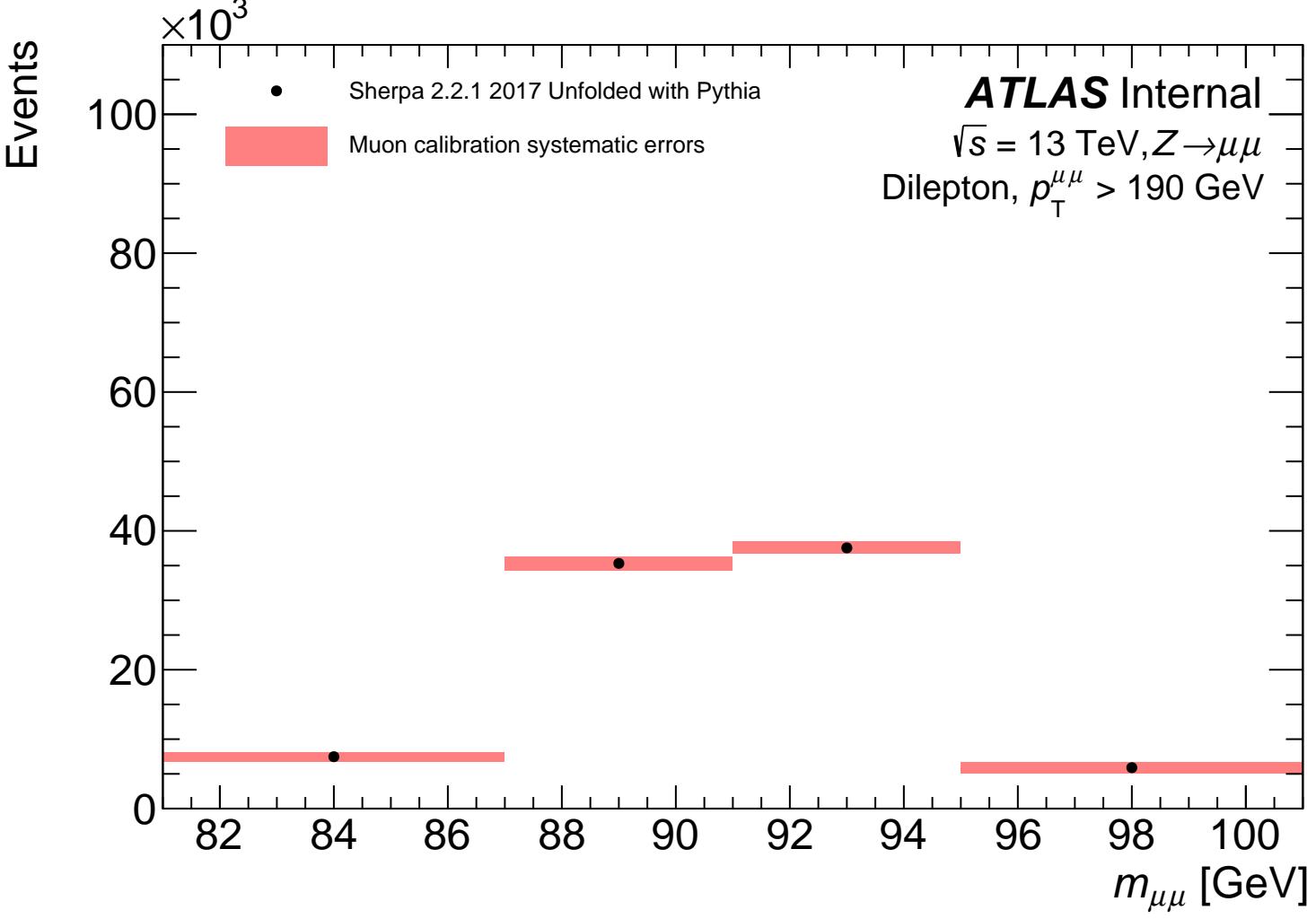
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

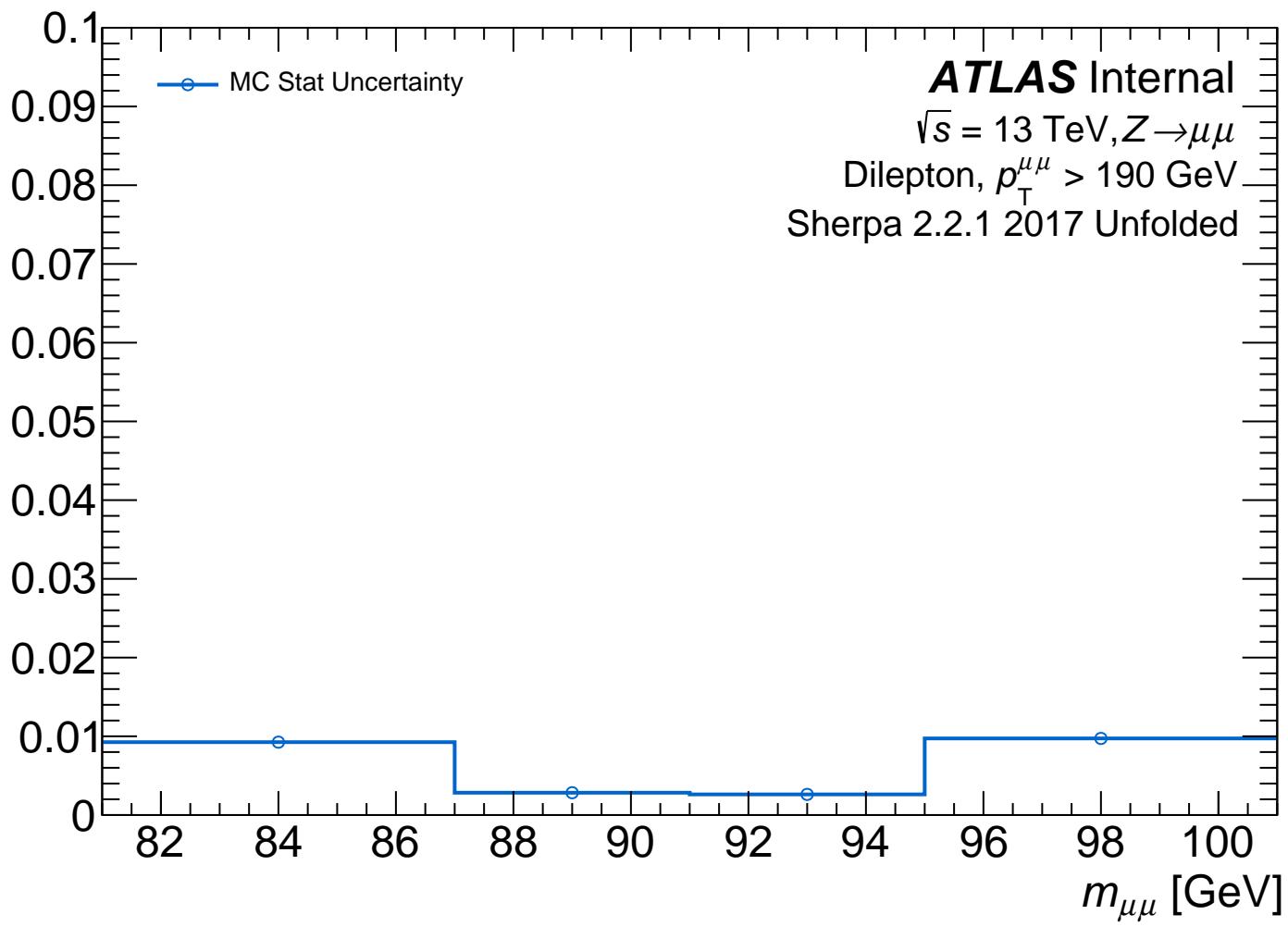
Sherpa 2.2.1 2017 Unfolded

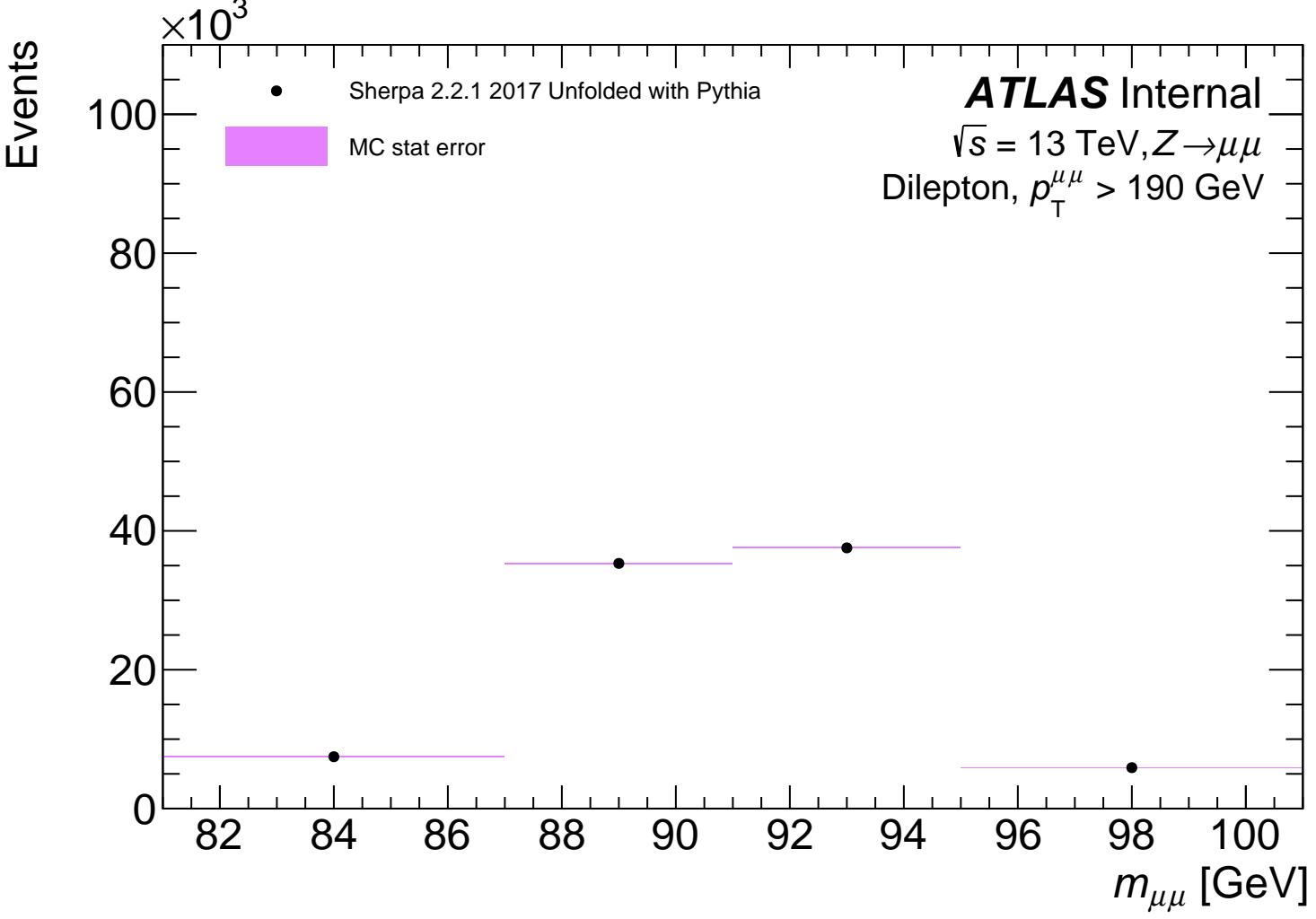


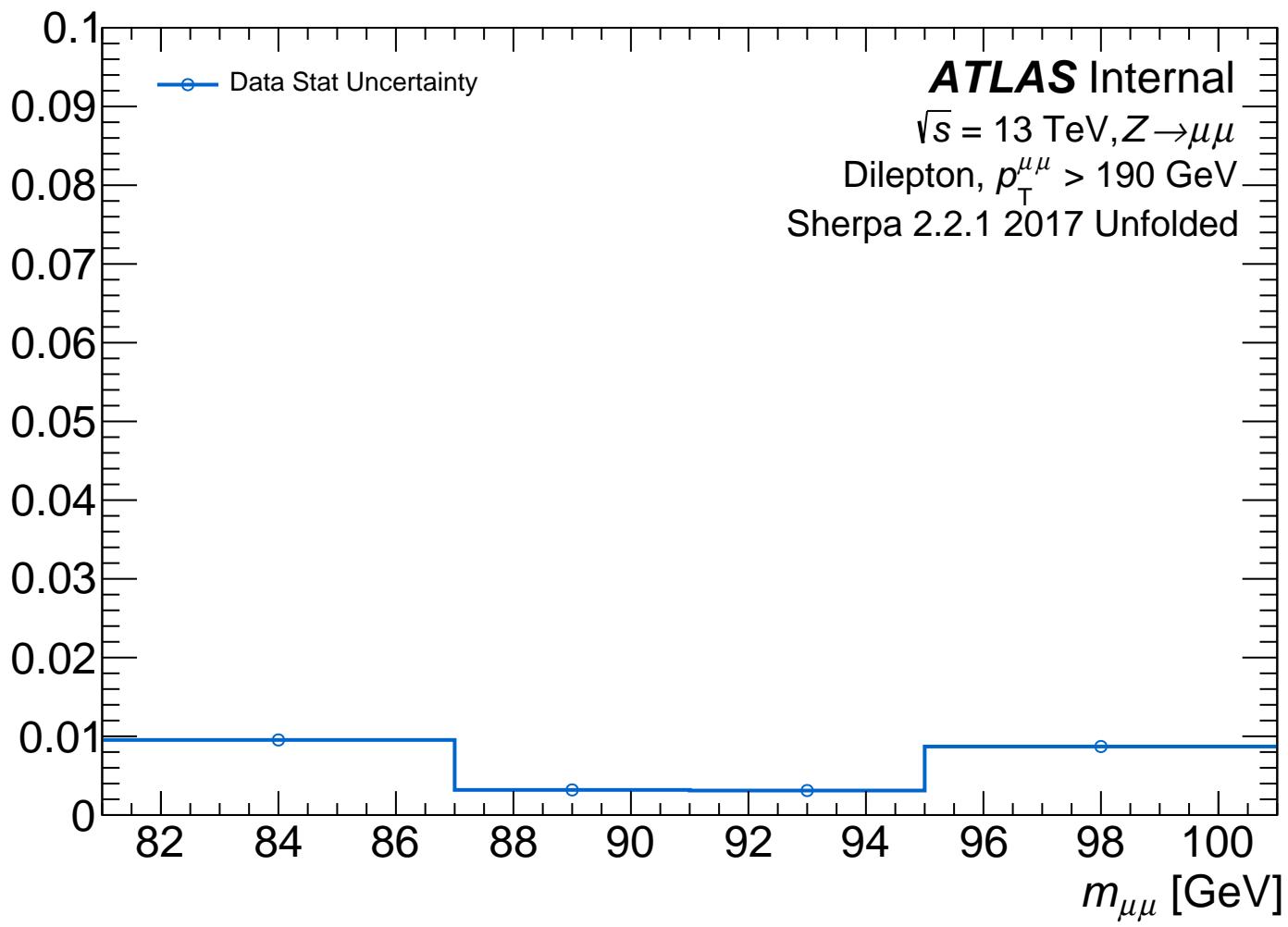


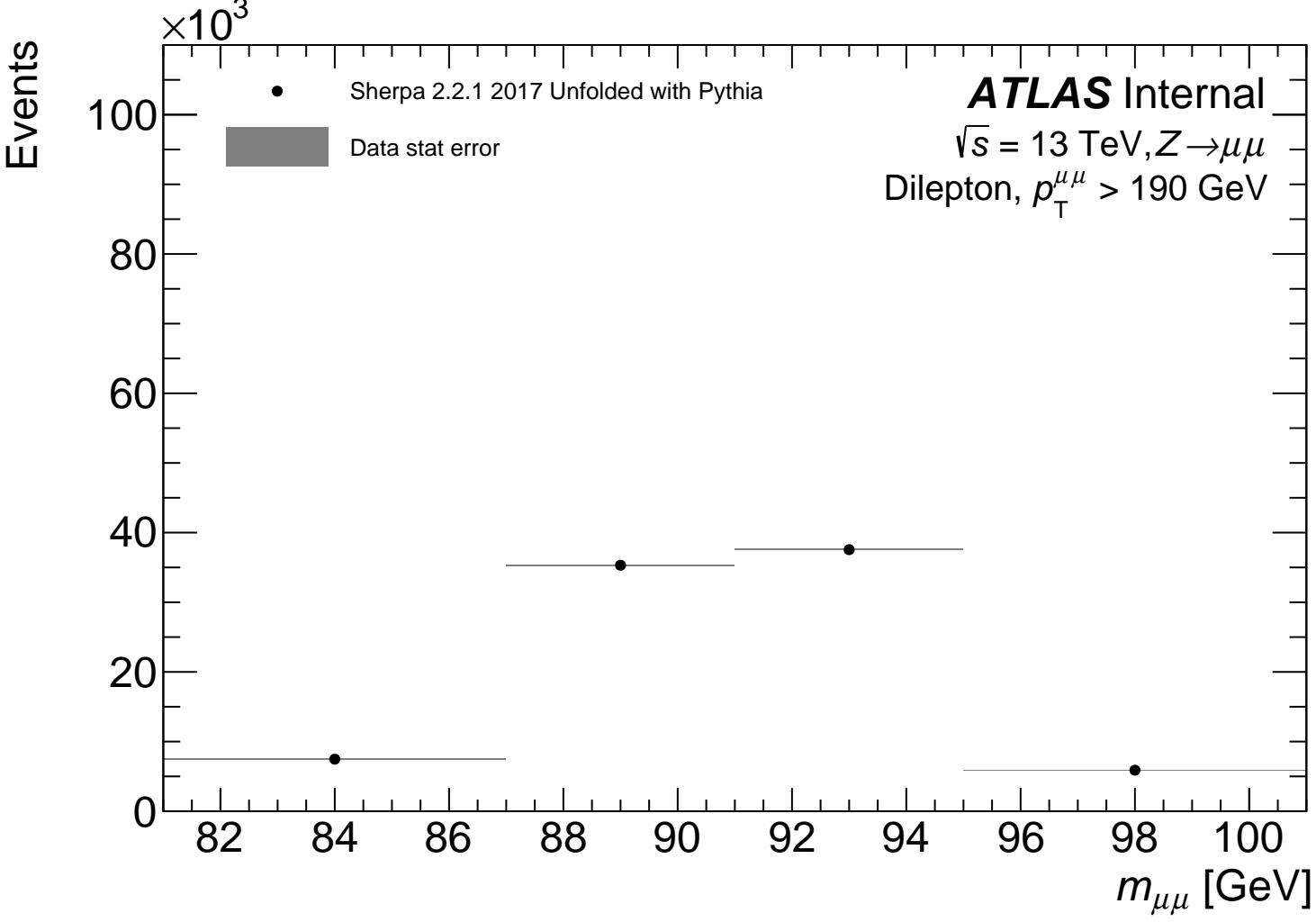


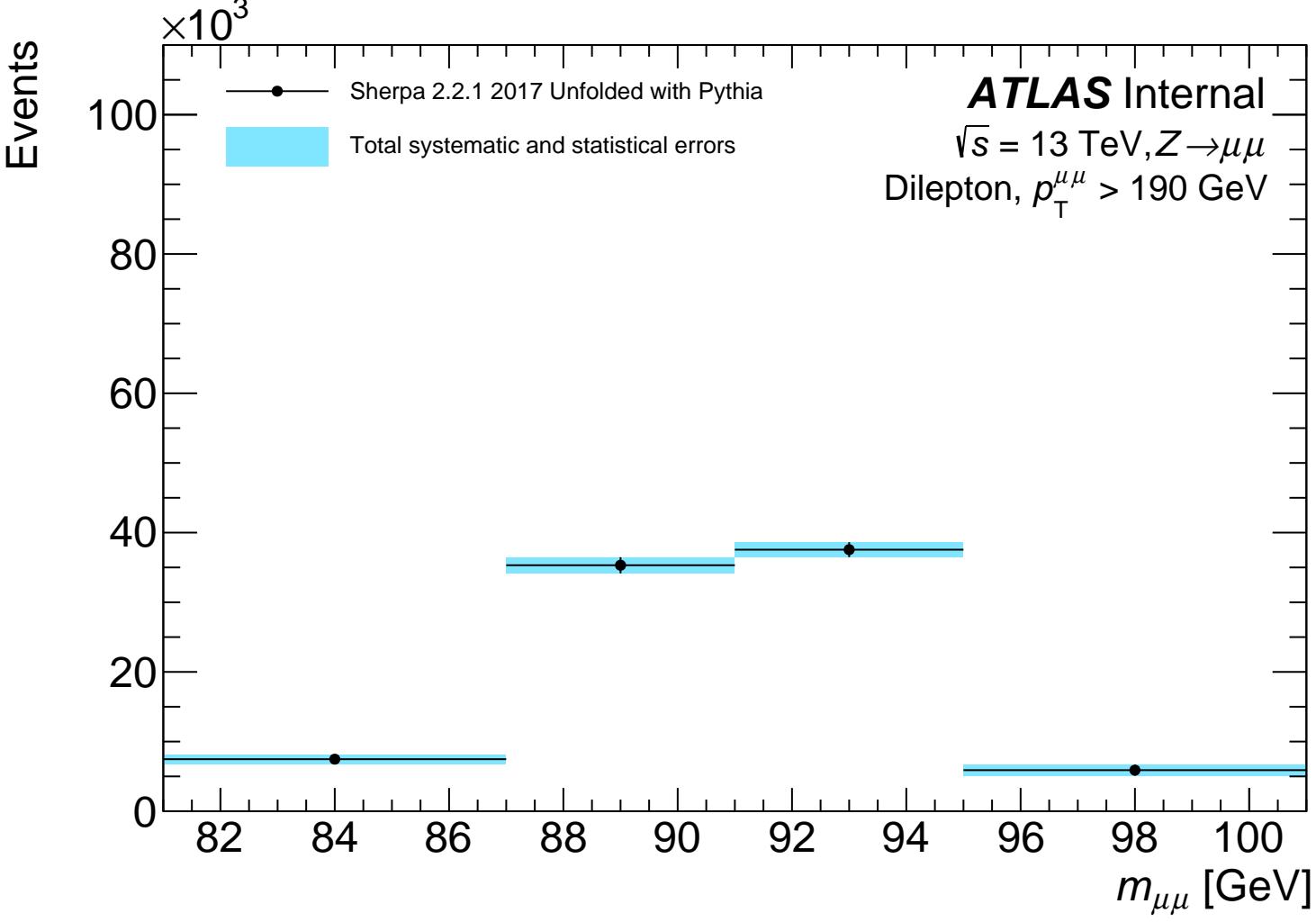


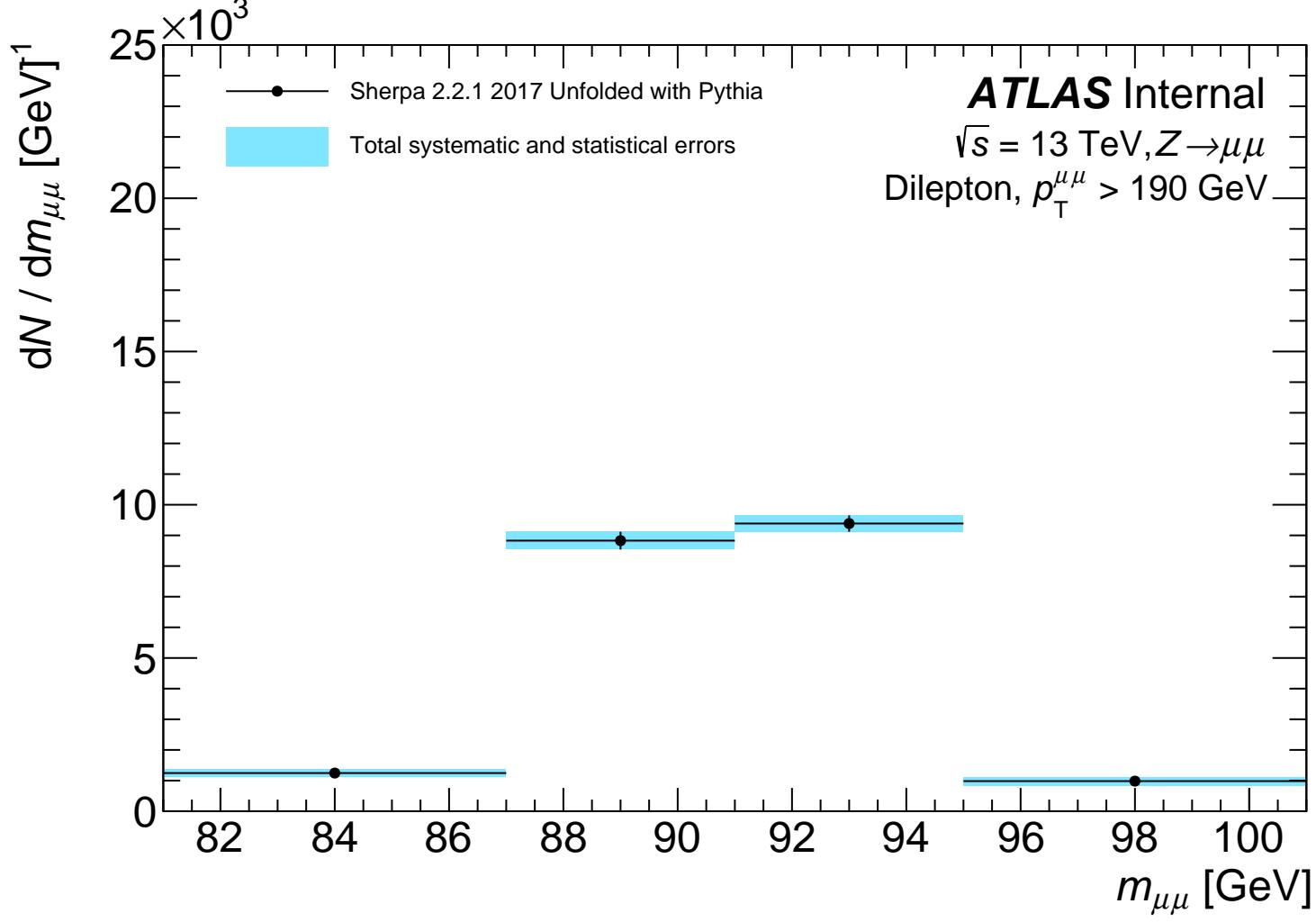


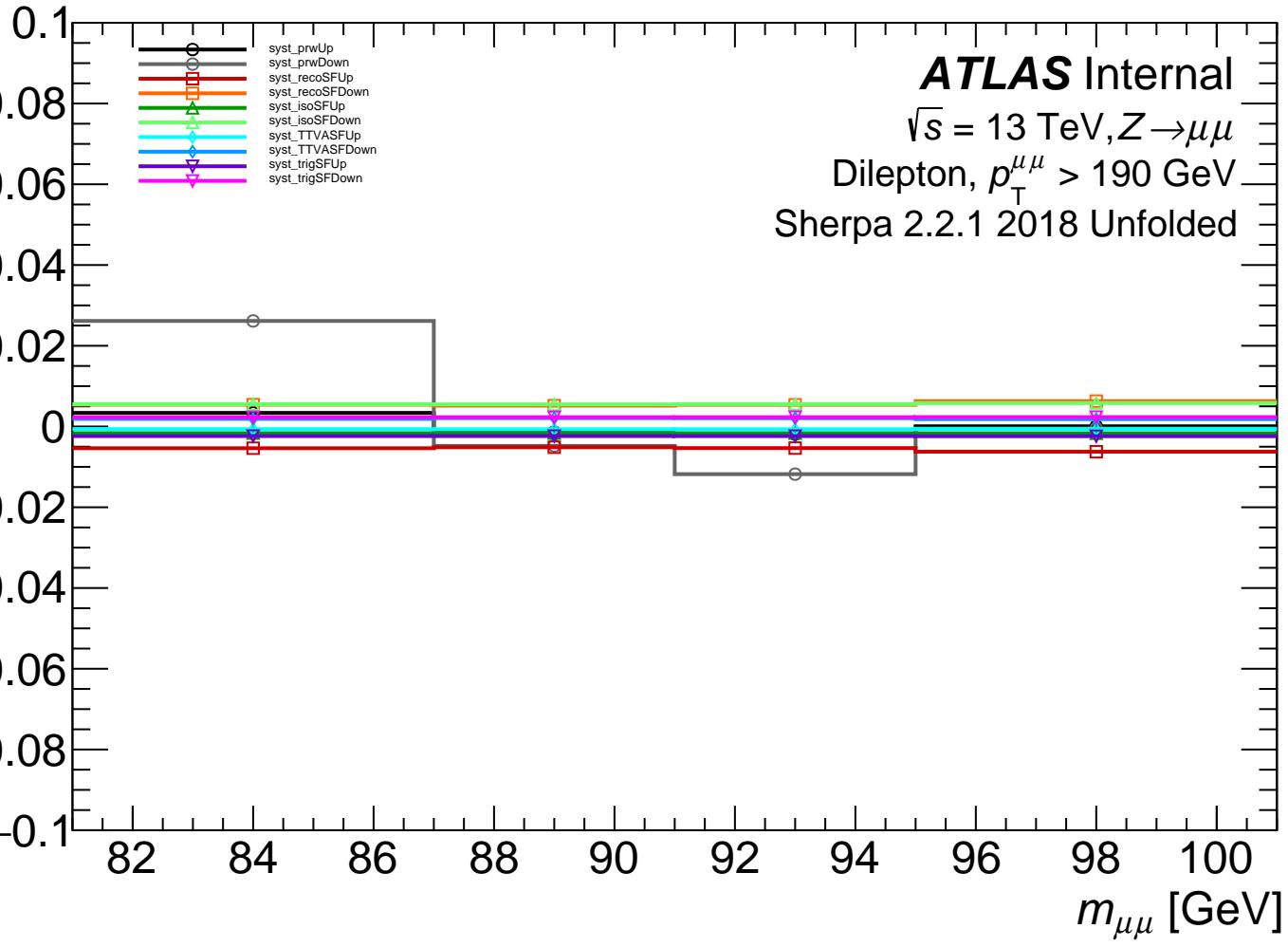


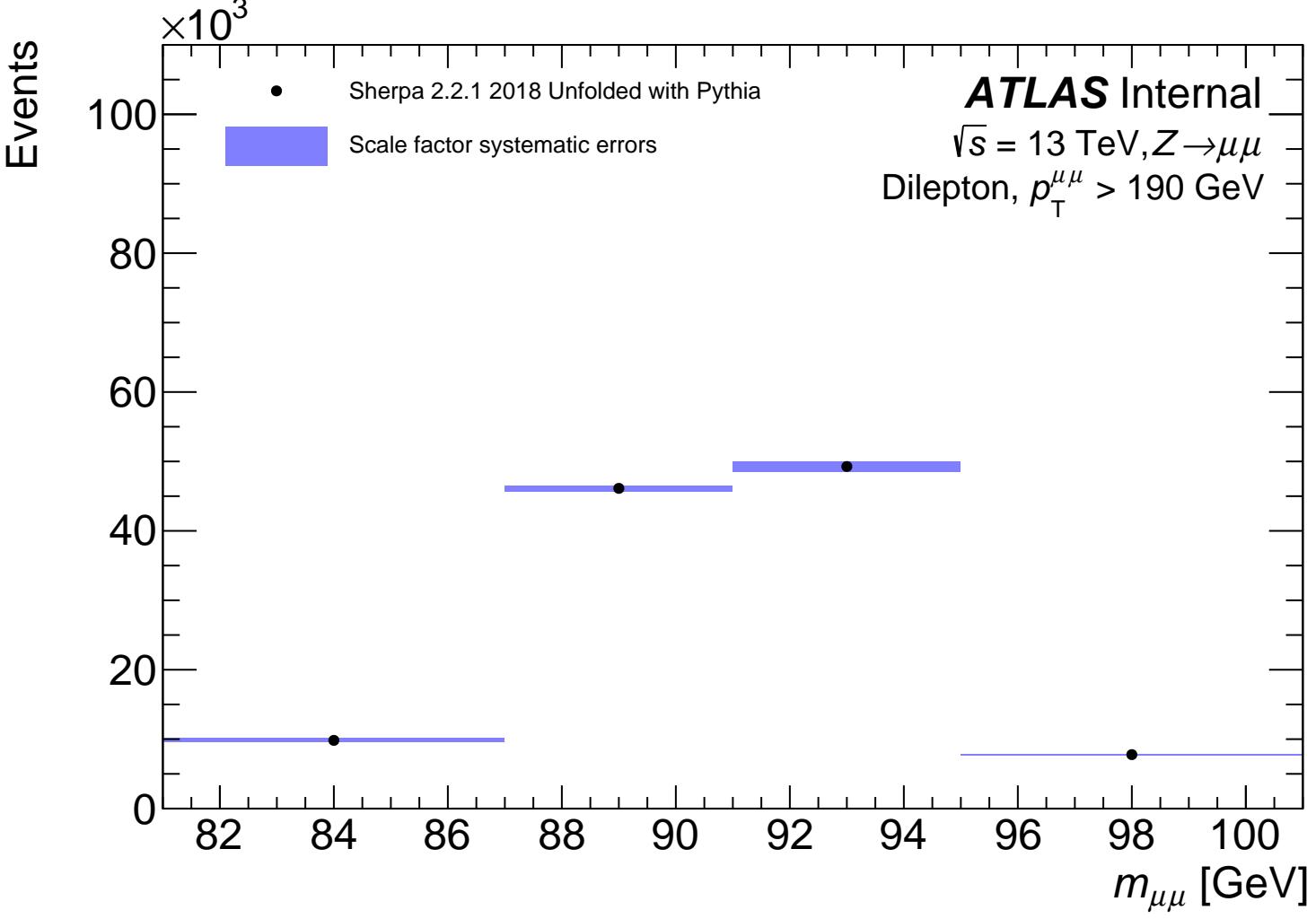


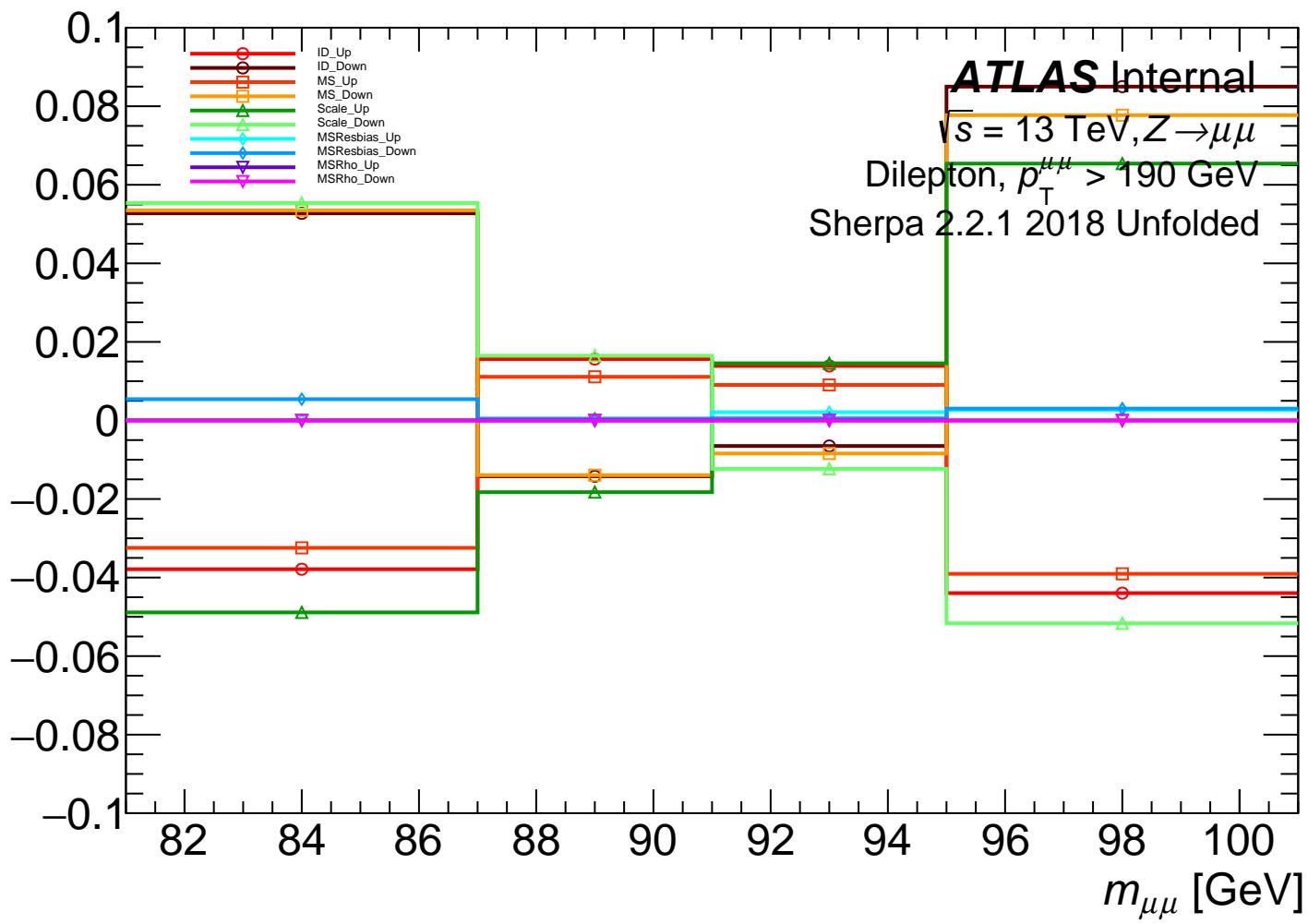


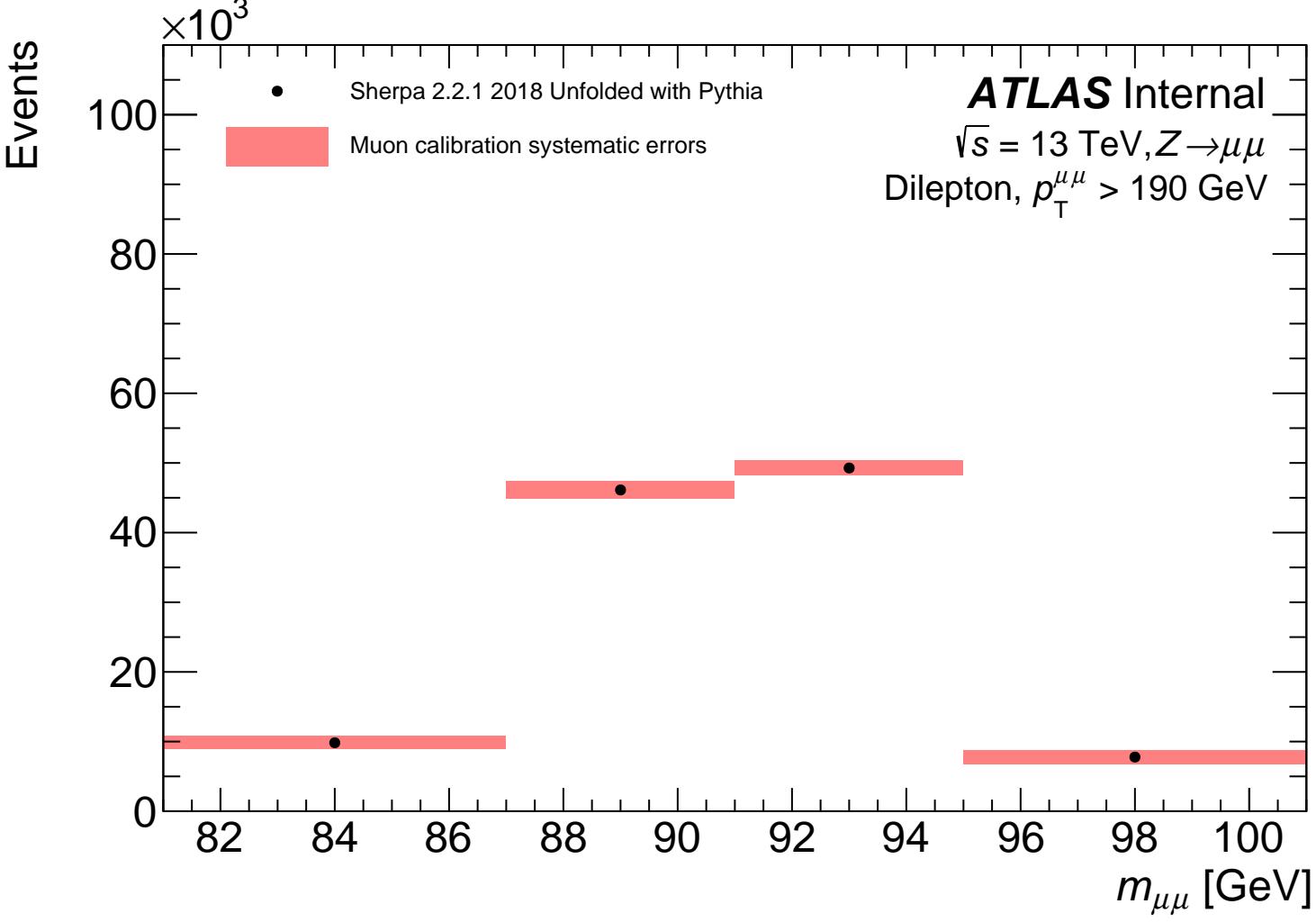


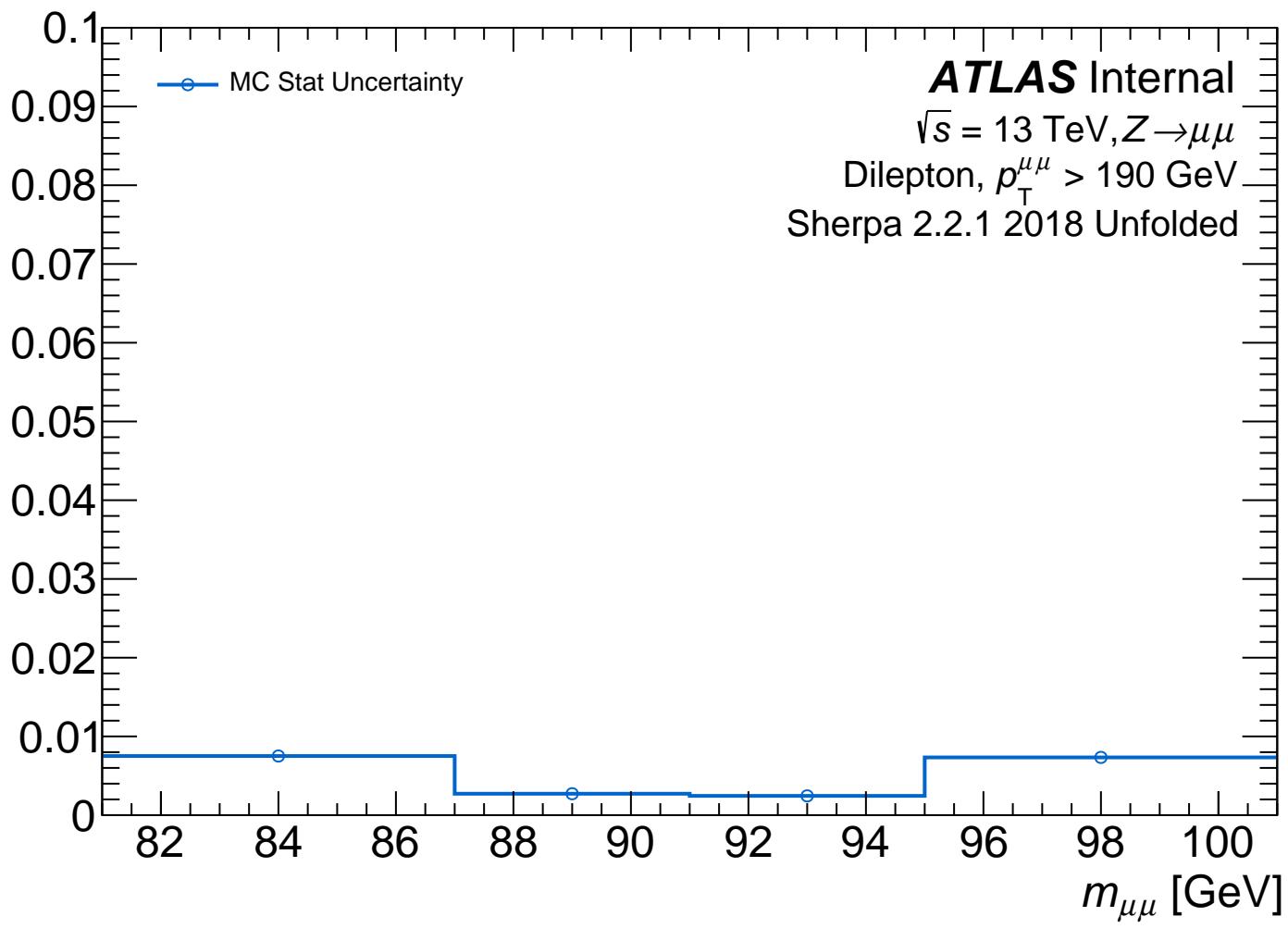


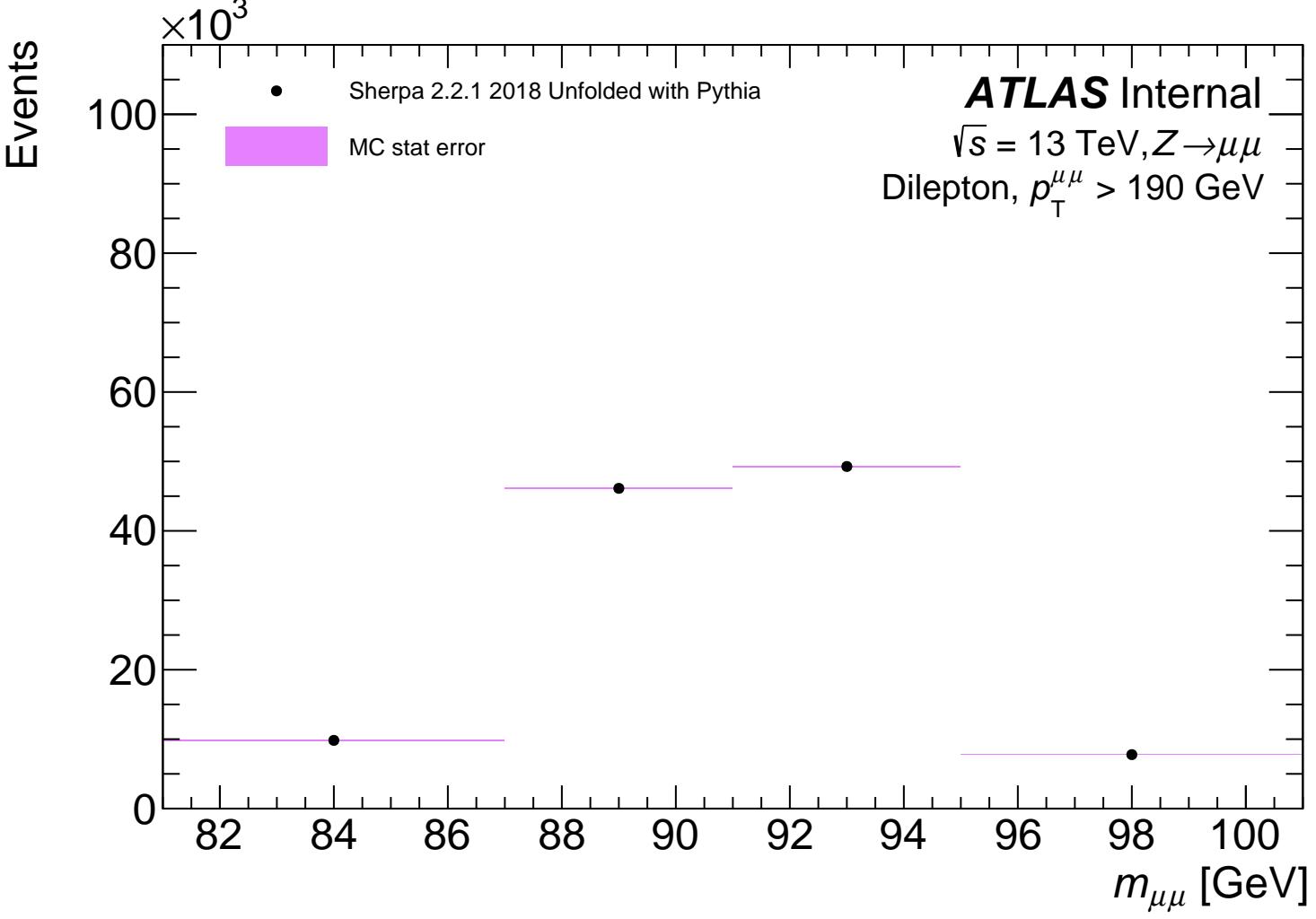


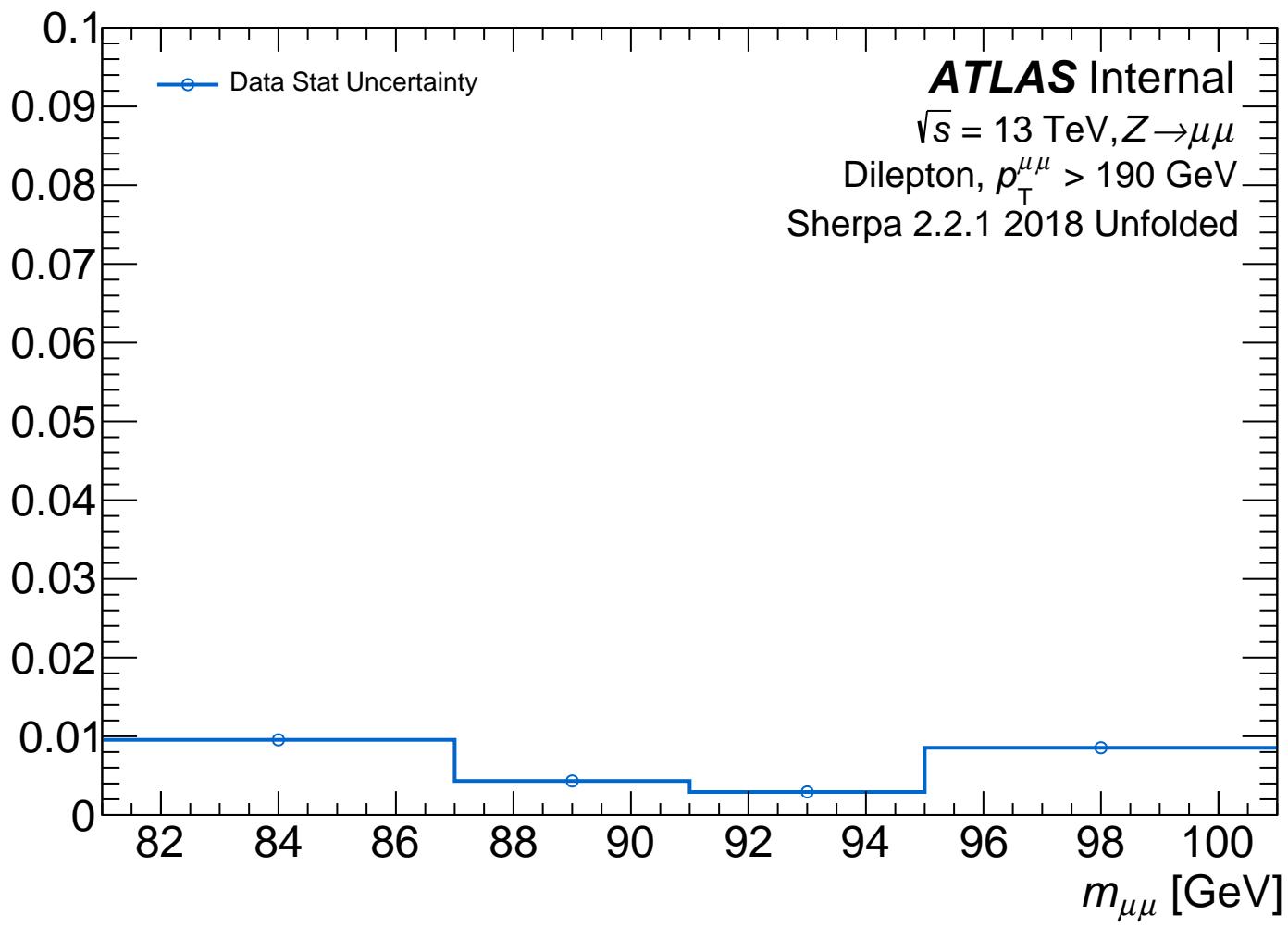


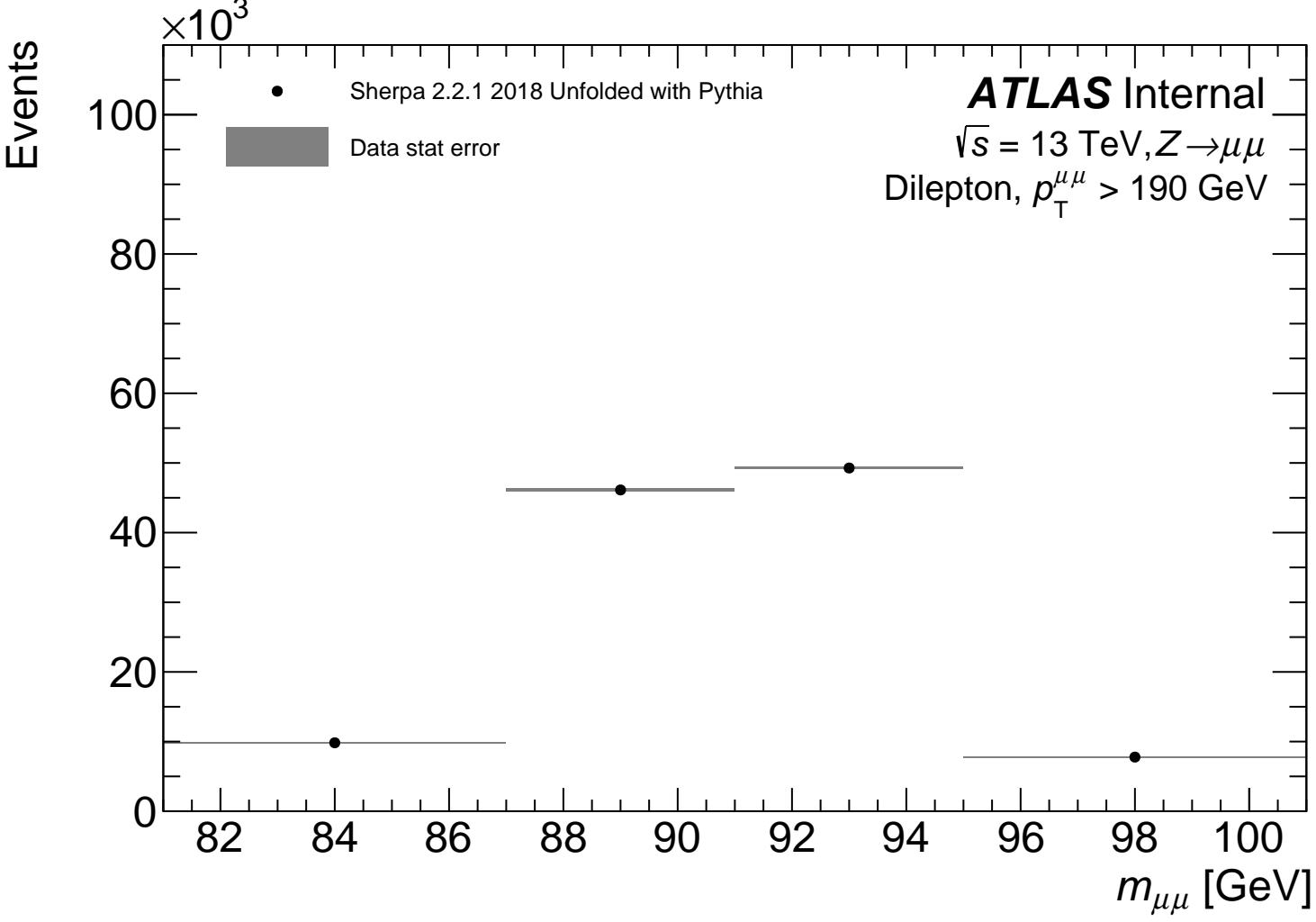


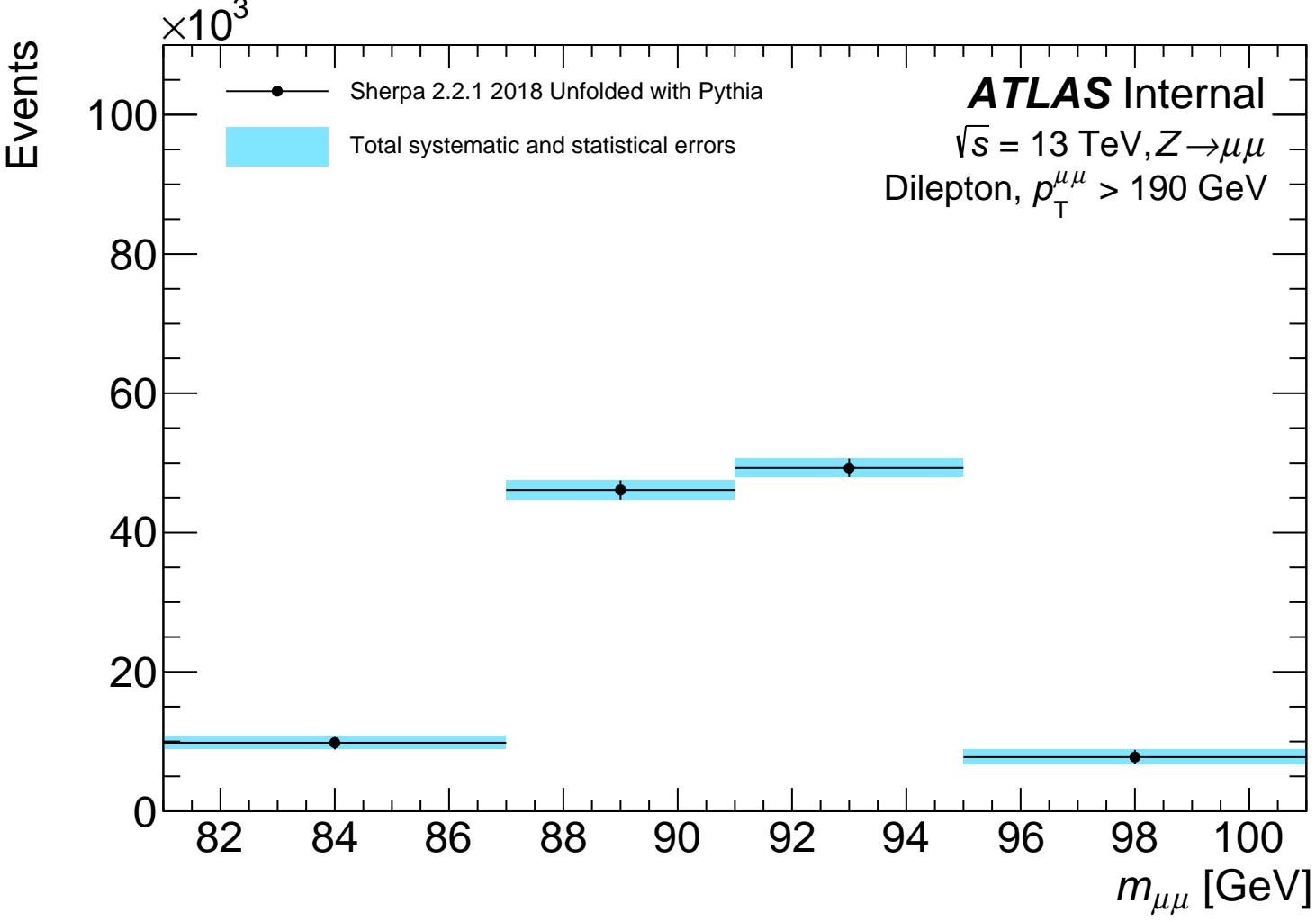


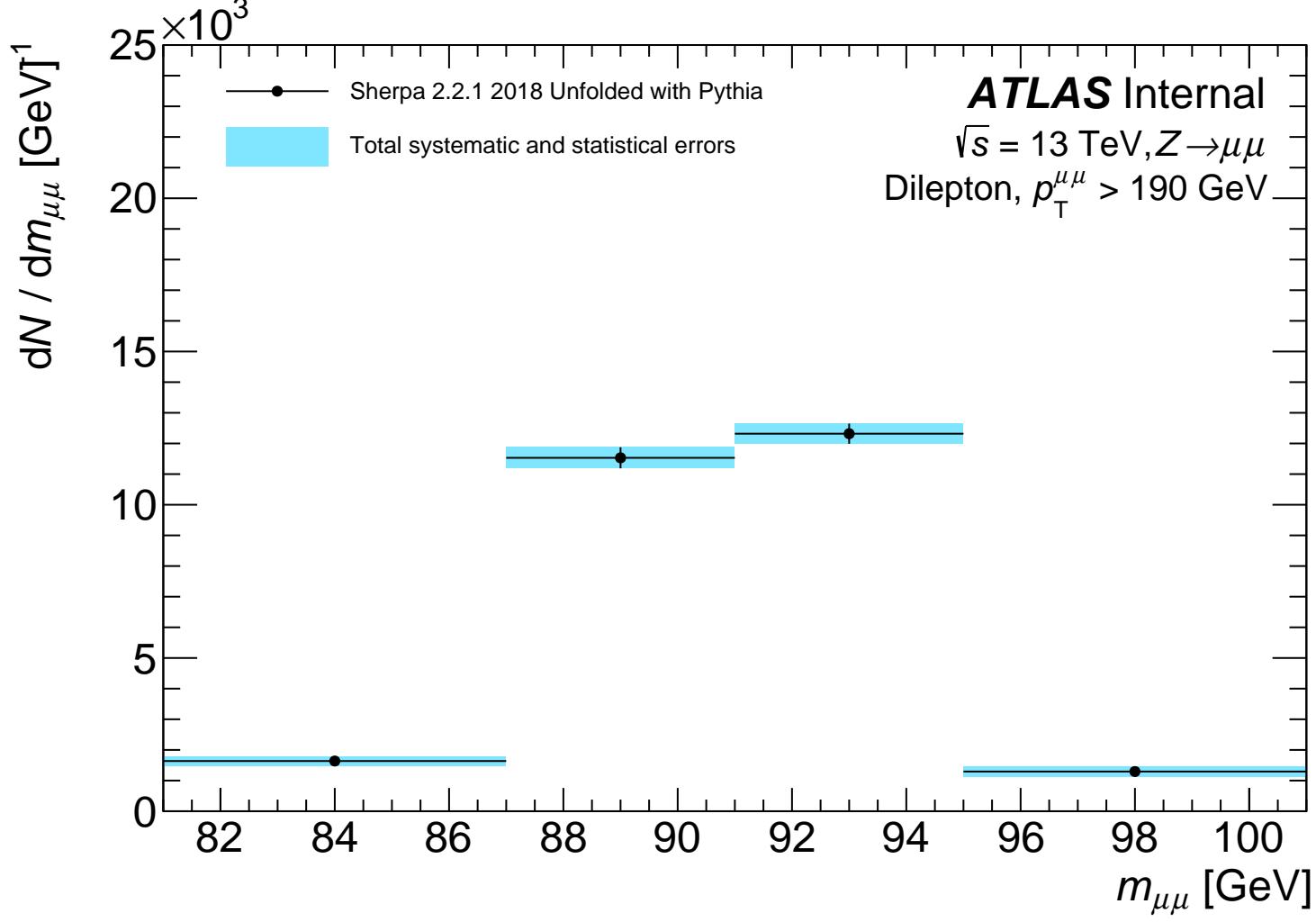










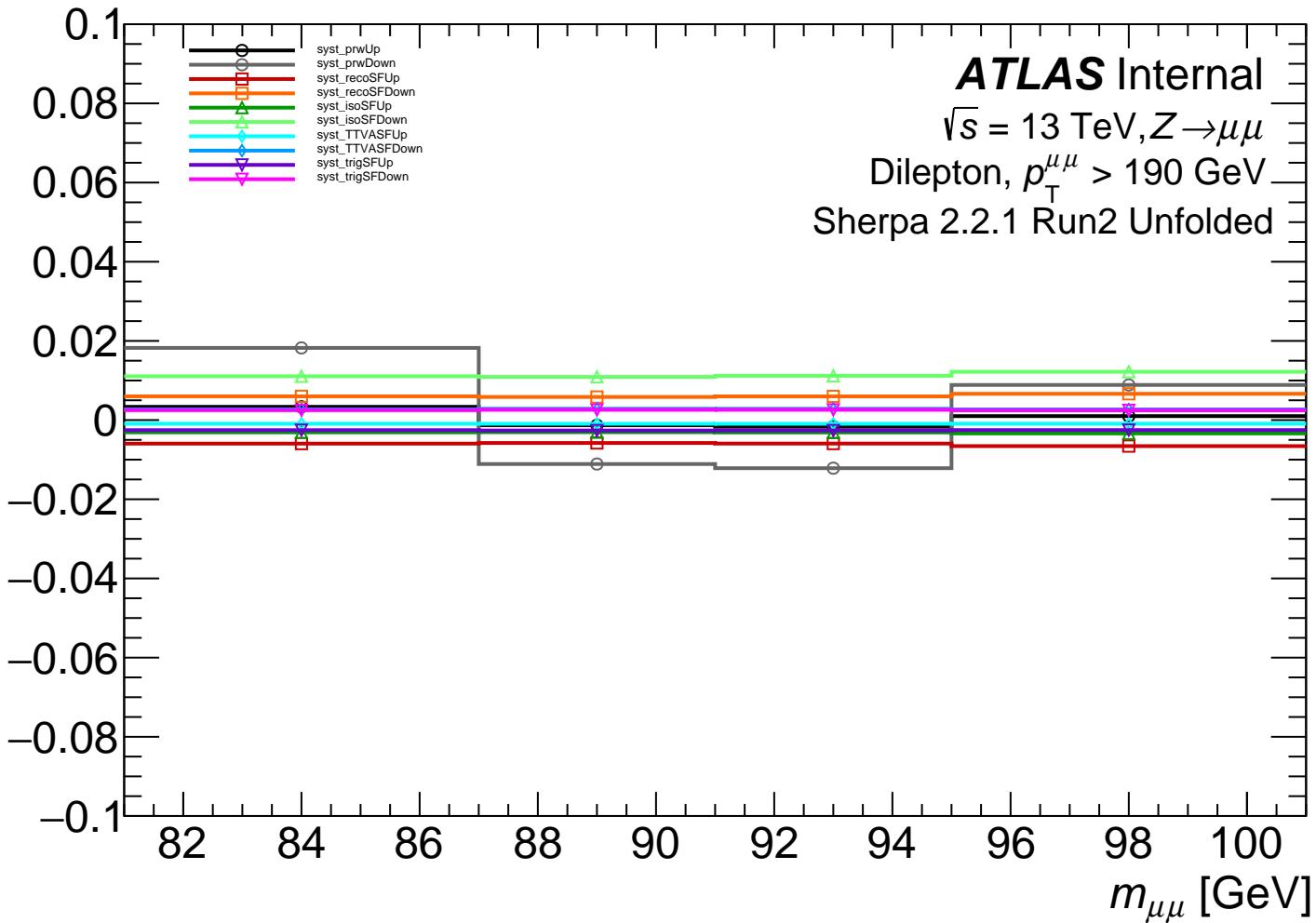


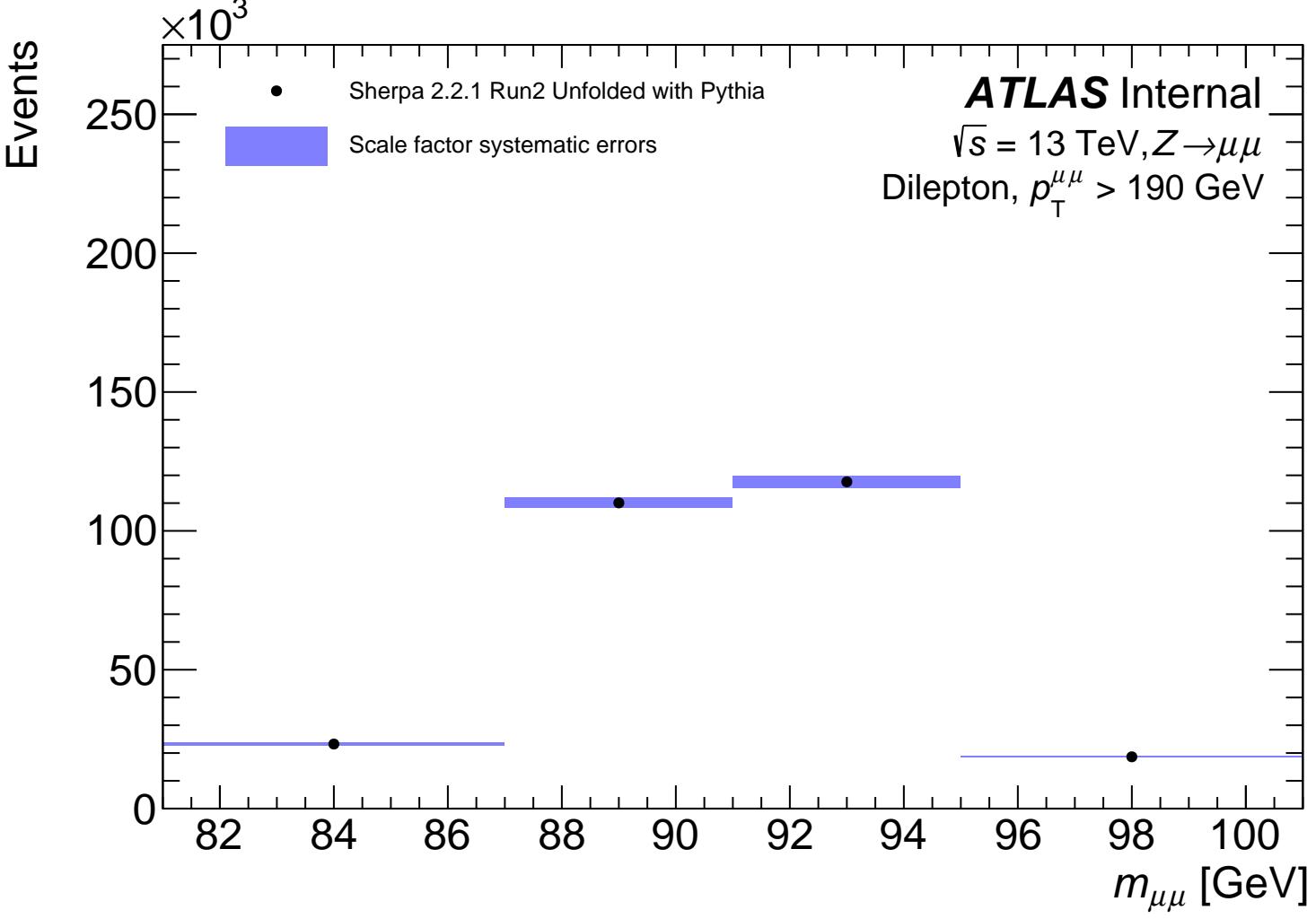
**ATLAS Internal**

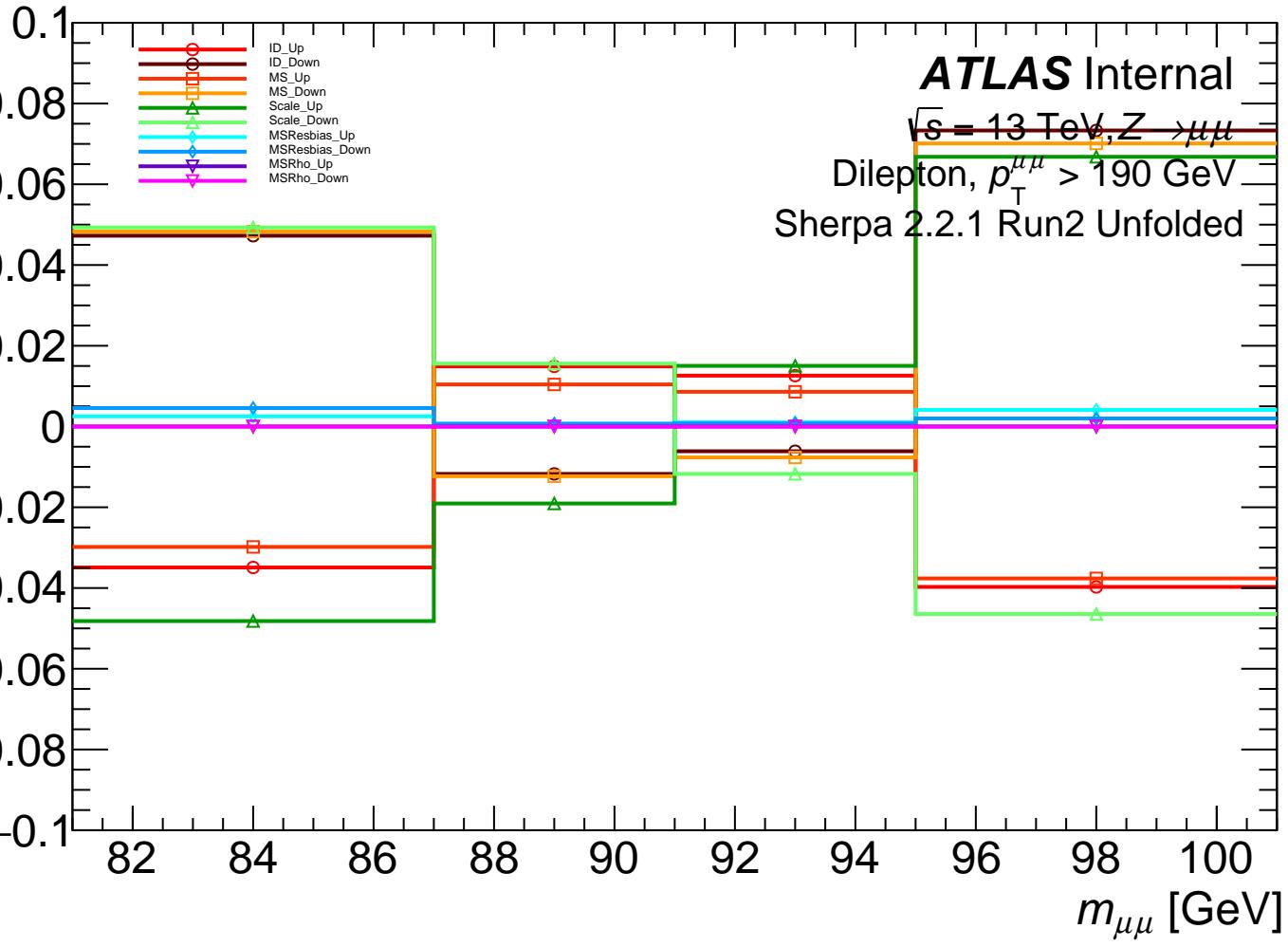
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

Sherpa 2.2.1 Run2 Unfolded







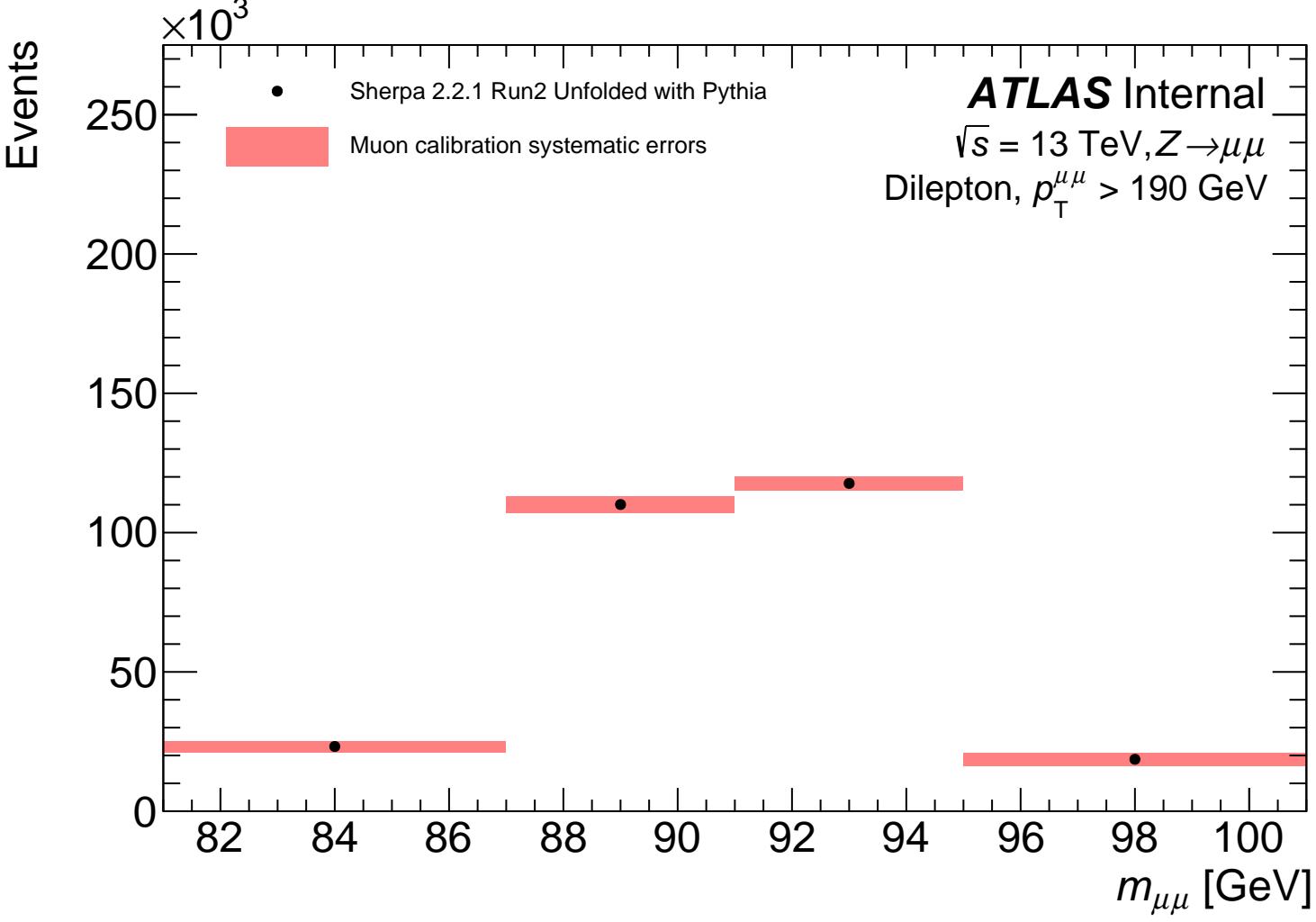
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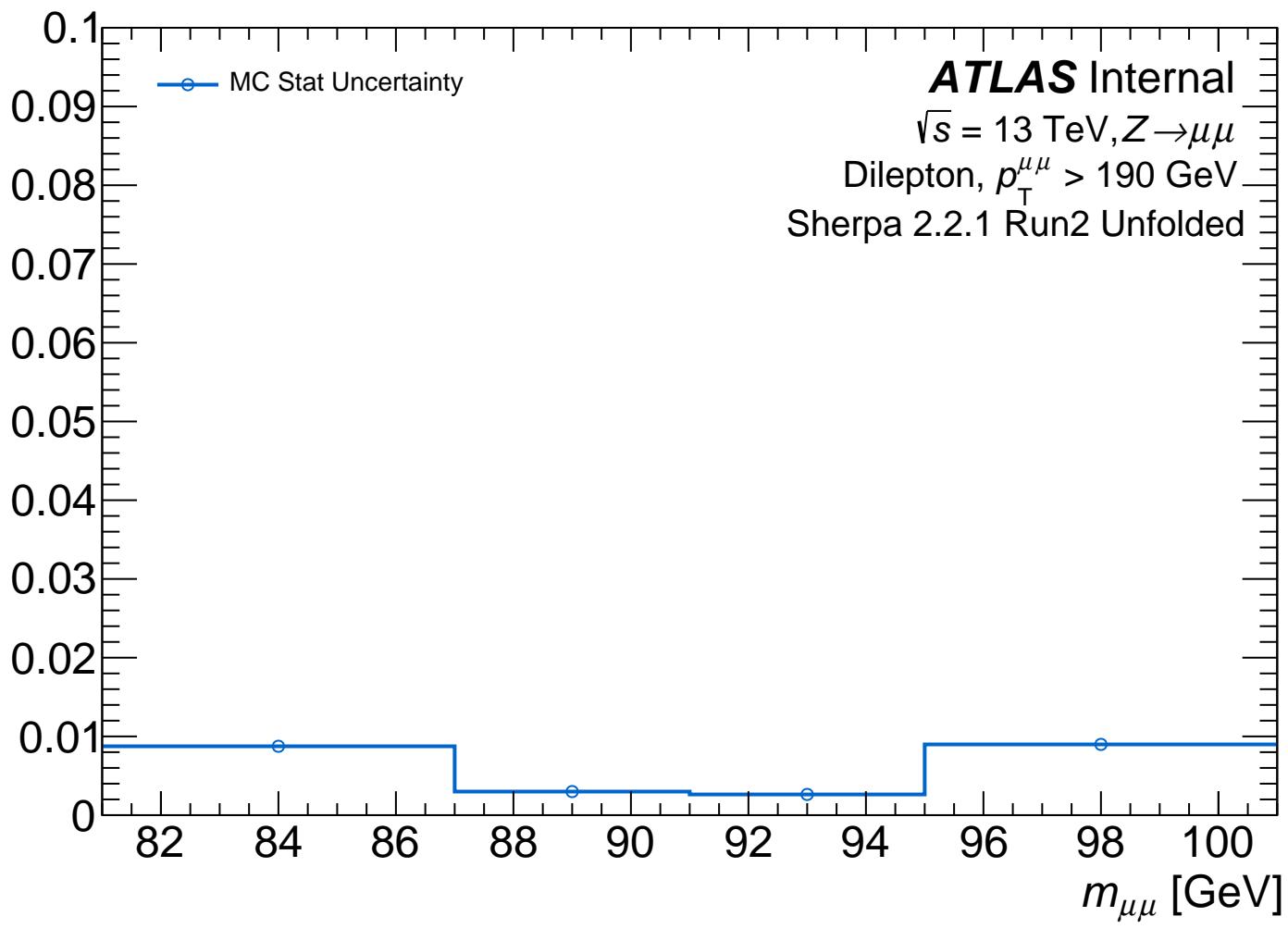
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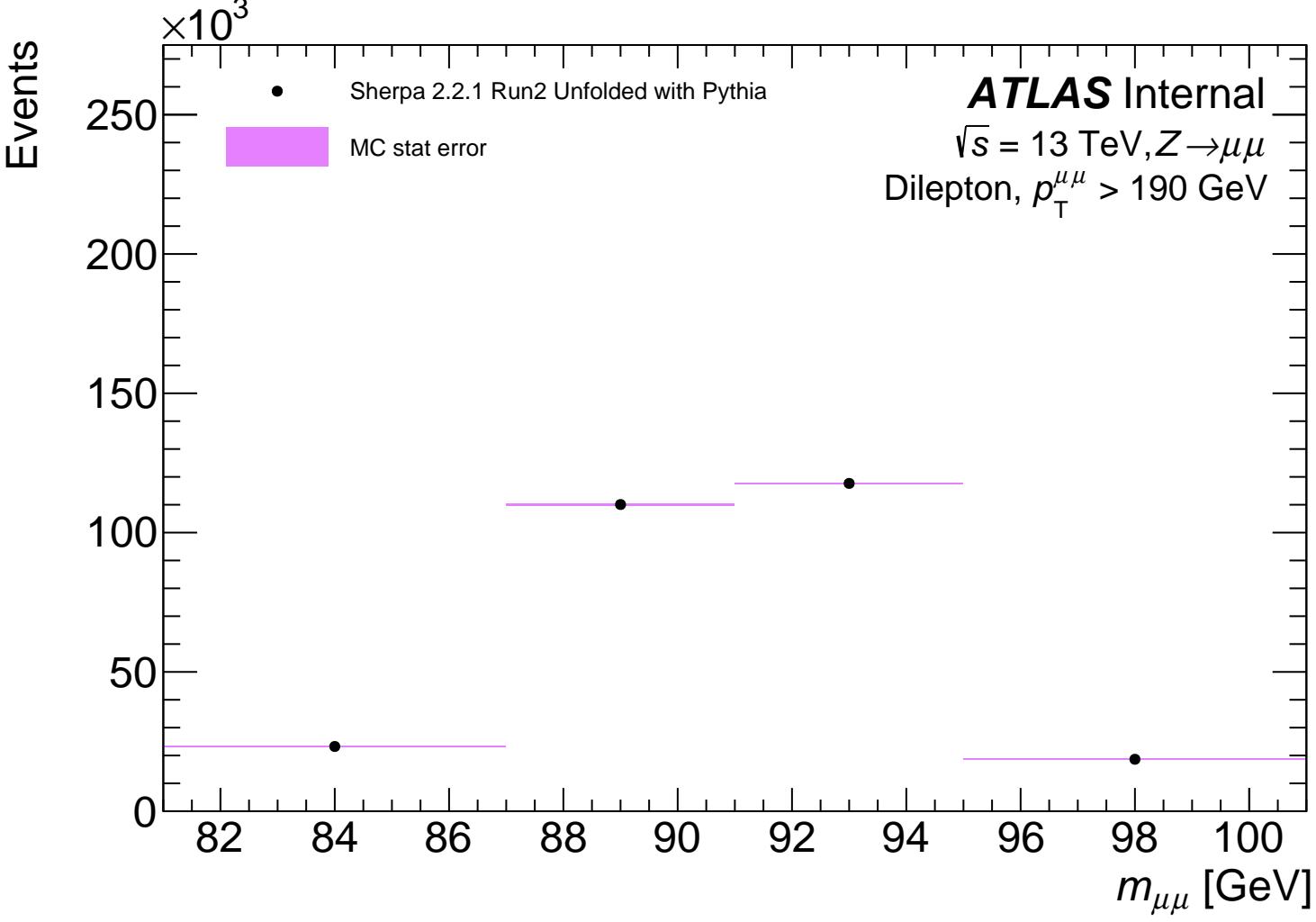
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

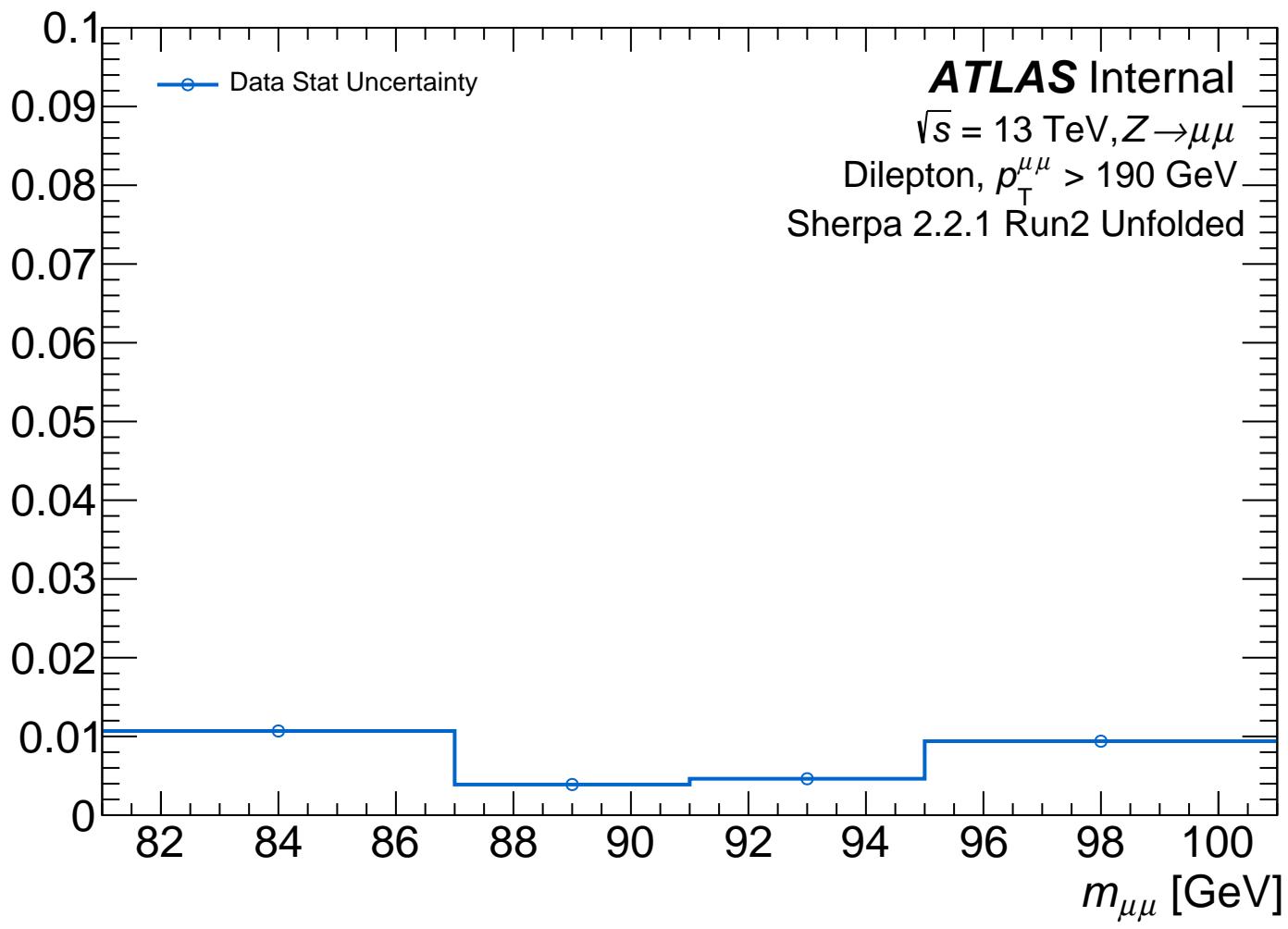
Sherpa 2.2.1 Run2 Unfolded

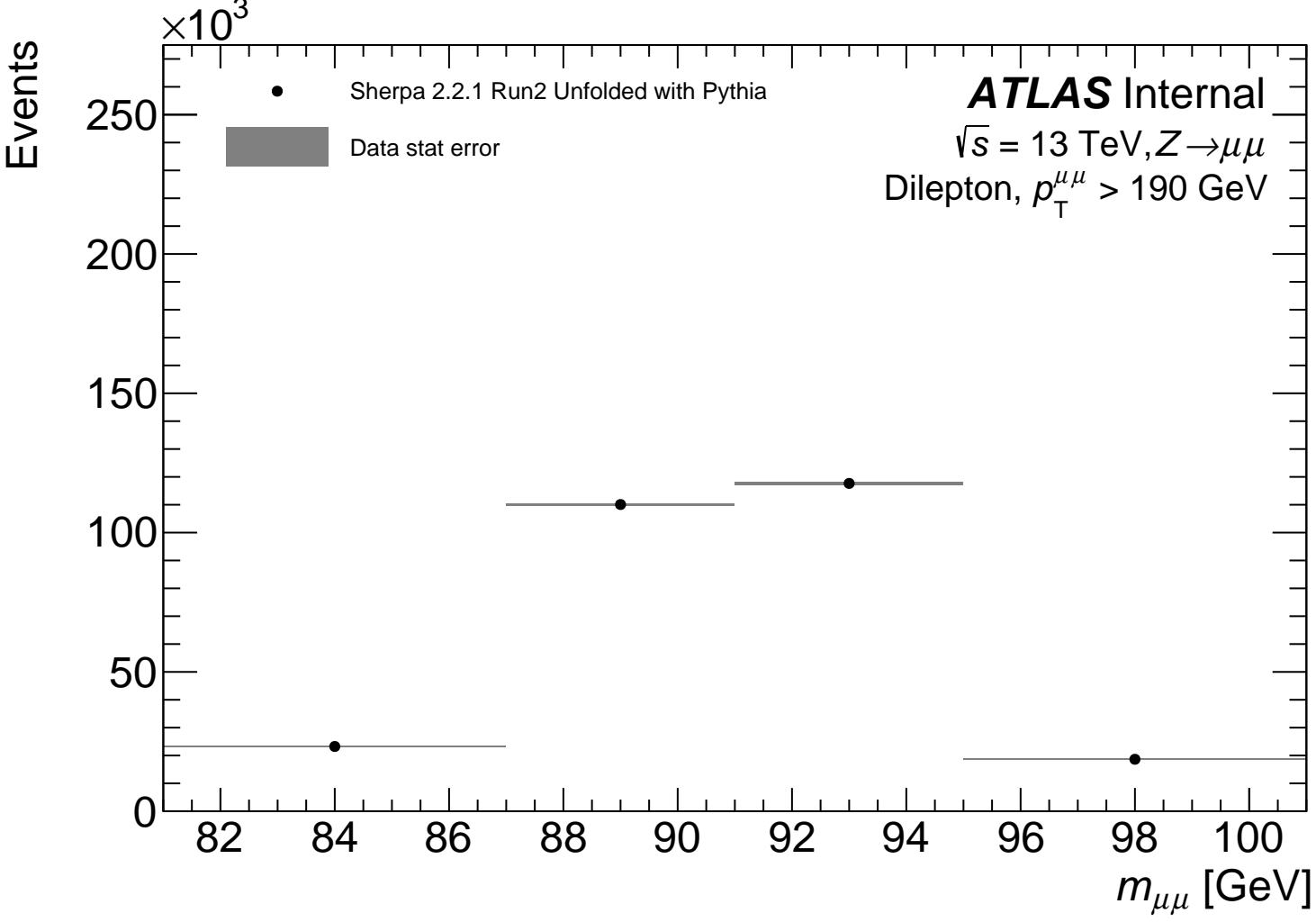
$m_{\mu\mu} [\text{GeV}]$

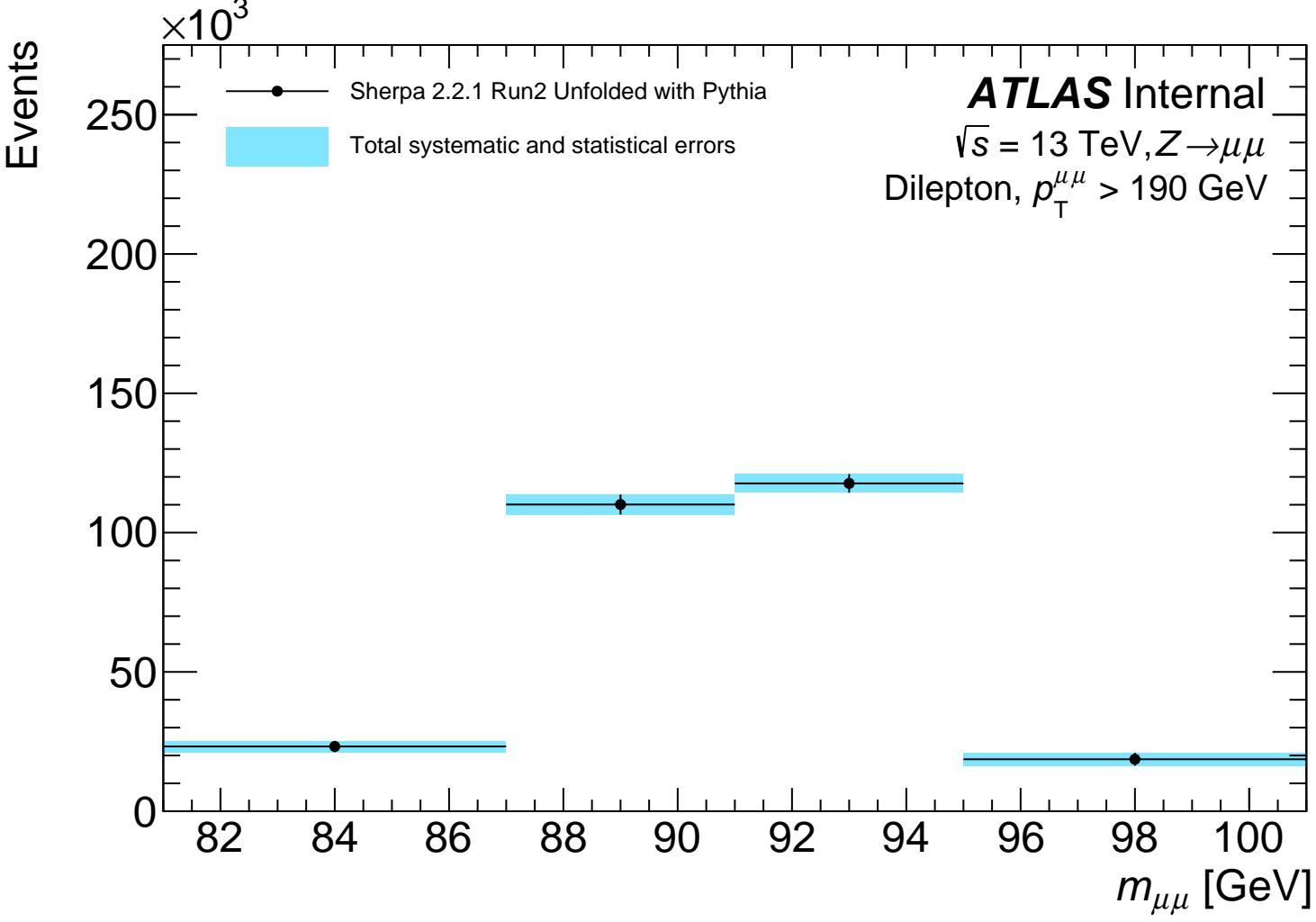


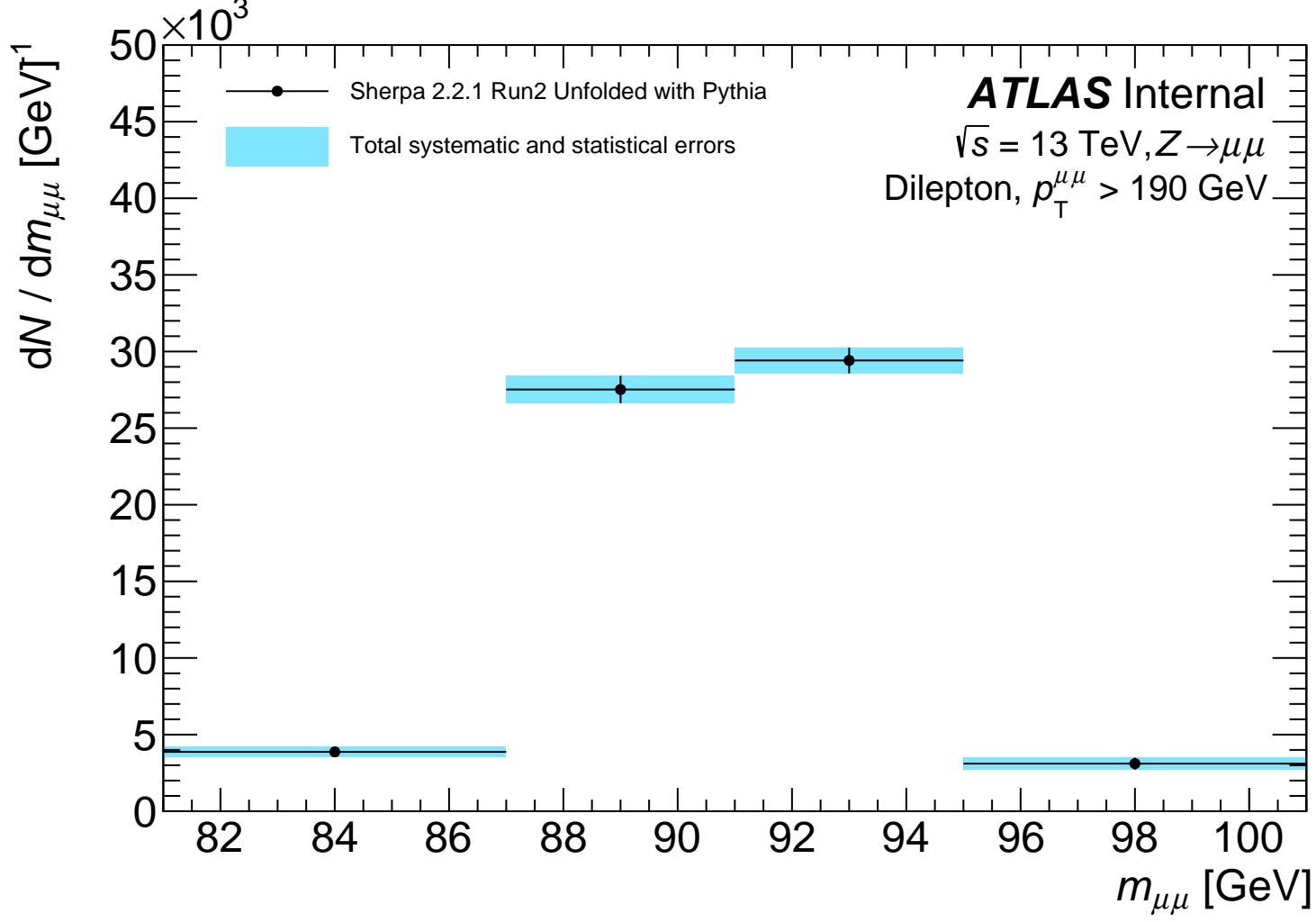










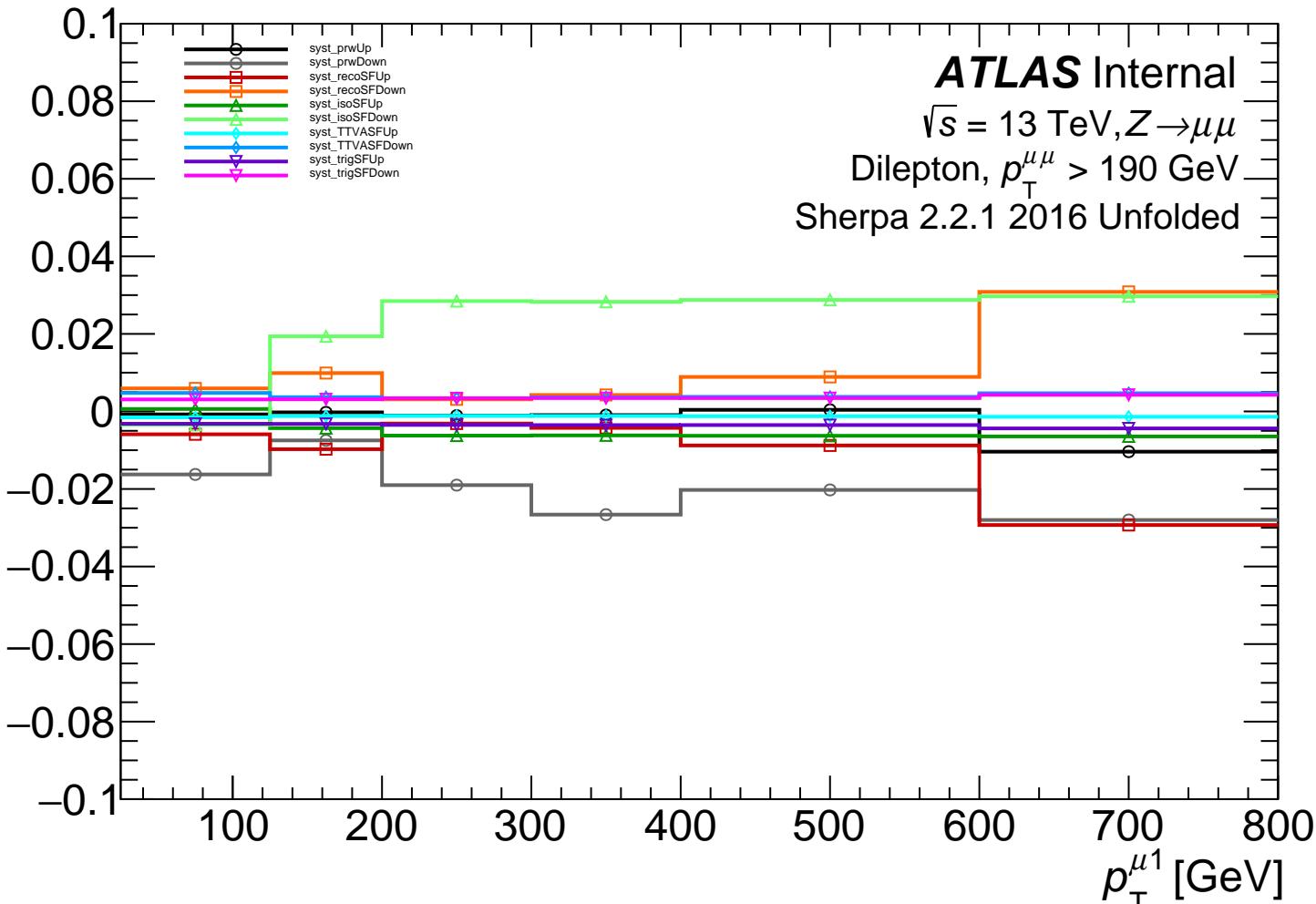


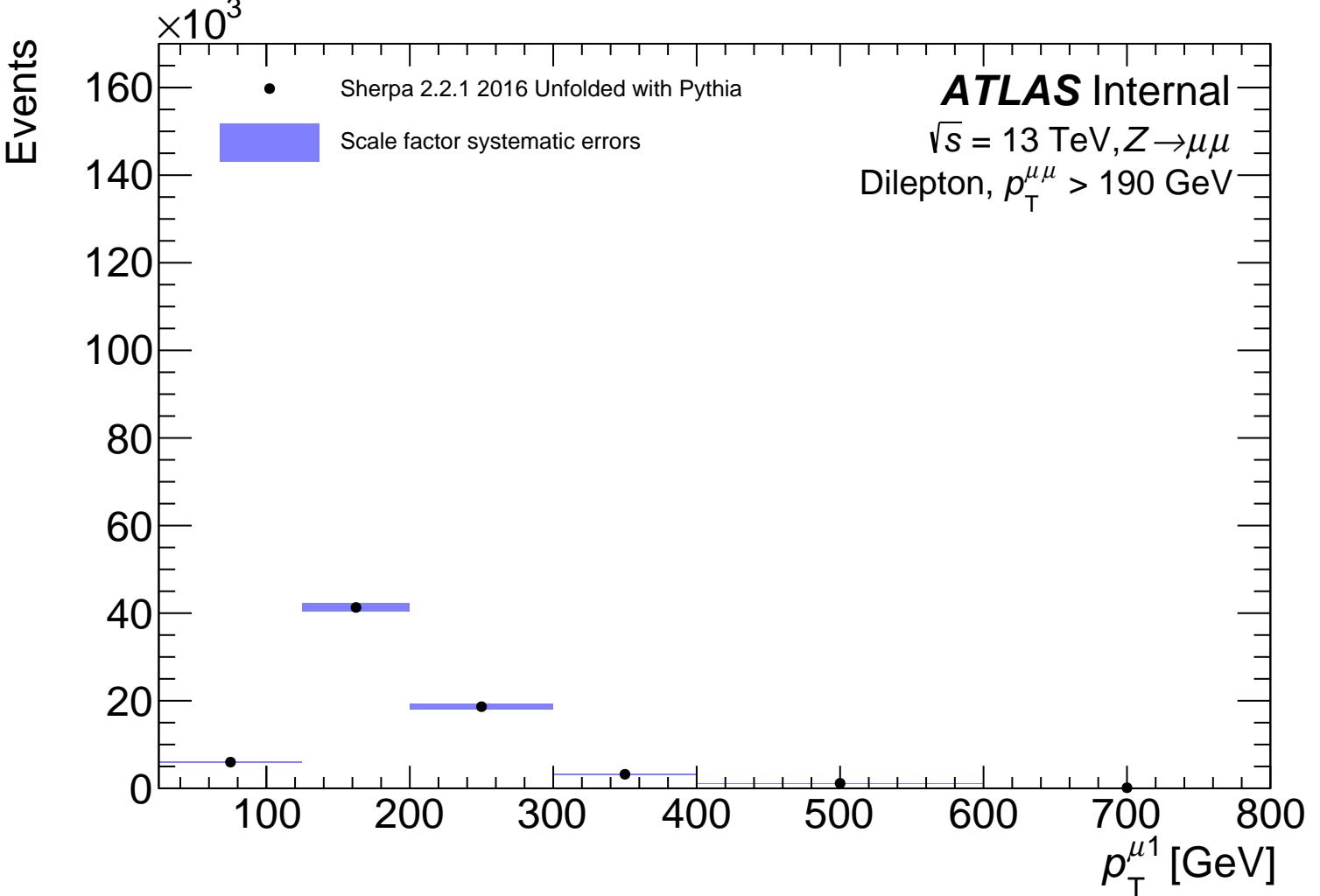
**ATLAS Internal**

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

Sherpa 2.2.1 2016 Unfolded



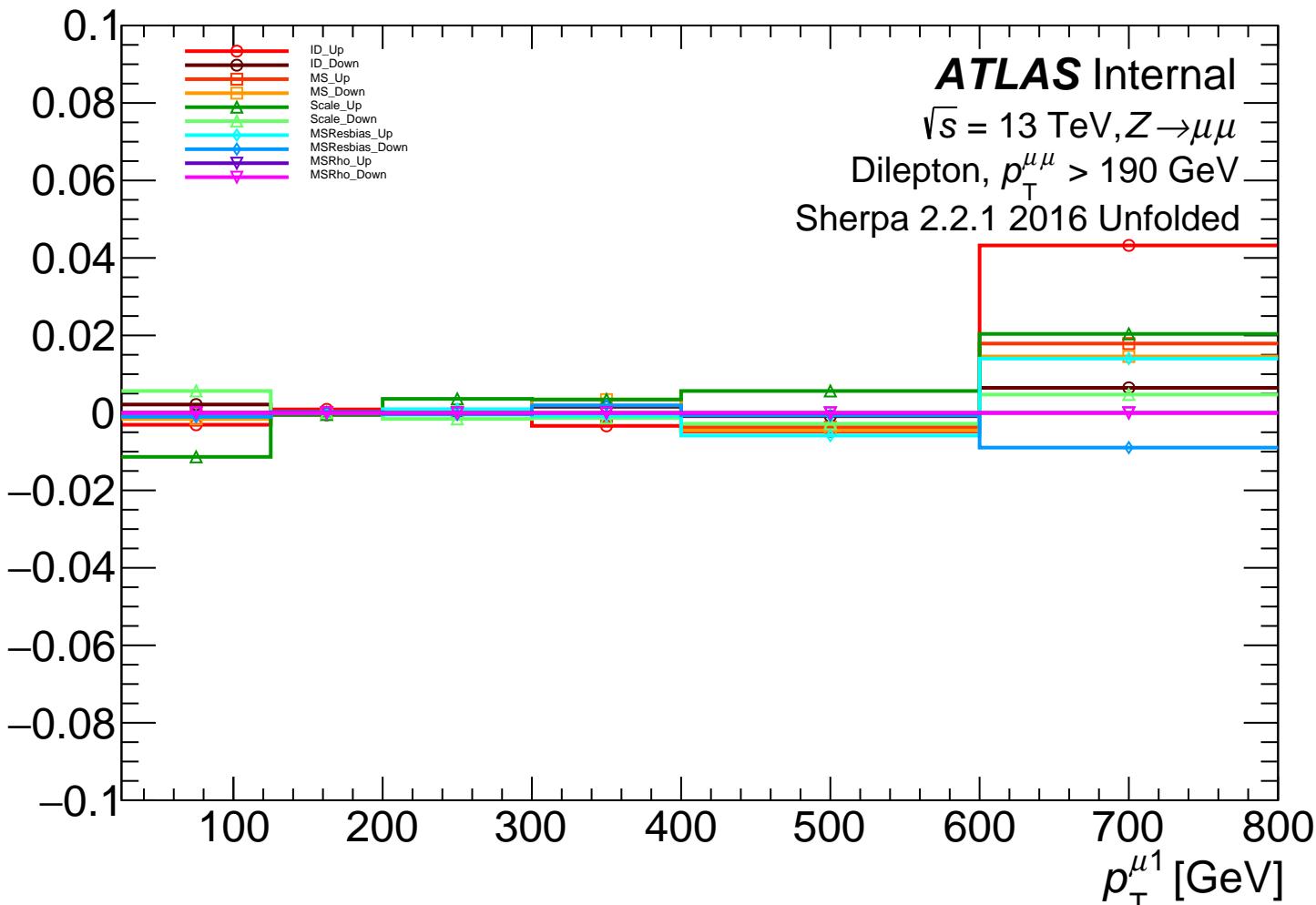


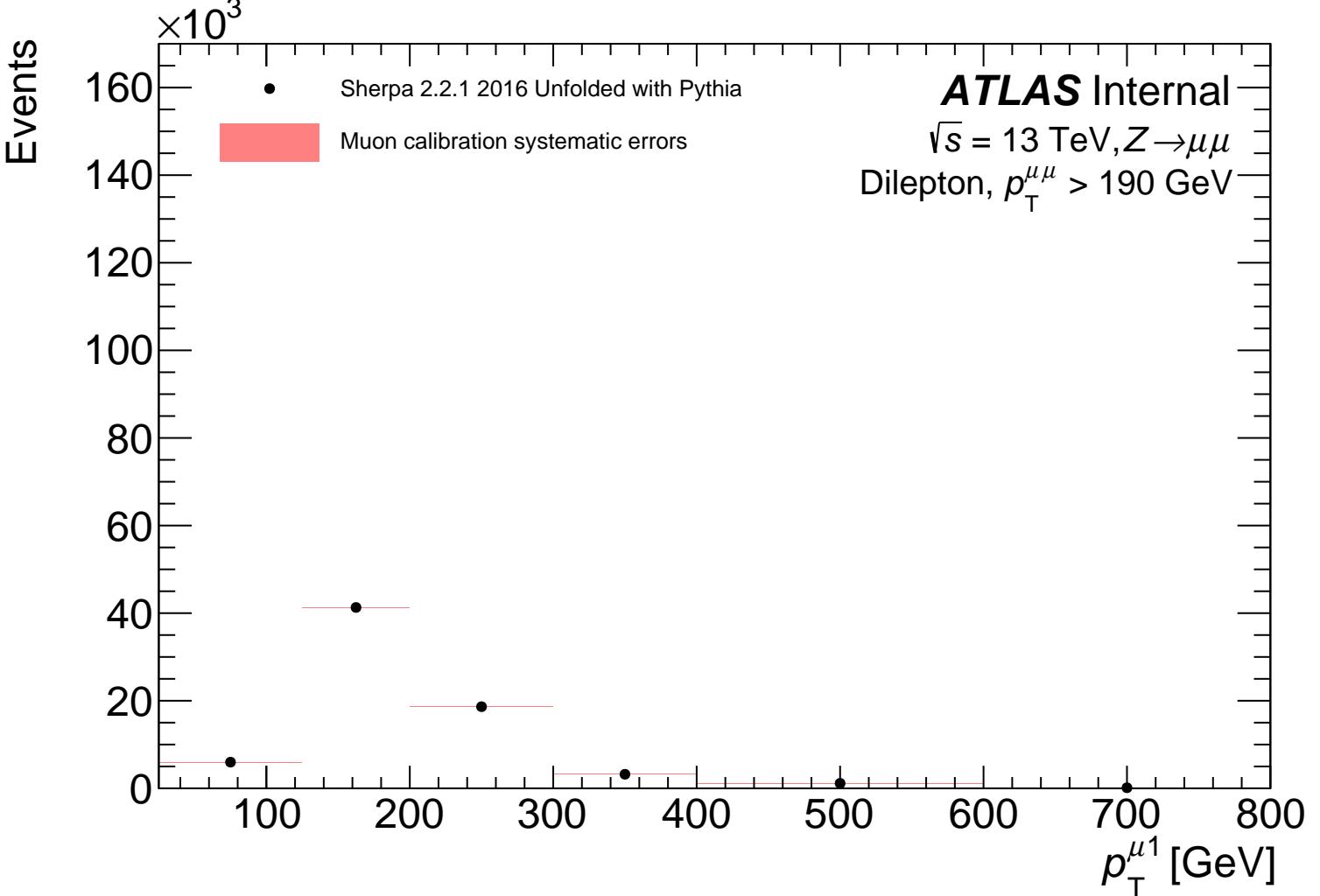
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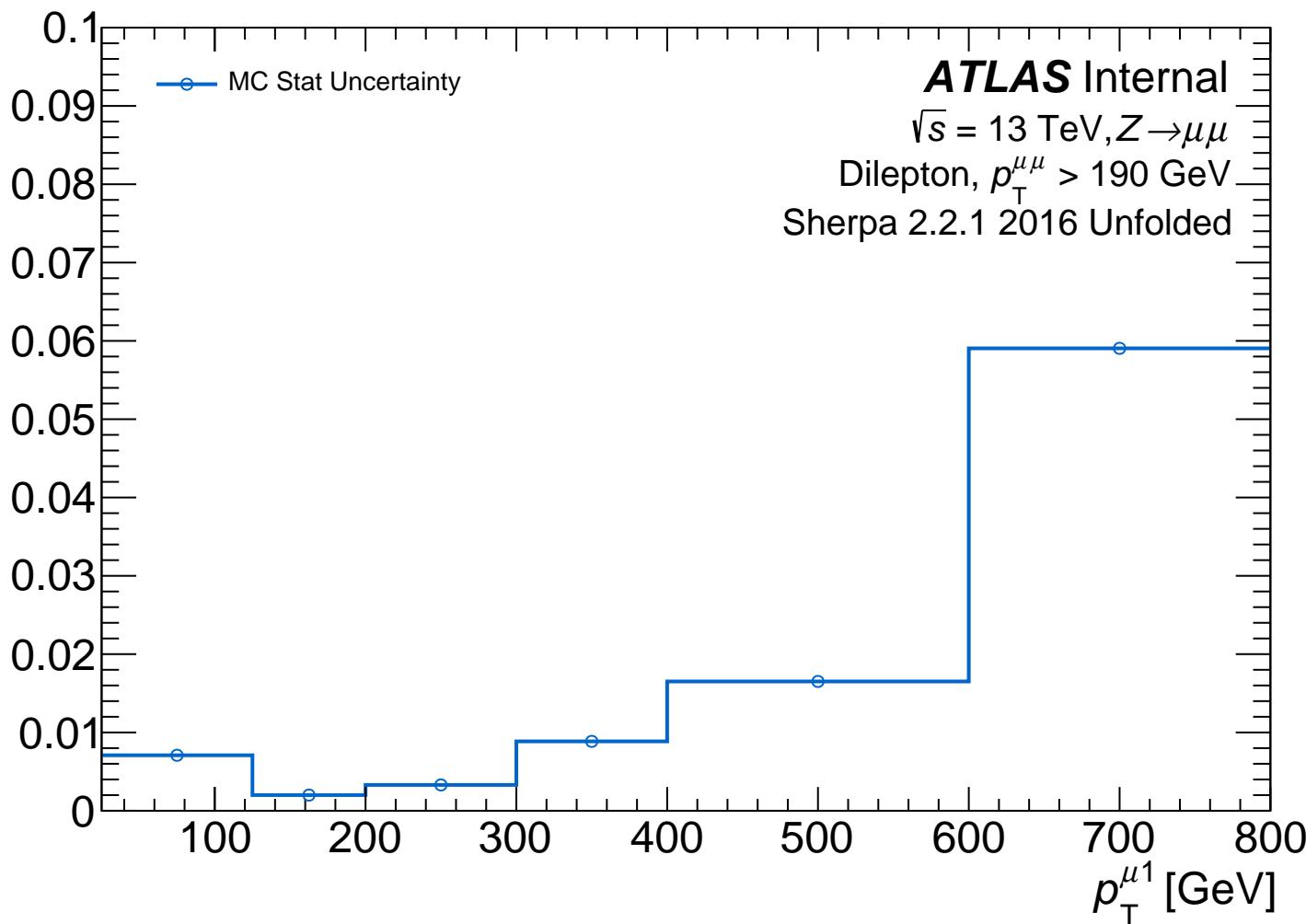
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

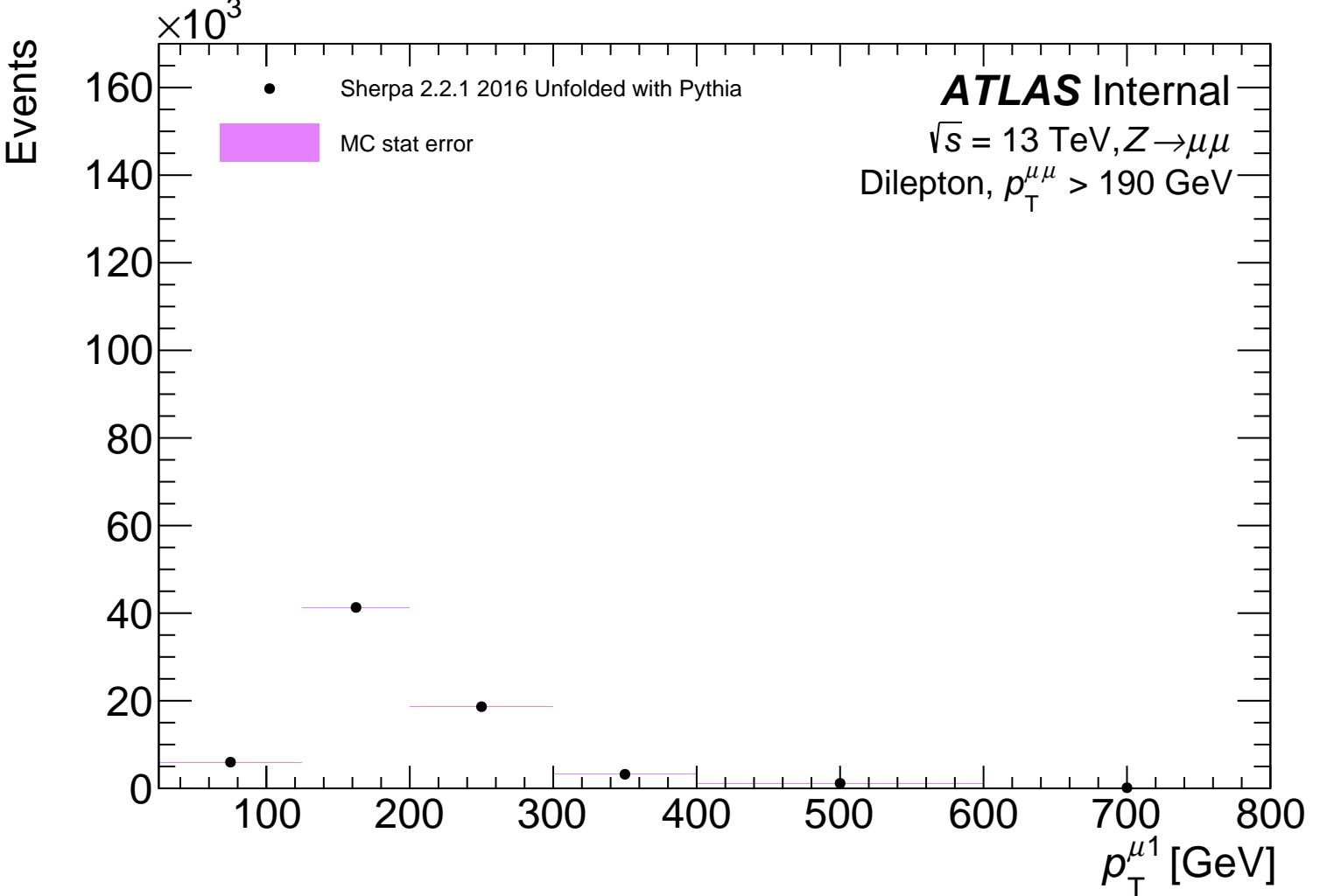
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

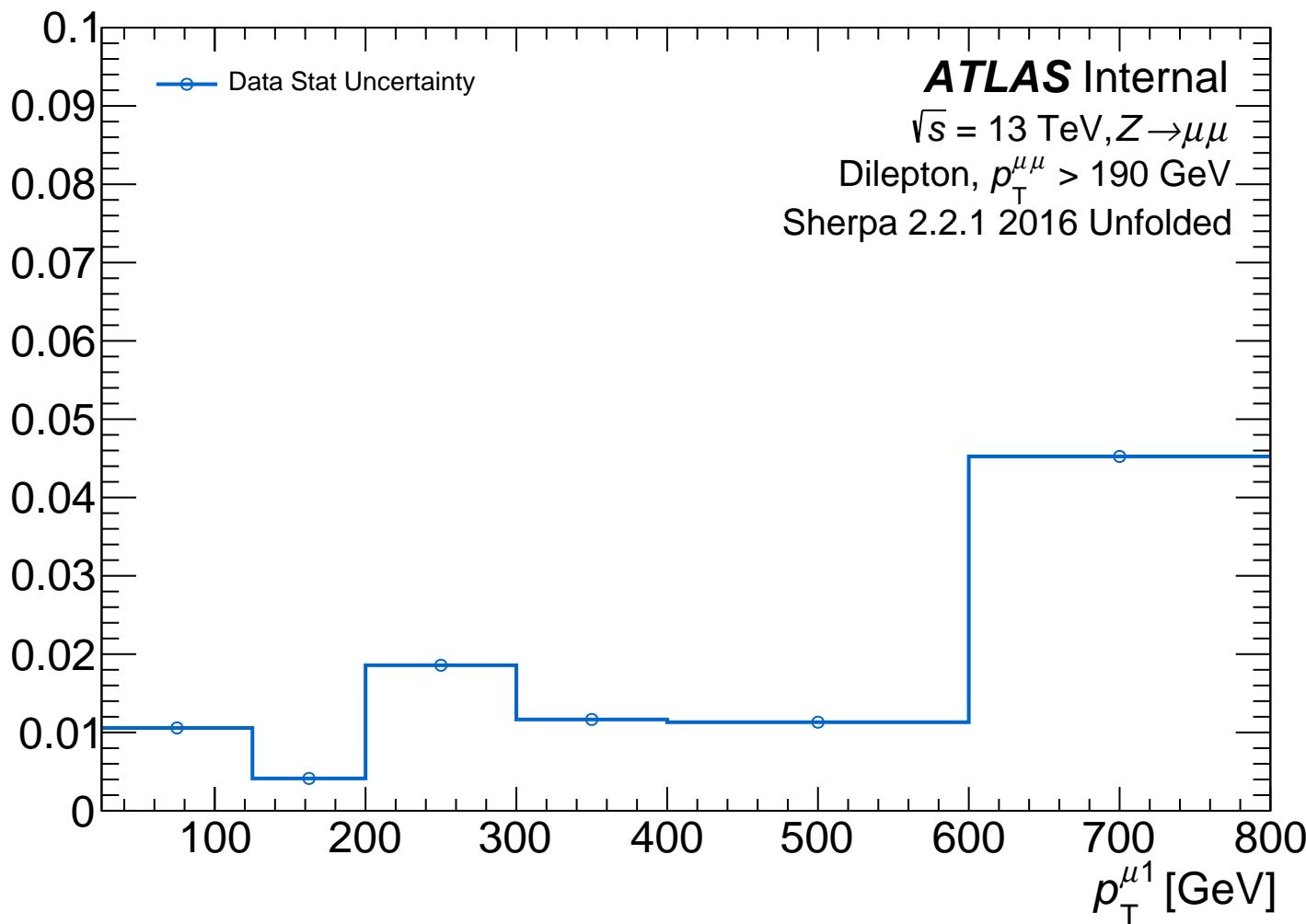
Sherpa 2.2.1 2016 Unfolded

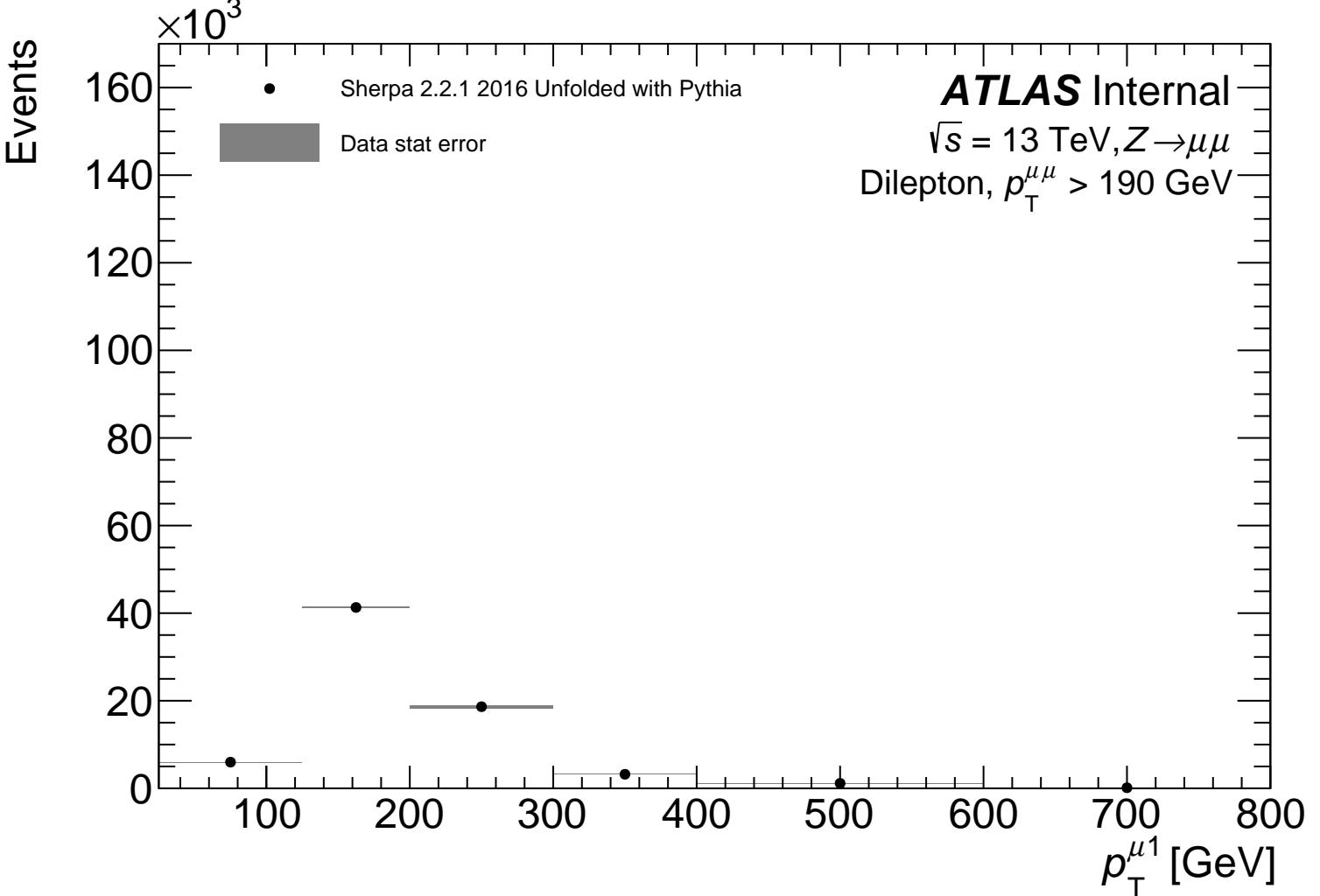


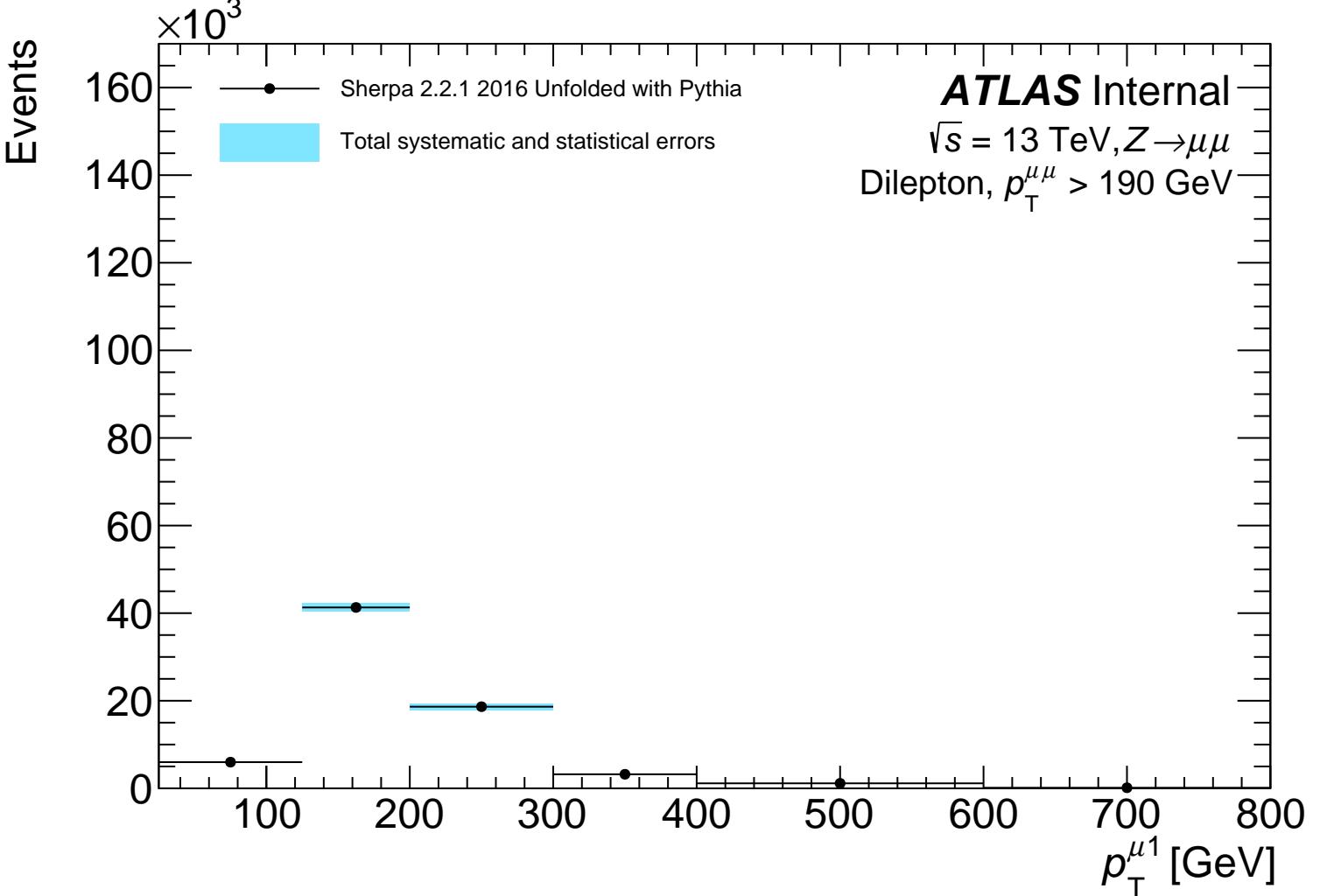


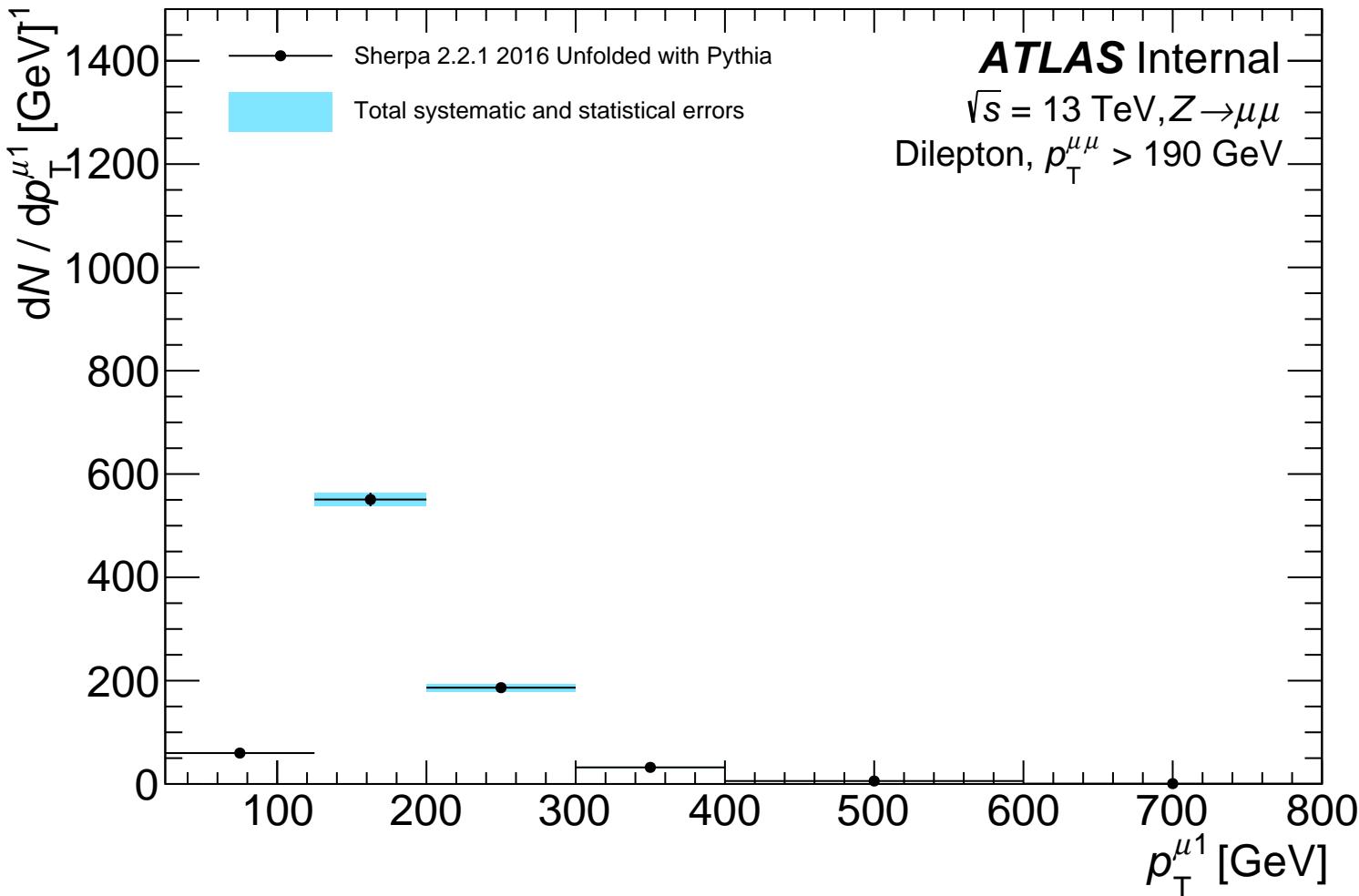










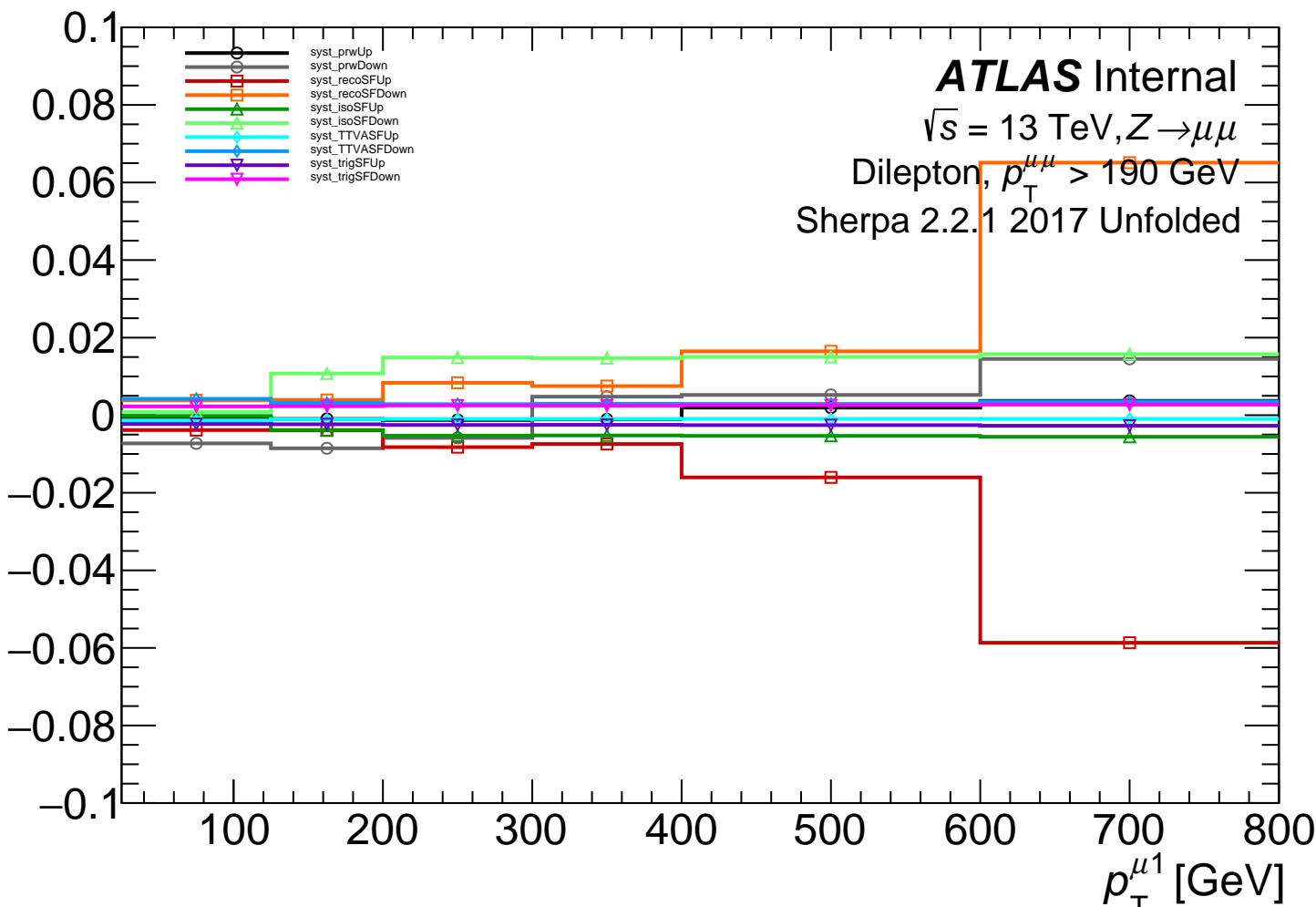


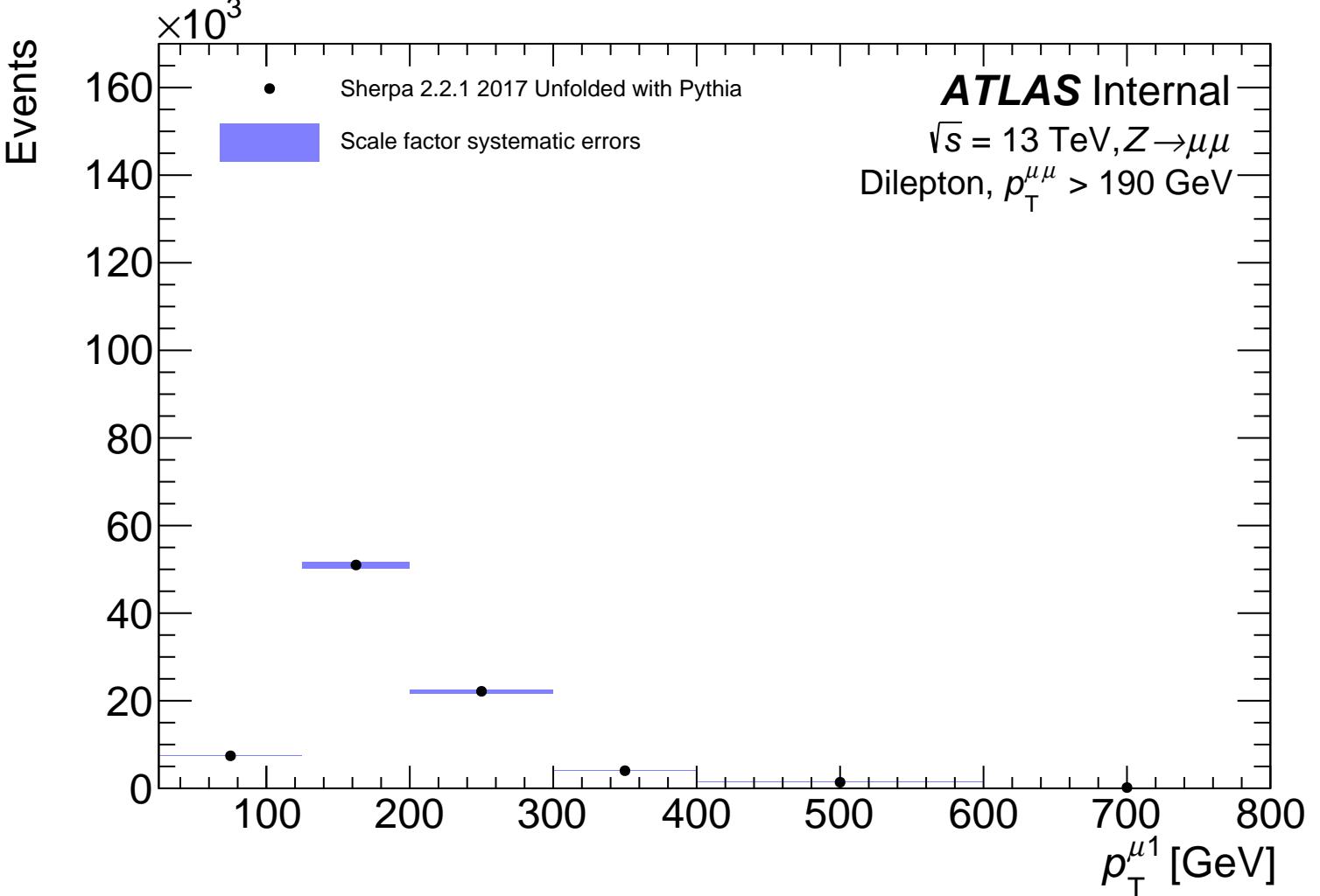
**ATLAS Internal**

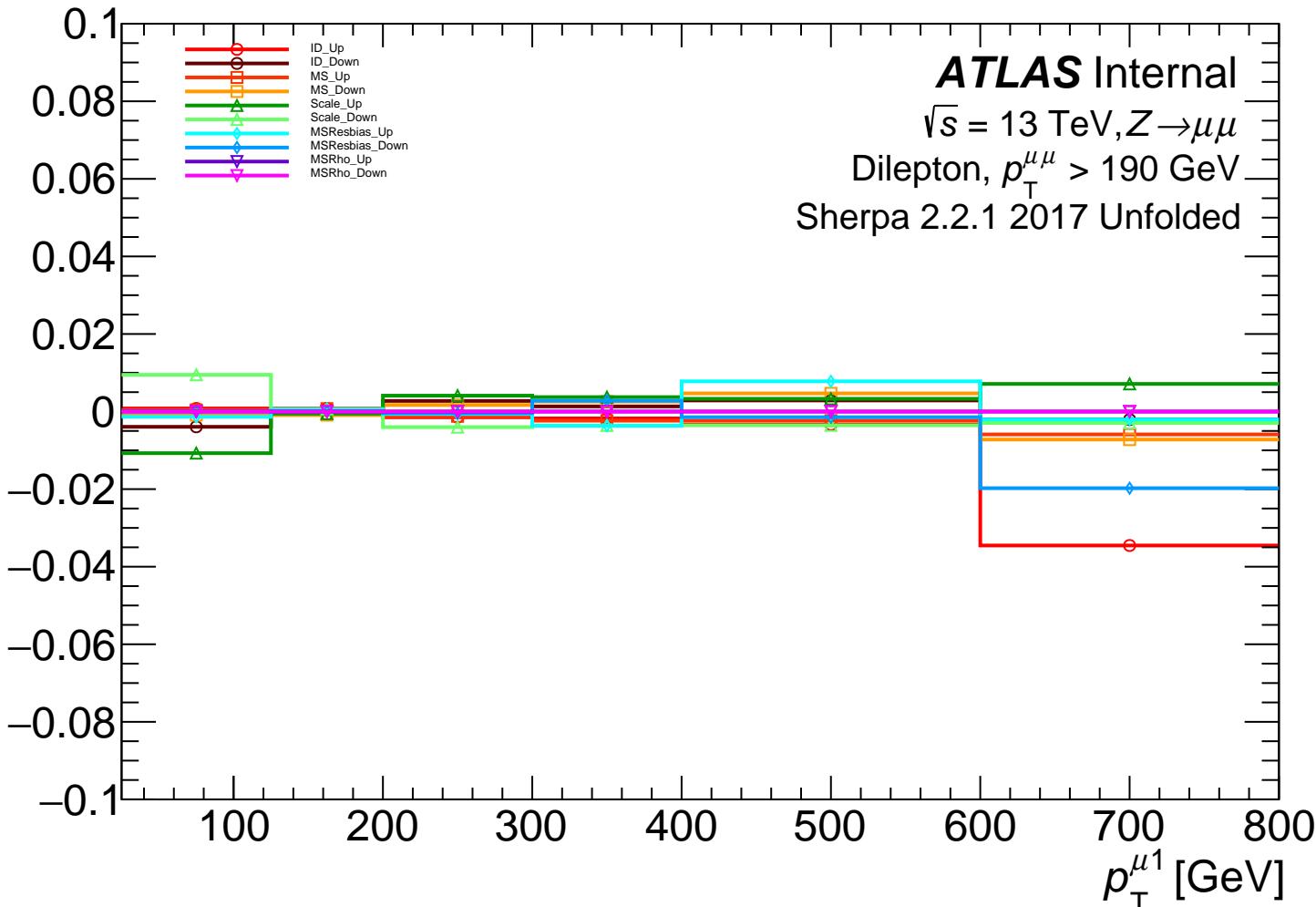
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

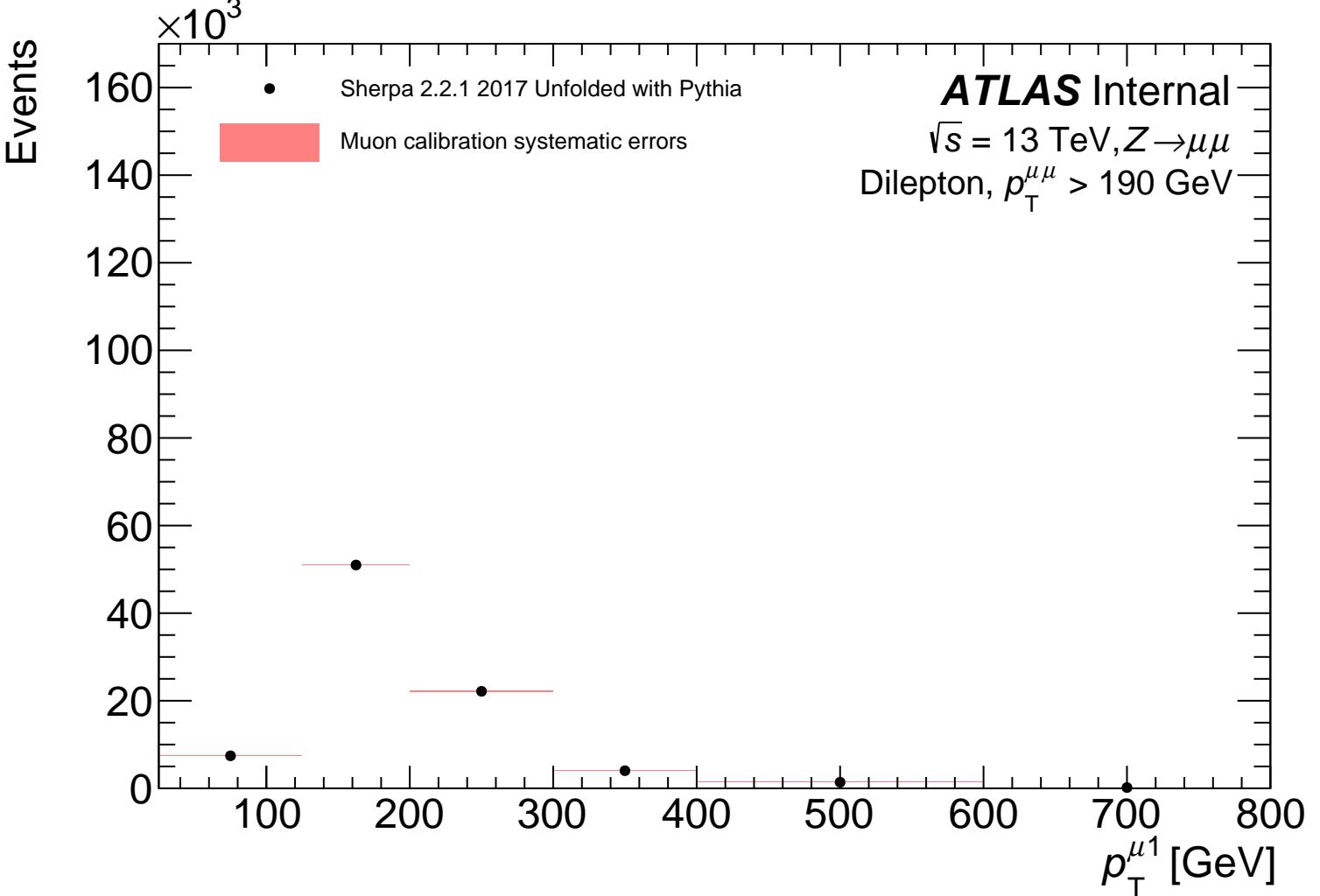
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

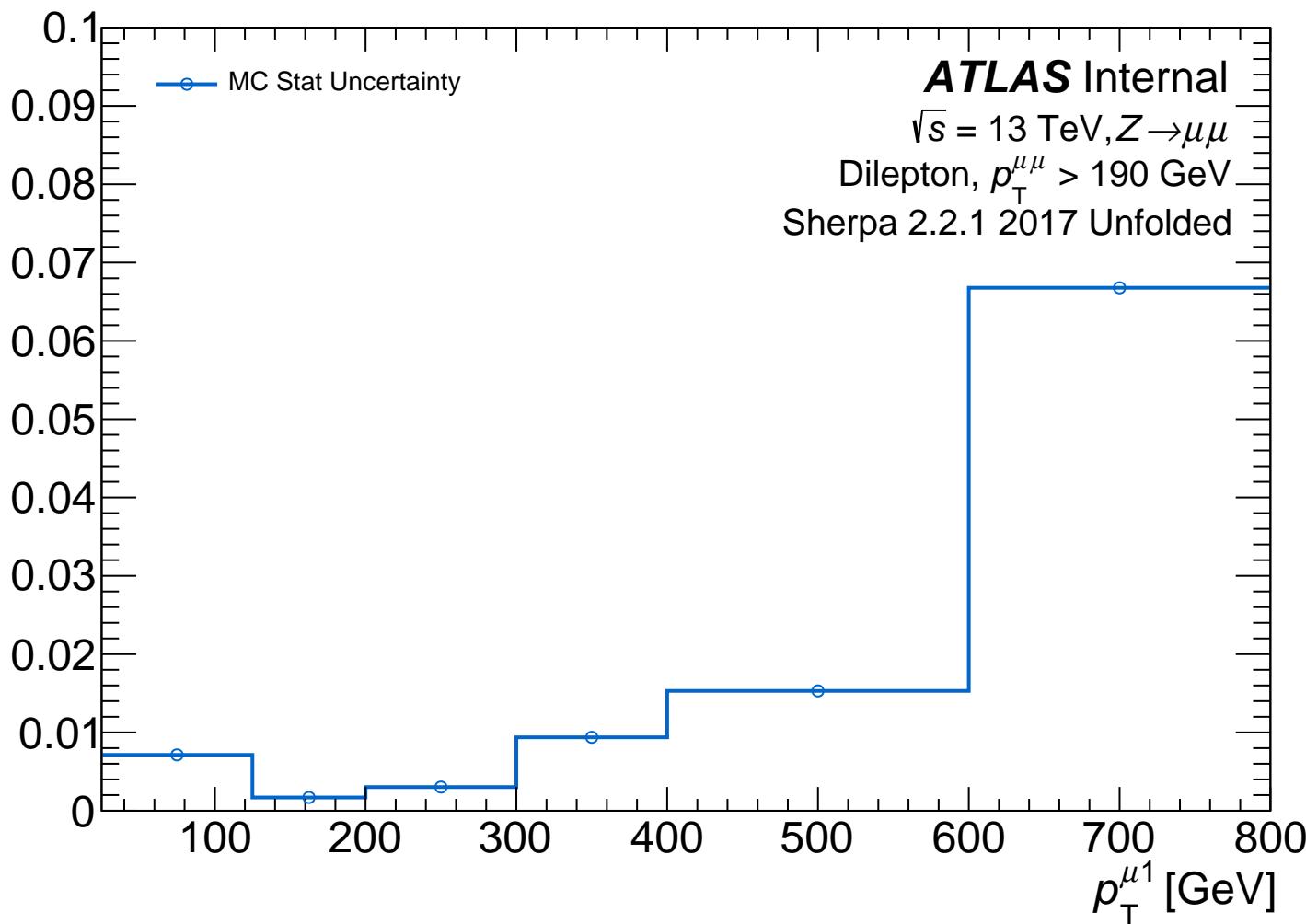
Sherpa 2.2.1 2017 Unfolded

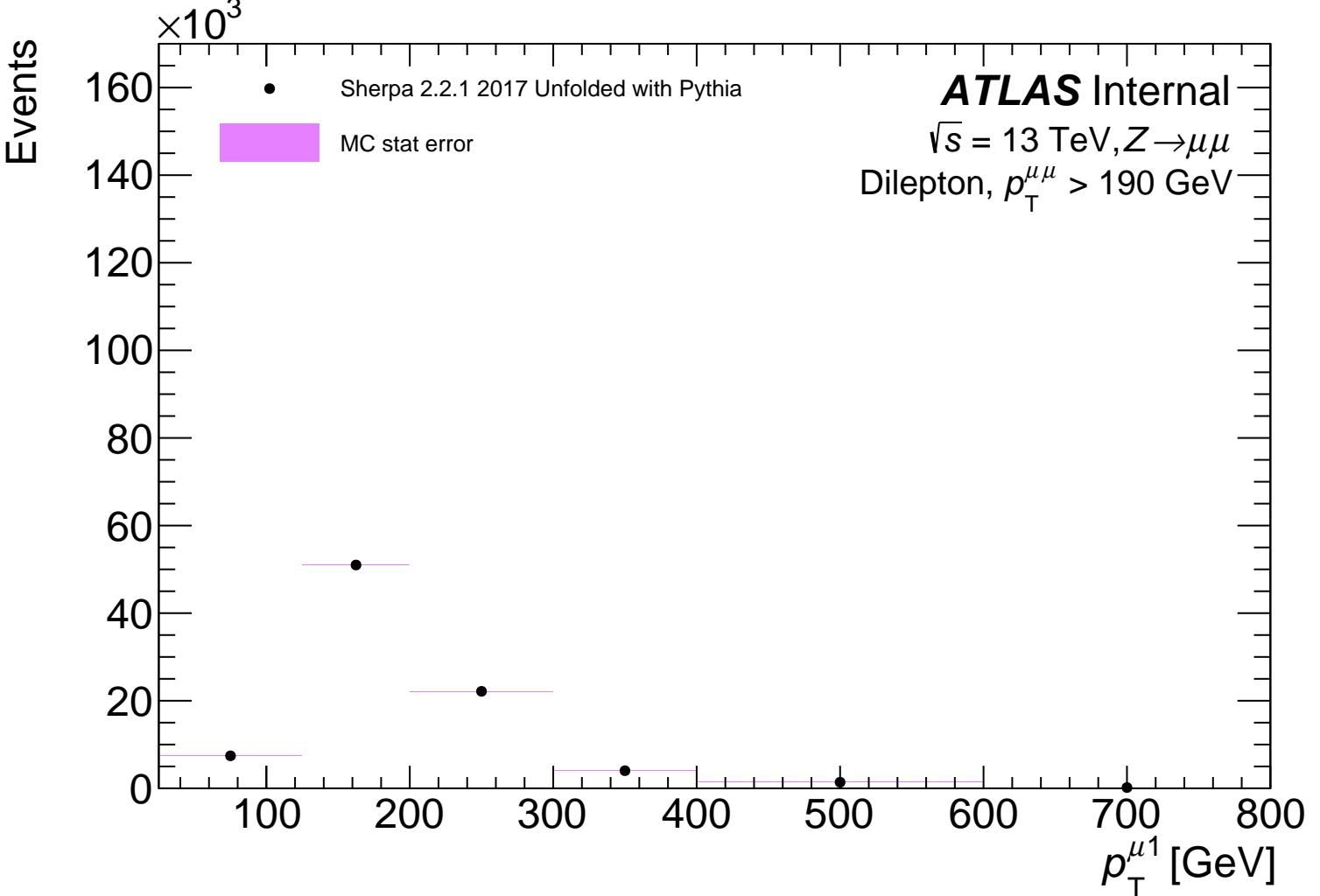


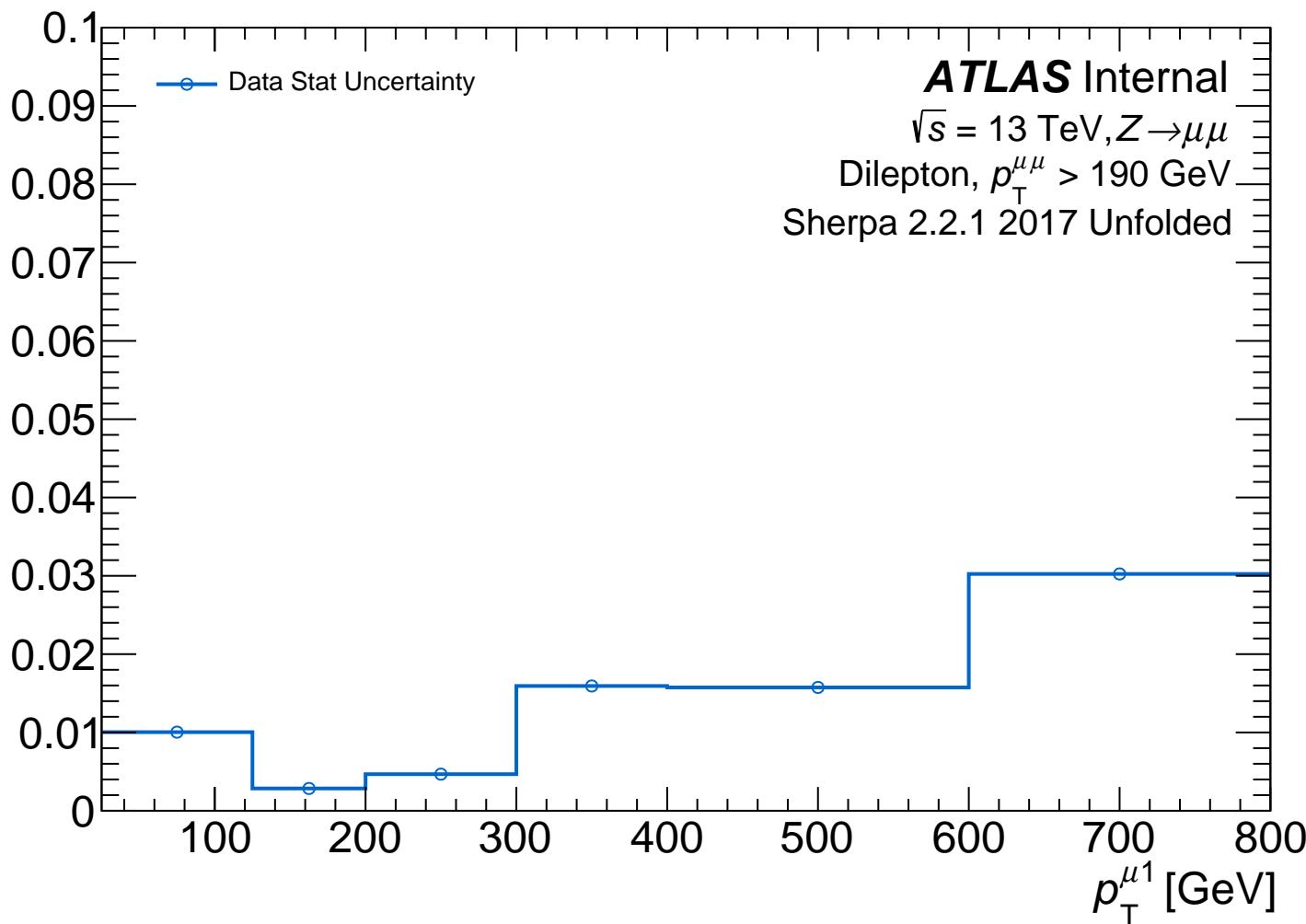


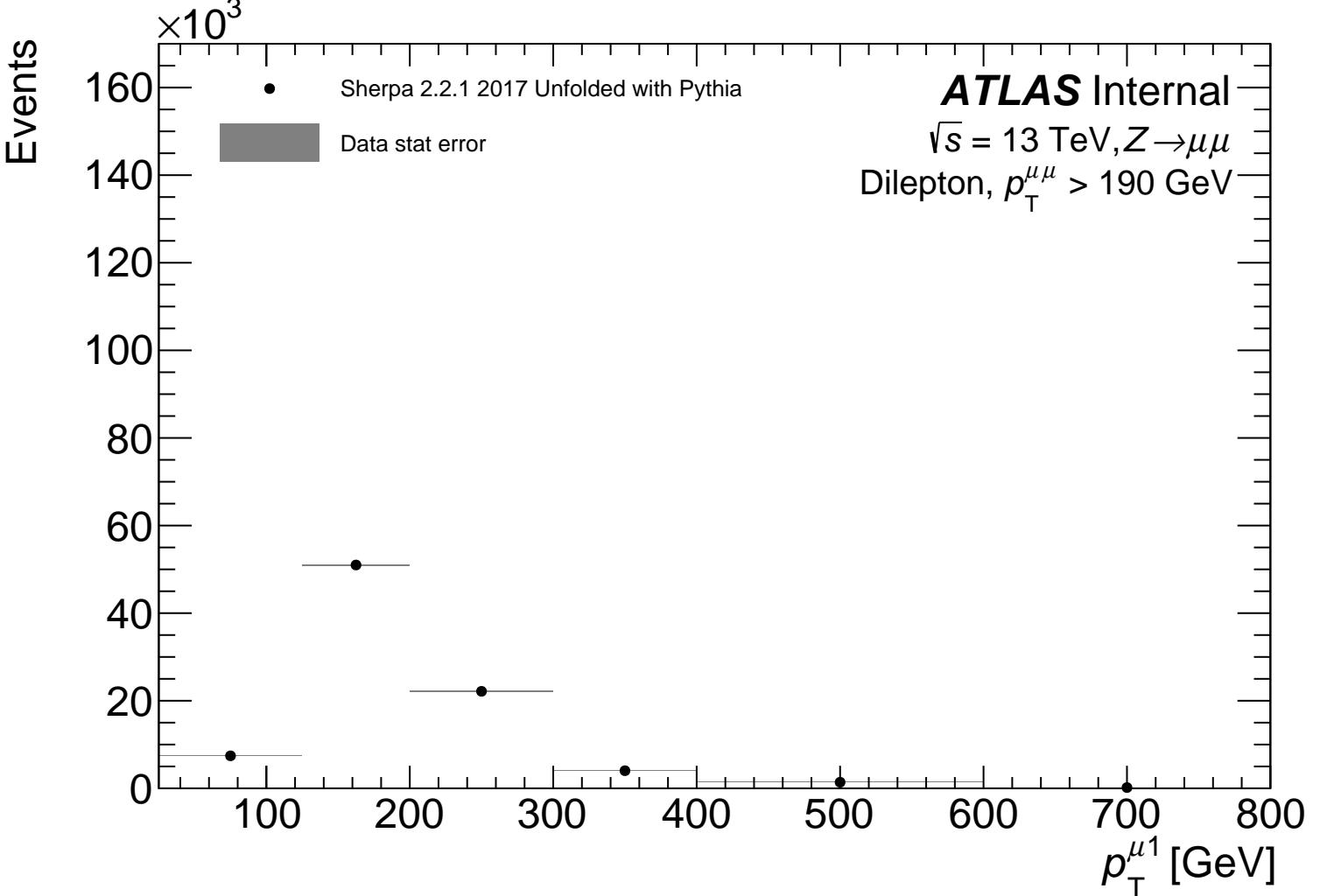


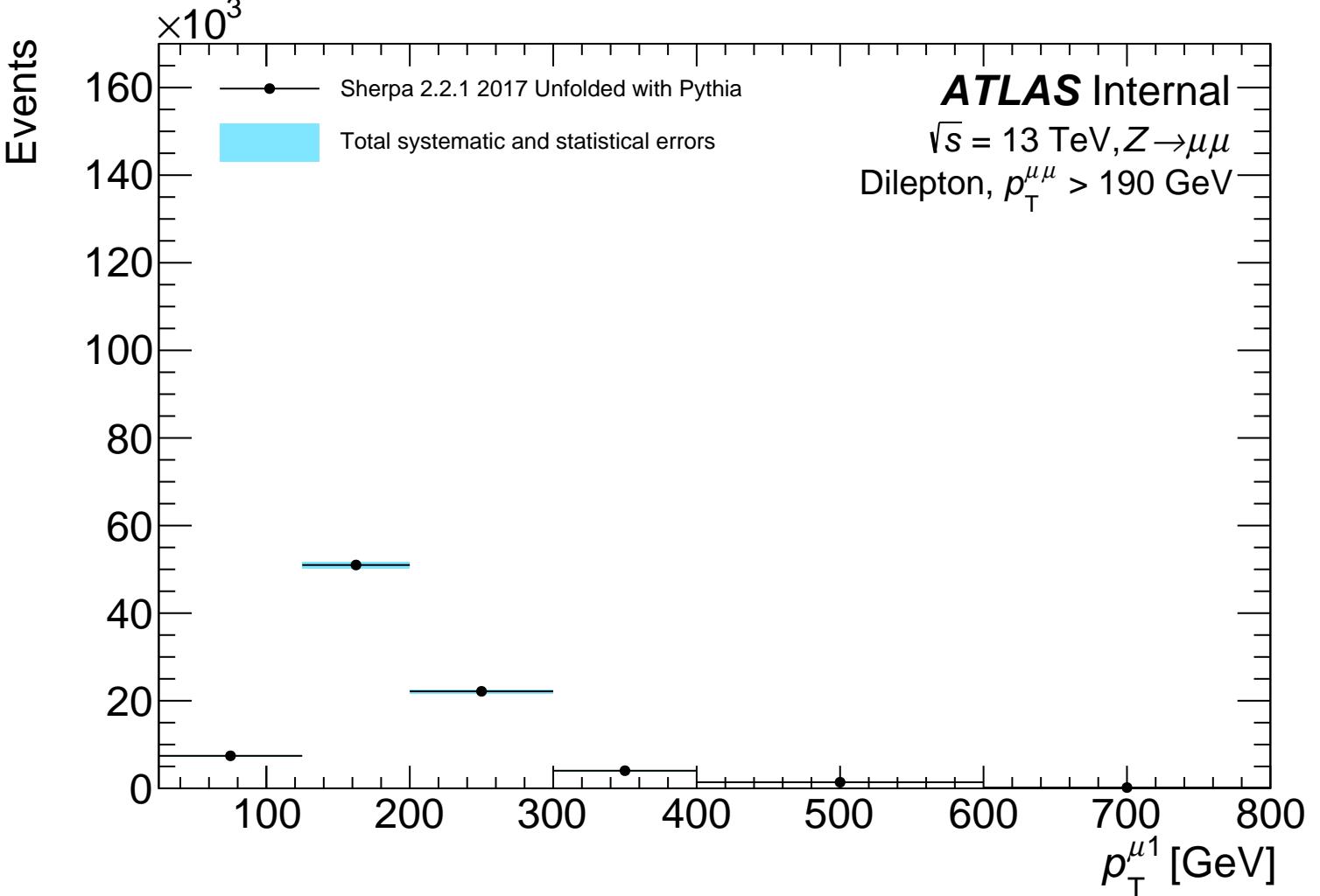


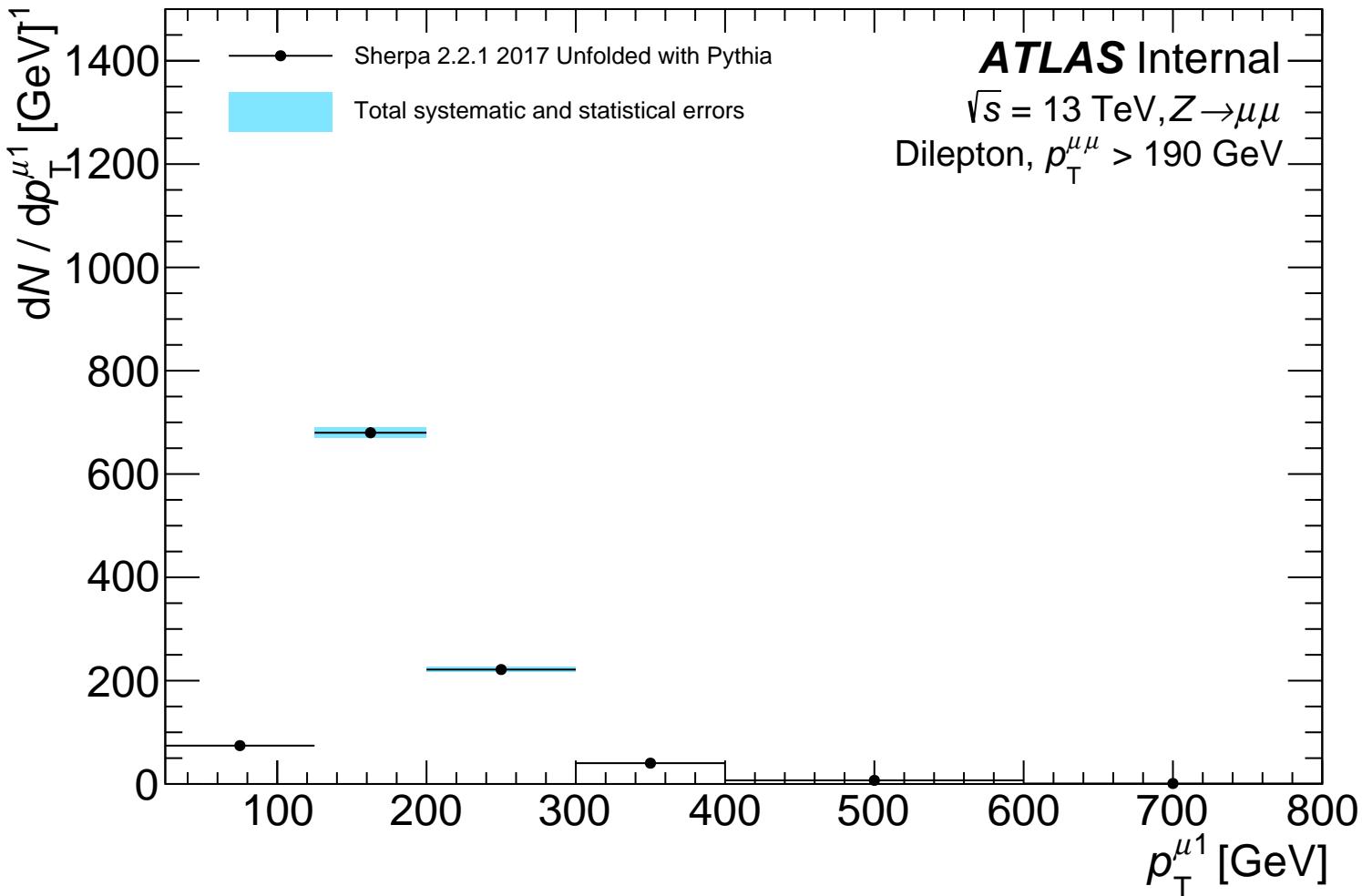










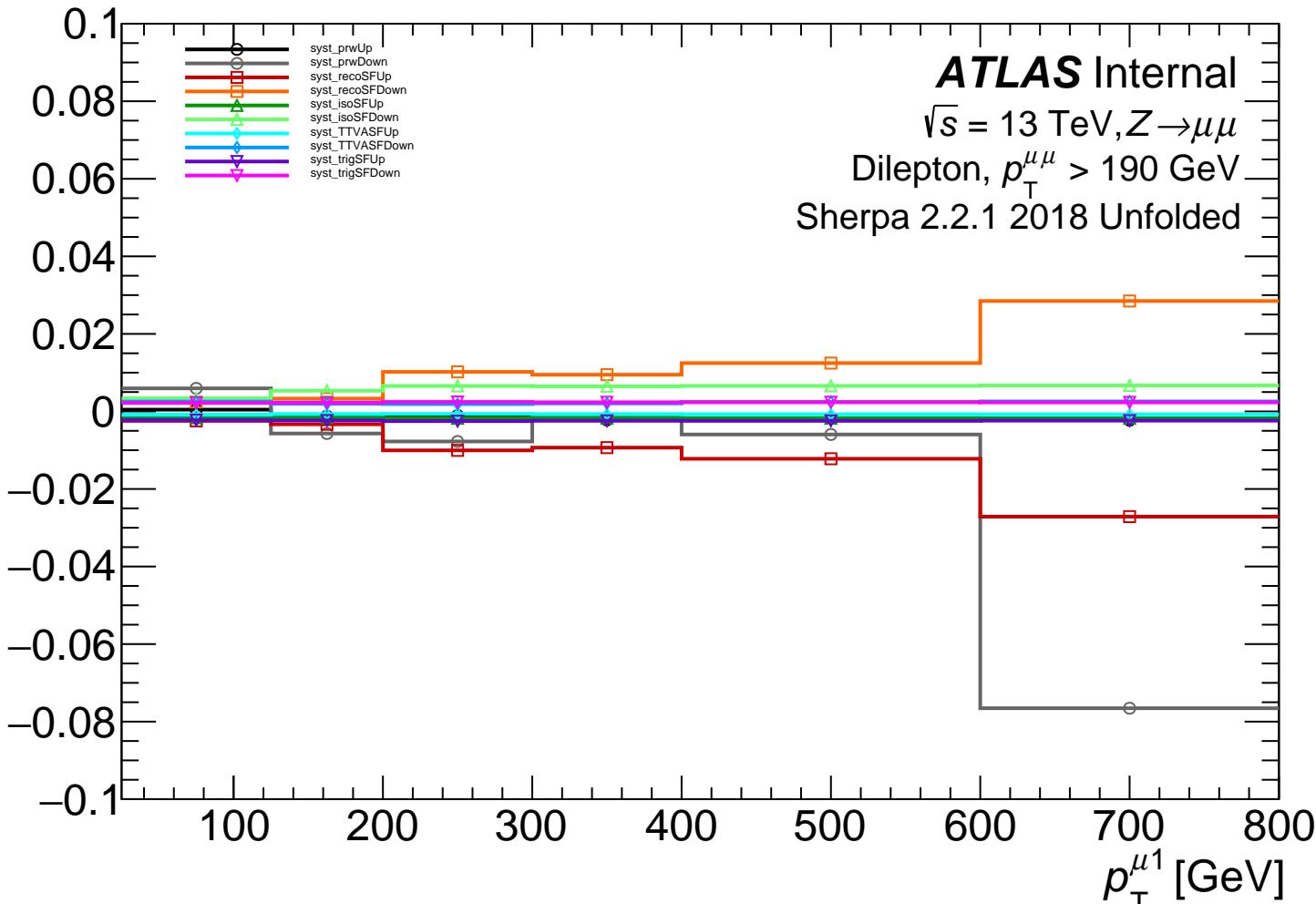


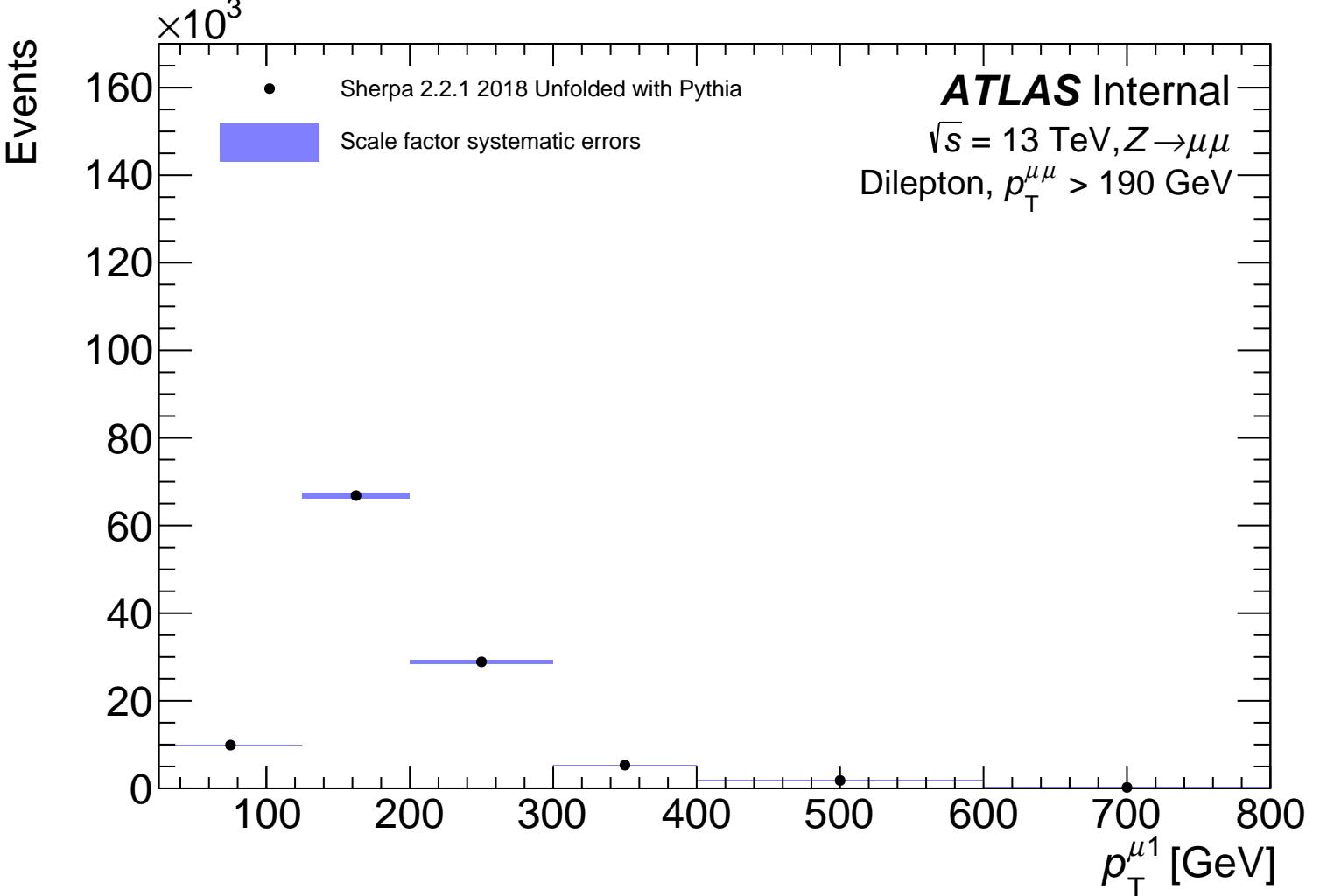
**ATLAS Internal**

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

Sherpa 2.2.1 2018 Unfolded



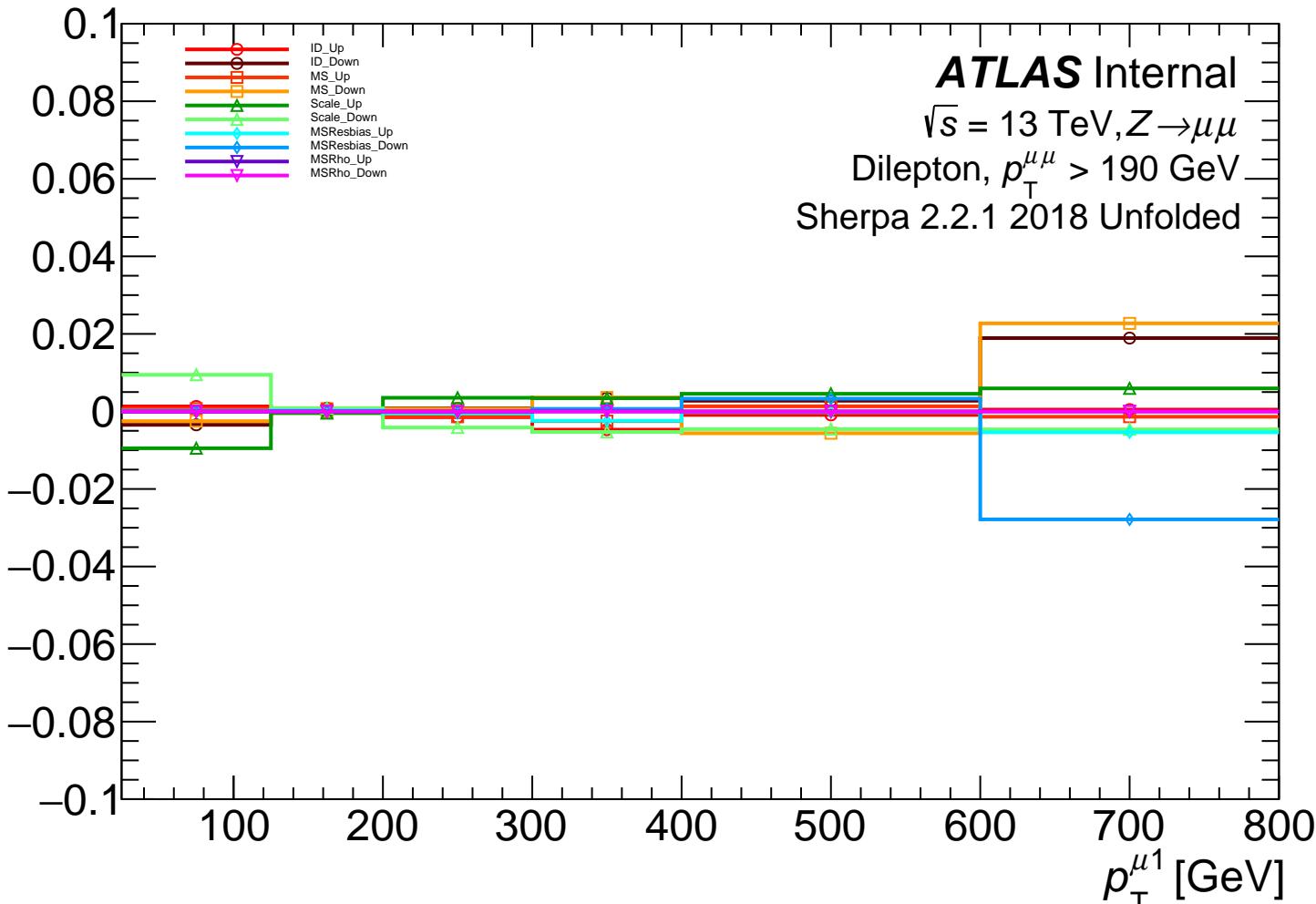


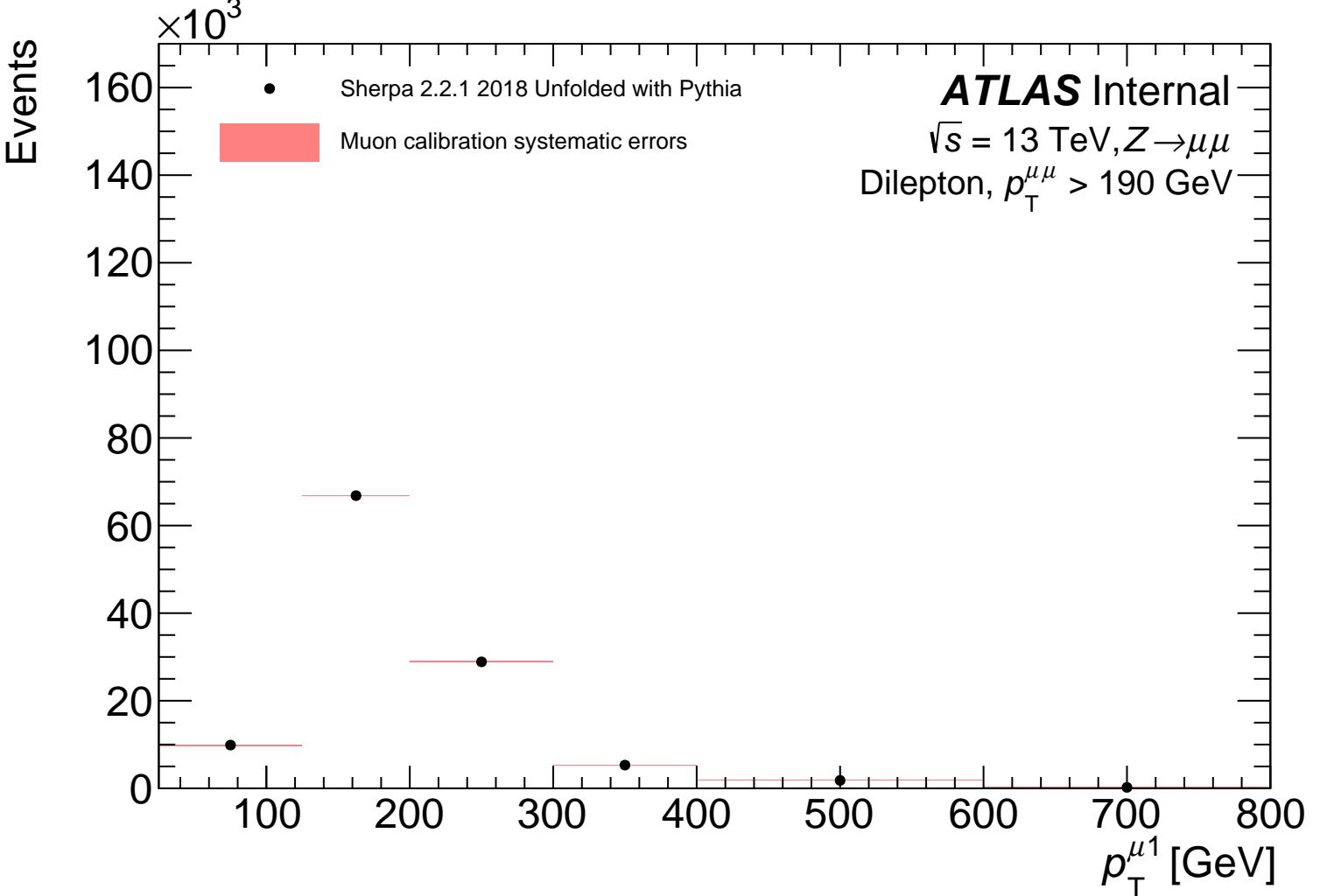
**ATLAS Internal**

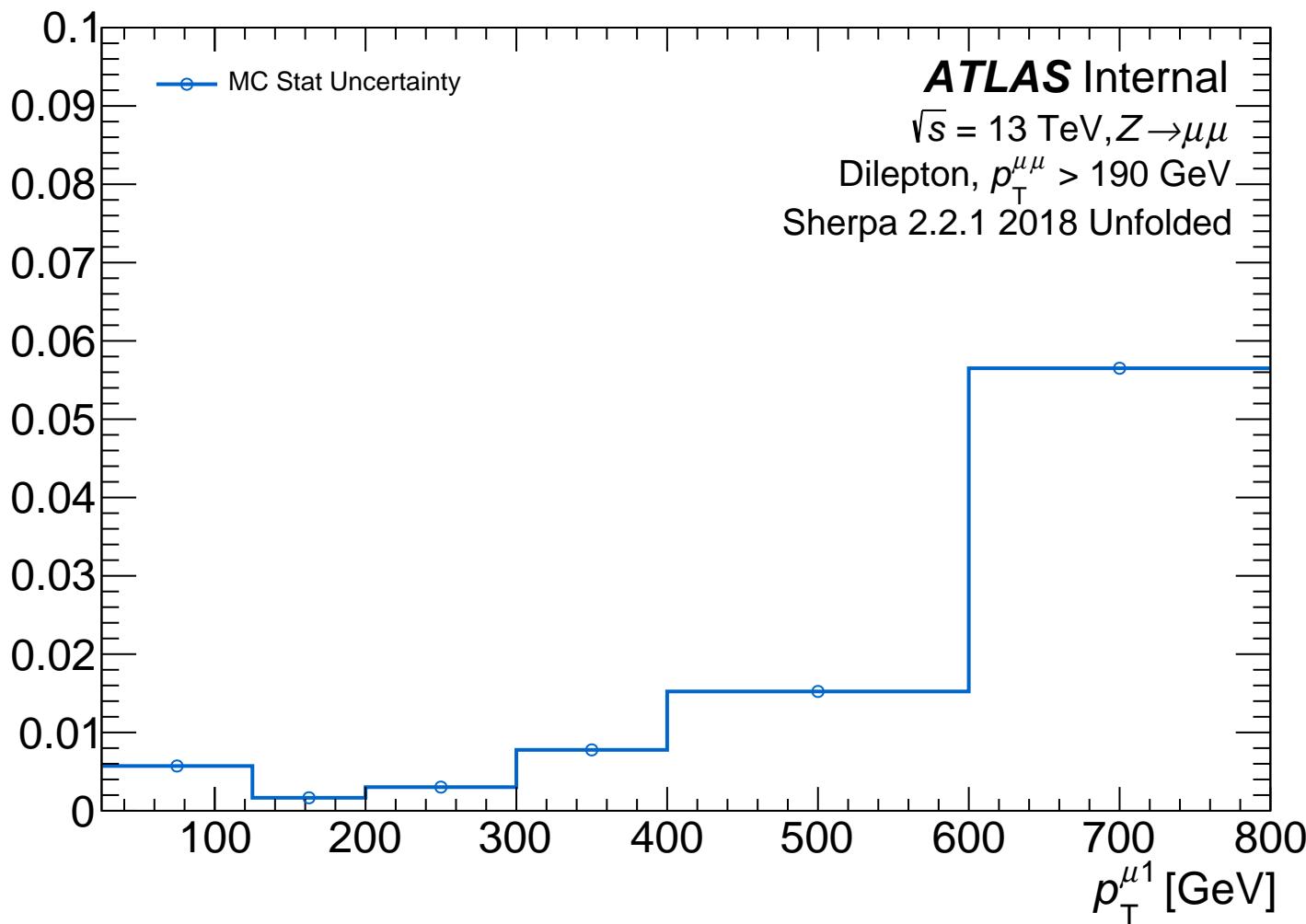
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

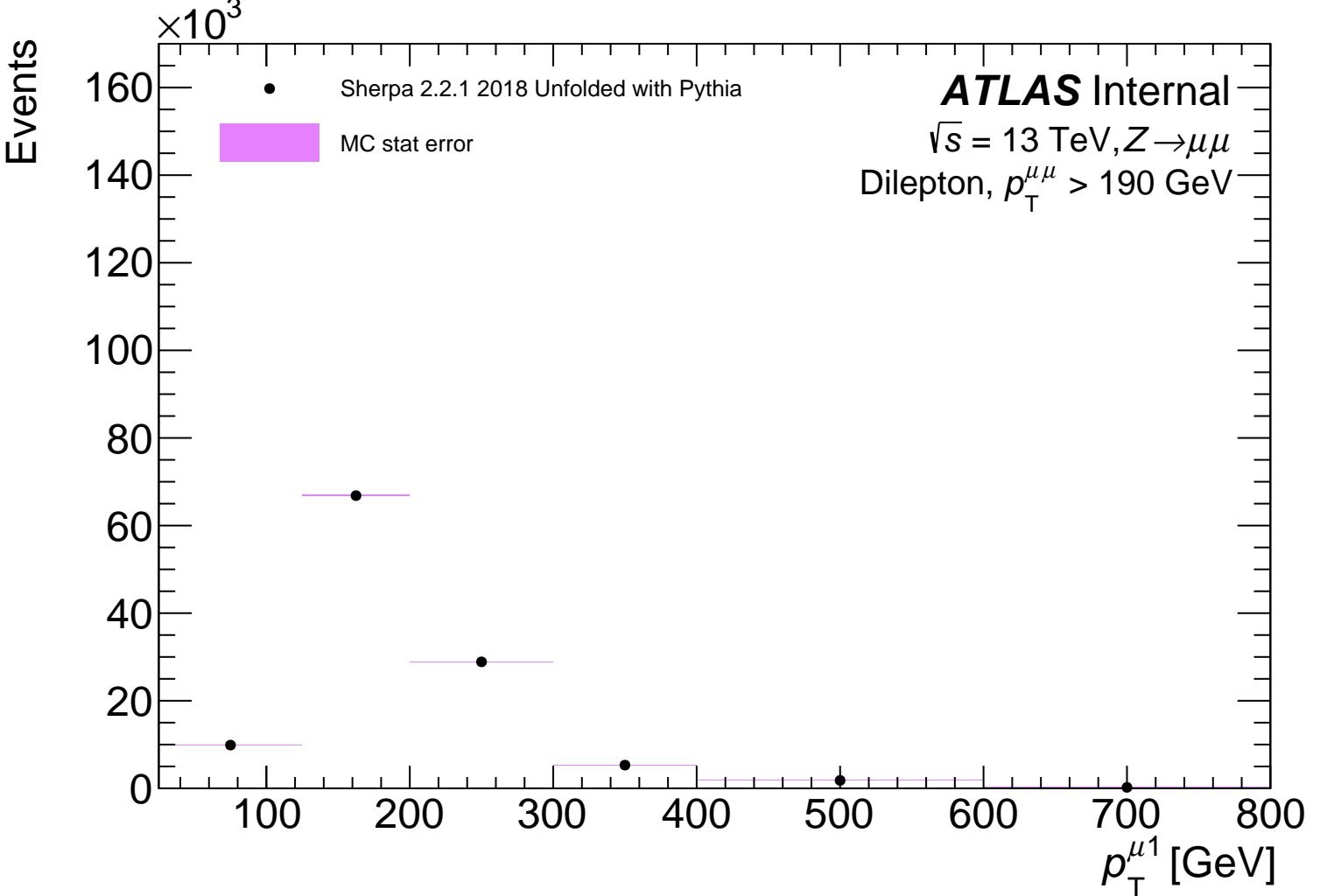
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

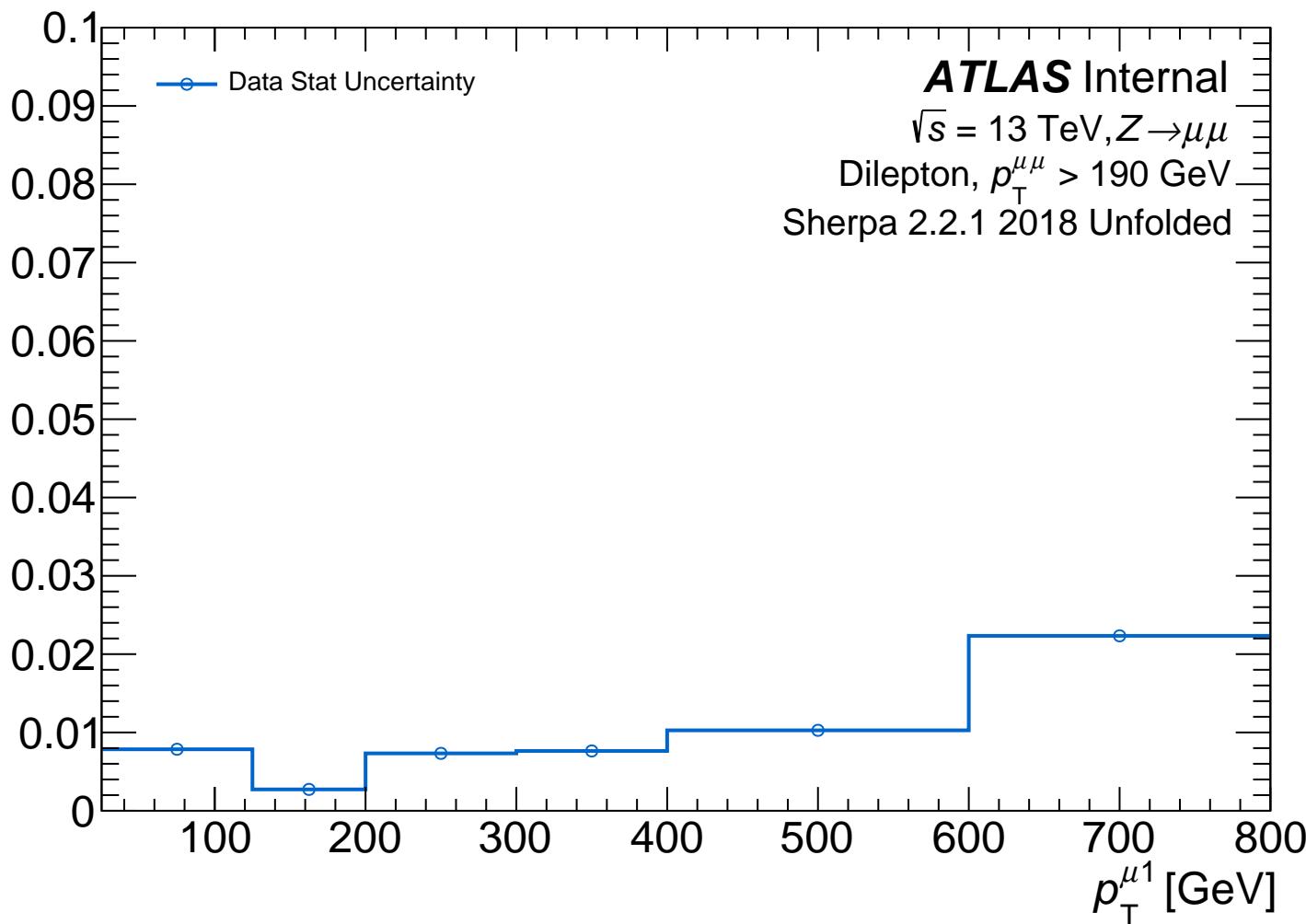
Sherpa 2.2.1 2018 Unfolded

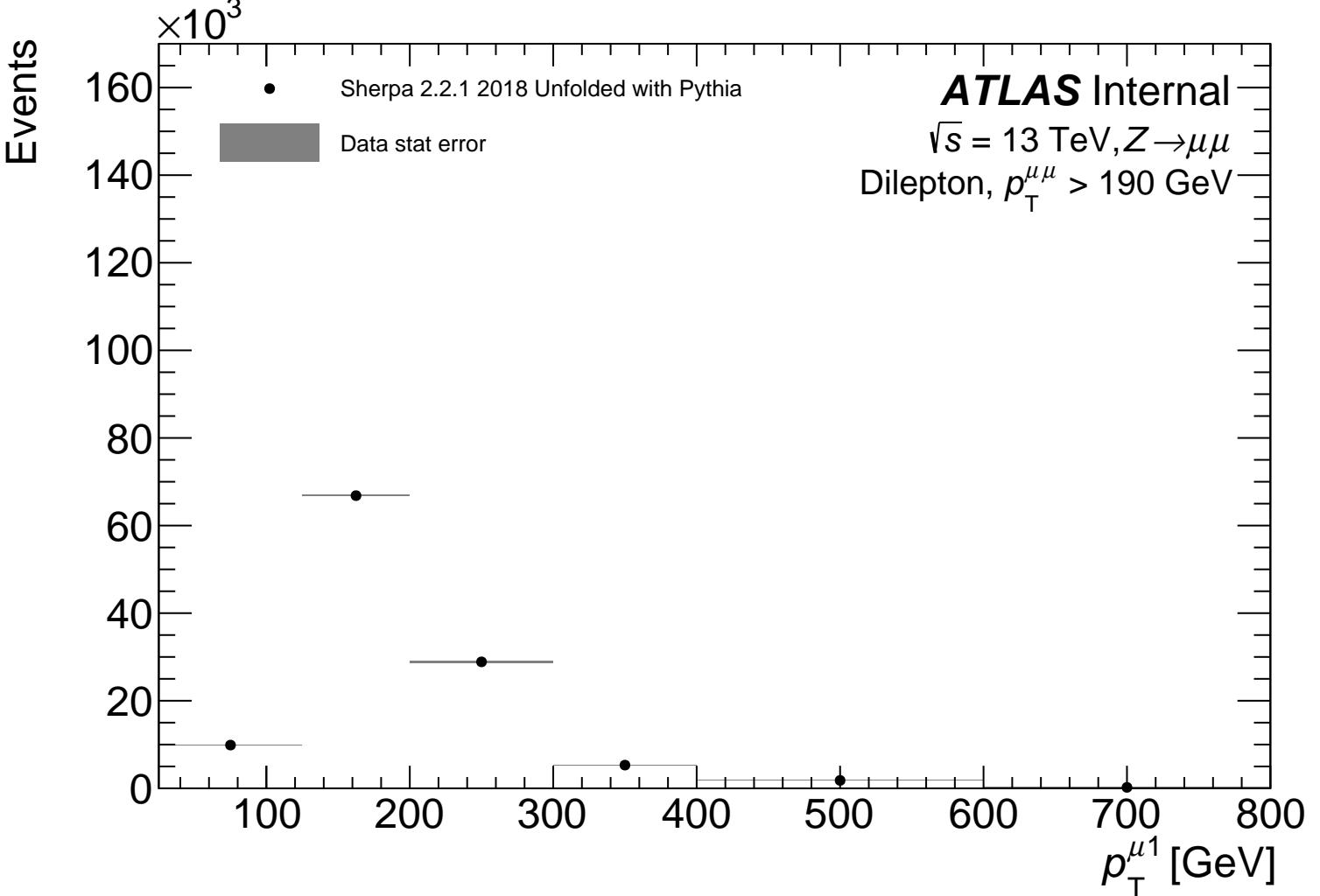


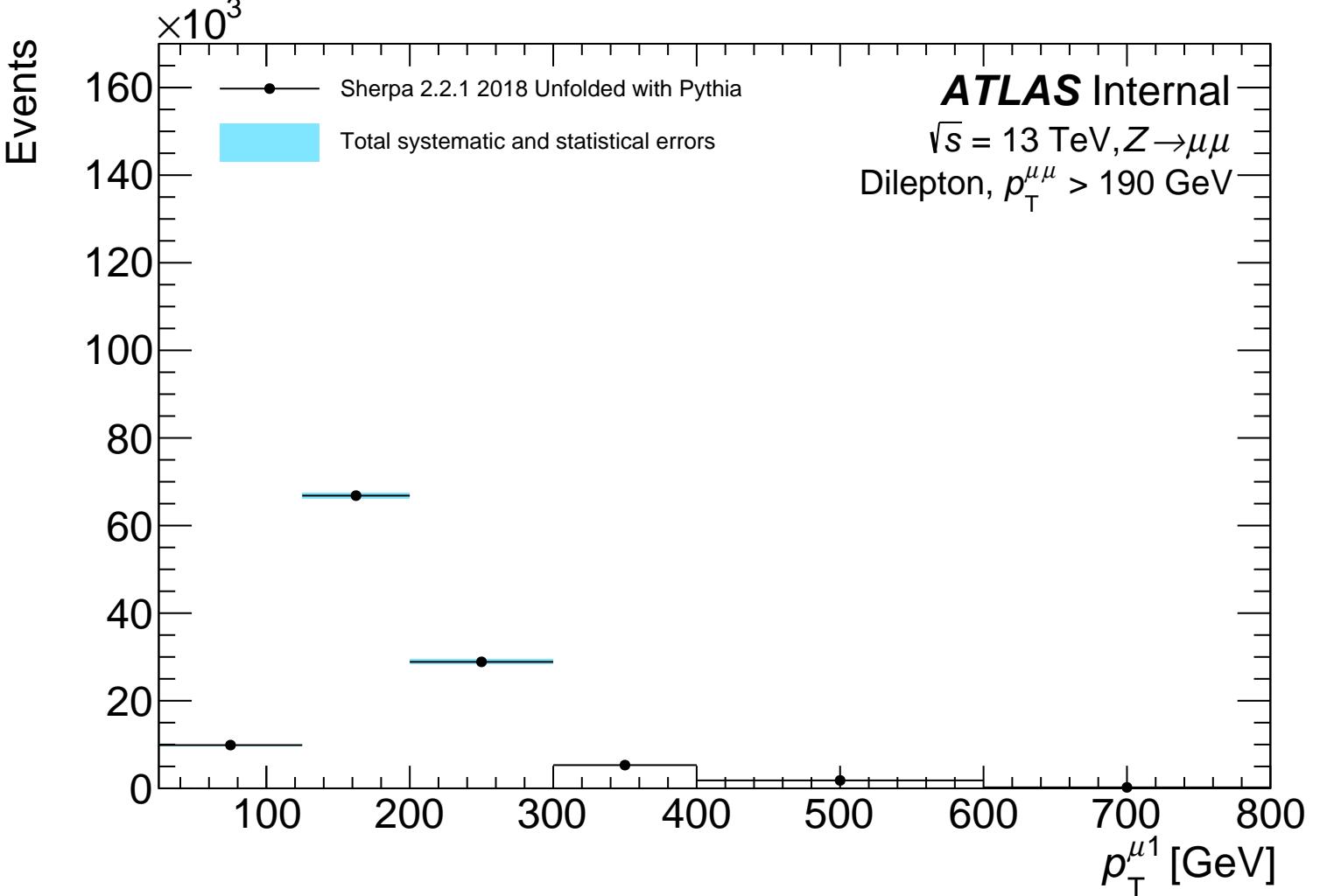


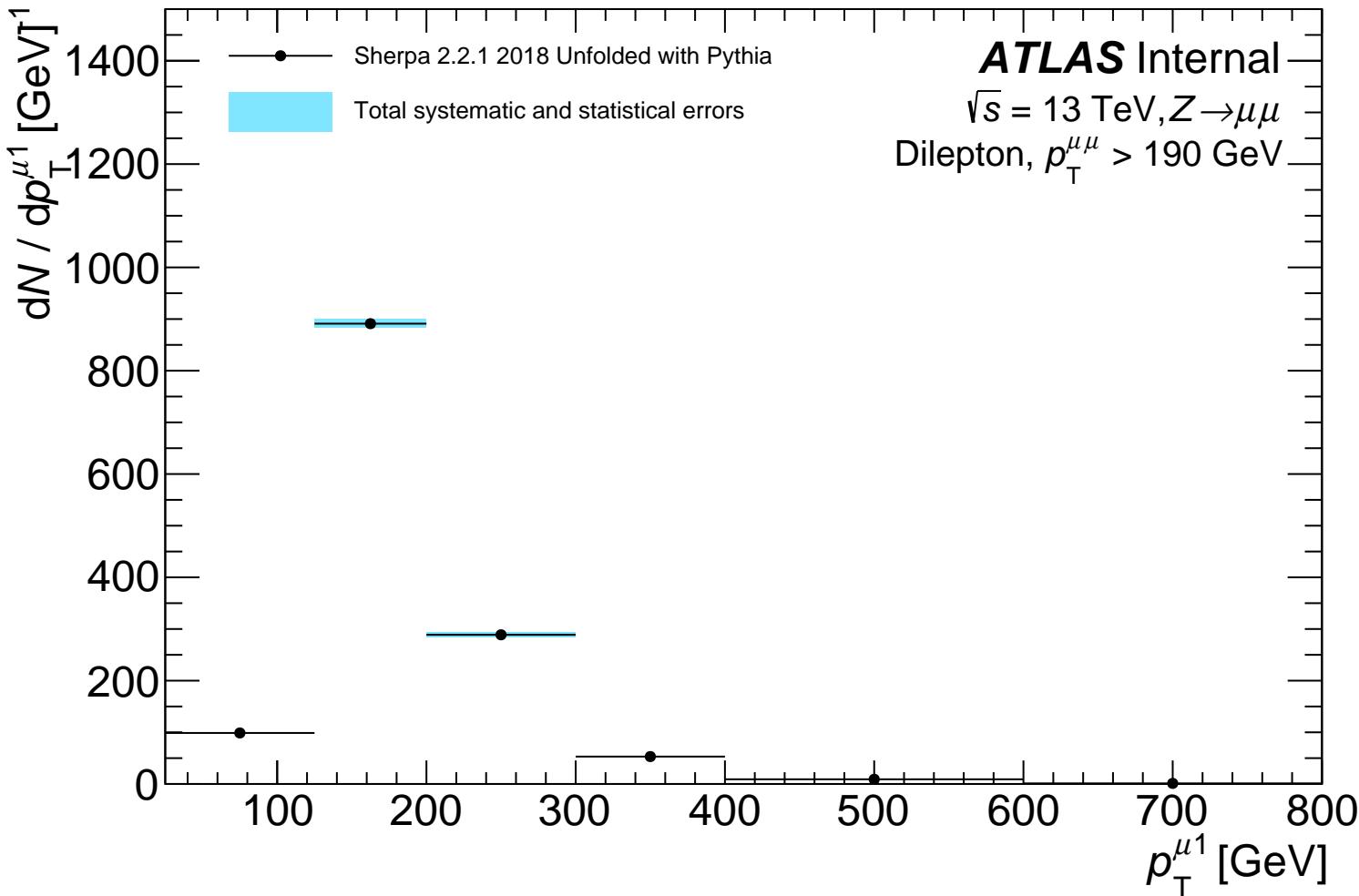










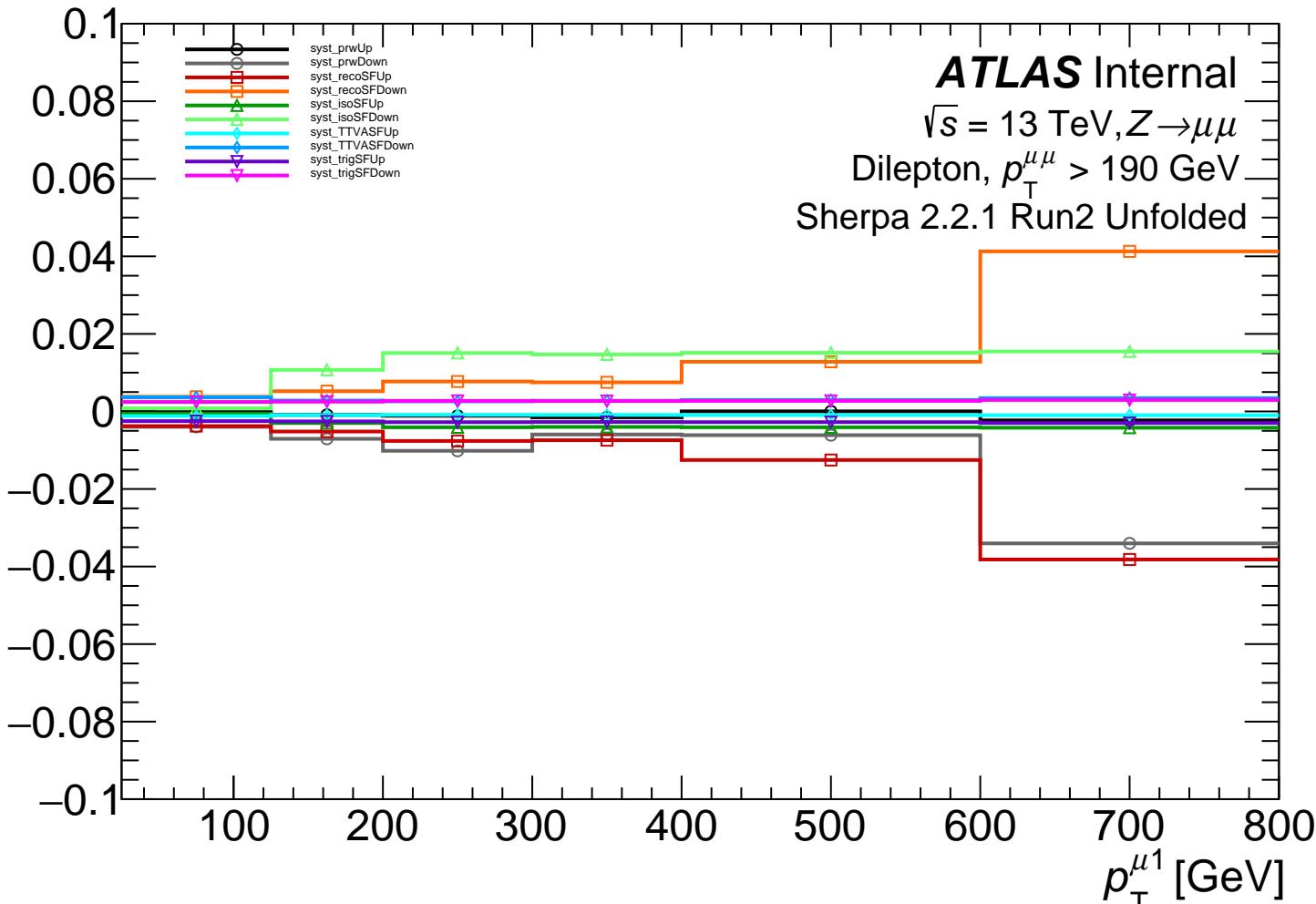


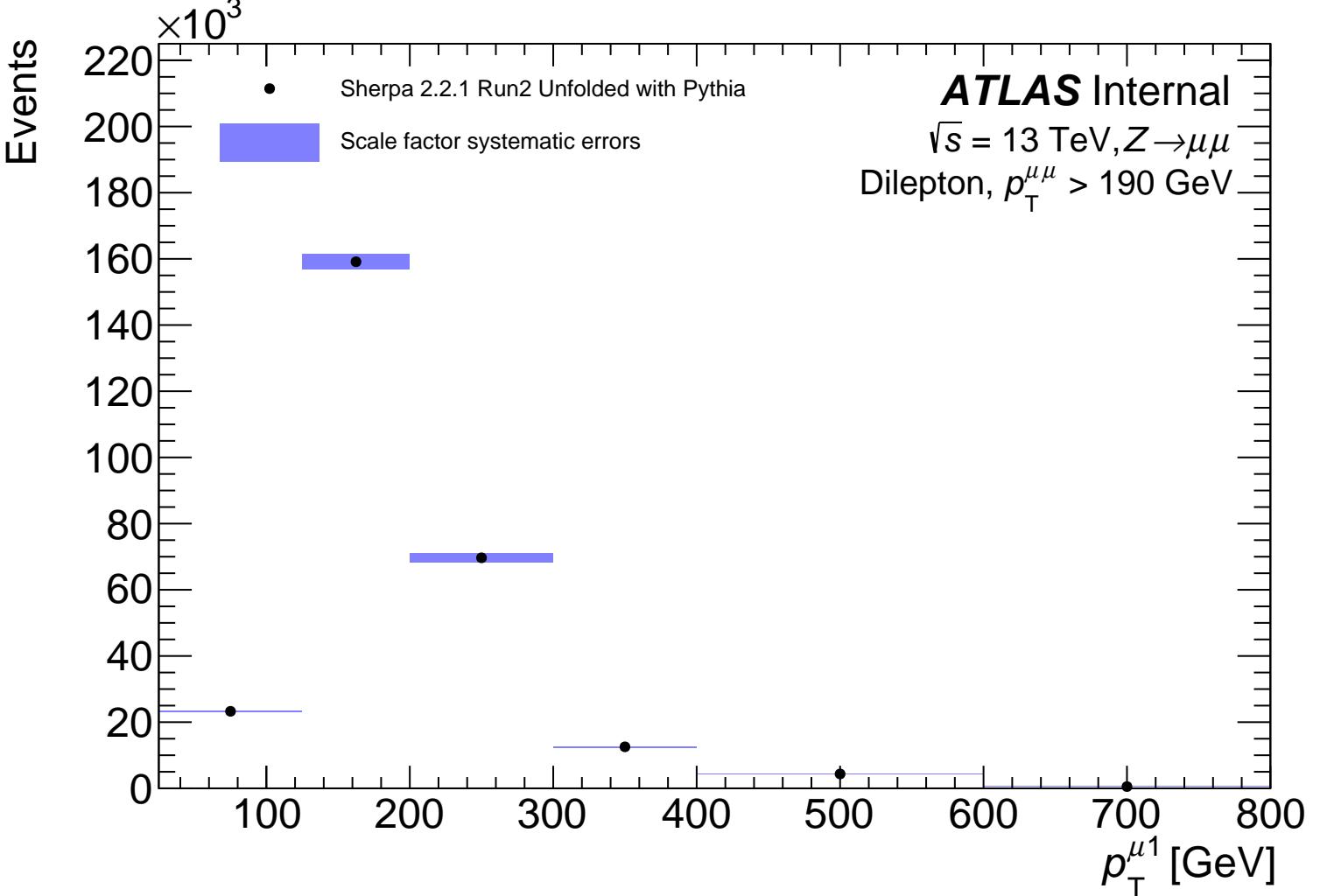
**ATLAS Internal**

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

Sherpa 2.2.1 Run2 Unfolded



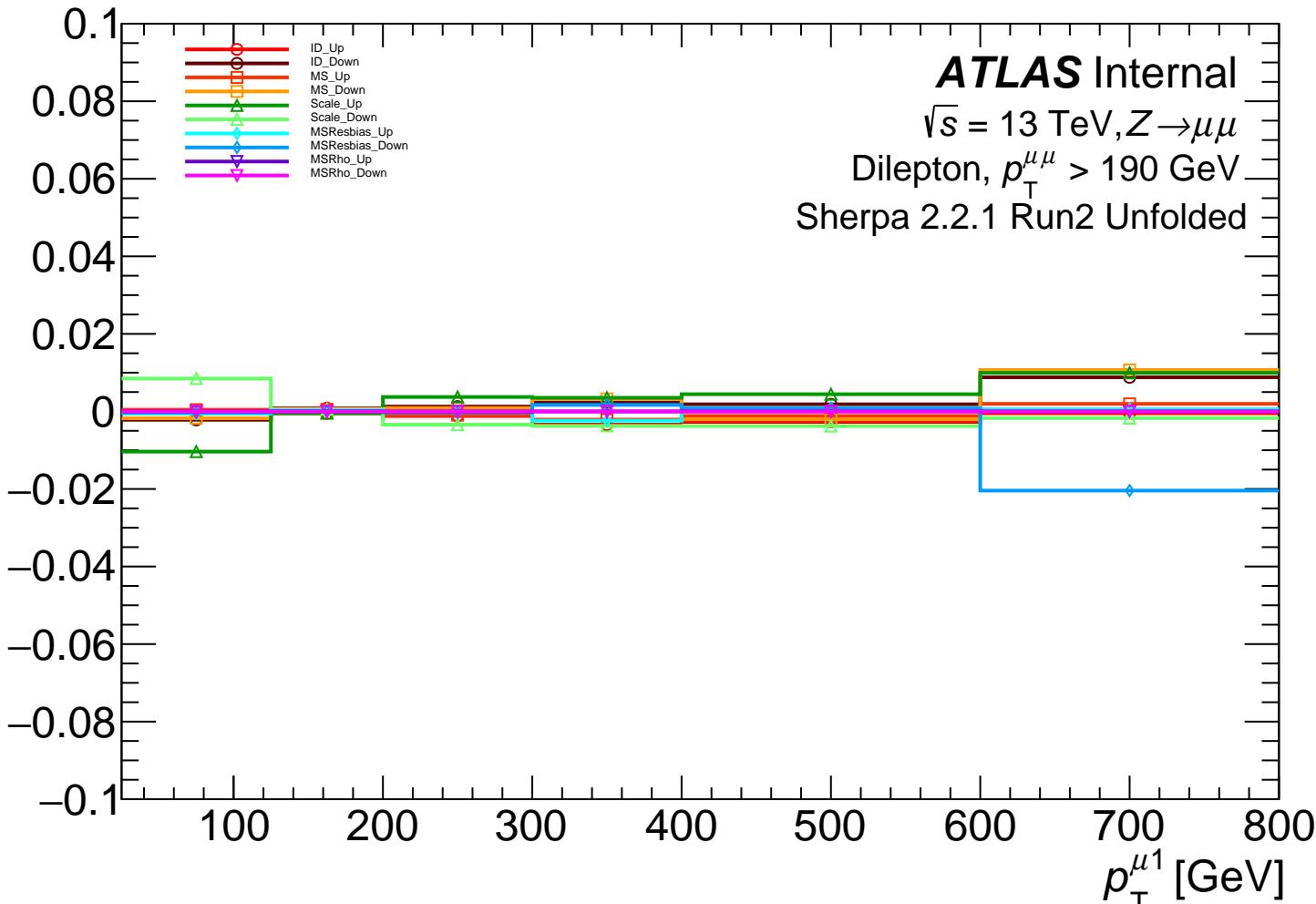


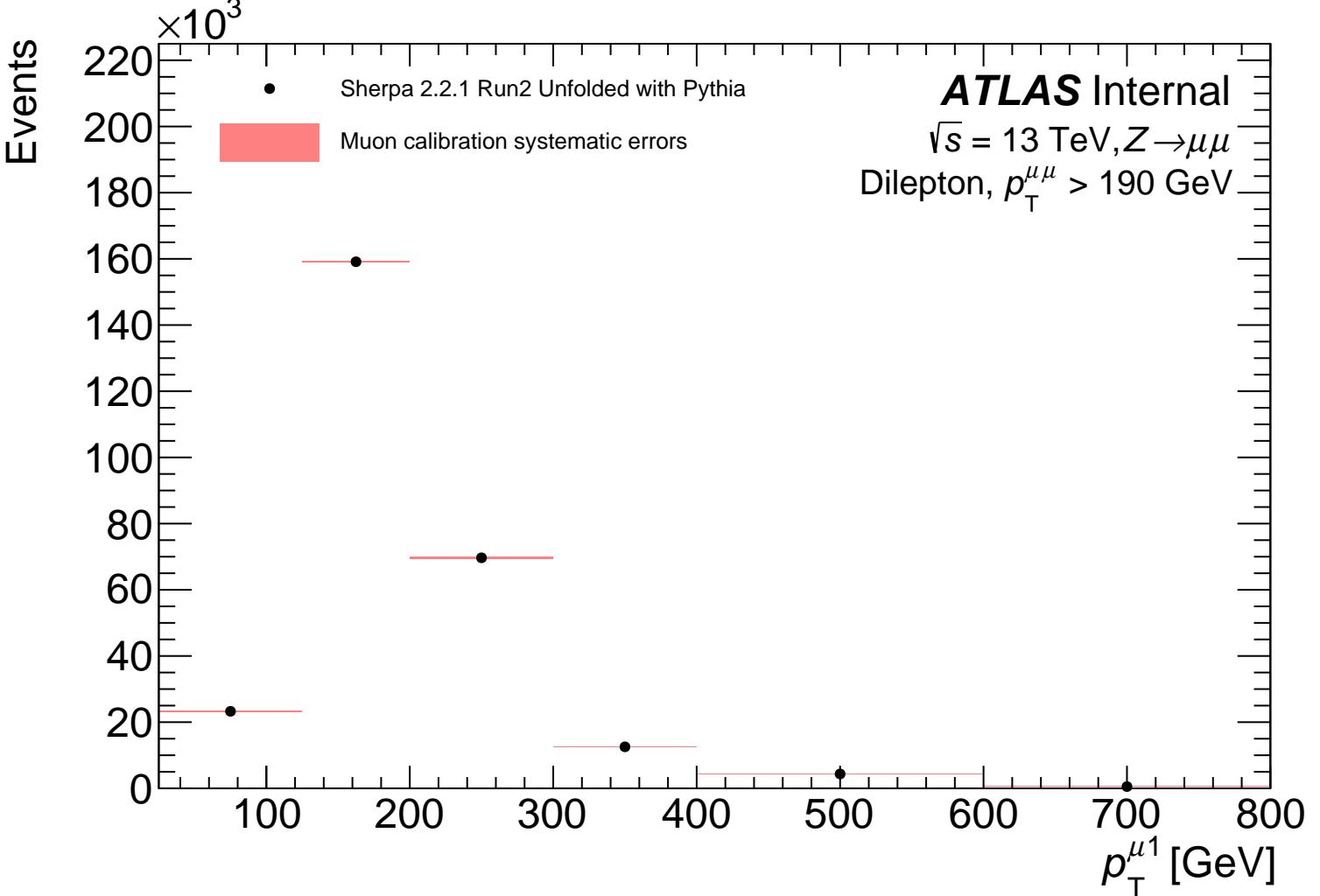
**ATLAS Internal**

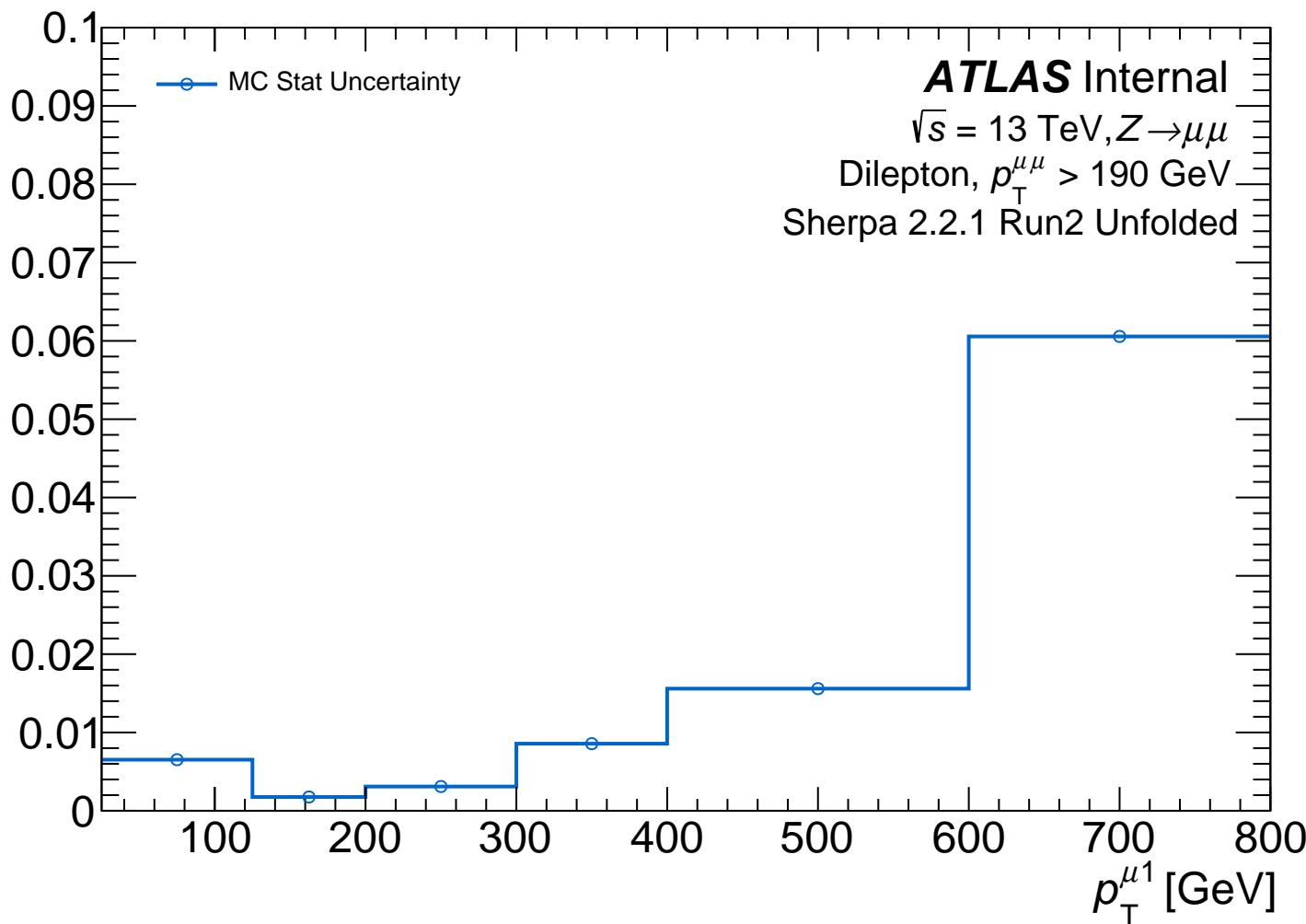
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

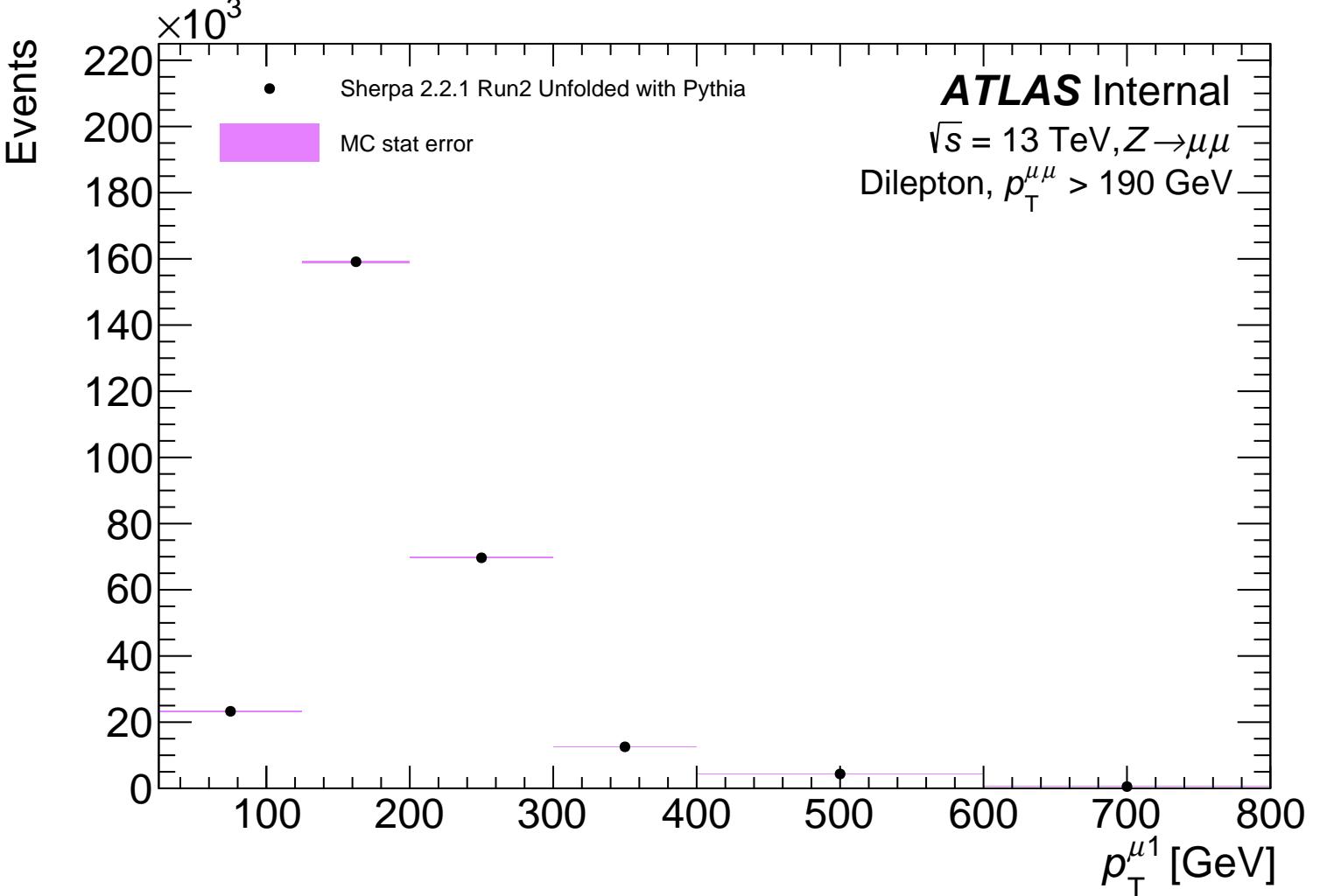
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

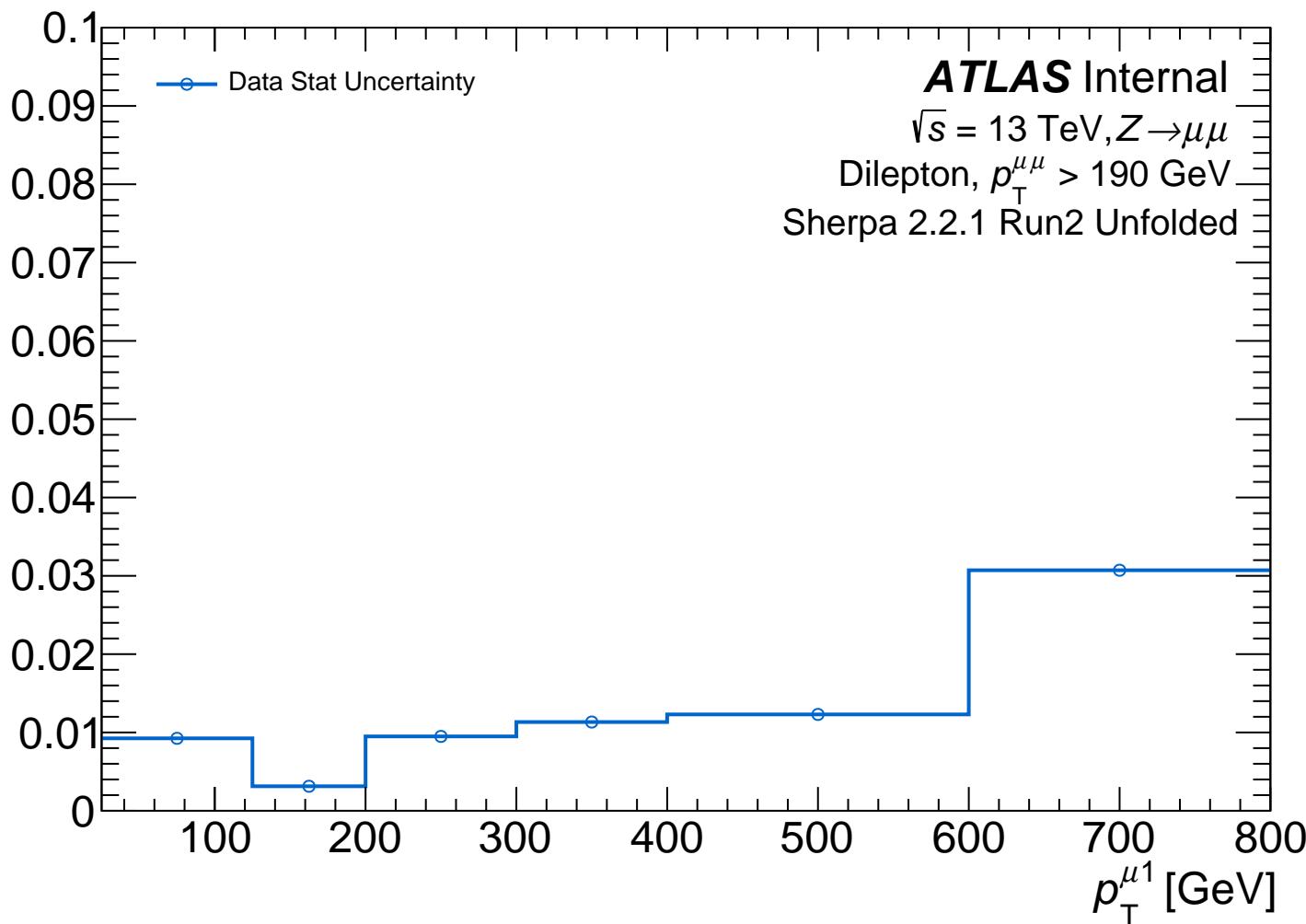
Sherpa 2.2.1 Run2 Unfolded

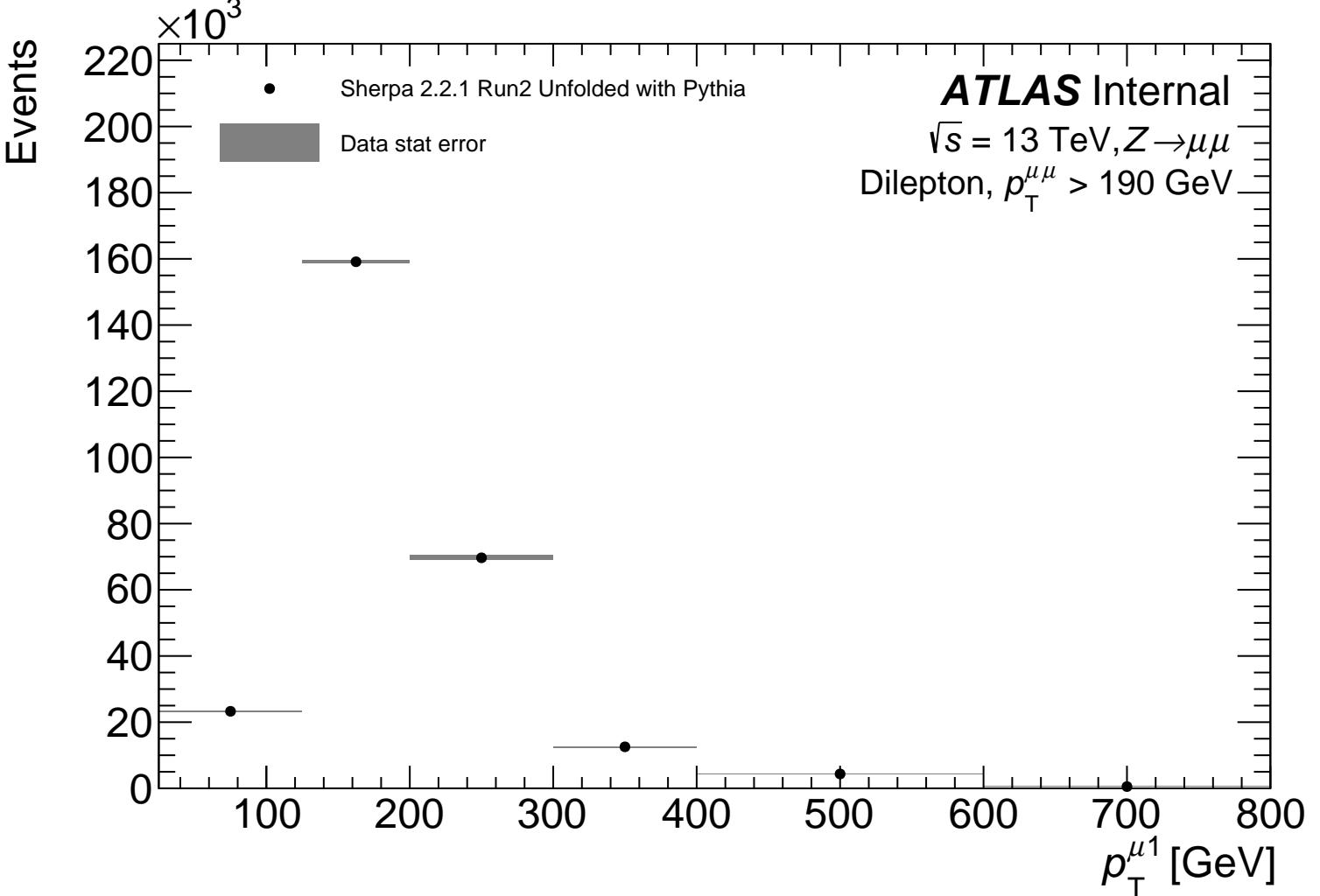


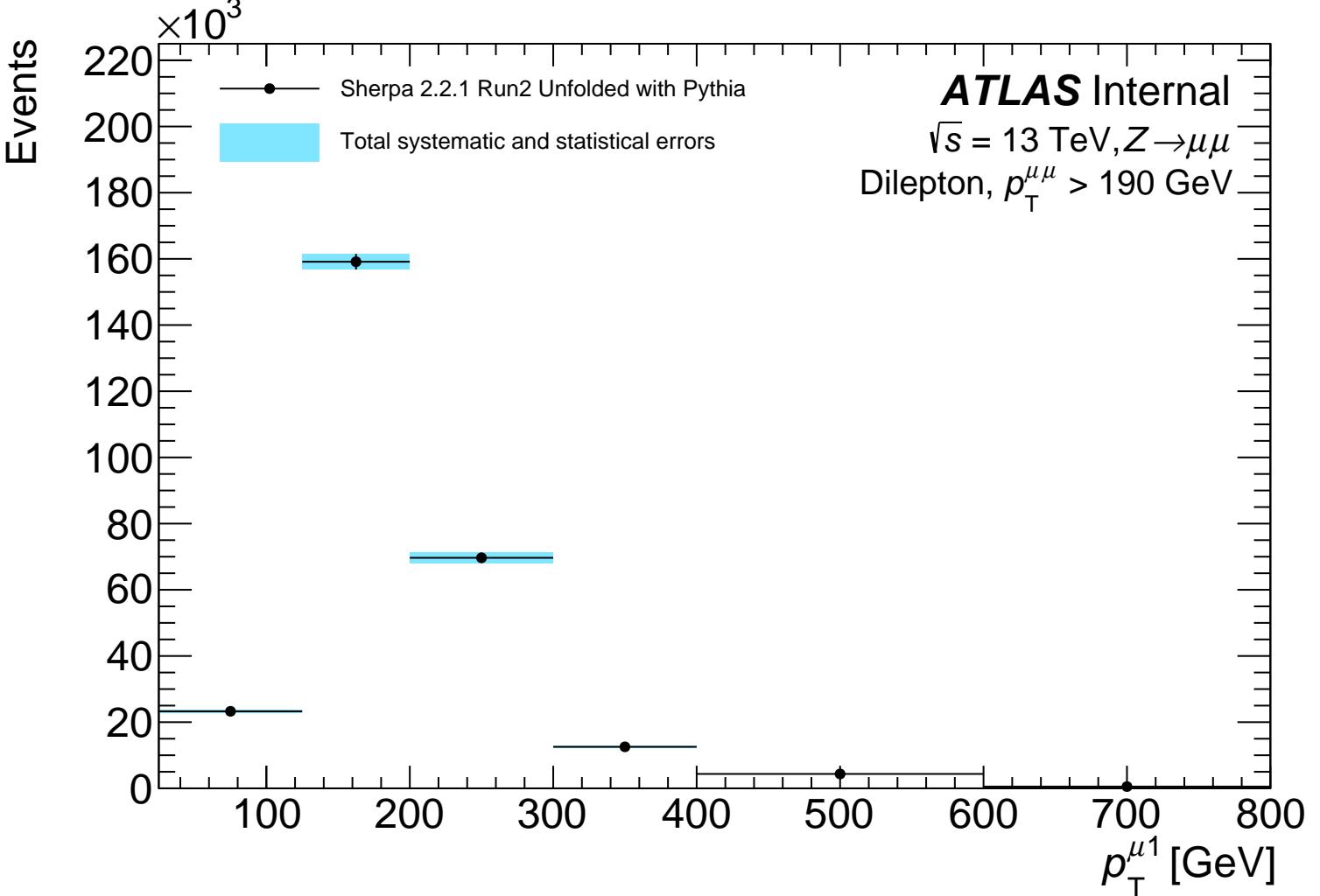


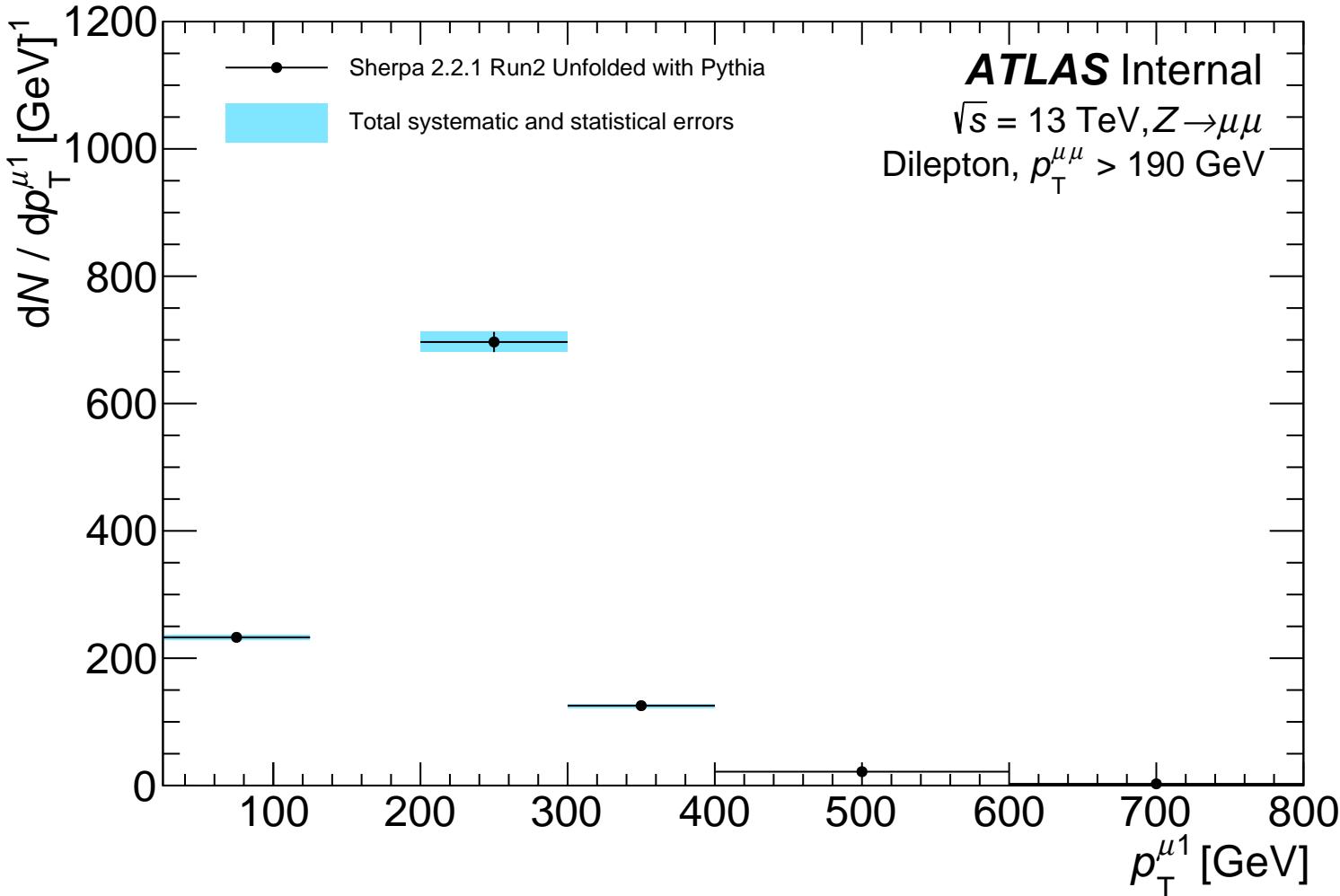










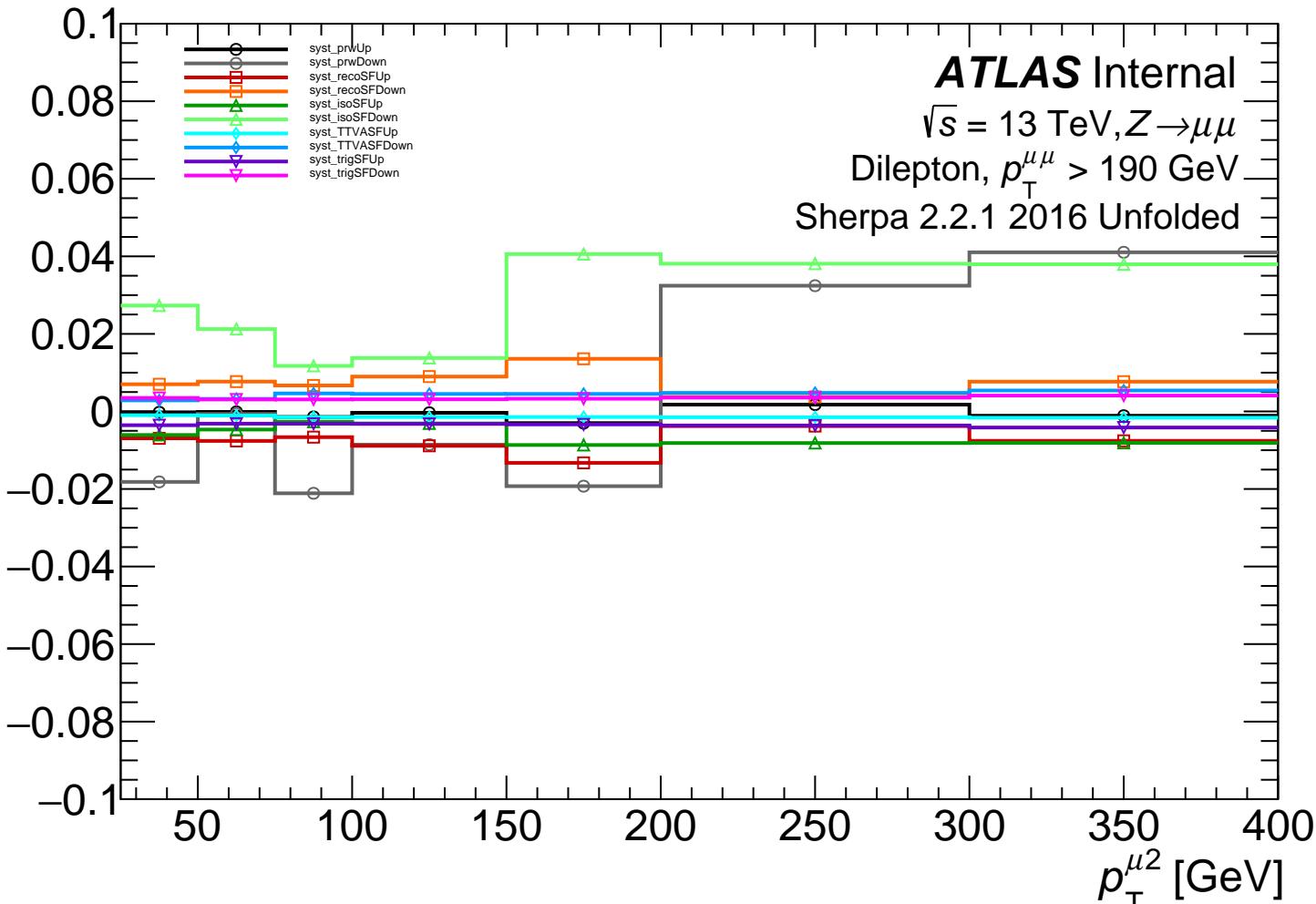


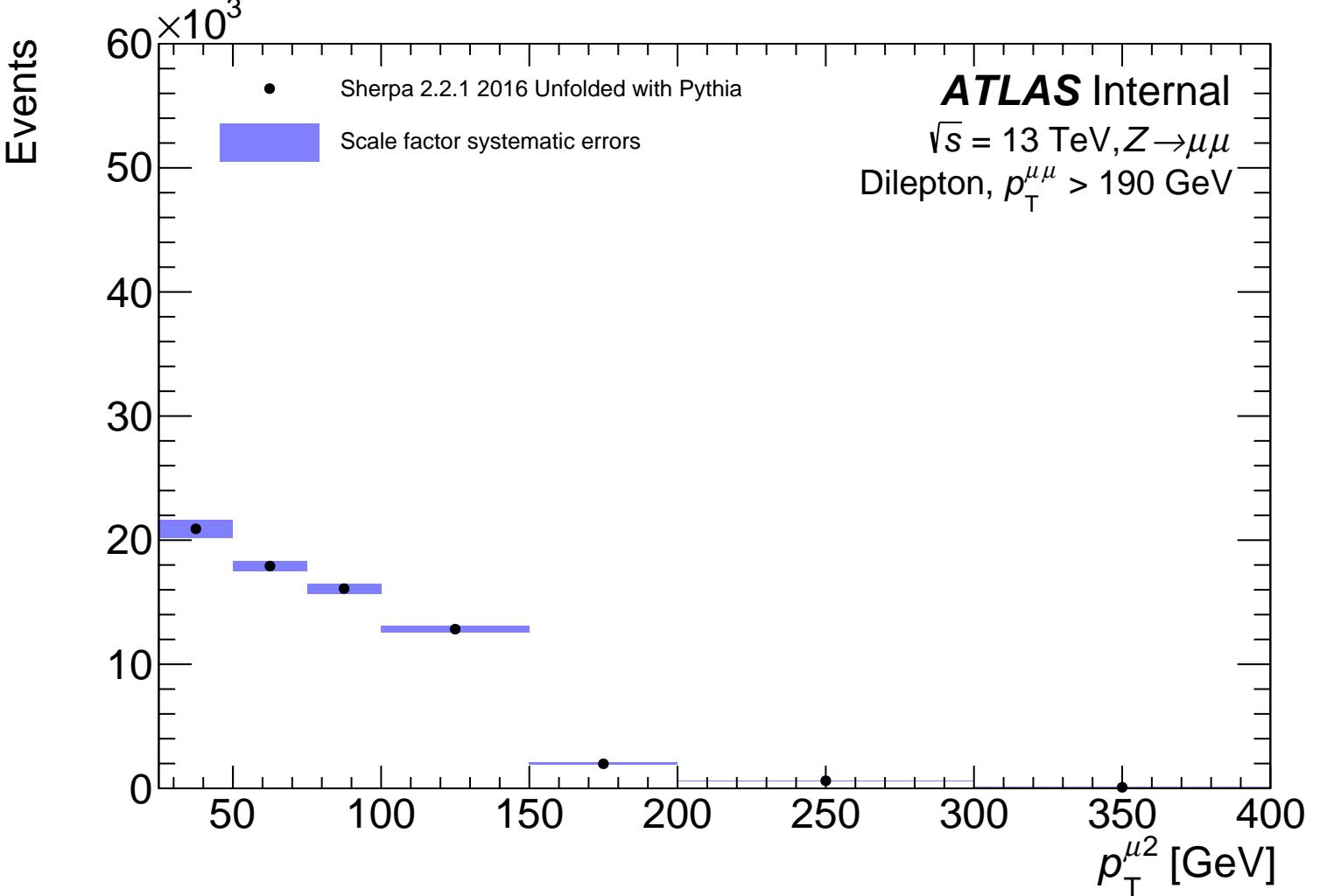
**ATLAS Internal**

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

Sherpa 2.2.1 2016 Unfolded





0.1

0.08

0.06

0.04

0.02

0

-0.02

-0.04

-0.06

-0.08

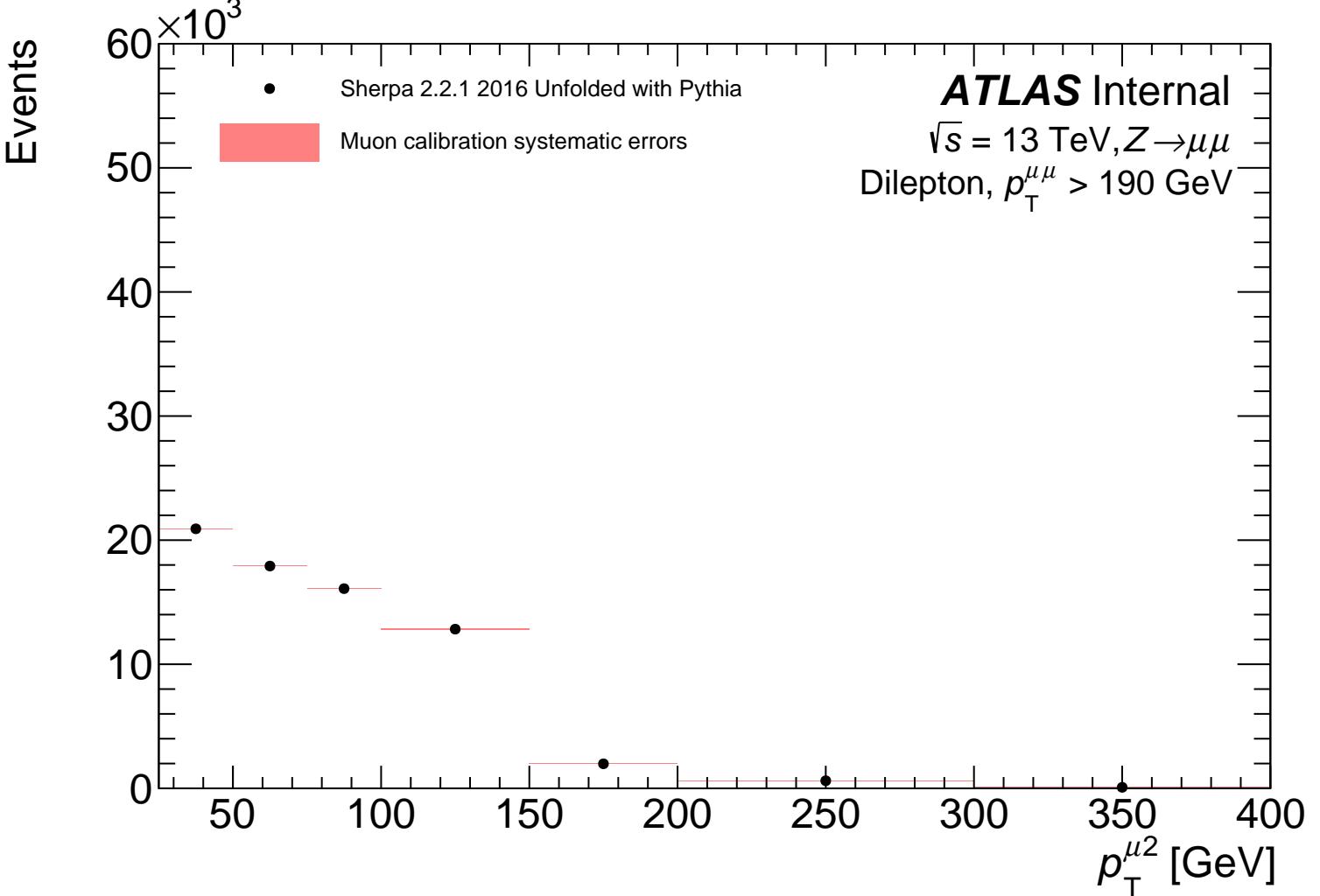
-0.1

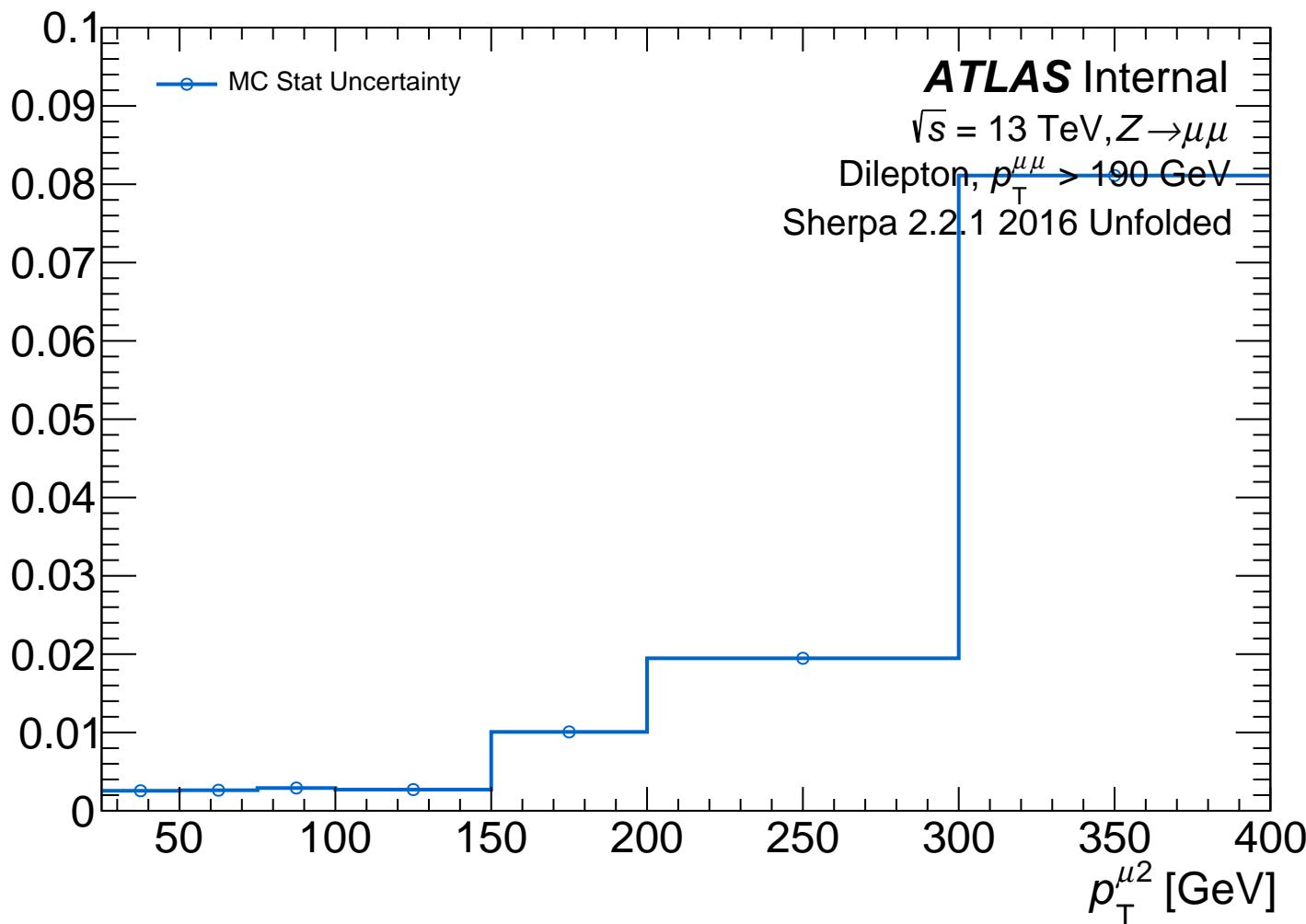
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ID\_Down  
MS\_Up  
MS\_Down  
Scale\_Up  
Scale\_Down  
MSResbias\_Up  
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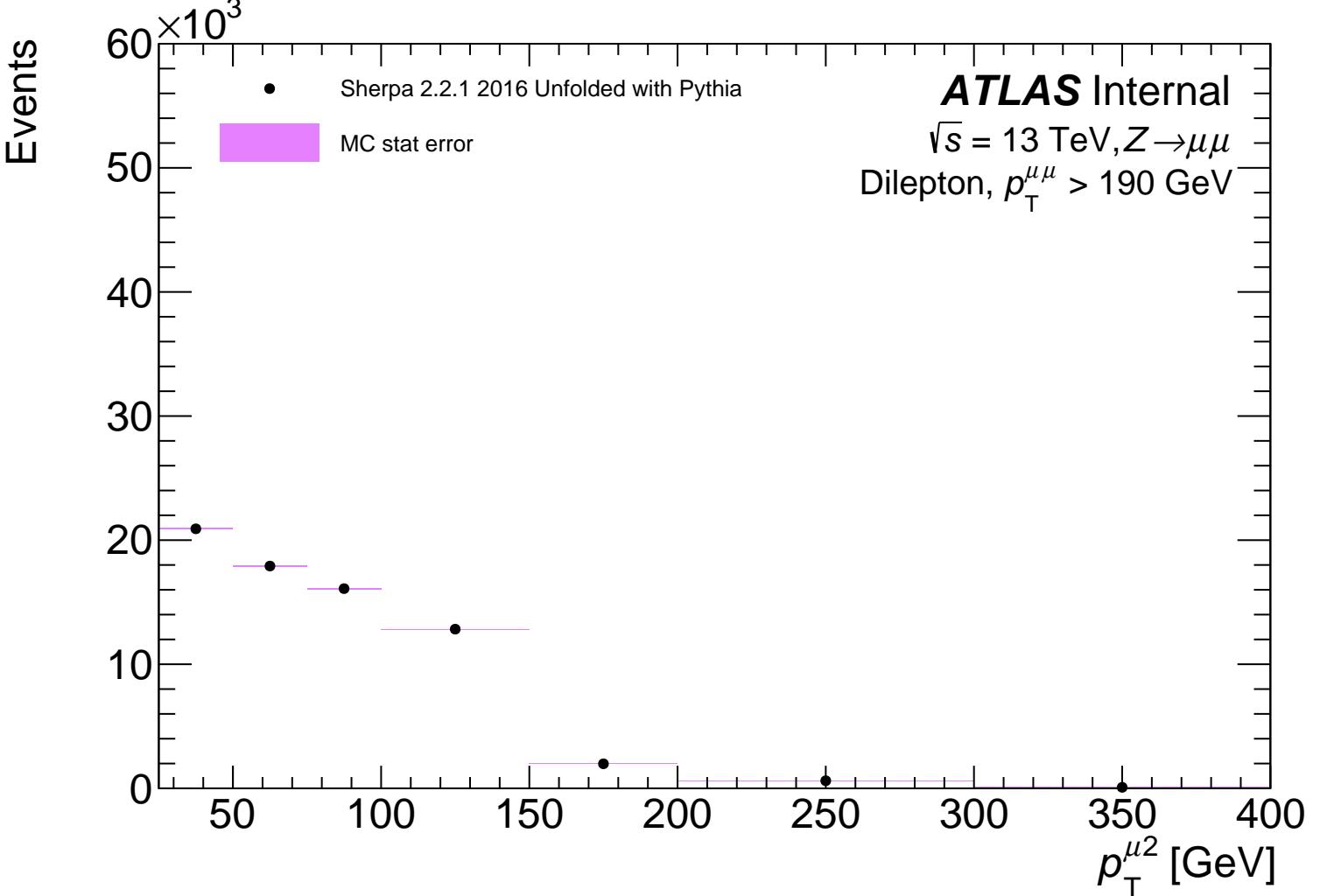
**ATLAS Internal** $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$ Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$ 

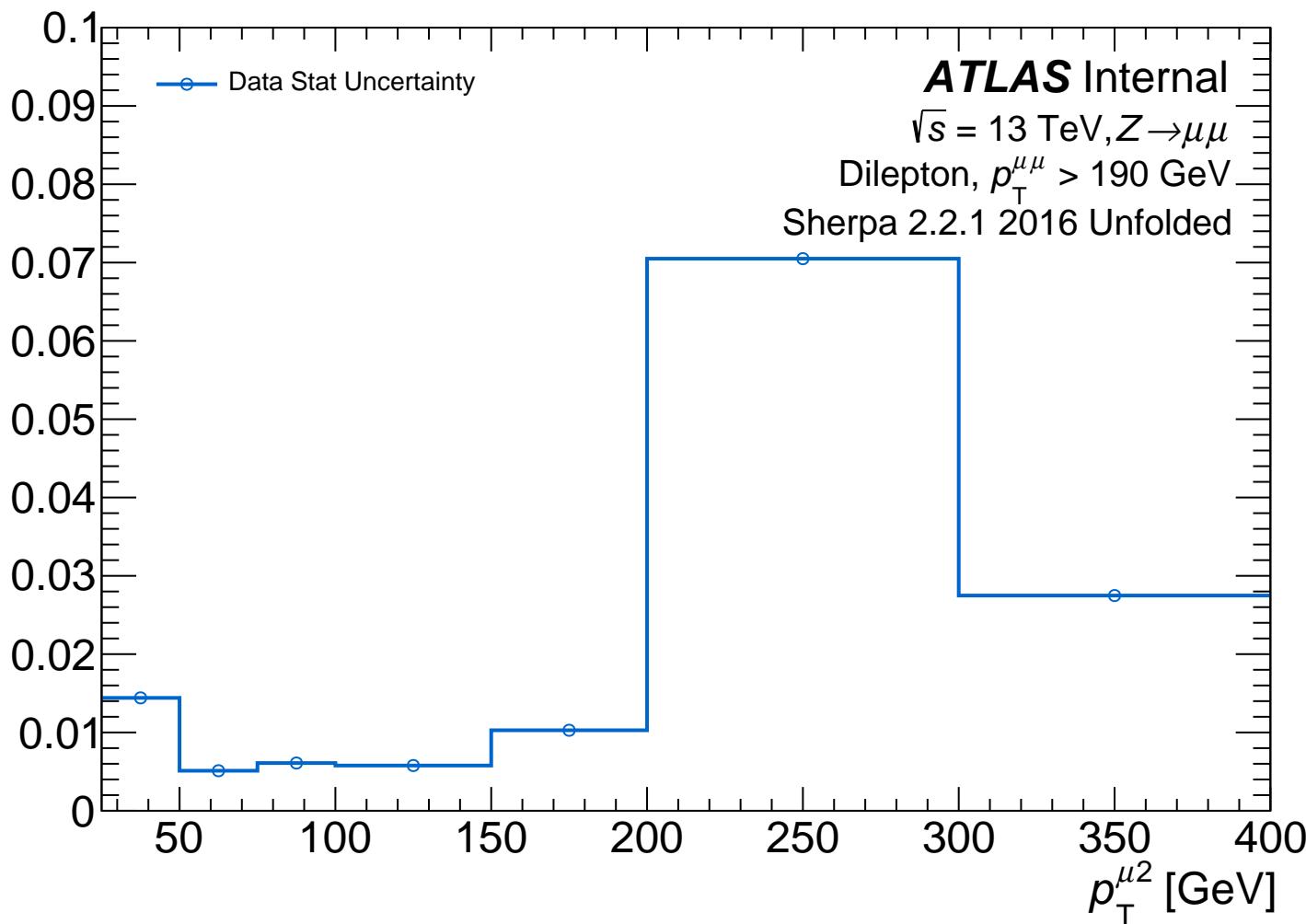
Sherpa 2.2.1 2016 Unfolded

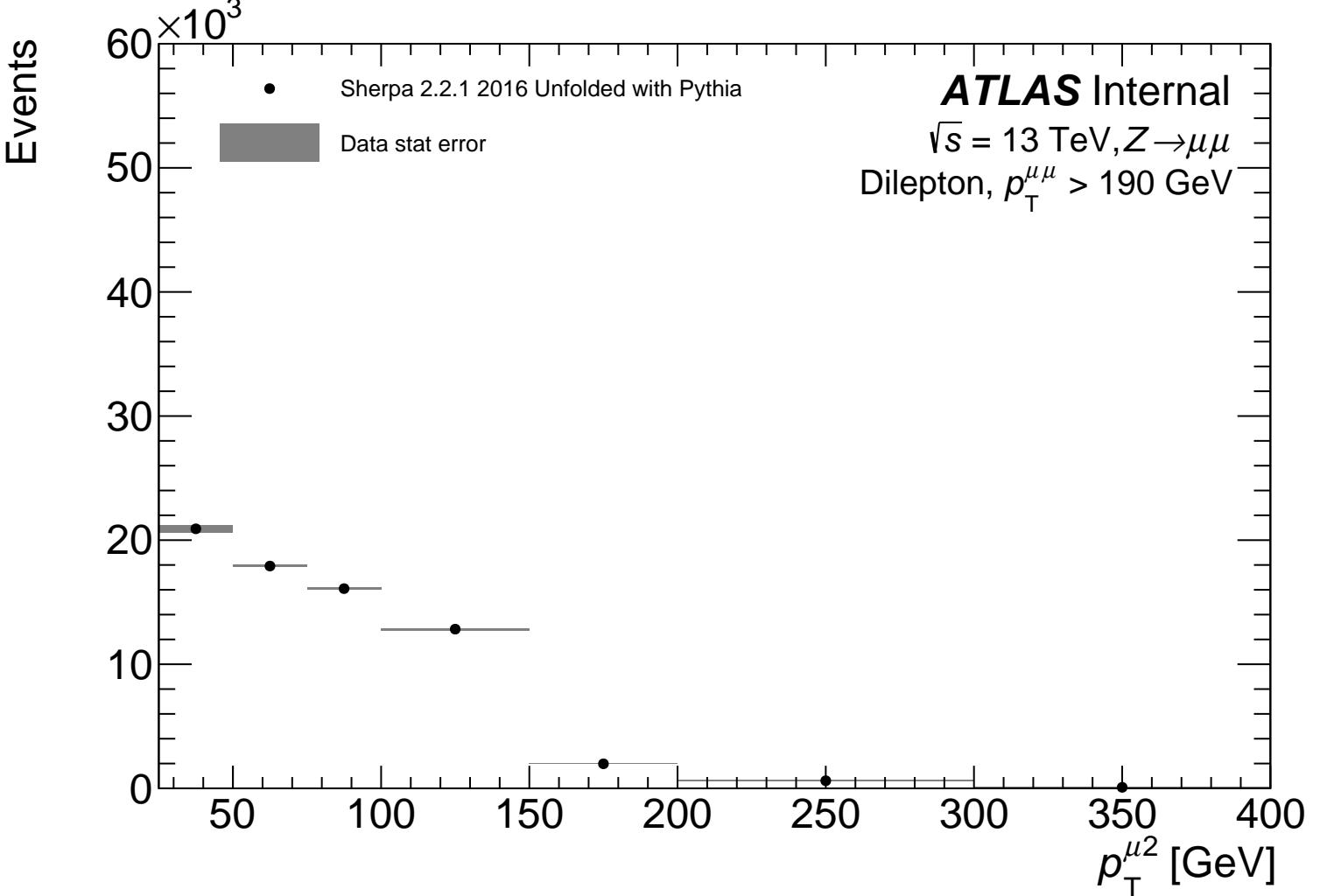


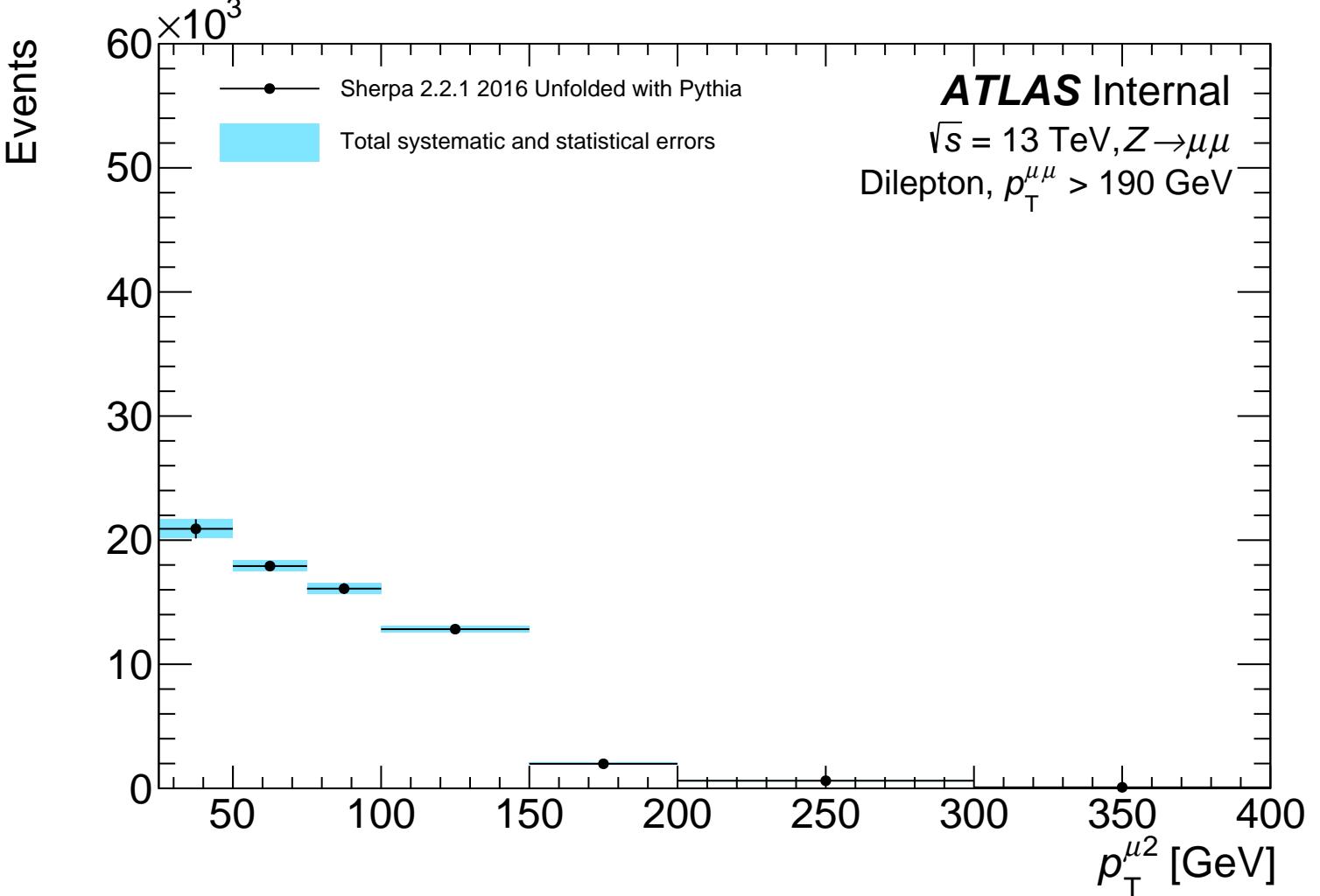


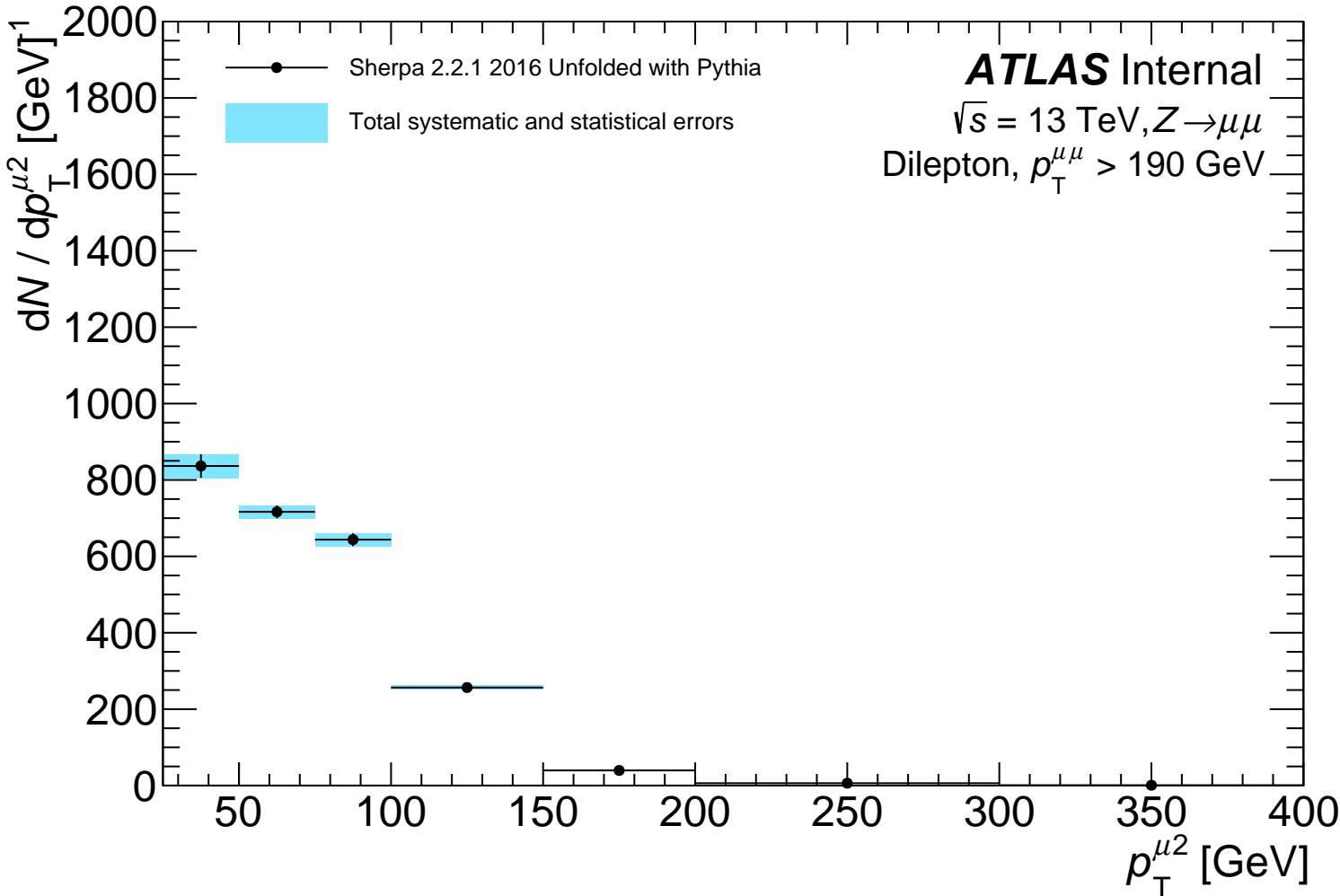


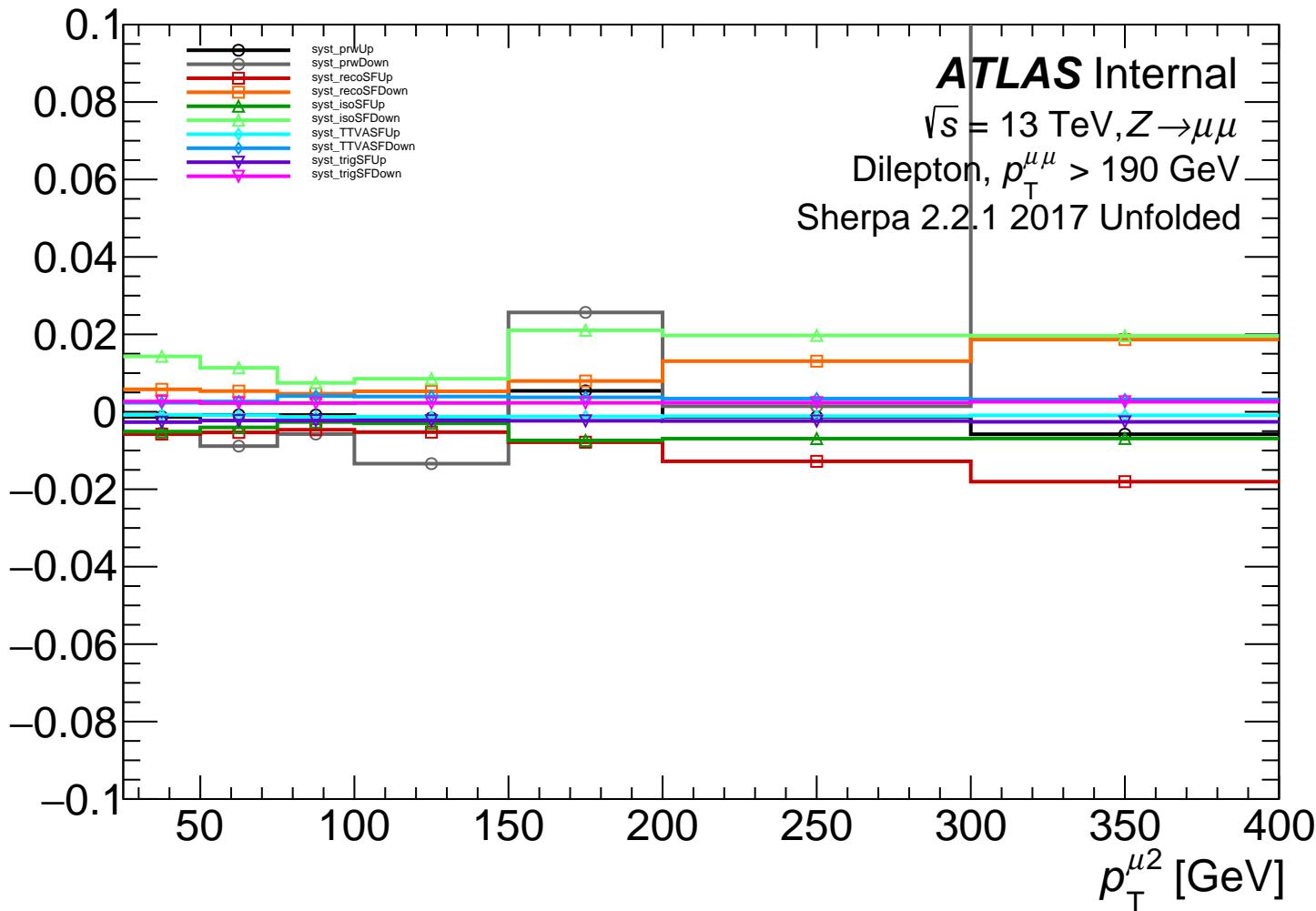




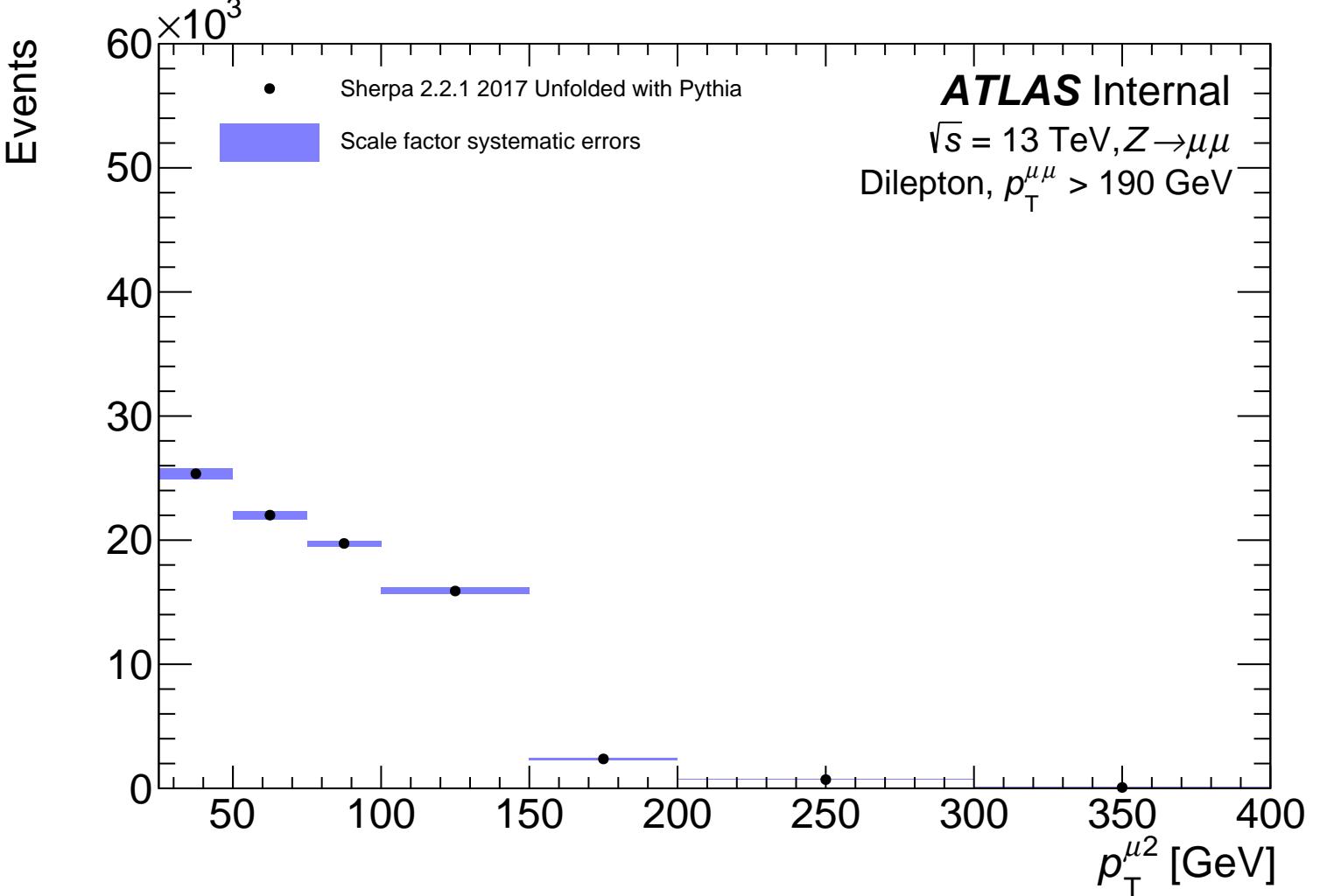








**ATLAS Internal**  
 $\sqrt{s} = 13$  TeV,  $Z \rightarrow \mu\mu$   
Dilepton,  $p_T^{\mu\mu} > 190$  GeV  
Sherpa 2.2.1 2017 Unfolded



0.1

0.08

0.06

0.04

0.02

0

-0.02

-0.04

-0.06

-0.08

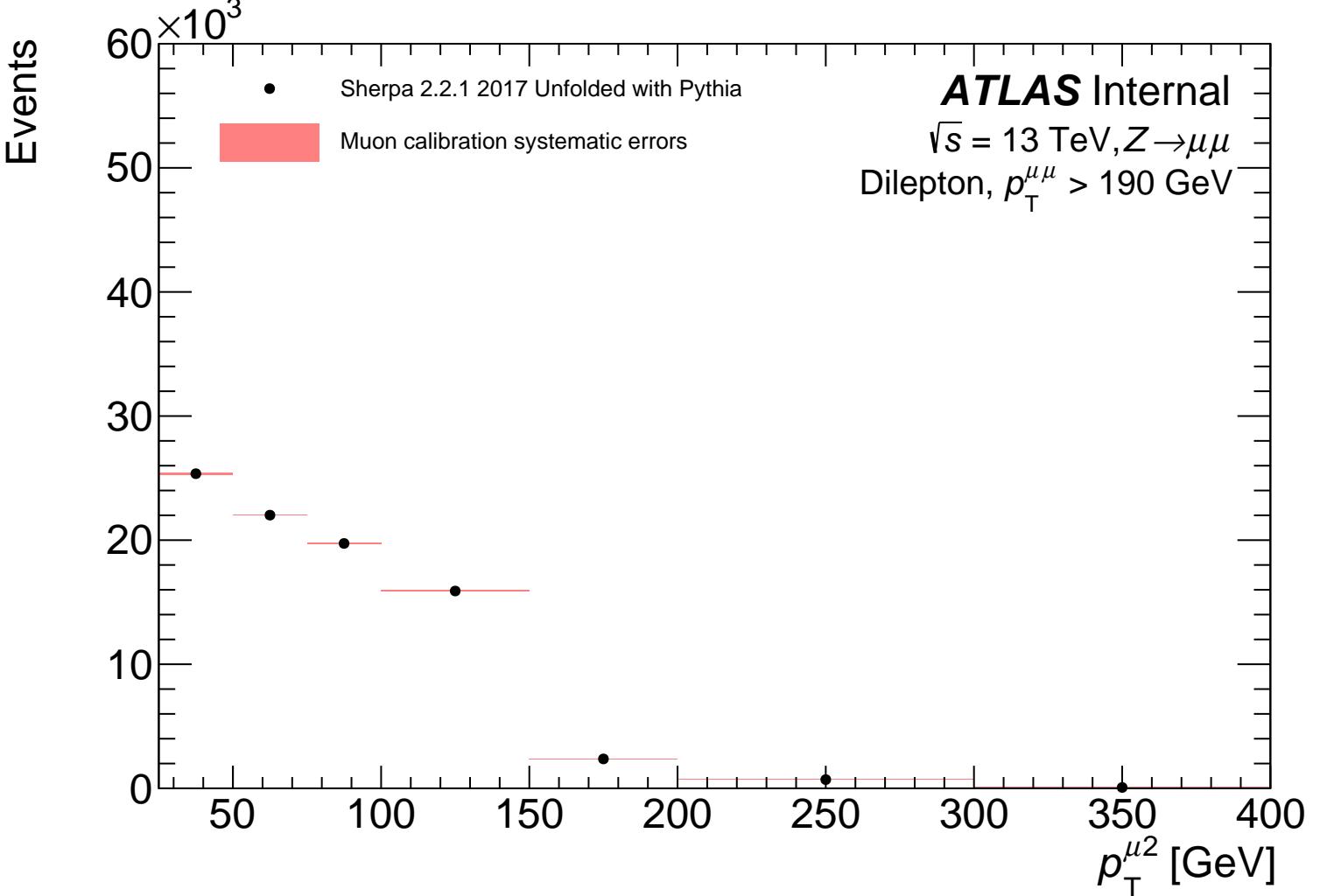
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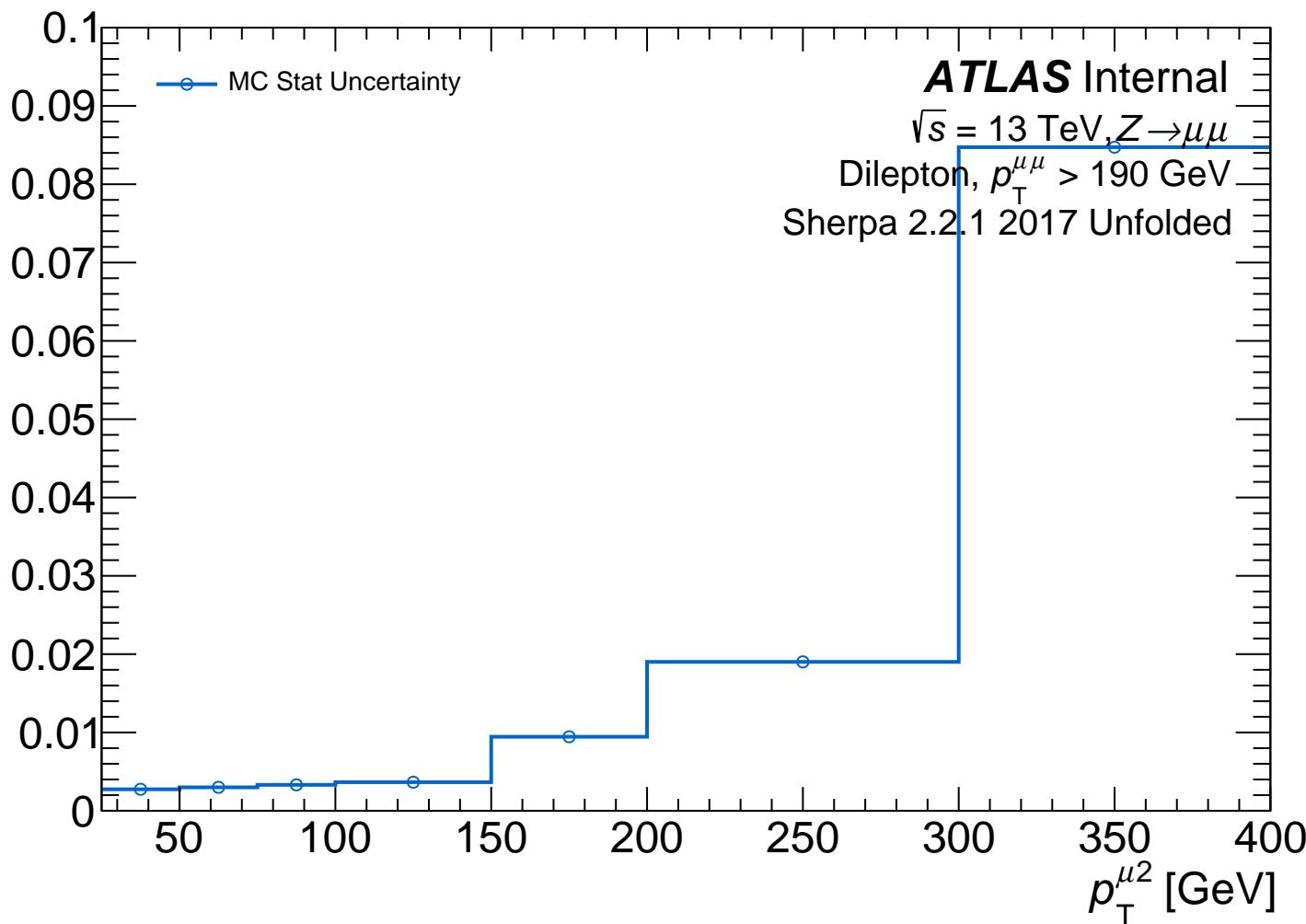
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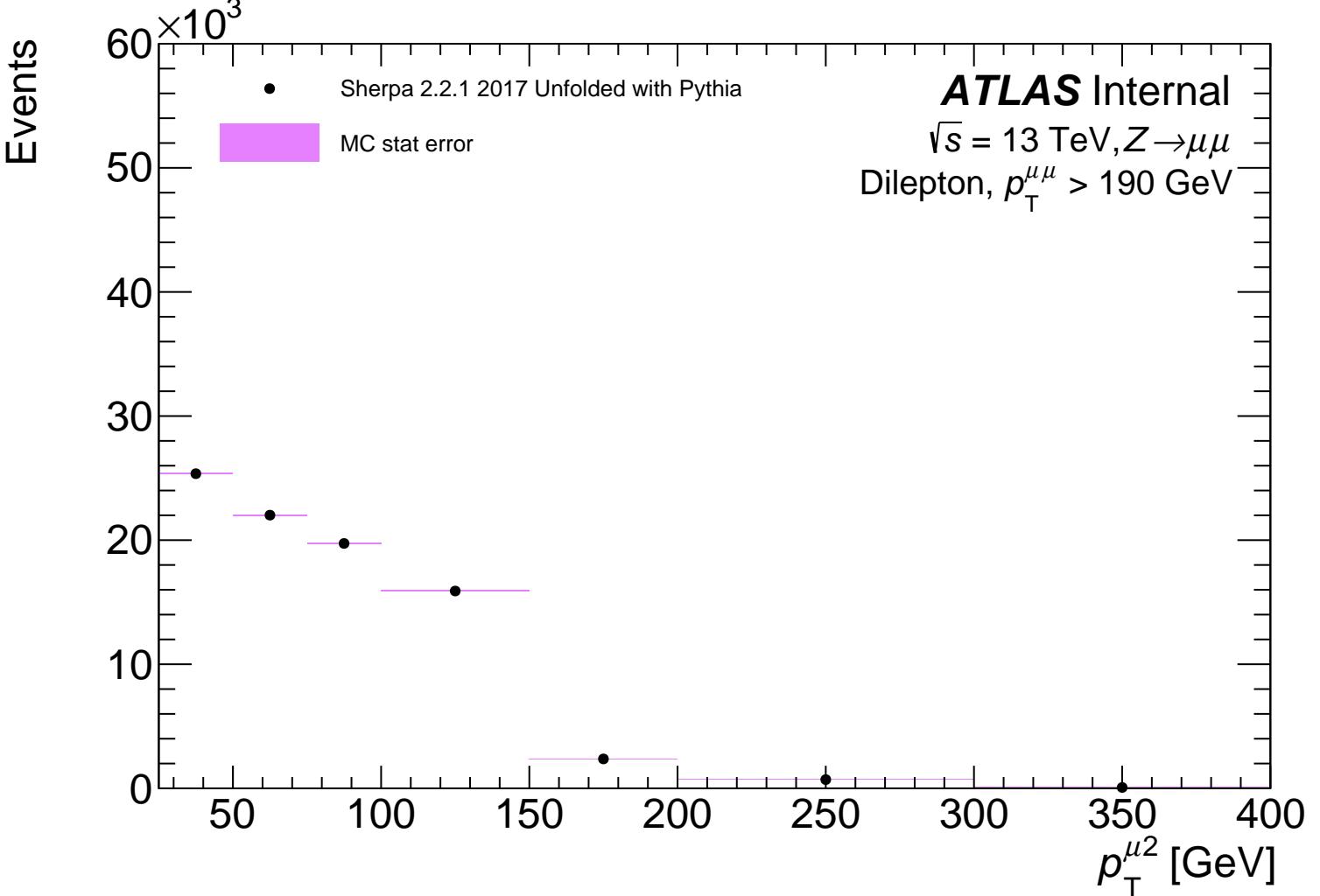
**ATLAS Internal** $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$ Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$ 

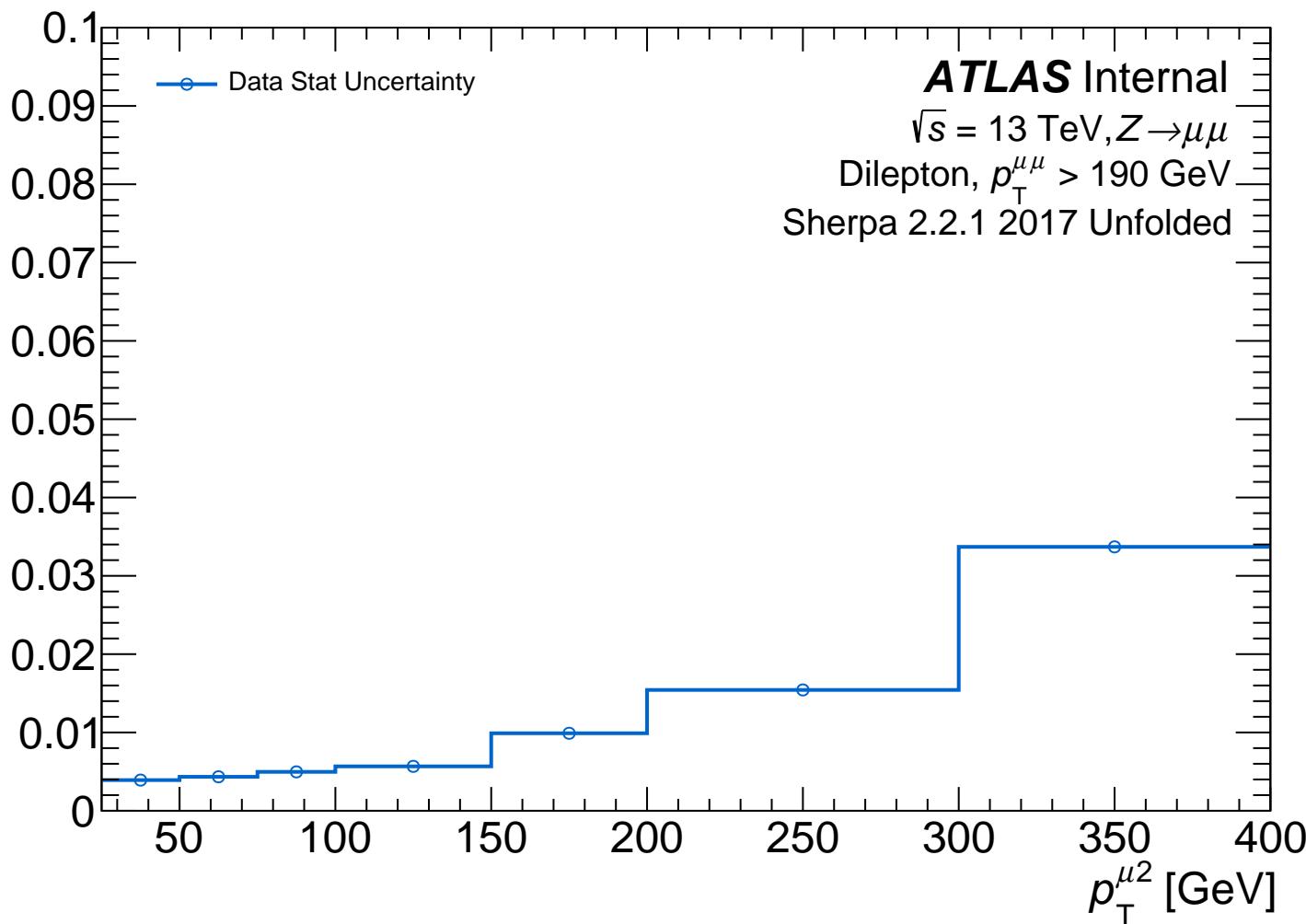
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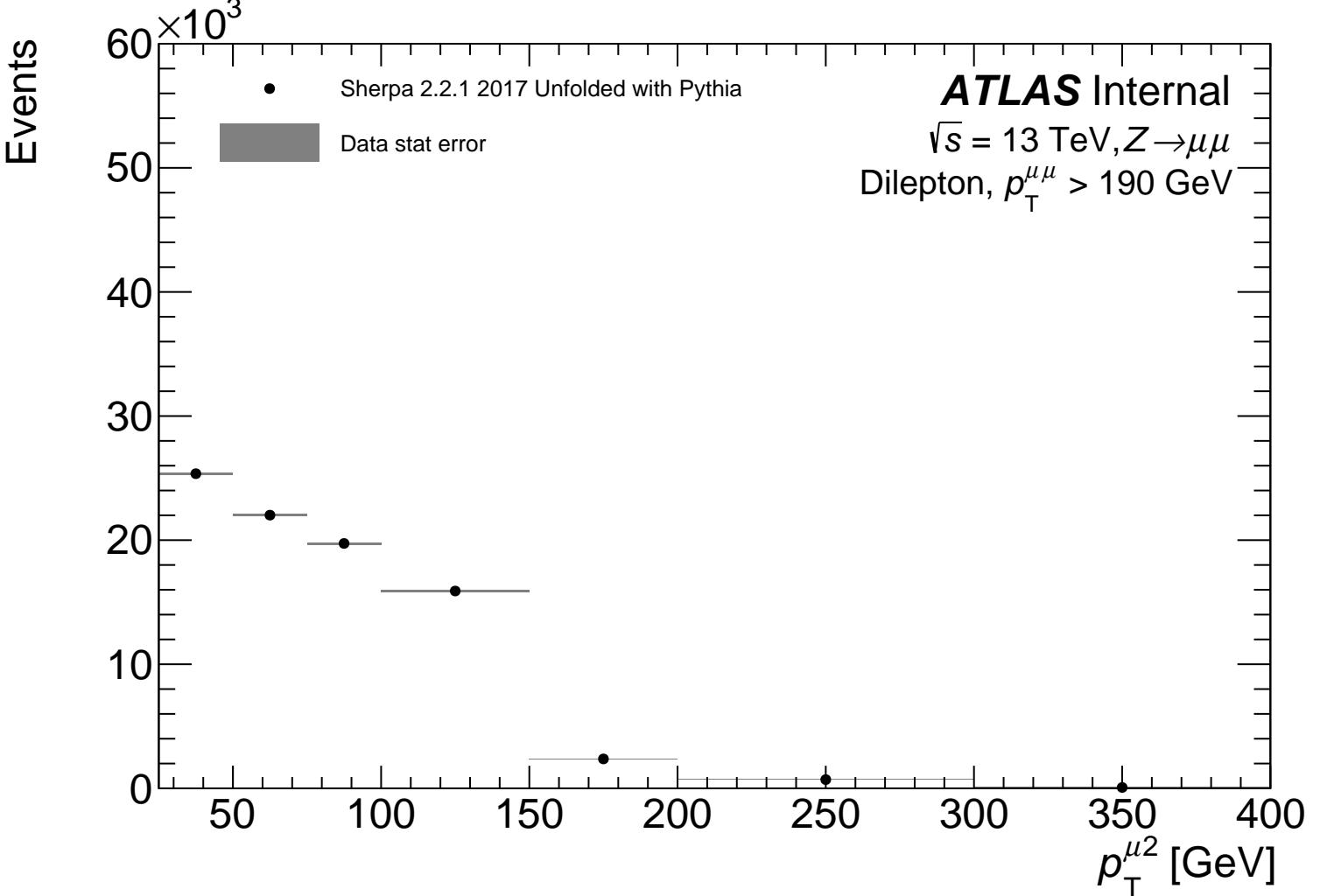


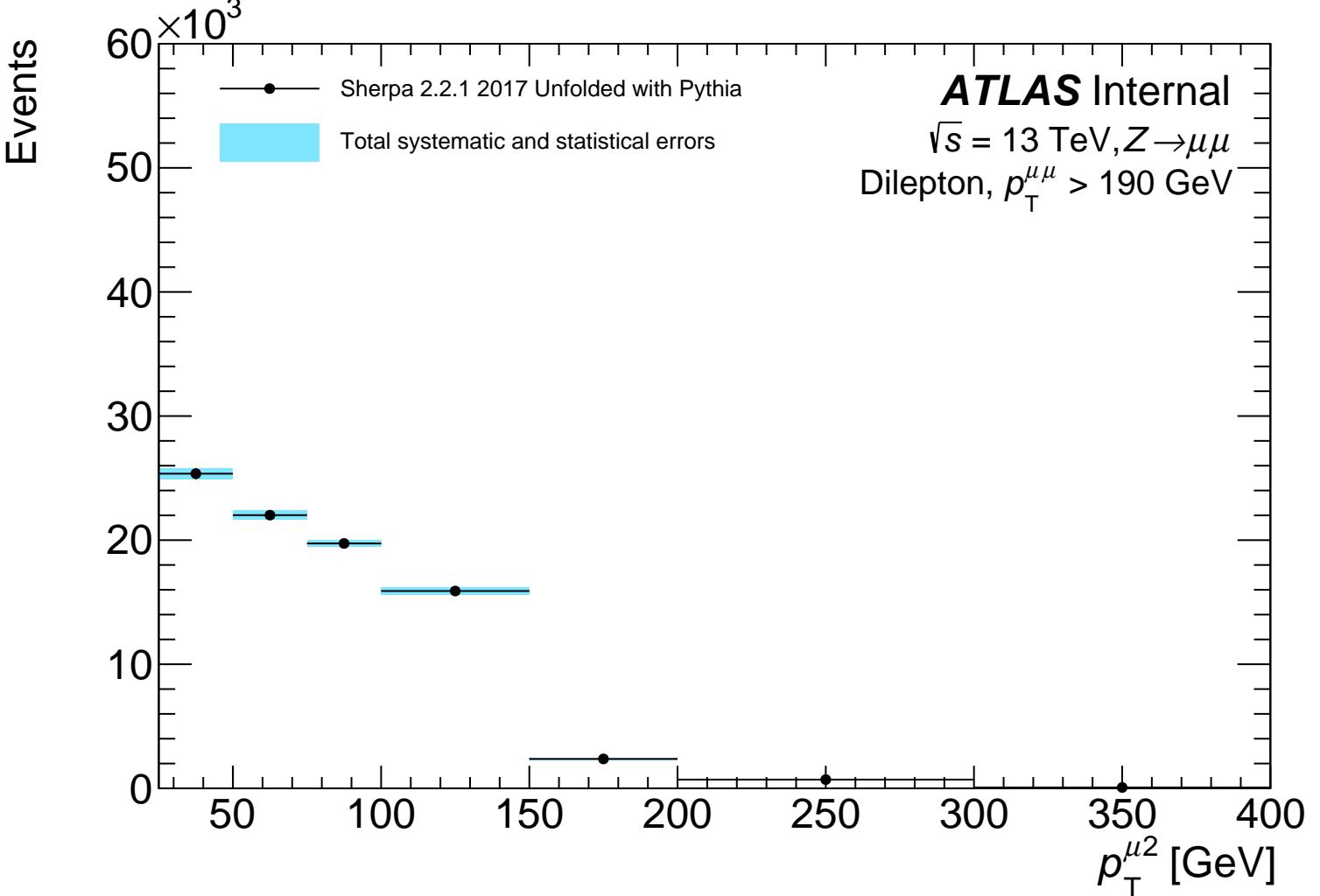


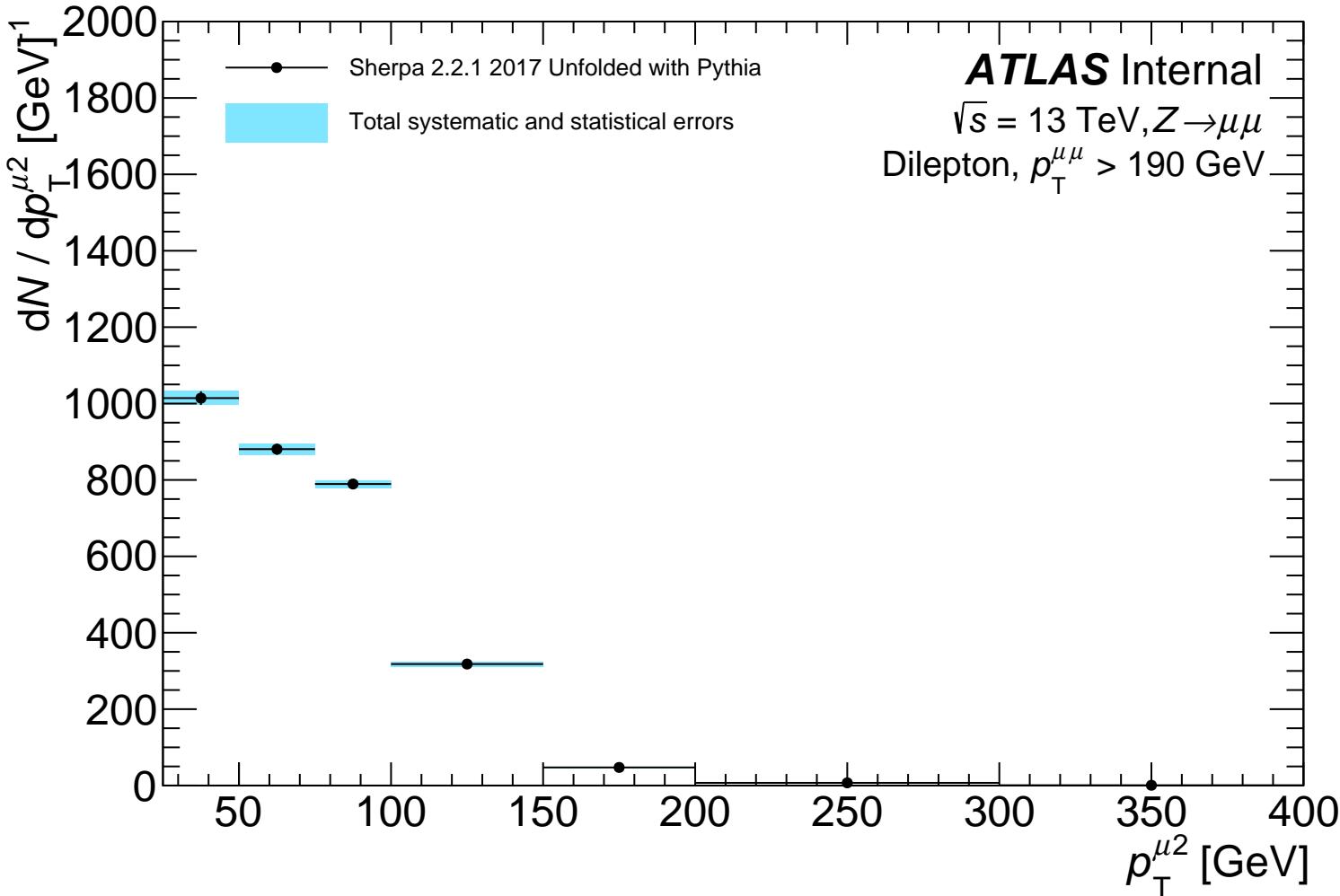












0.1

0.08

0.06

0.04

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0

-0.02

-0.04

-0.06

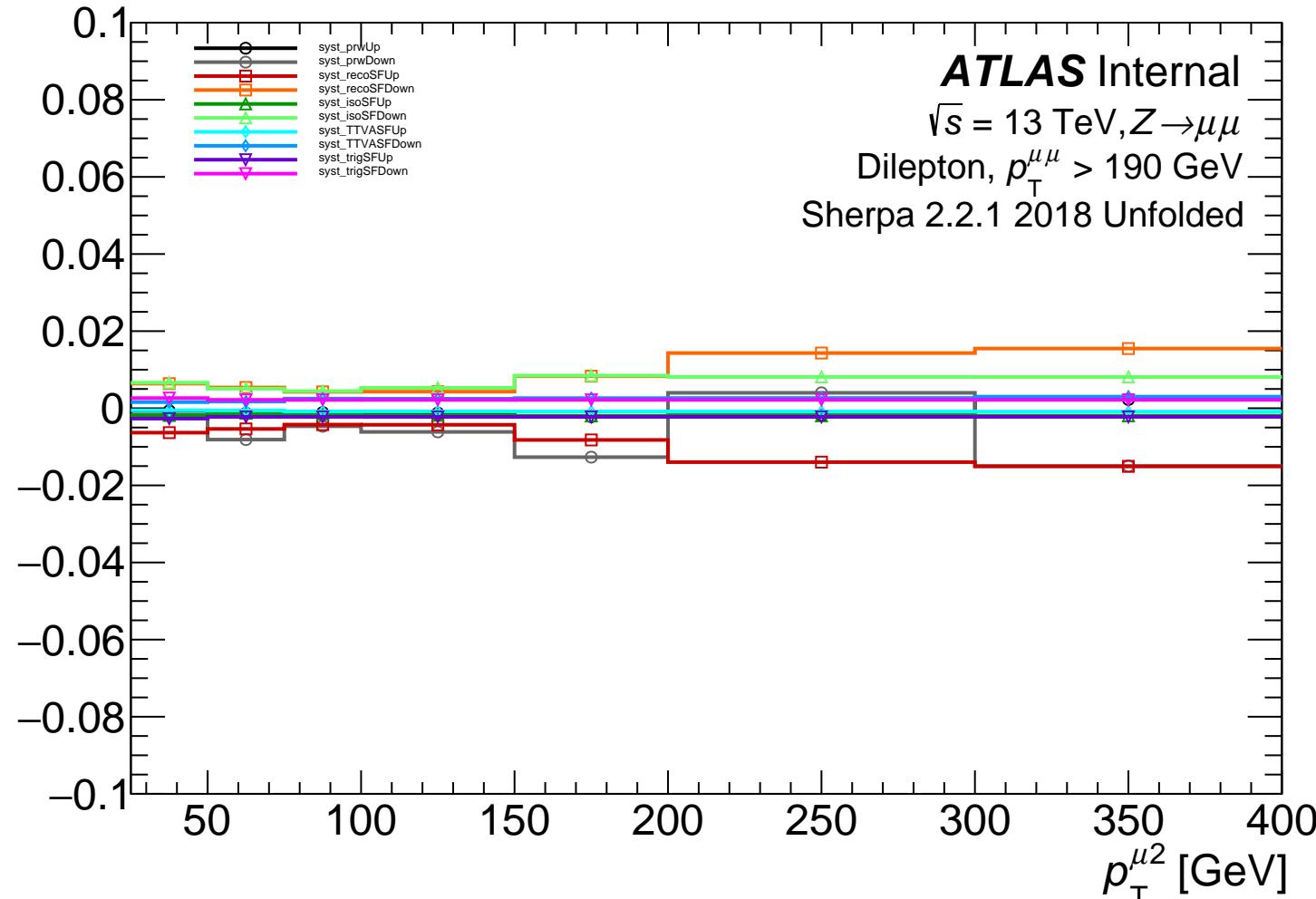
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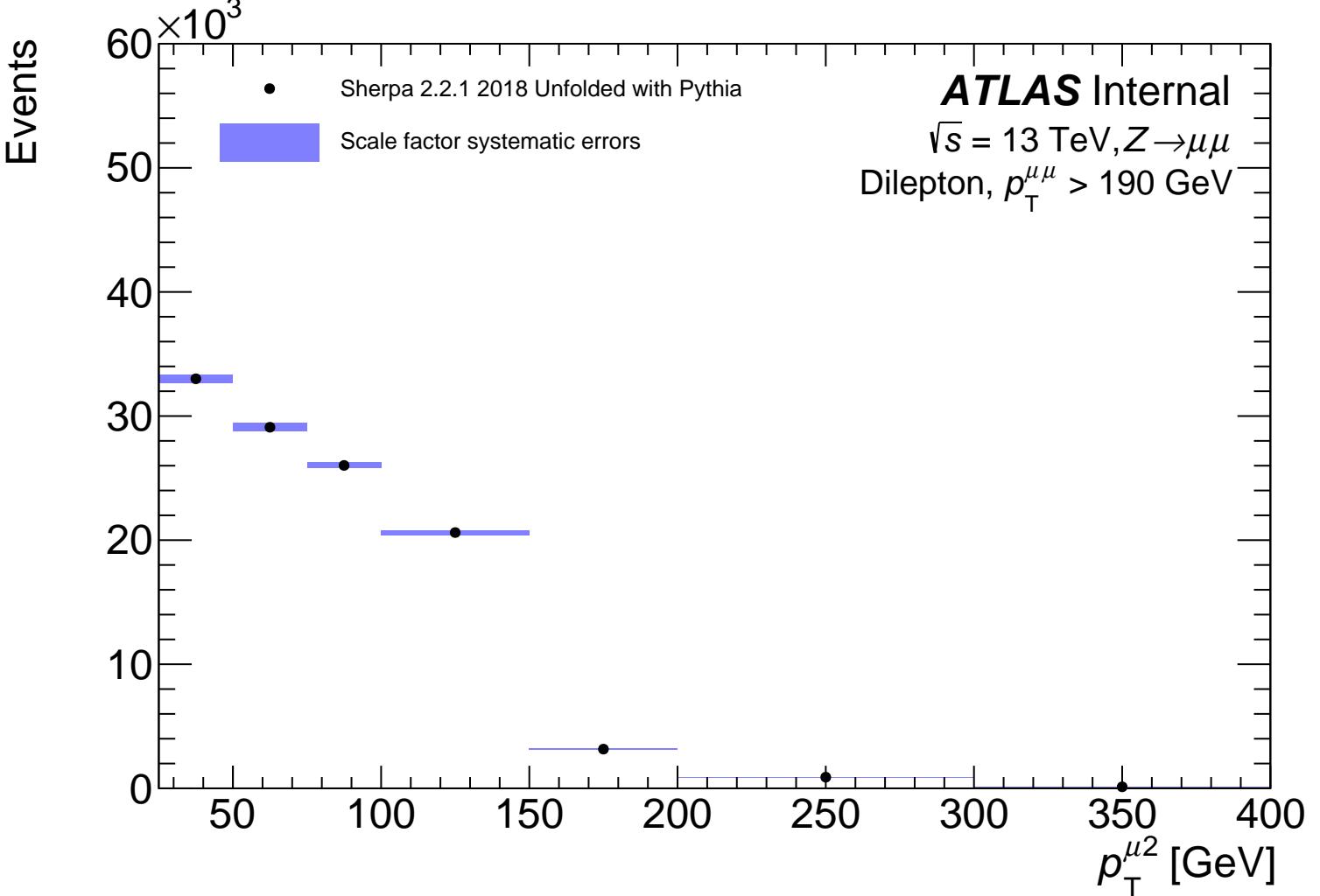
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syst\_recoSFDown  
syst\_isoSFUp  
syst\_isoSFDown  
syst\_TTVASFUp  
syst\_TTVASFDown  
syst\_trigSFUp  
syst\_trigSFDown

**ATLAS Internal** $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$ Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$ 

Sherpa 2.2.1 2018 Unfolded

 $p_T^{\mu^2} [\text{GeV}]$ 



0.1

0.08

0.06

0.04

0.02

0

-0.02

-0.04

-0.06

-0.08

-0.1

50

100

150

200

250

300

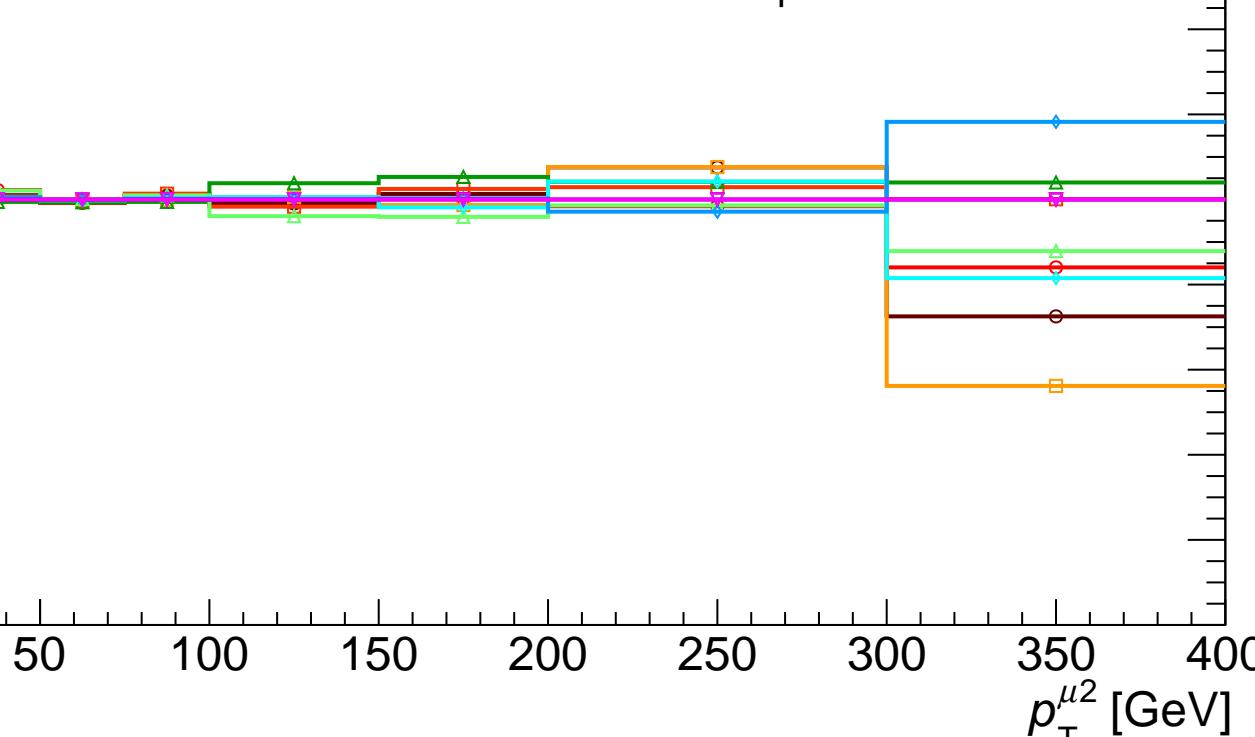
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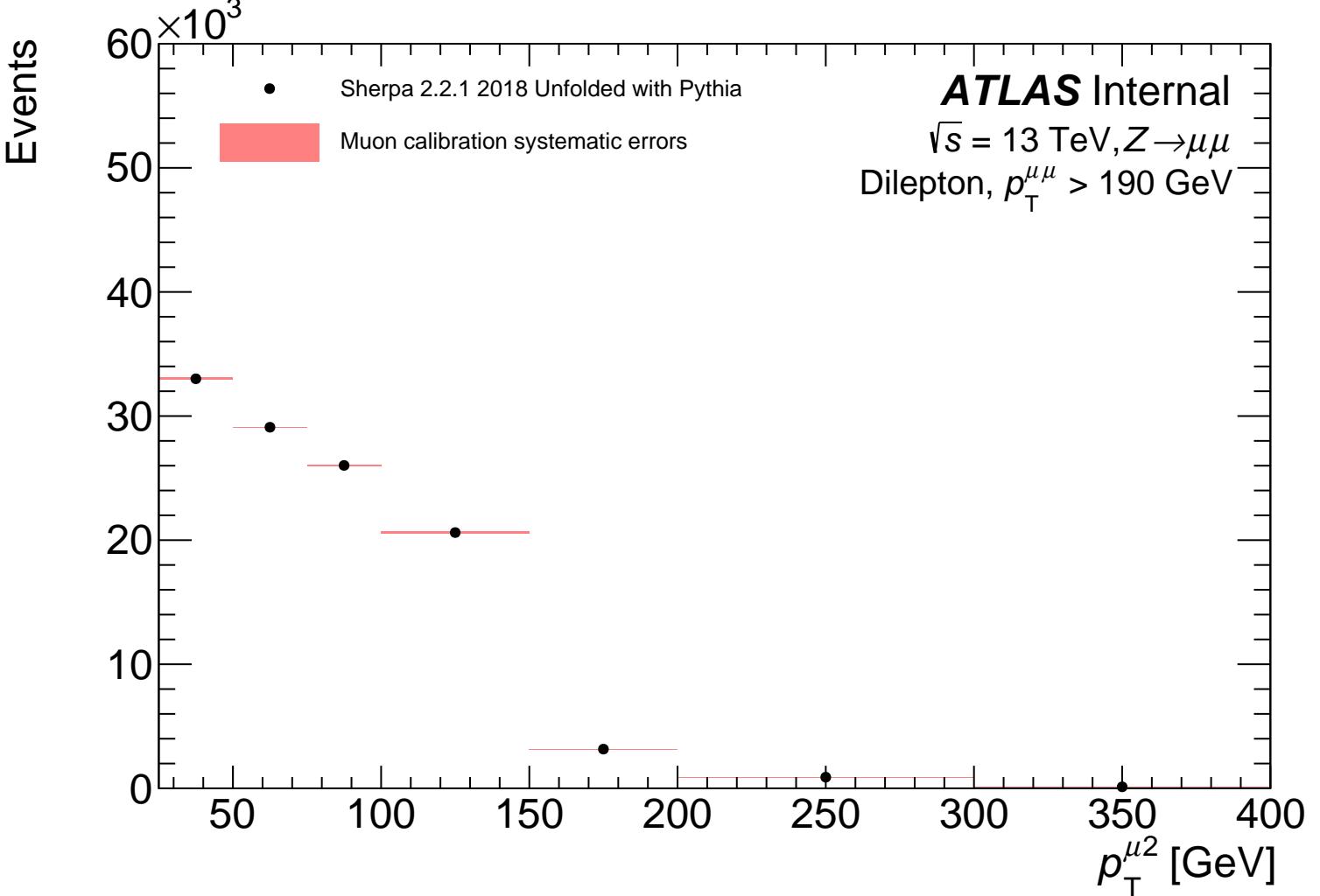
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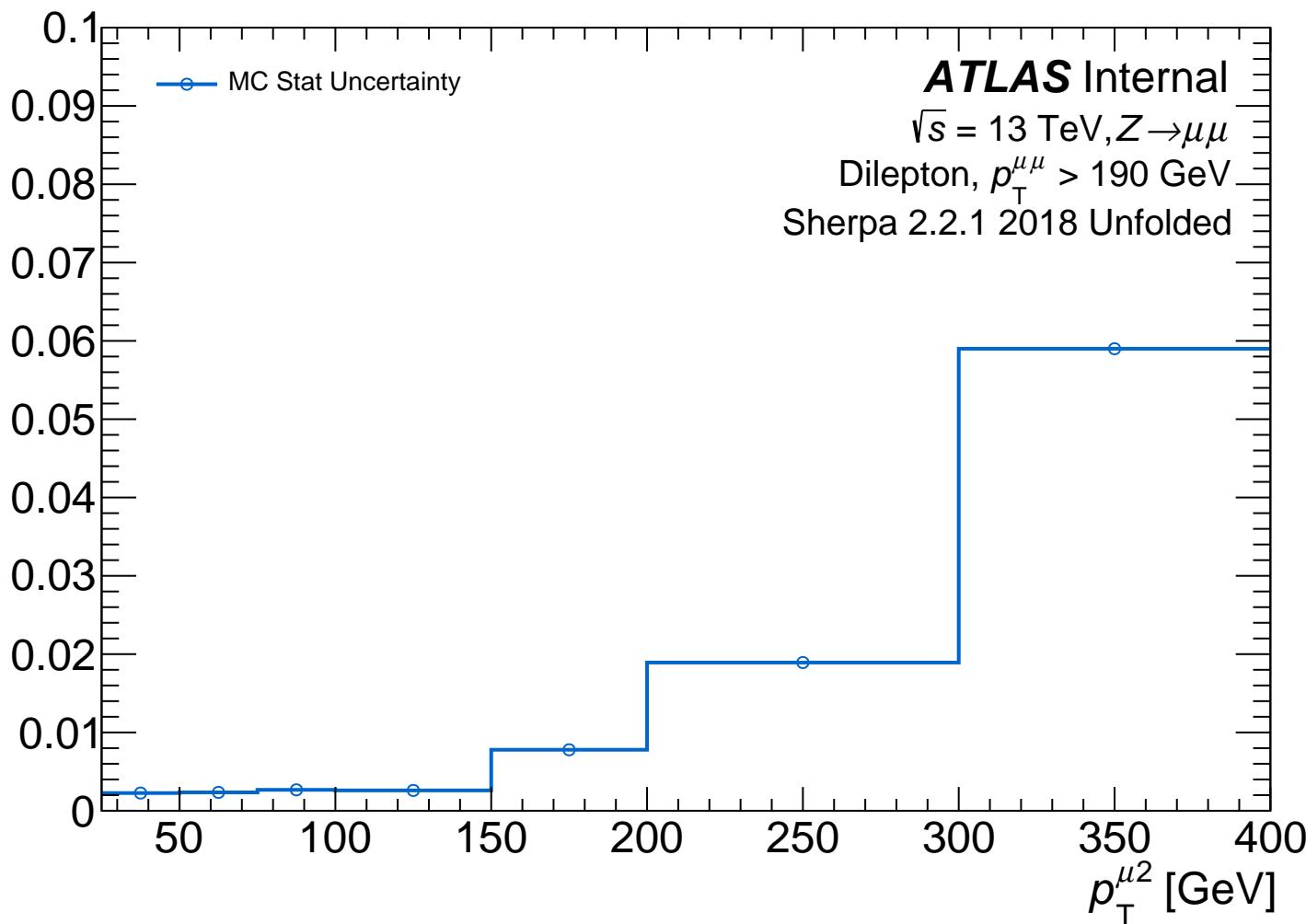
 $p_T^{\mu^2}$  [GeV]

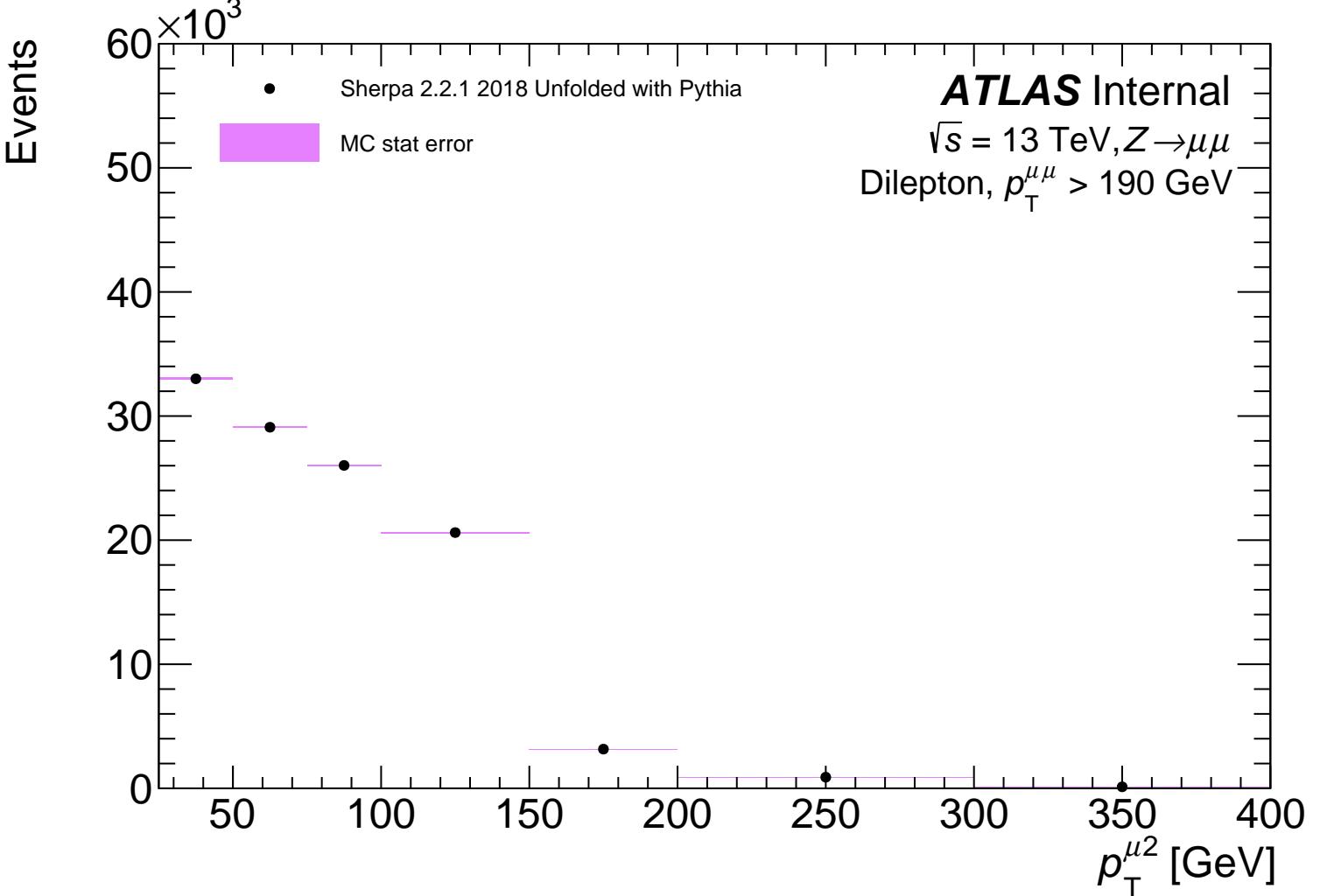
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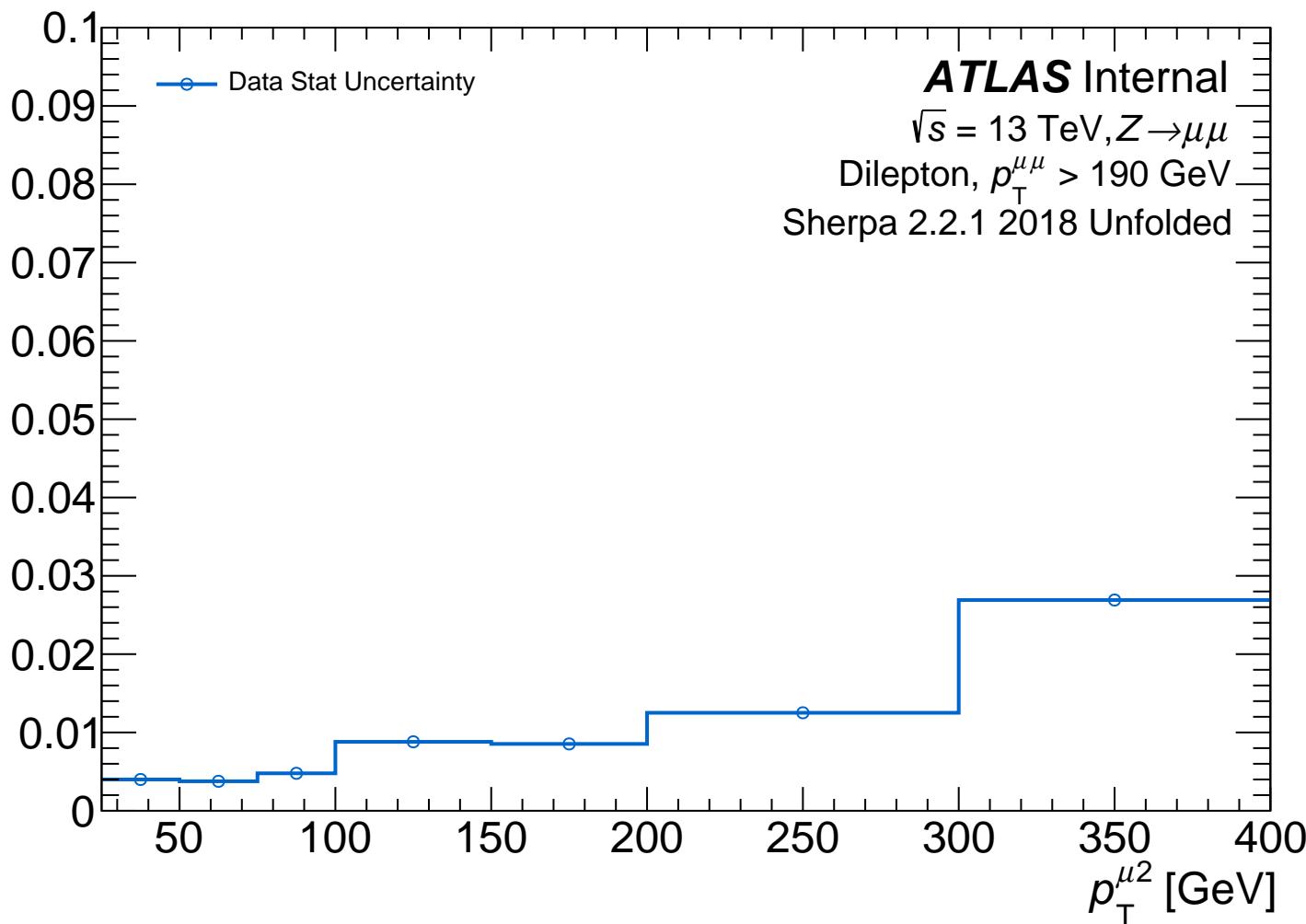
**ATLAS Internal**  
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$   
 Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$   
 Sherpa 2.2.1 2018 Unfolded

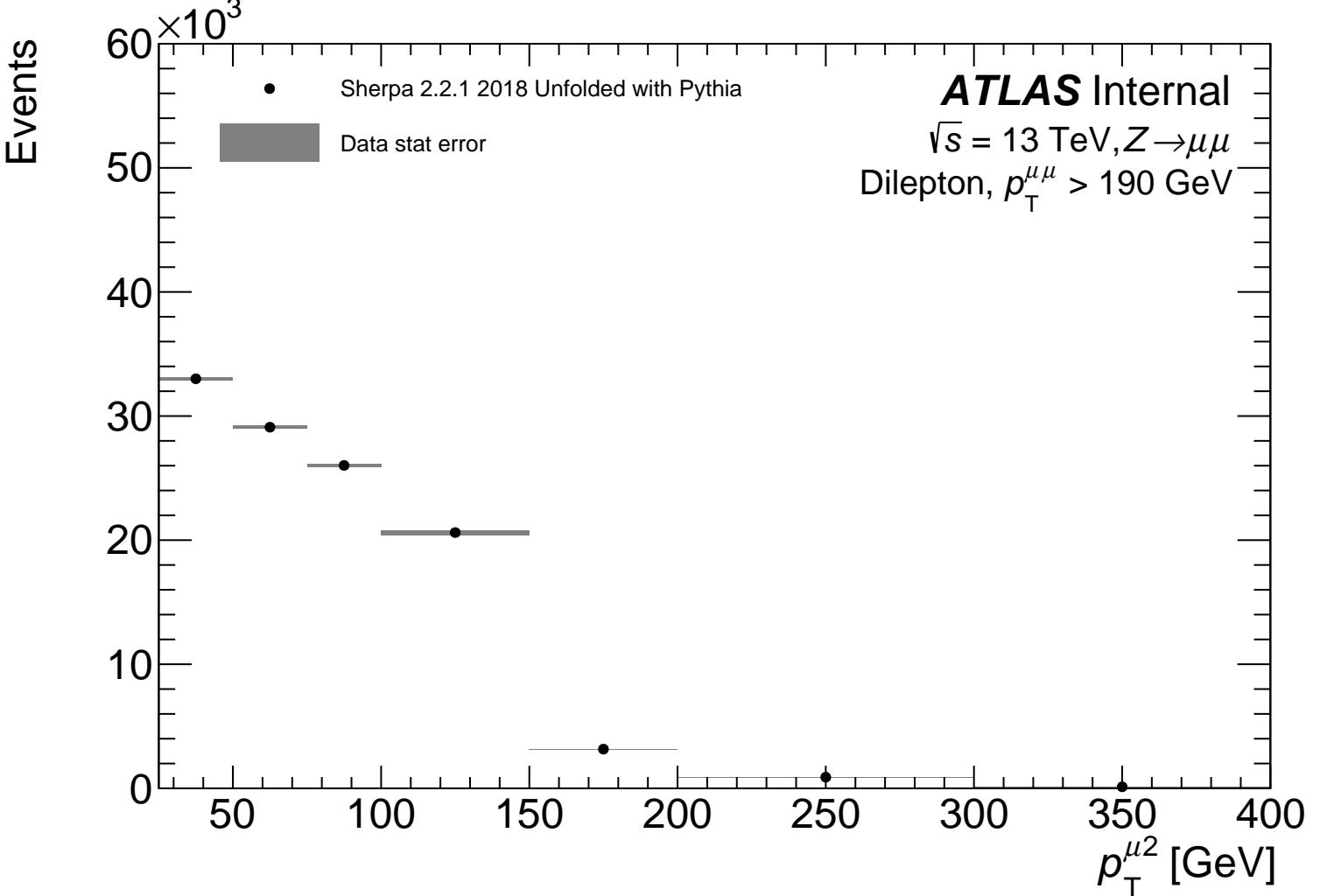


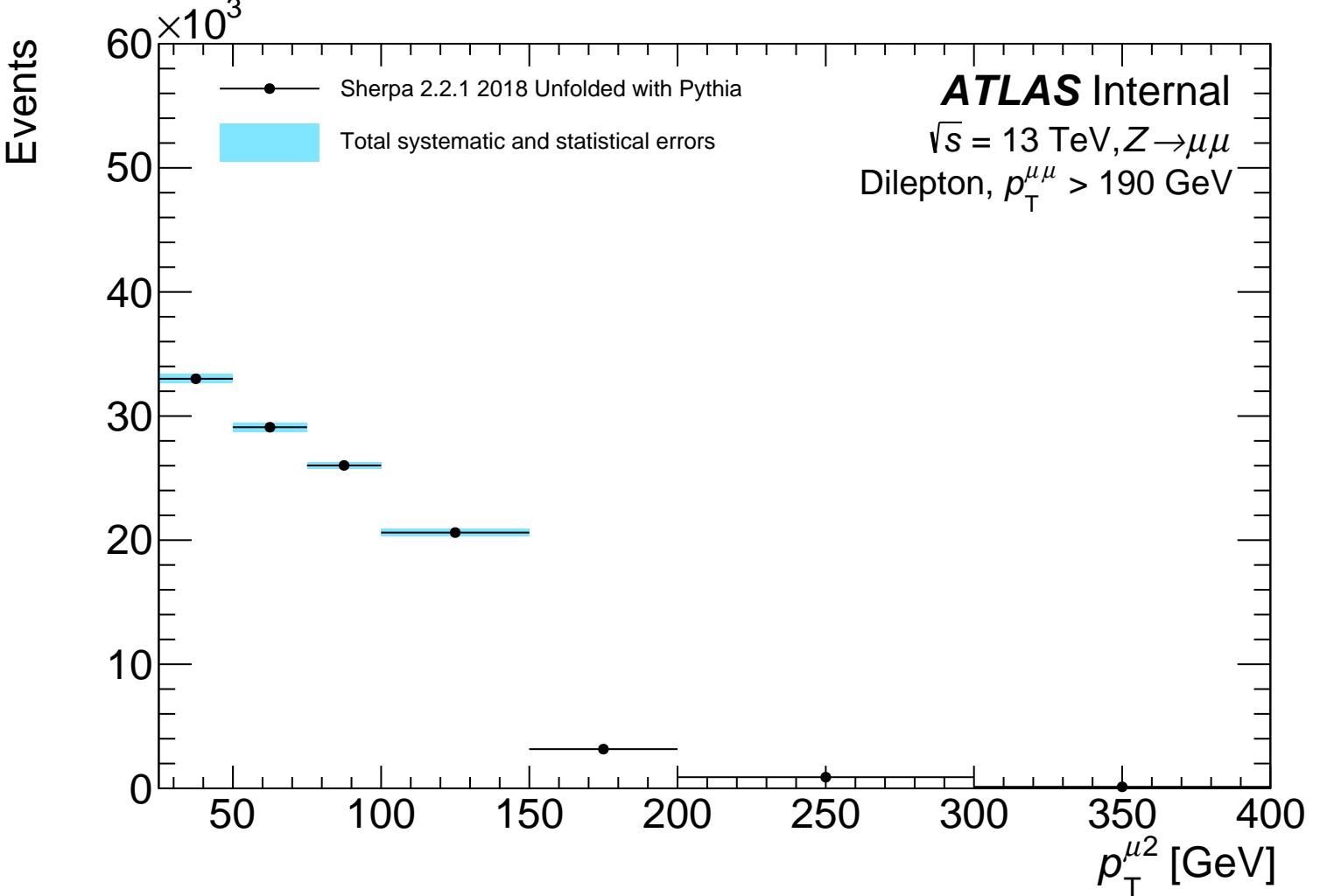


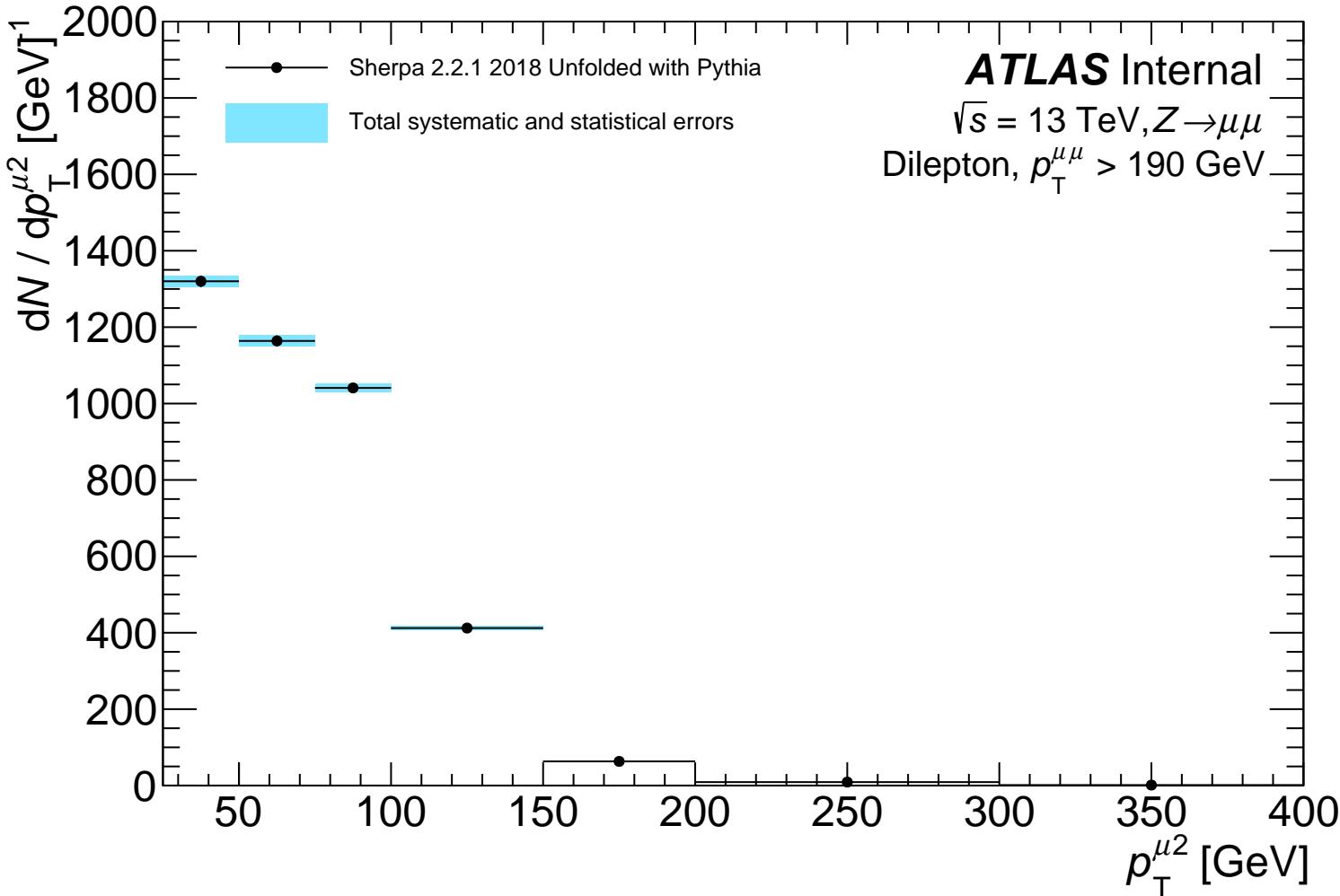


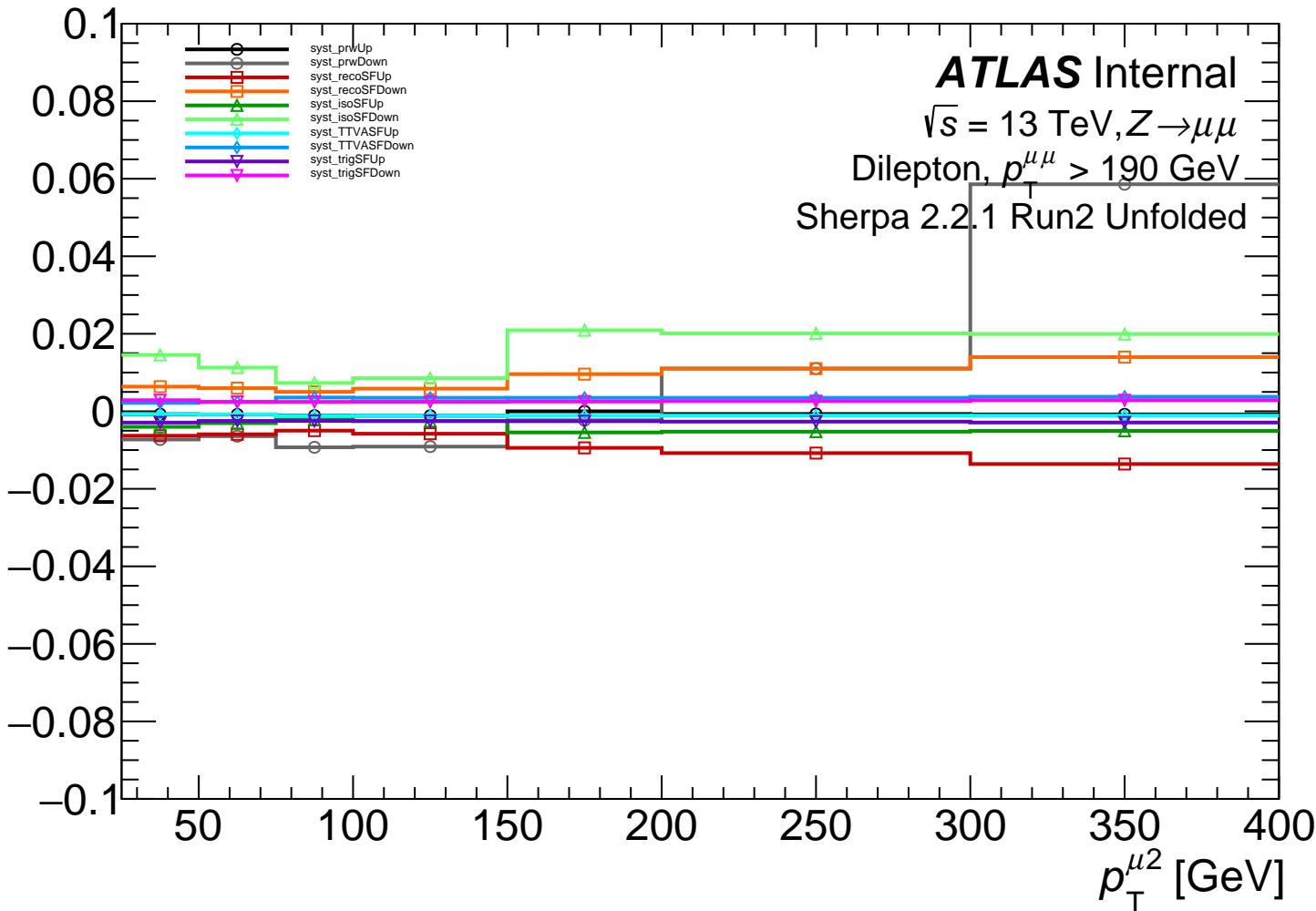


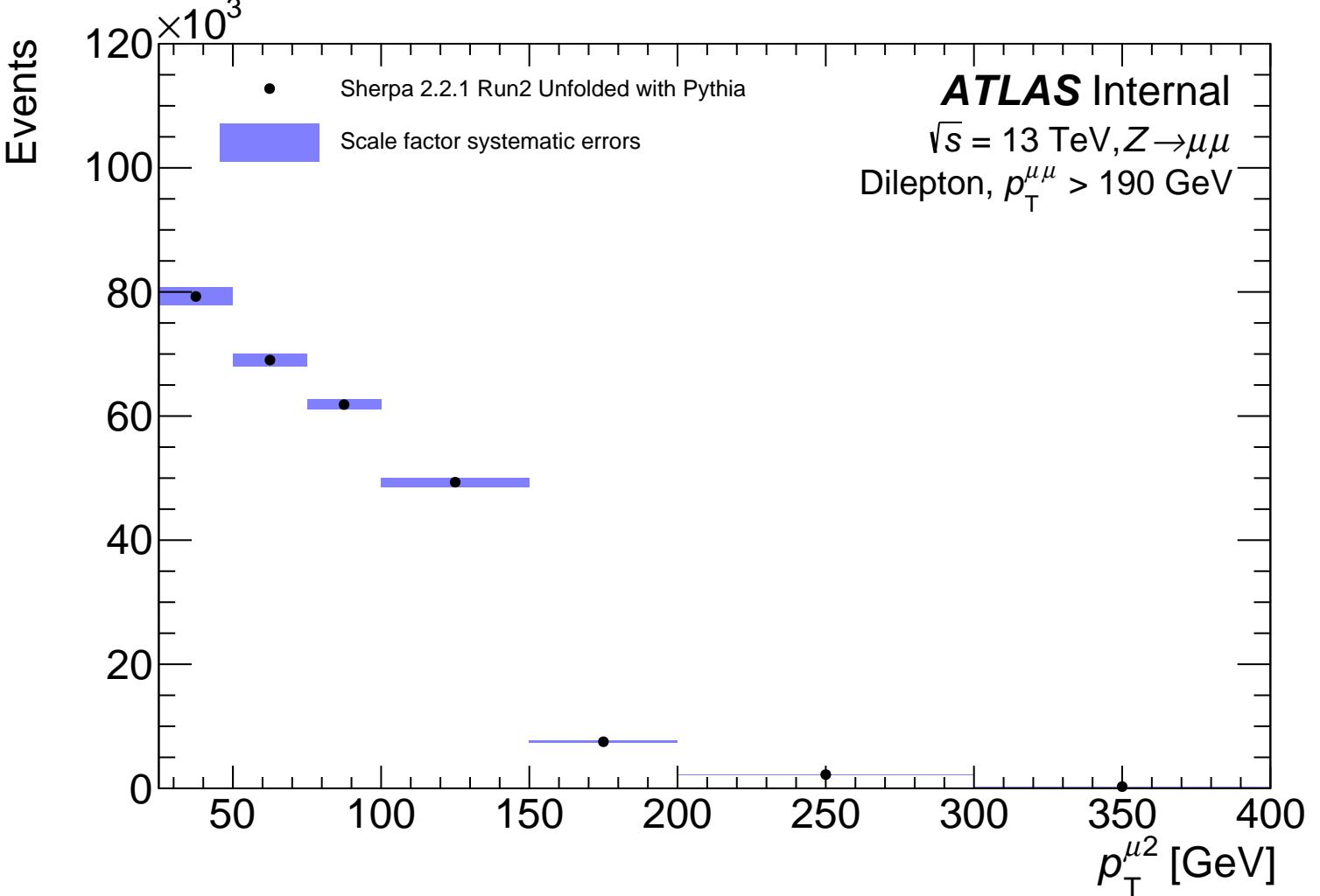












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-0.02

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-0.06

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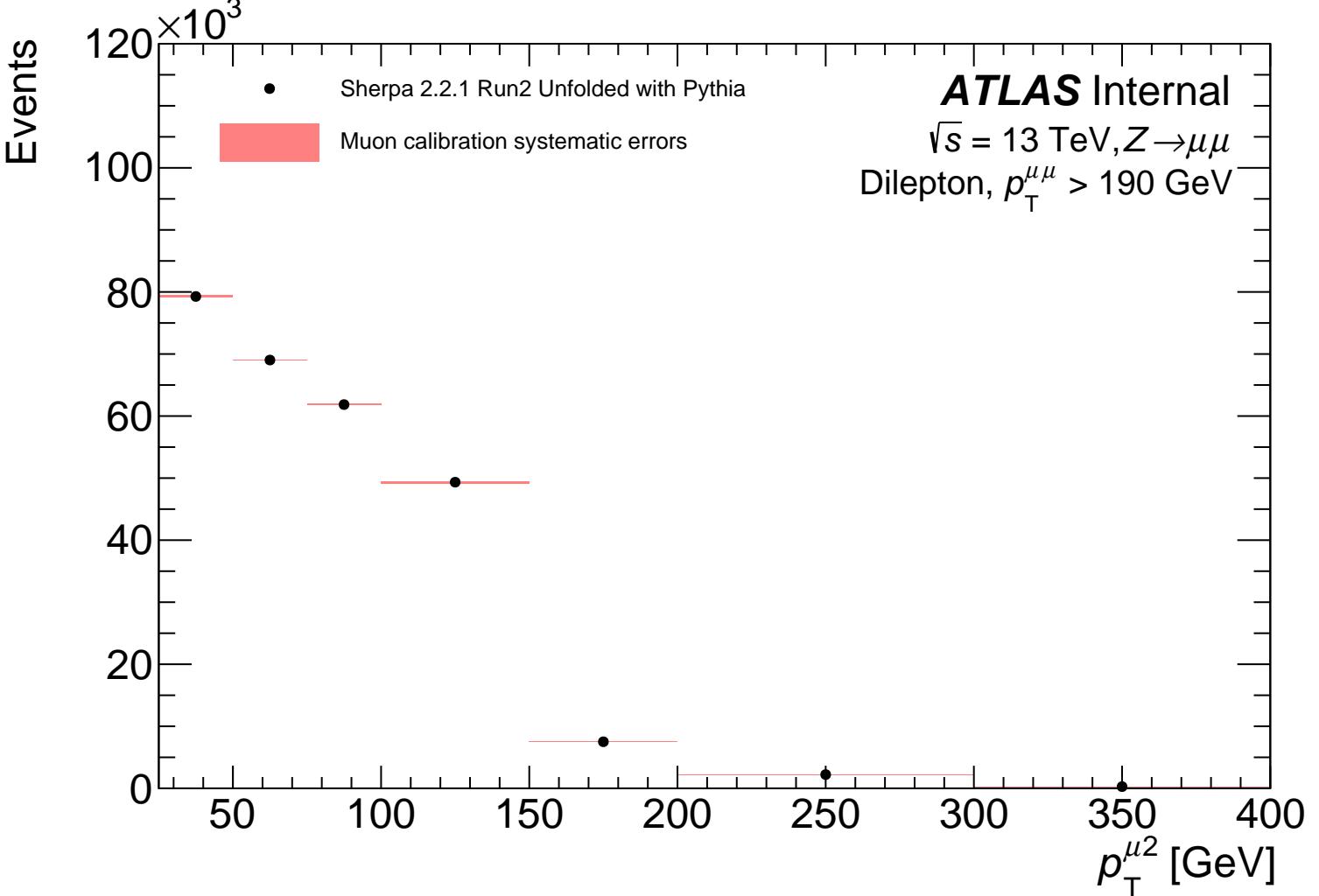
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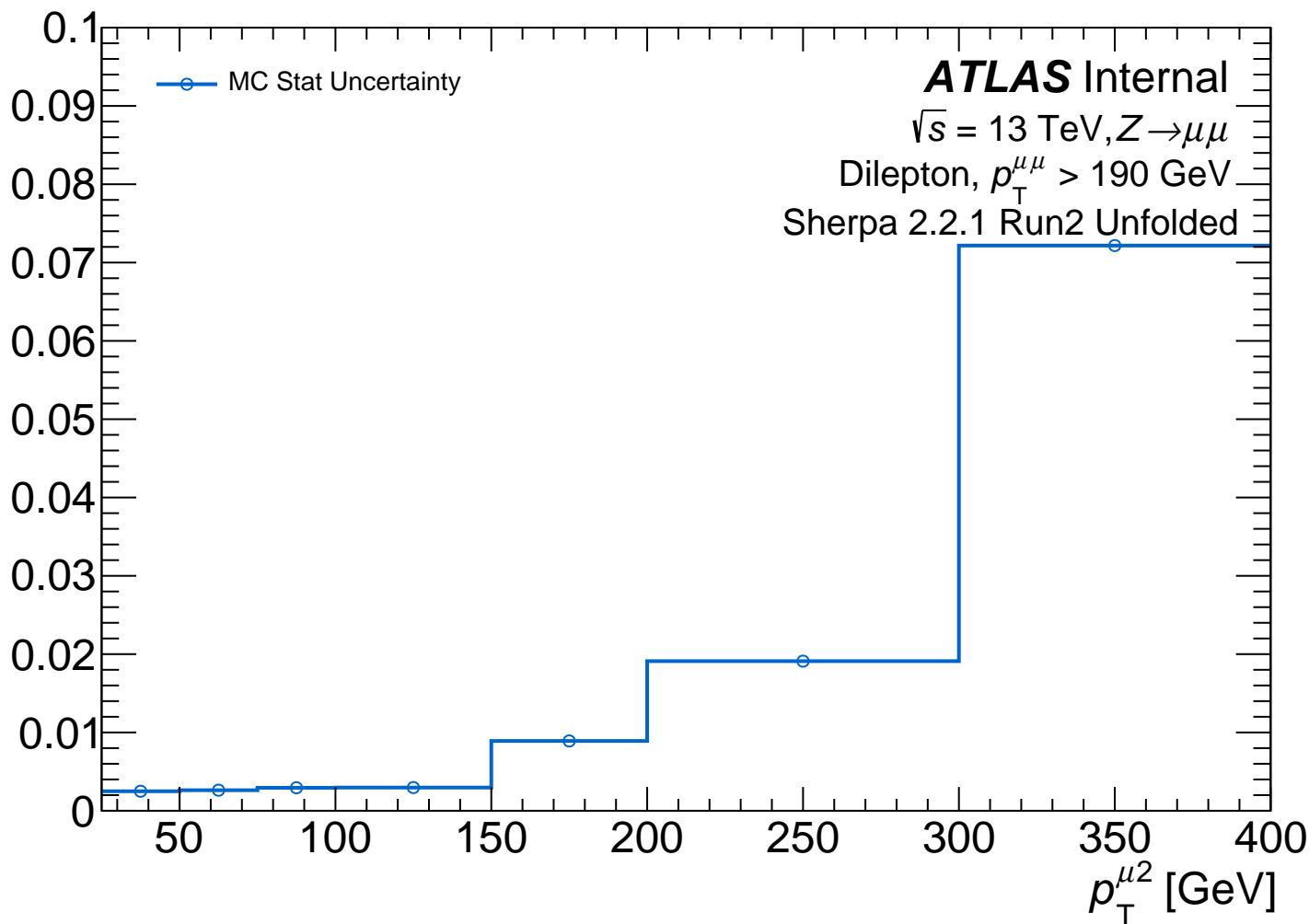
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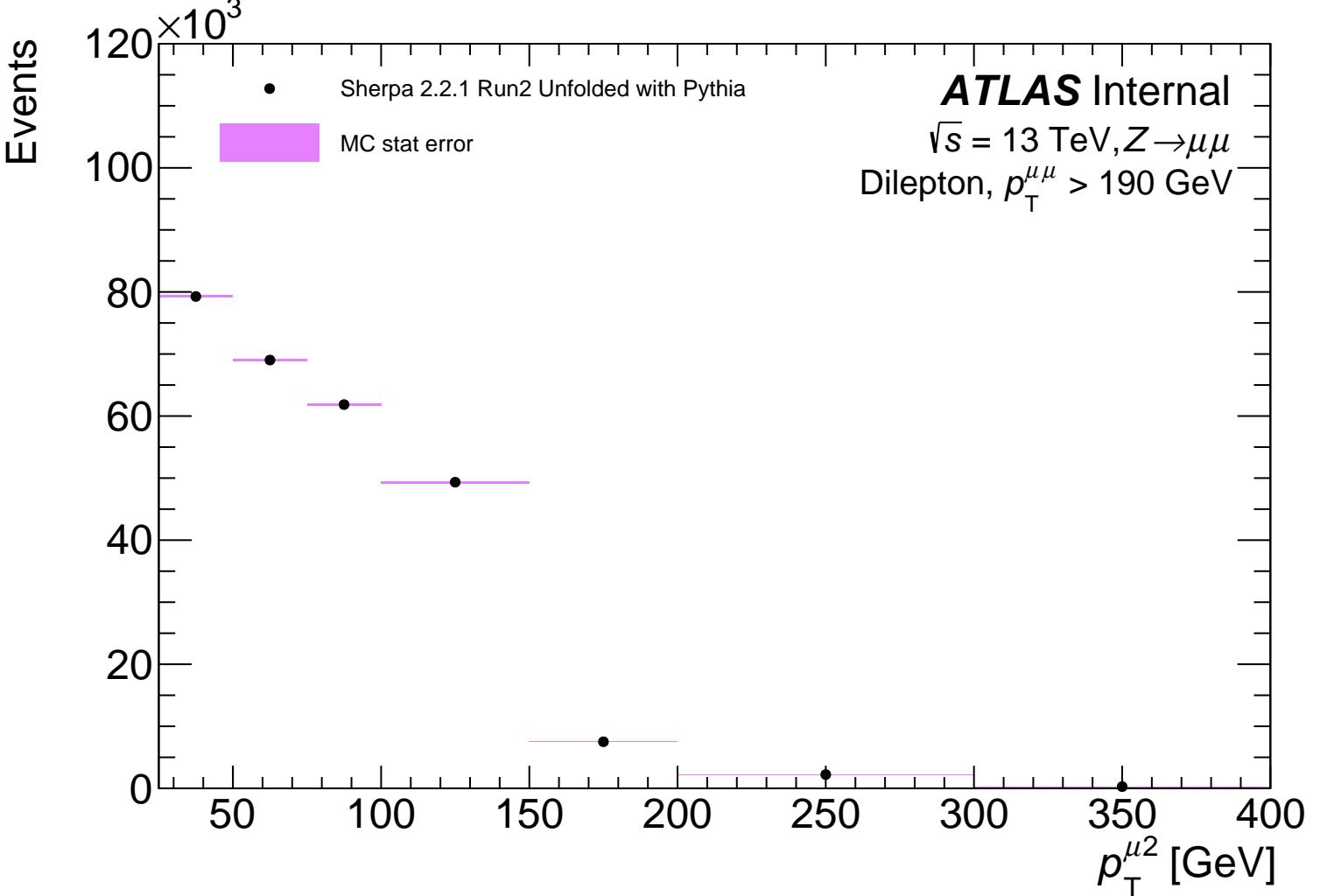
**ATLAS Internal** $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$ Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$ 

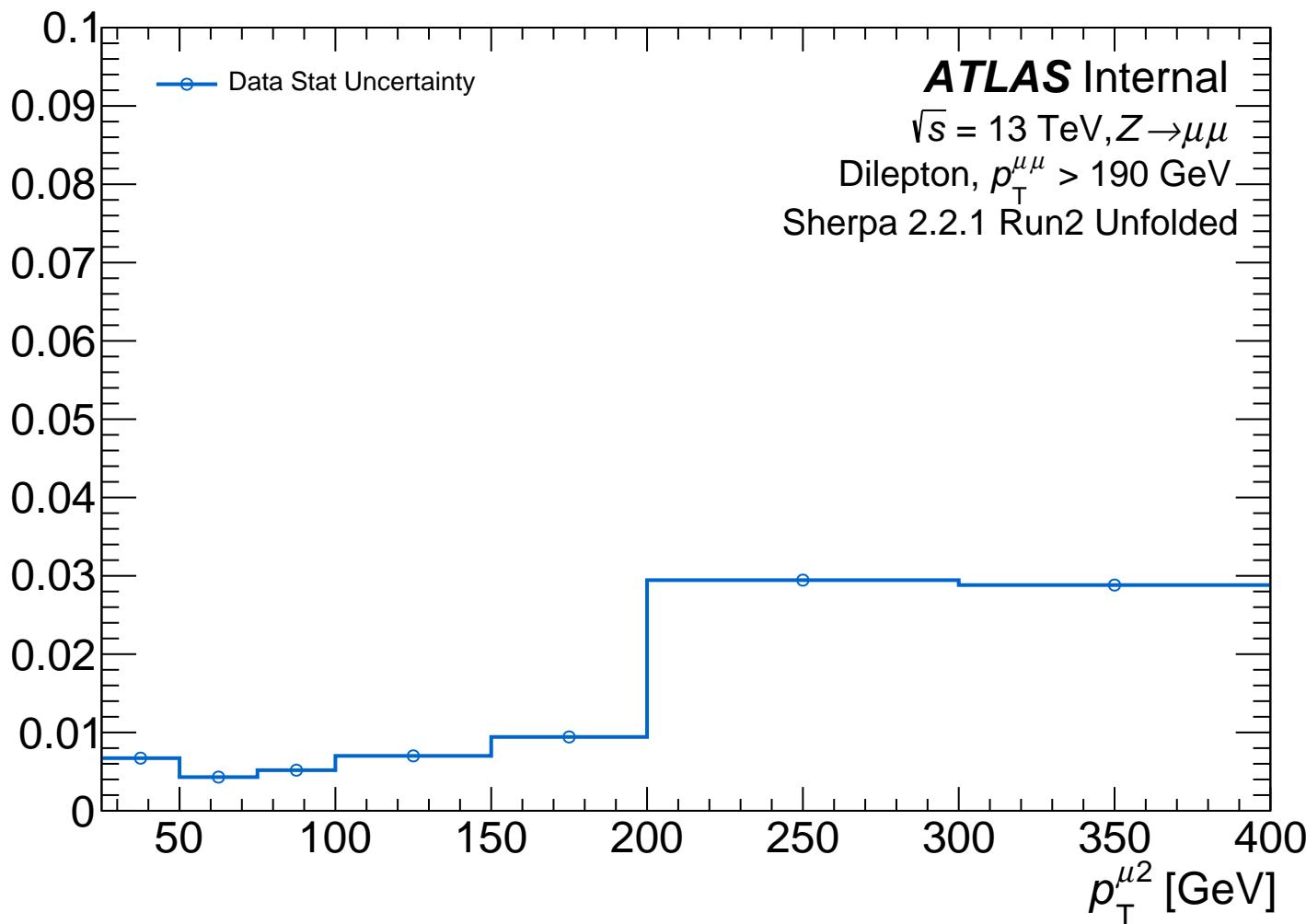
Sherpa 2.2.1 Run2 Unfolded

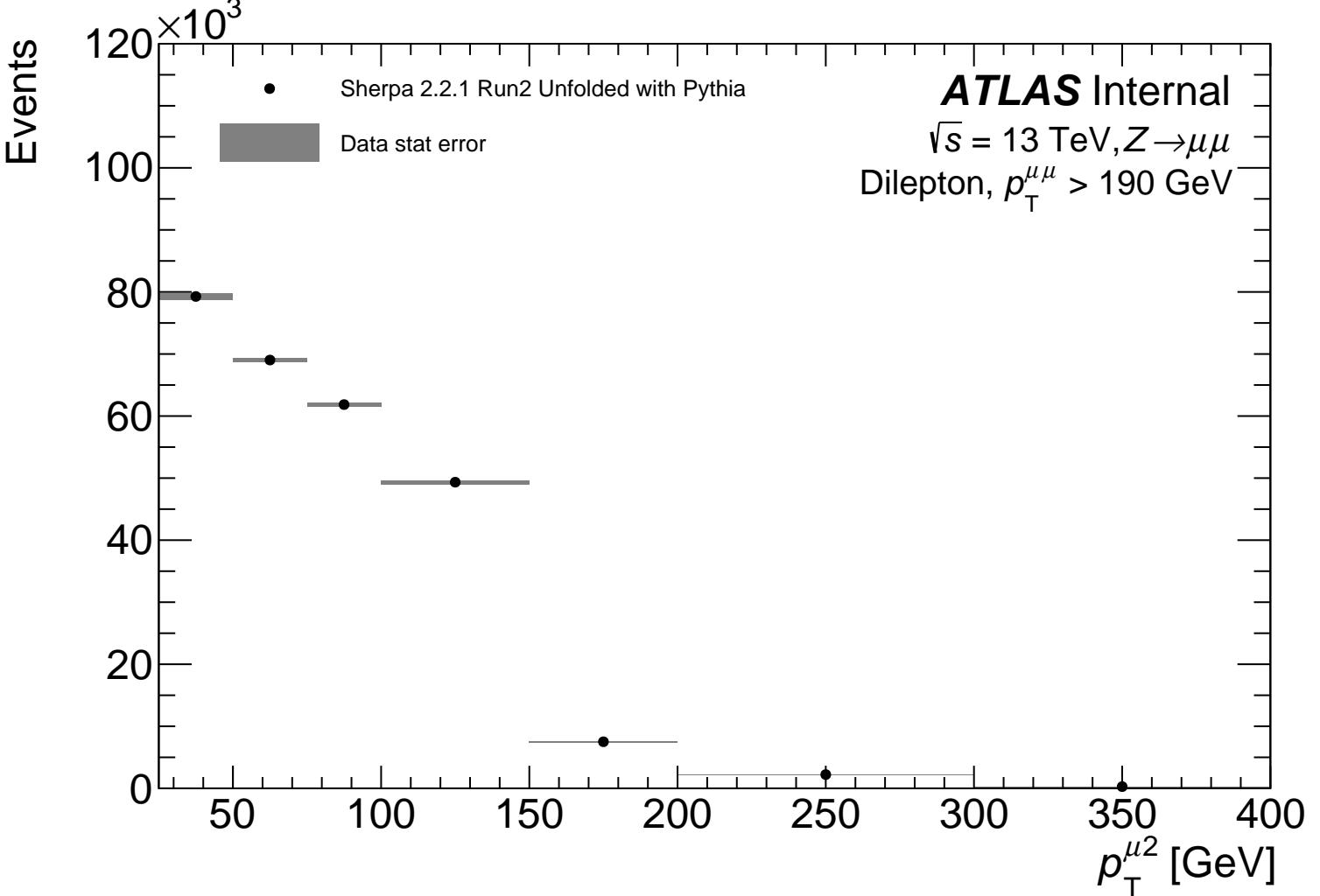


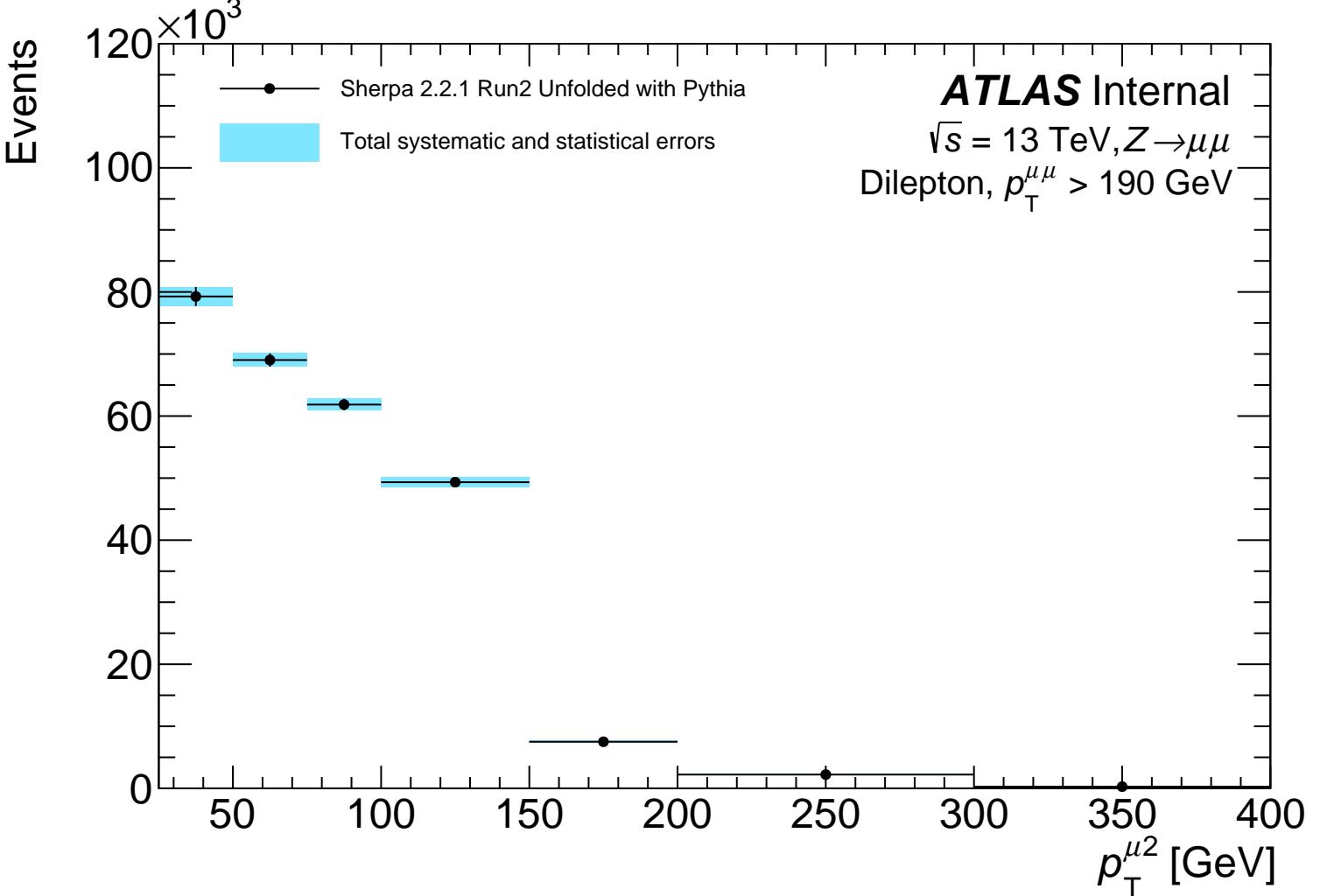


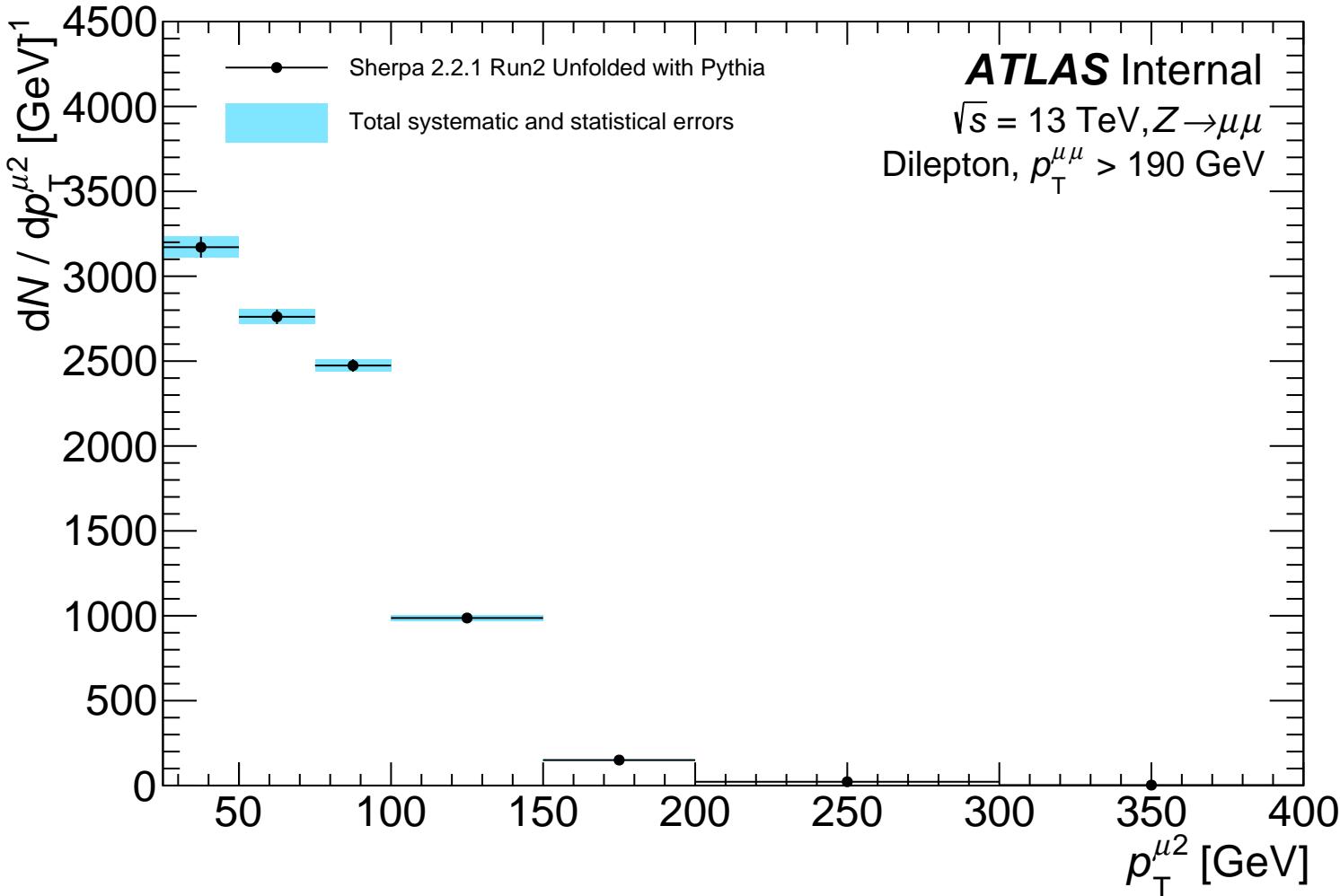










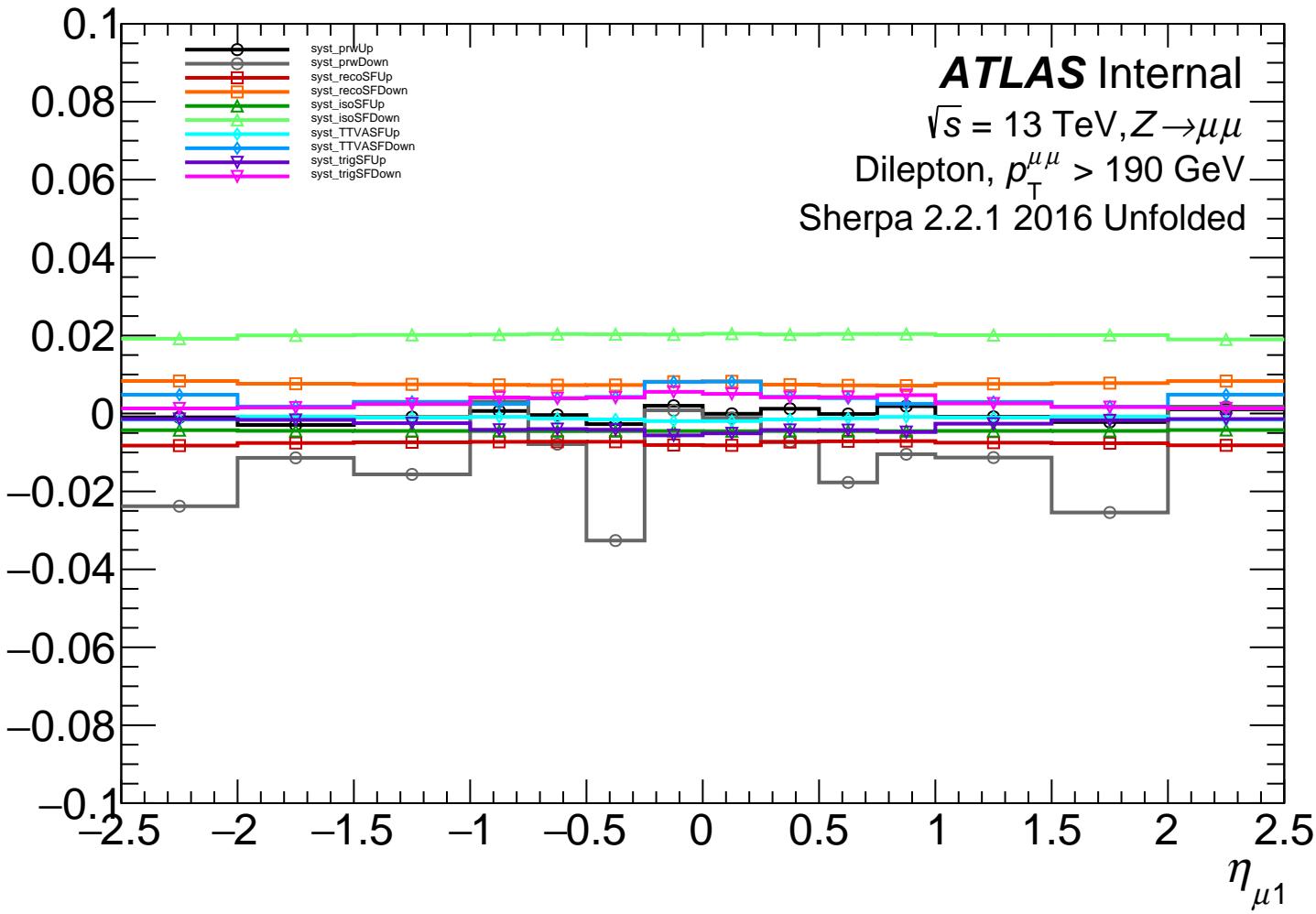


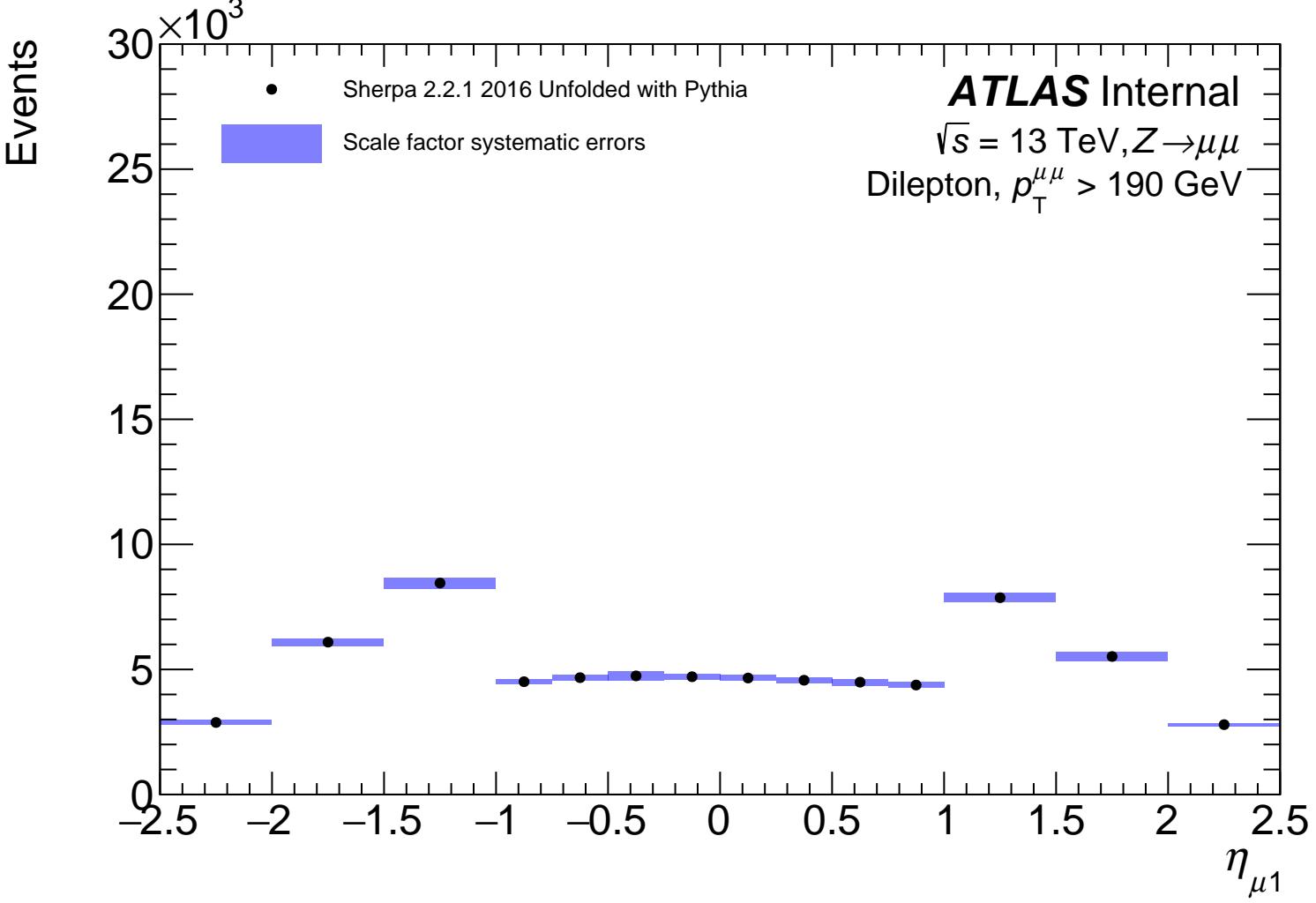
**ATLAS Internal**

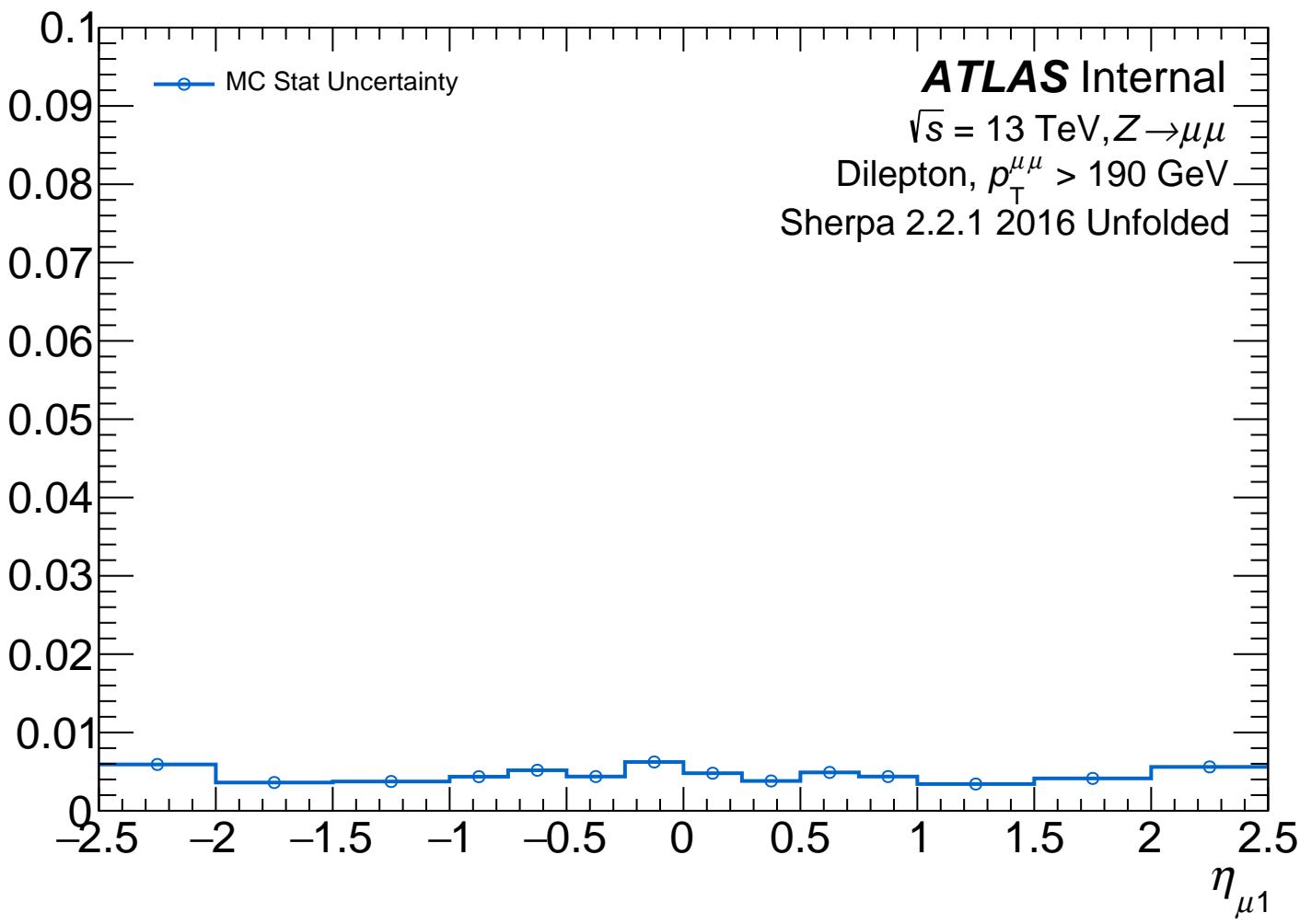
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

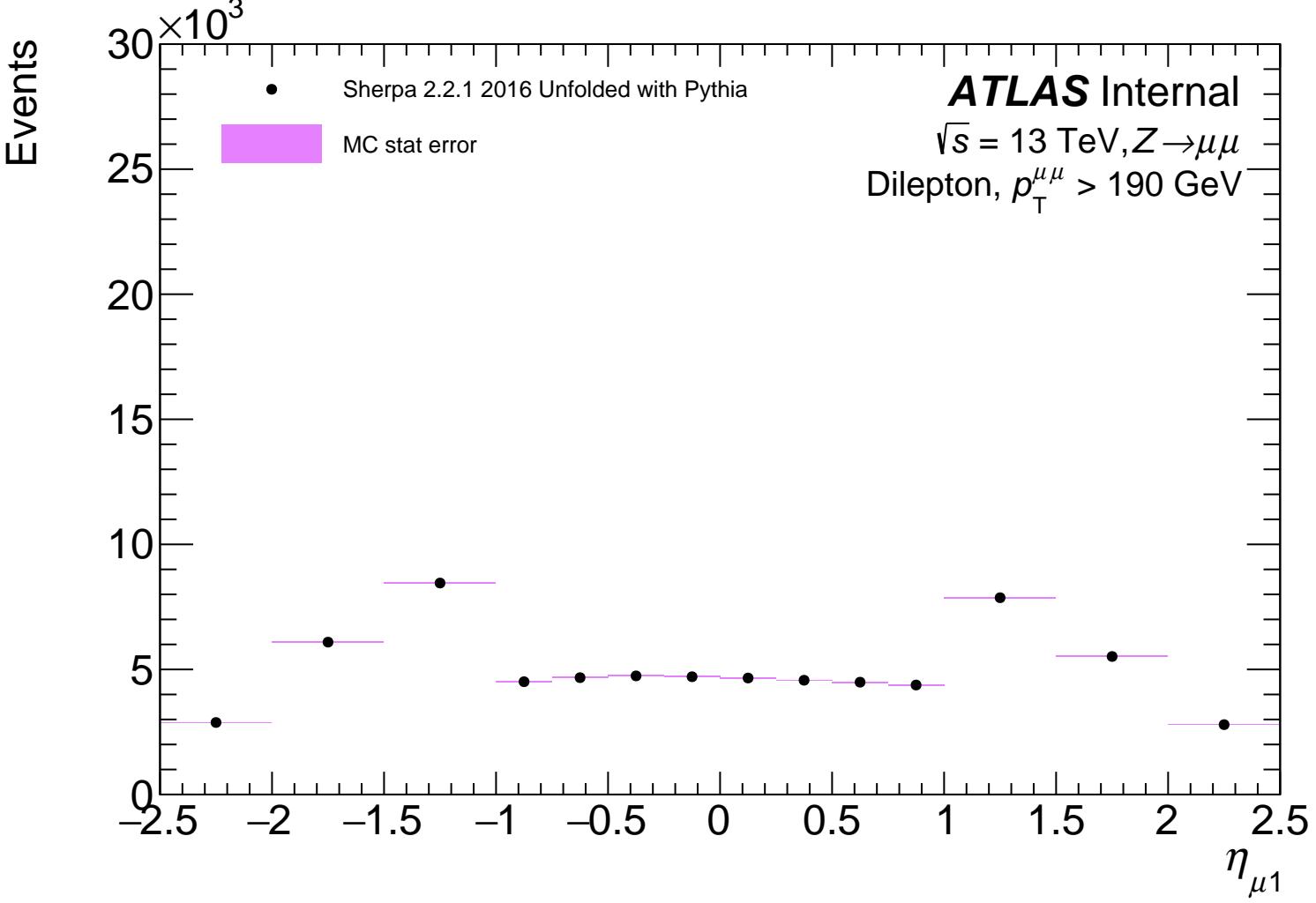
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

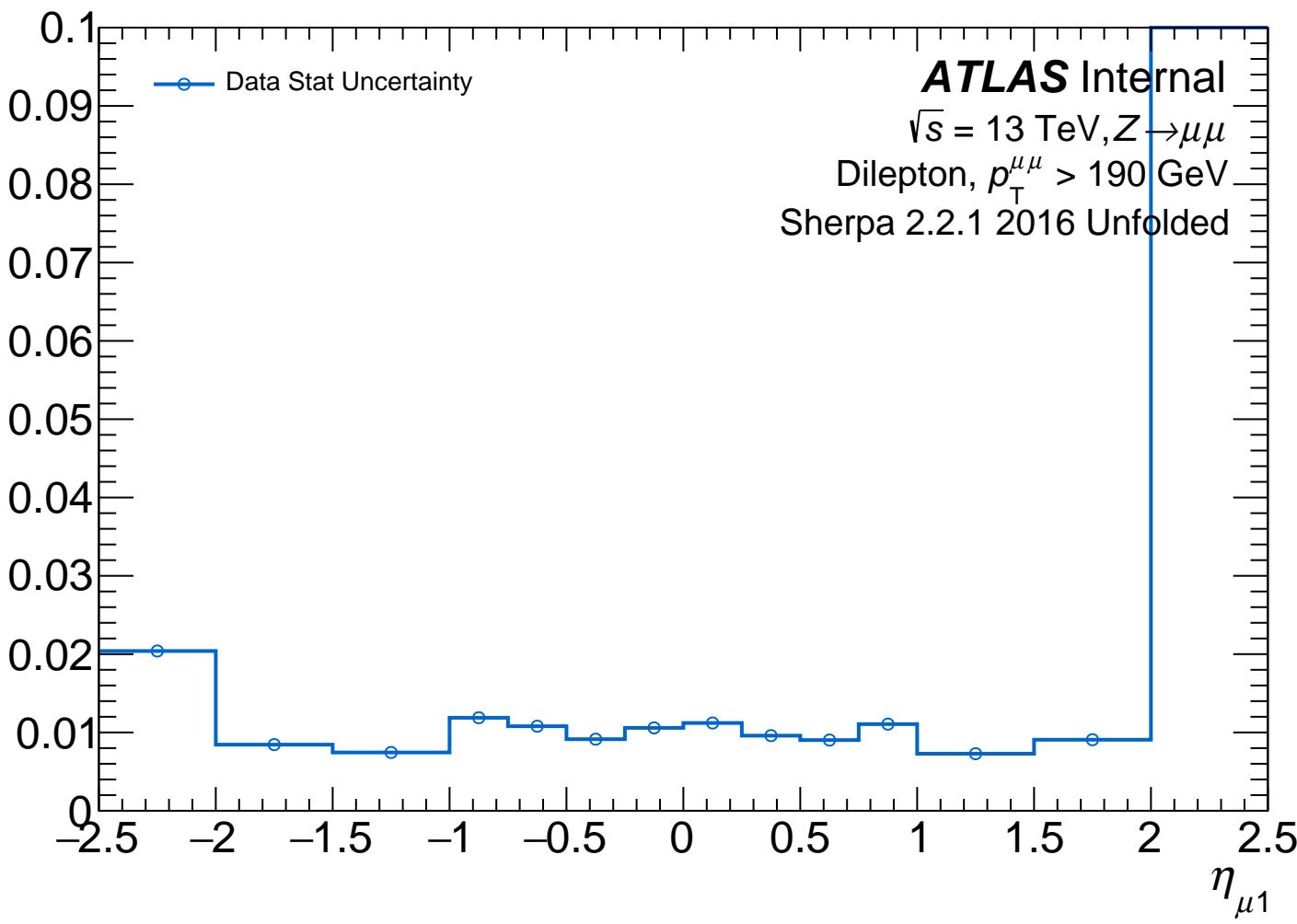
Sherpa 2.2.1 2016 Unfolded

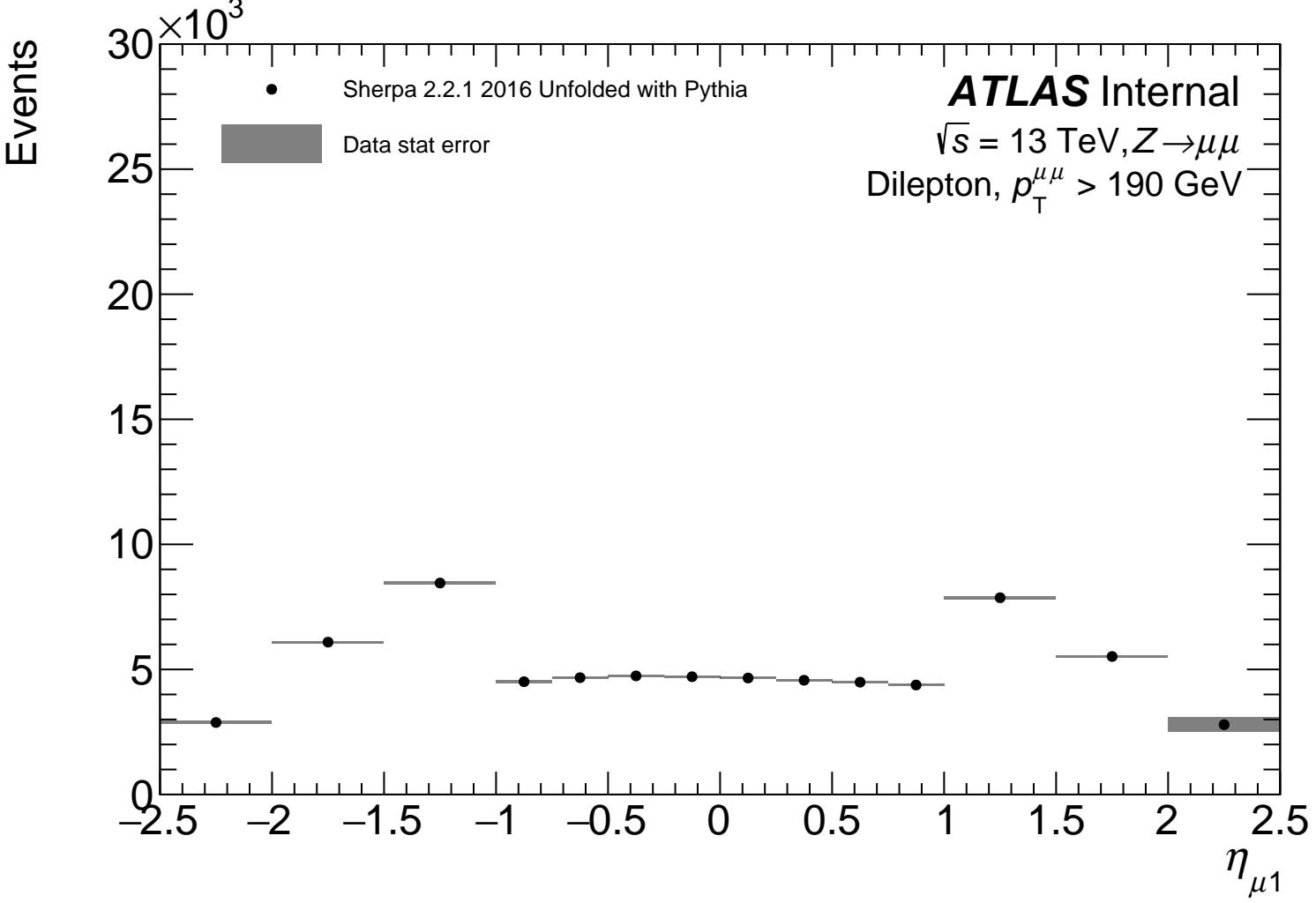


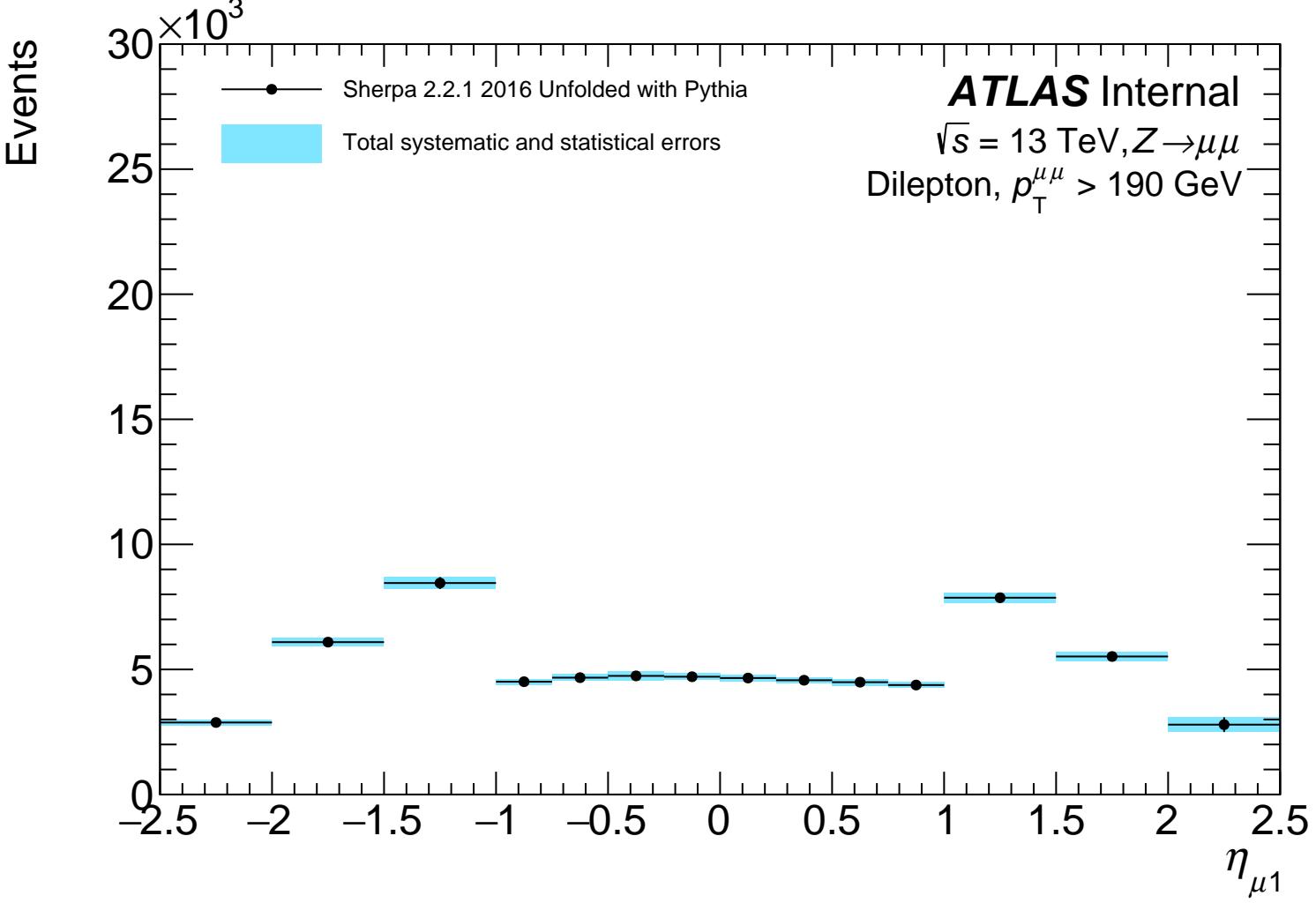


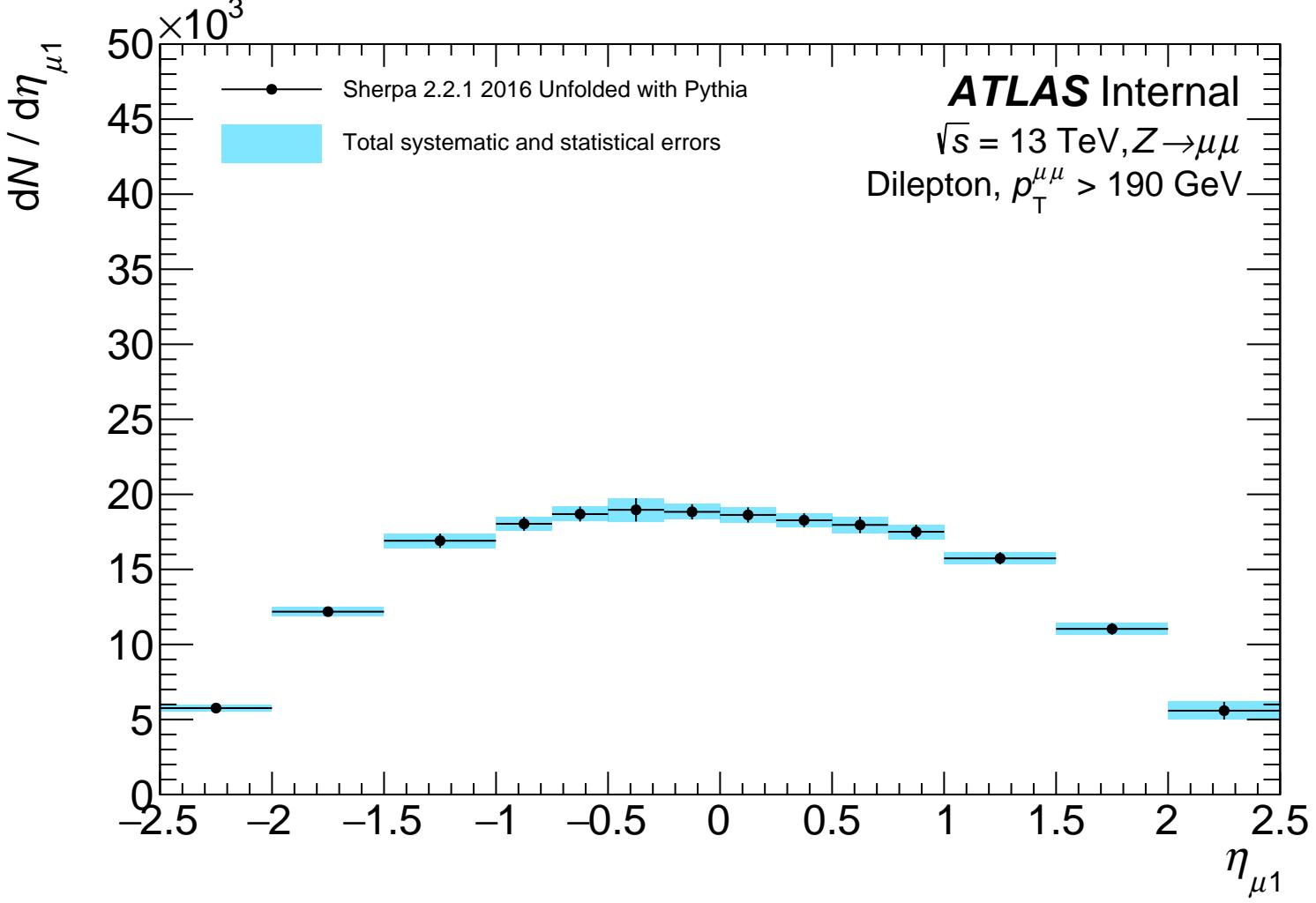


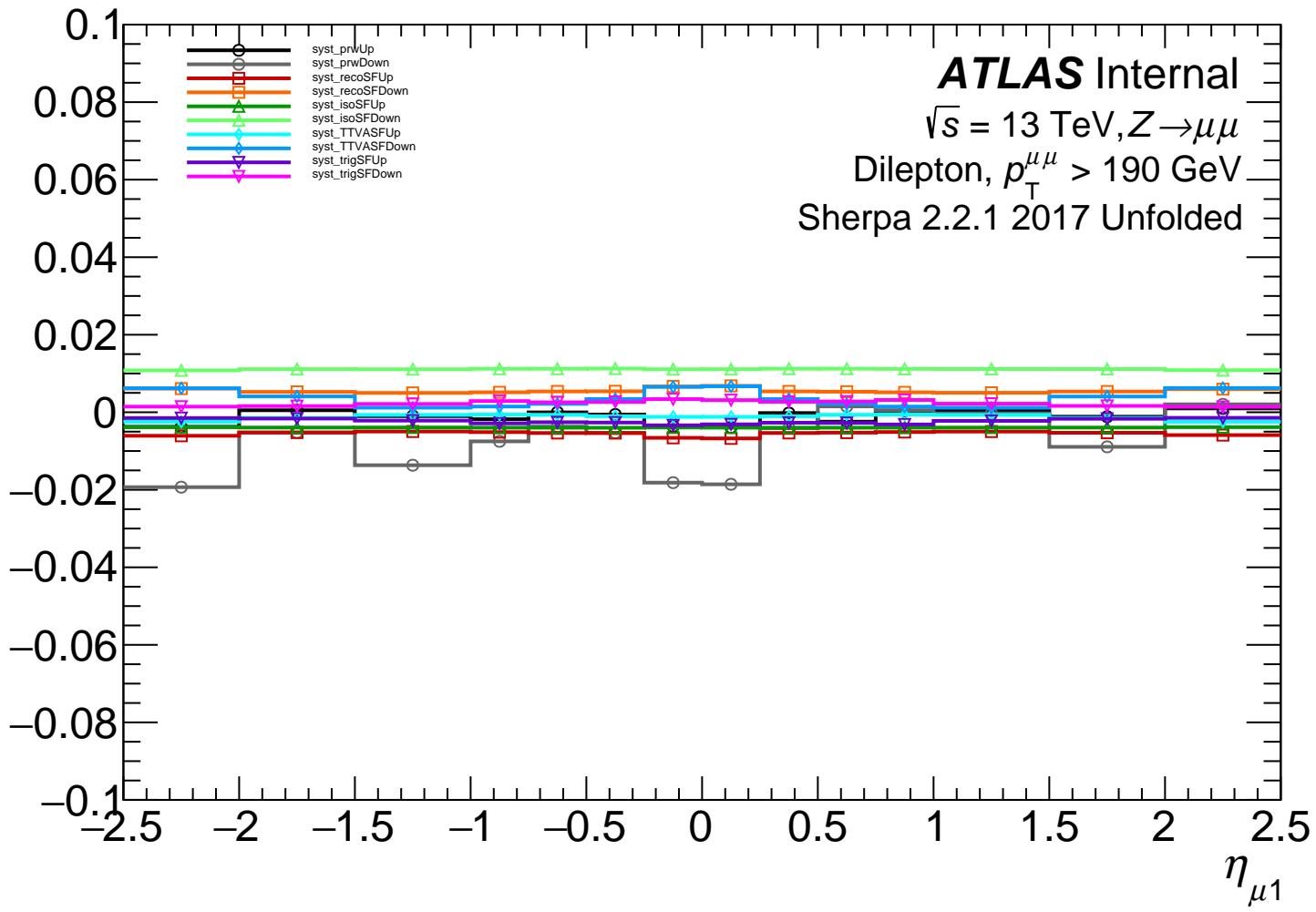


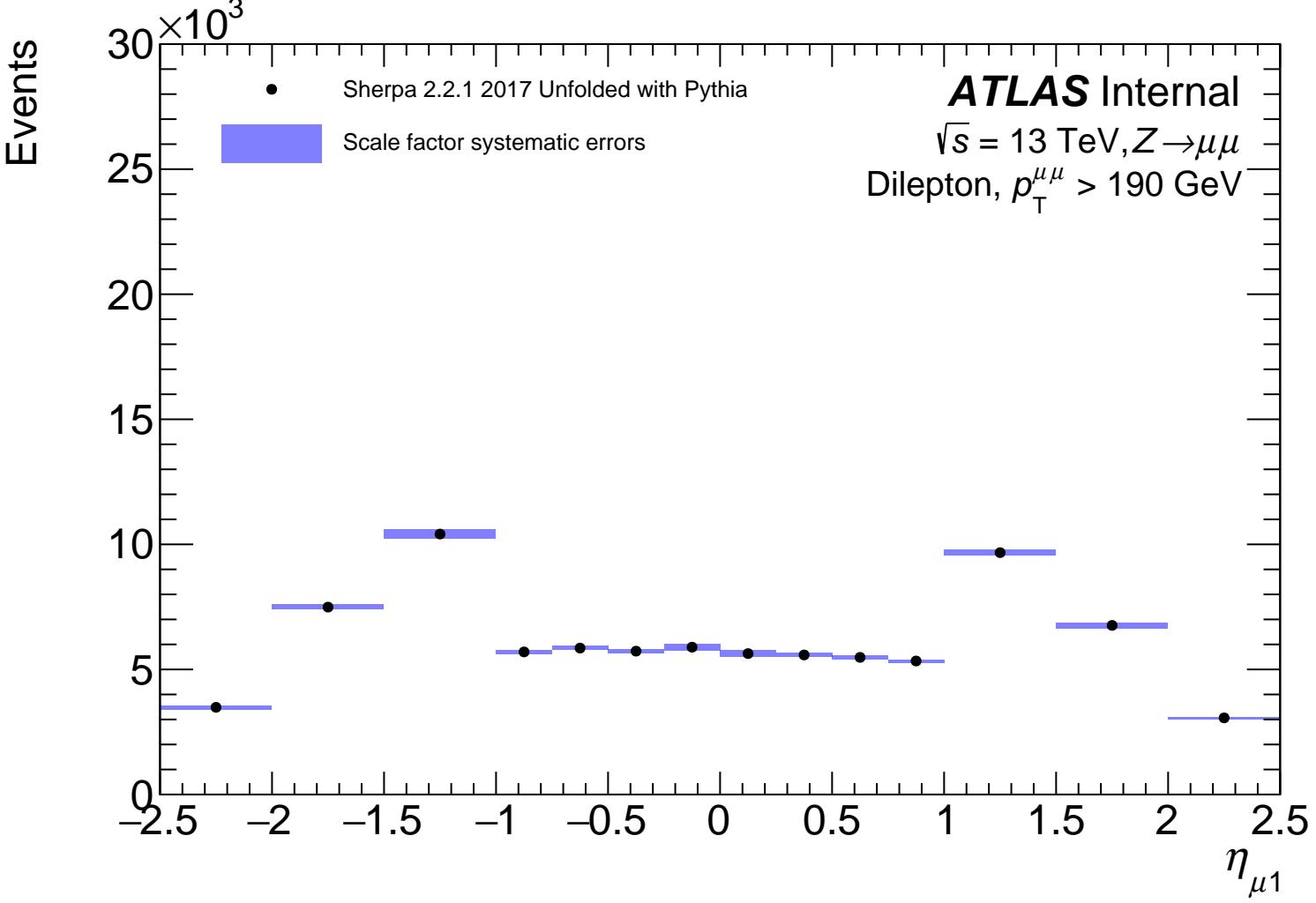


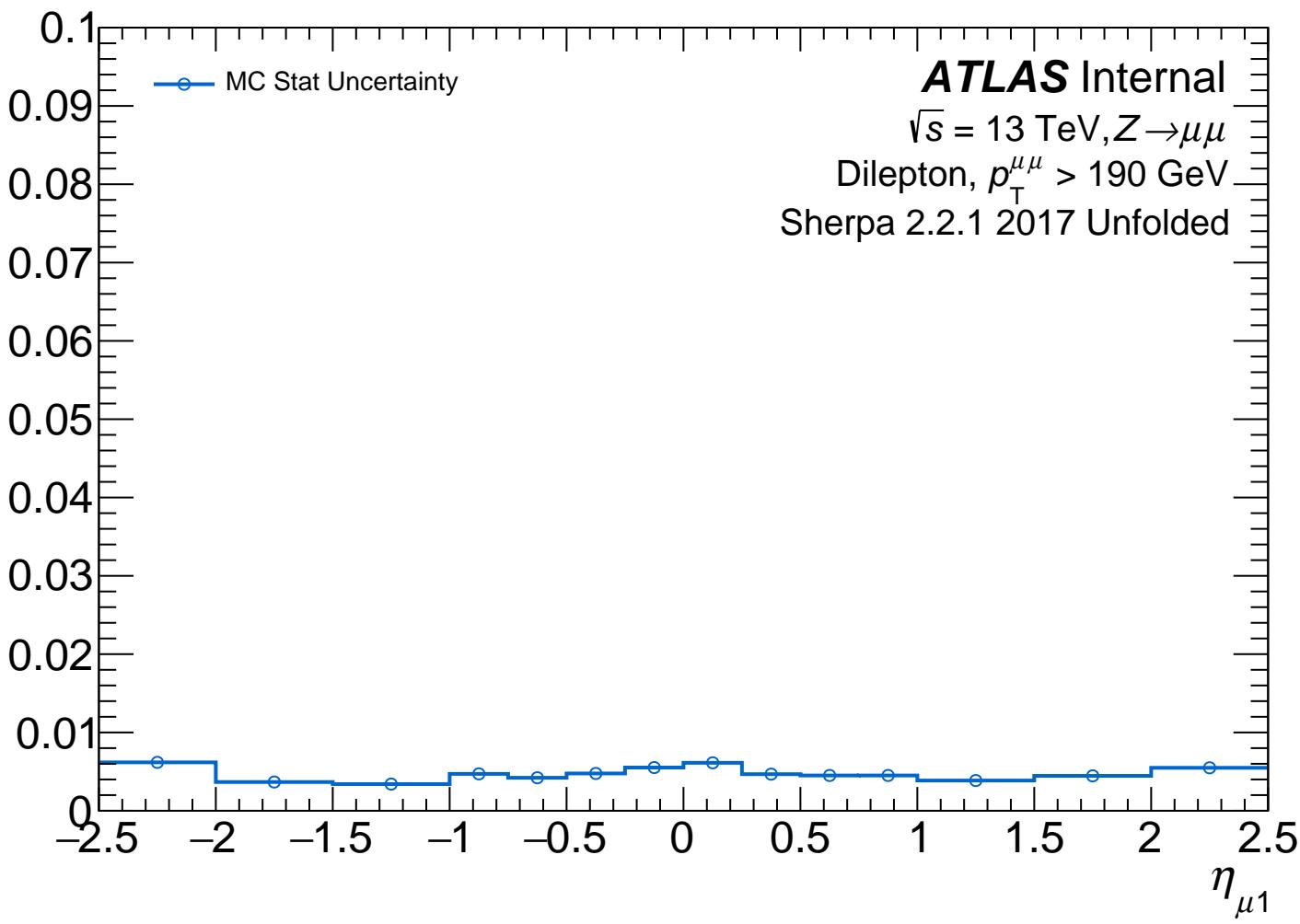


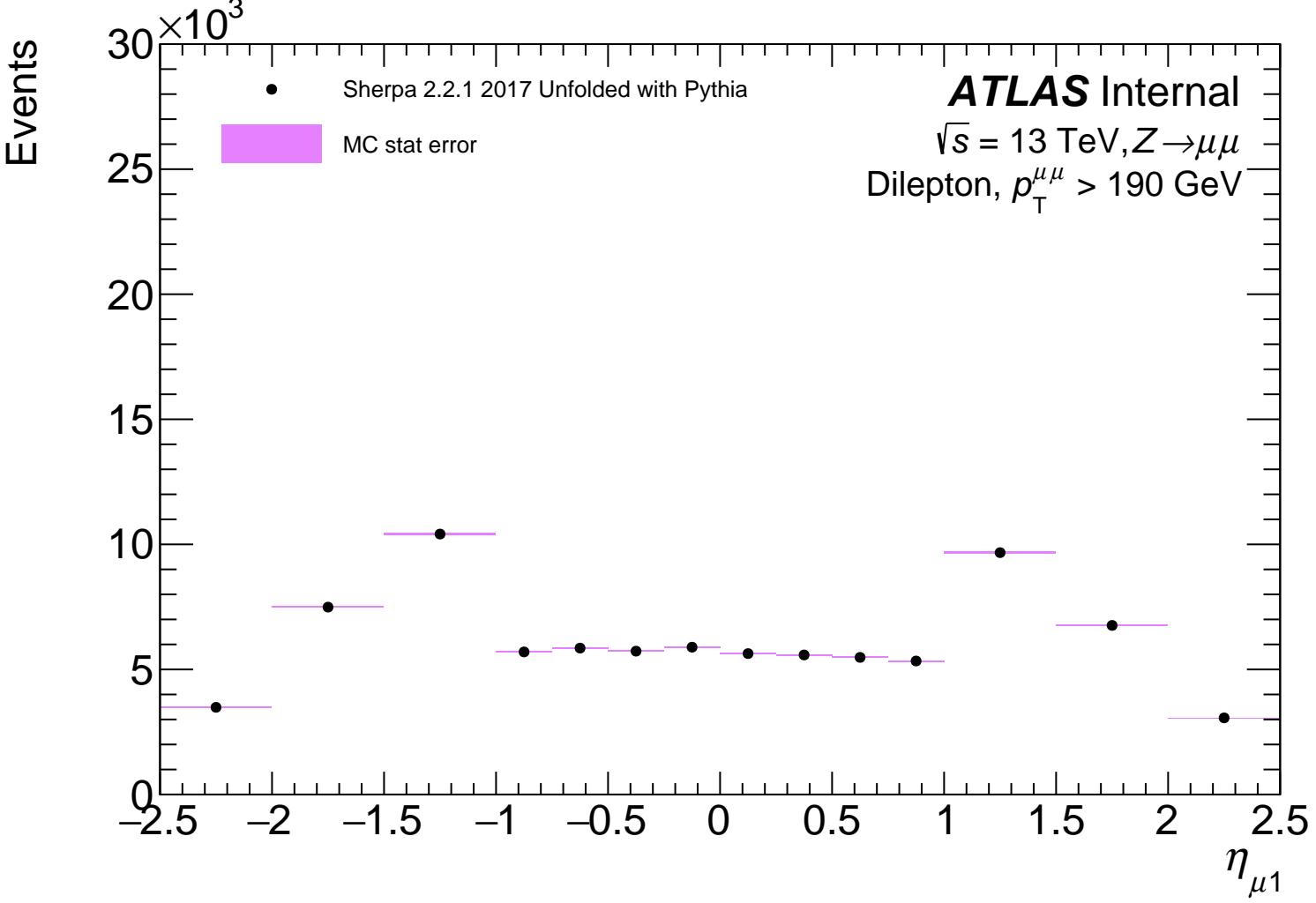


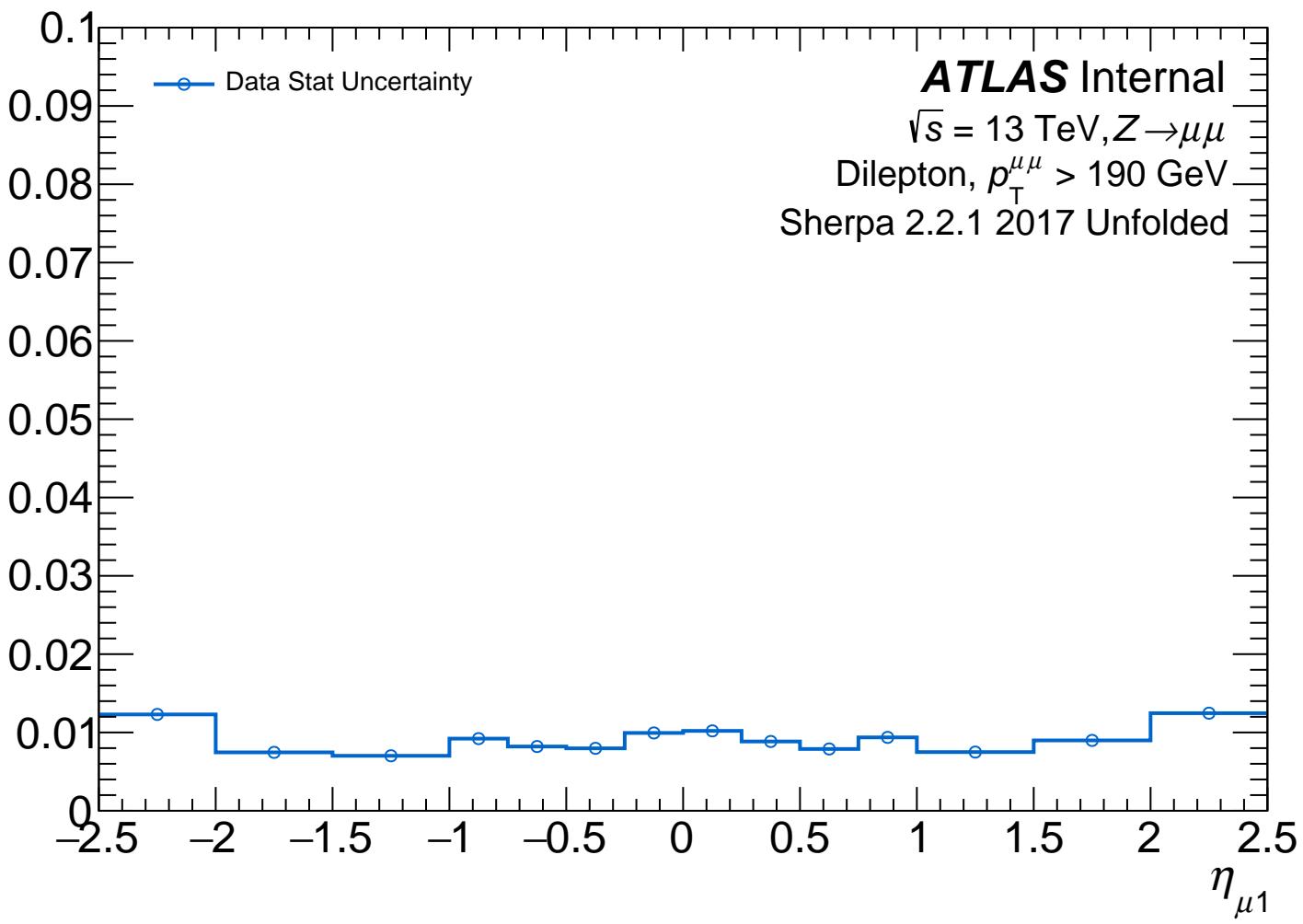


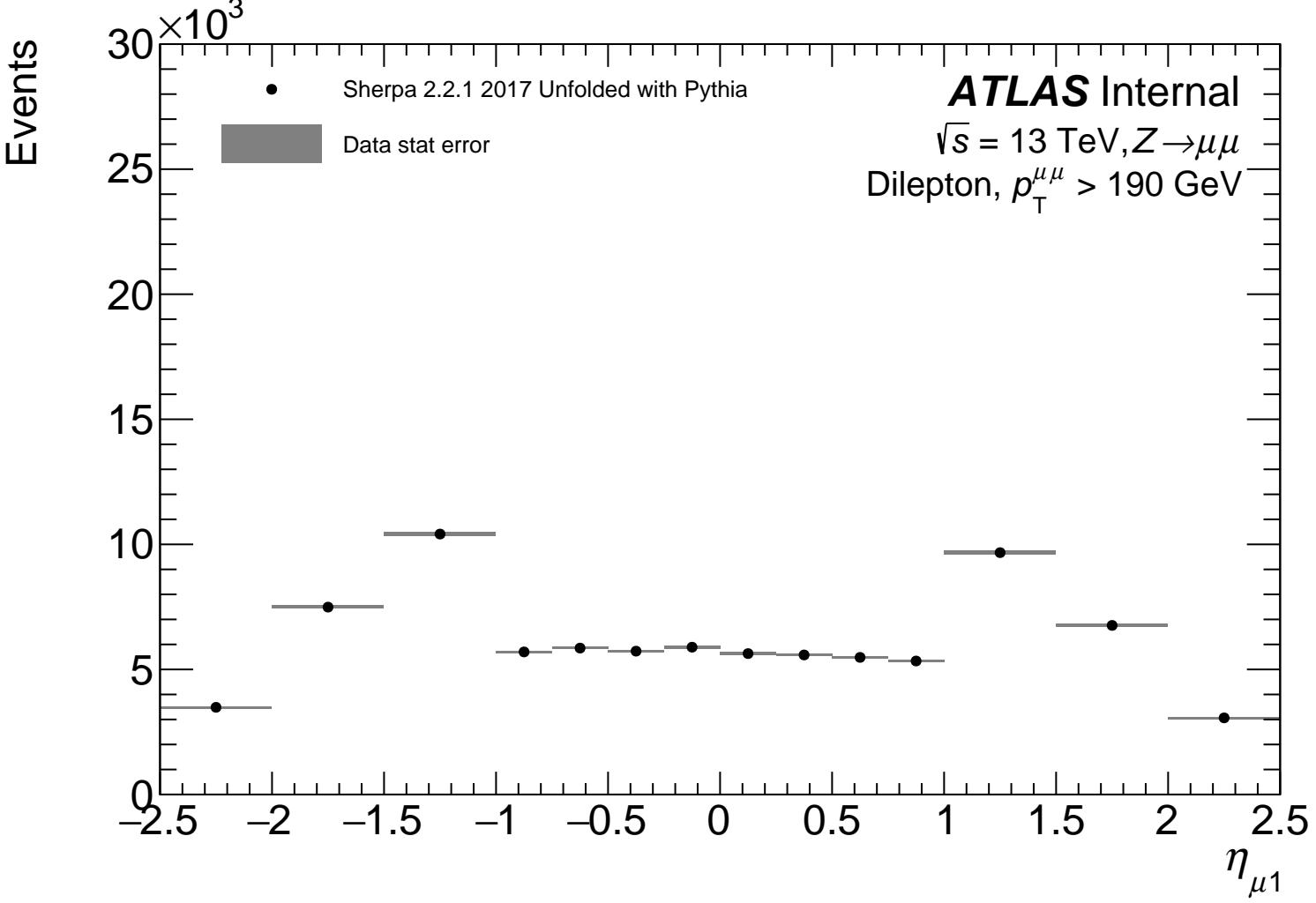


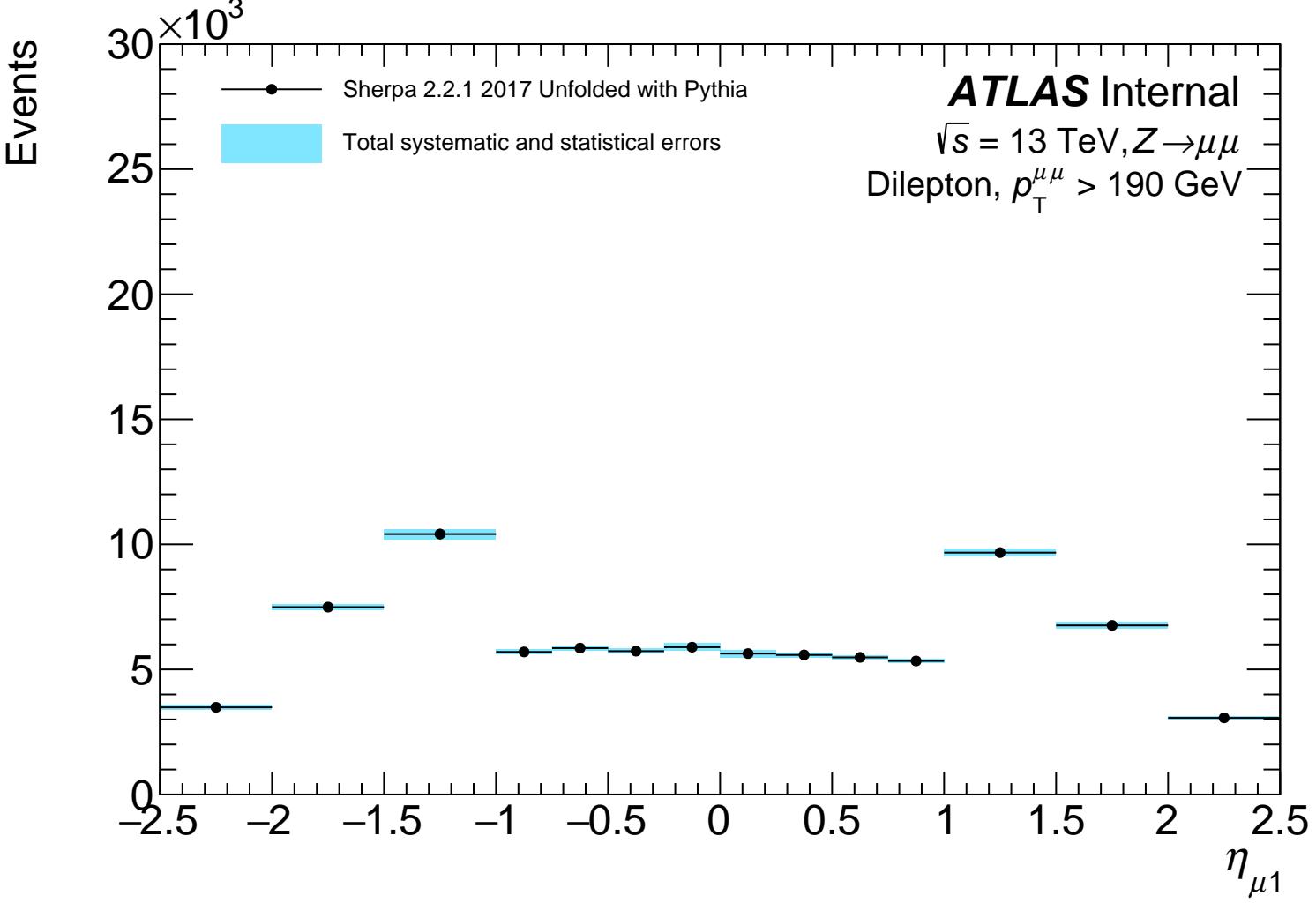


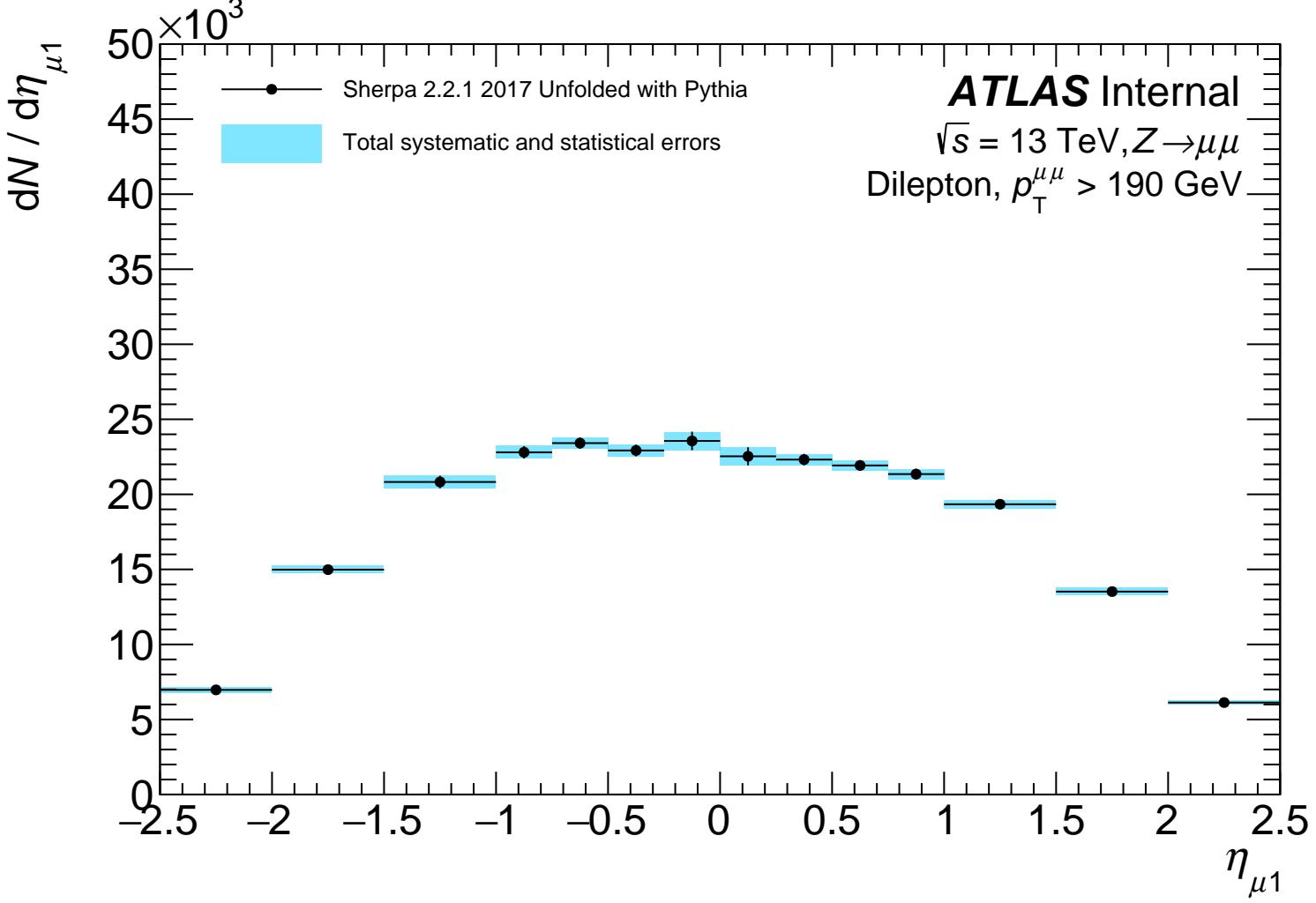


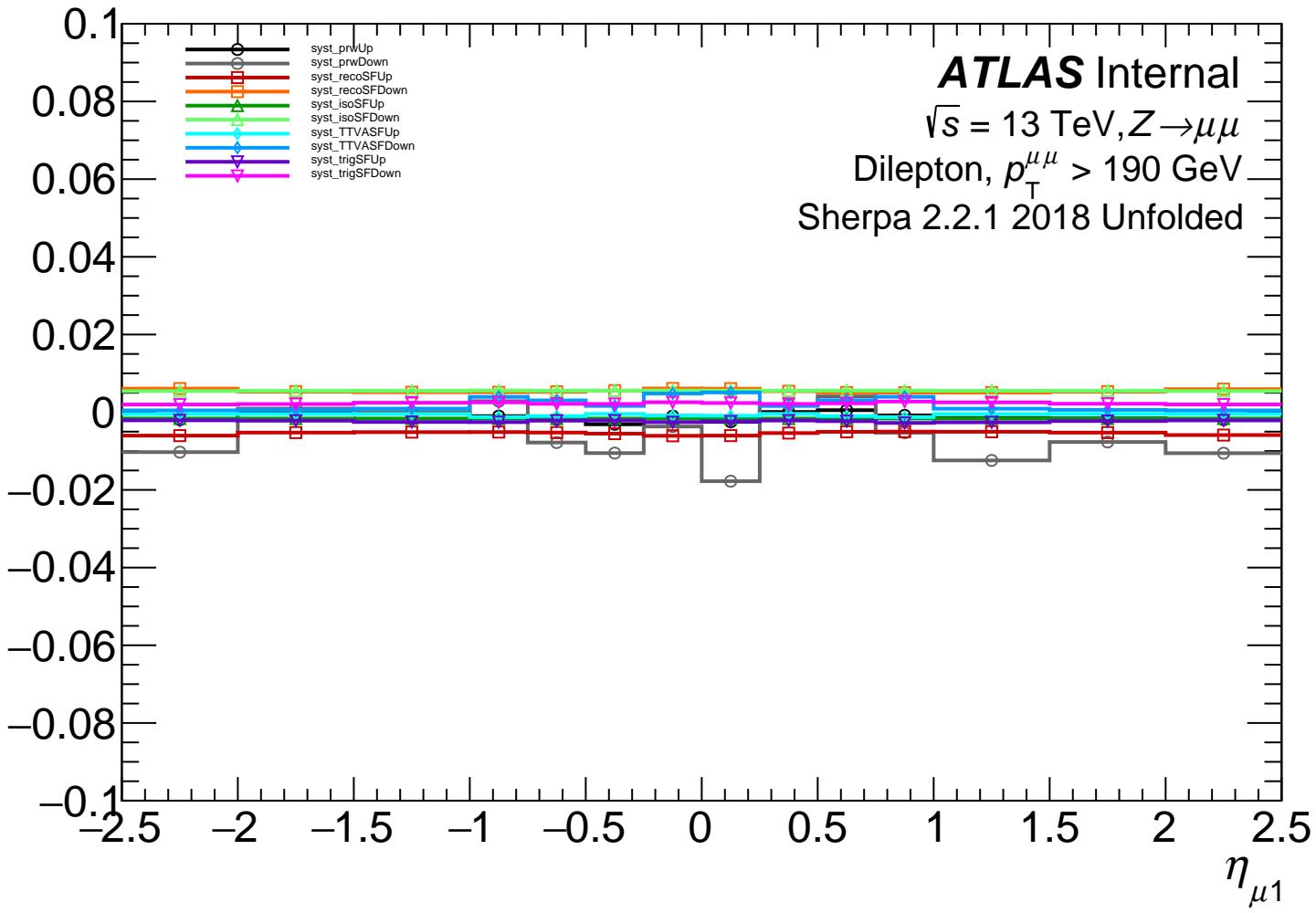


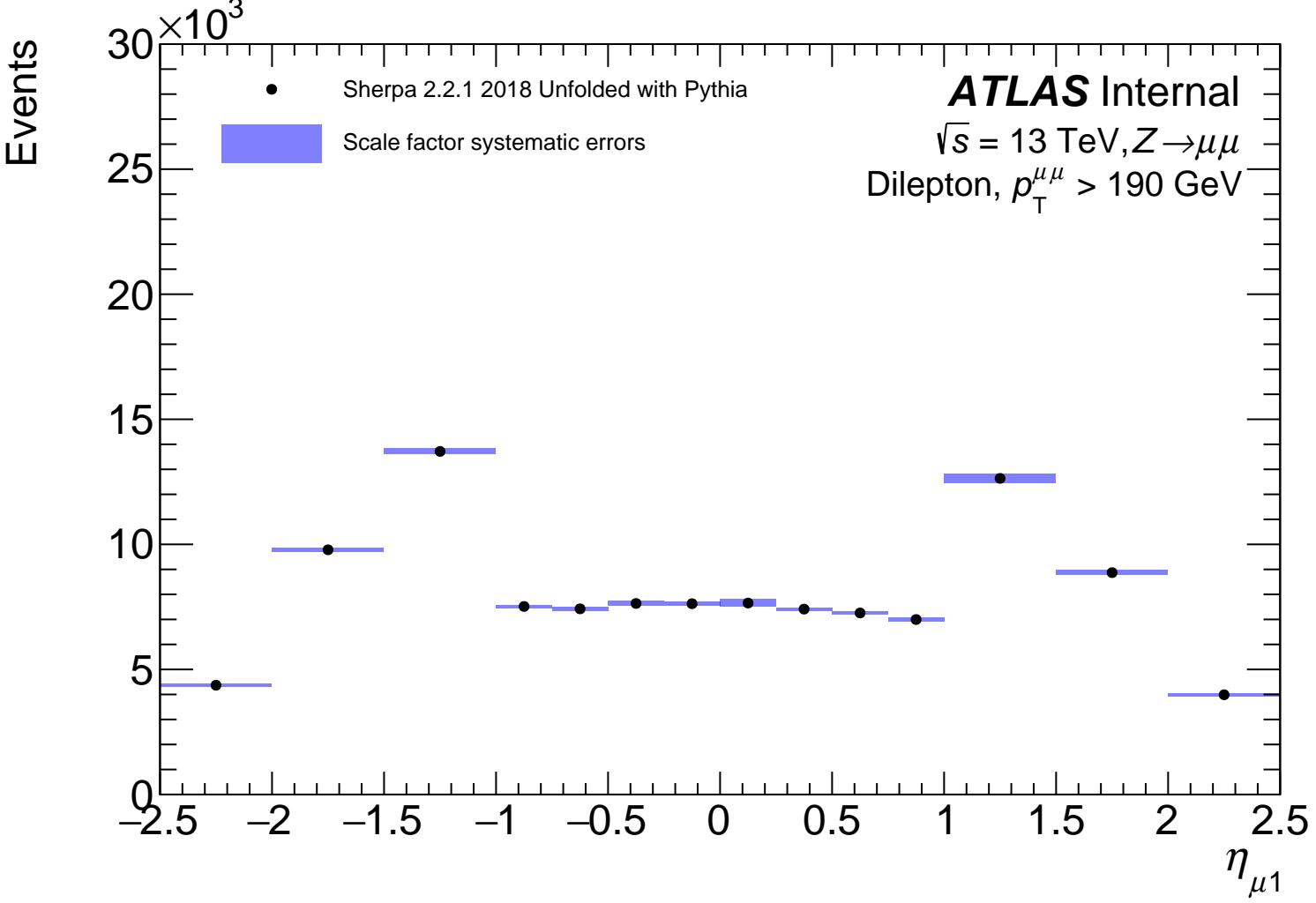


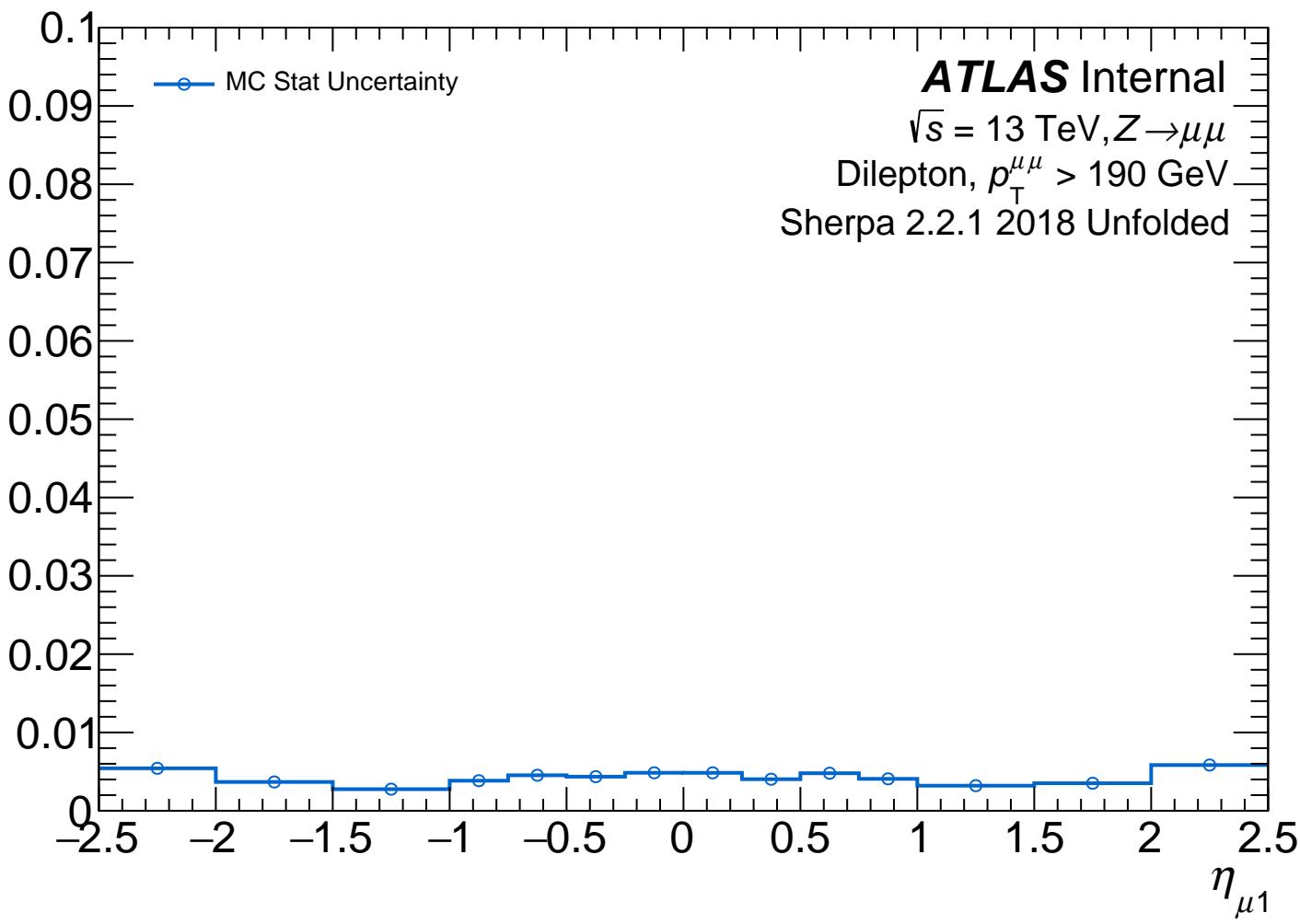


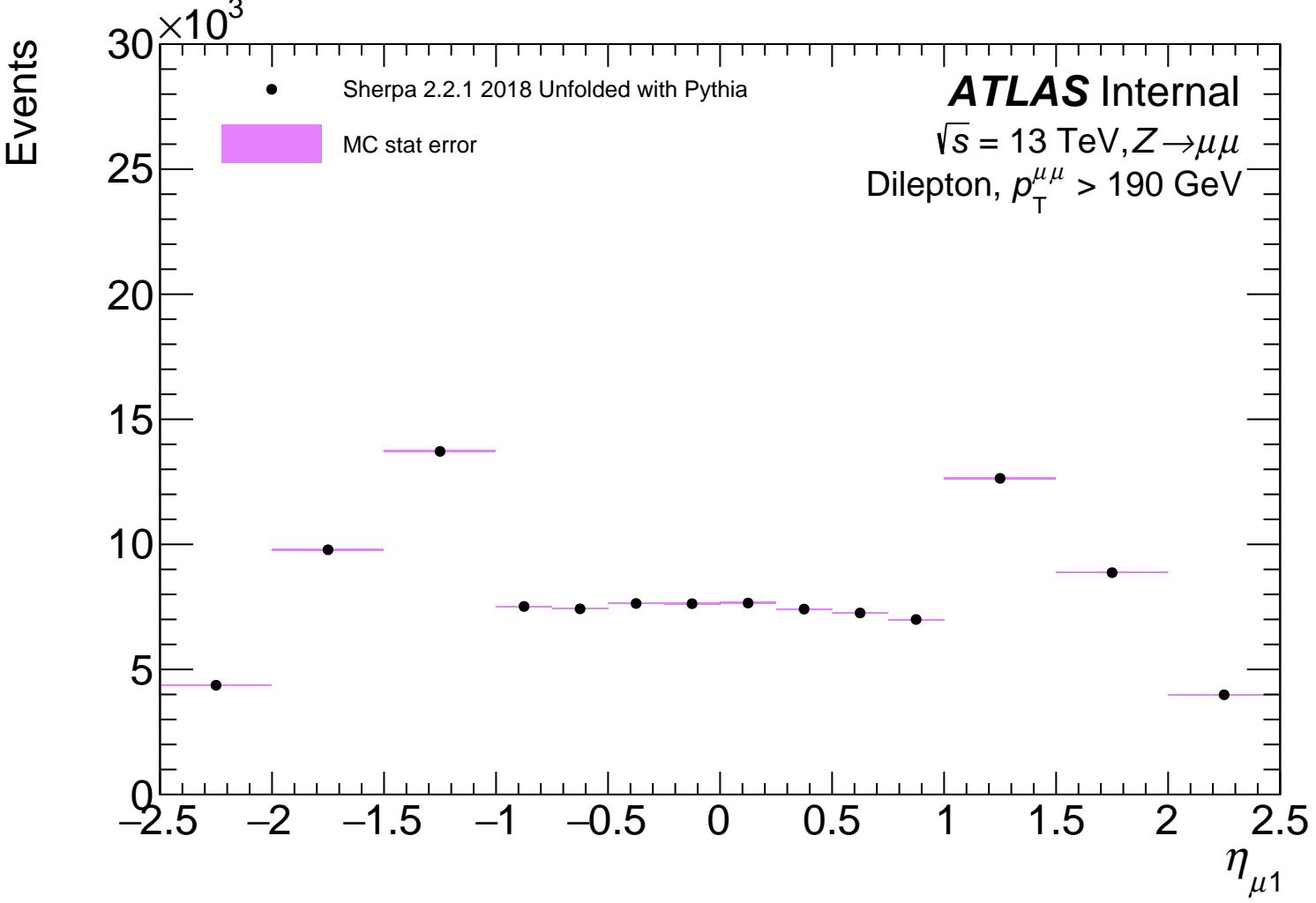


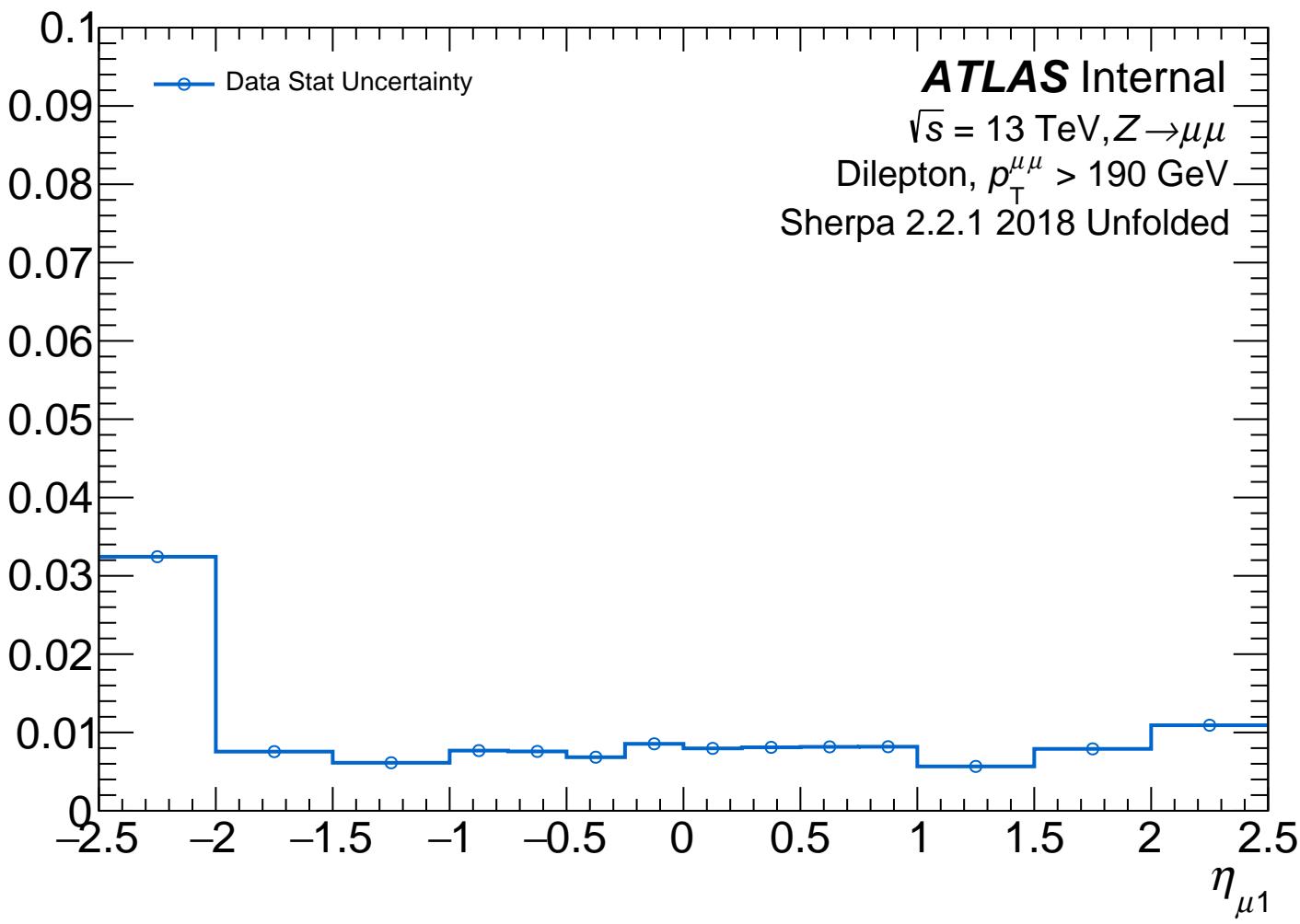


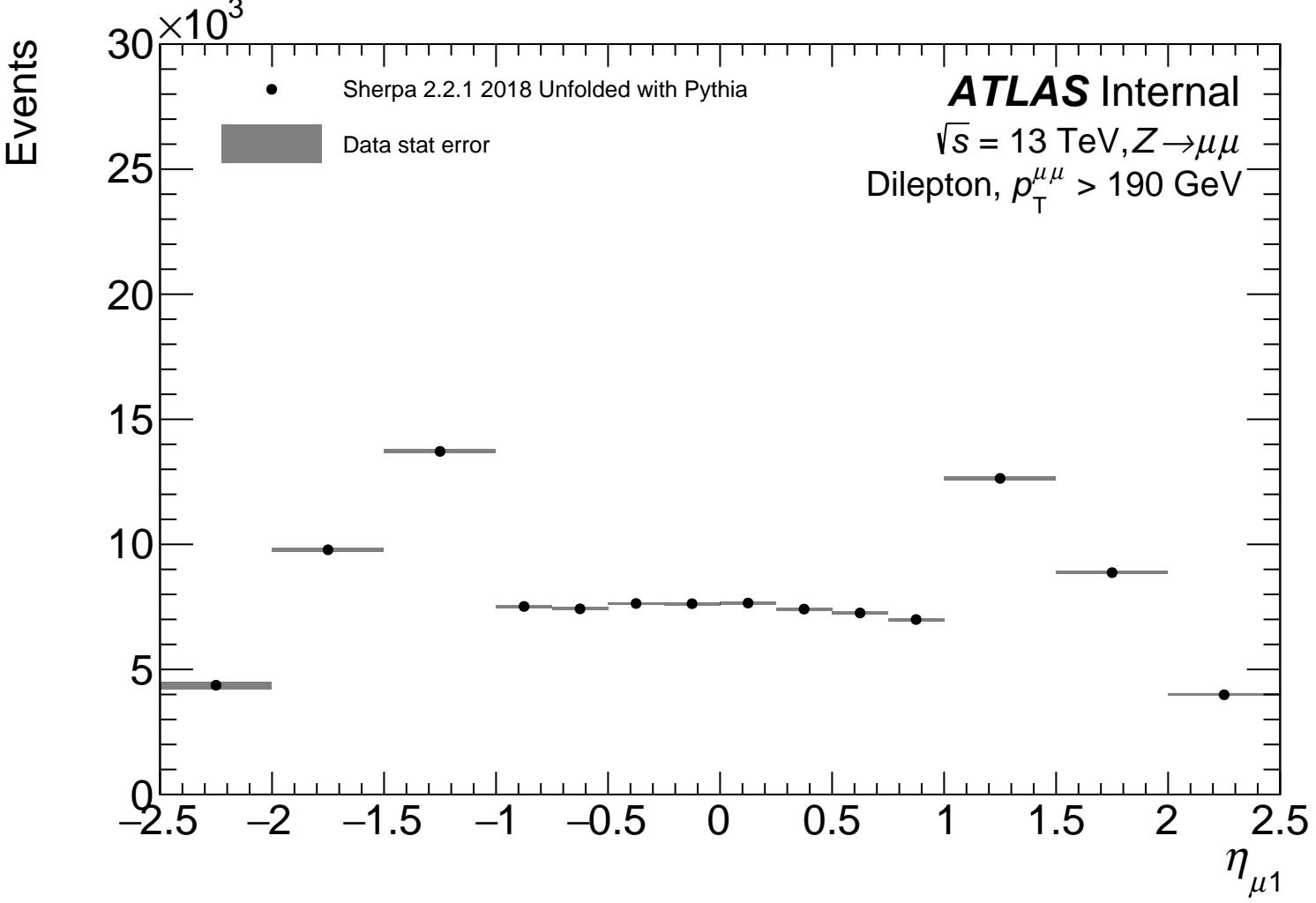


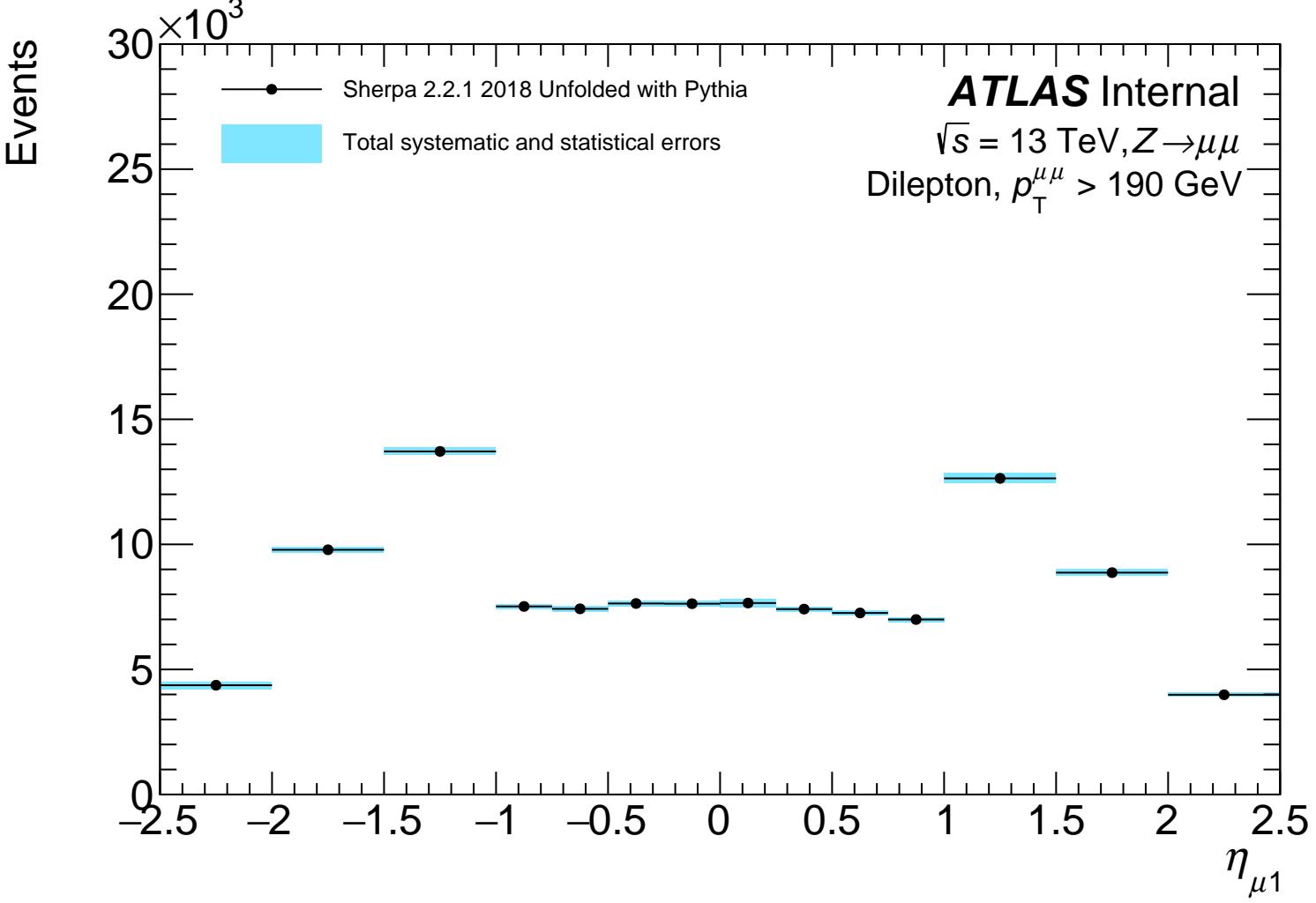


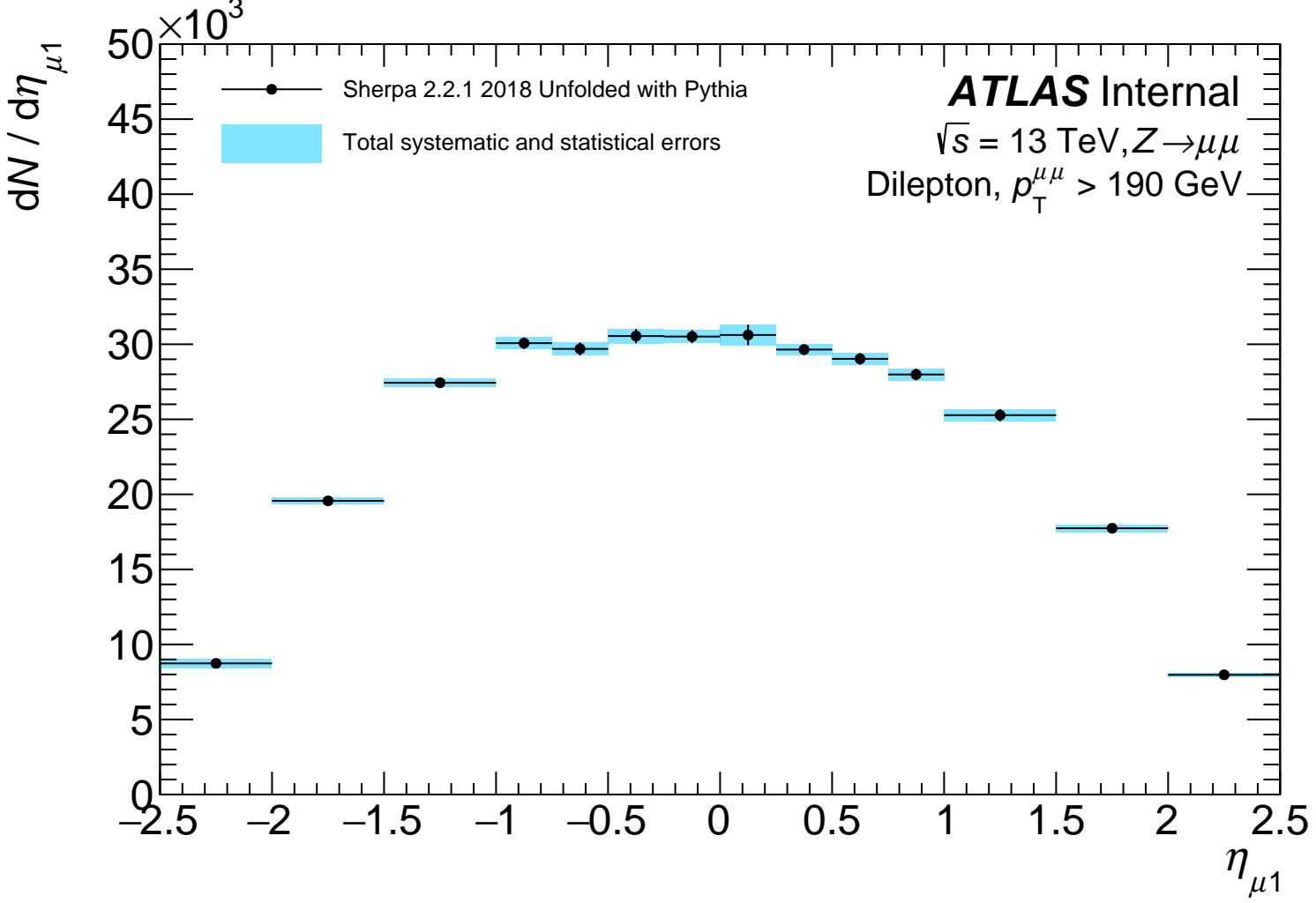










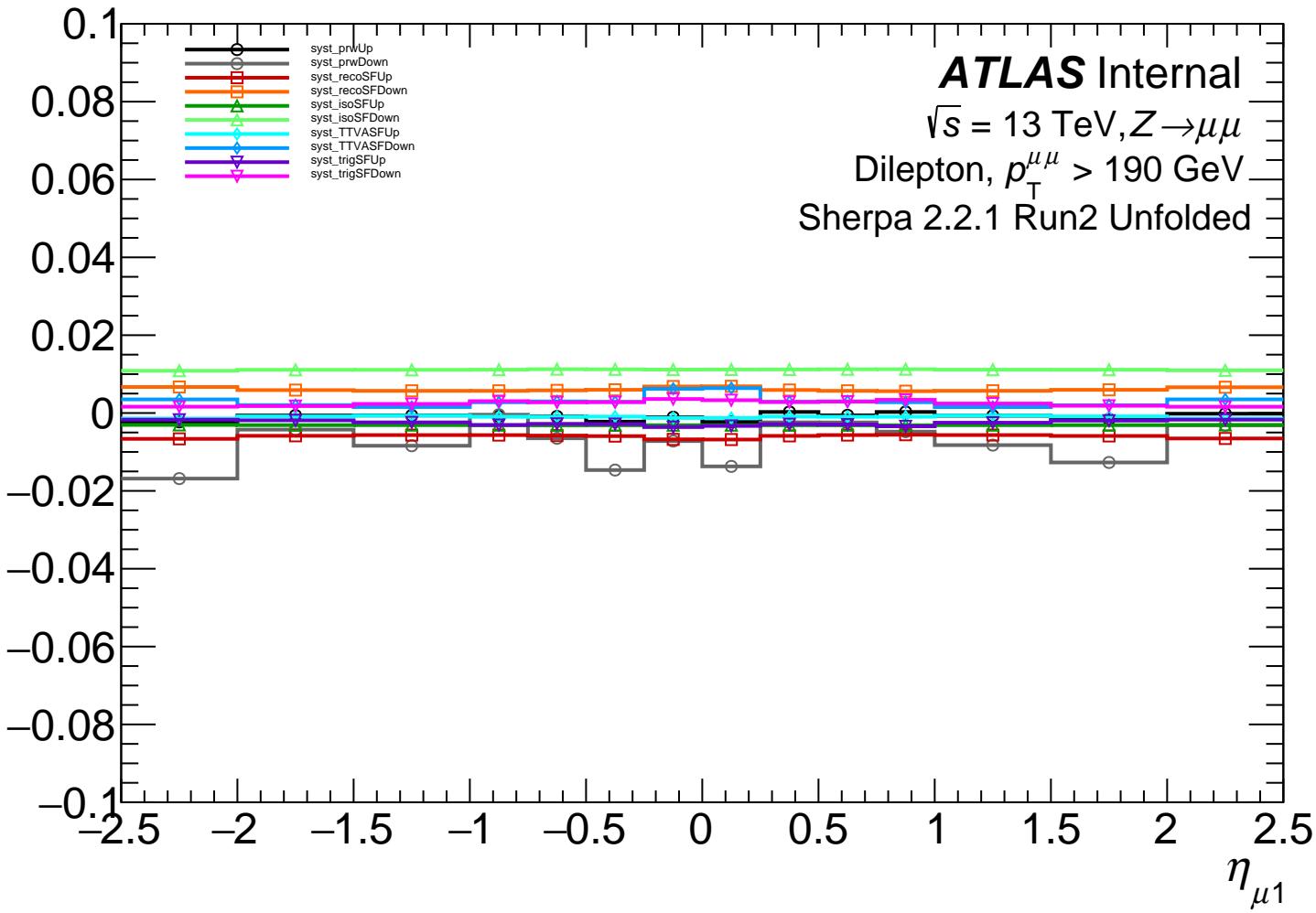


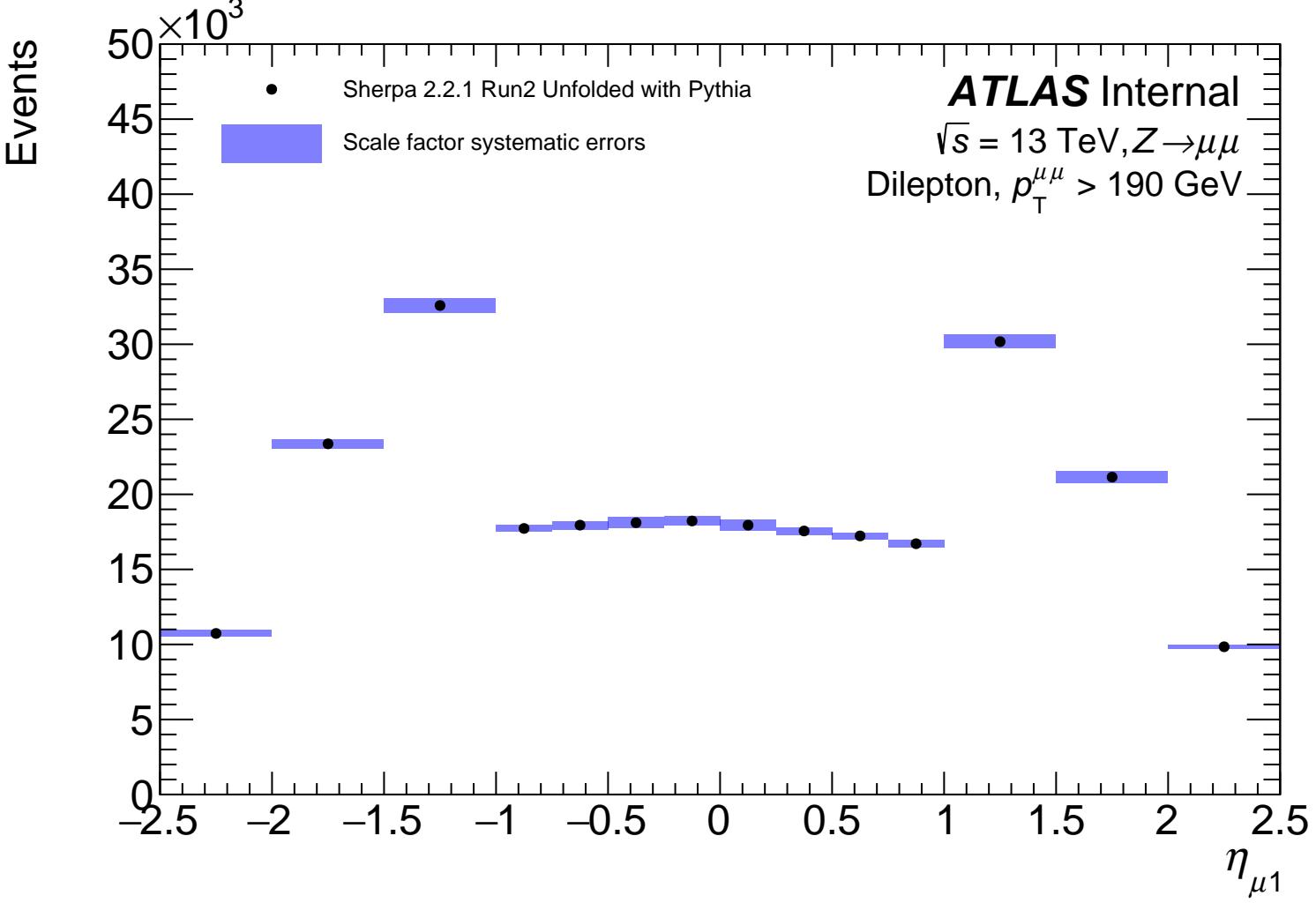
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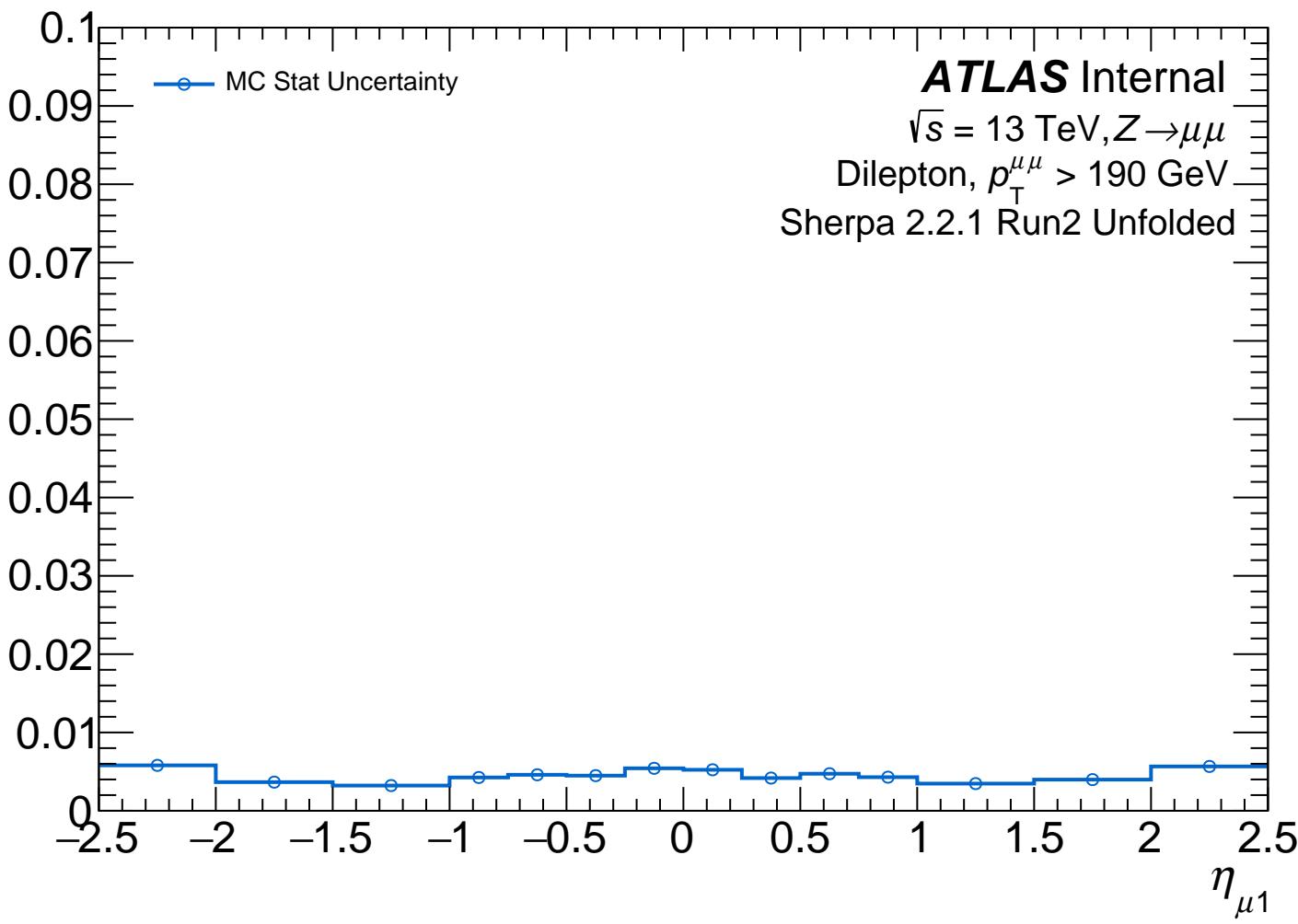
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

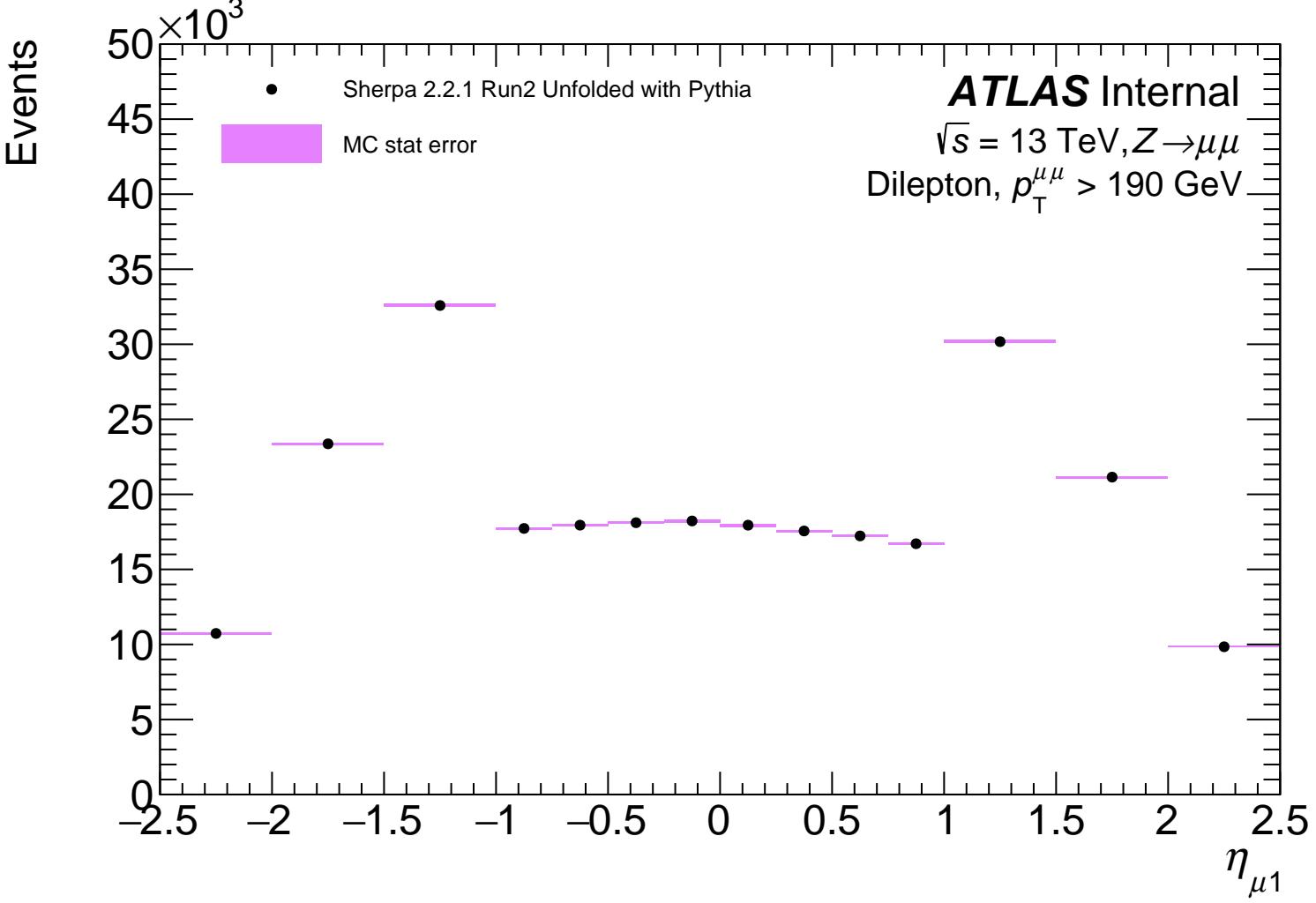
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

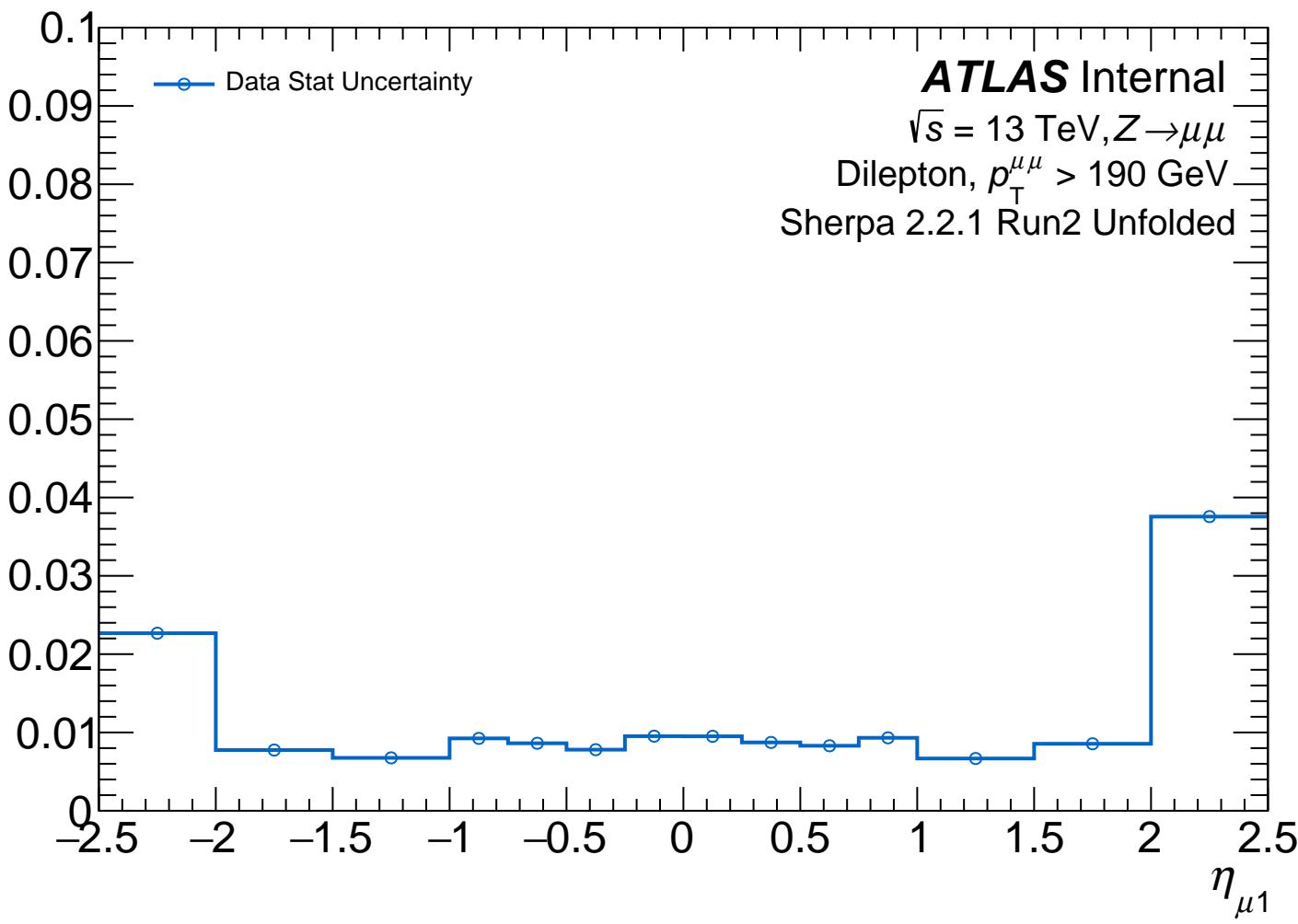
Sherpa 2.2.1 Run2 Unfolded

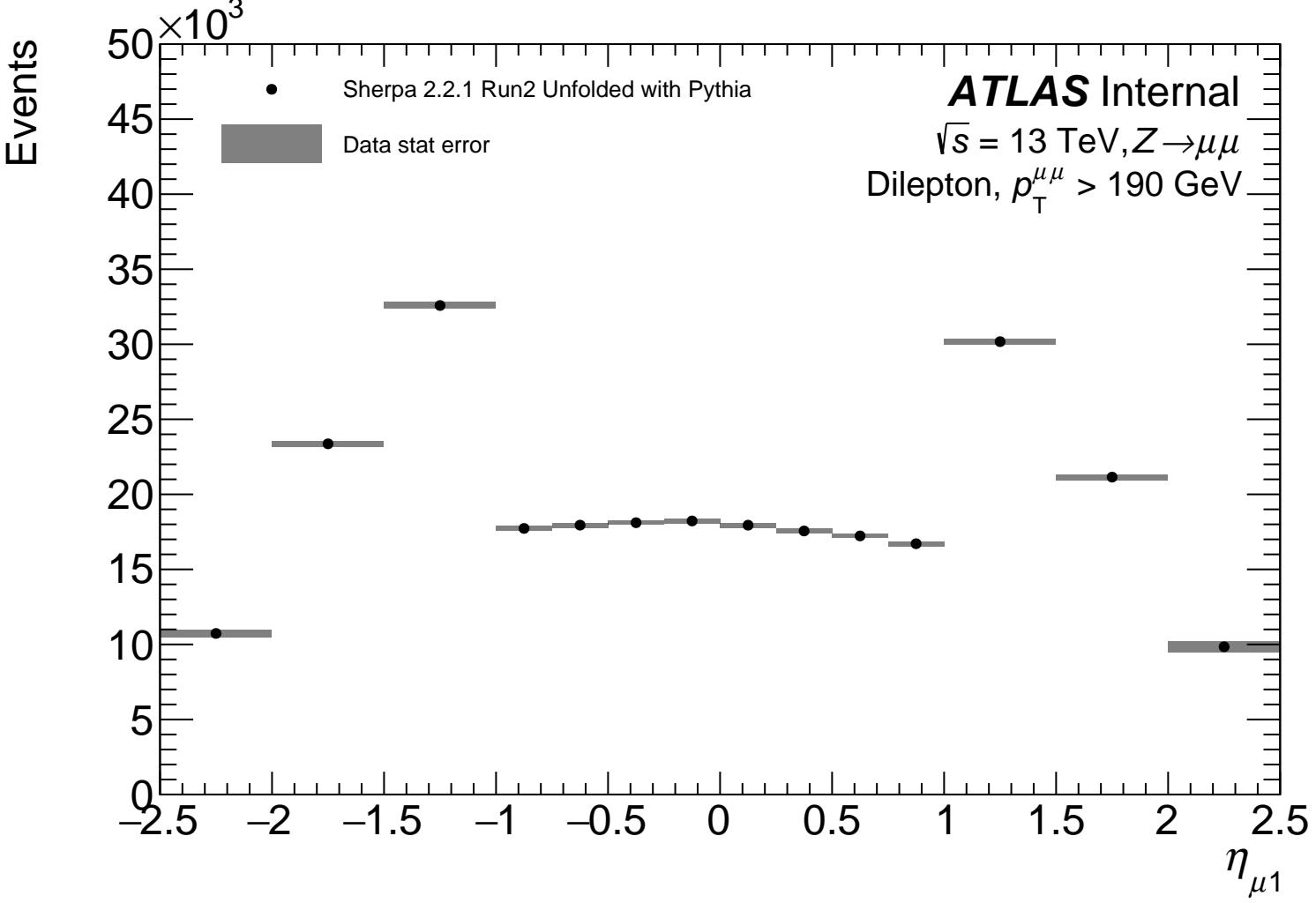


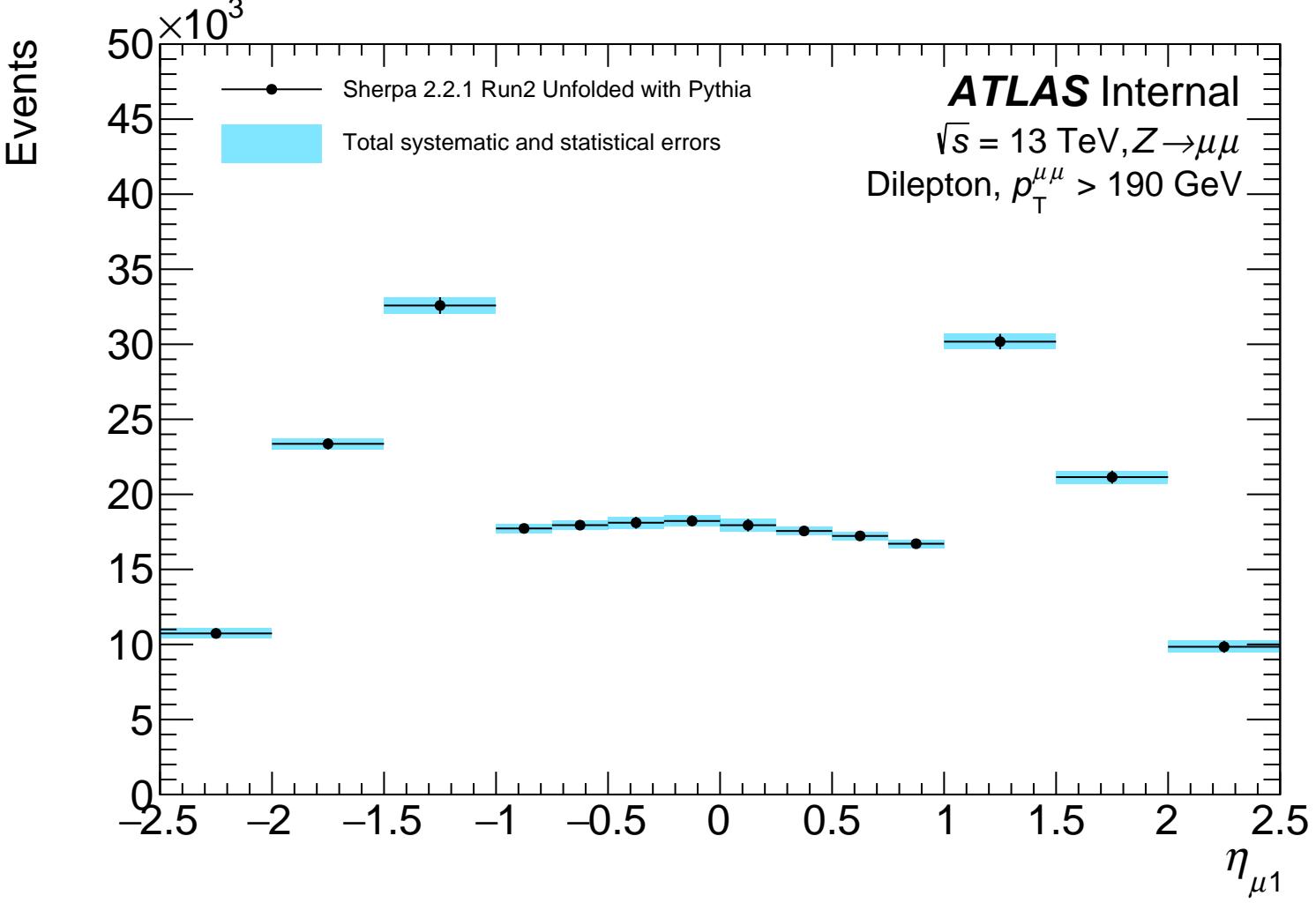


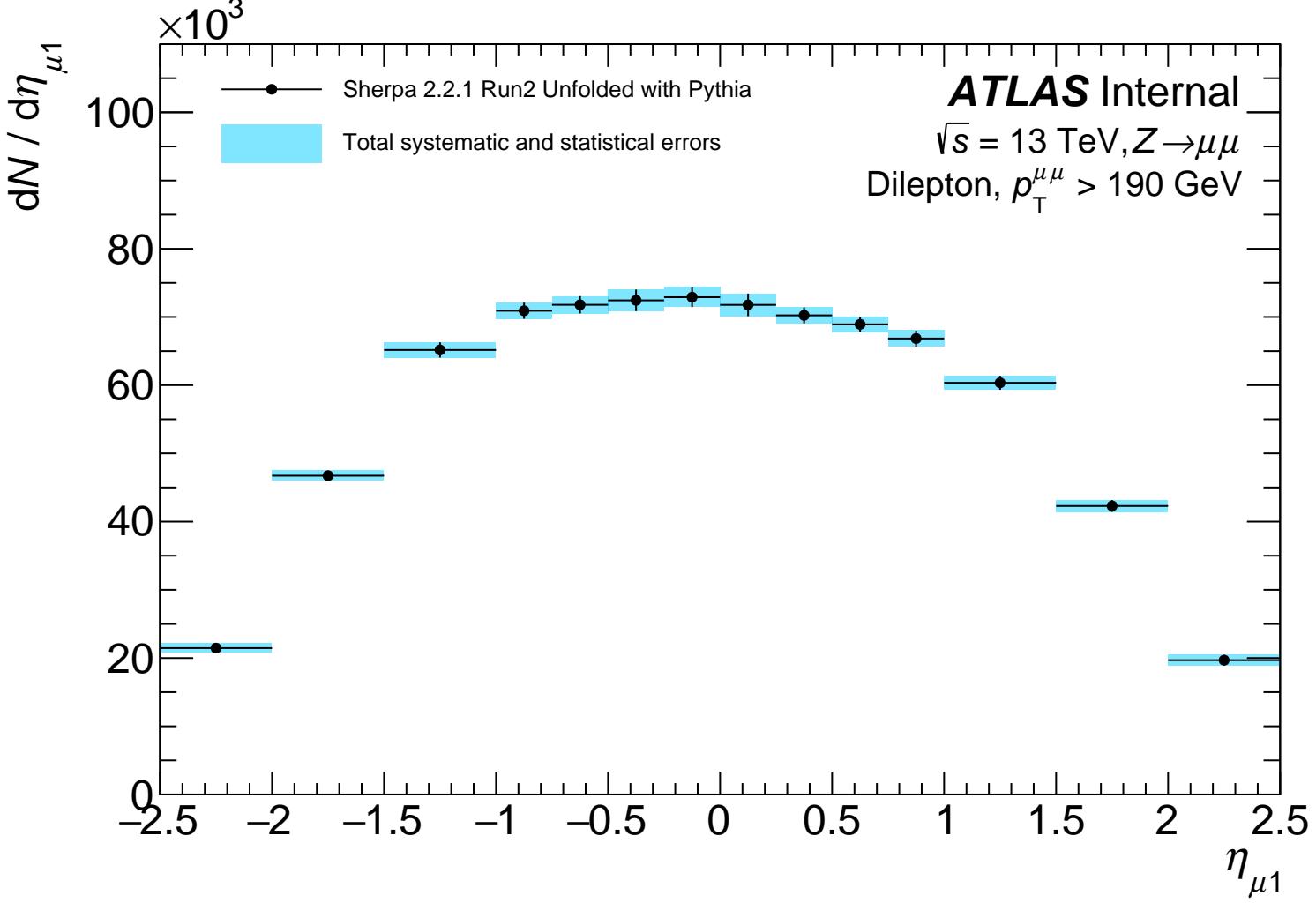


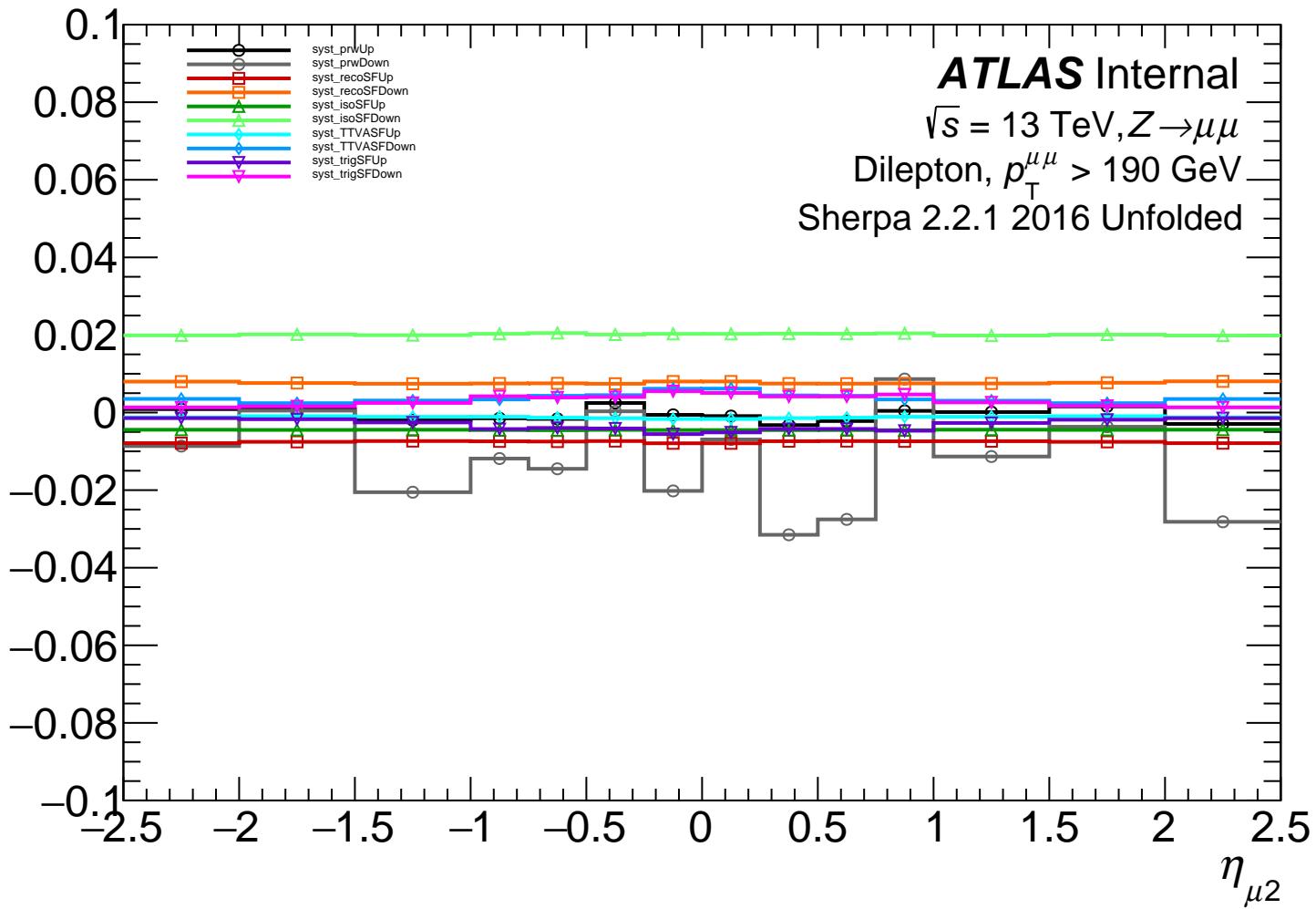


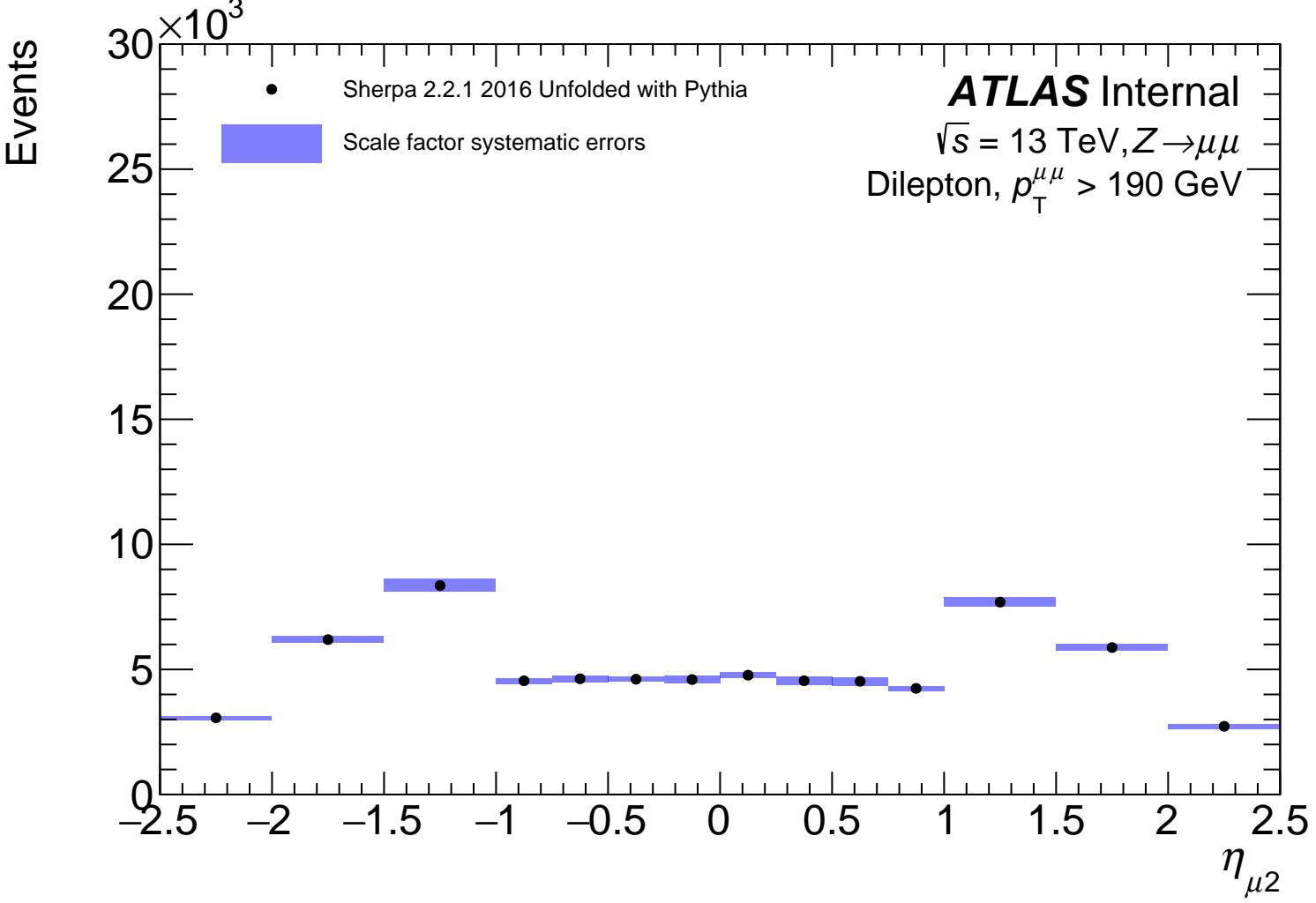


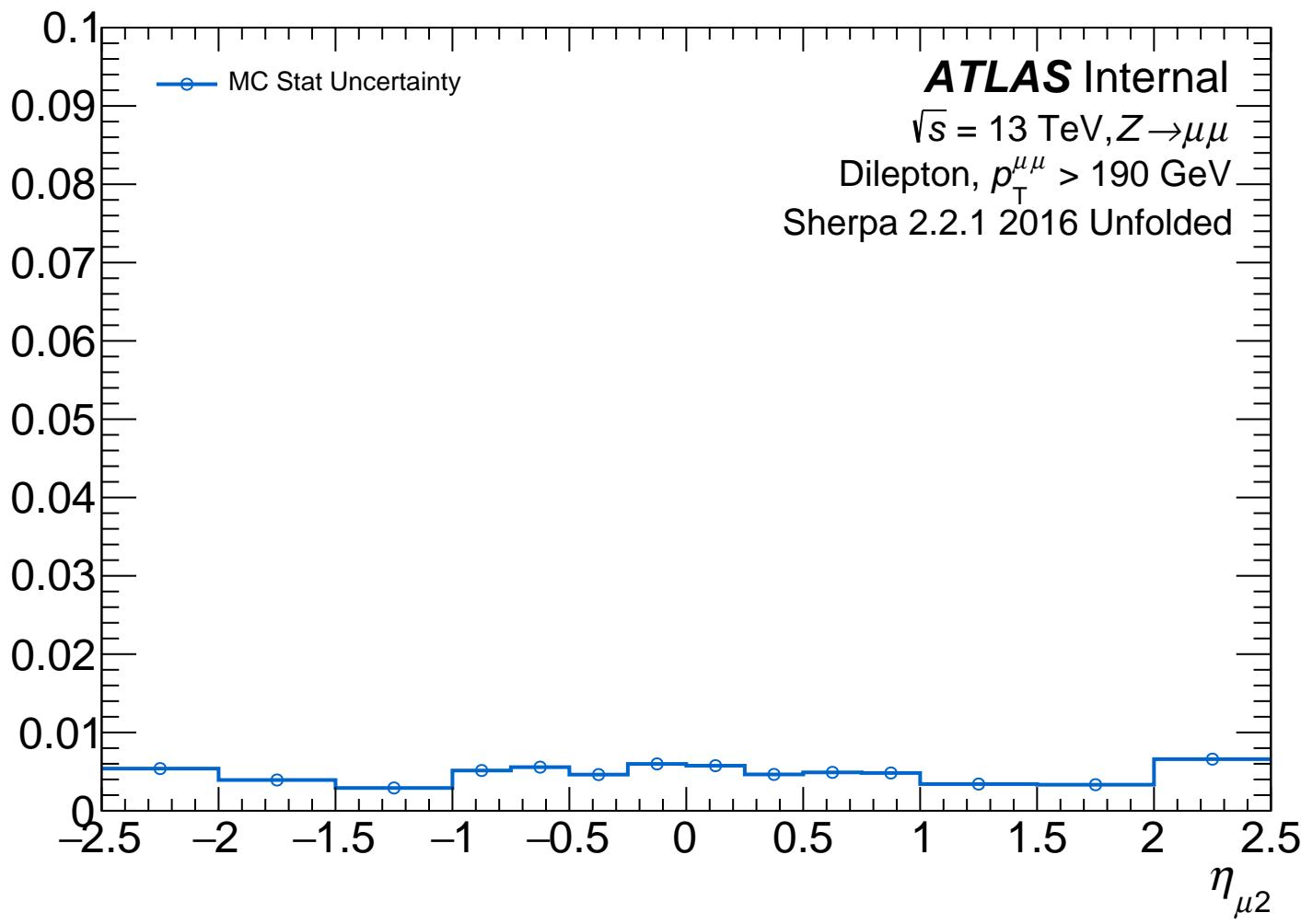


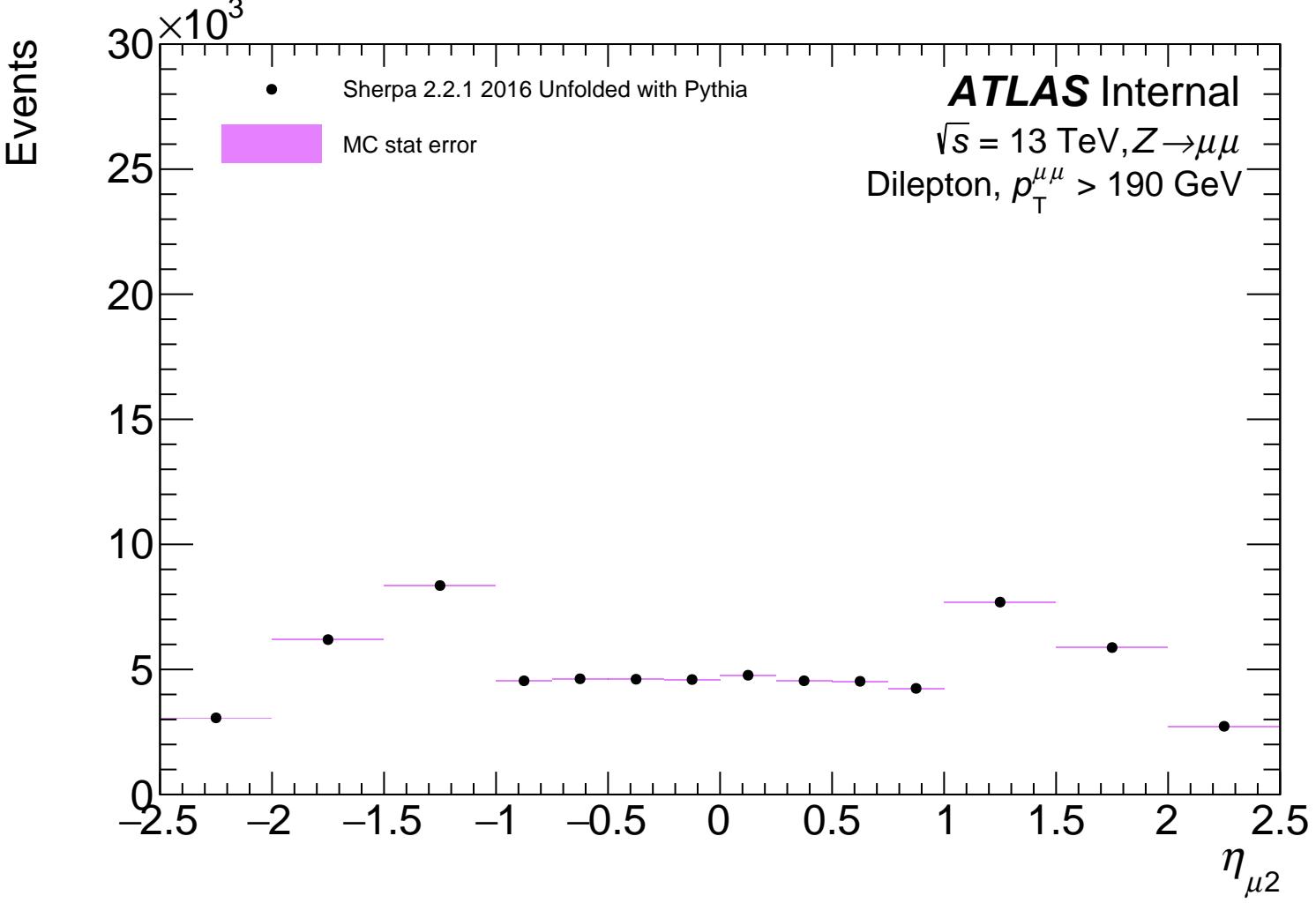


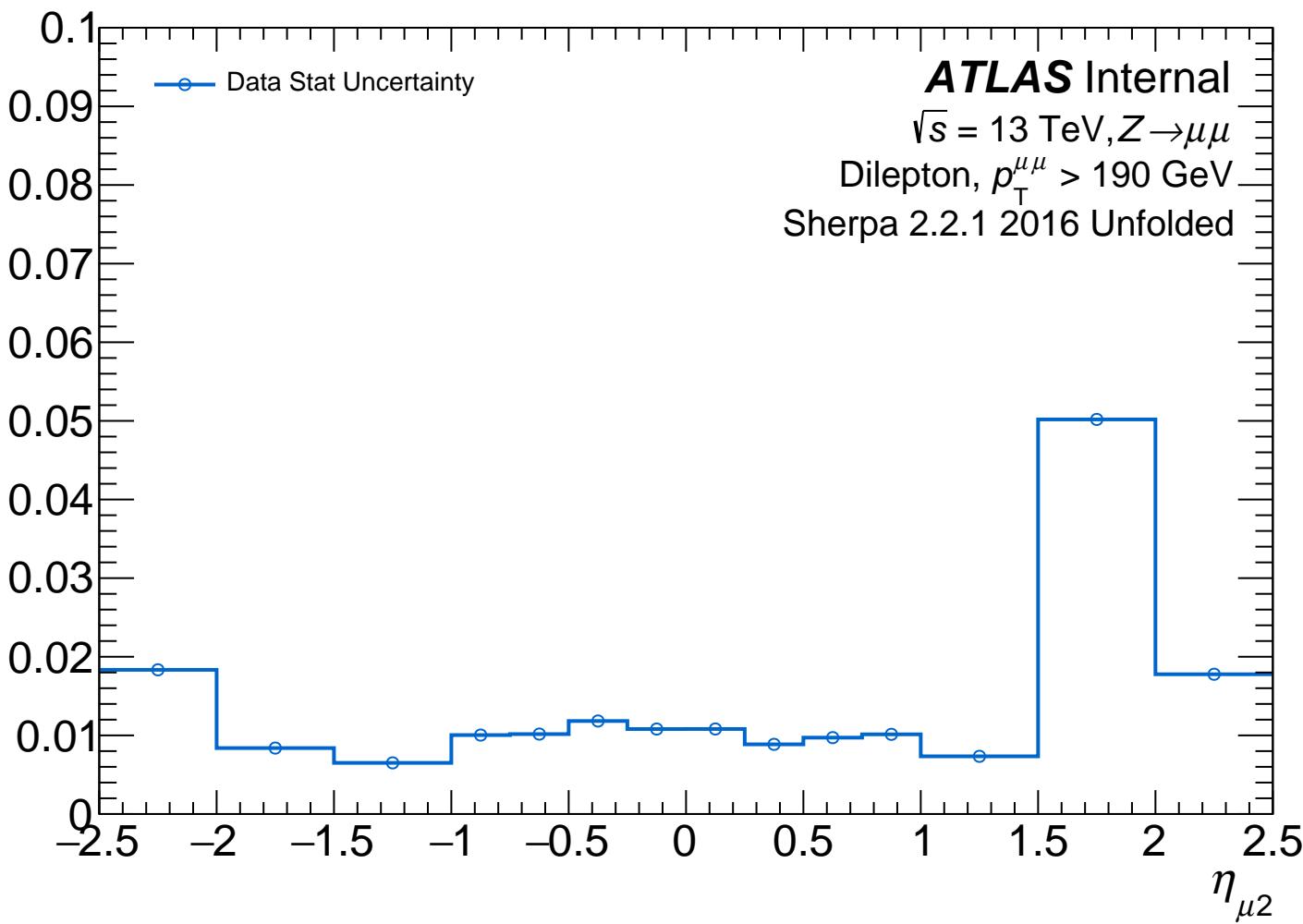


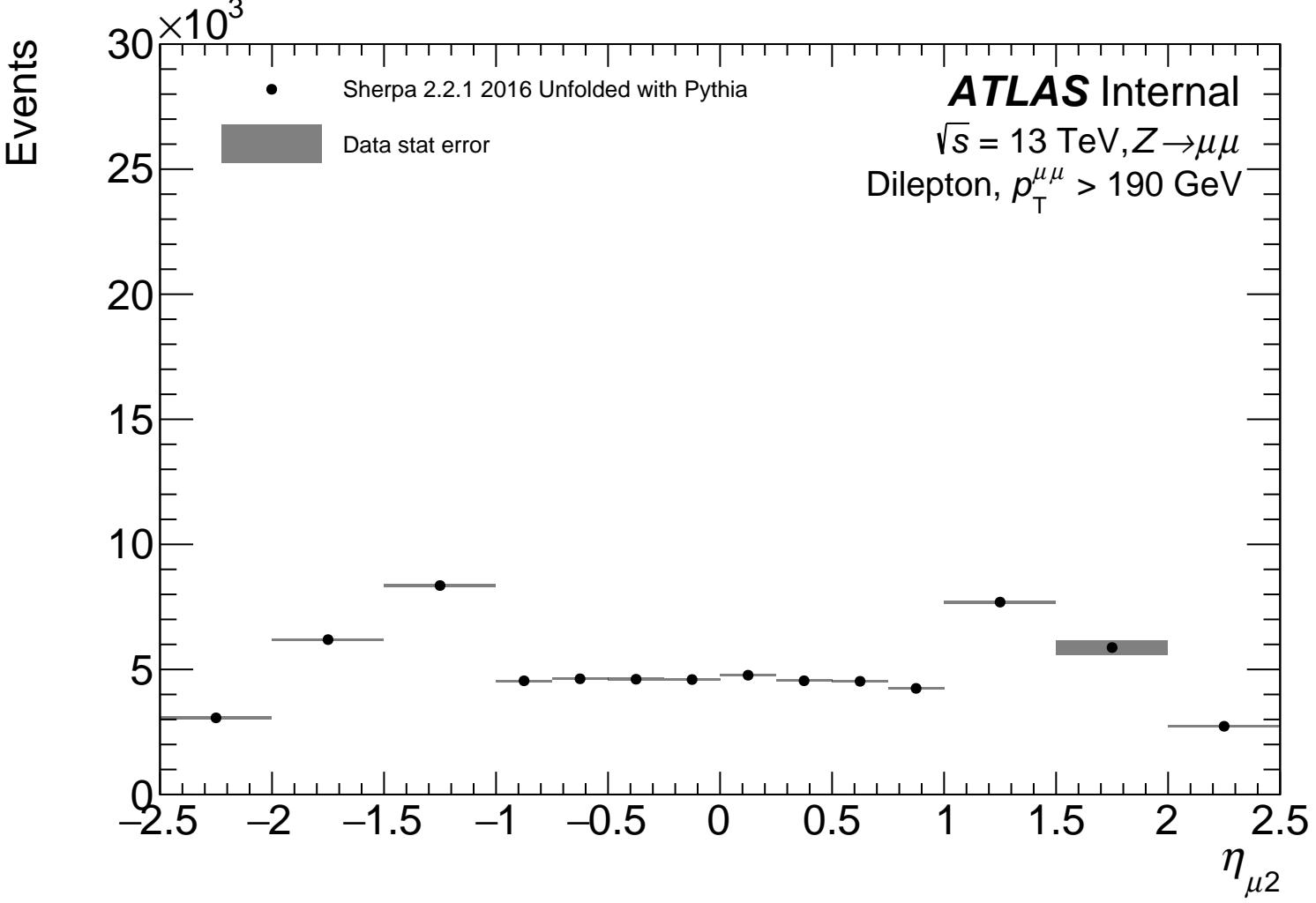


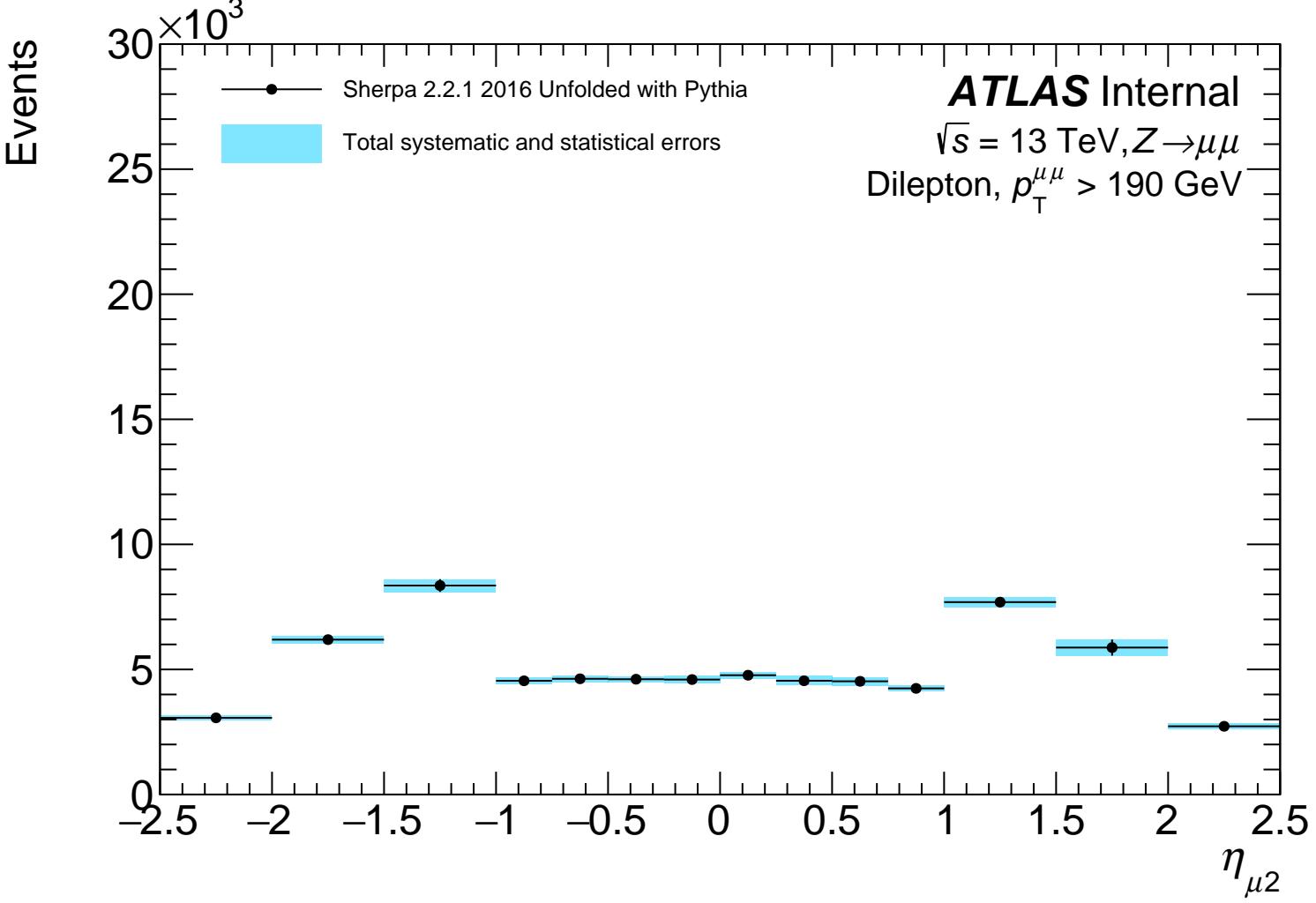


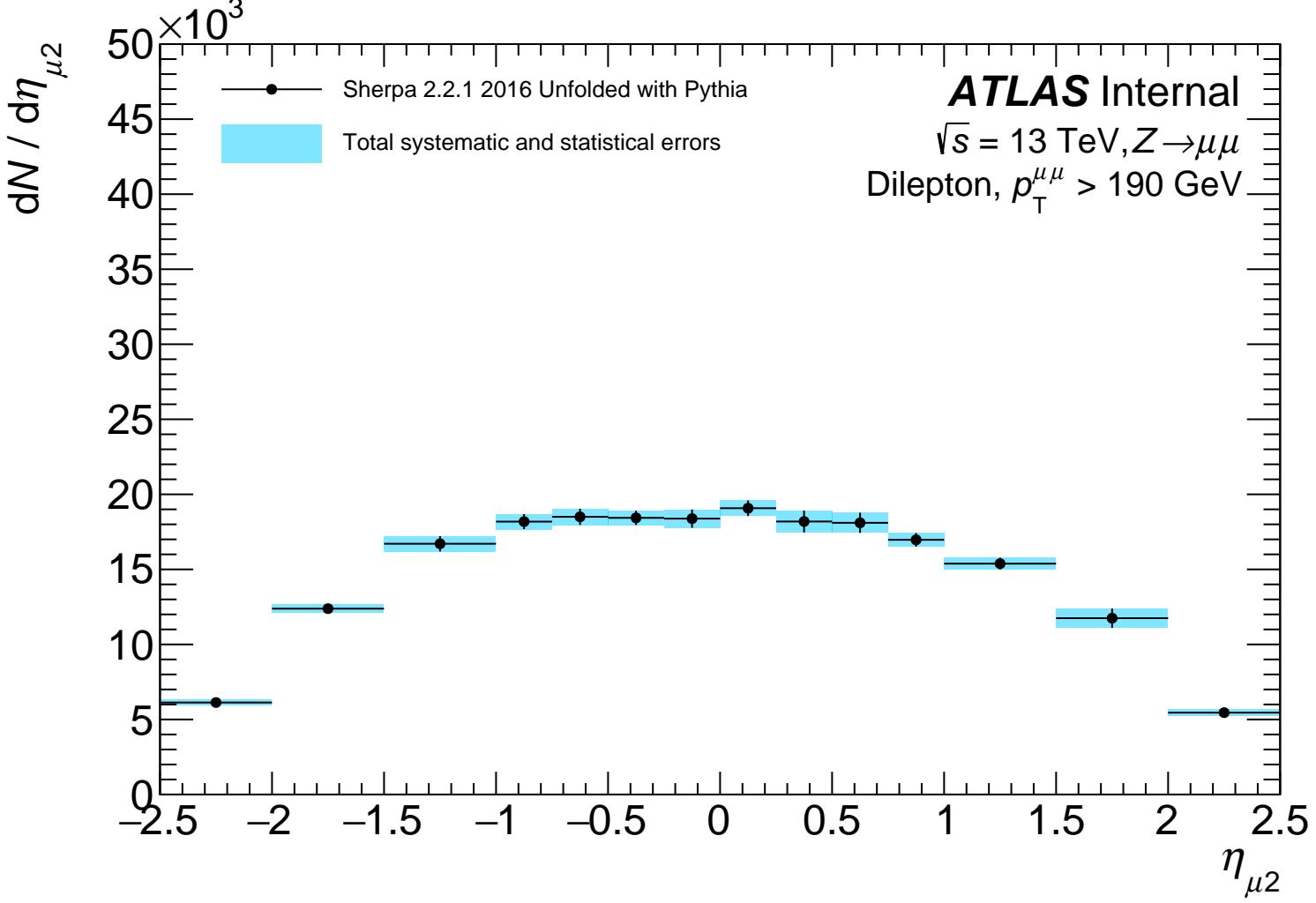


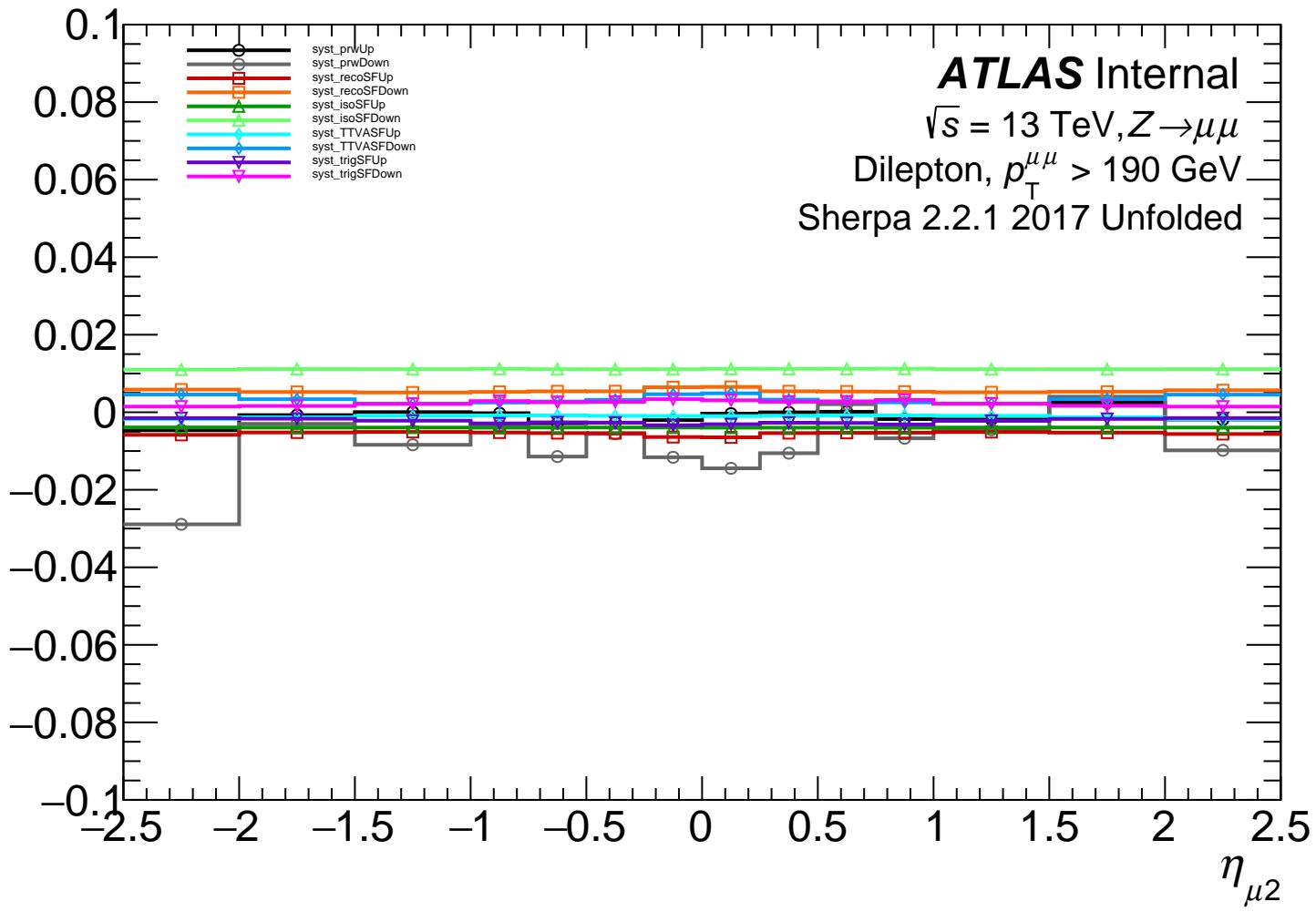


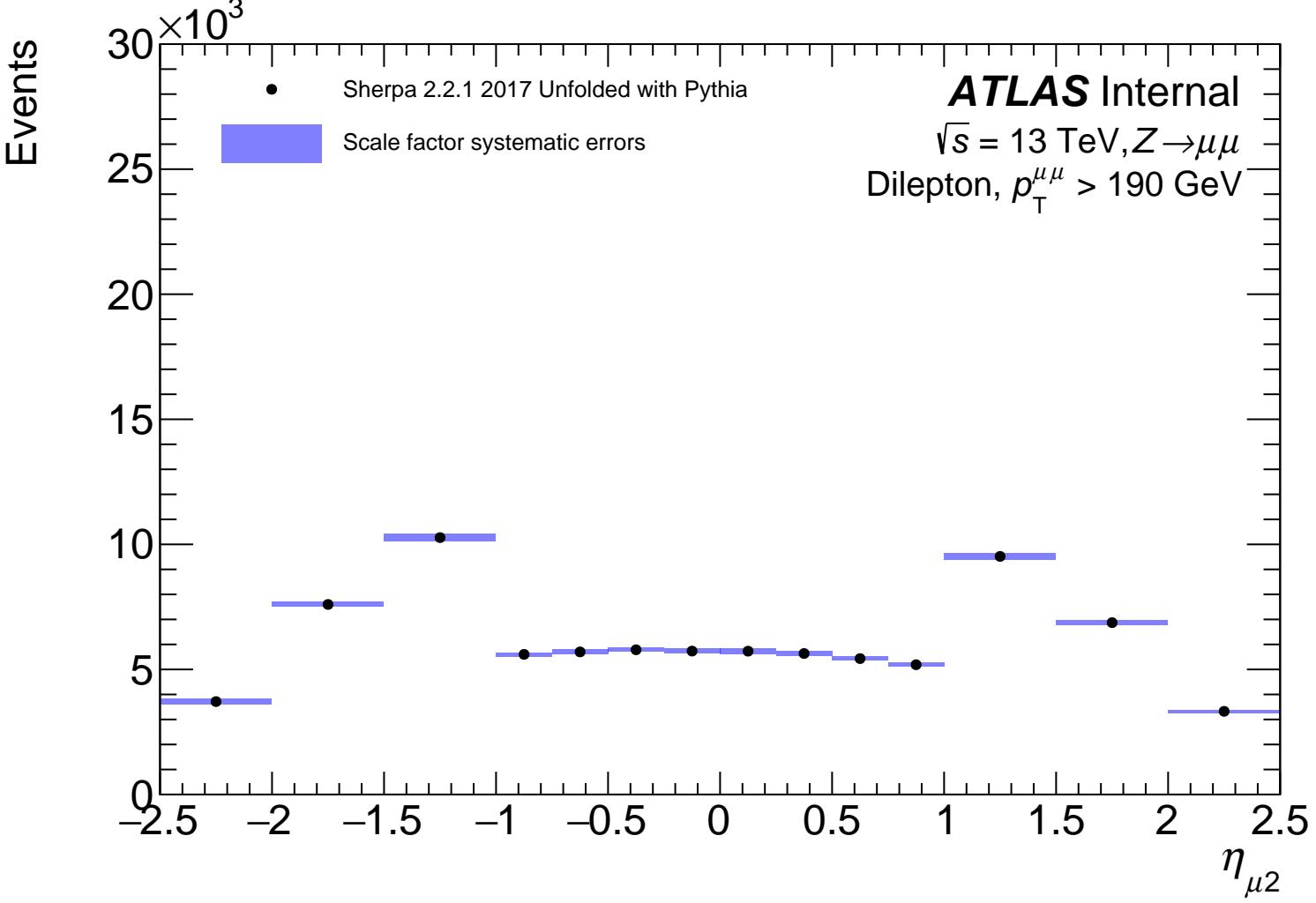


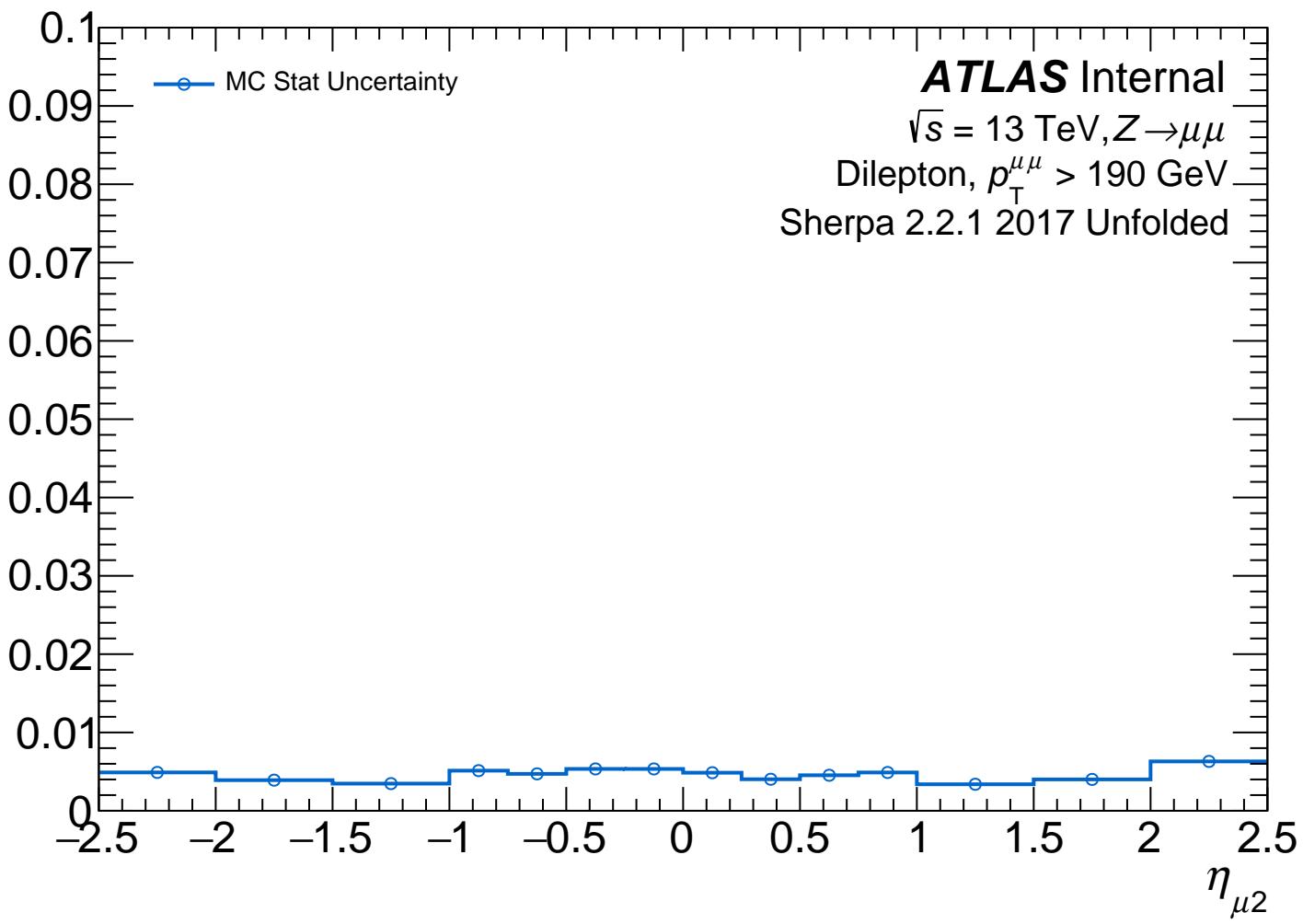


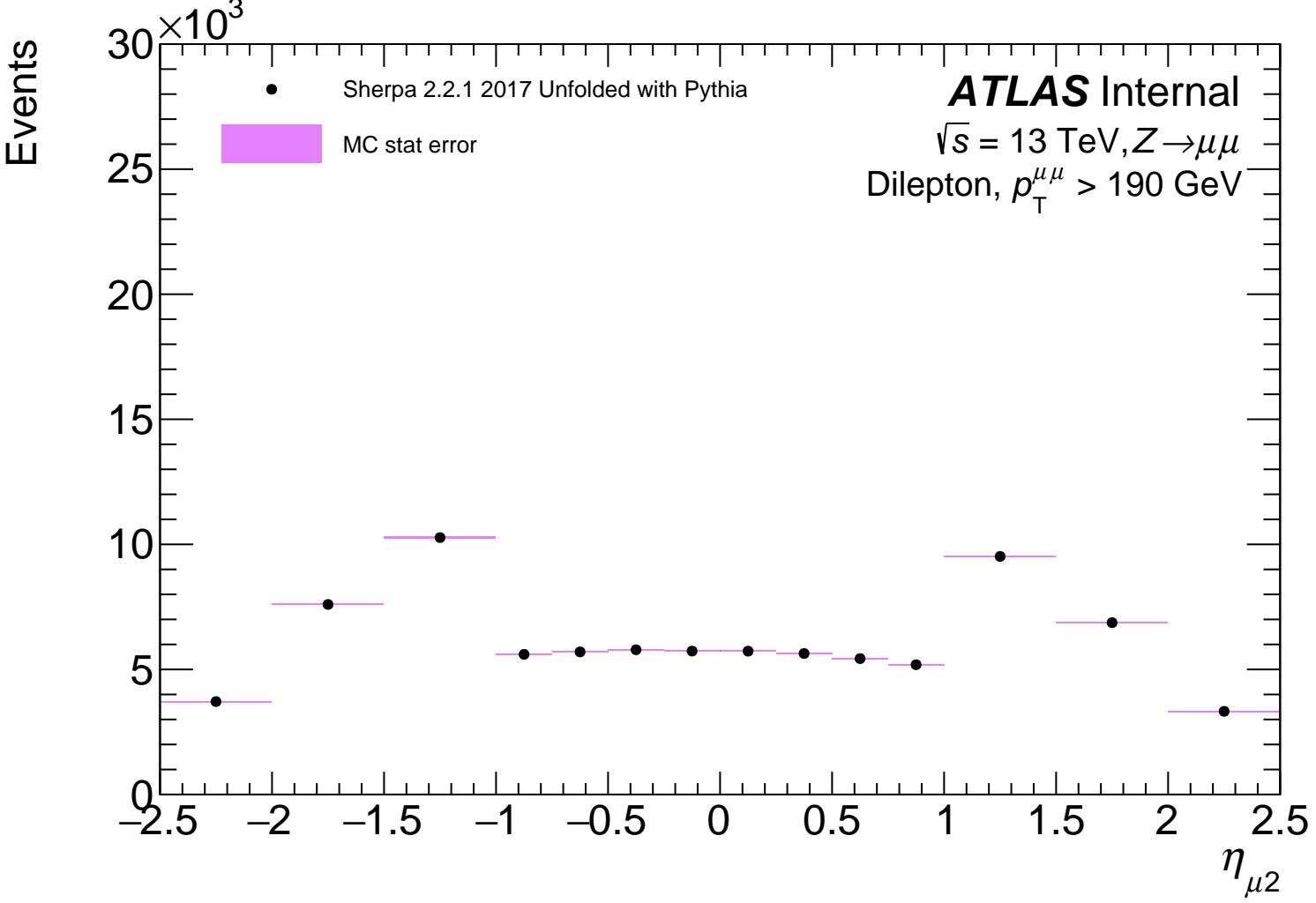


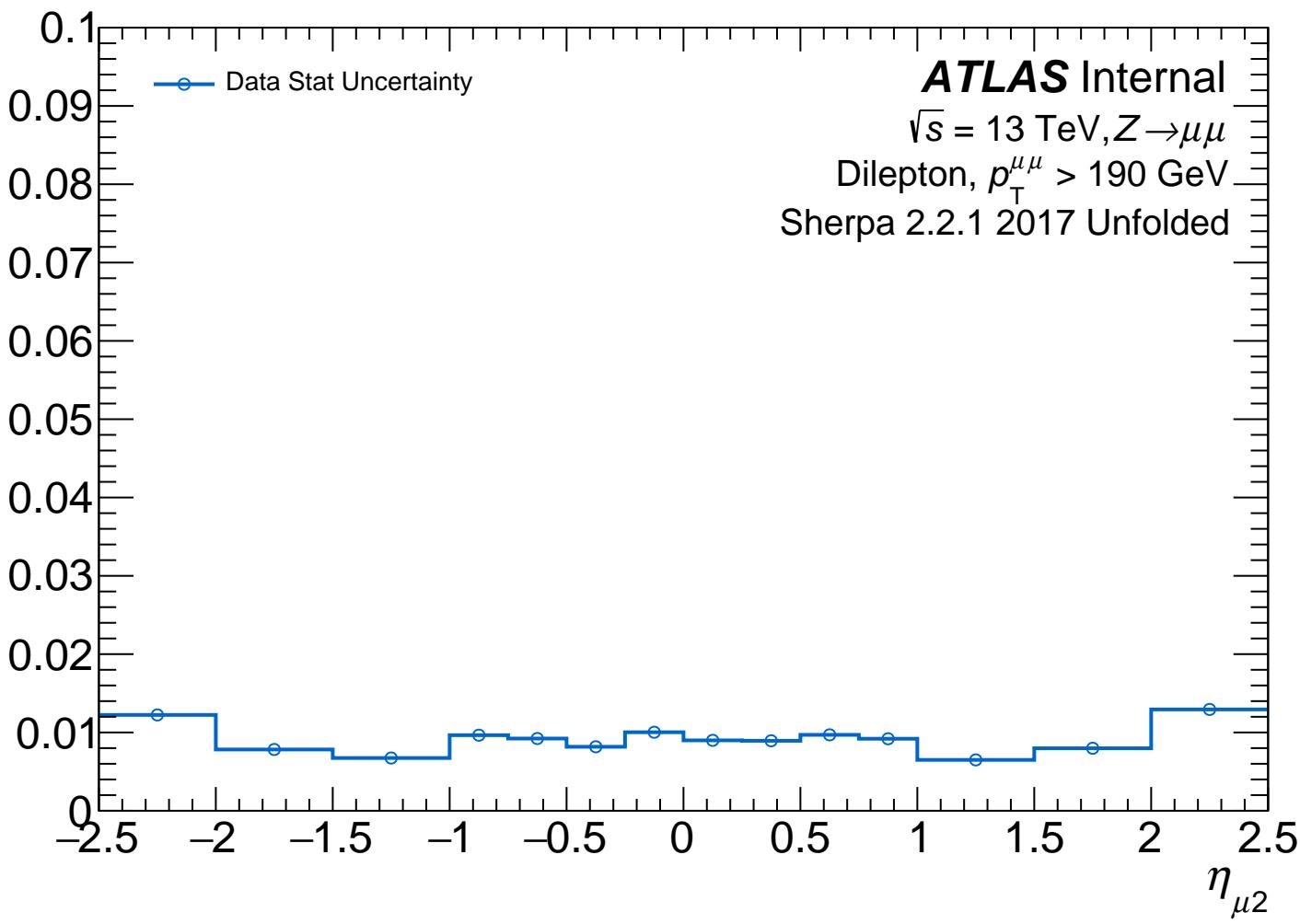


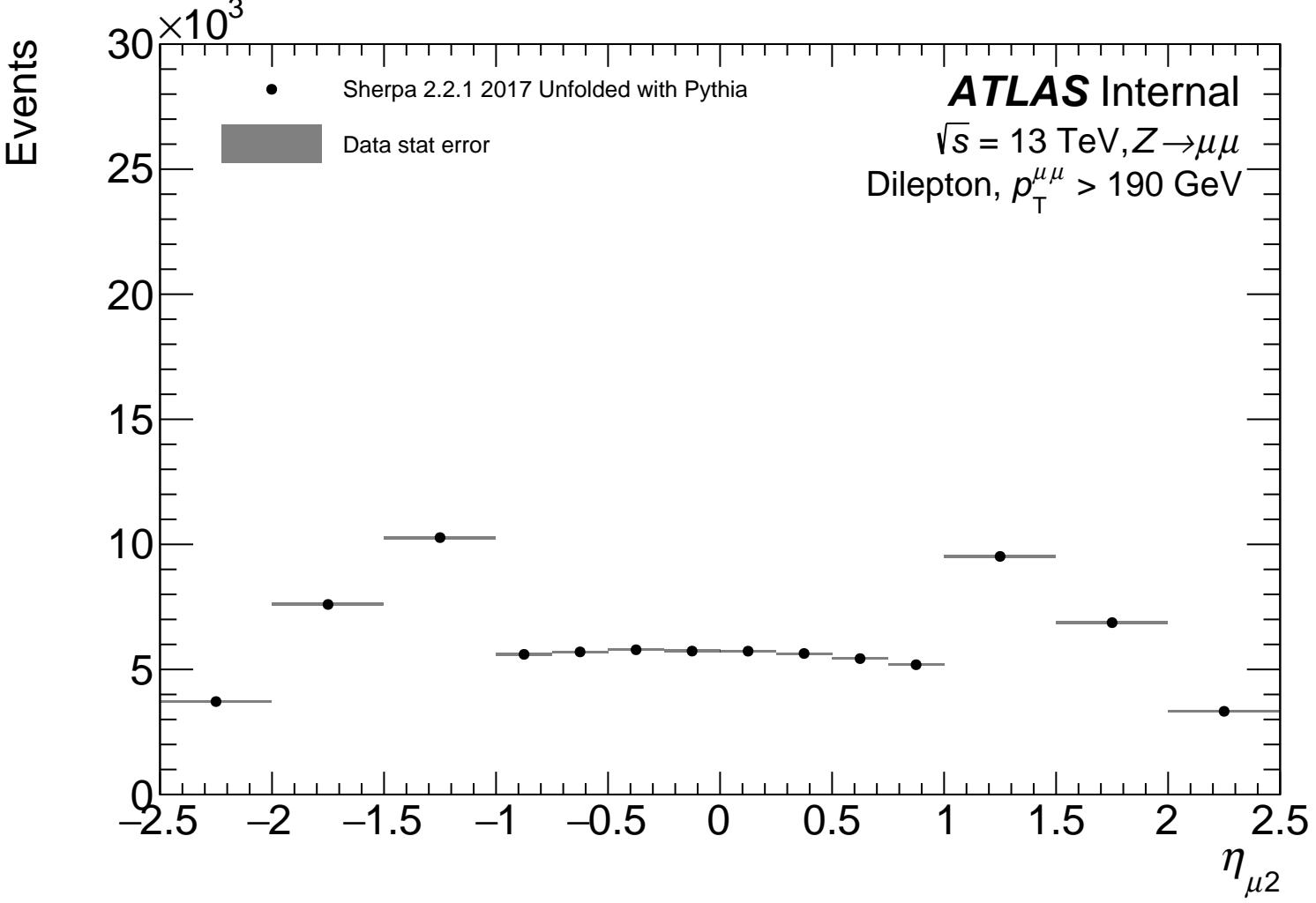


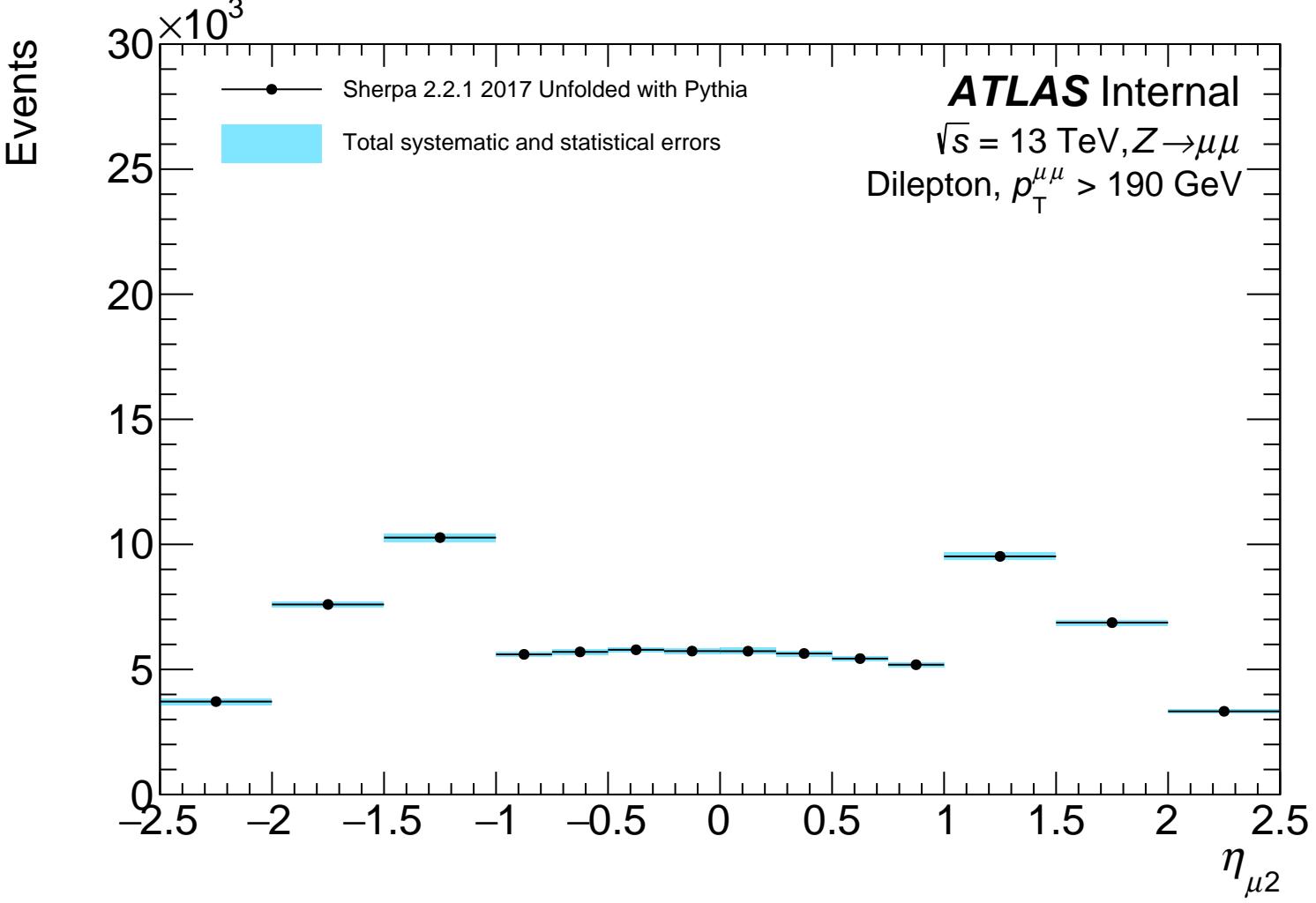


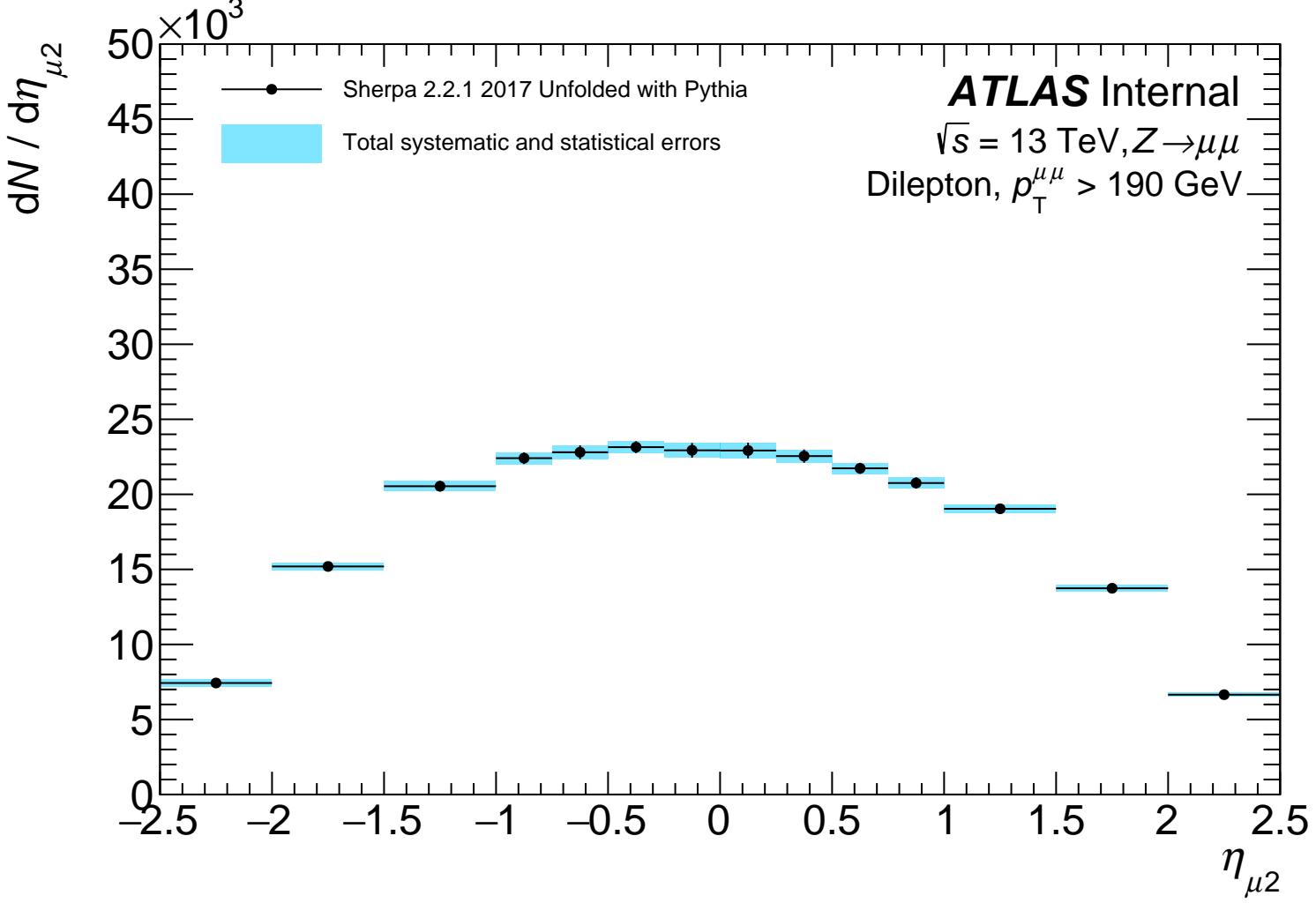










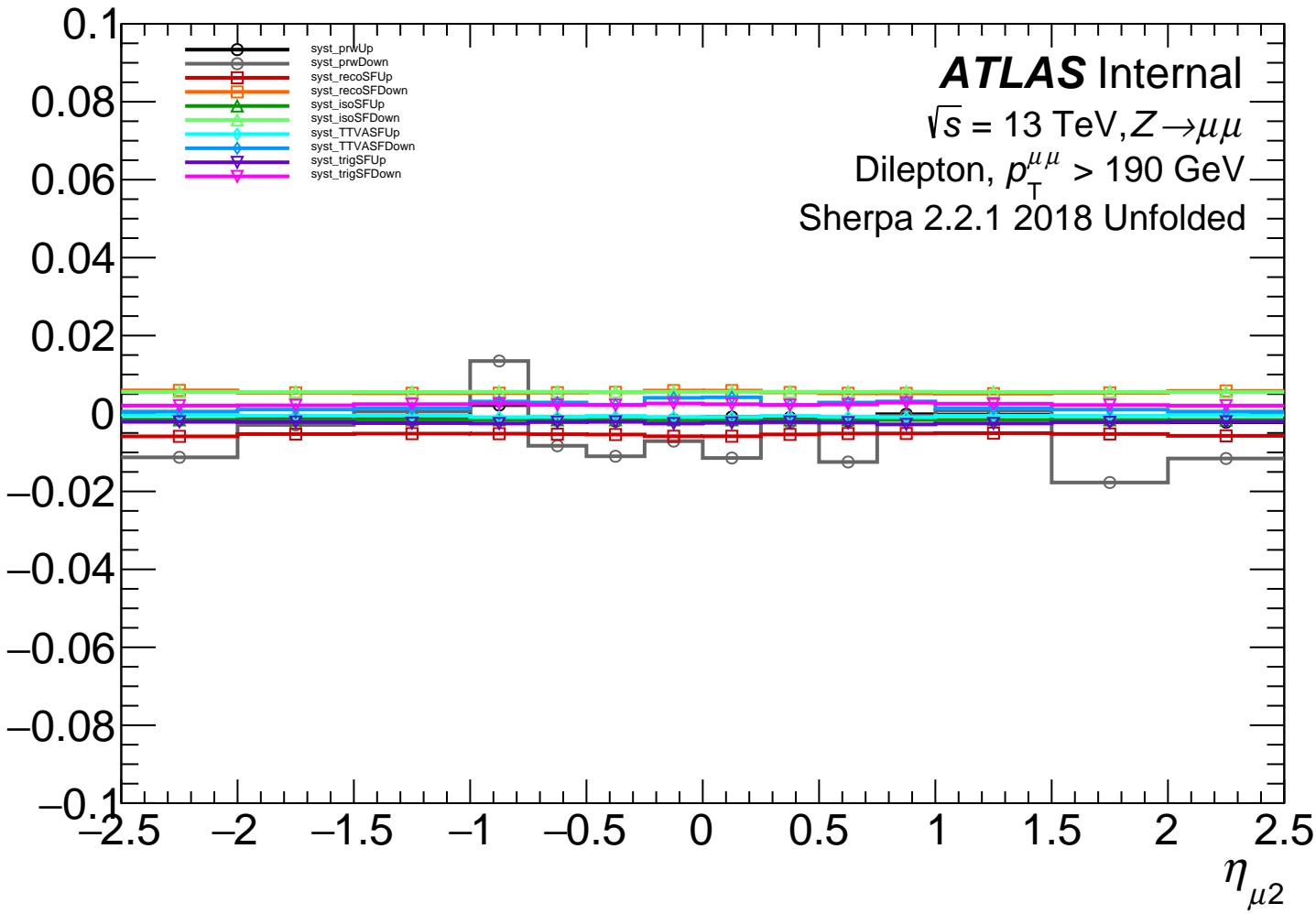


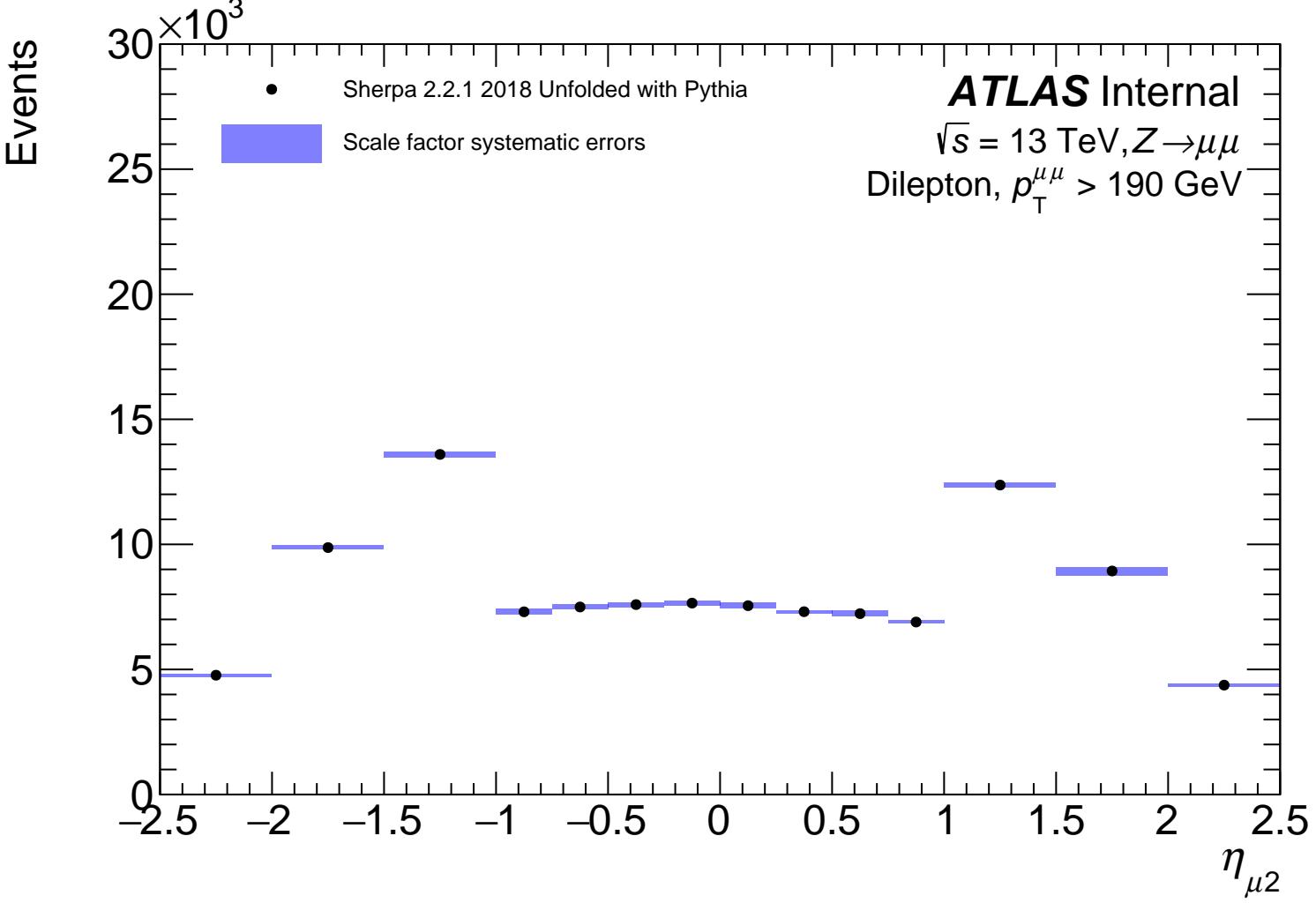
**ATLAS Internal**

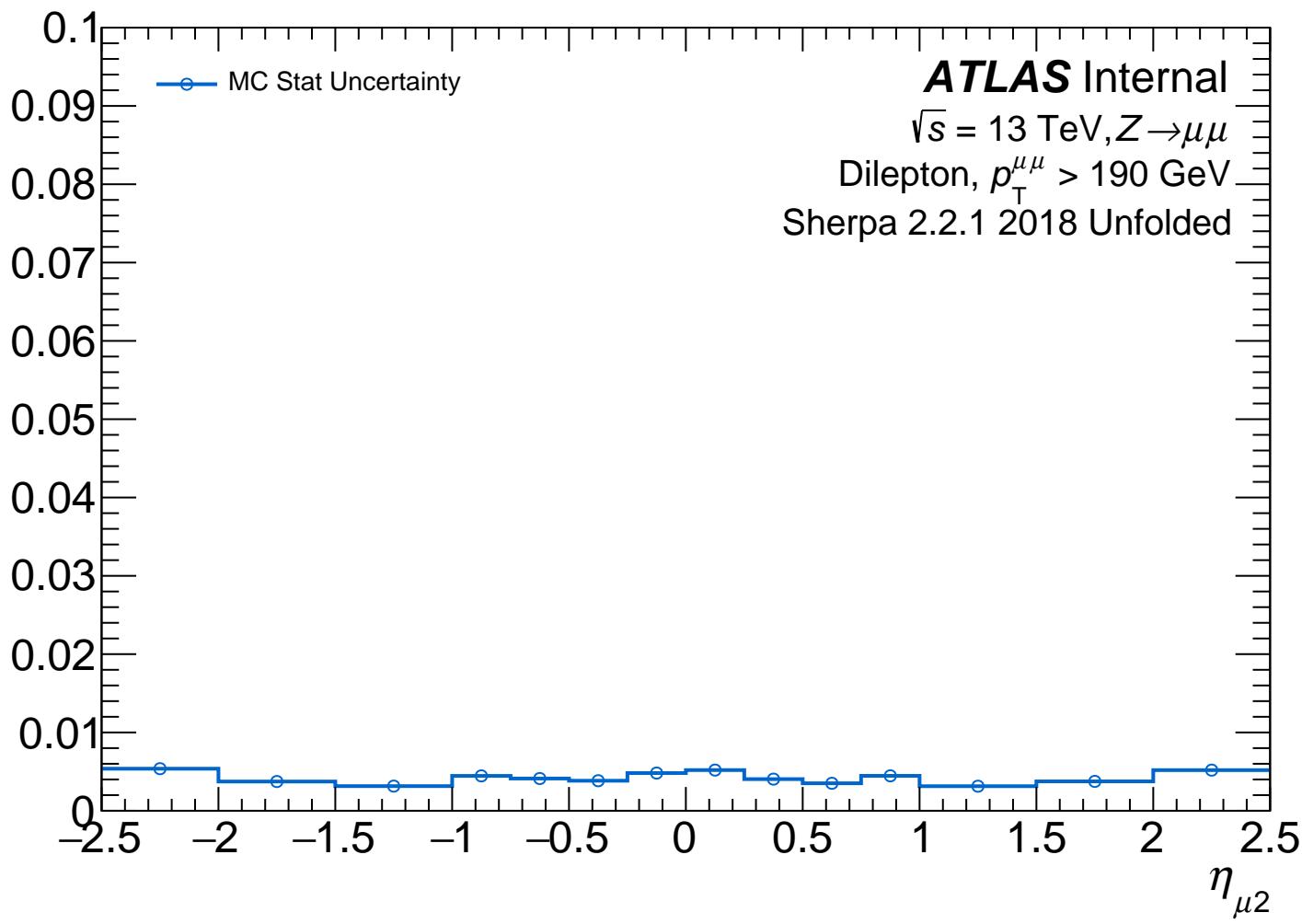
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

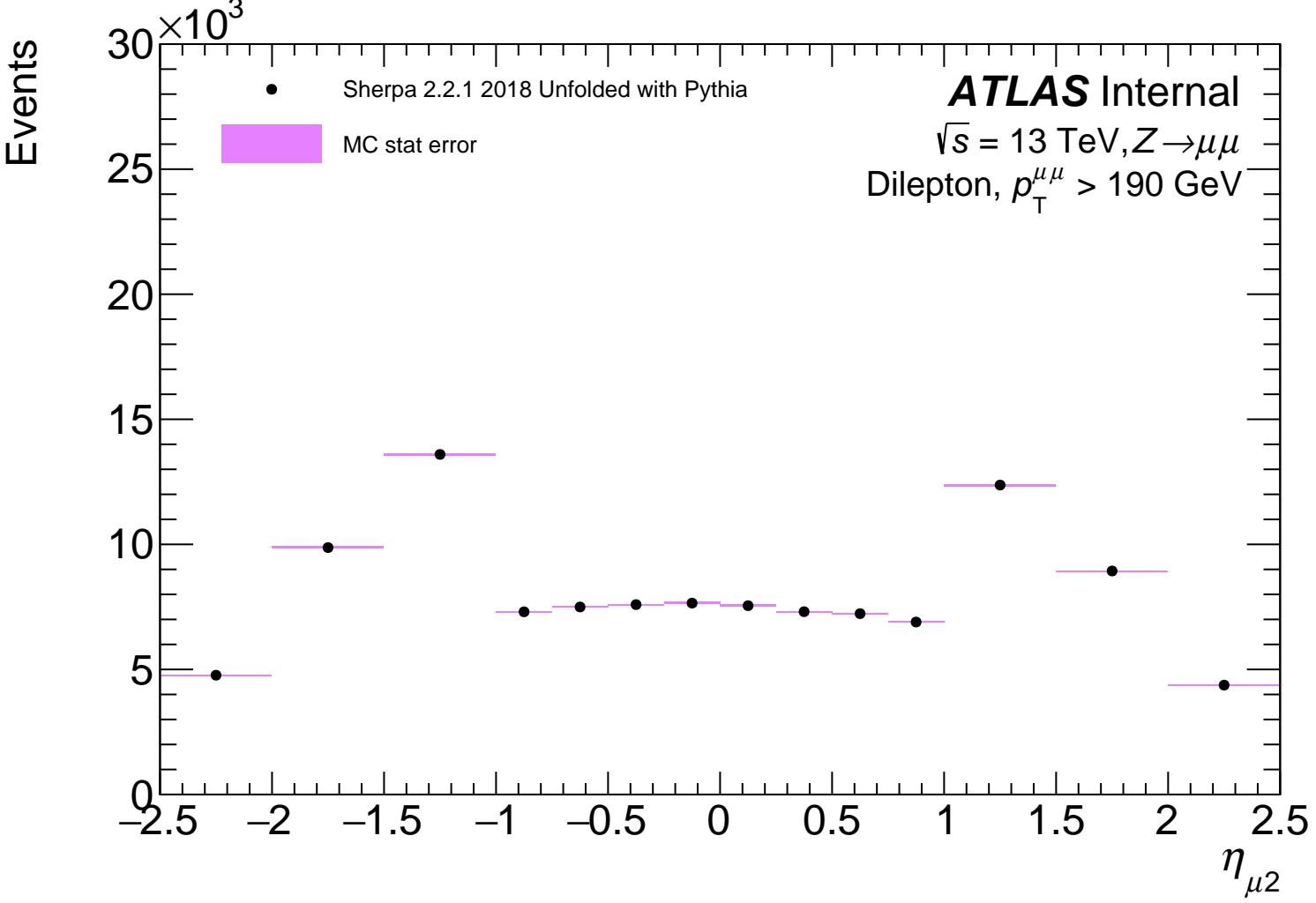
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

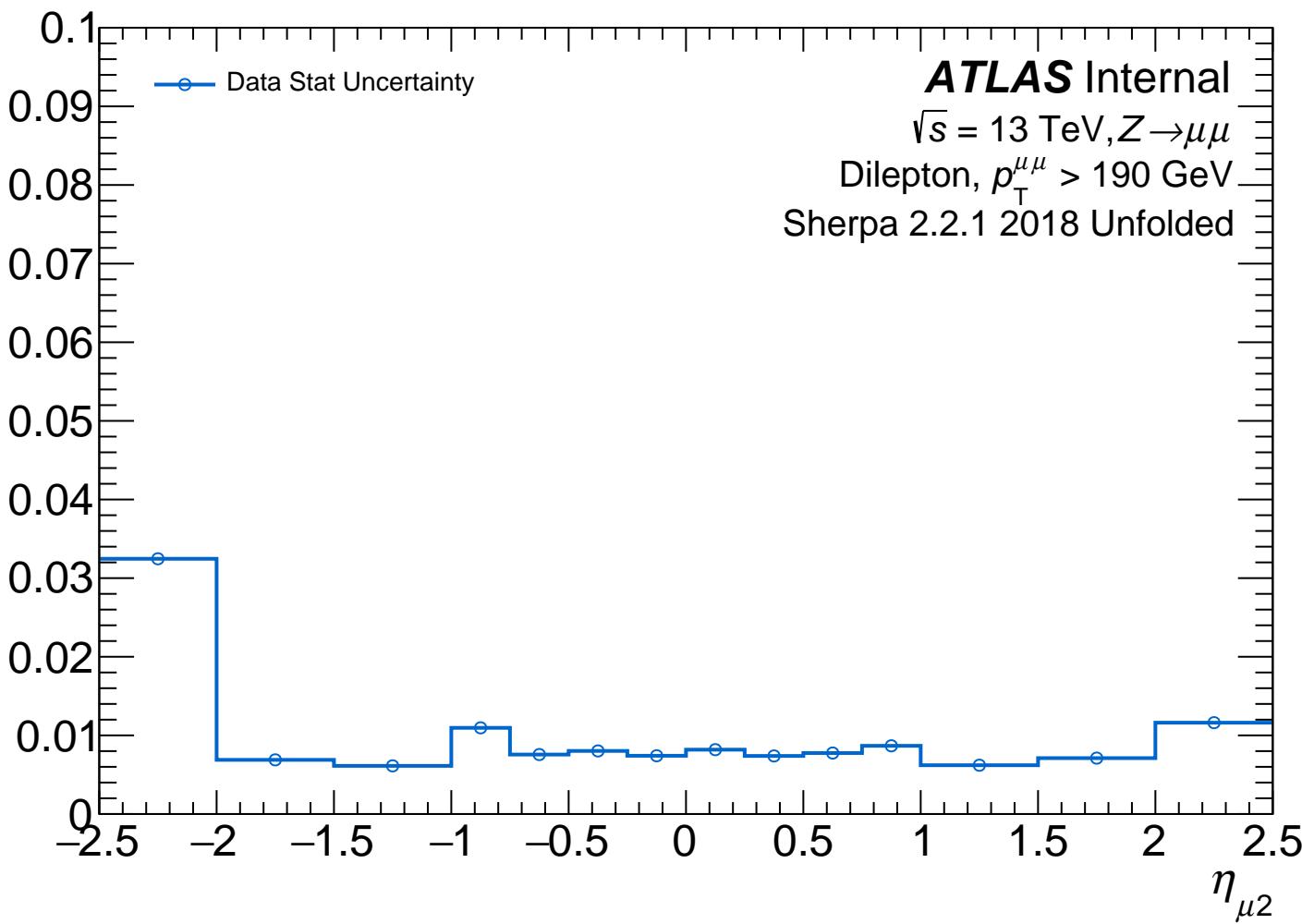
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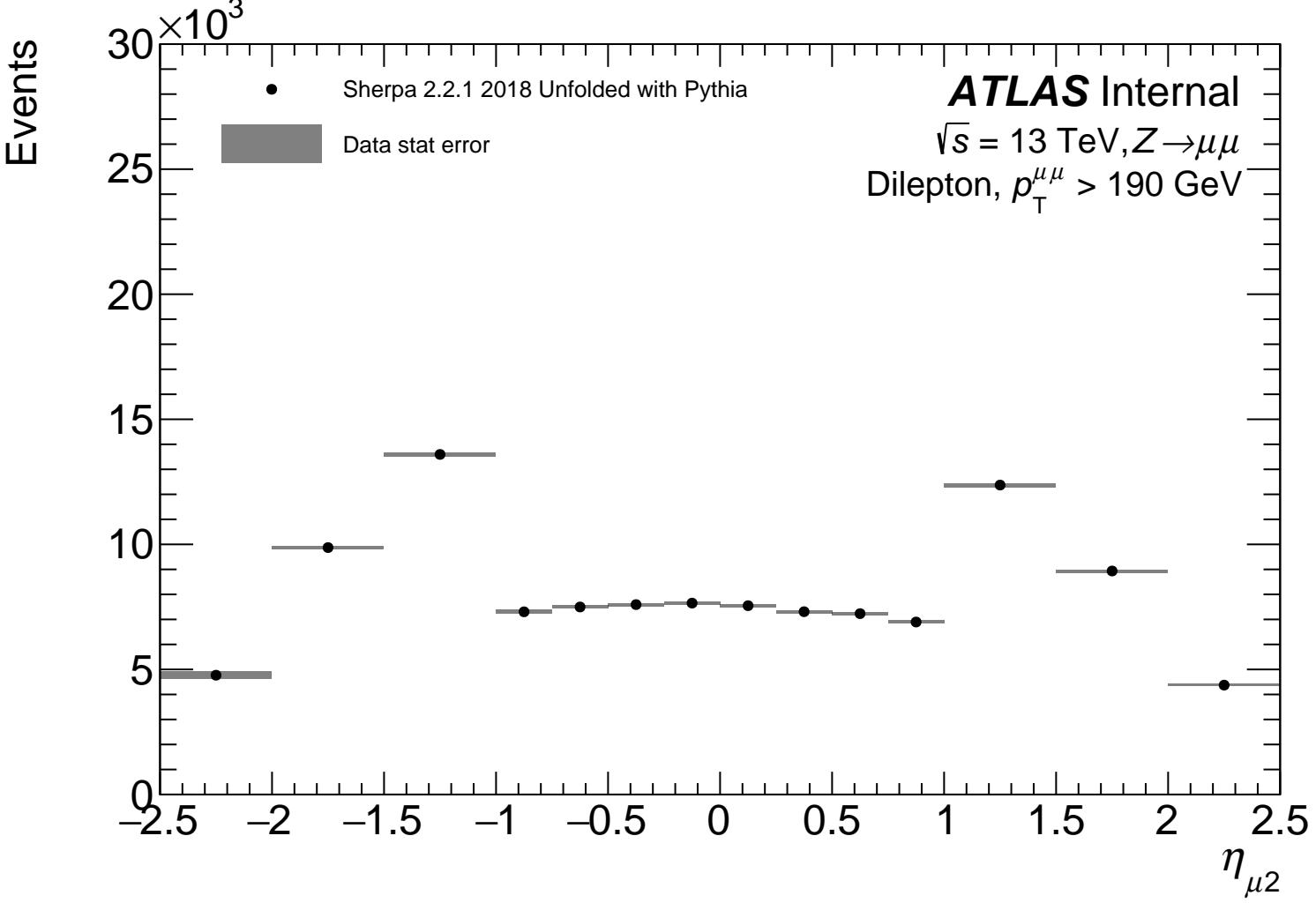


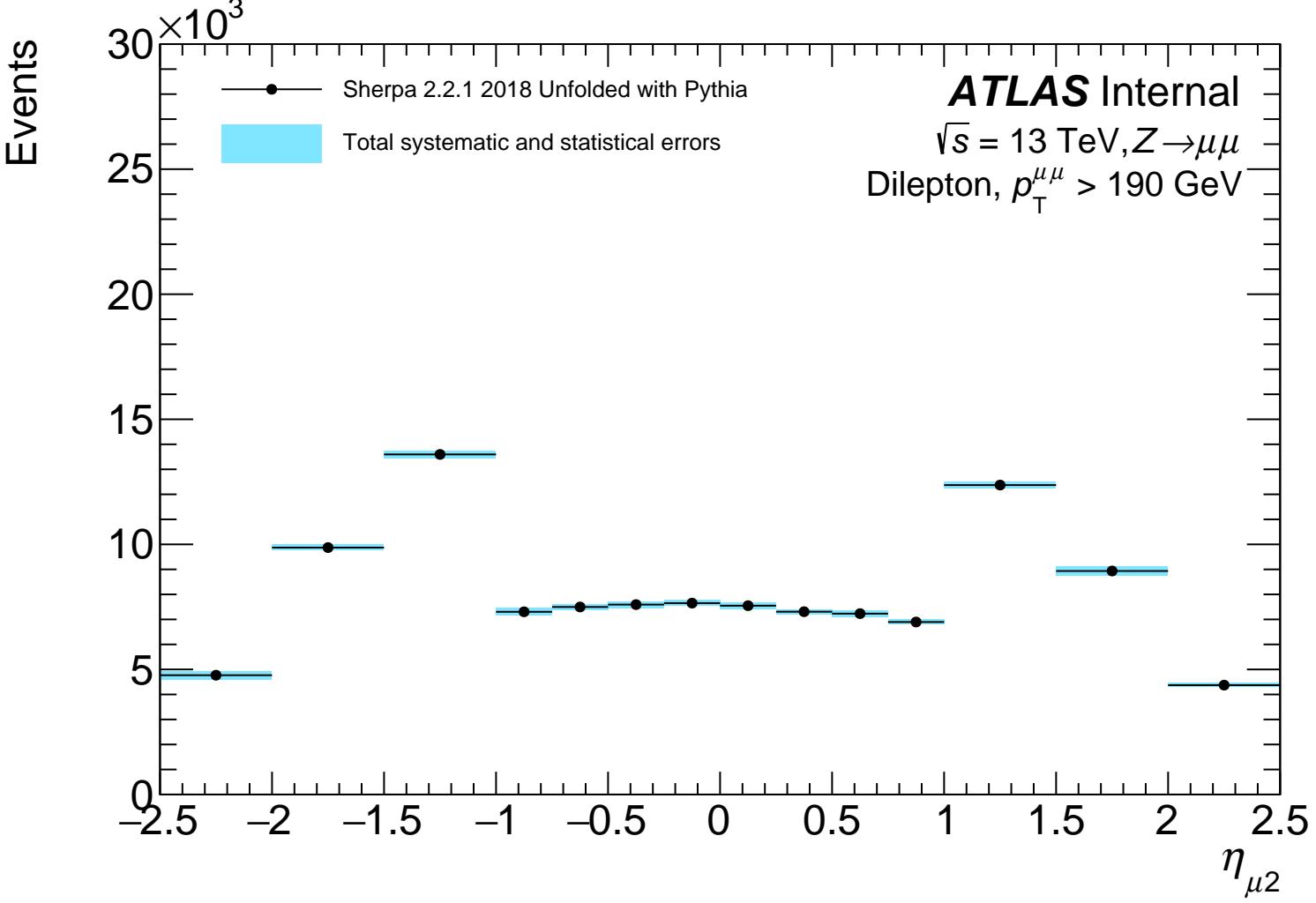


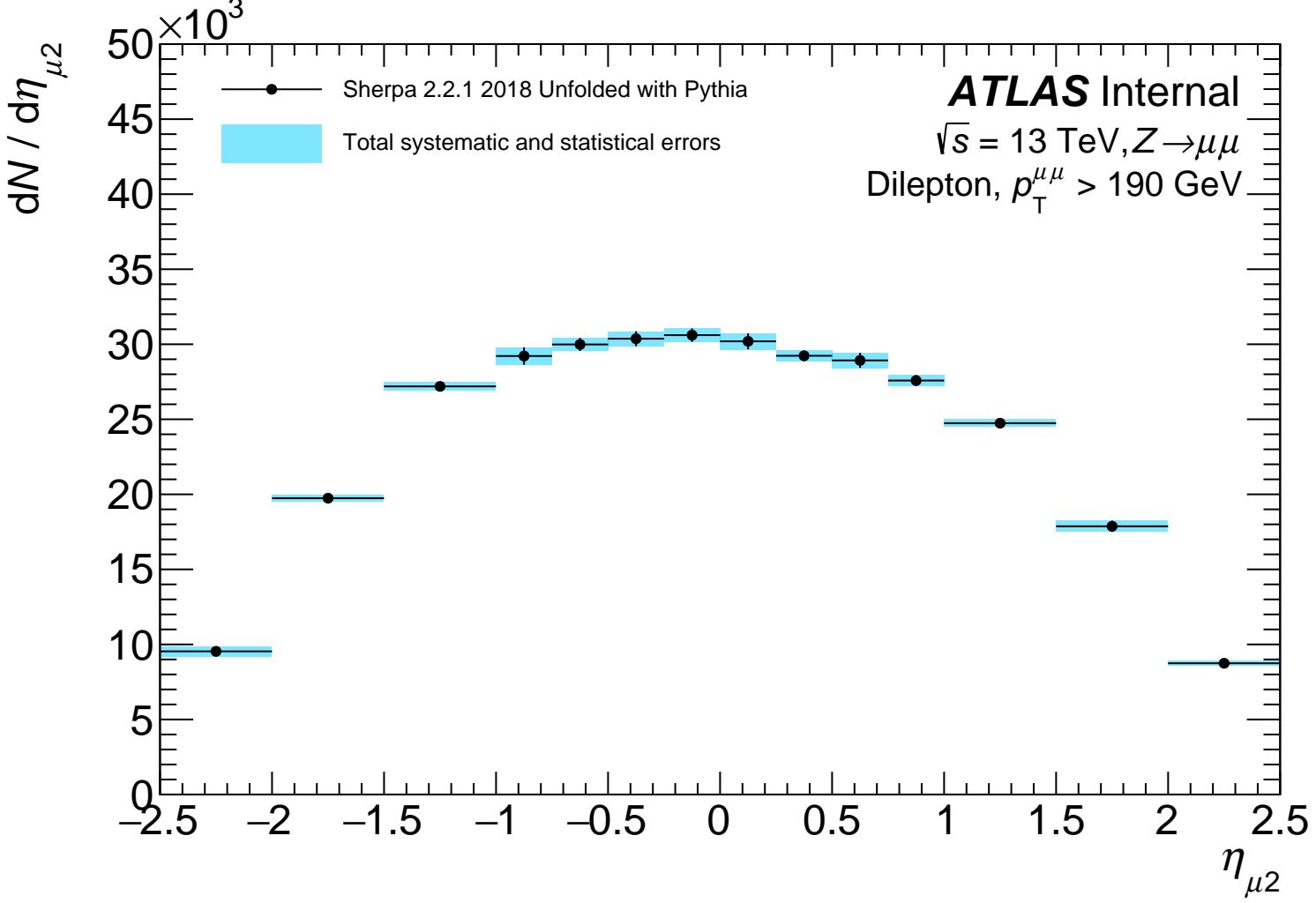


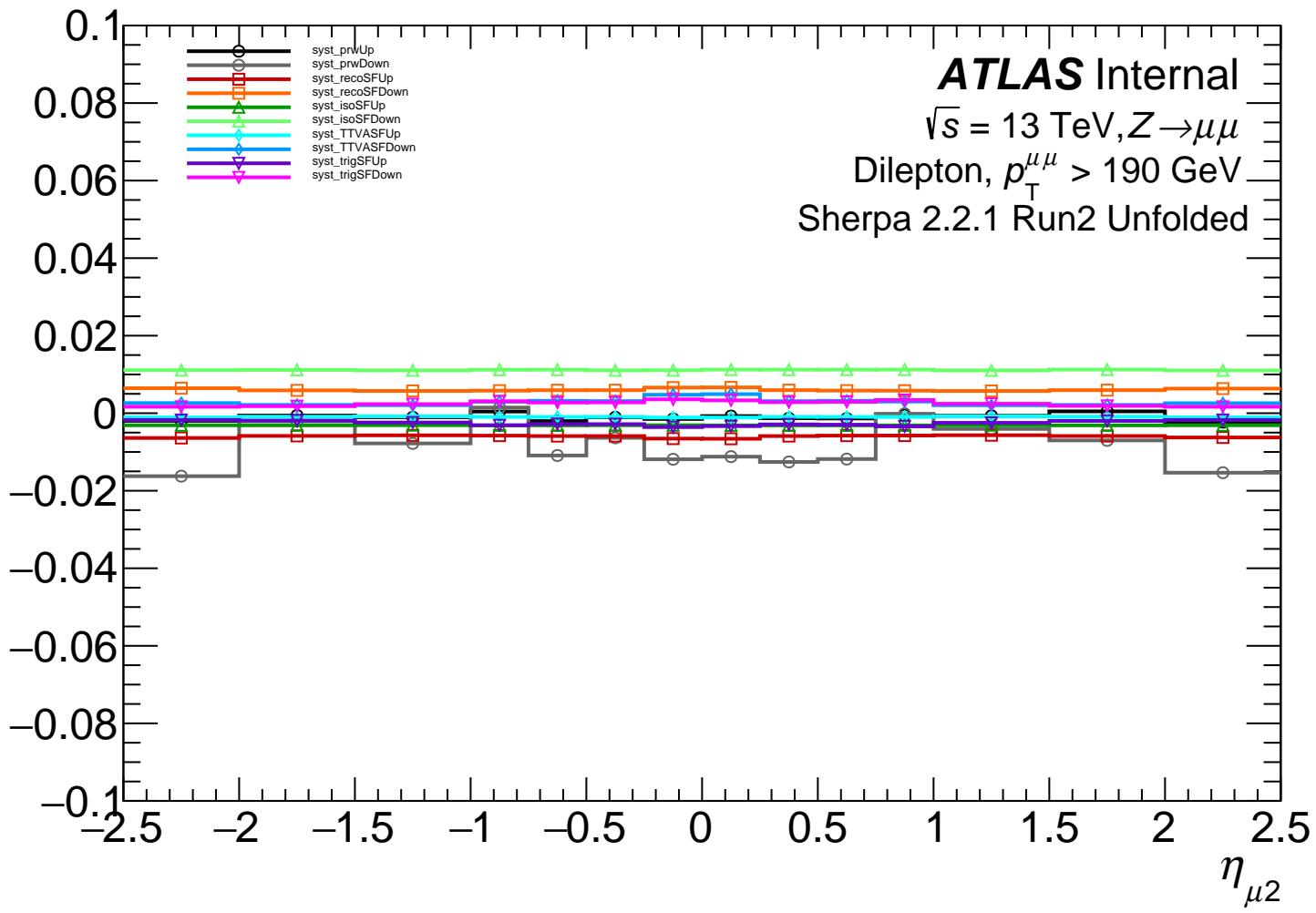


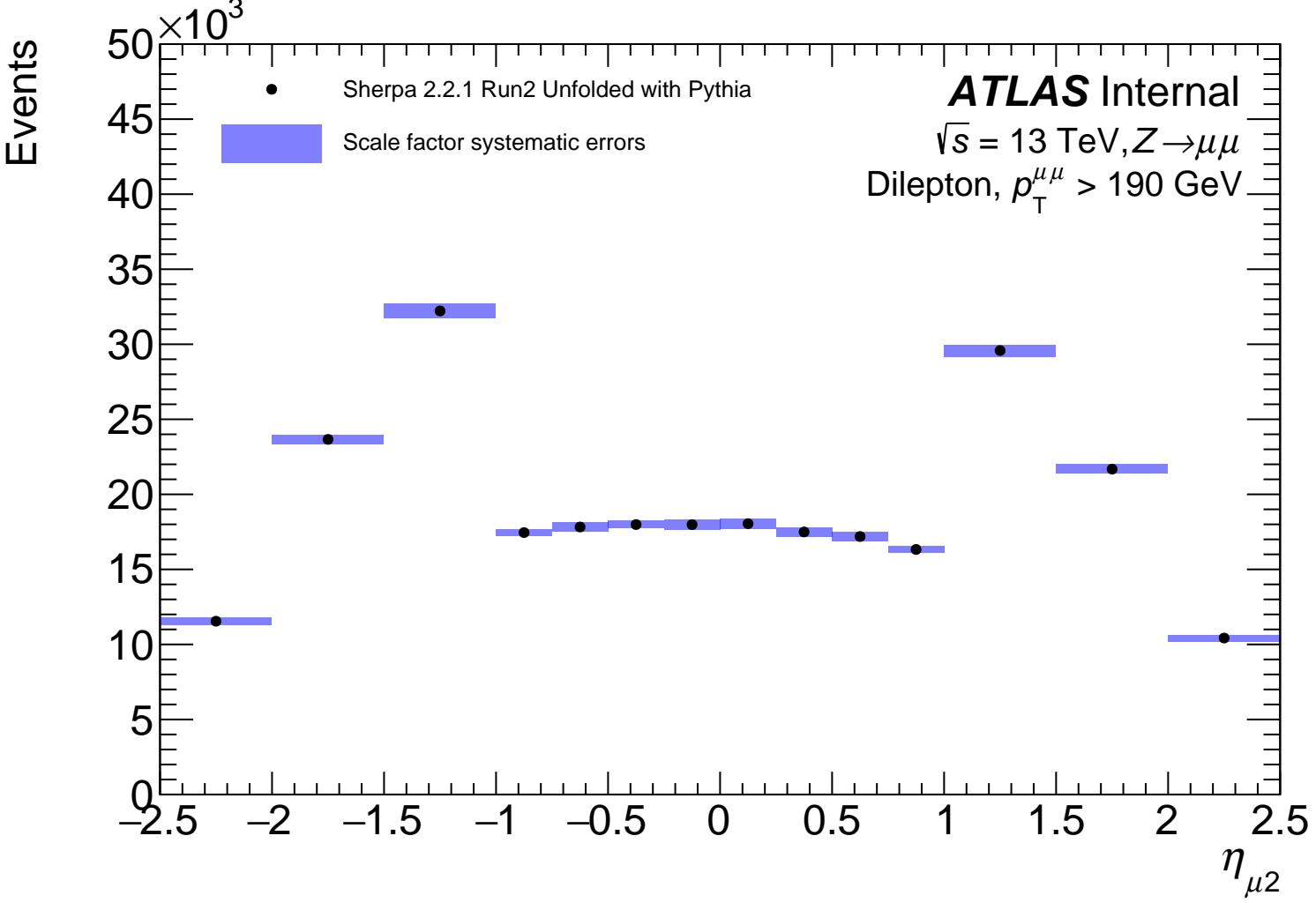


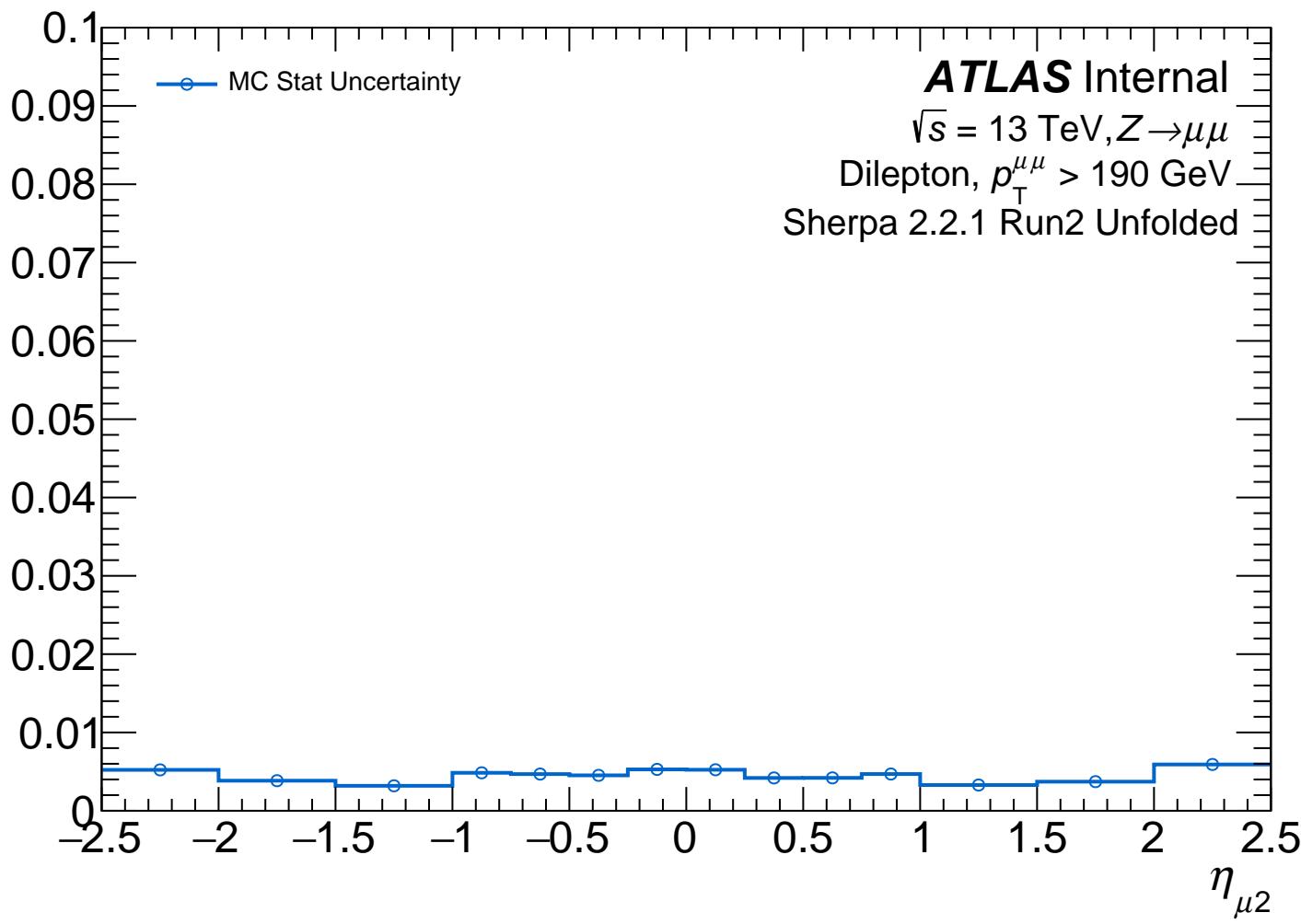


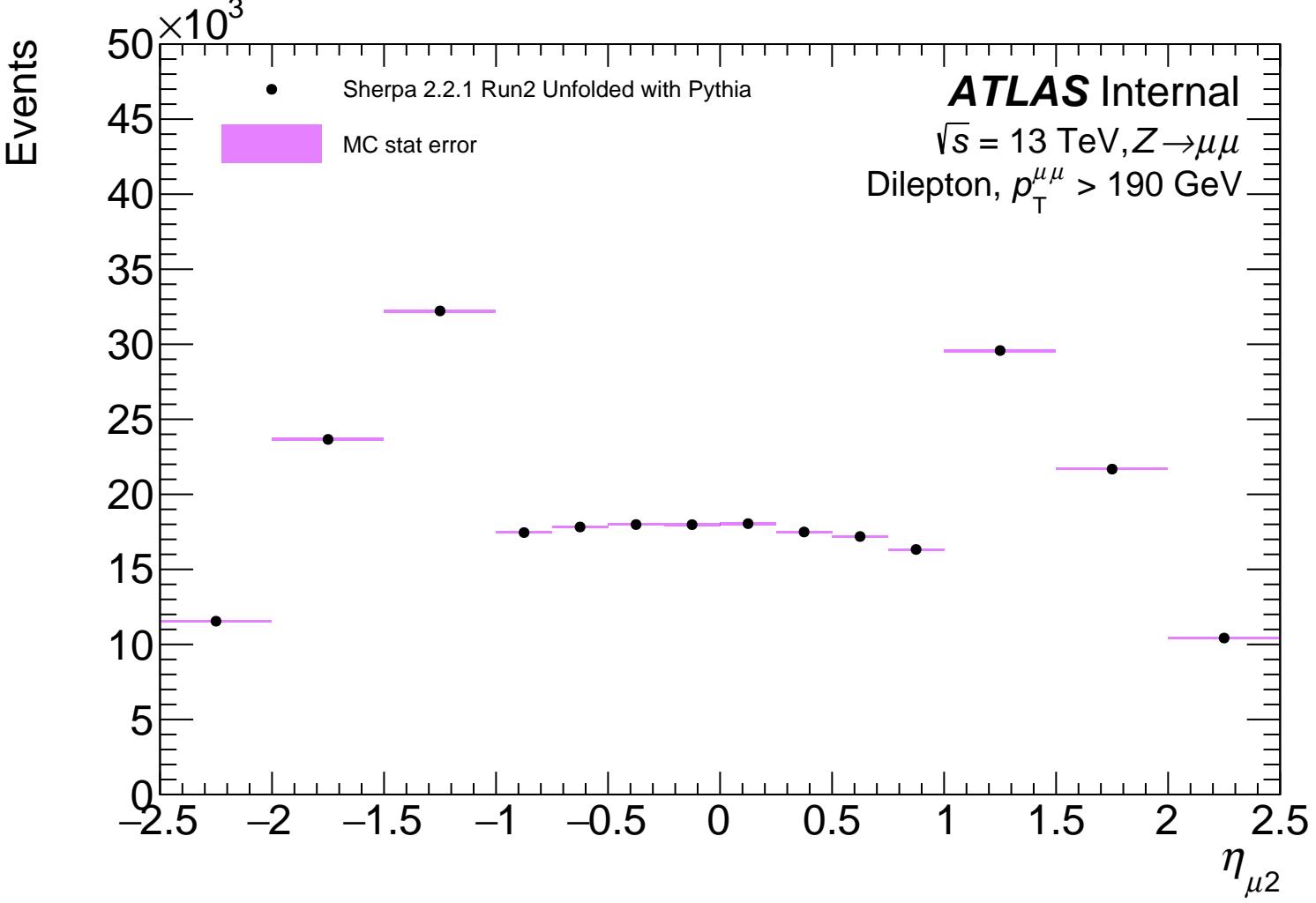


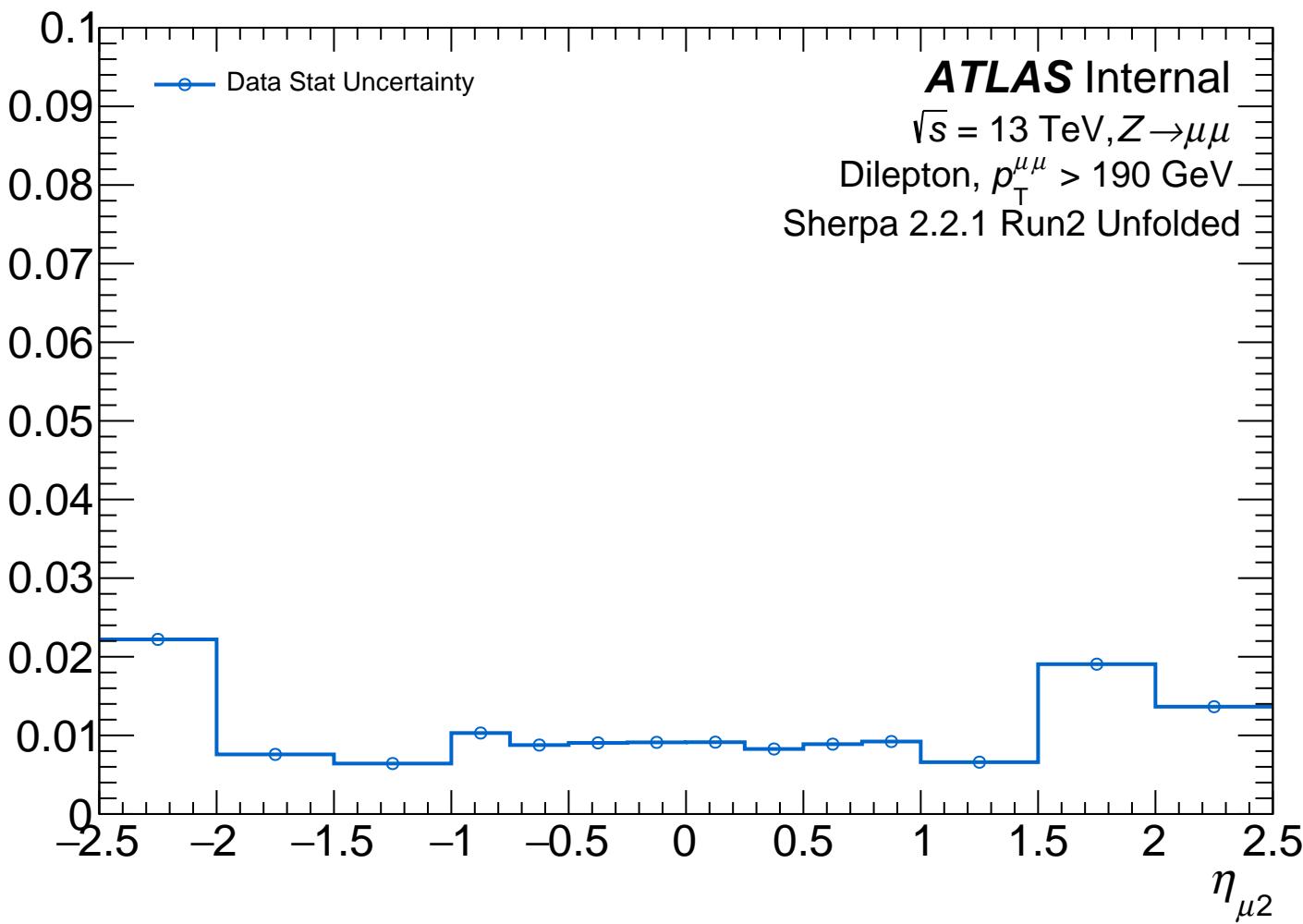


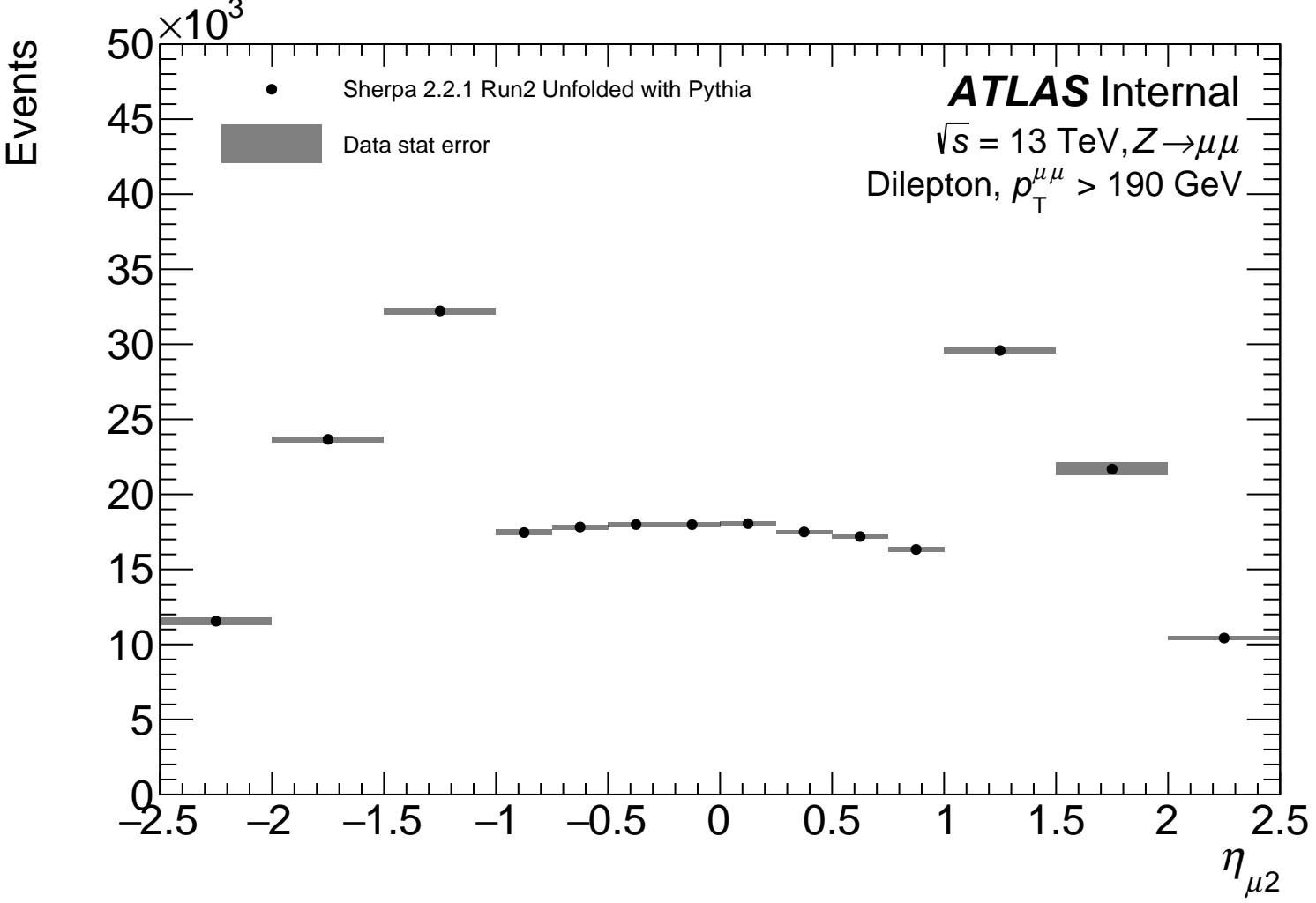


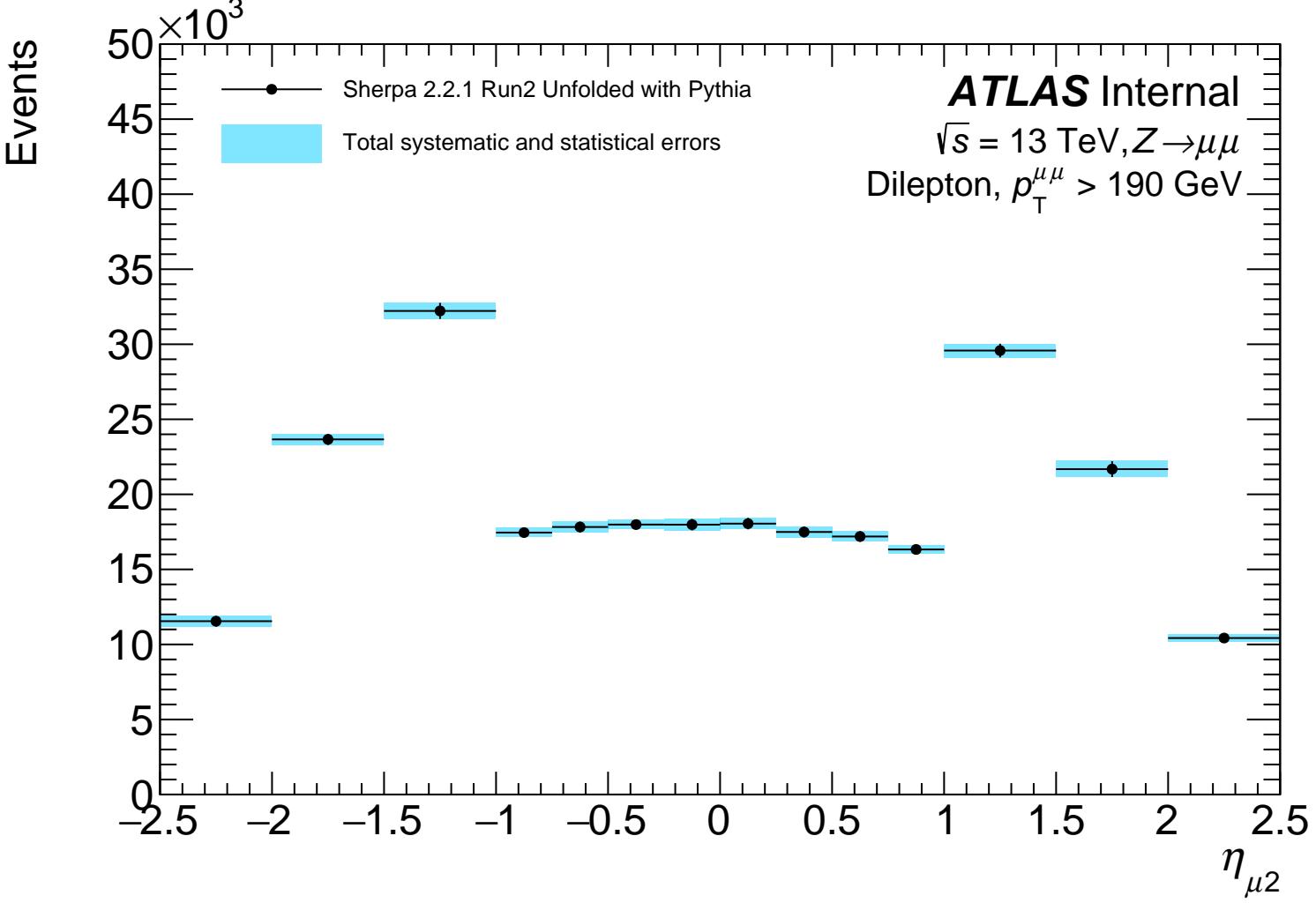


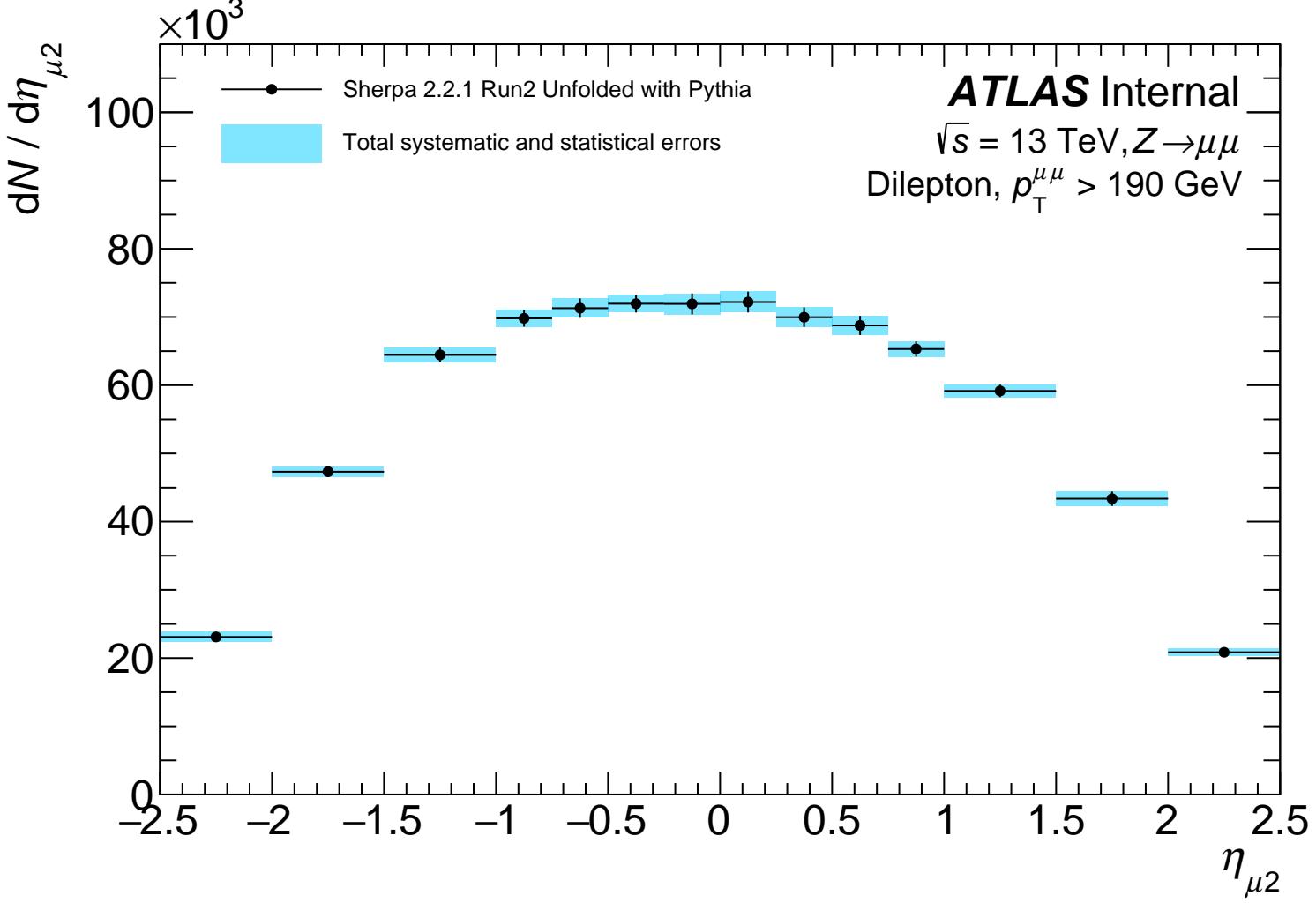


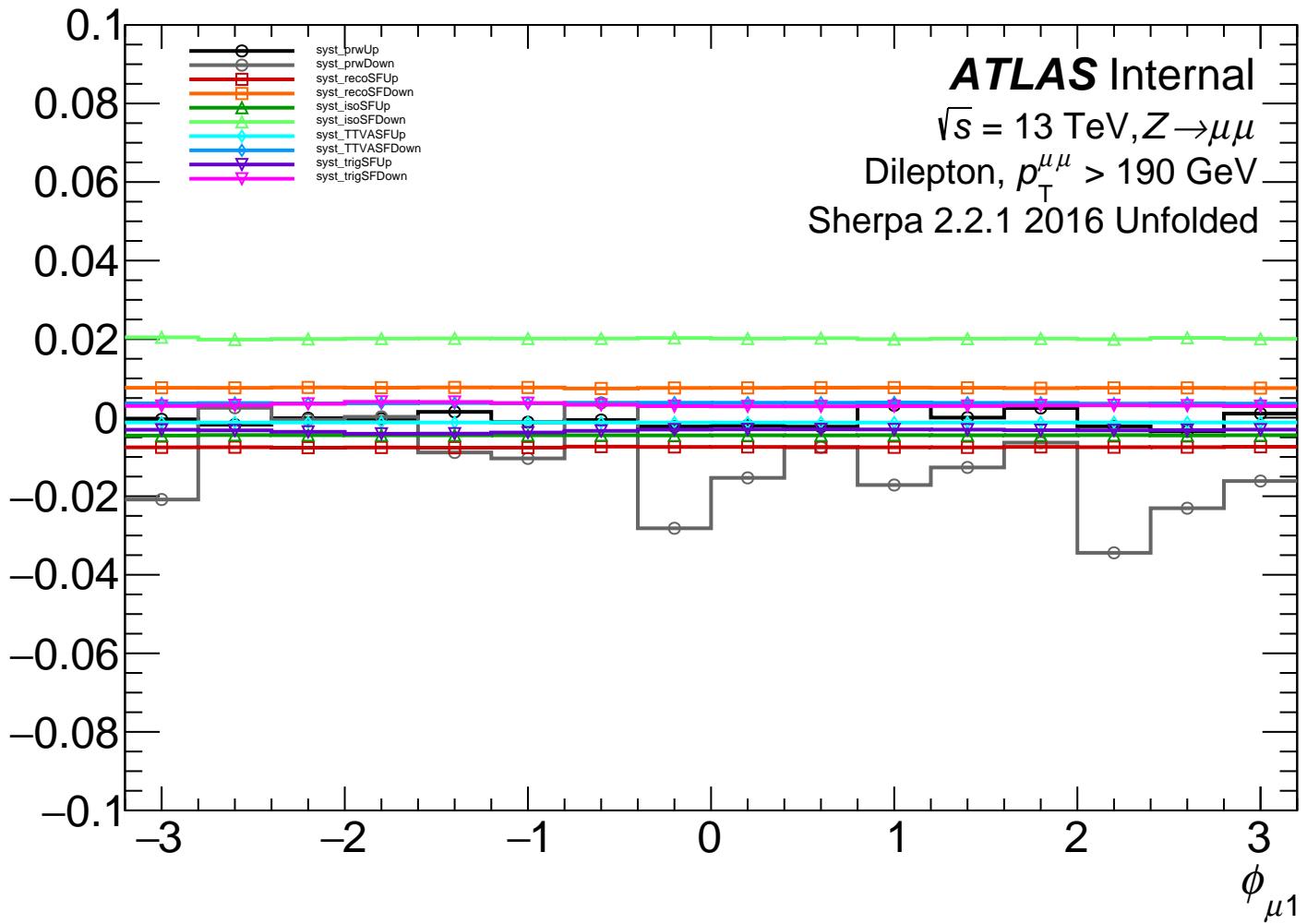


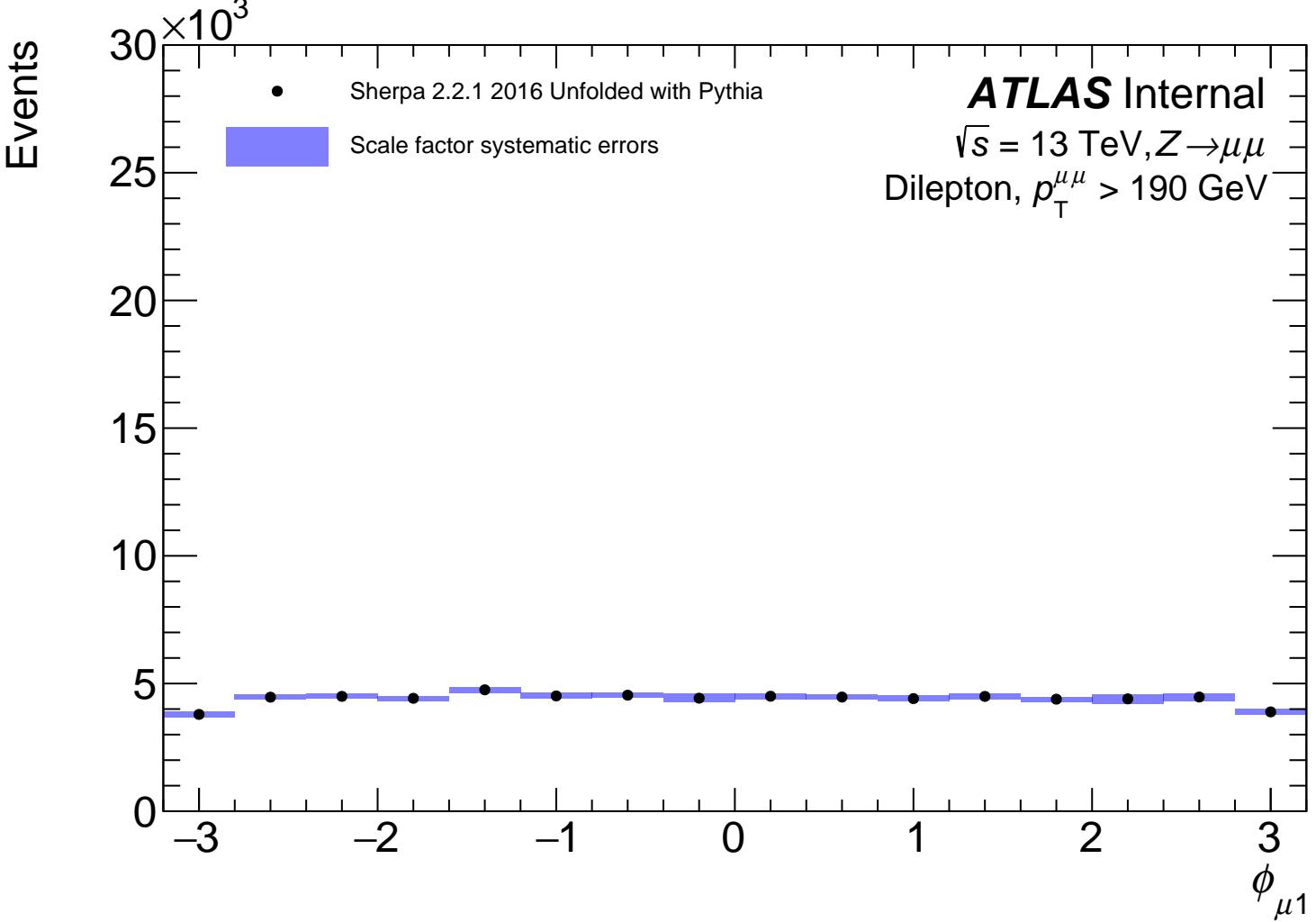


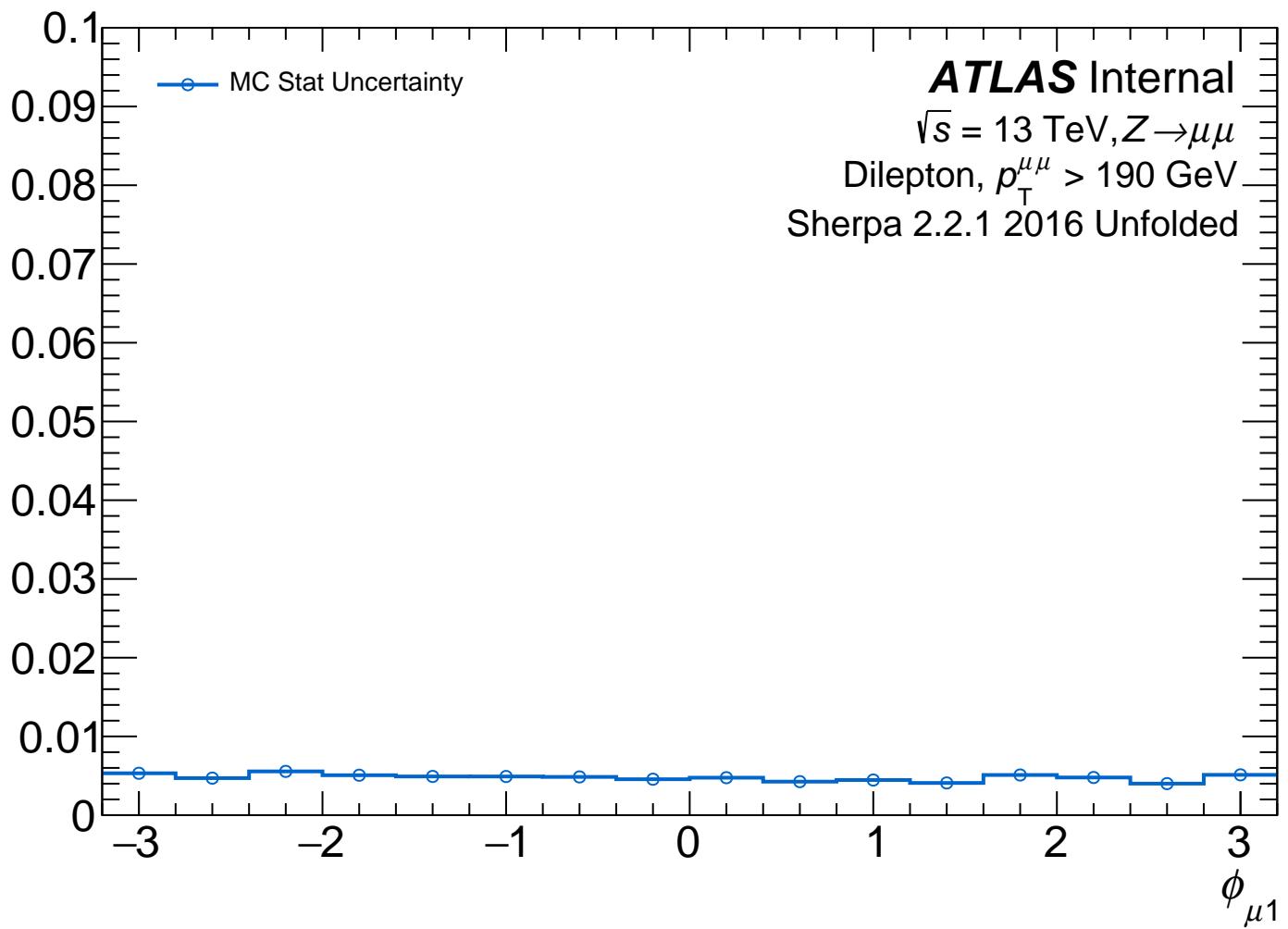


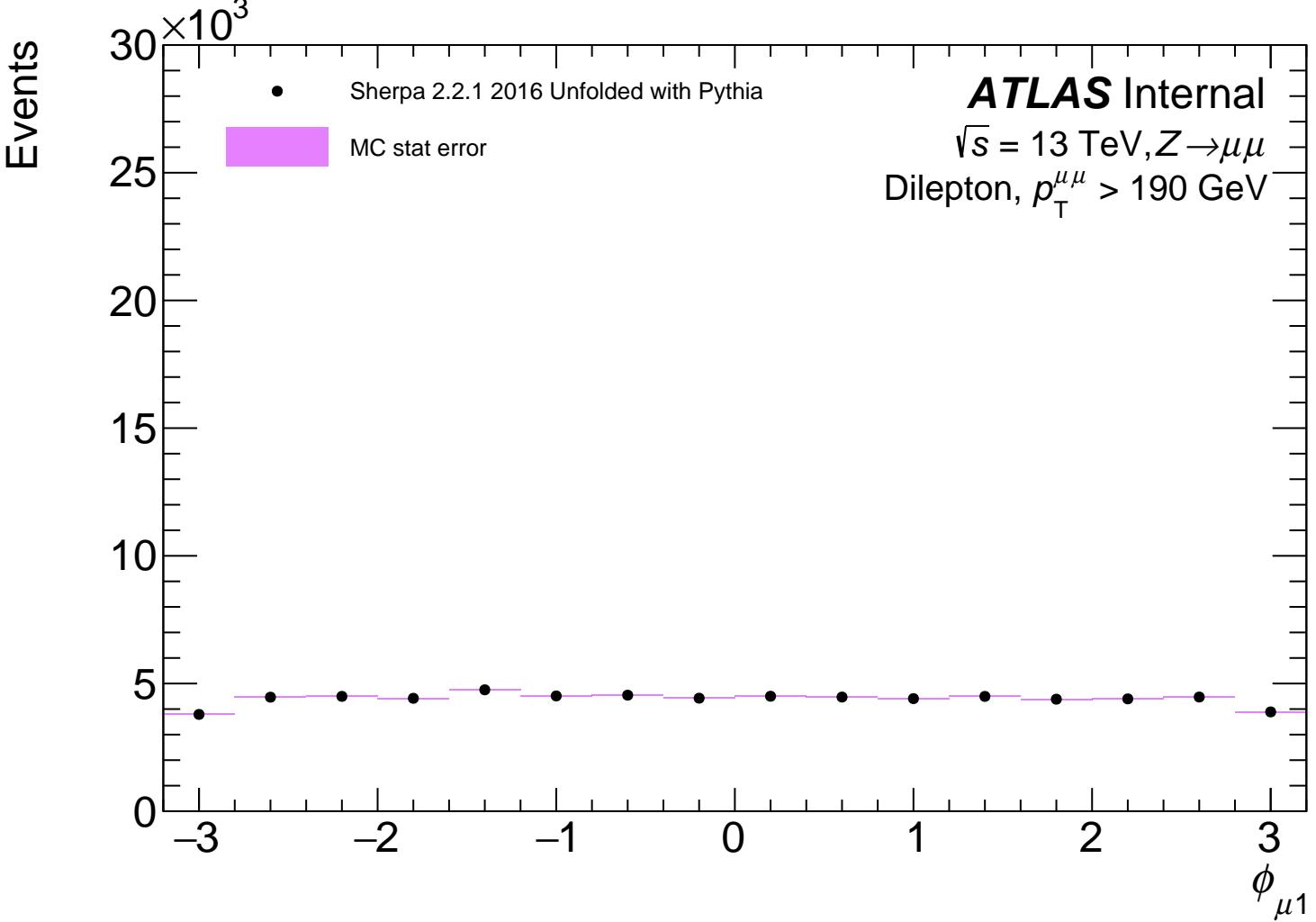


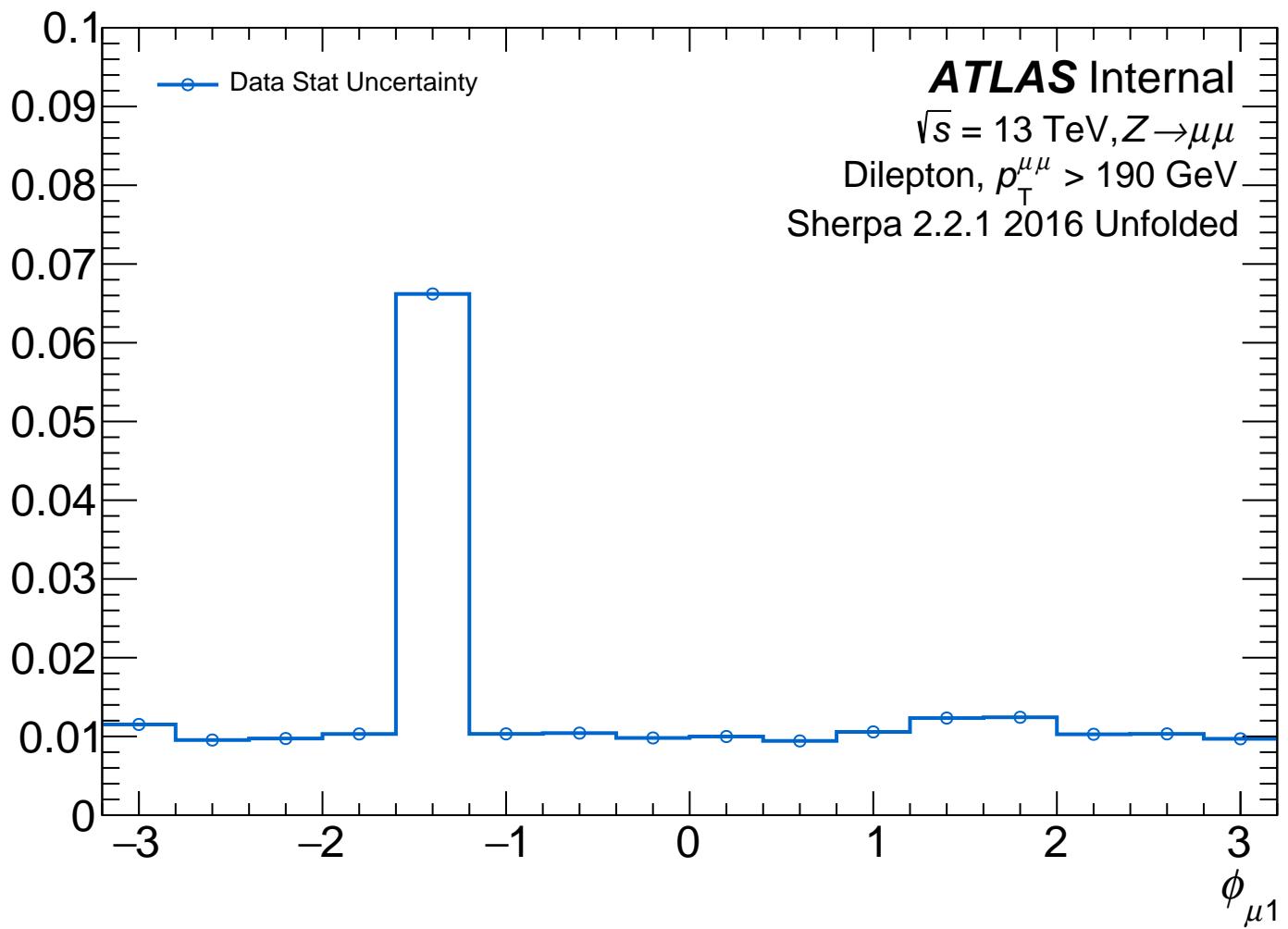


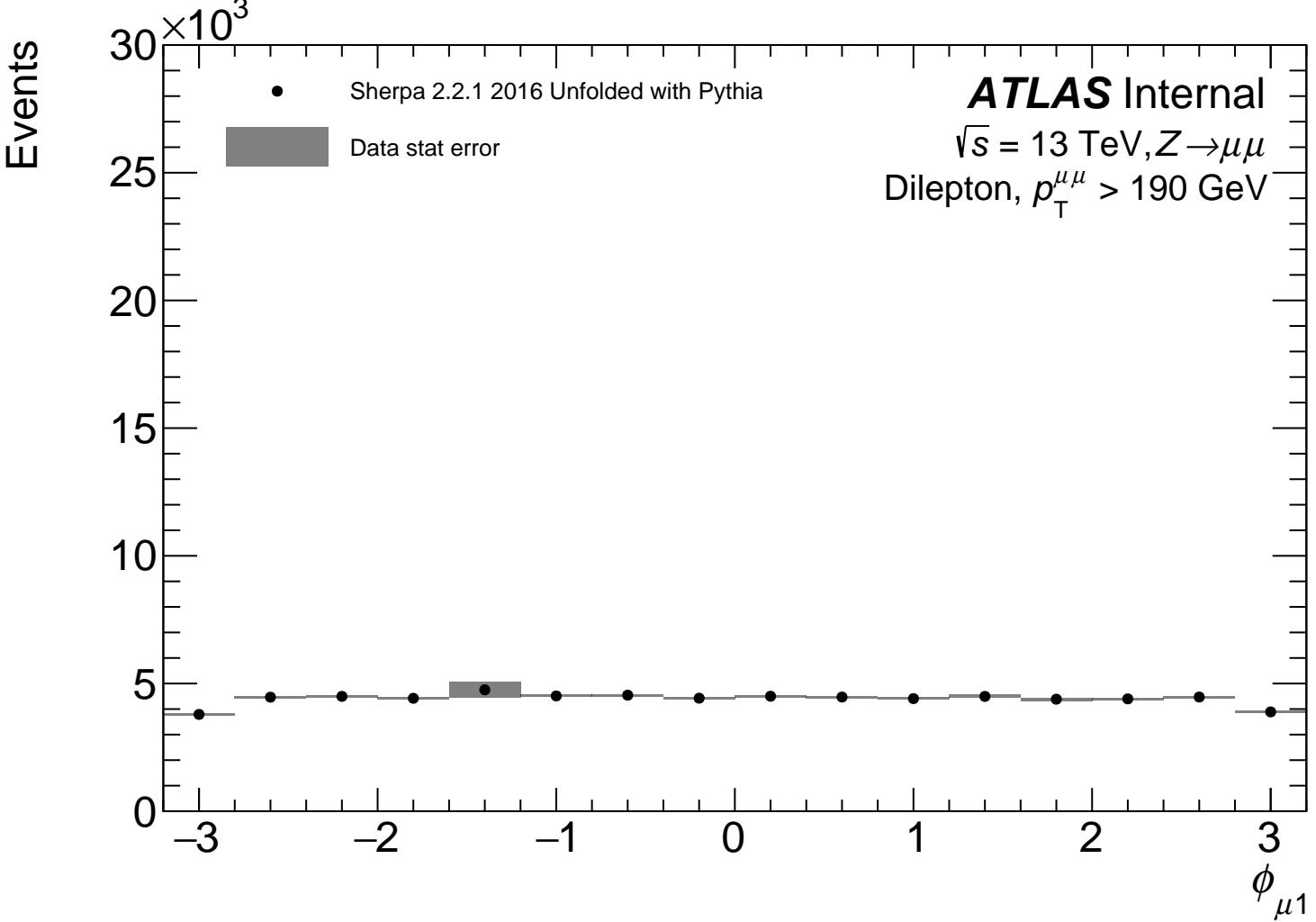


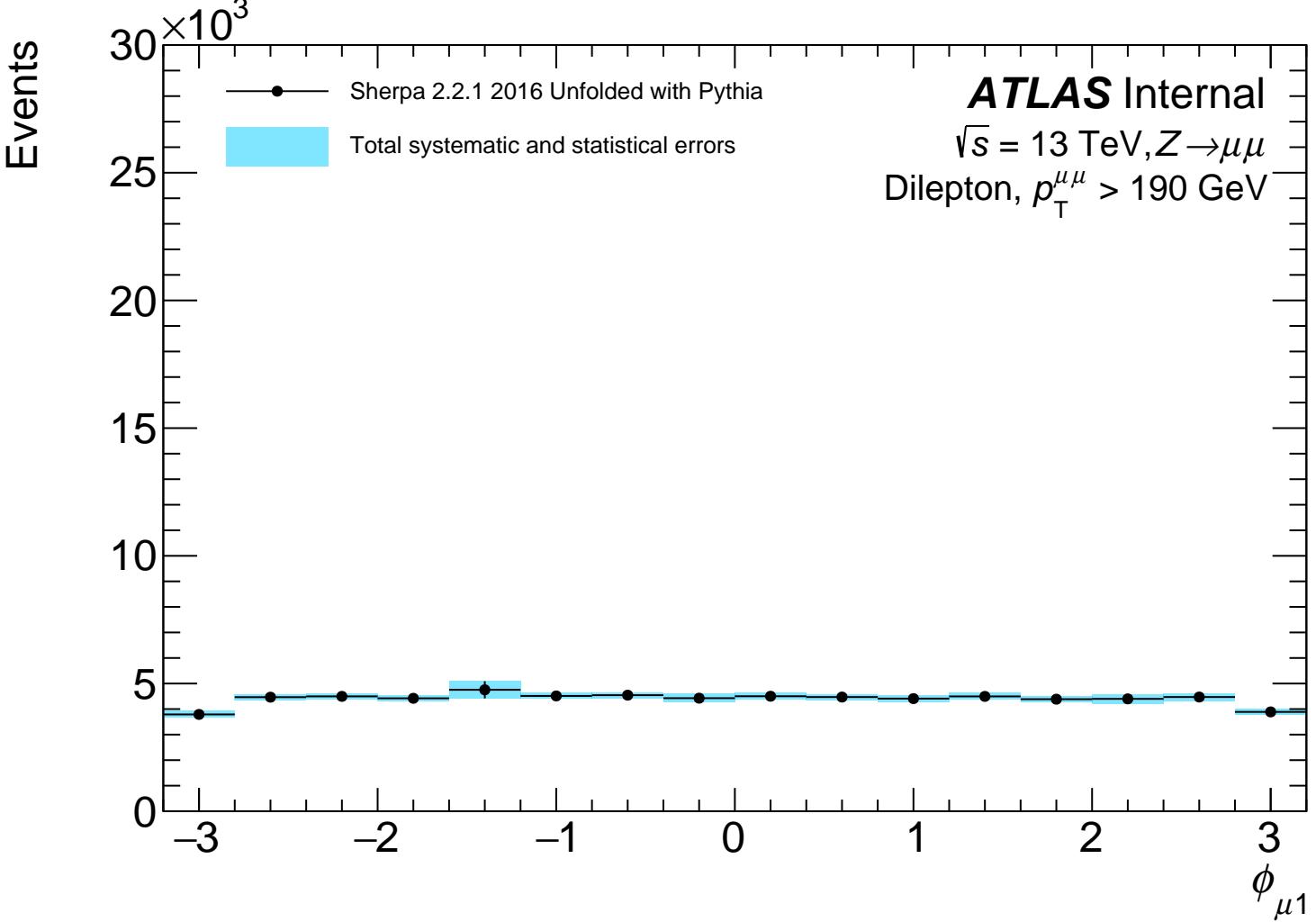


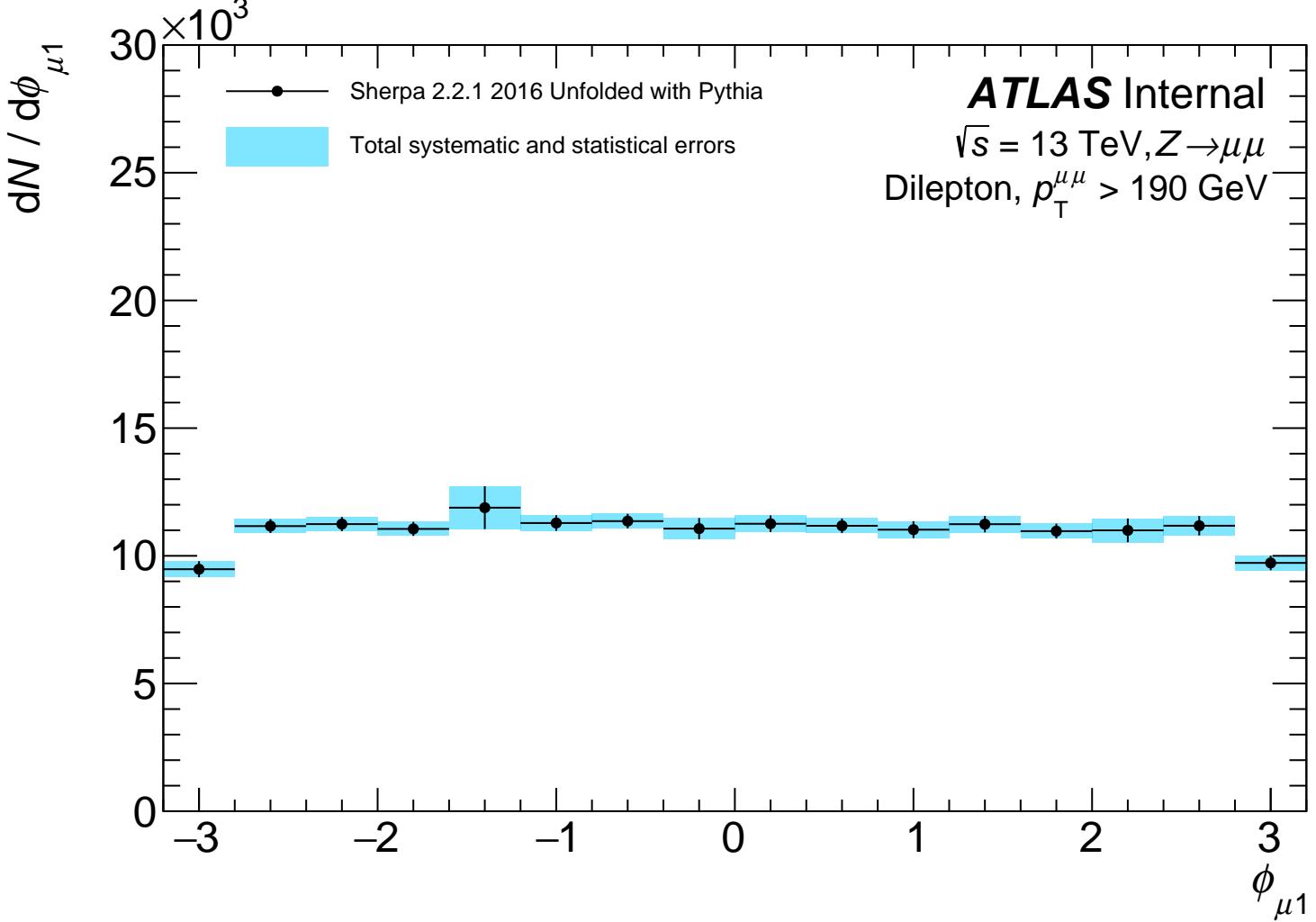










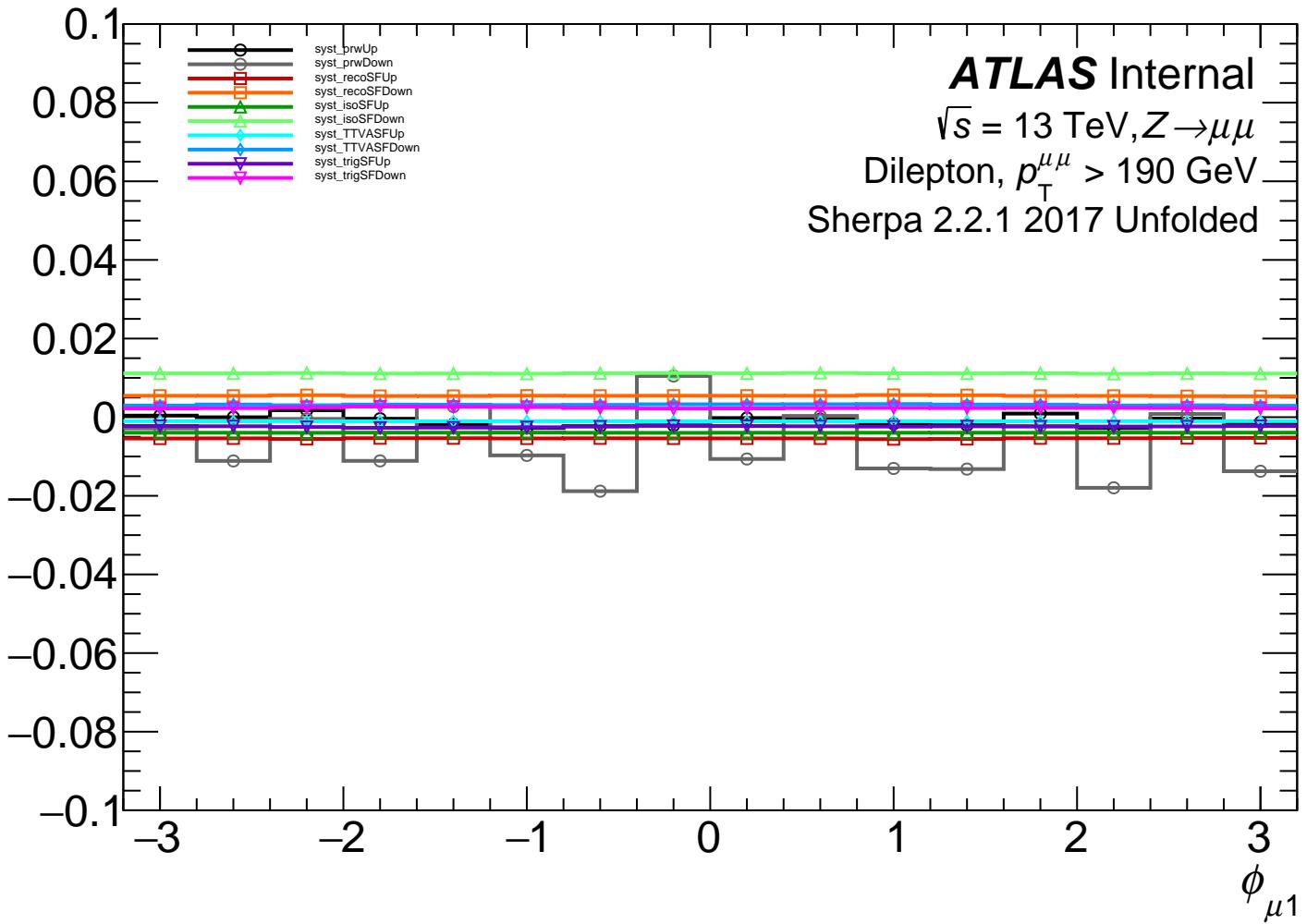


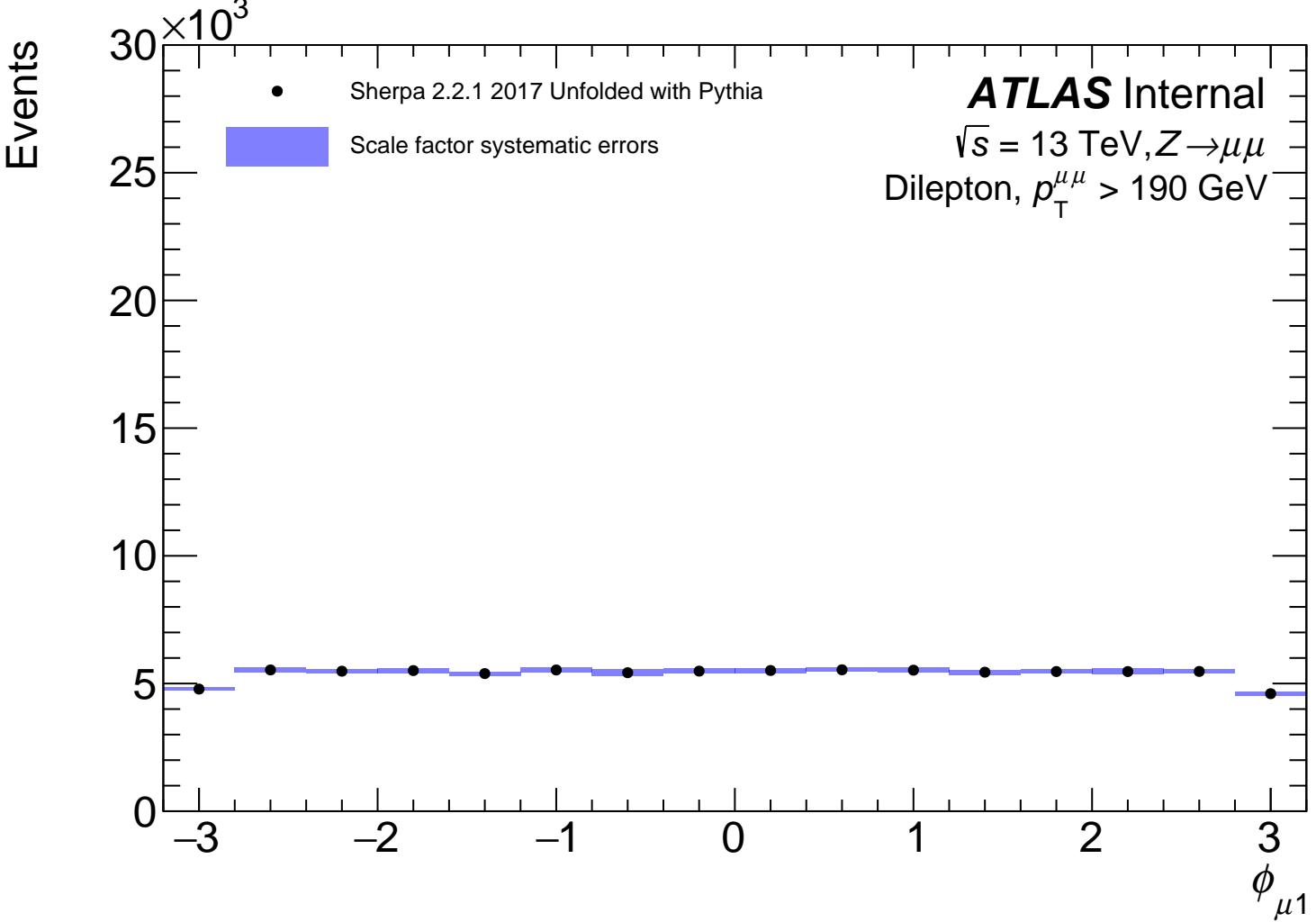
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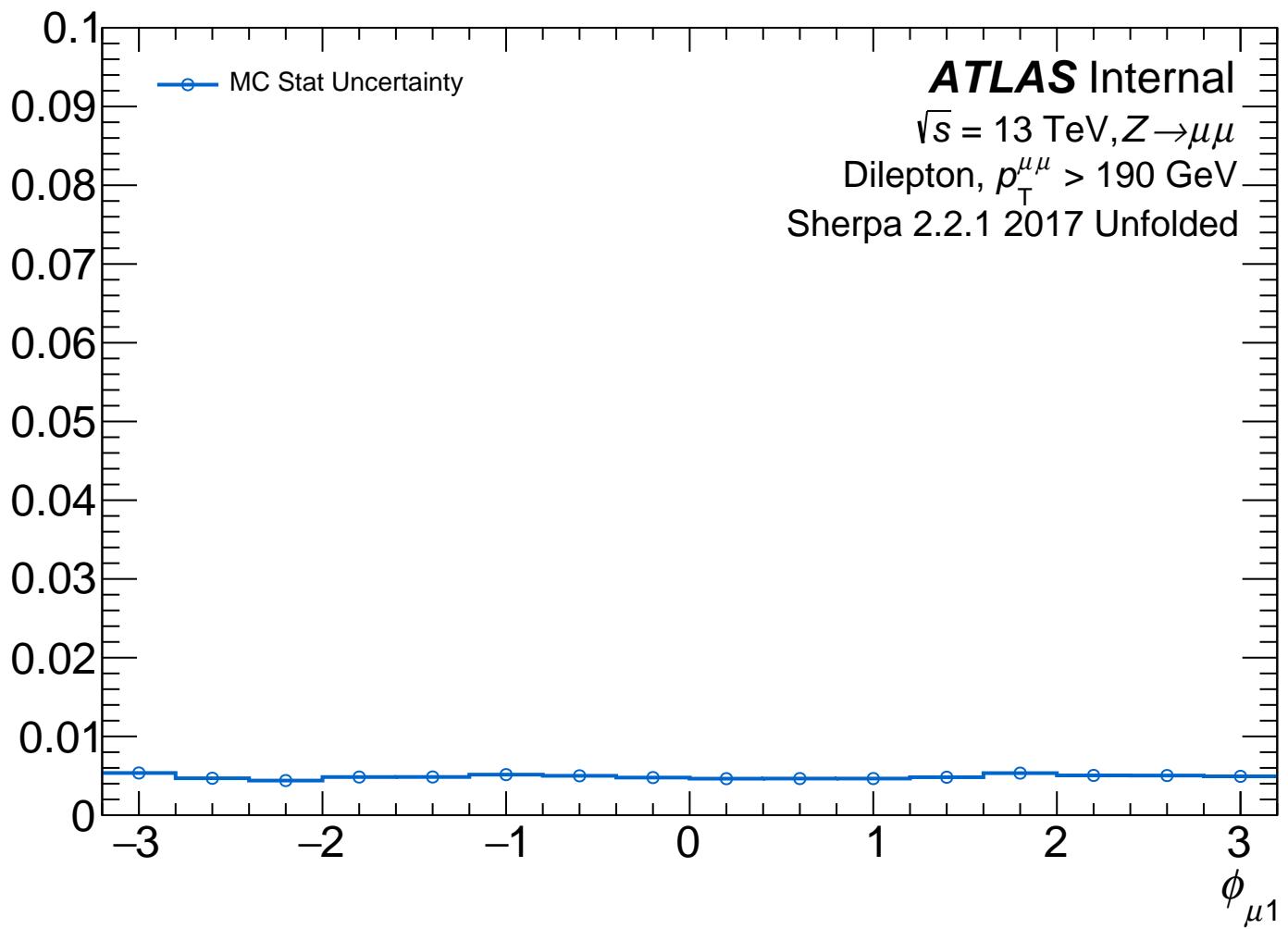
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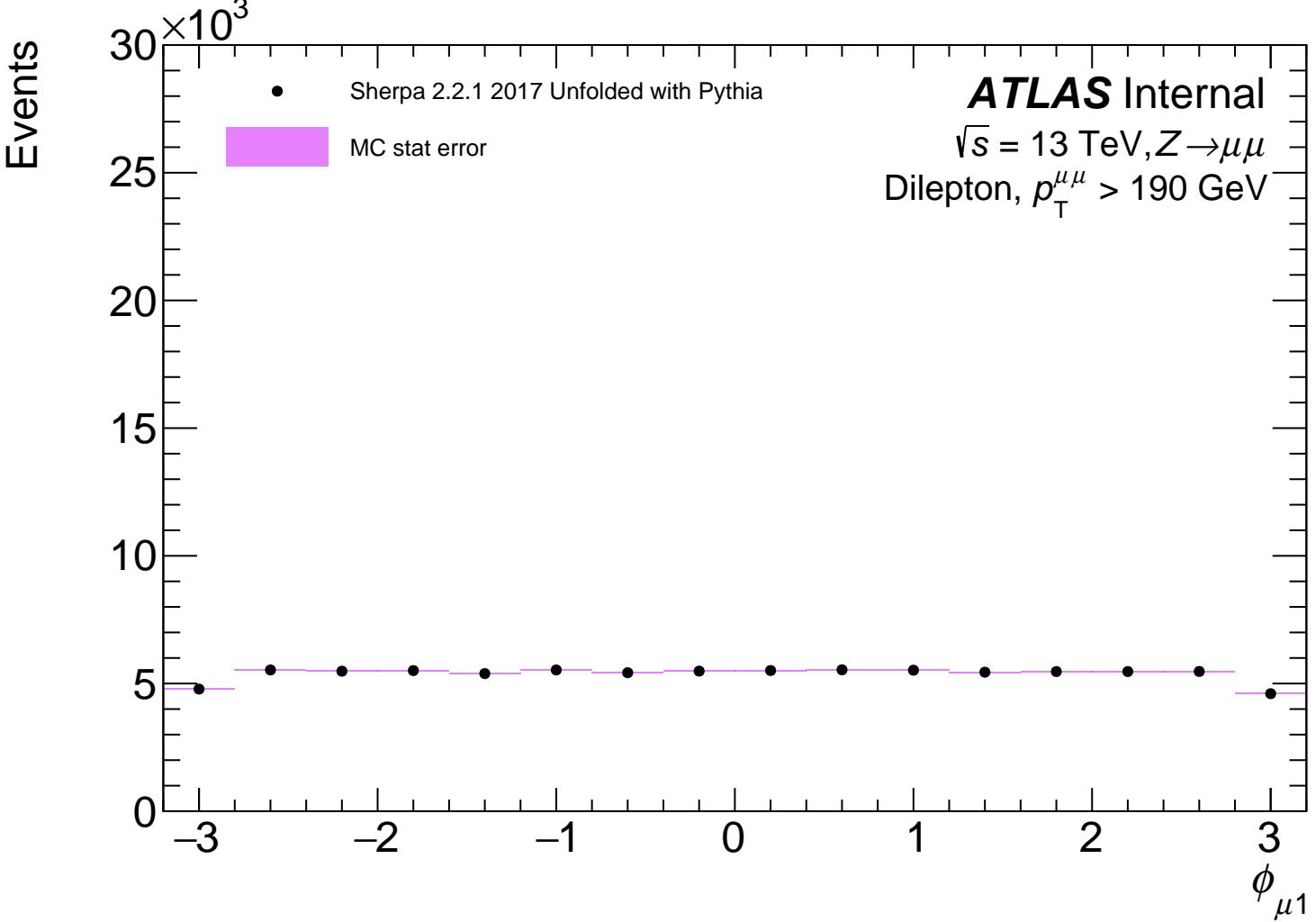
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

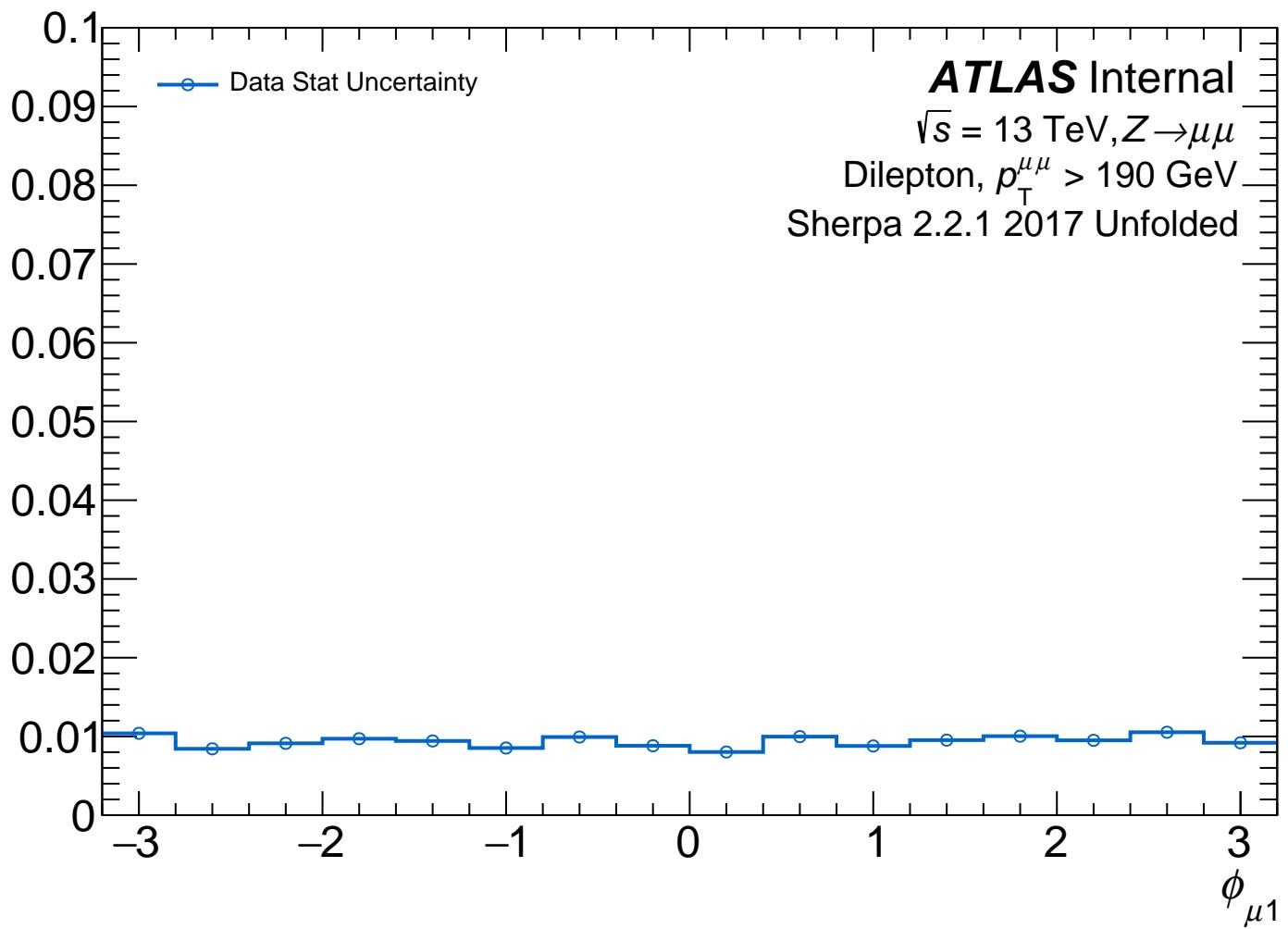
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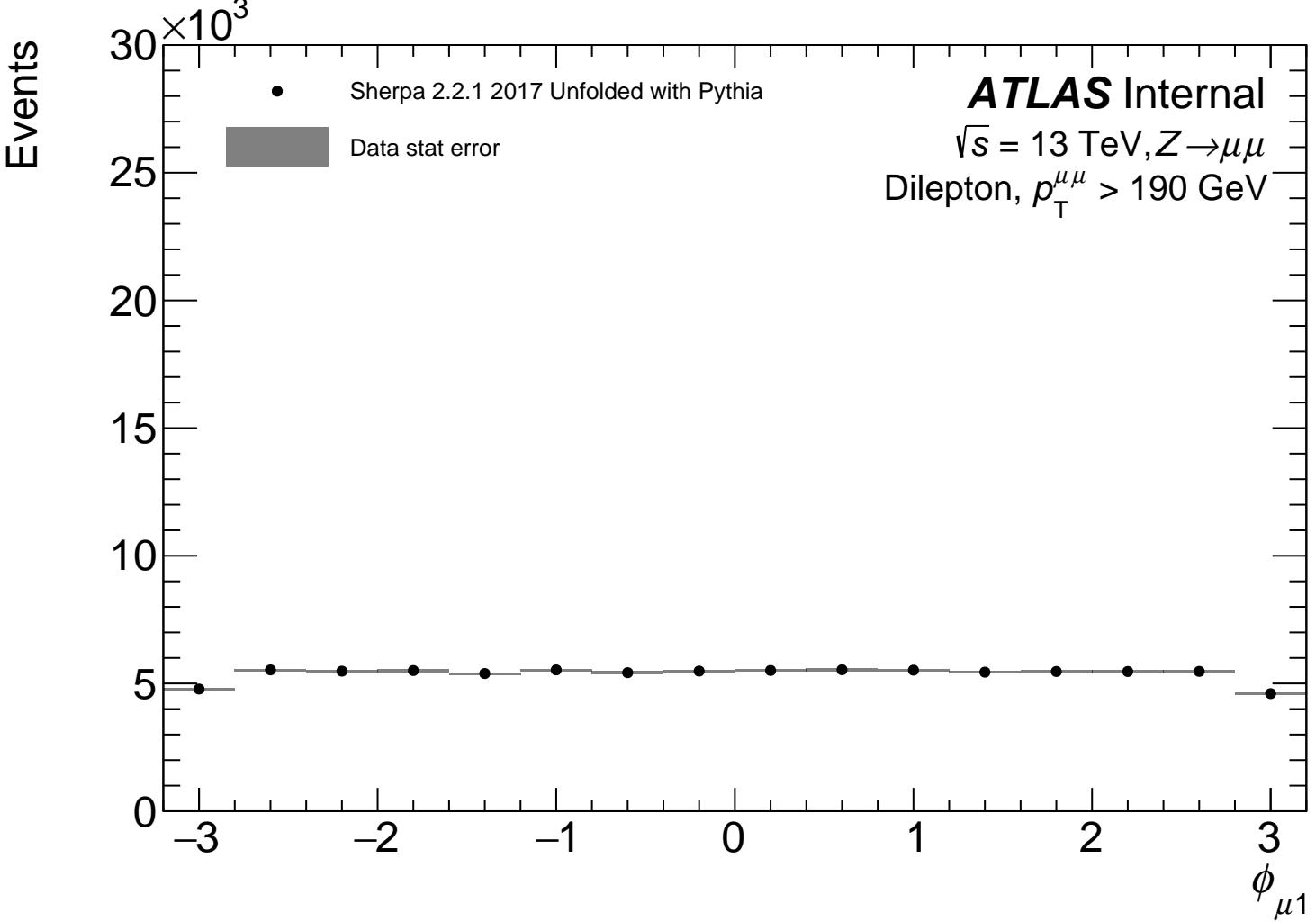


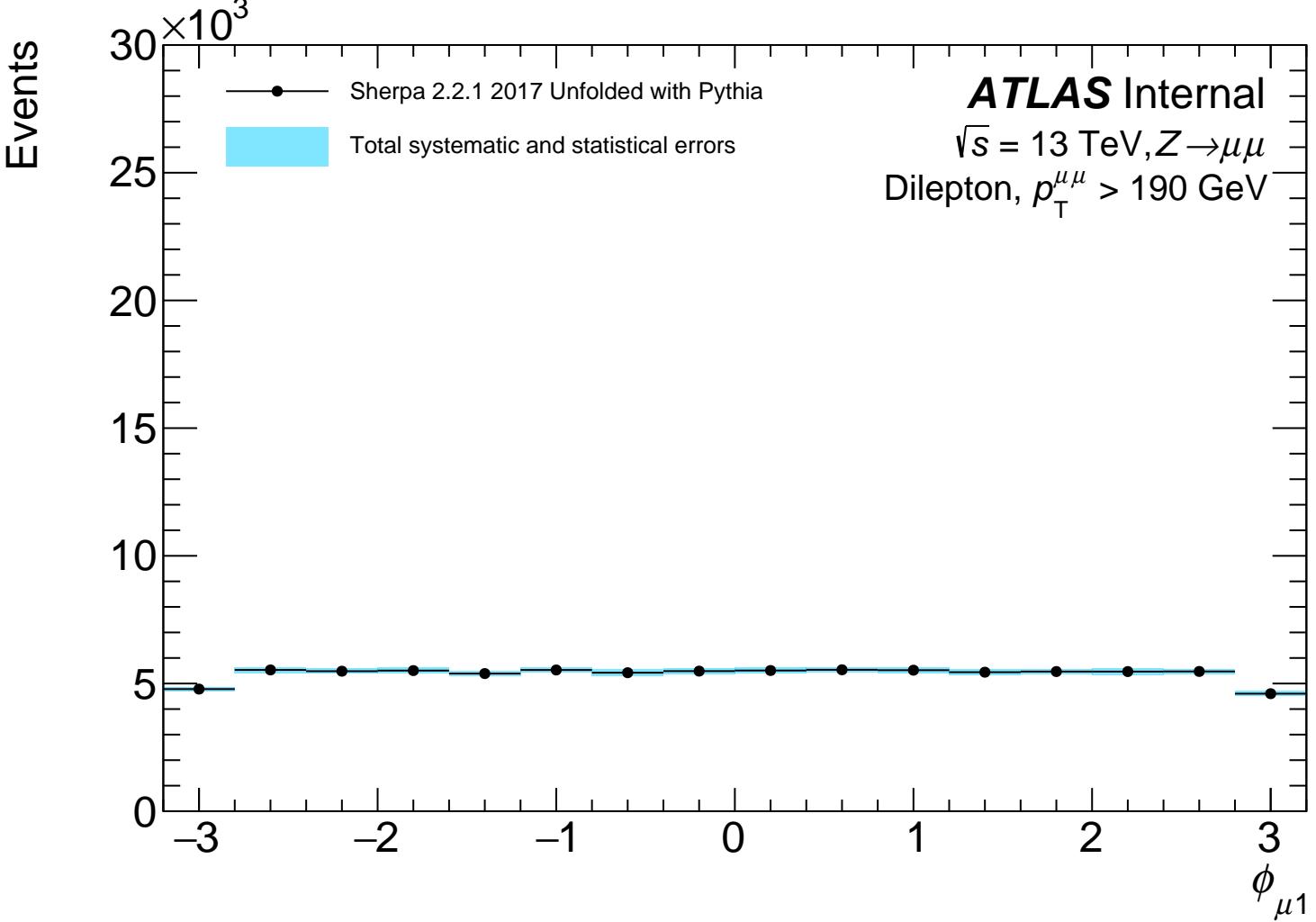


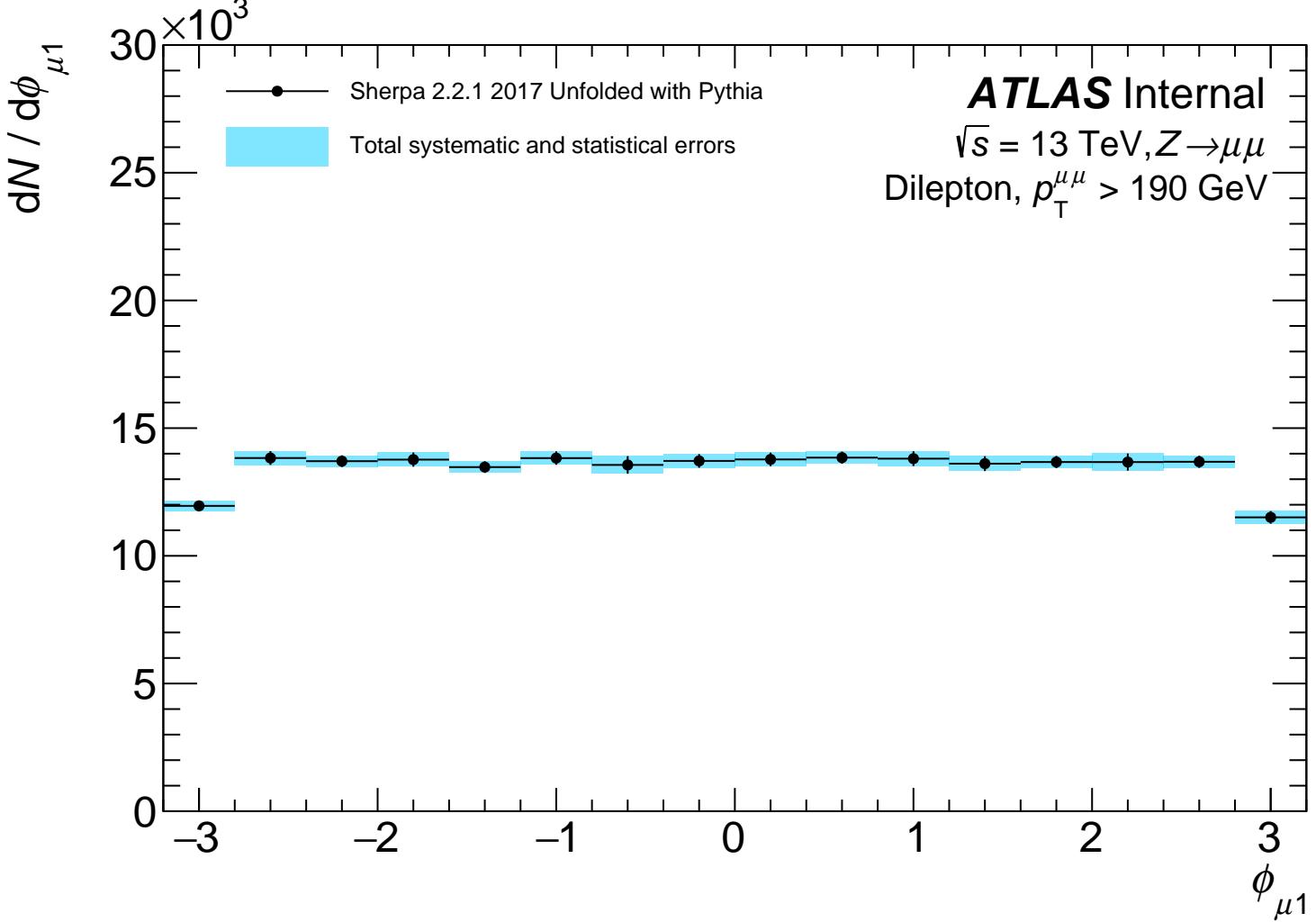










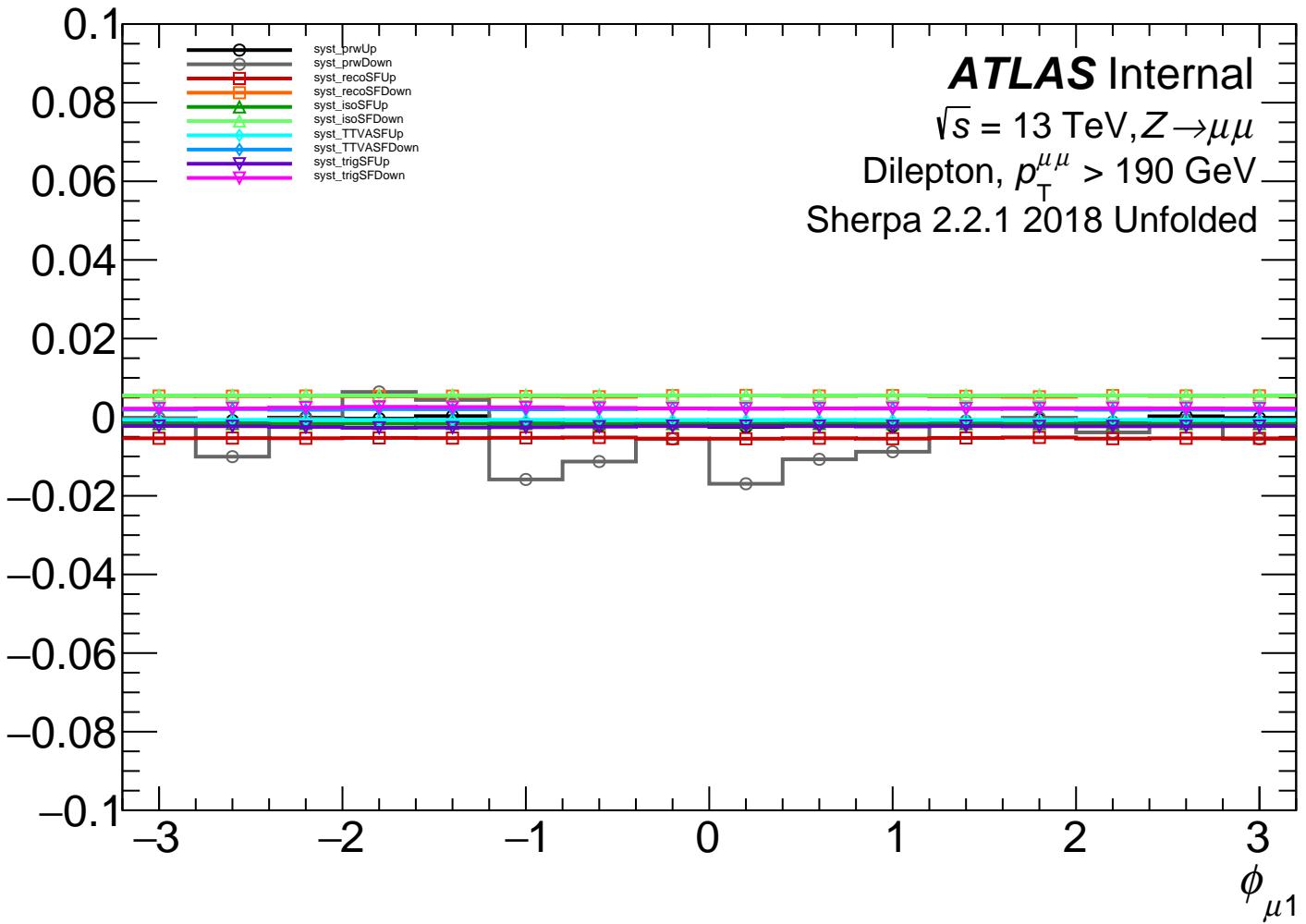


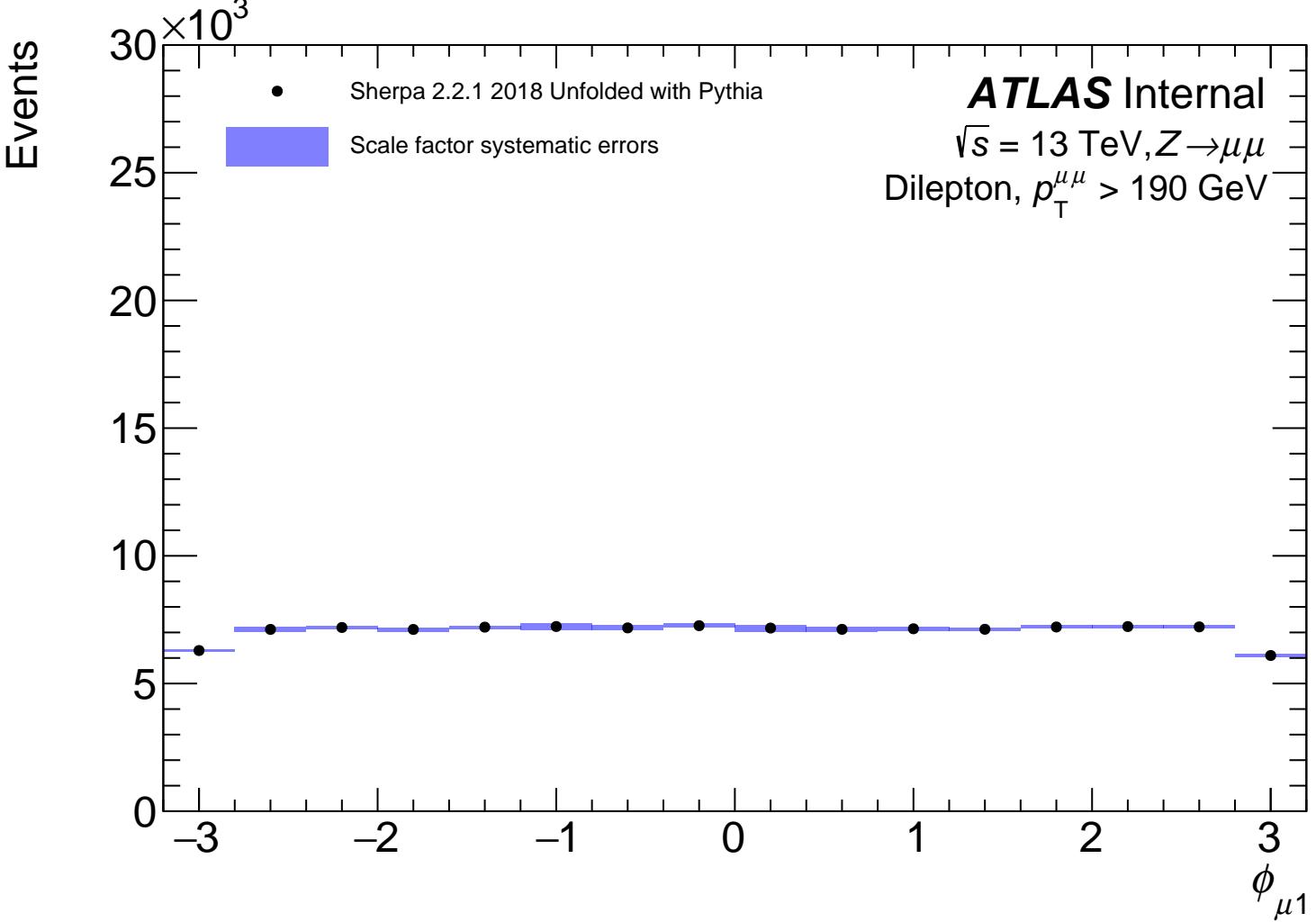
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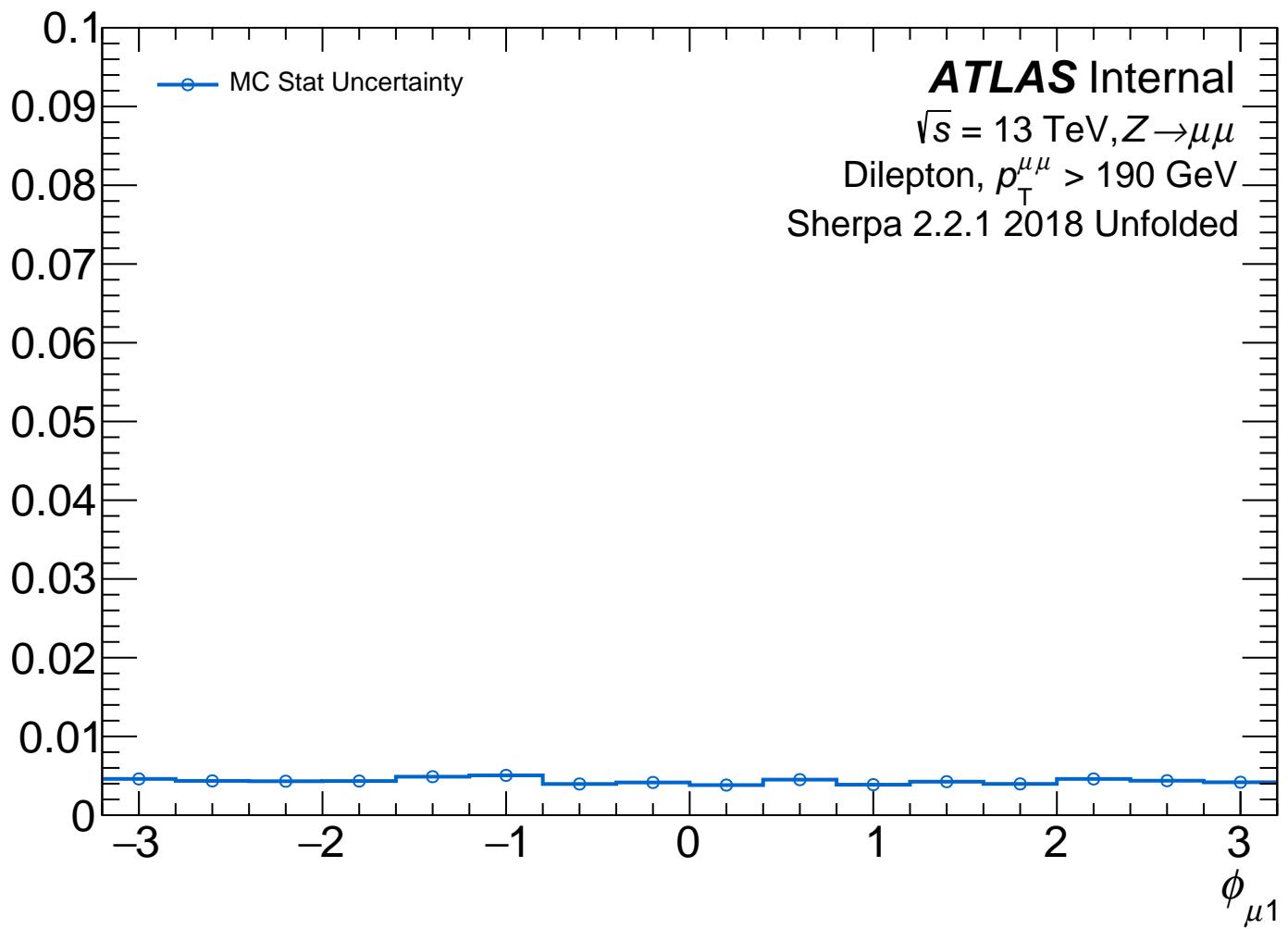
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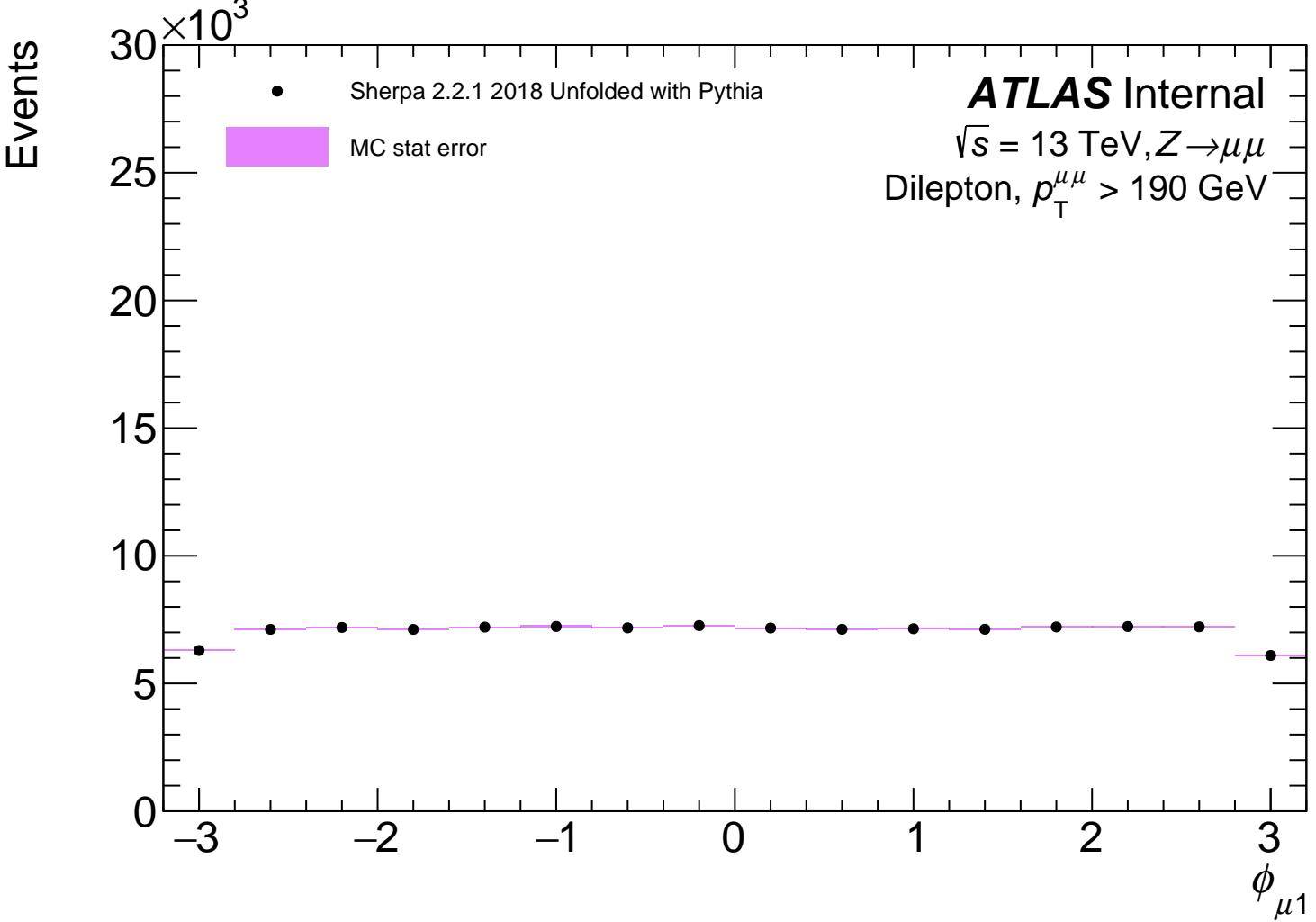
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

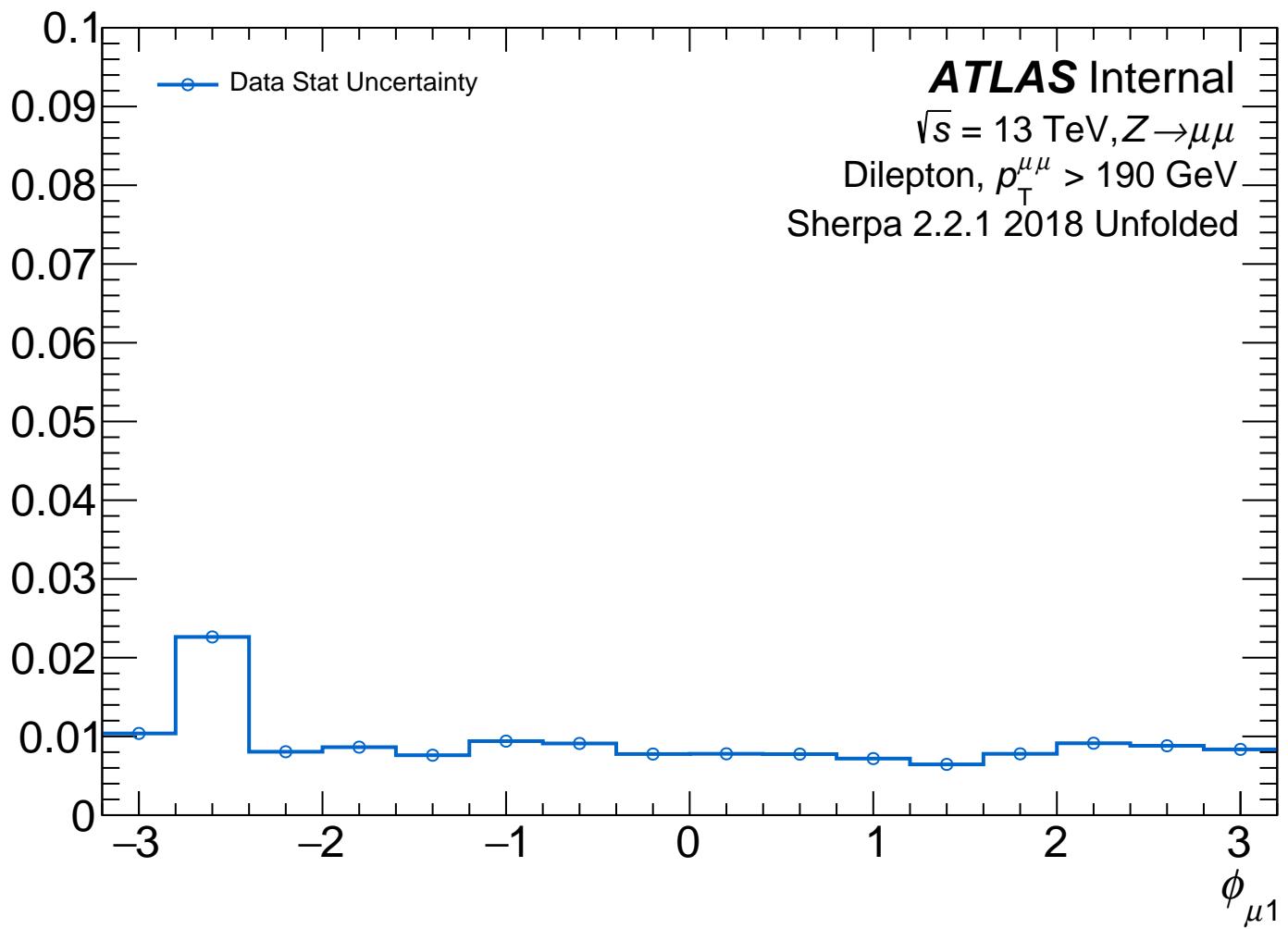
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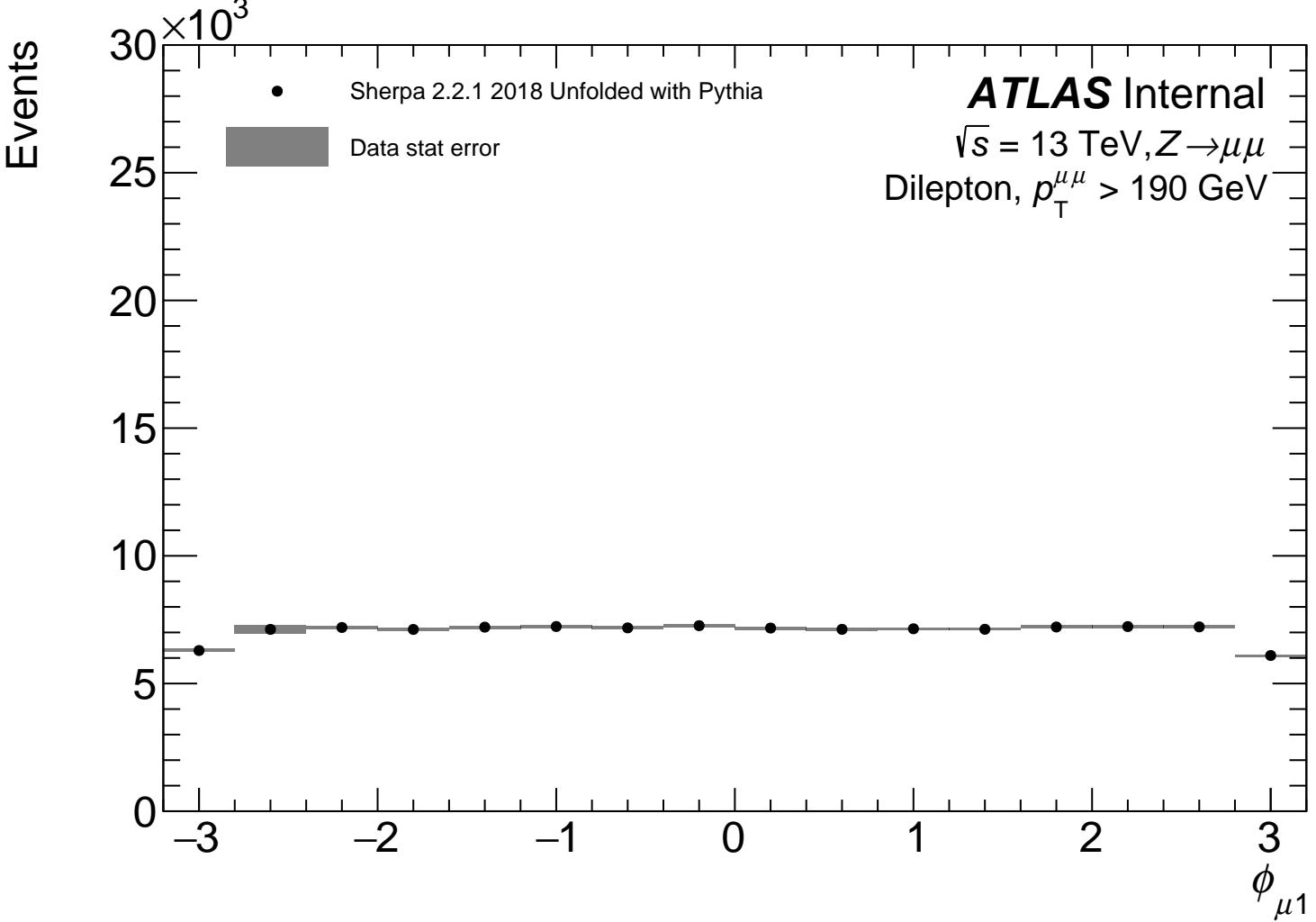


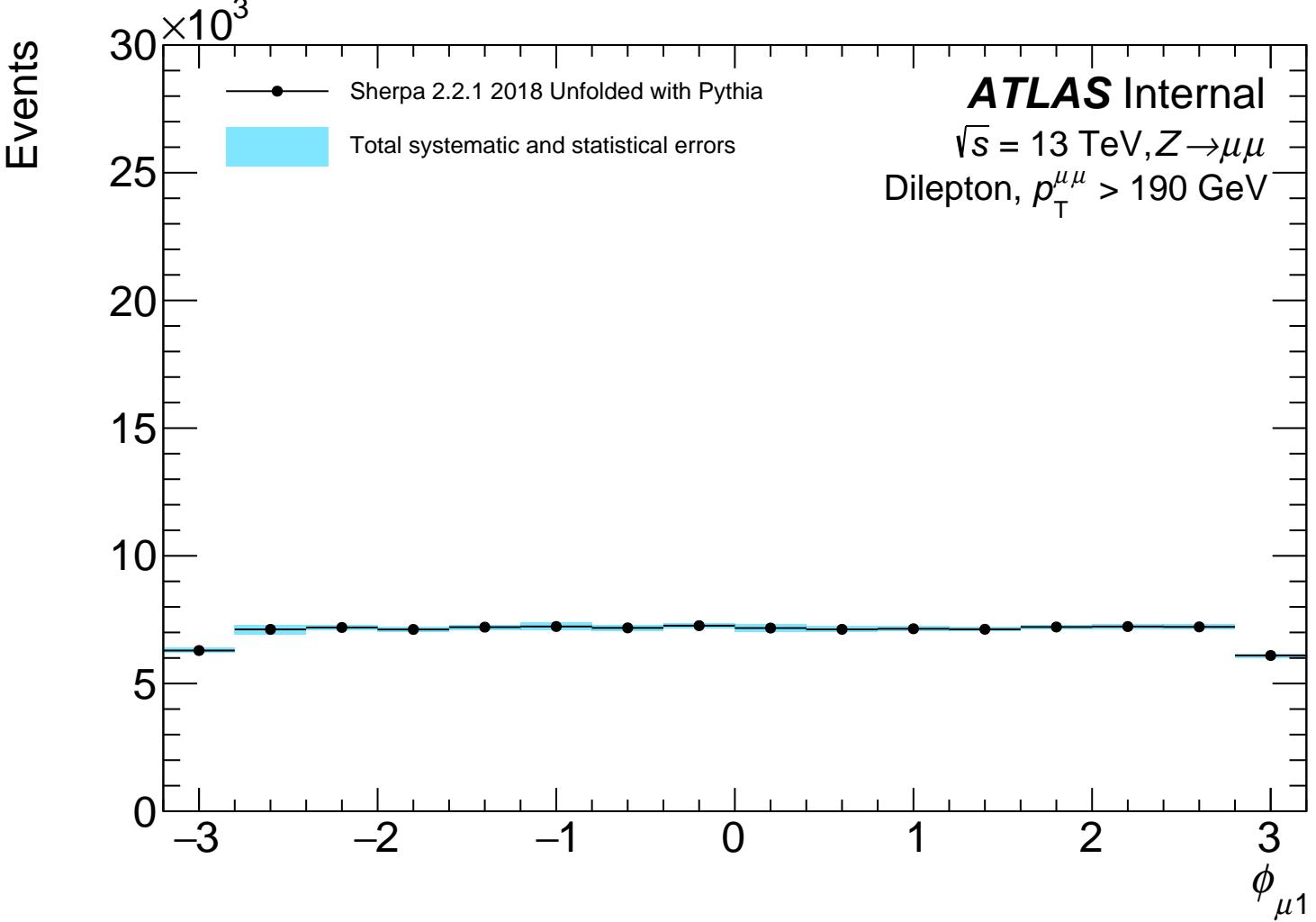


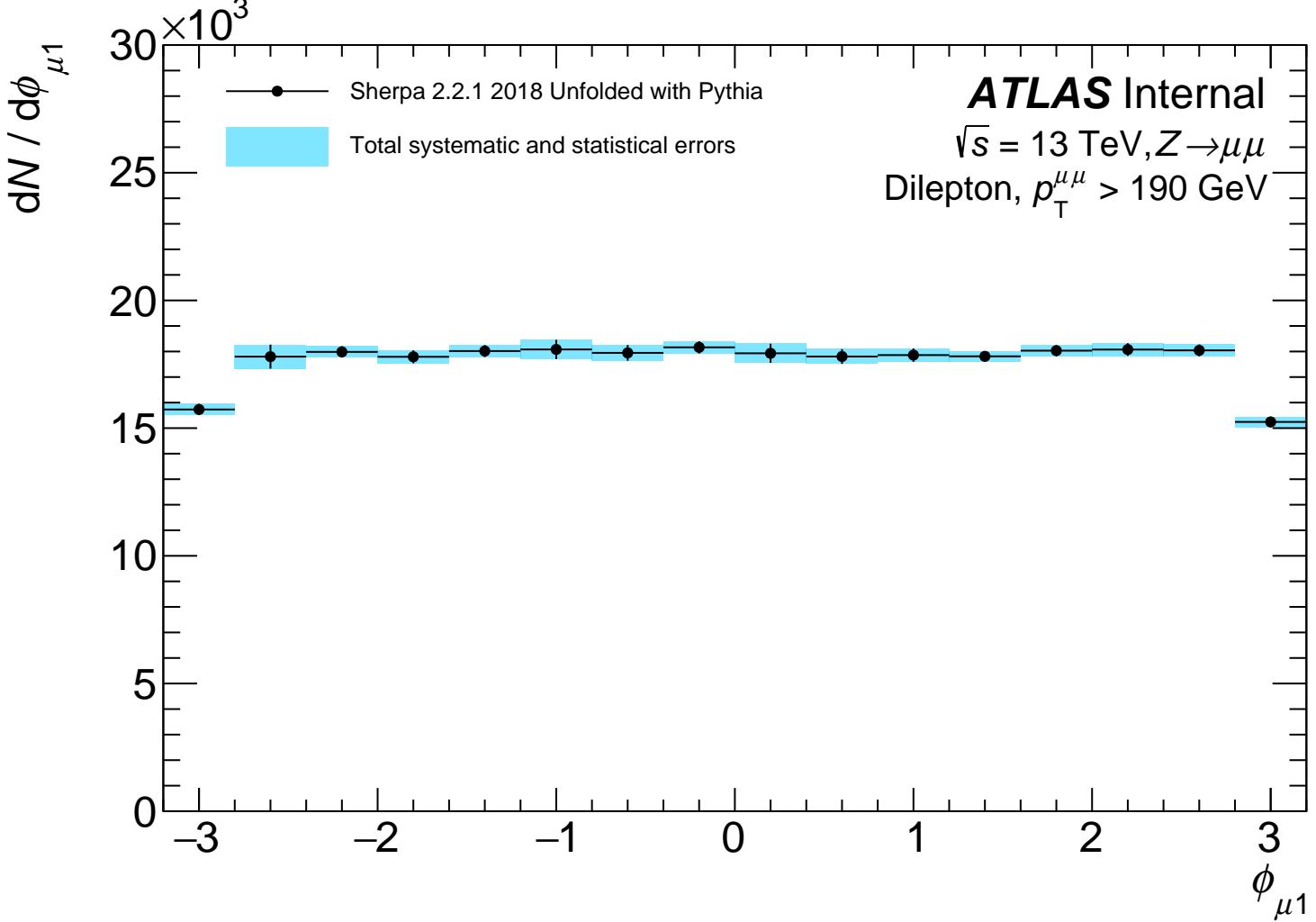










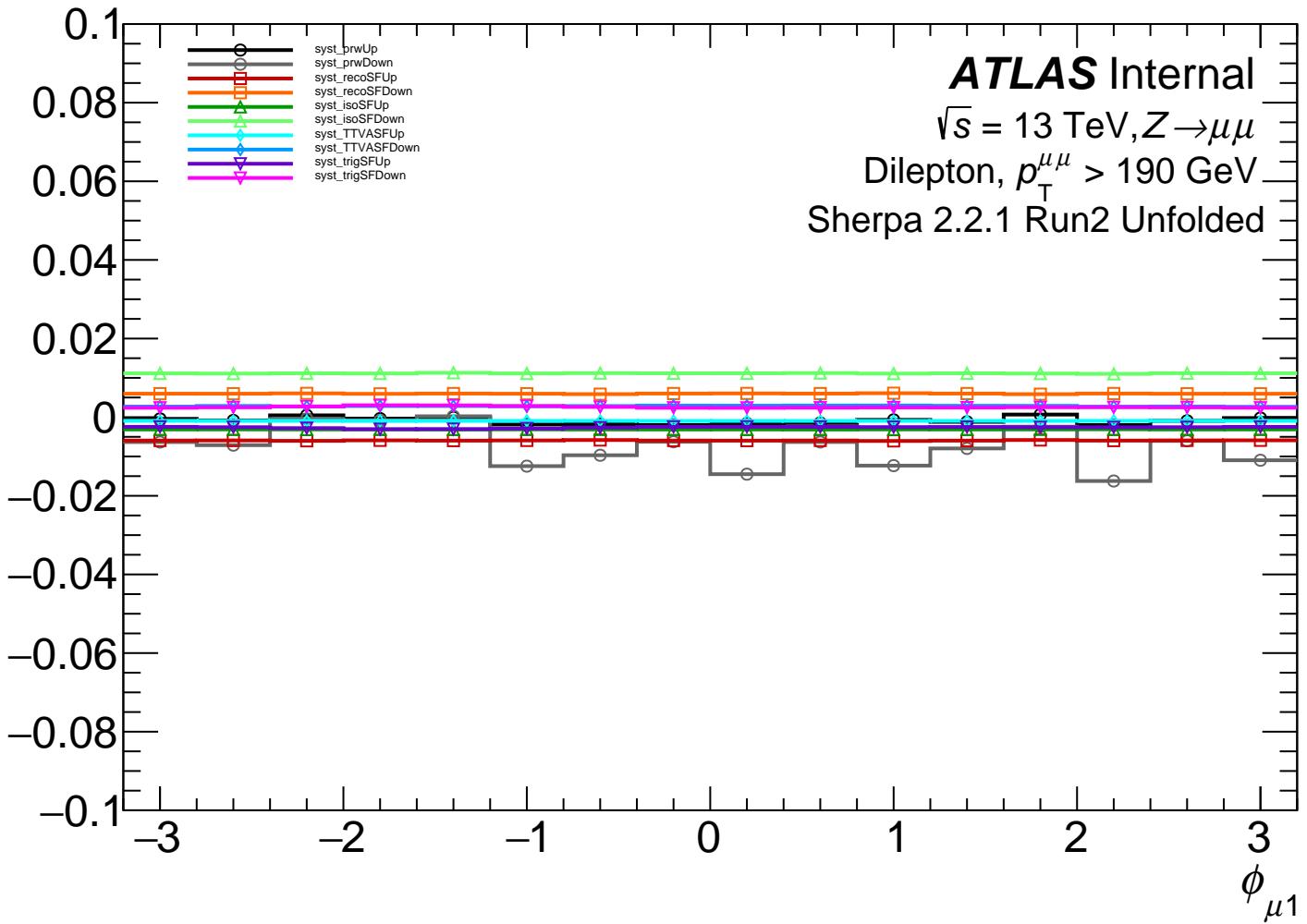


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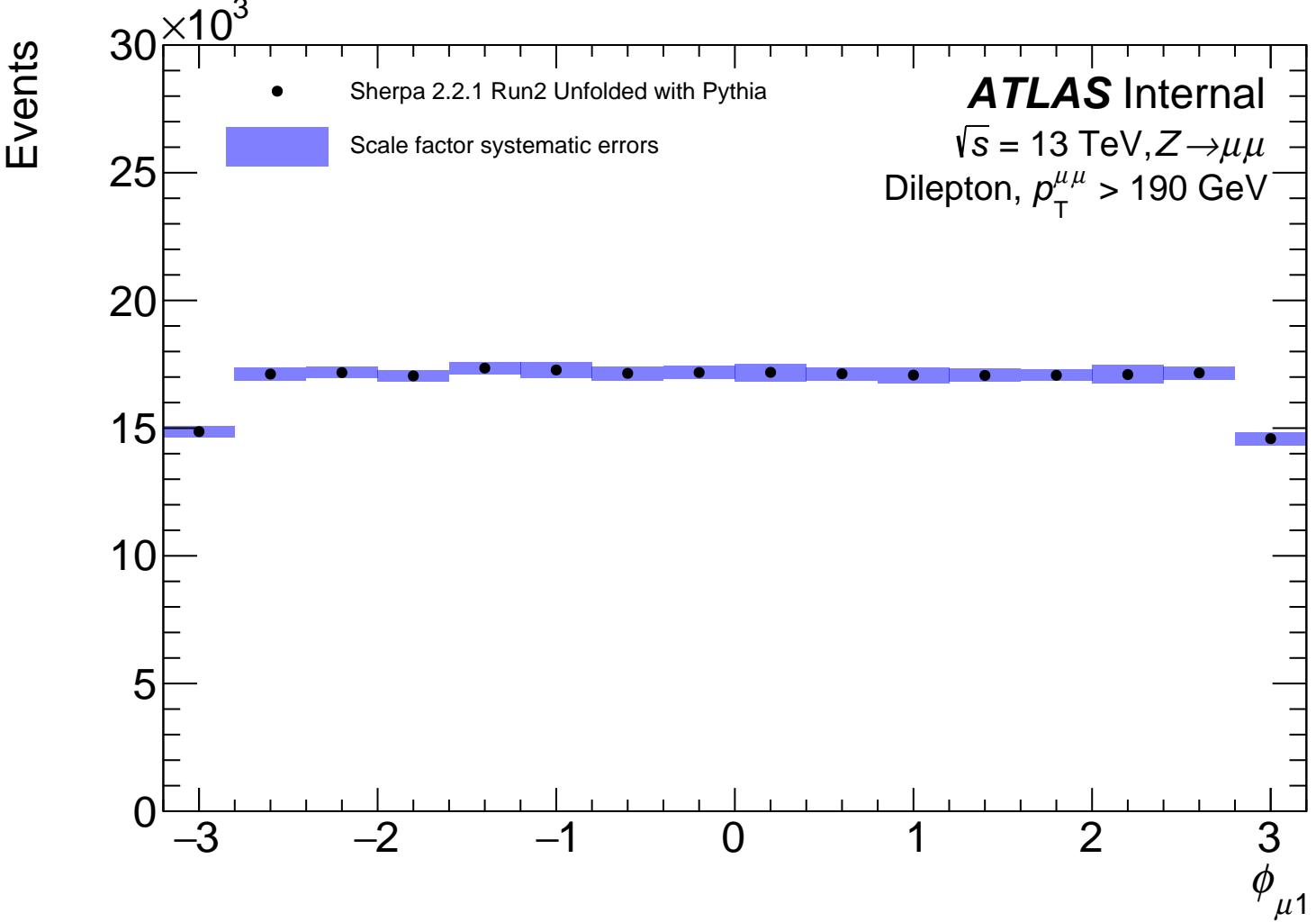
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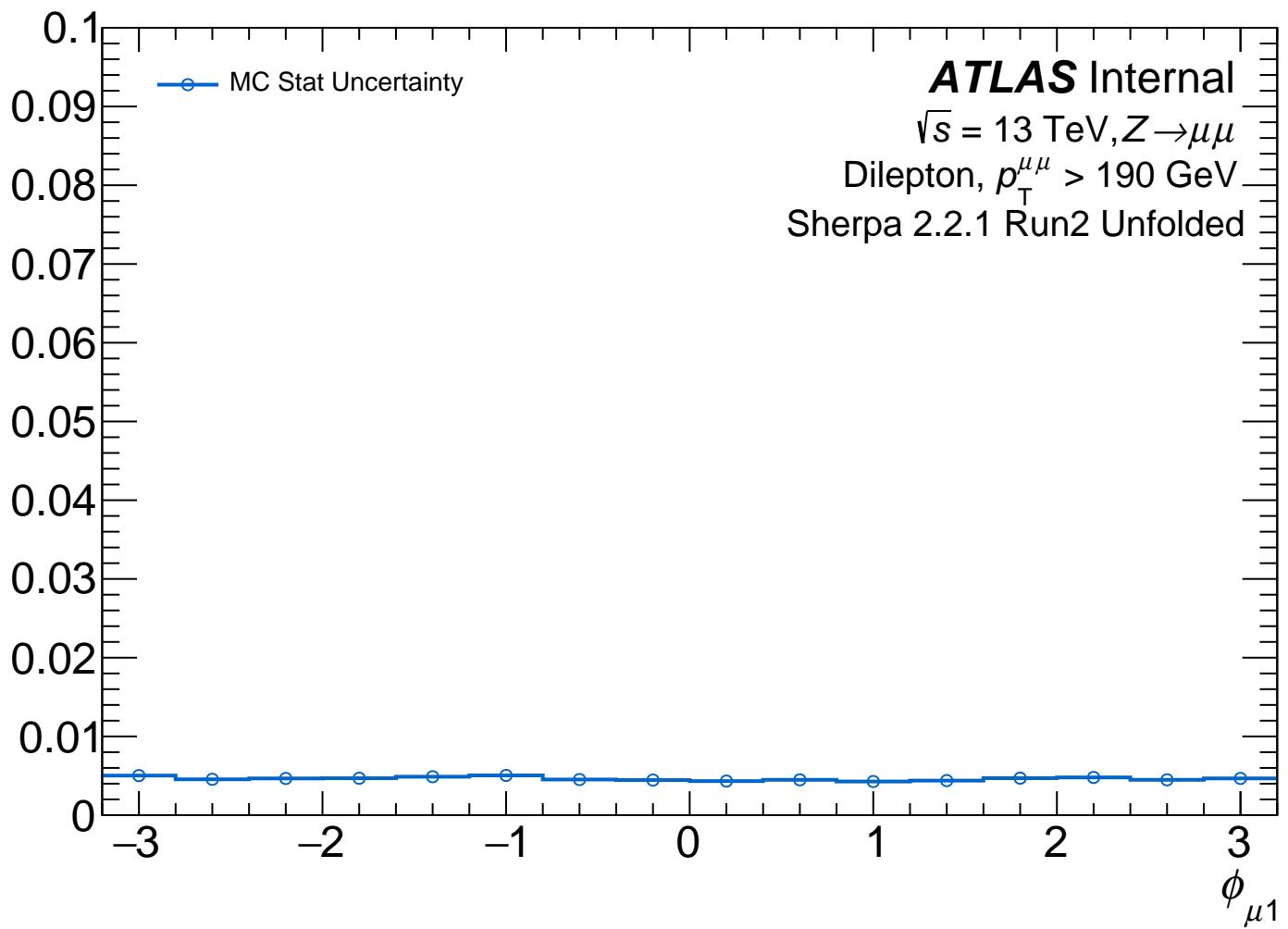
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

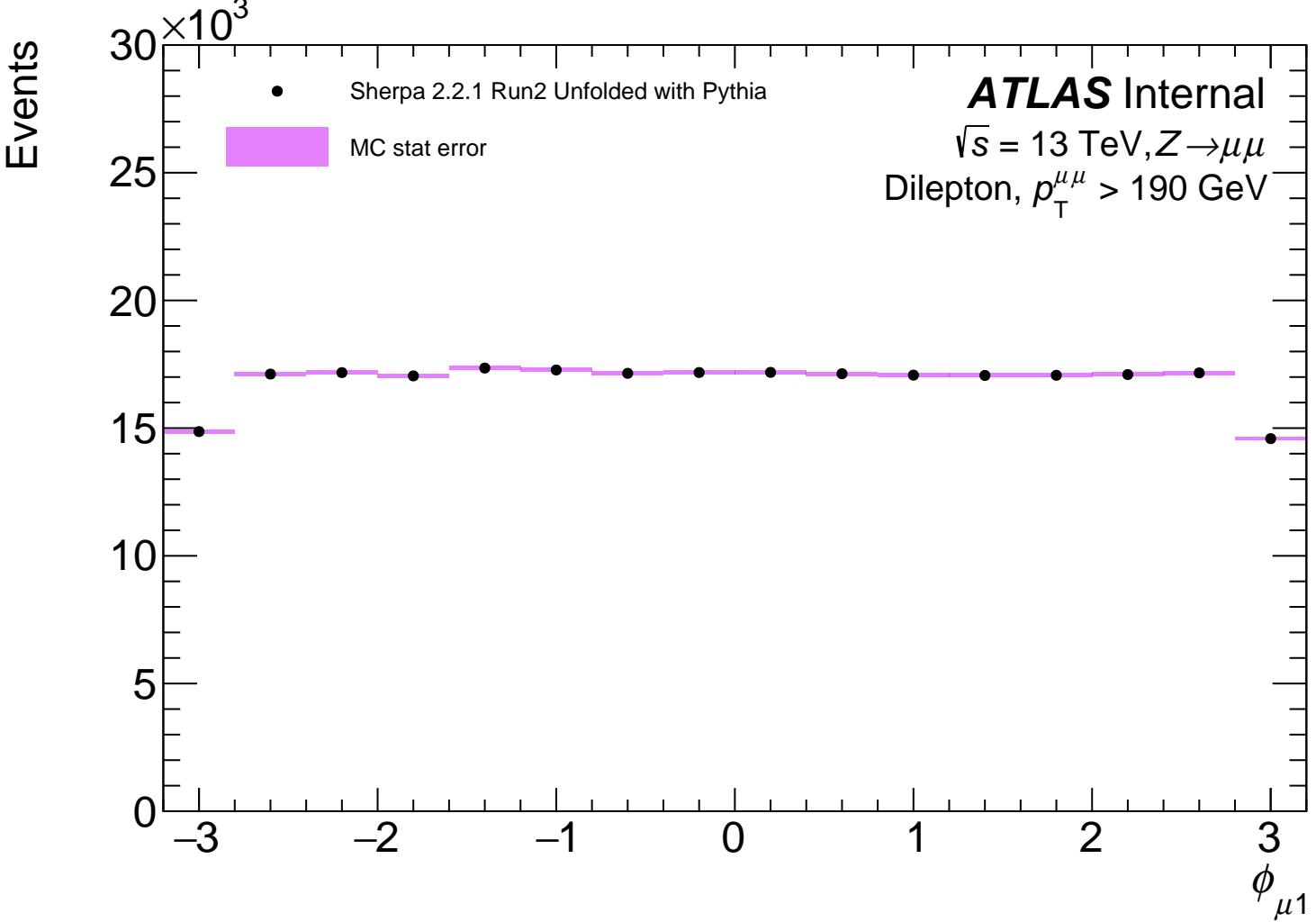
Sherpa 2.2.1 Run2 Unfolded

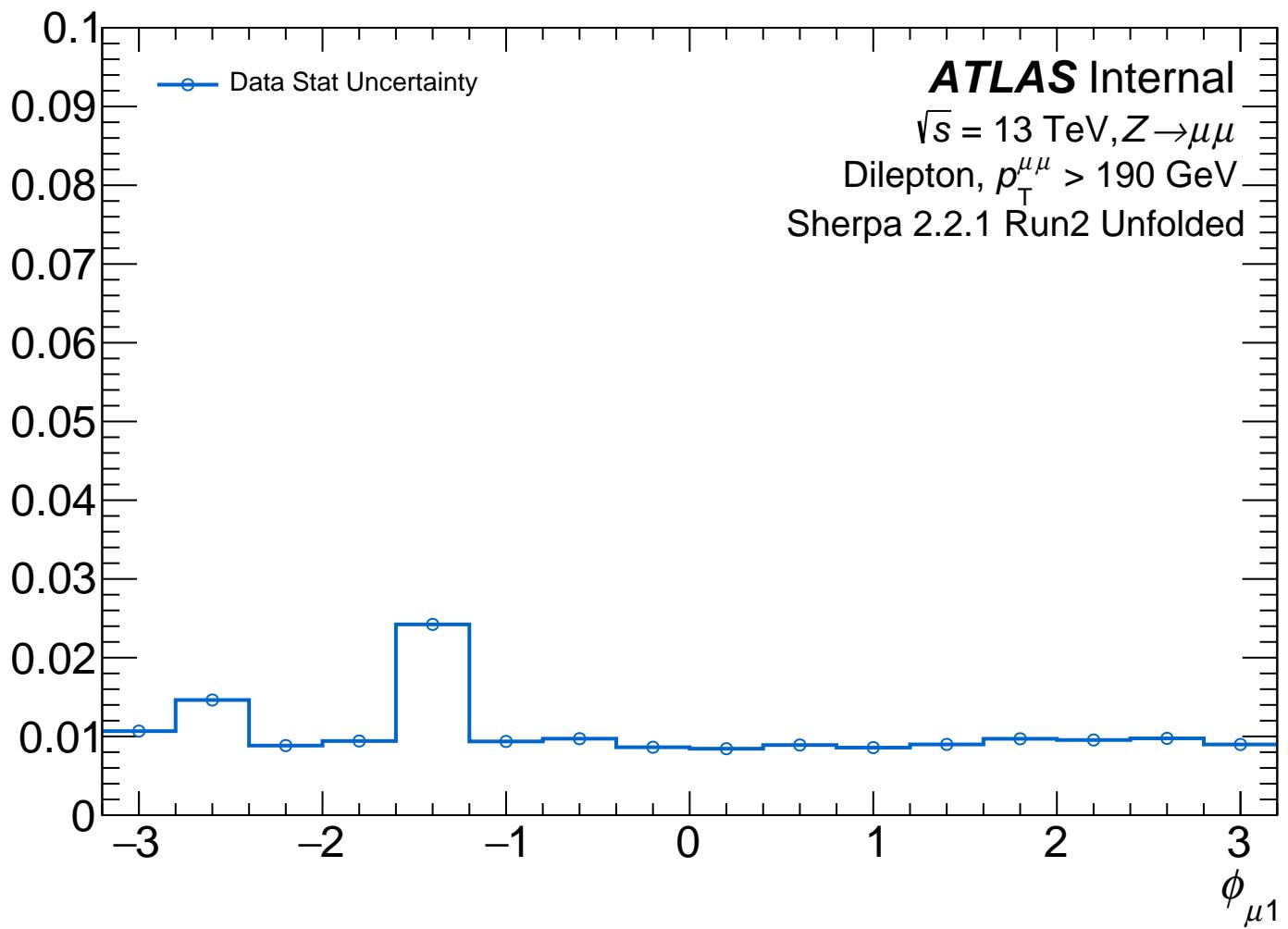


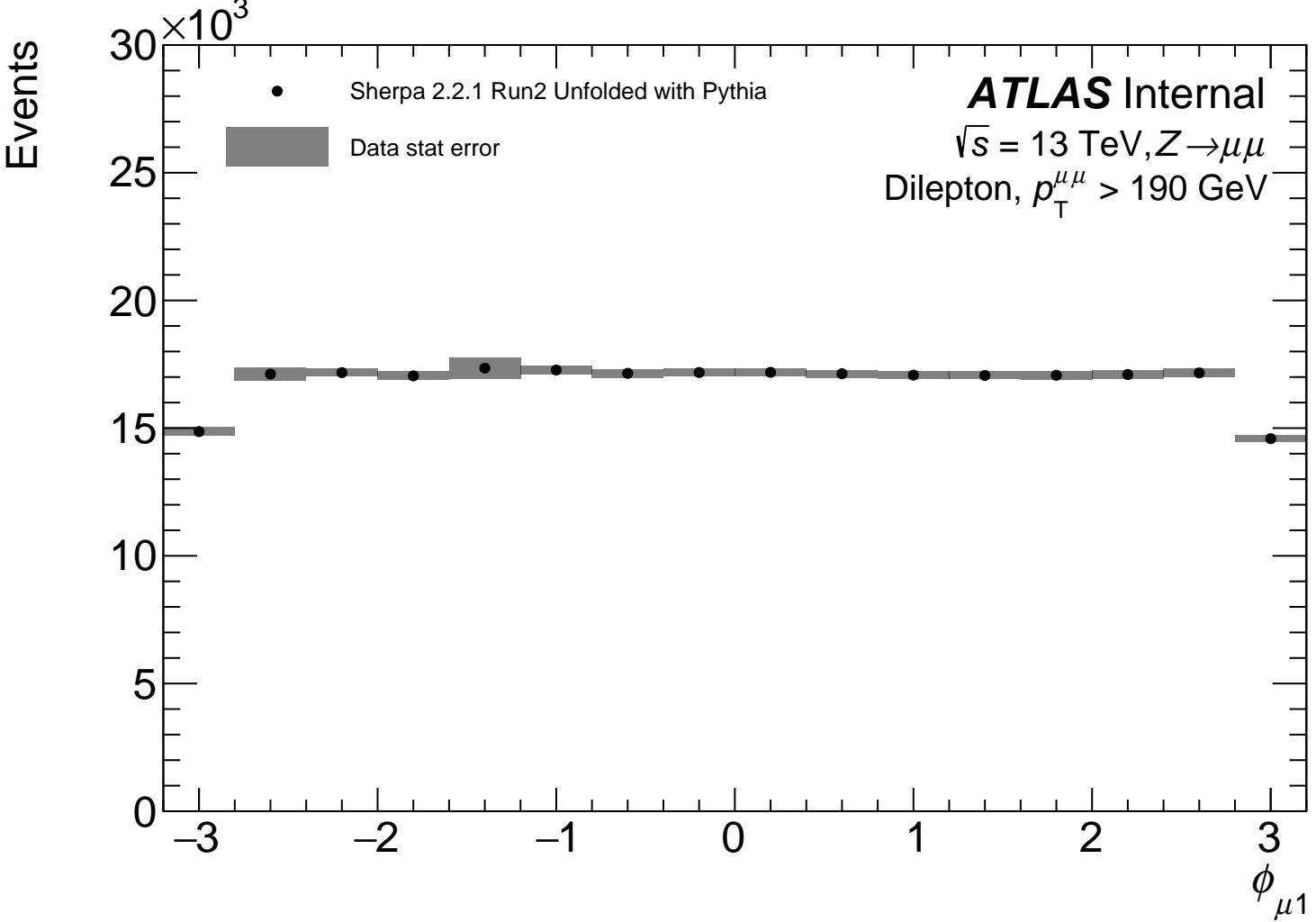
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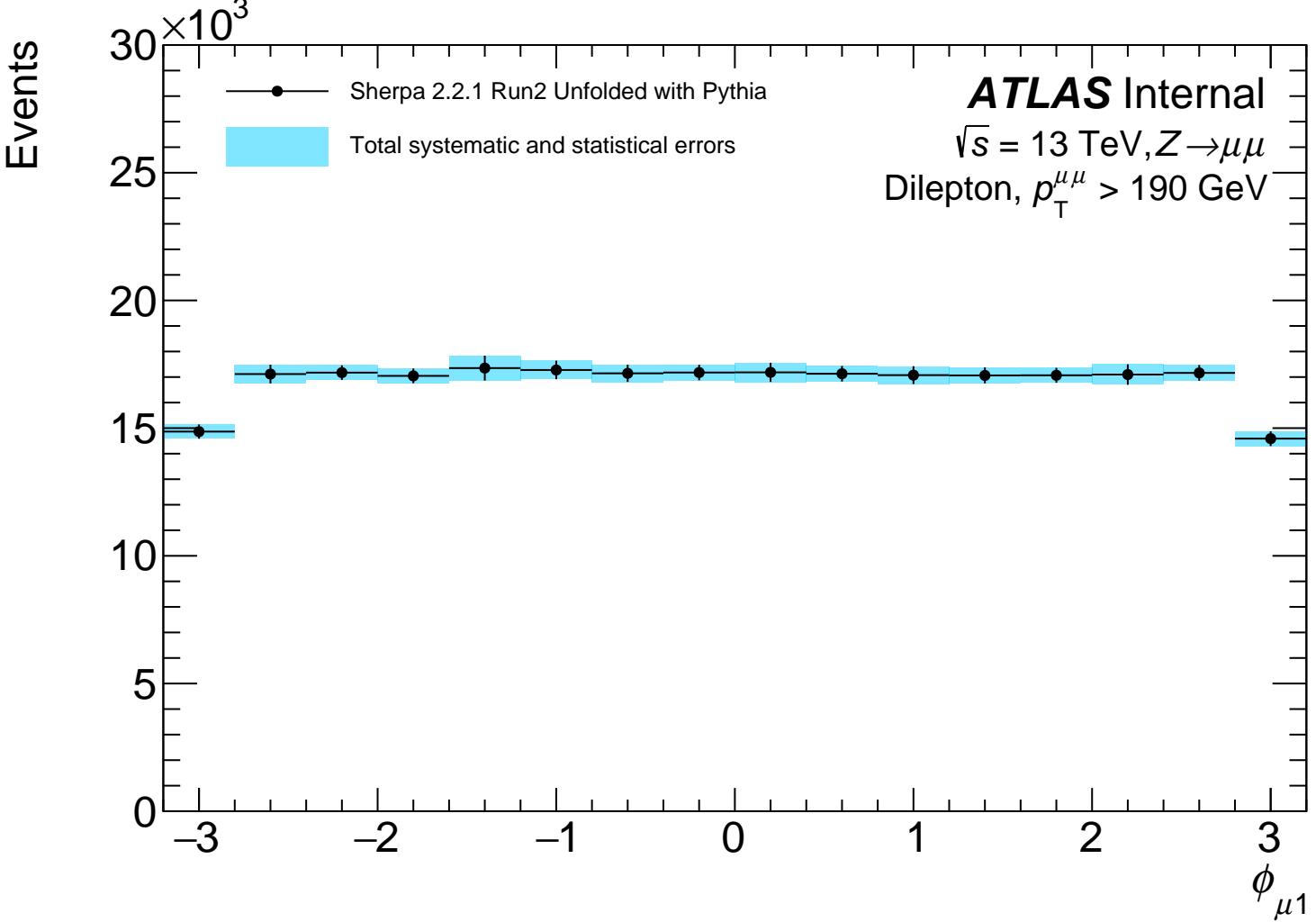


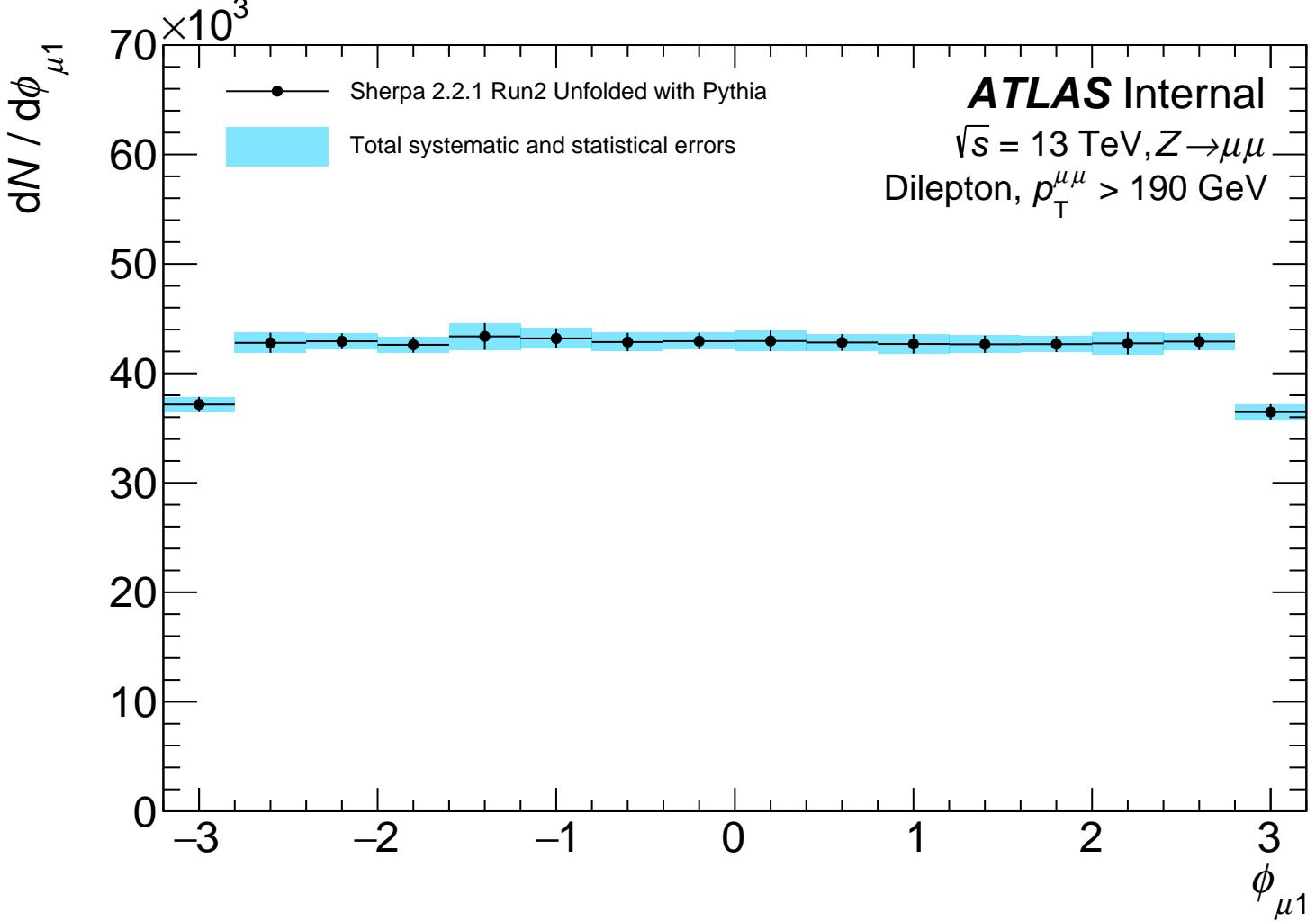


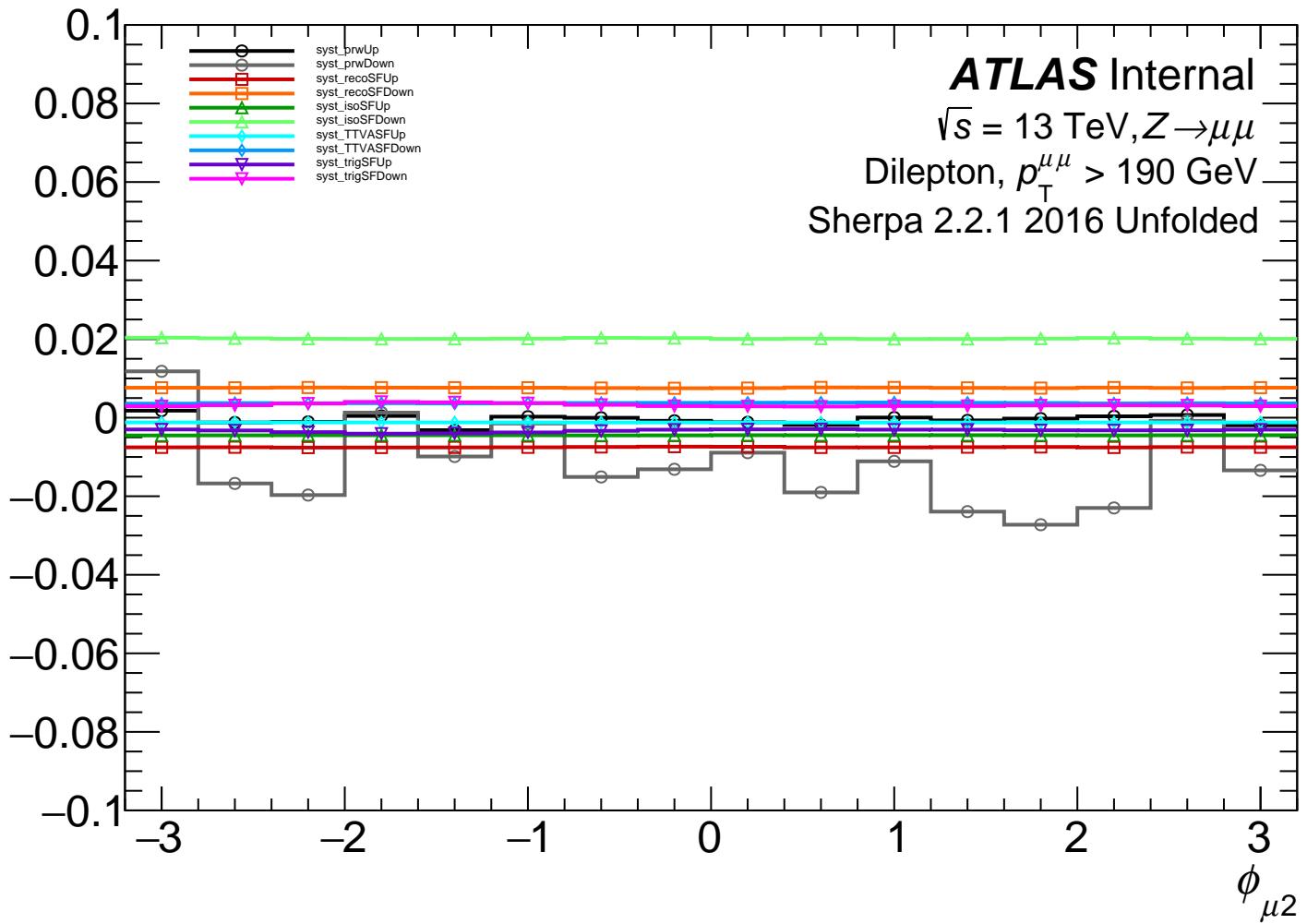


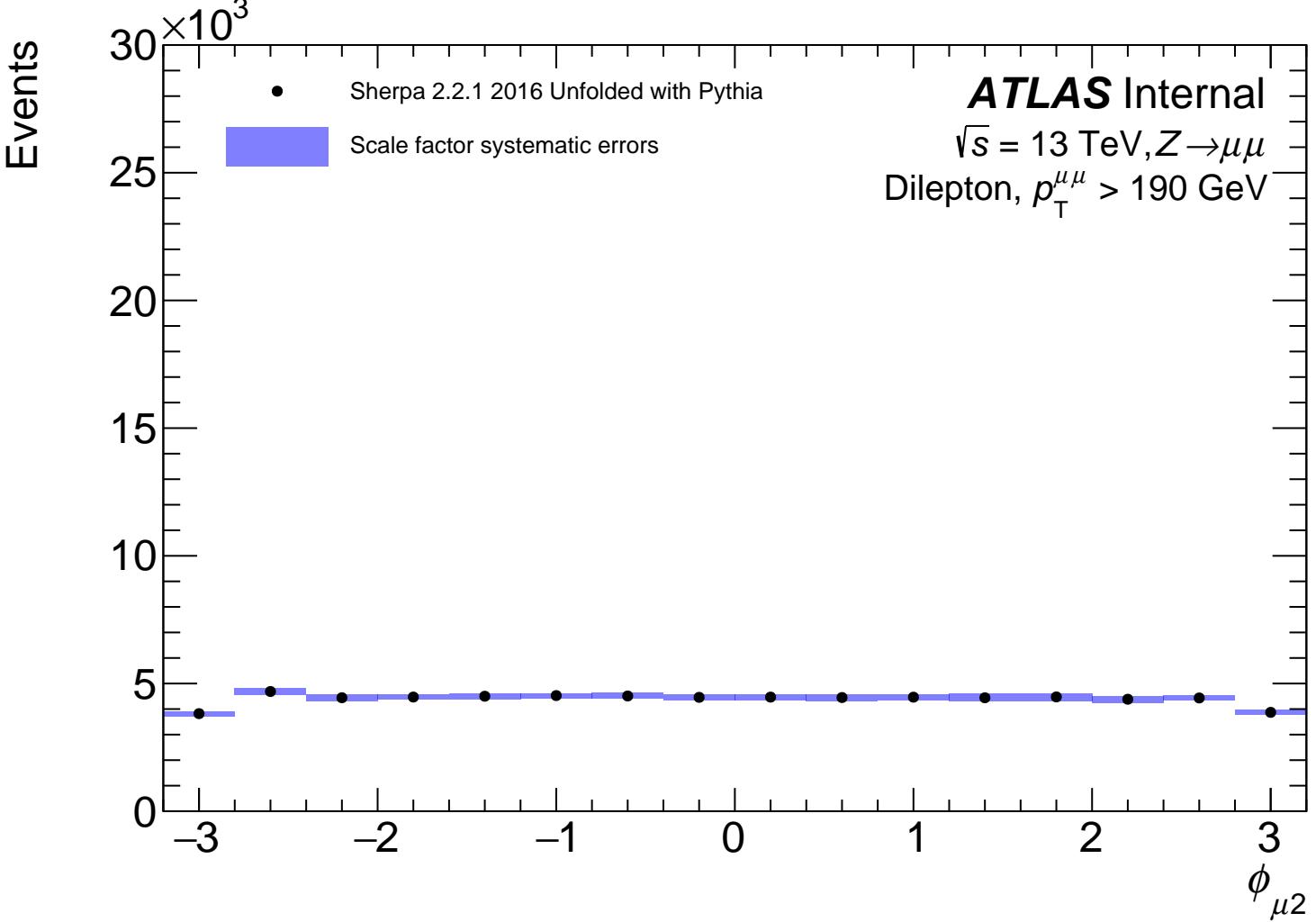


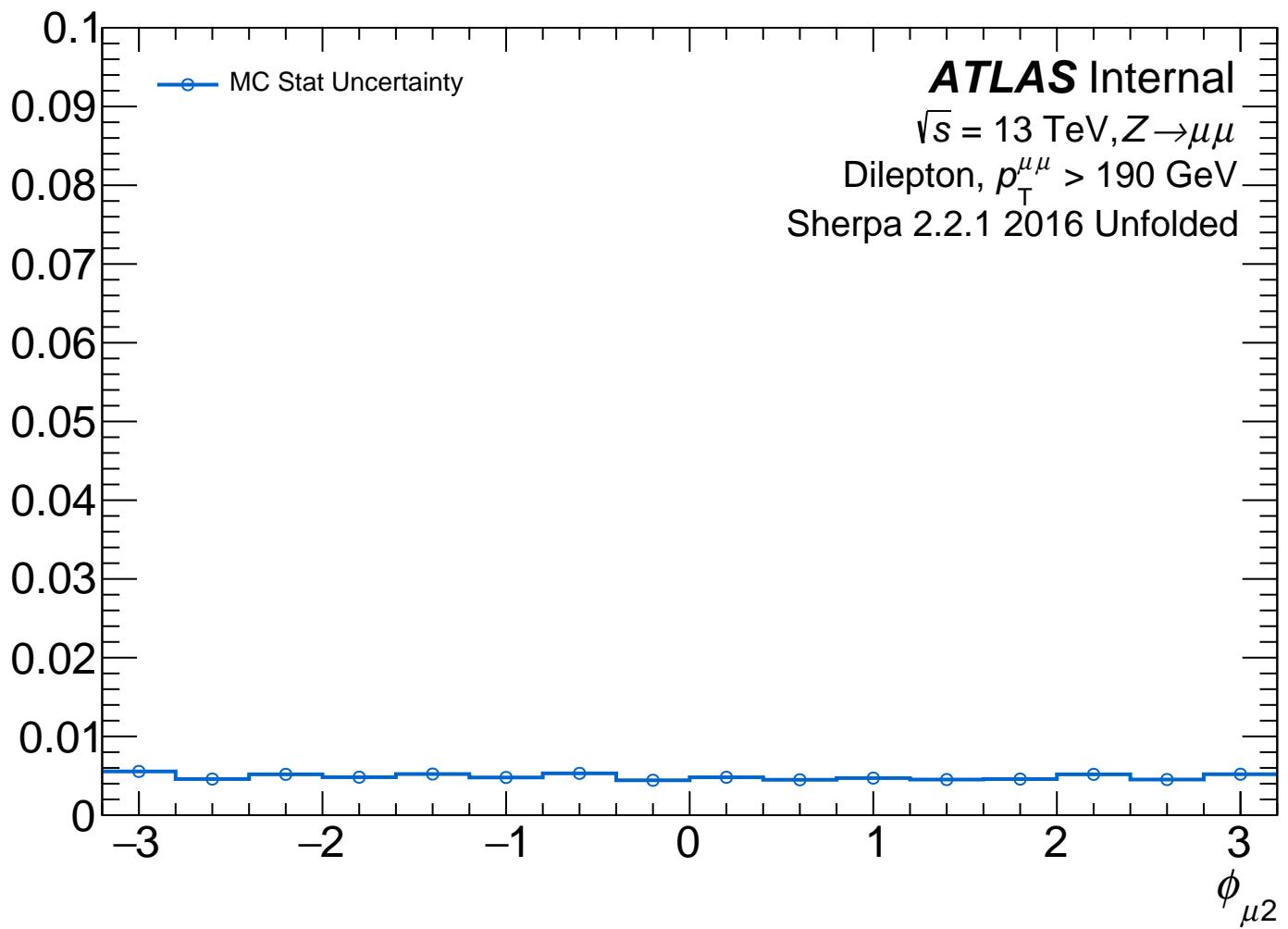


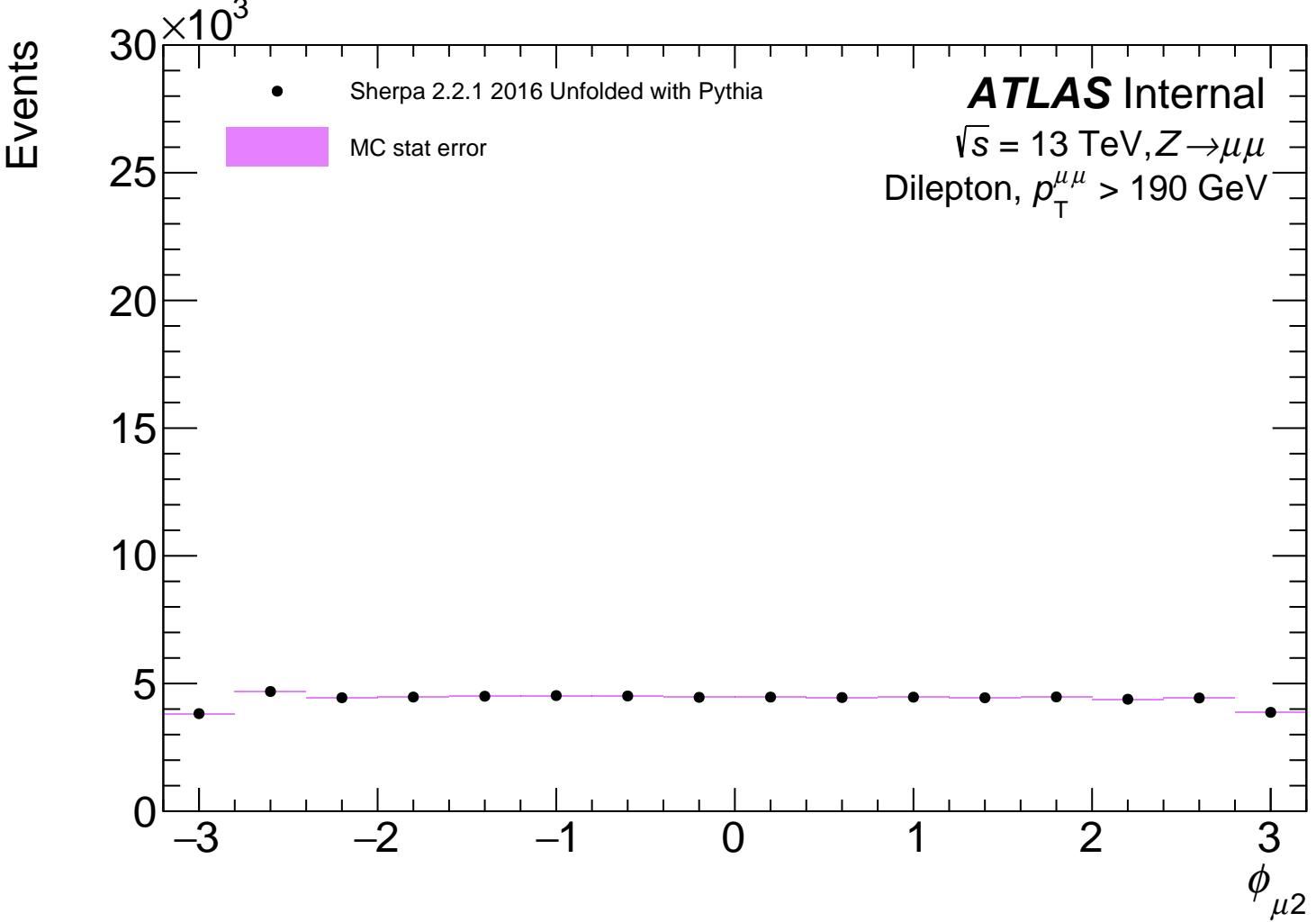


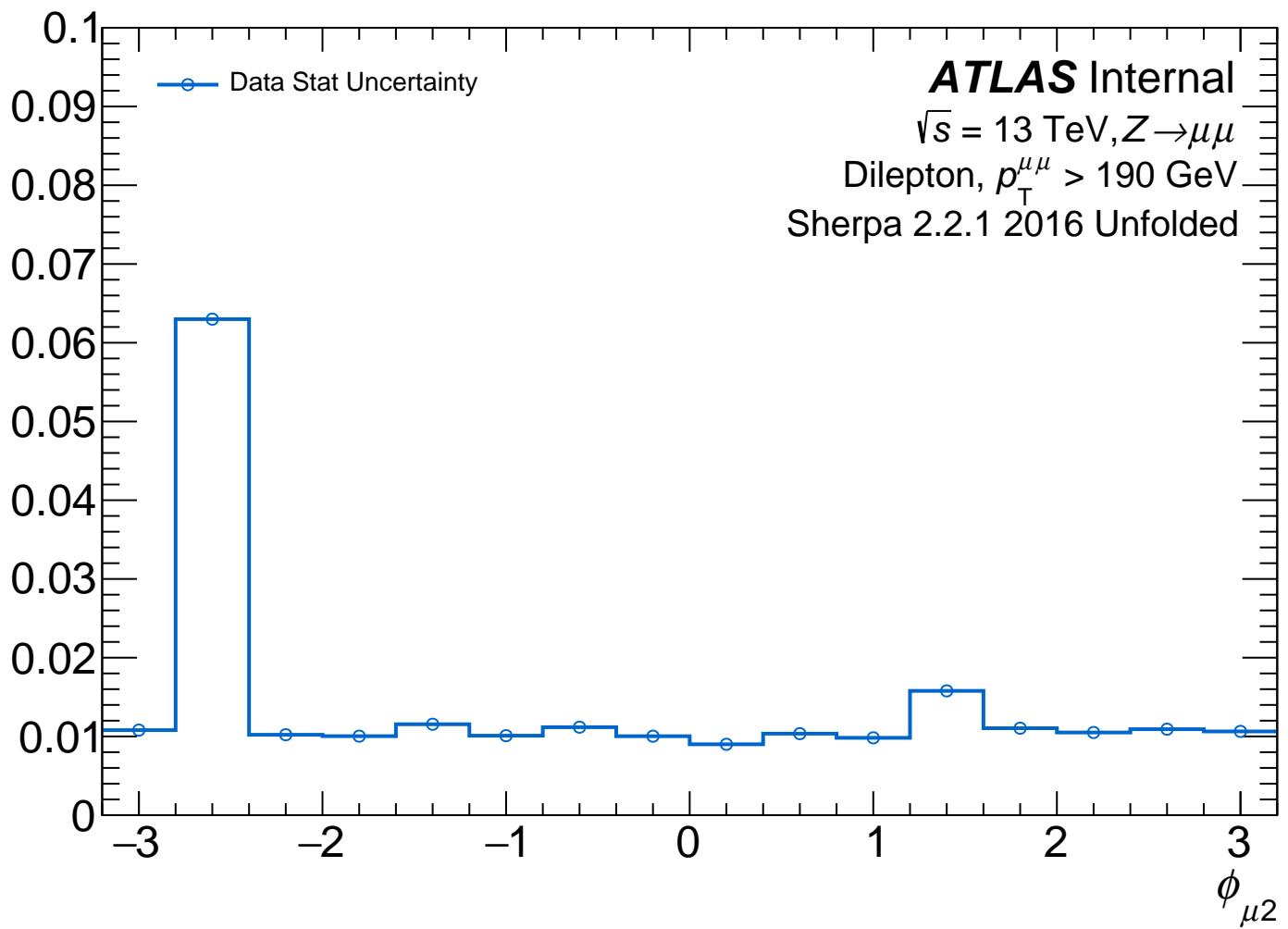


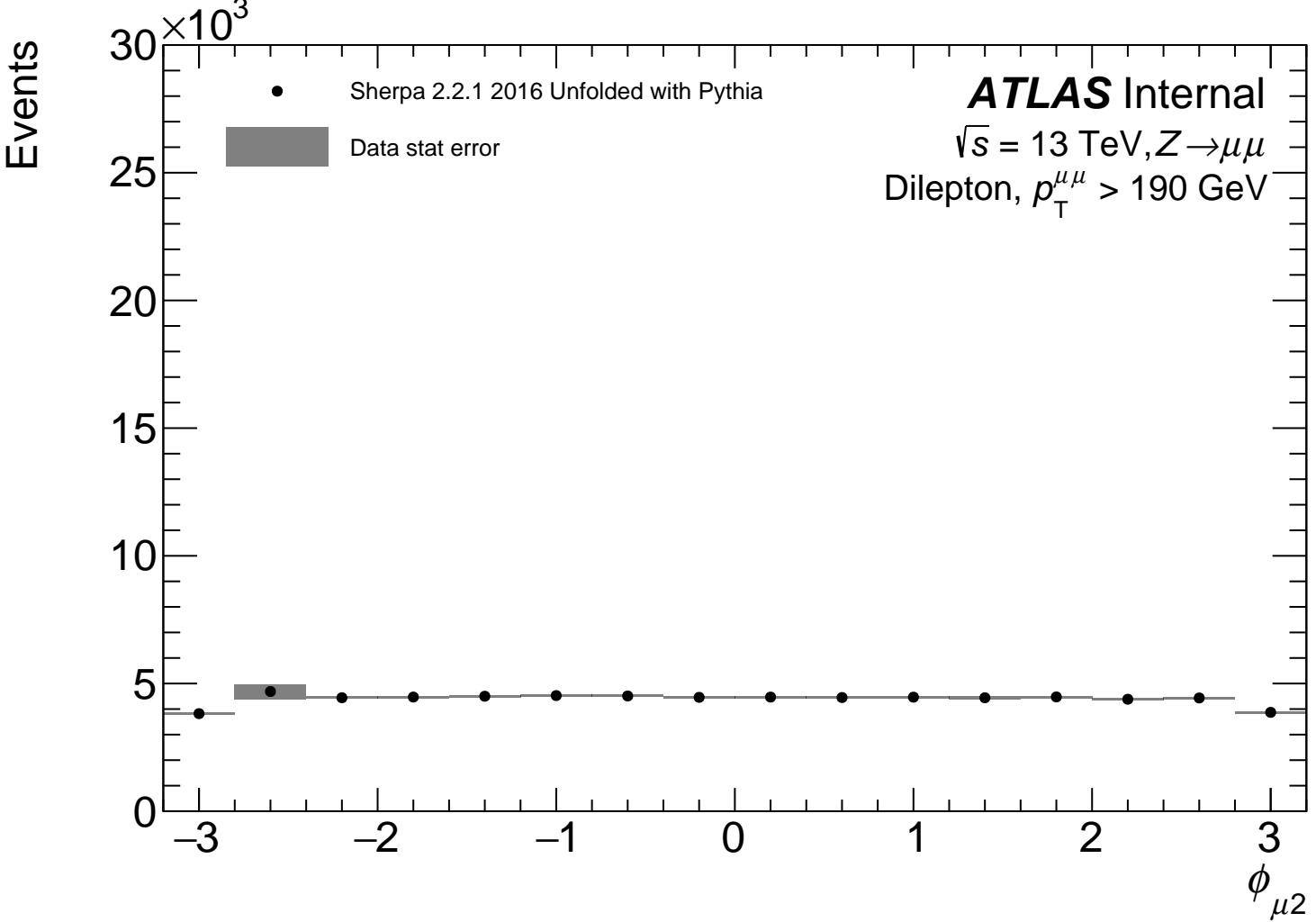


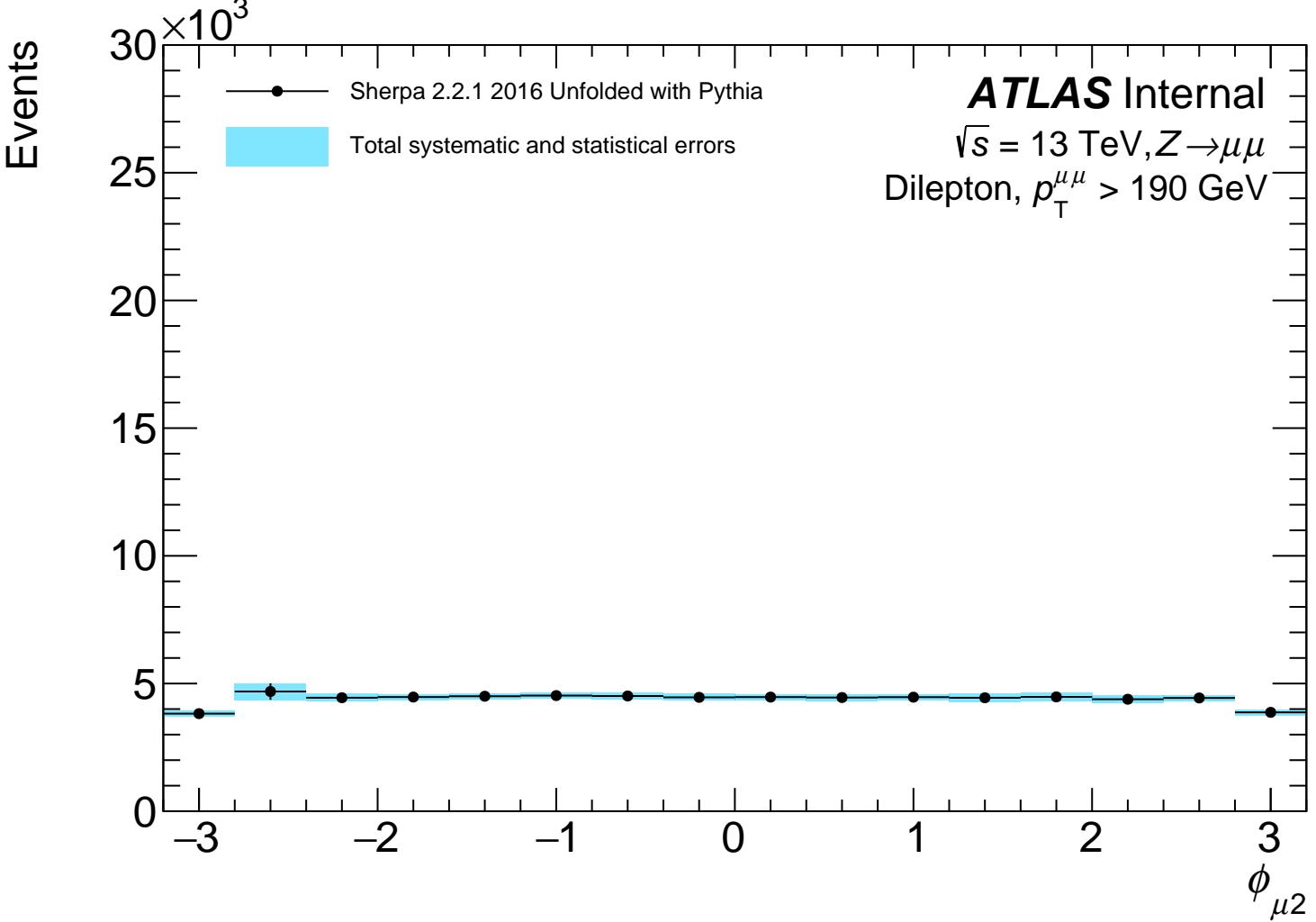


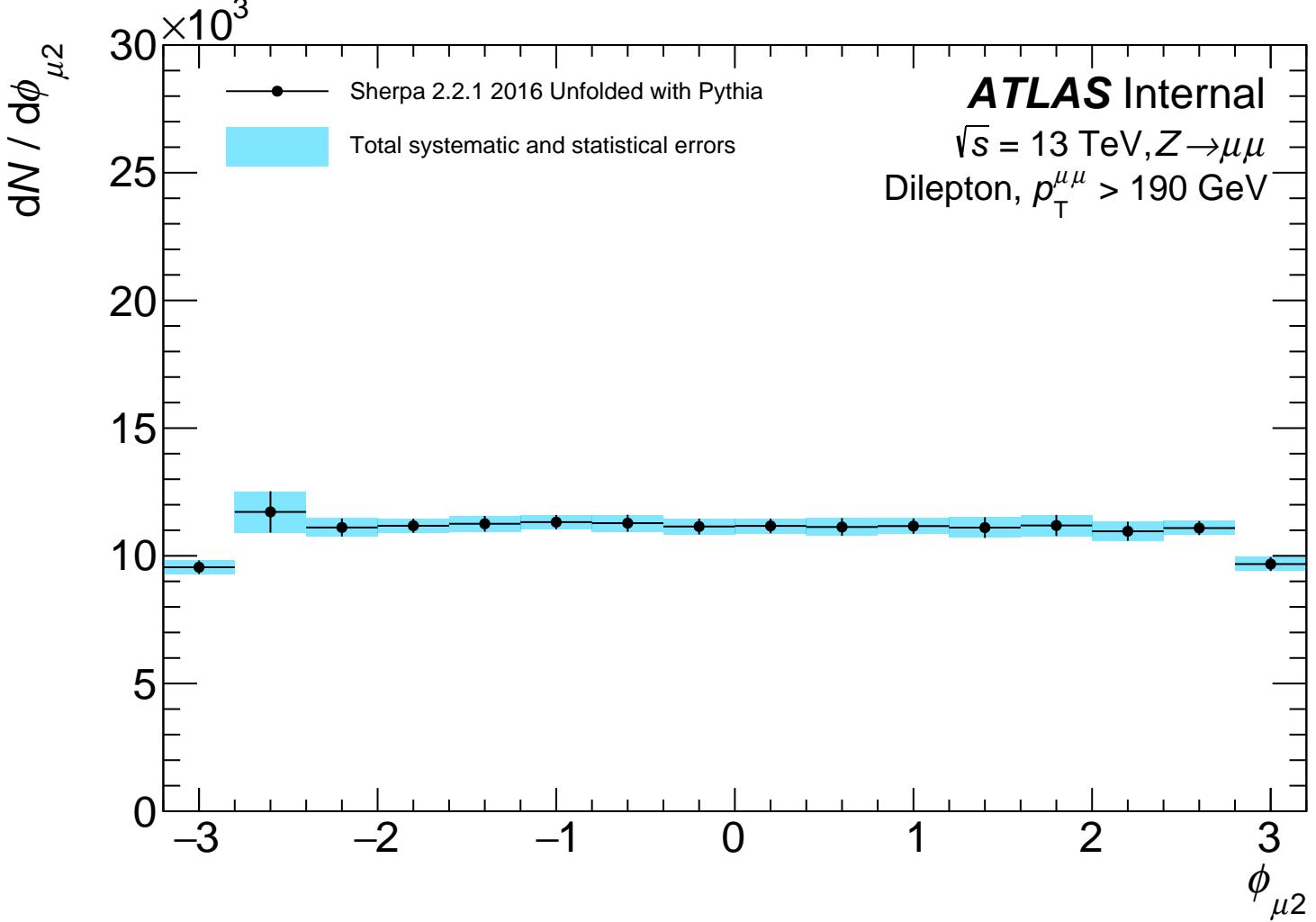










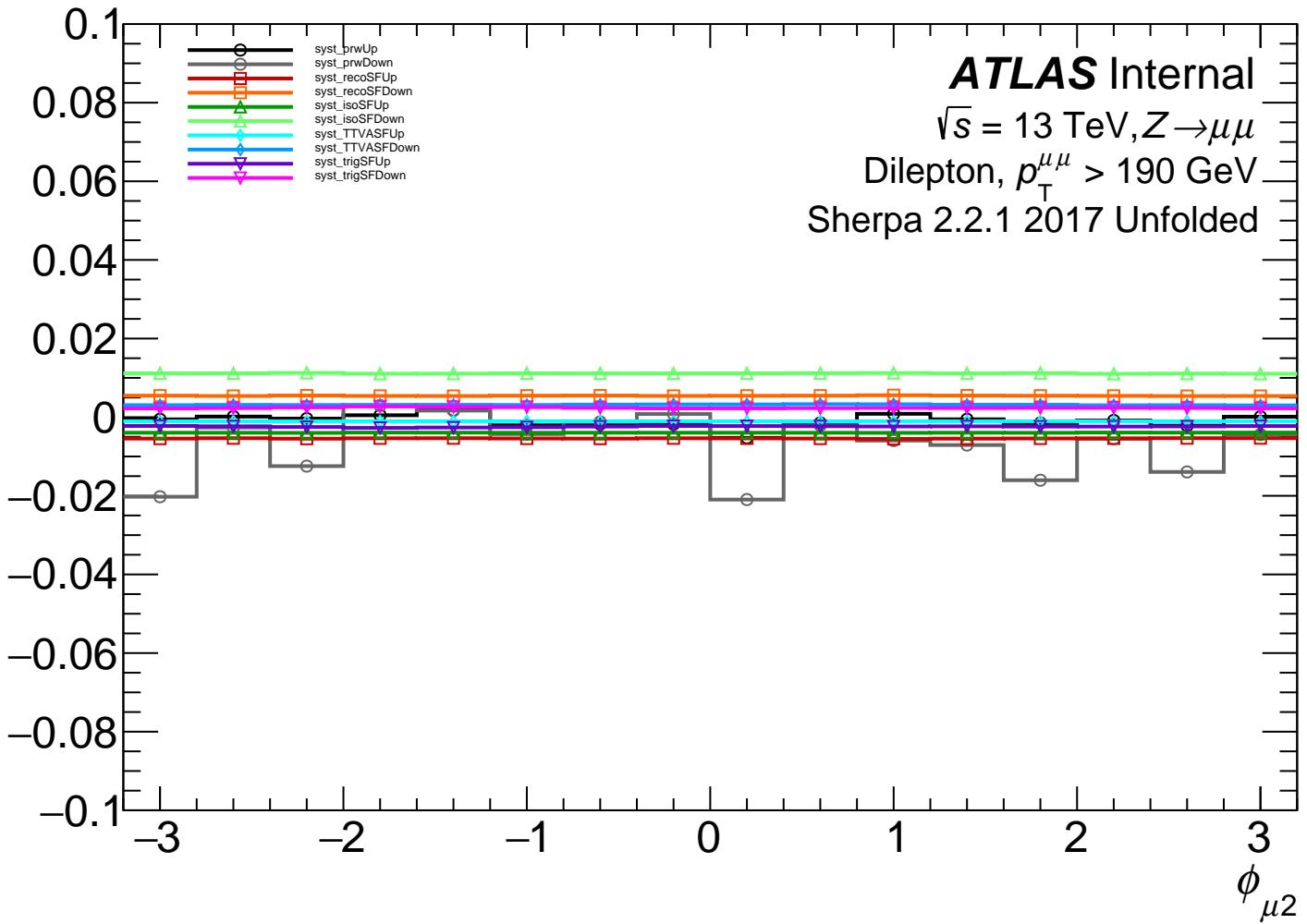


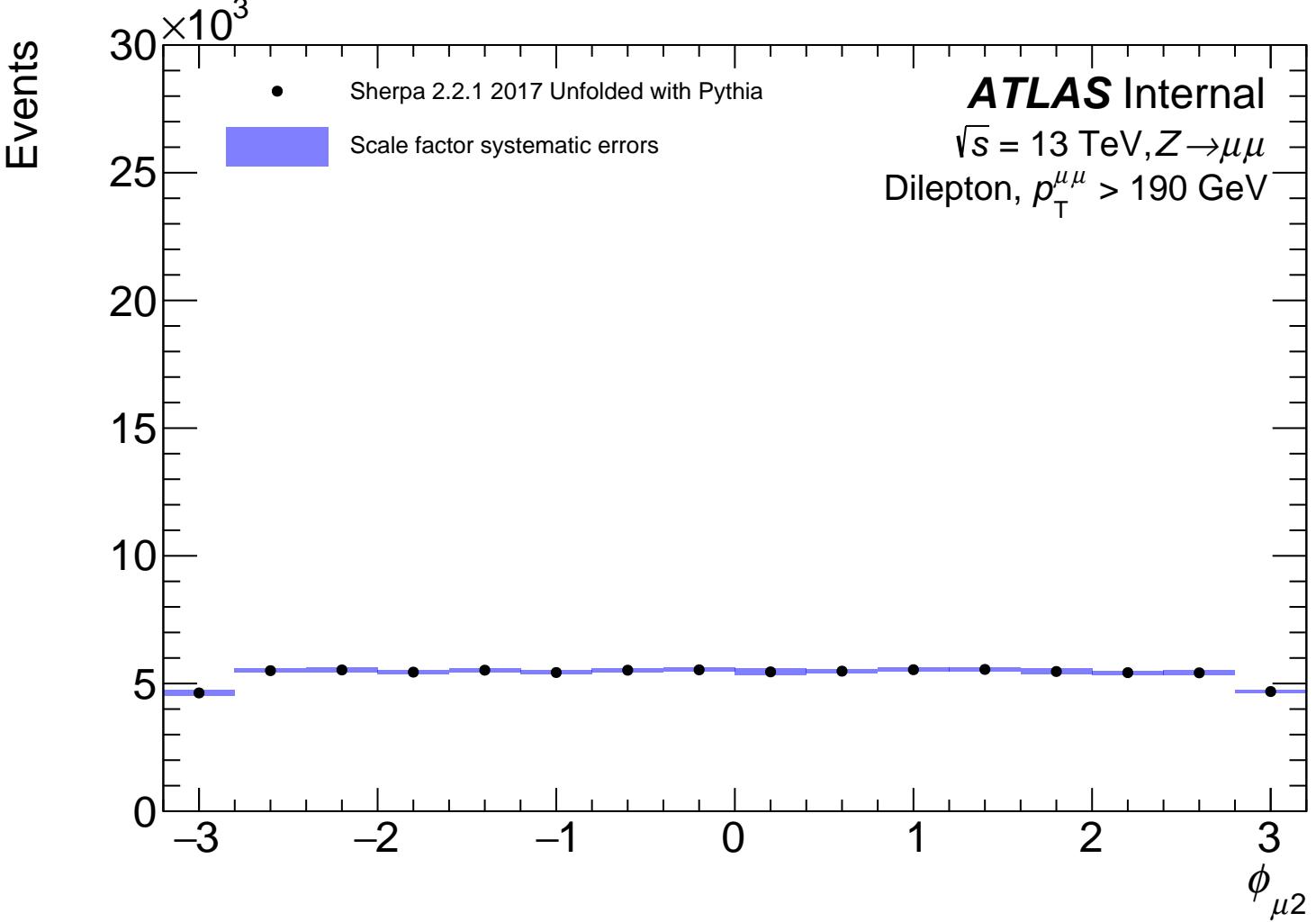
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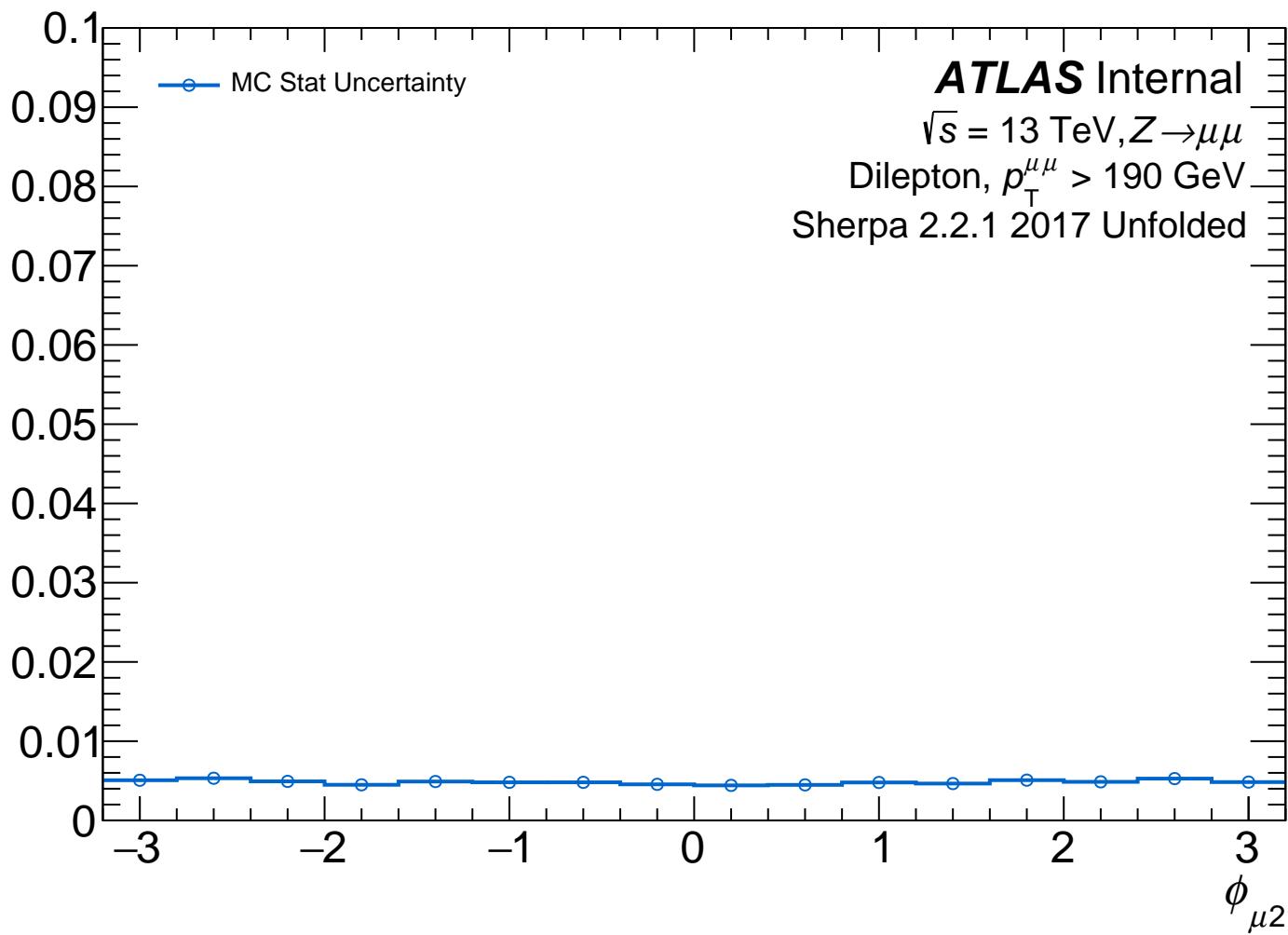
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

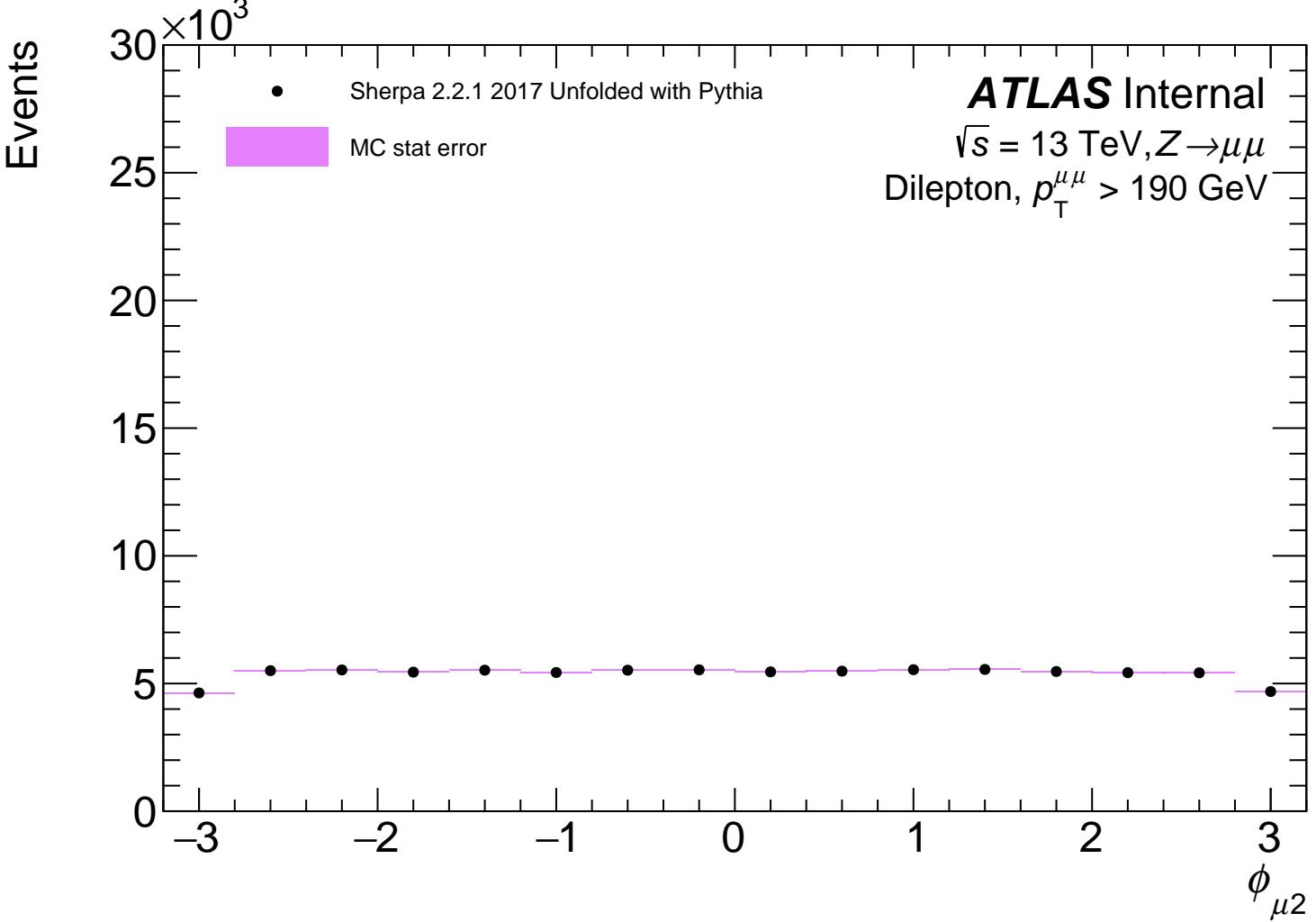
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

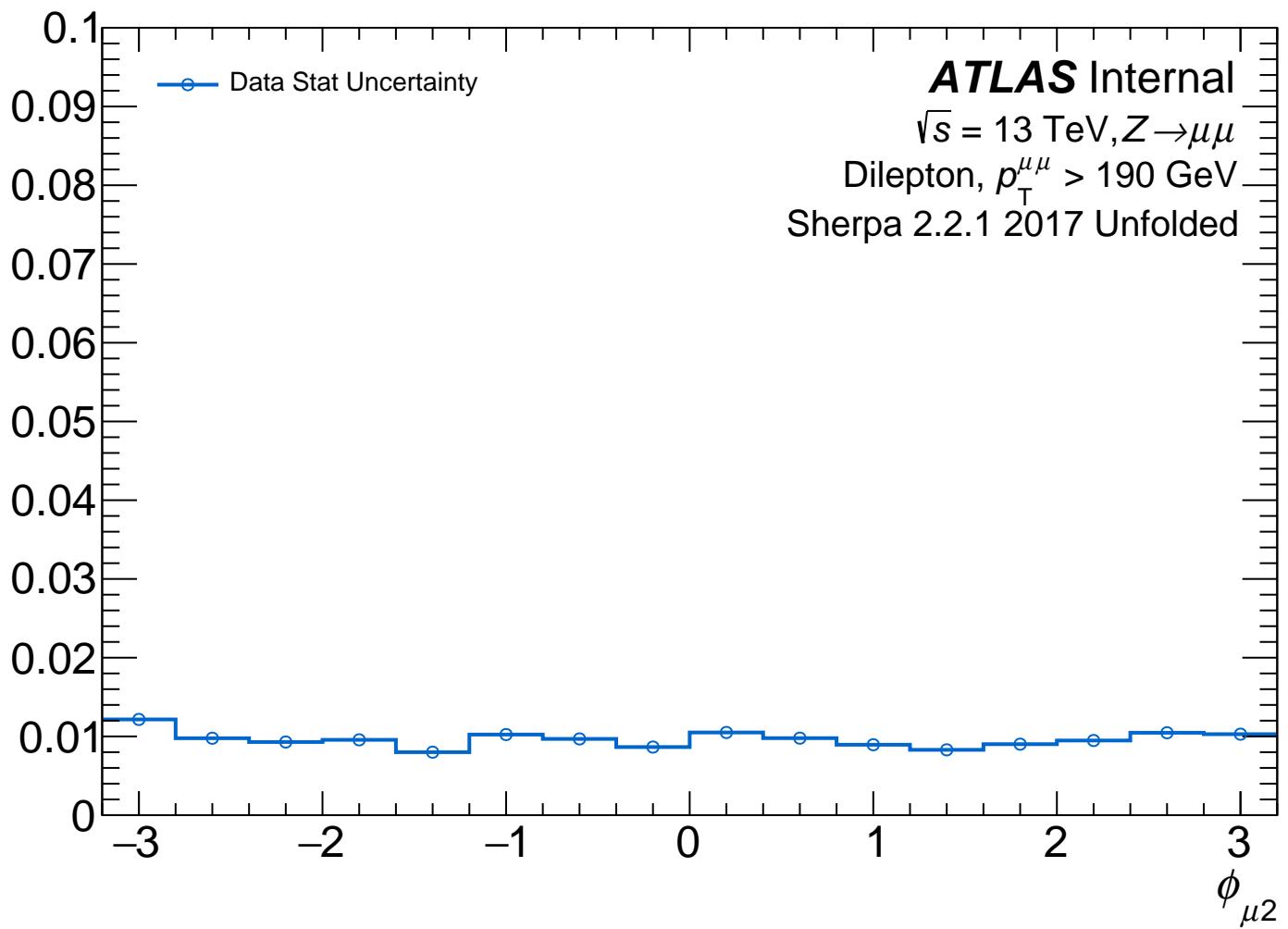
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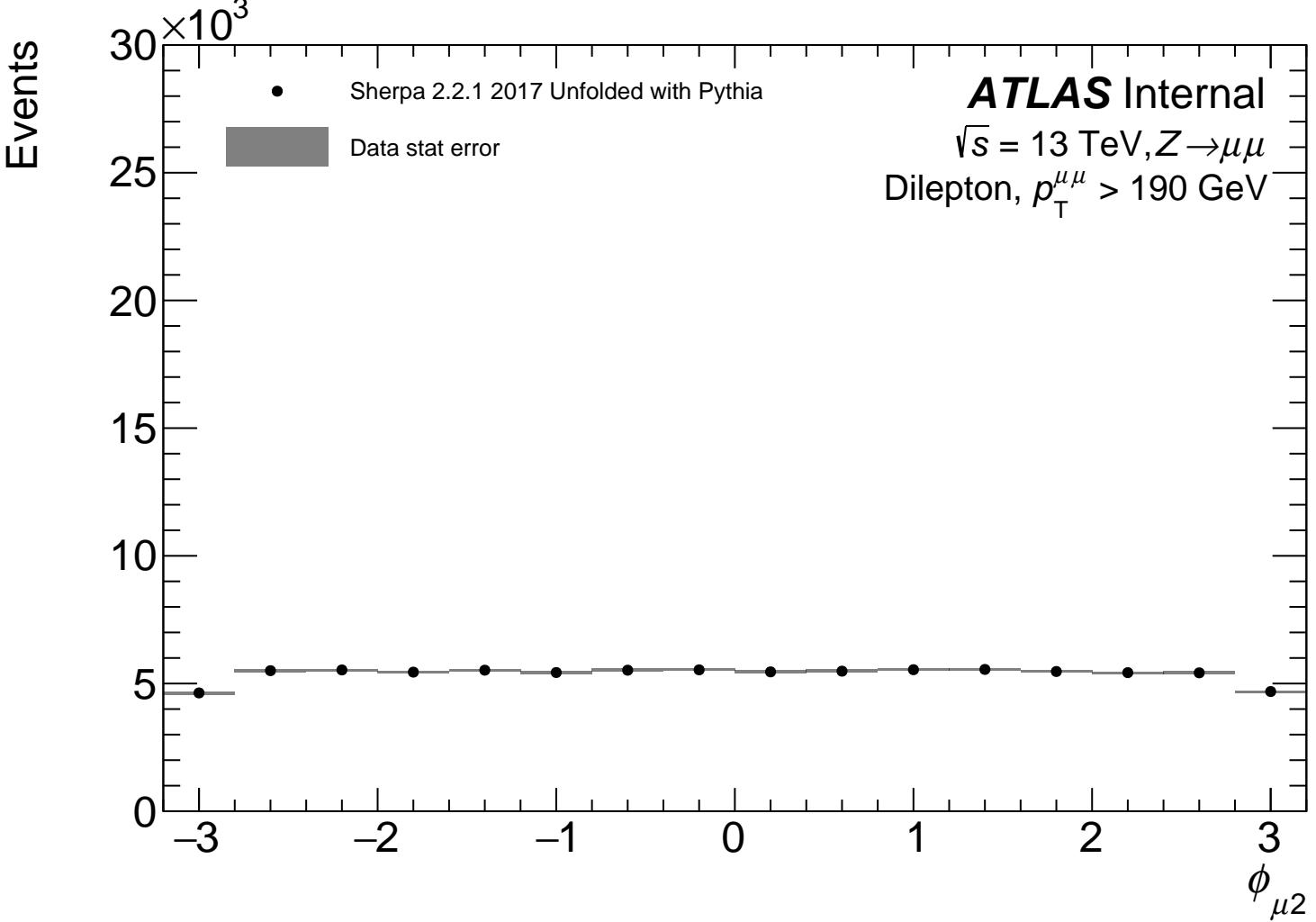


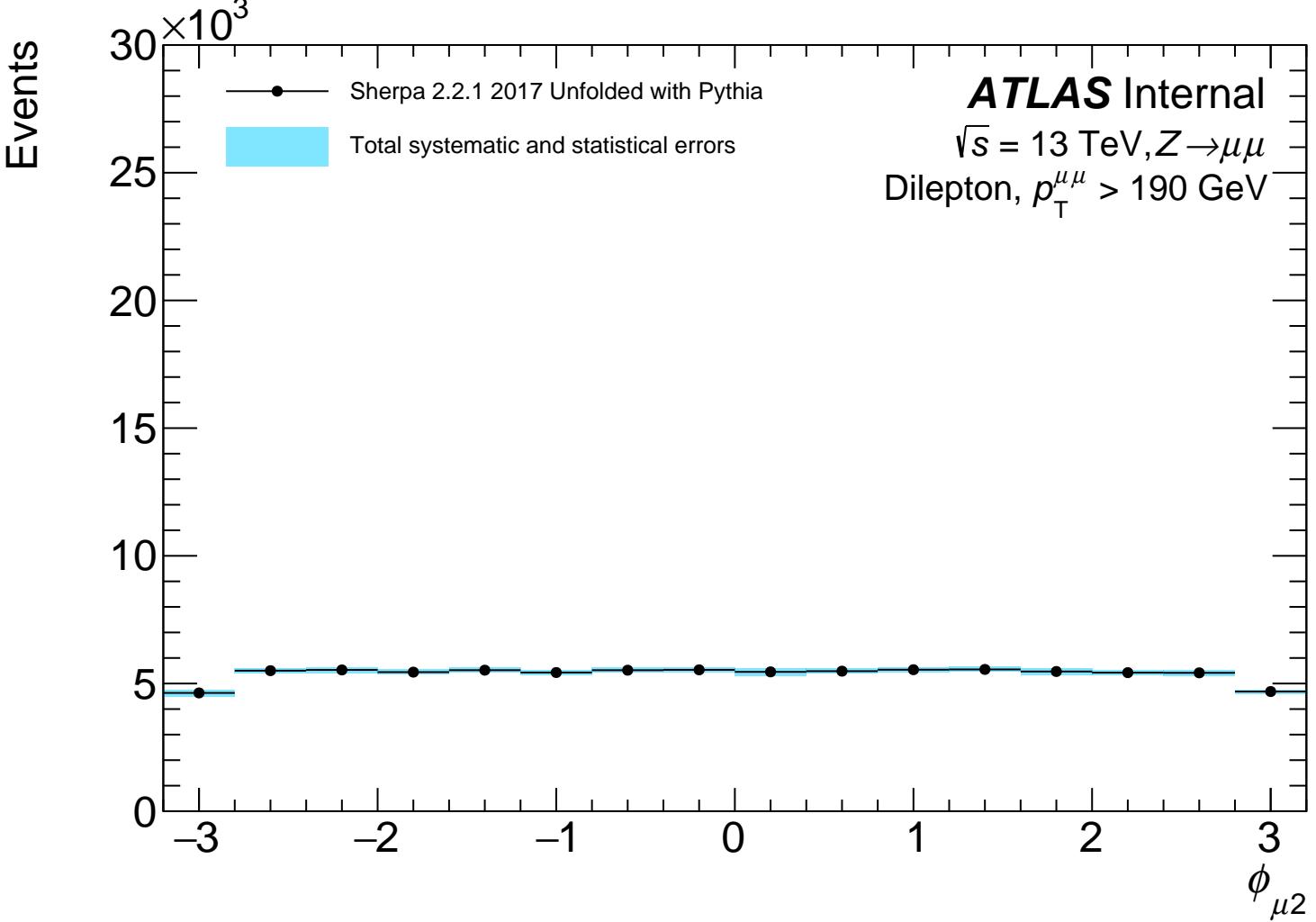


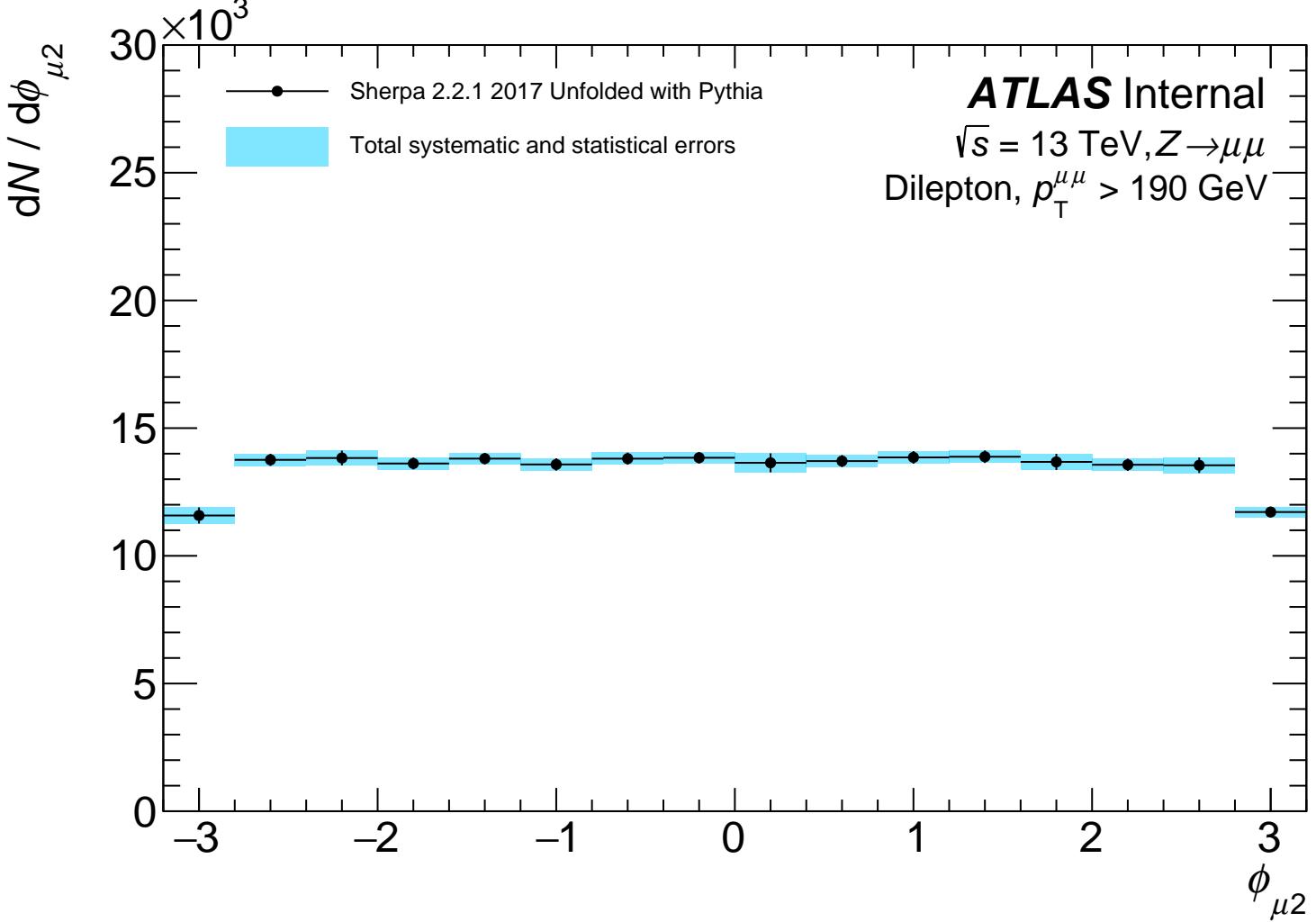










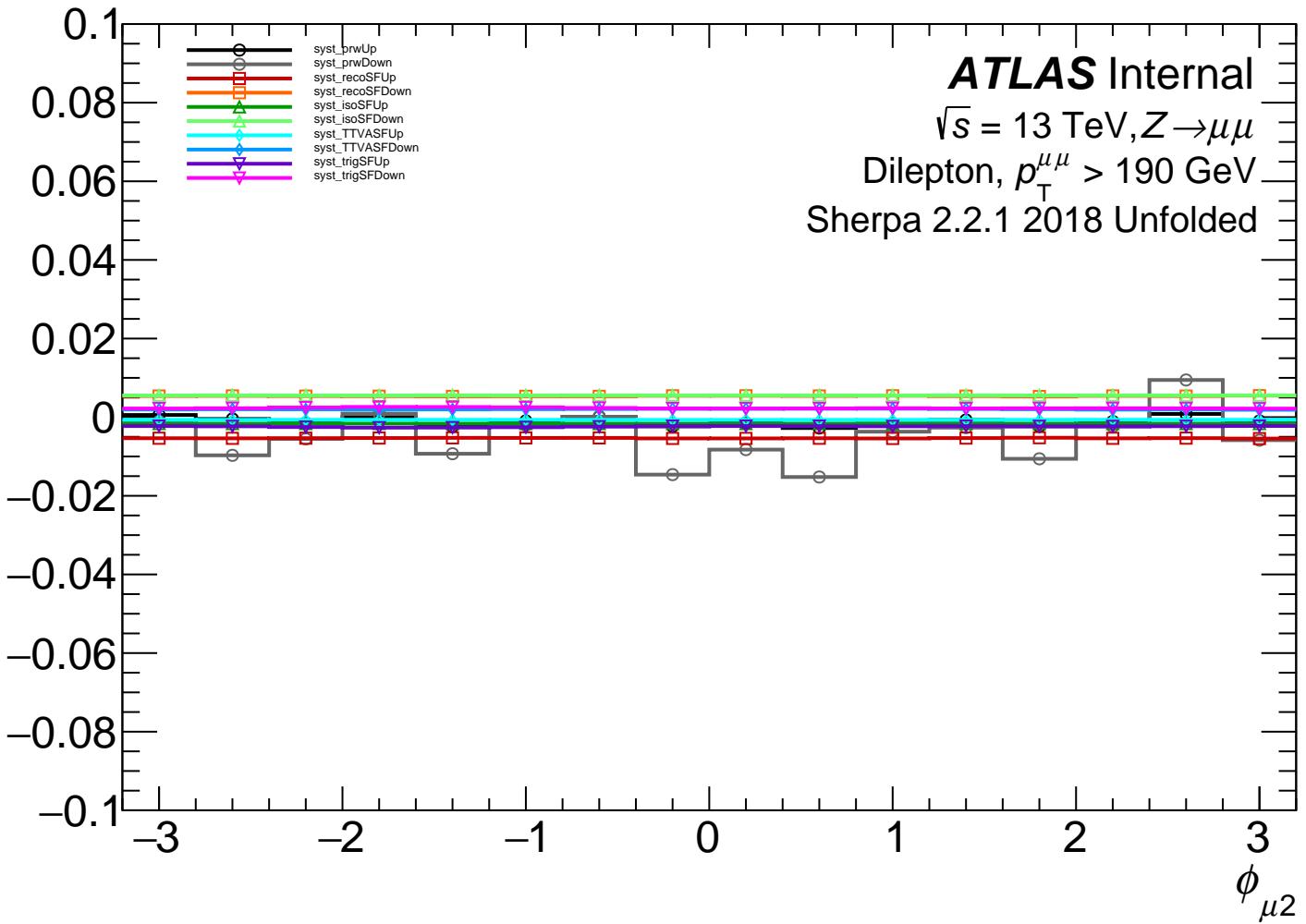


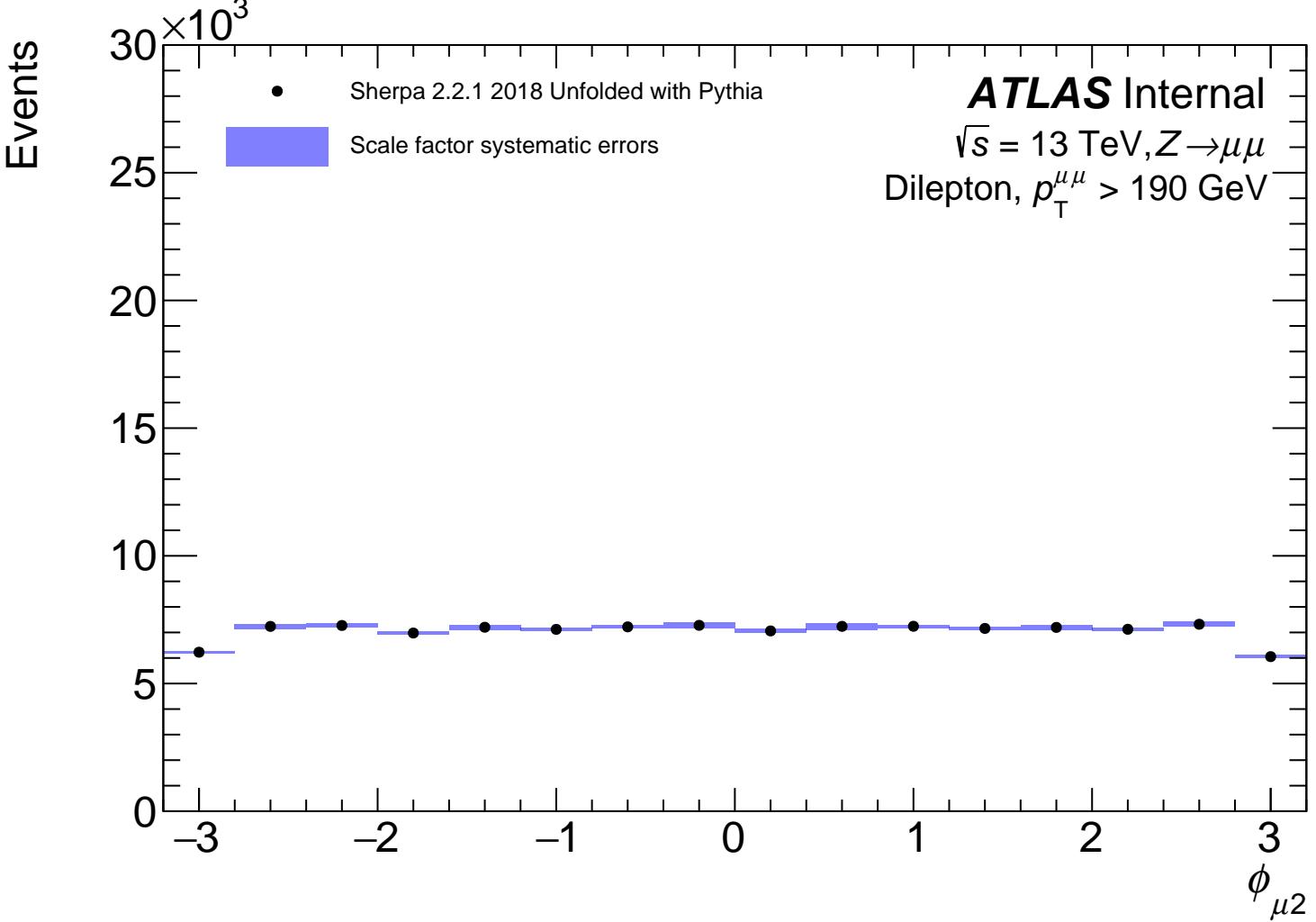
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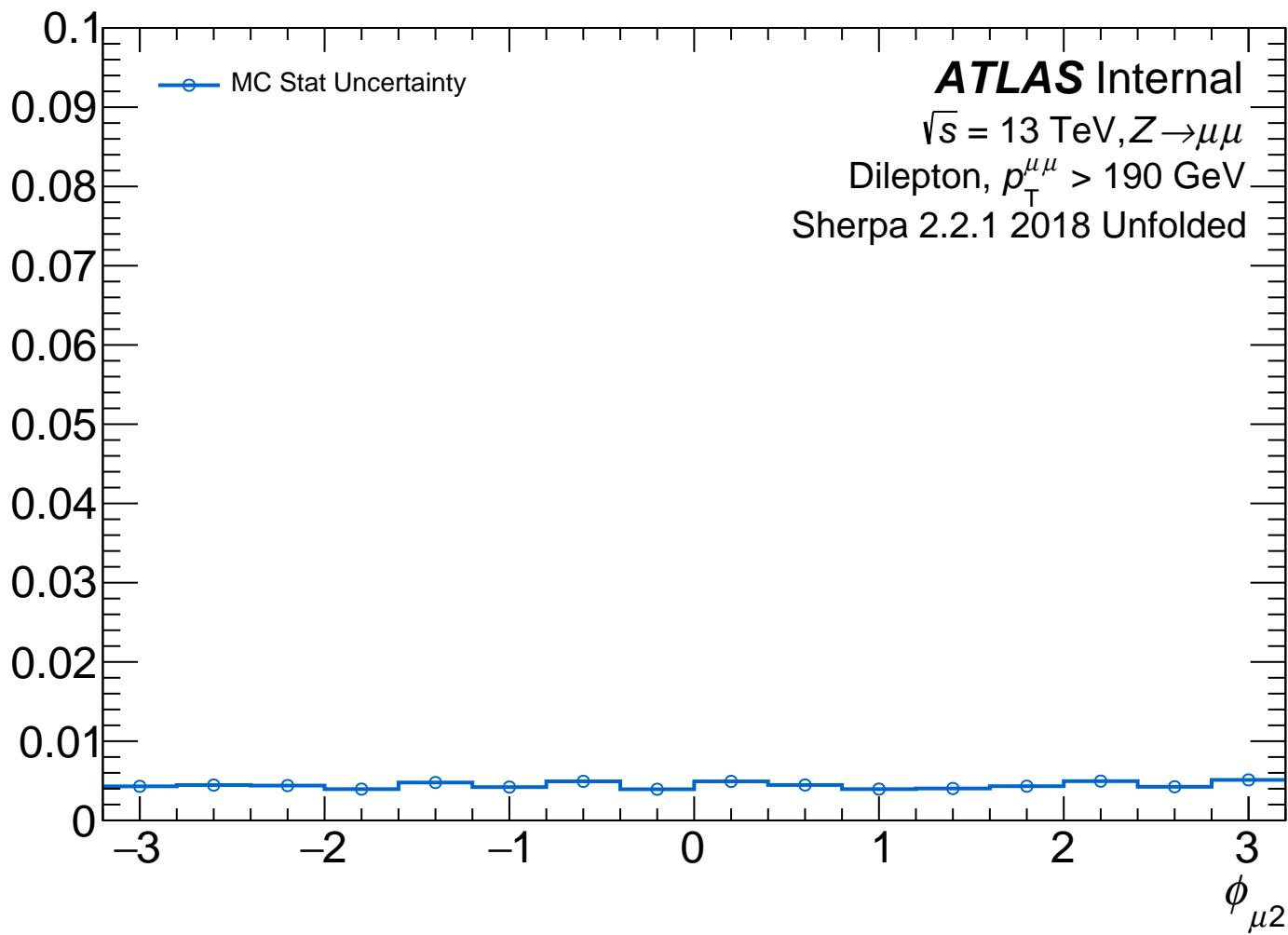
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

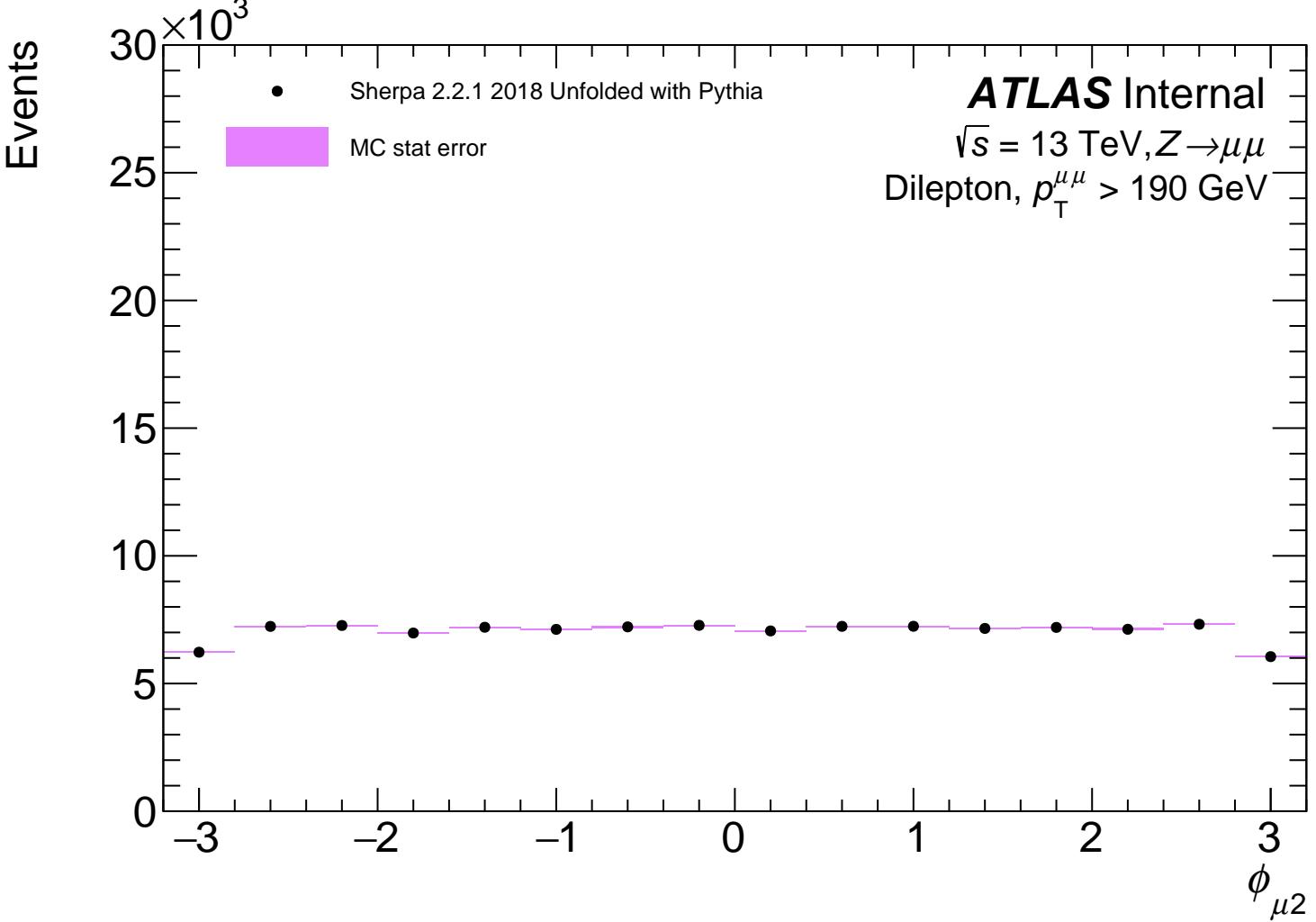
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

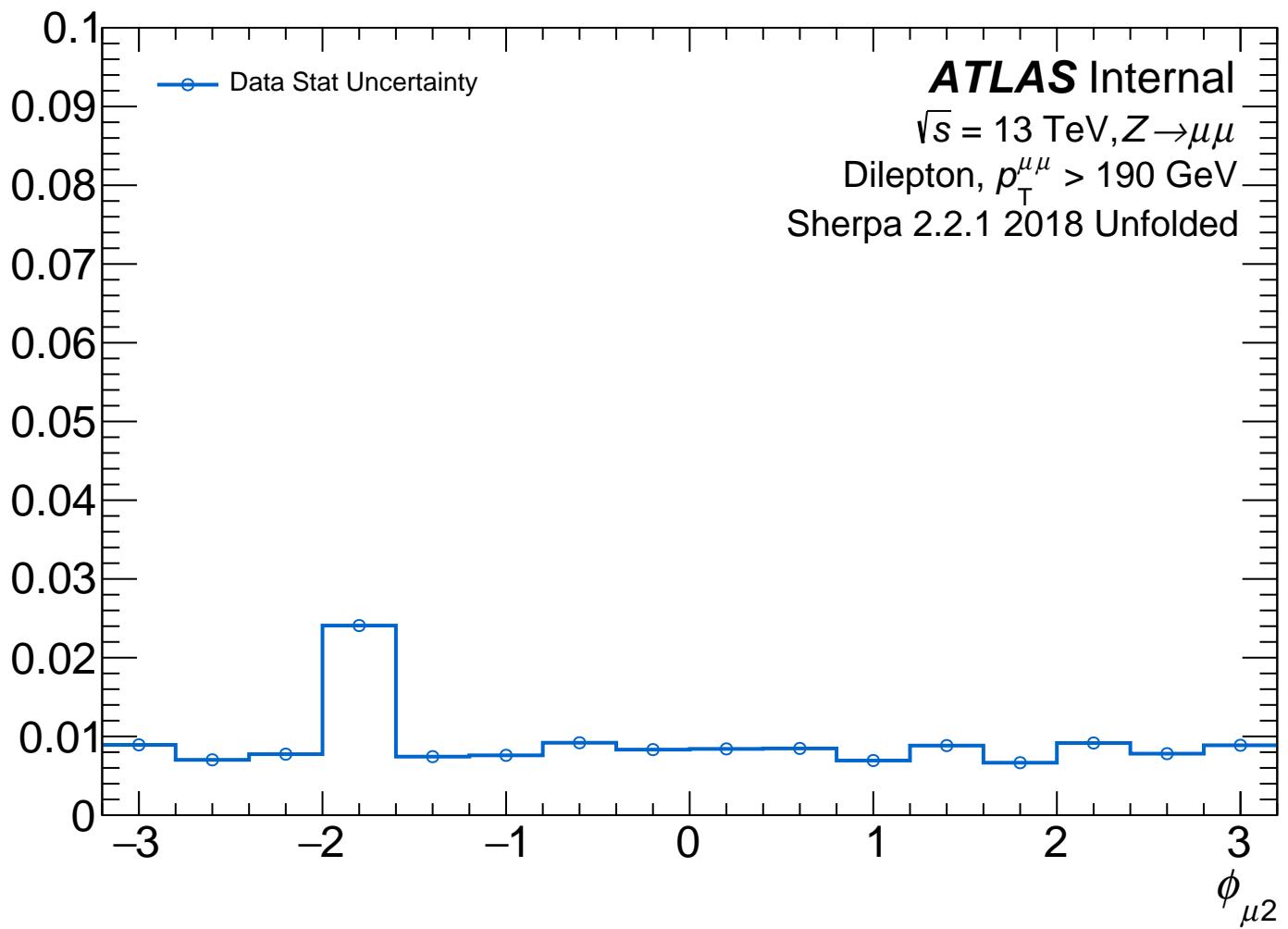
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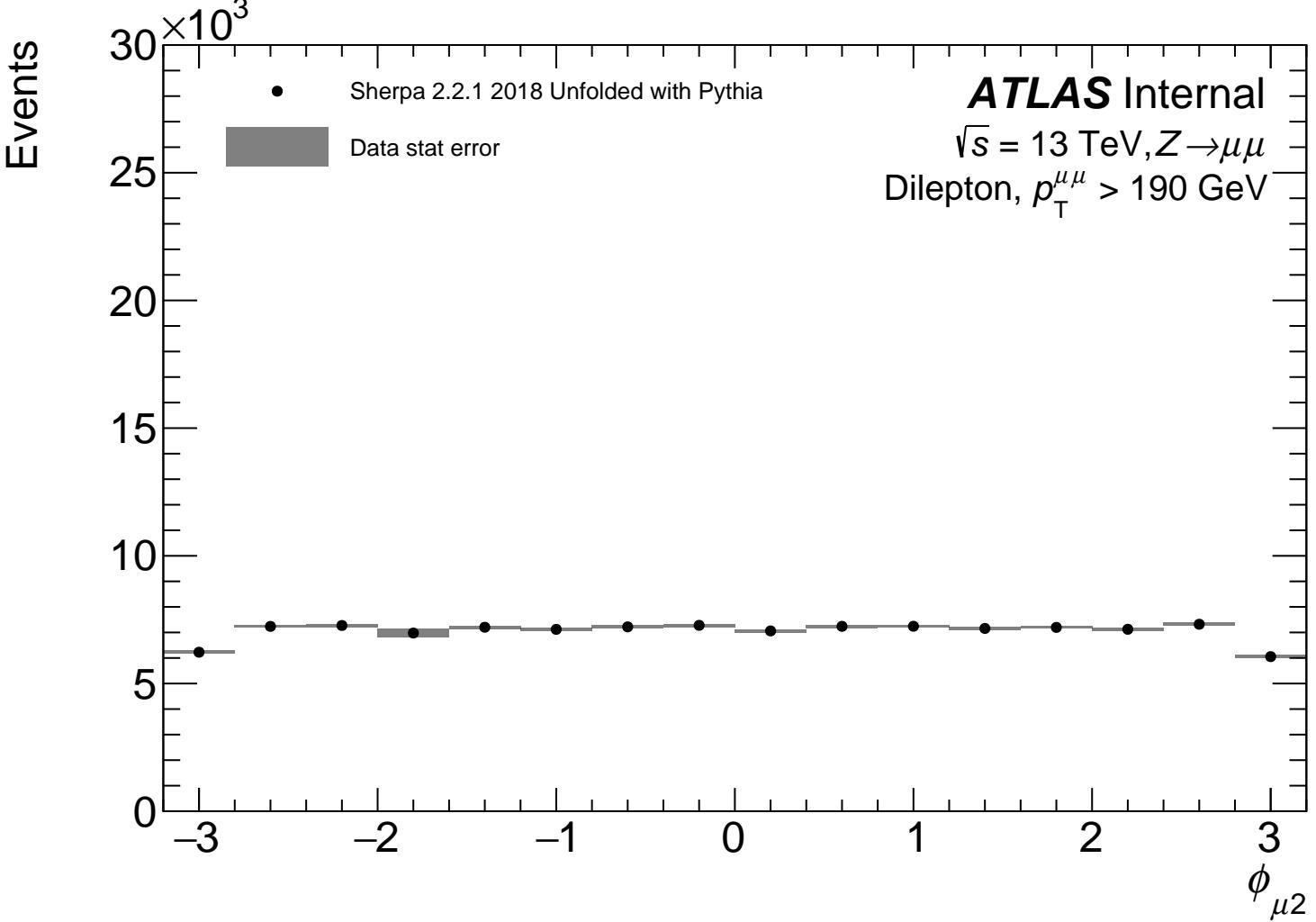


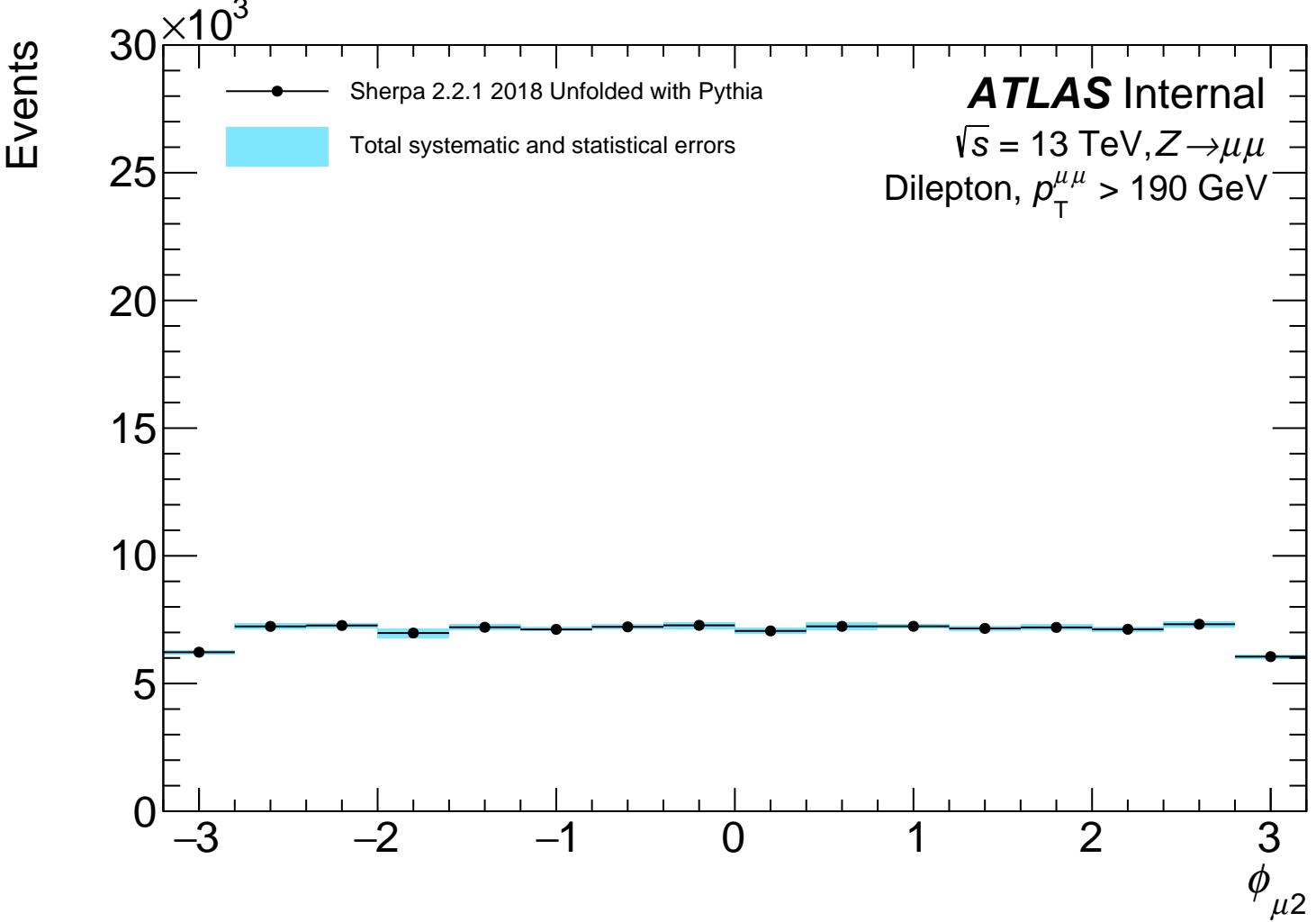


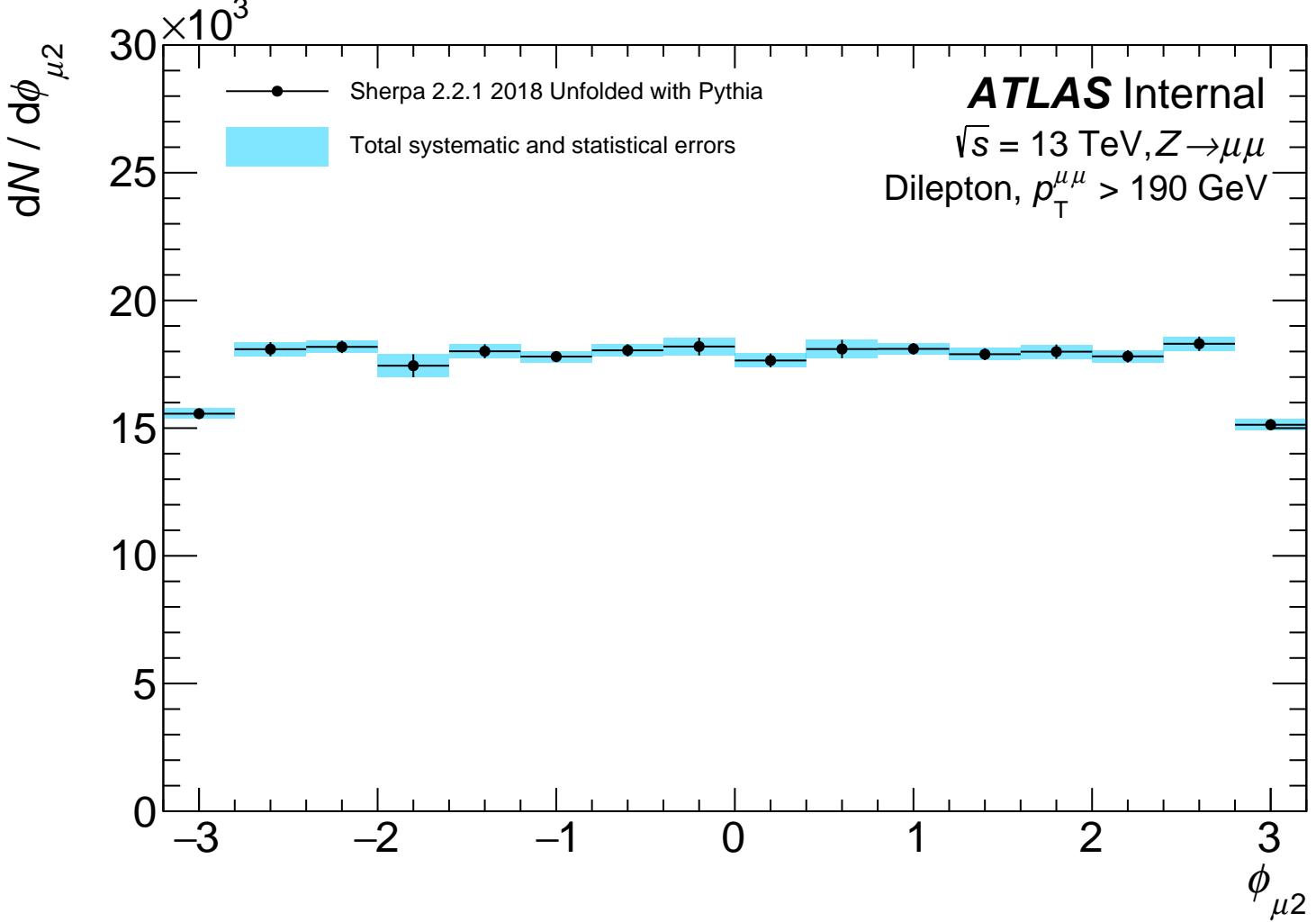










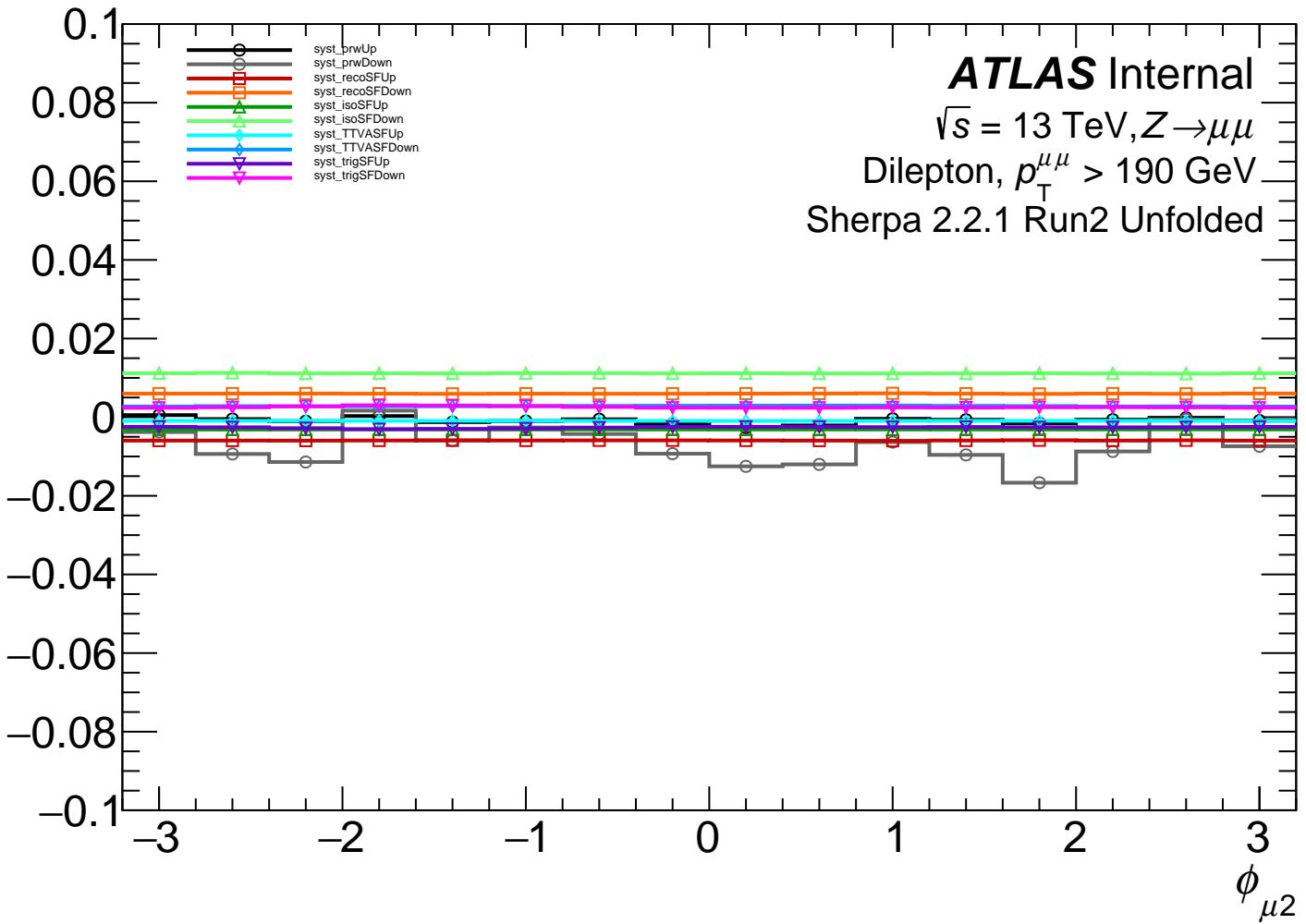


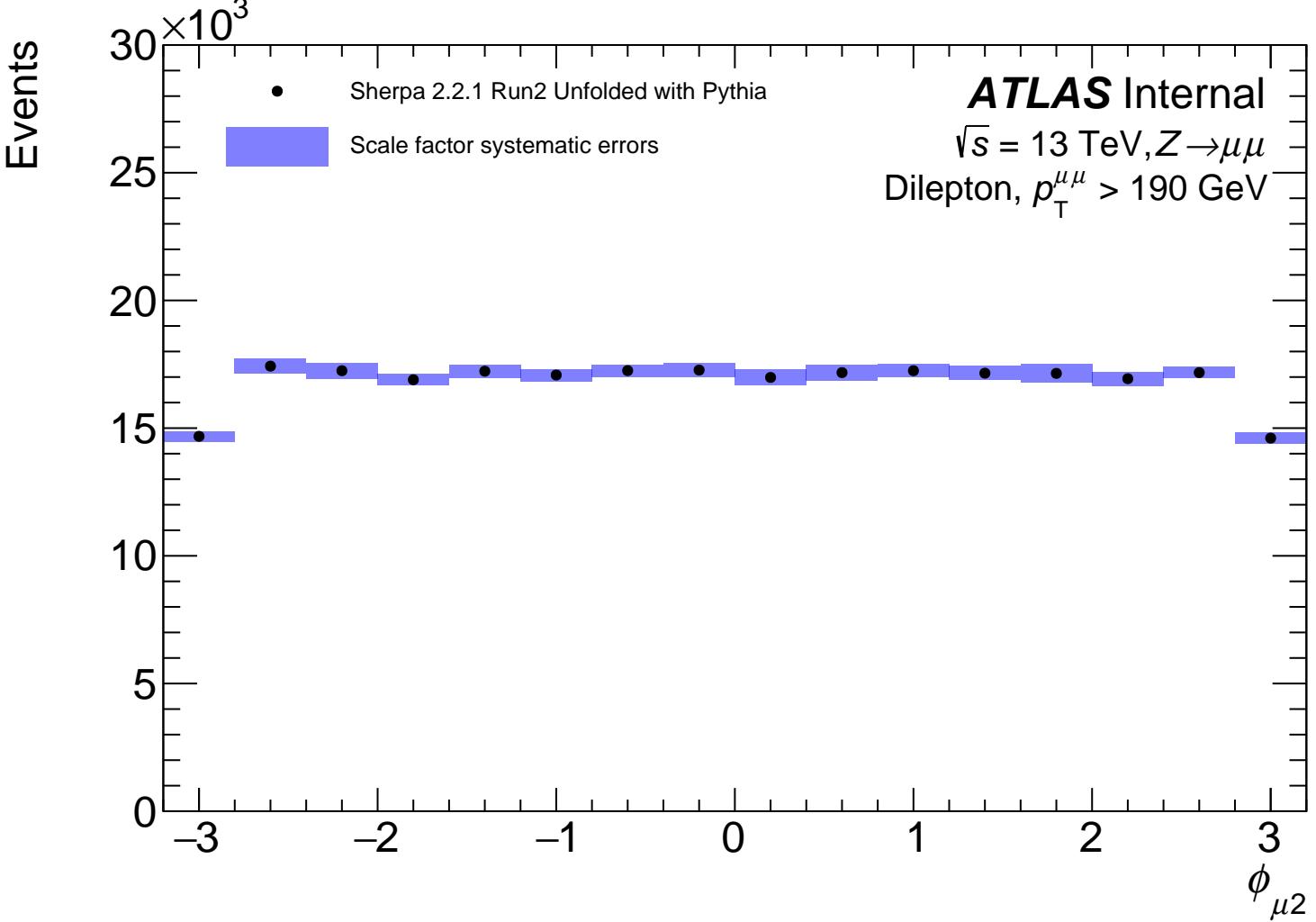
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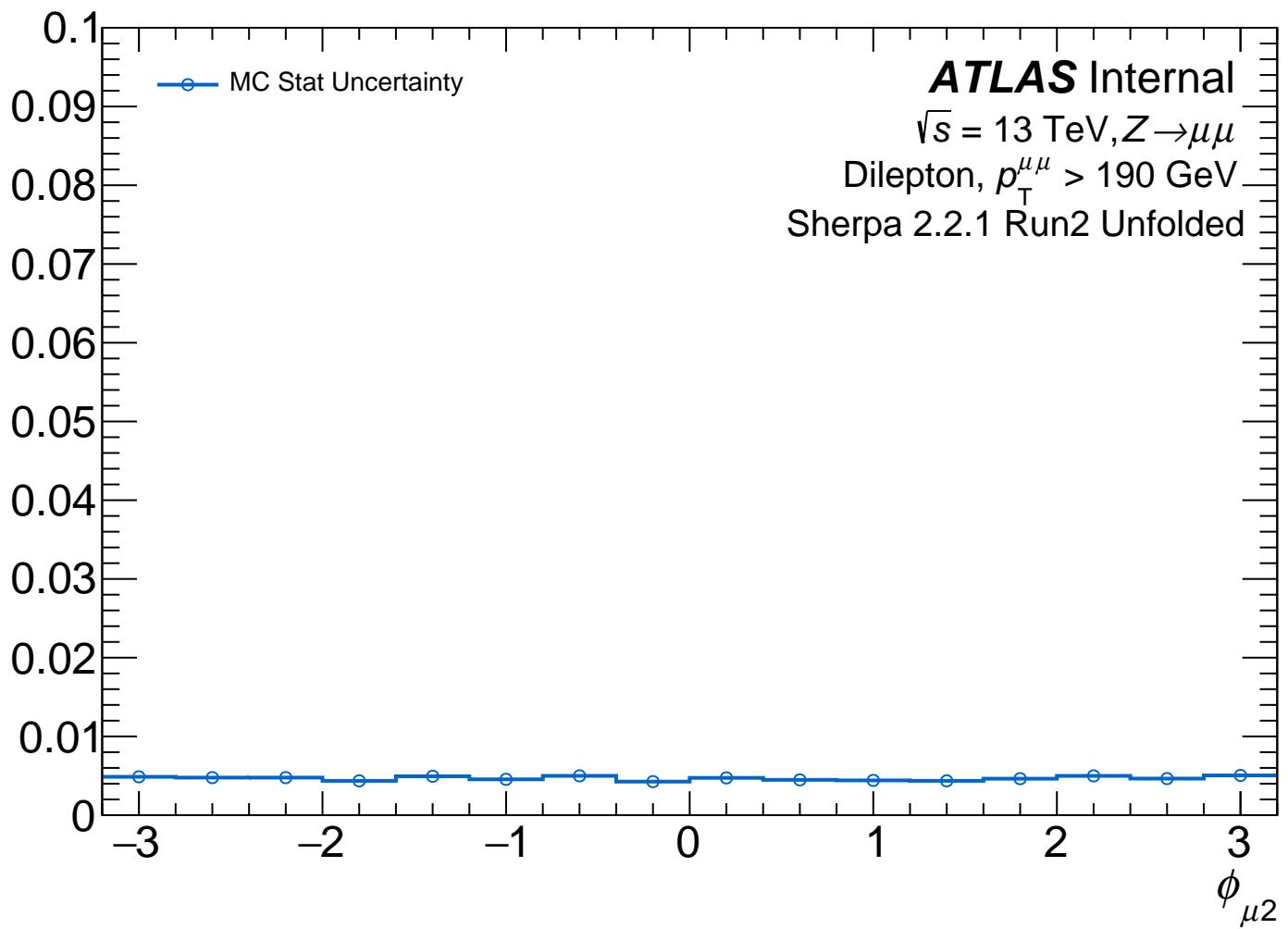
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

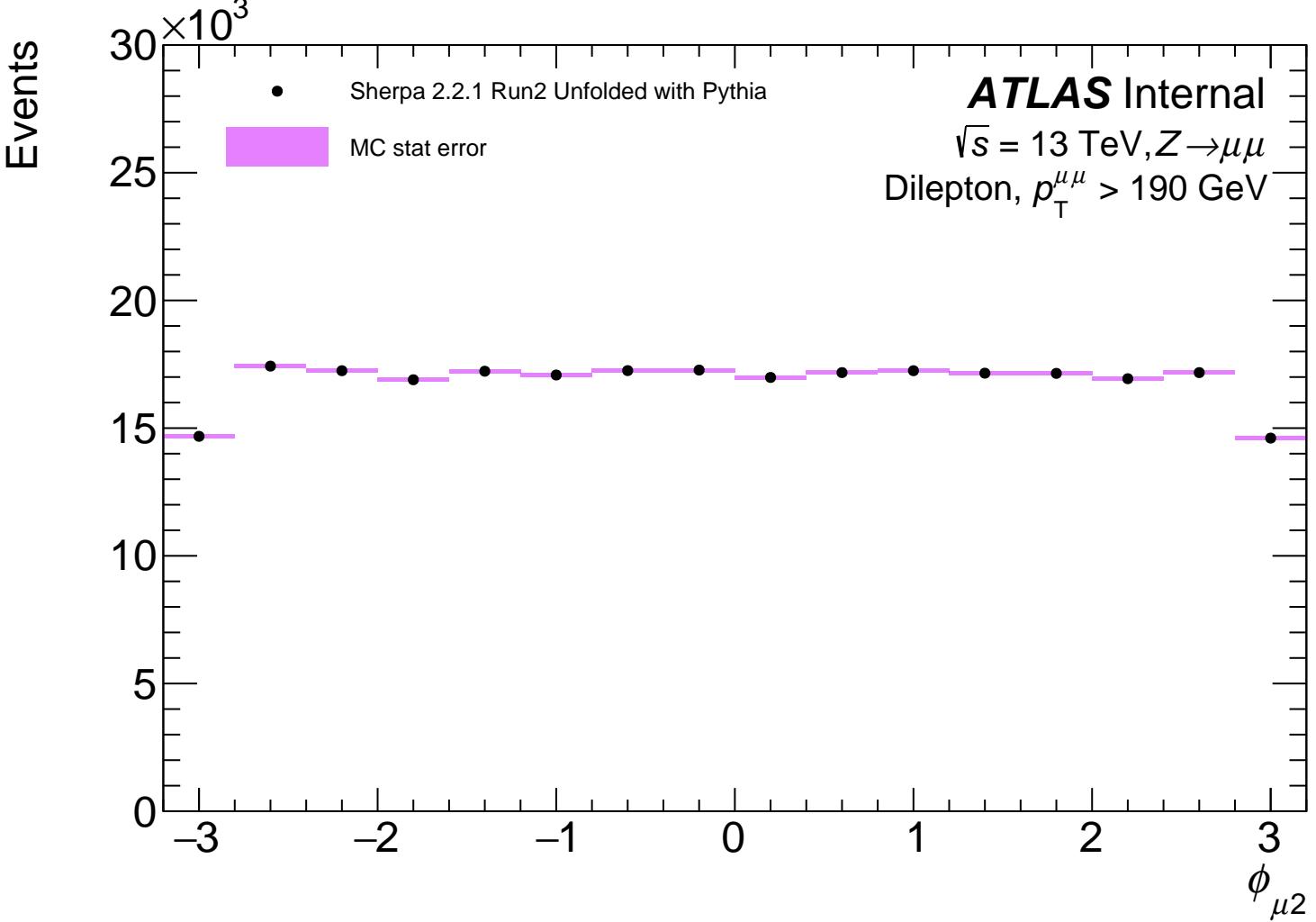
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

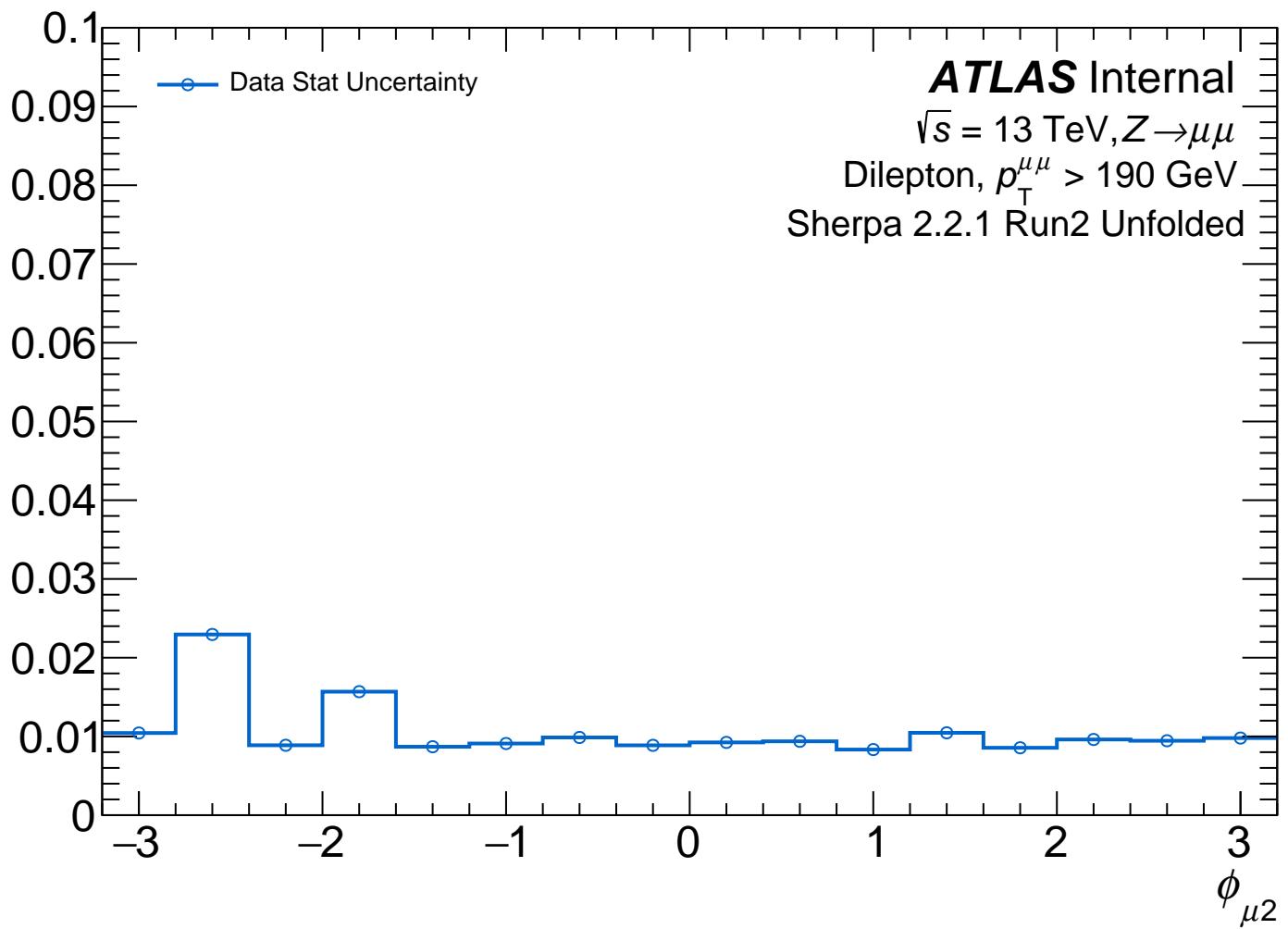
Sherpa 2.2.1 Run2 Unfolded

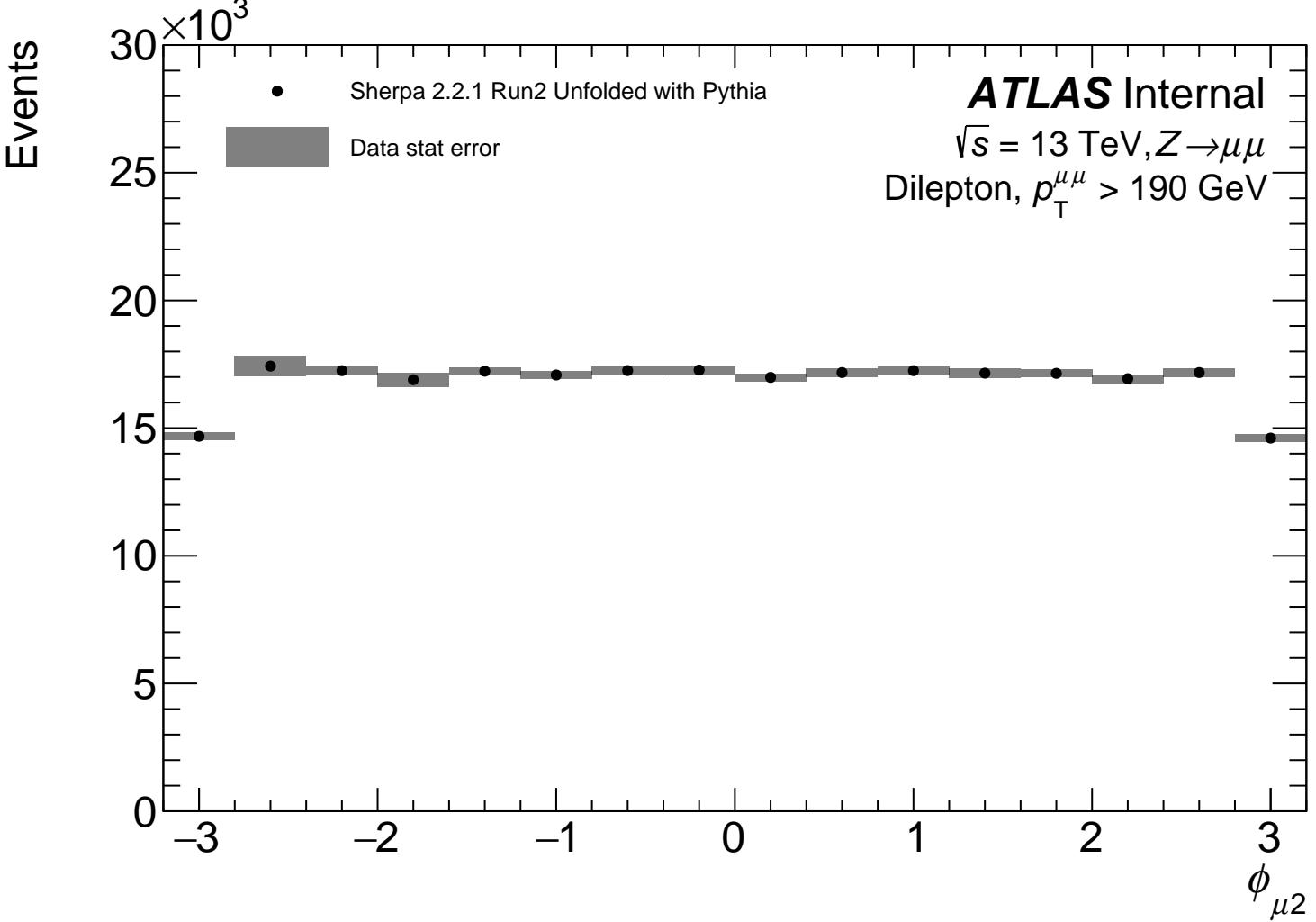


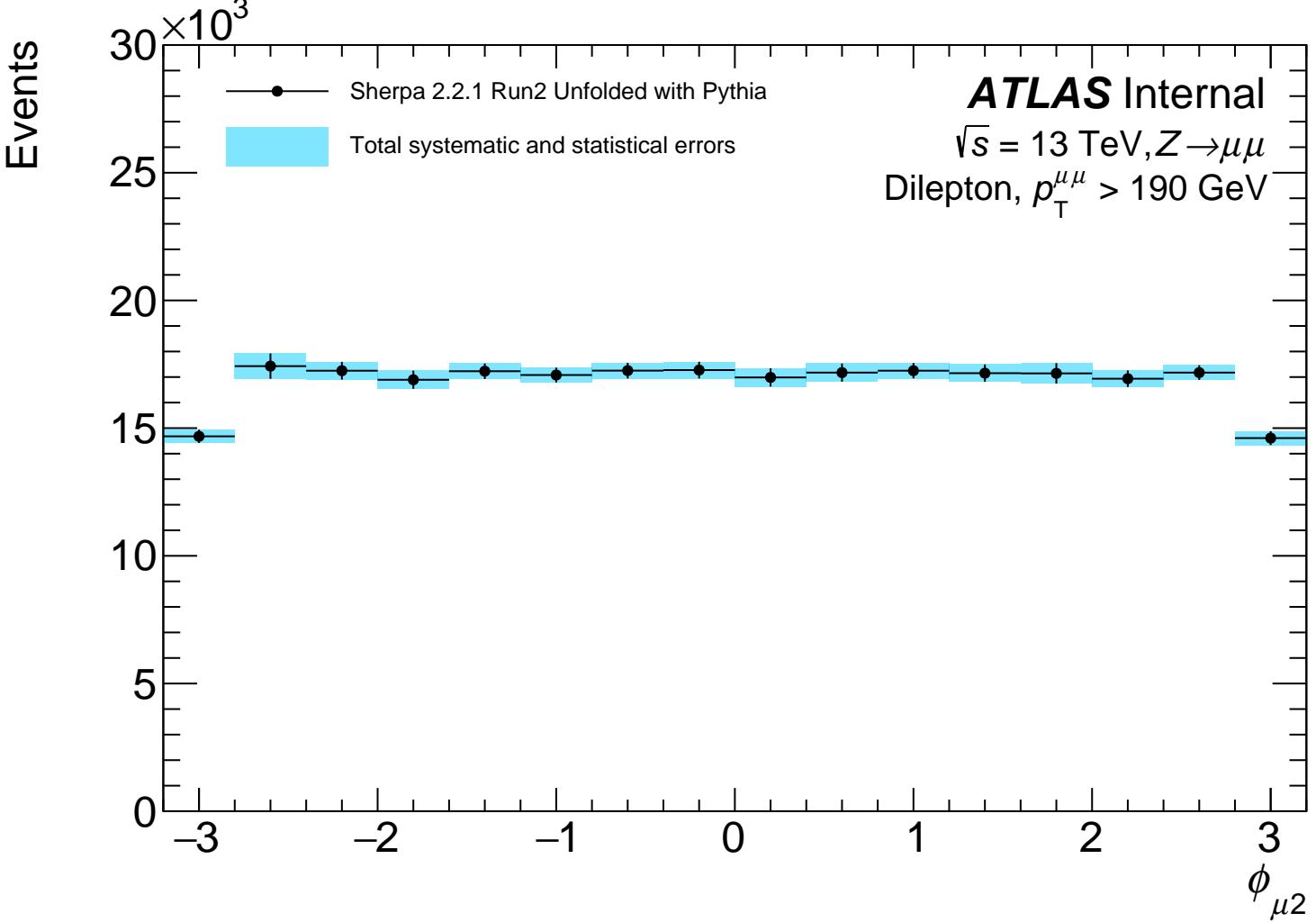


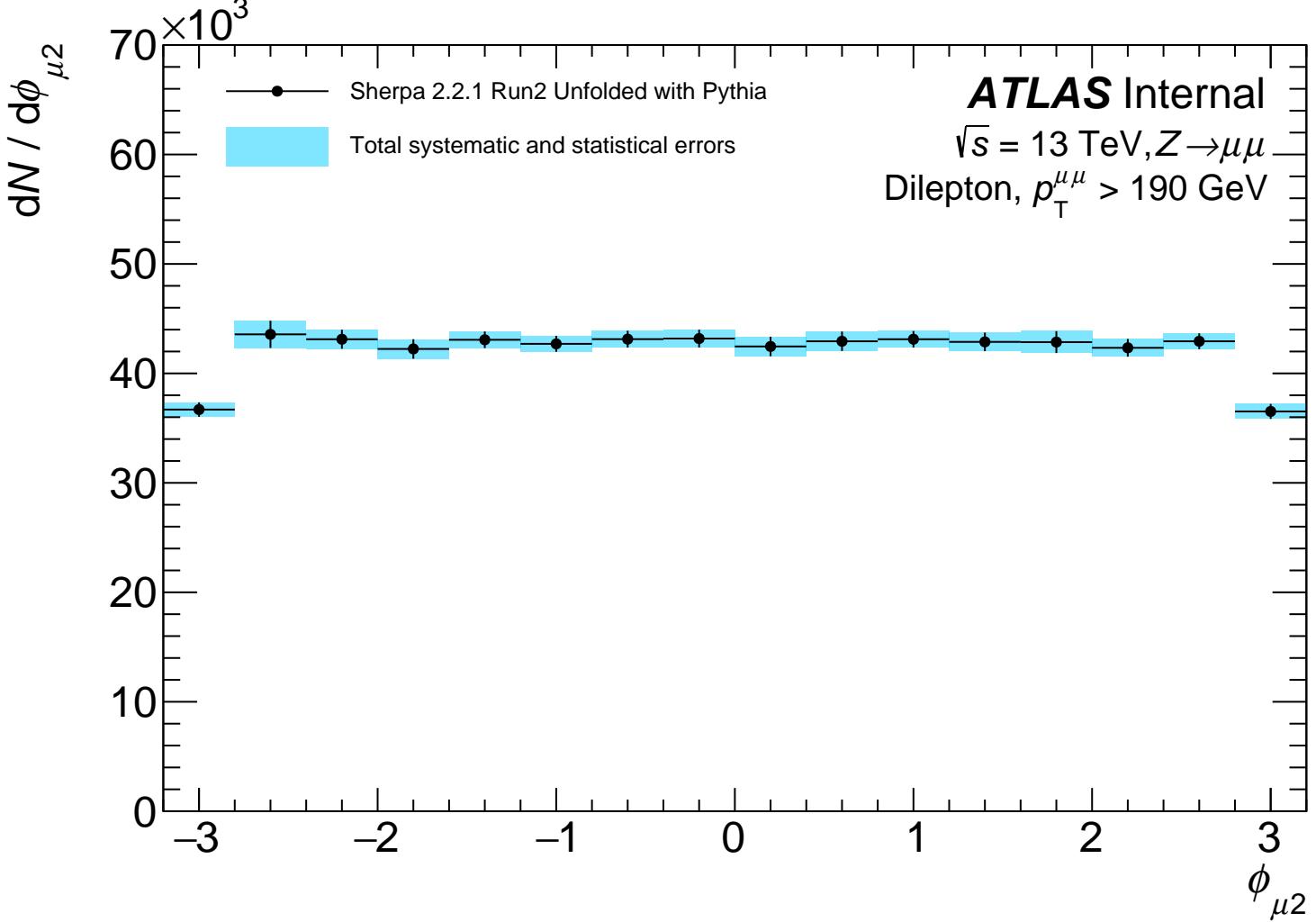










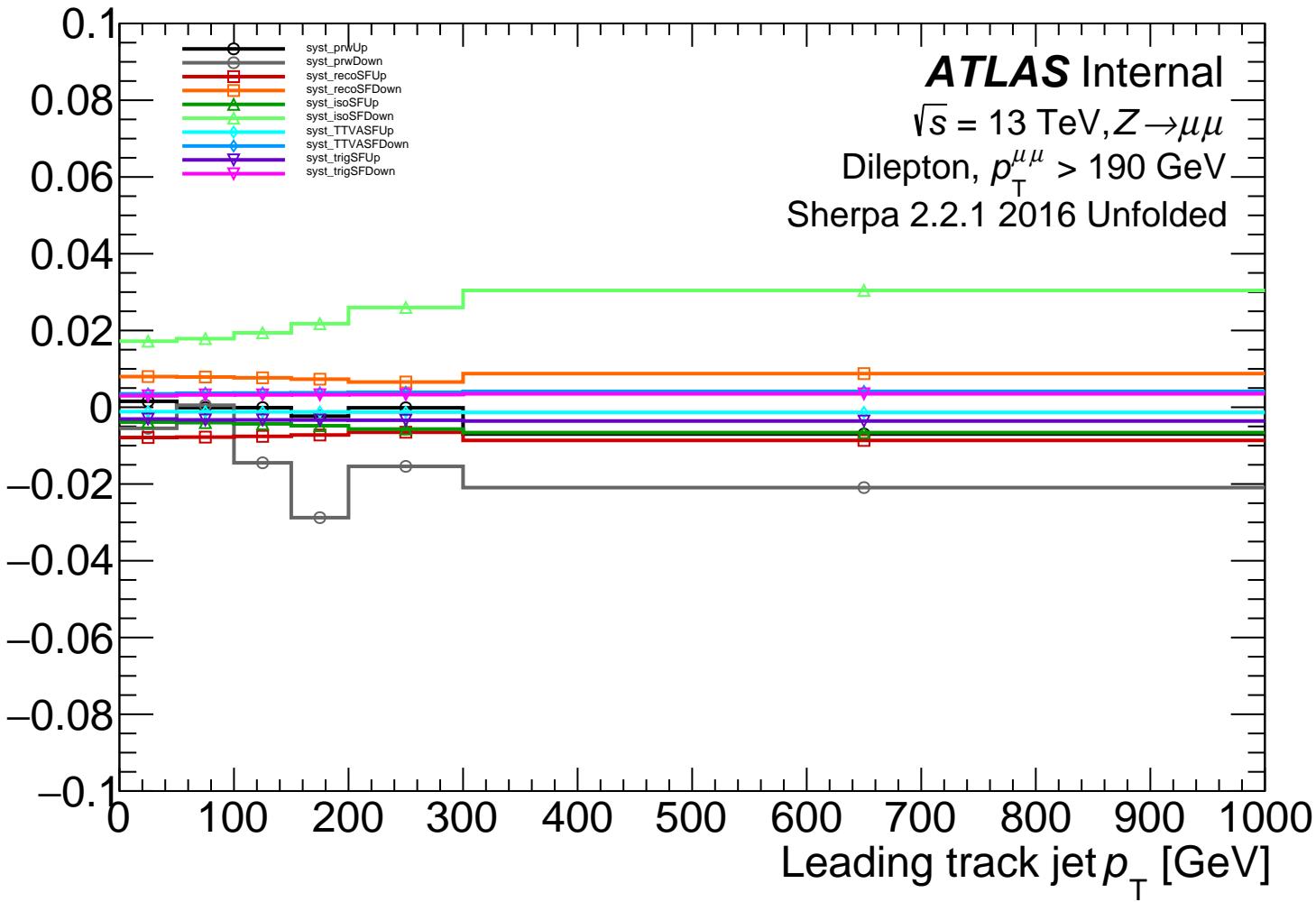


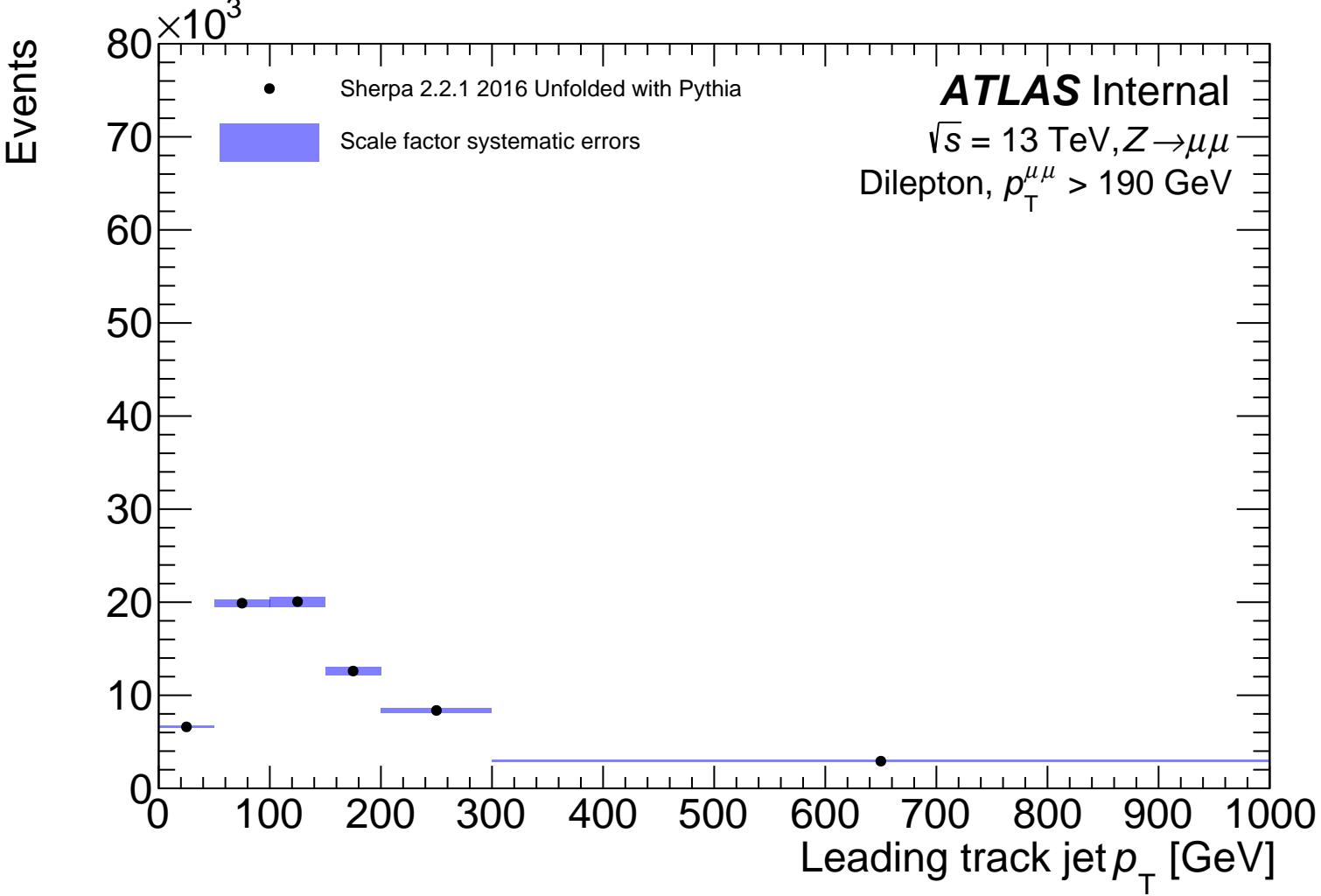
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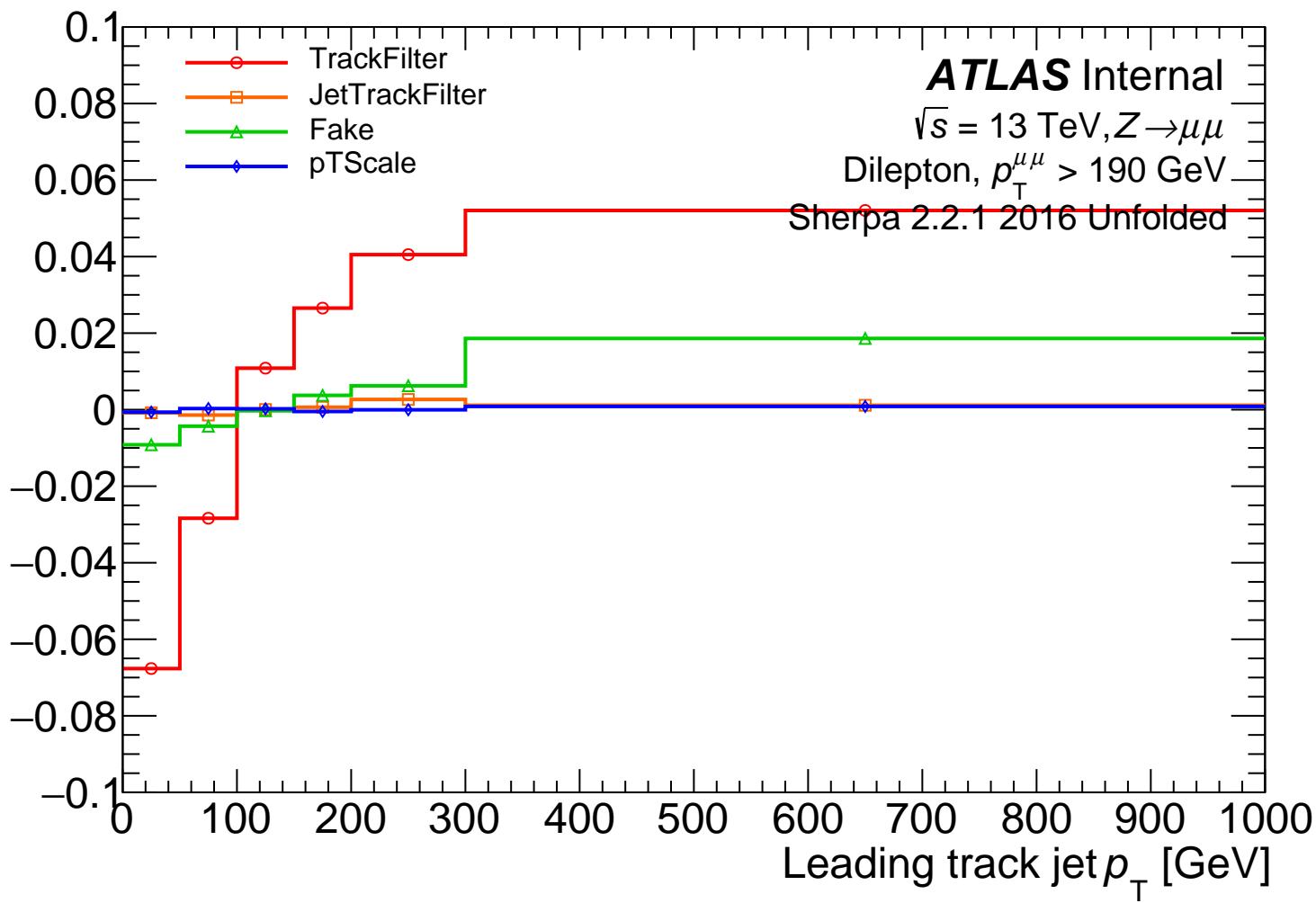
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

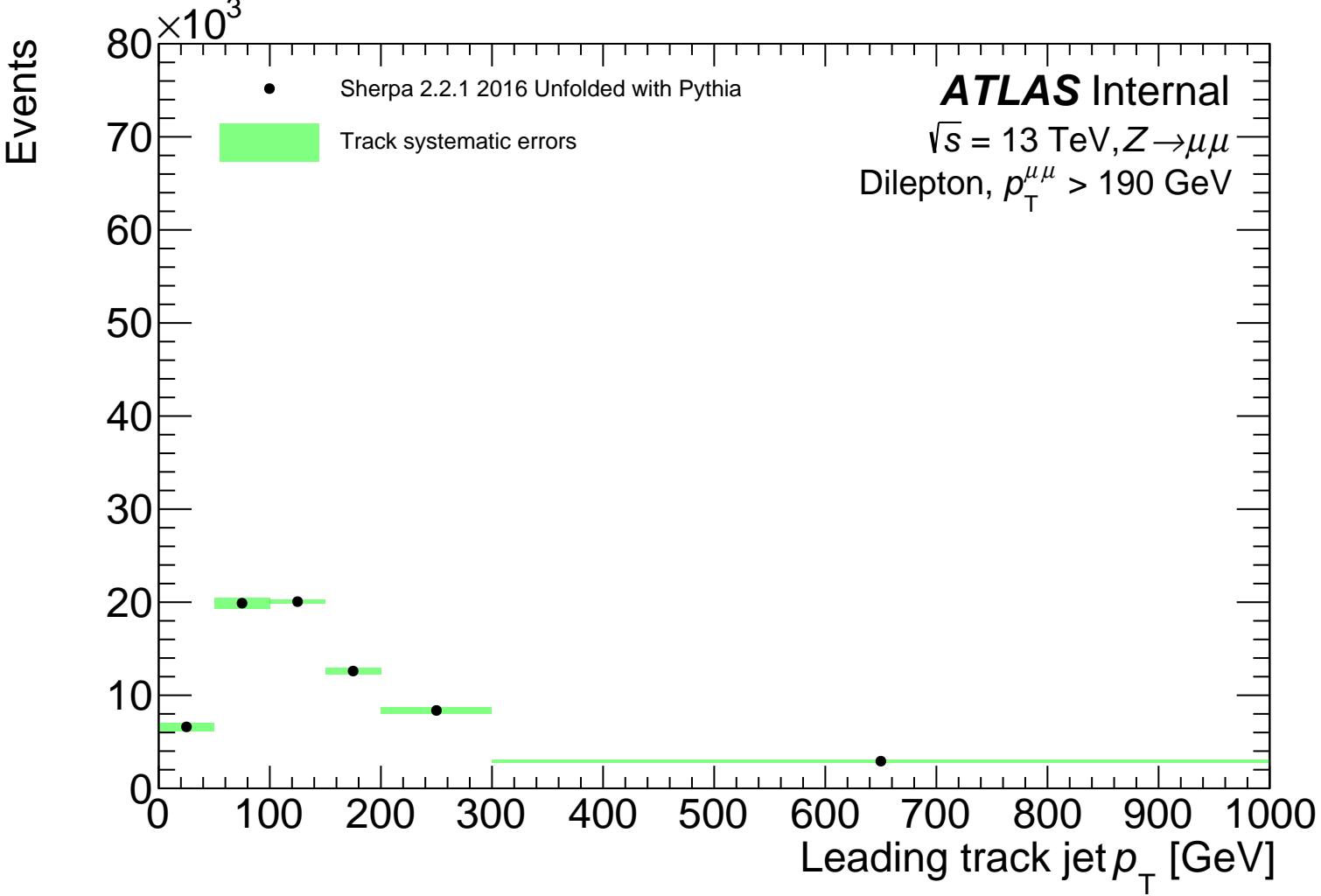
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

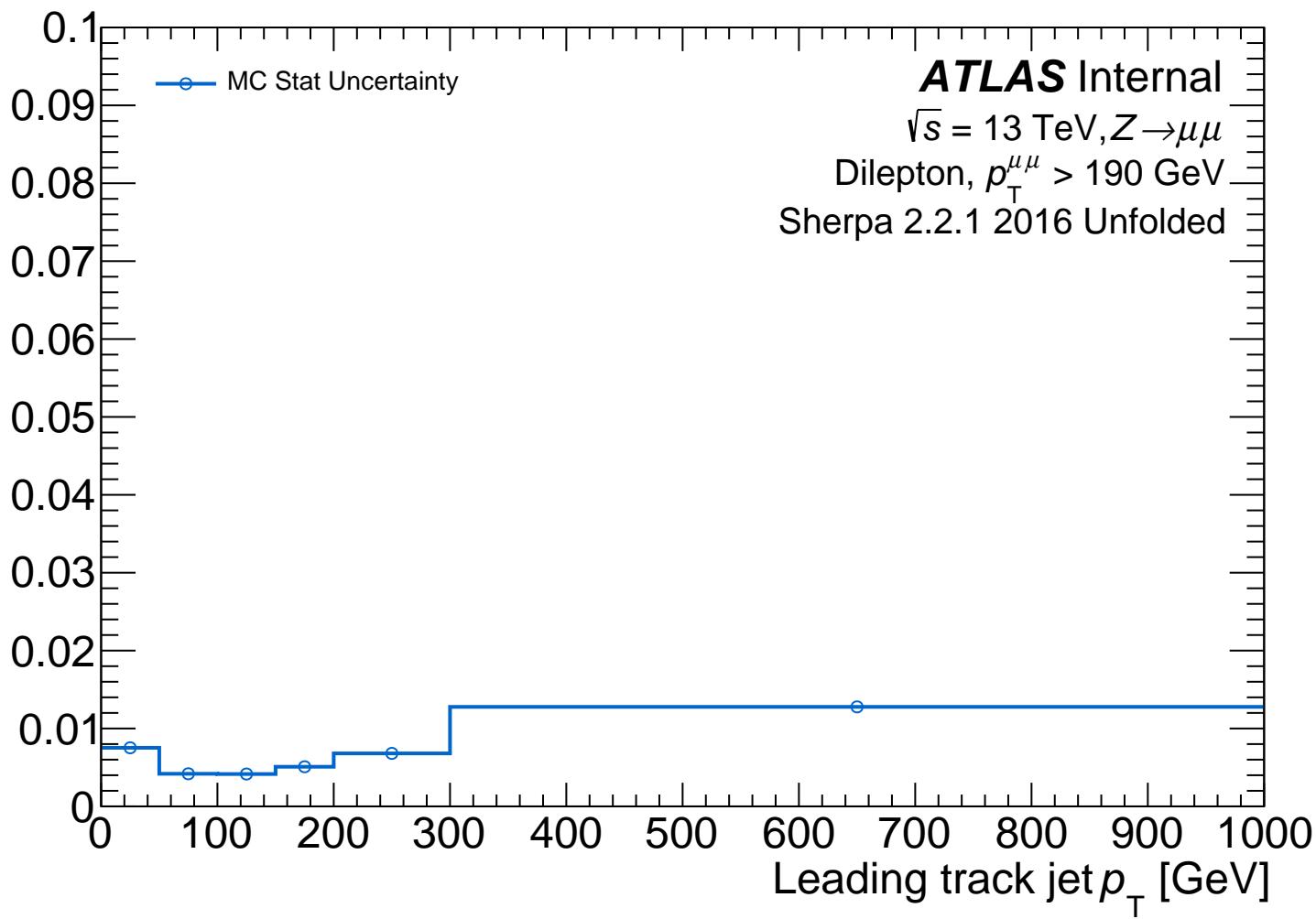
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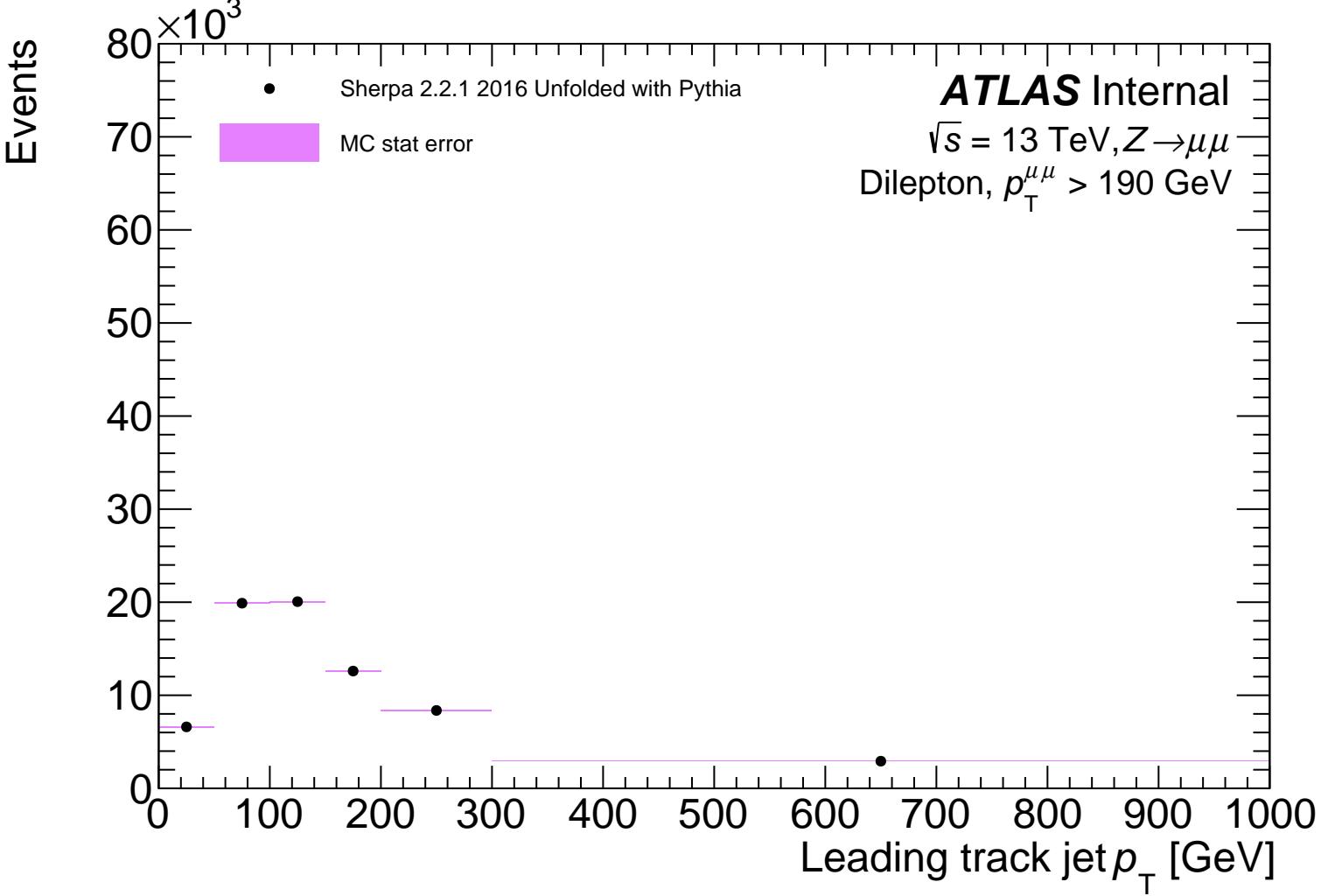


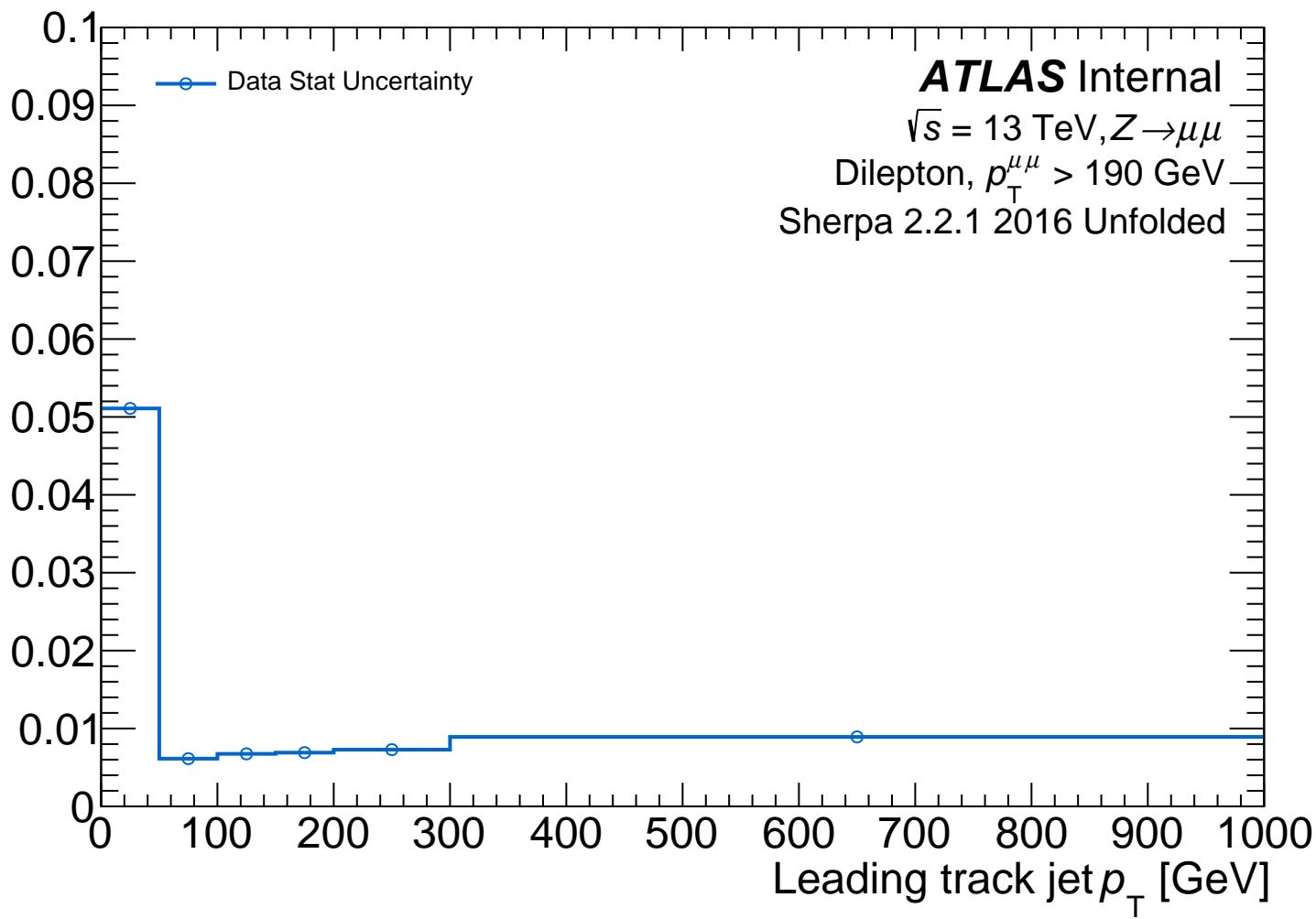


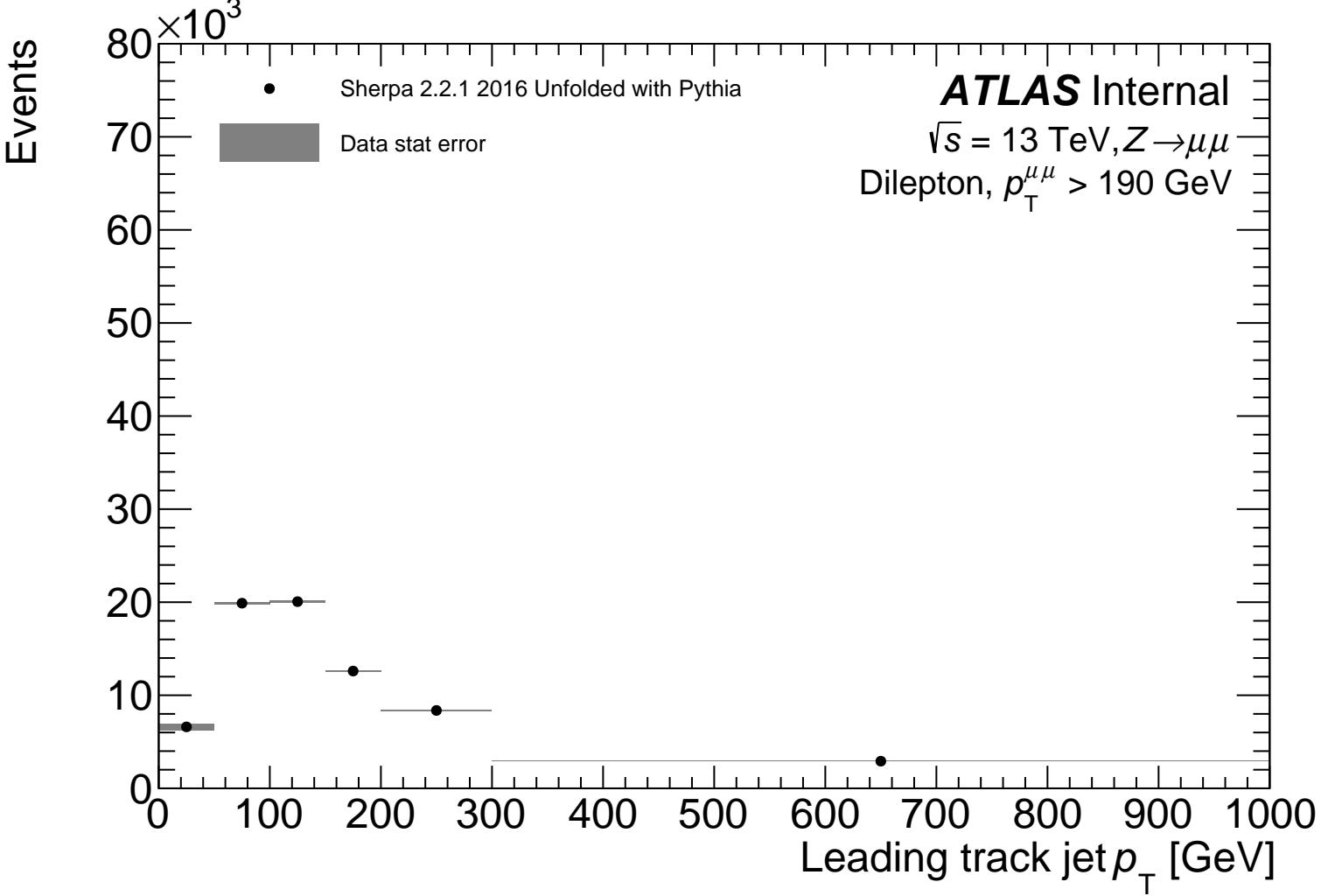


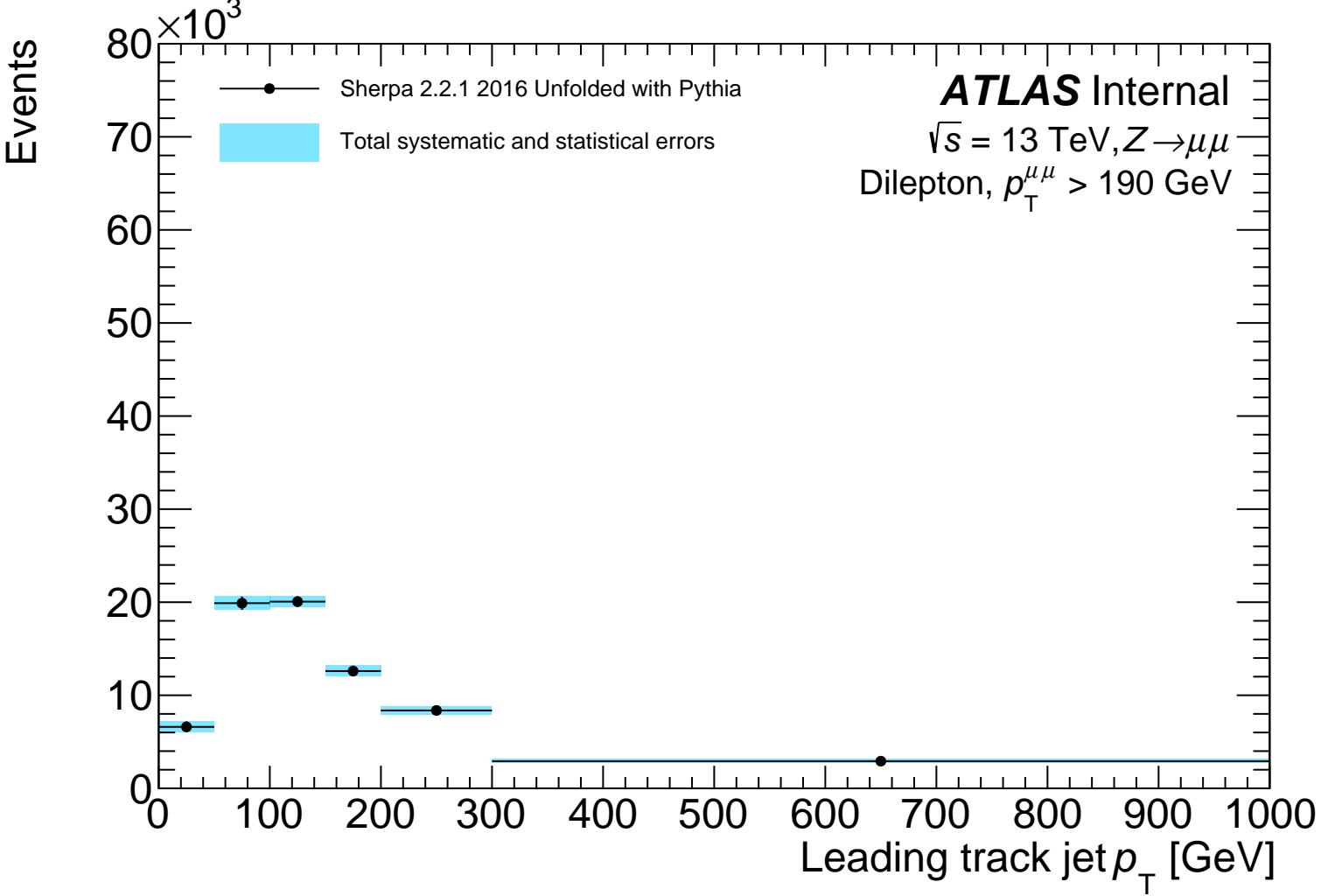


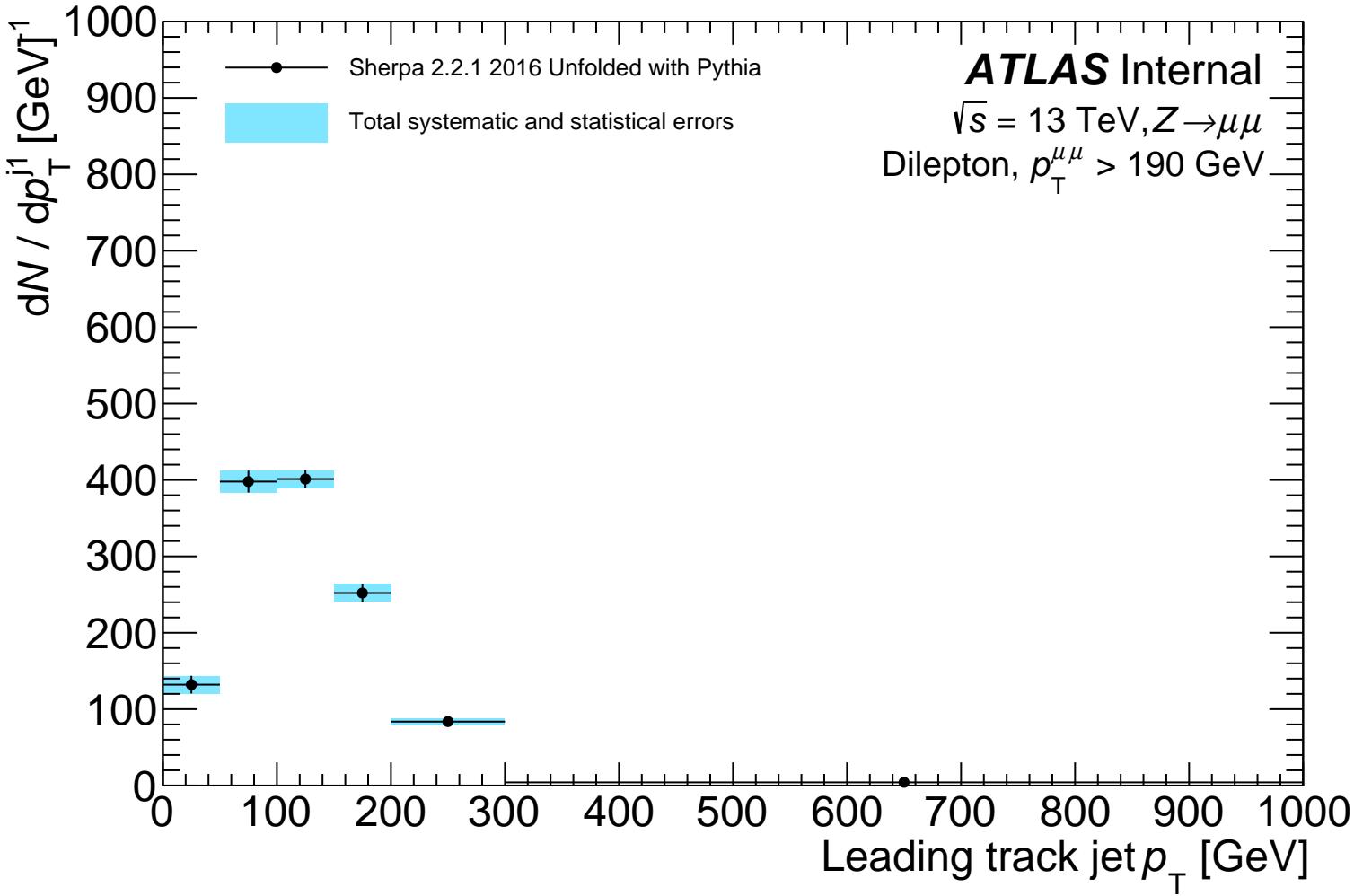










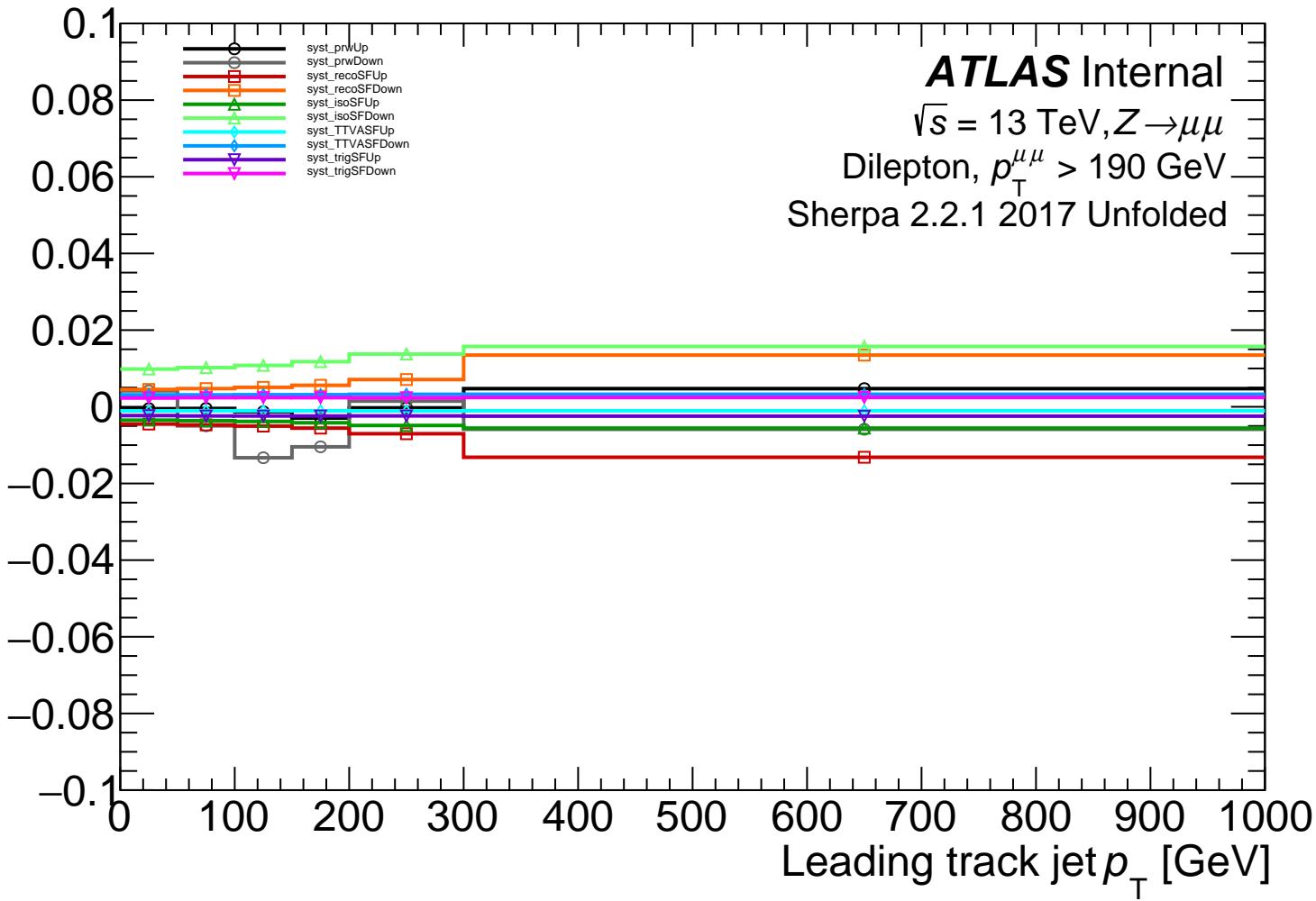


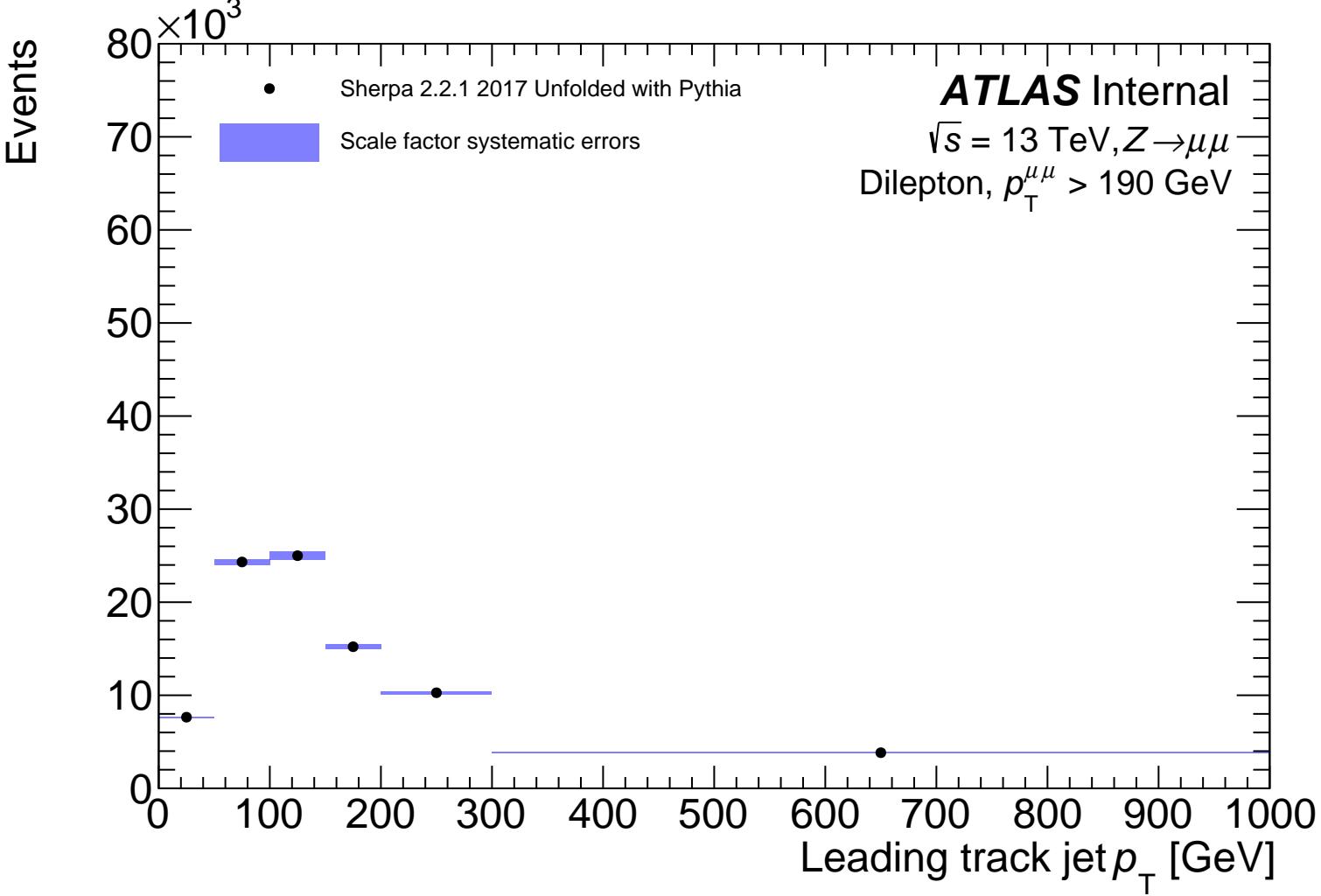
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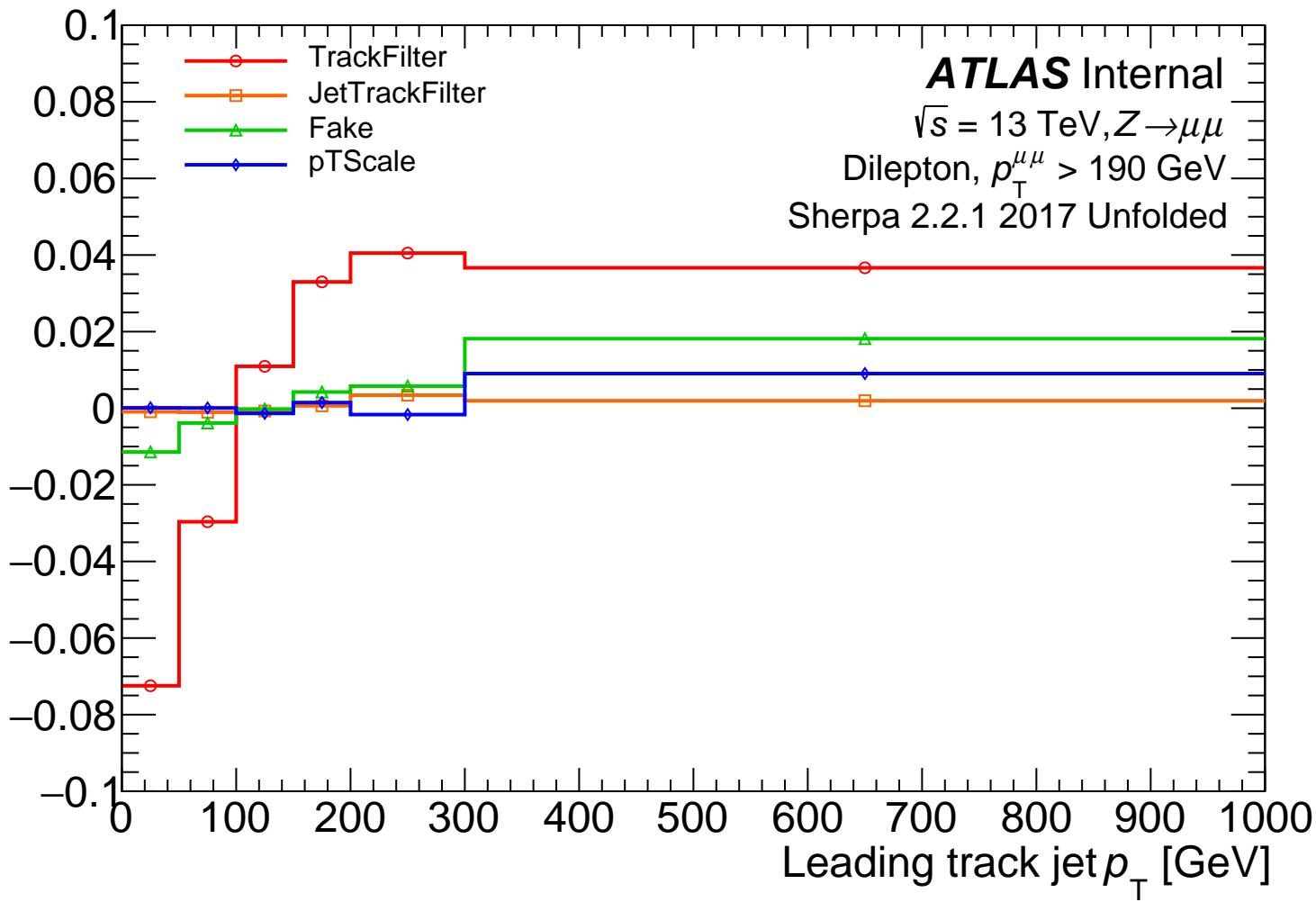
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

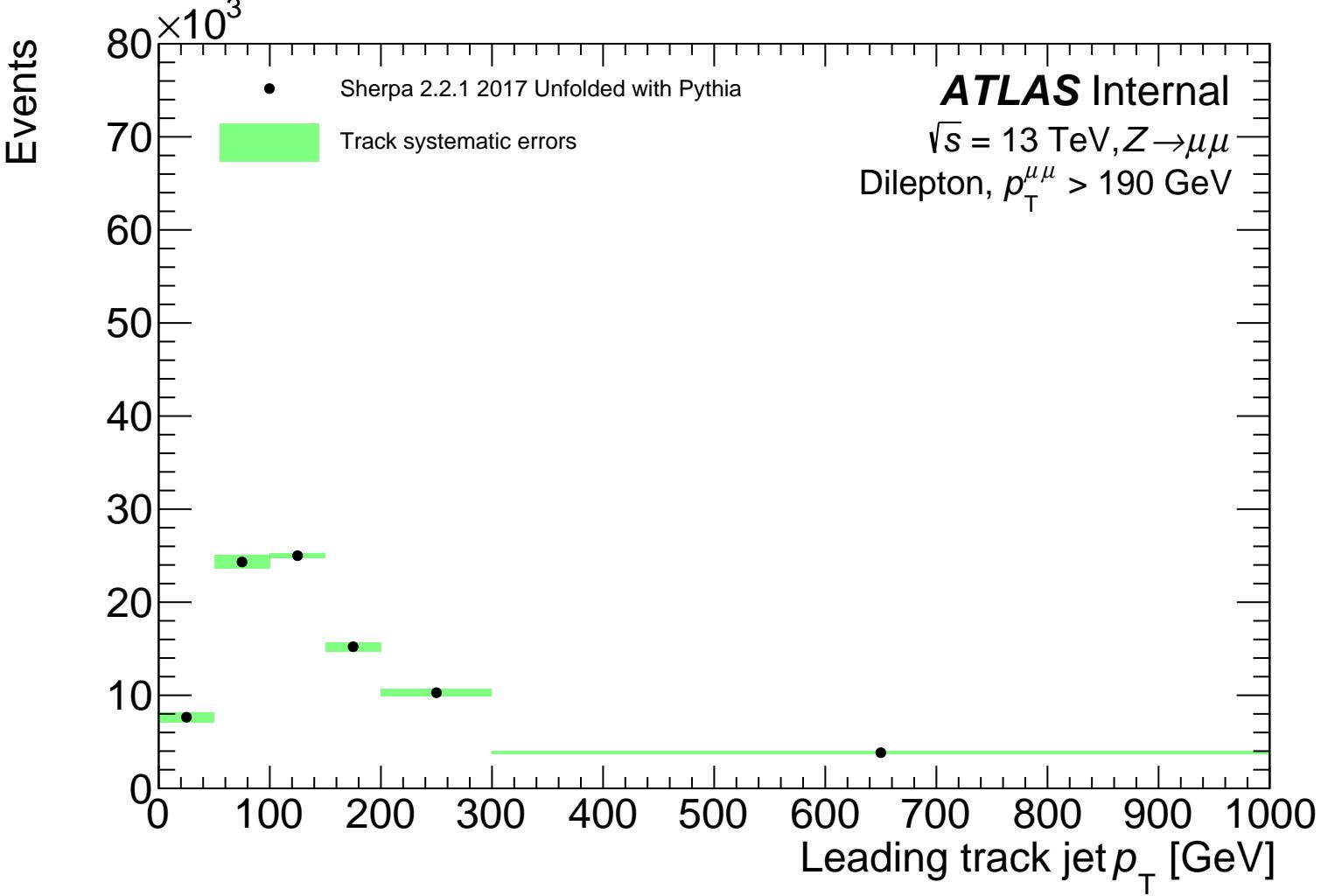
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

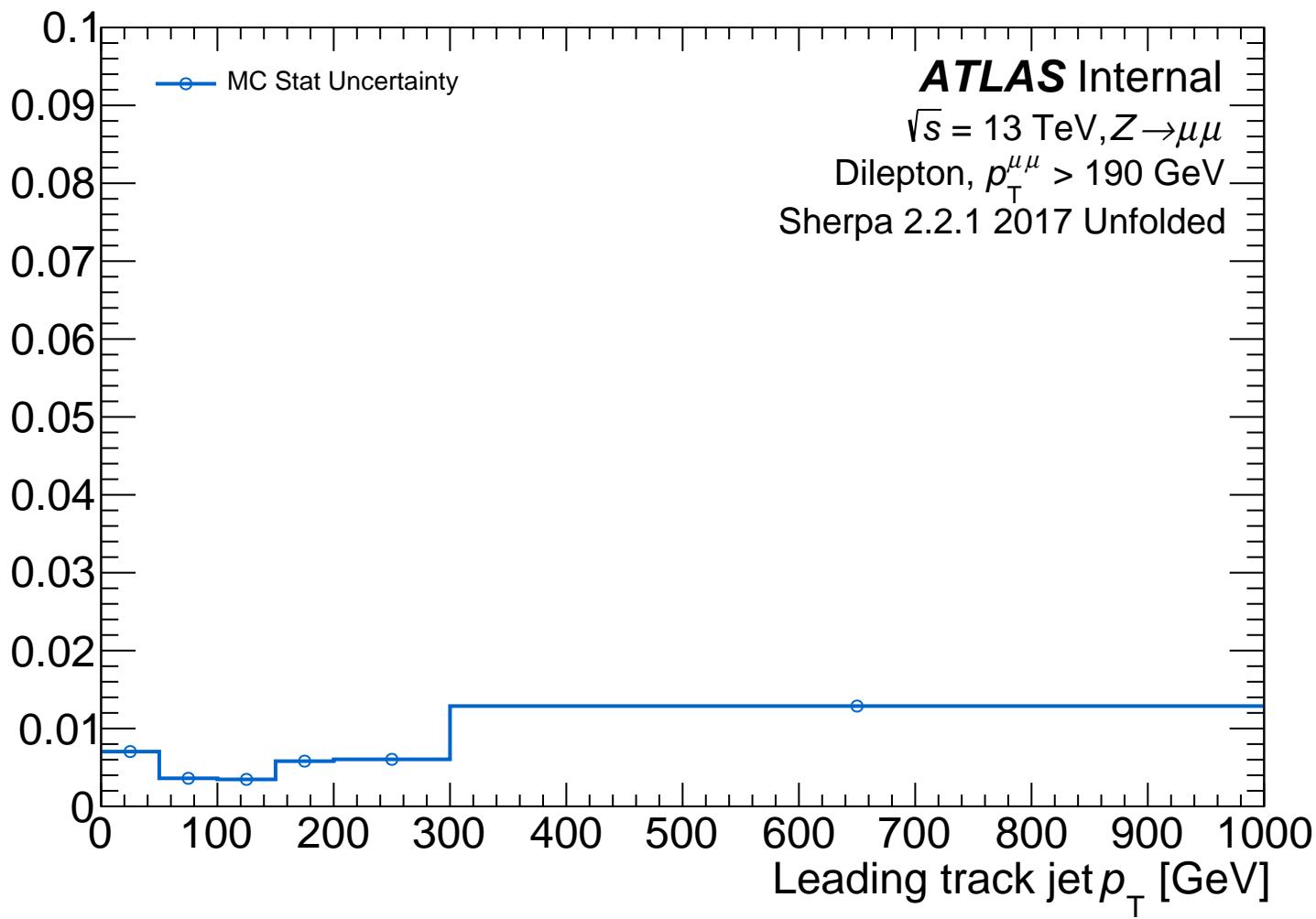
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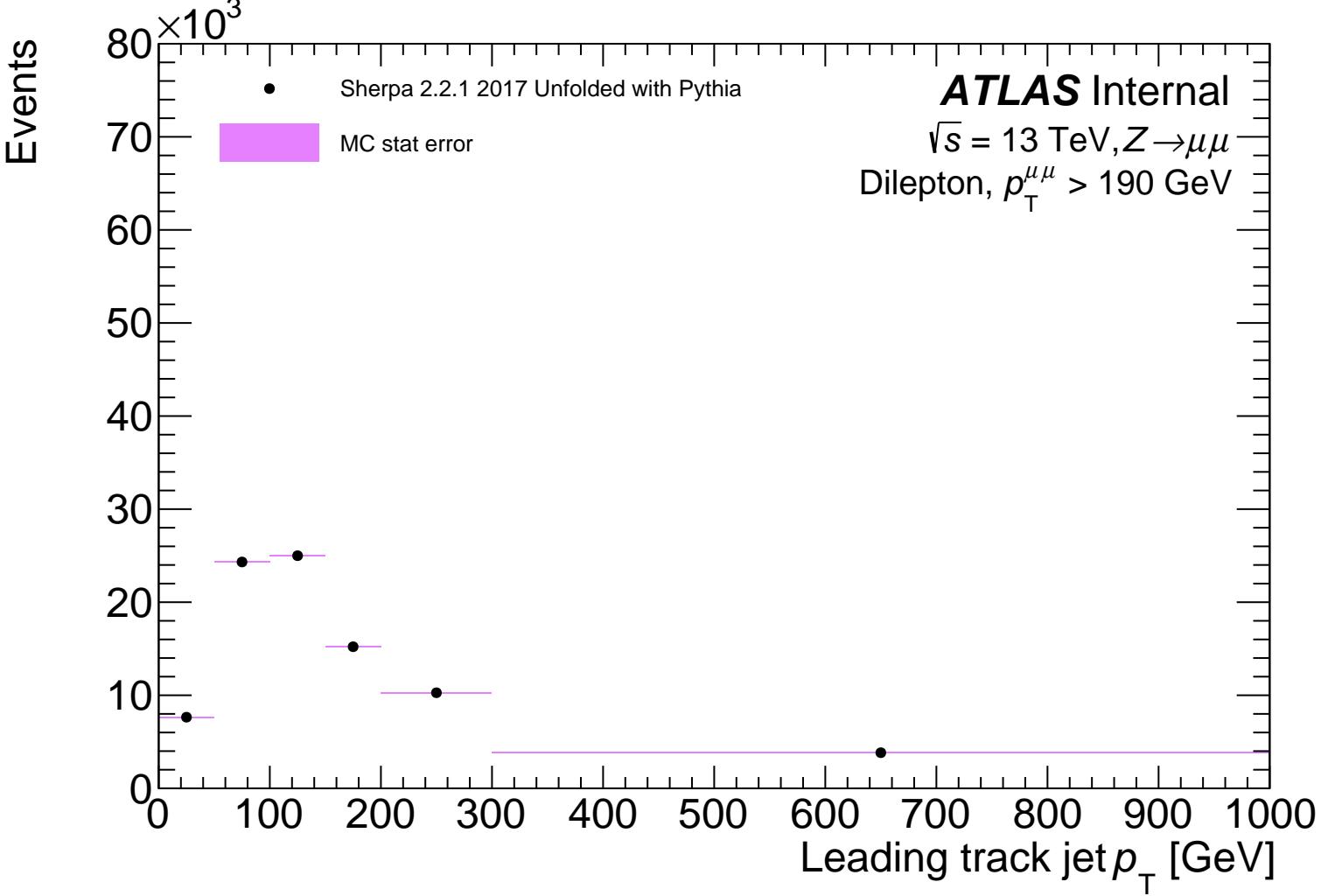


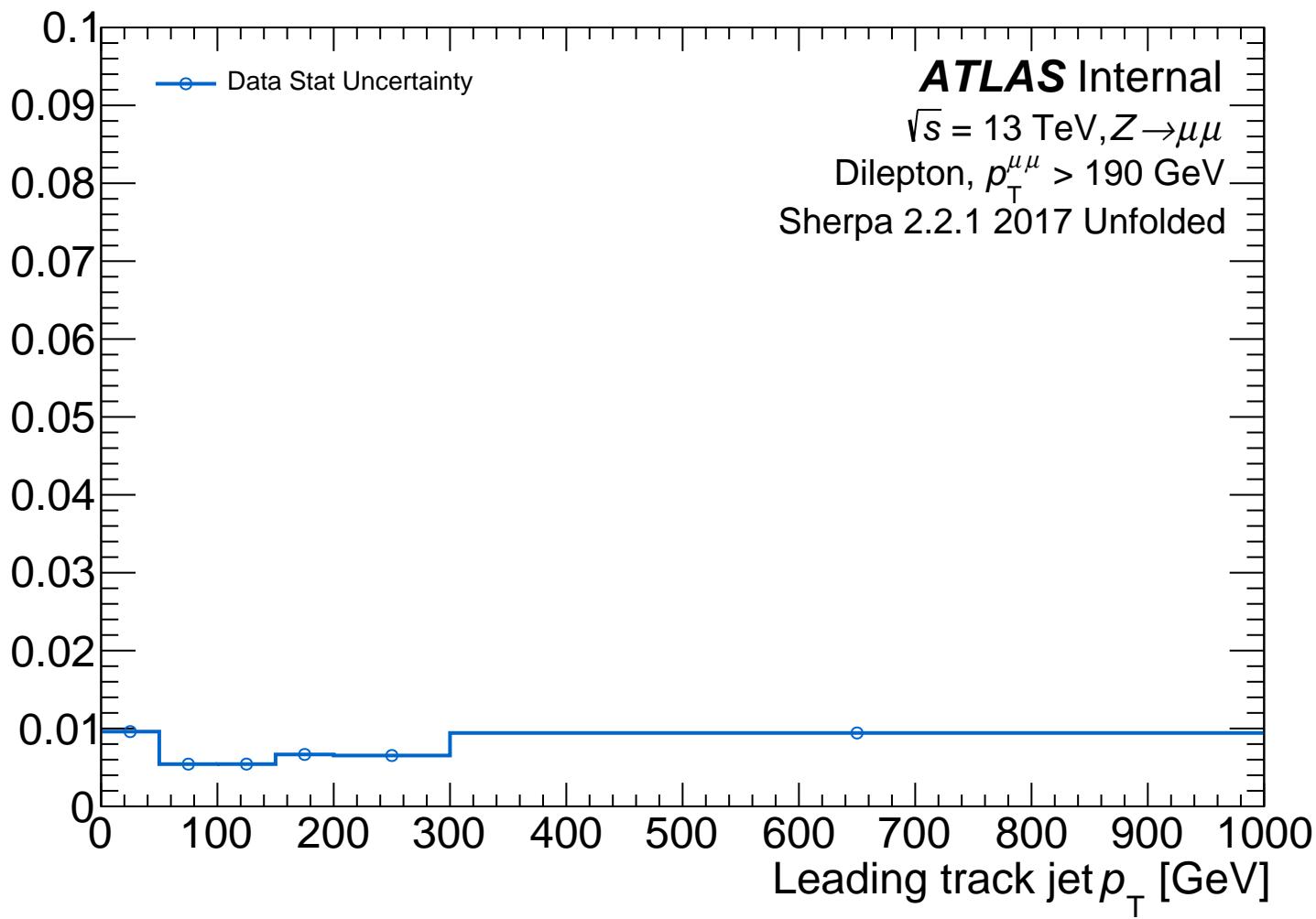


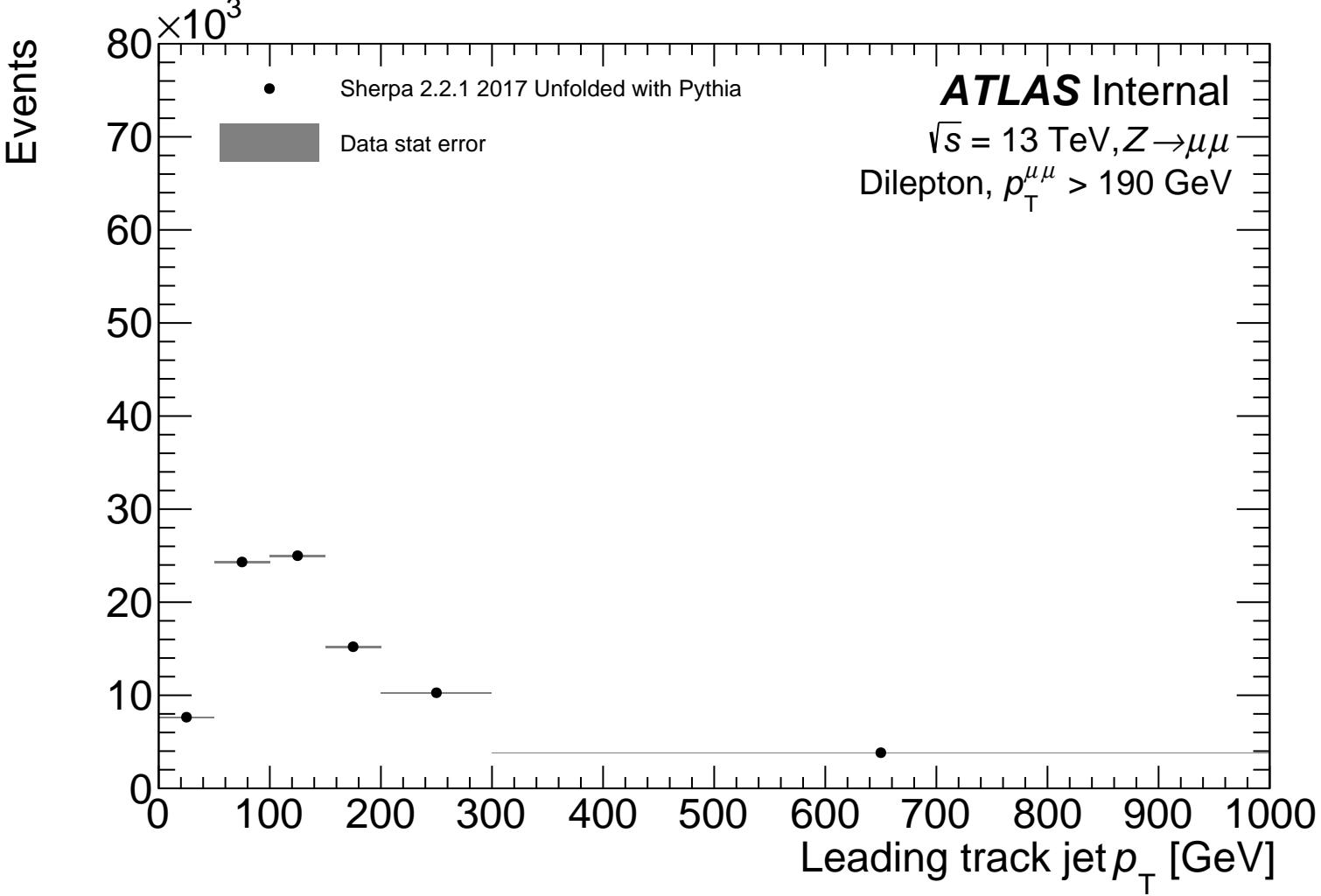


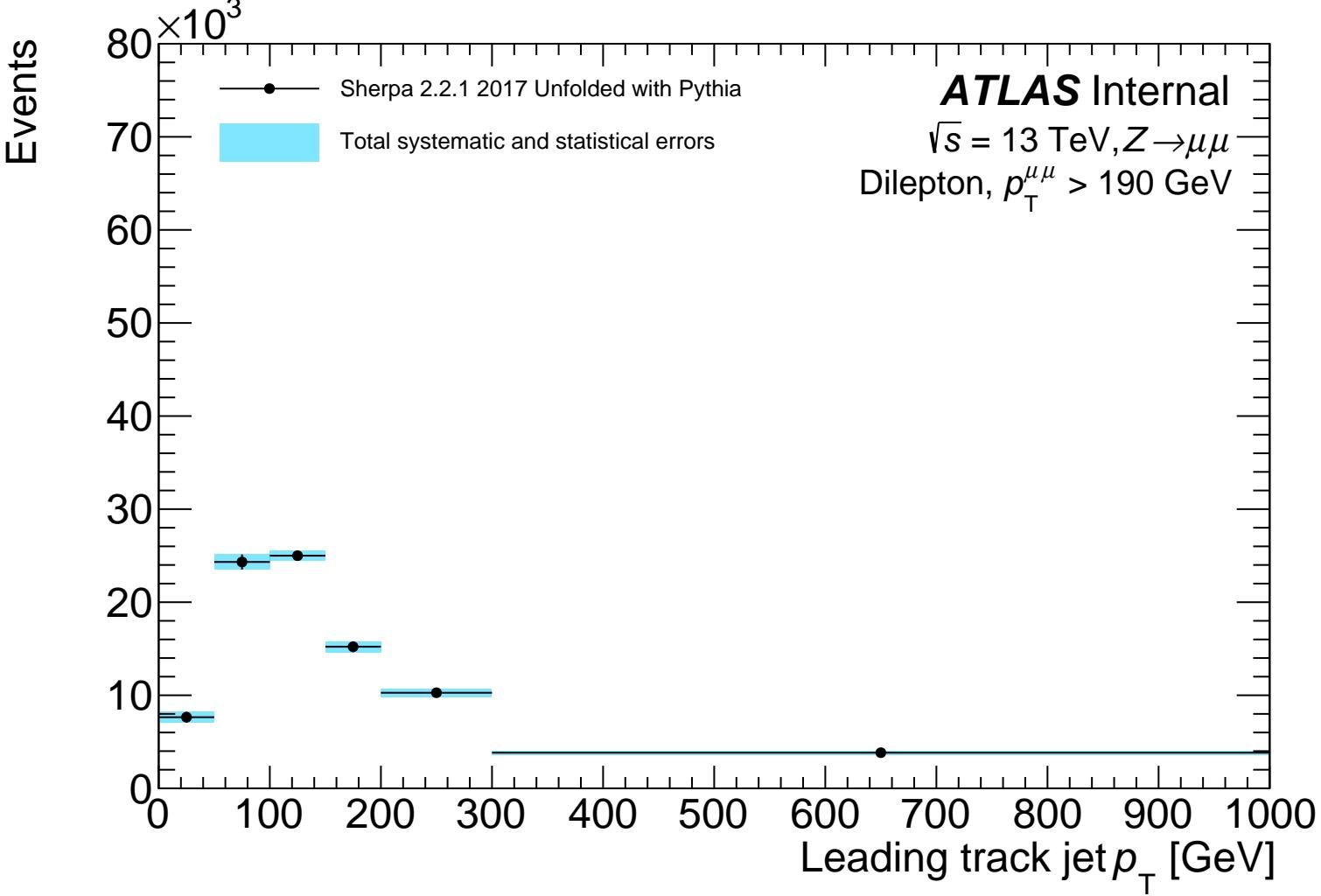


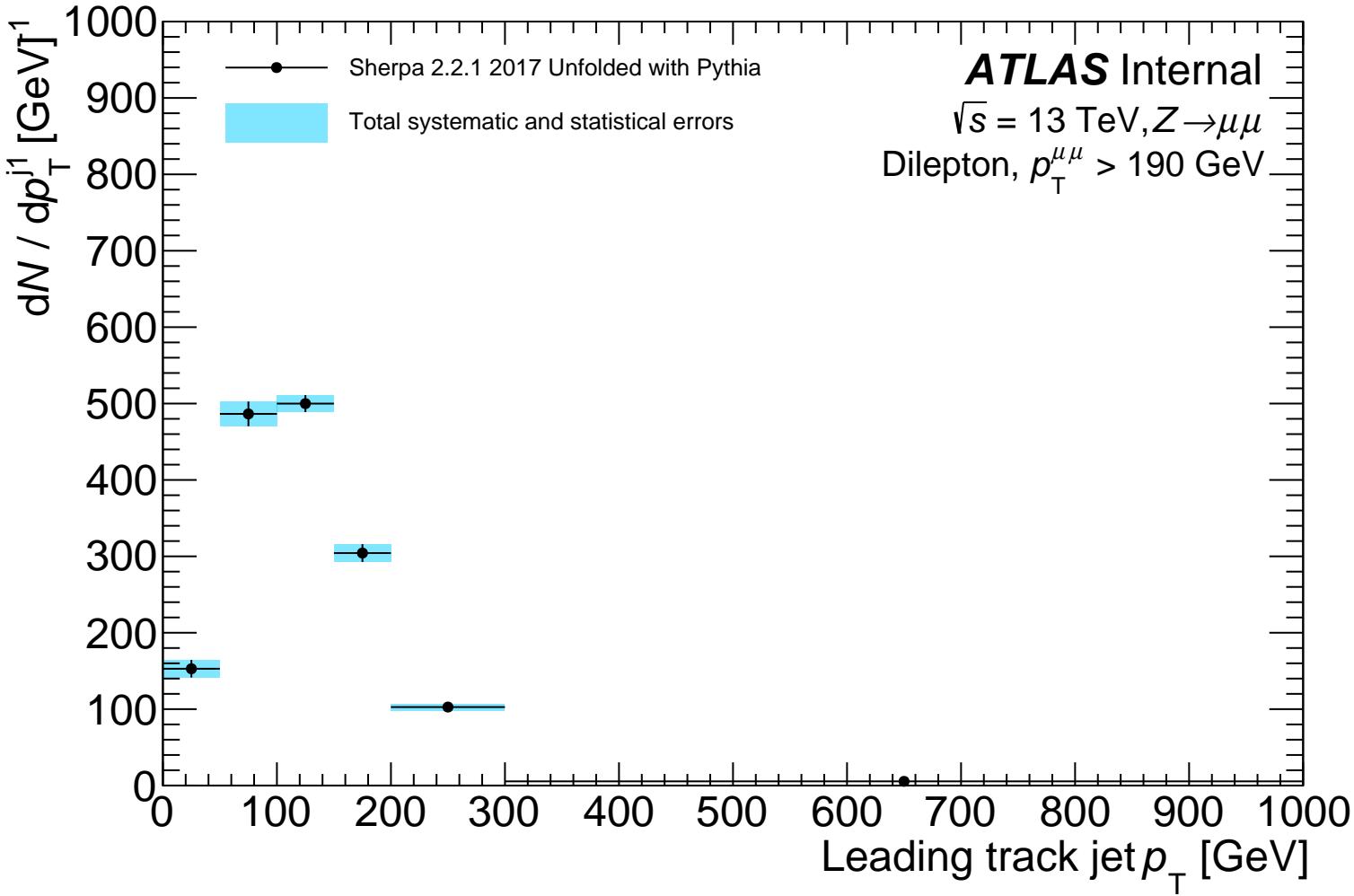










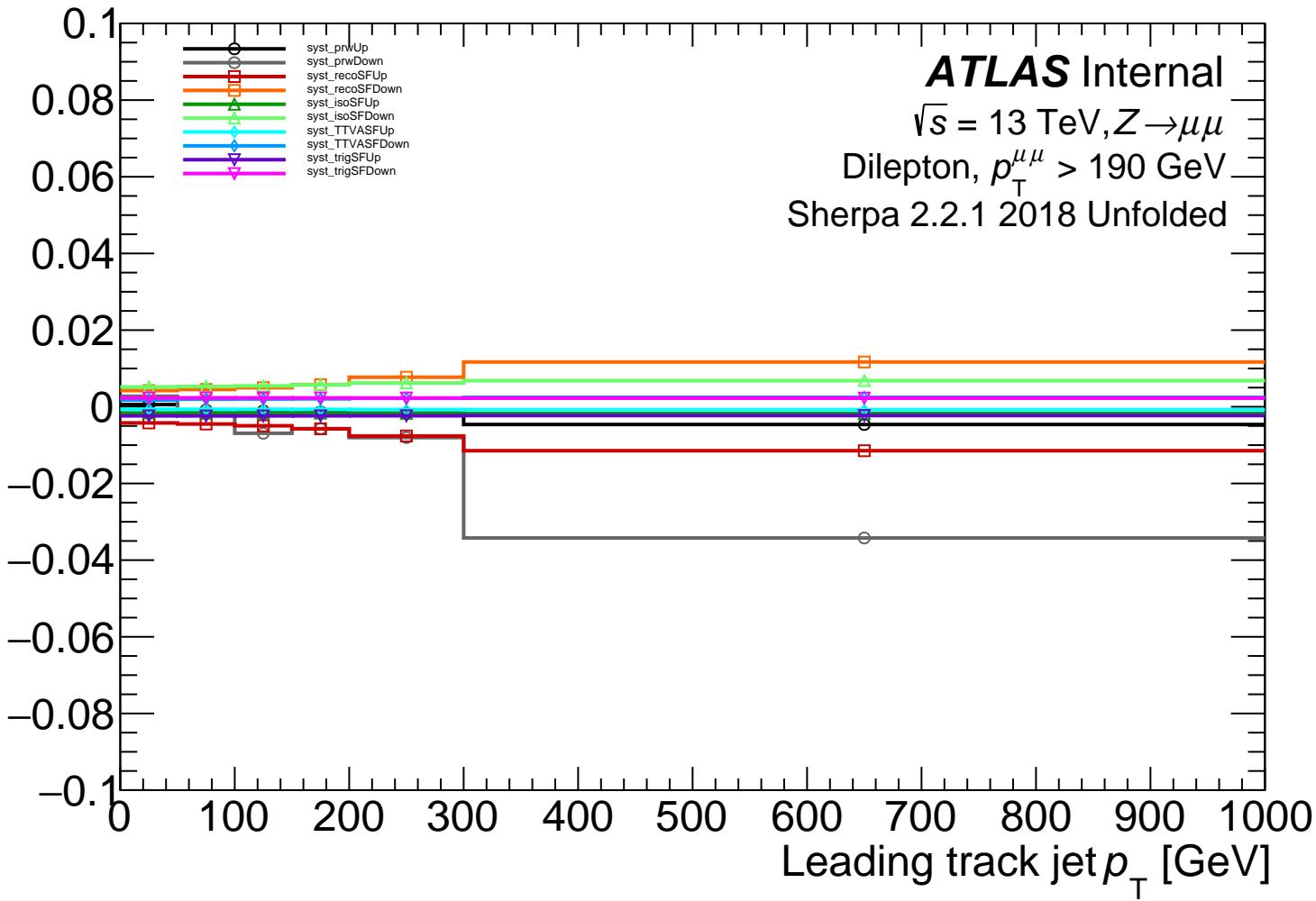


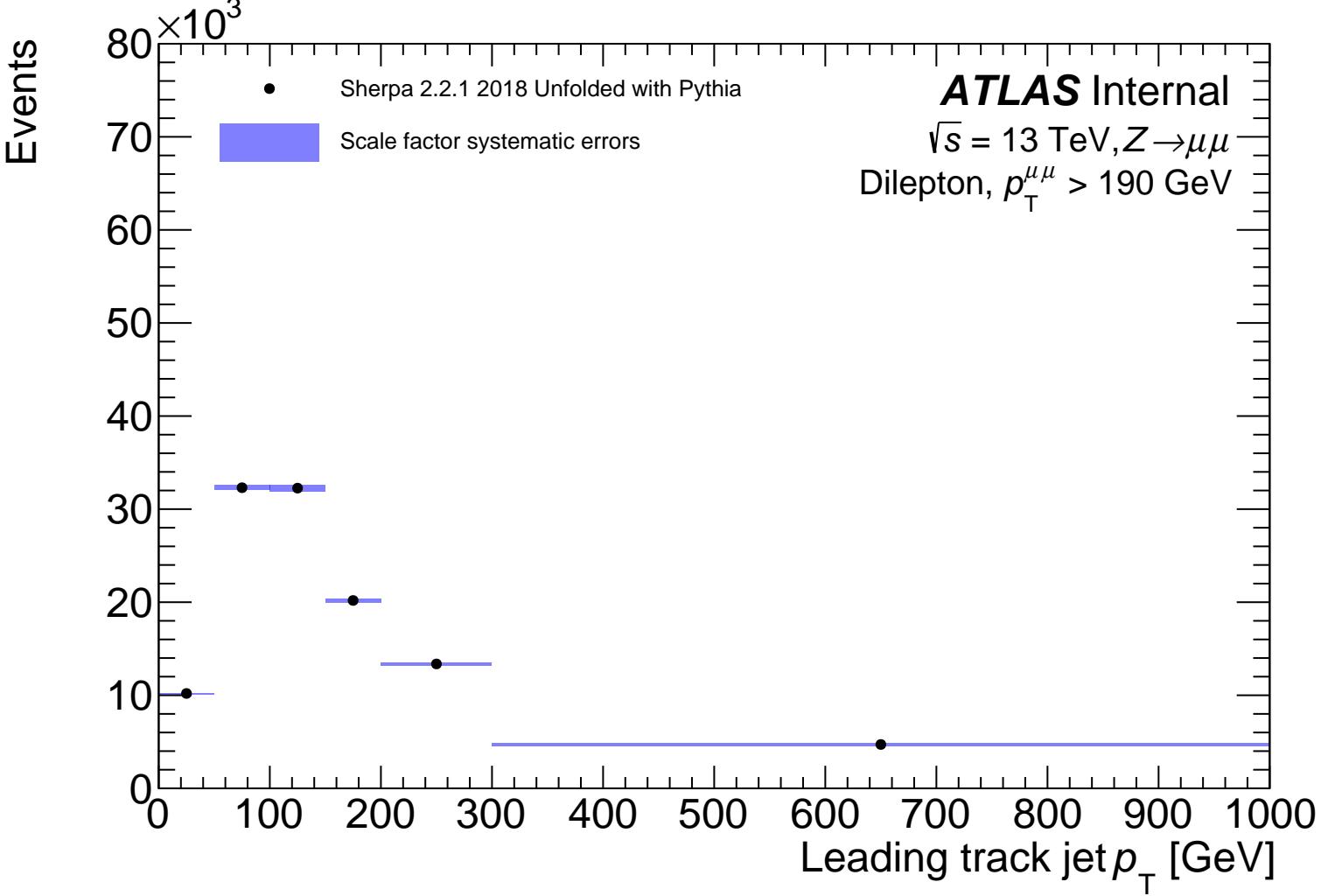
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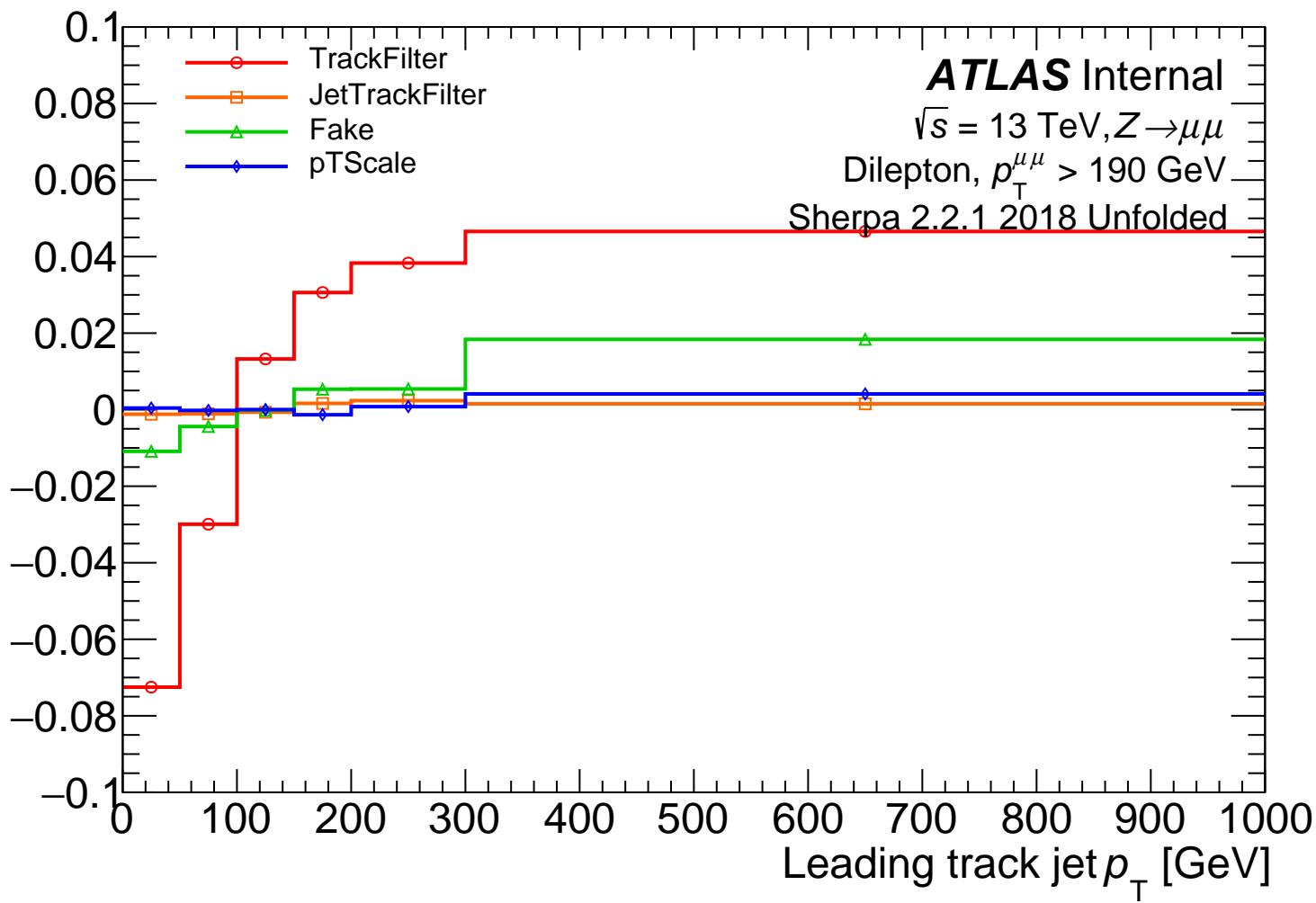
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

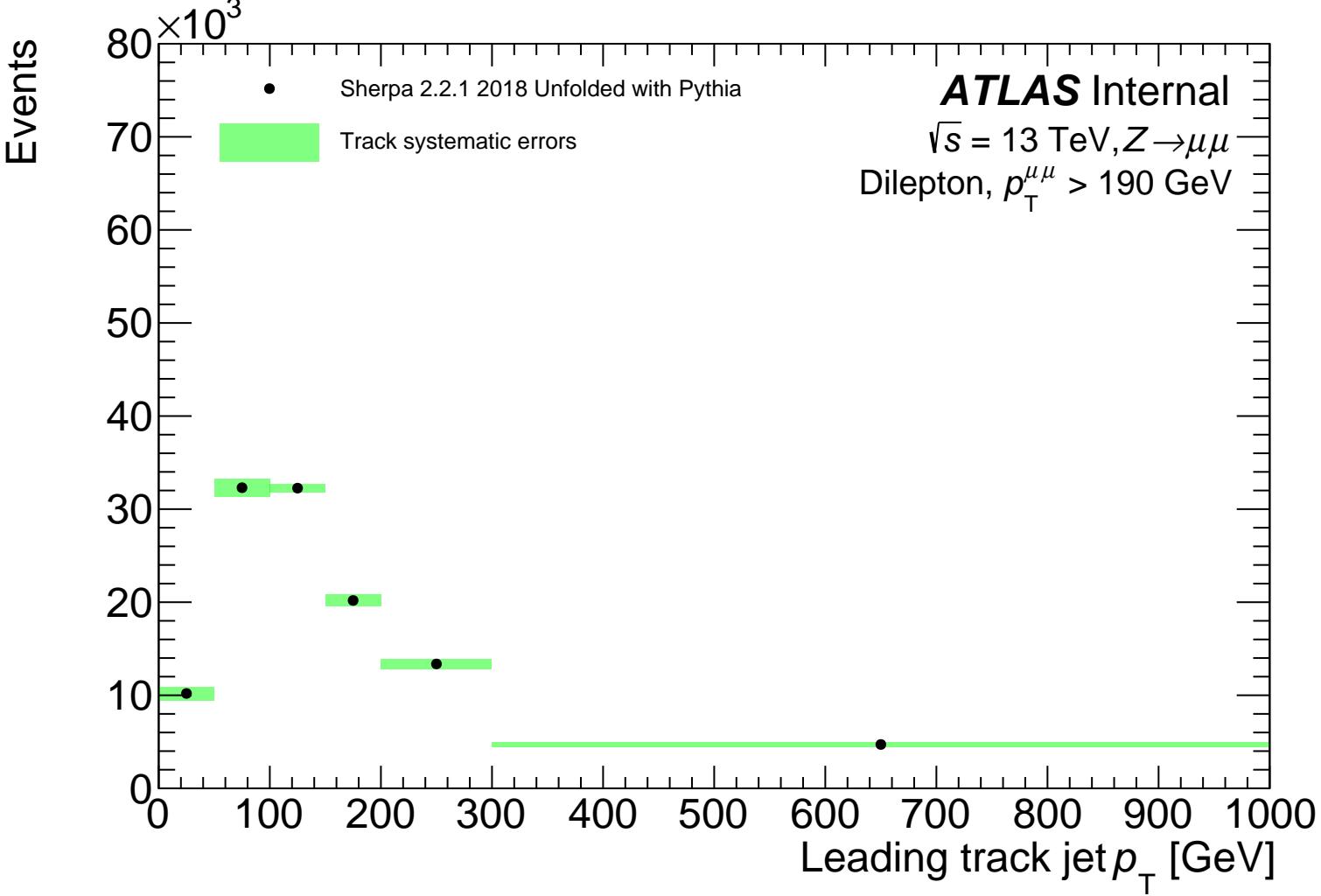
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

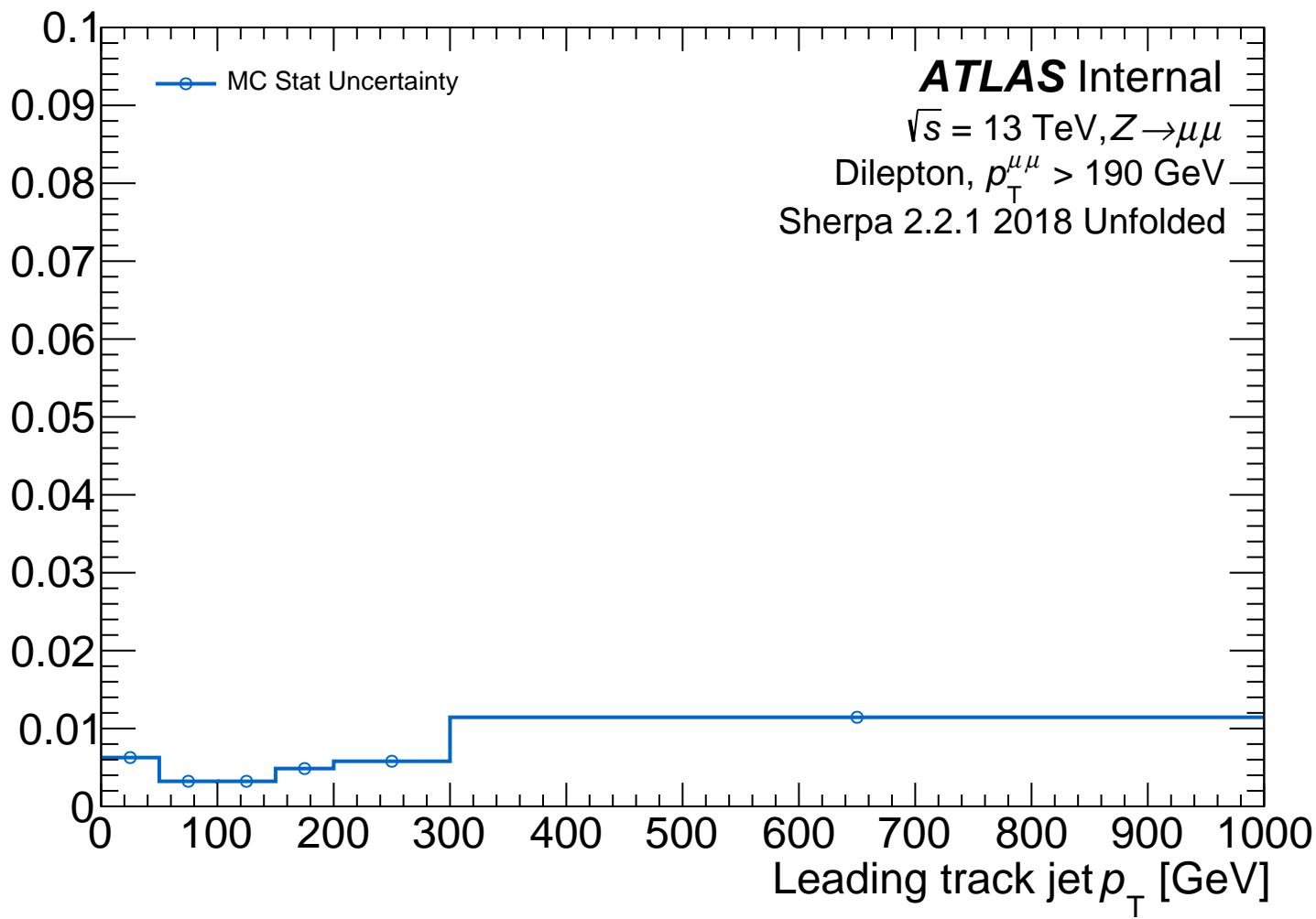
Sherpa 2.2.1 2018 Unfolded

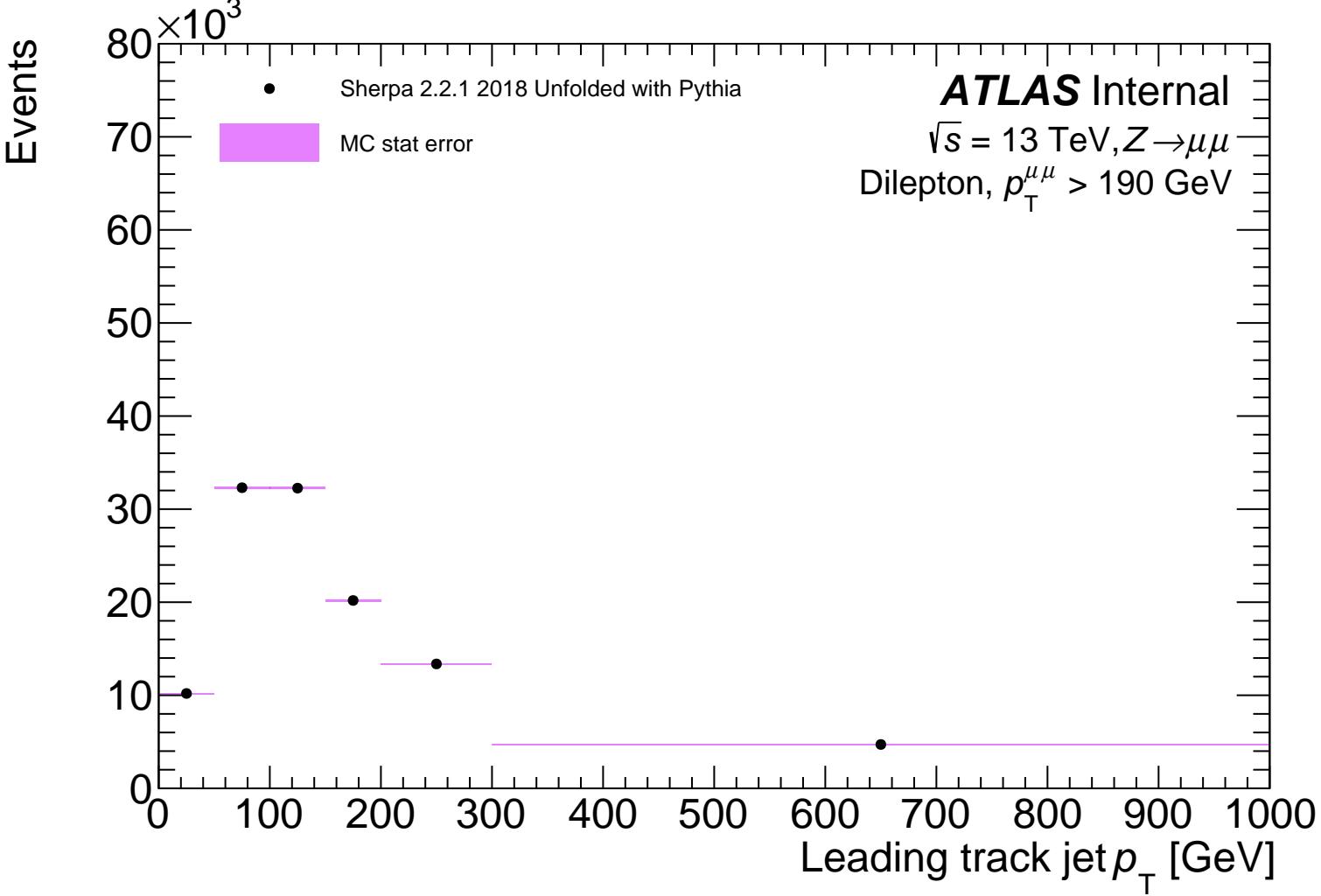


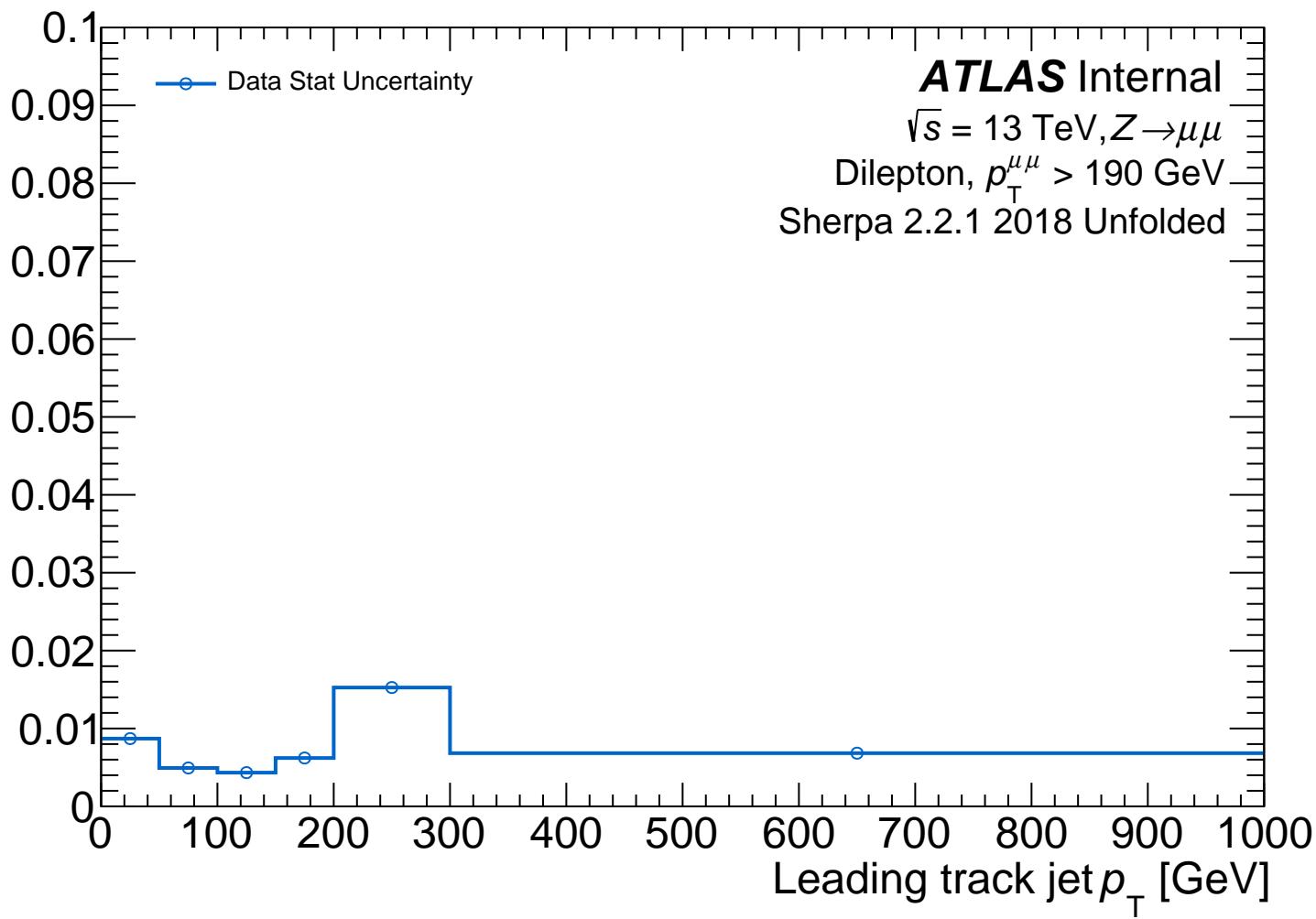


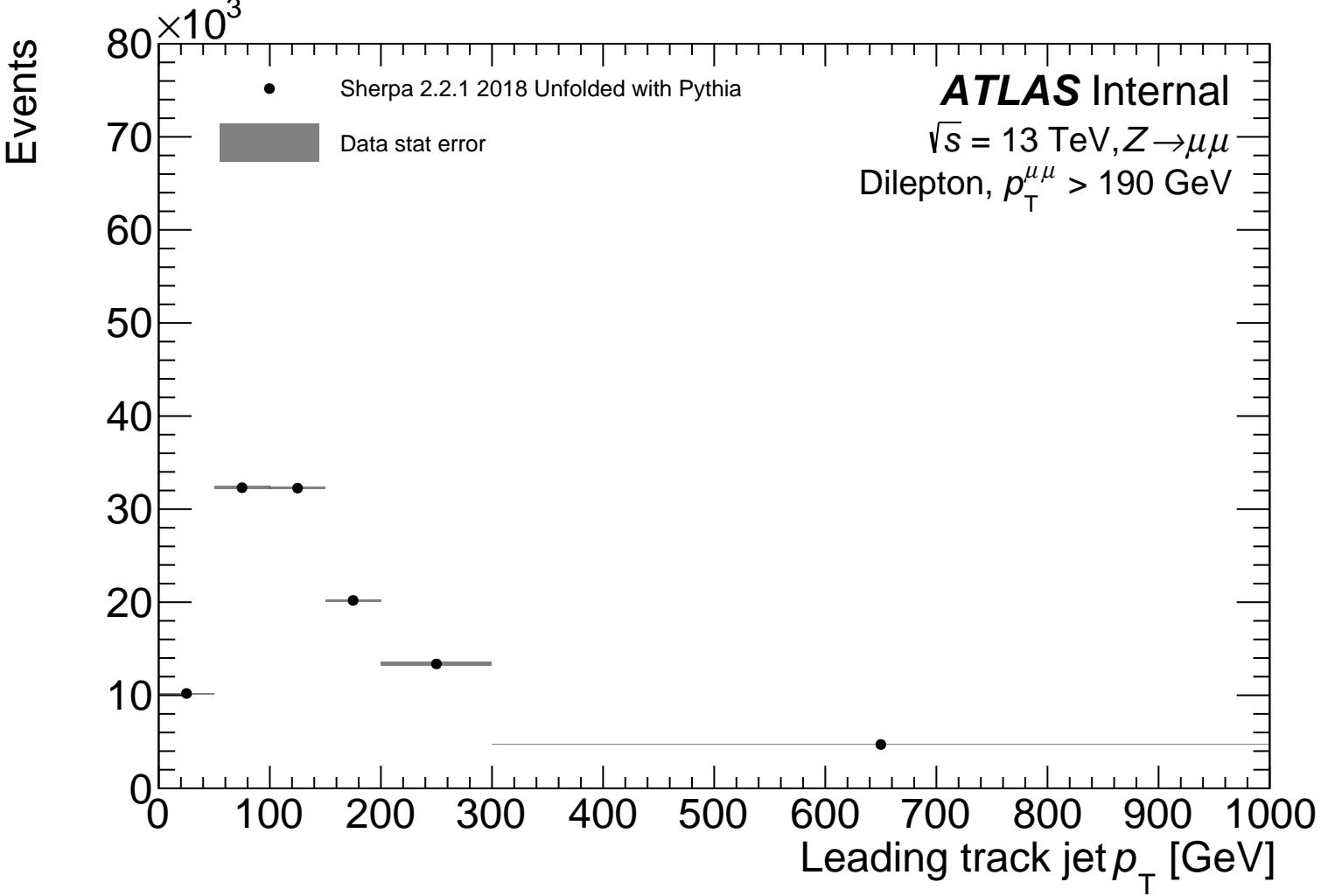


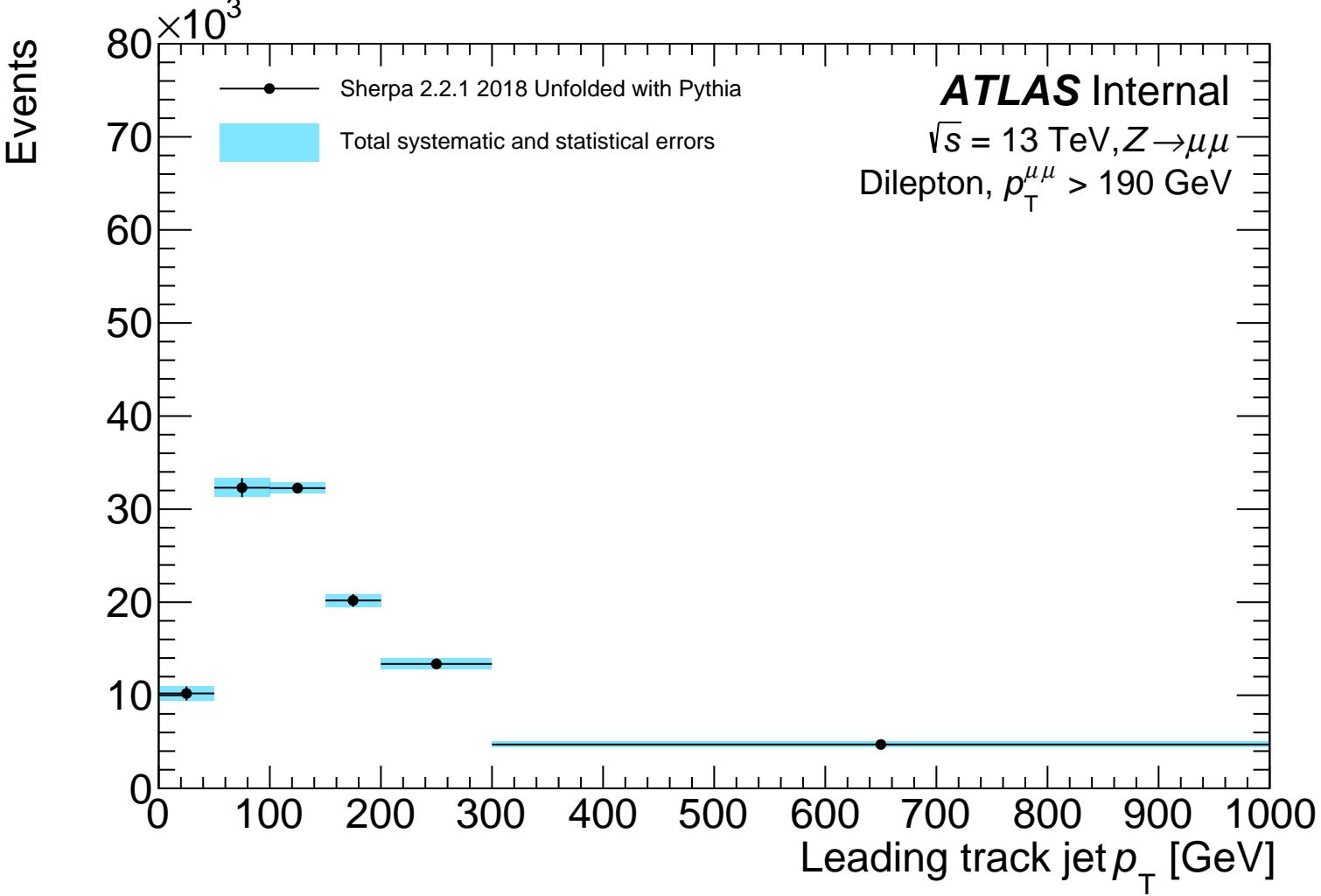


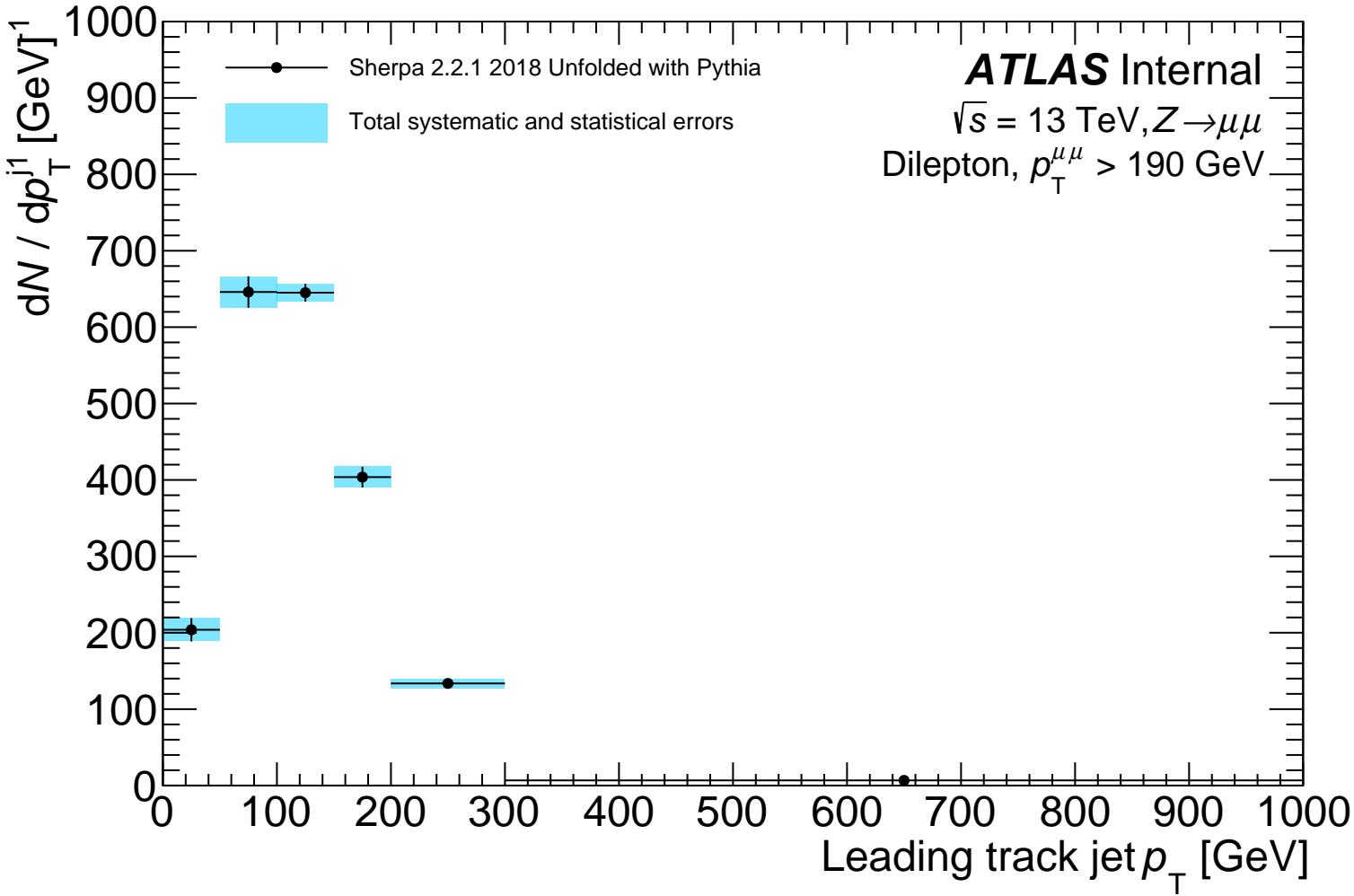










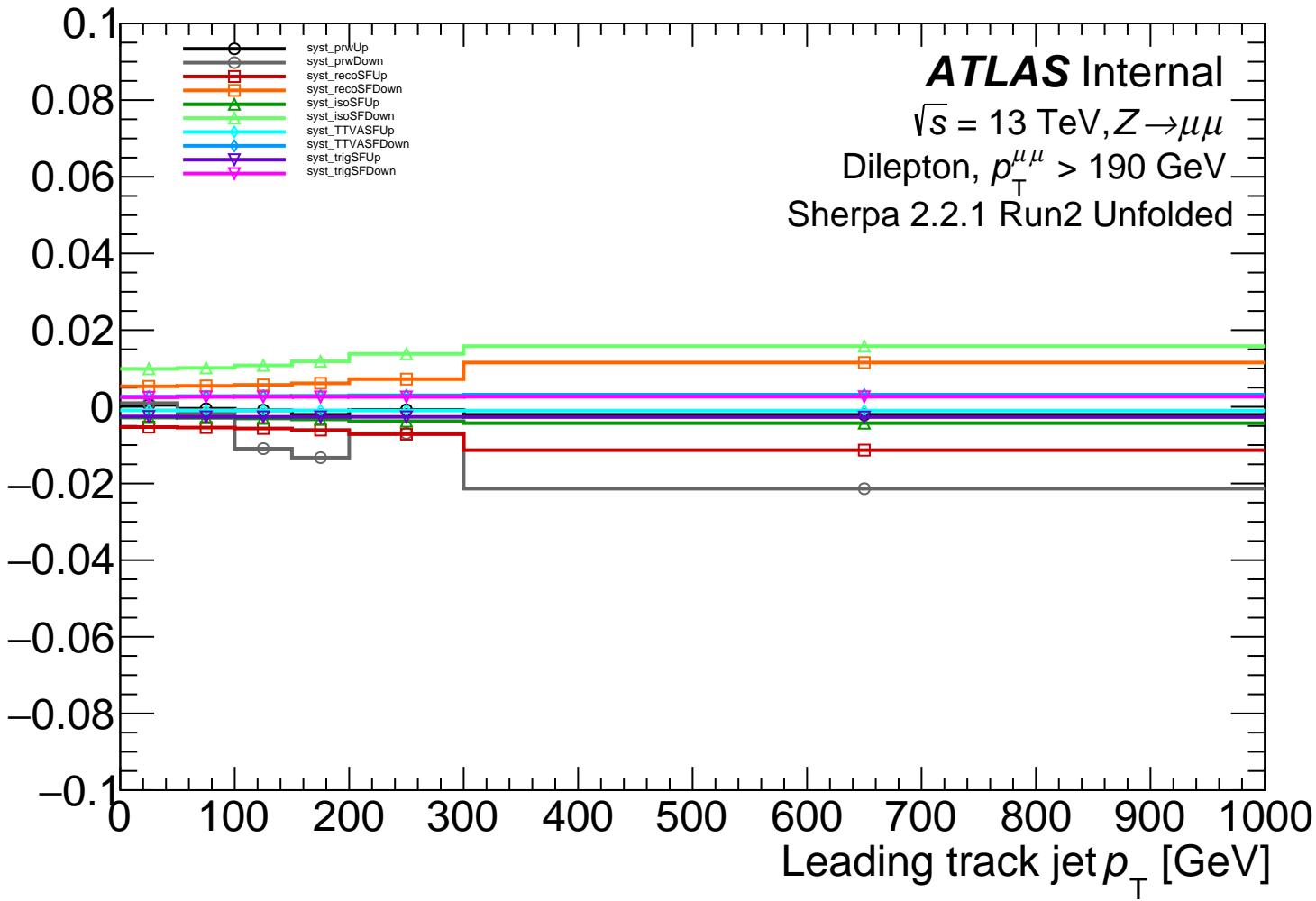


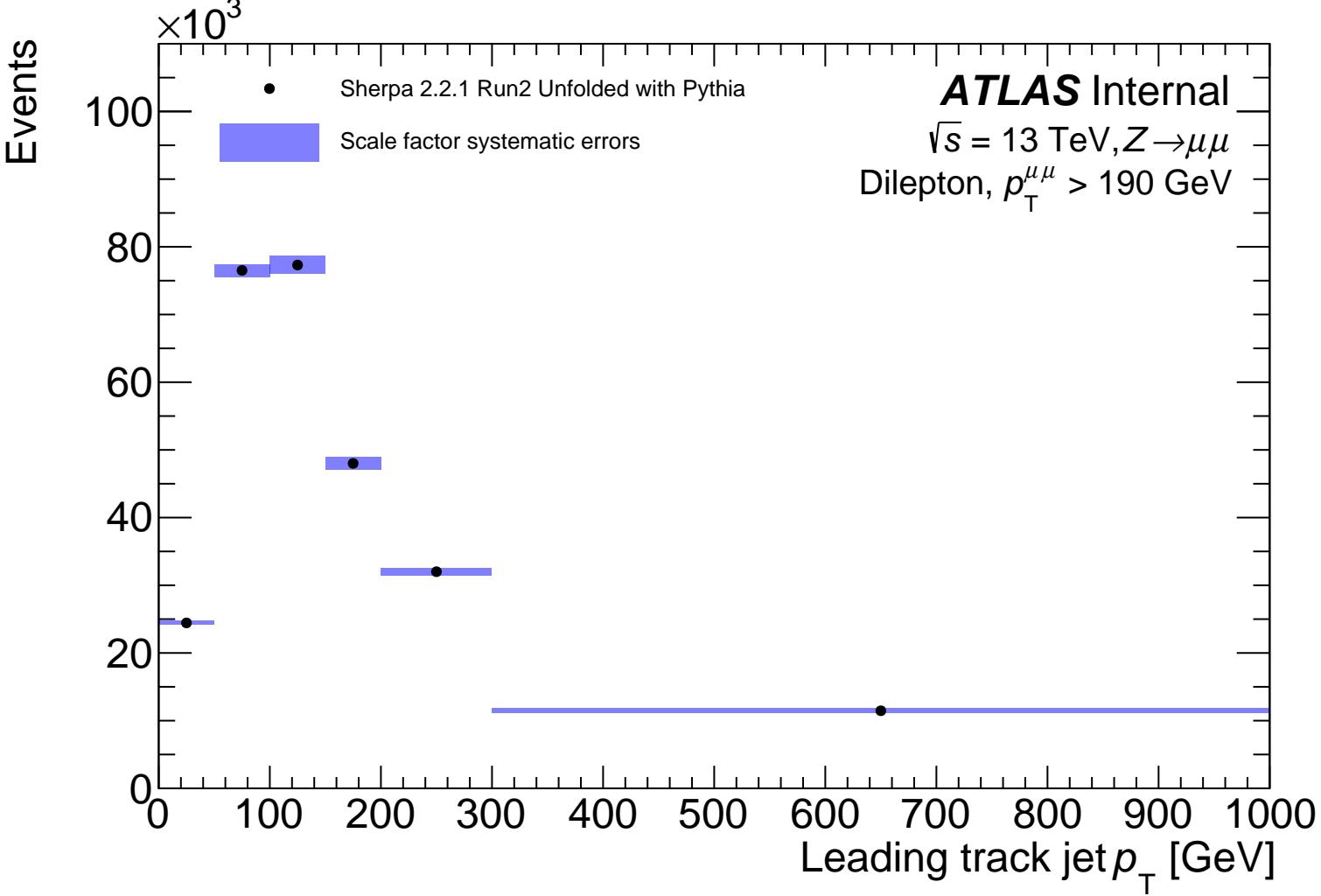
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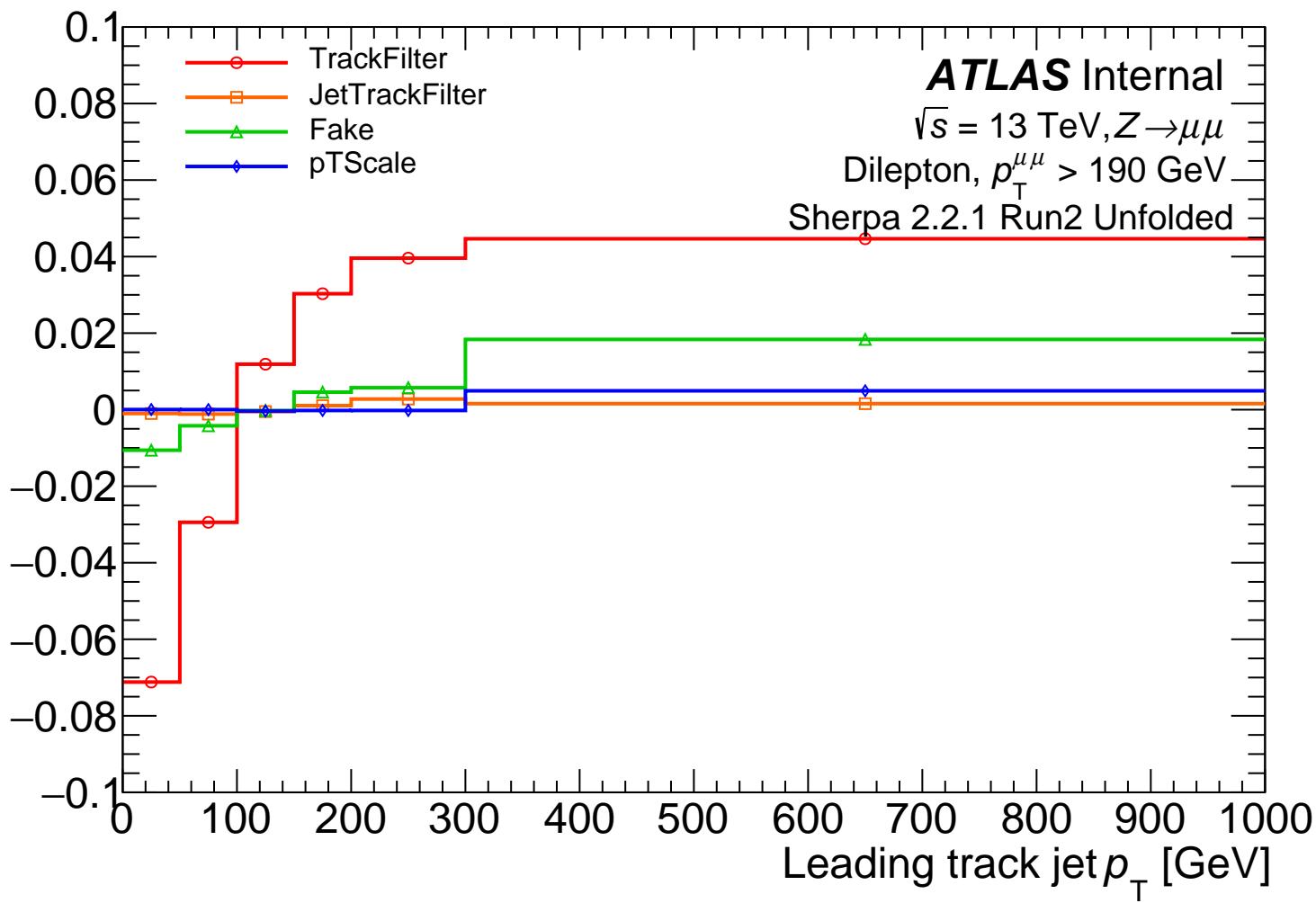
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

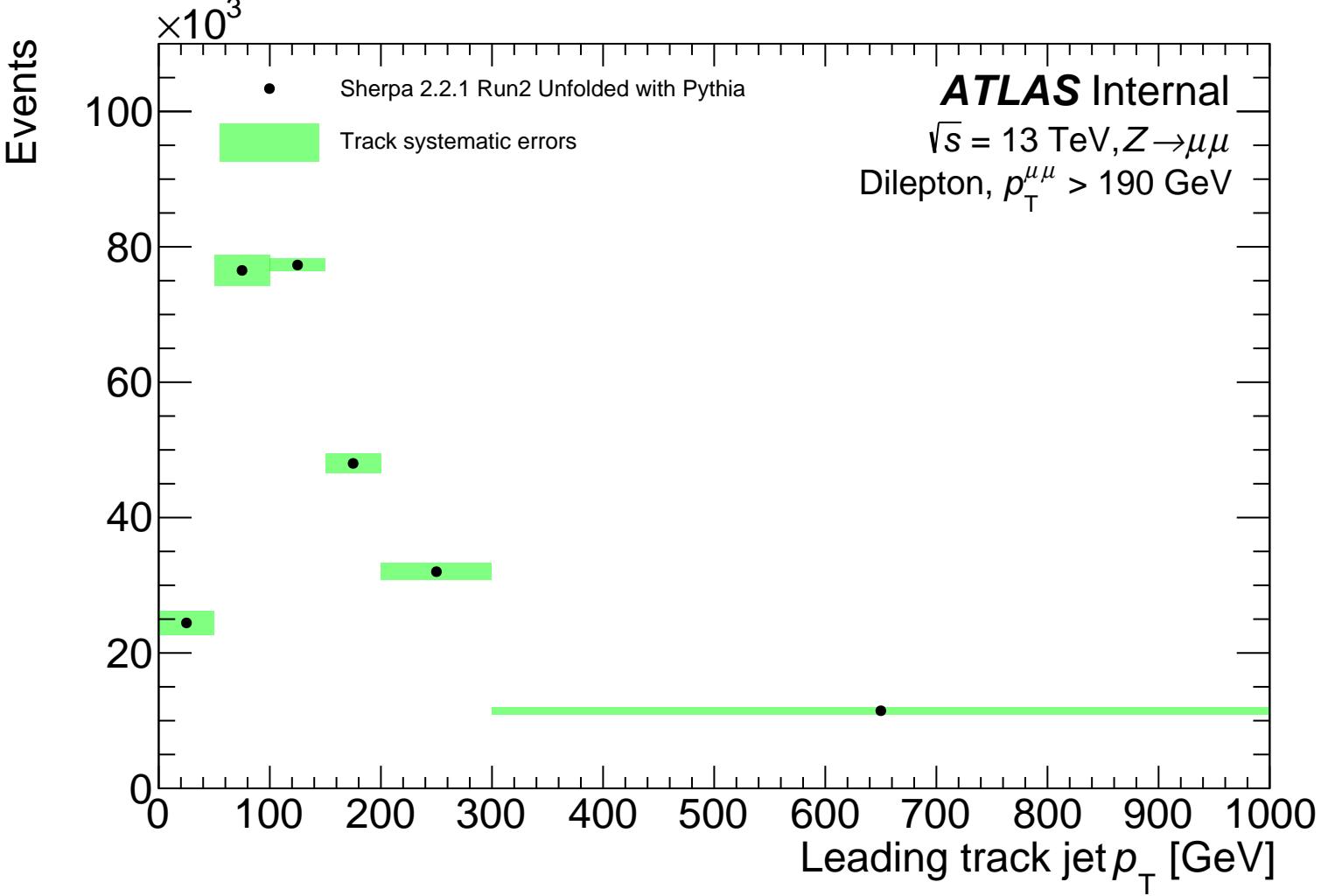
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

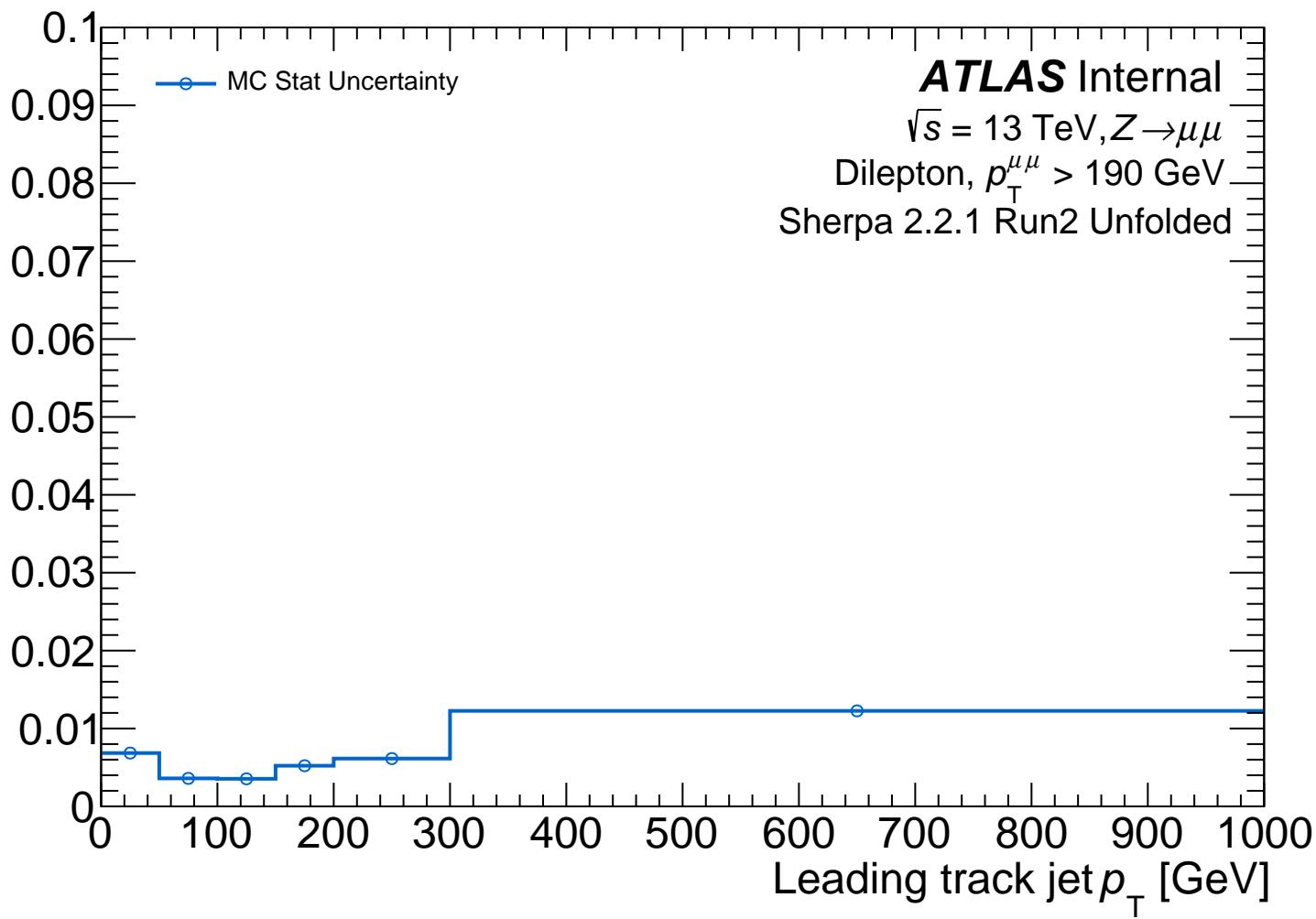
Sherpa 2.2.1 Run2 Unfolded

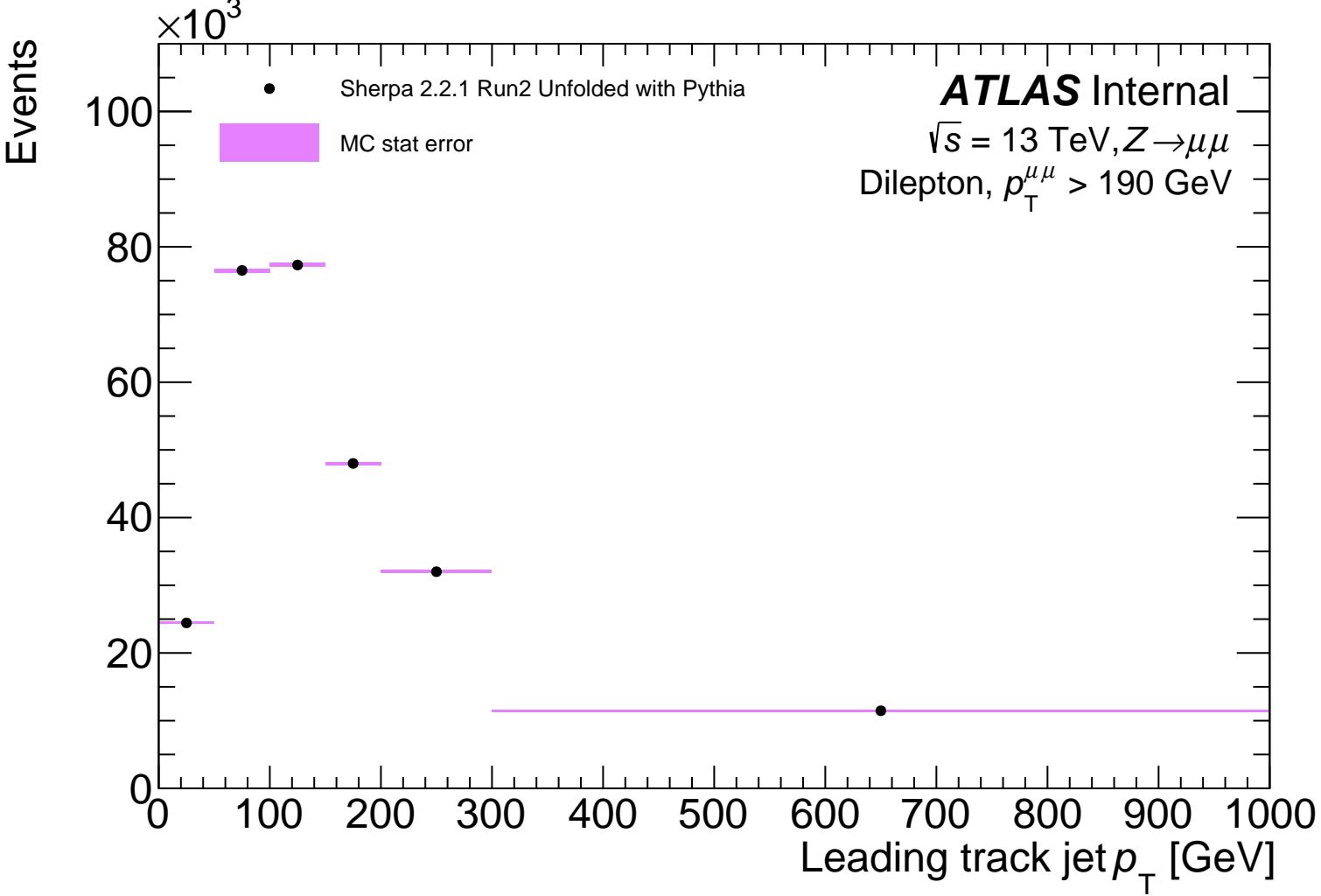


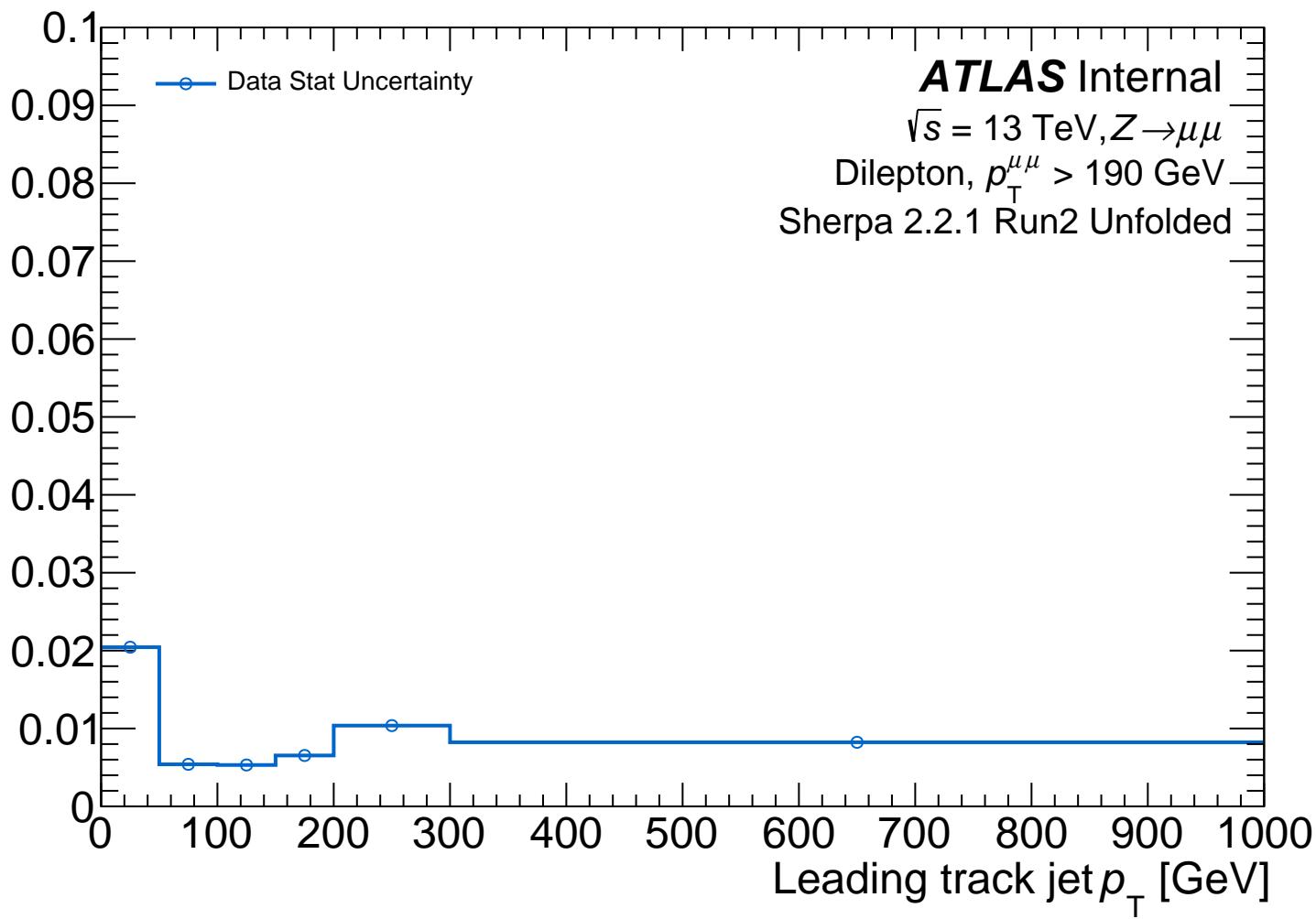


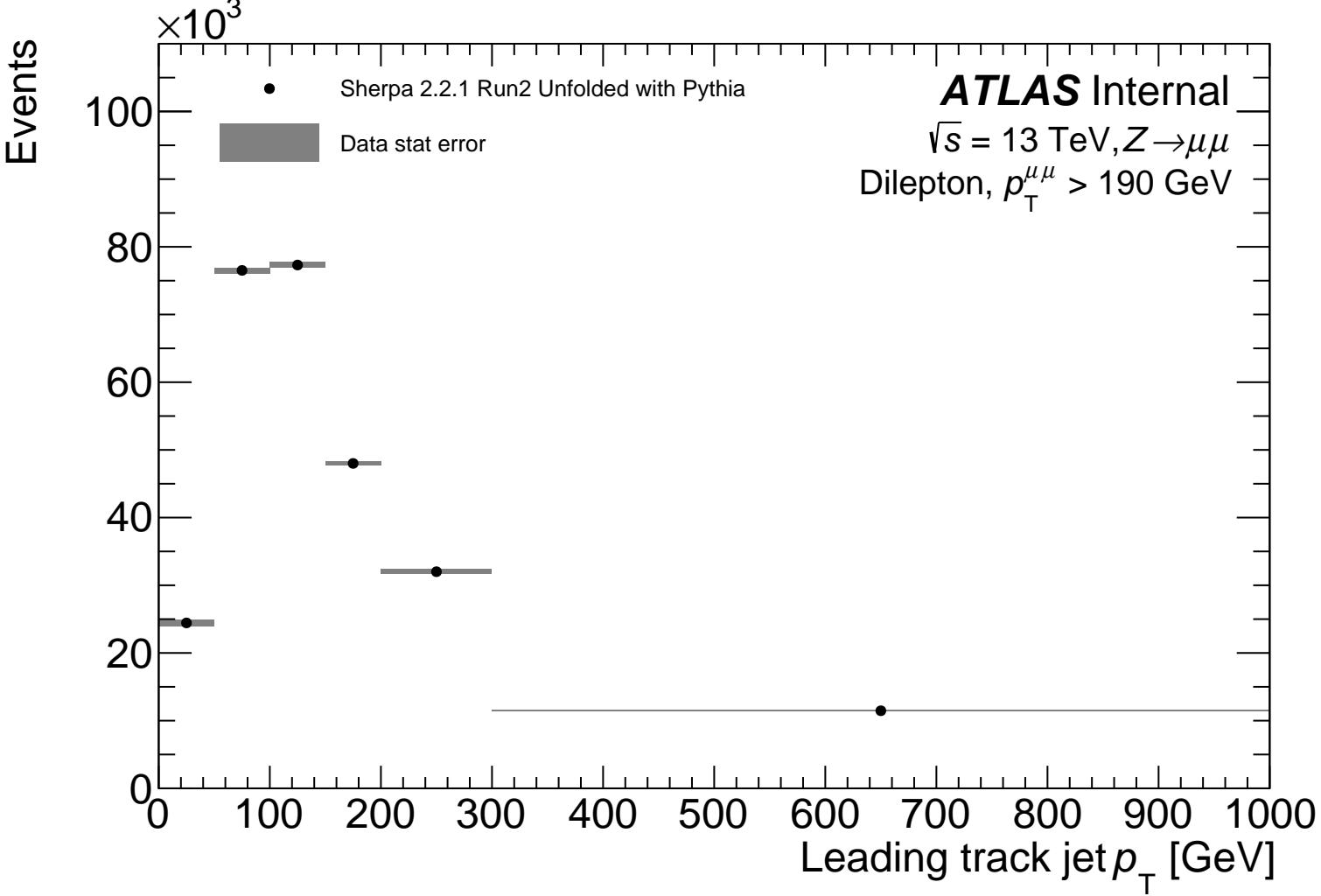


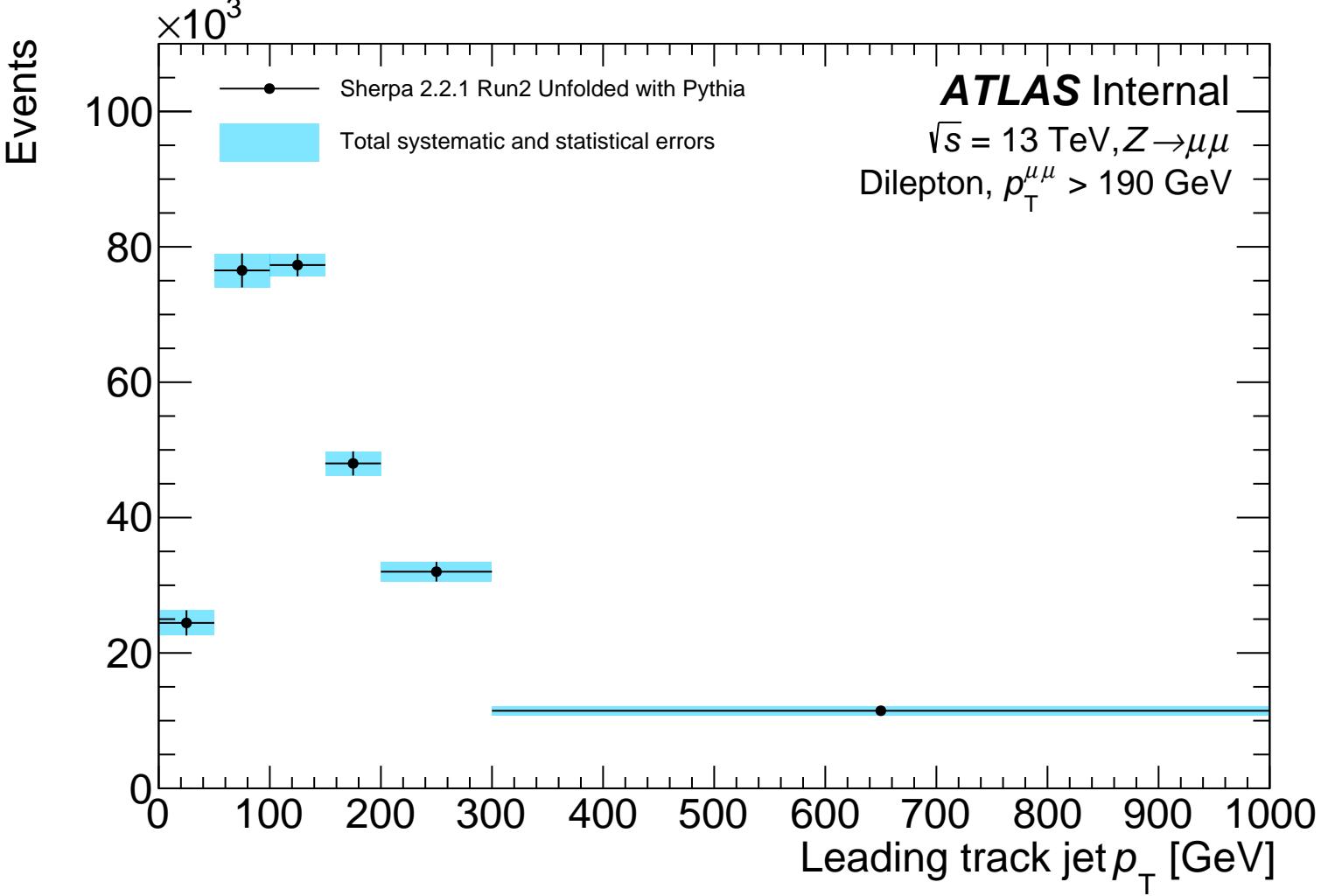


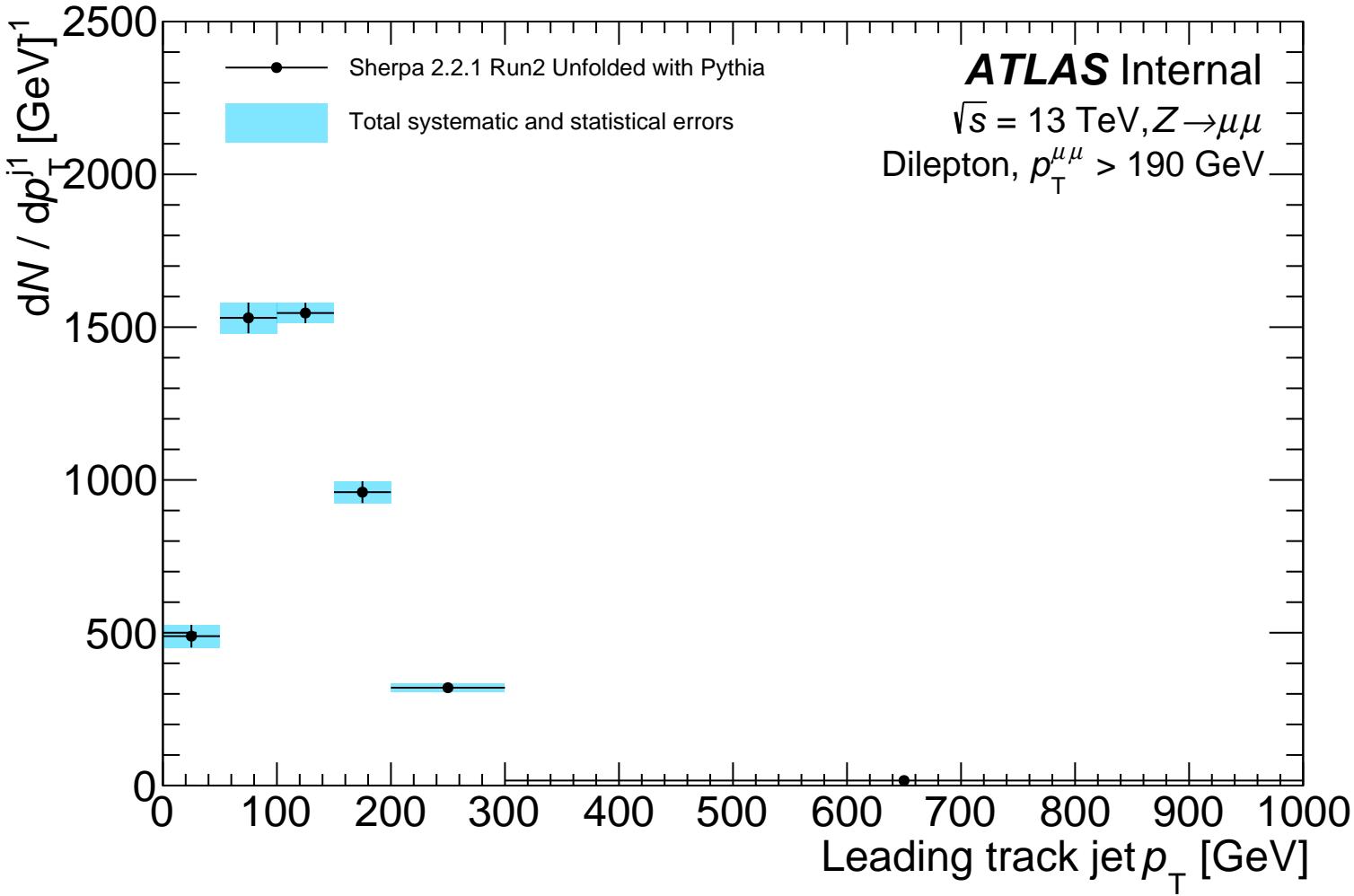










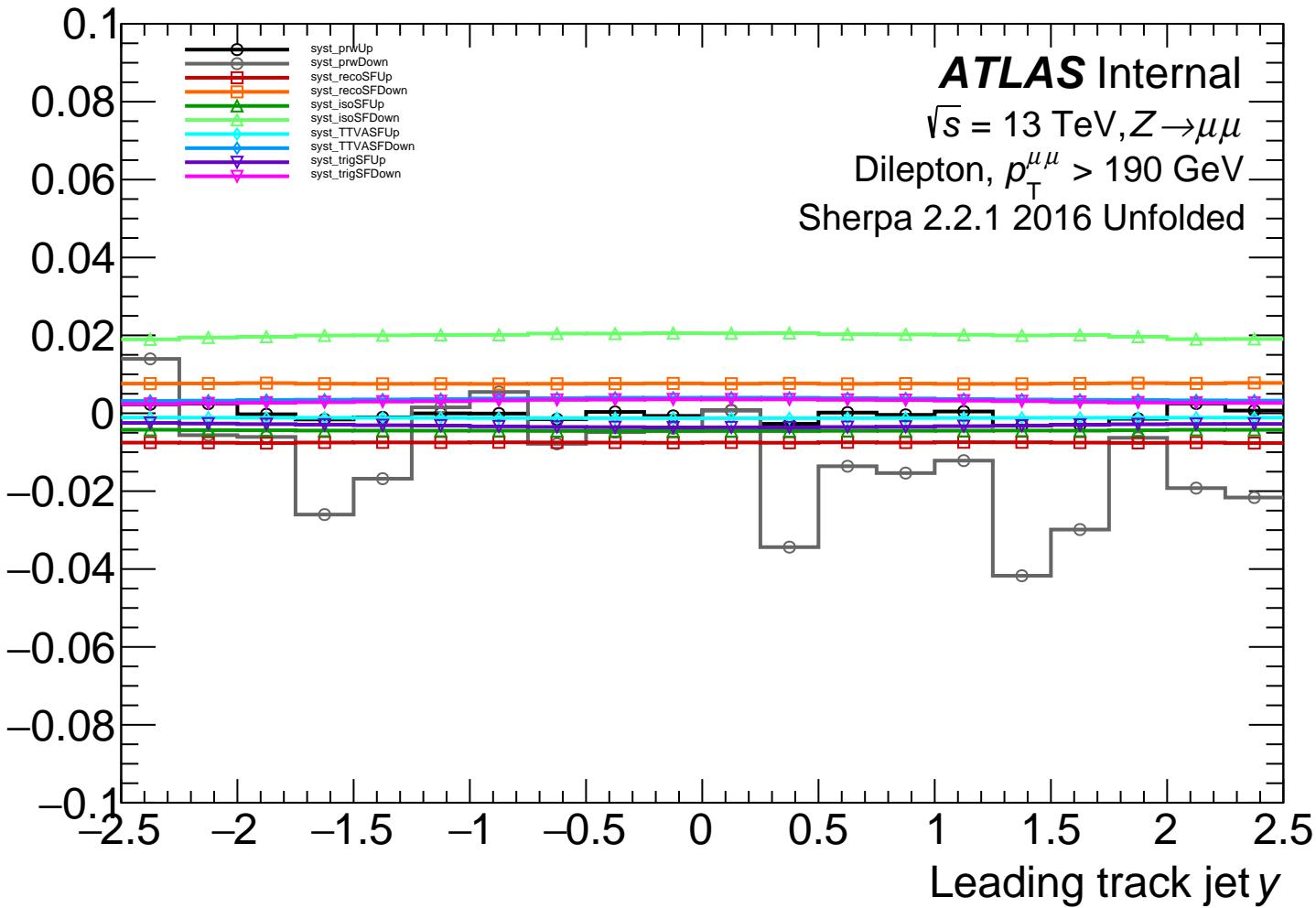


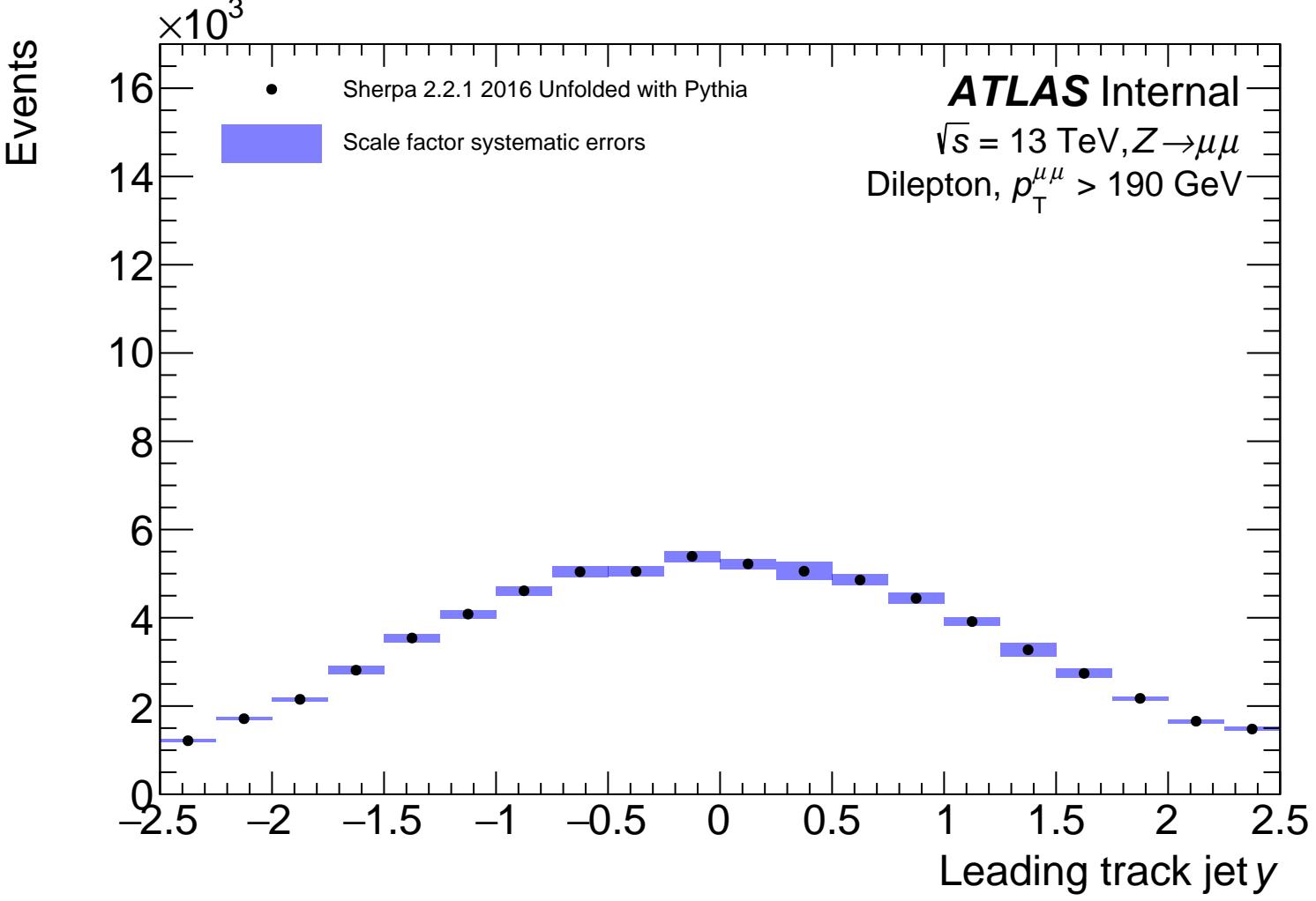
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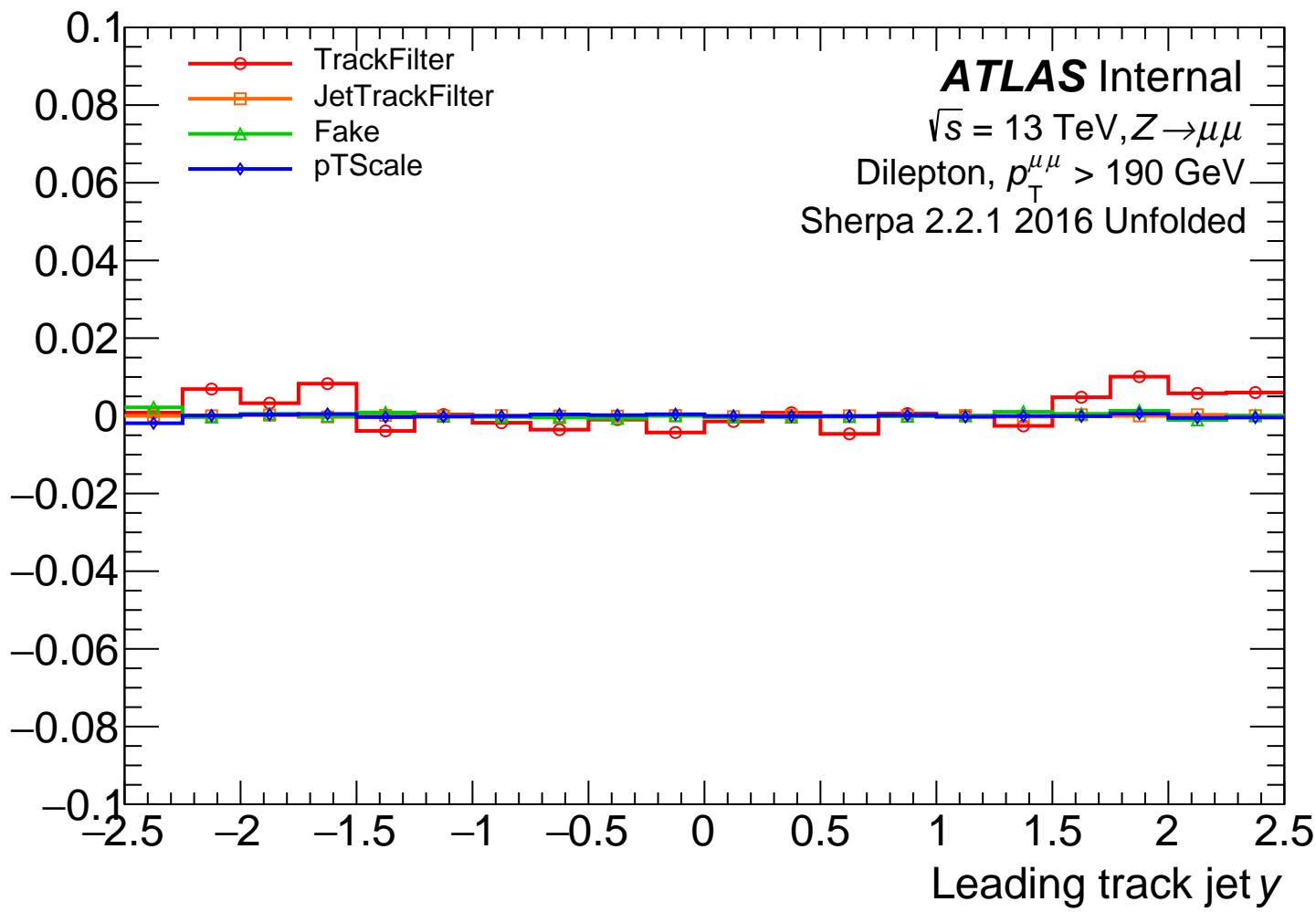
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

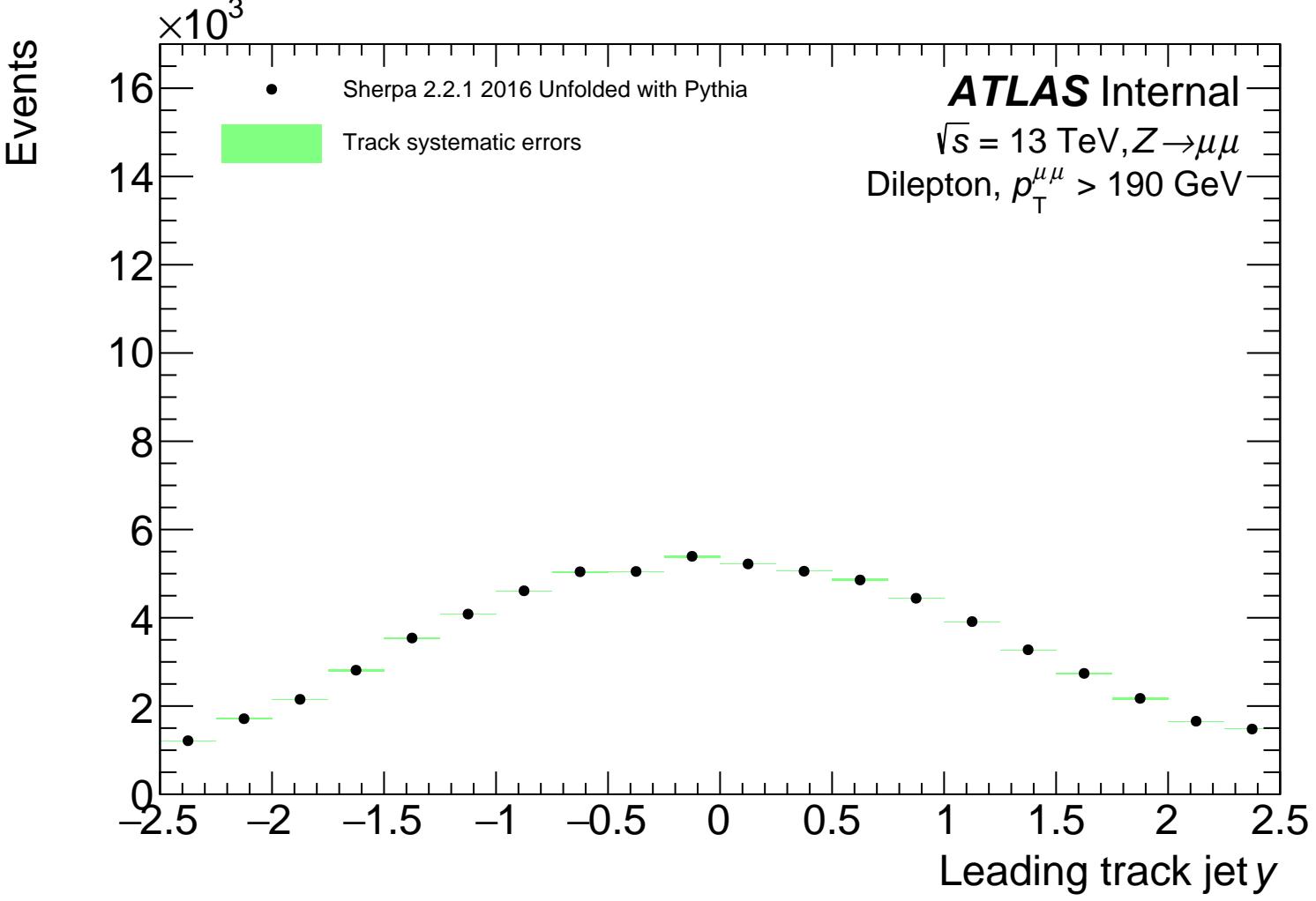
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

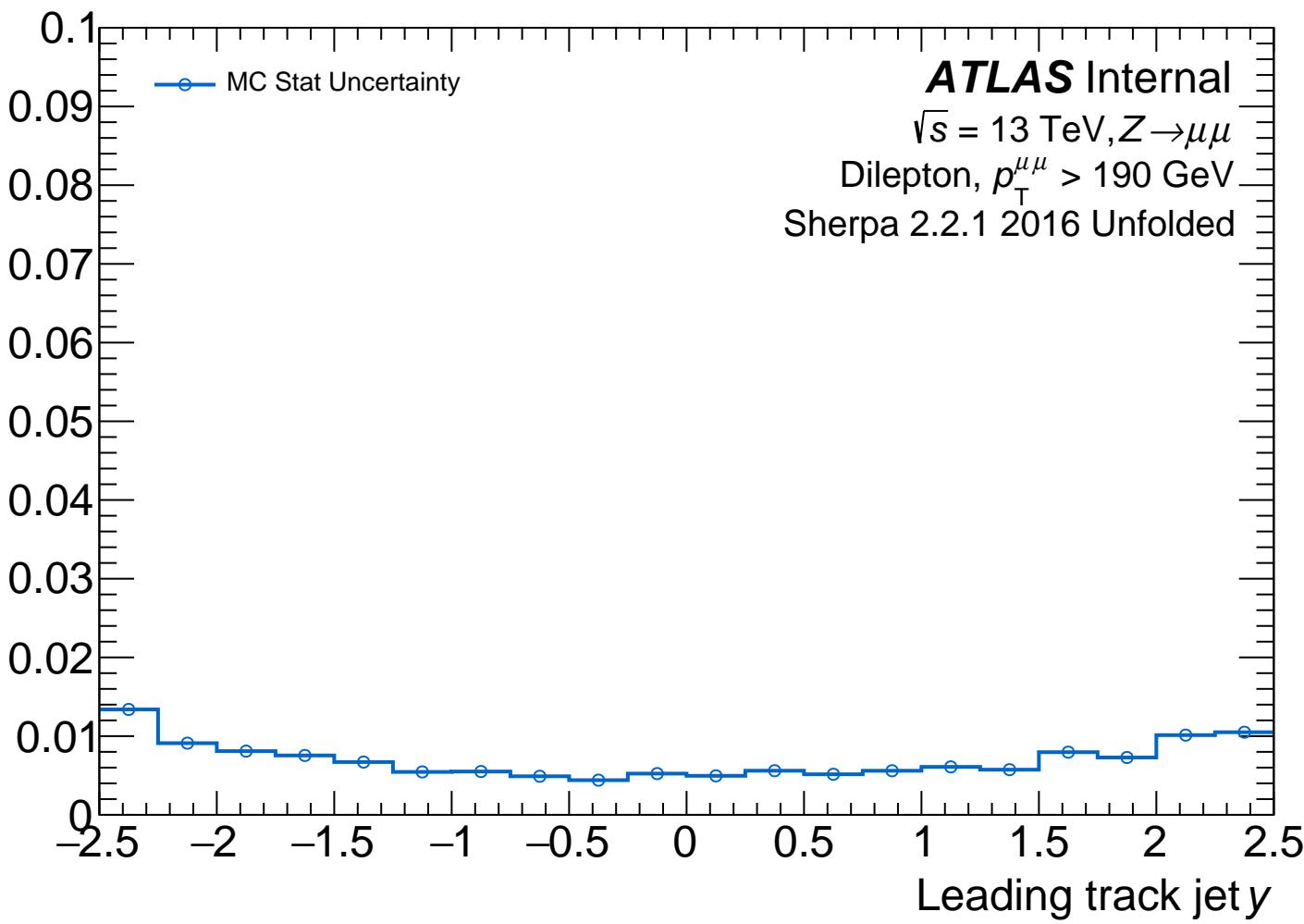
Sherpa 2.2.1 2016 Unfolded

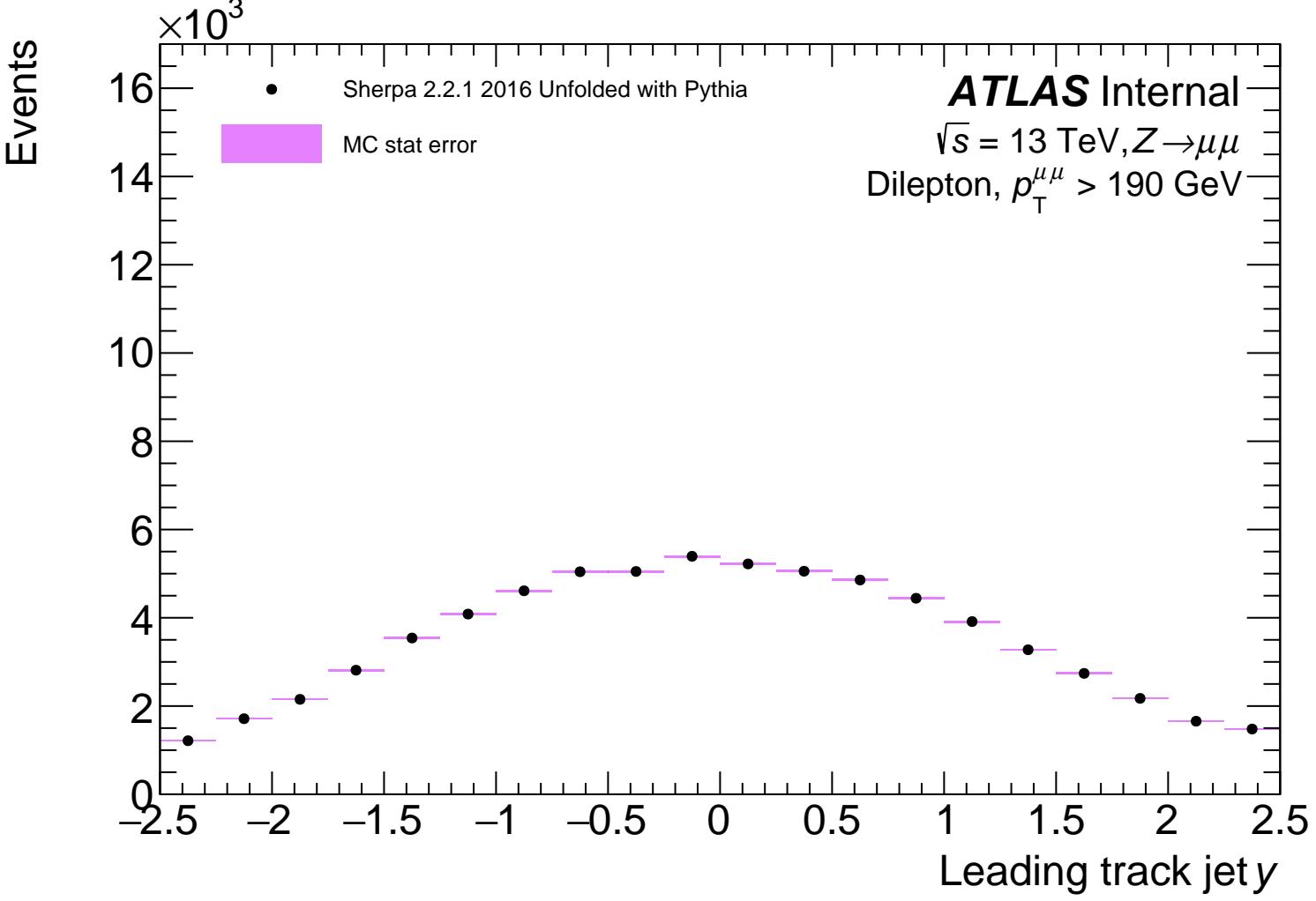


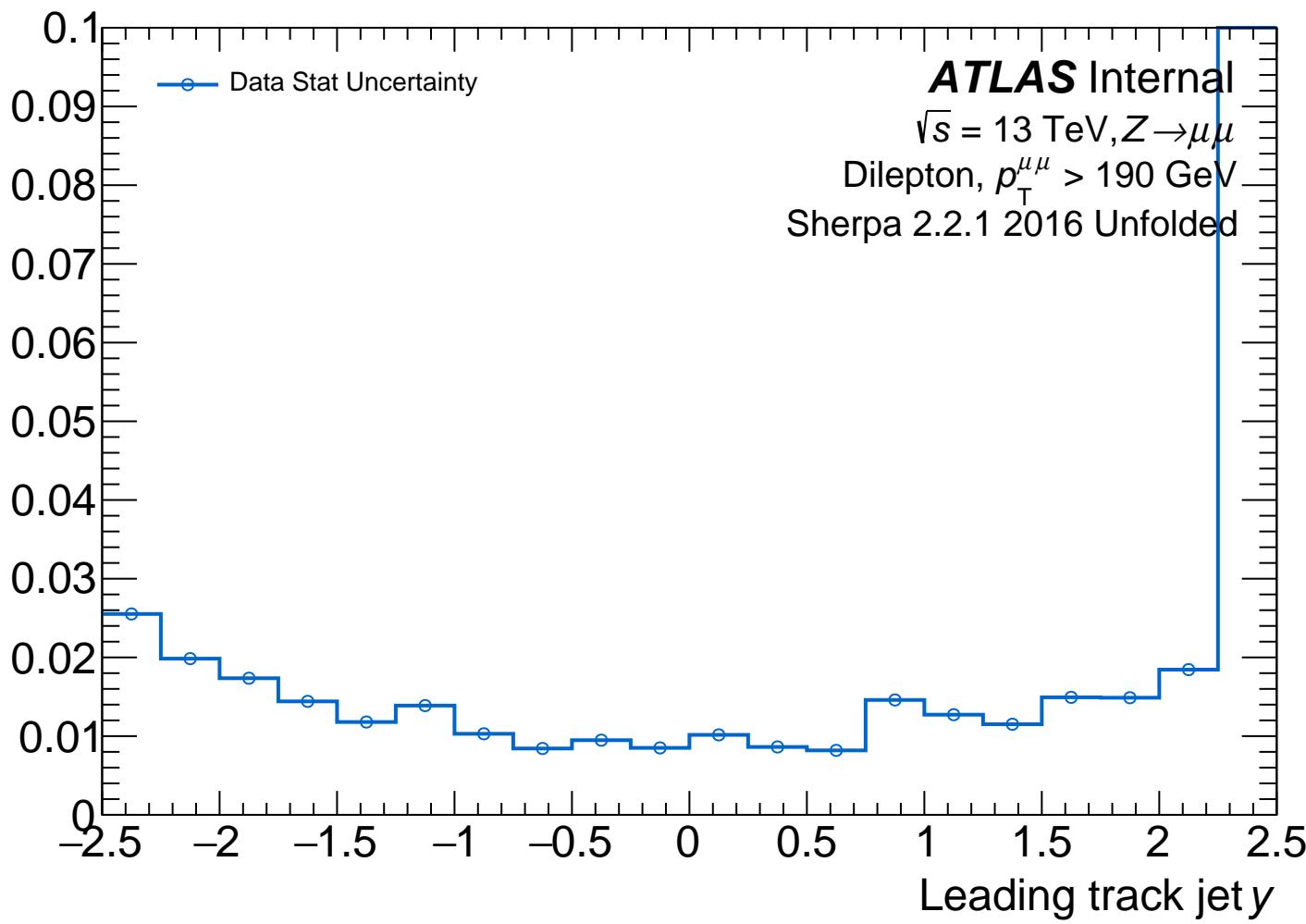


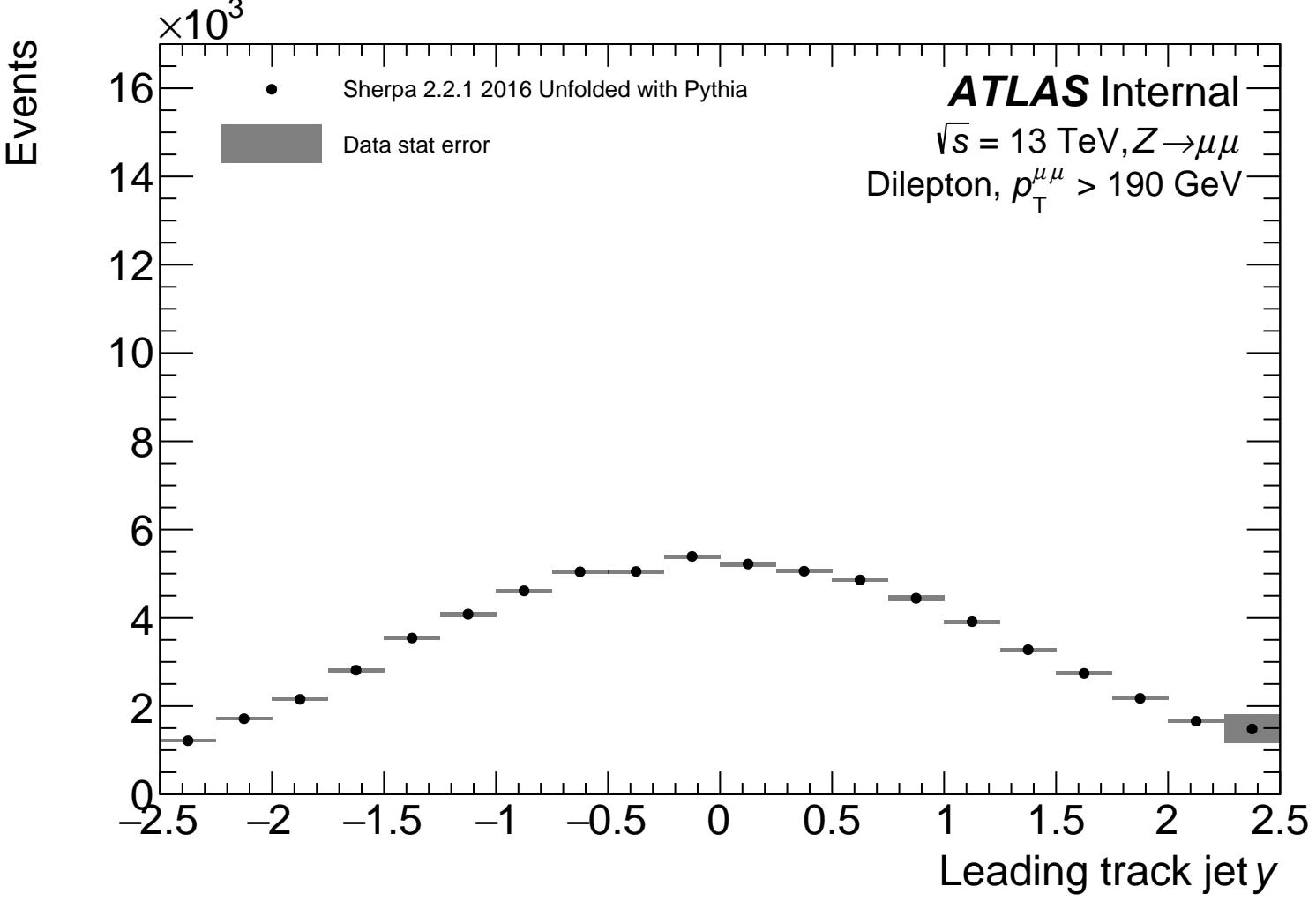


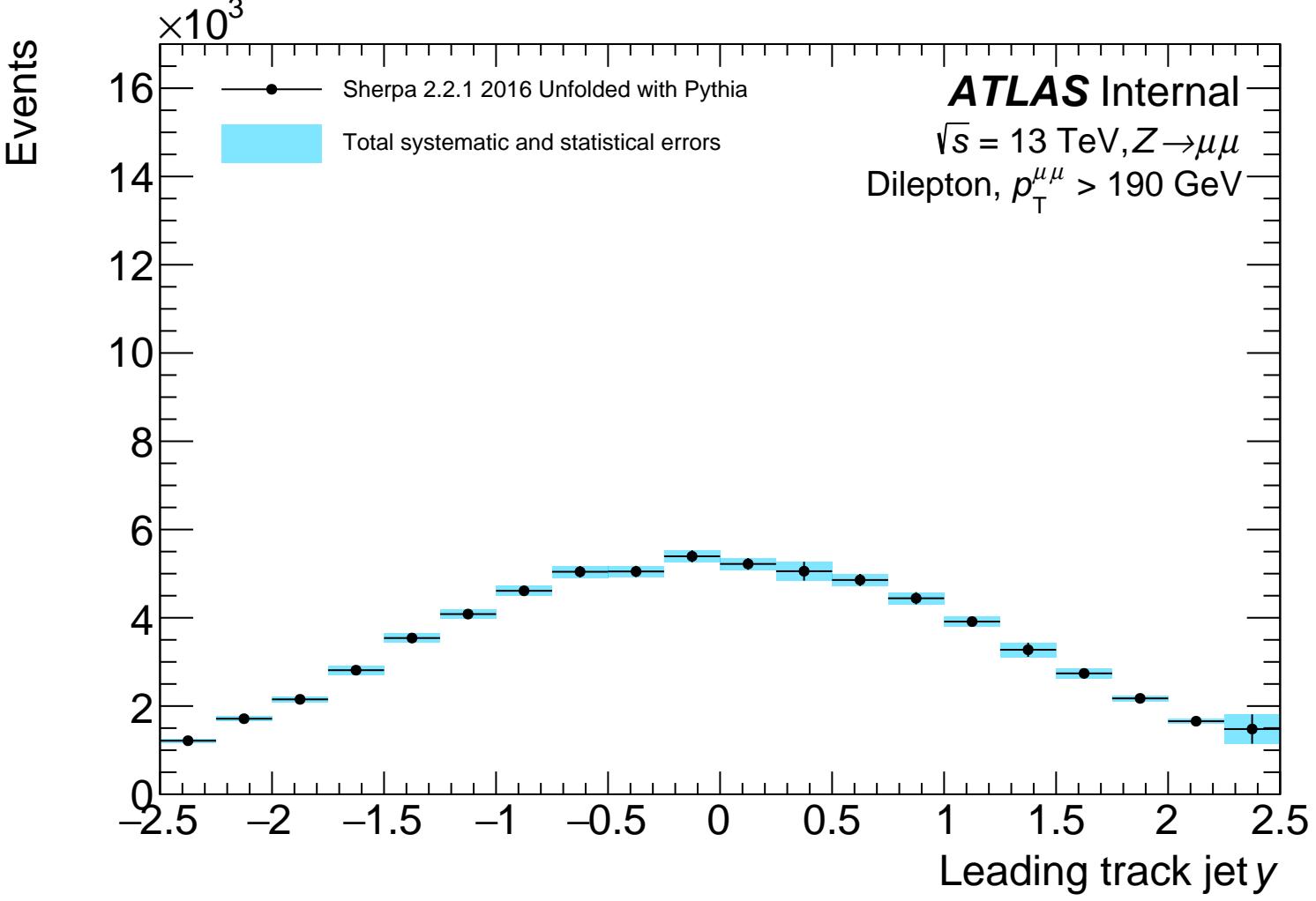


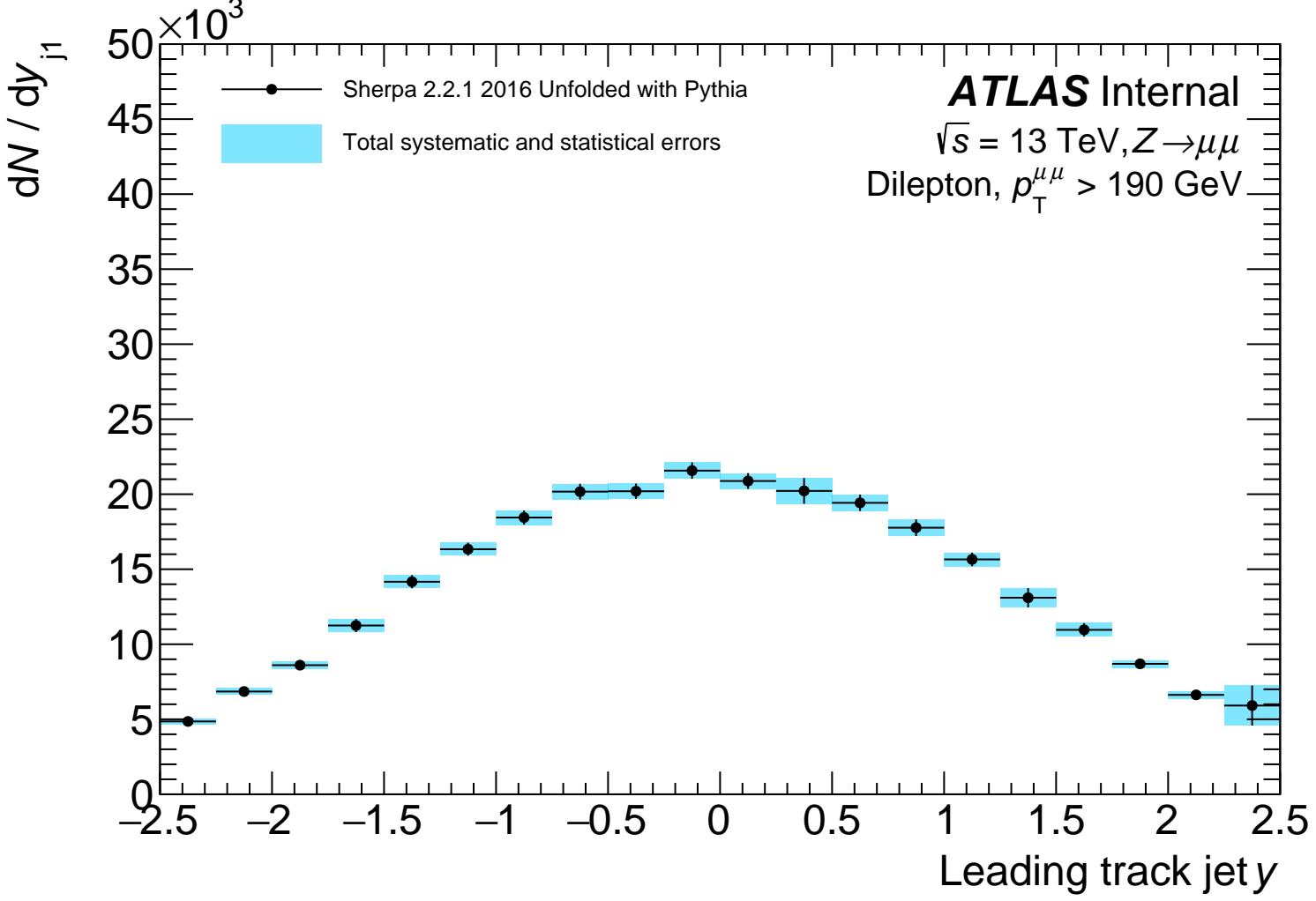










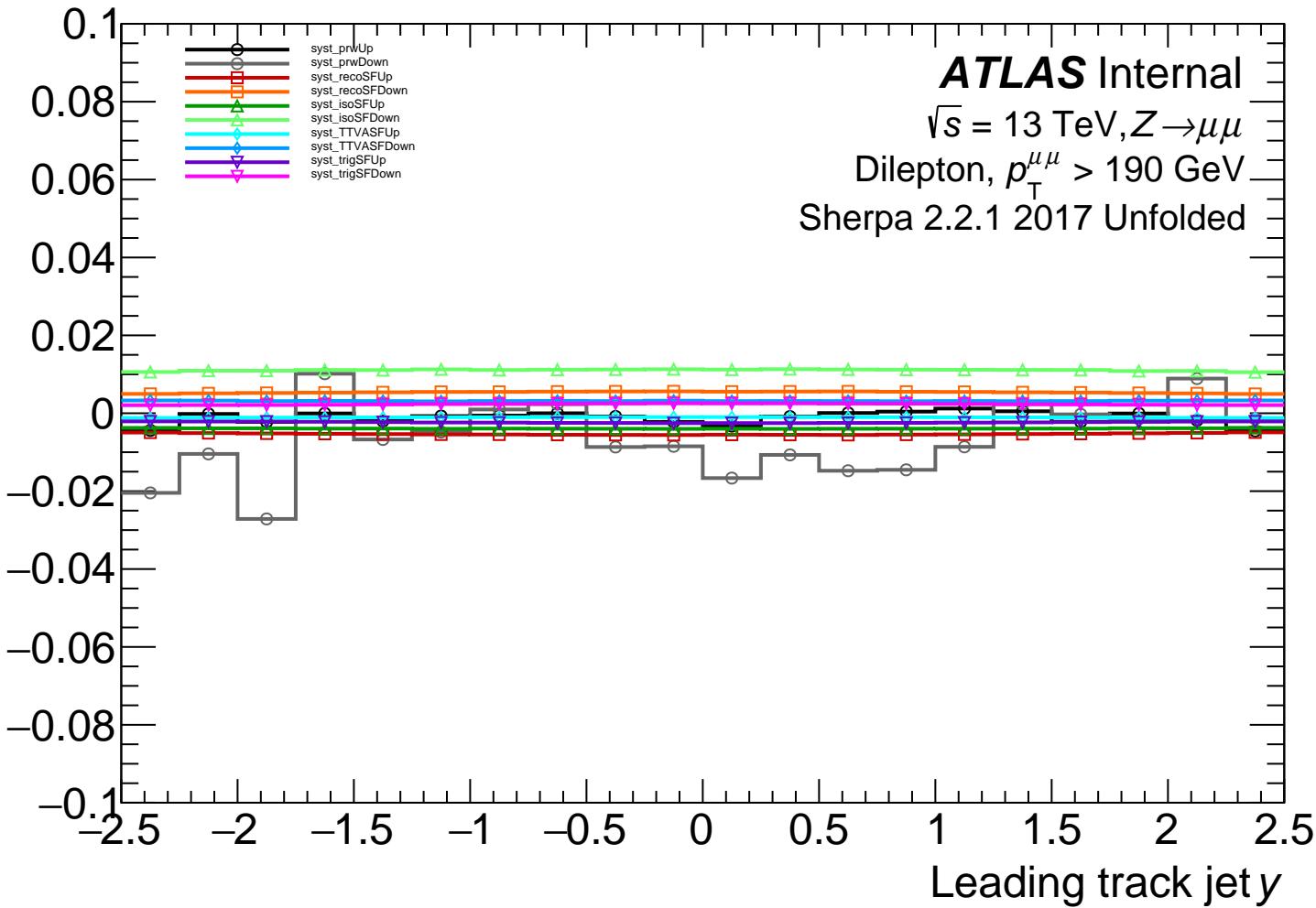


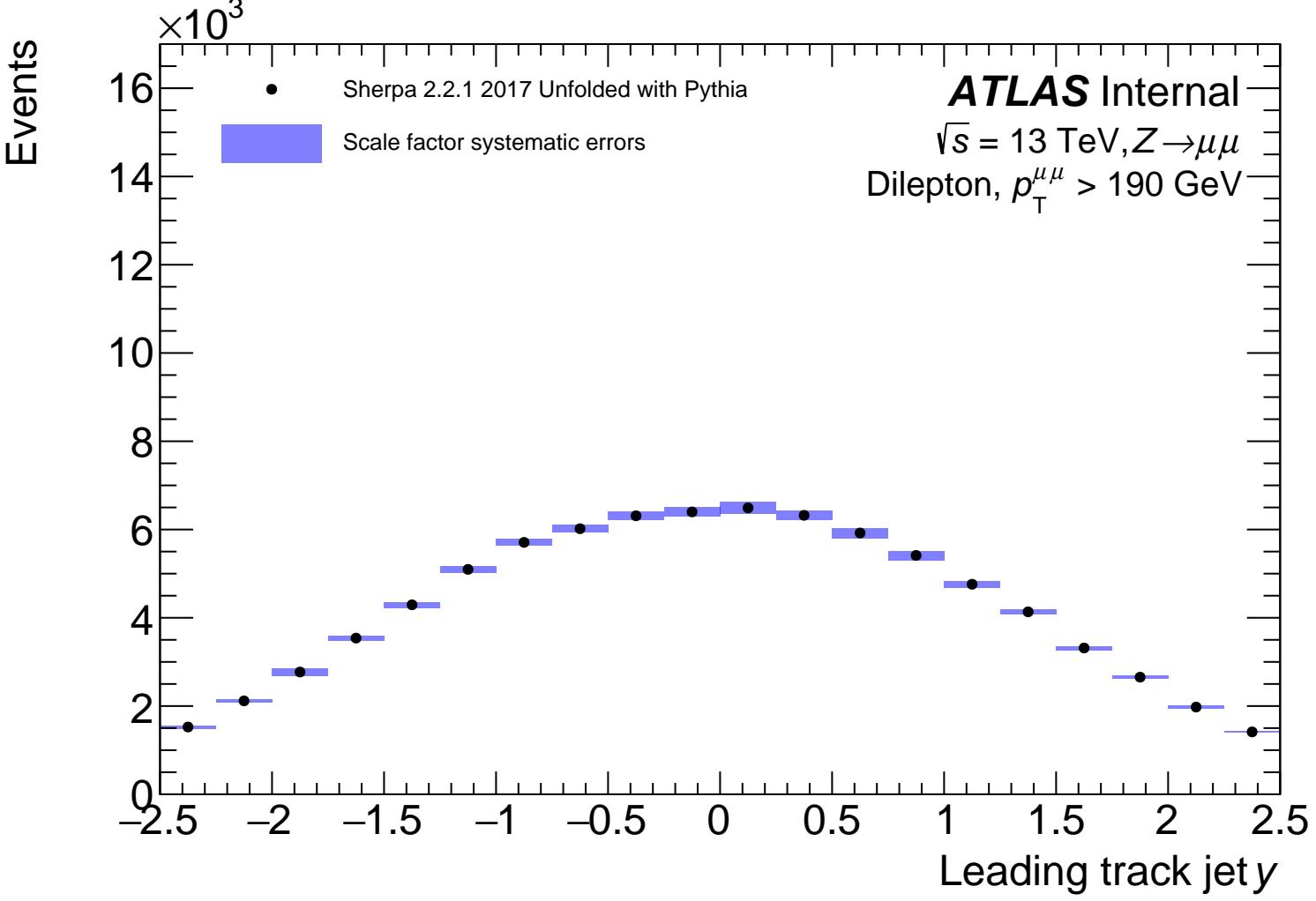
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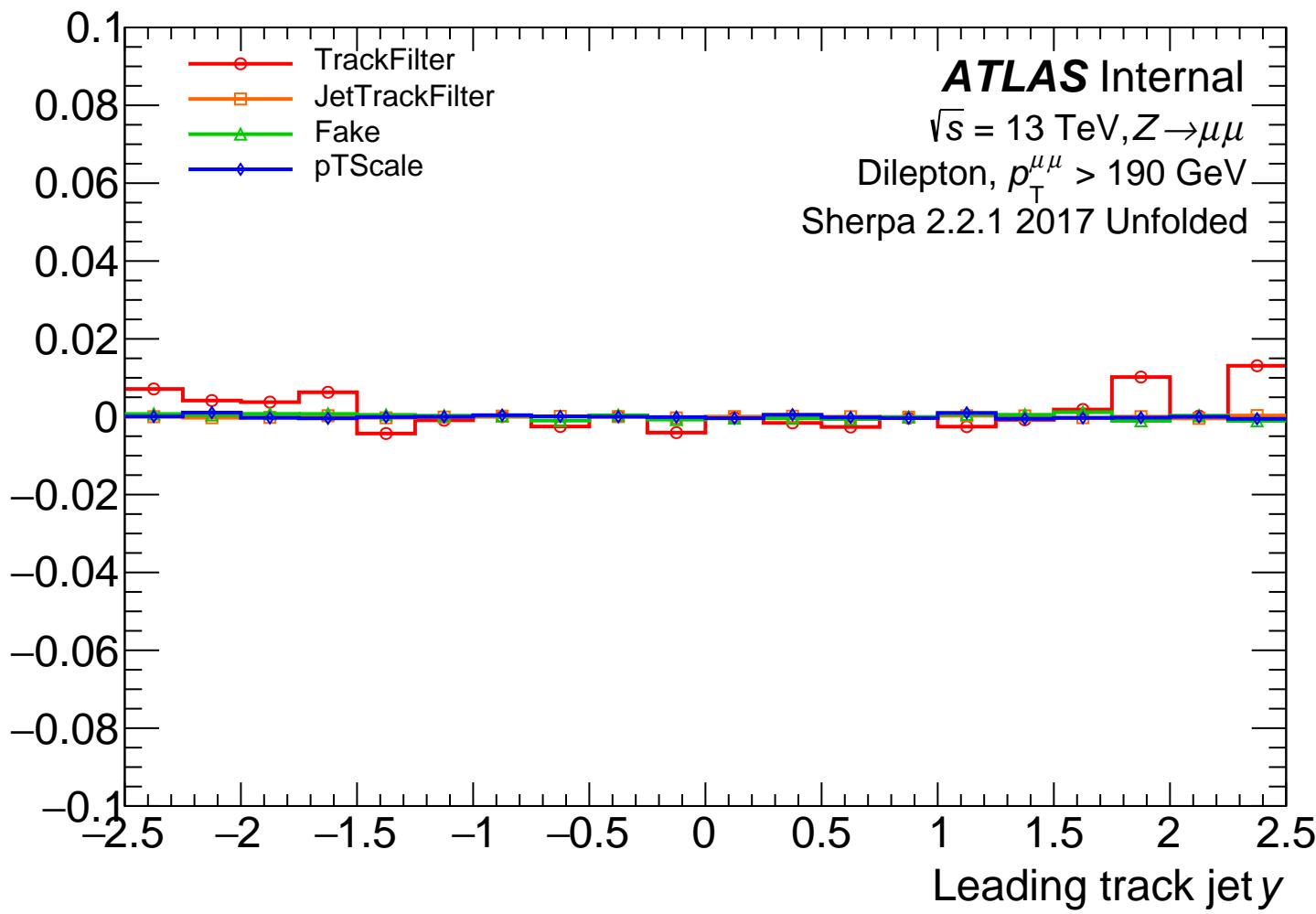
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

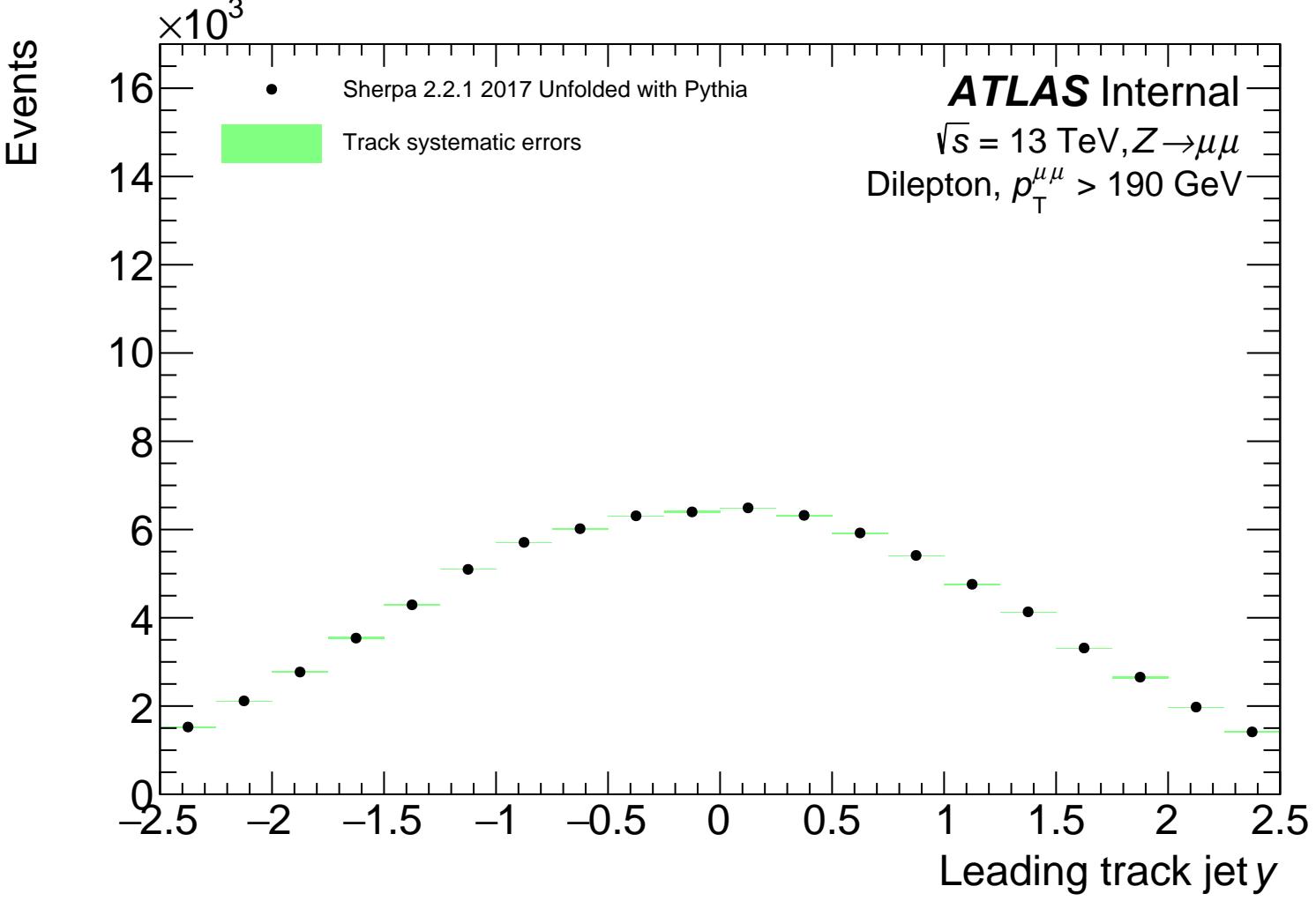
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

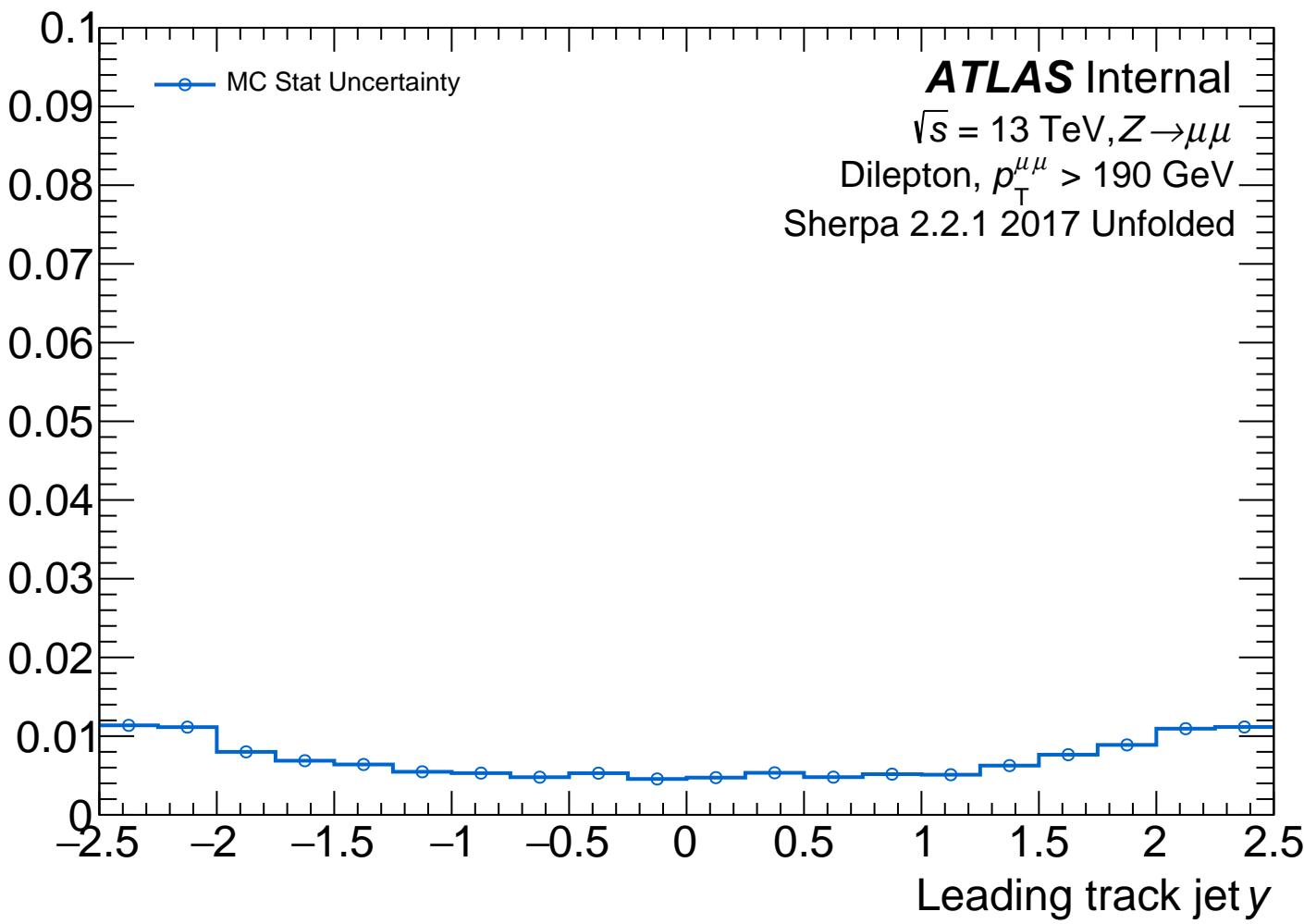
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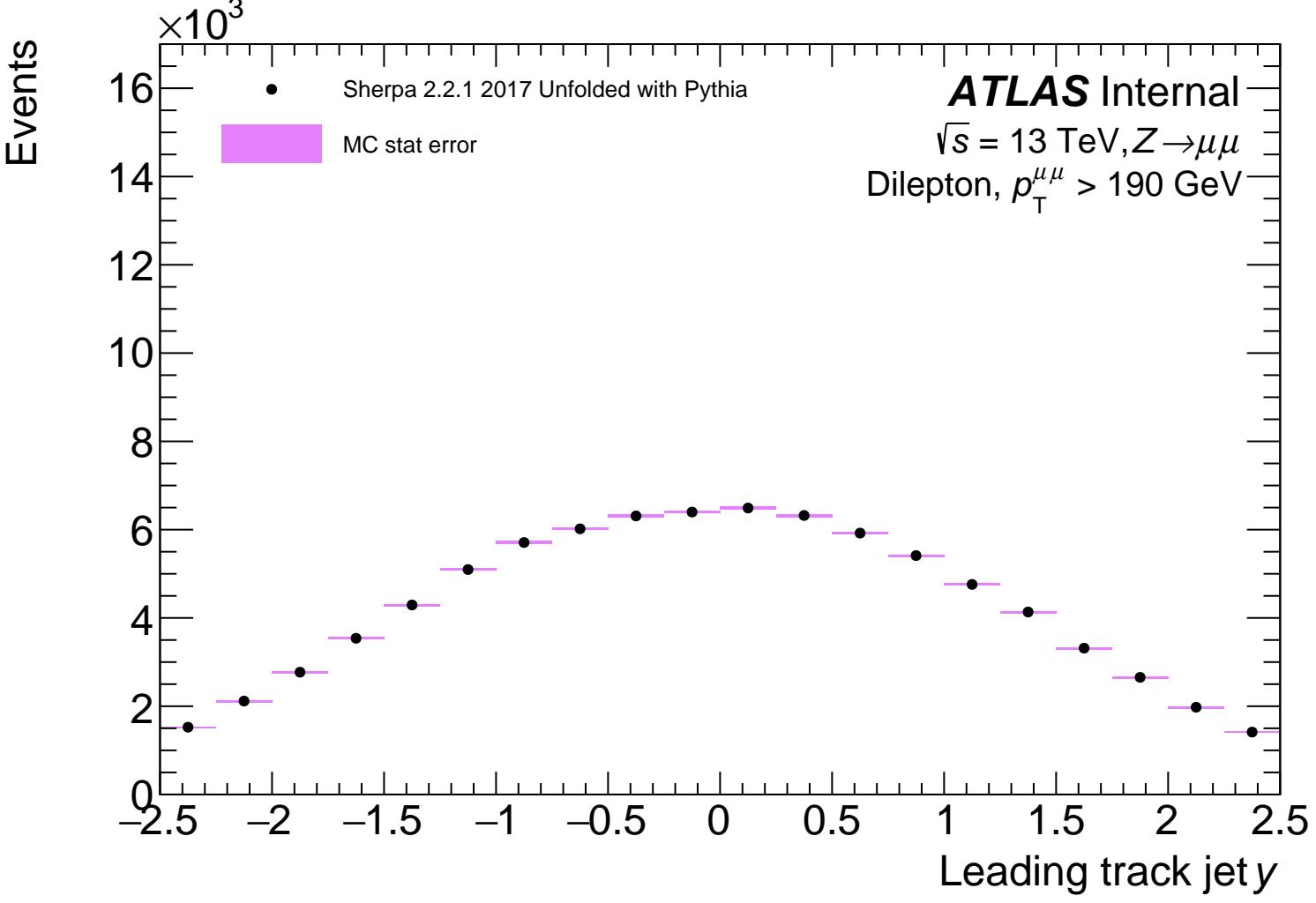


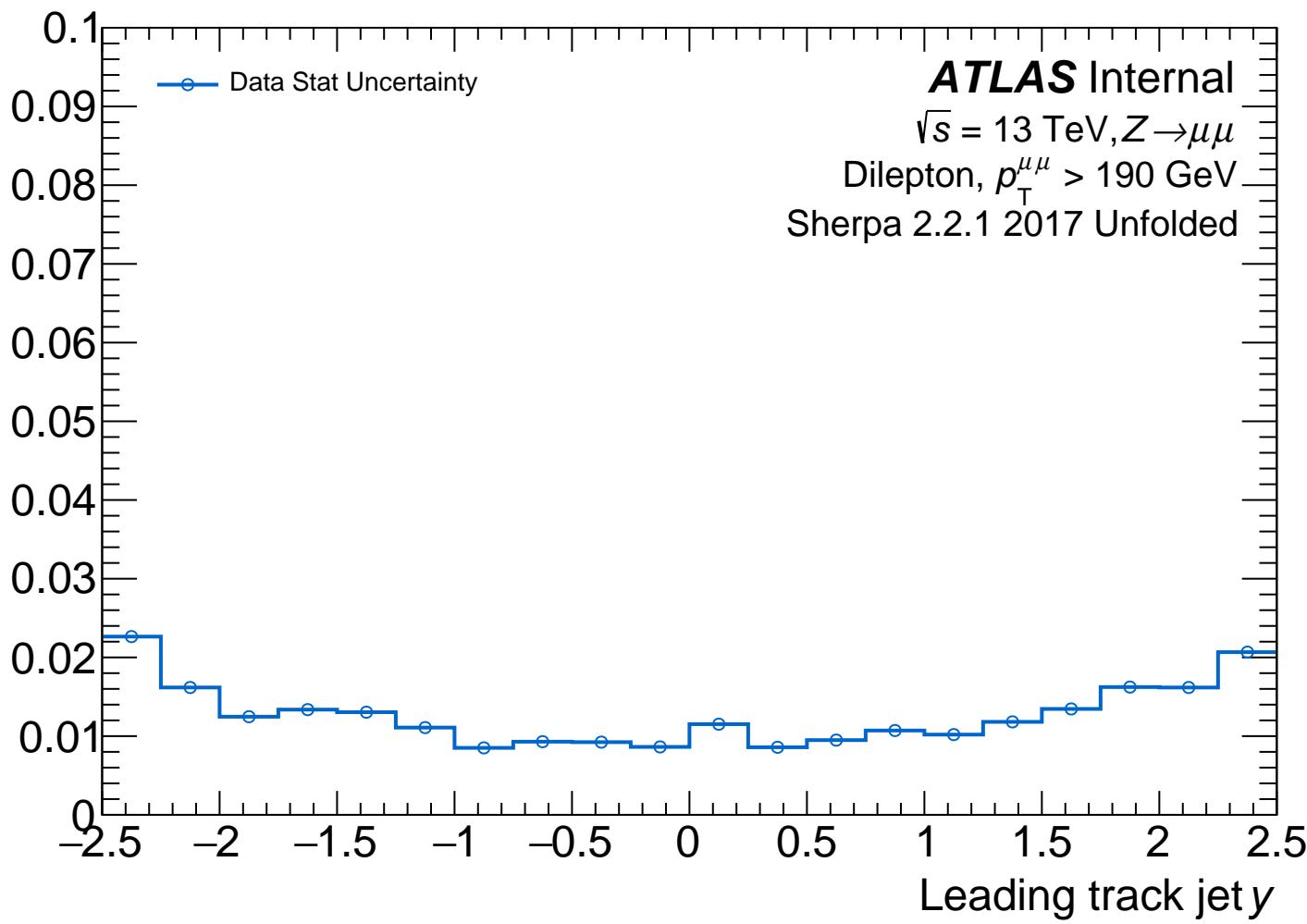


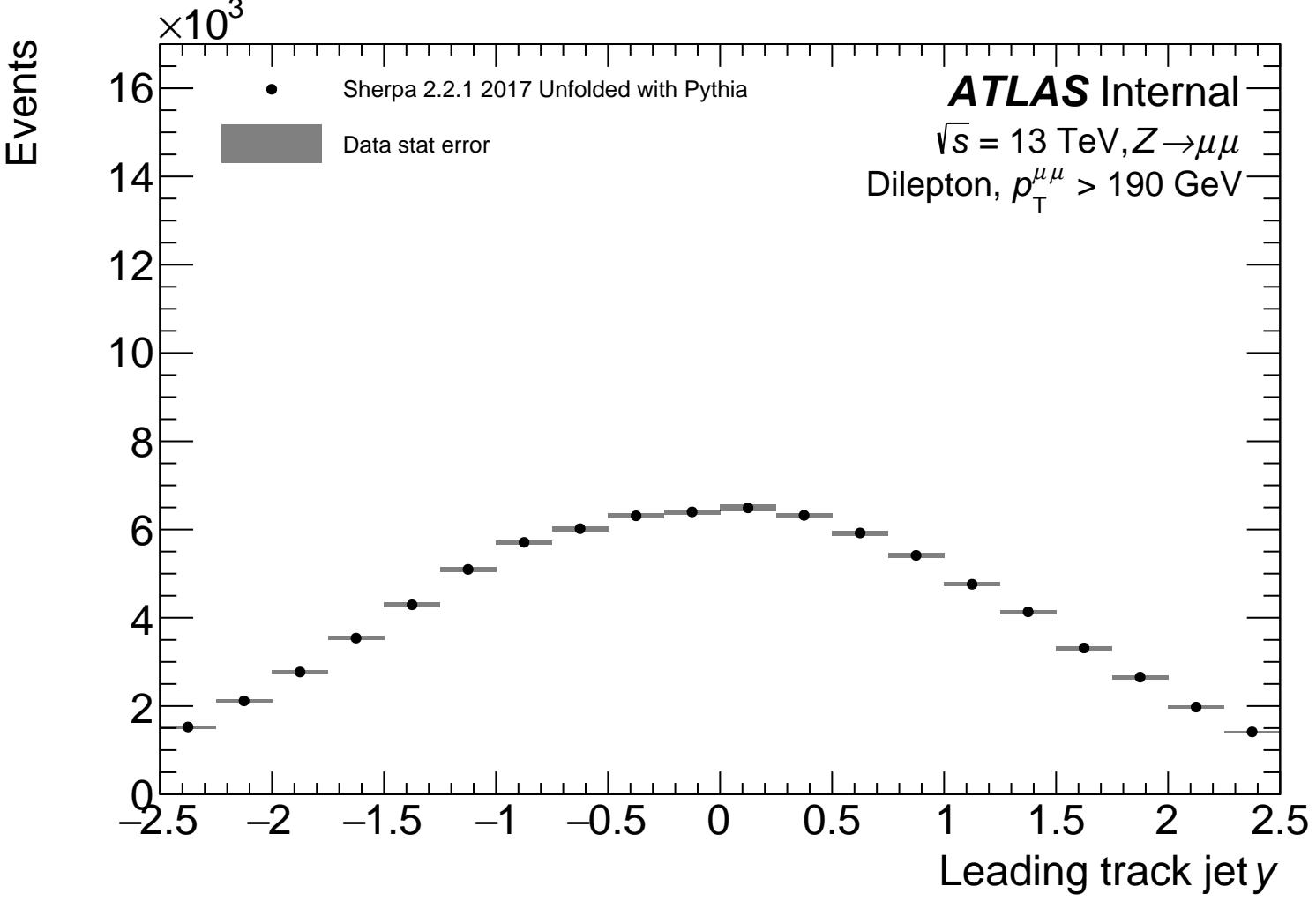


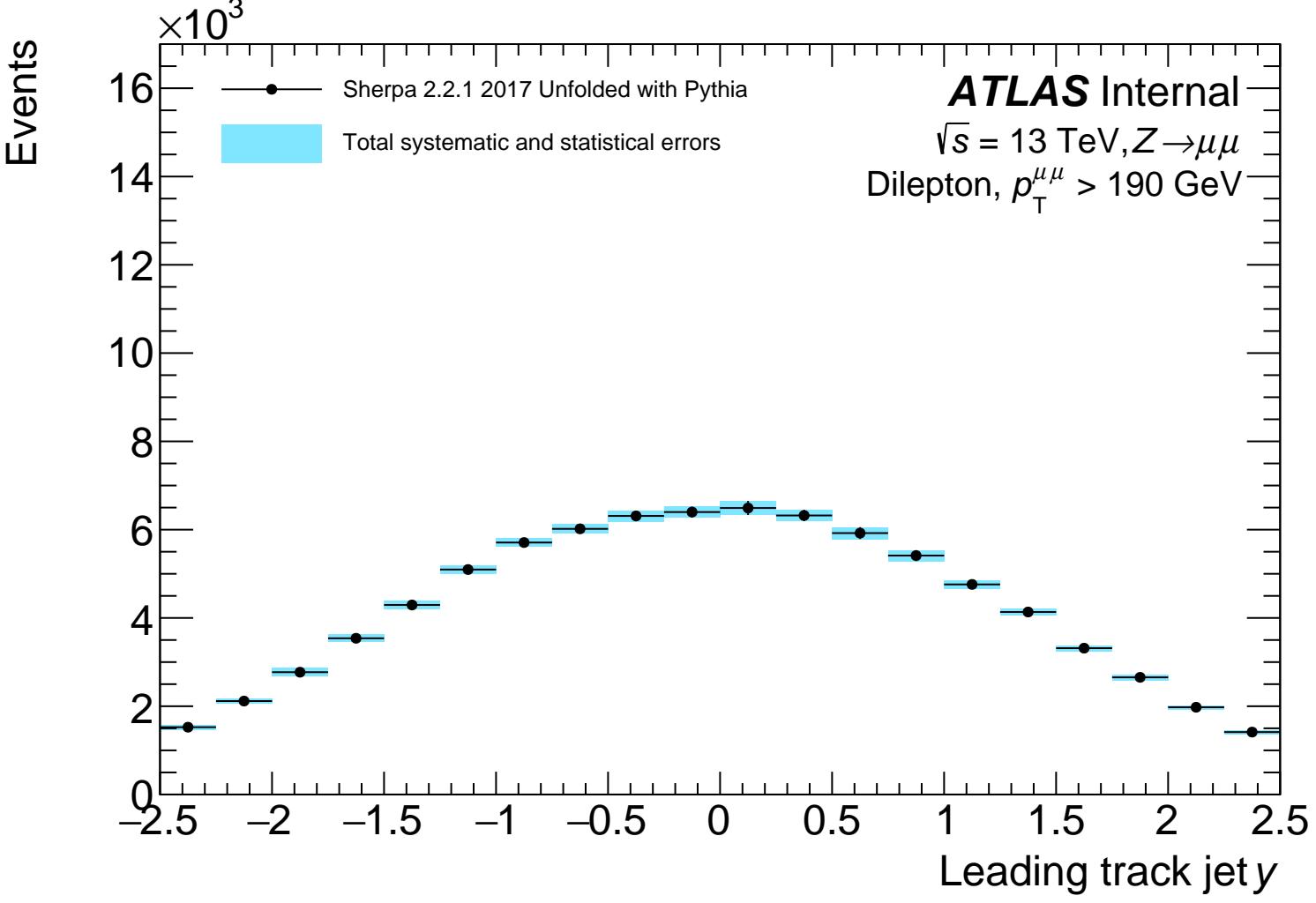


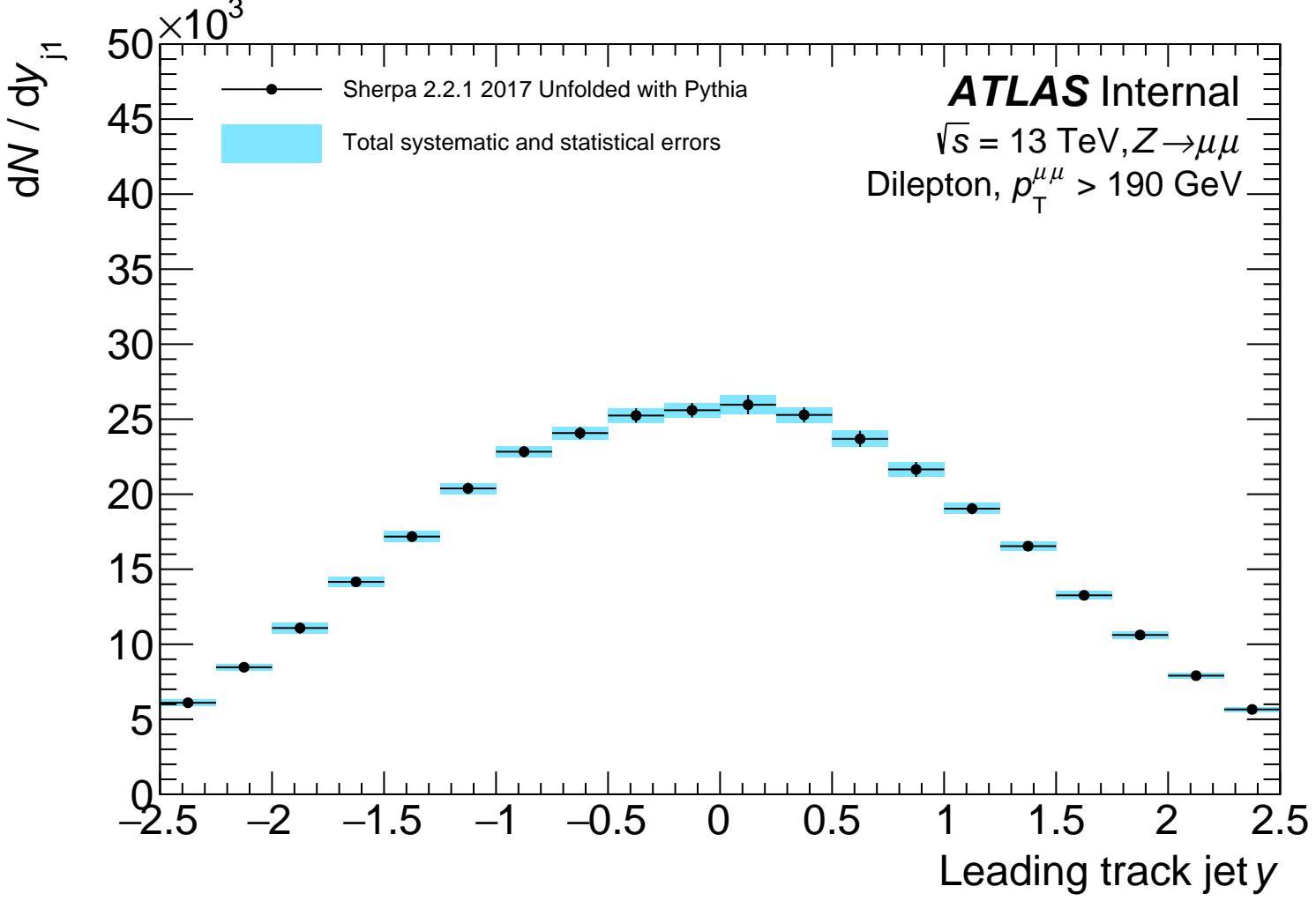










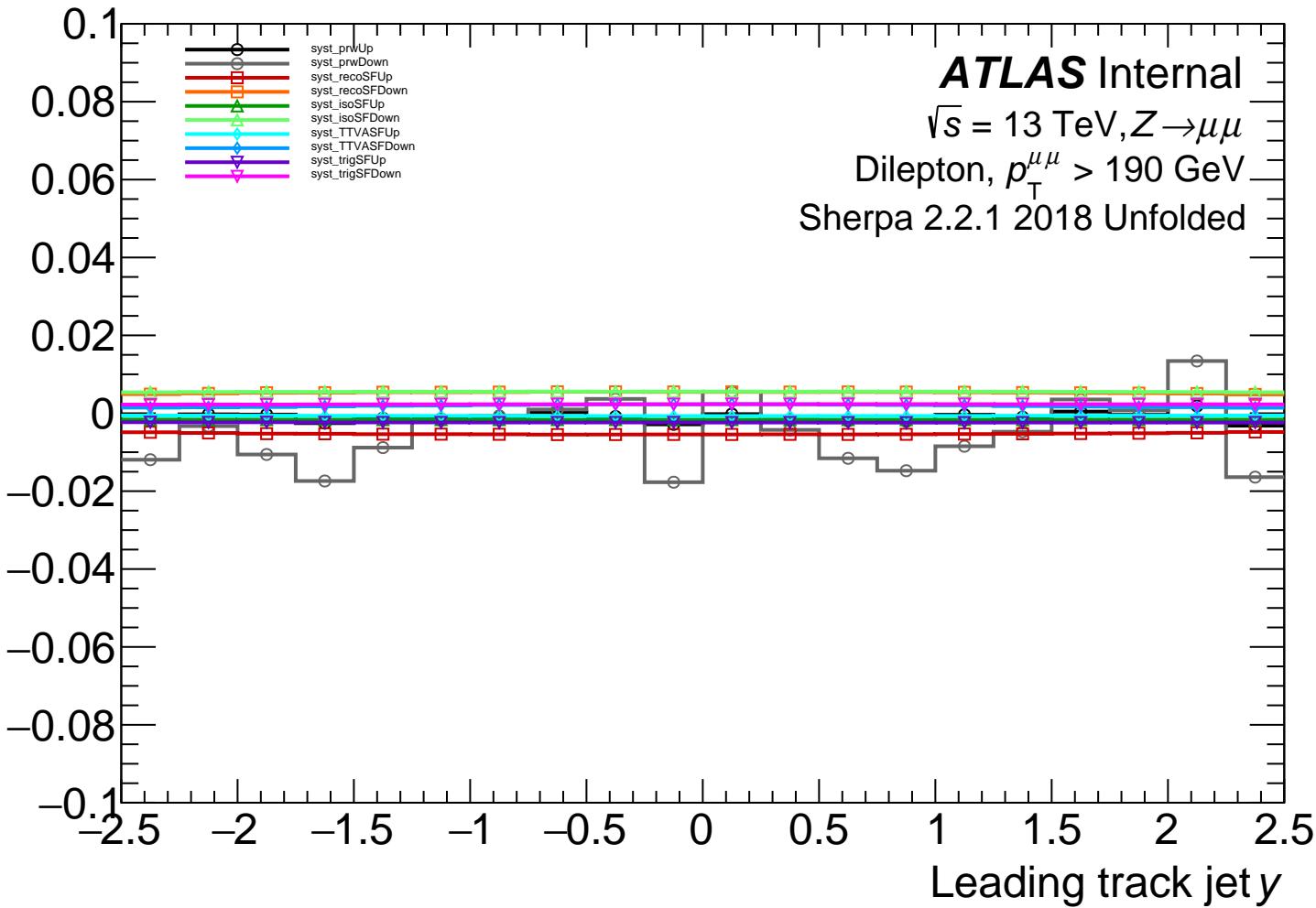


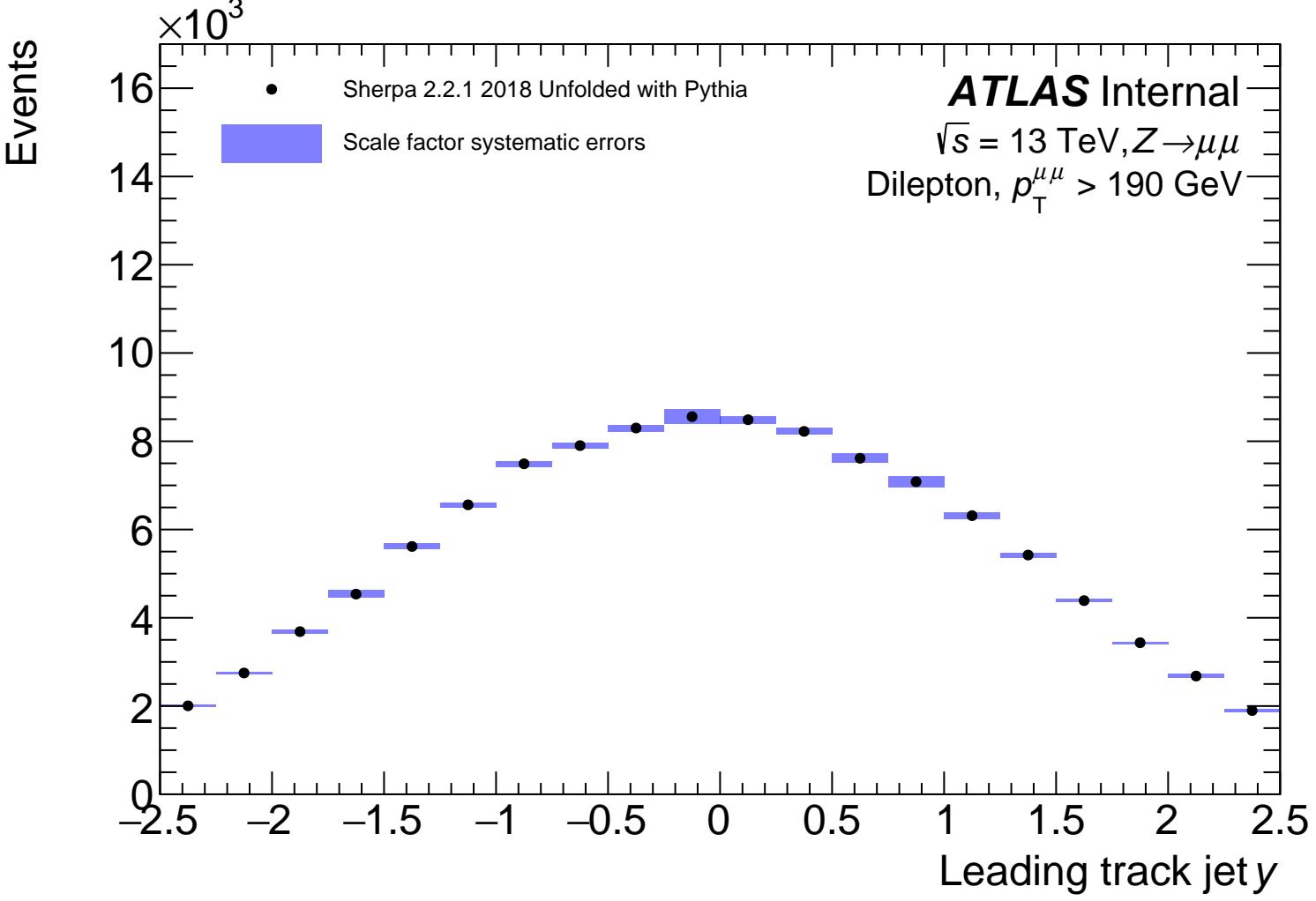
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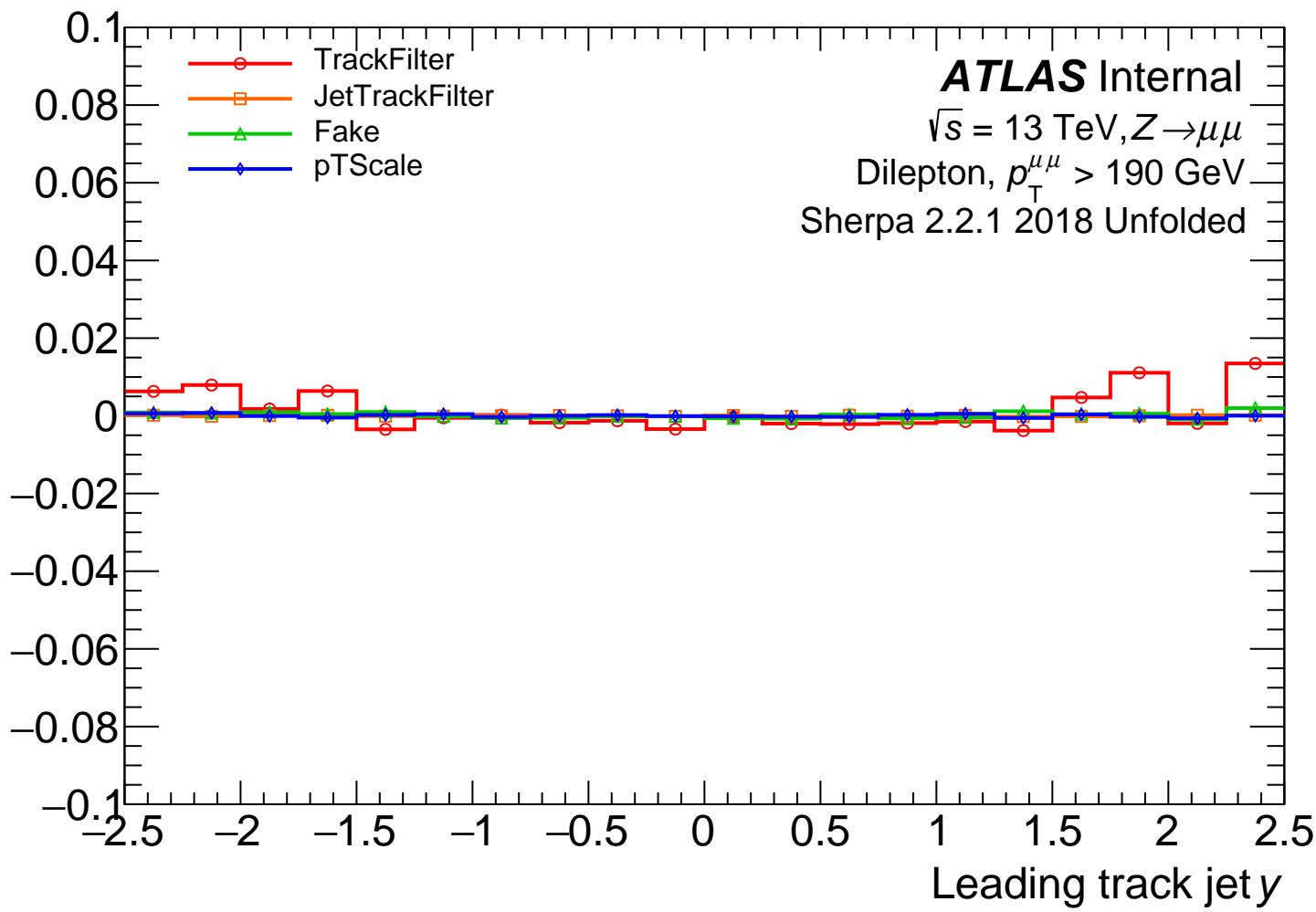
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

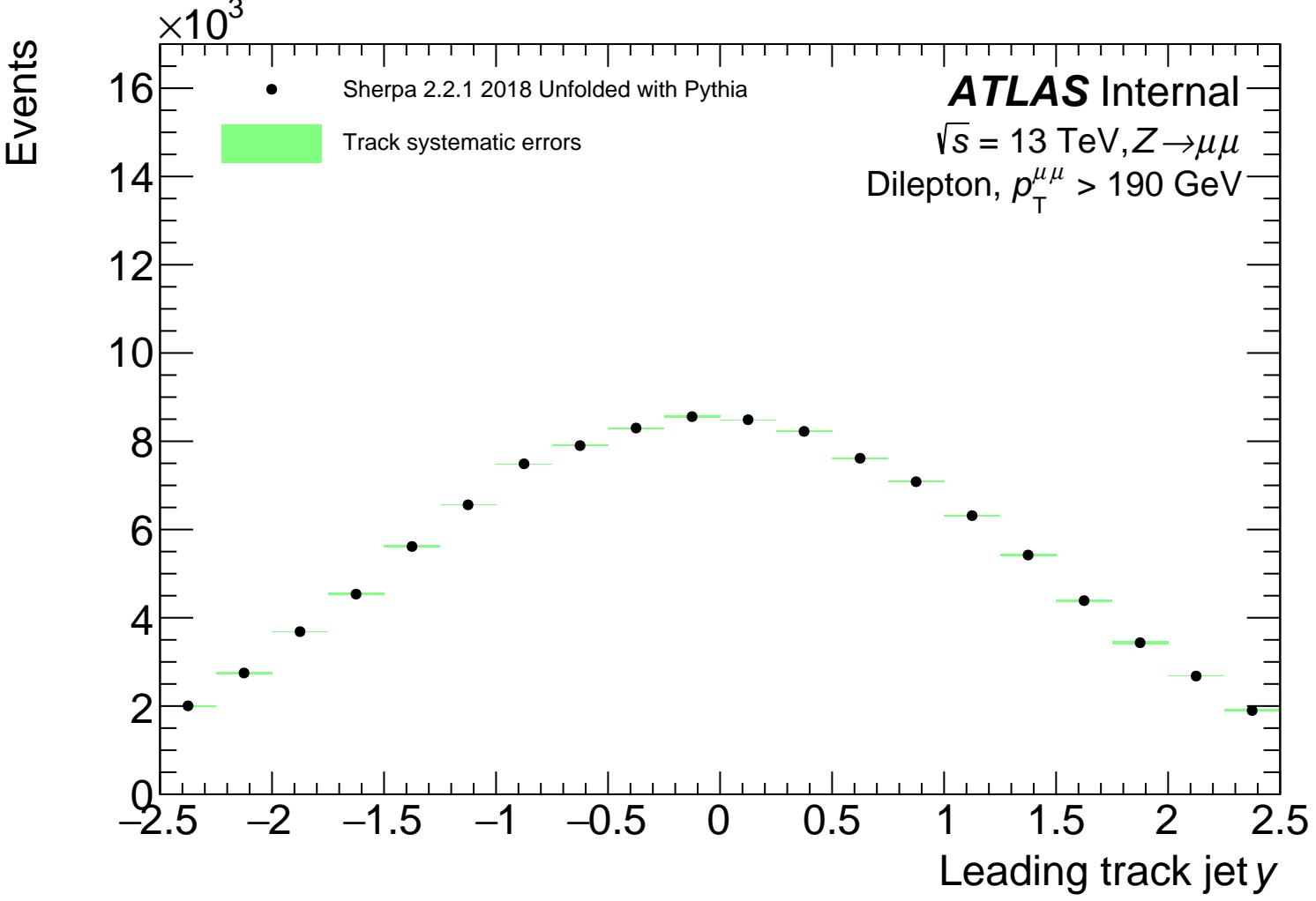
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

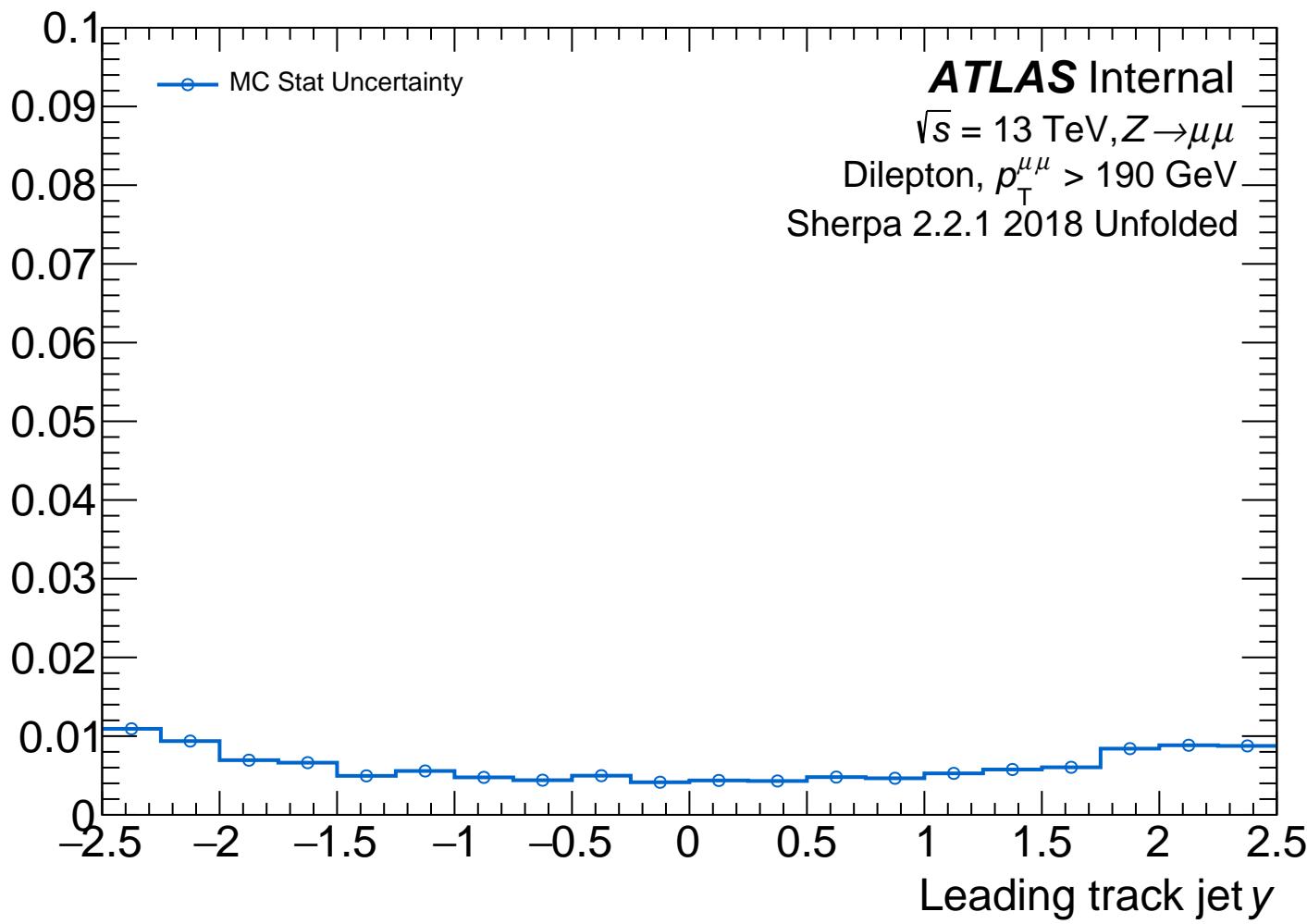
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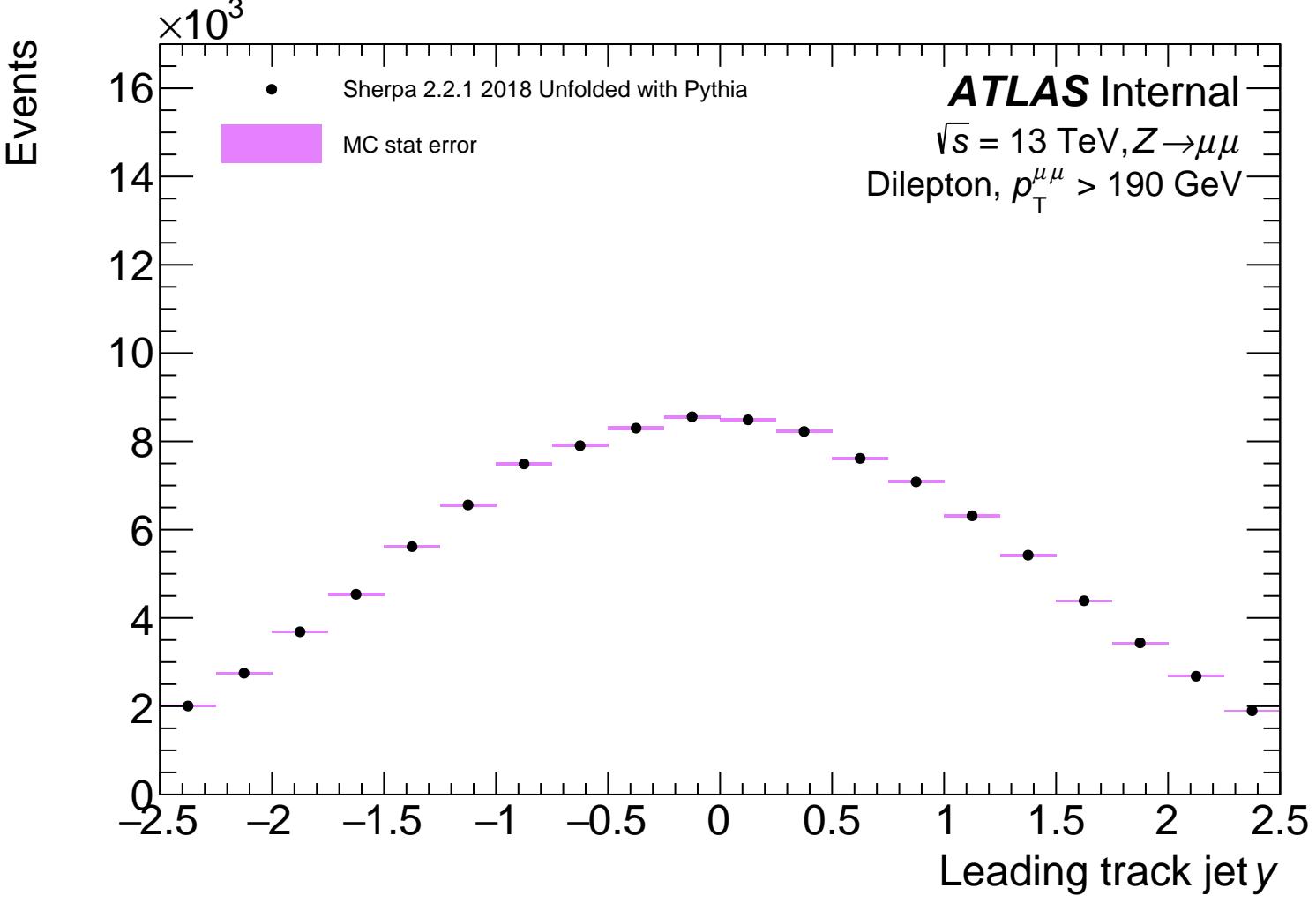


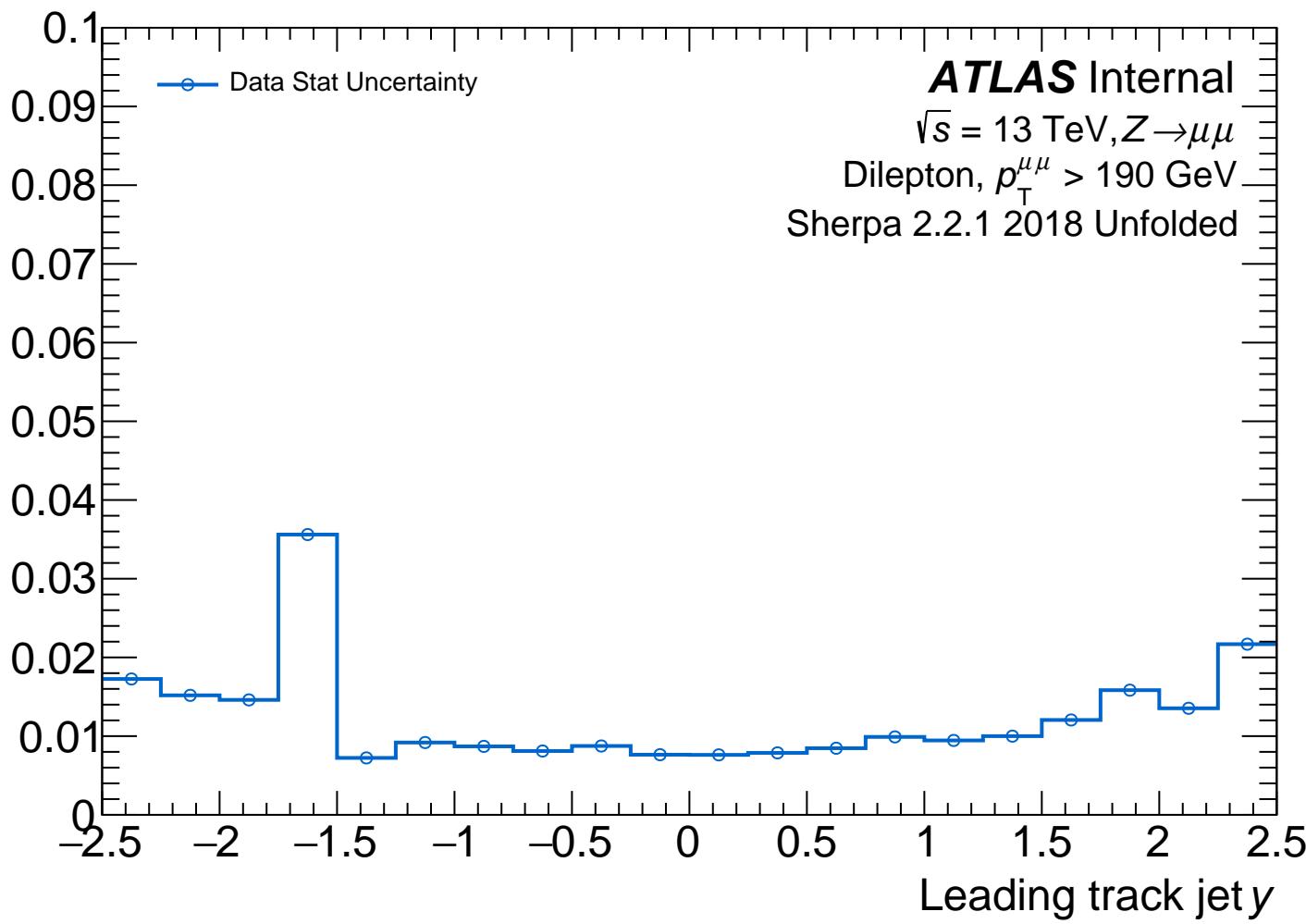


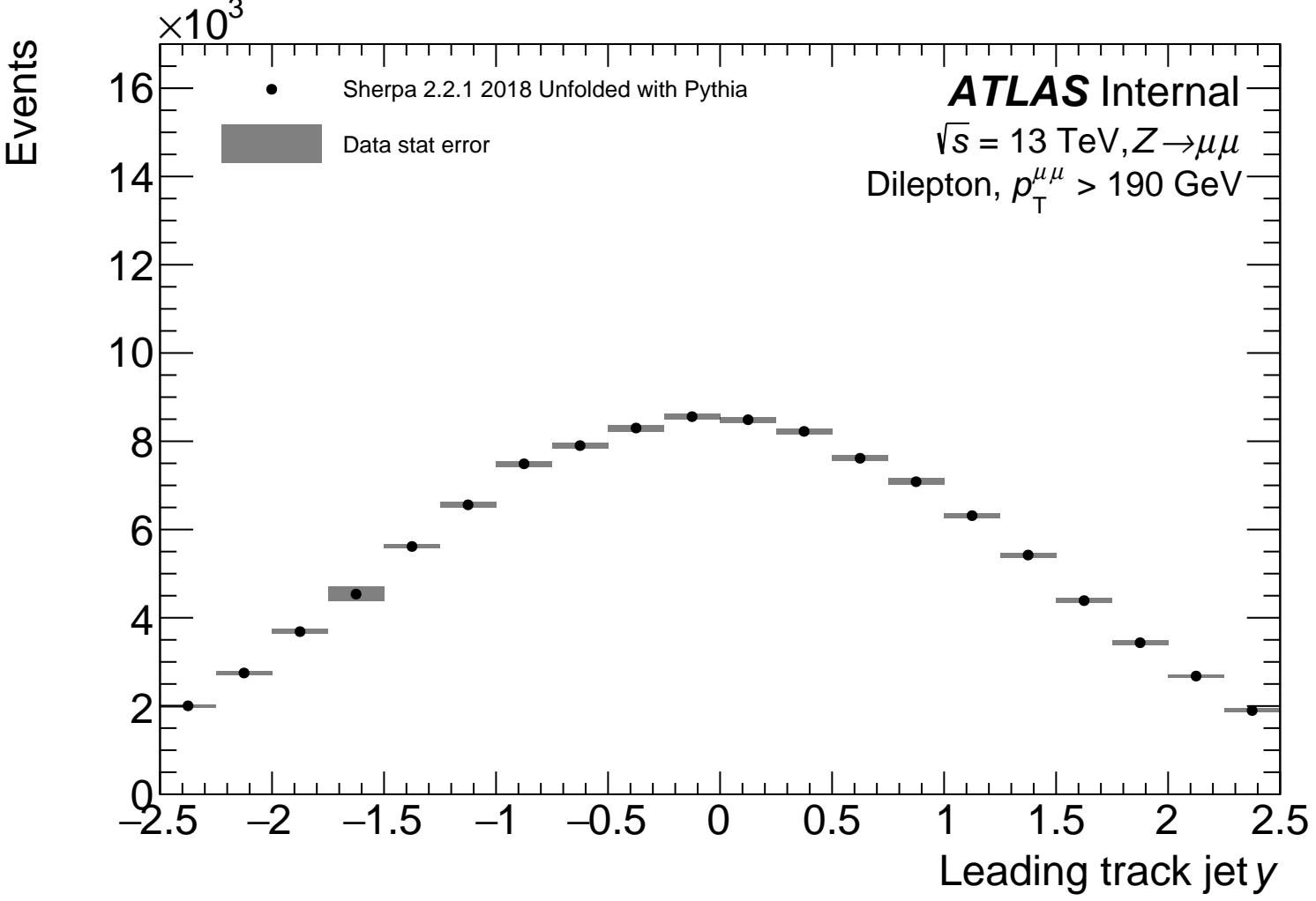


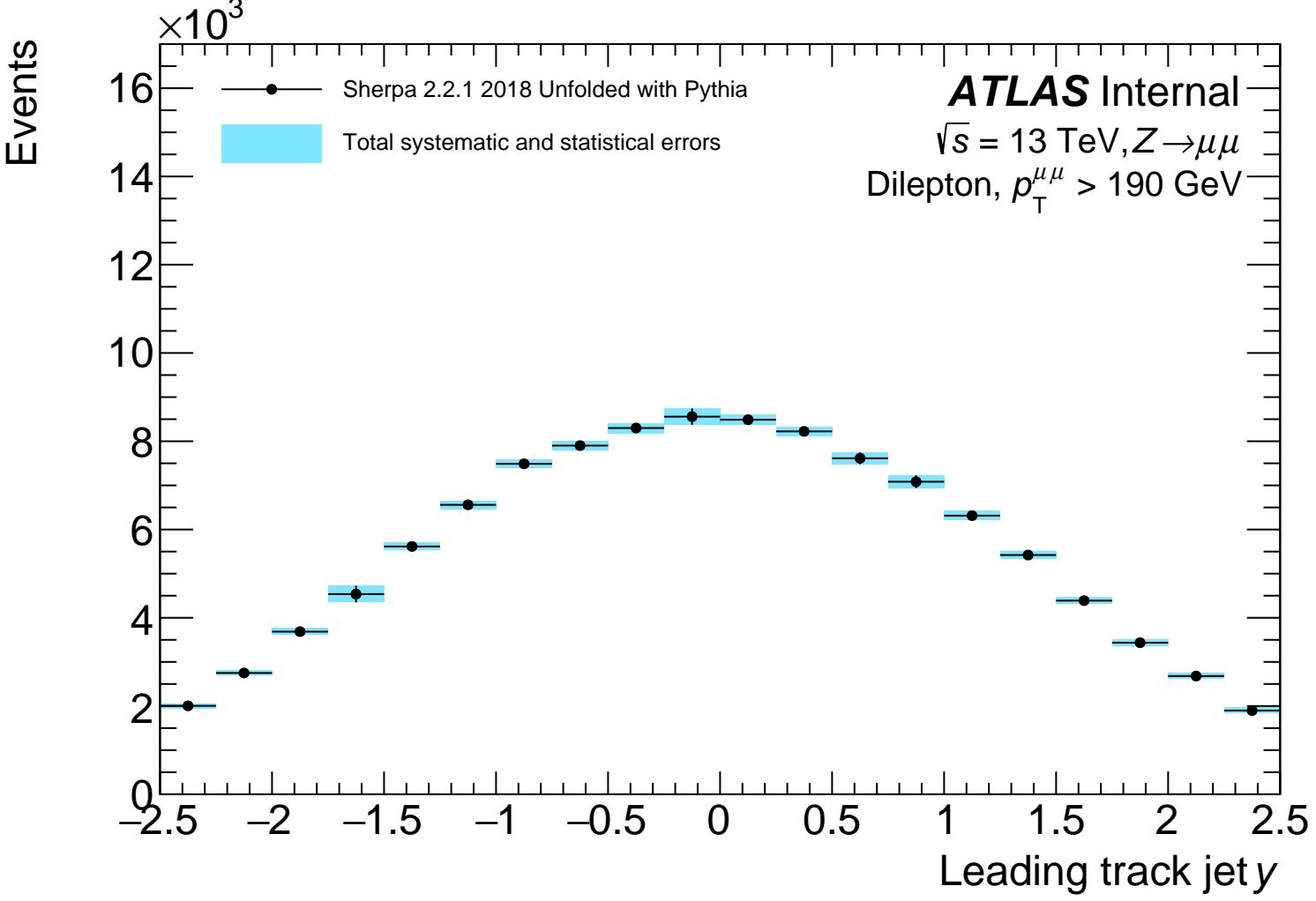


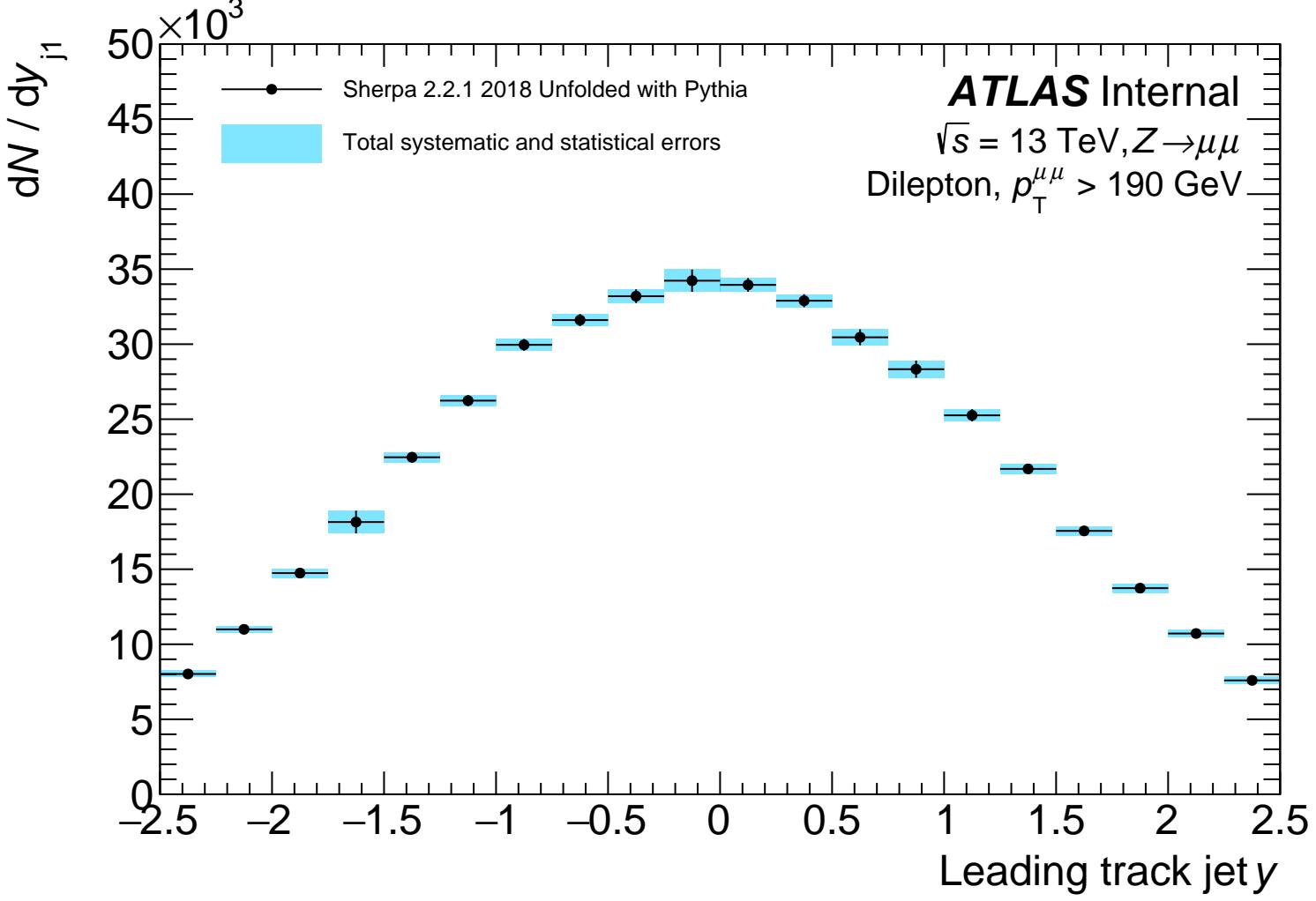










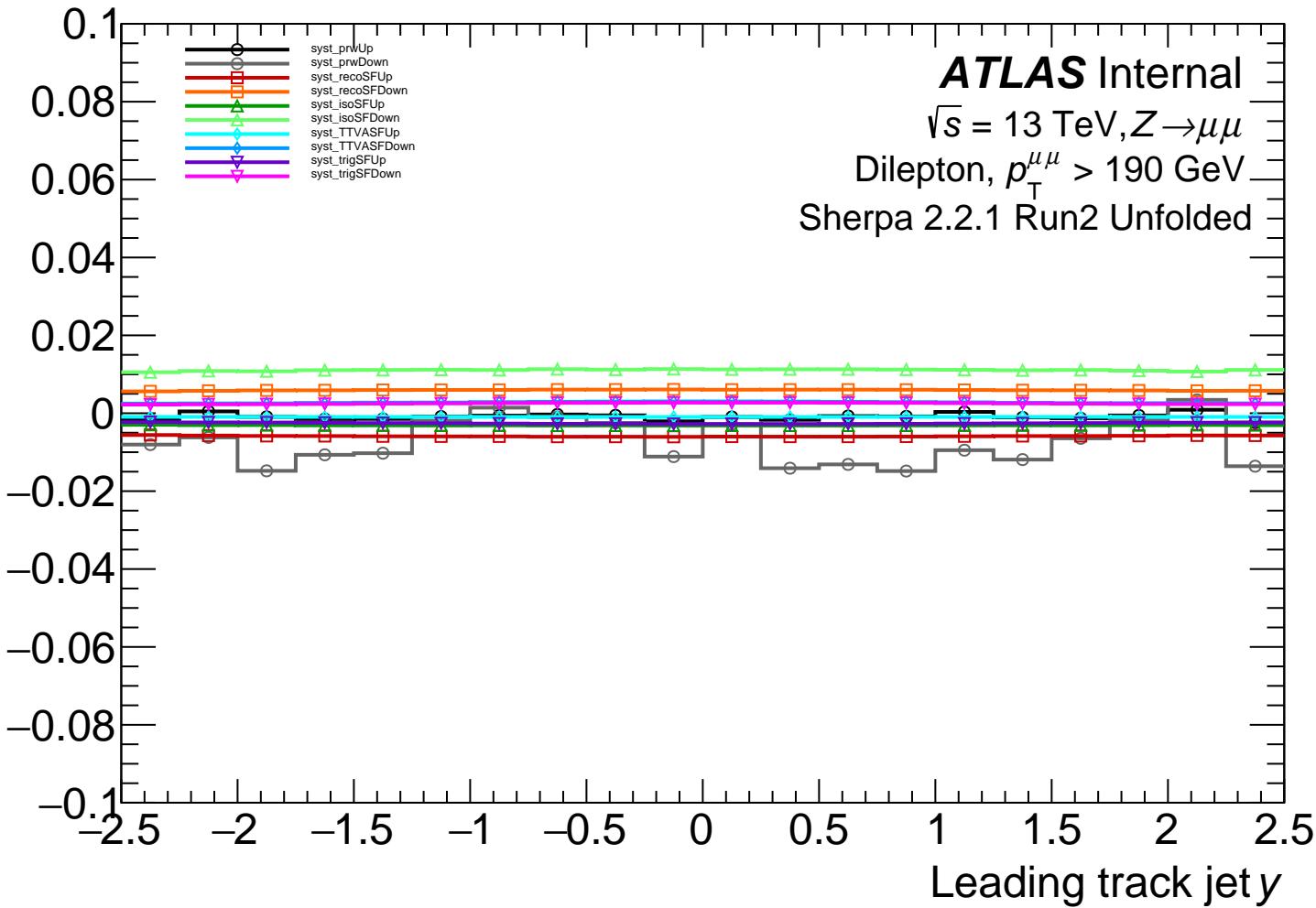


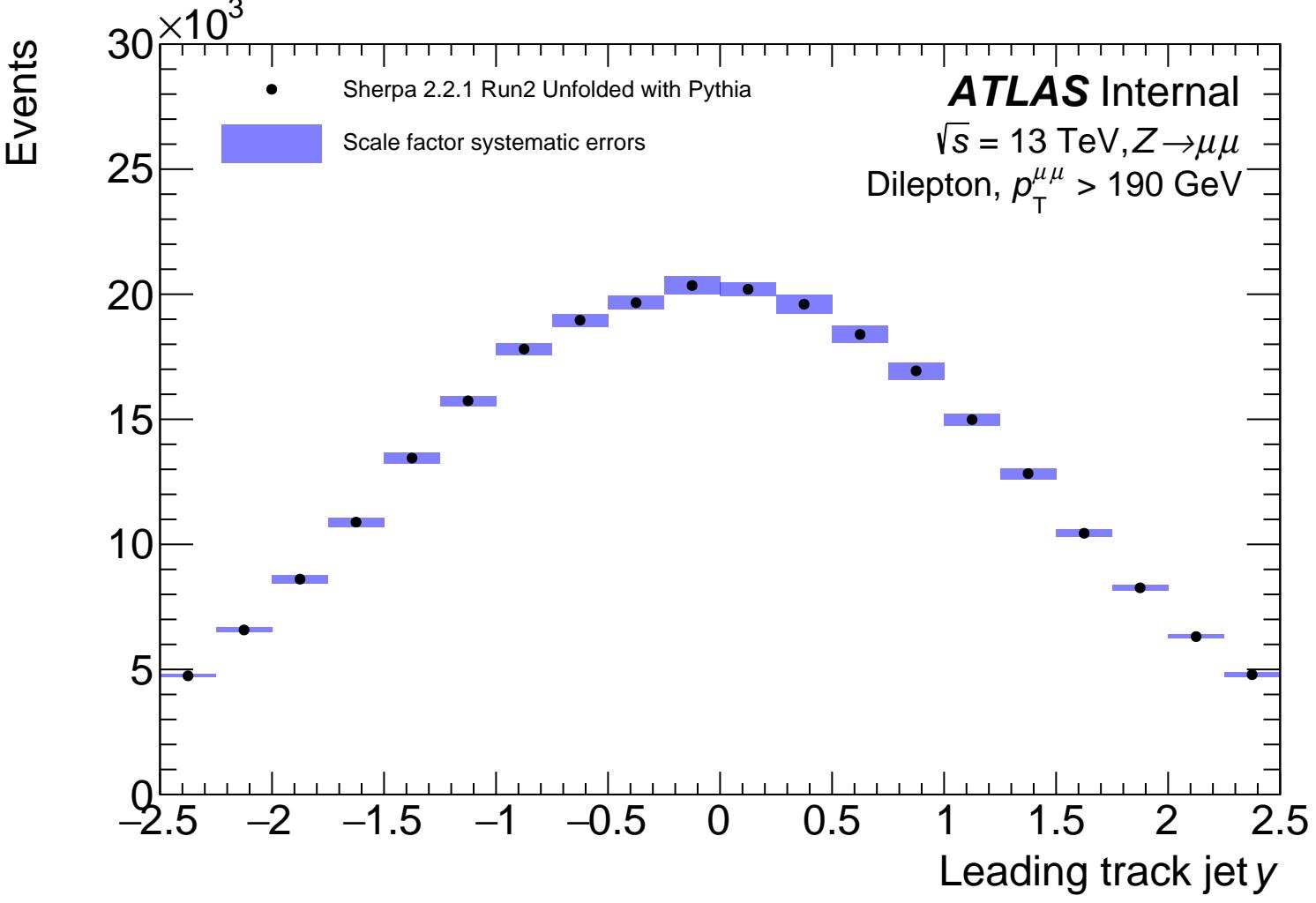
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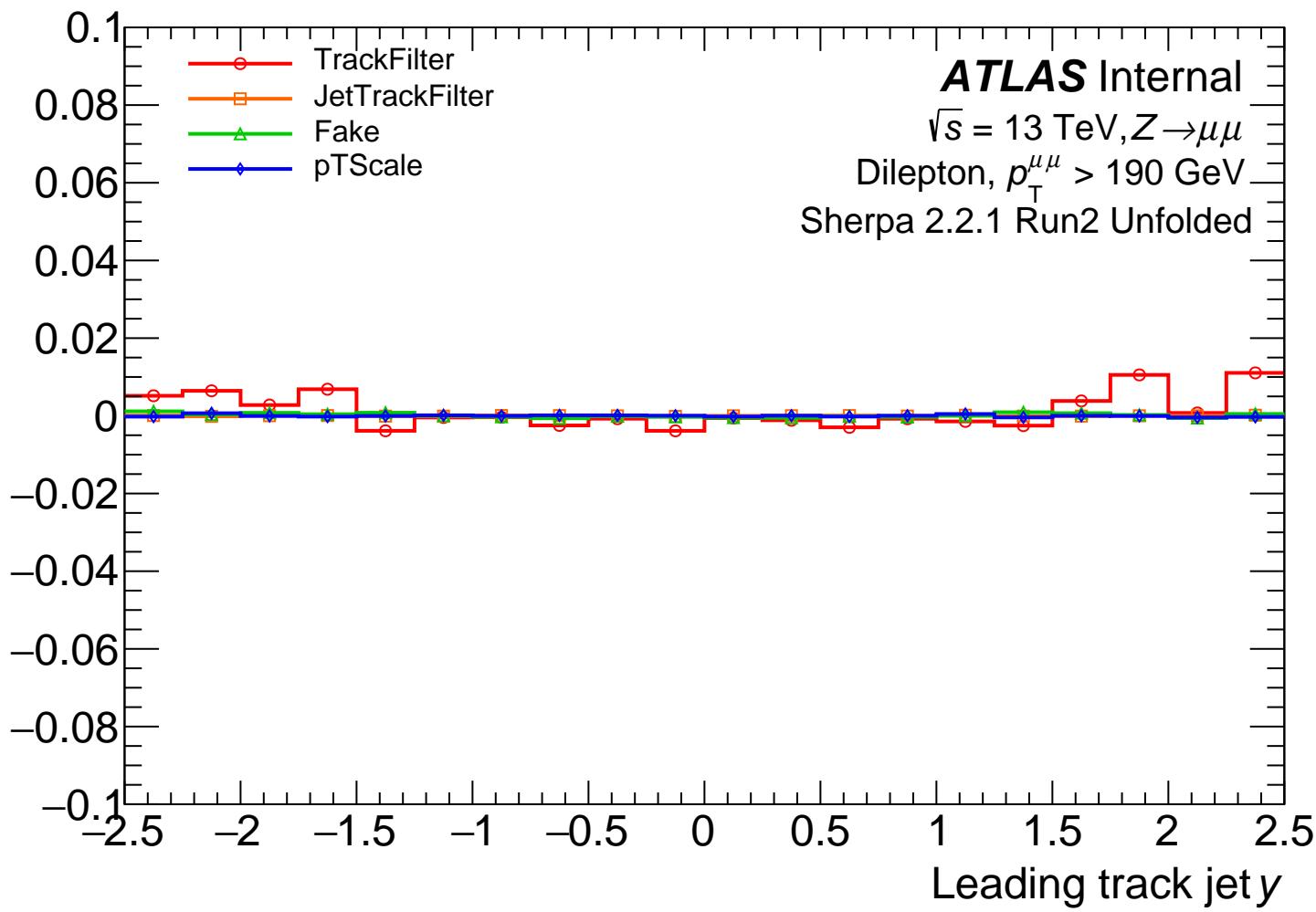
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

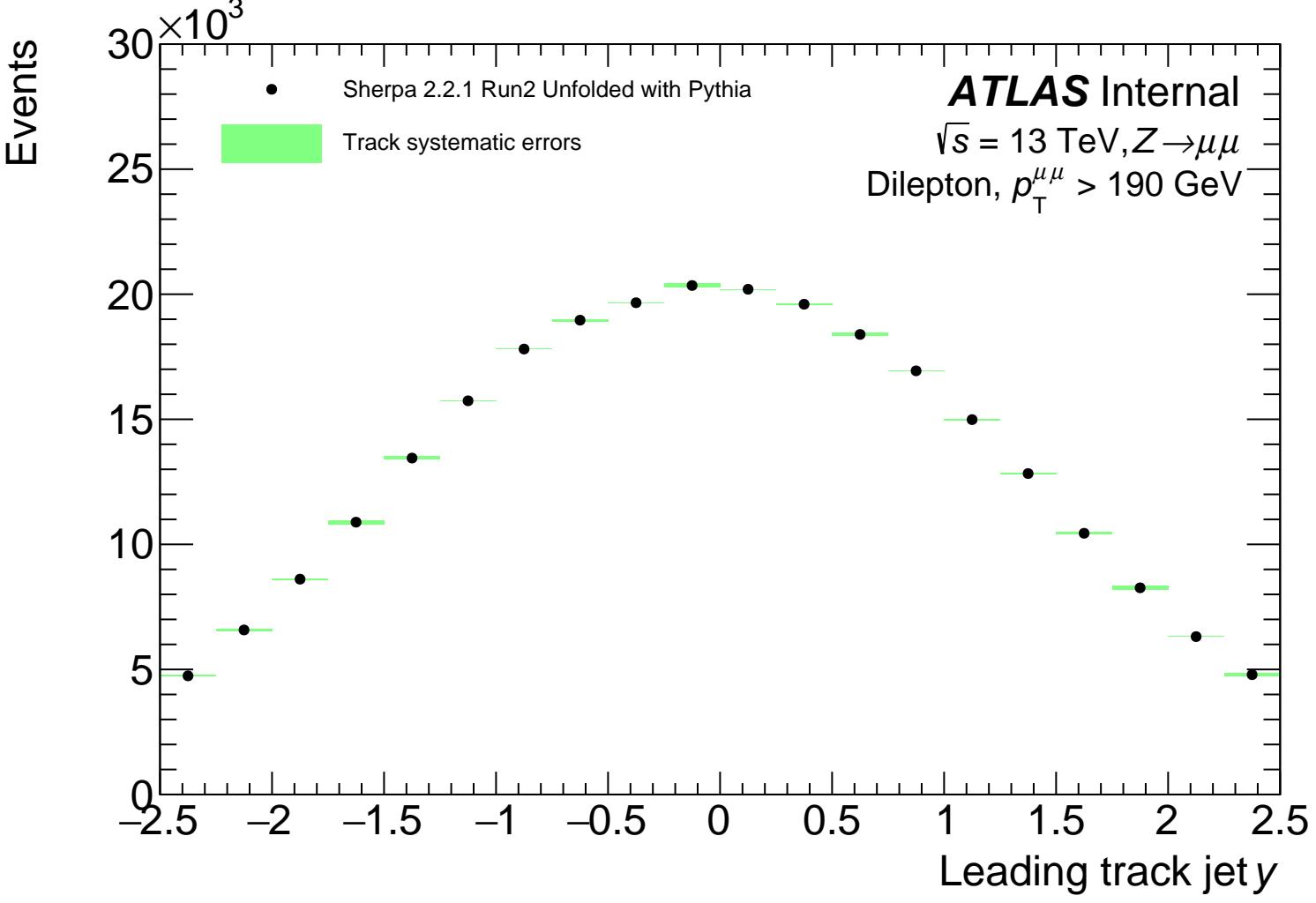
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

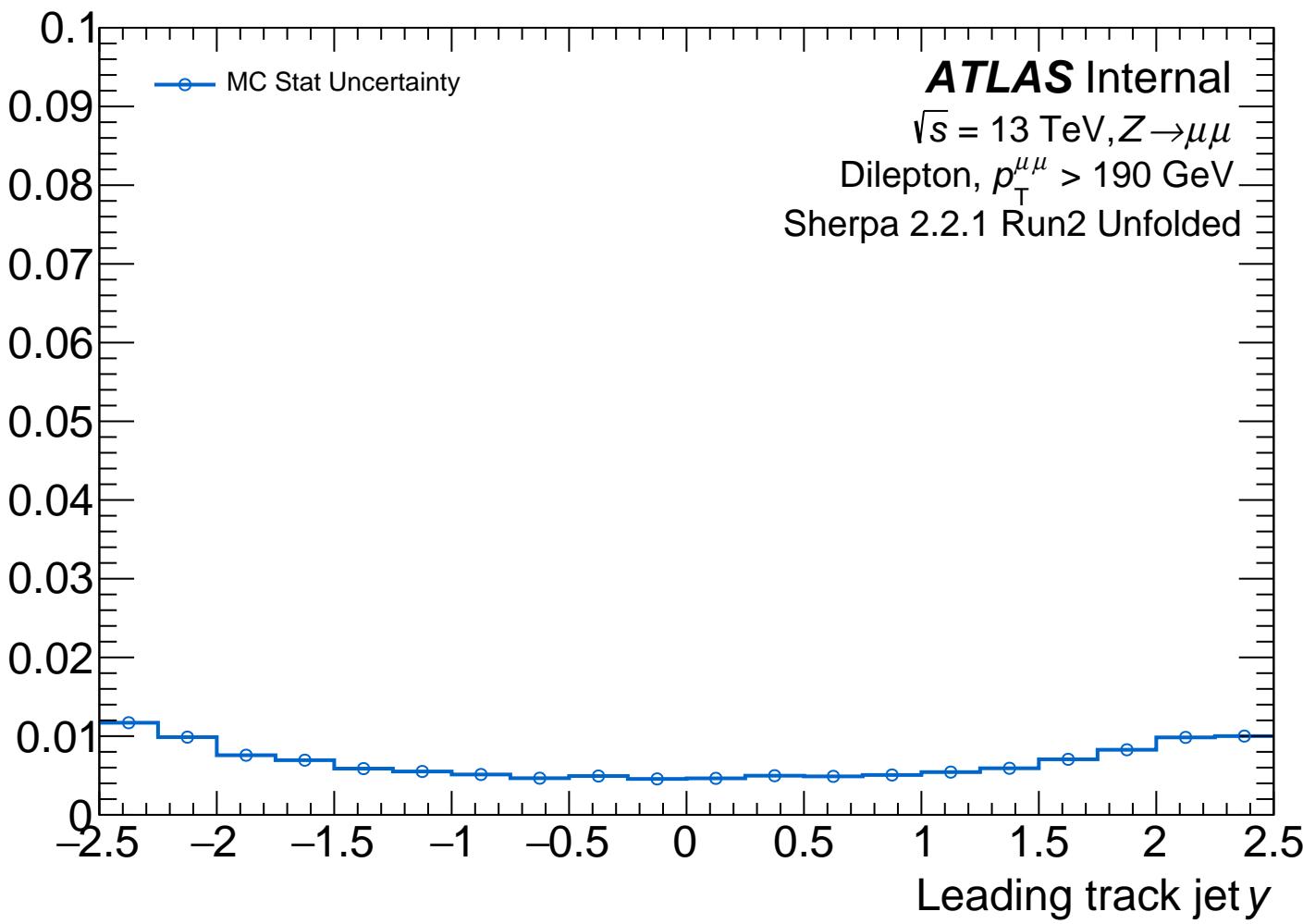
Sherpa 2.2.1 Run2 Unfolded

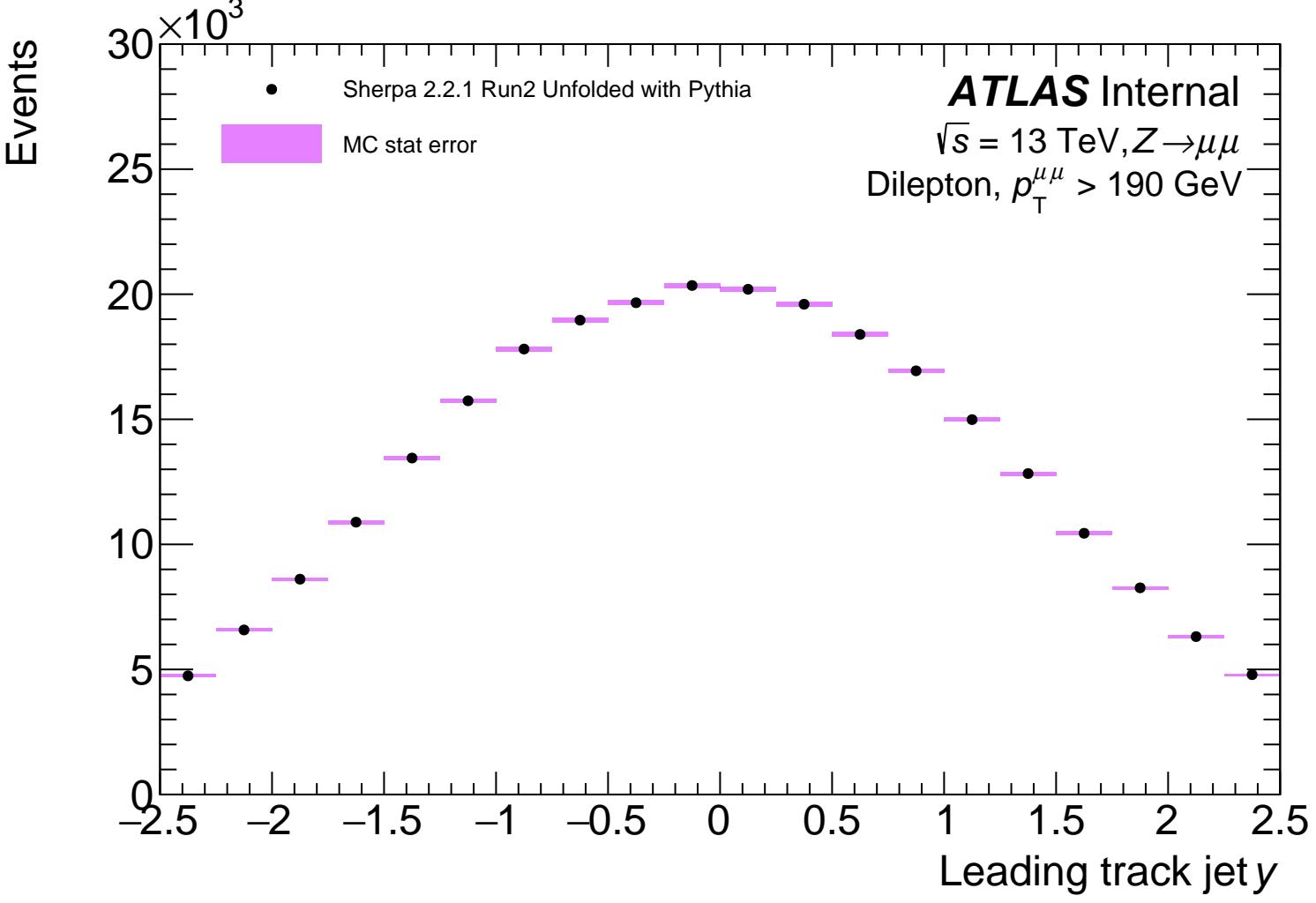


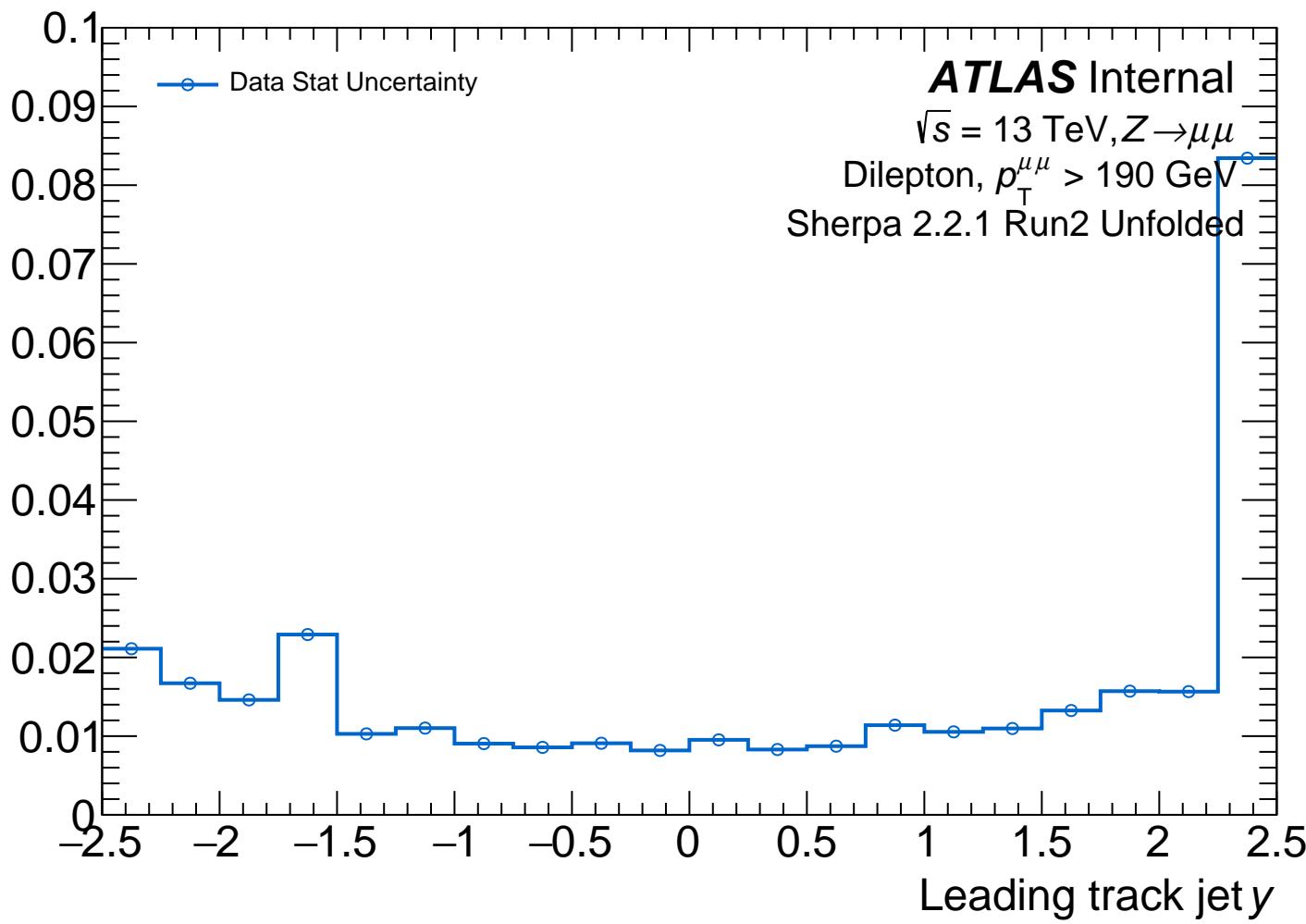


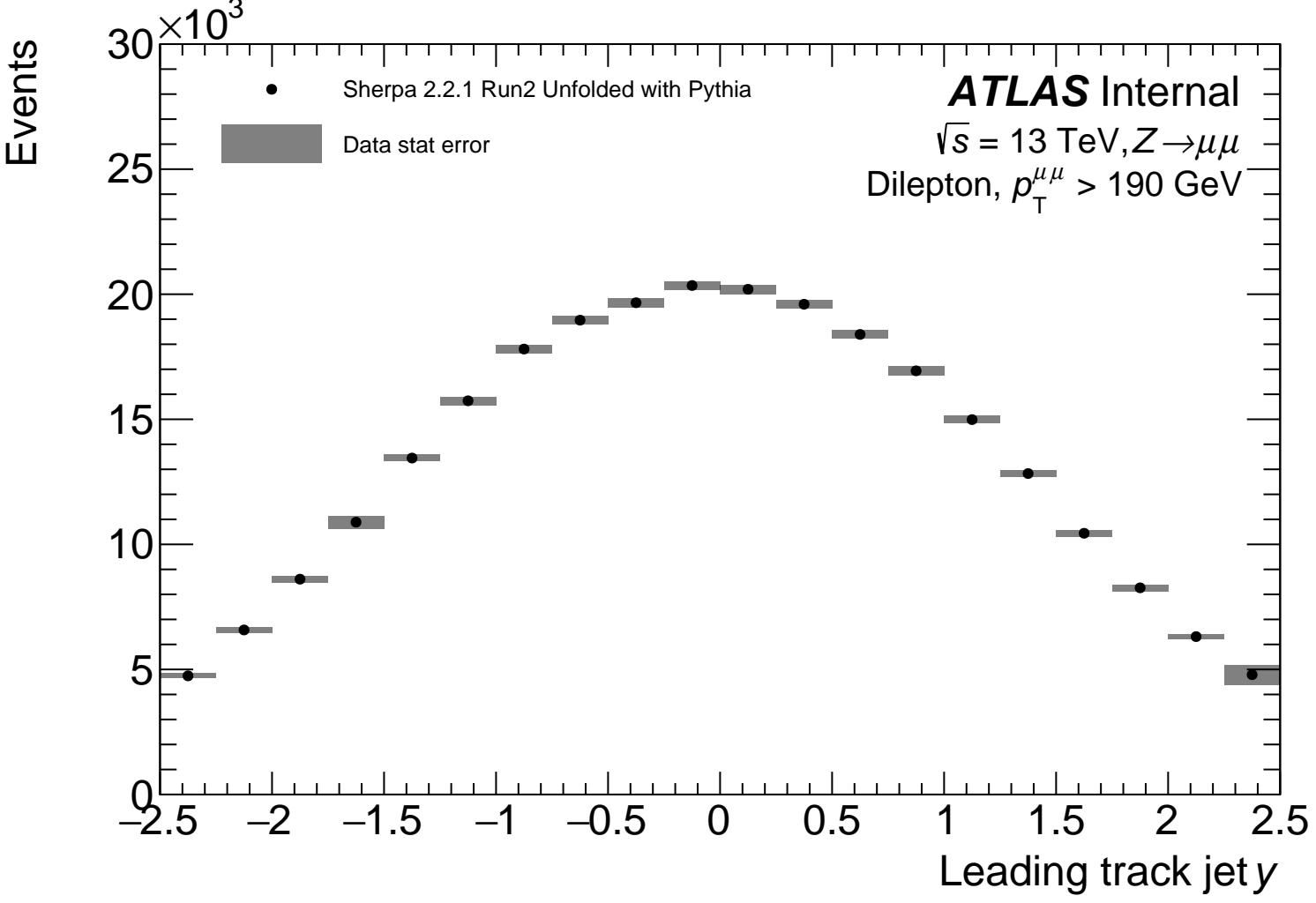


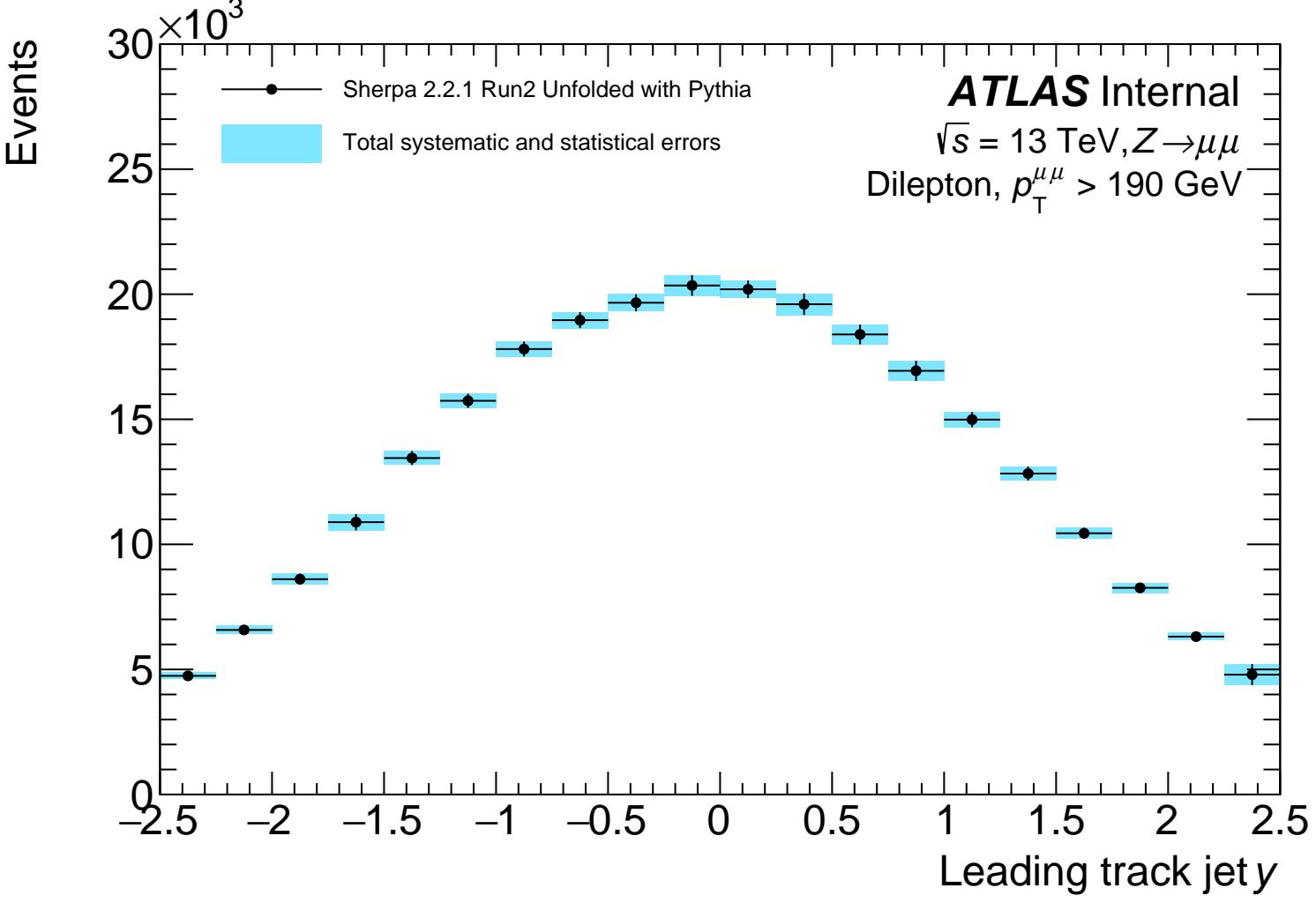


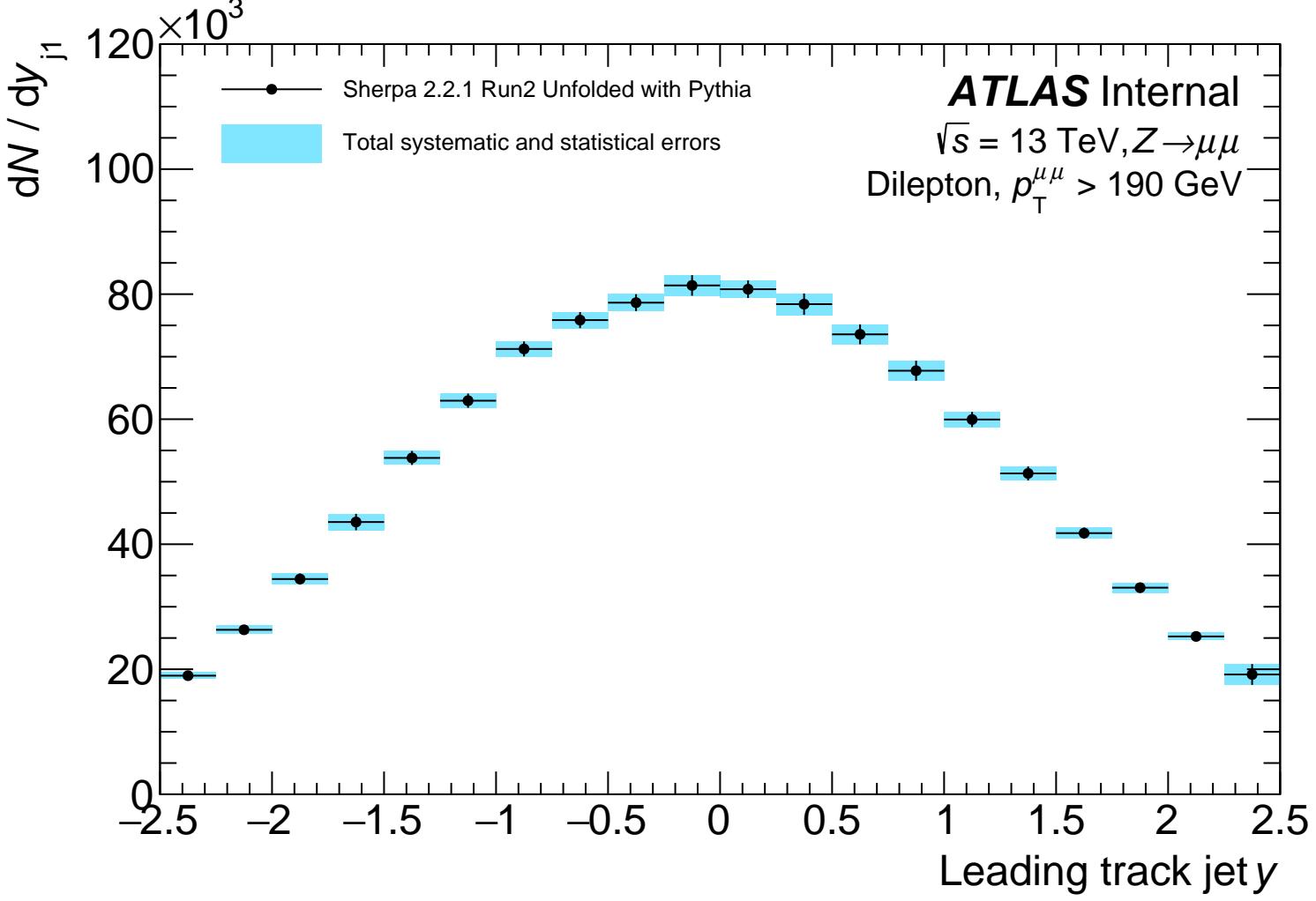










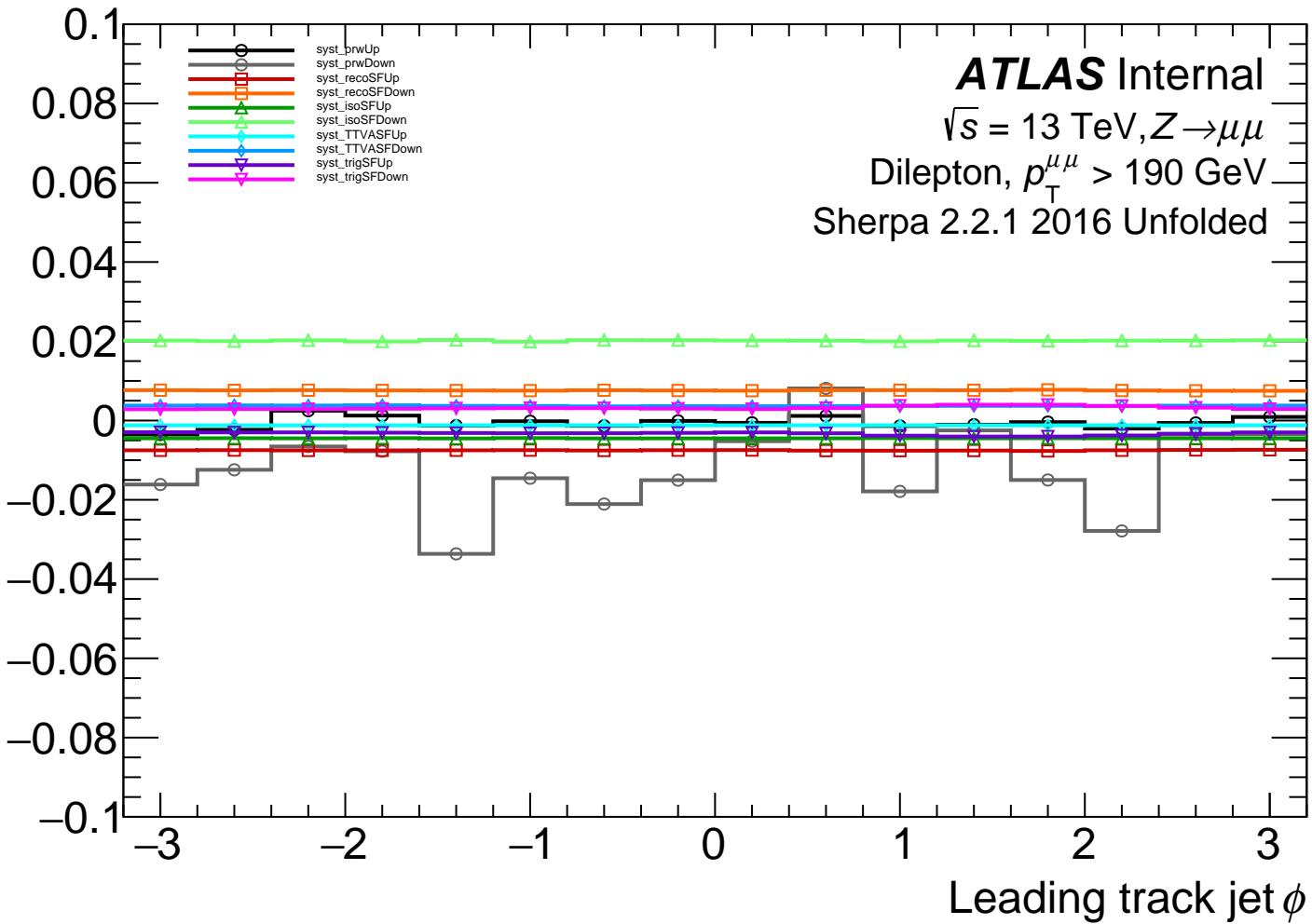


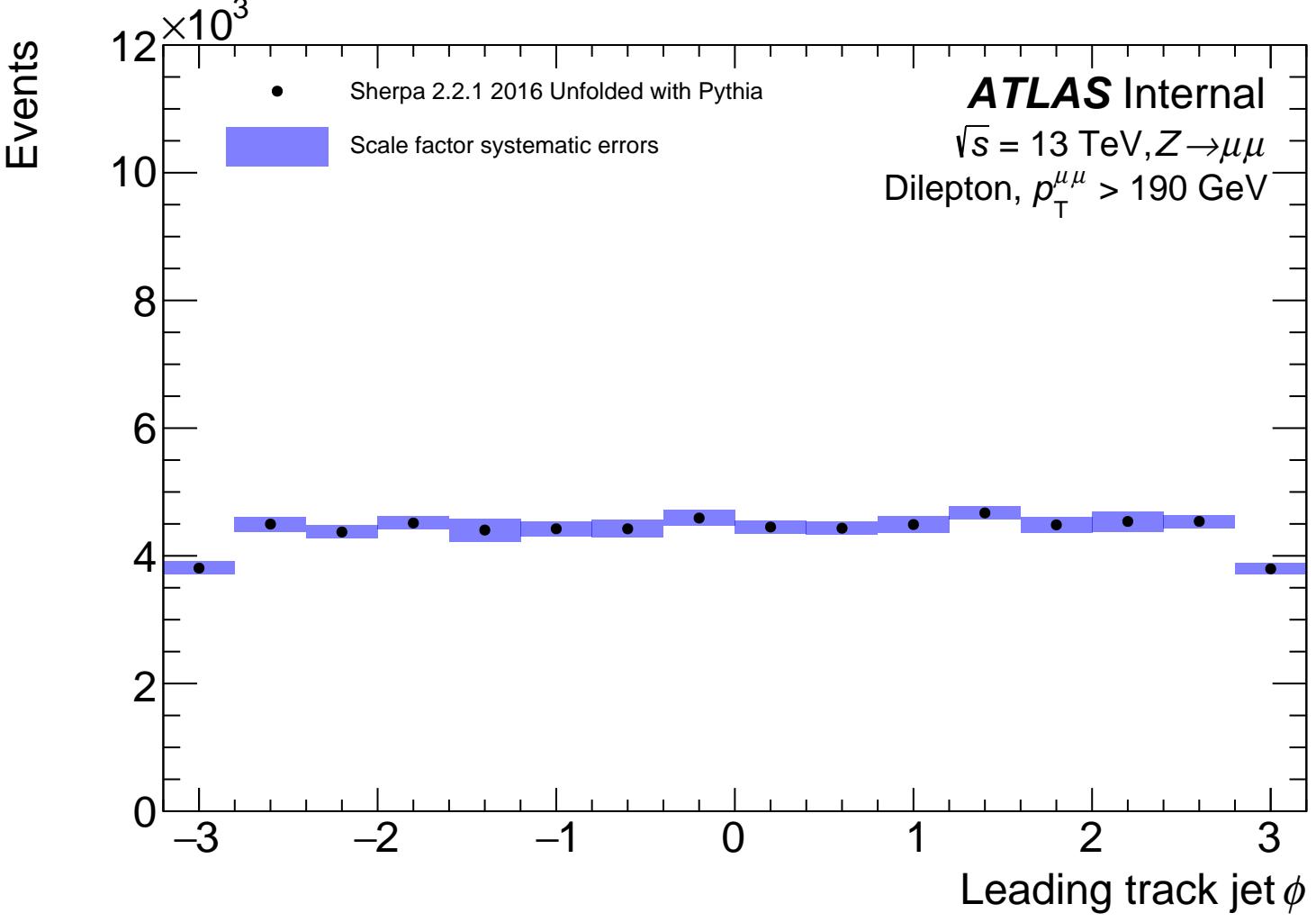
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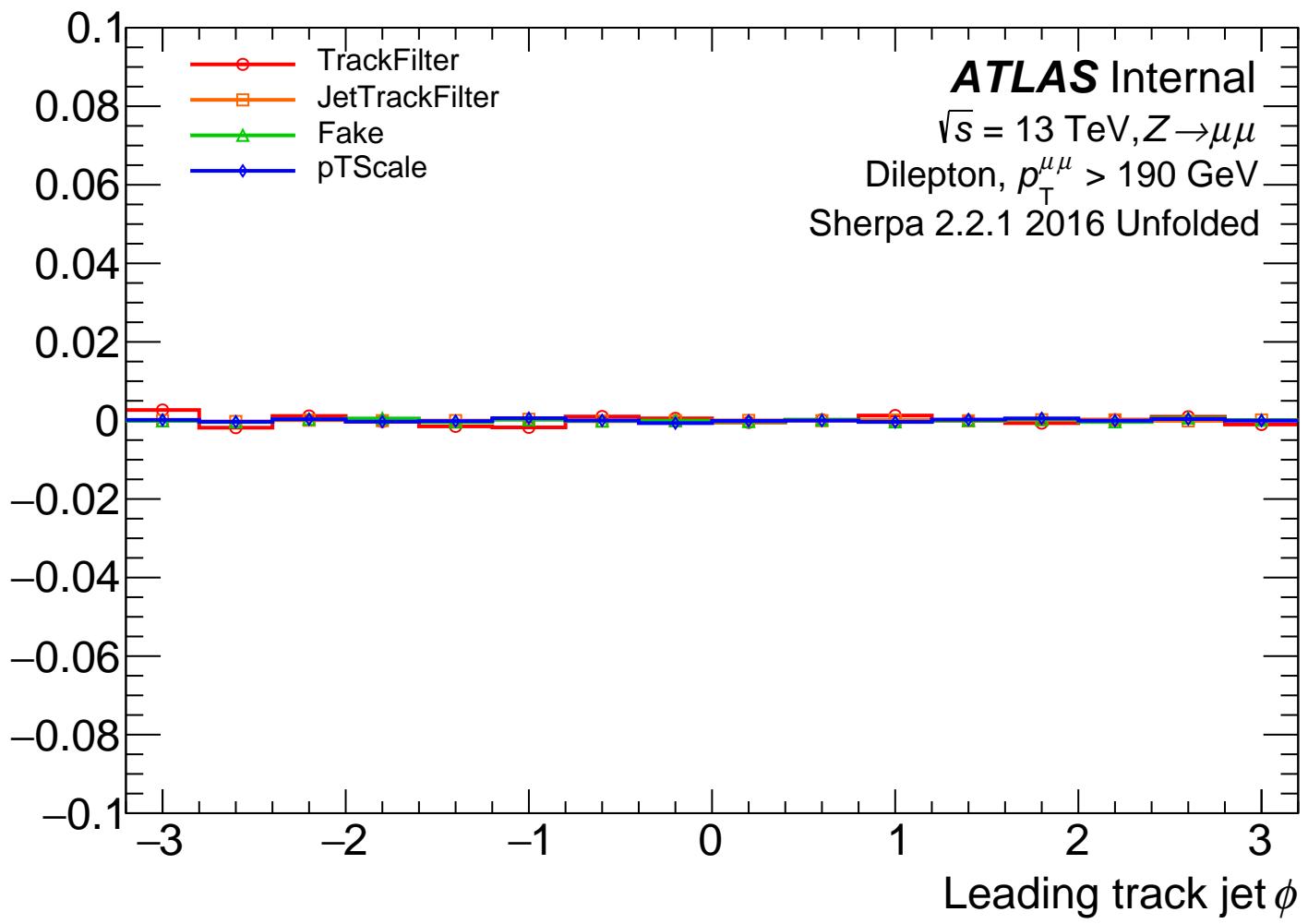
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

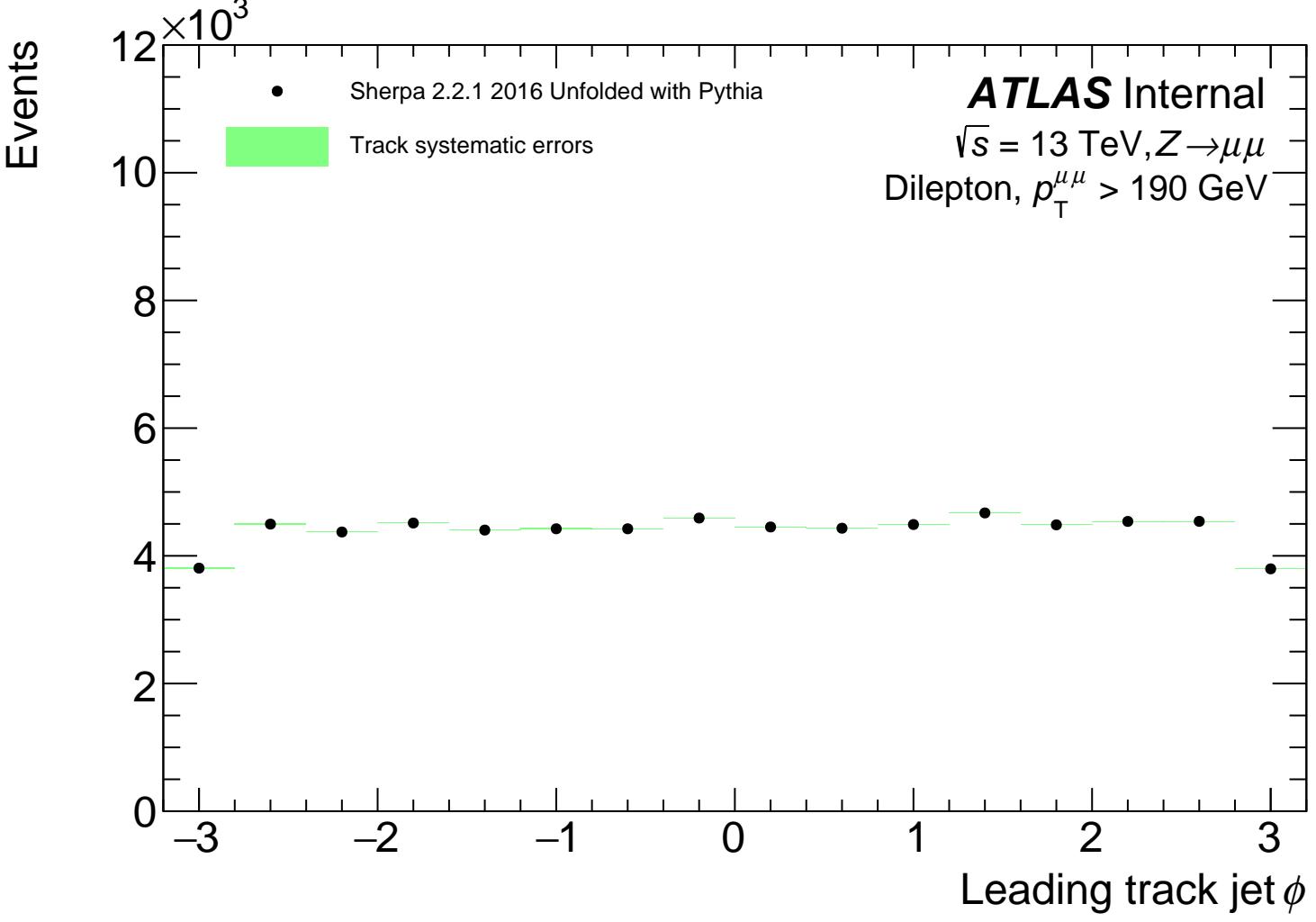
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

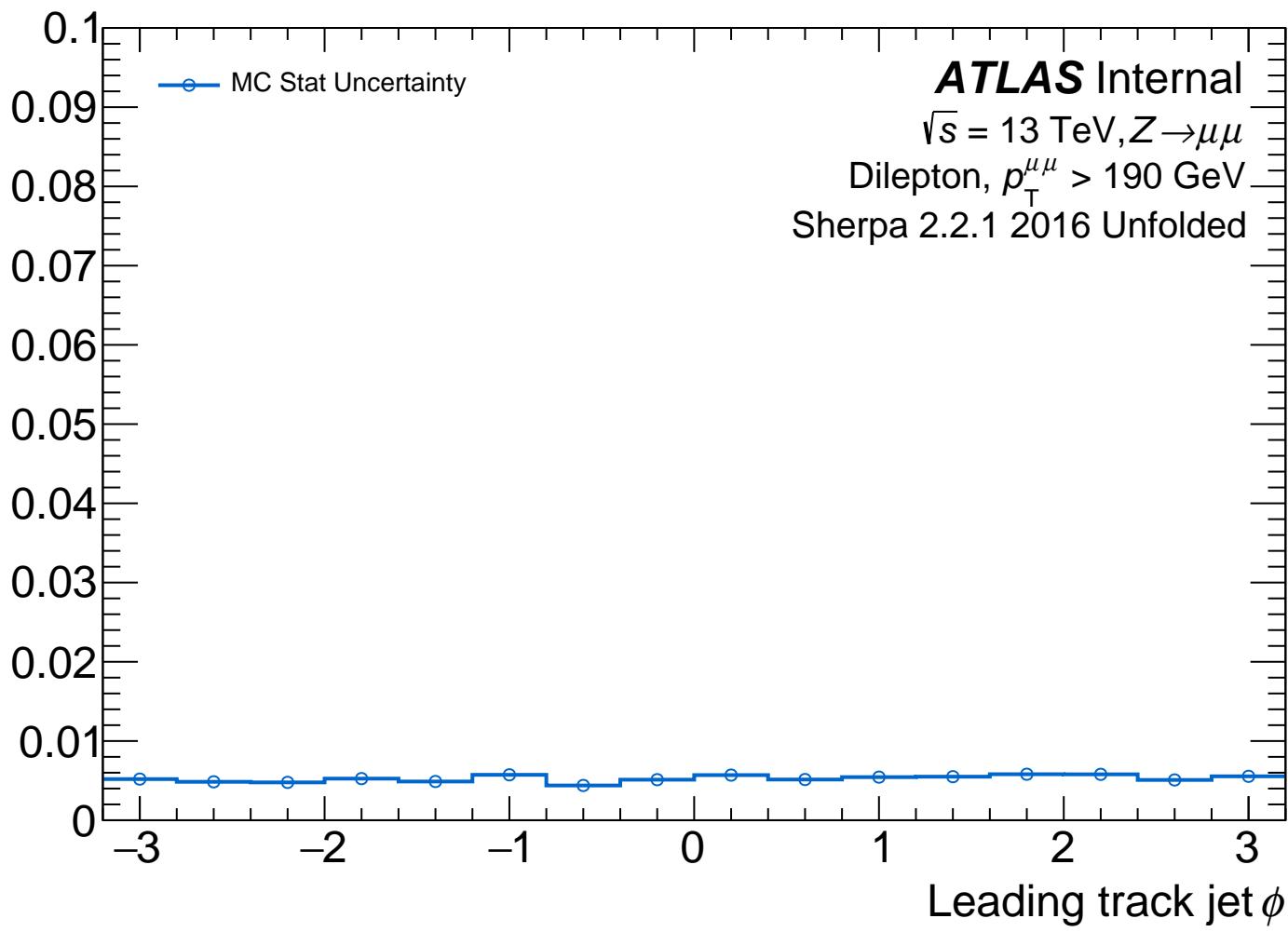
Sherpa 2.2.1 2016 Unfolded

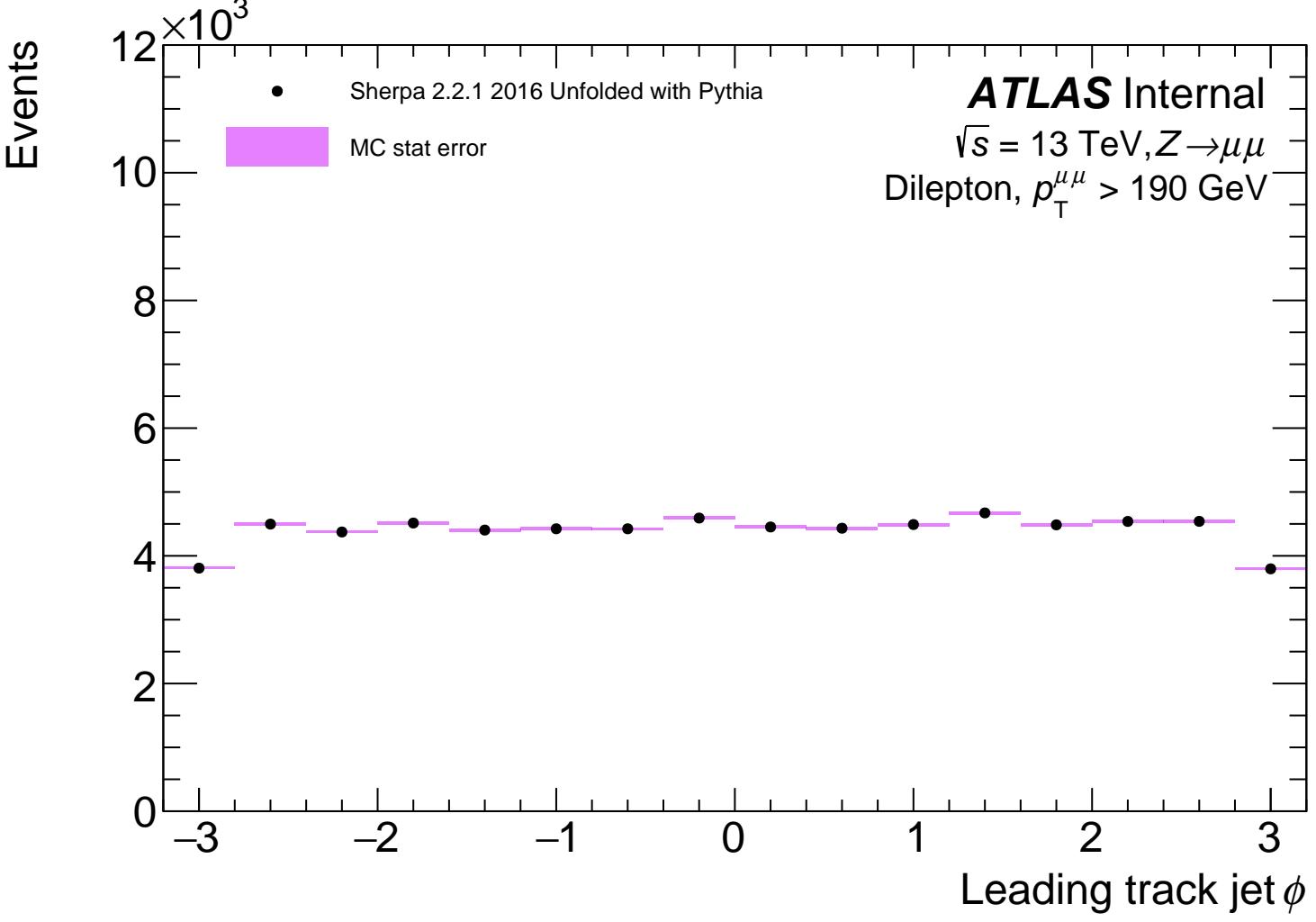


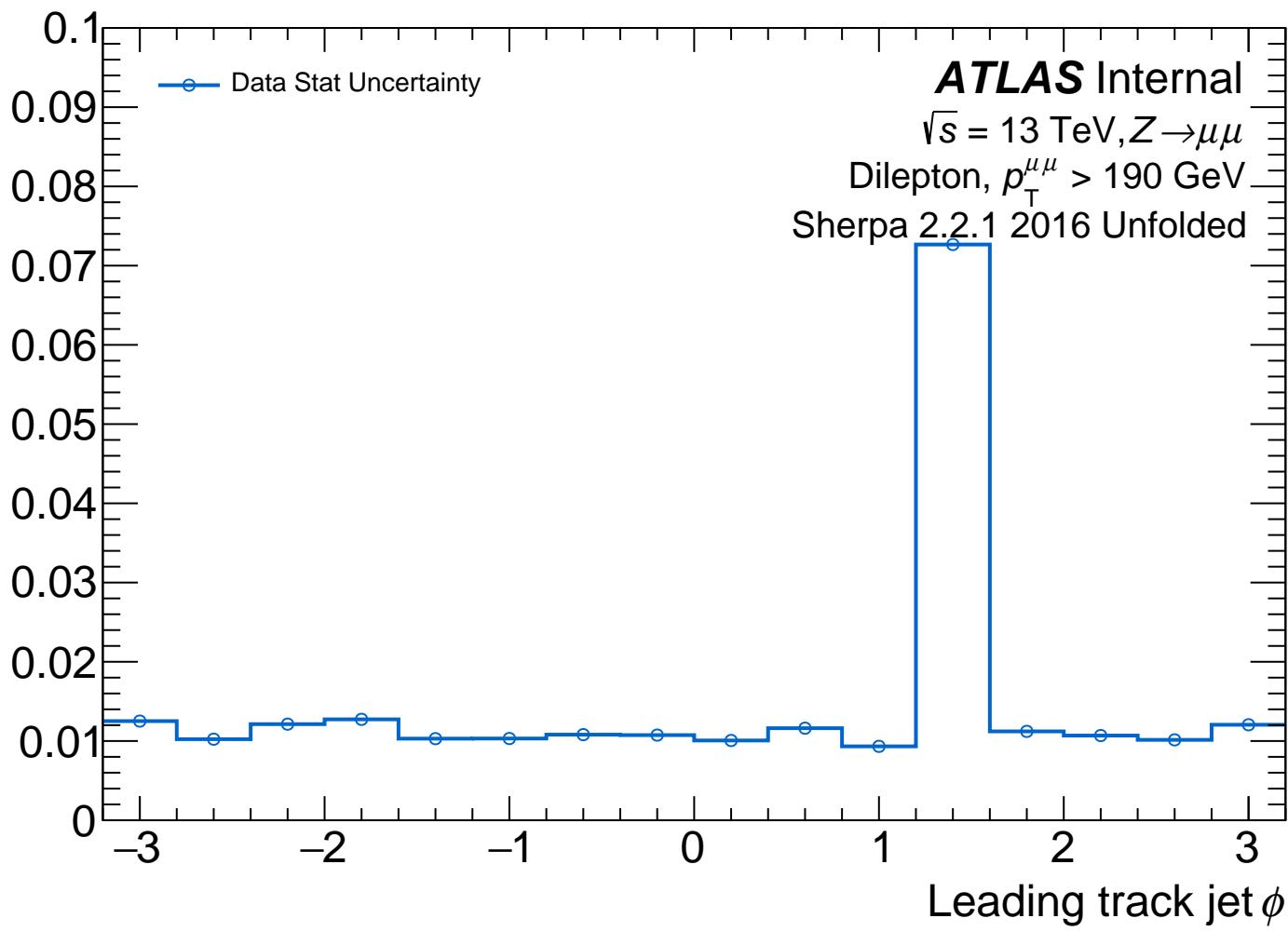


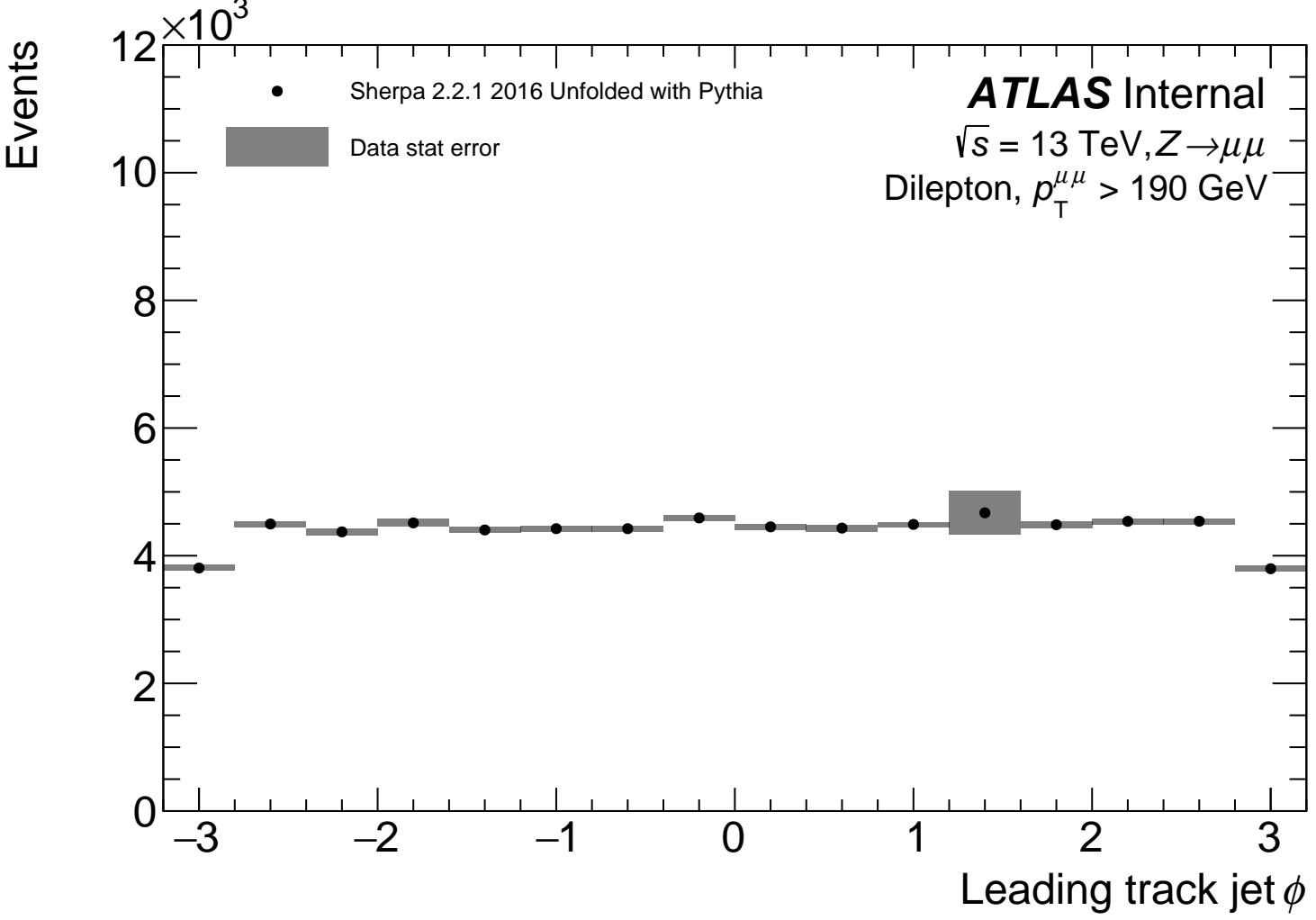


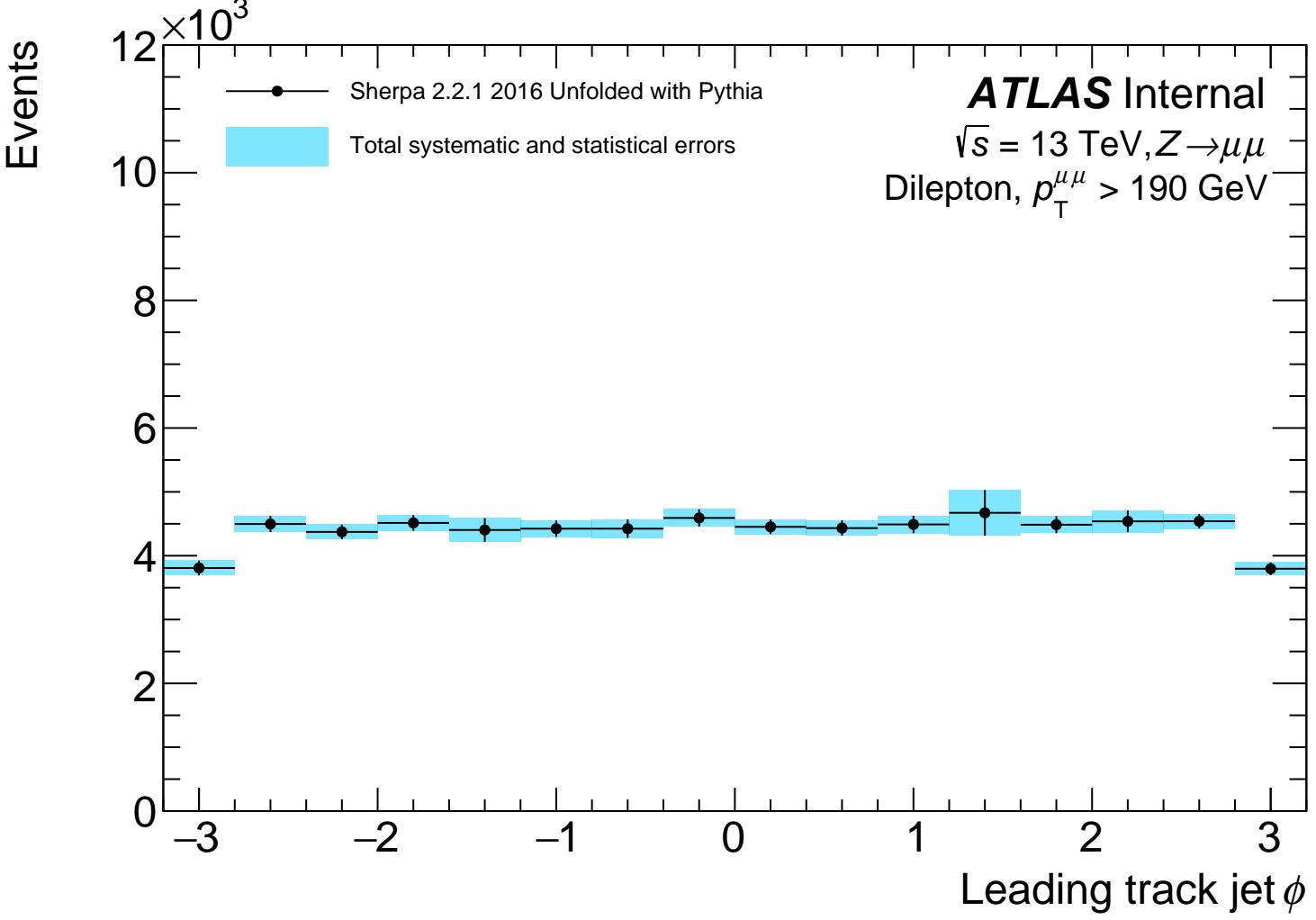


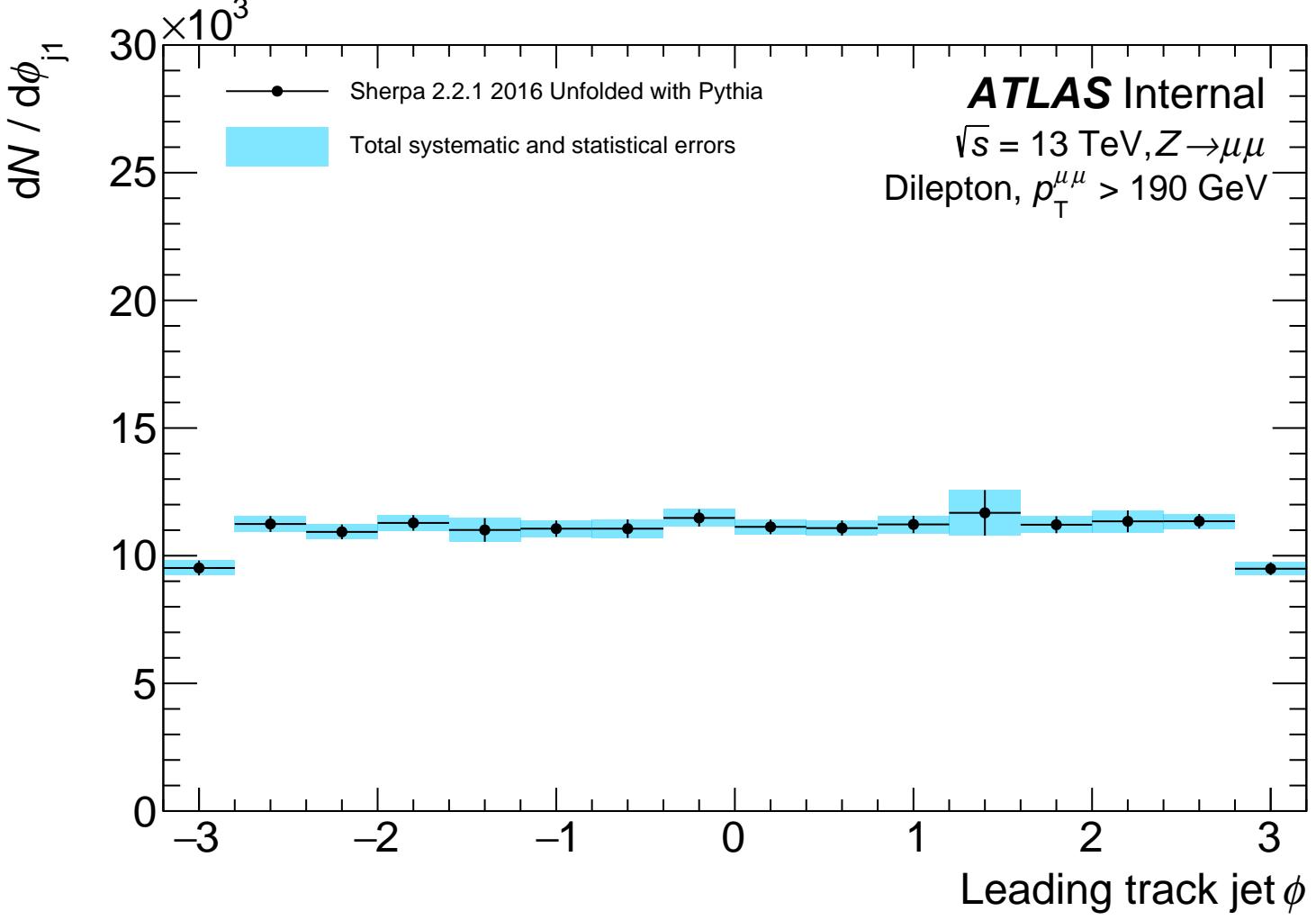


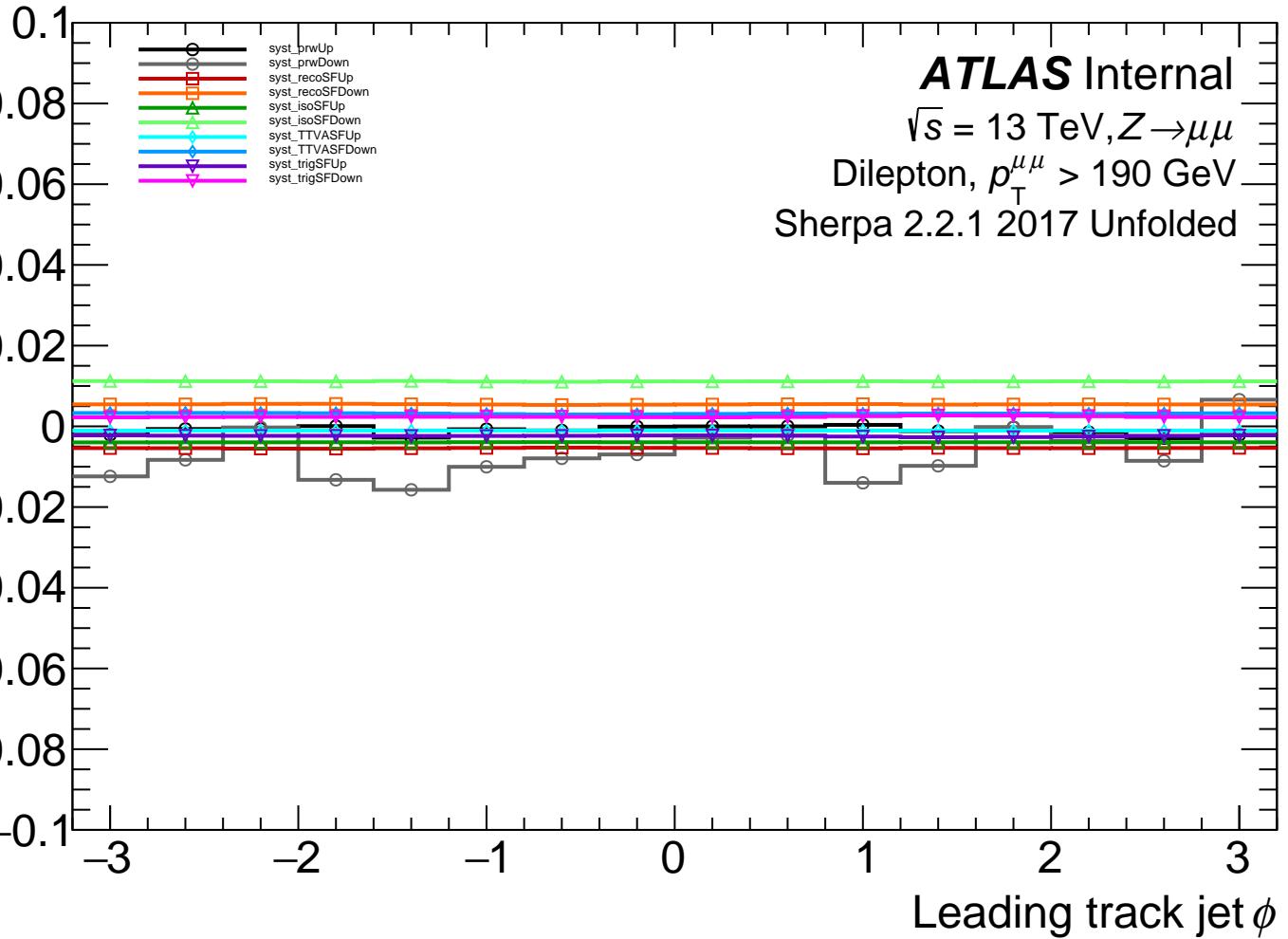


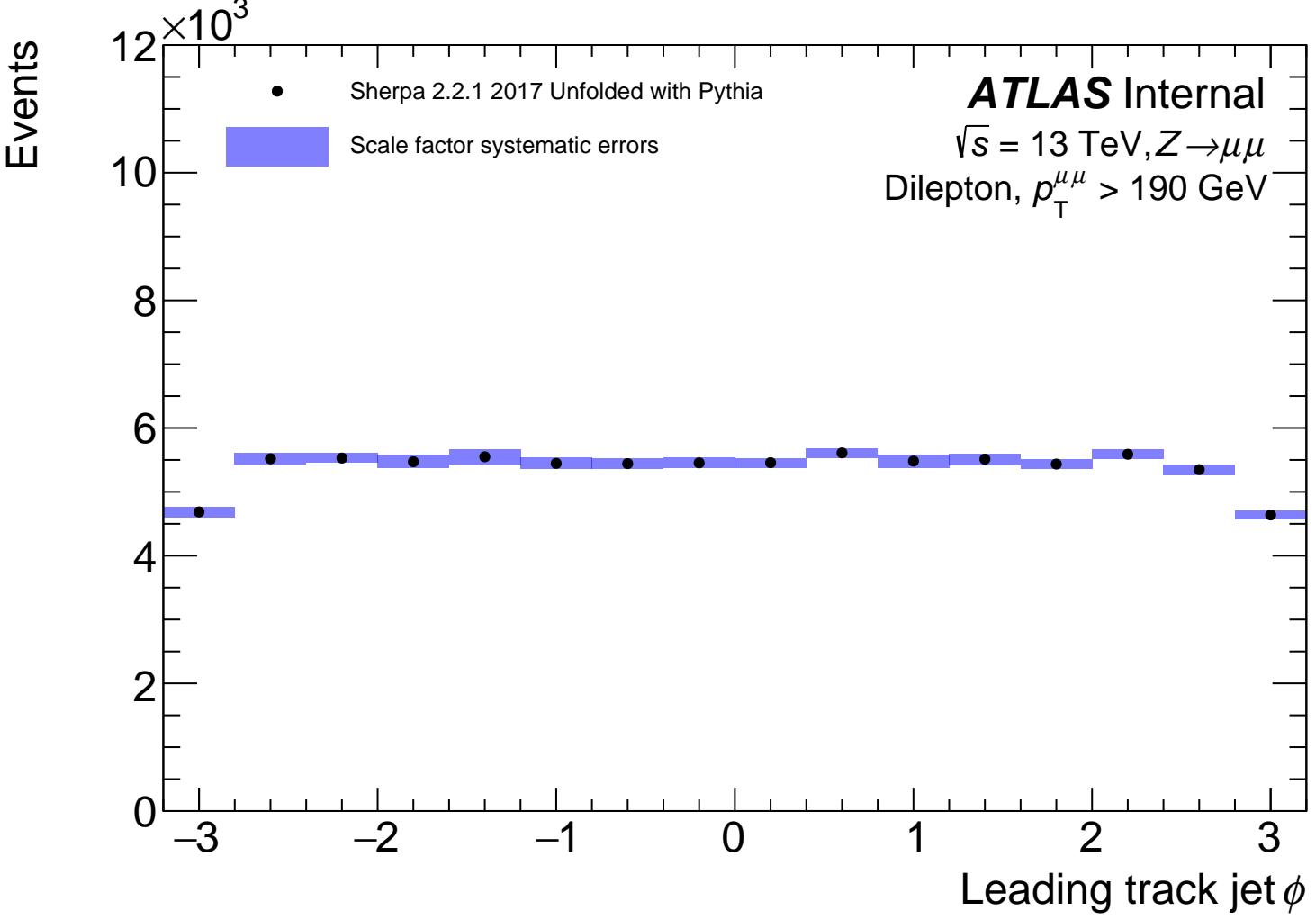


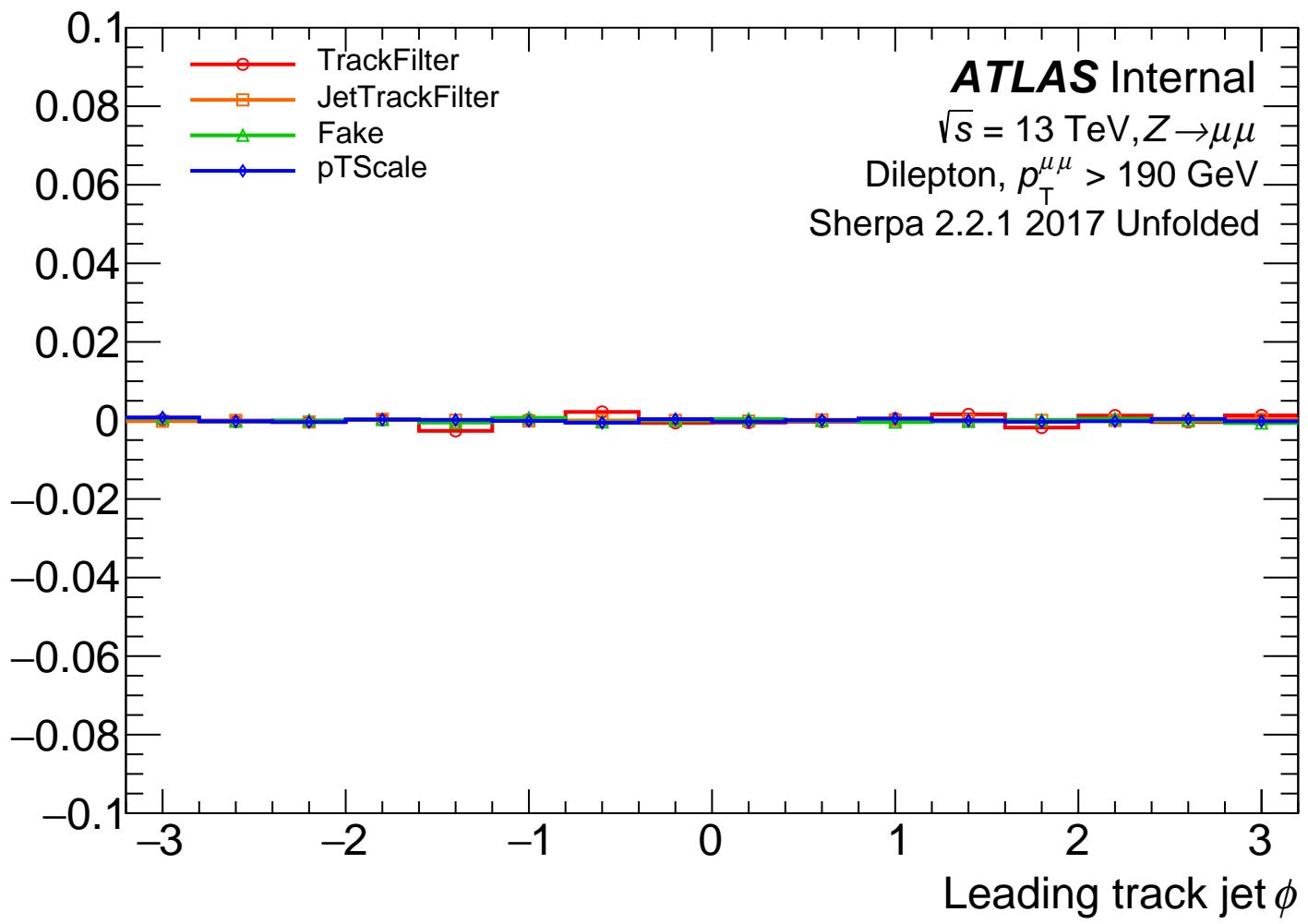


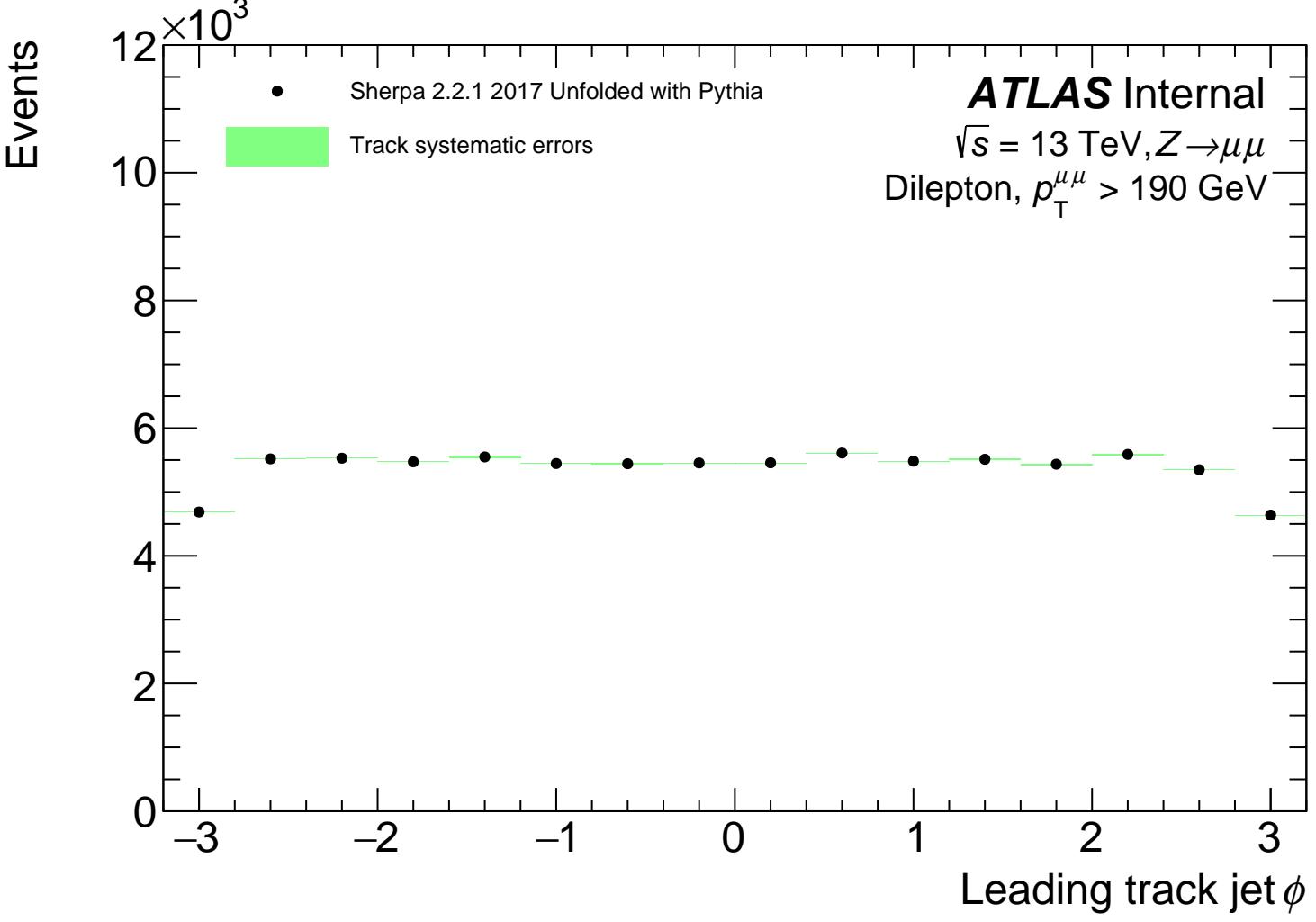


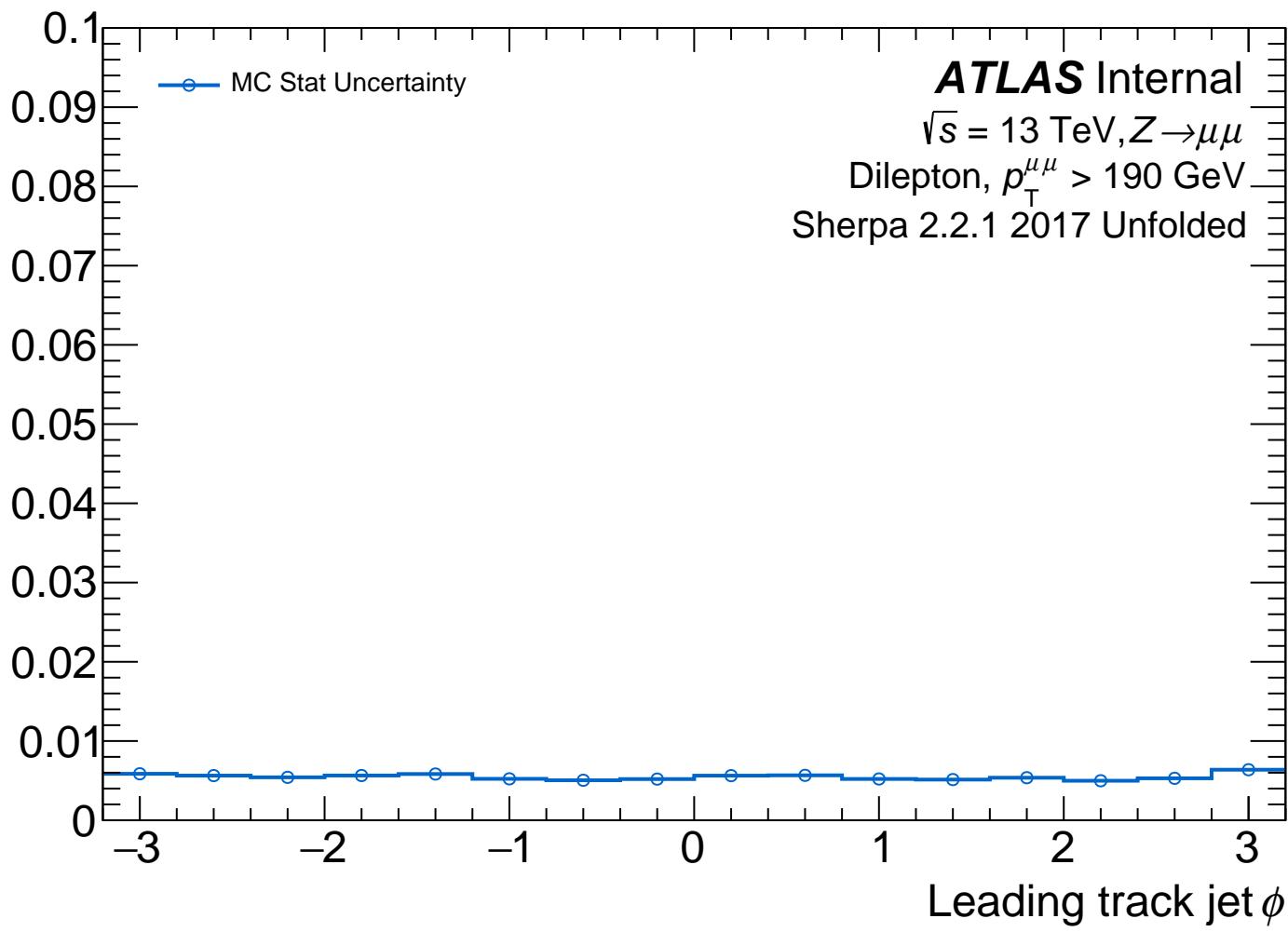


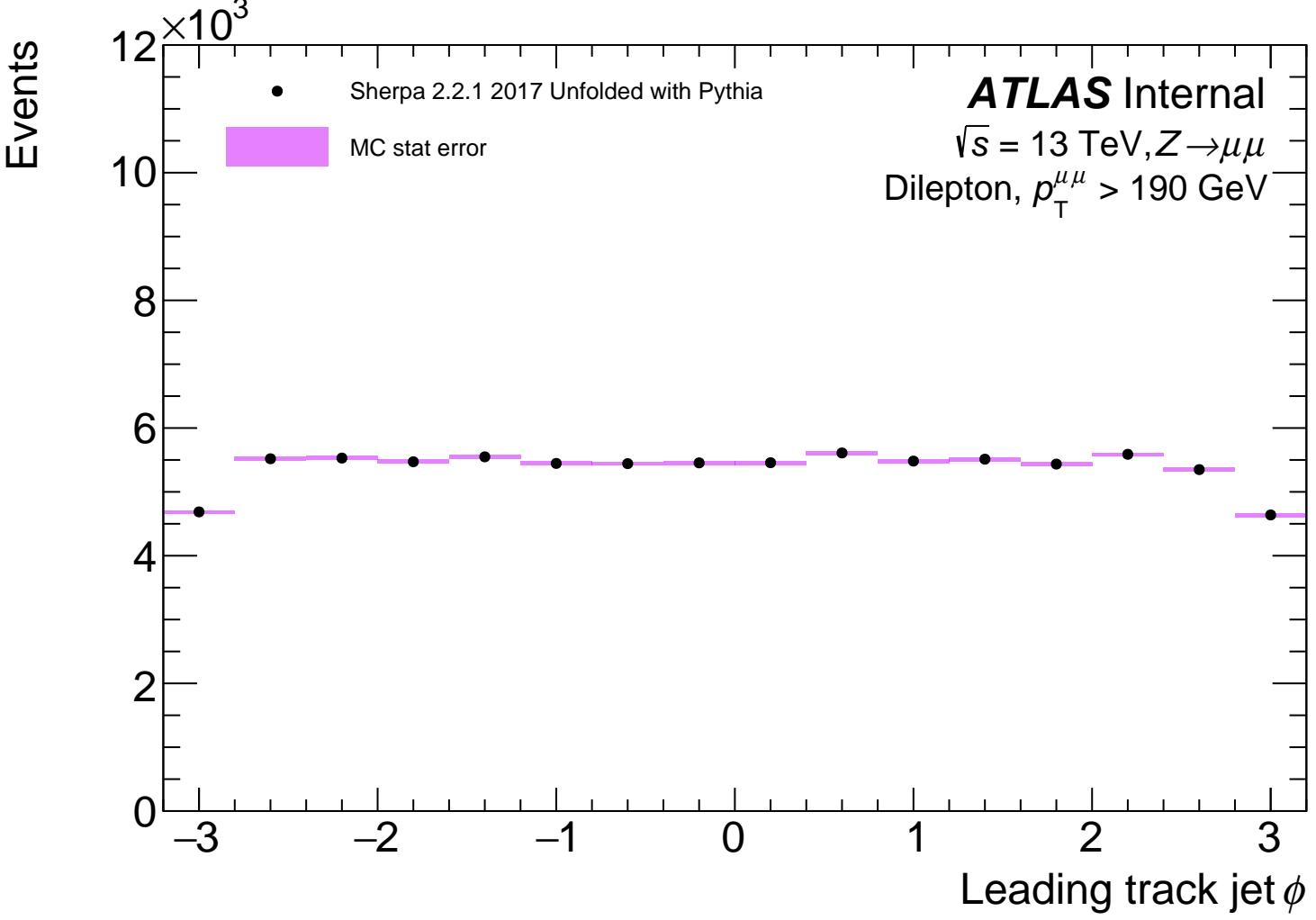


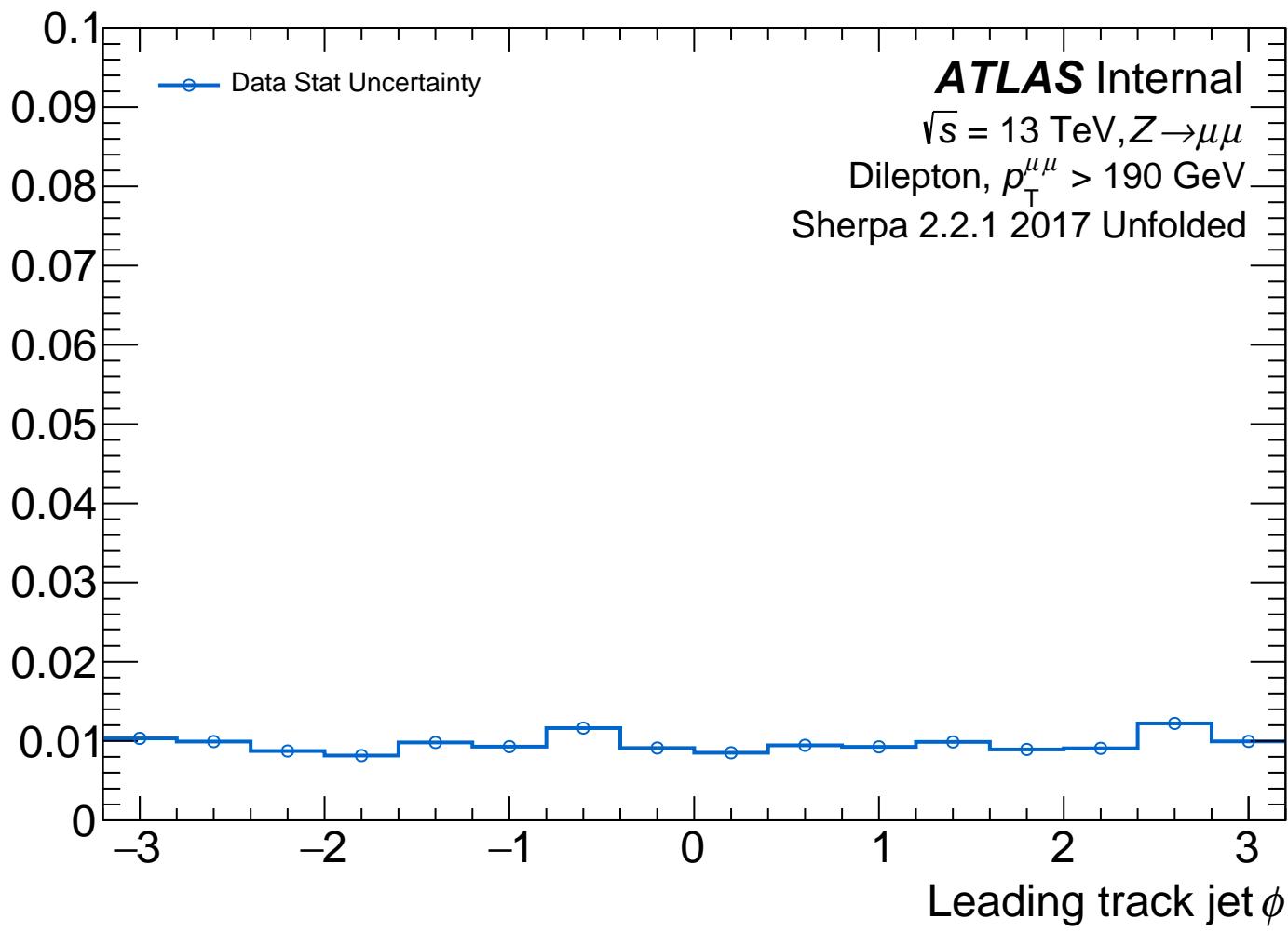


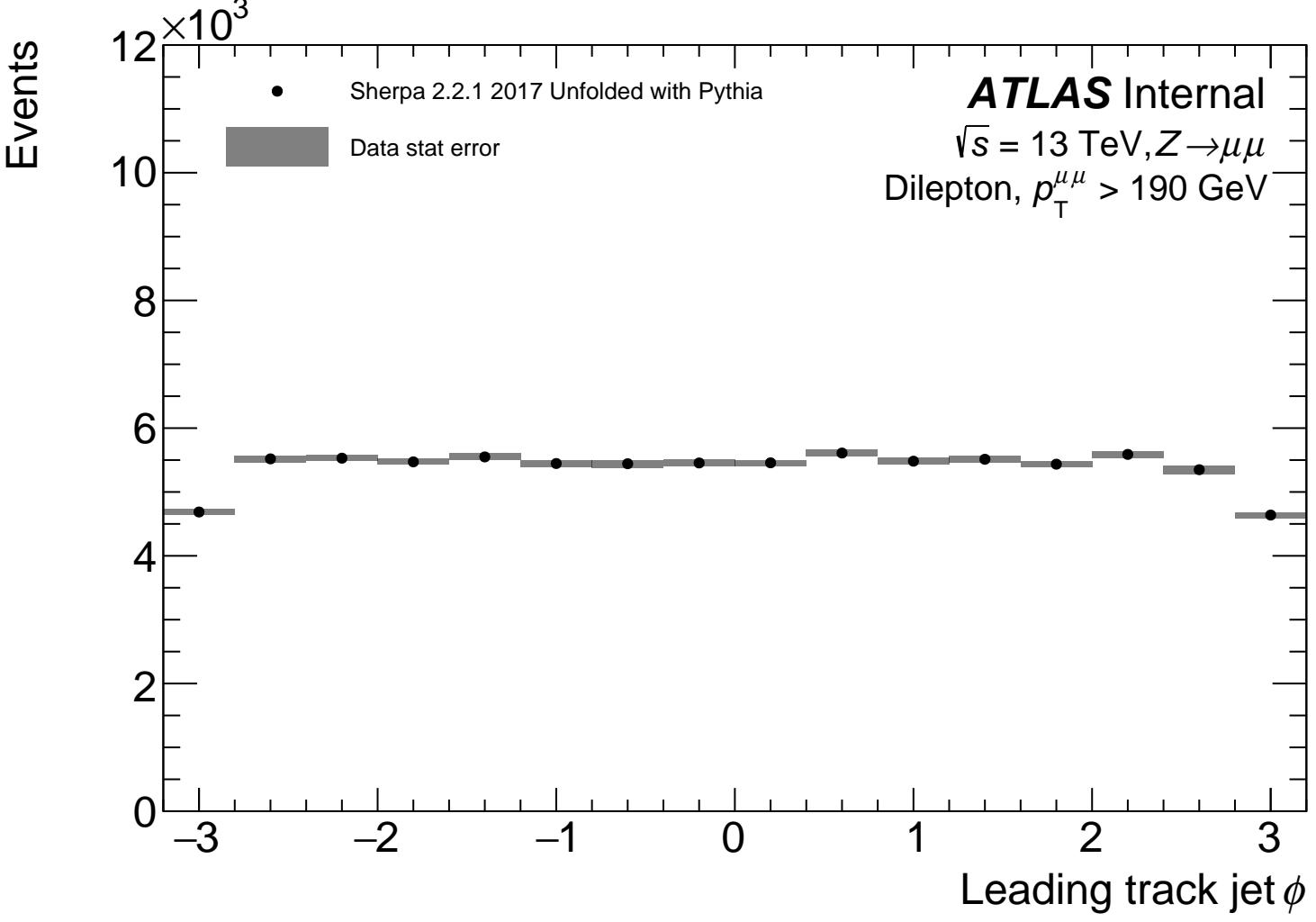


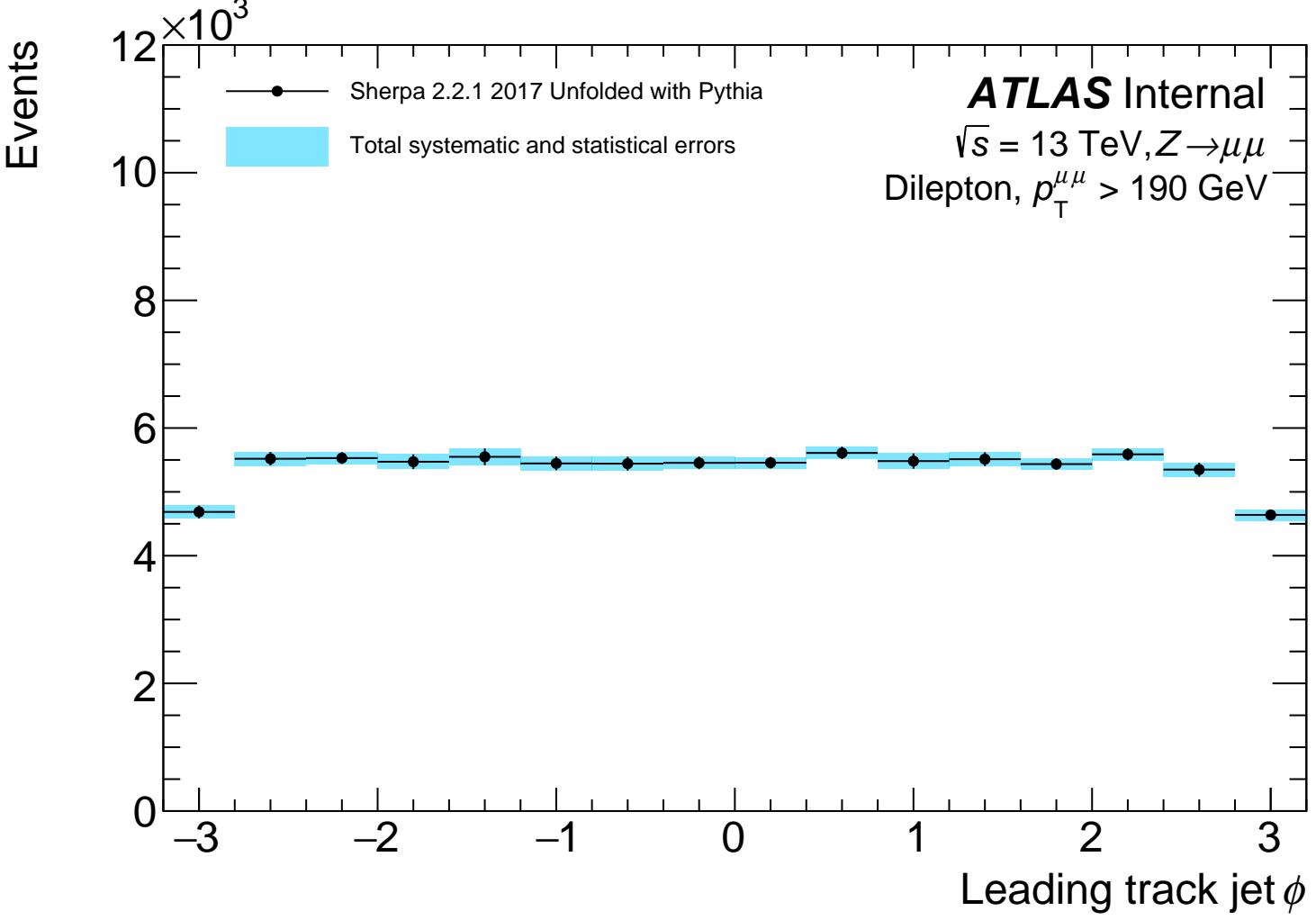


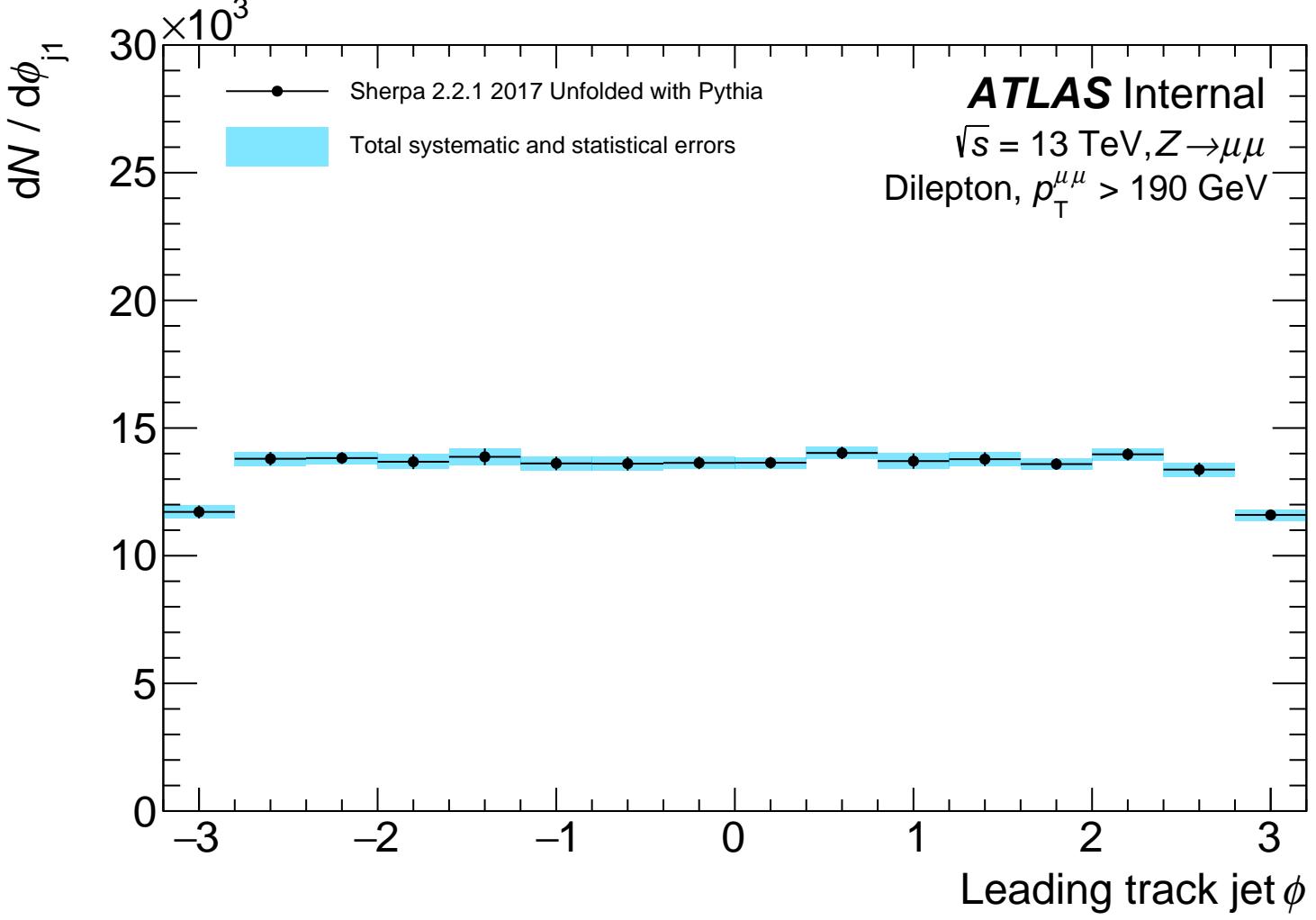


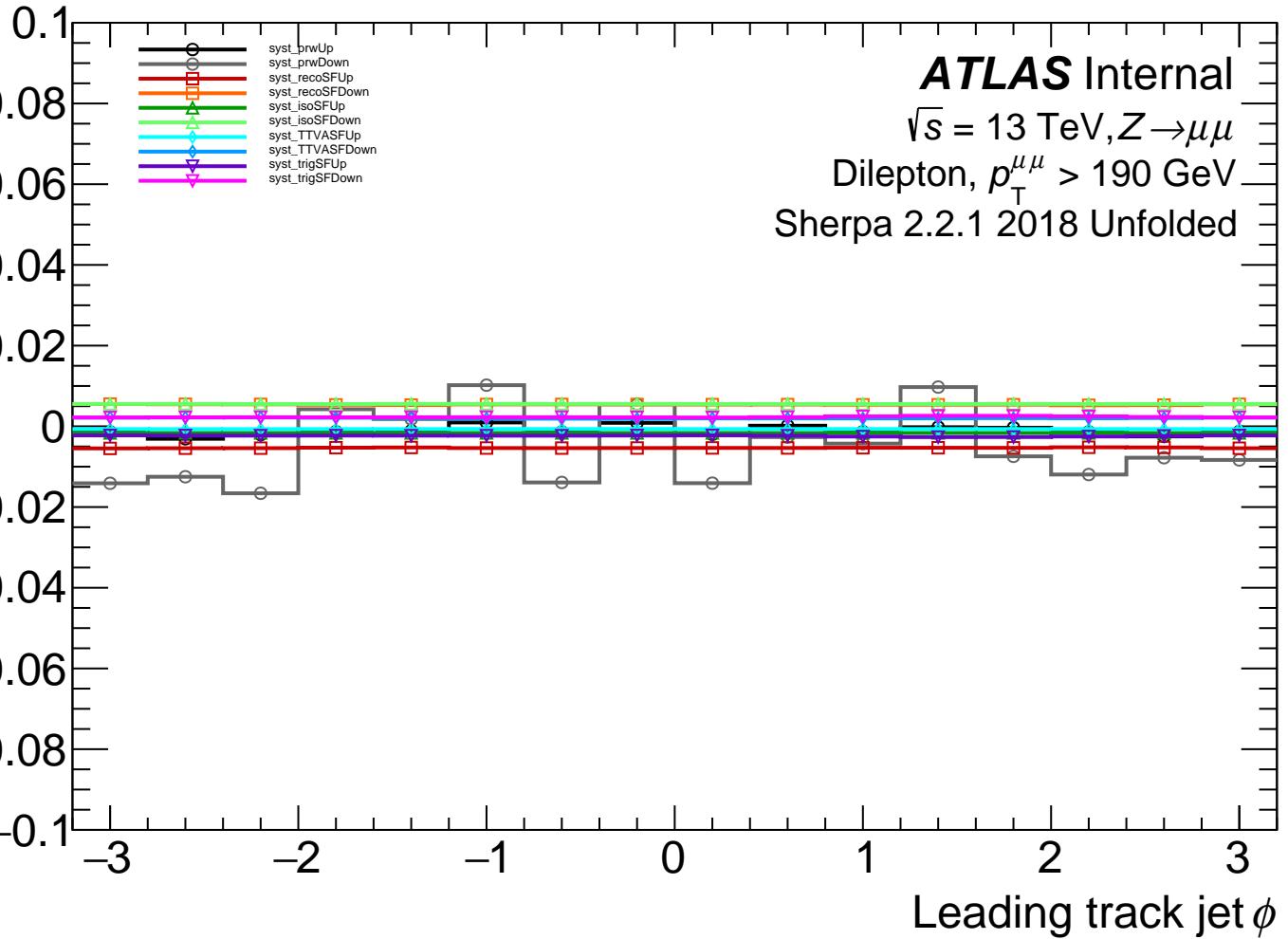


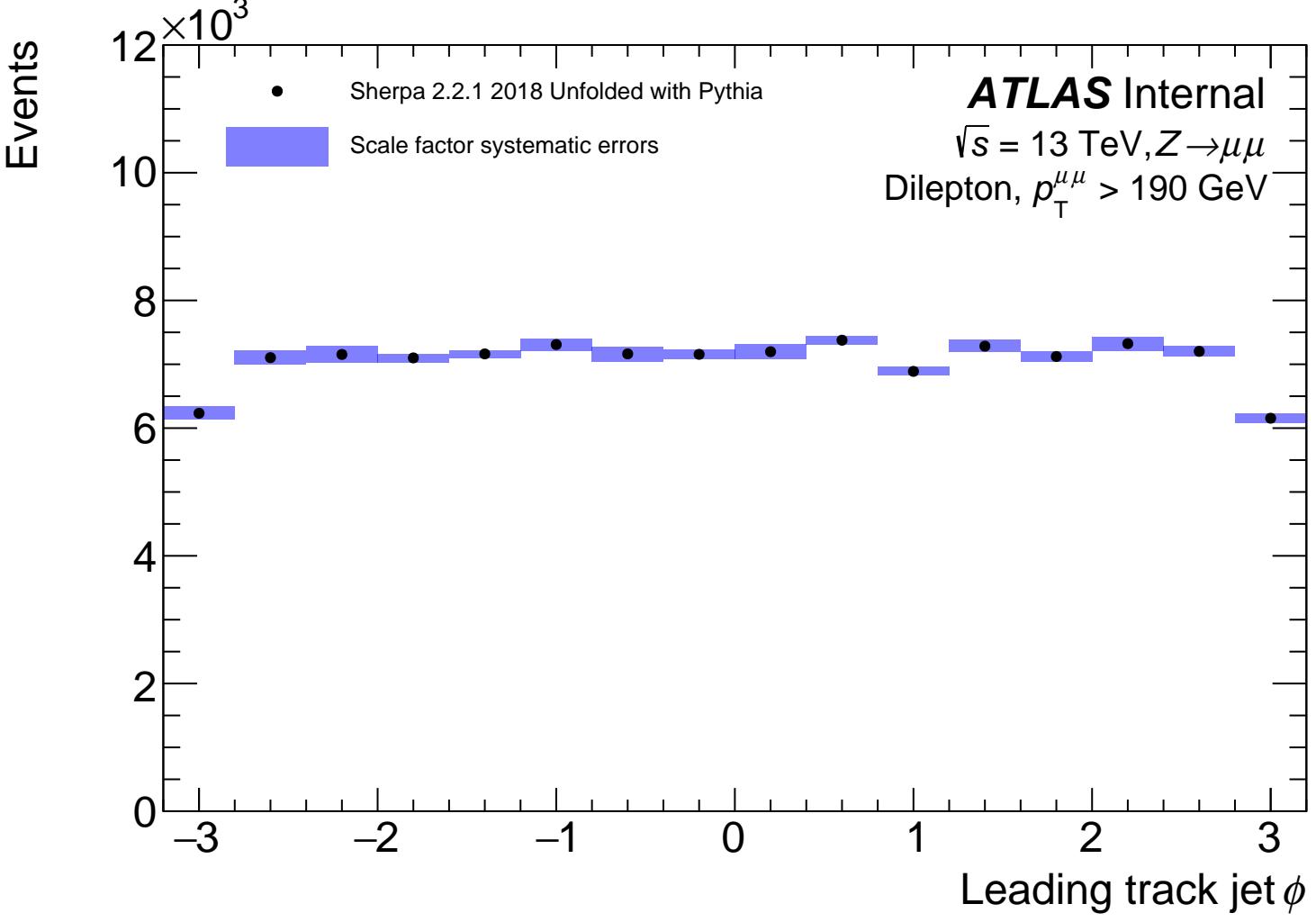


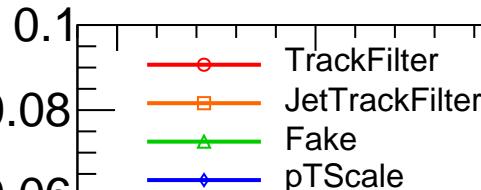




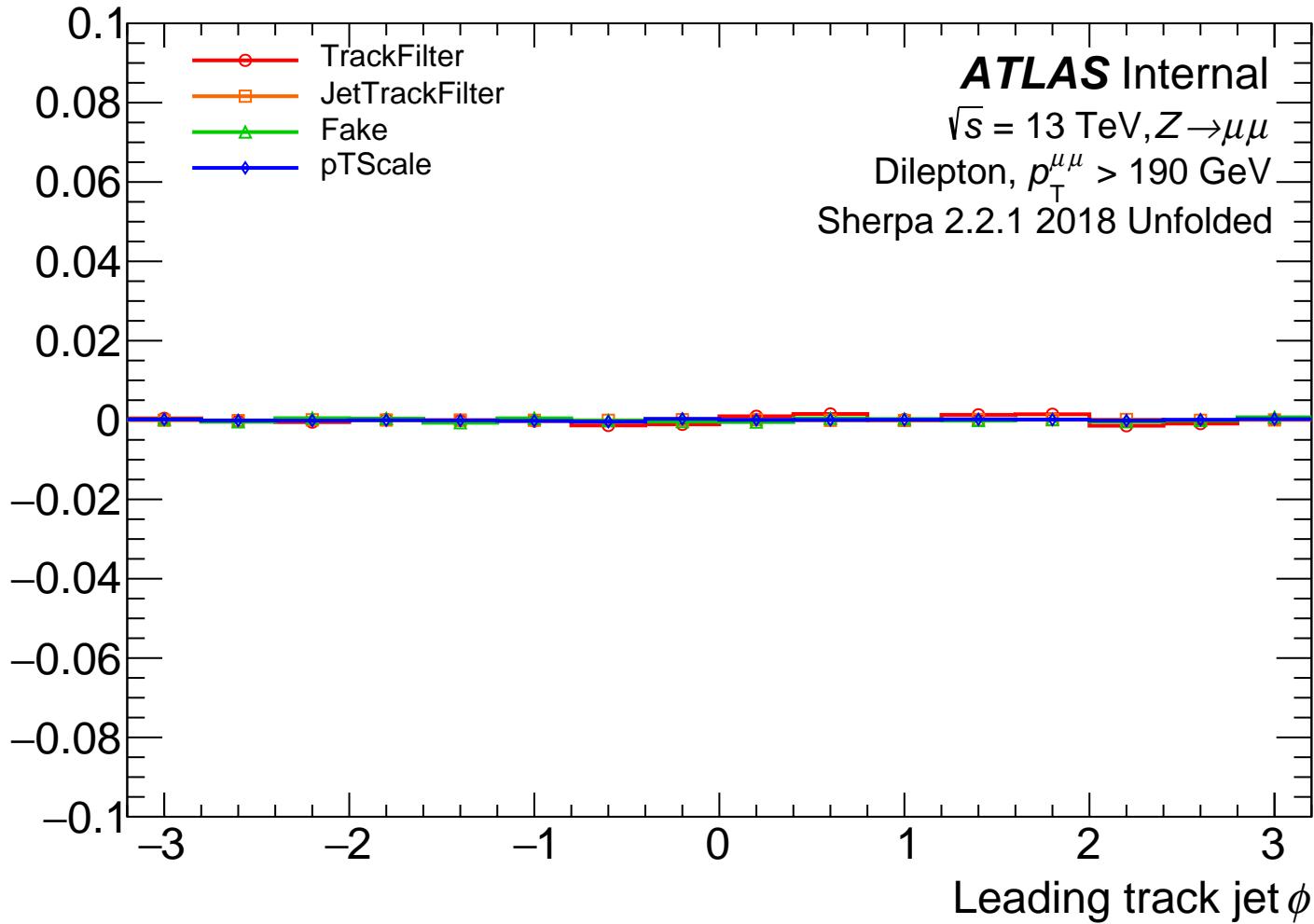


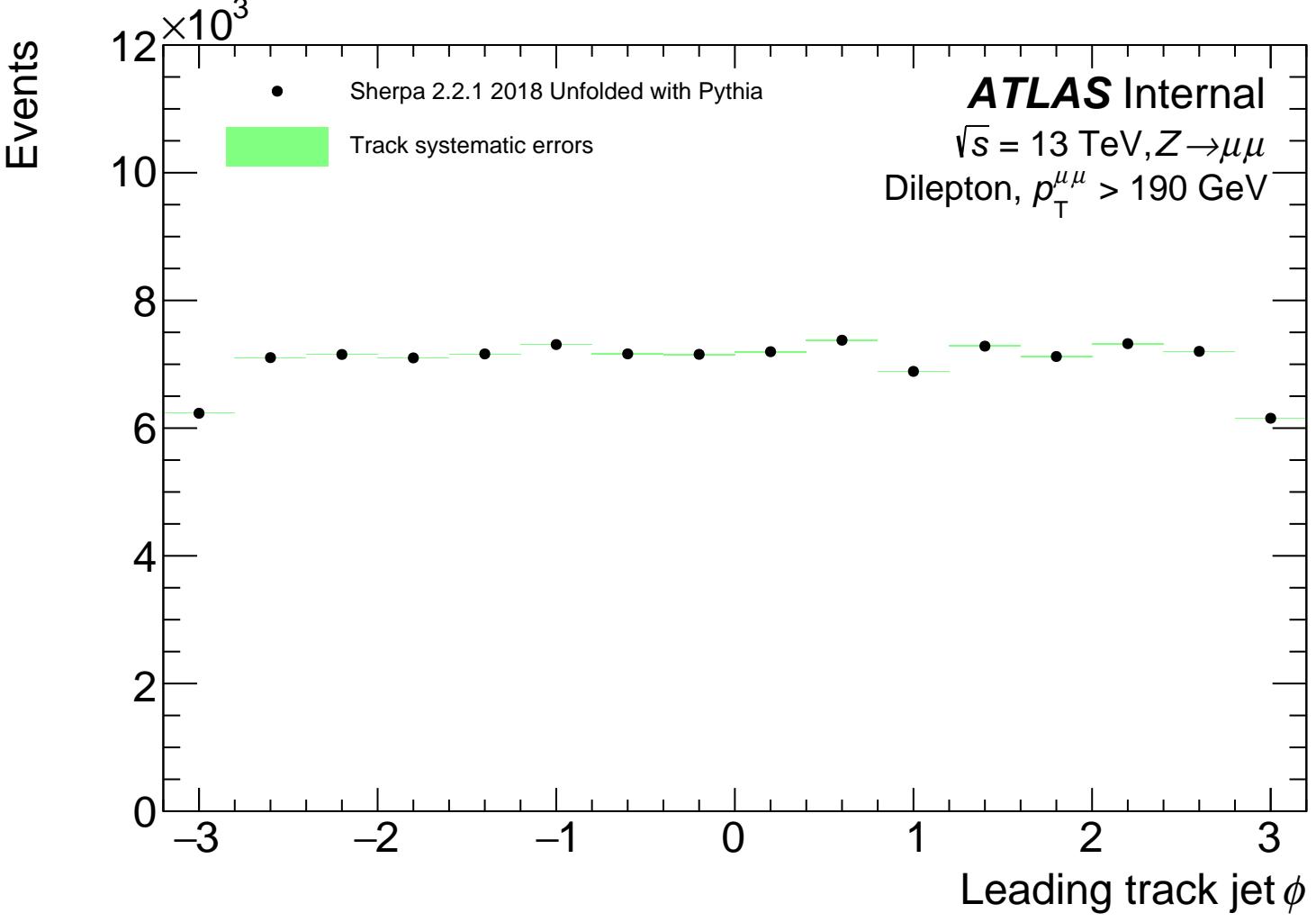


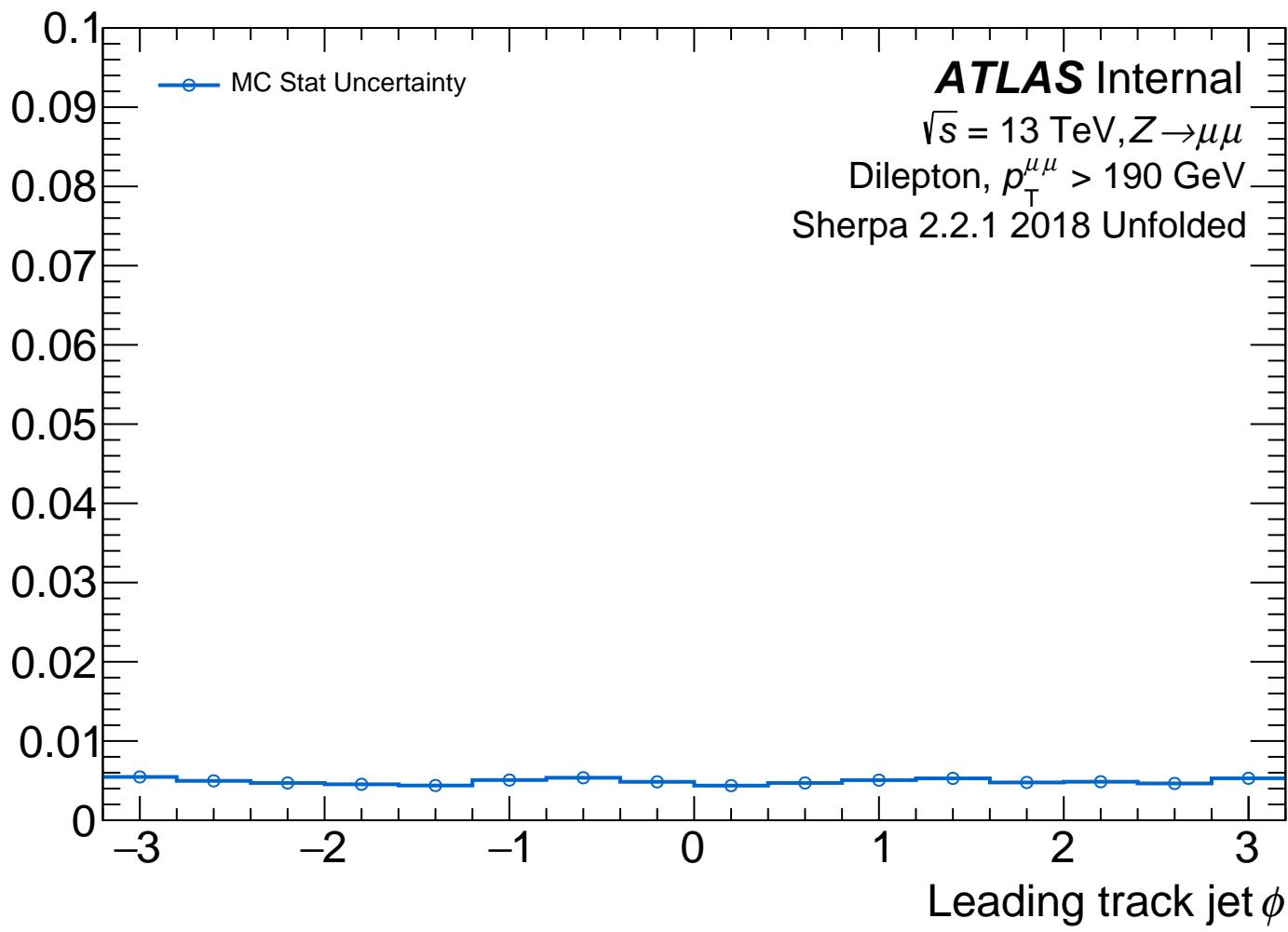


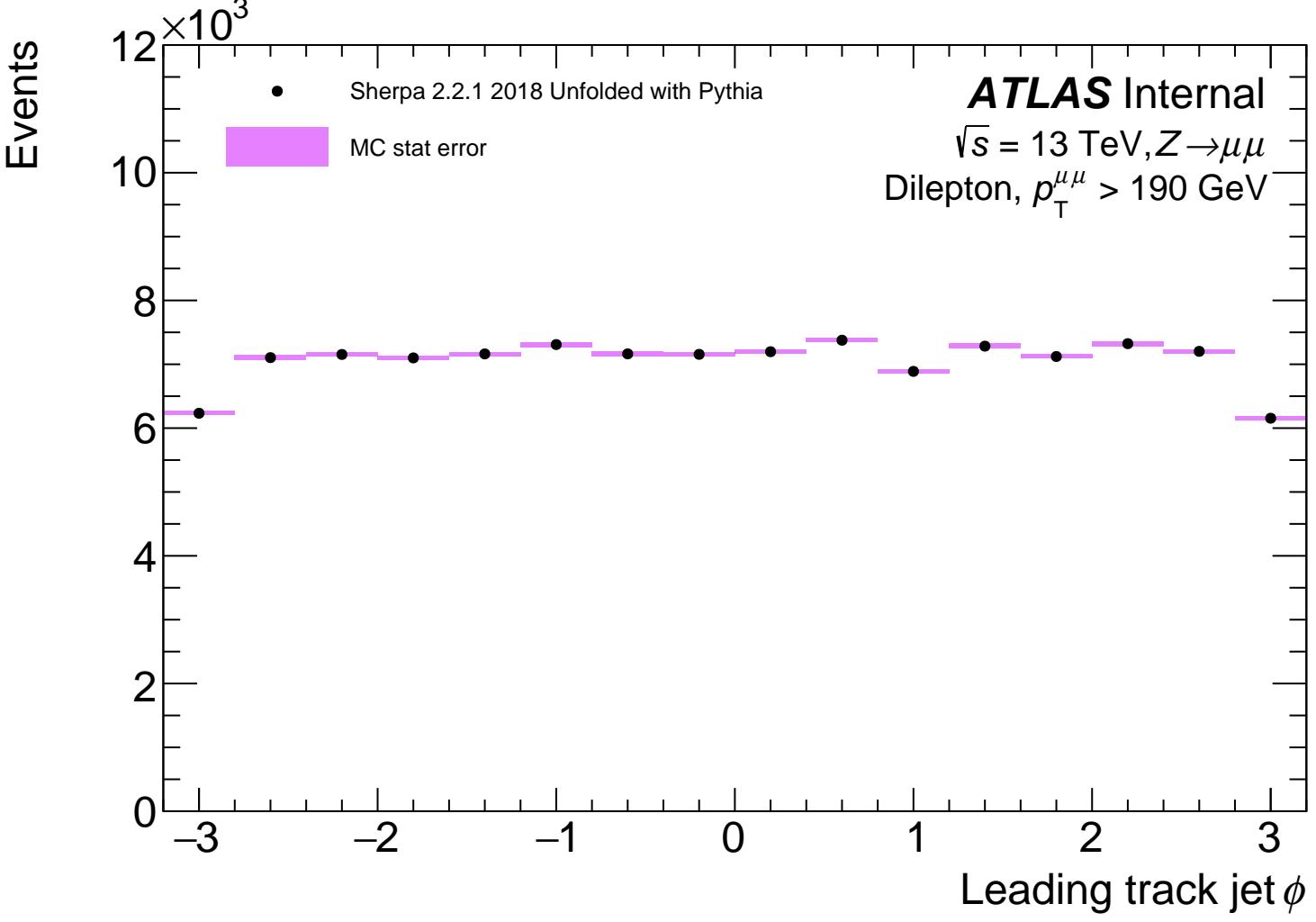


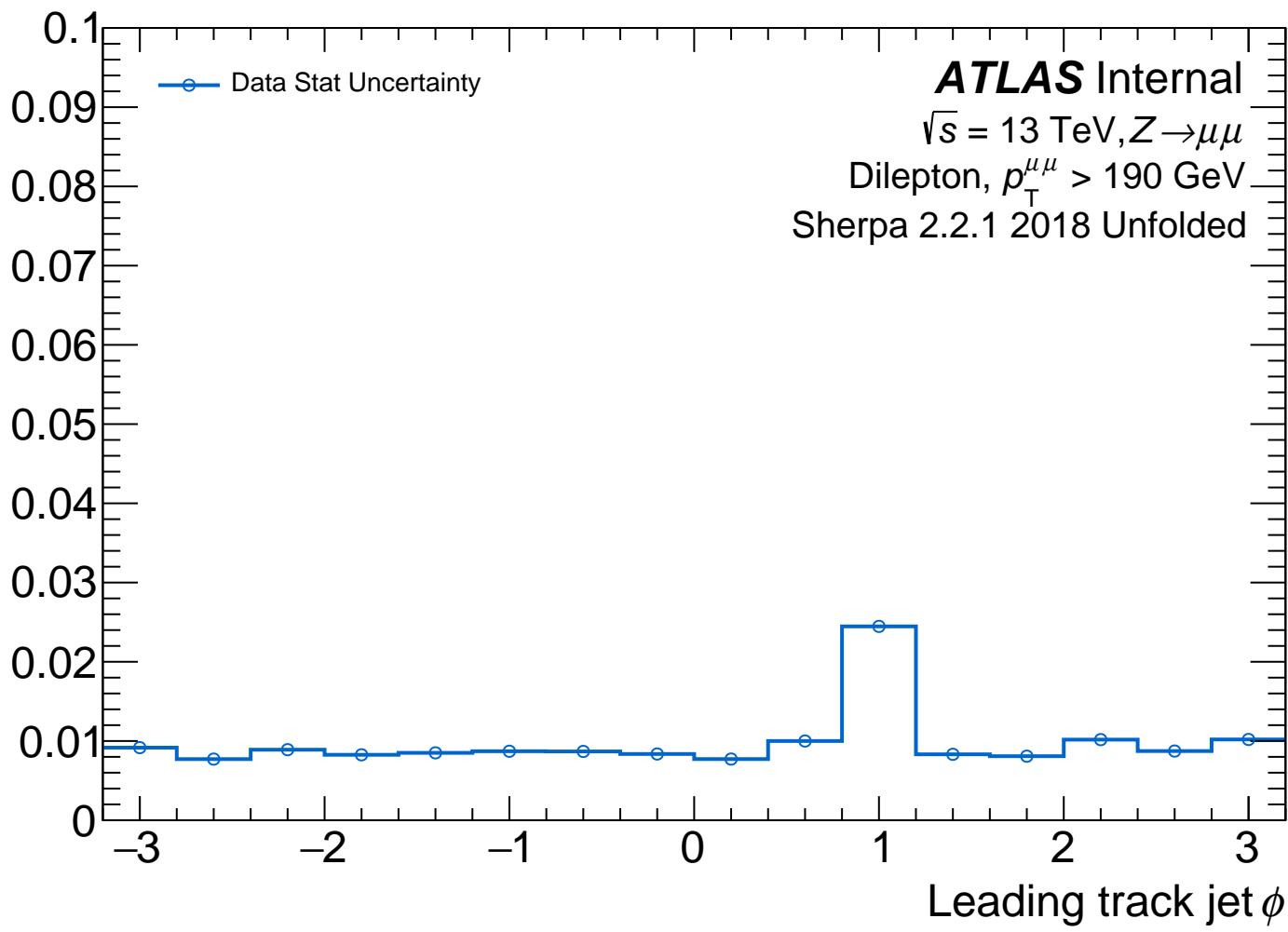
**ATLAS Internal**  
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$   
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$   
Sherpa 2.2.1 2018 Unfolded

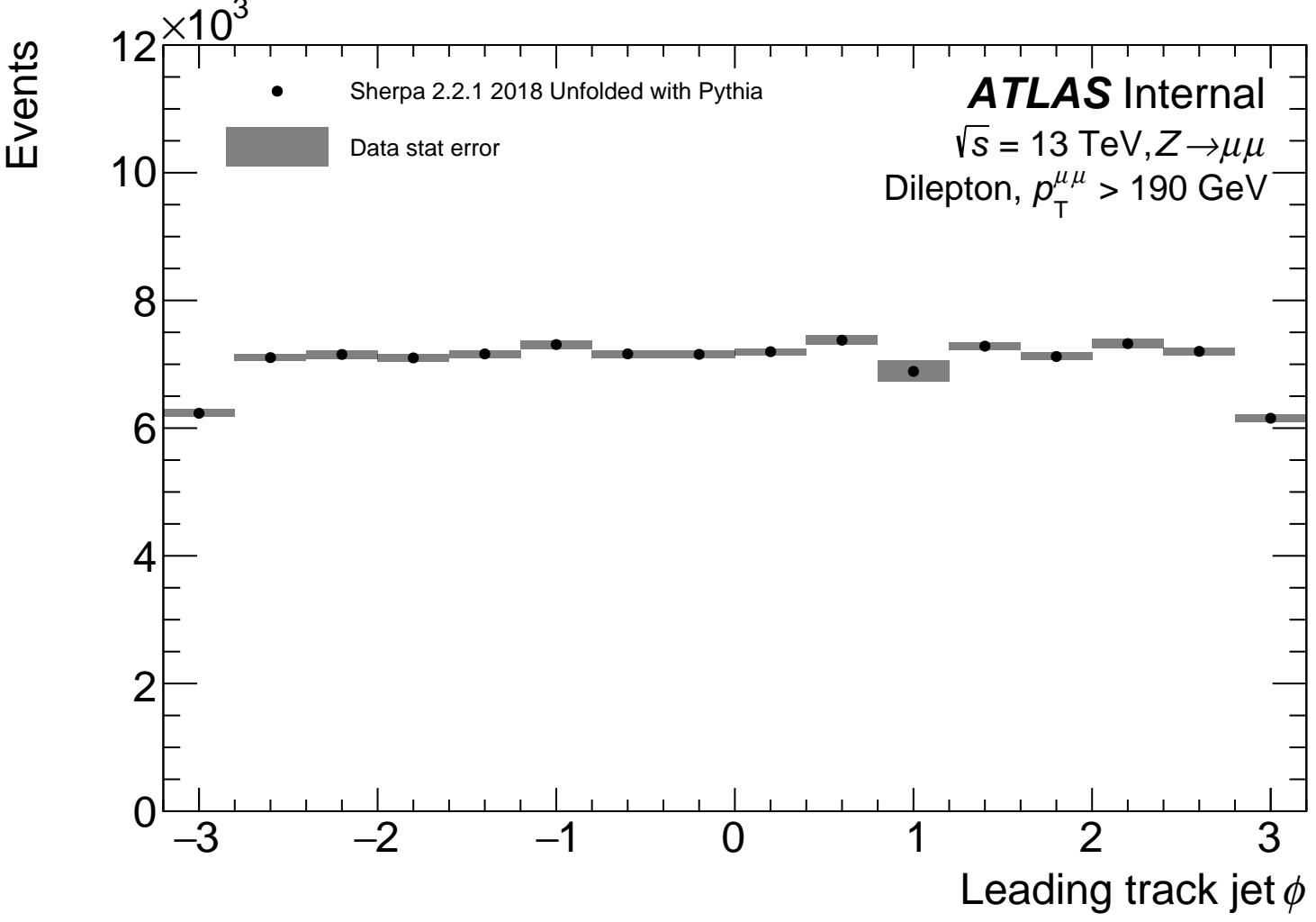


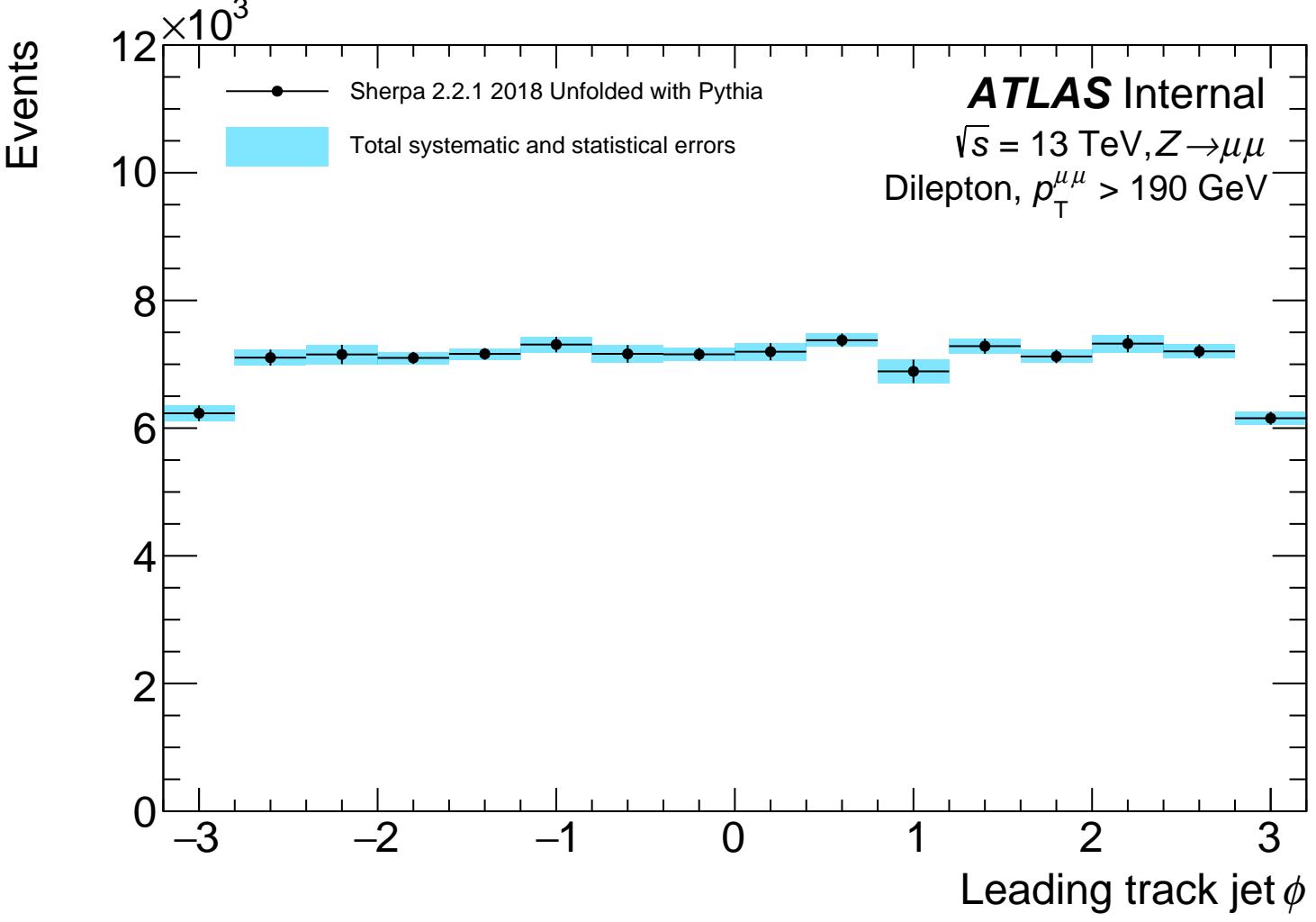


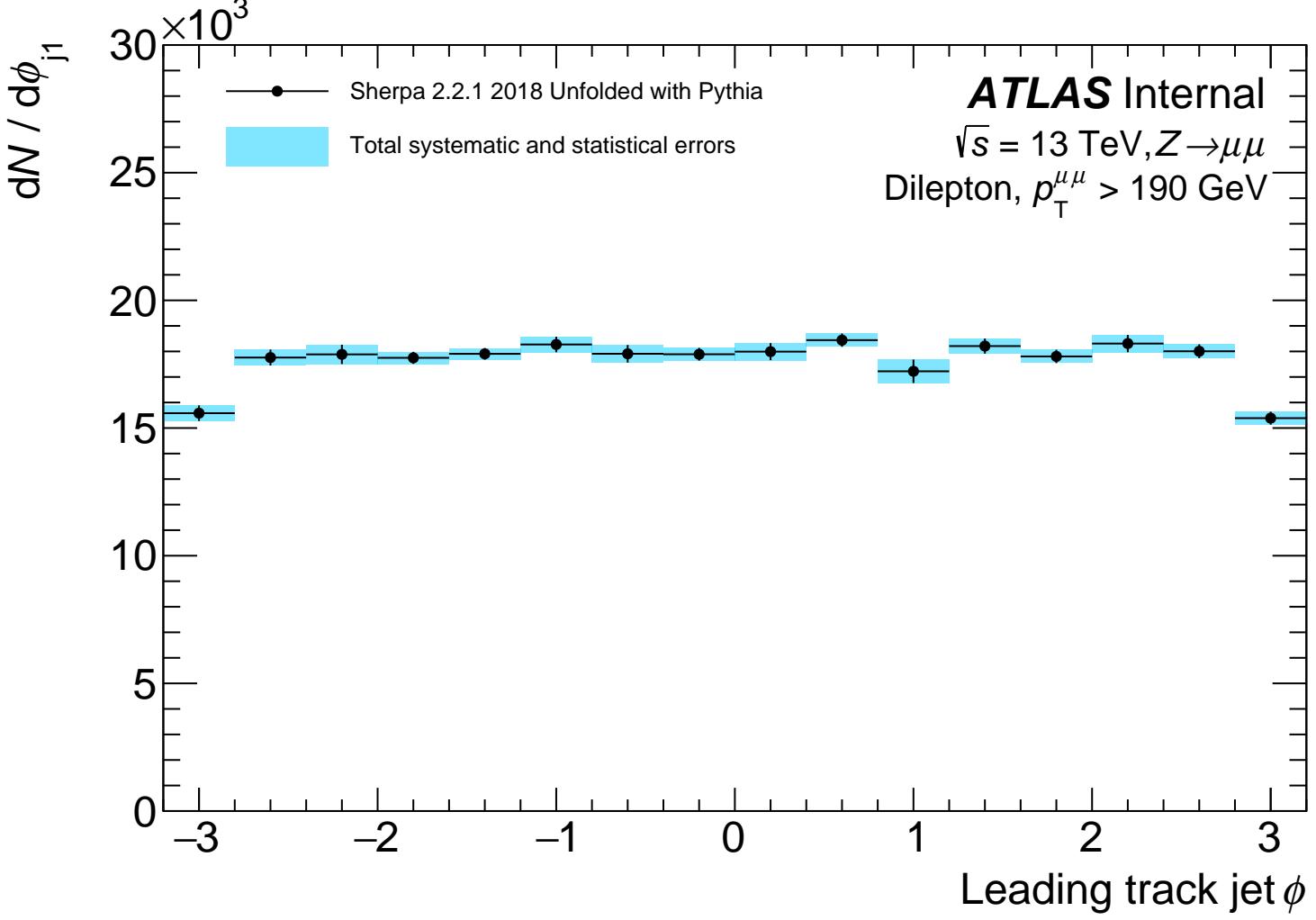










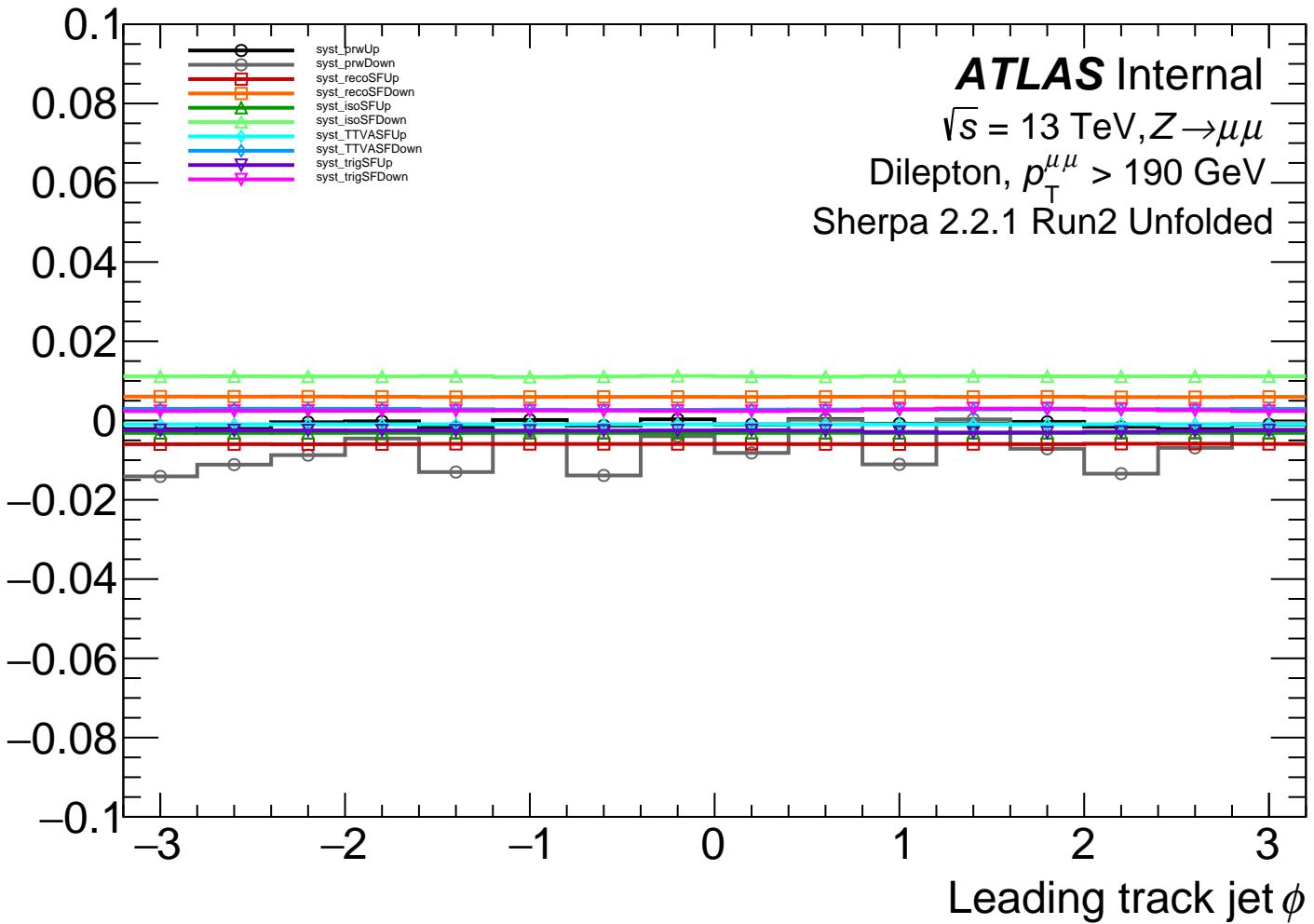


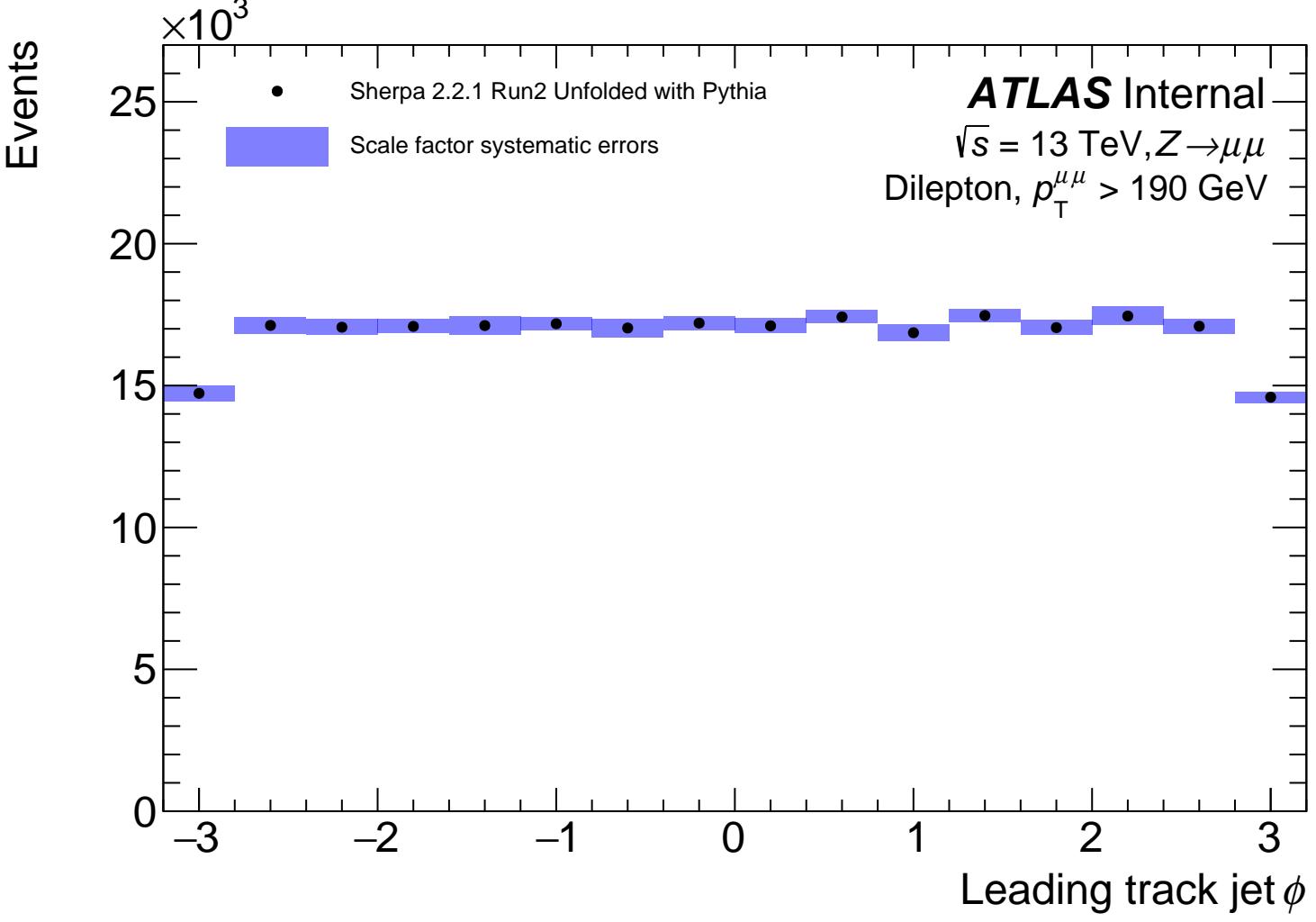
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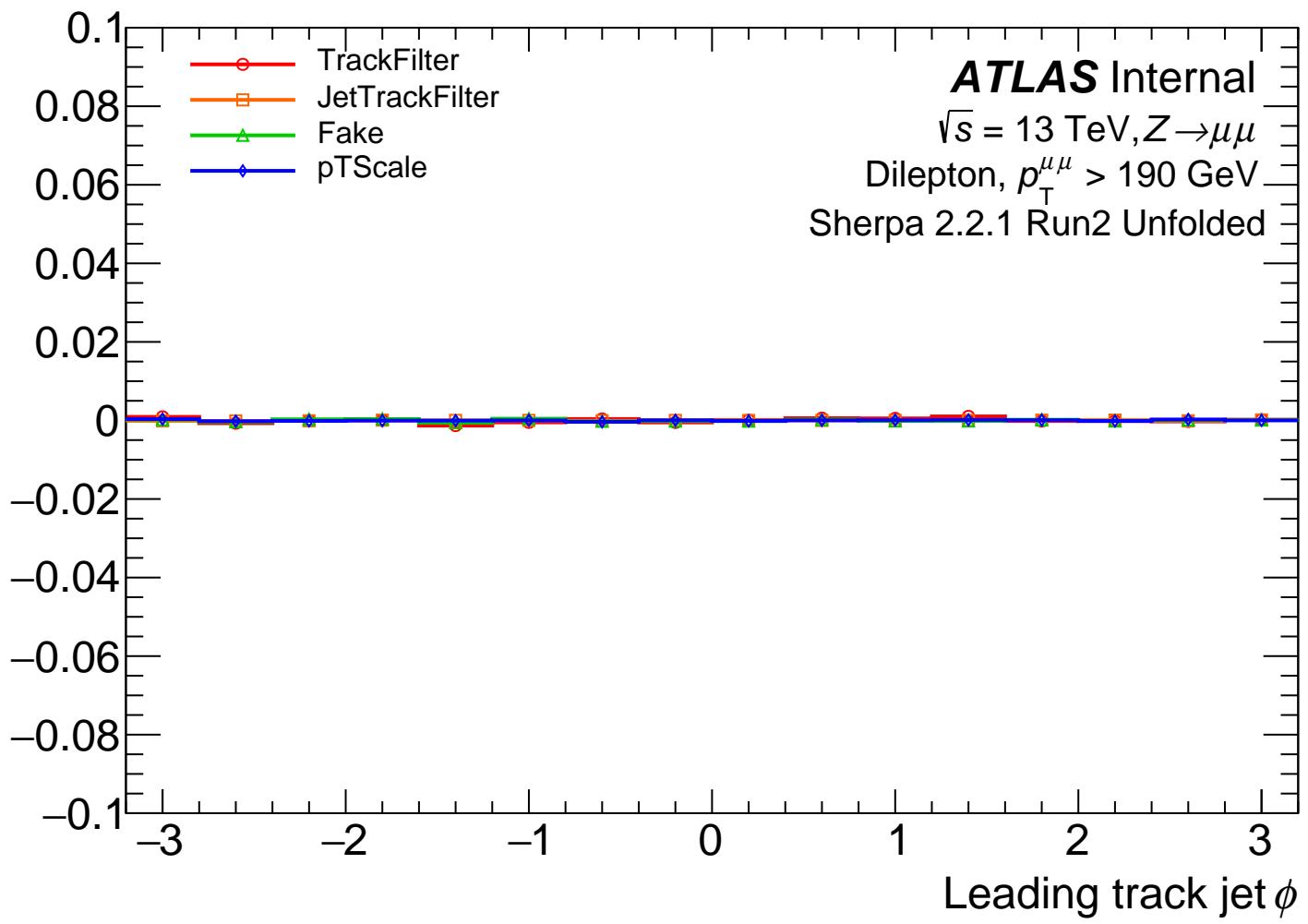
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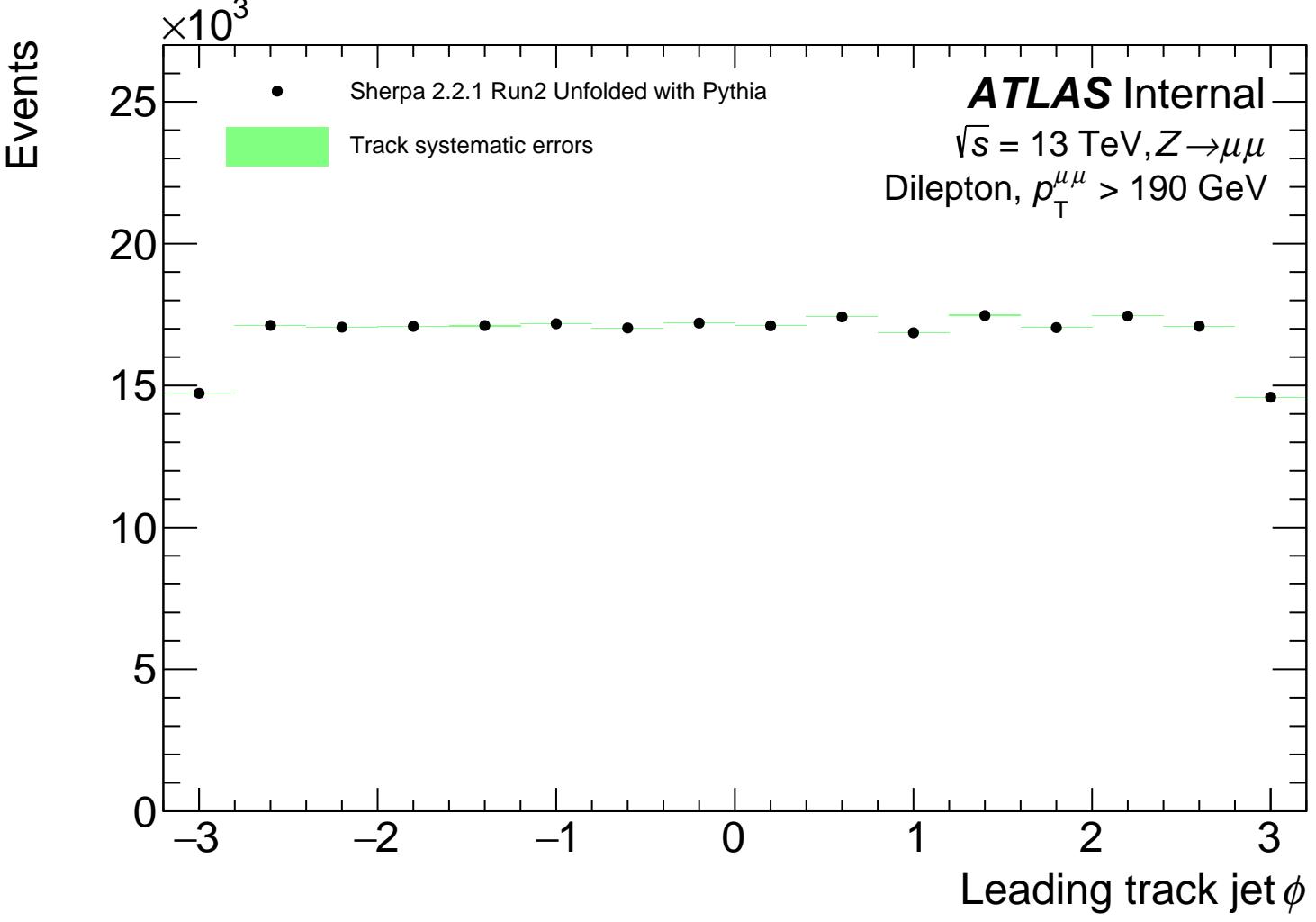
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

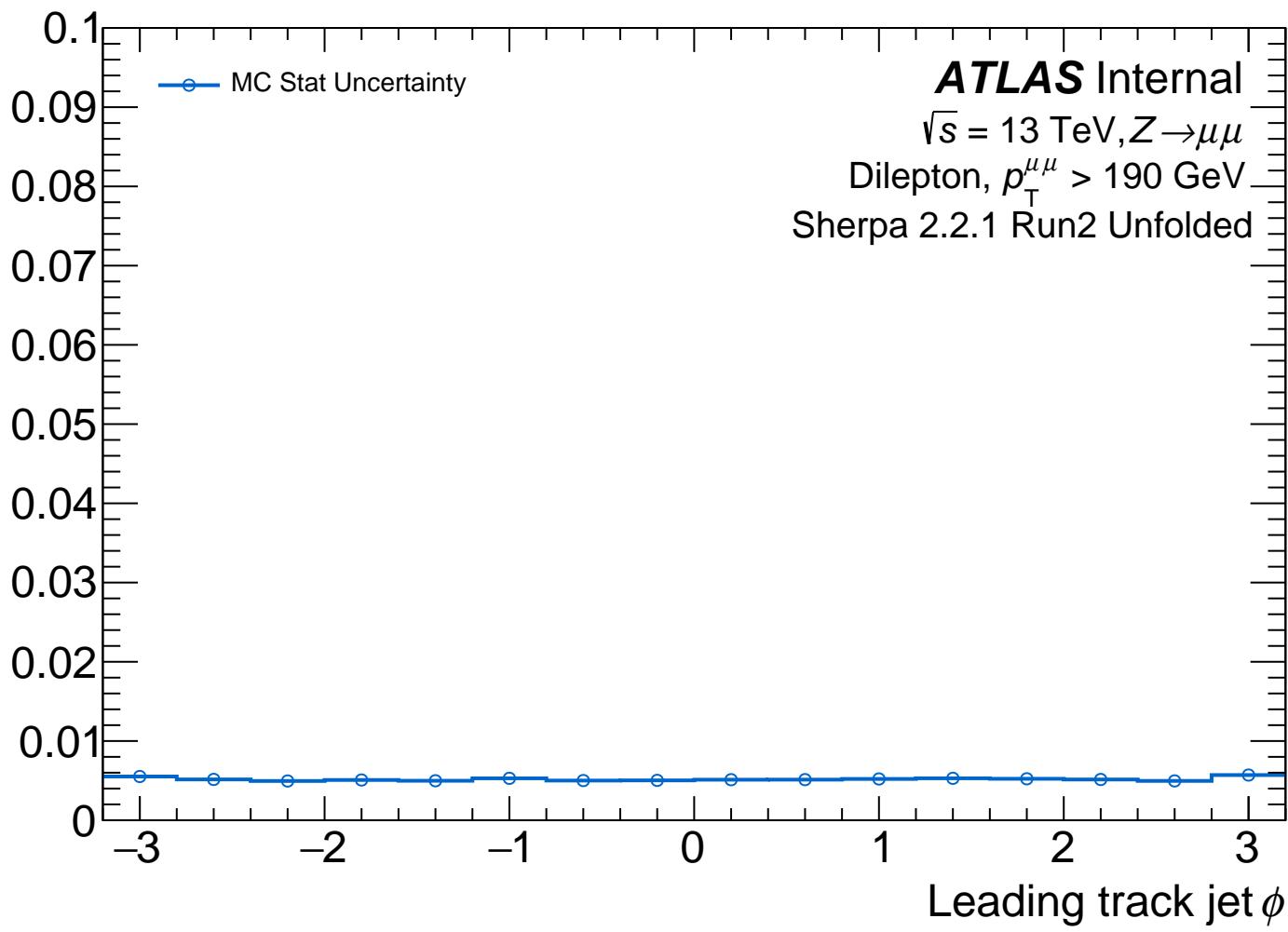
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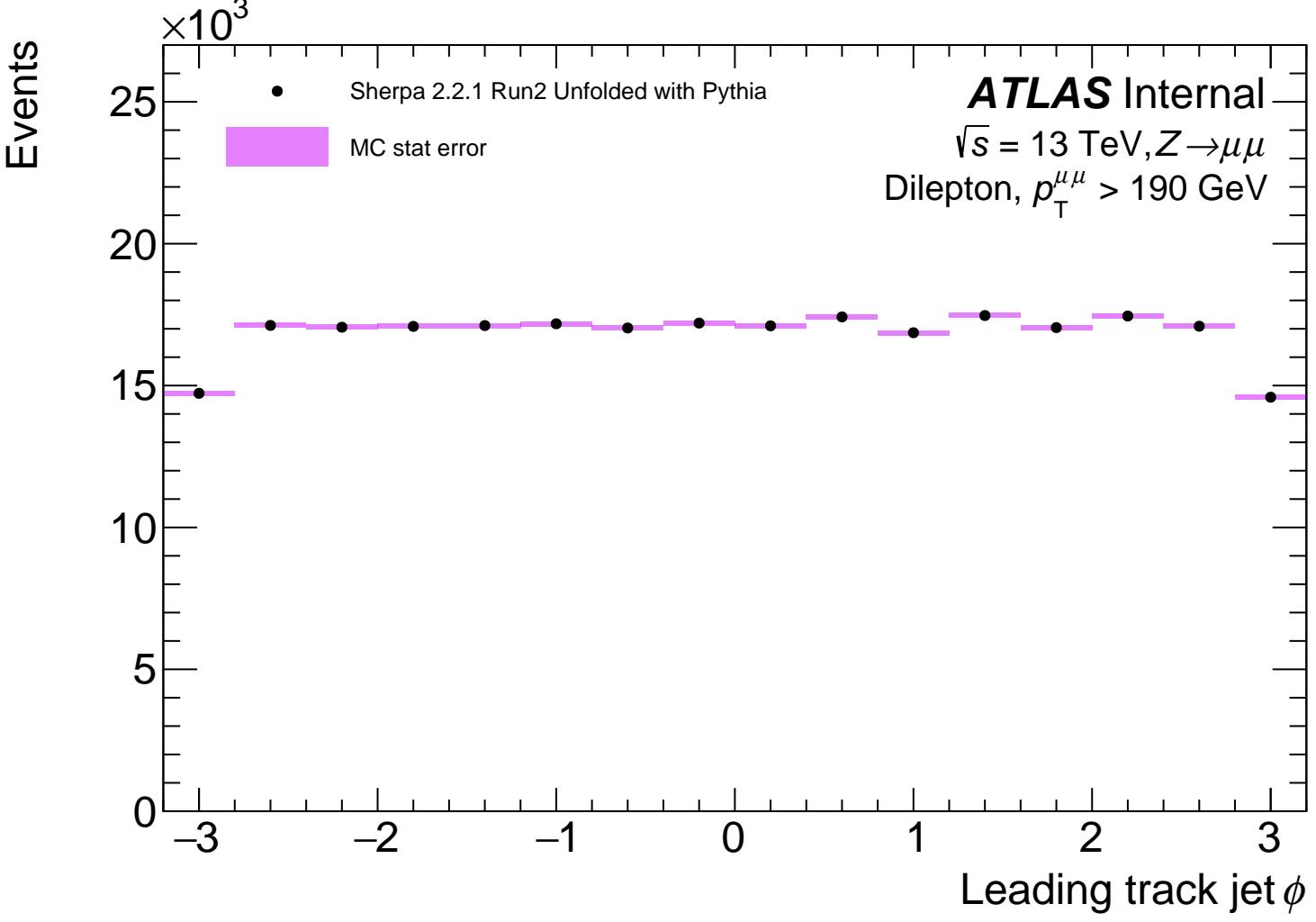


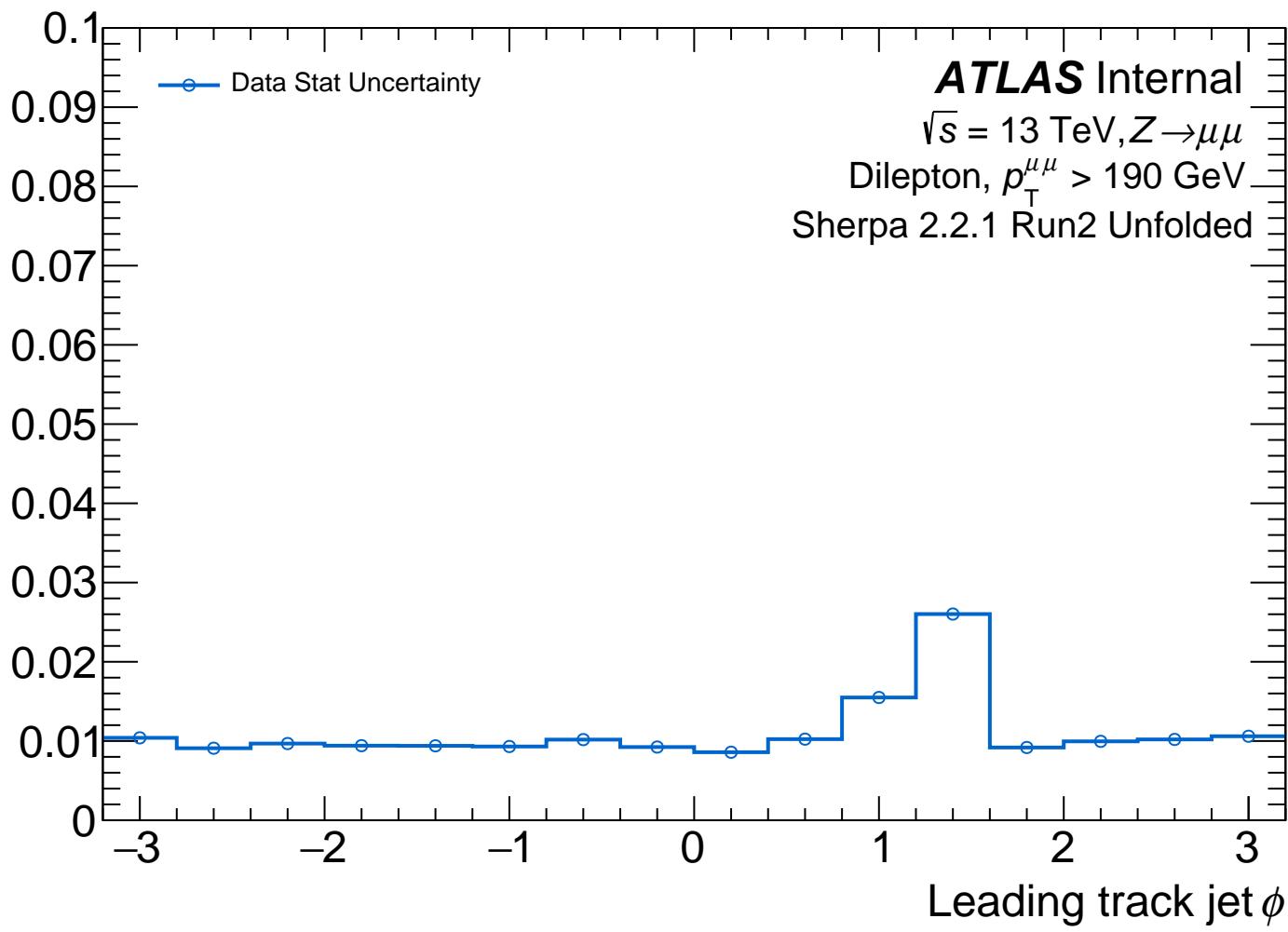


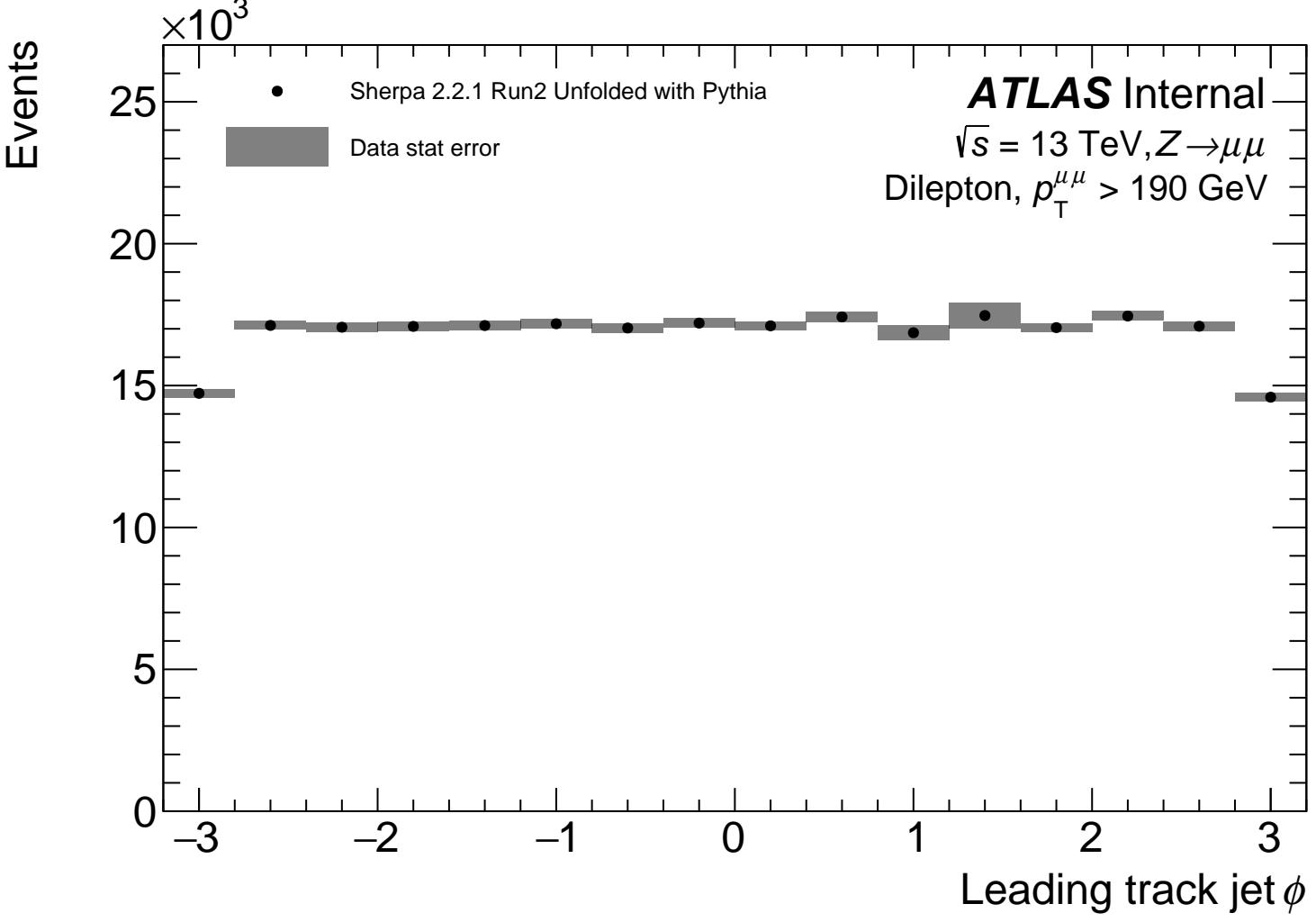


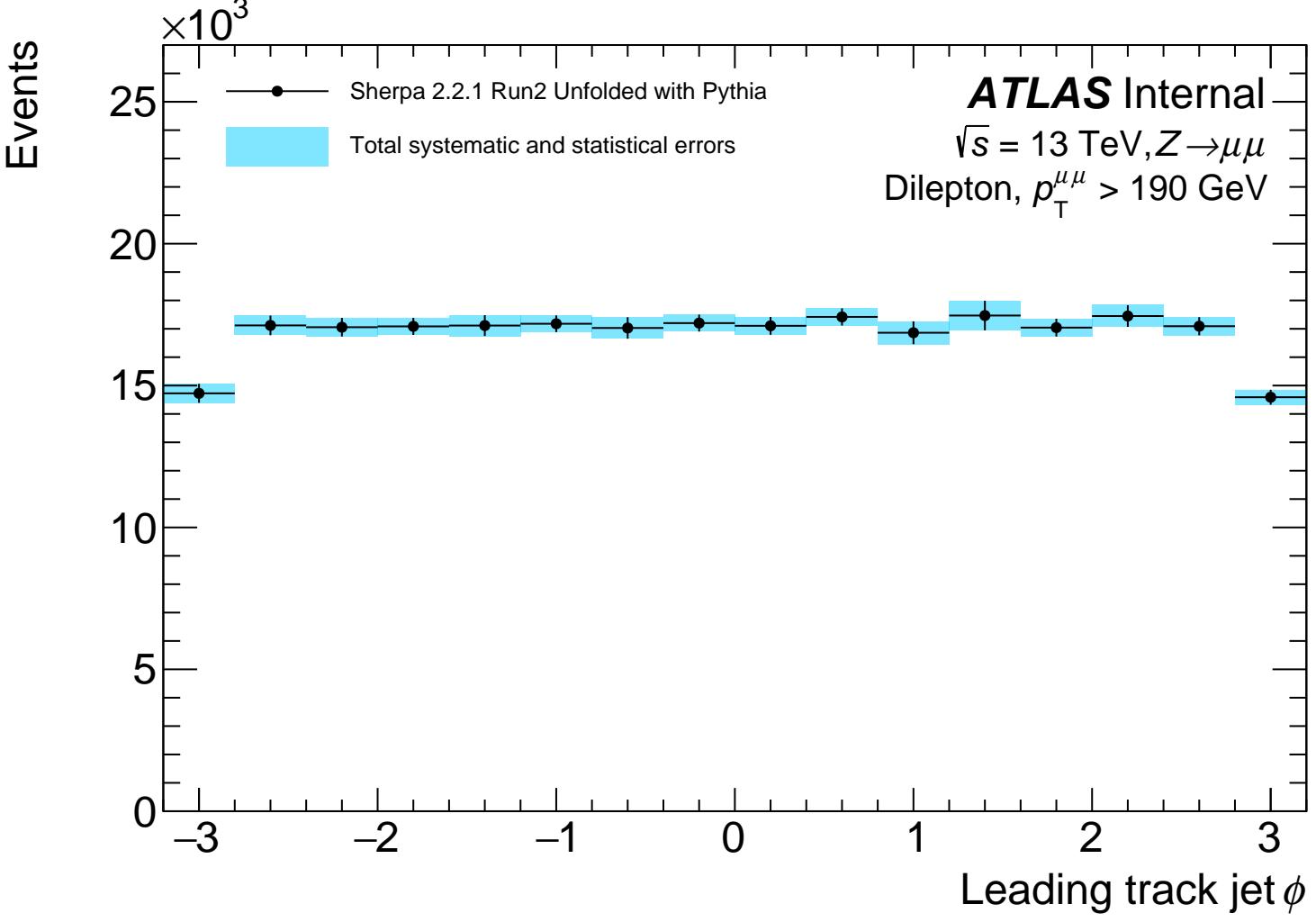


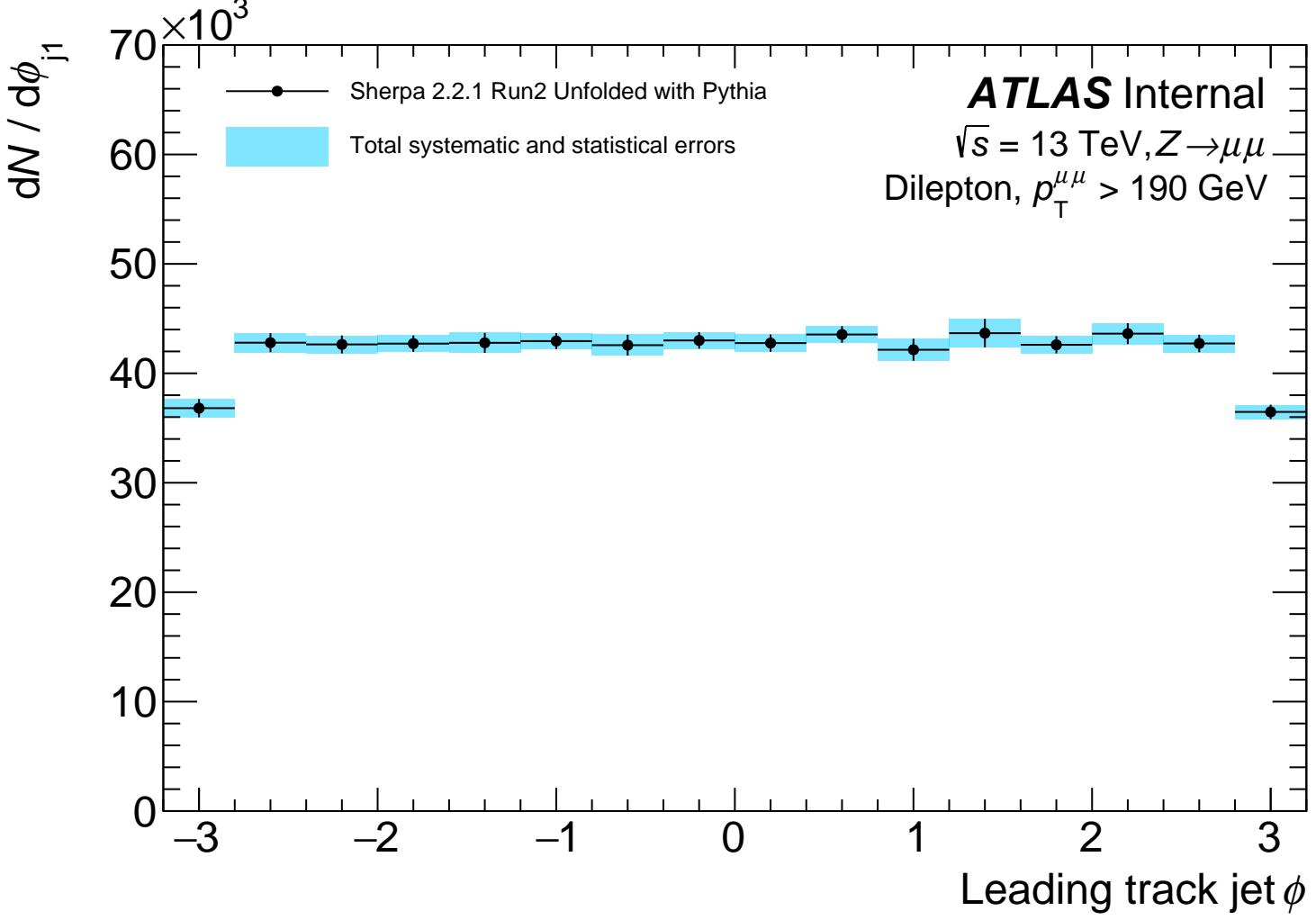


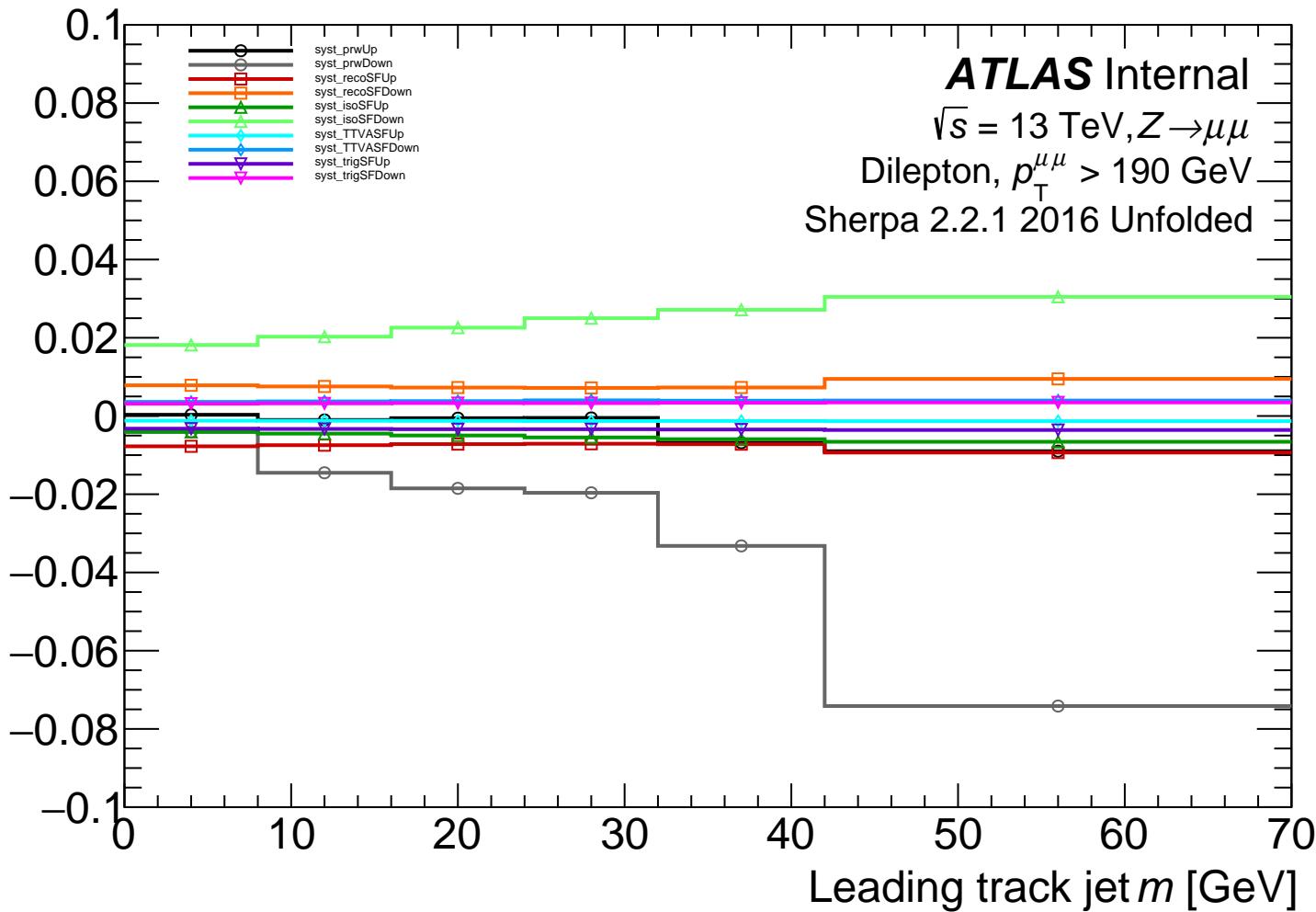




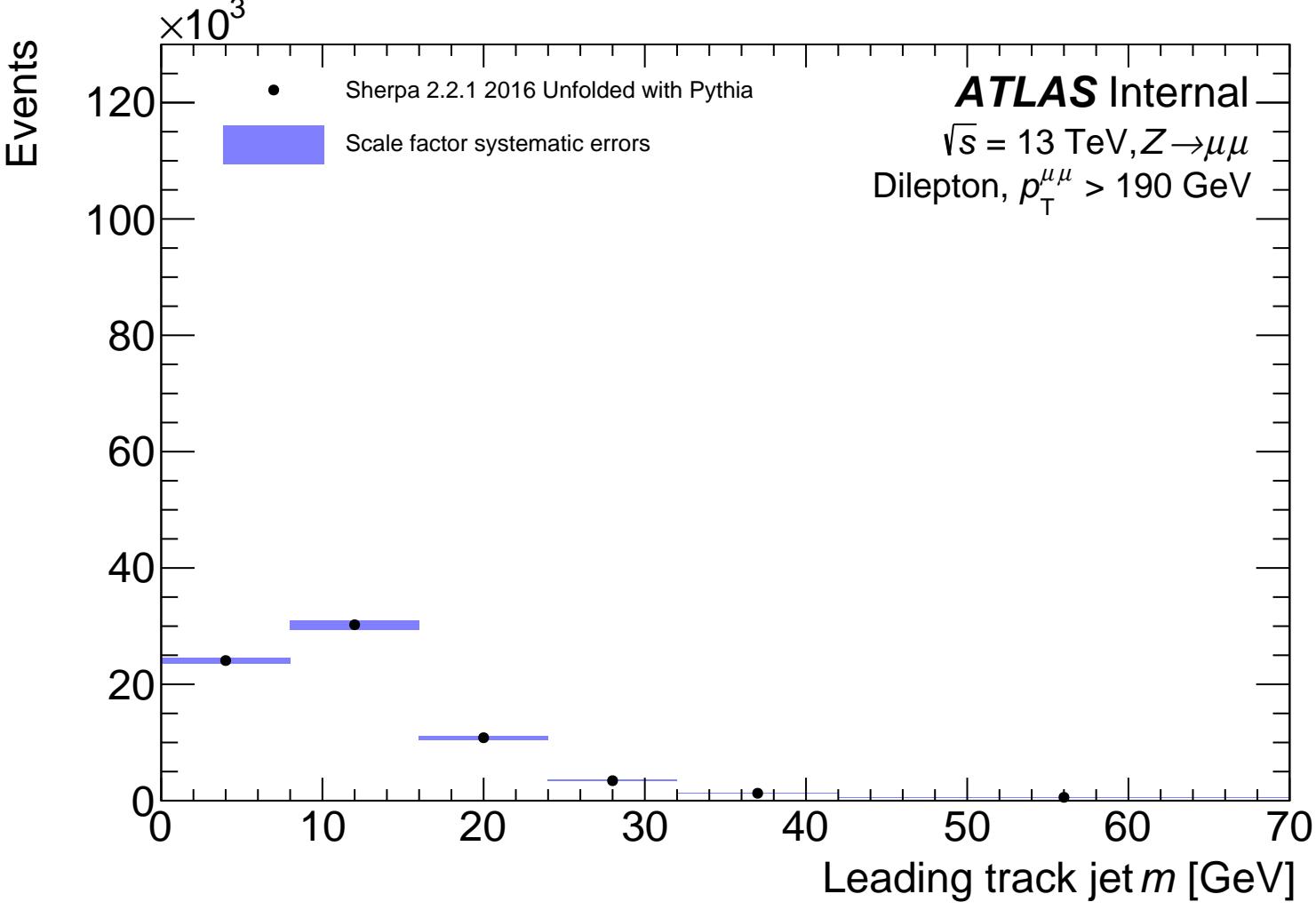


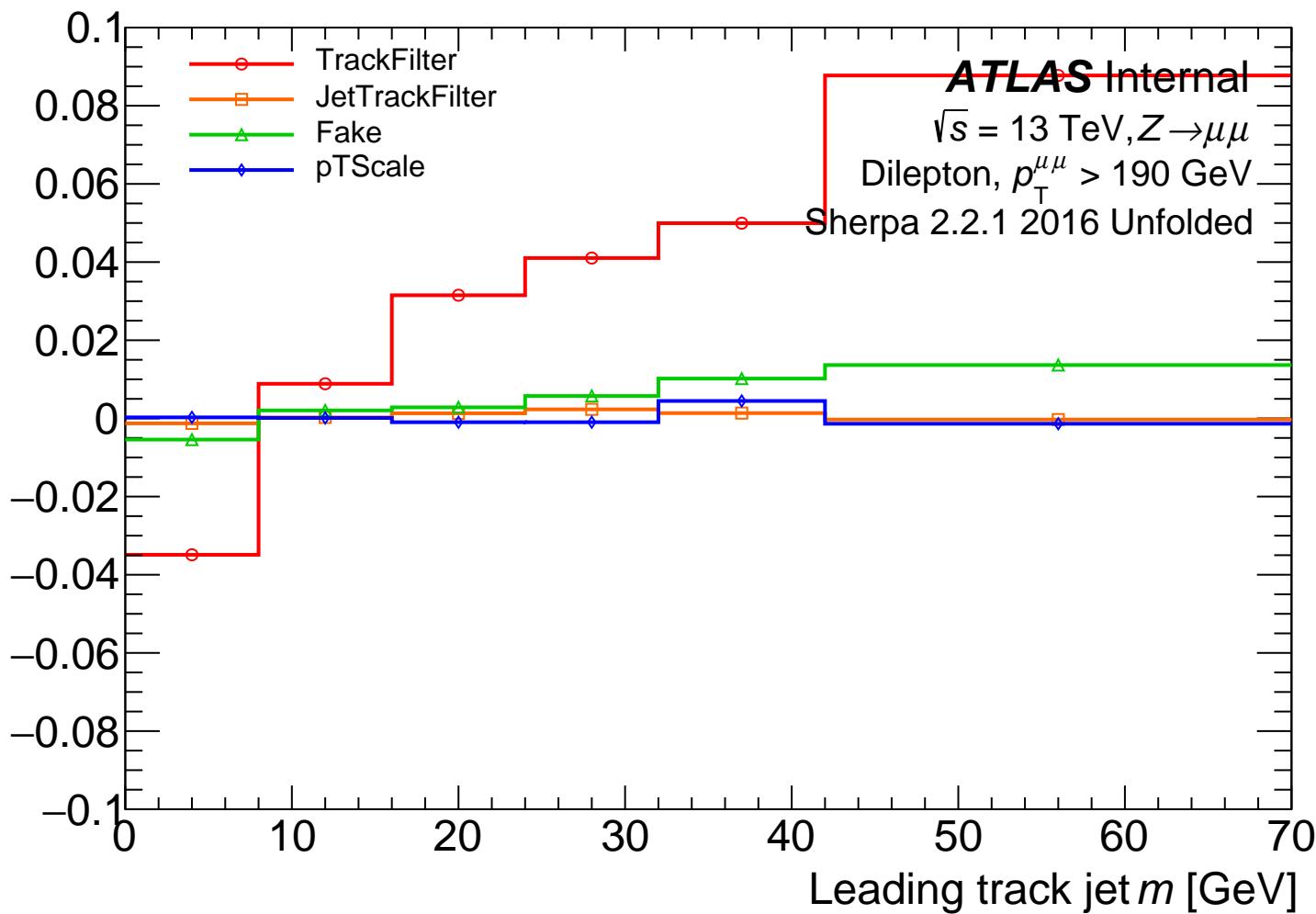


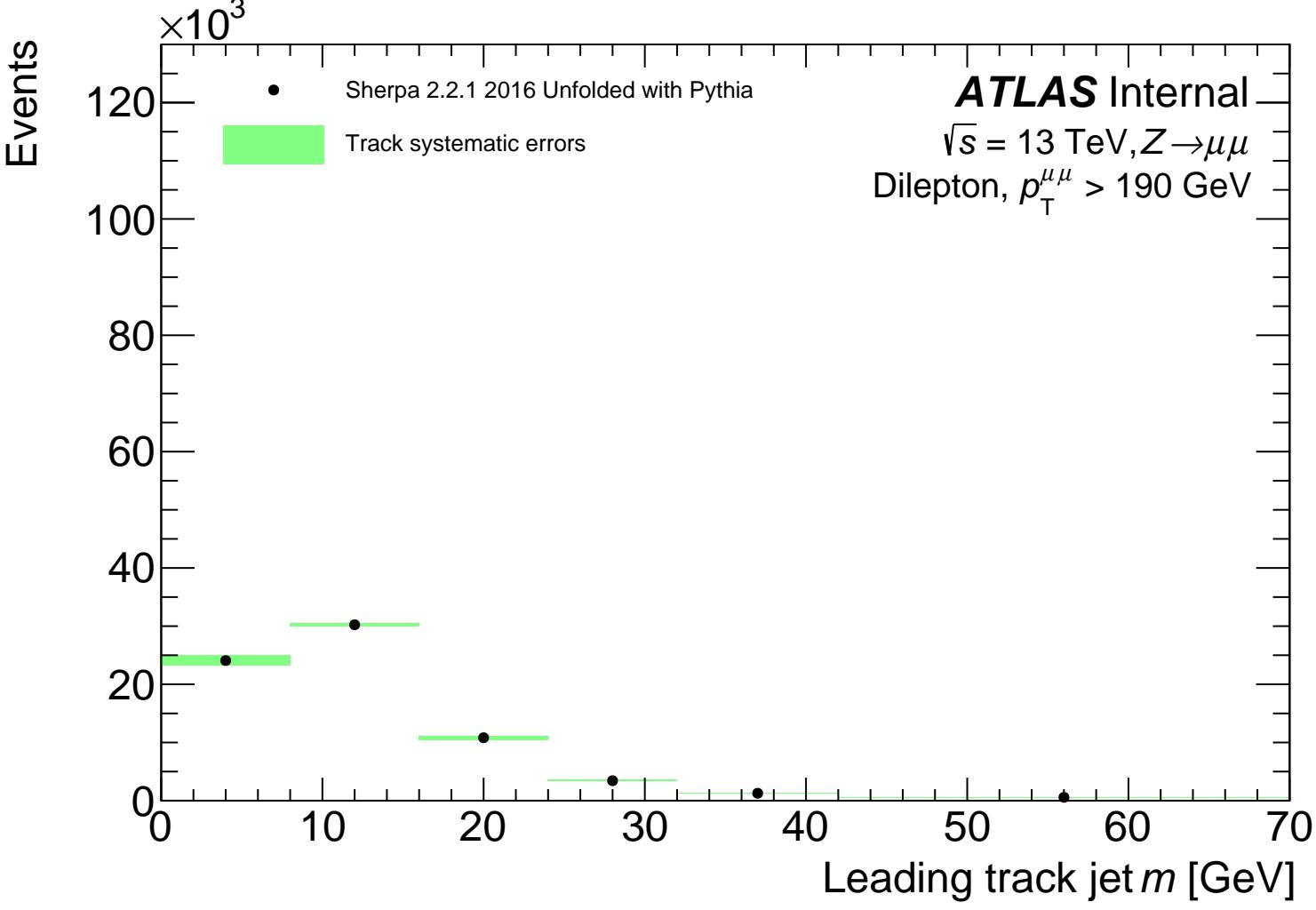


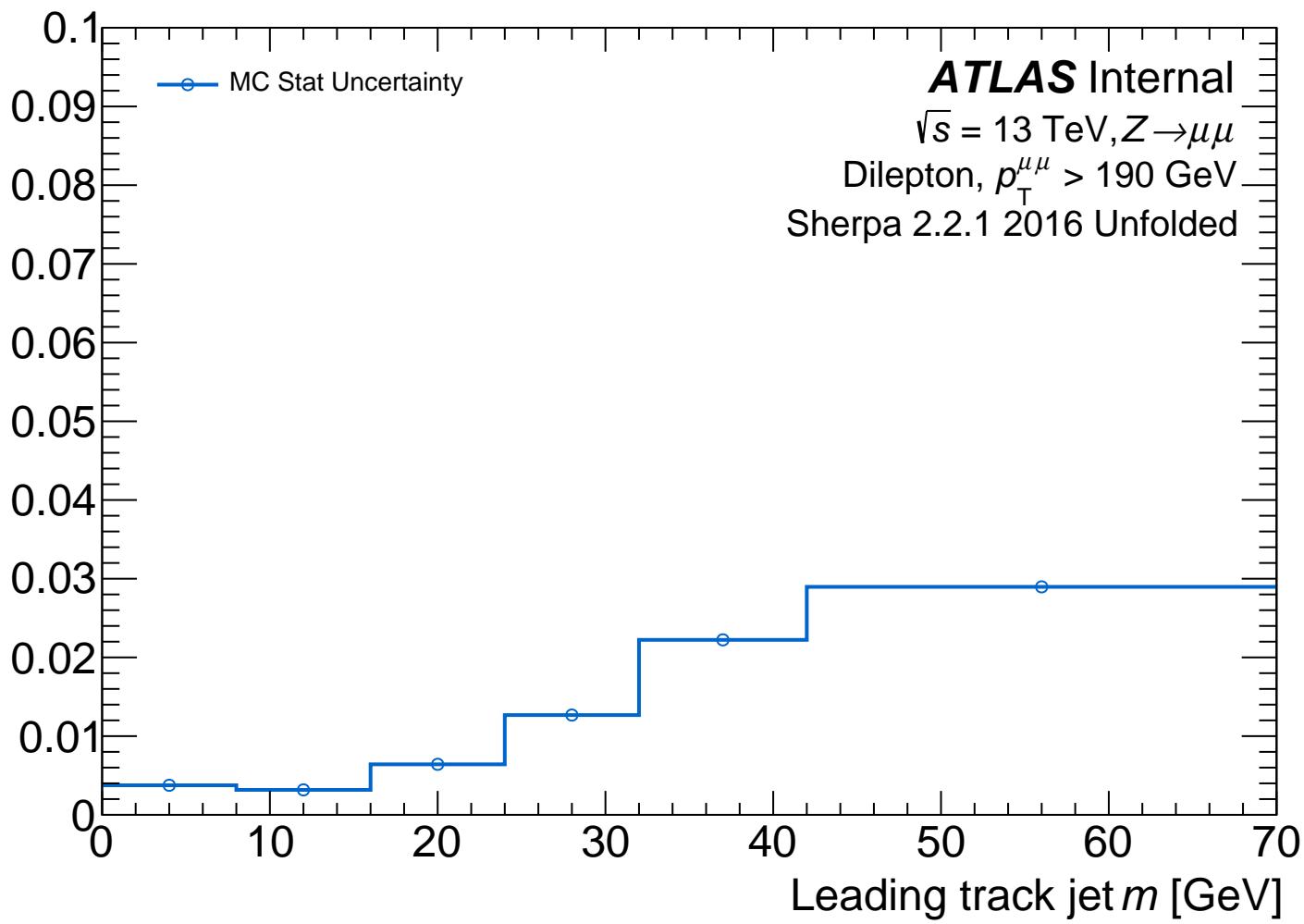


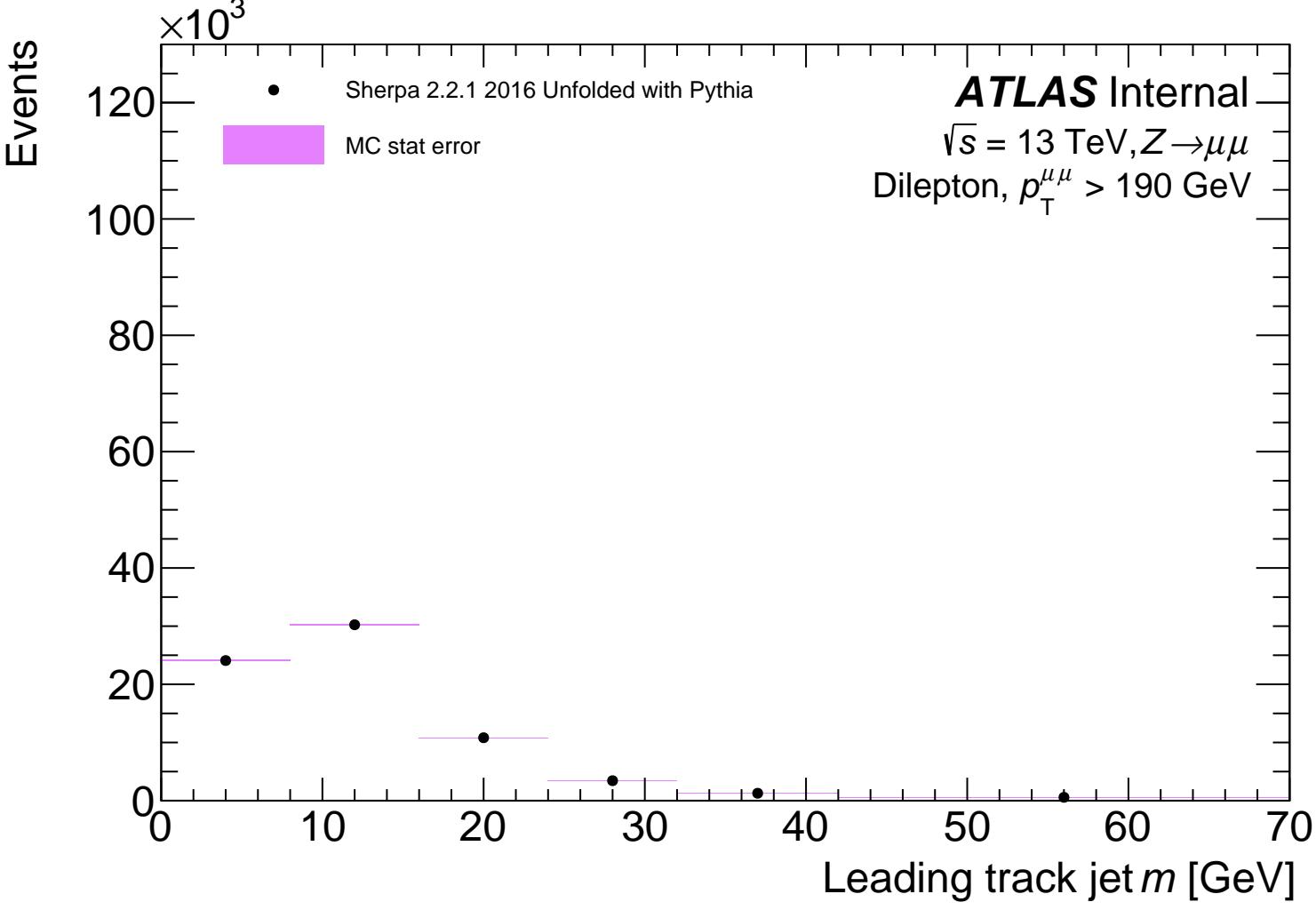
**ATLAS Internal**  
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$   
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$   
Sherpa 2.2.1 2016 Unfolded

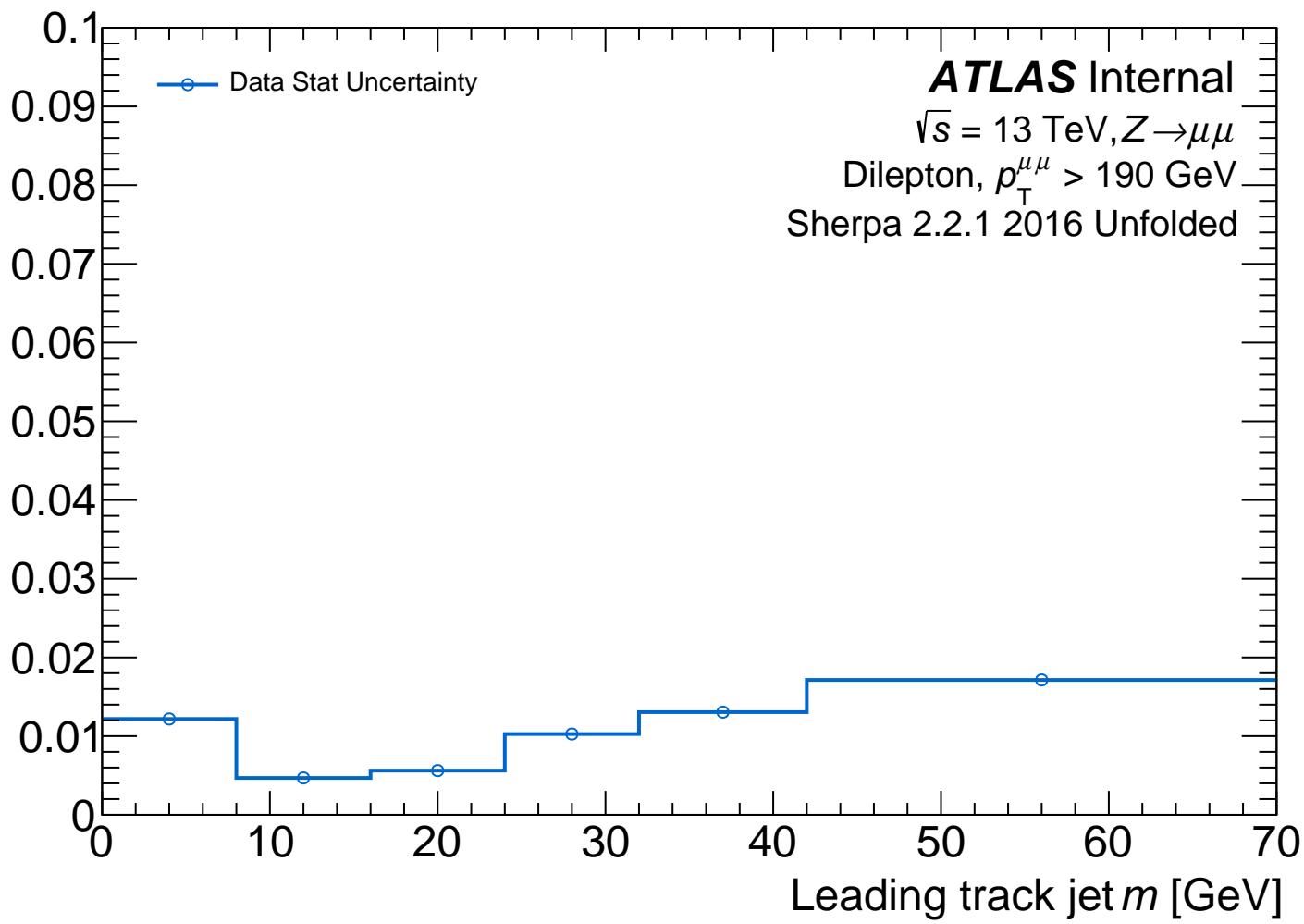


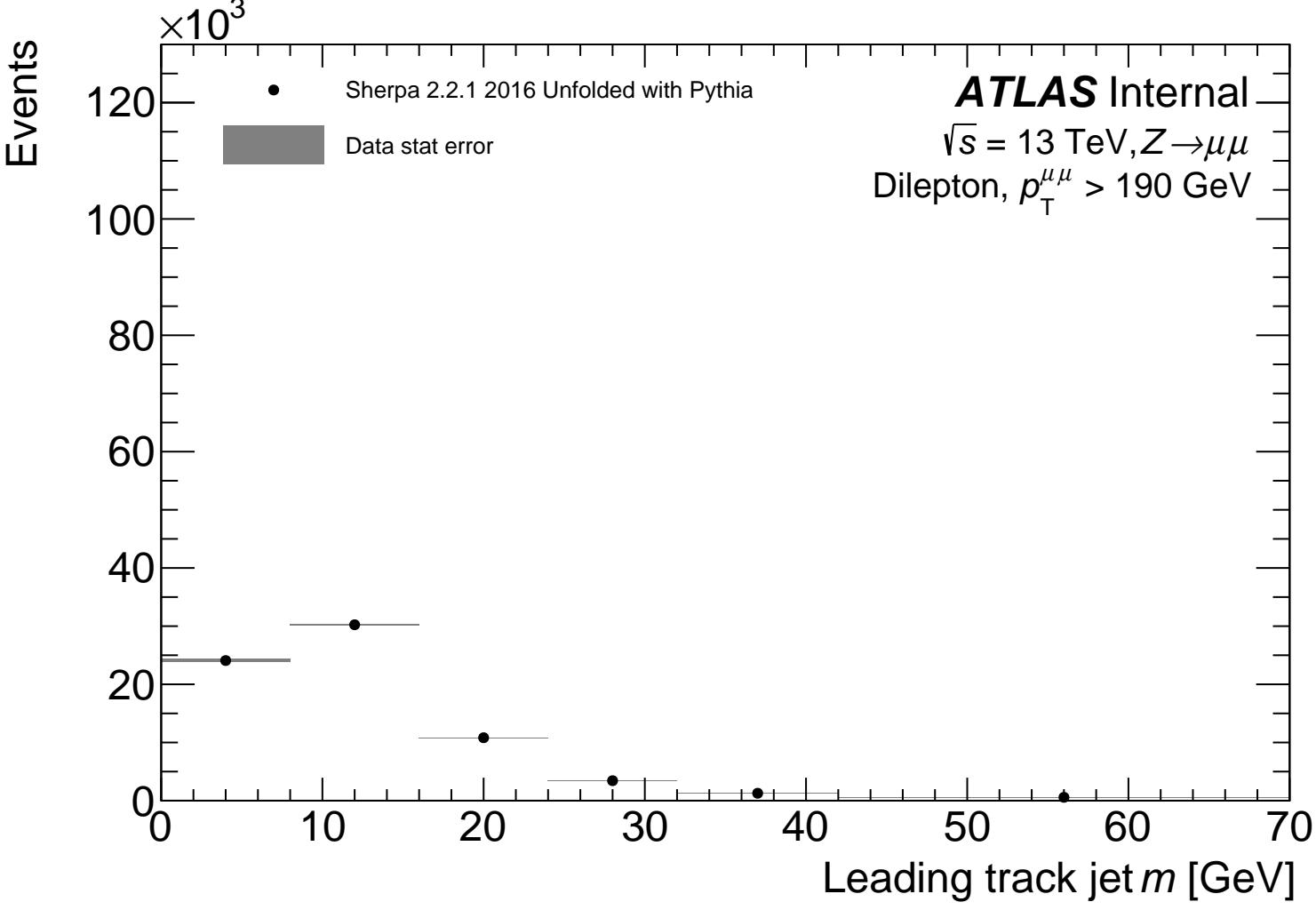


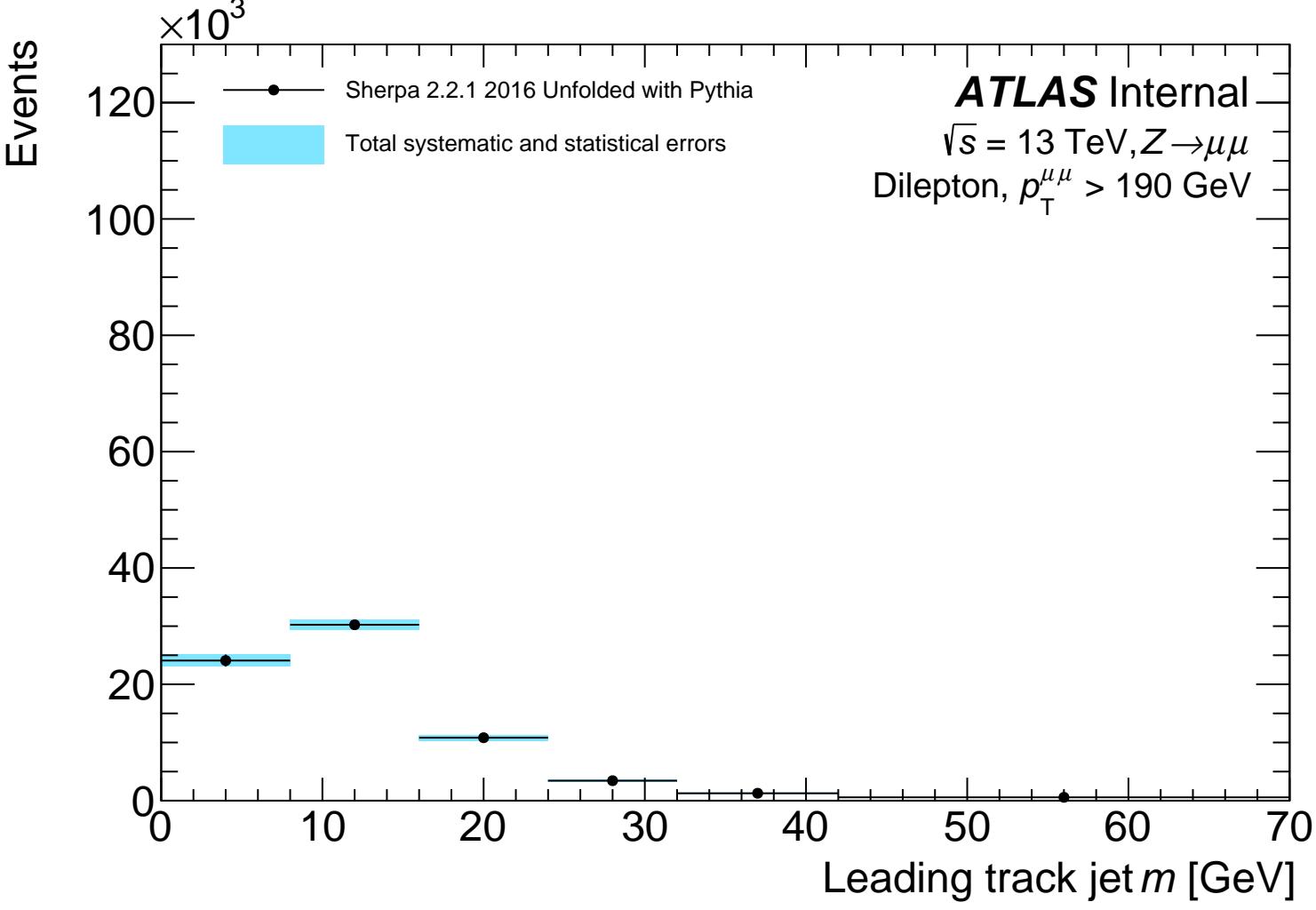


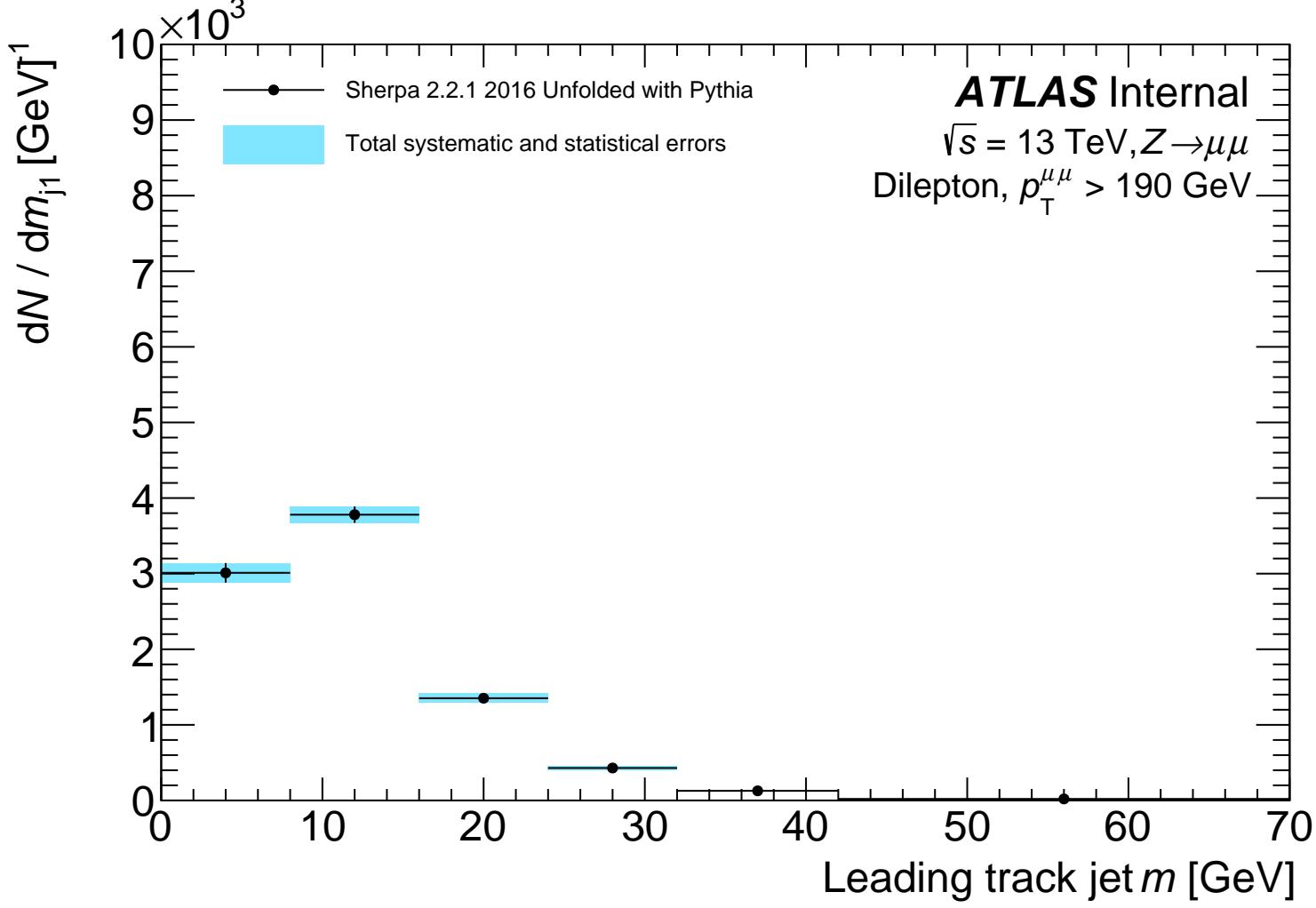


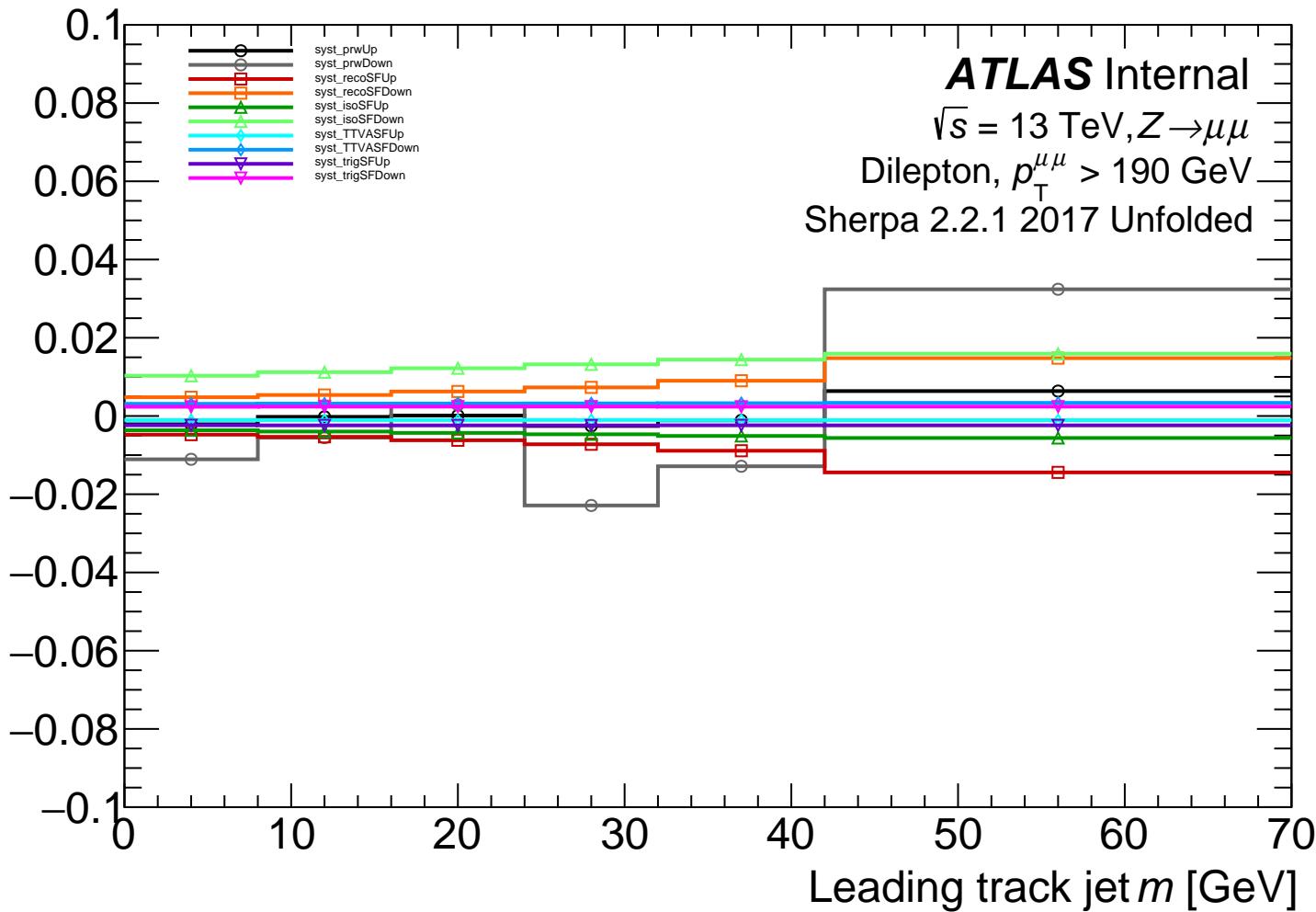


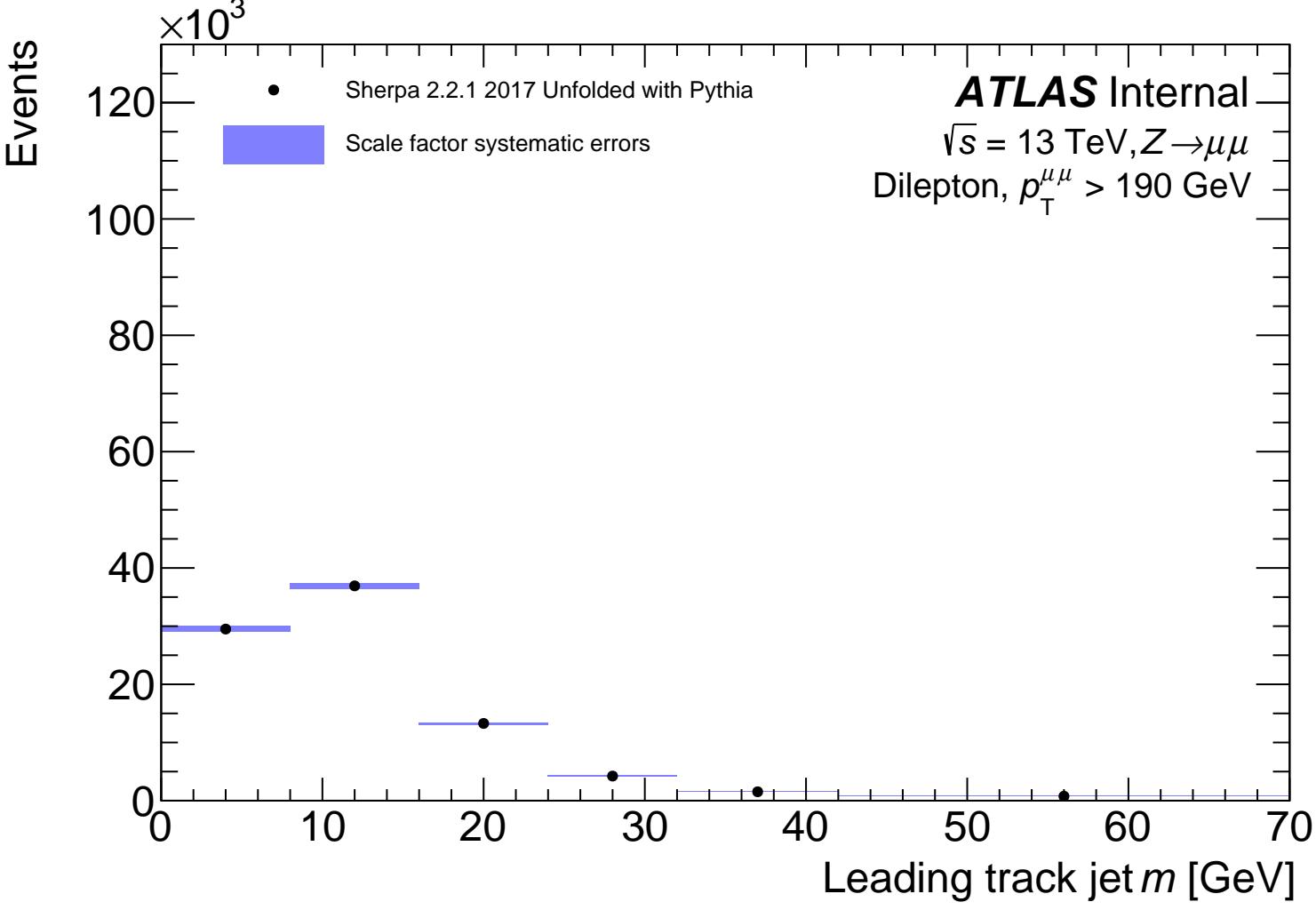


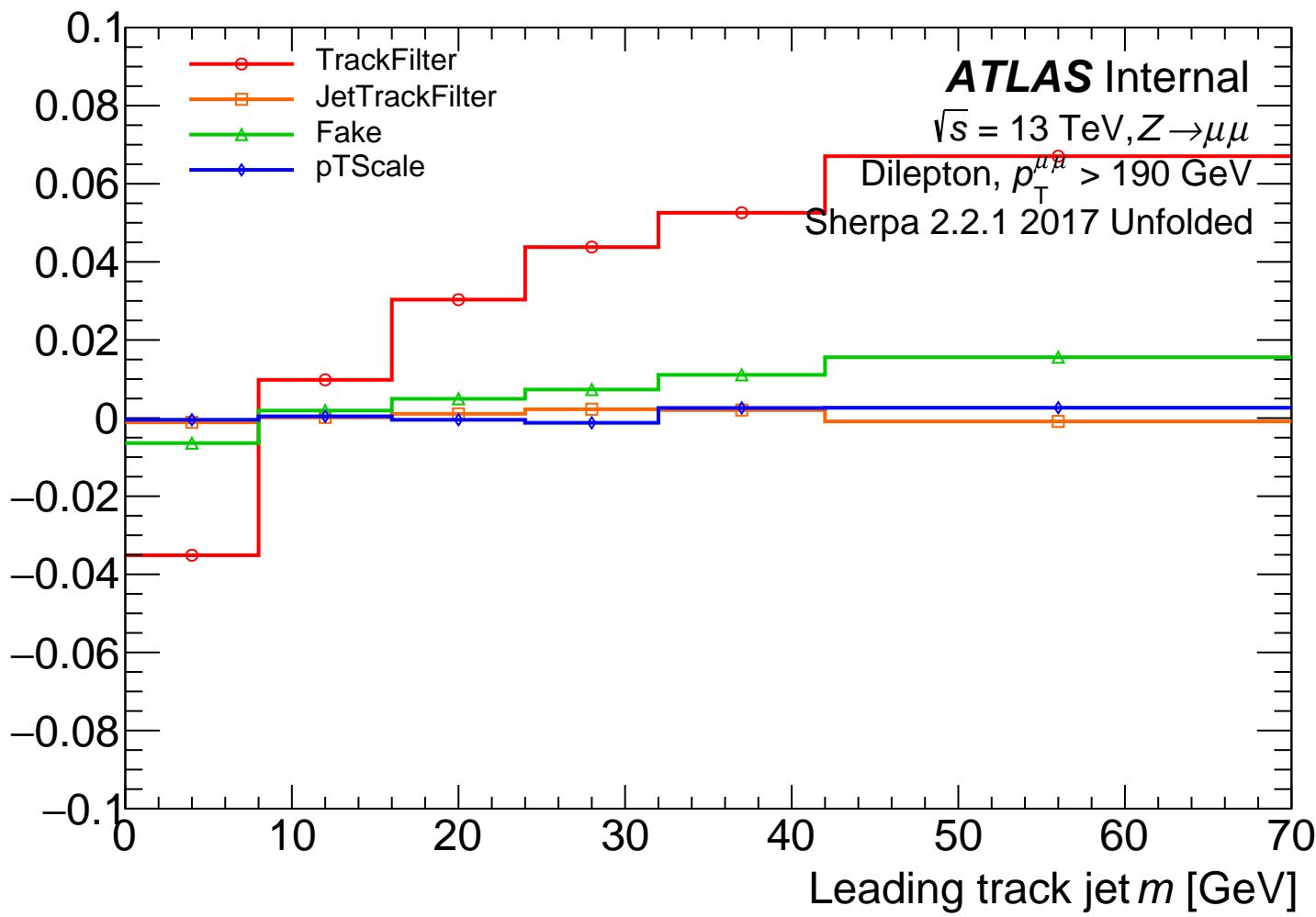


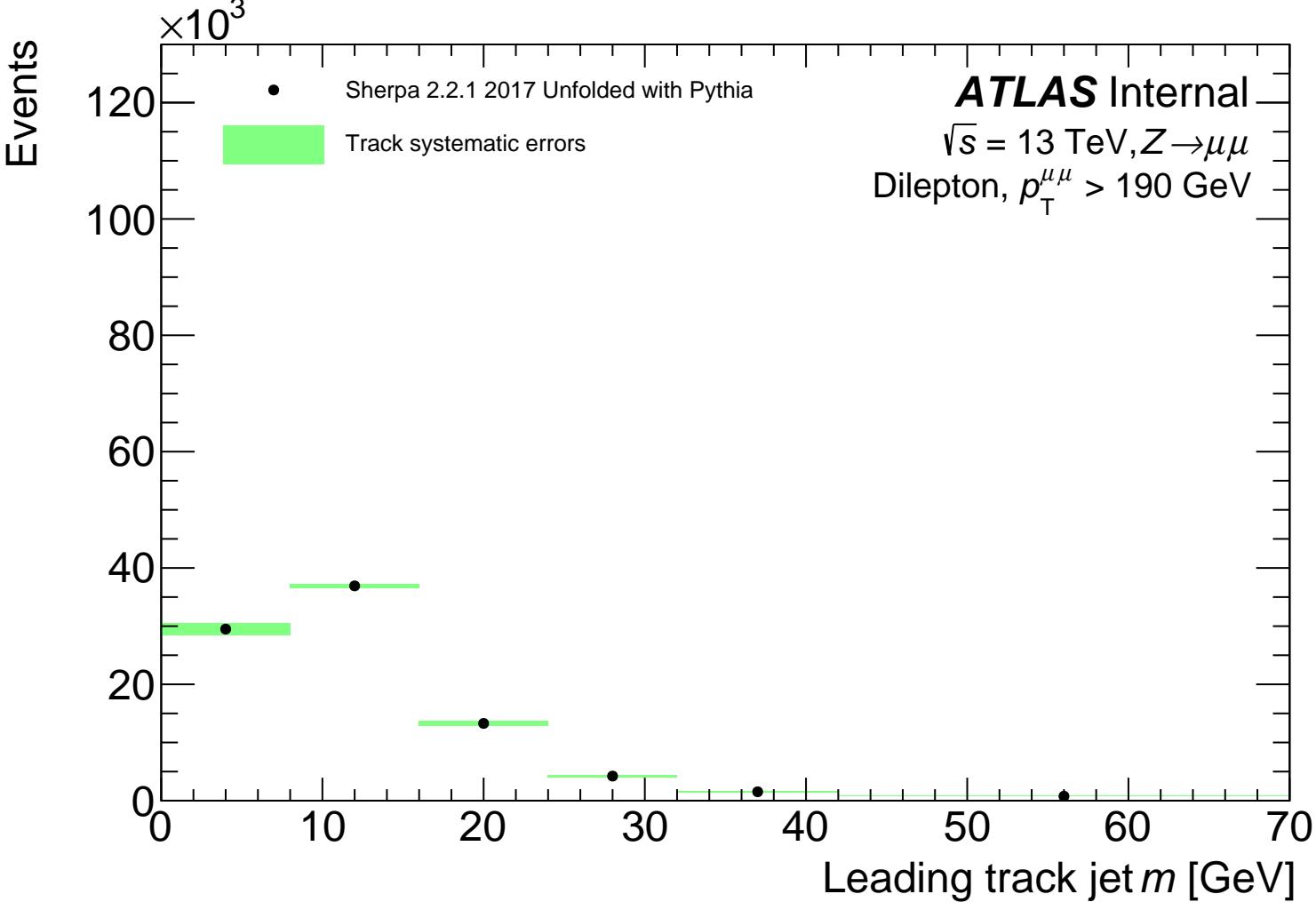


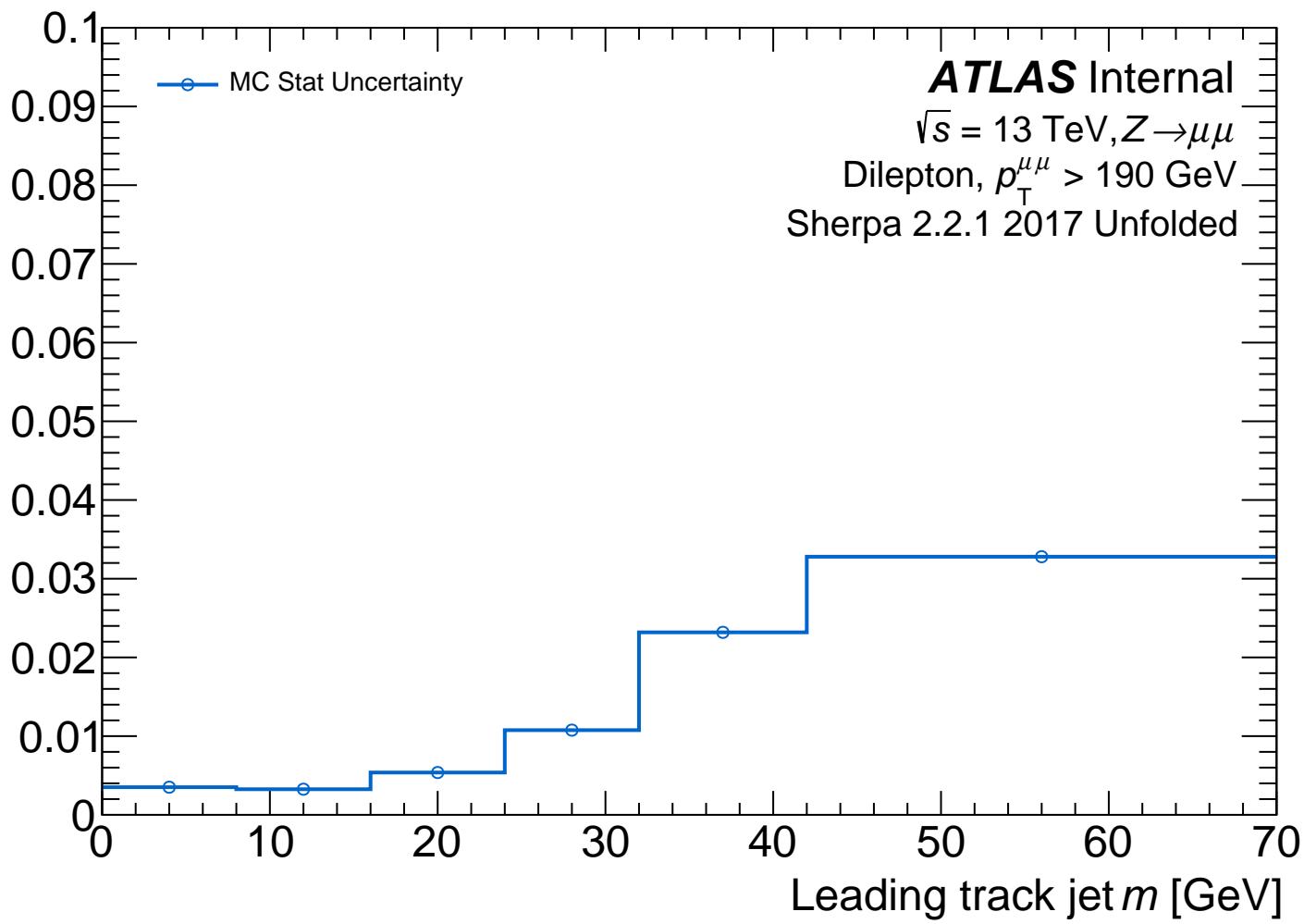


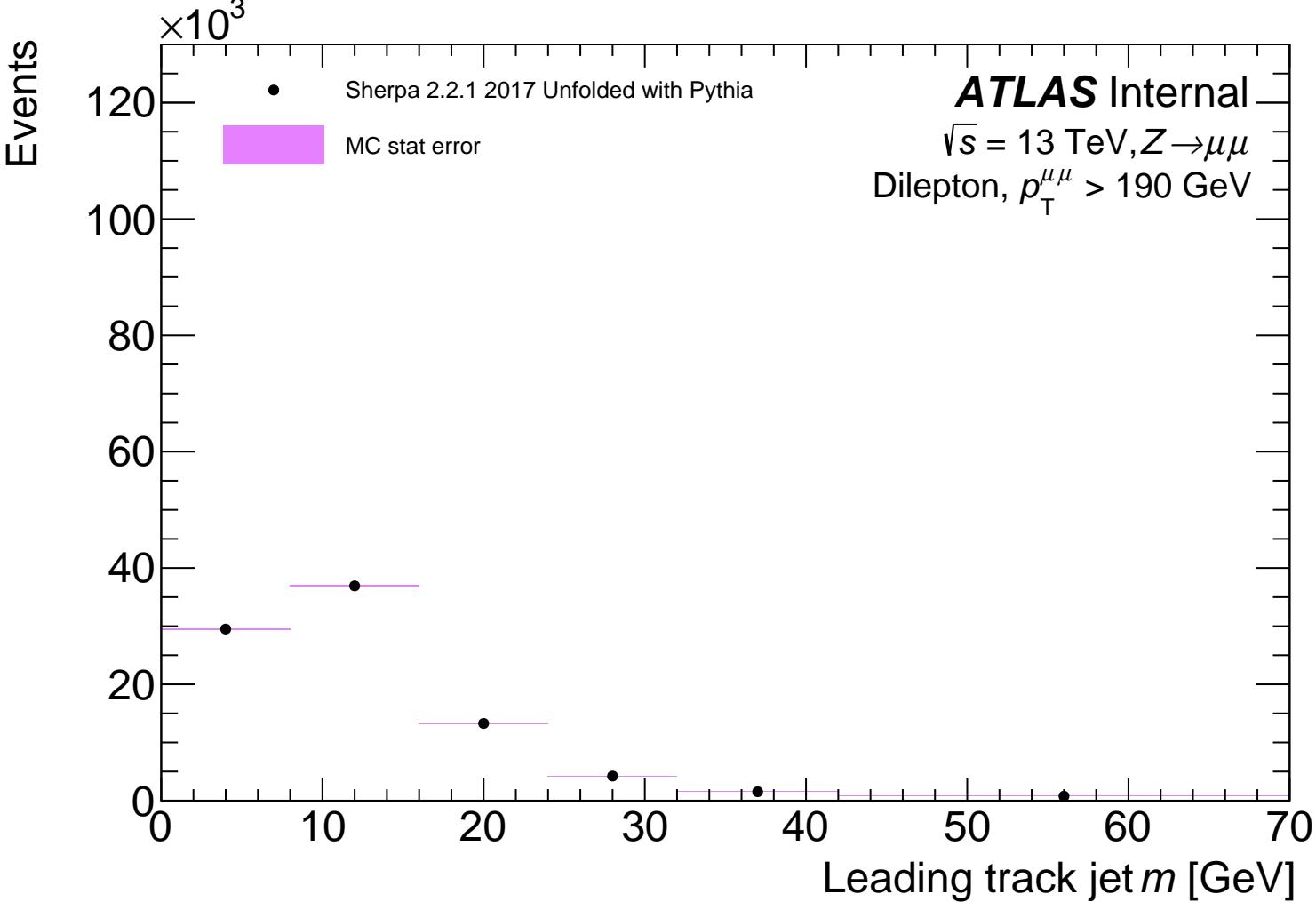


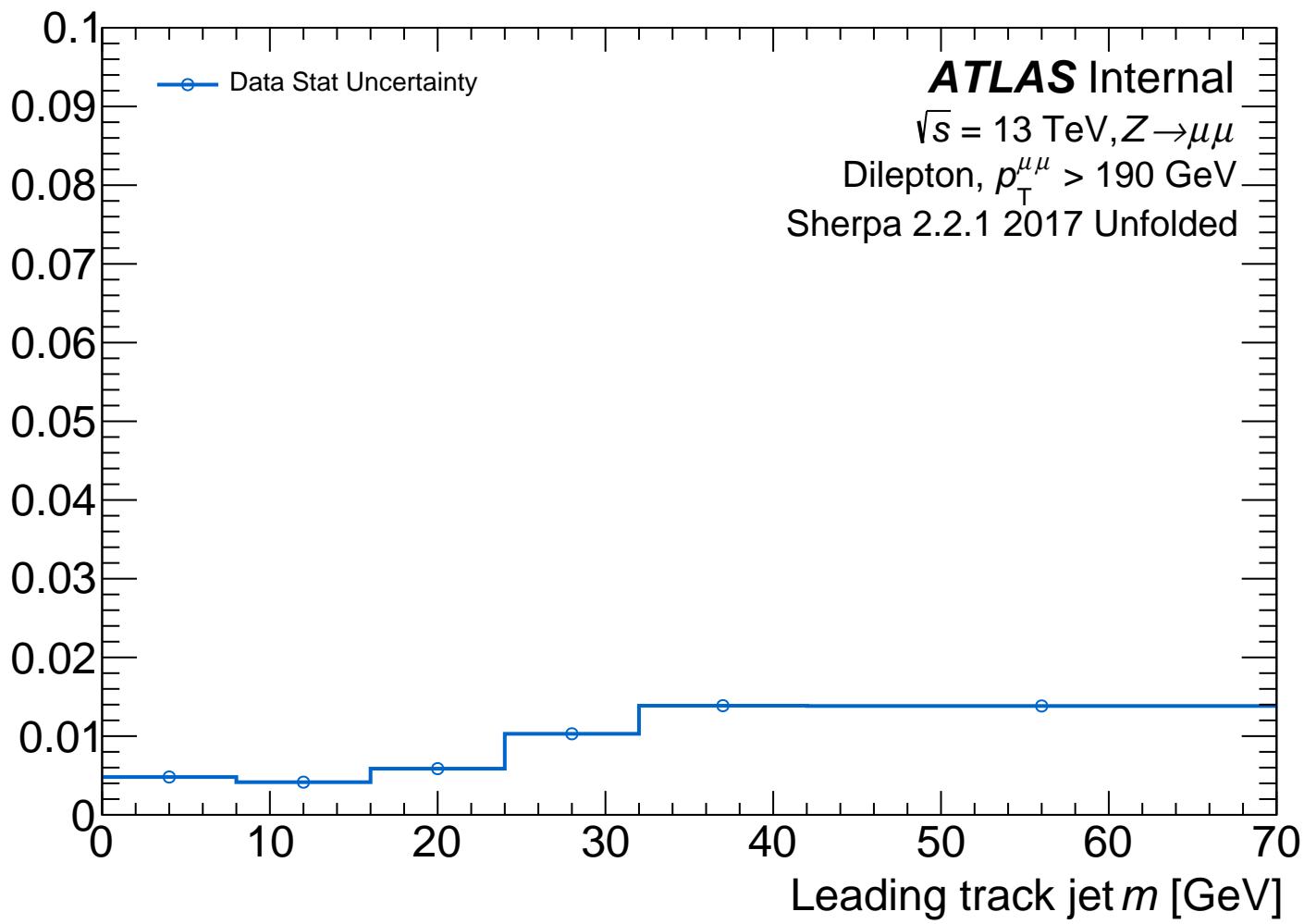


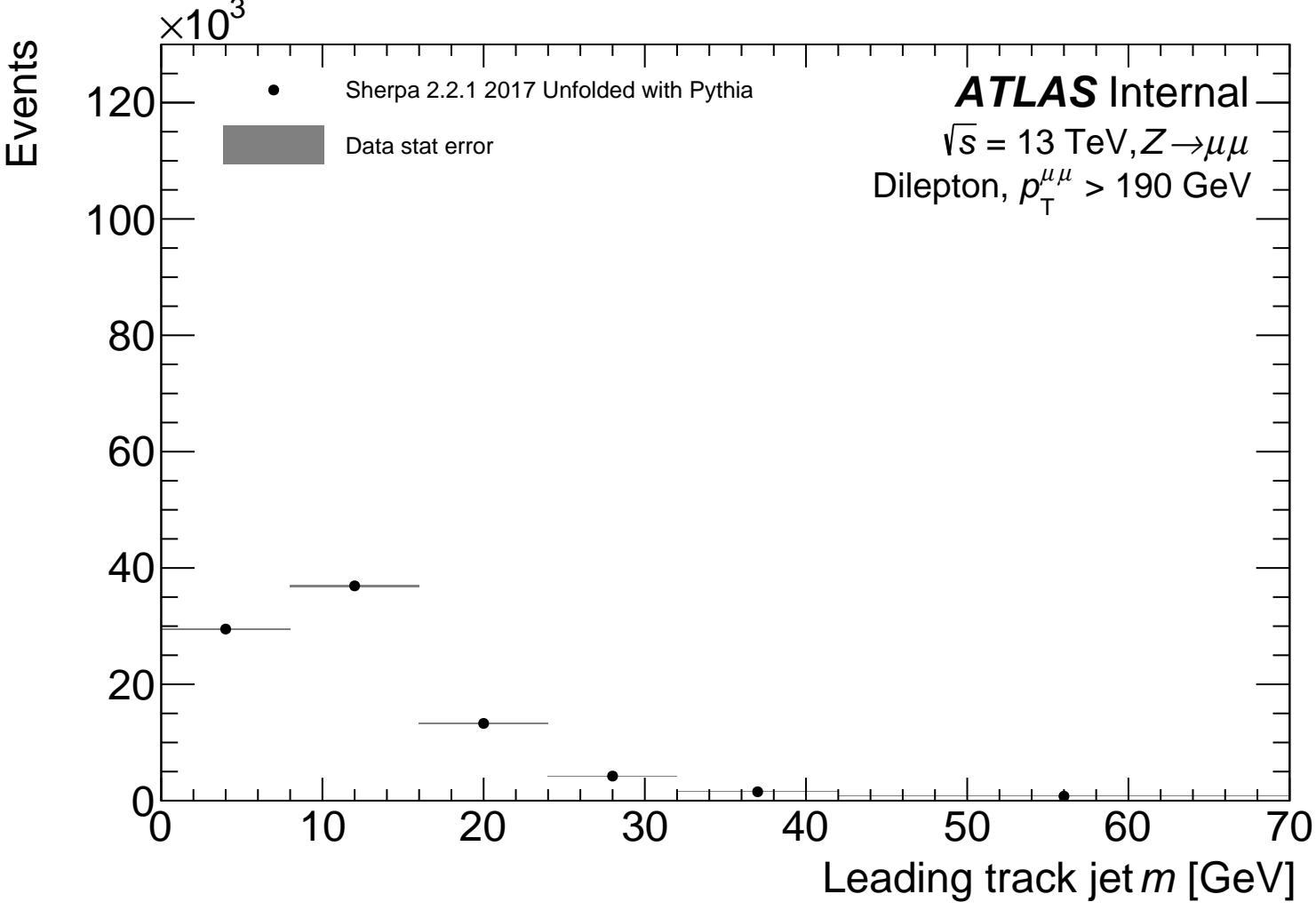


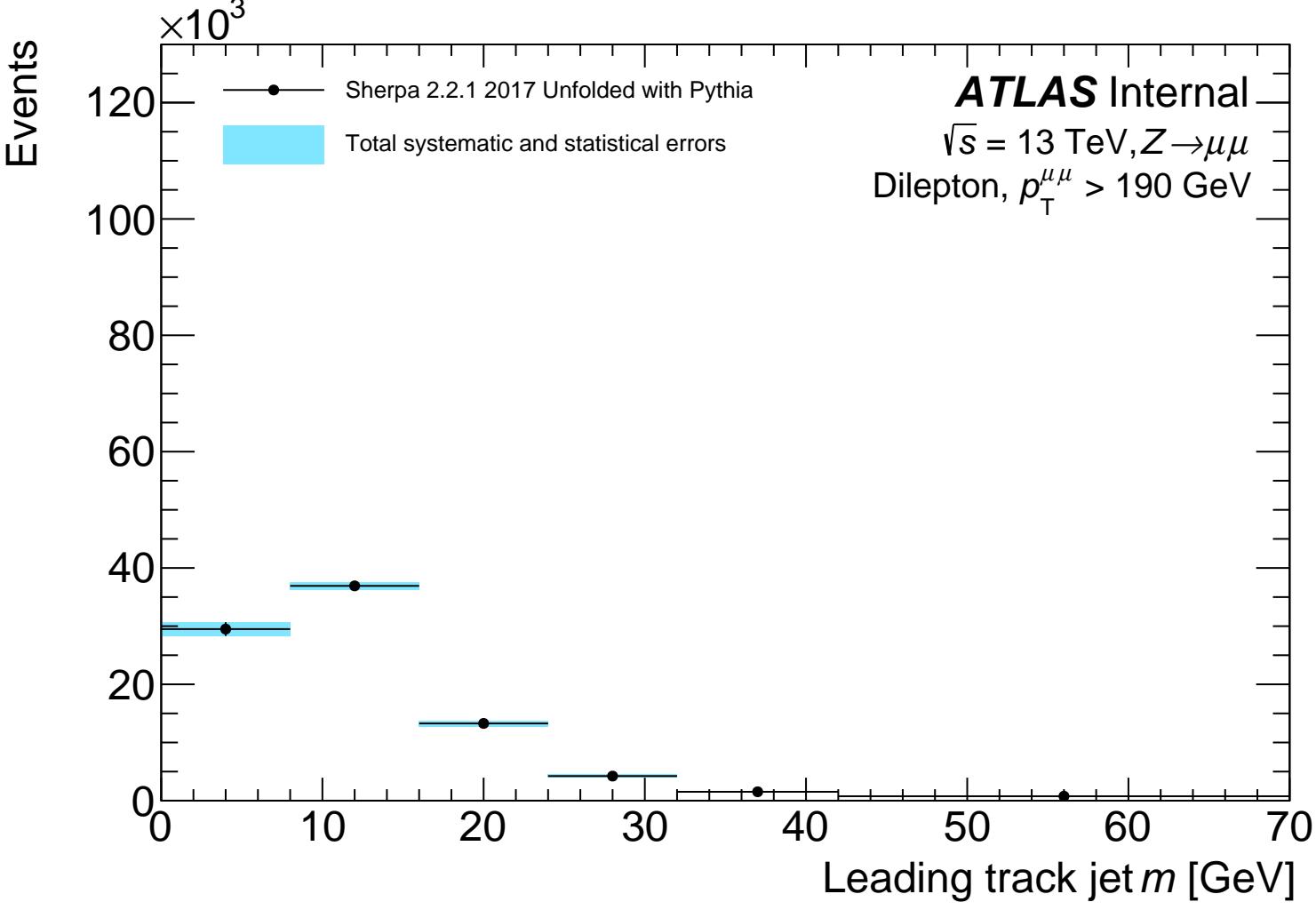


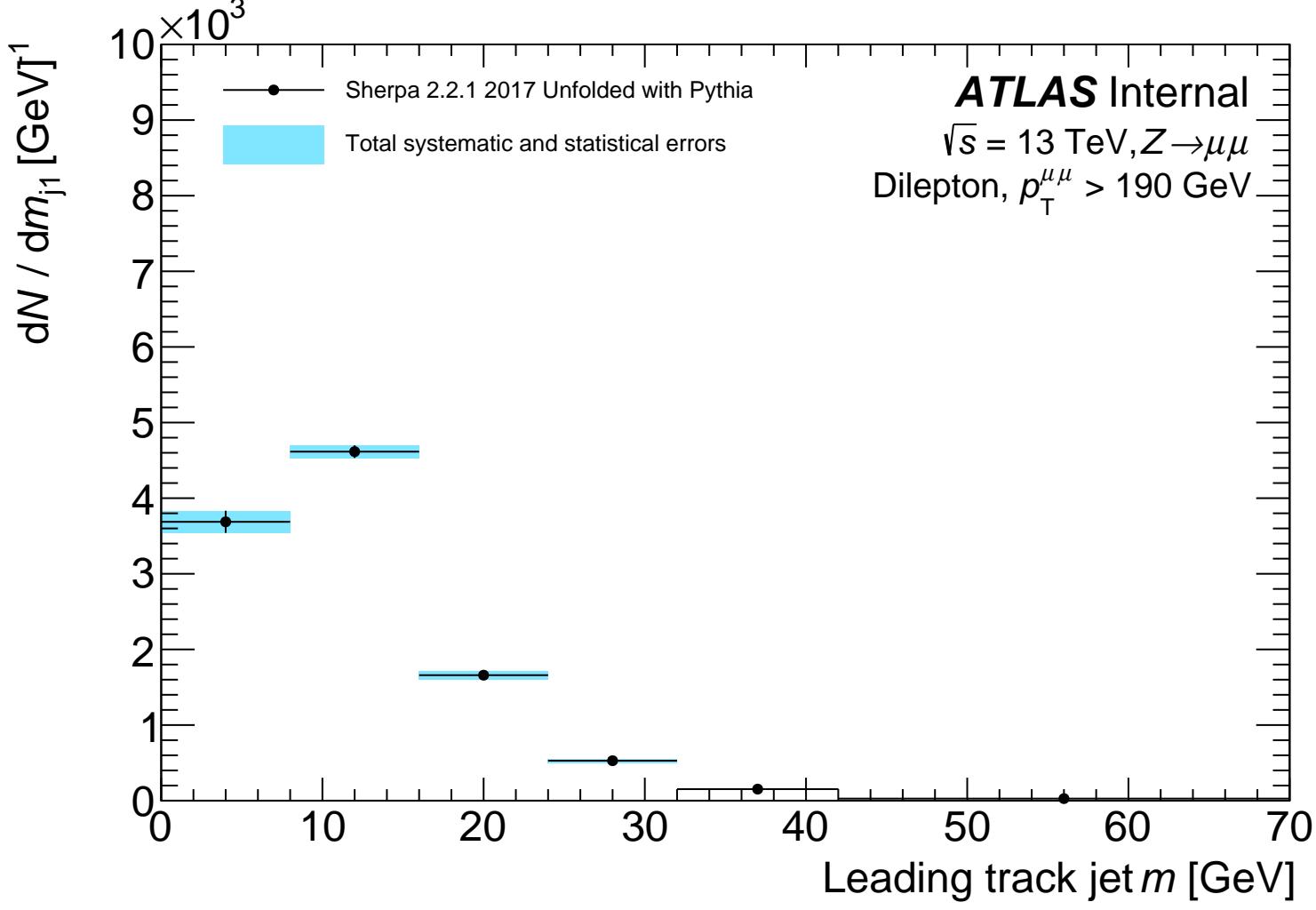










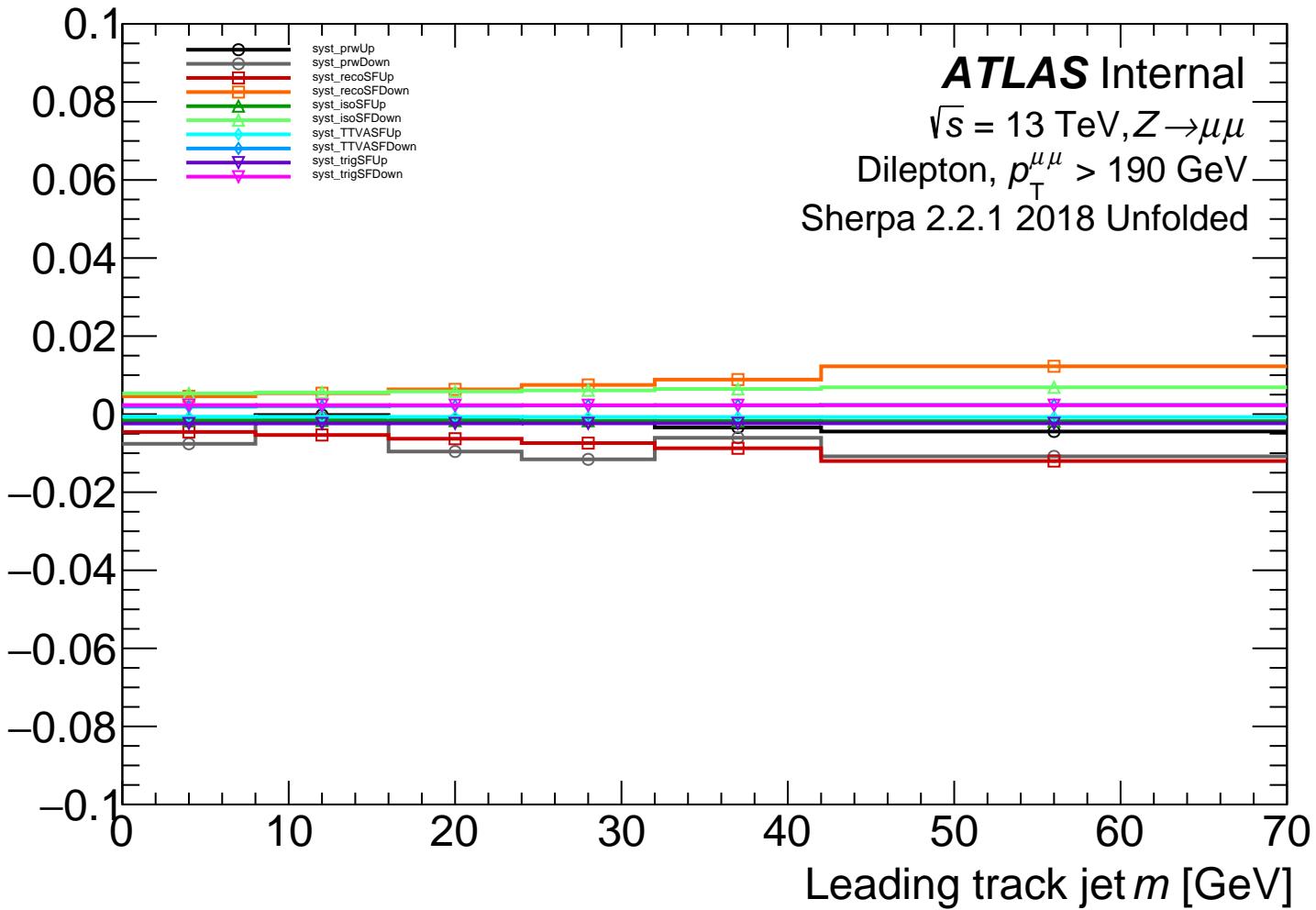


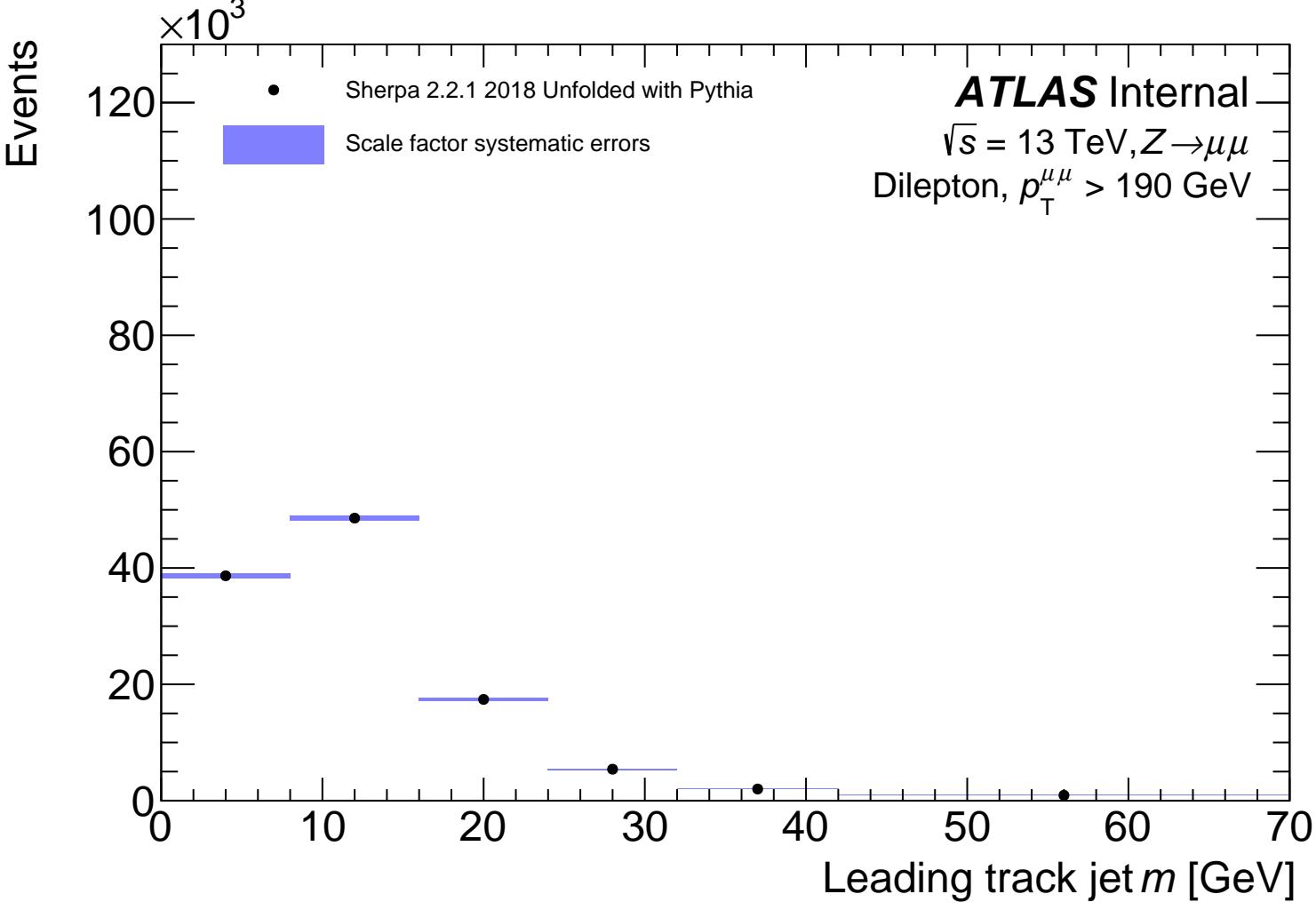
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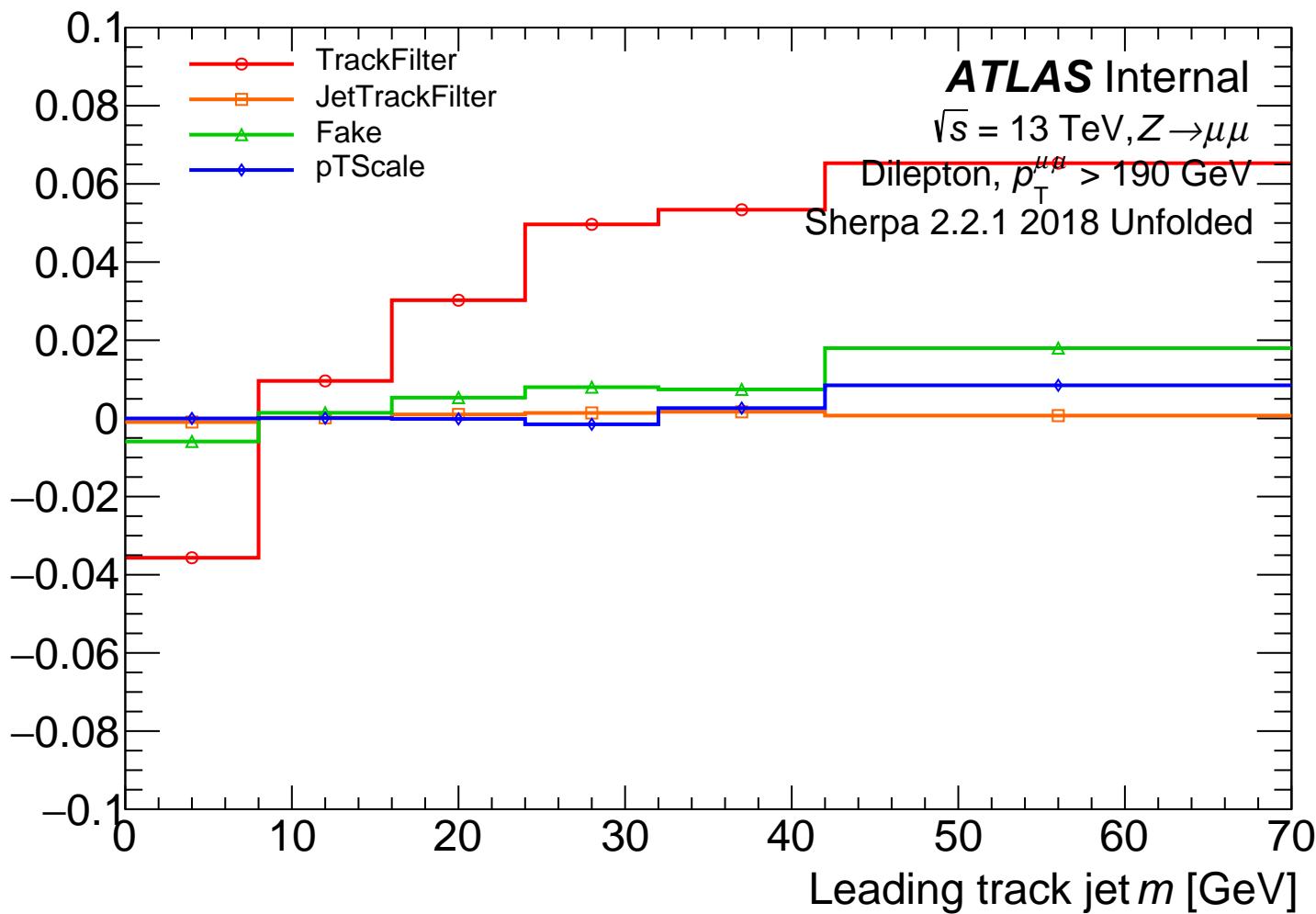
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

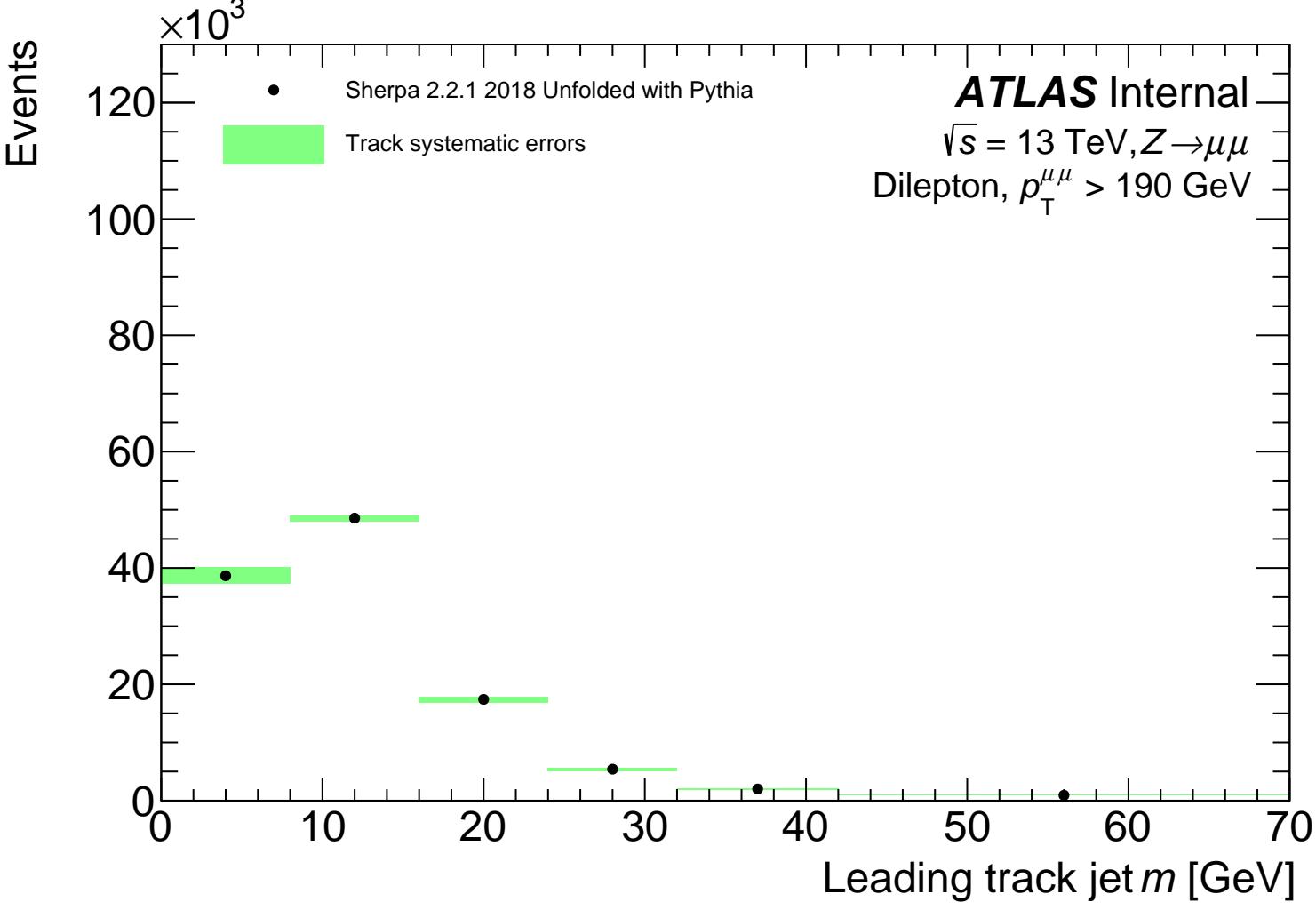
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

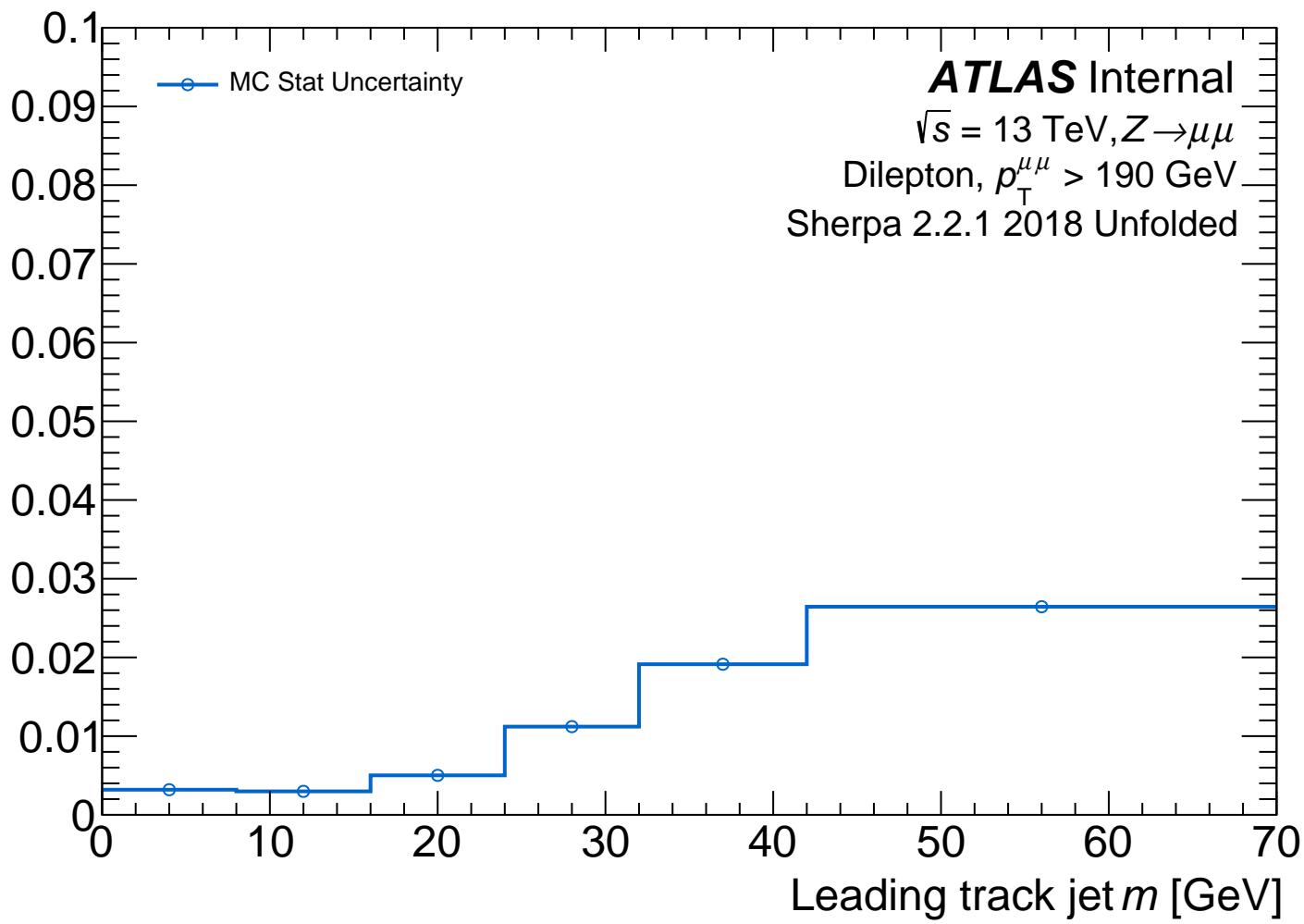
Sherpa 2.2.1 2018 Unfolded

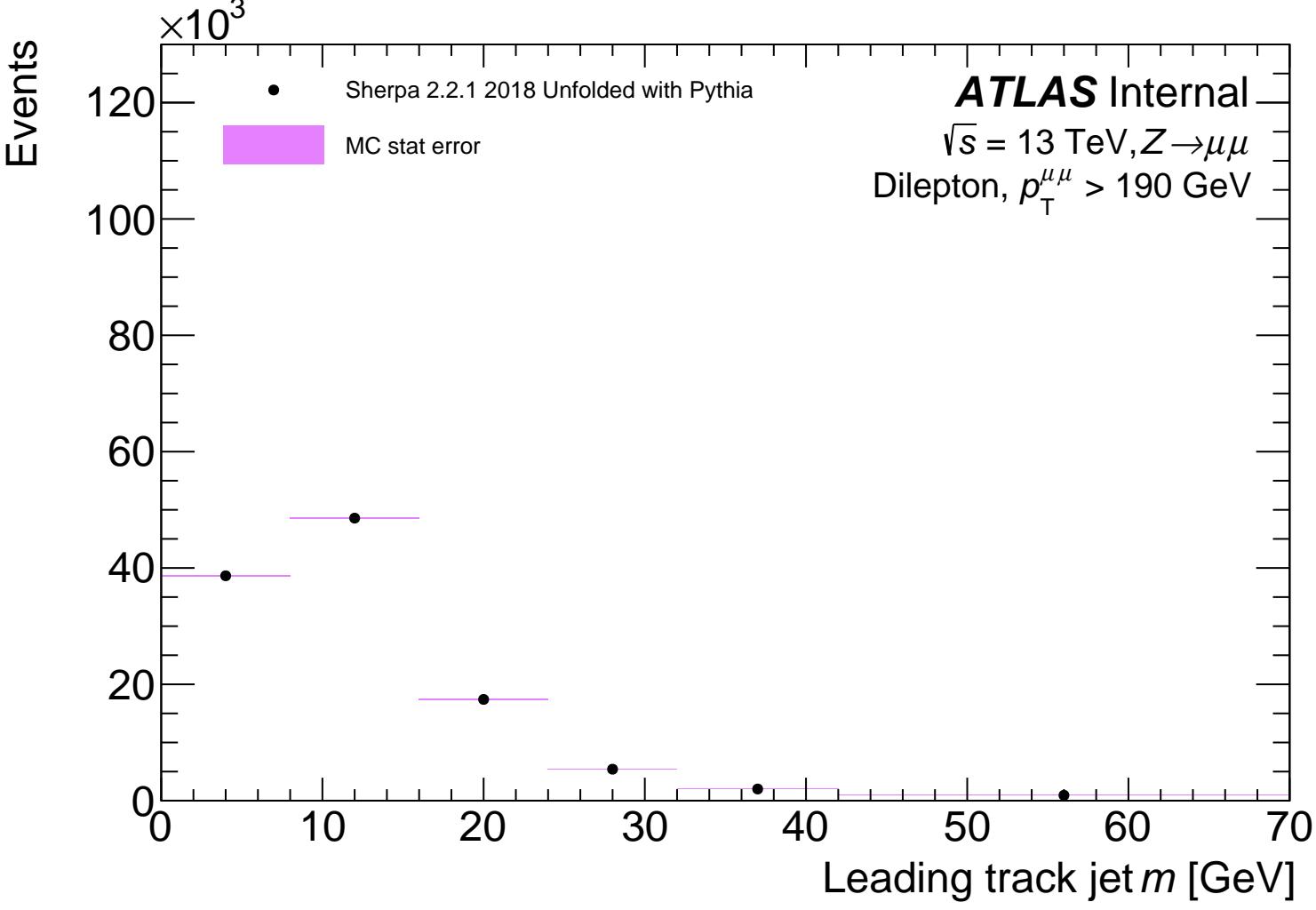


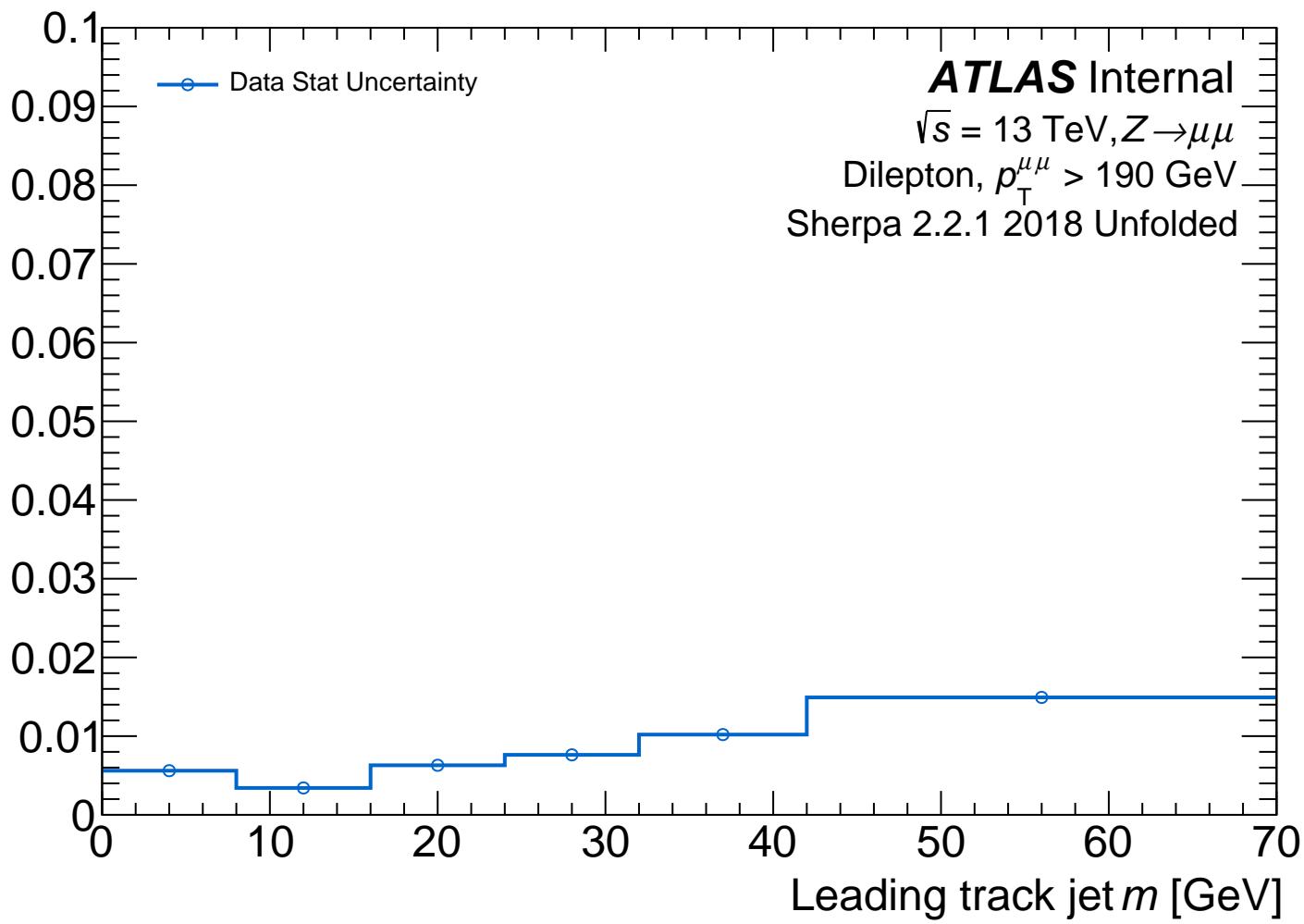


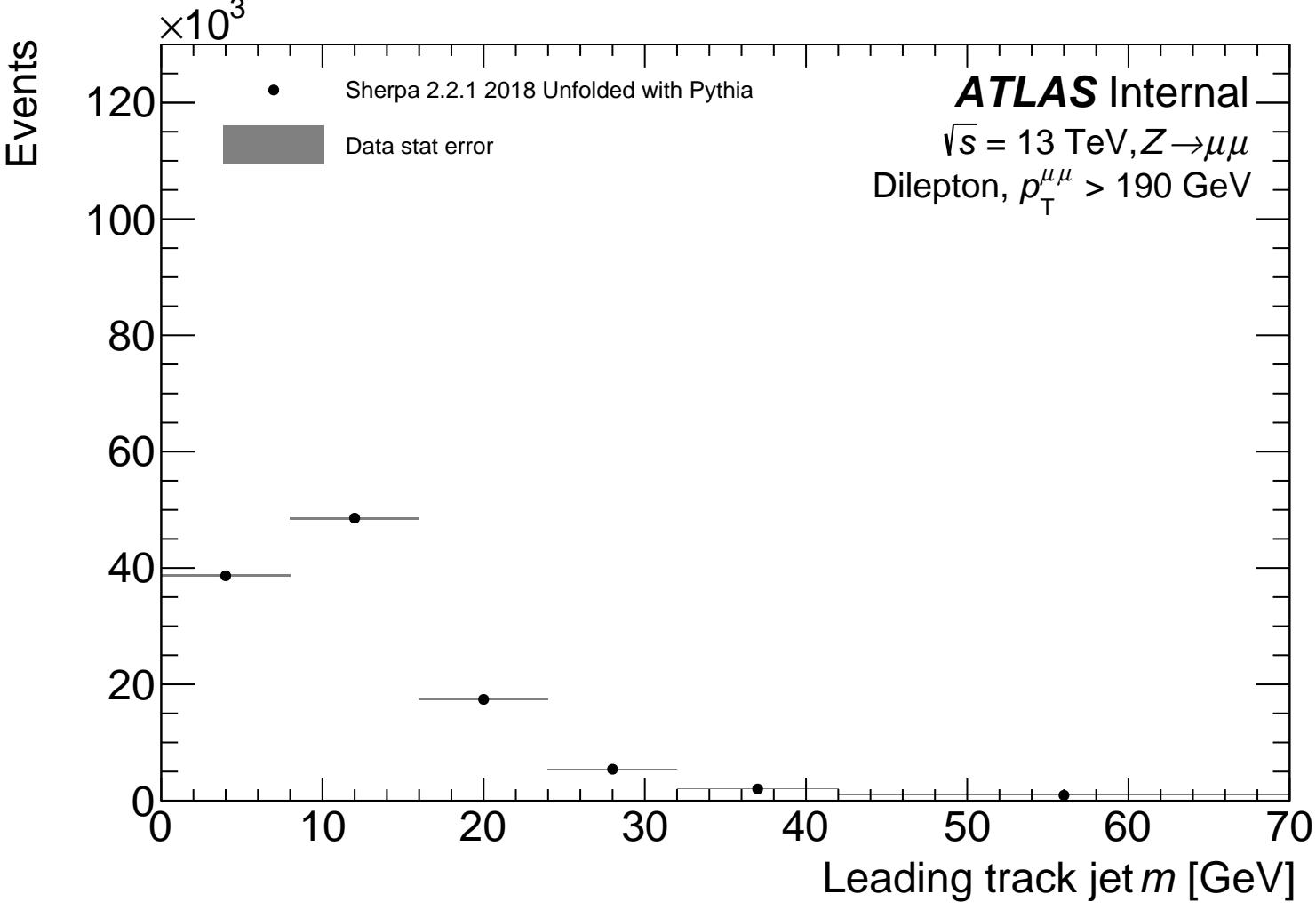


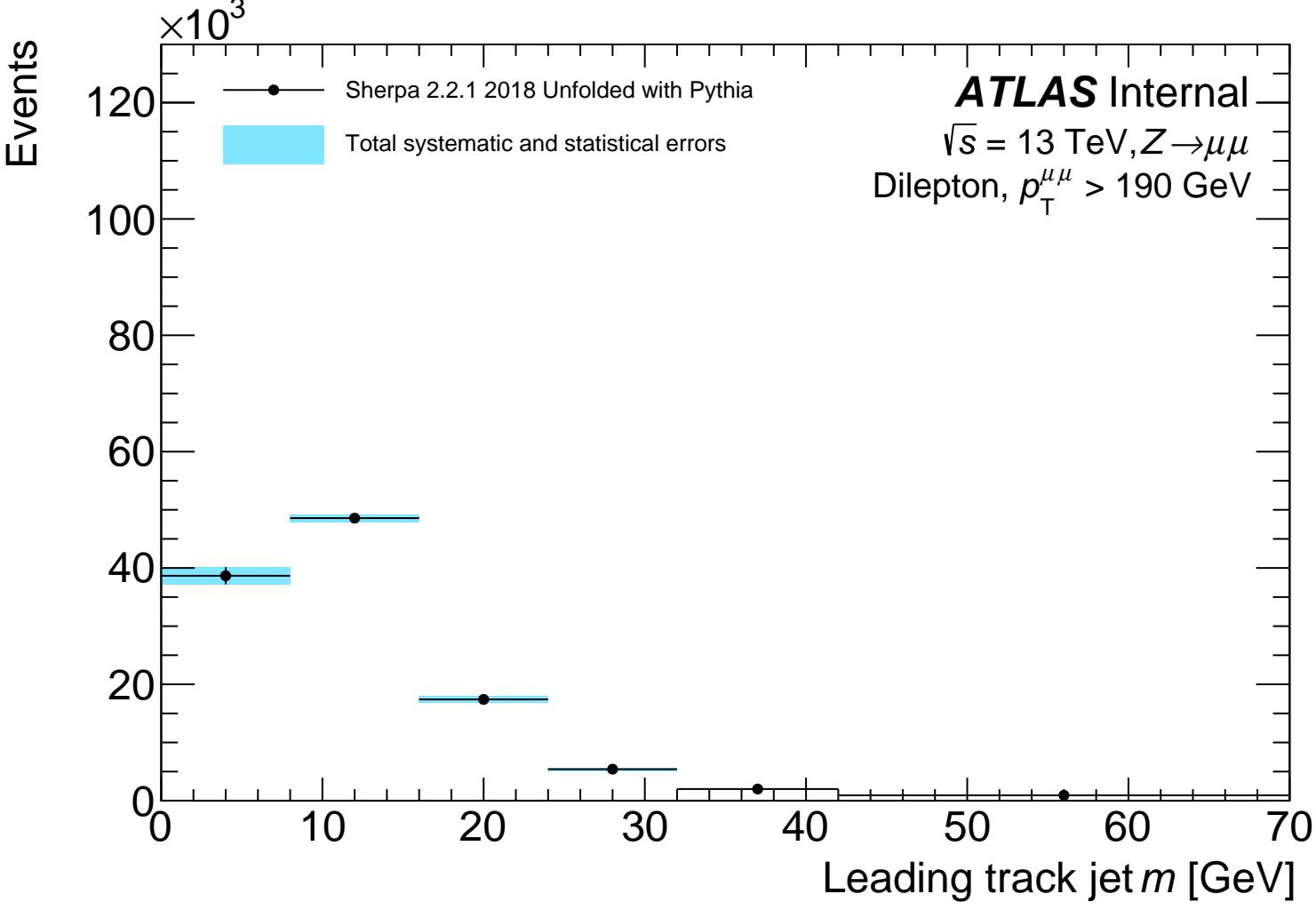


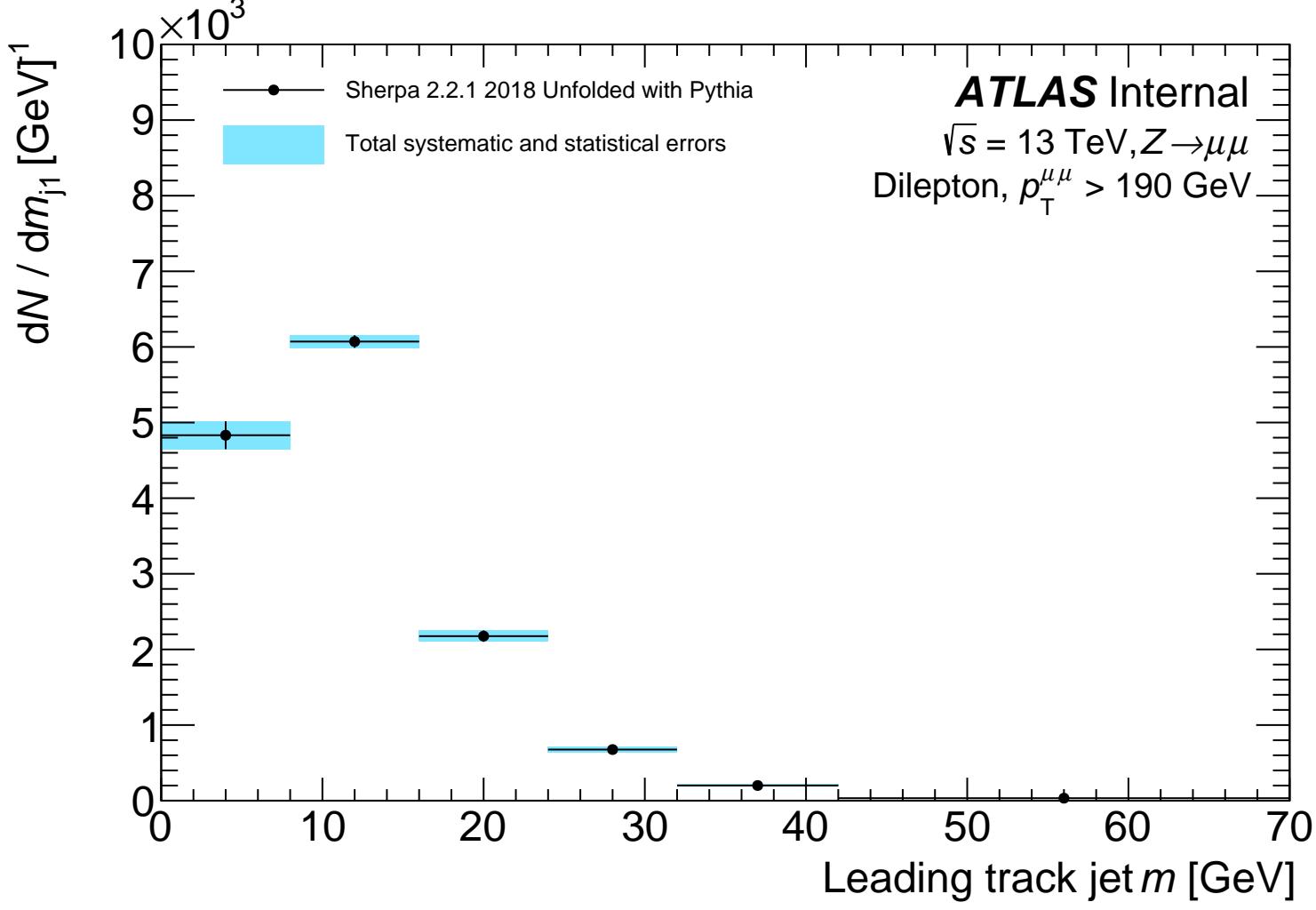










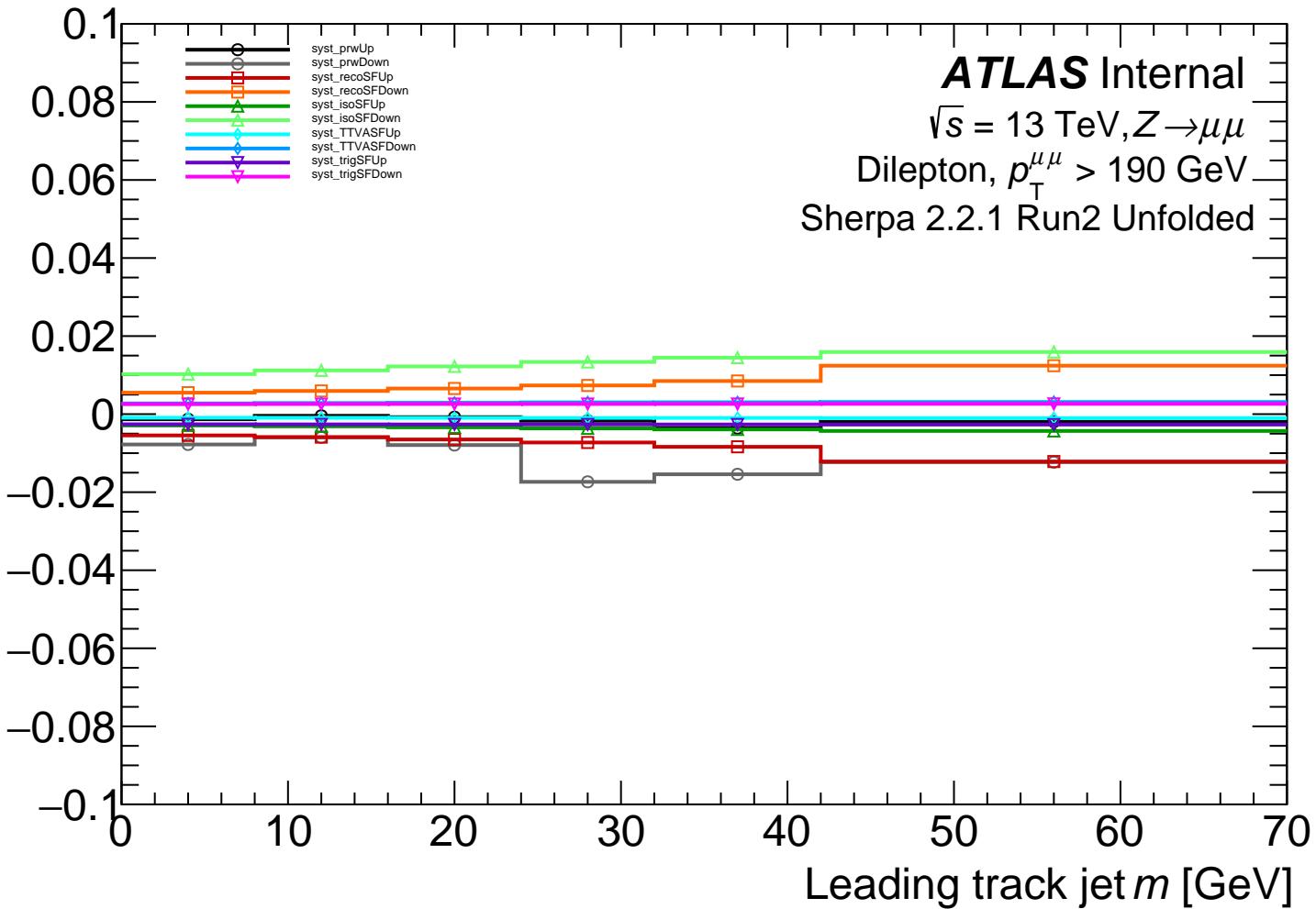


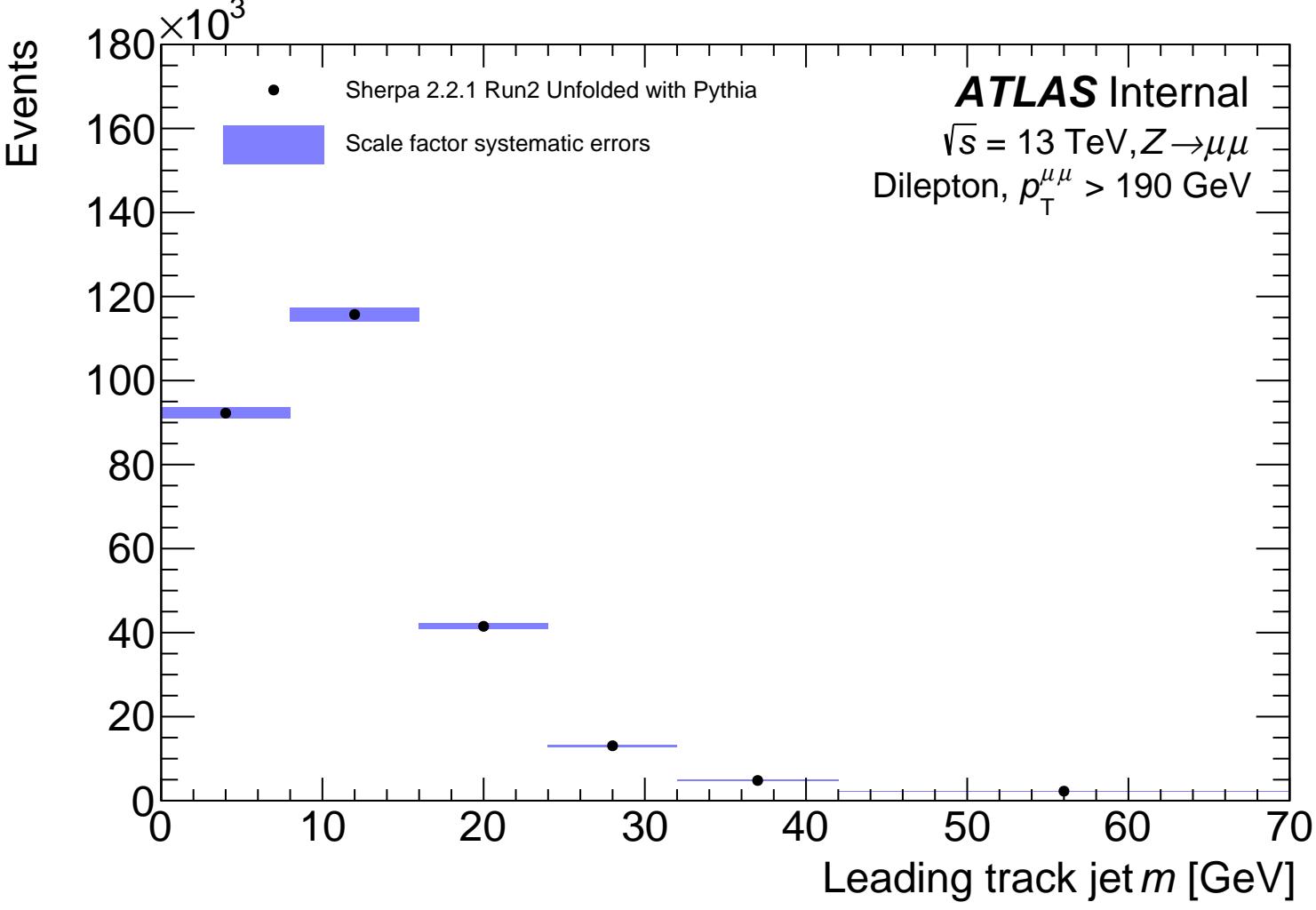
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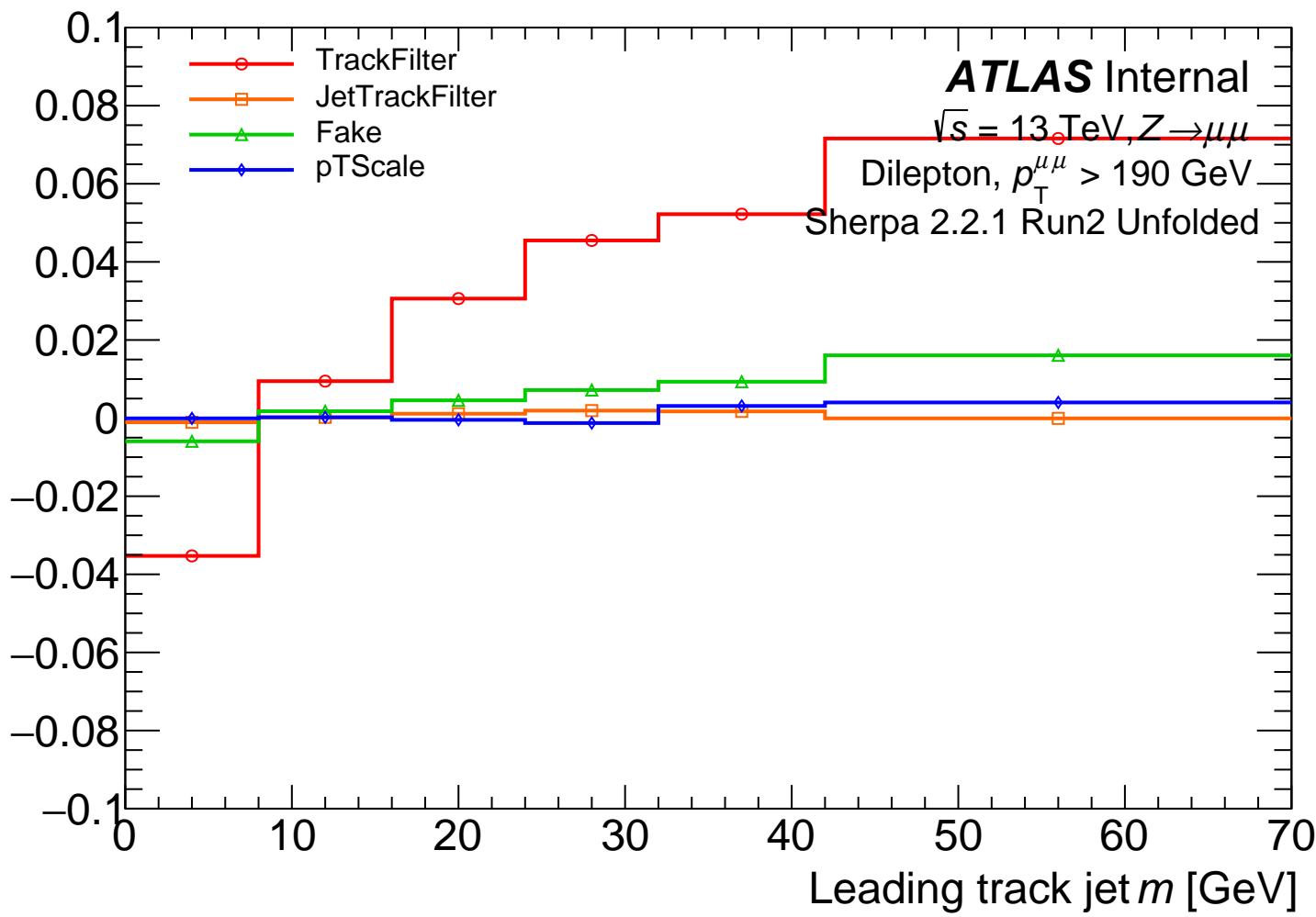
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

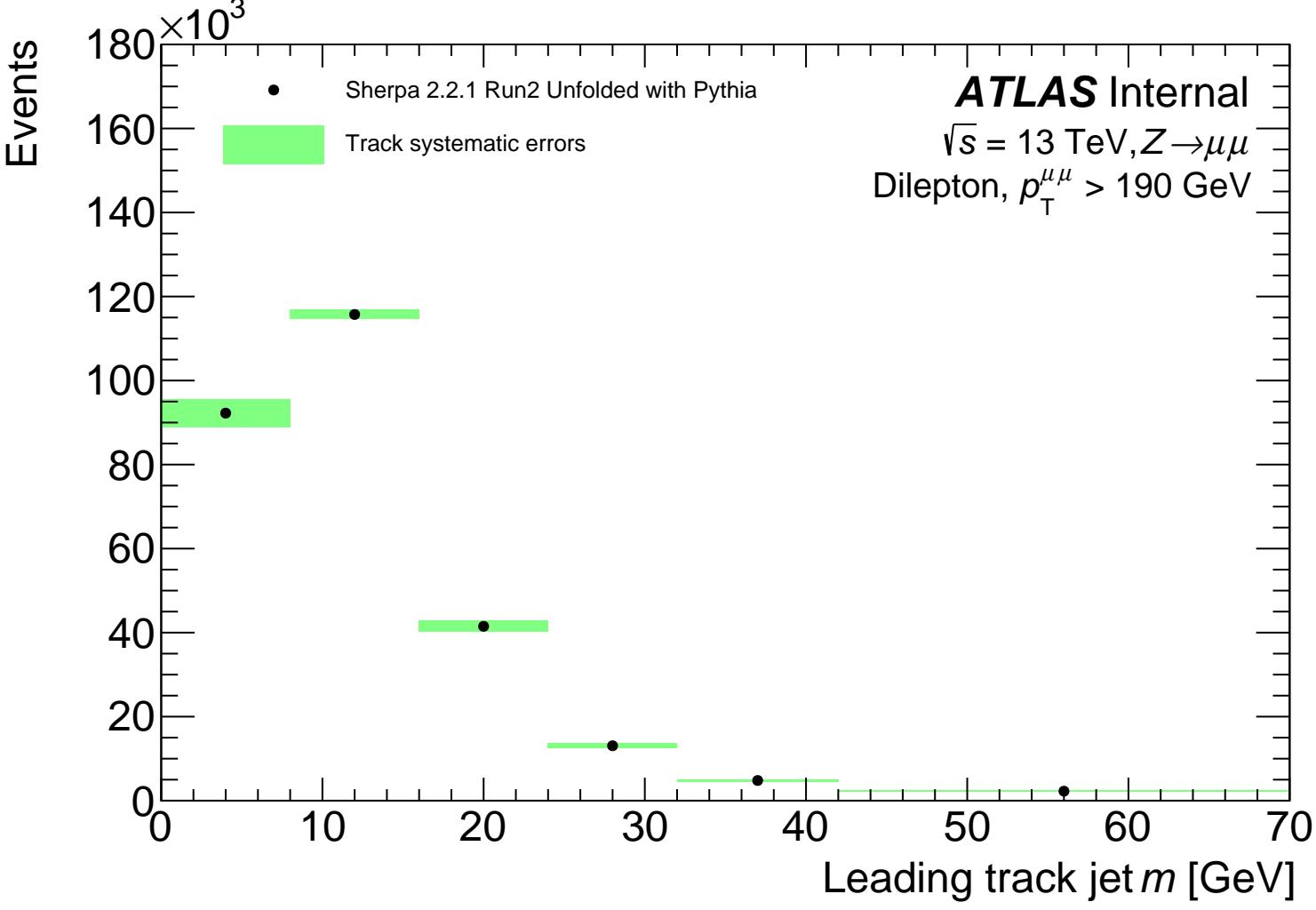
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

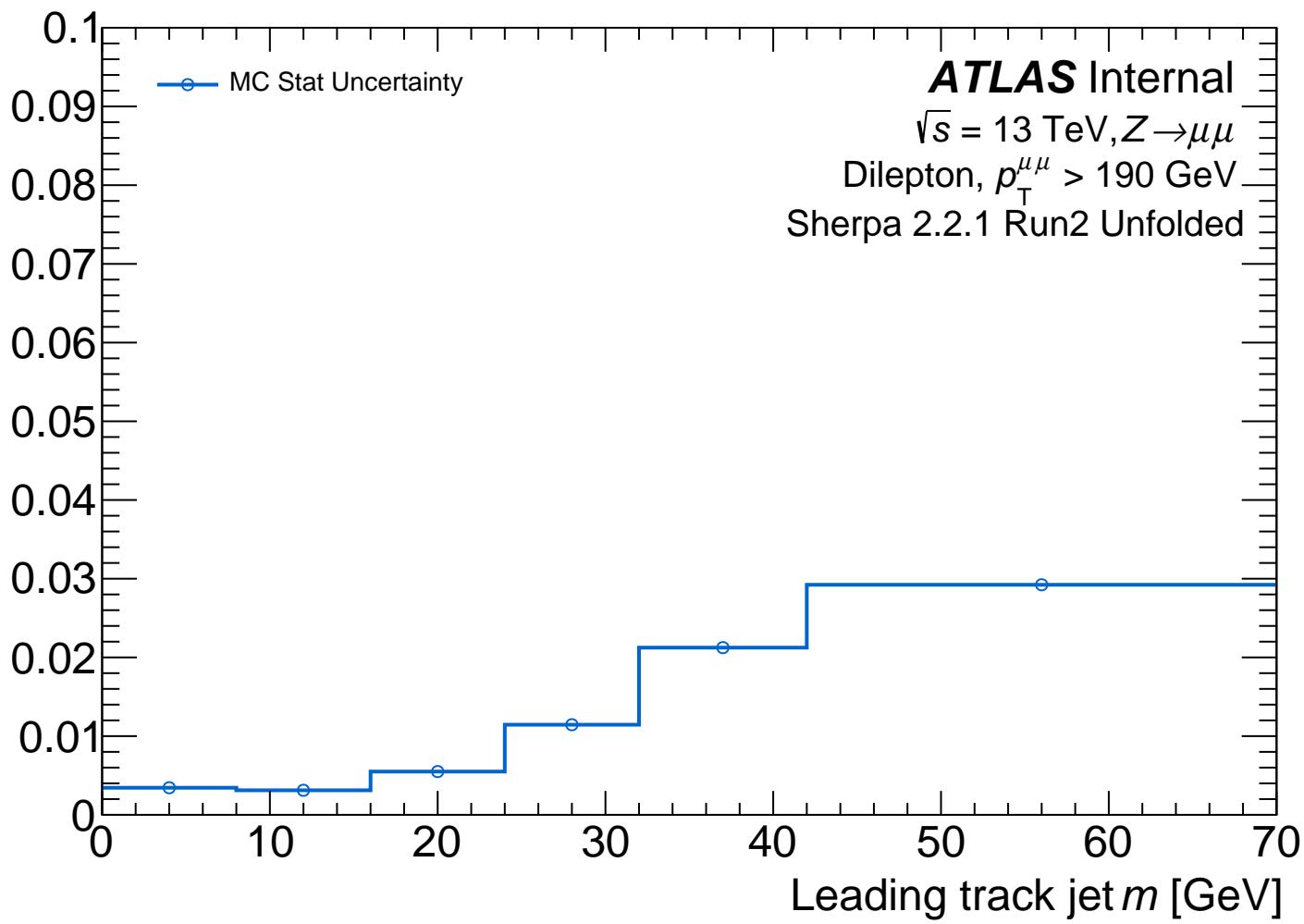
Sherpa 2.2.1 Run2 Unfolded

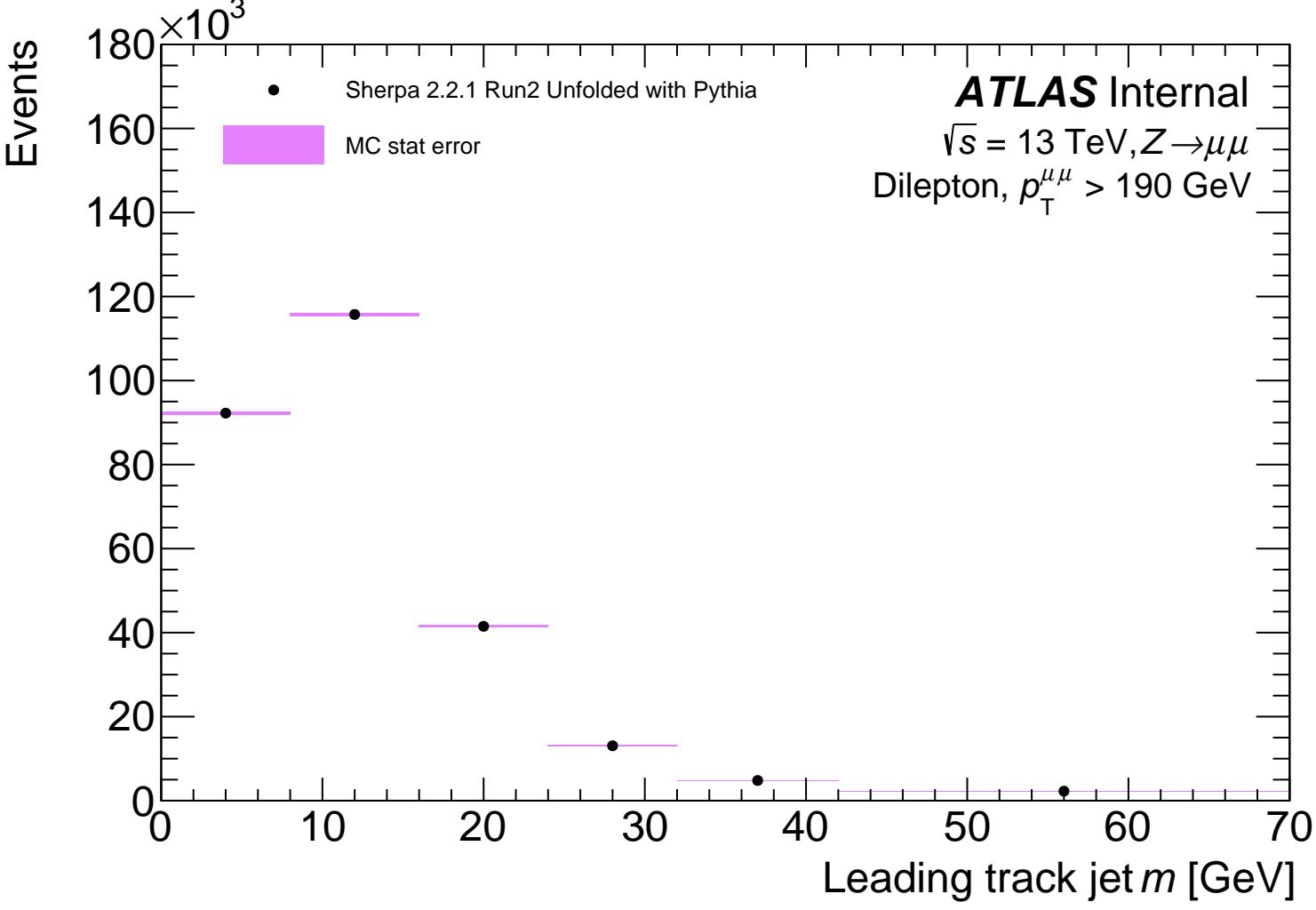


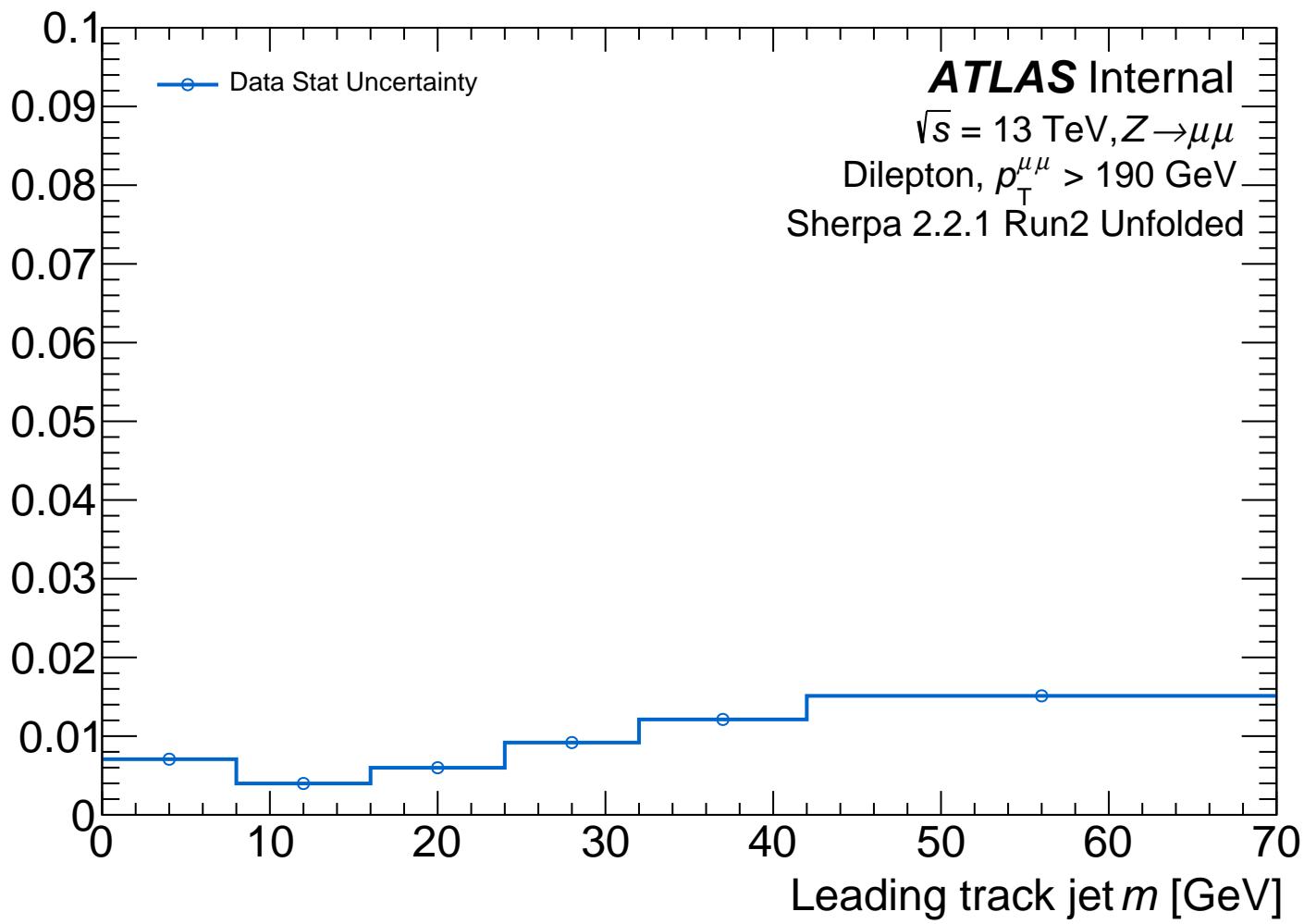


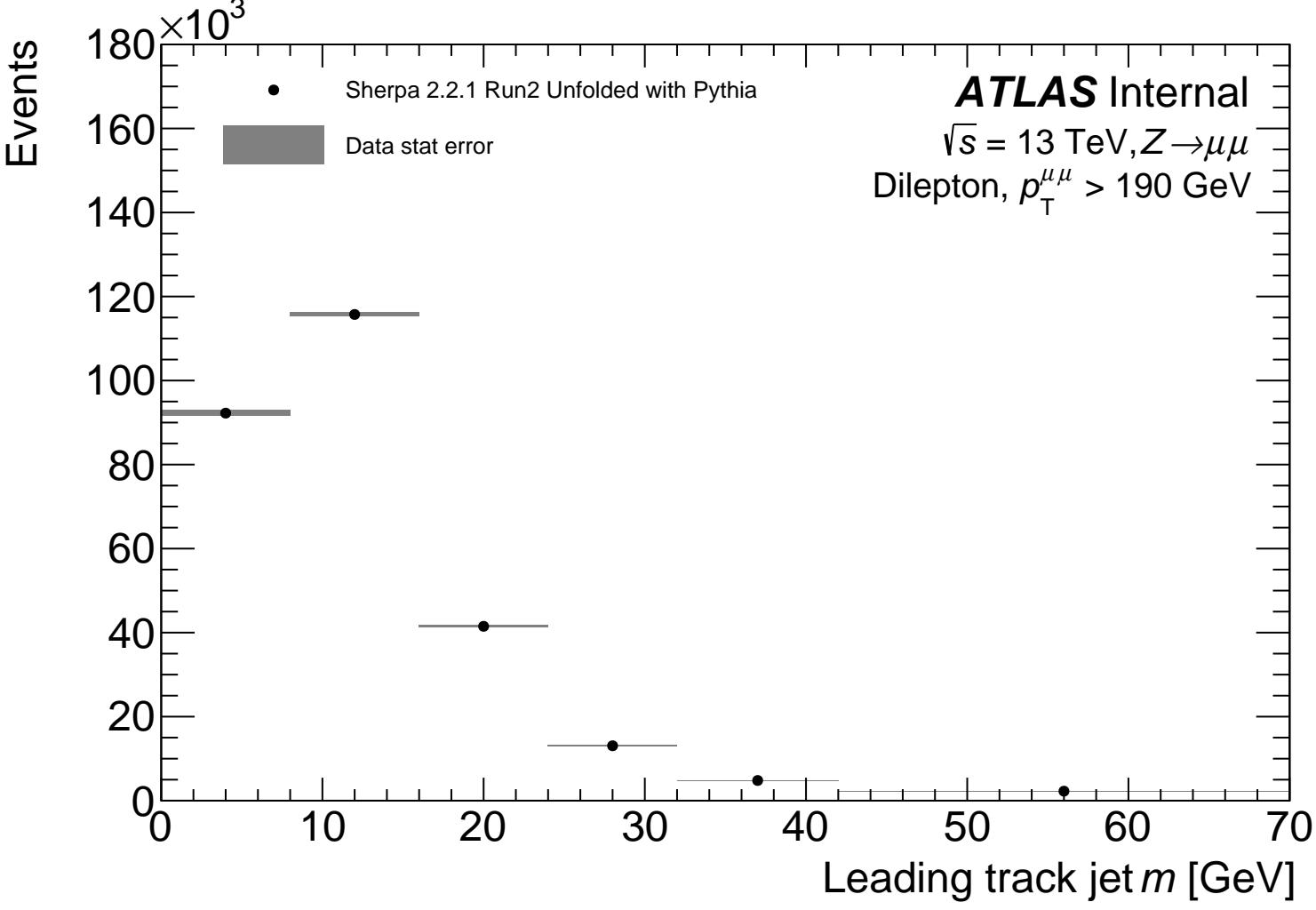


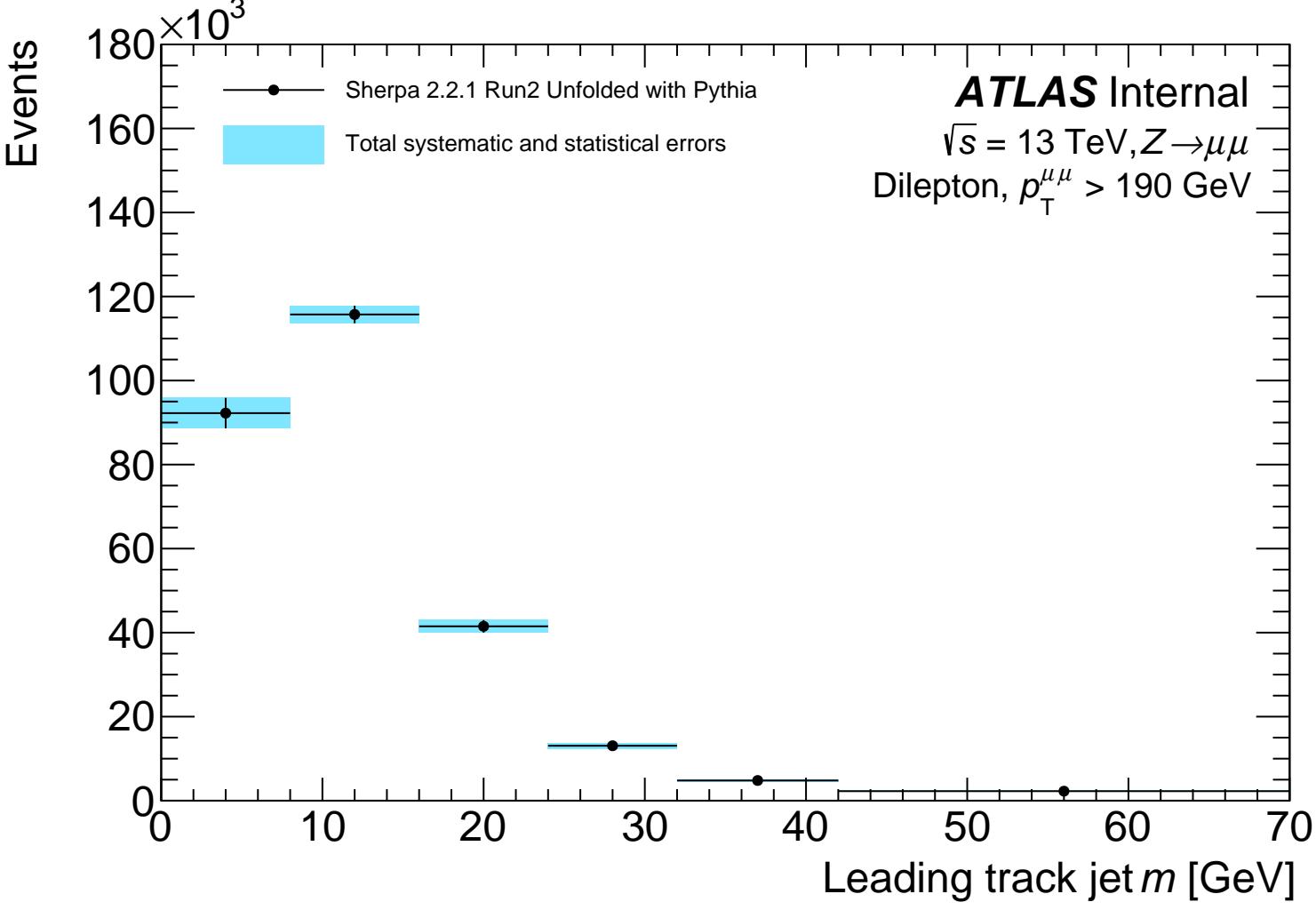


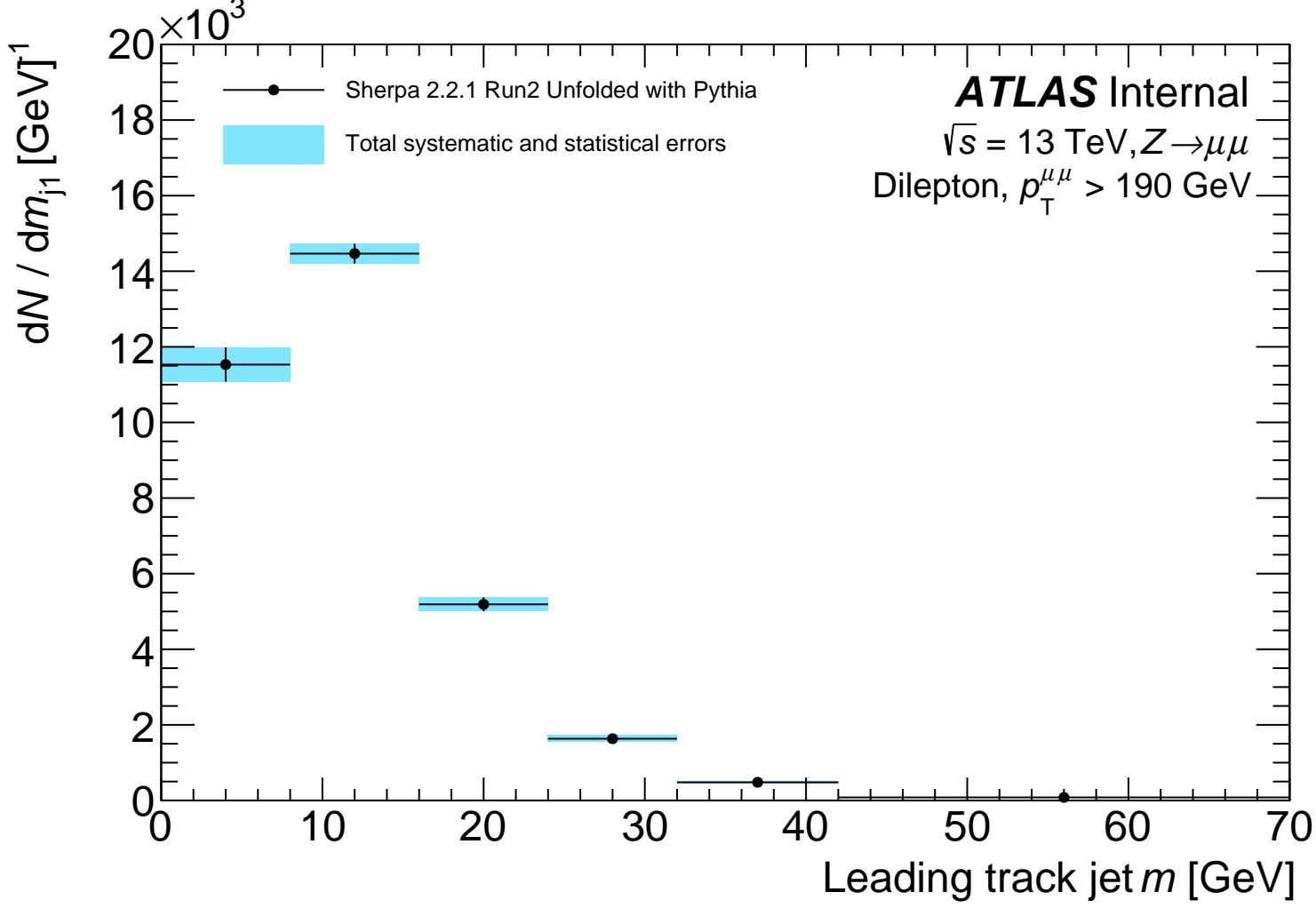










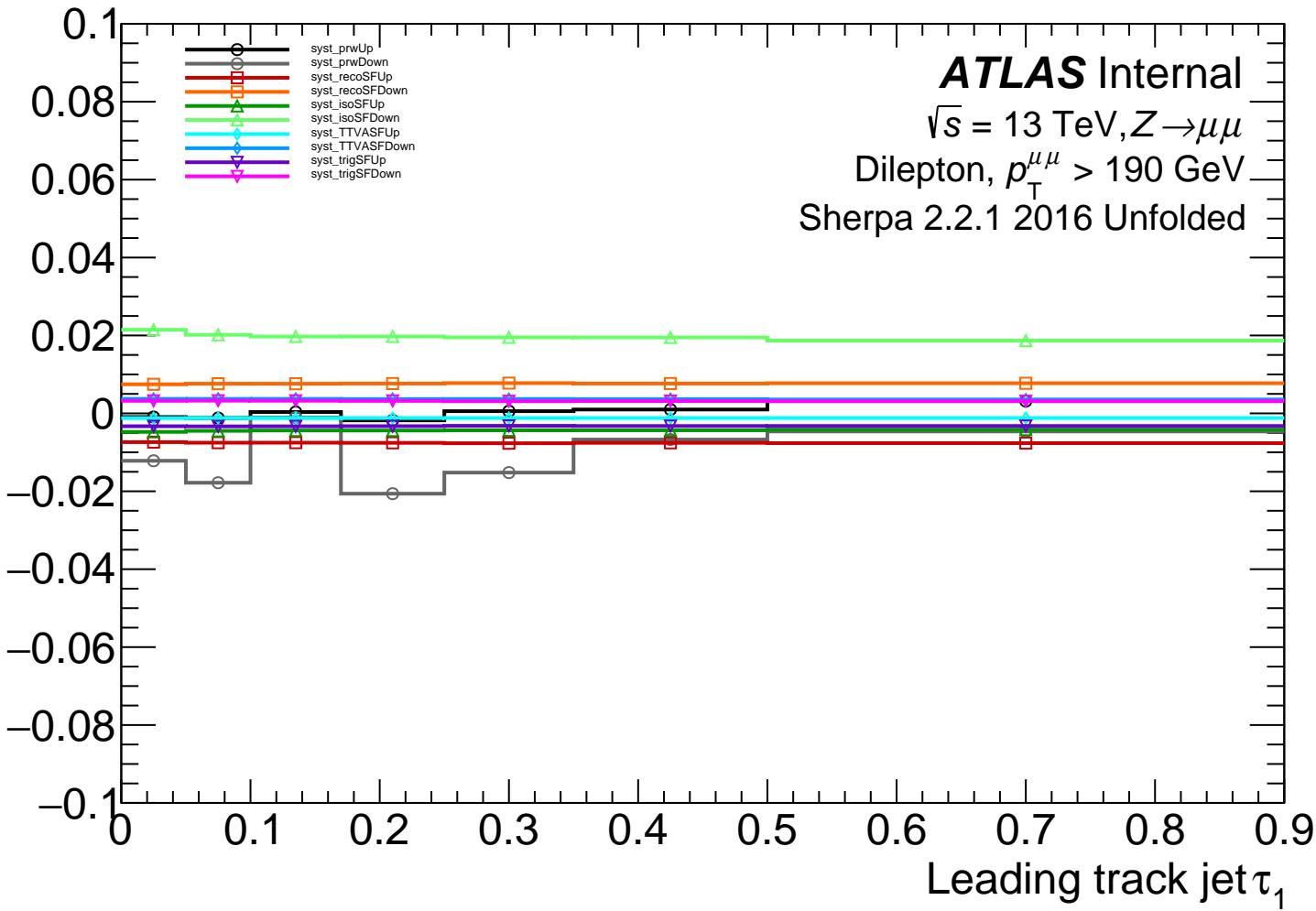


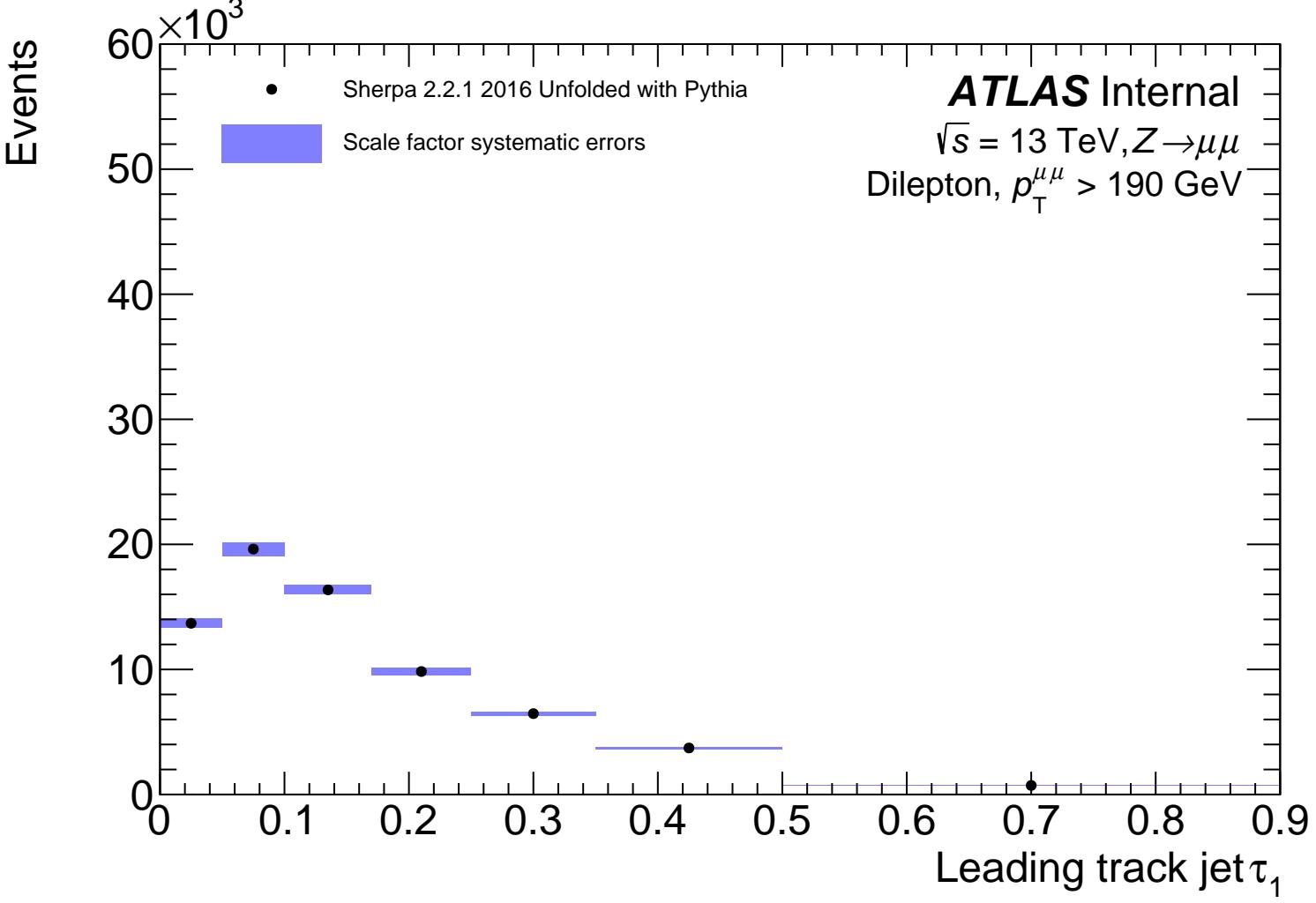
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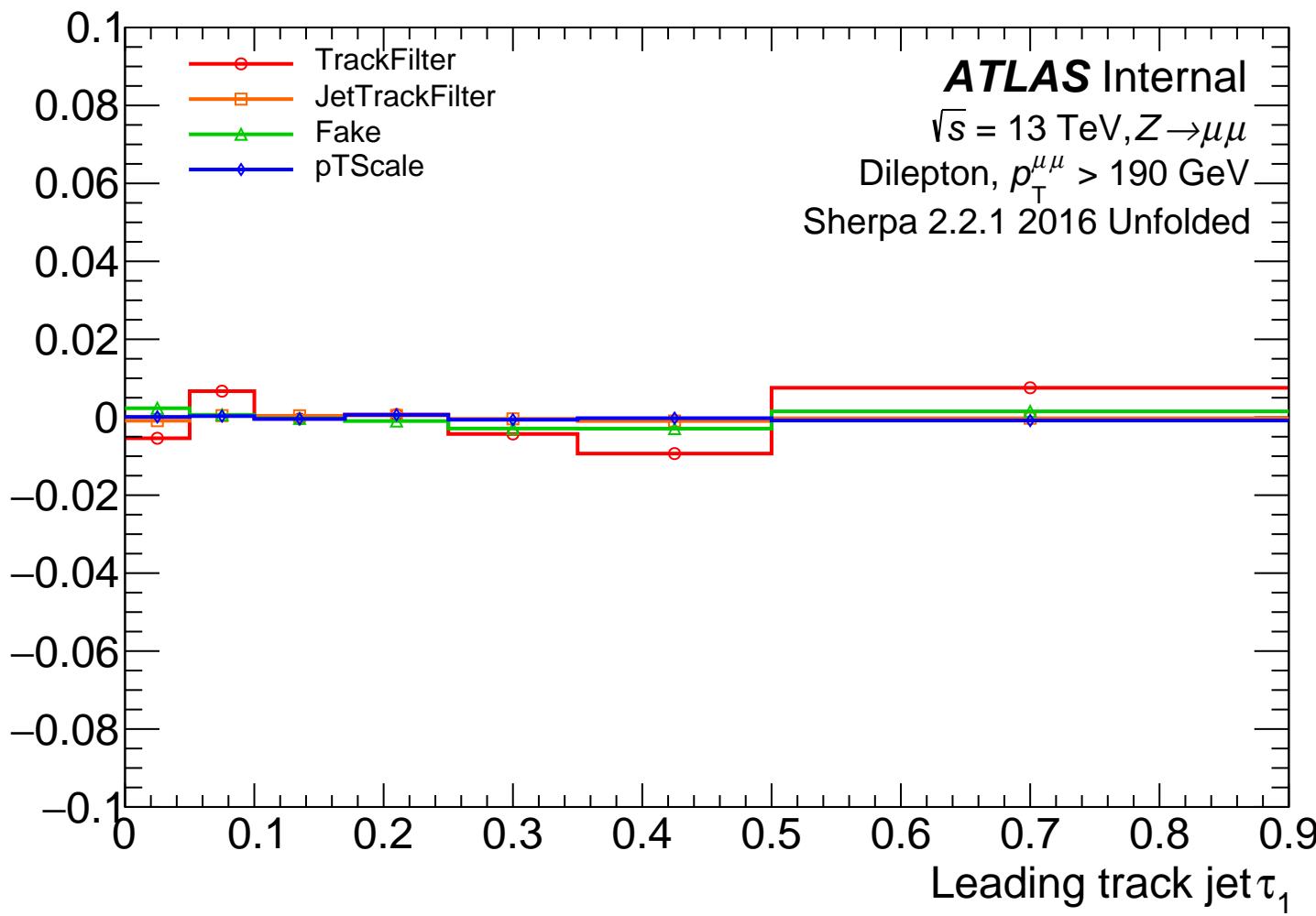
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

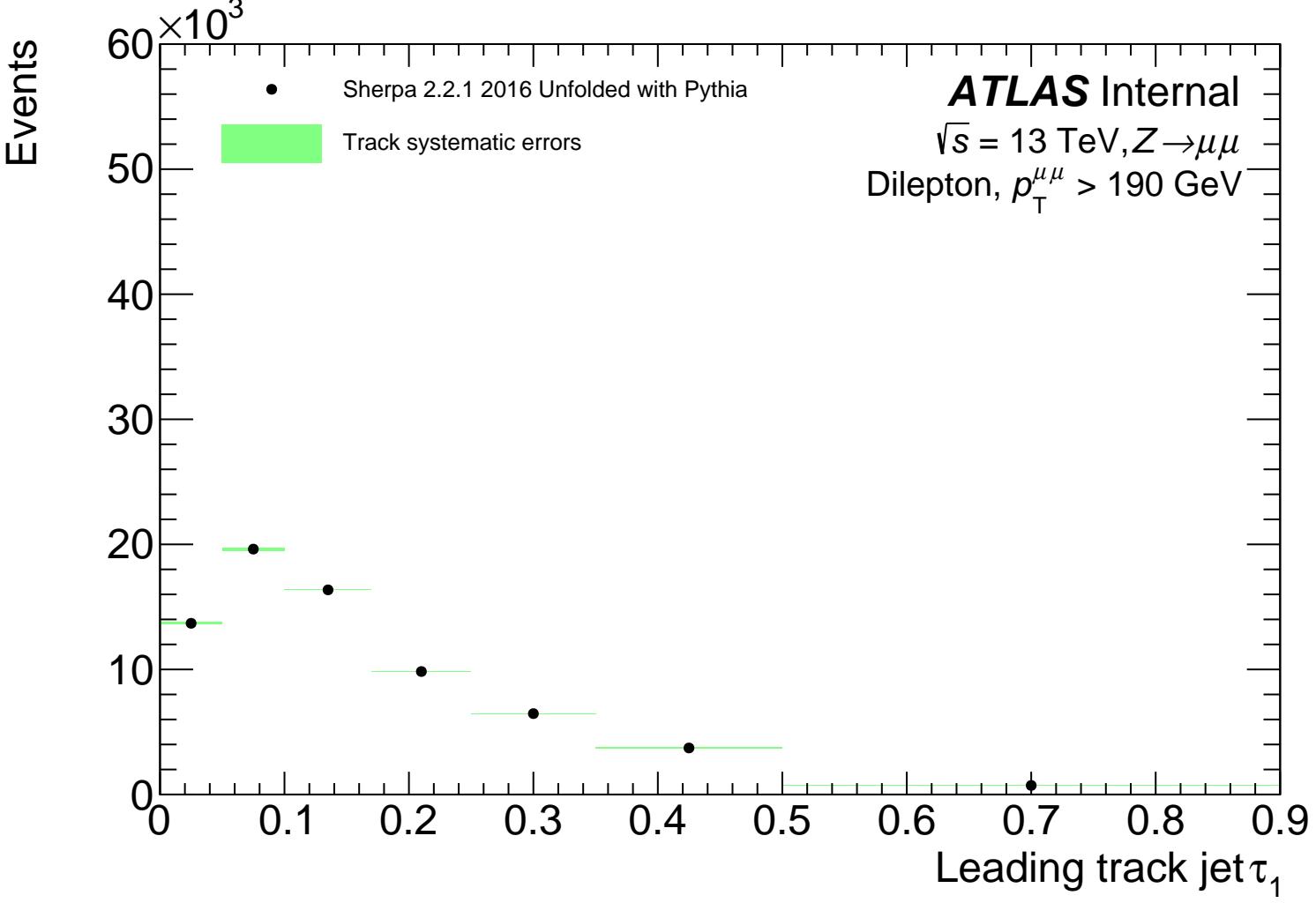
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

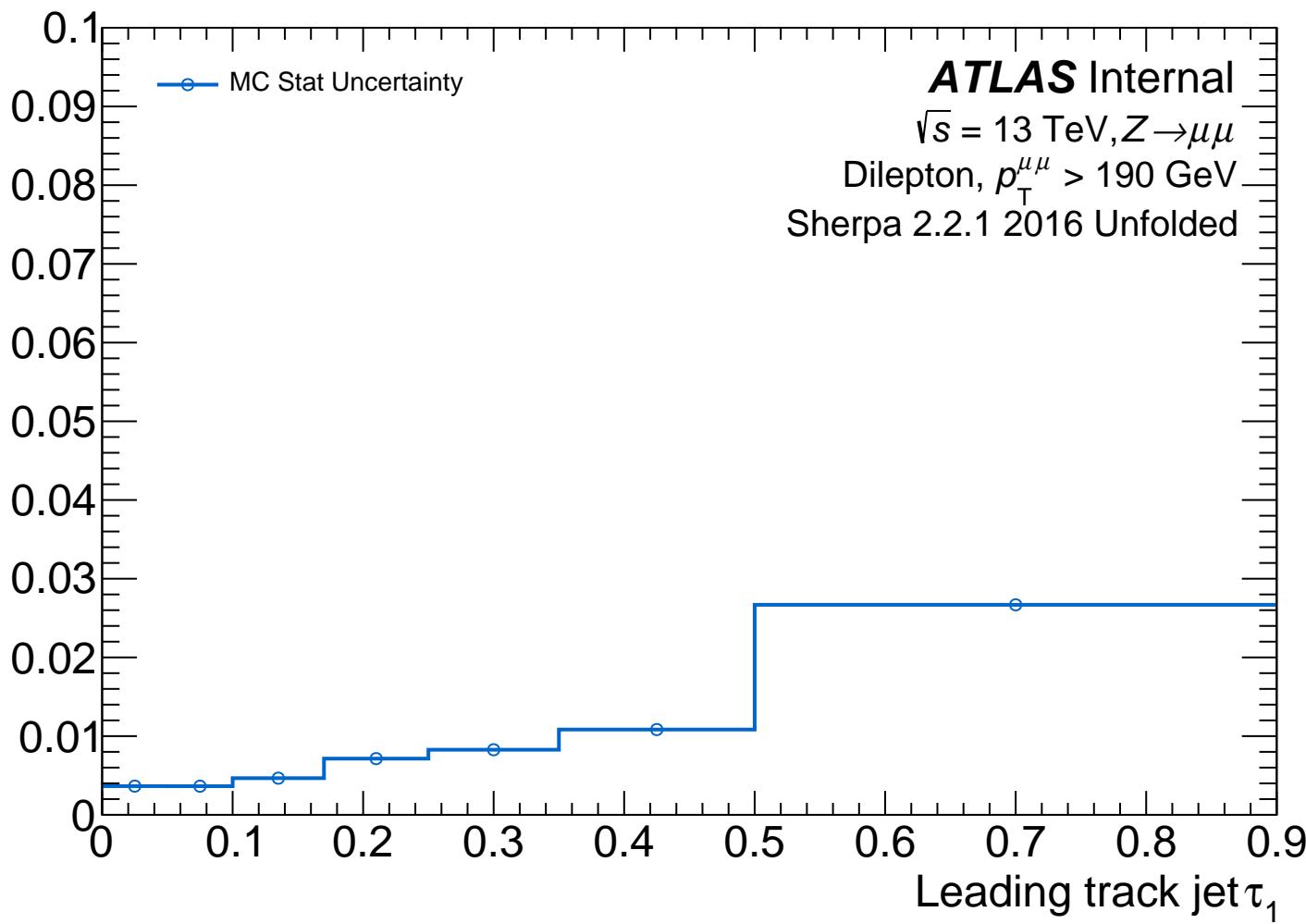
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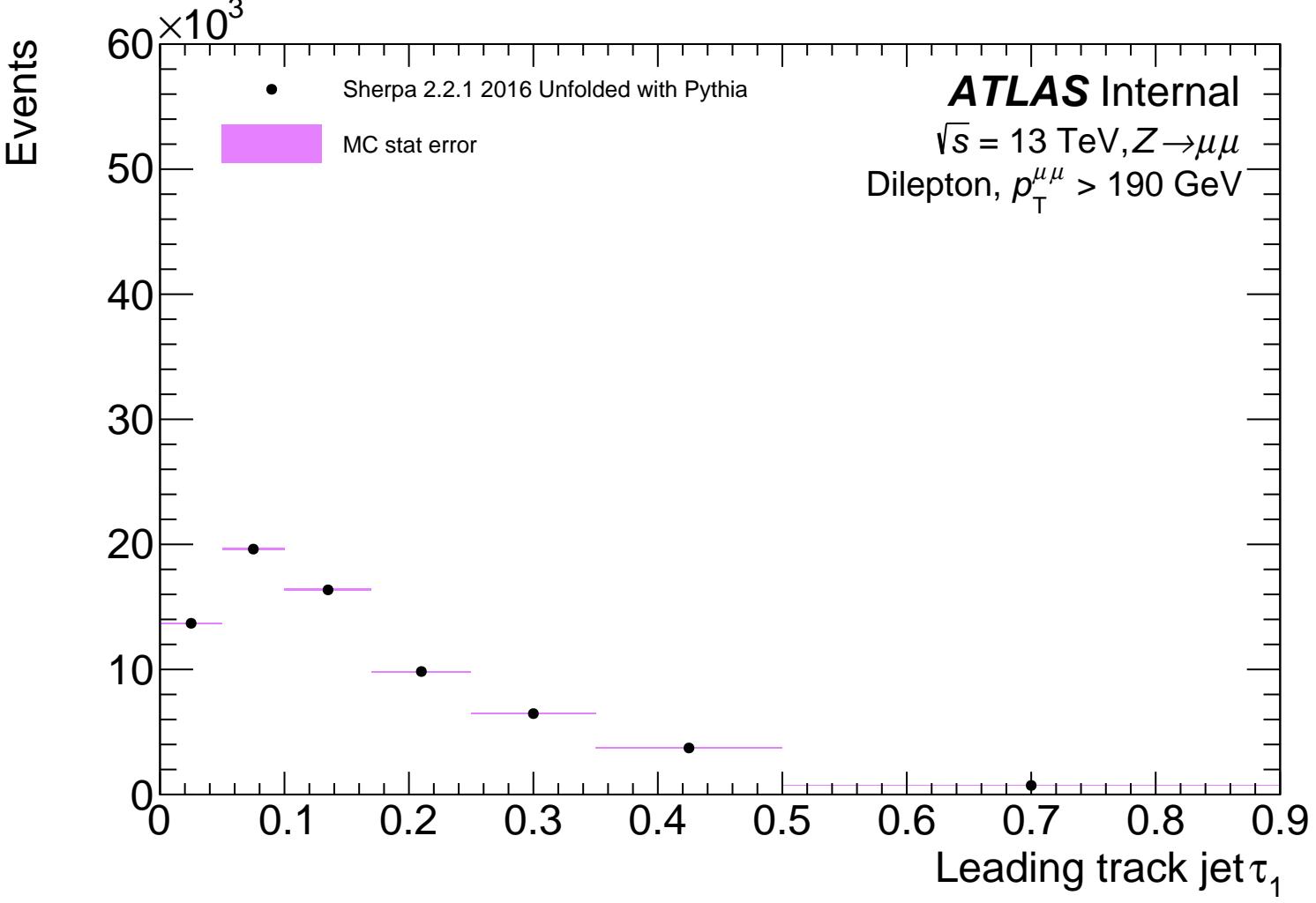


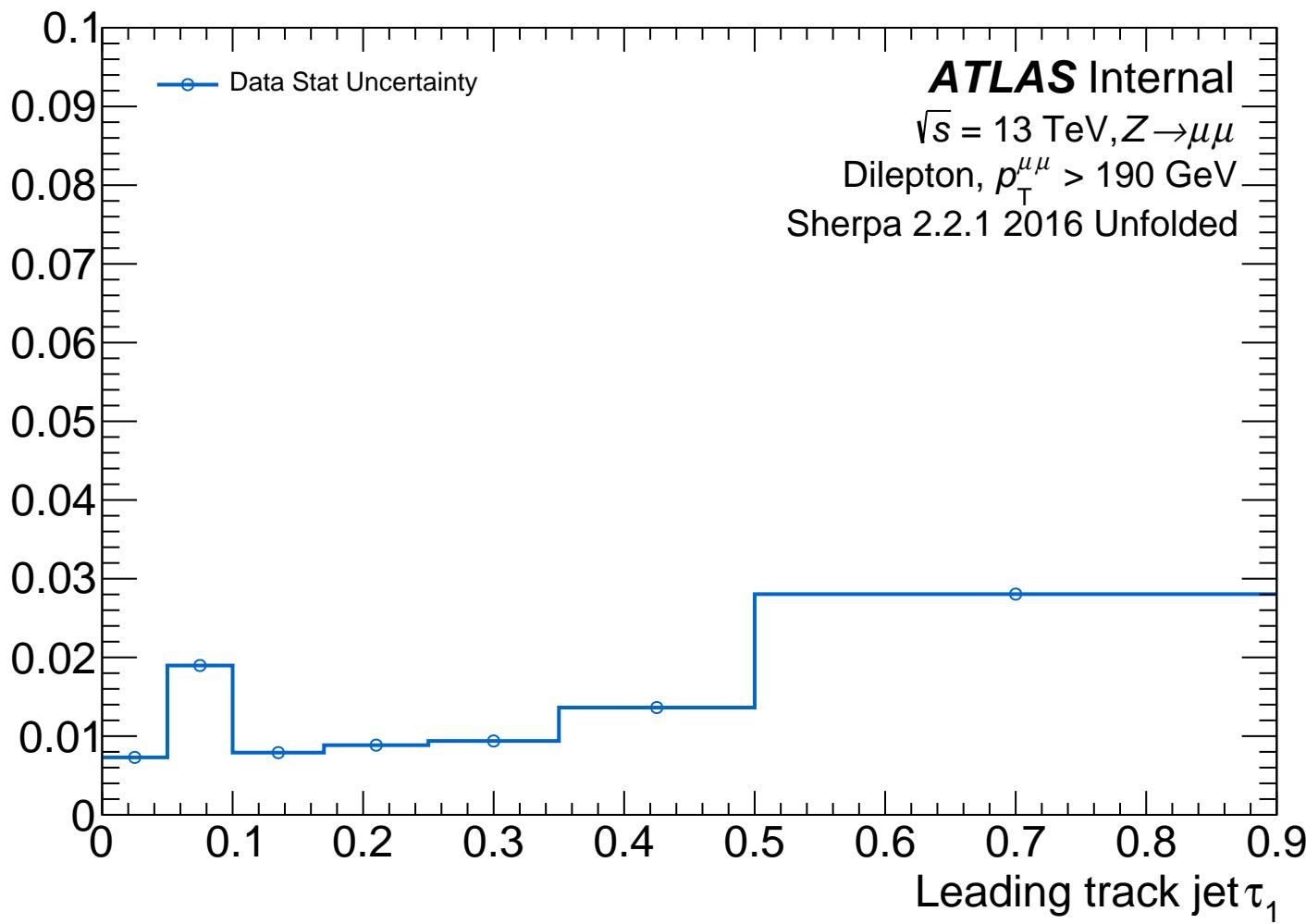


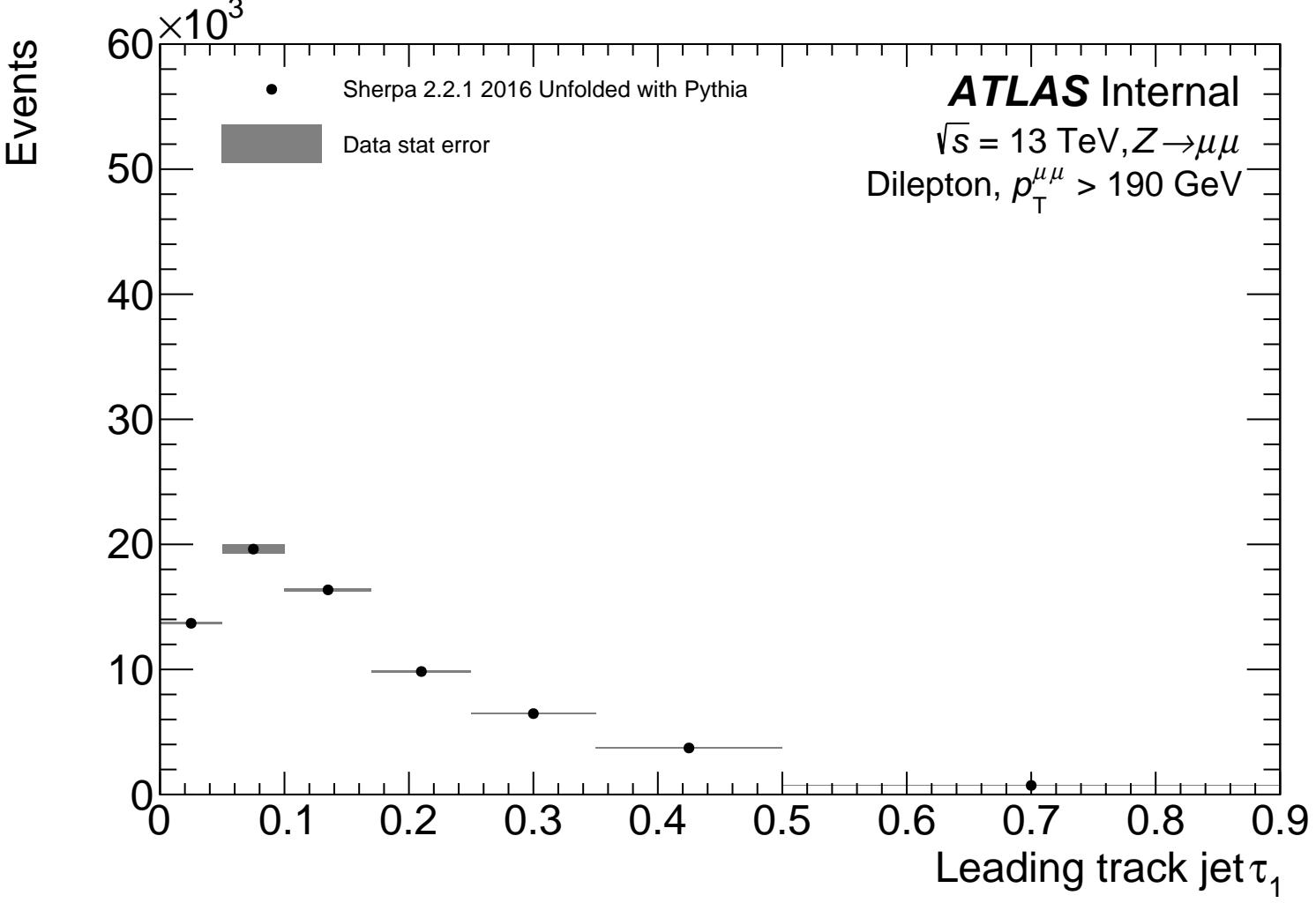


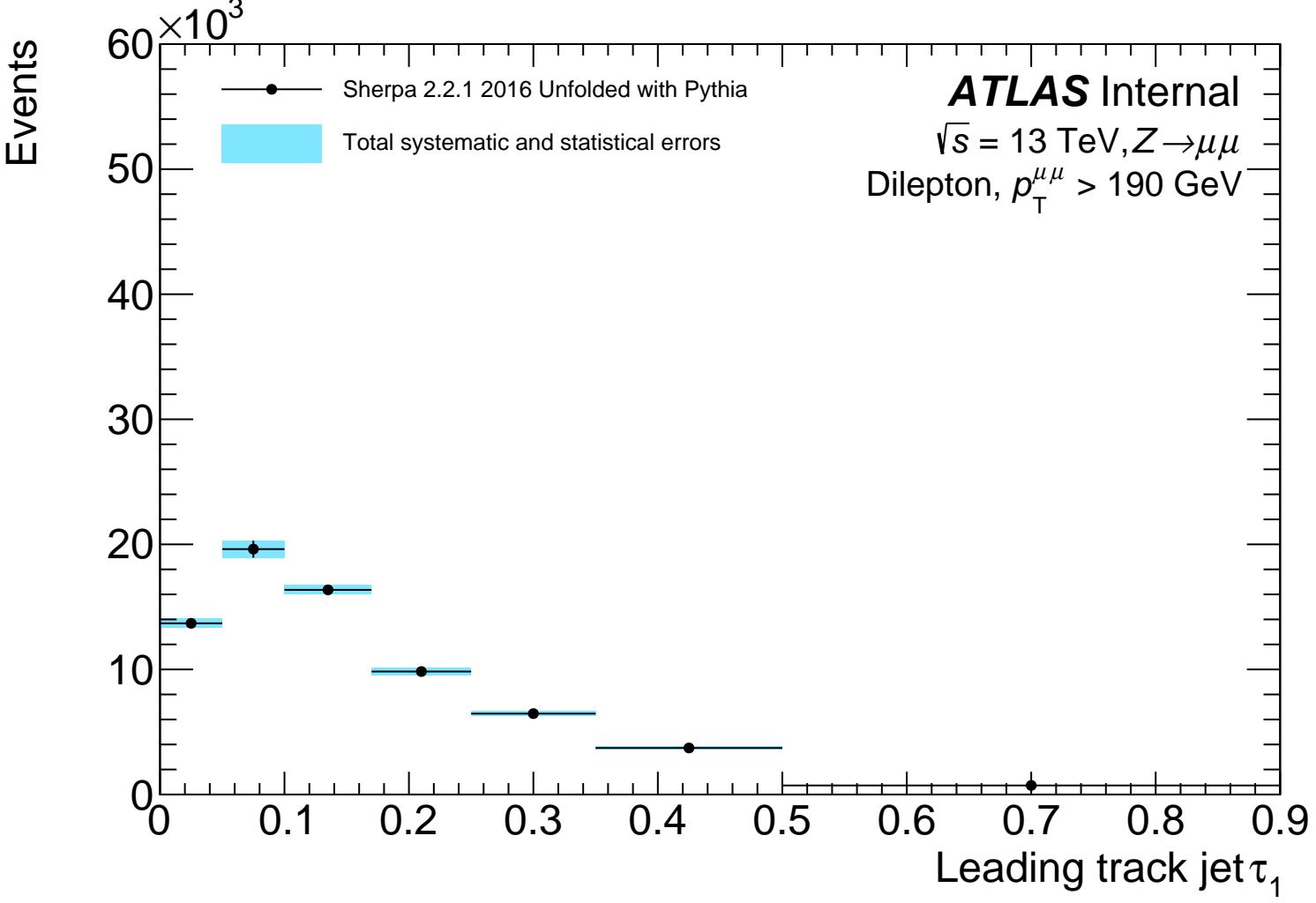


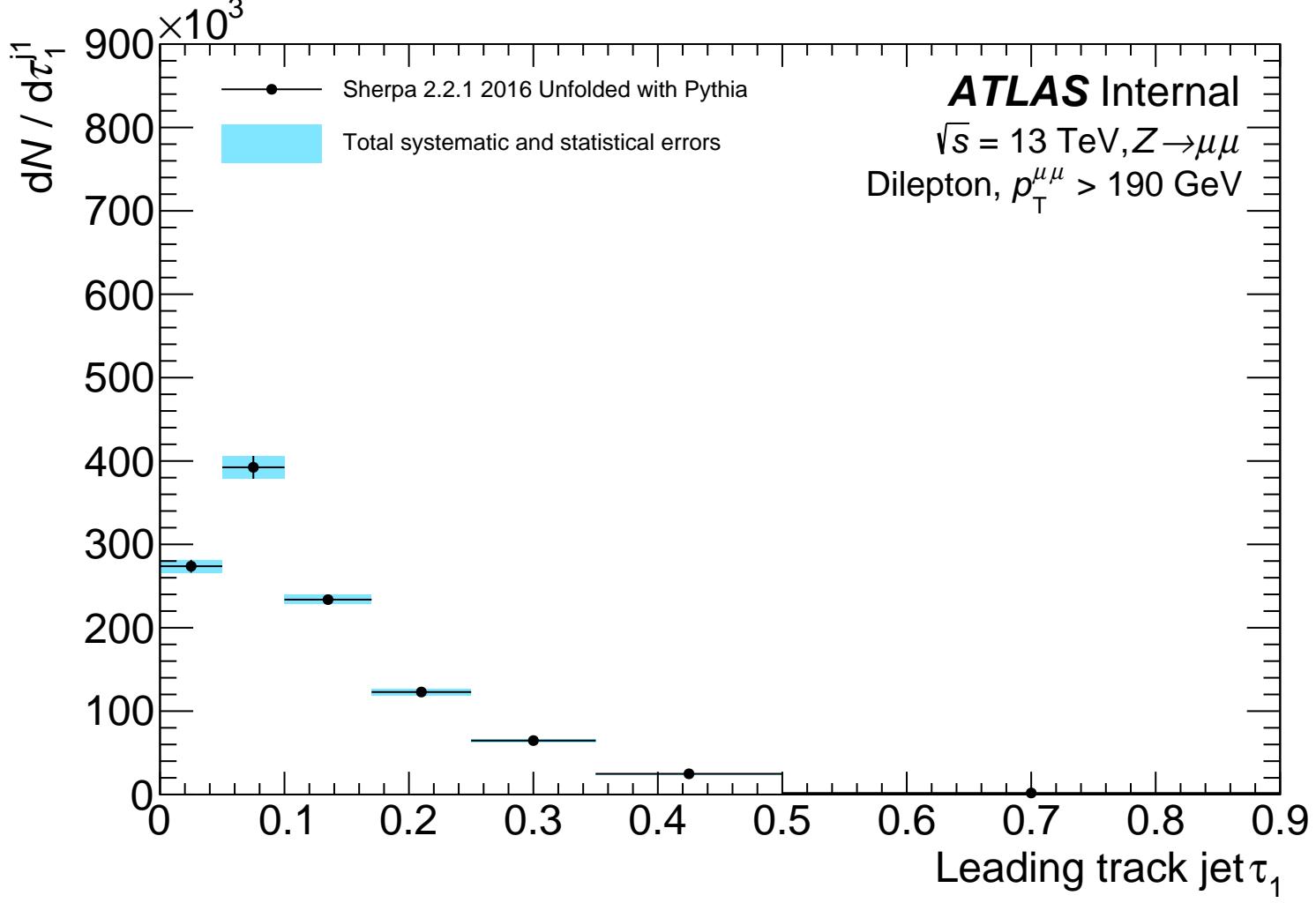










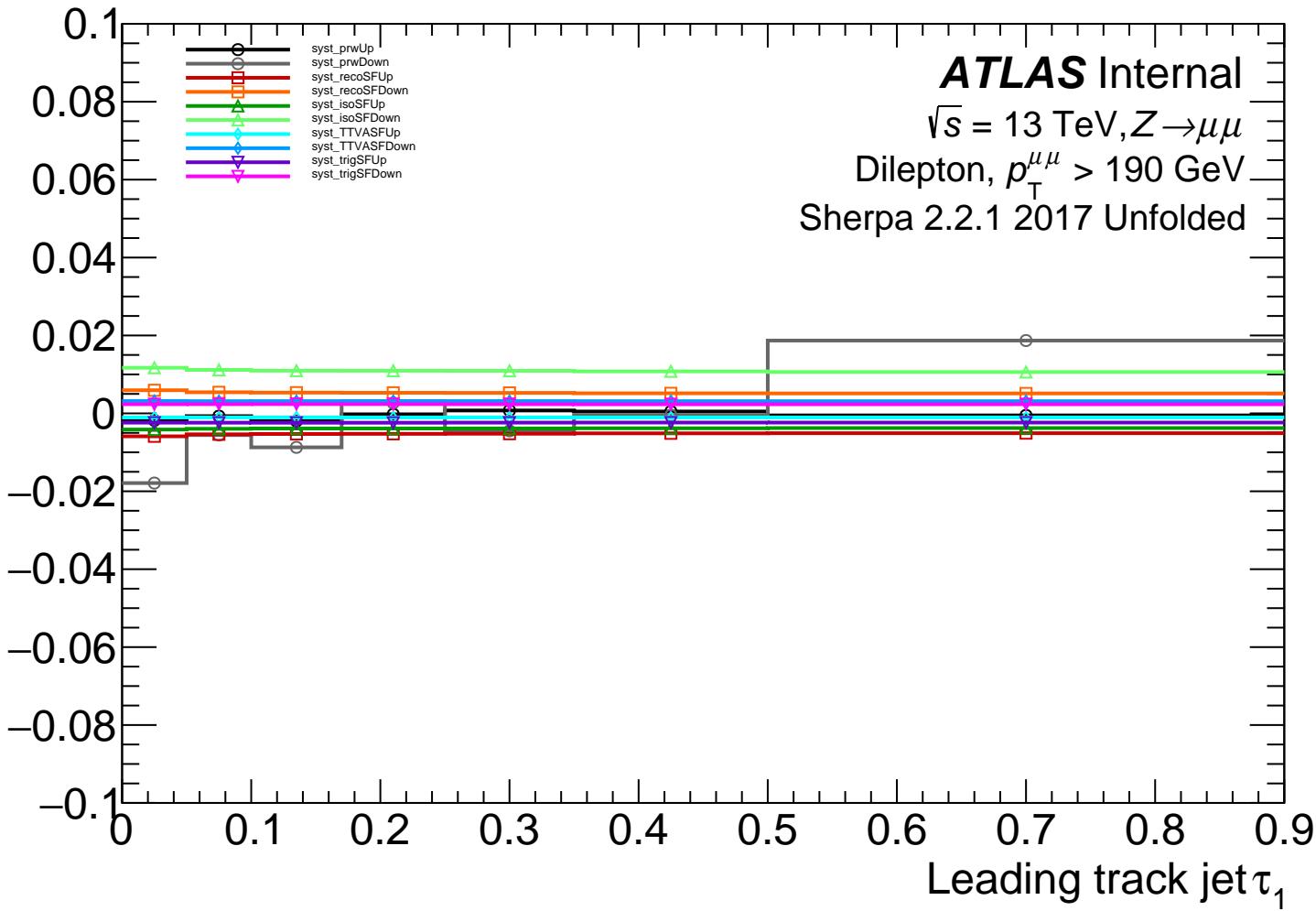


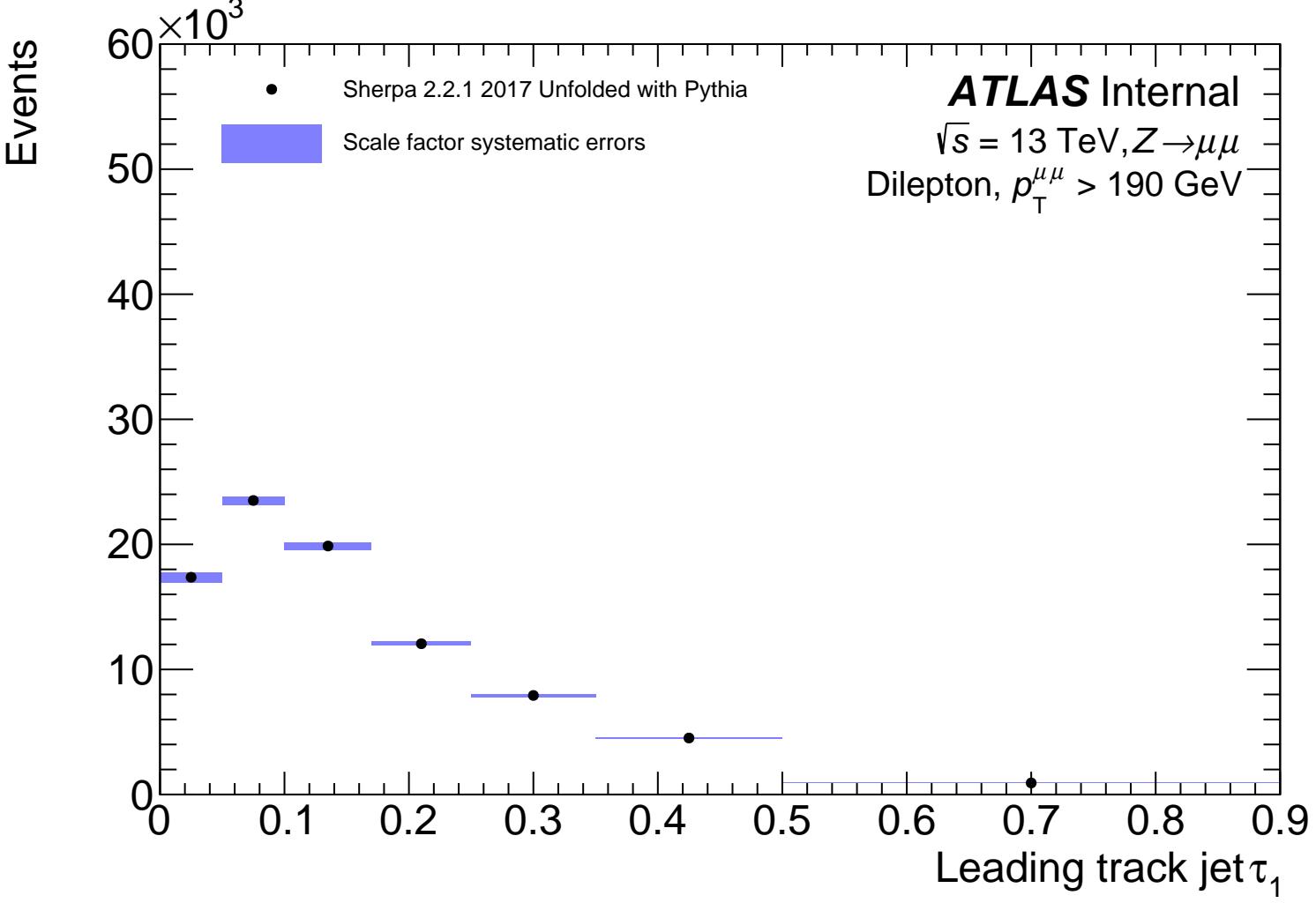
**ATLAS Internal**

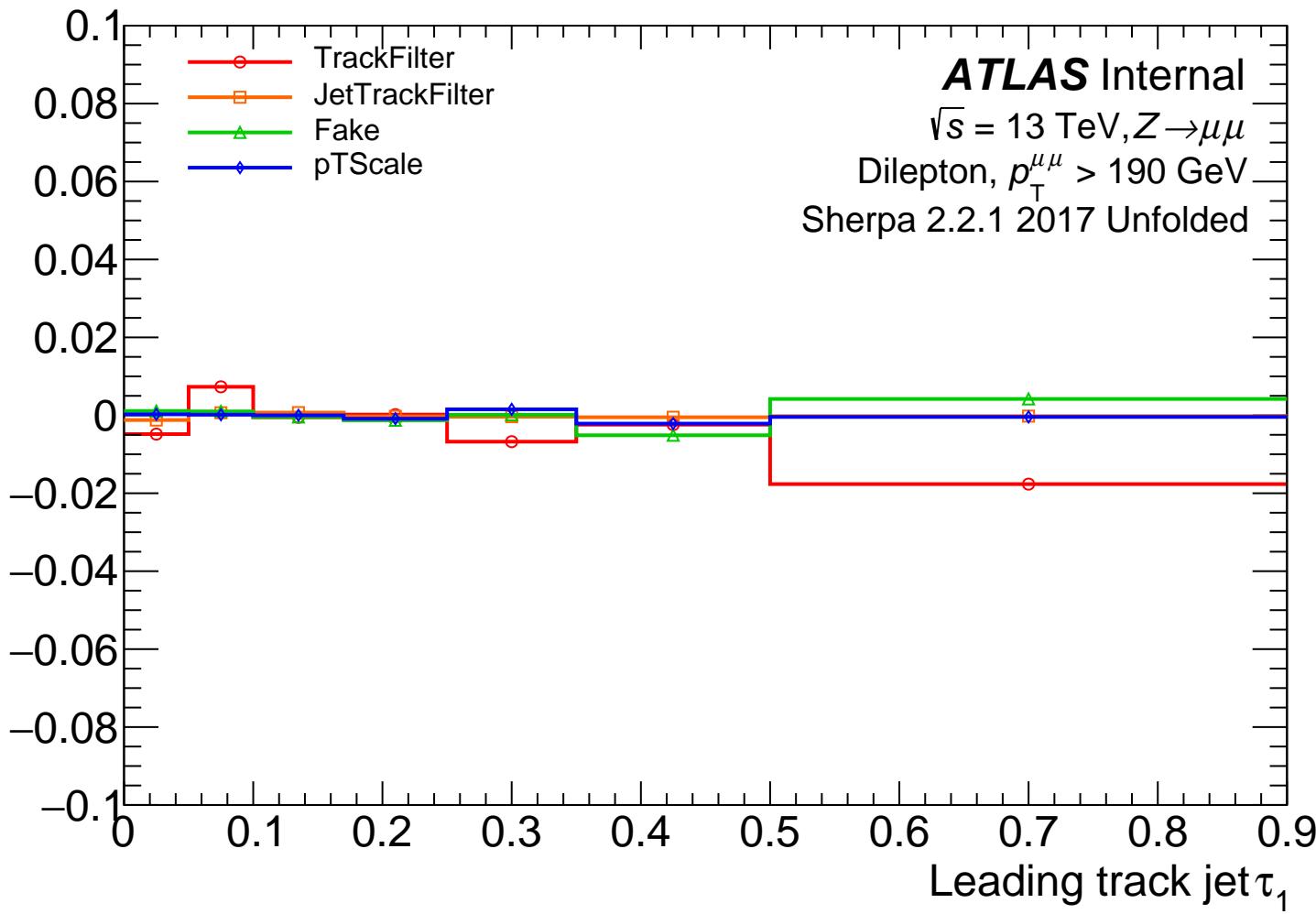
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

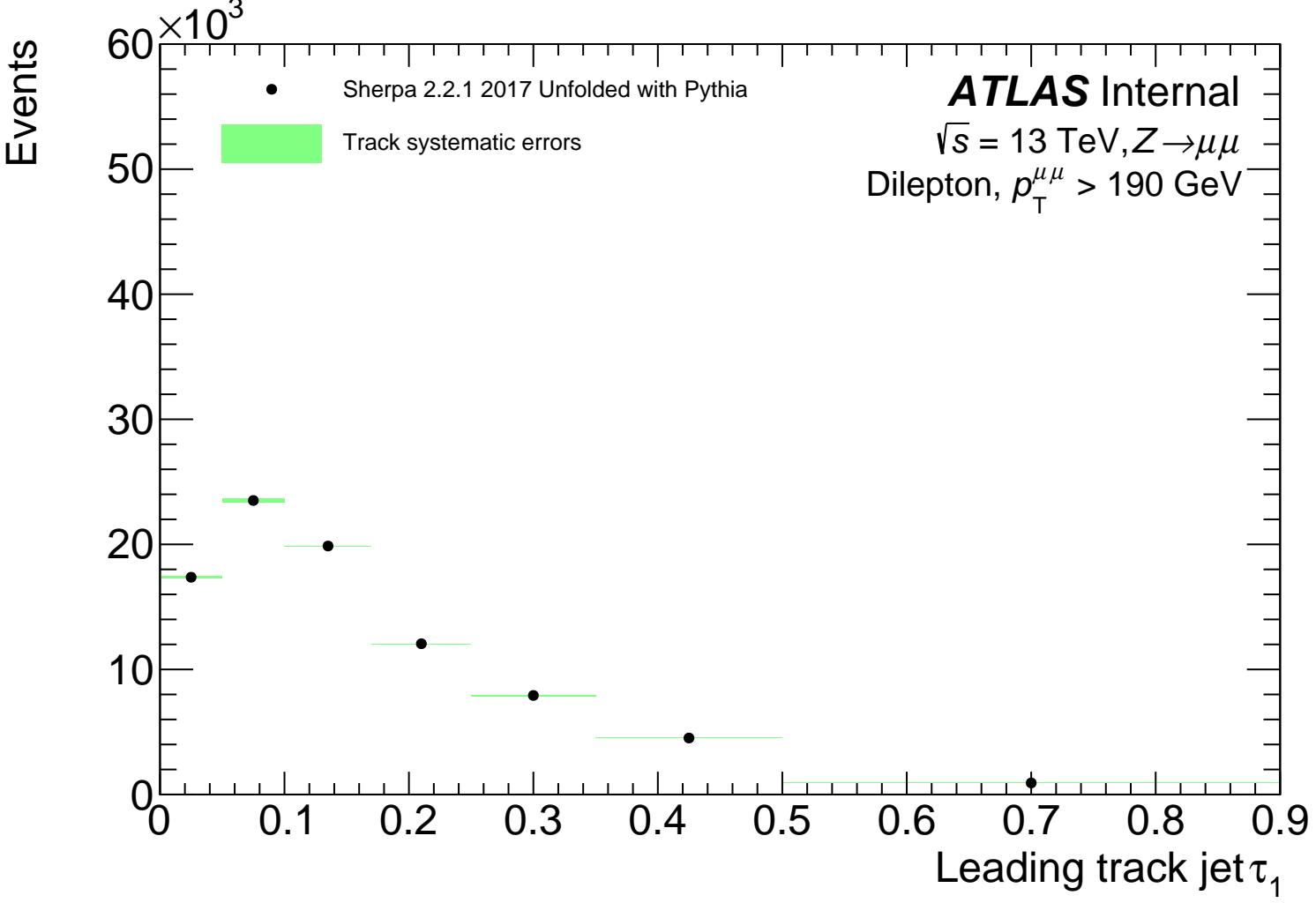
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

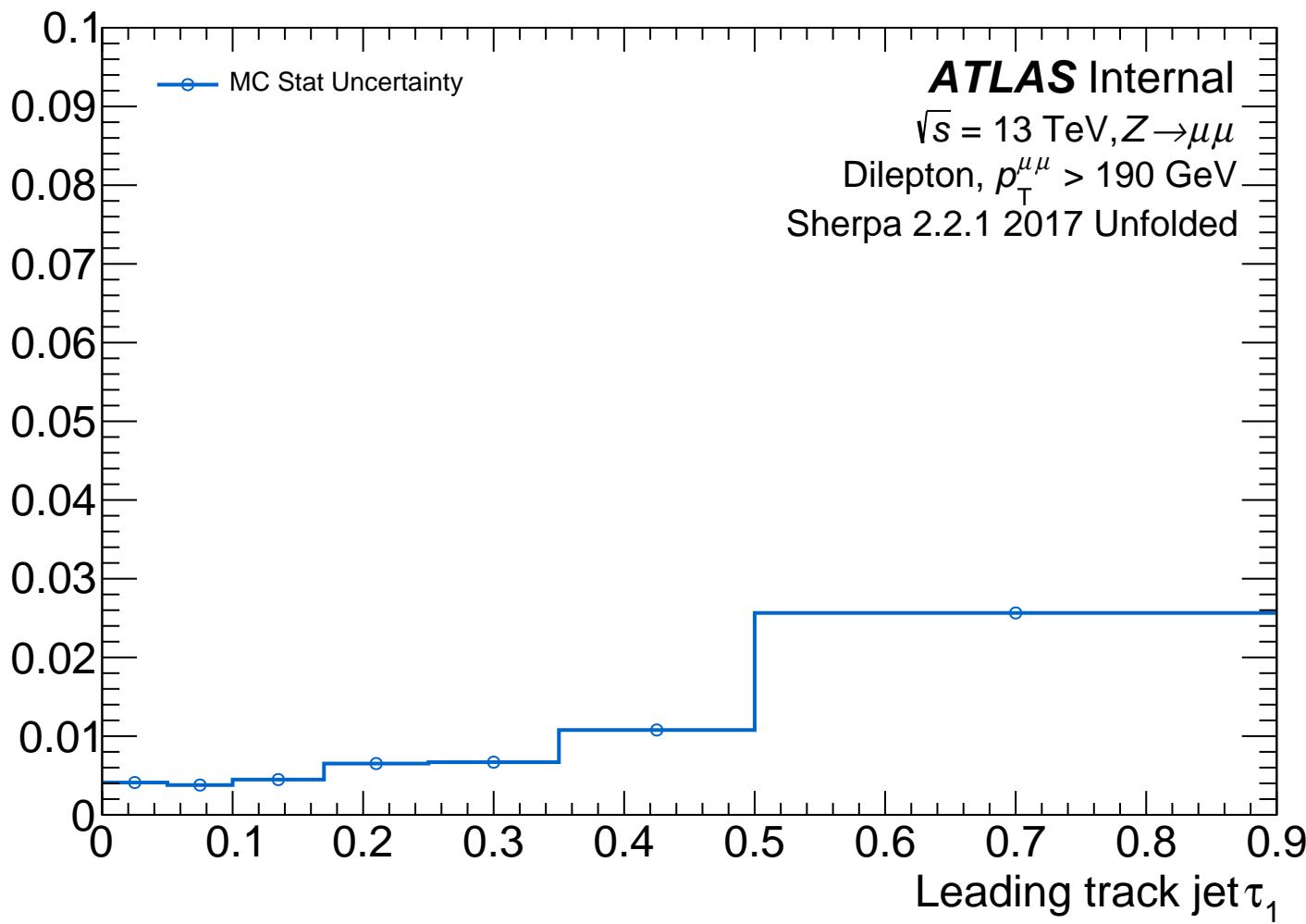
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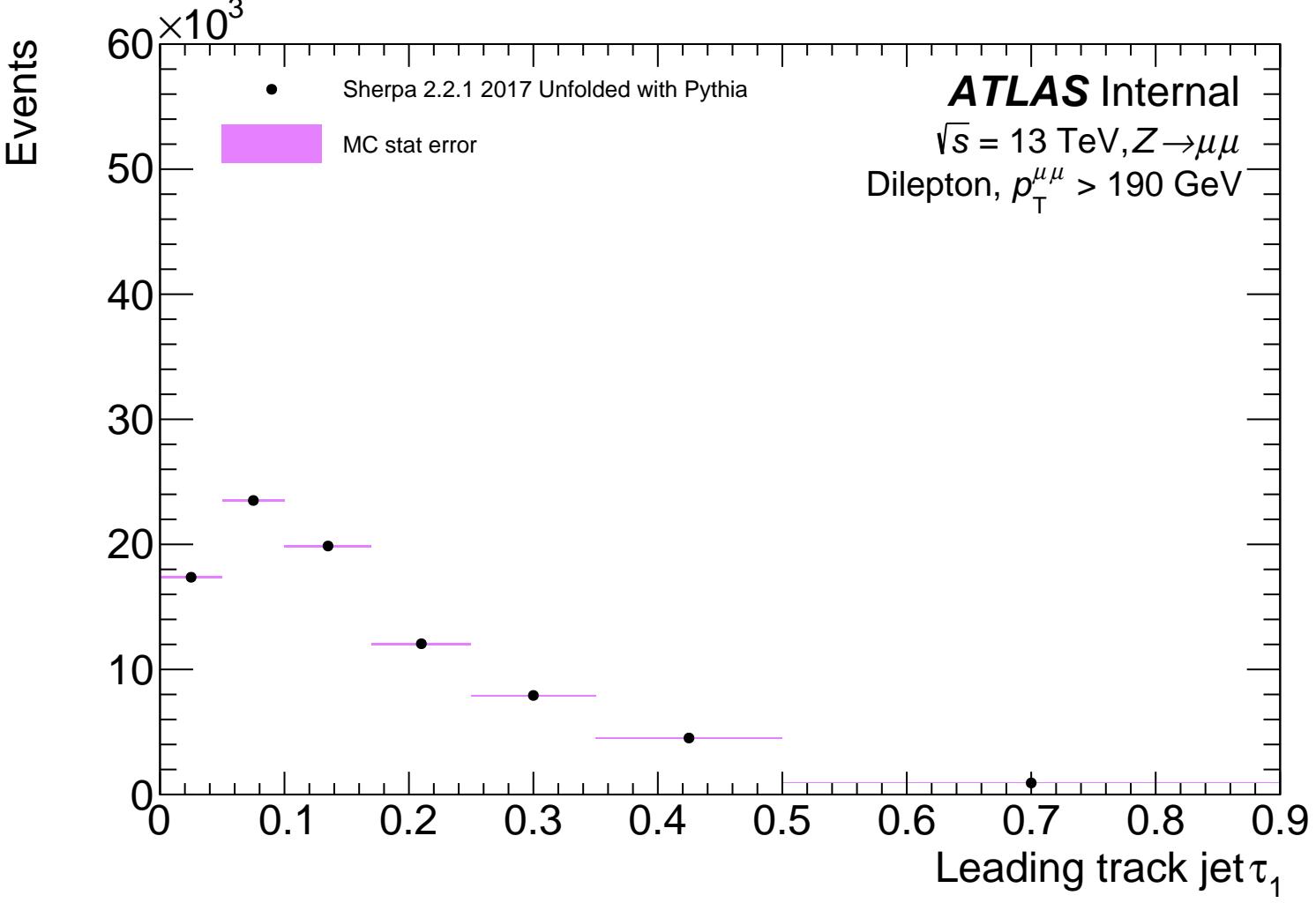


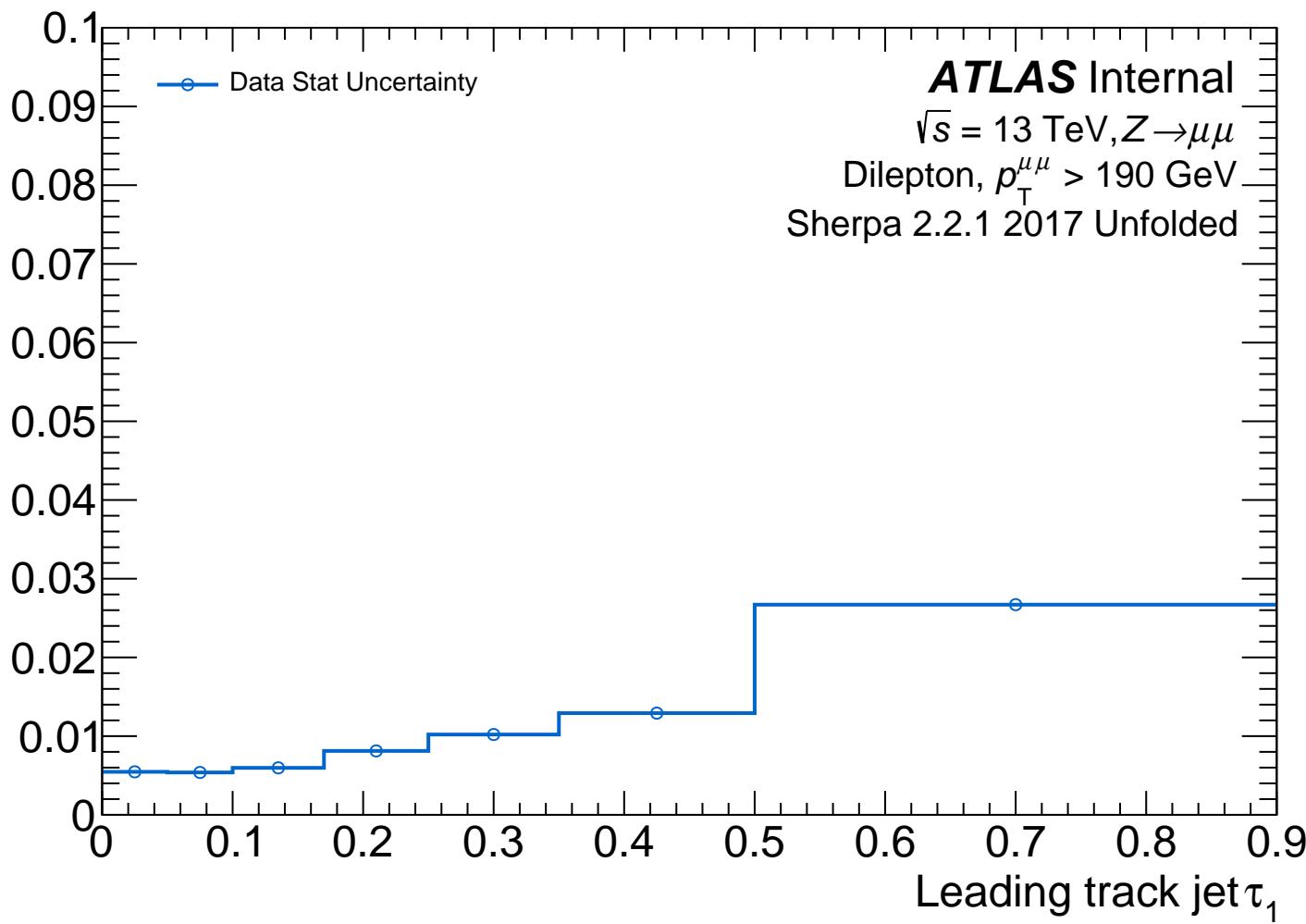


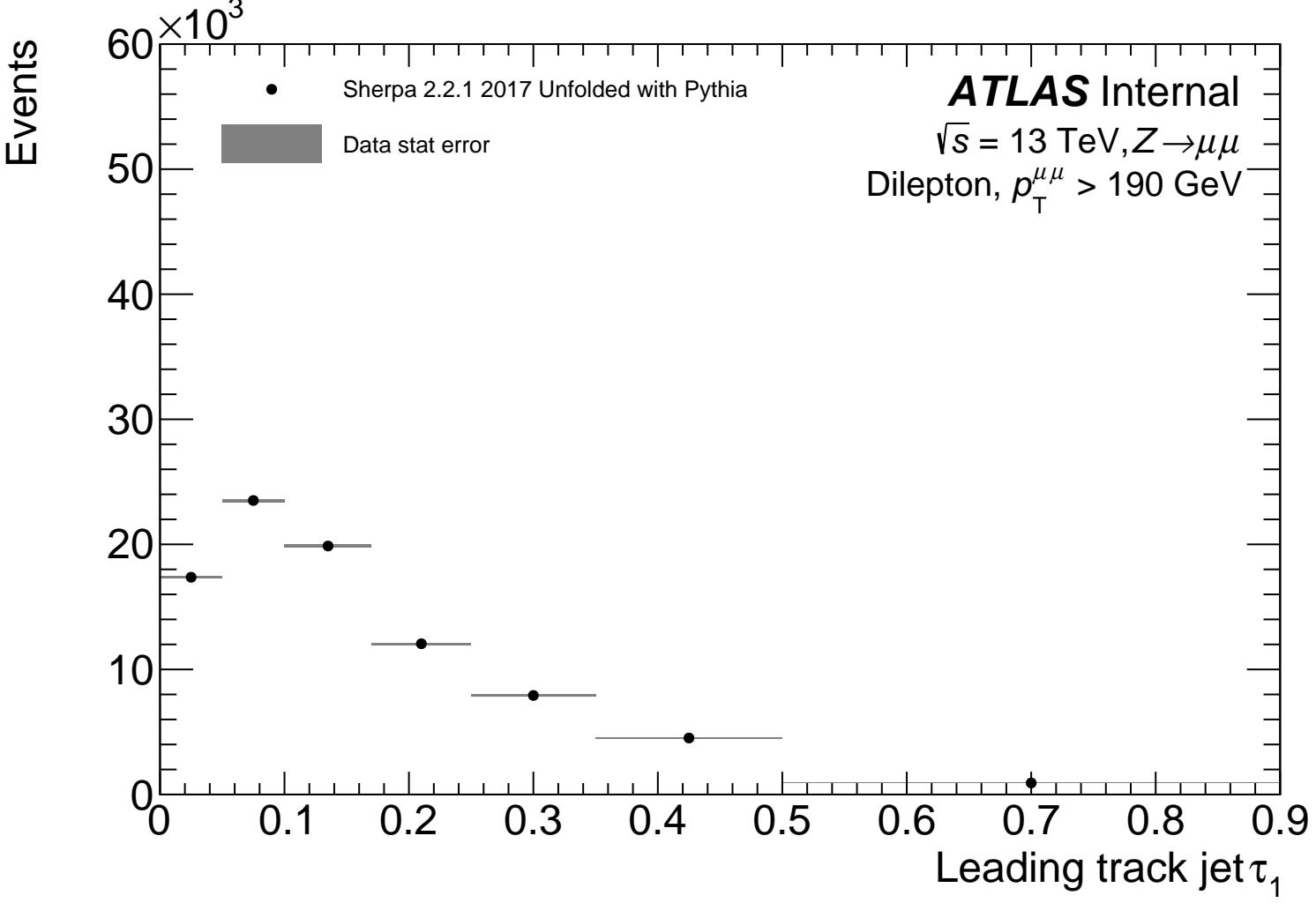


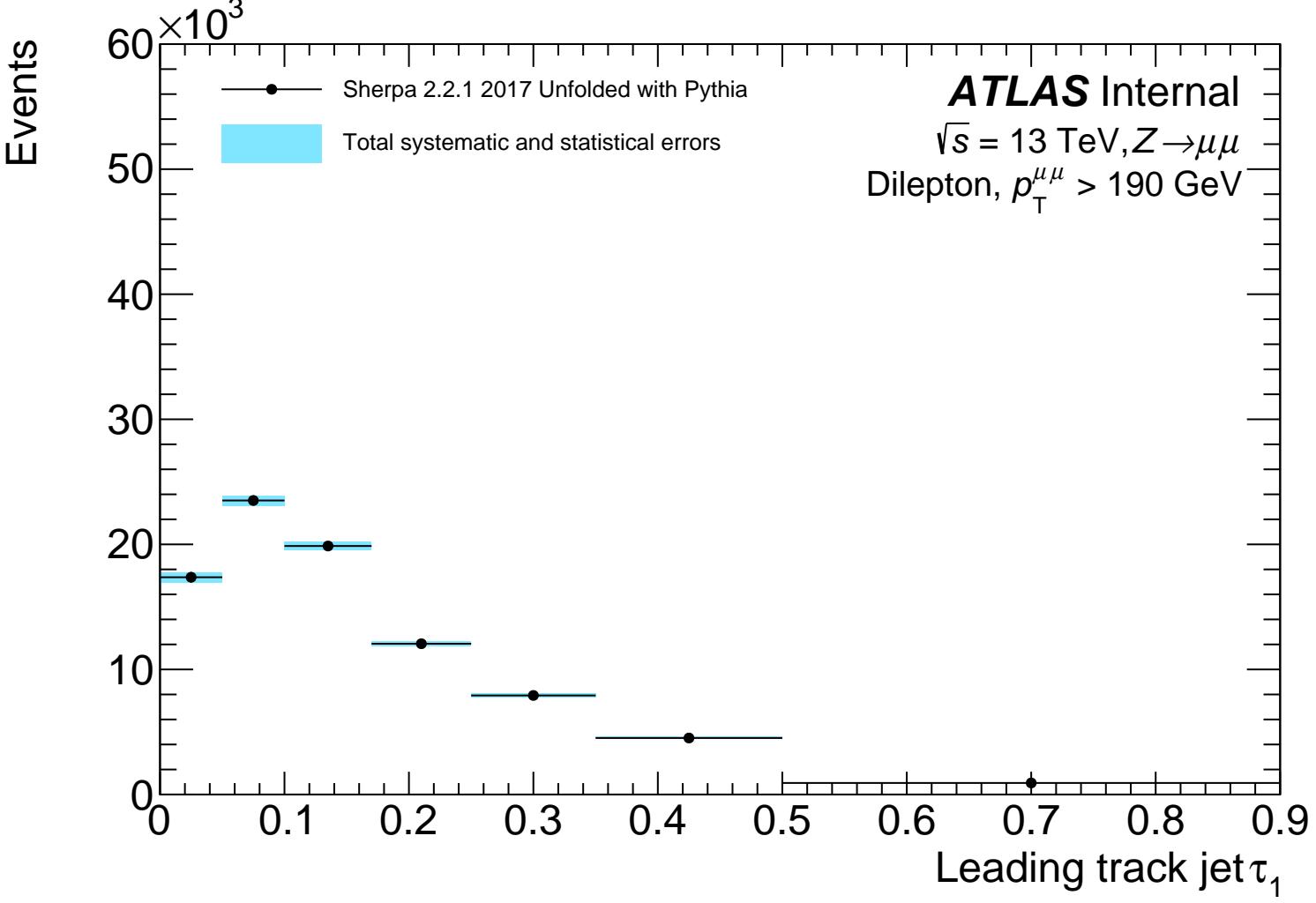


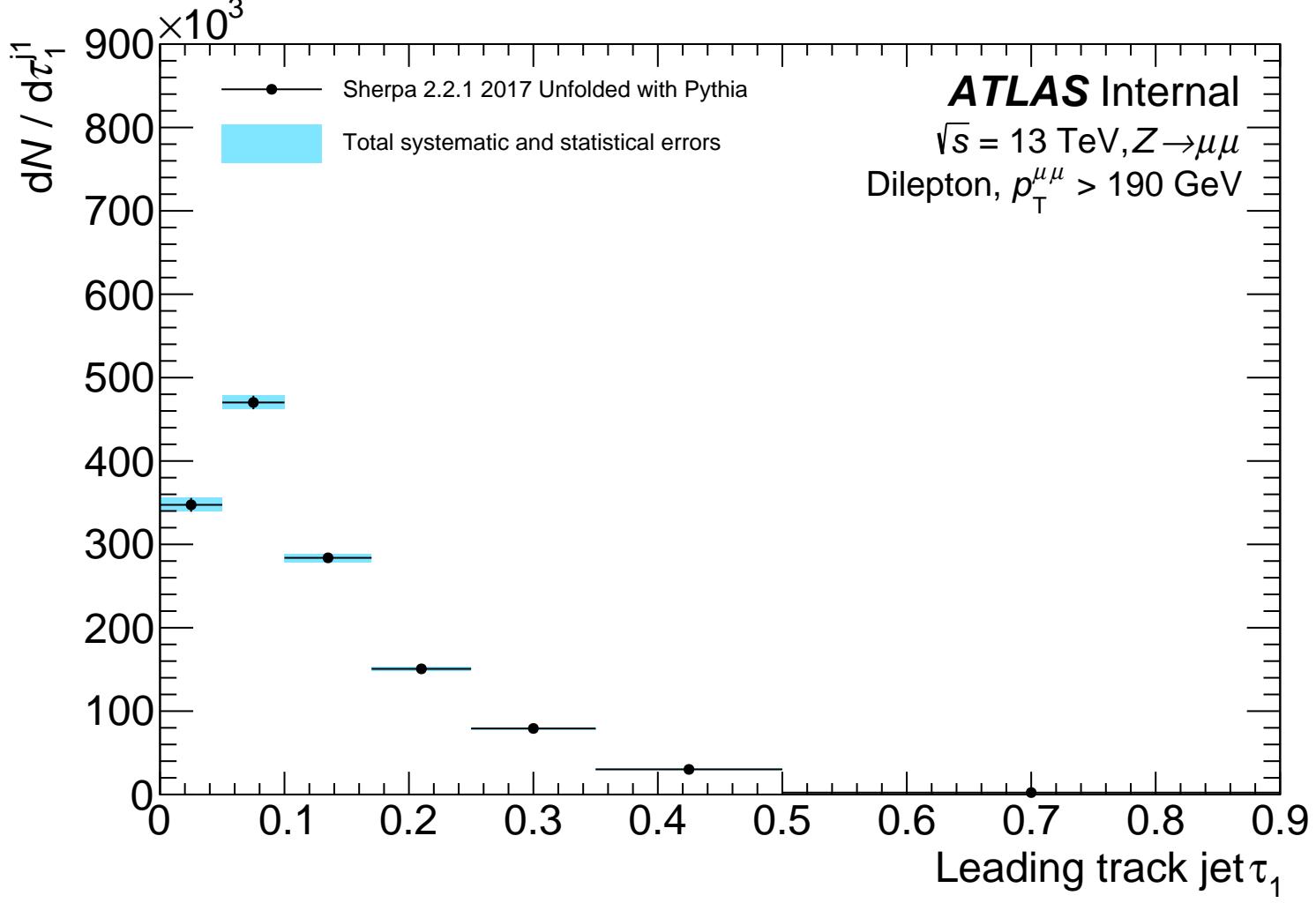


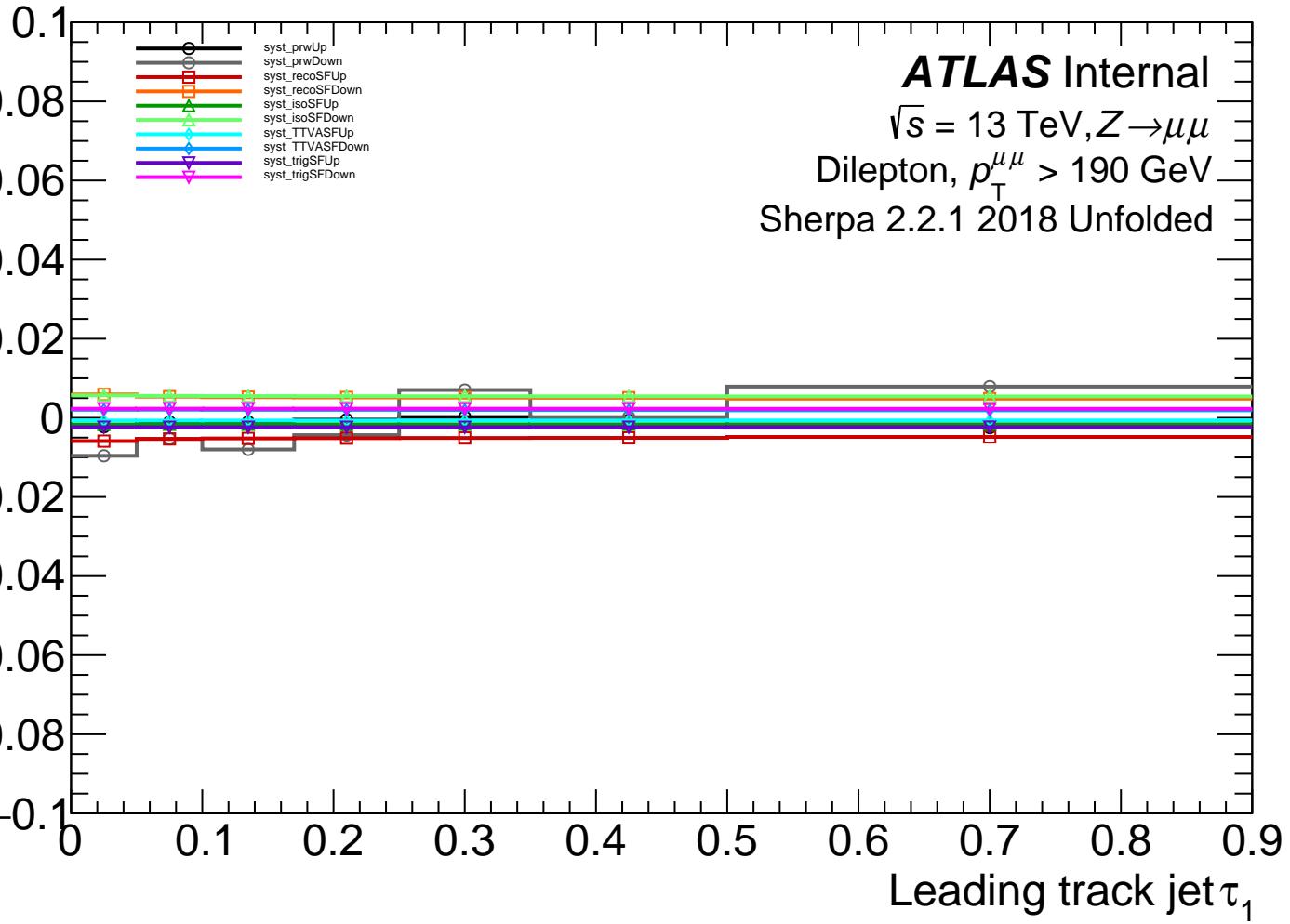


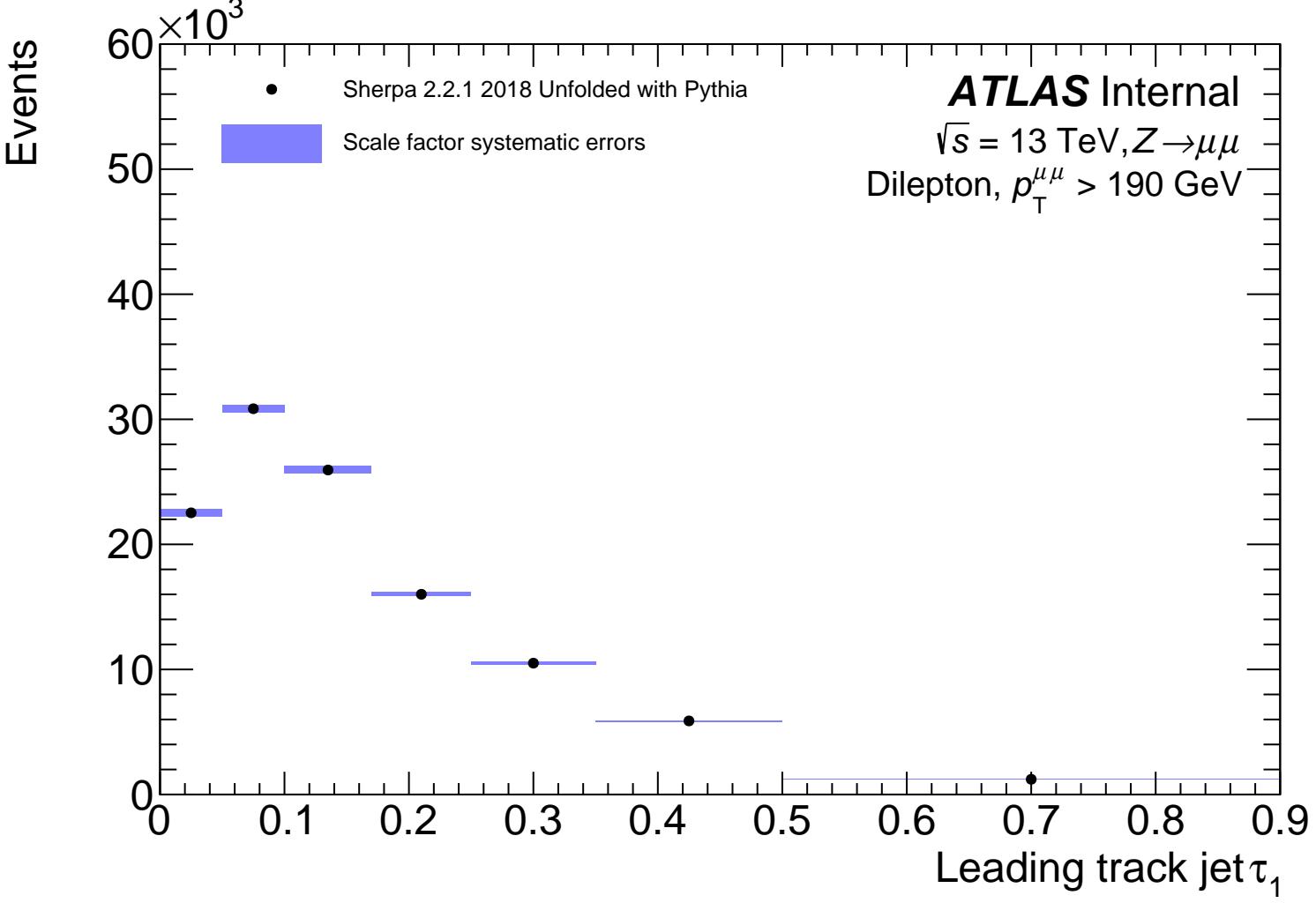


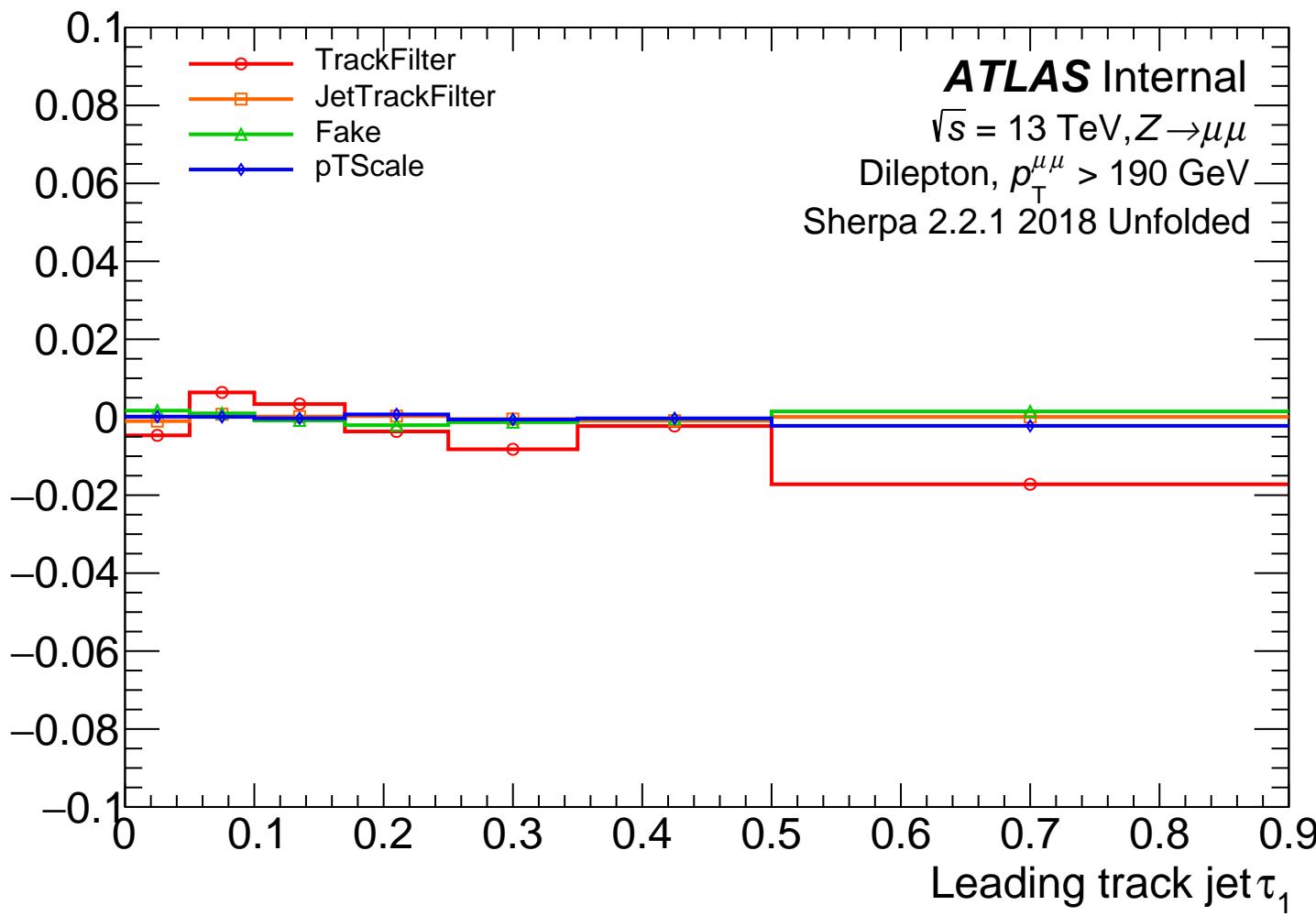


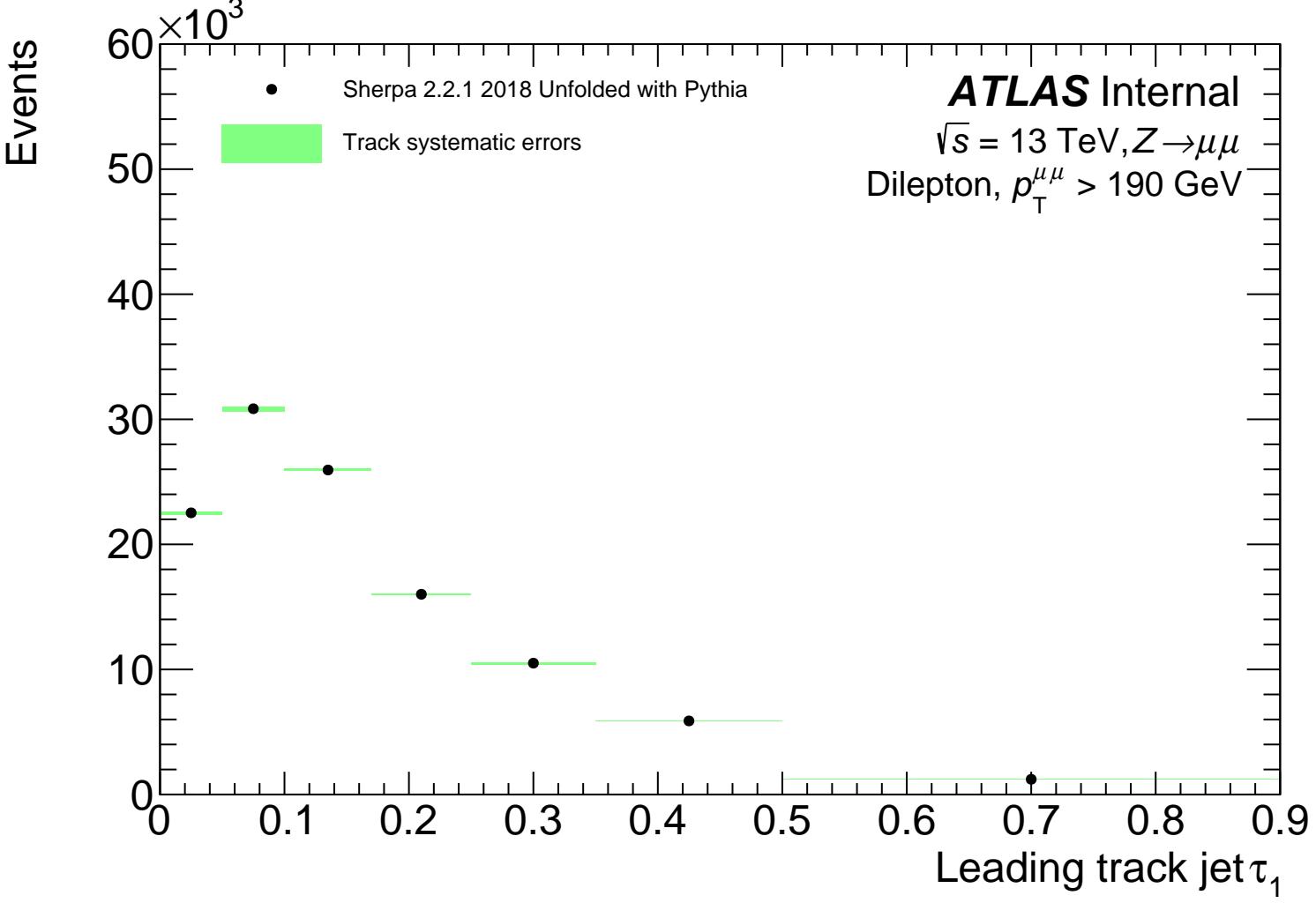


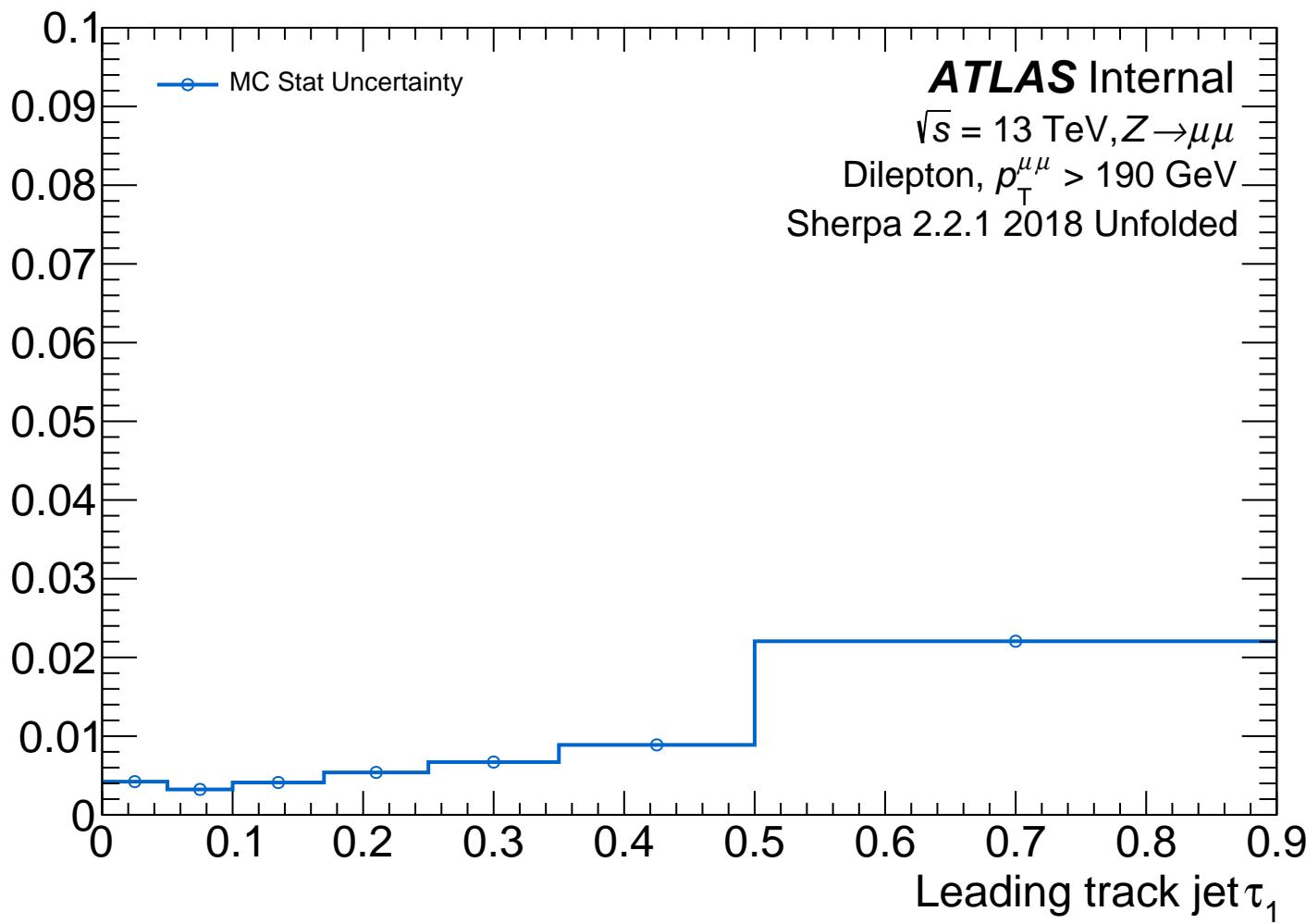


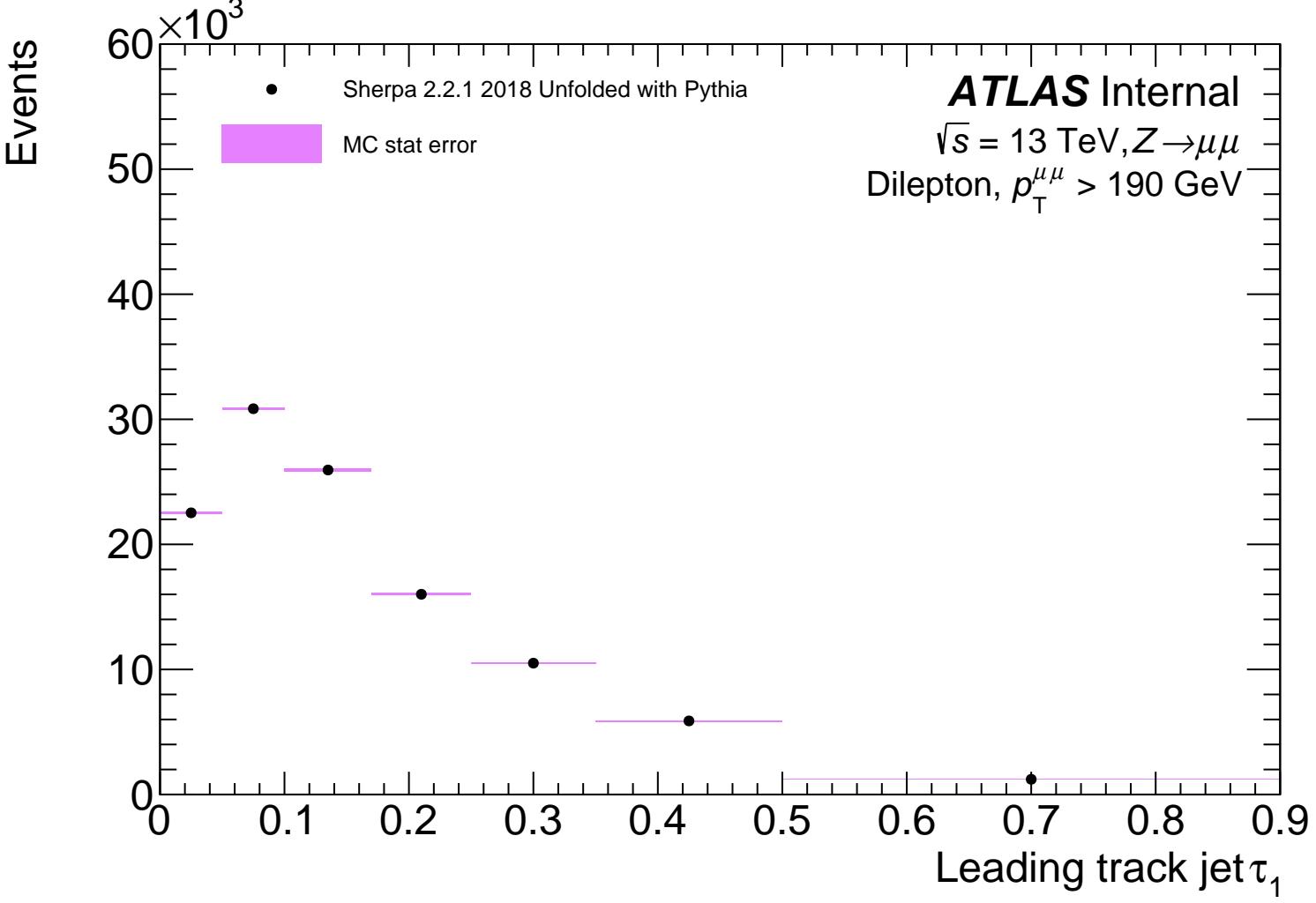


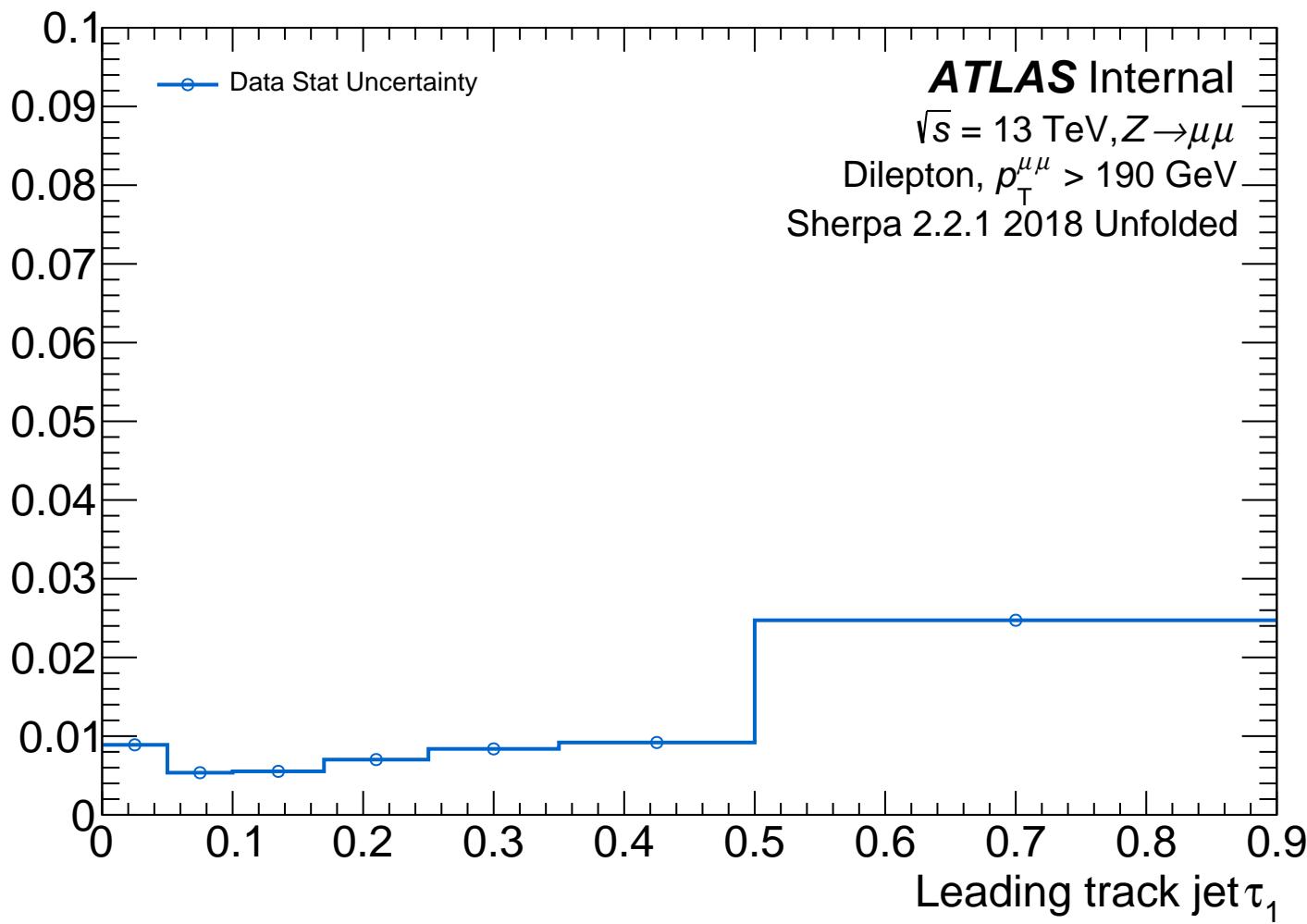


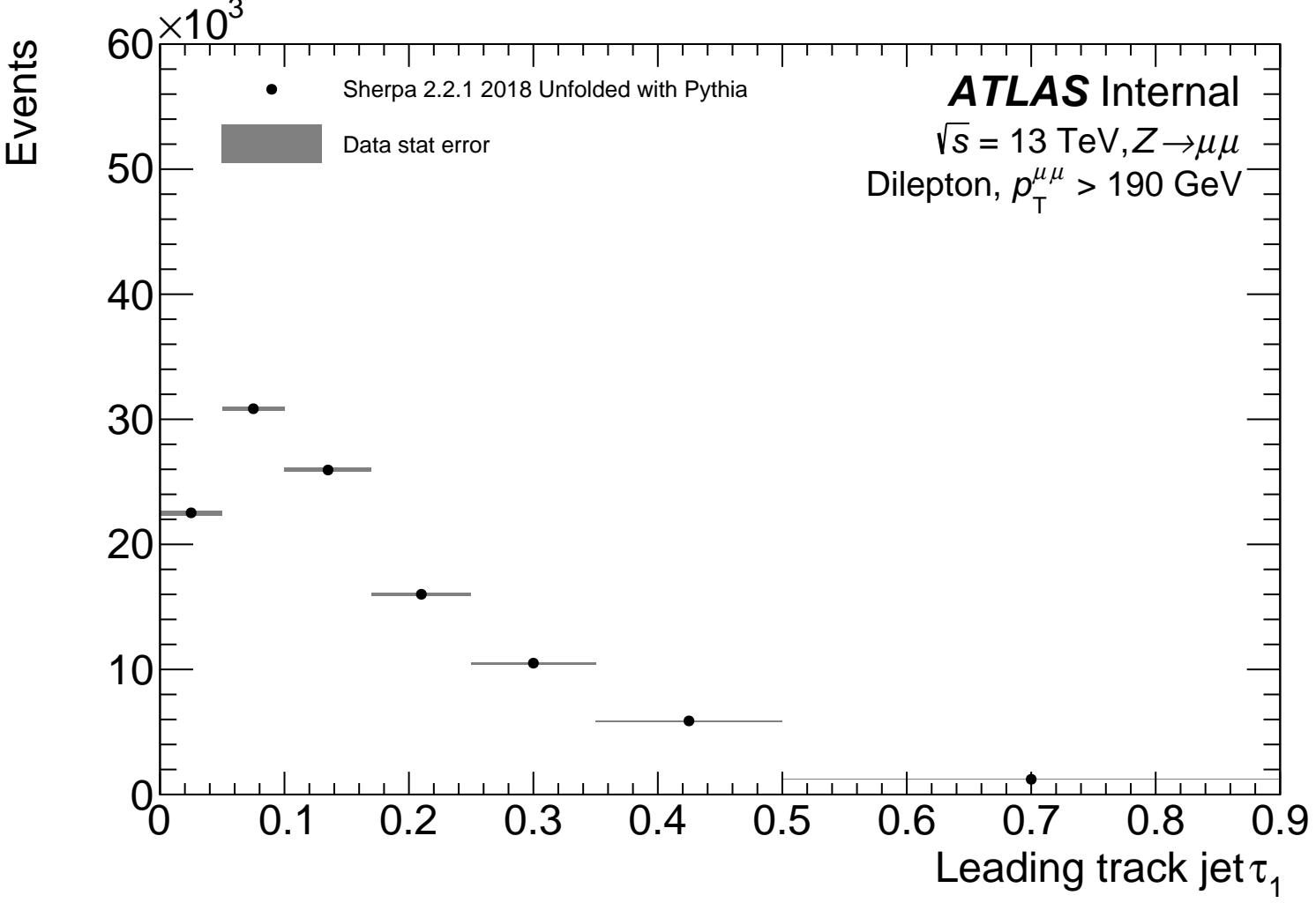


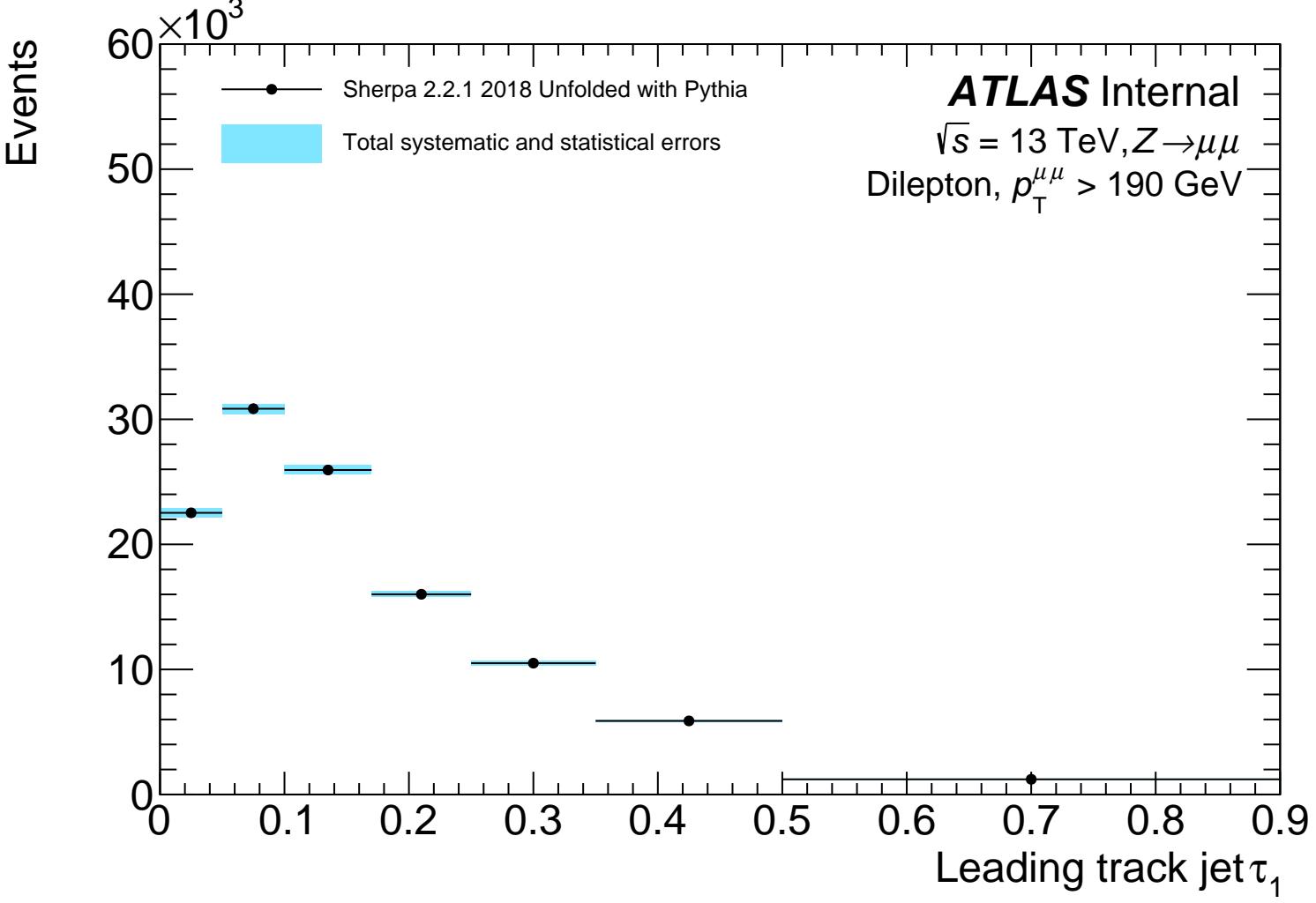


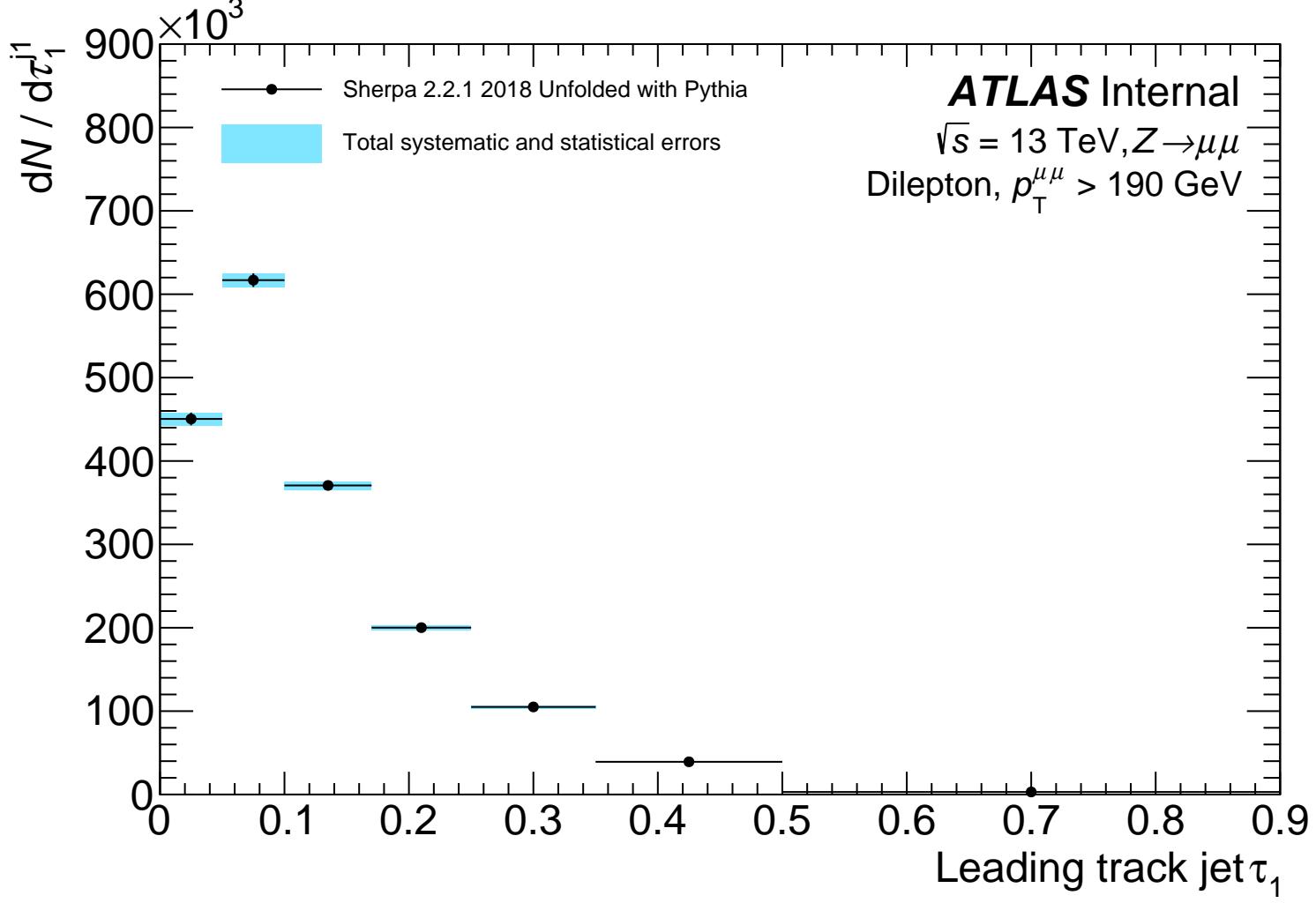










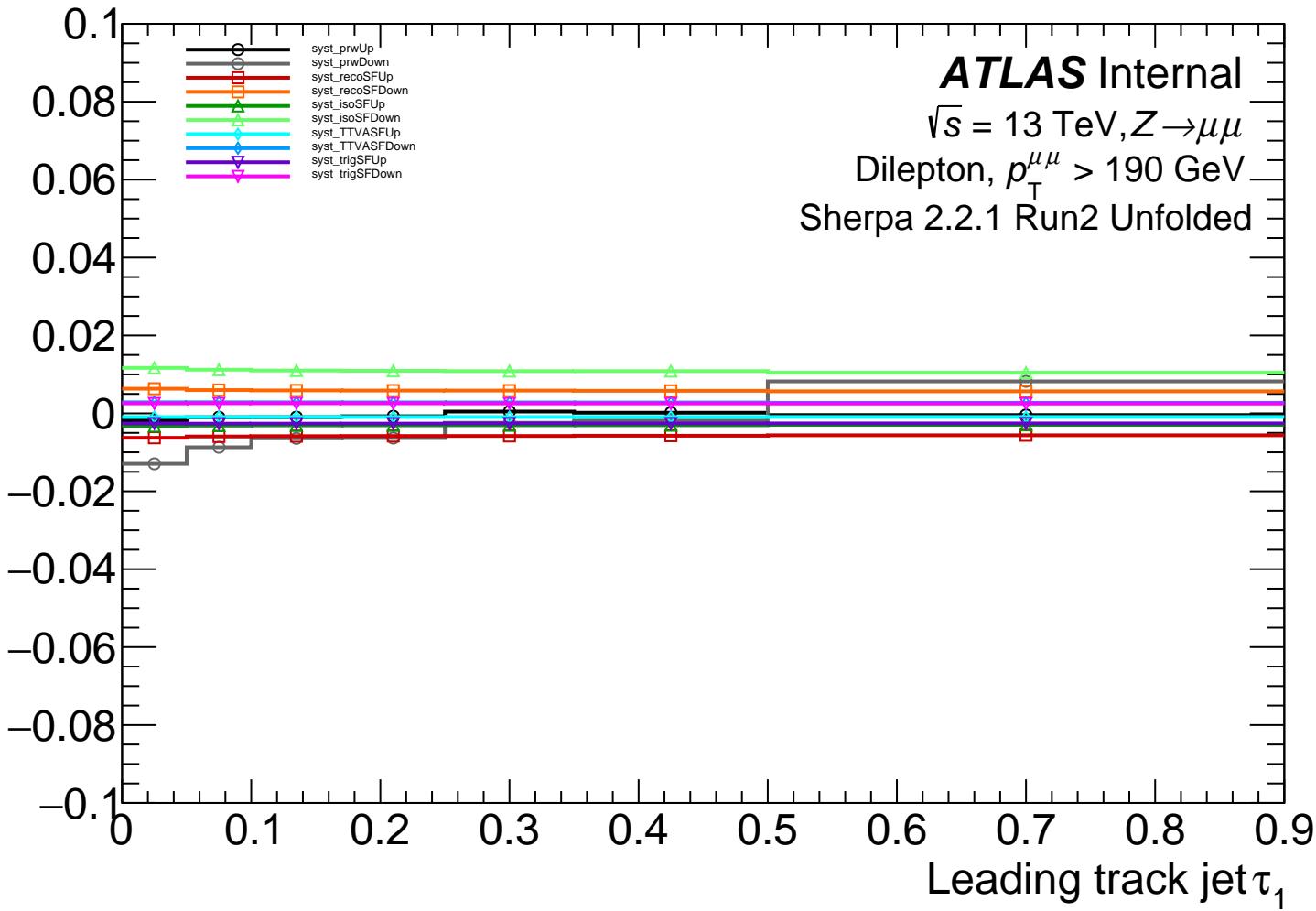


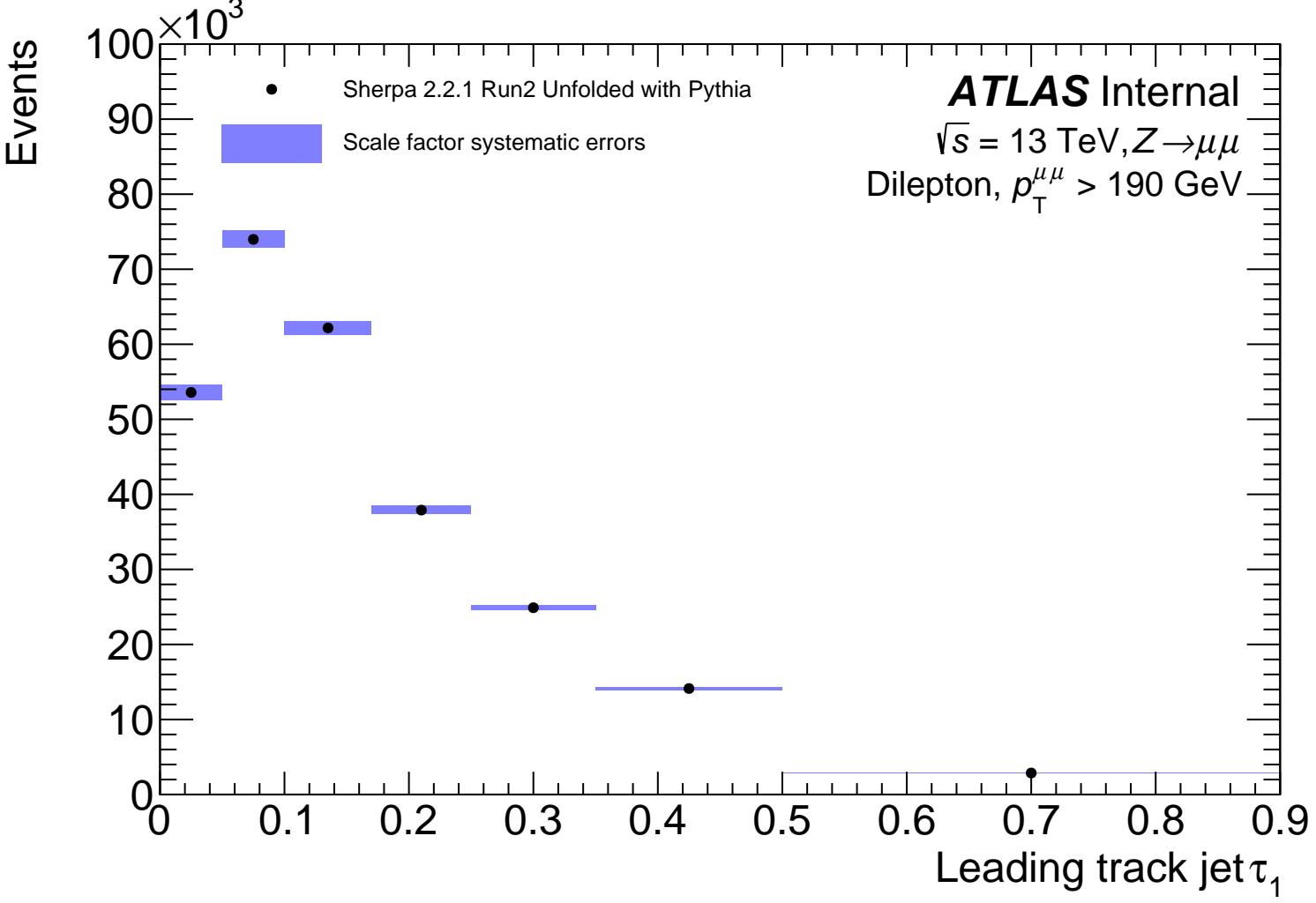
**ATLAS Internal**

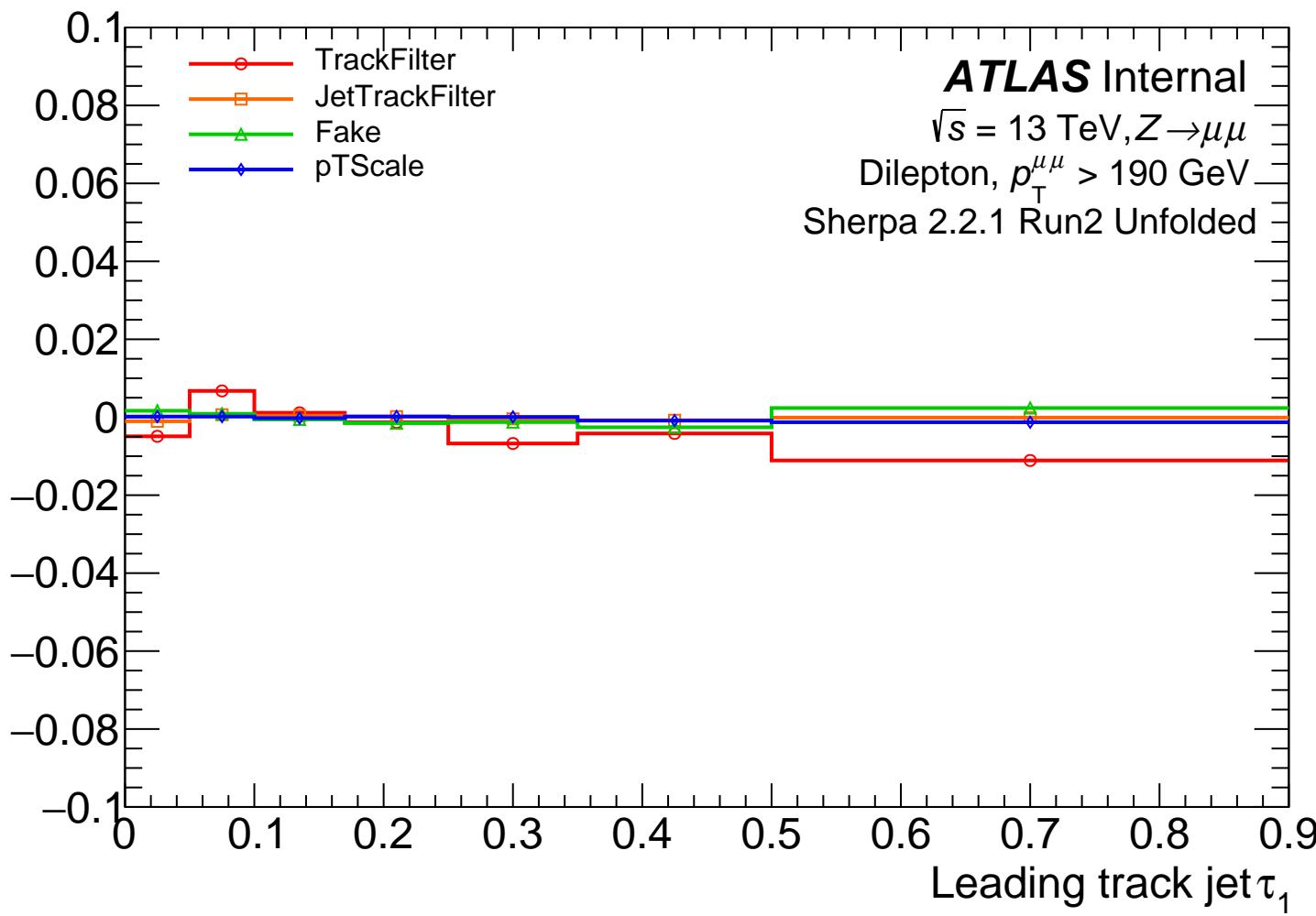
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

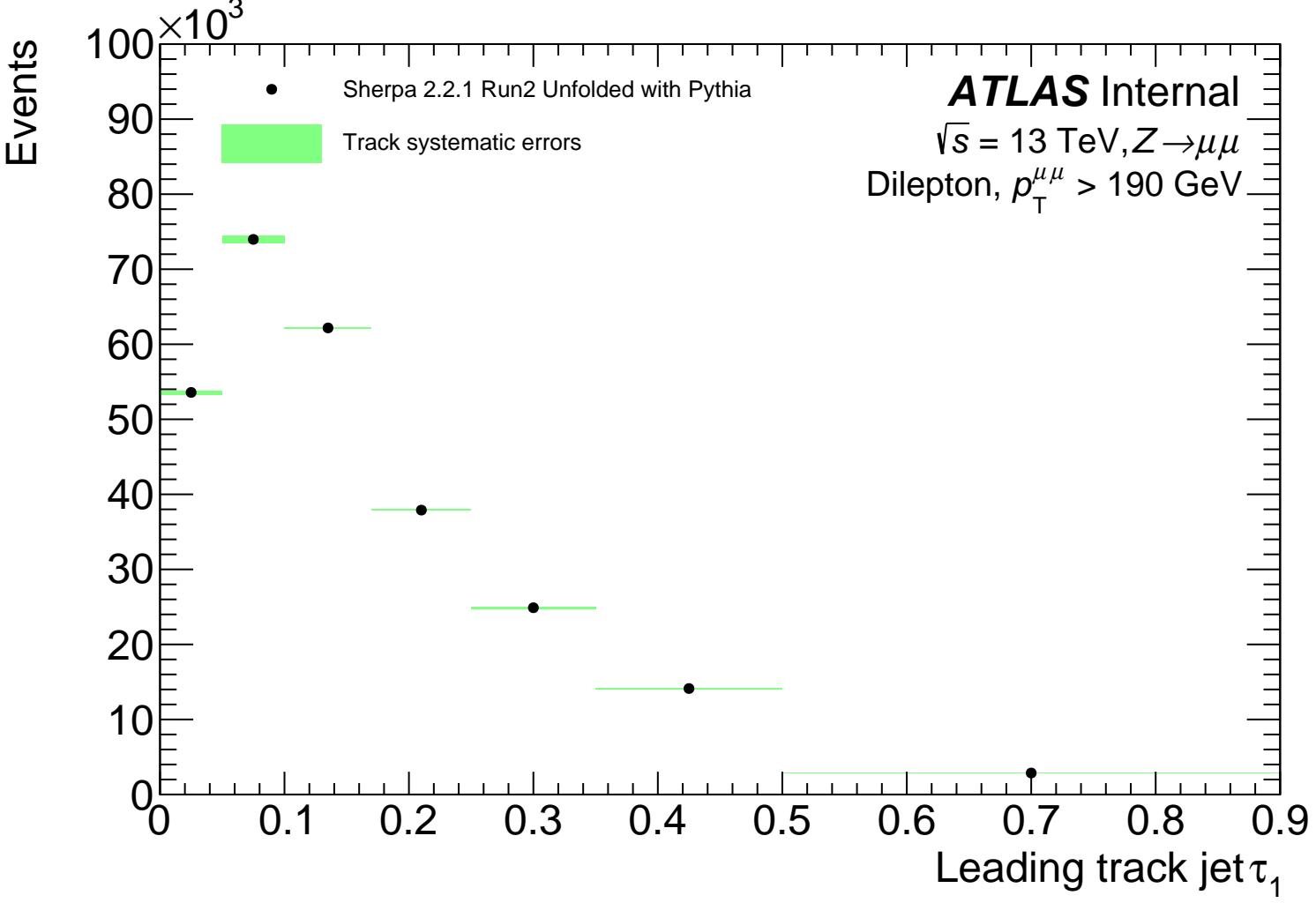
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

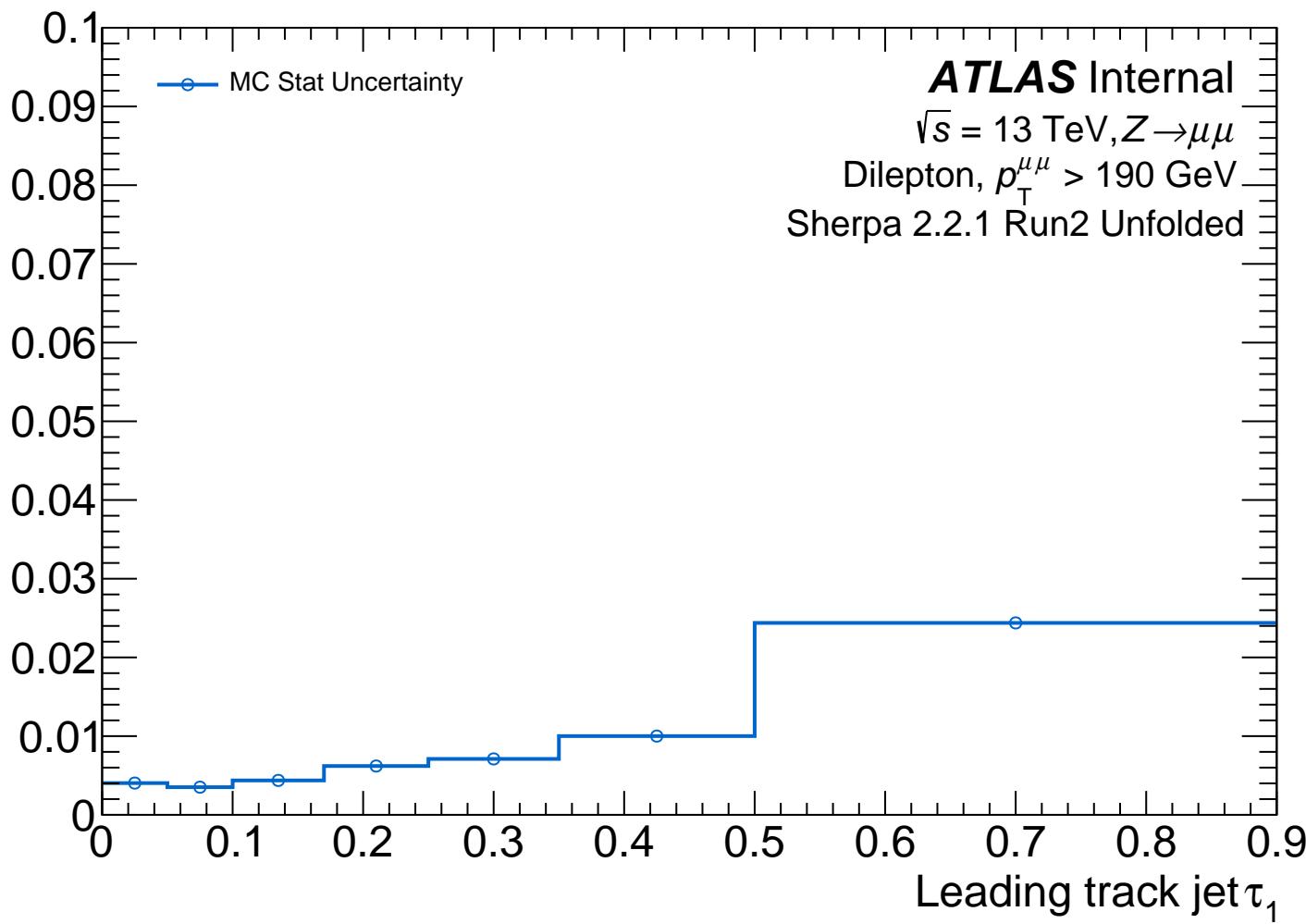
Sherpa 2.2.1 Run2 Unfolded

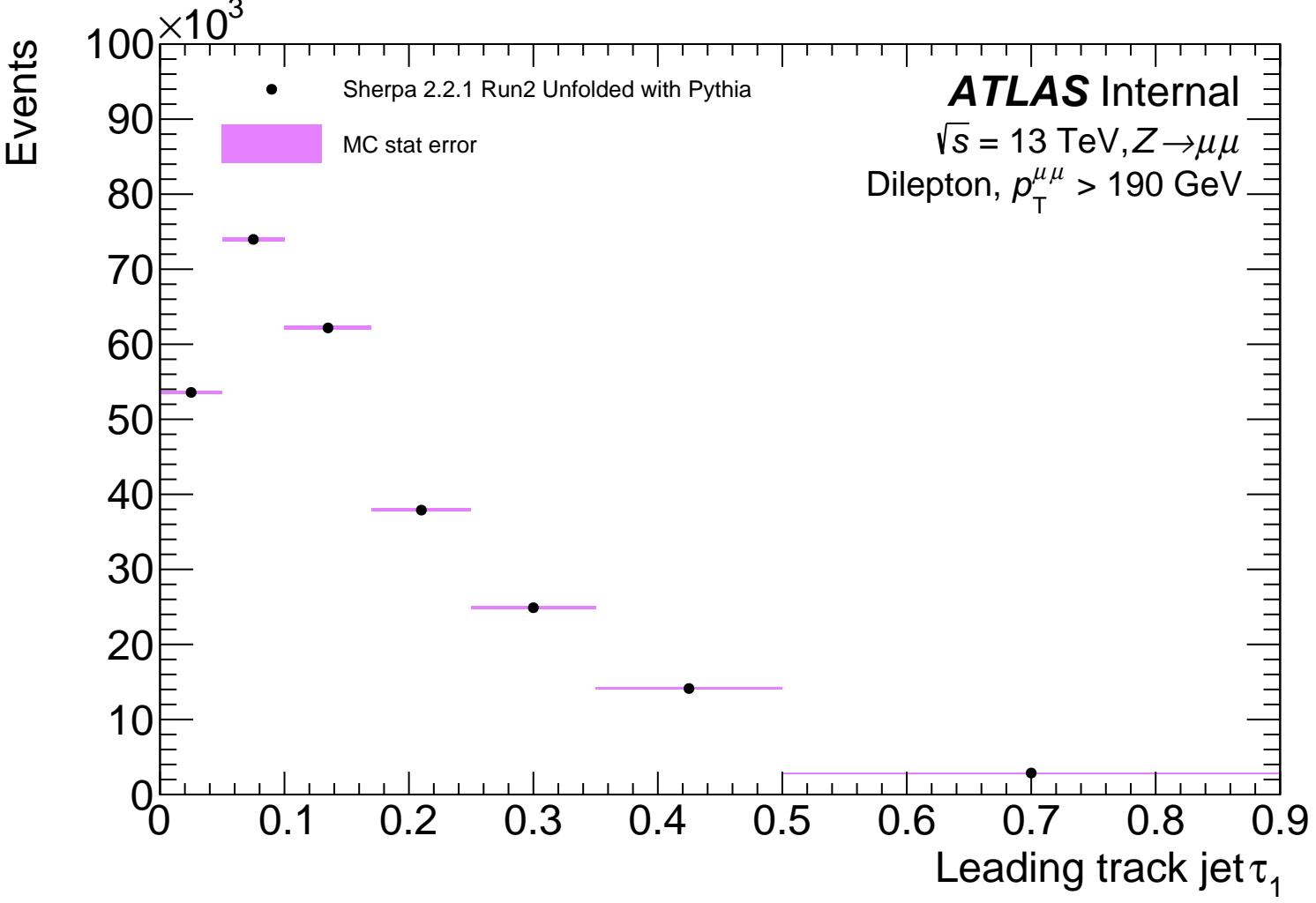


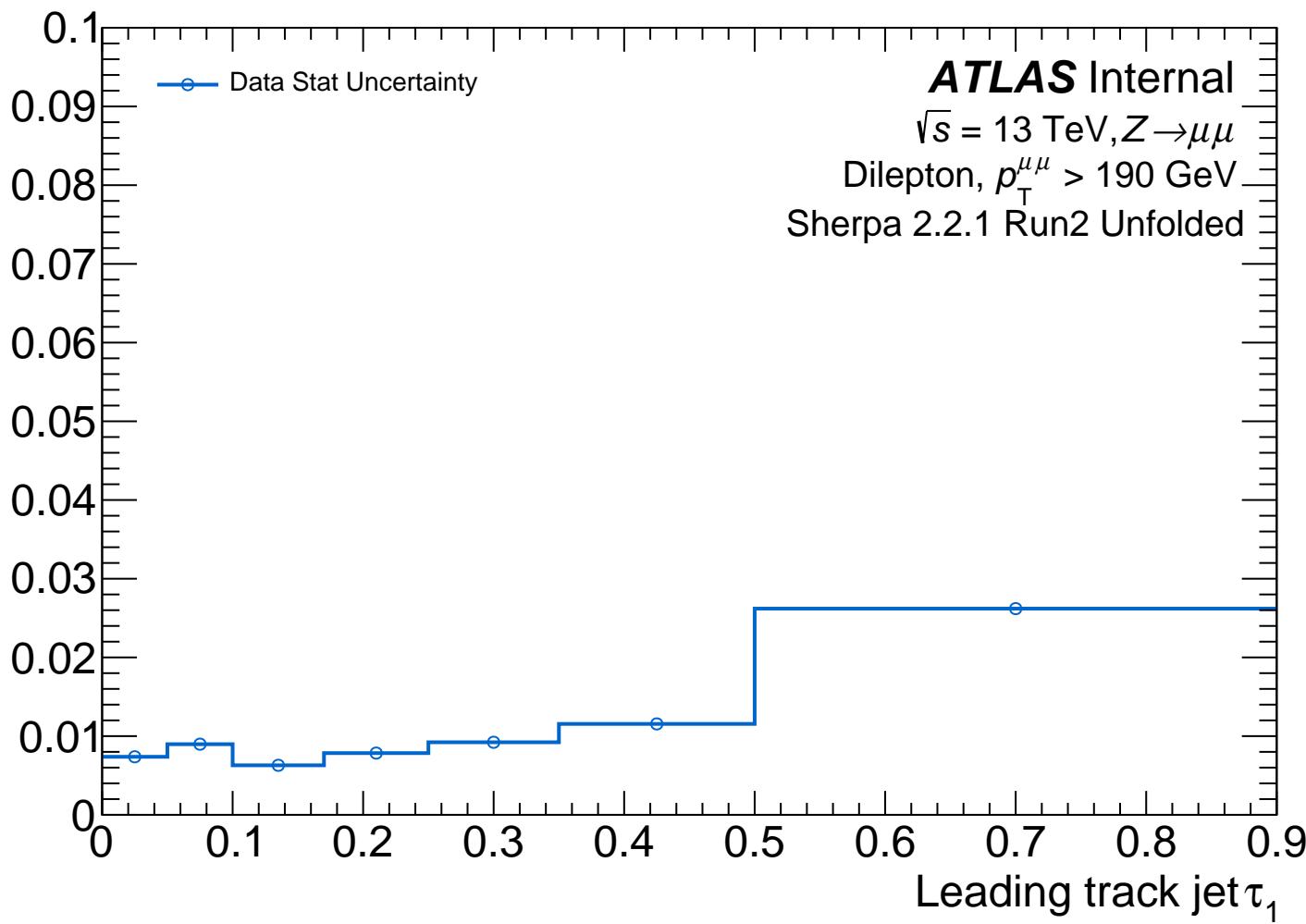


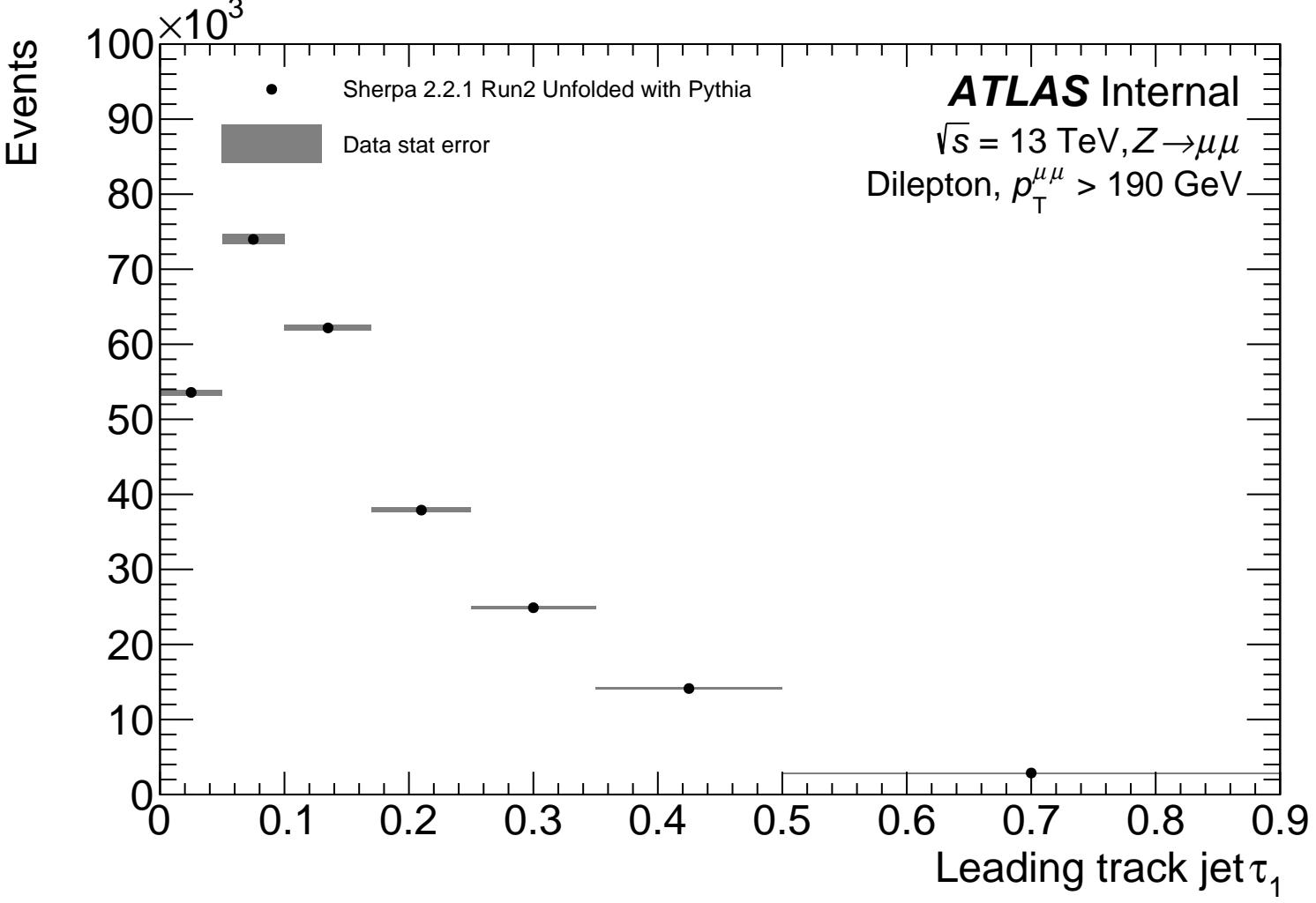


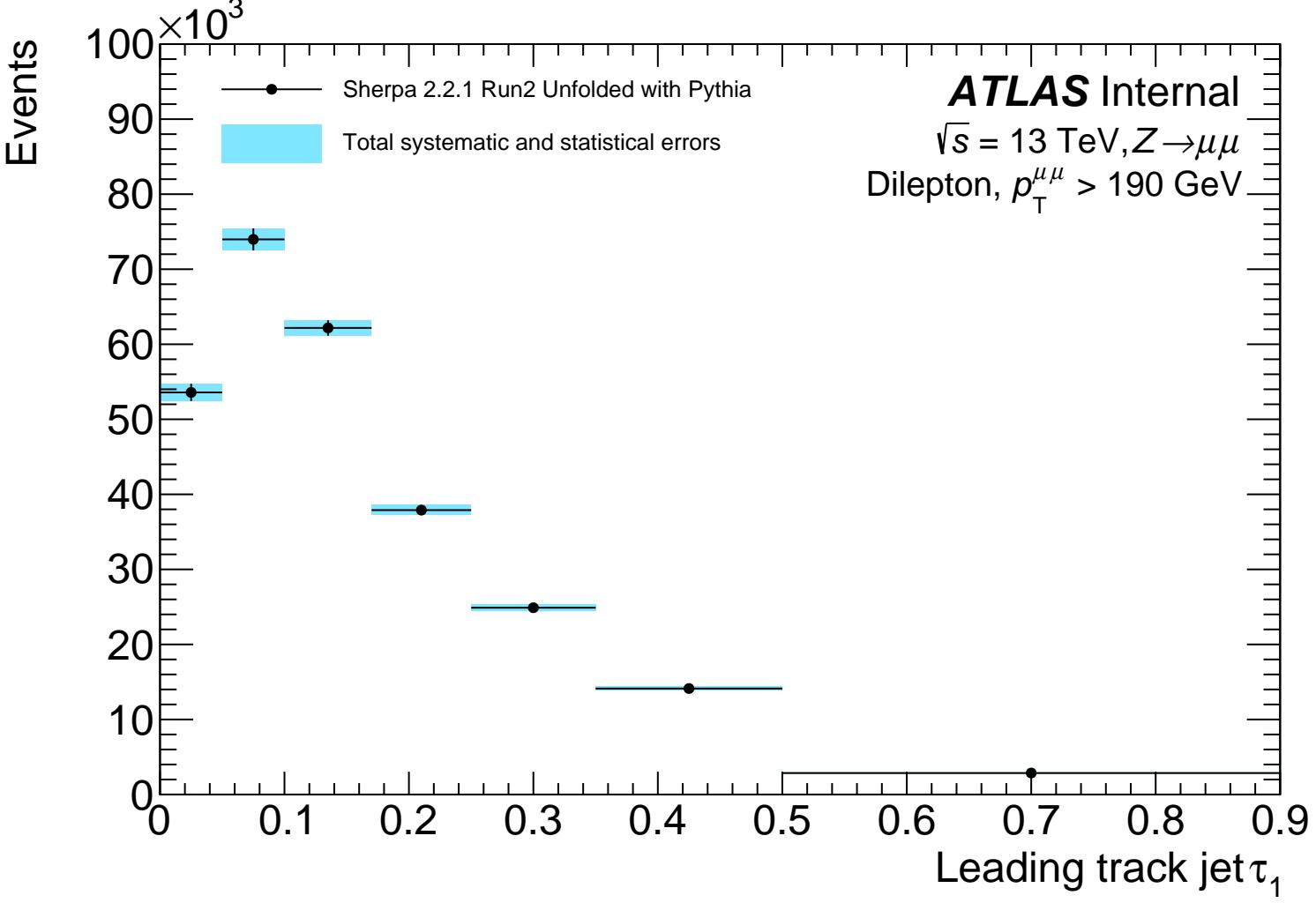


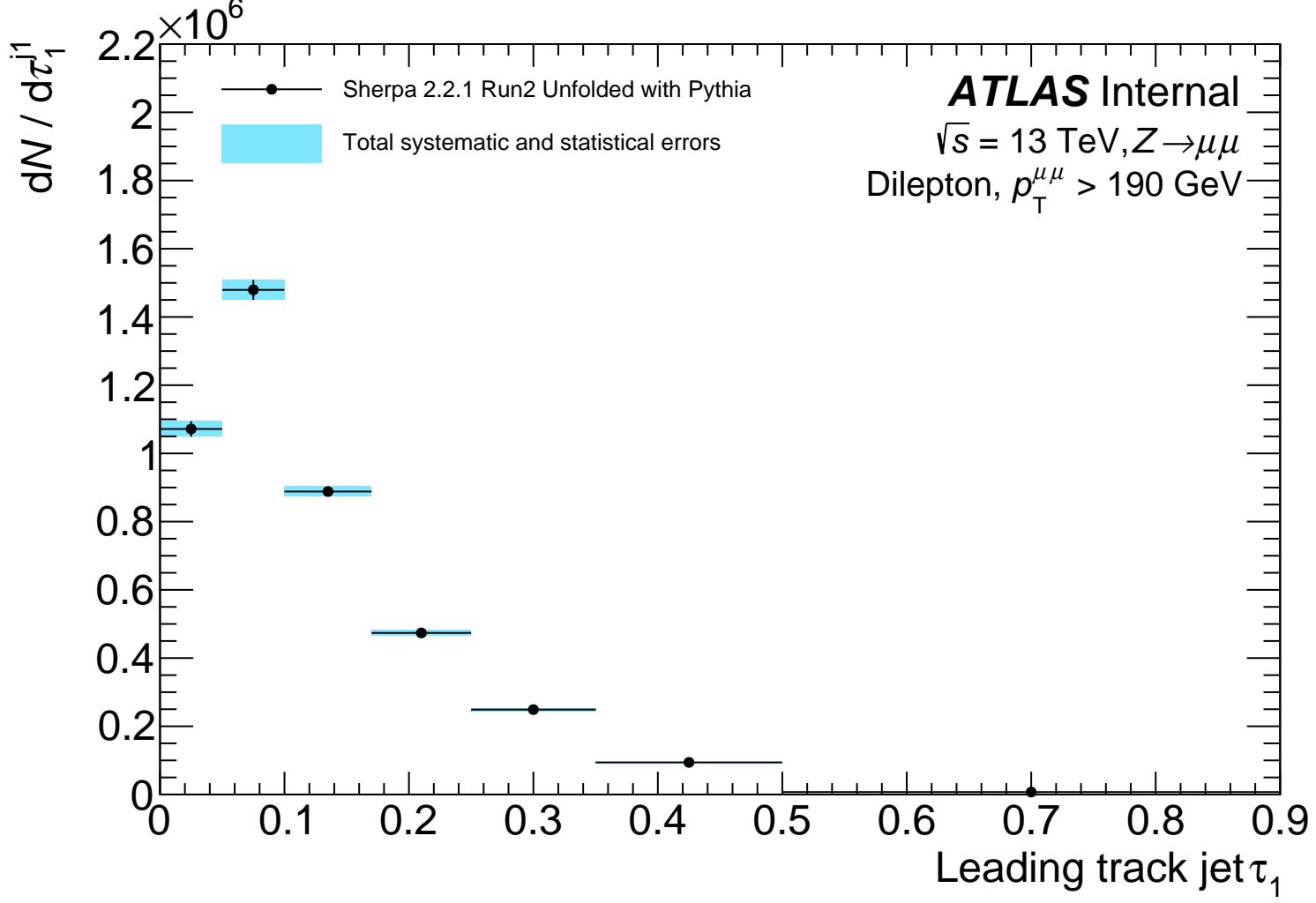


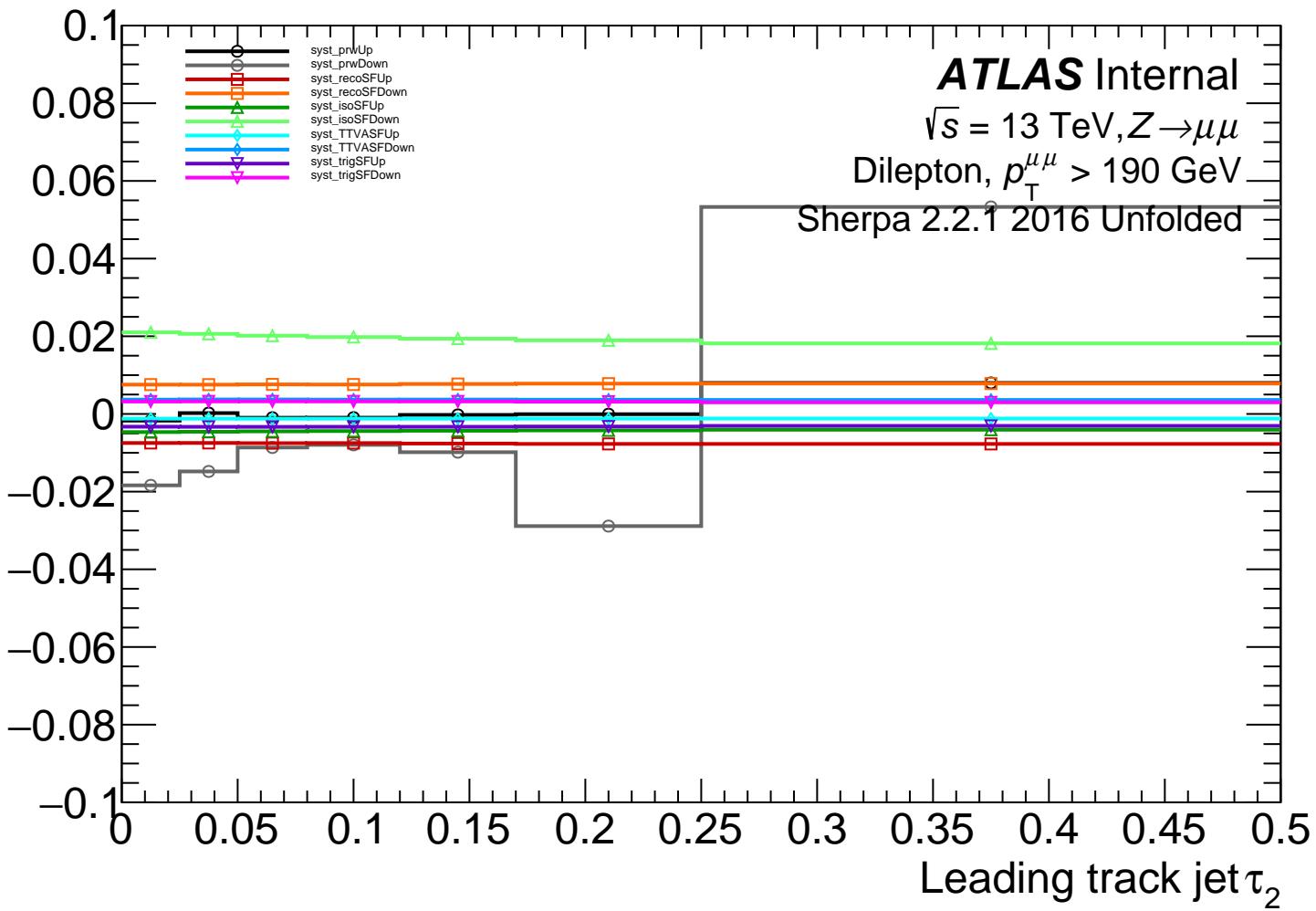


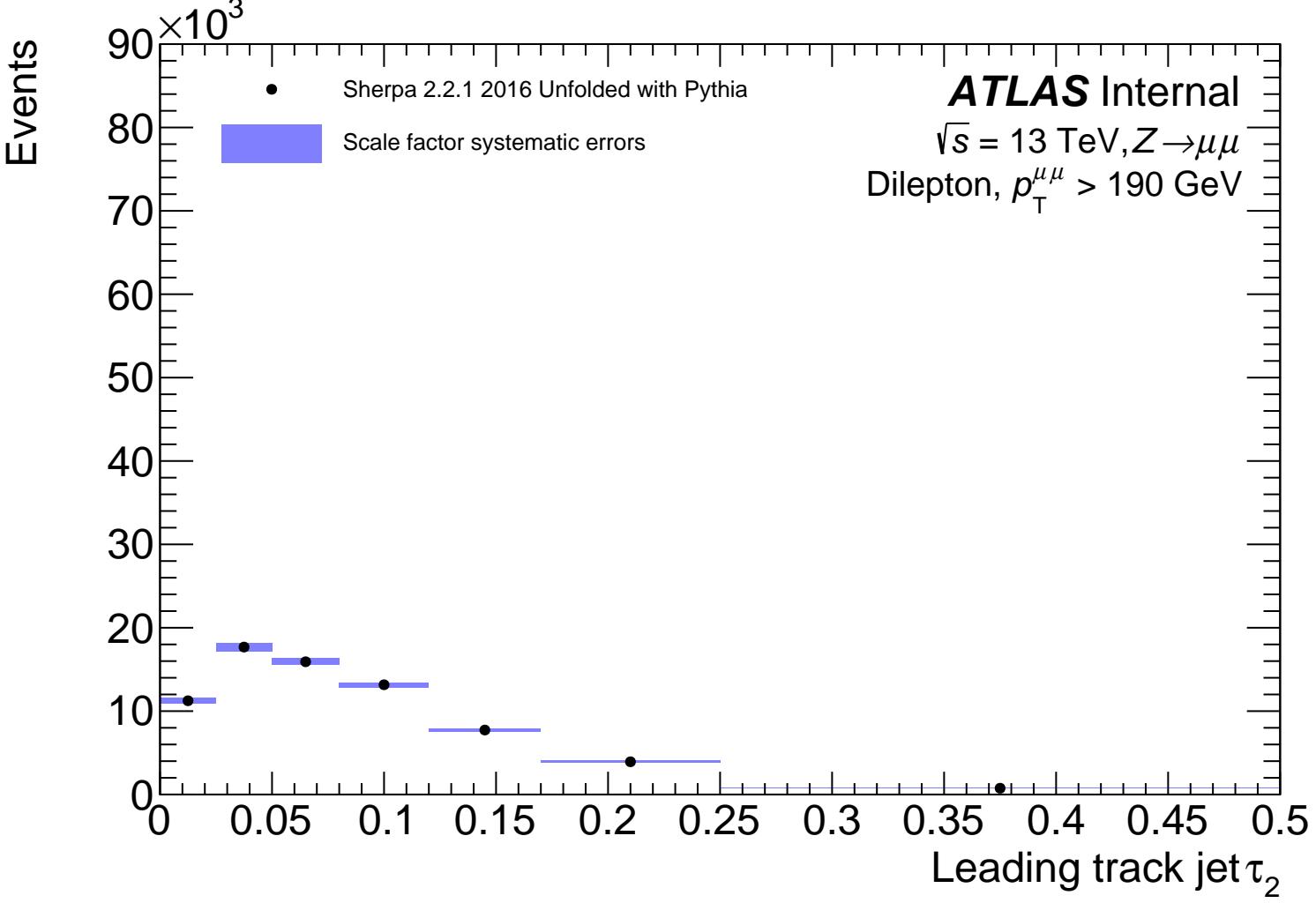


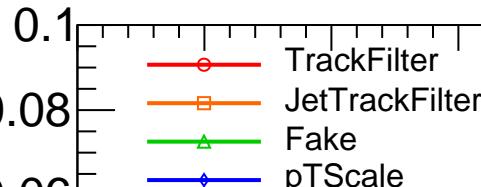




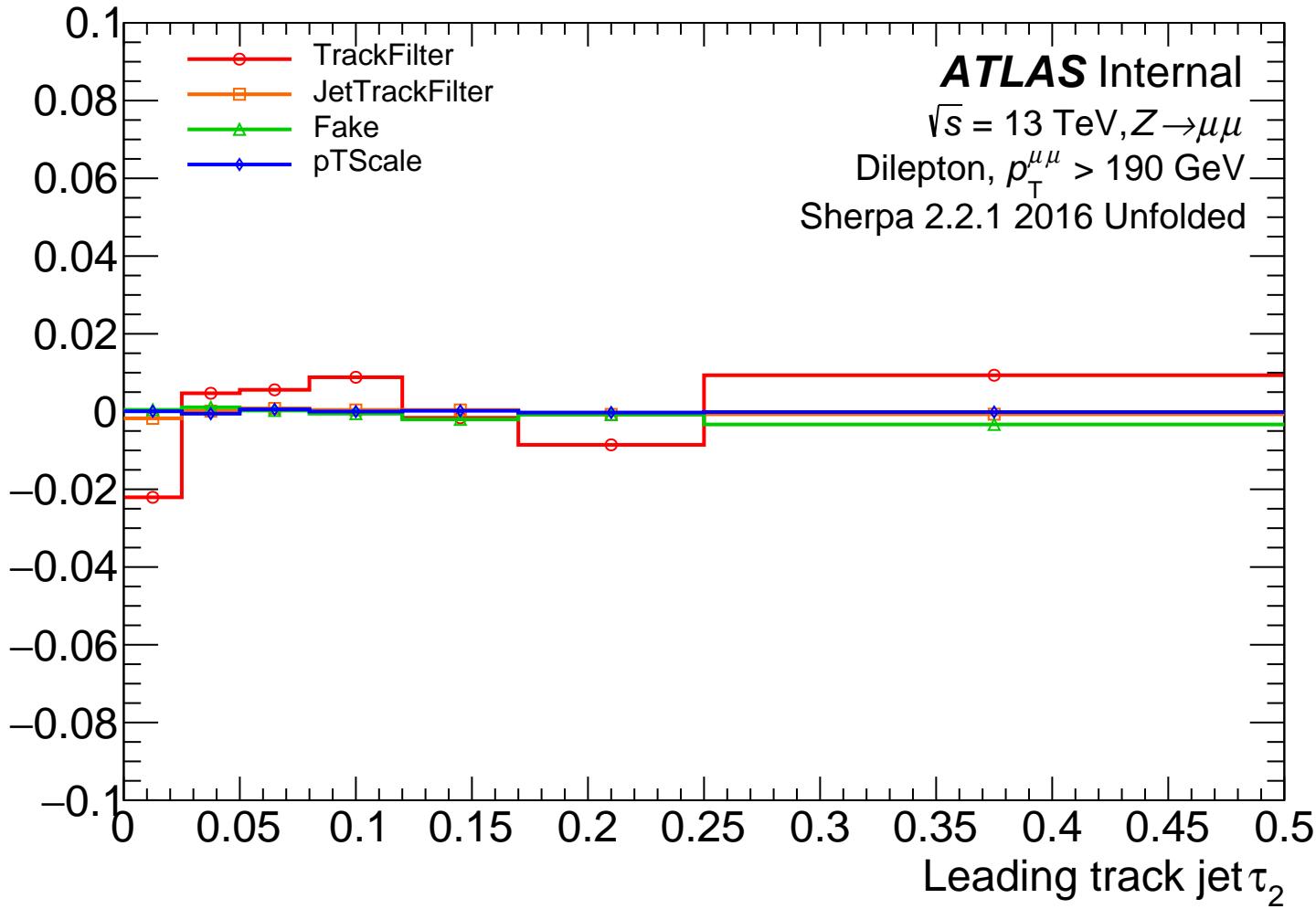


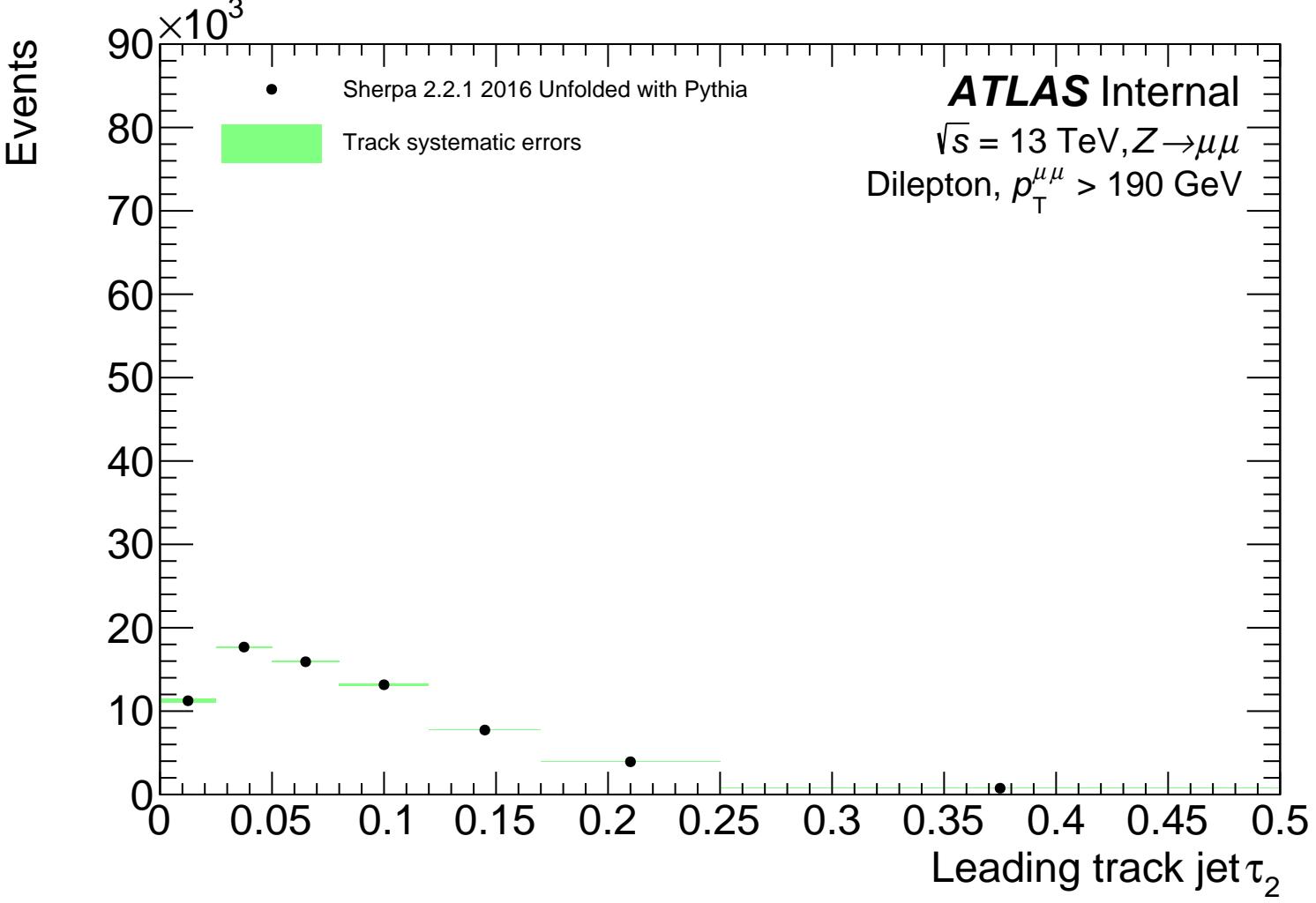


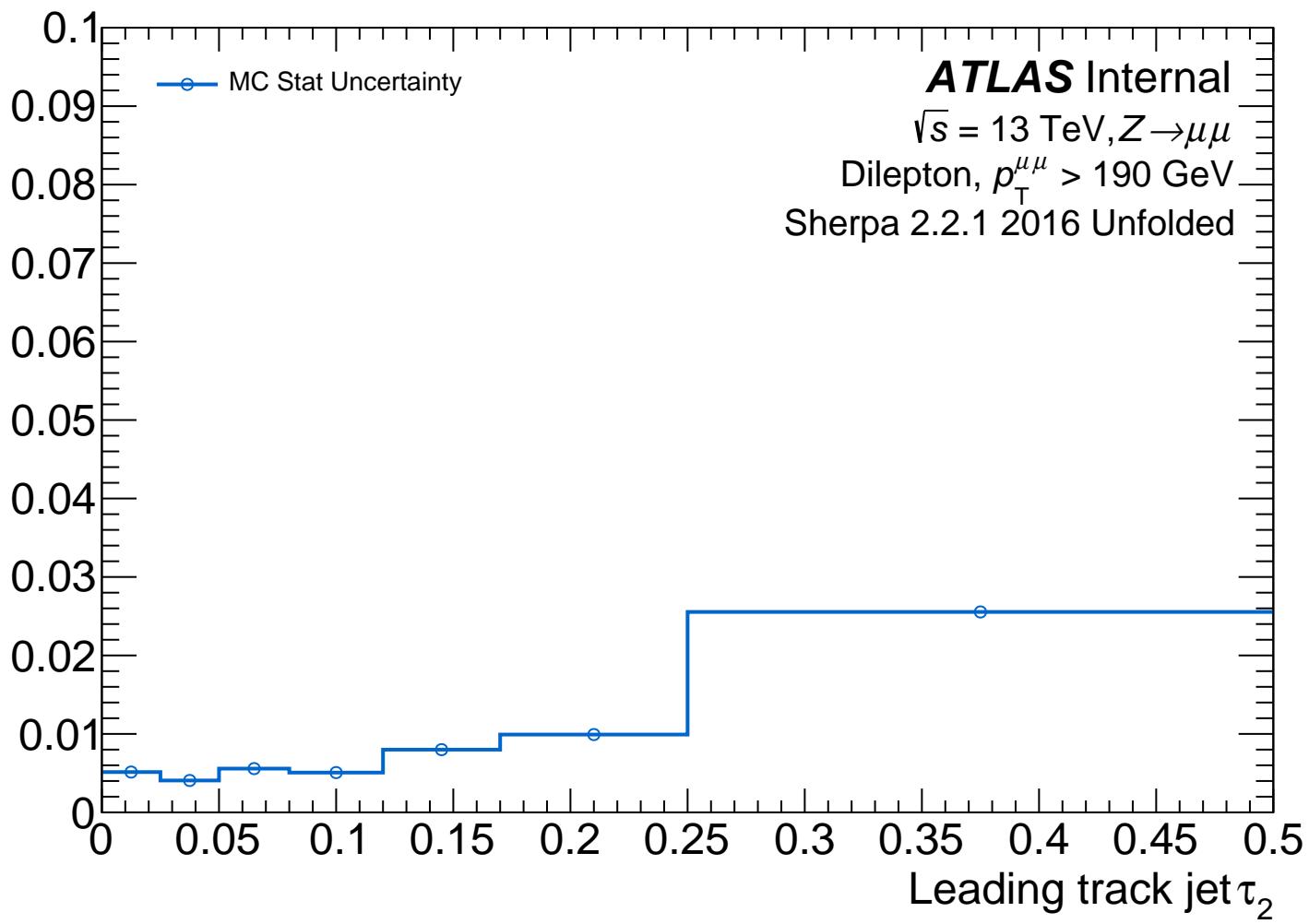


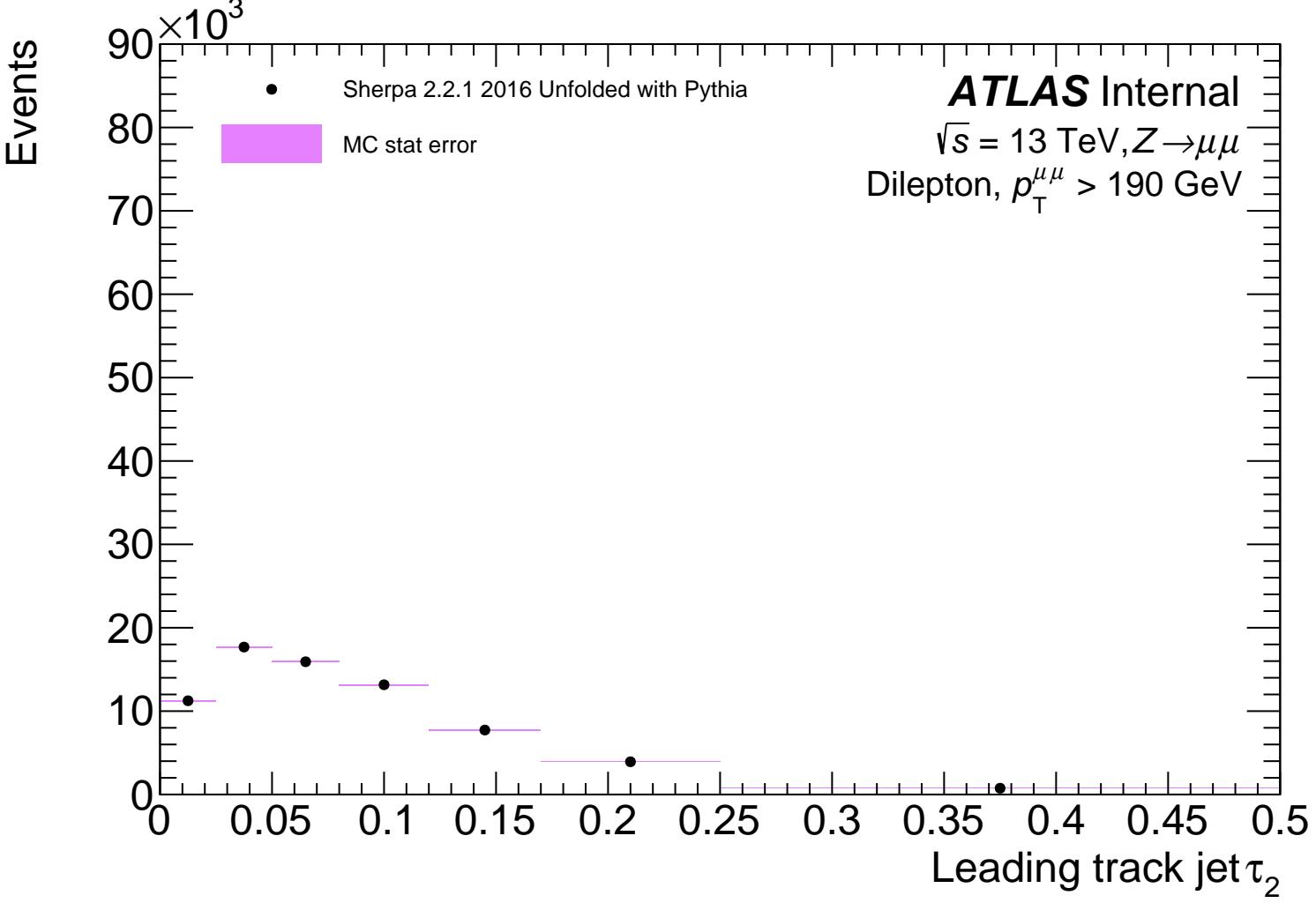


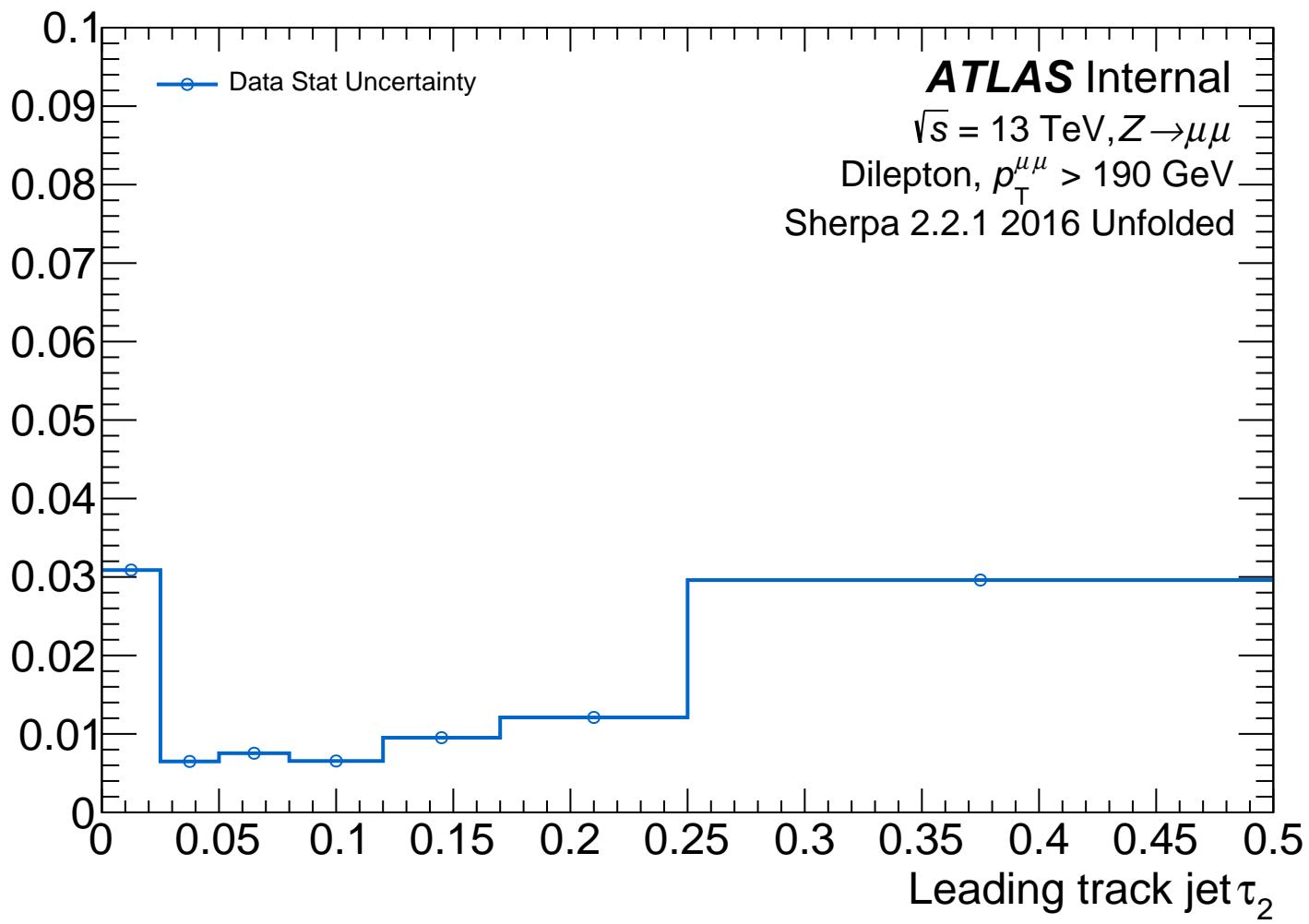
**ATLAS Internal**  
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$   
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$   
Sherpa 2.2.1 2016 Unfolded

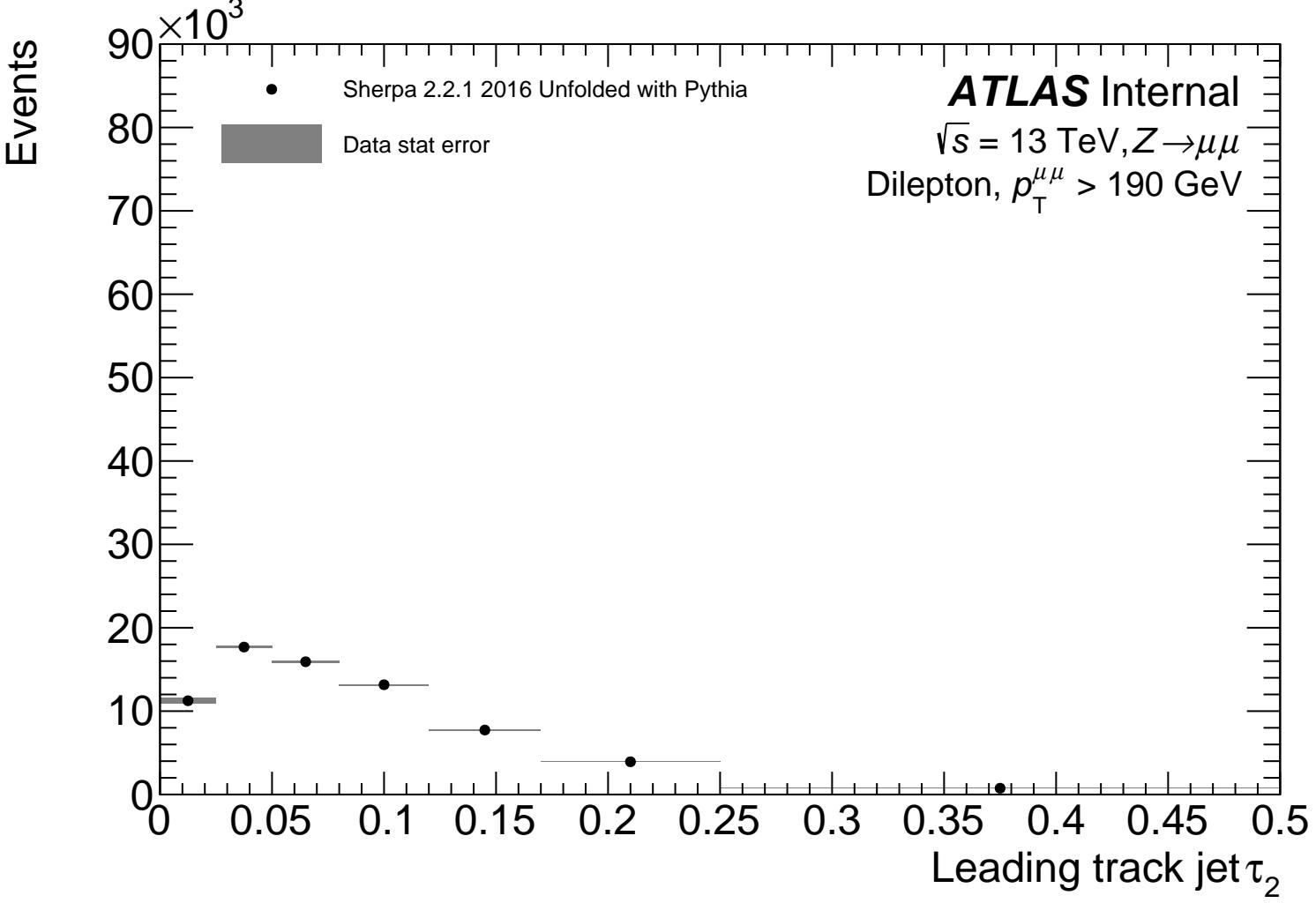


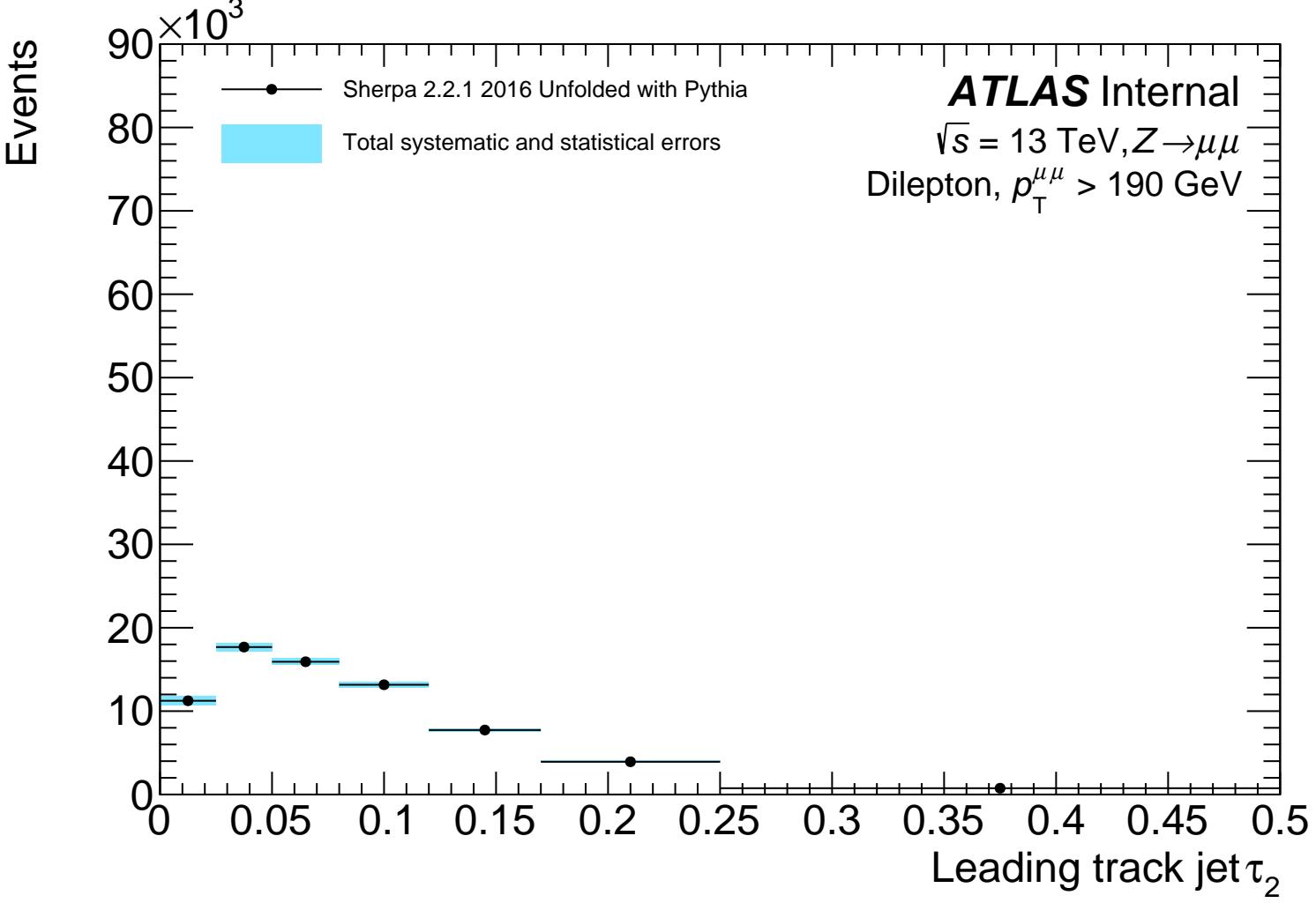


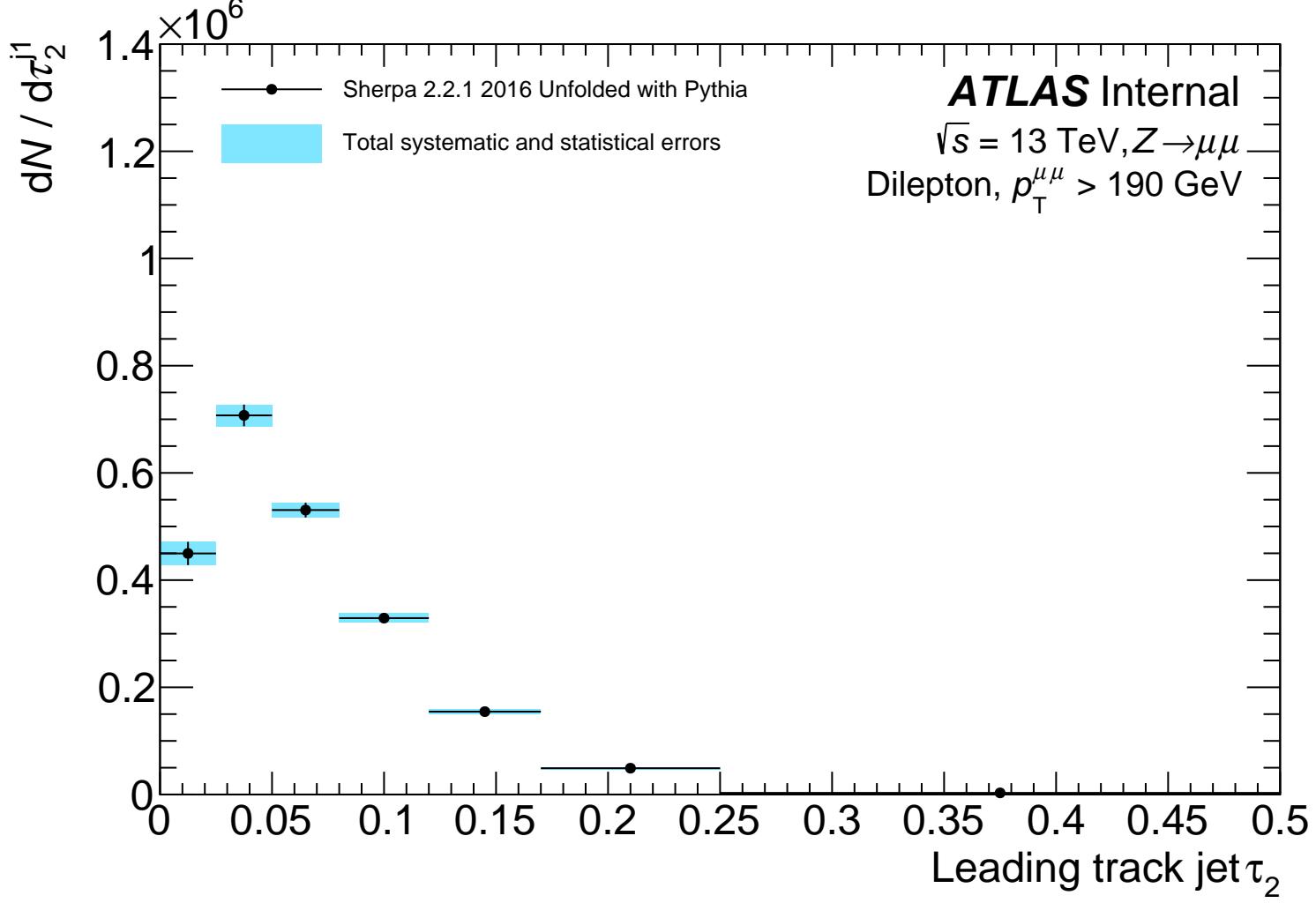












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-0.06

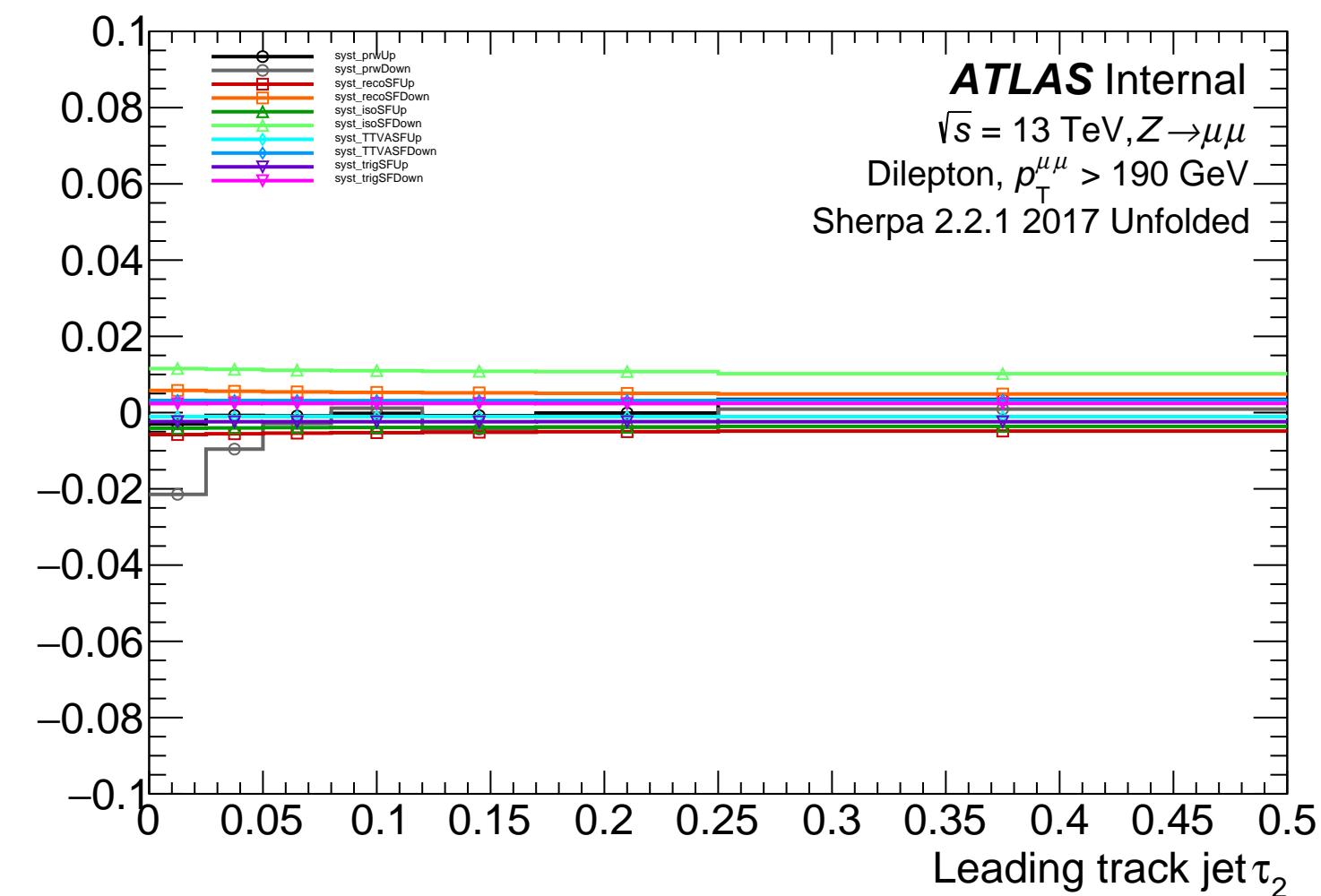
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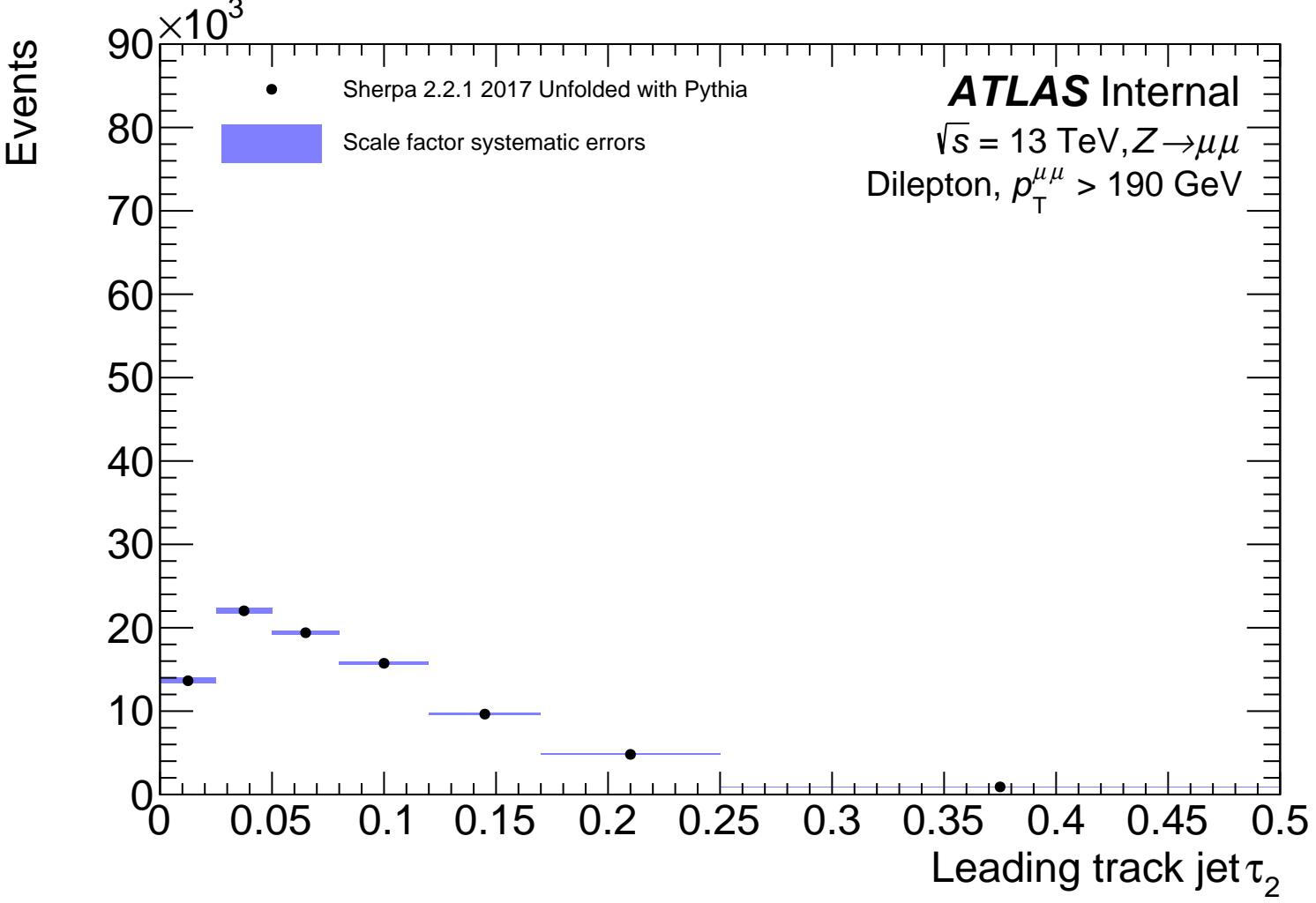
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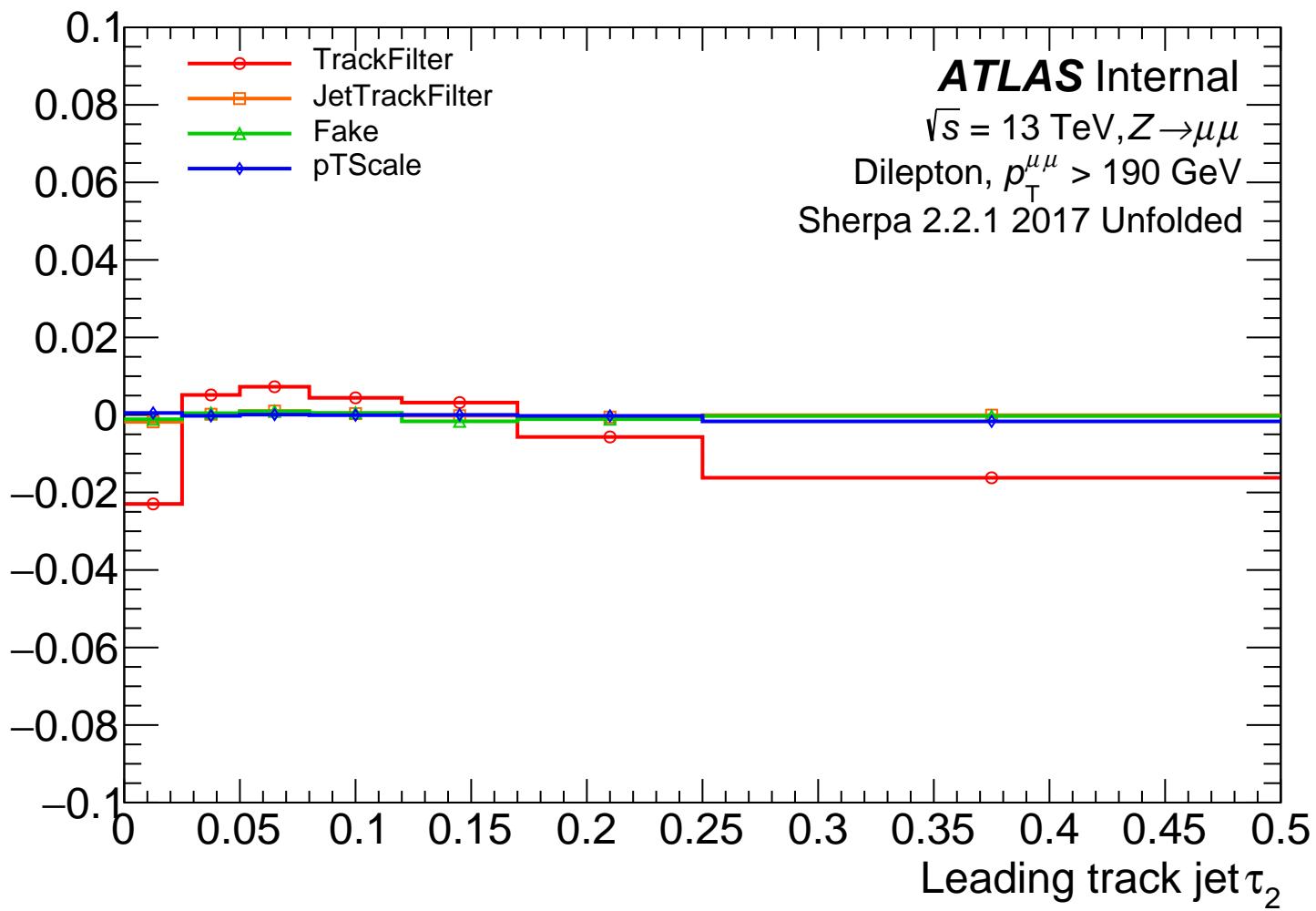
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- syst\_prvDown
- syst\_recoSFUp
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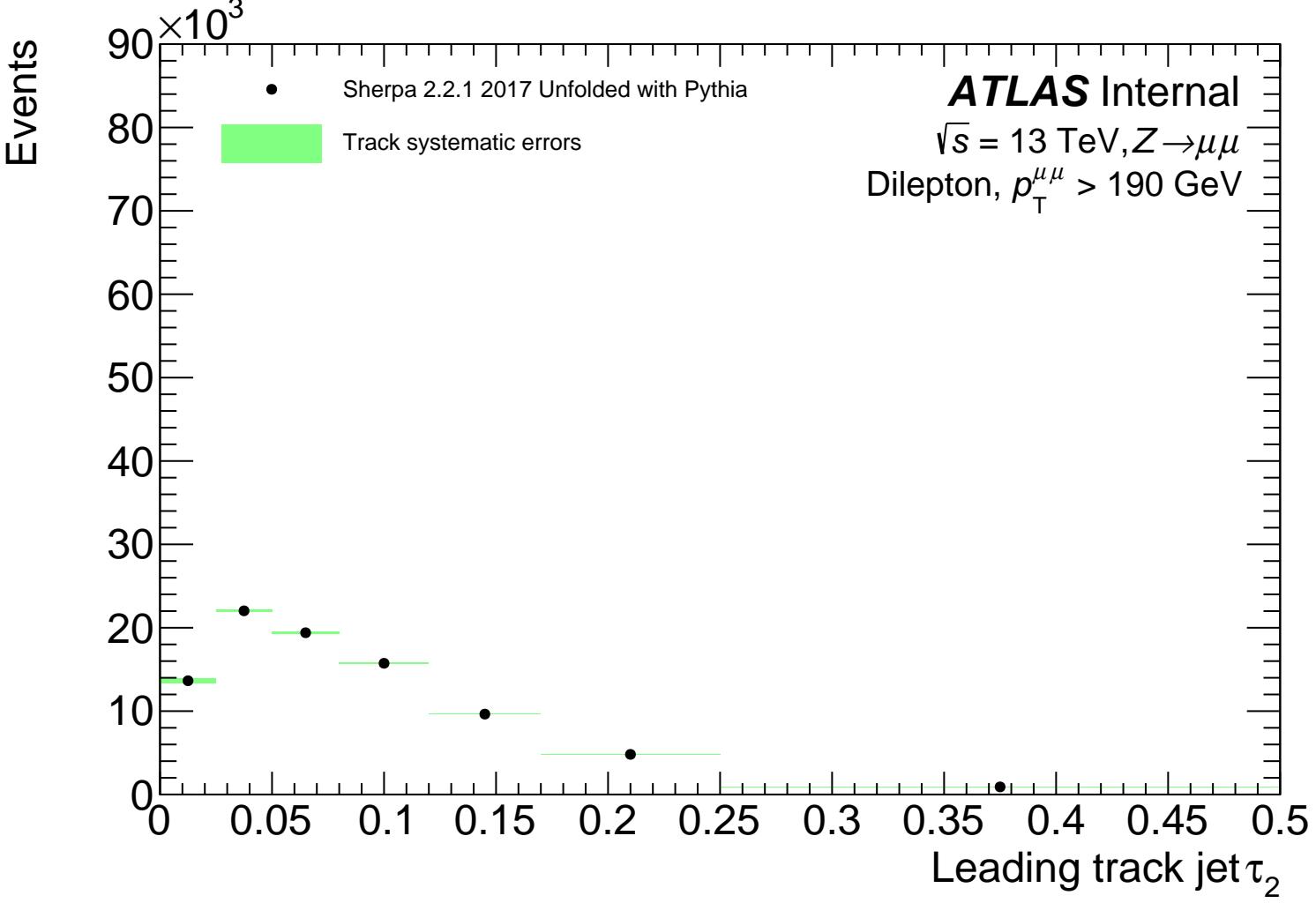
**ATLAS Internal** $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$ Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$ 

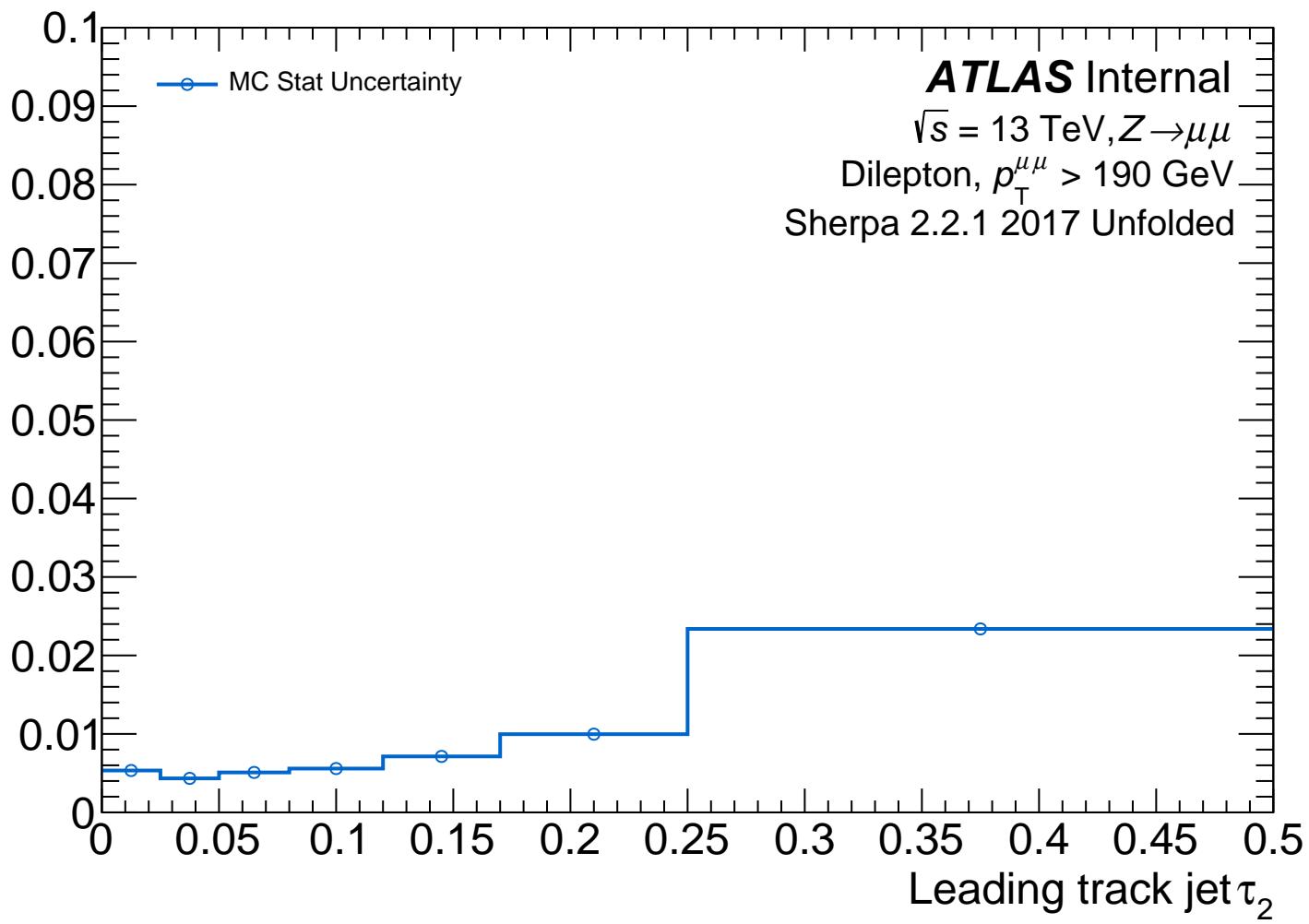
Sherpa 2.2.1 2017 Unfolded

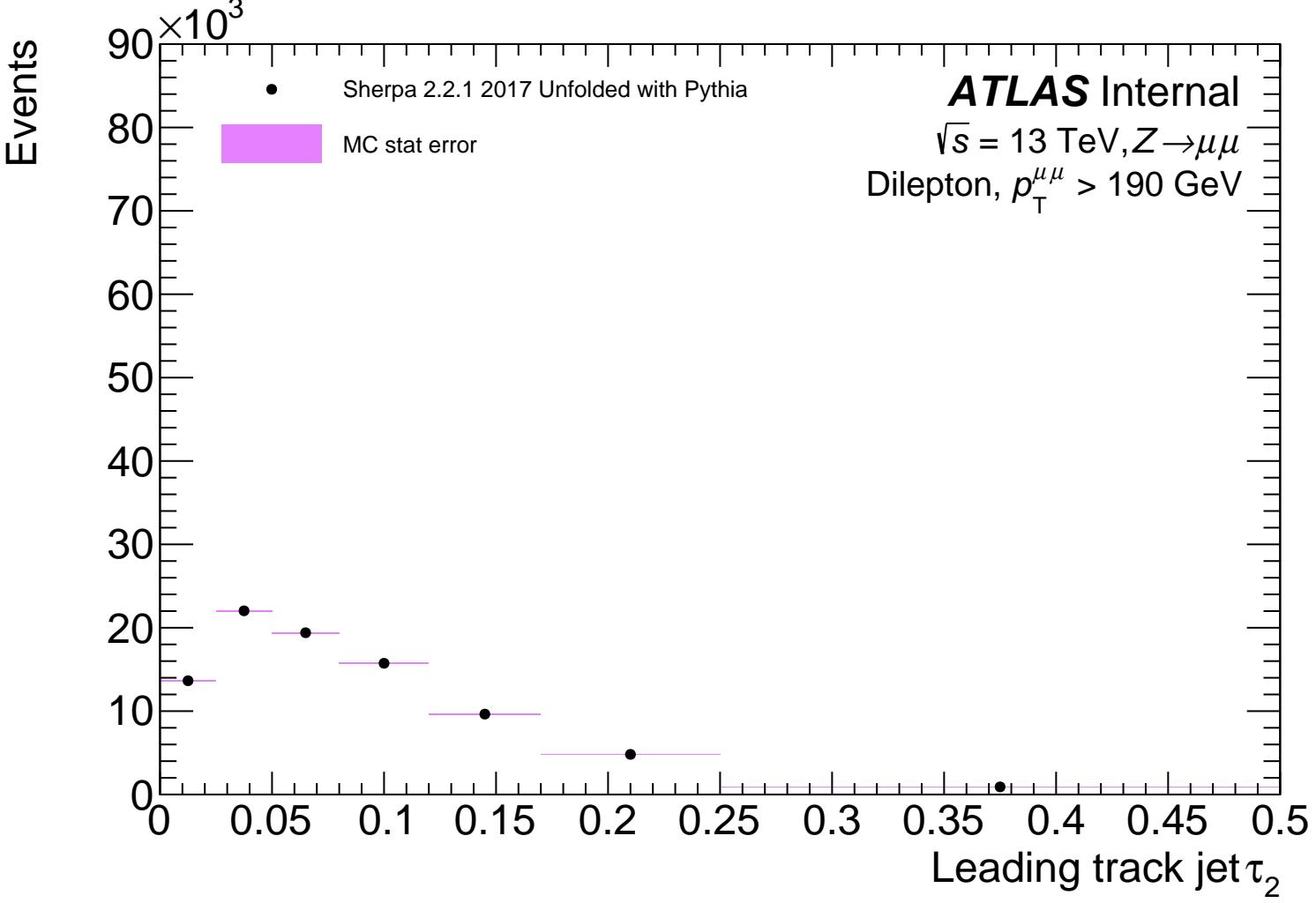
Leading track jet  $\tau_2$ 

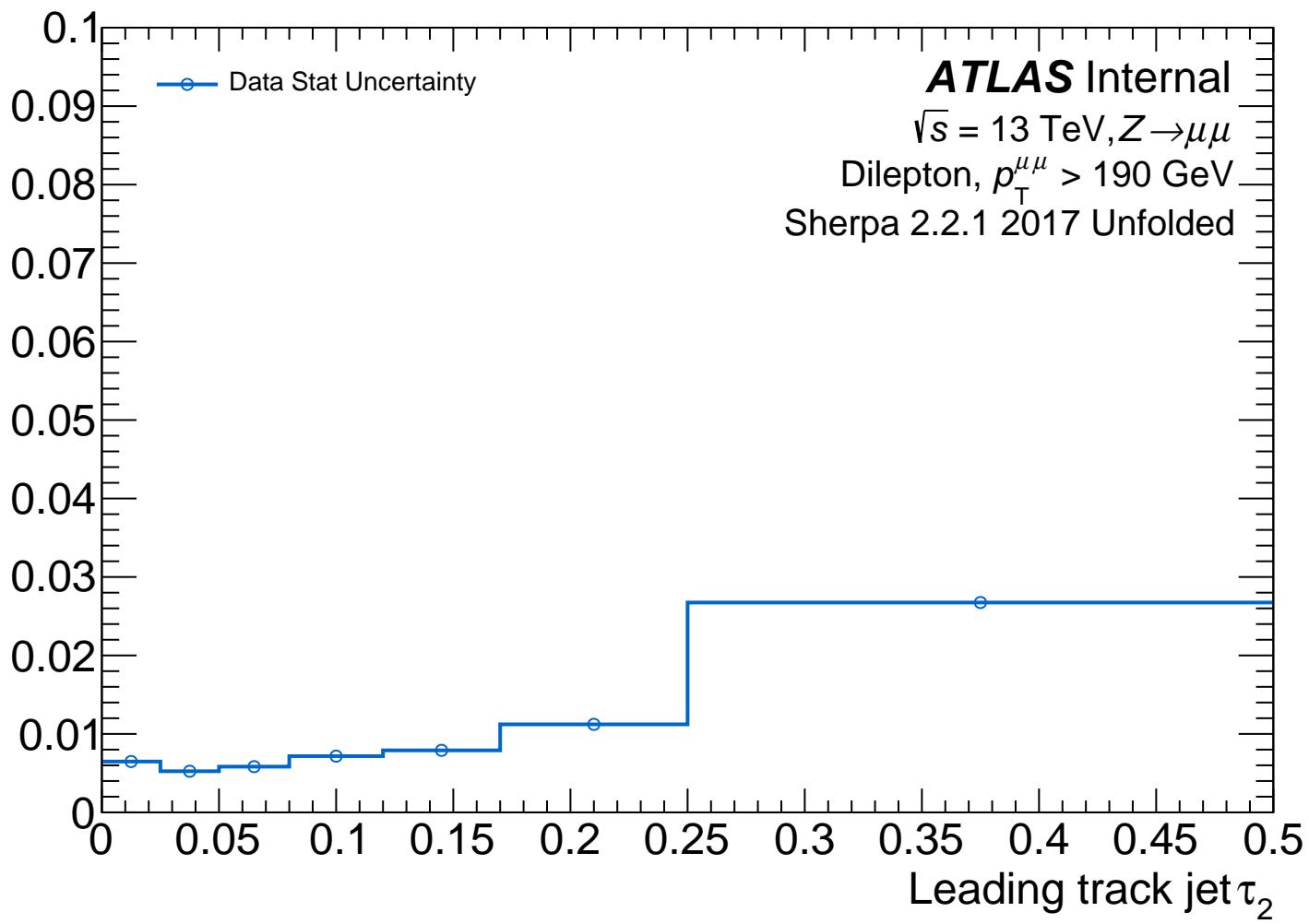


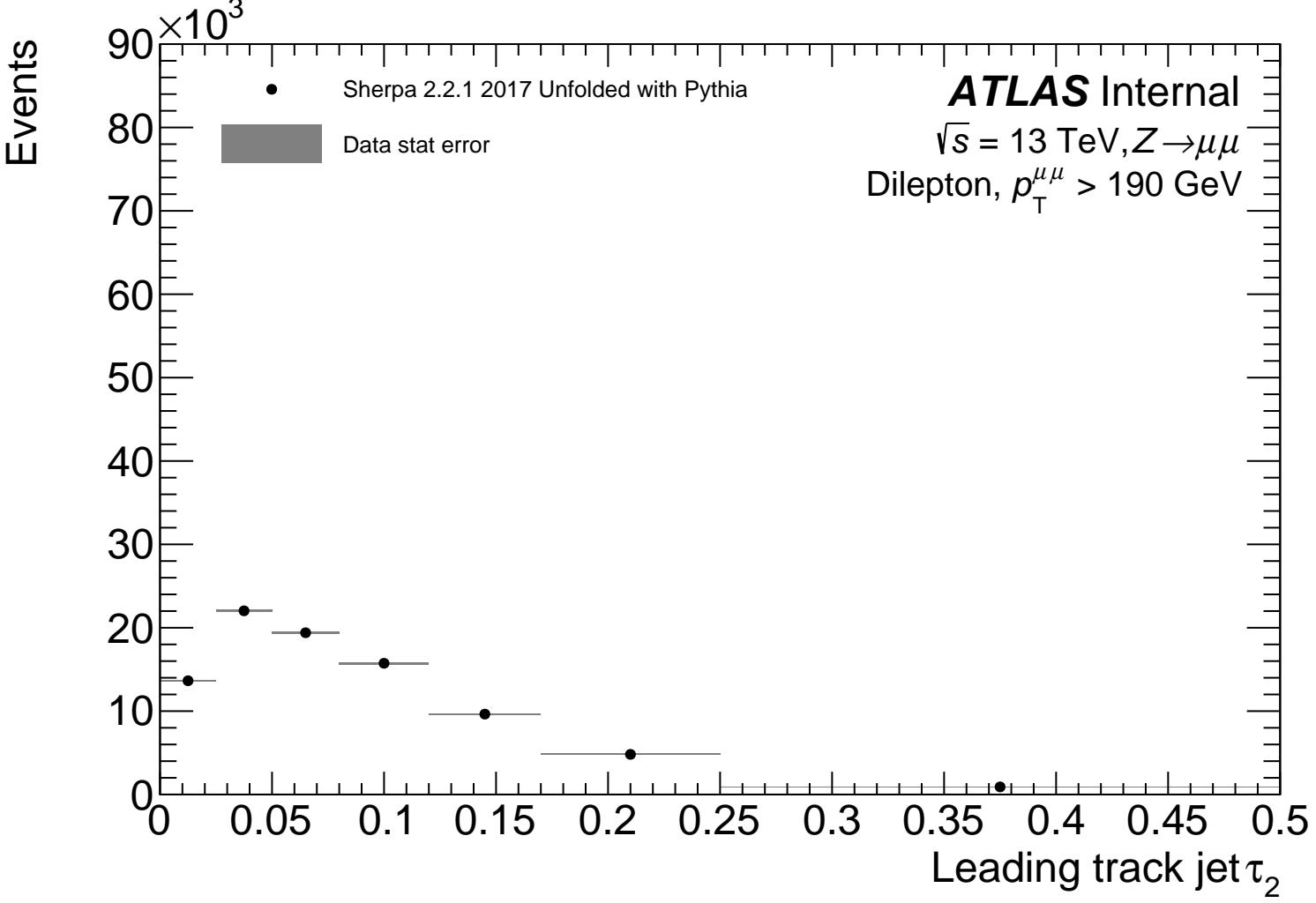


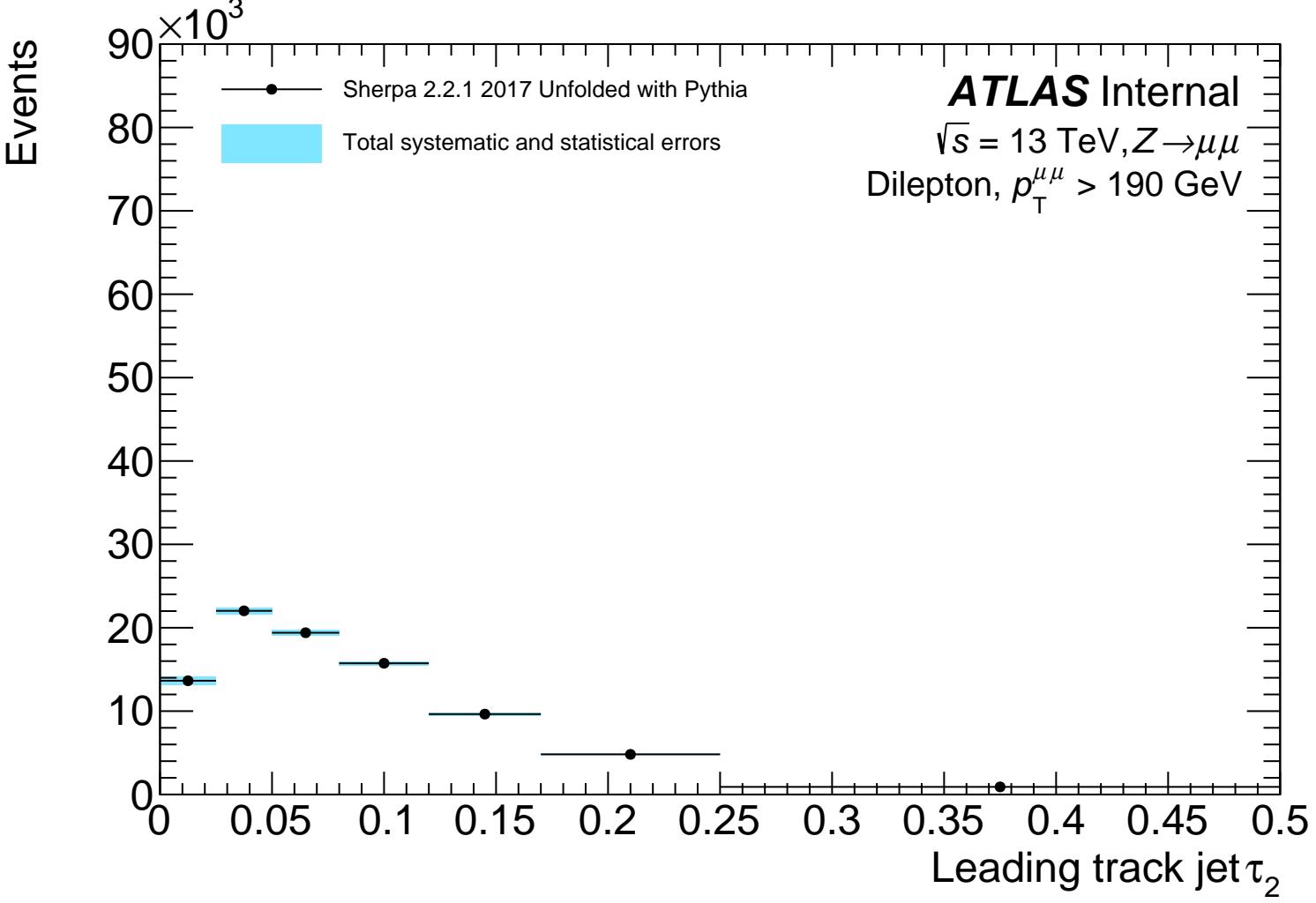


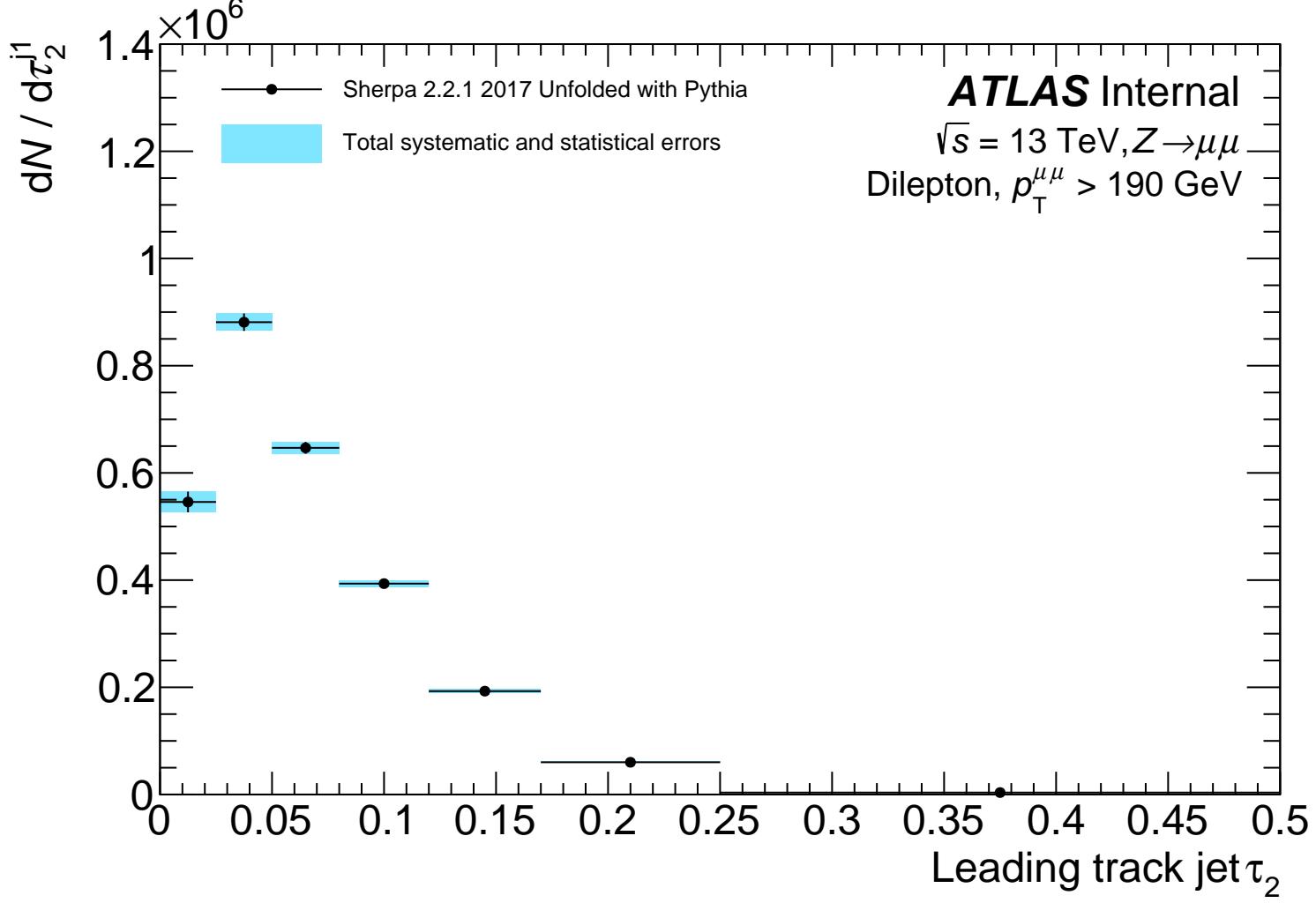










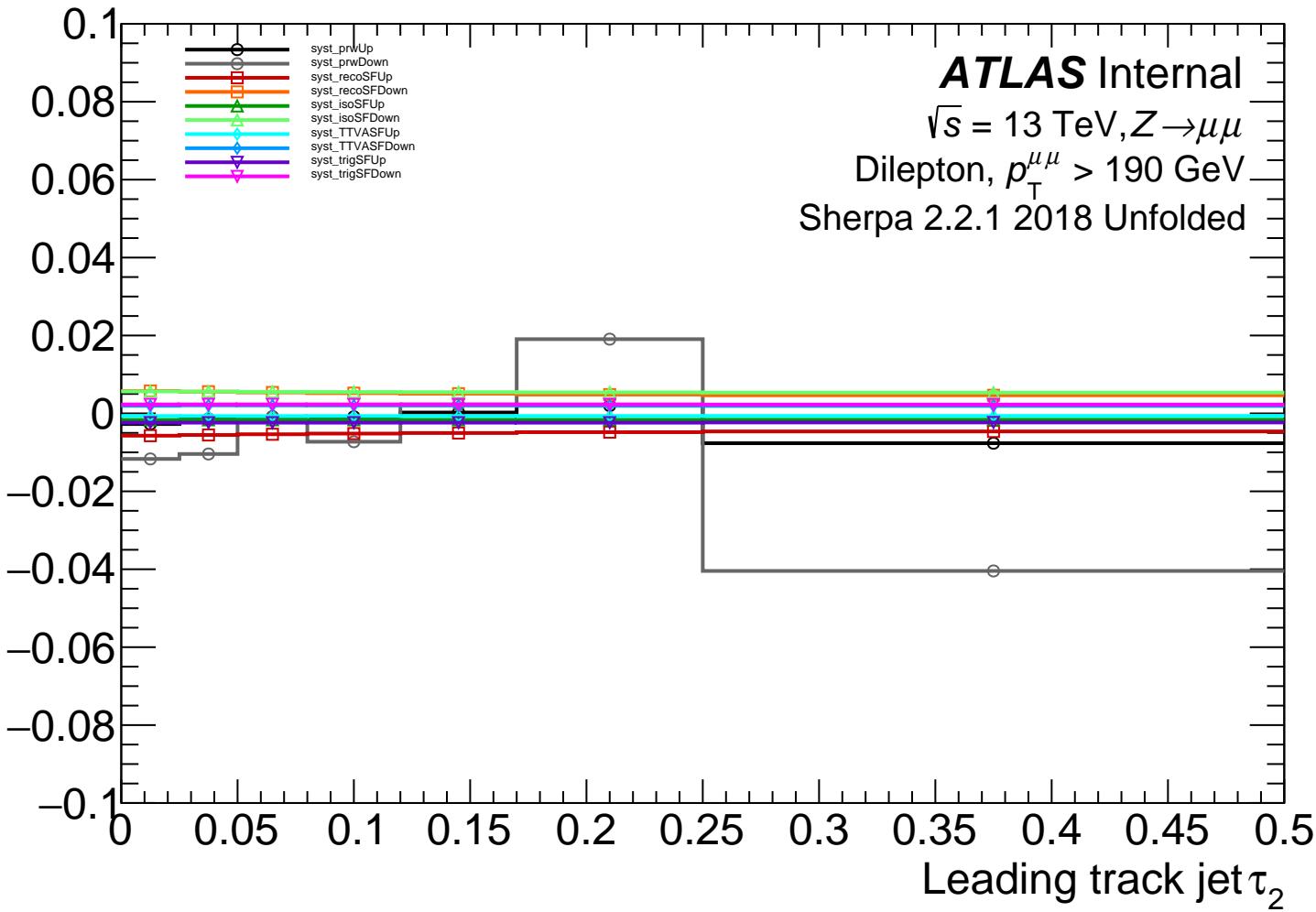


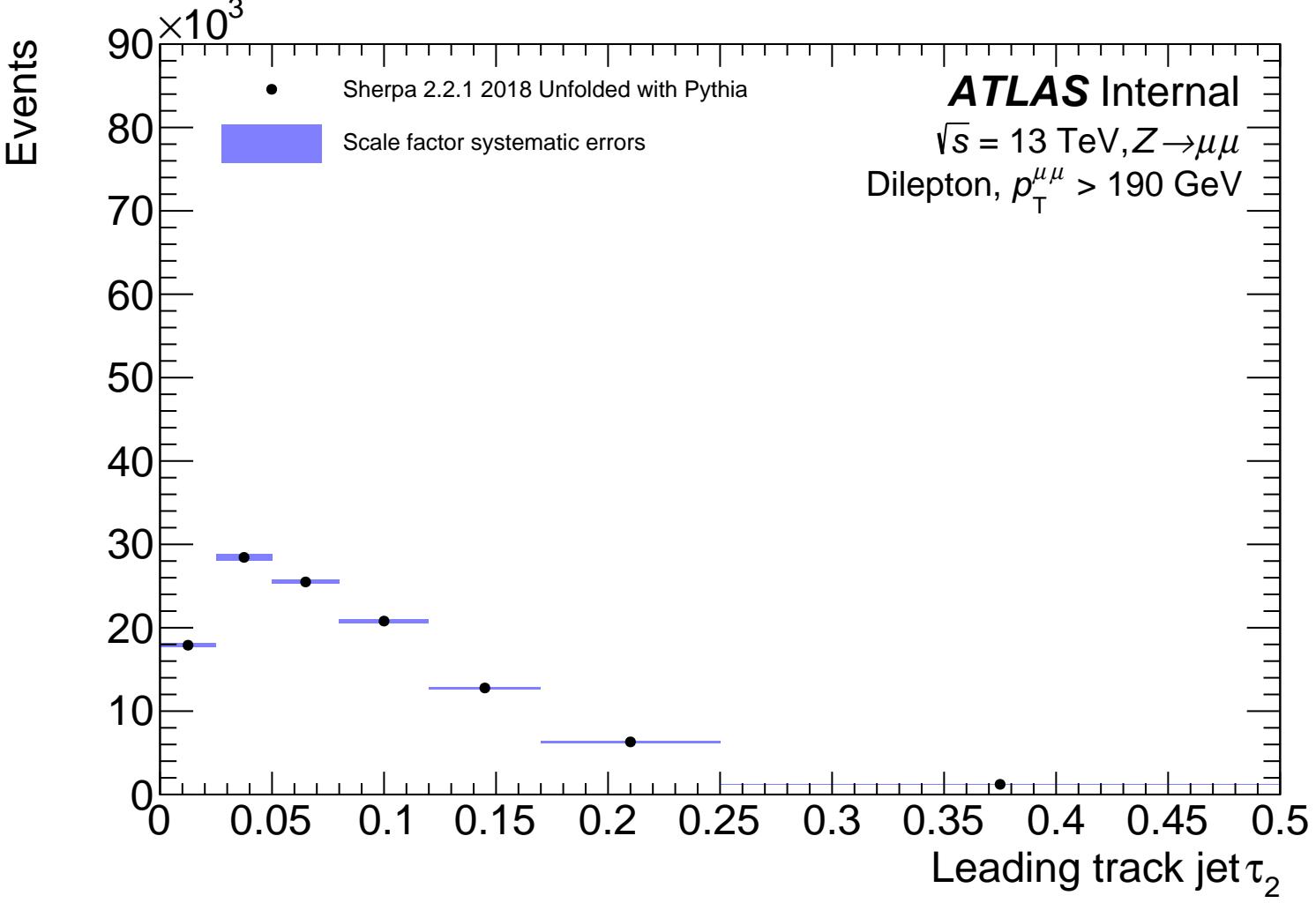
**ATLAS Internal**

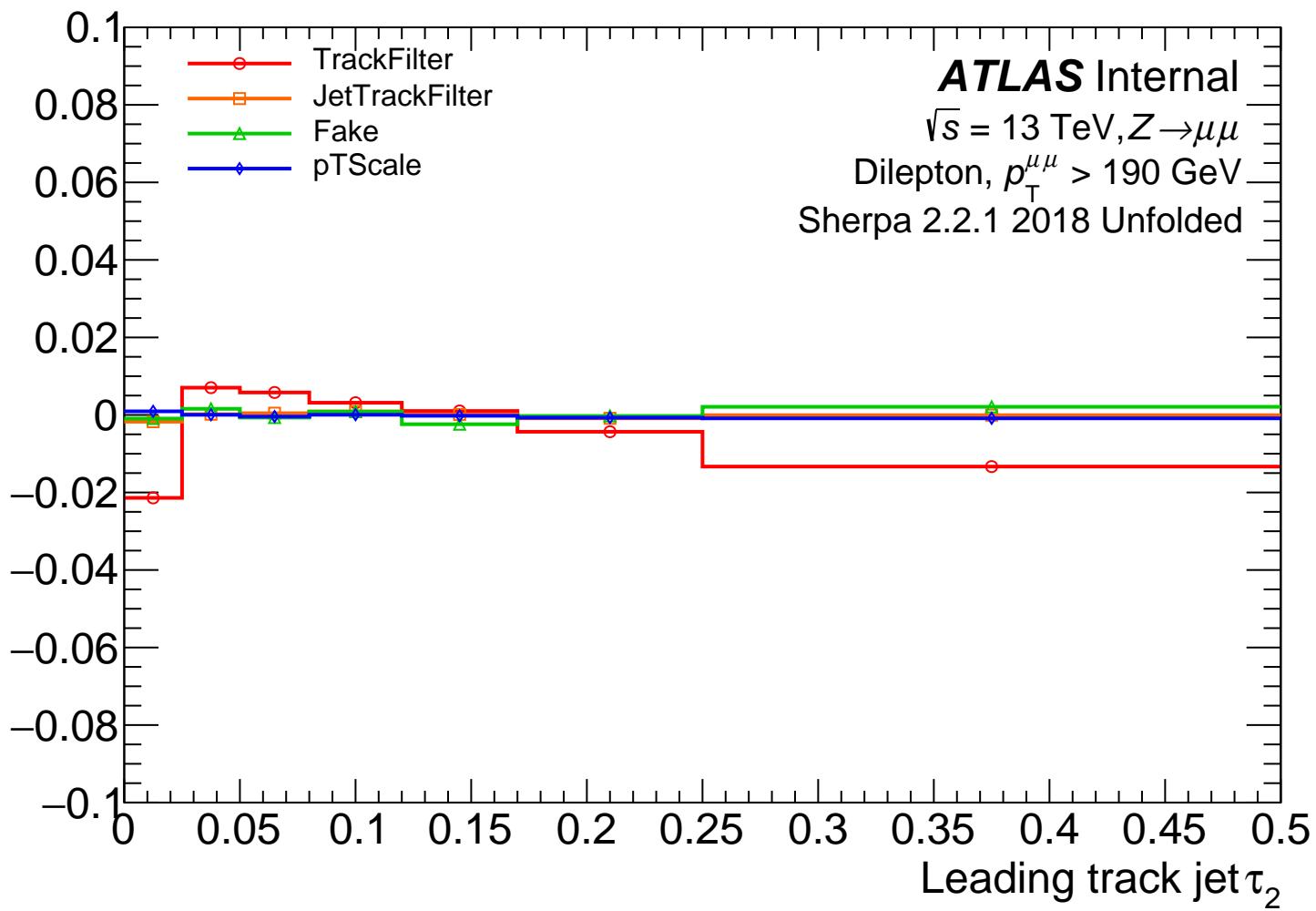
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

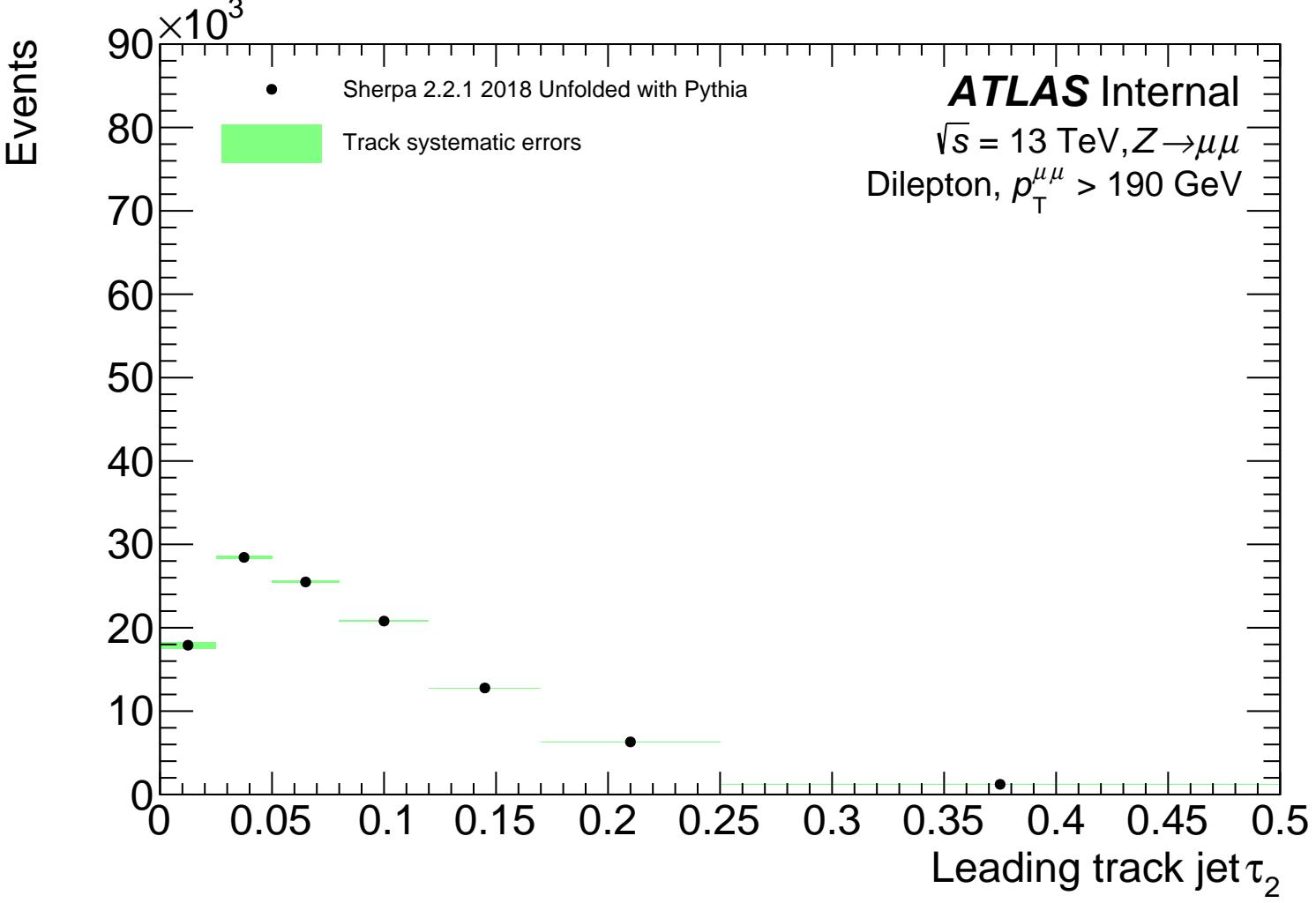
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

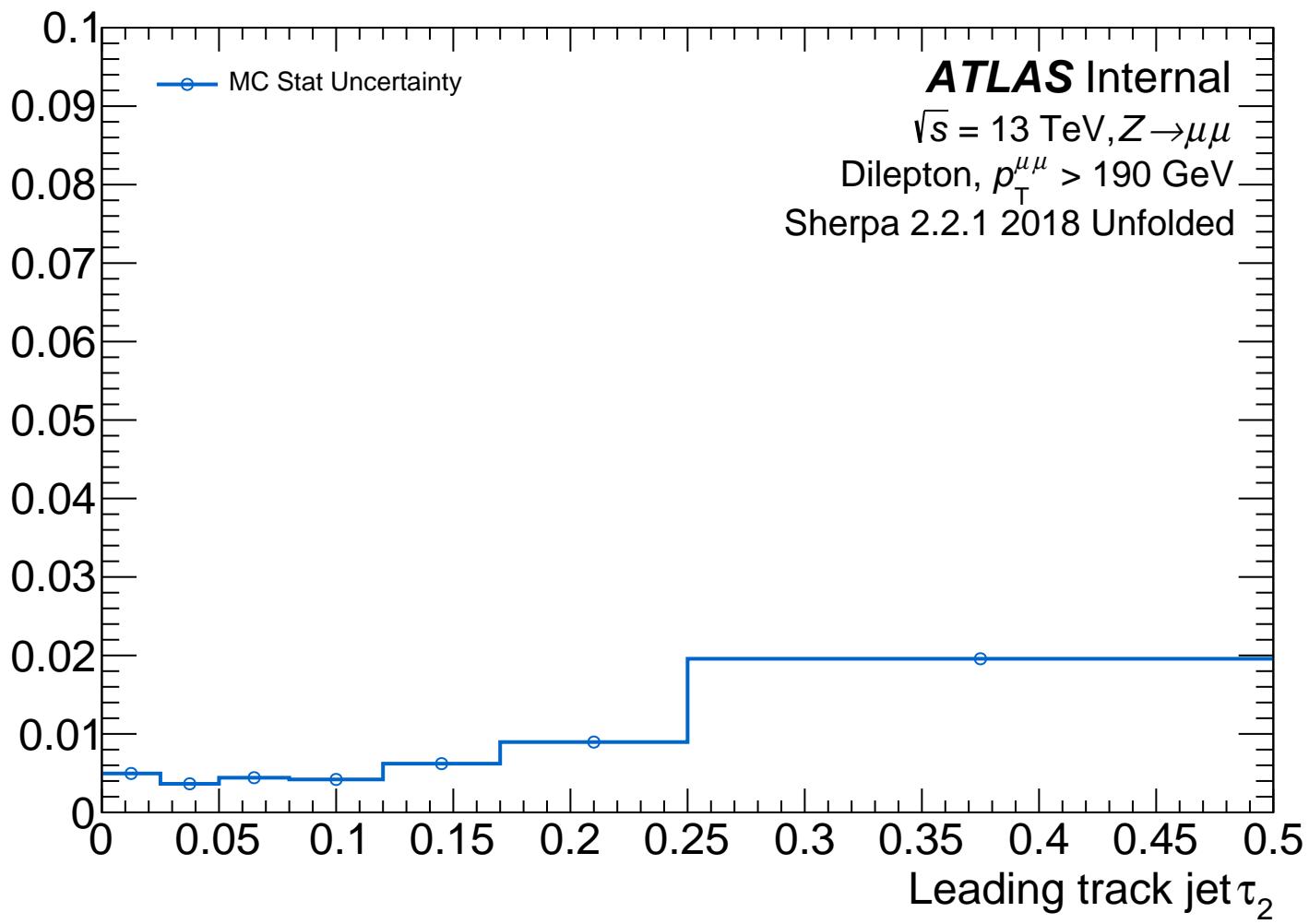
Sherpa 2.2.1 2018 Unfolded

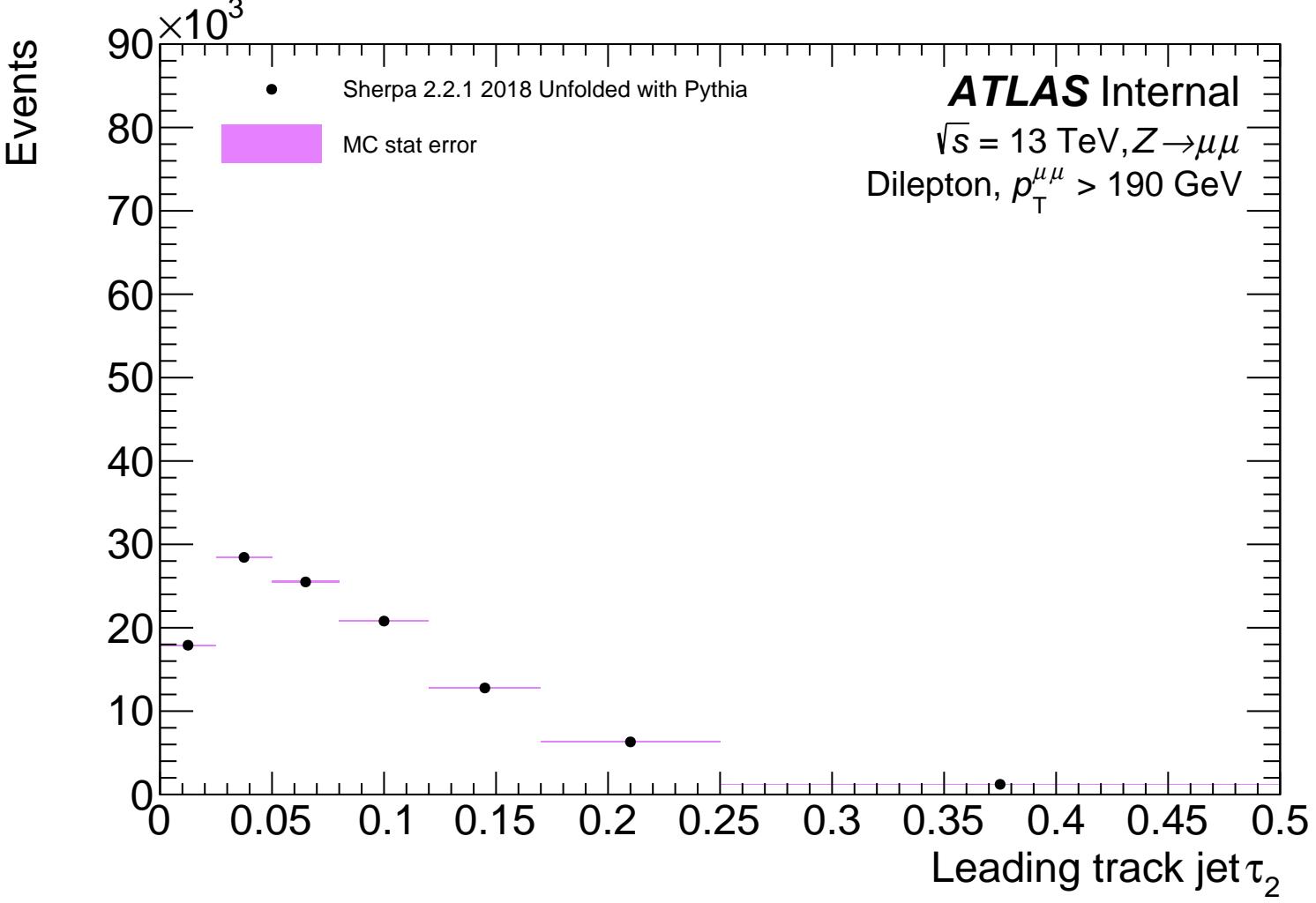


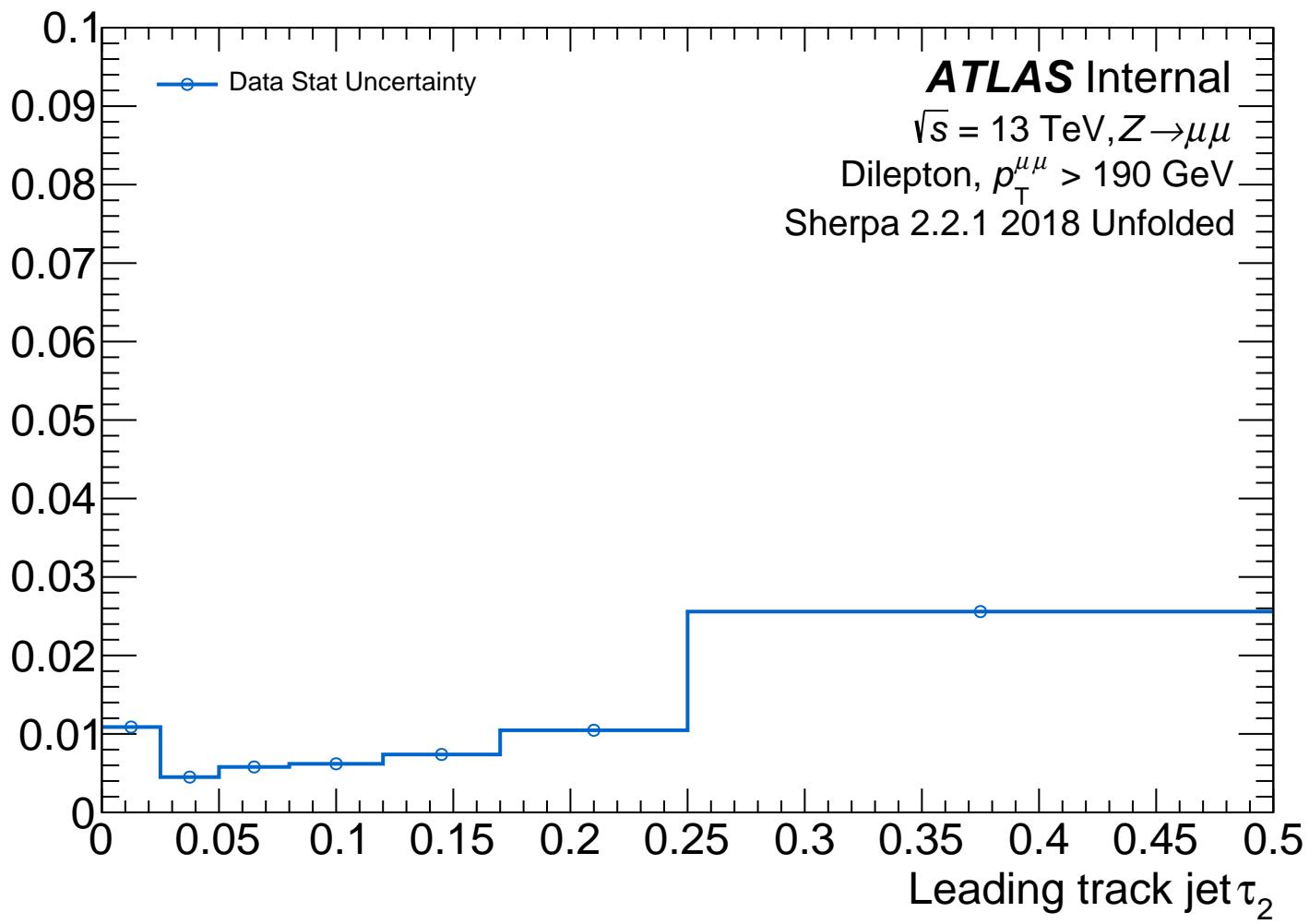


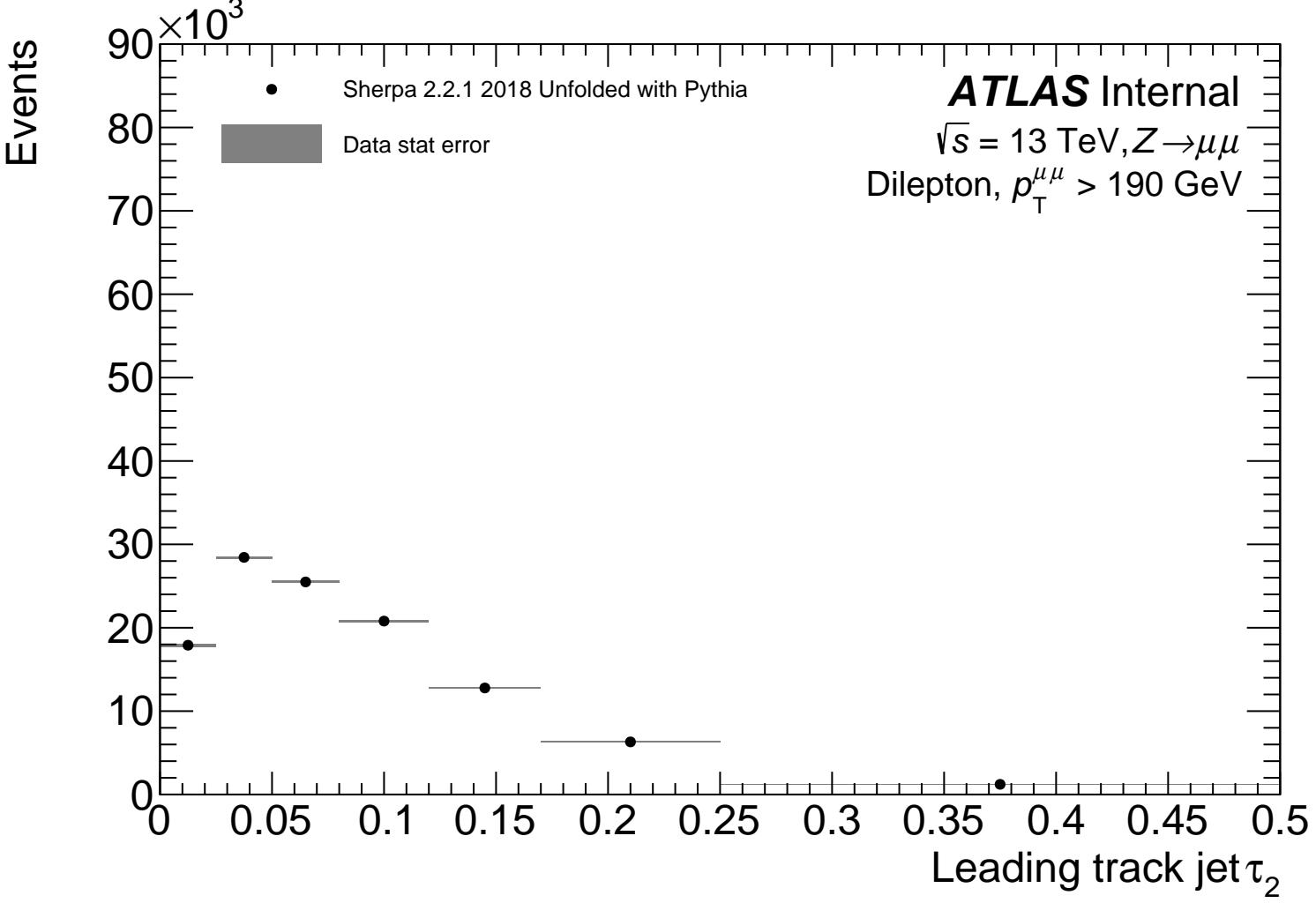


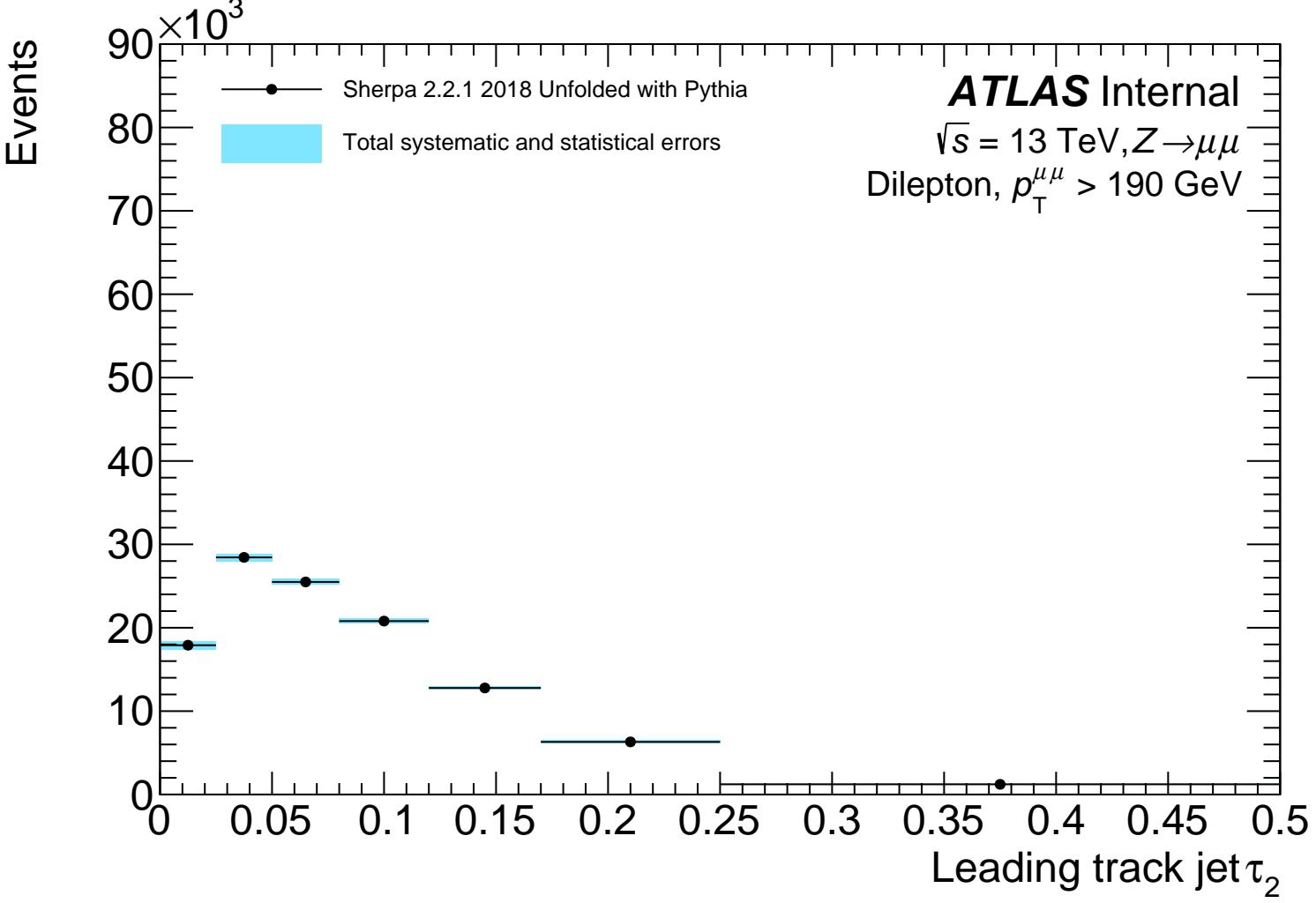


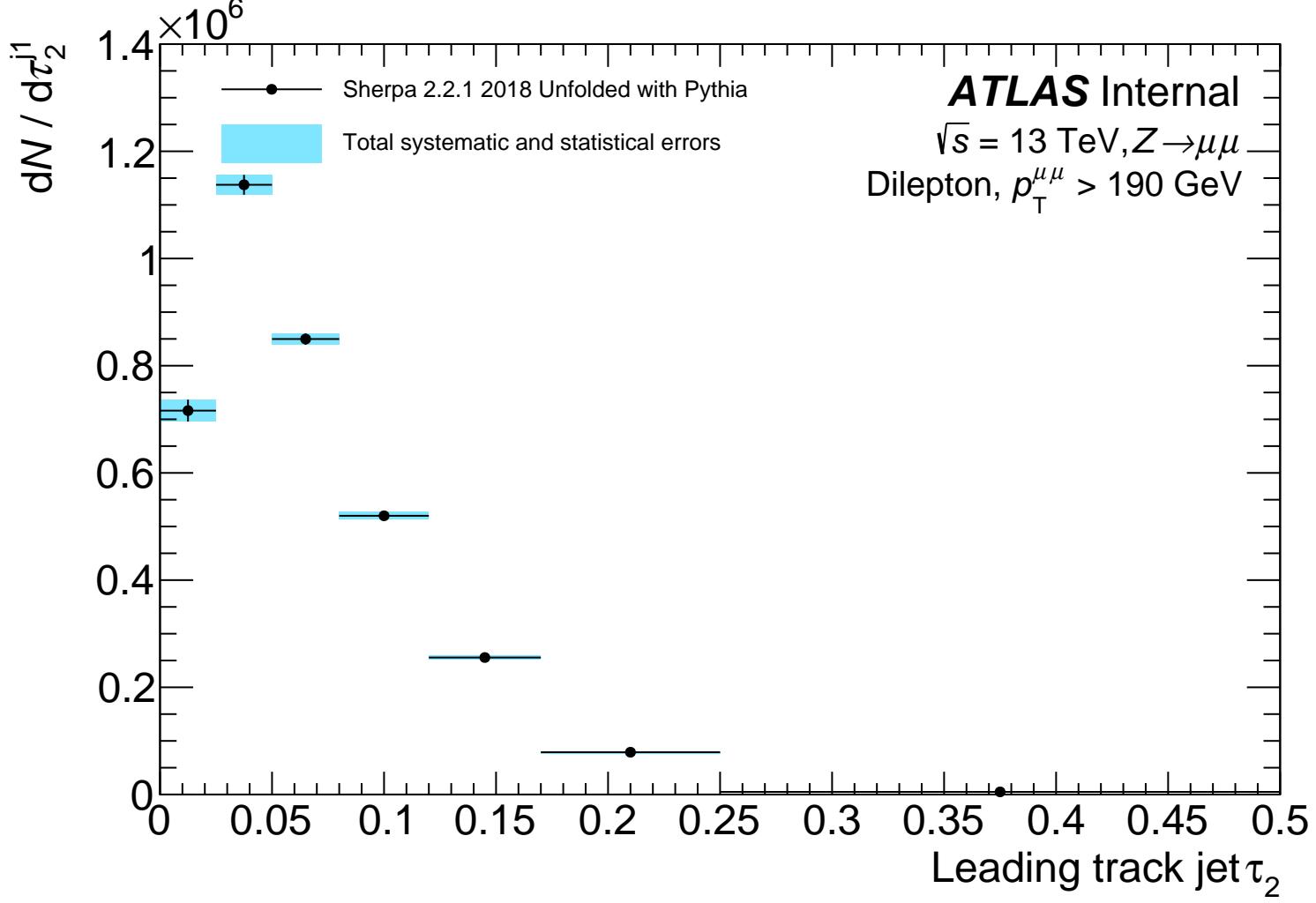










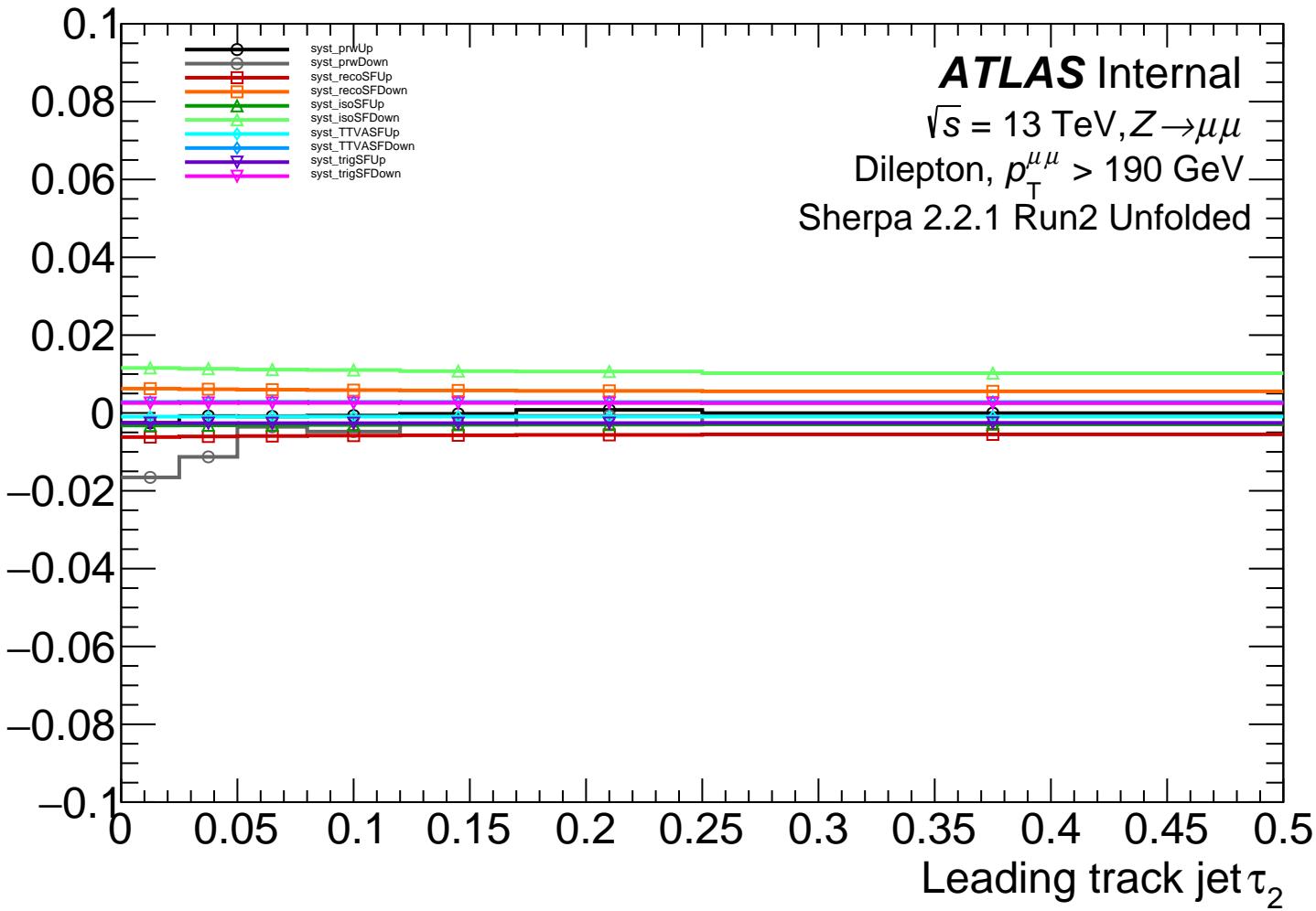


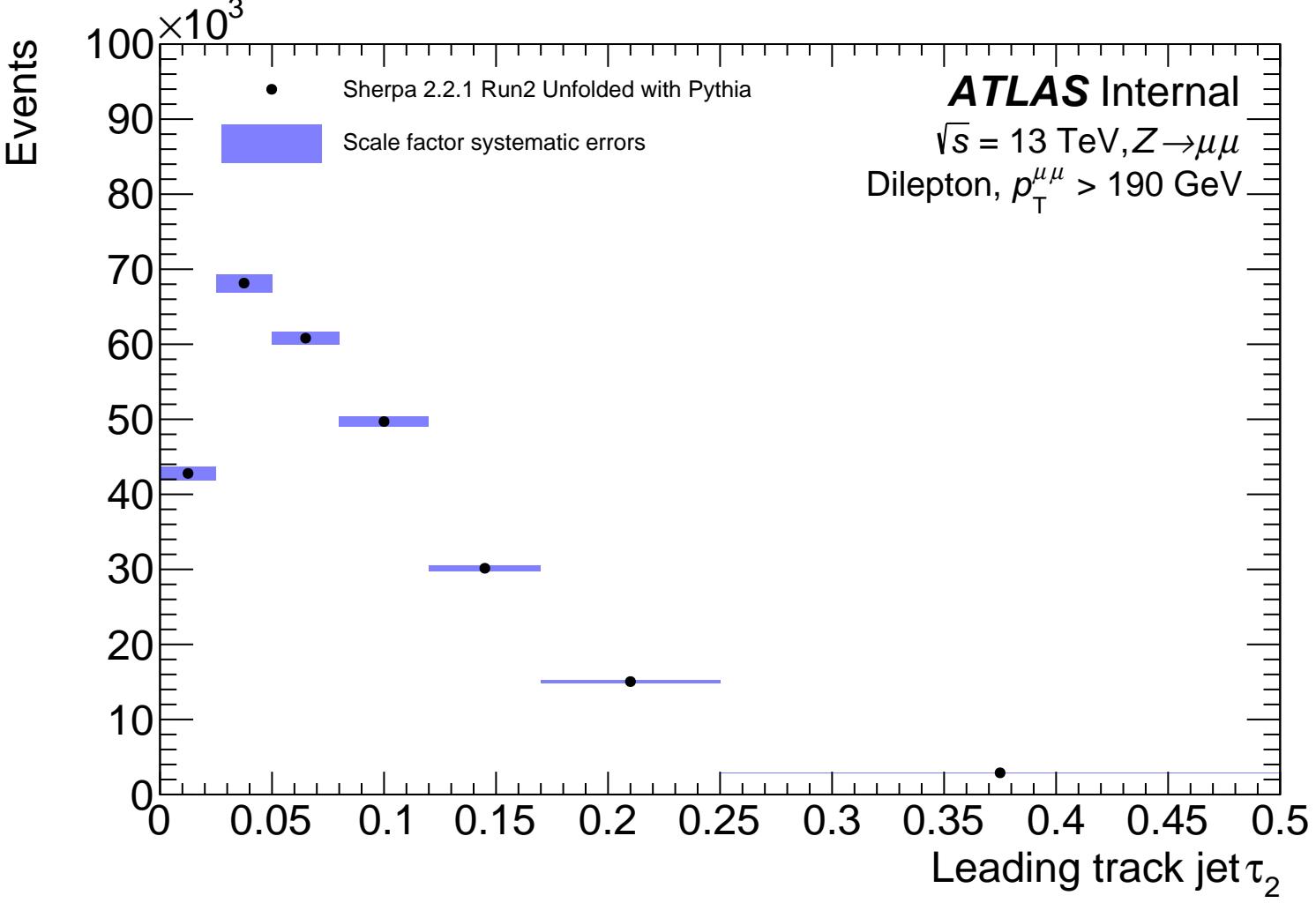
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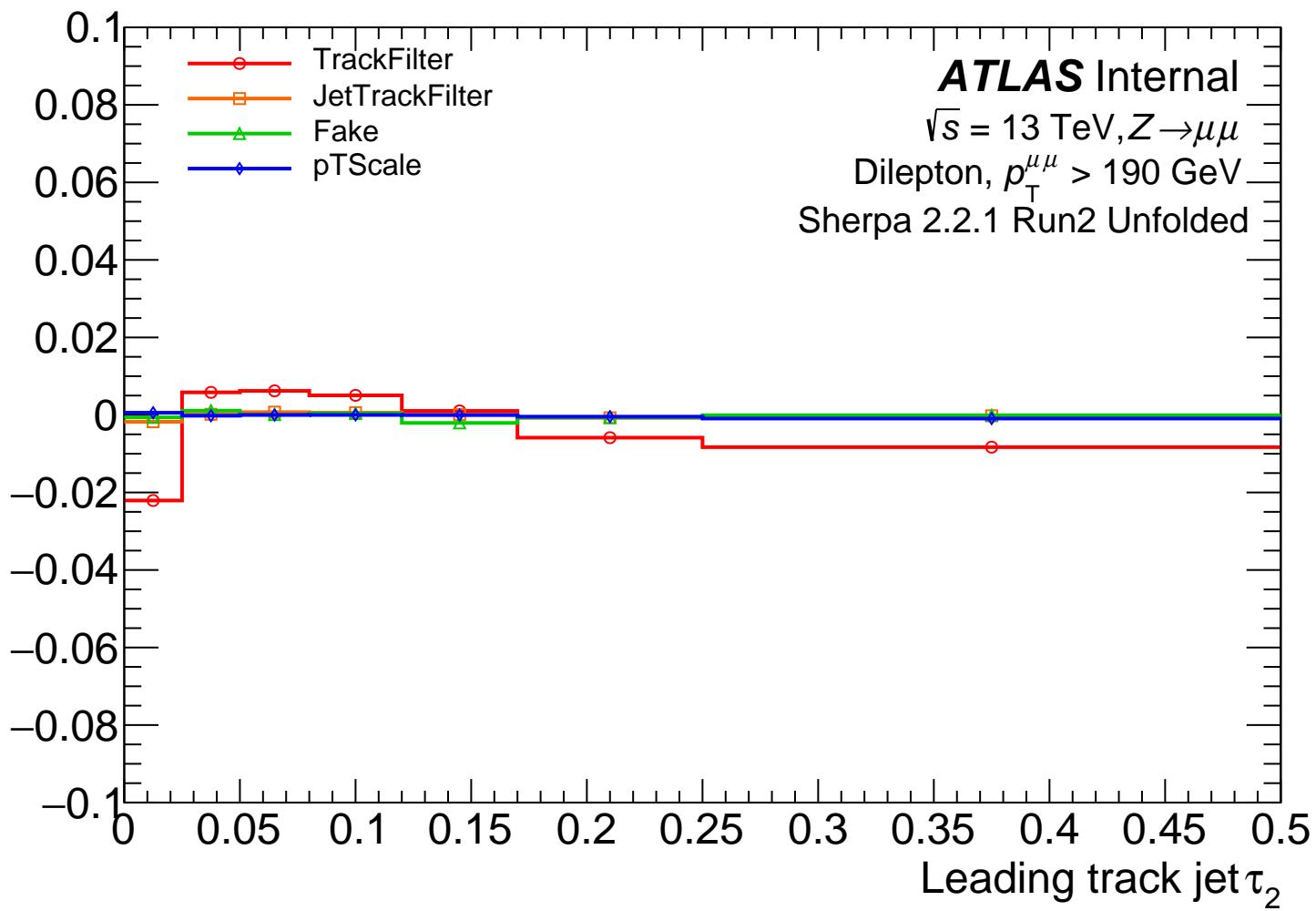
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

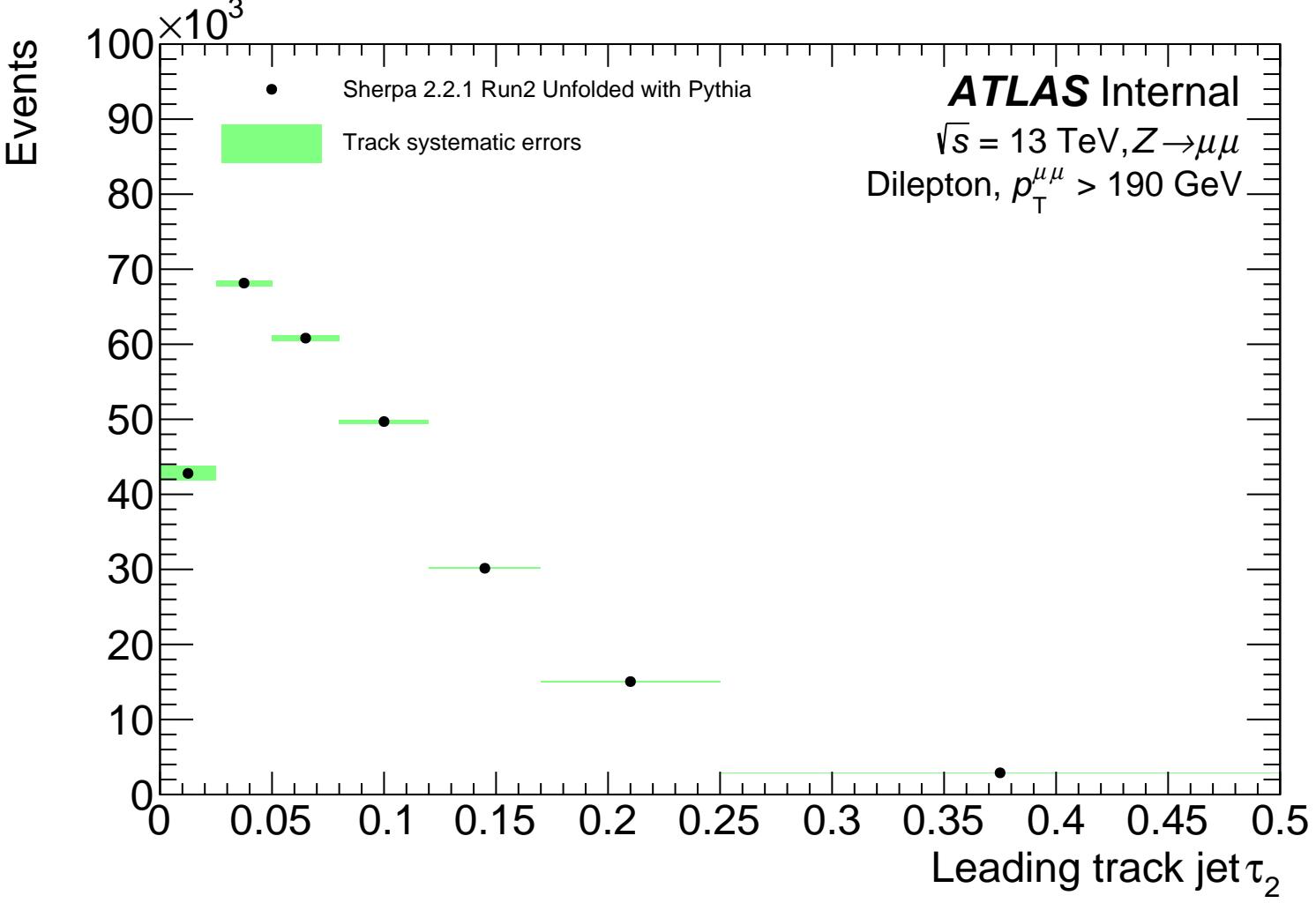
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

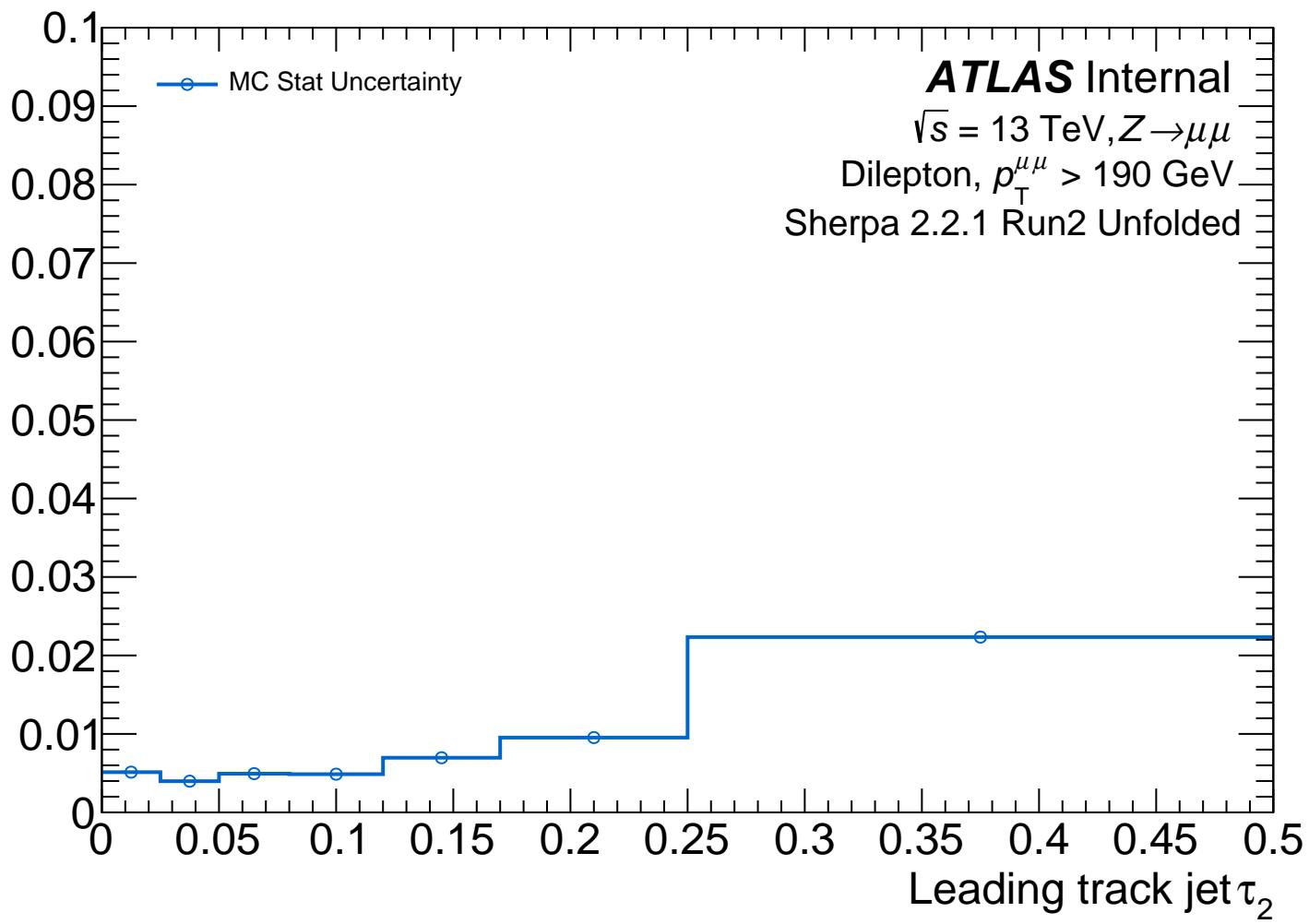
Sherpa 2.2.1 Run2 Unfolded

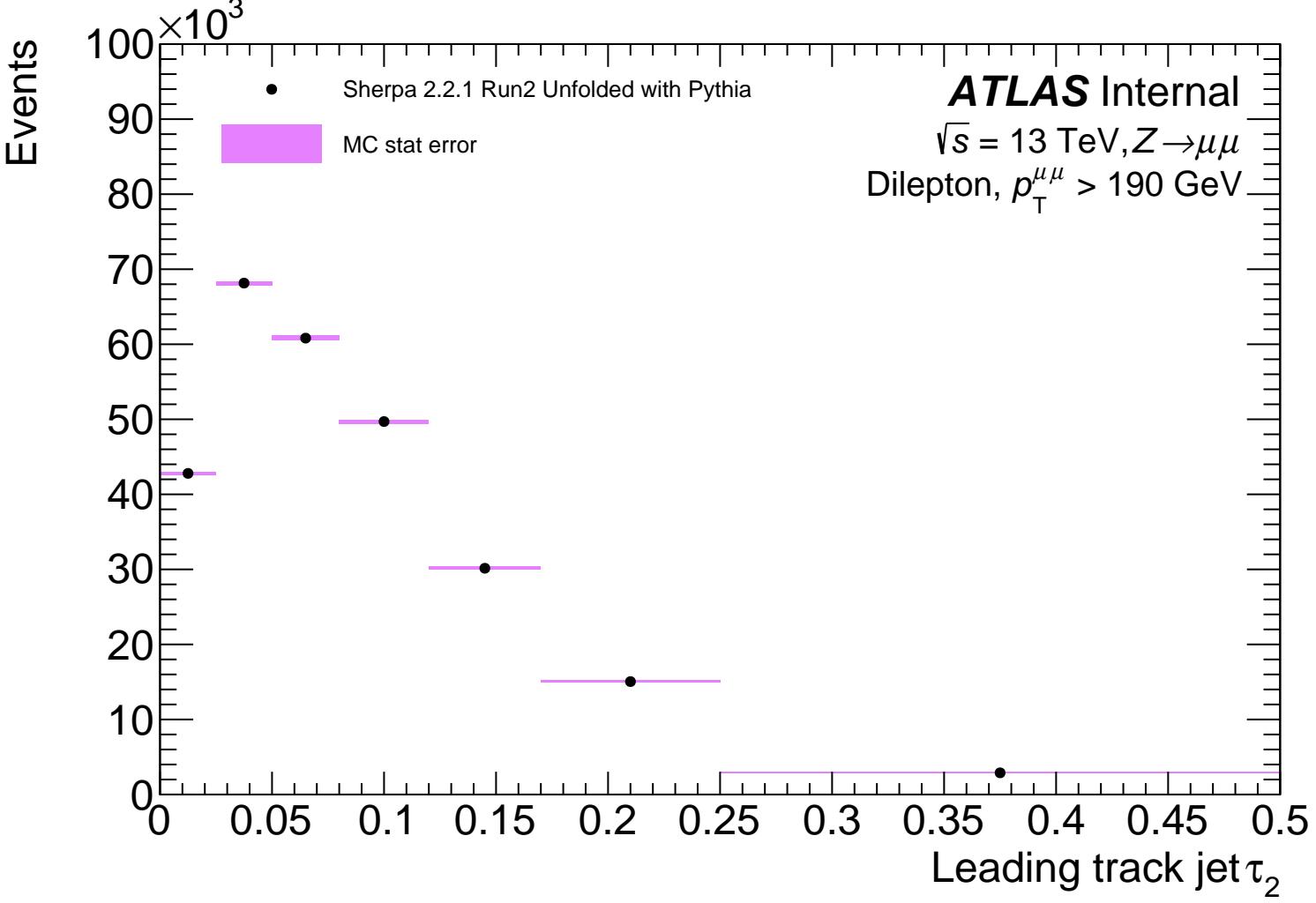


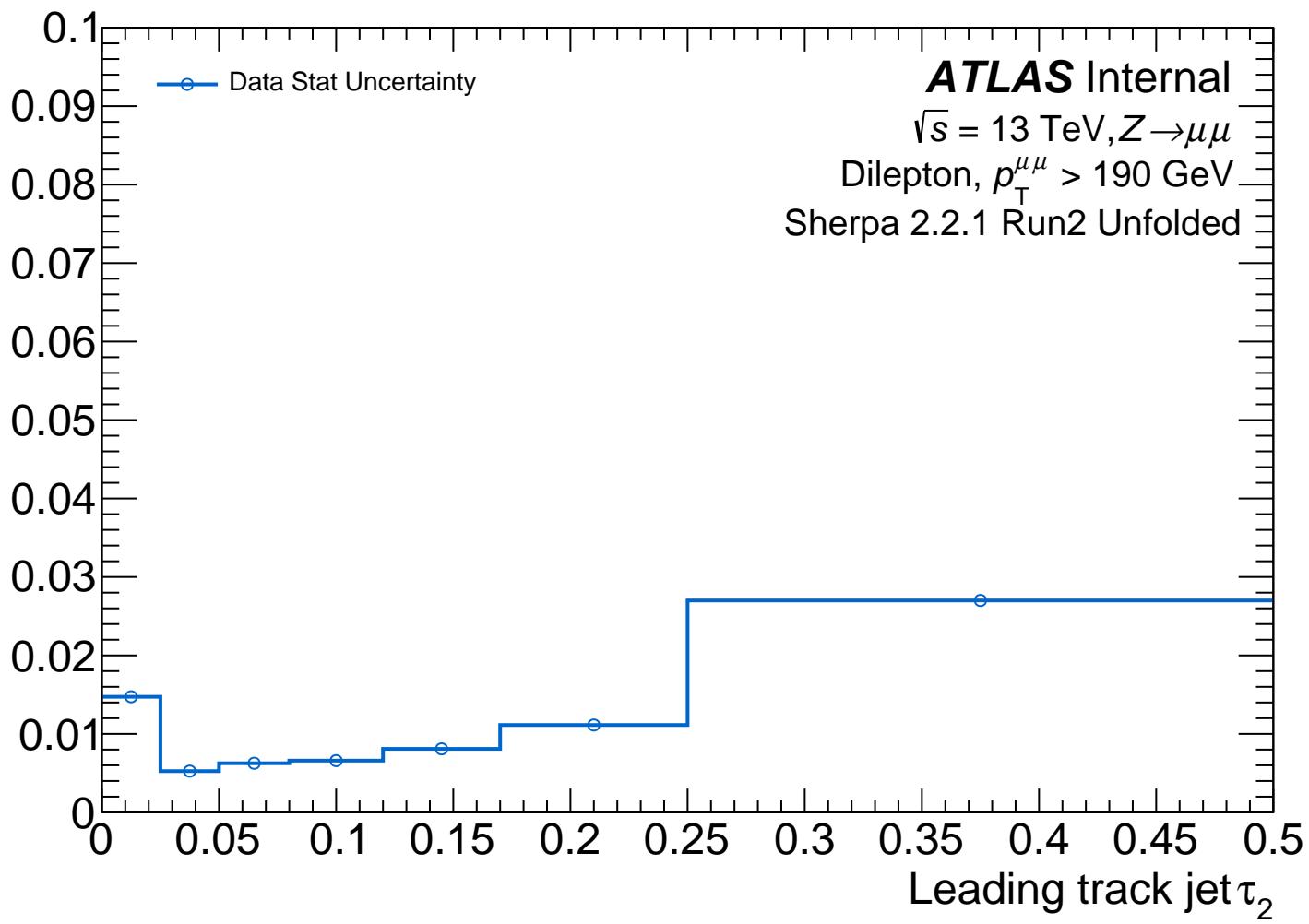


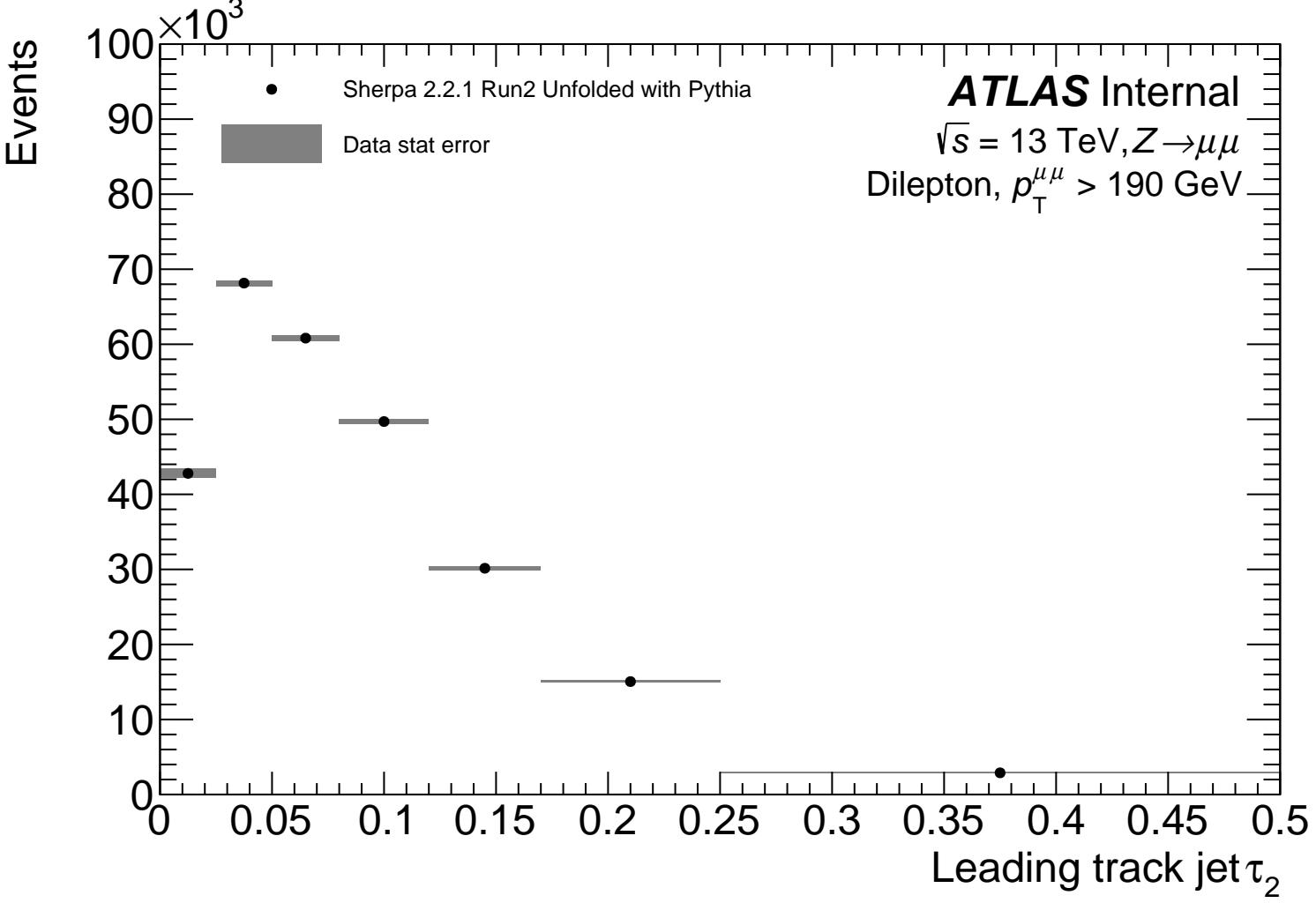


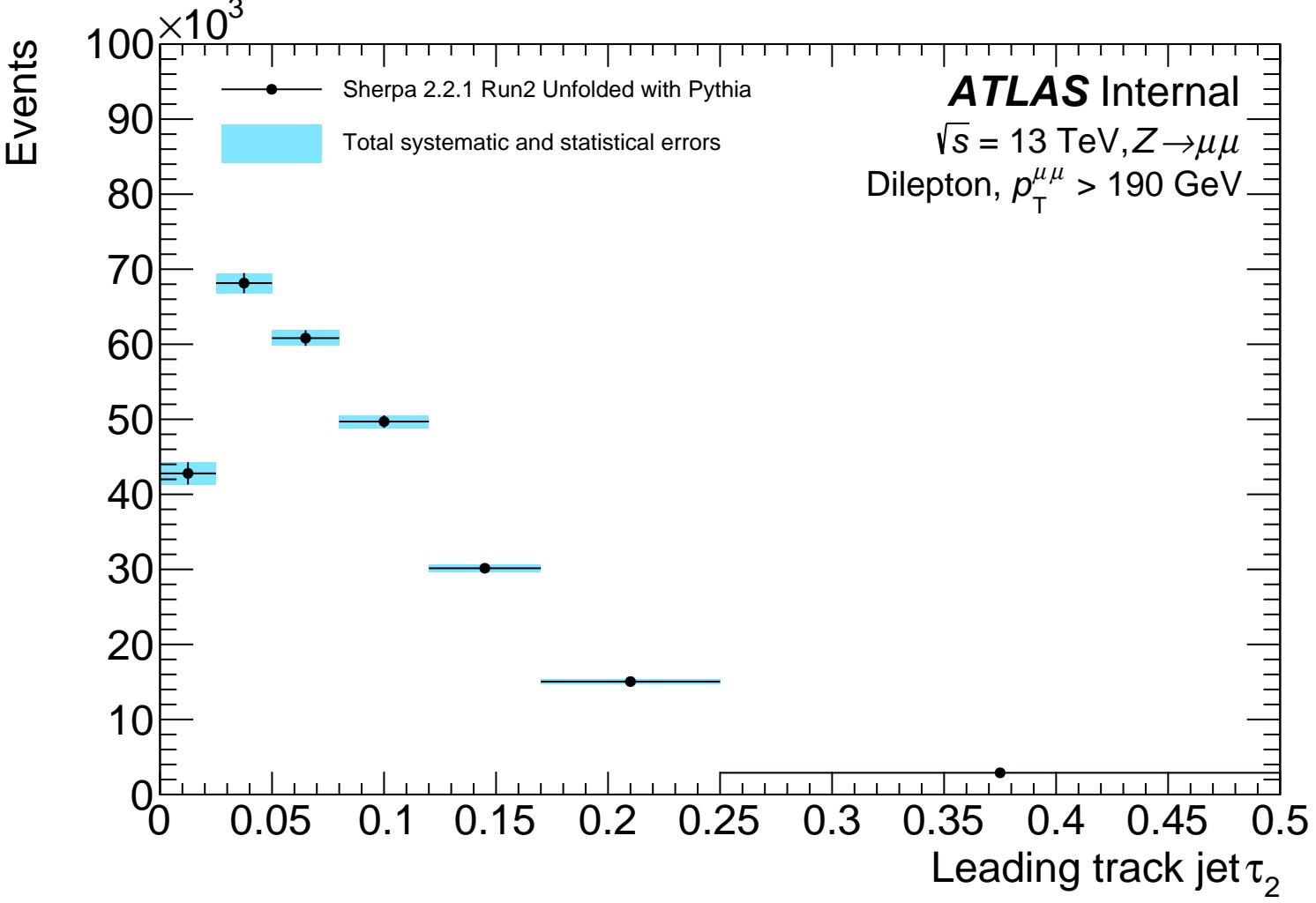


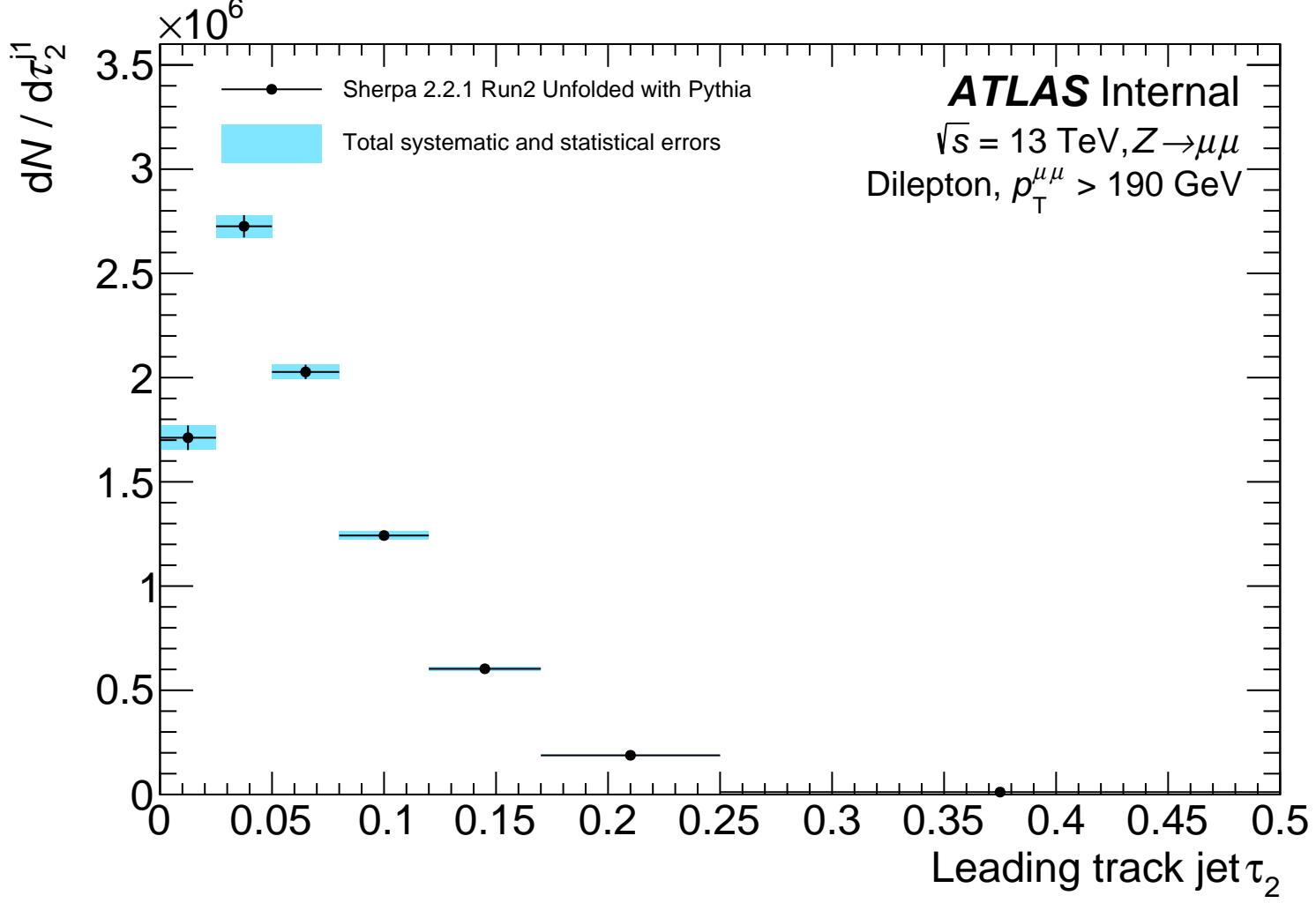










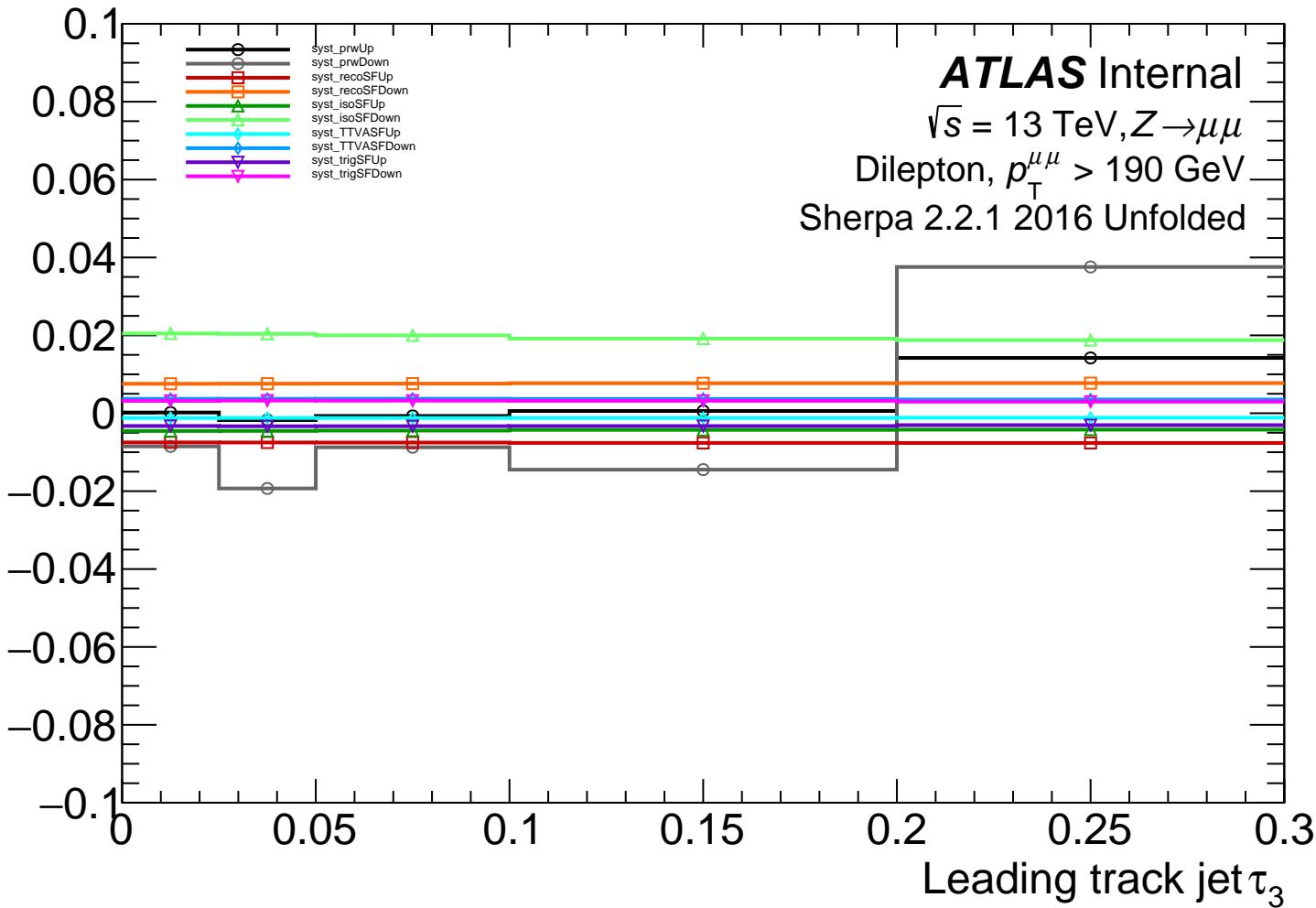


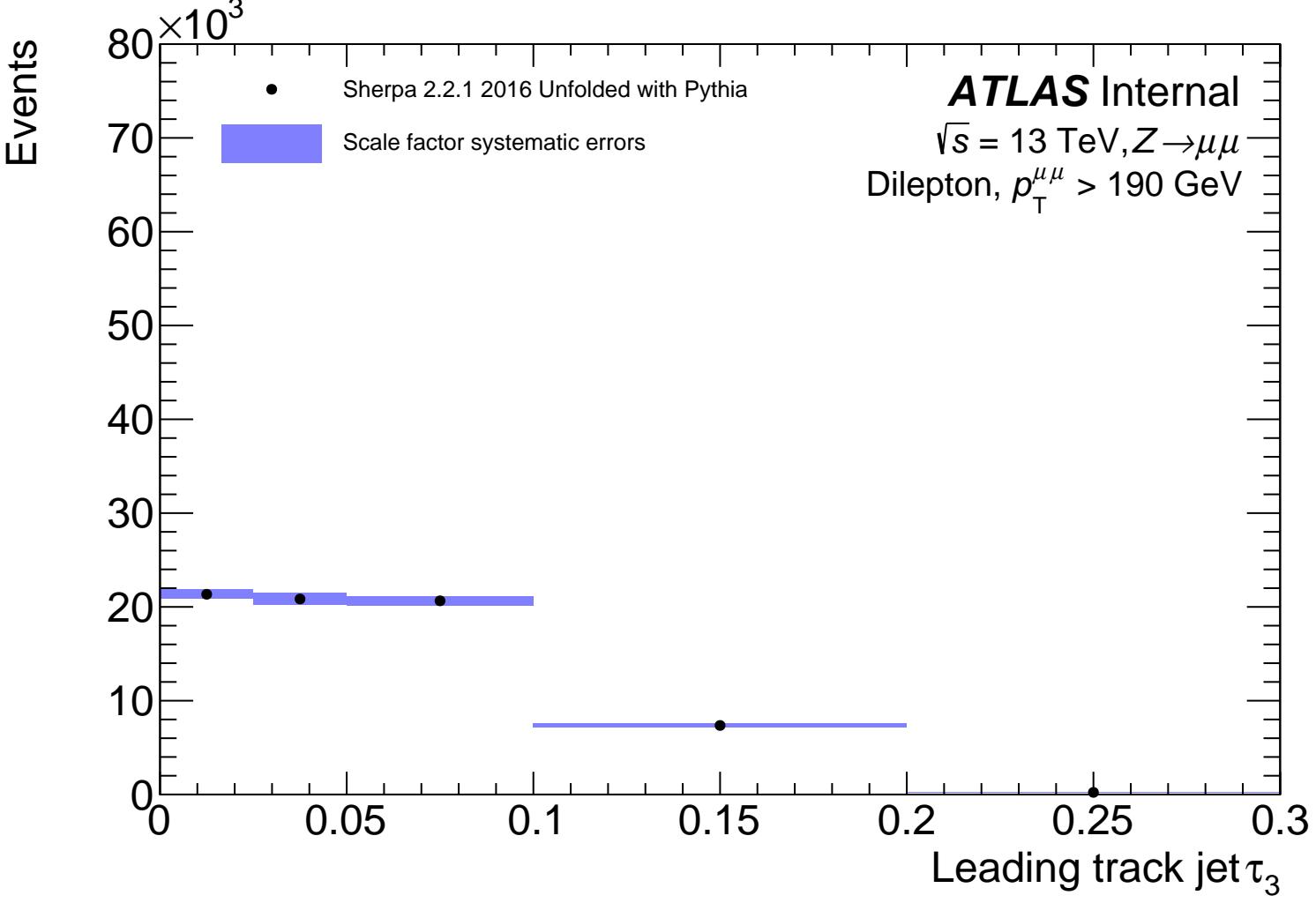
**ATLAS Internal**

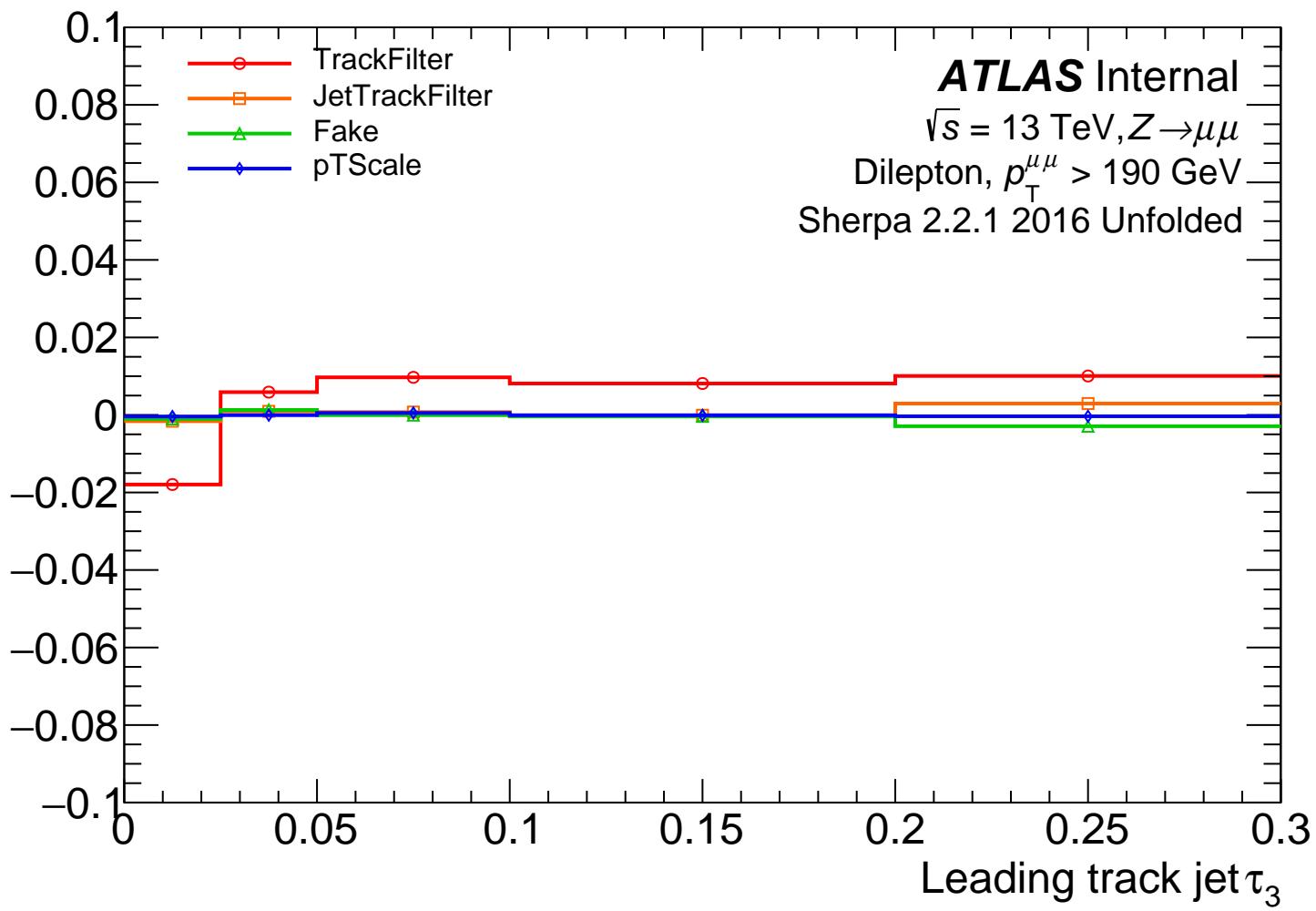
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

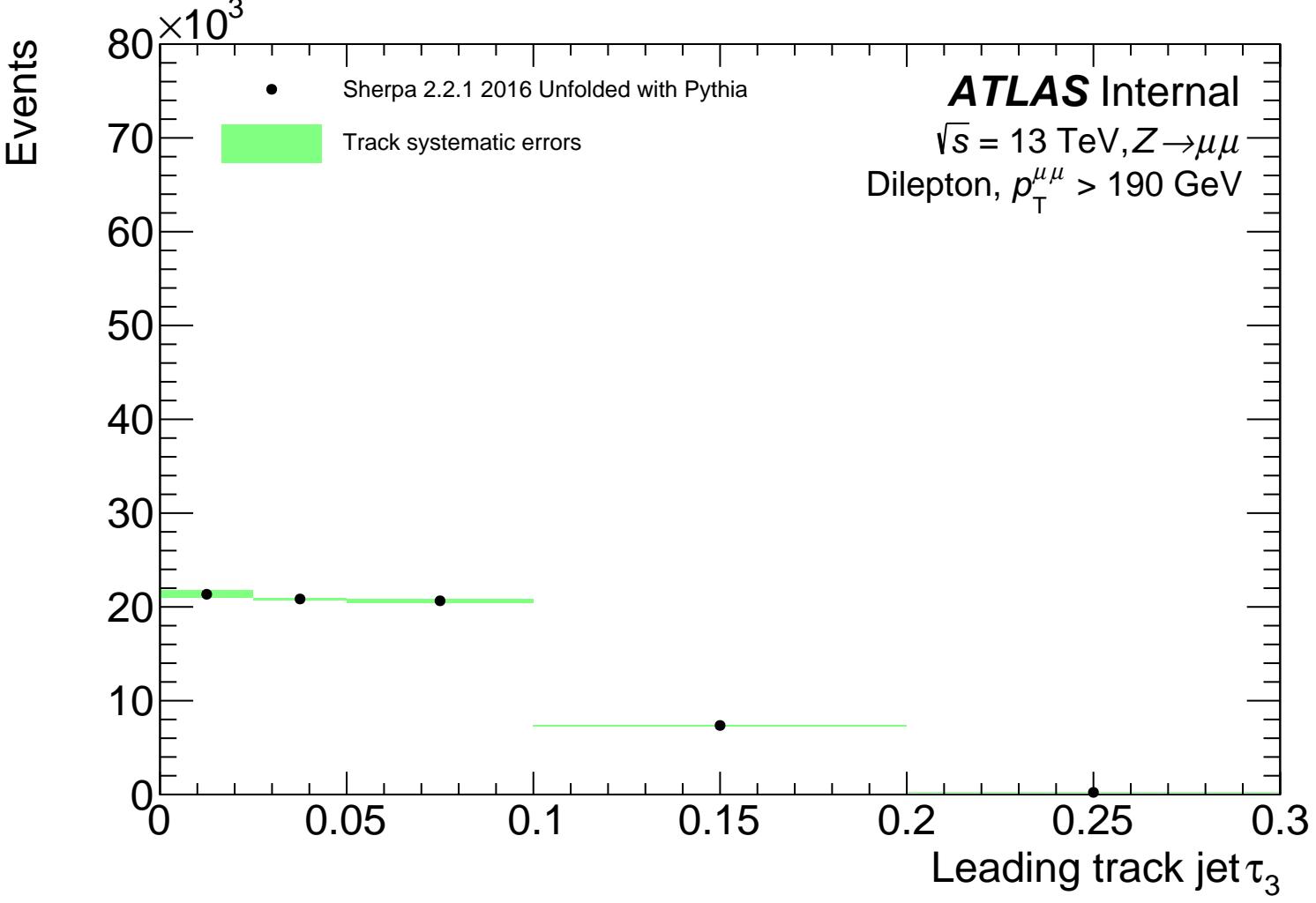
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

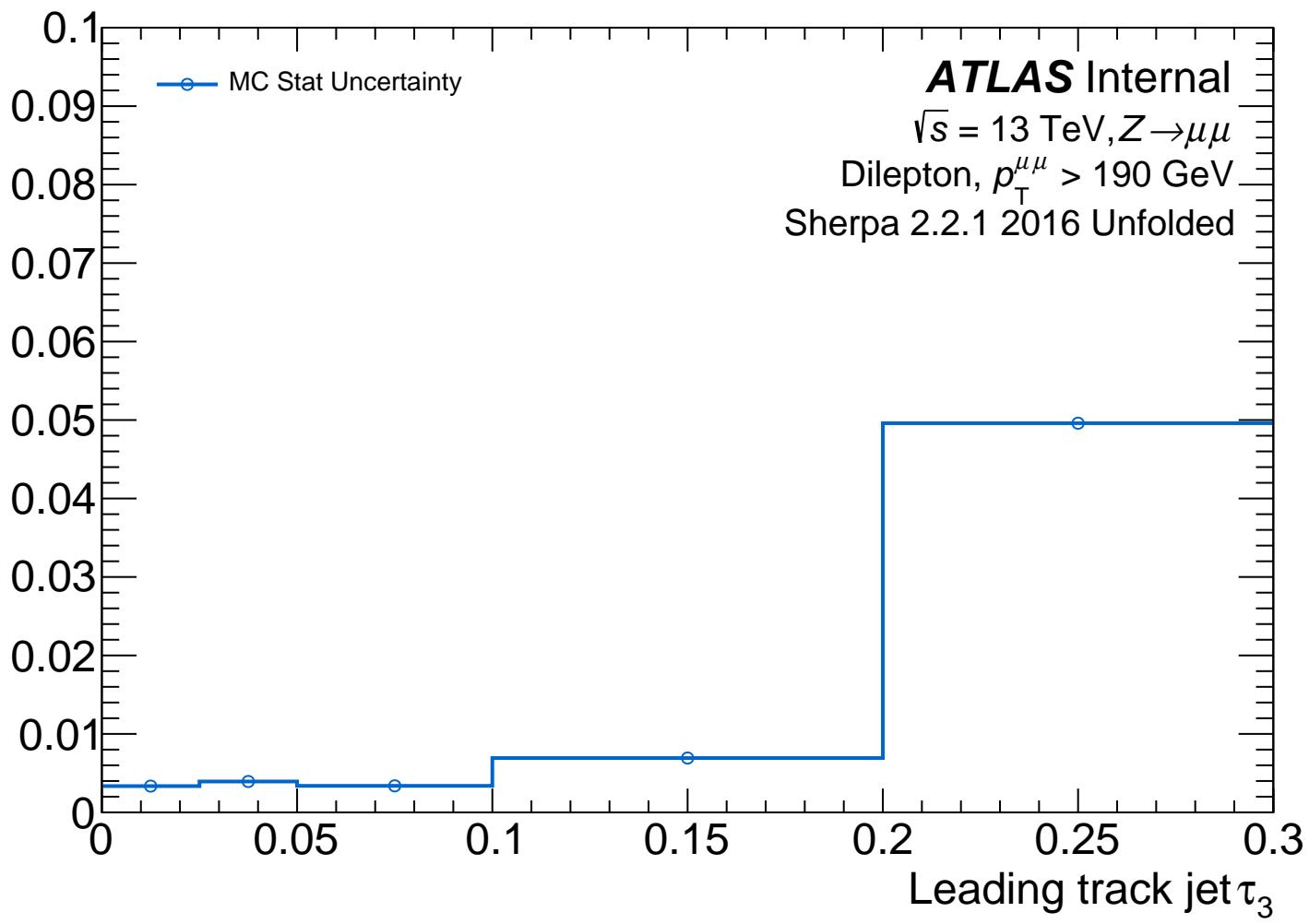
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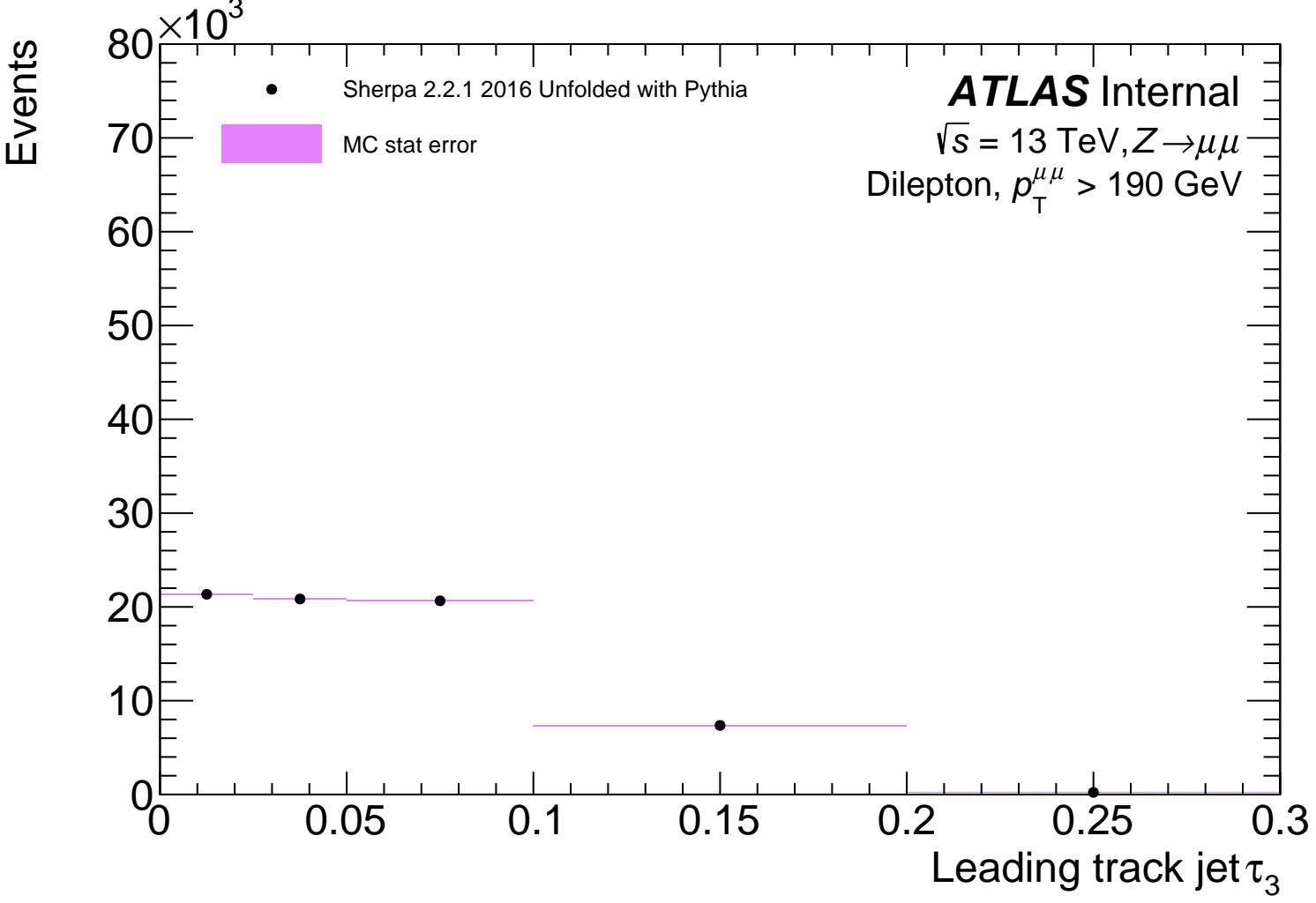


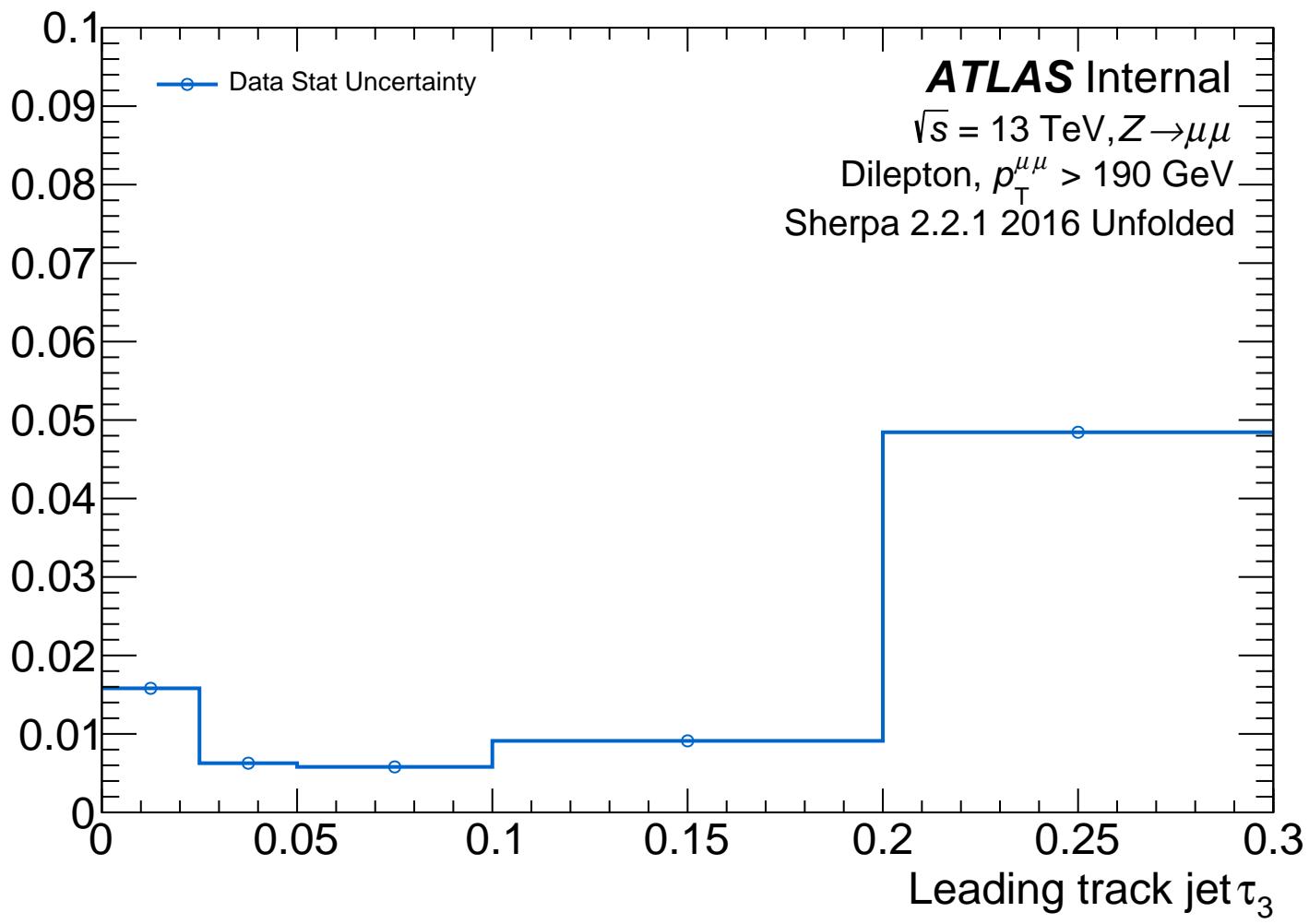


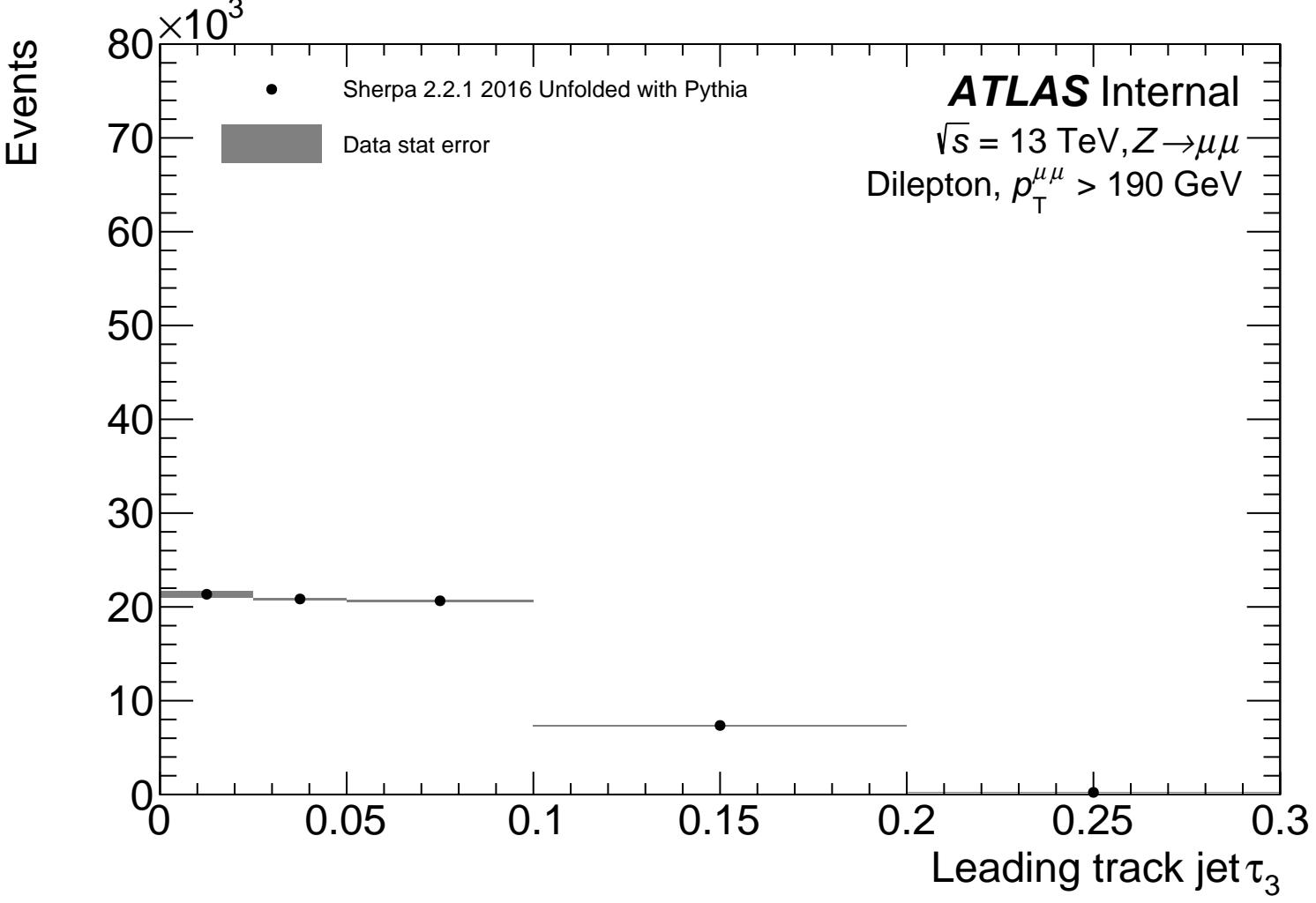


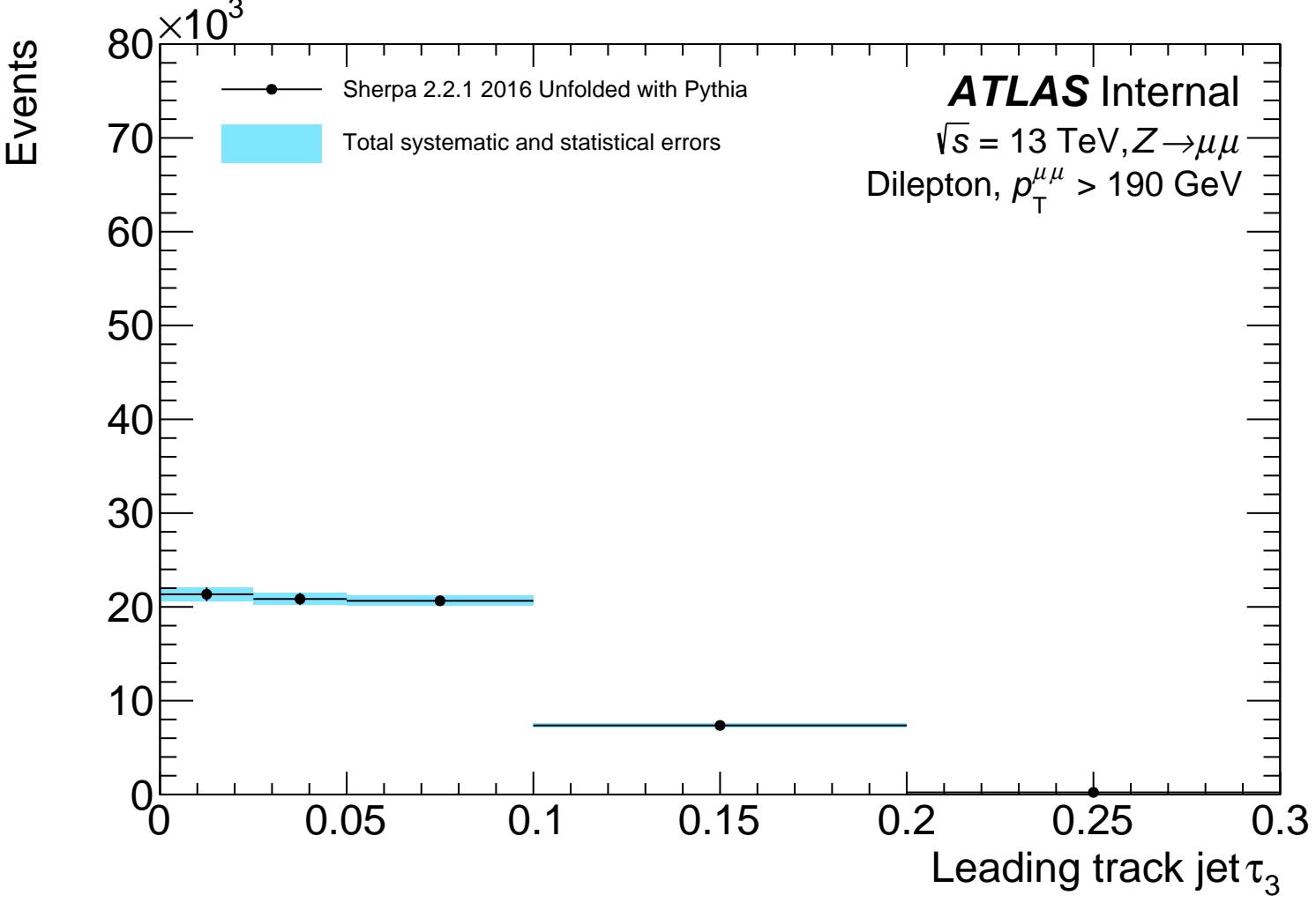


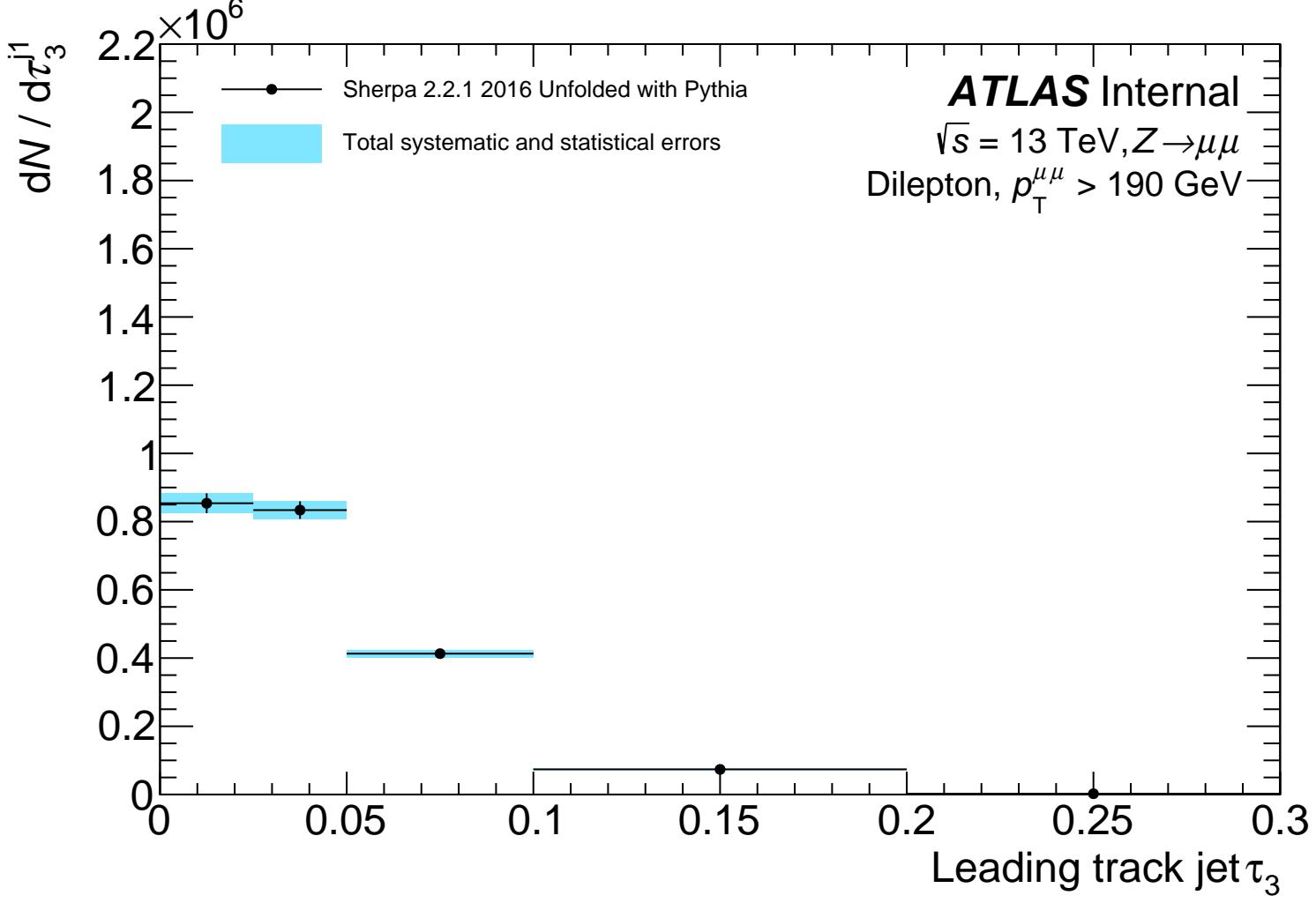


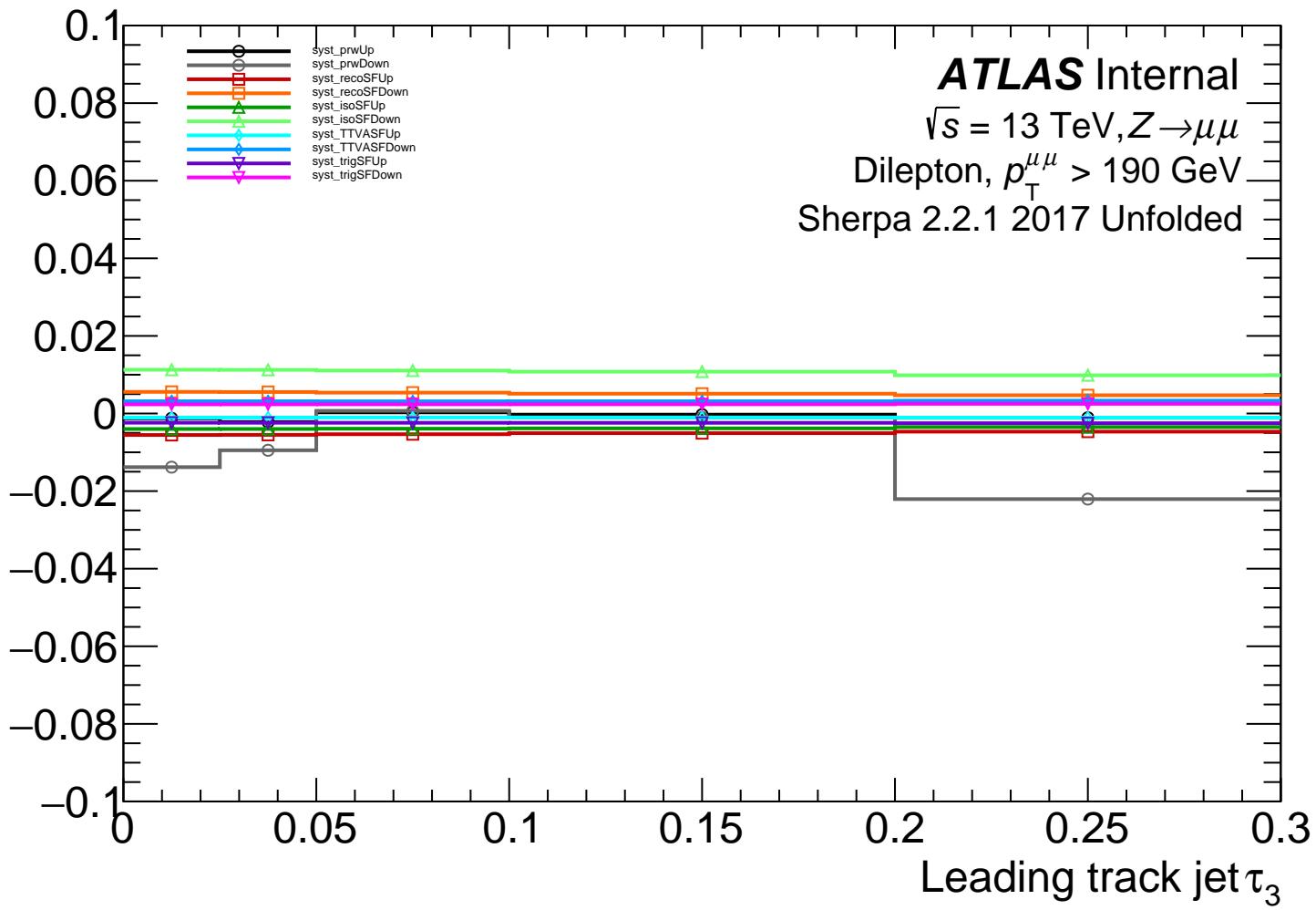


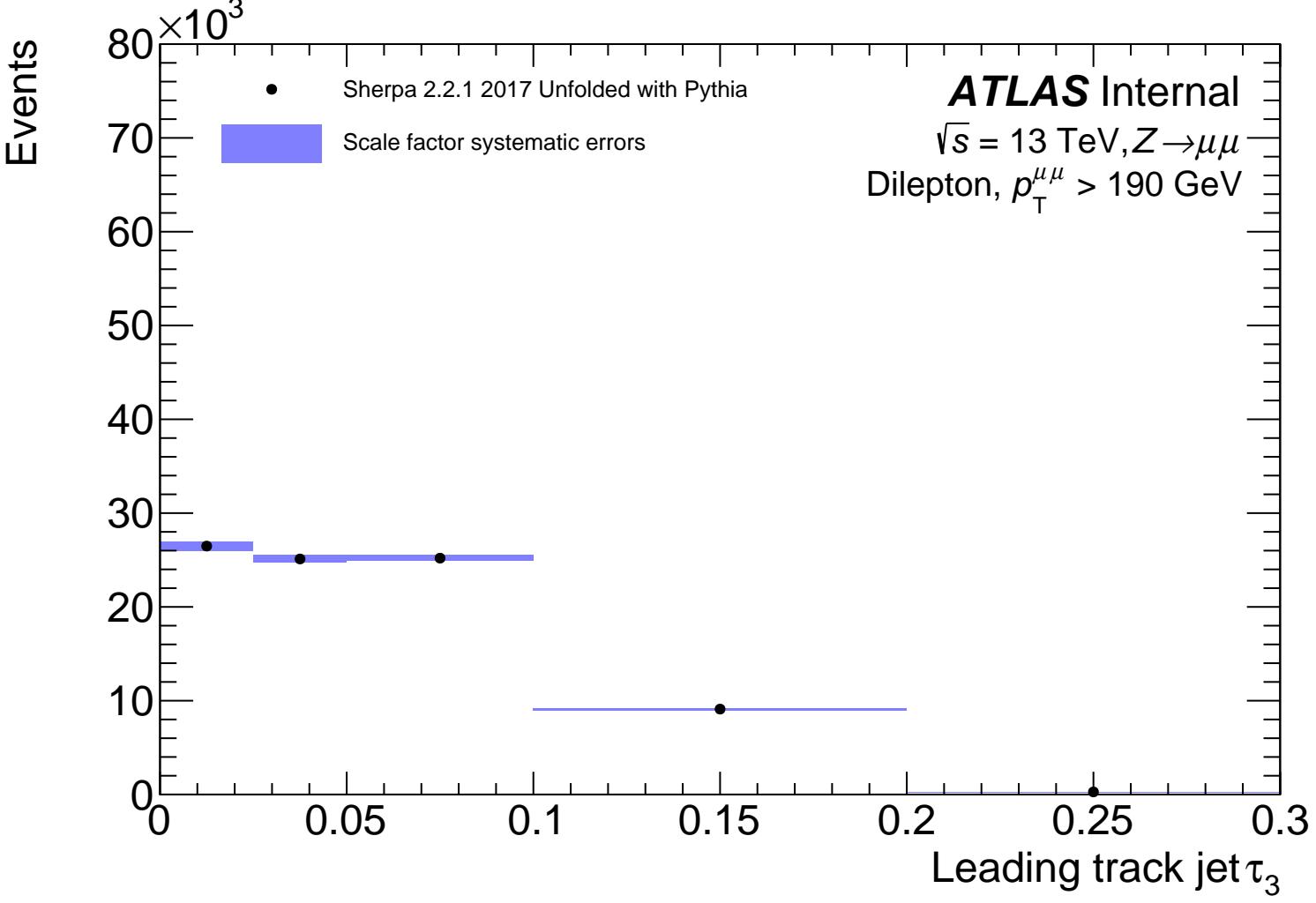


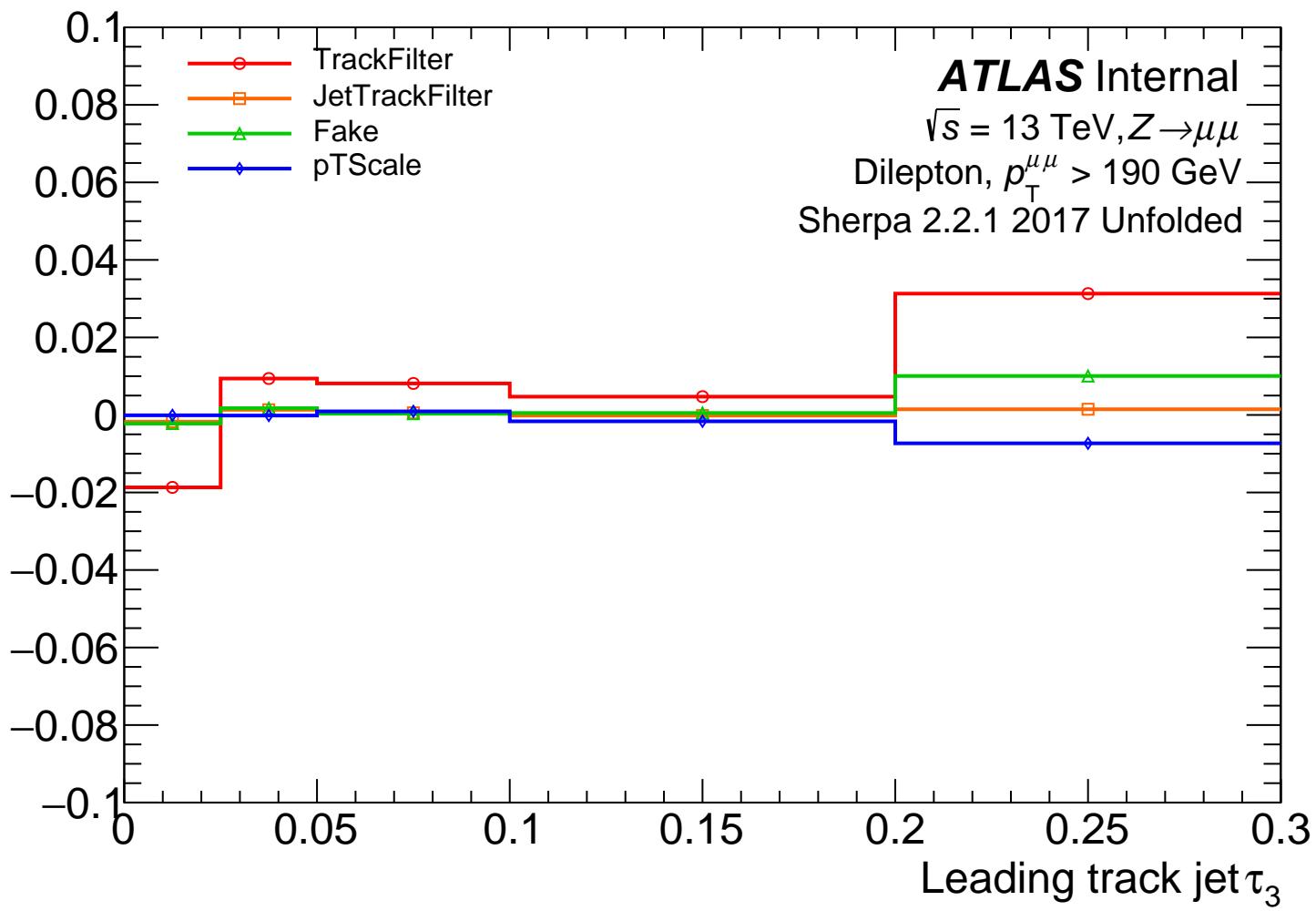


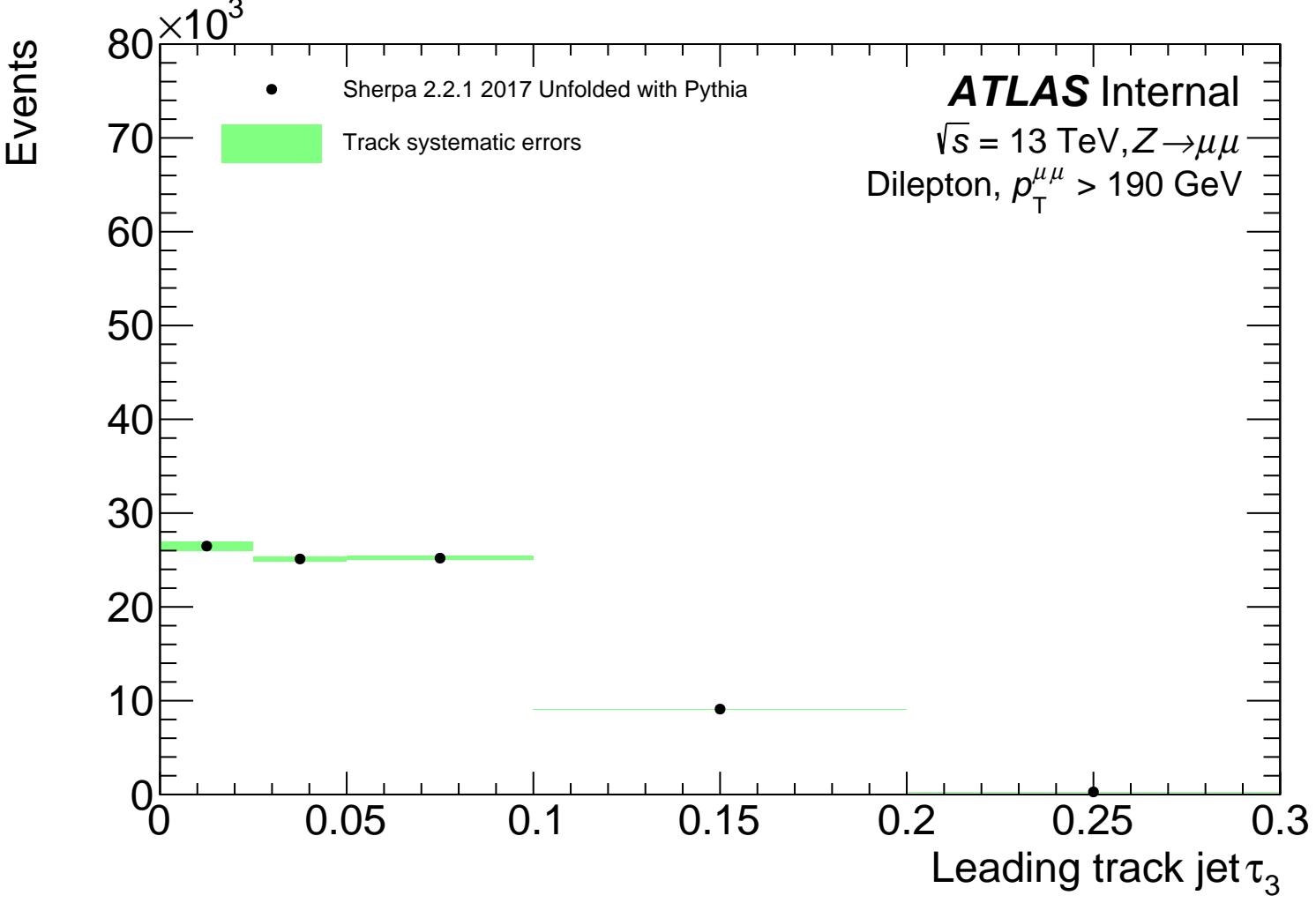


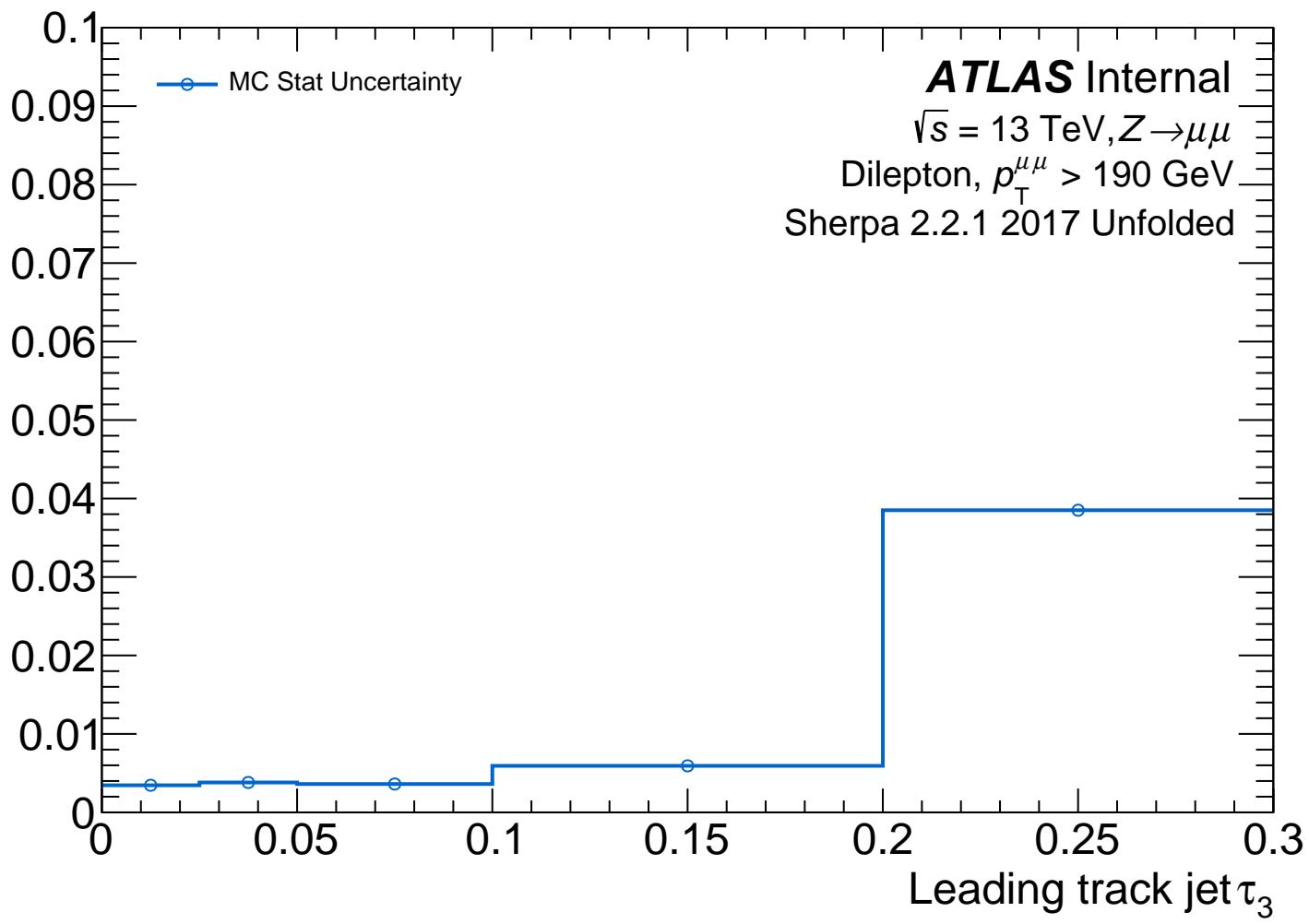


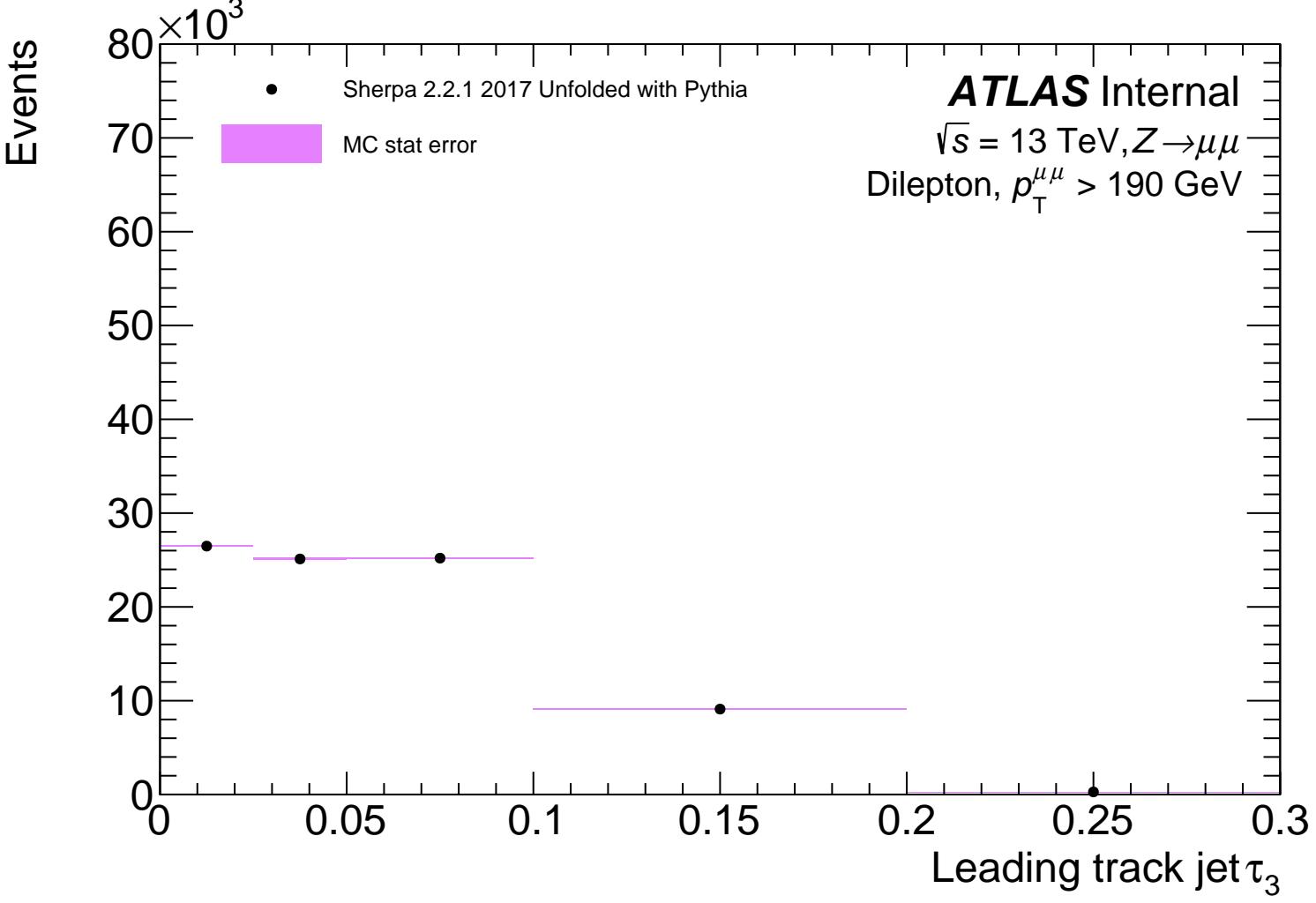


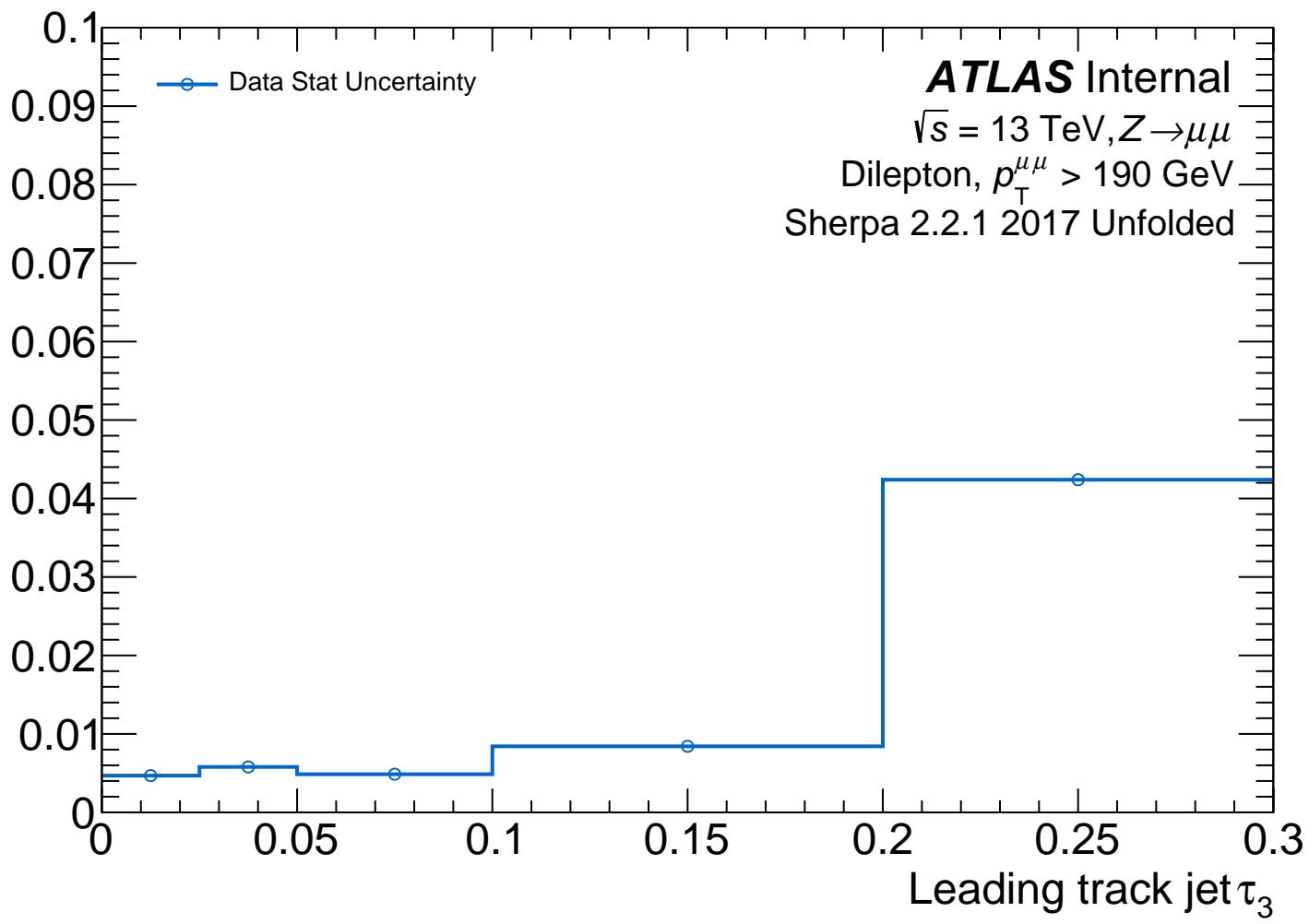


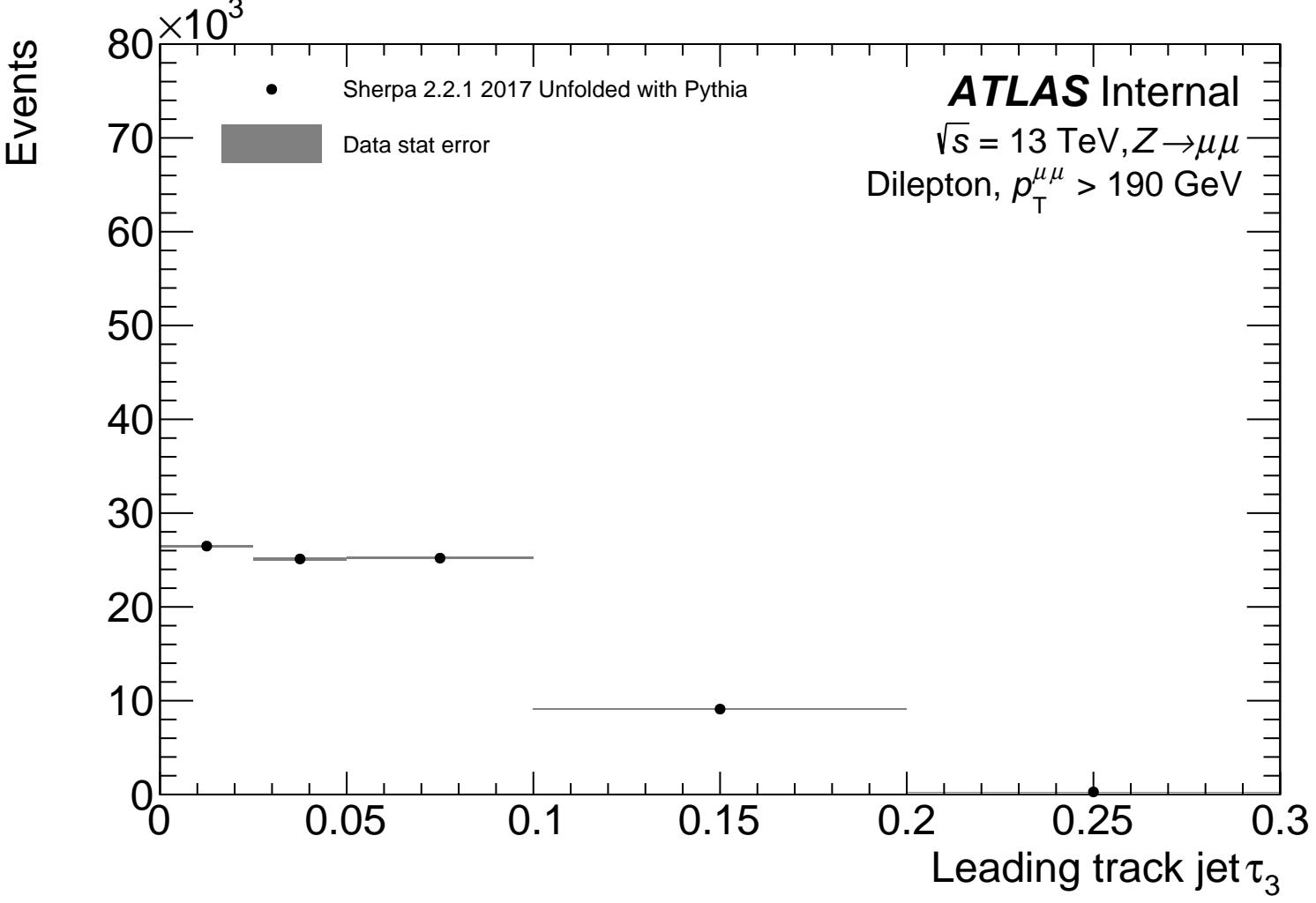


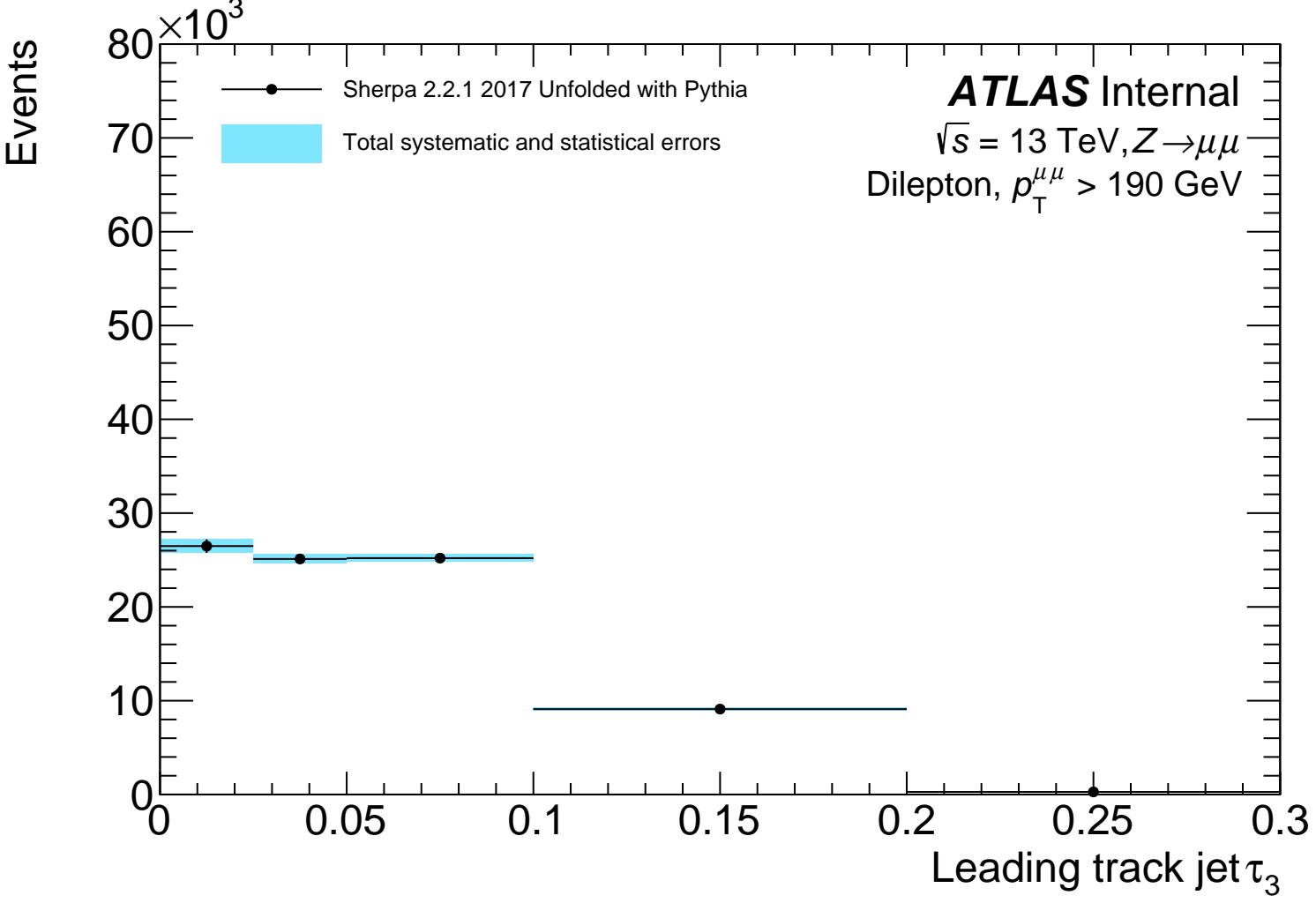


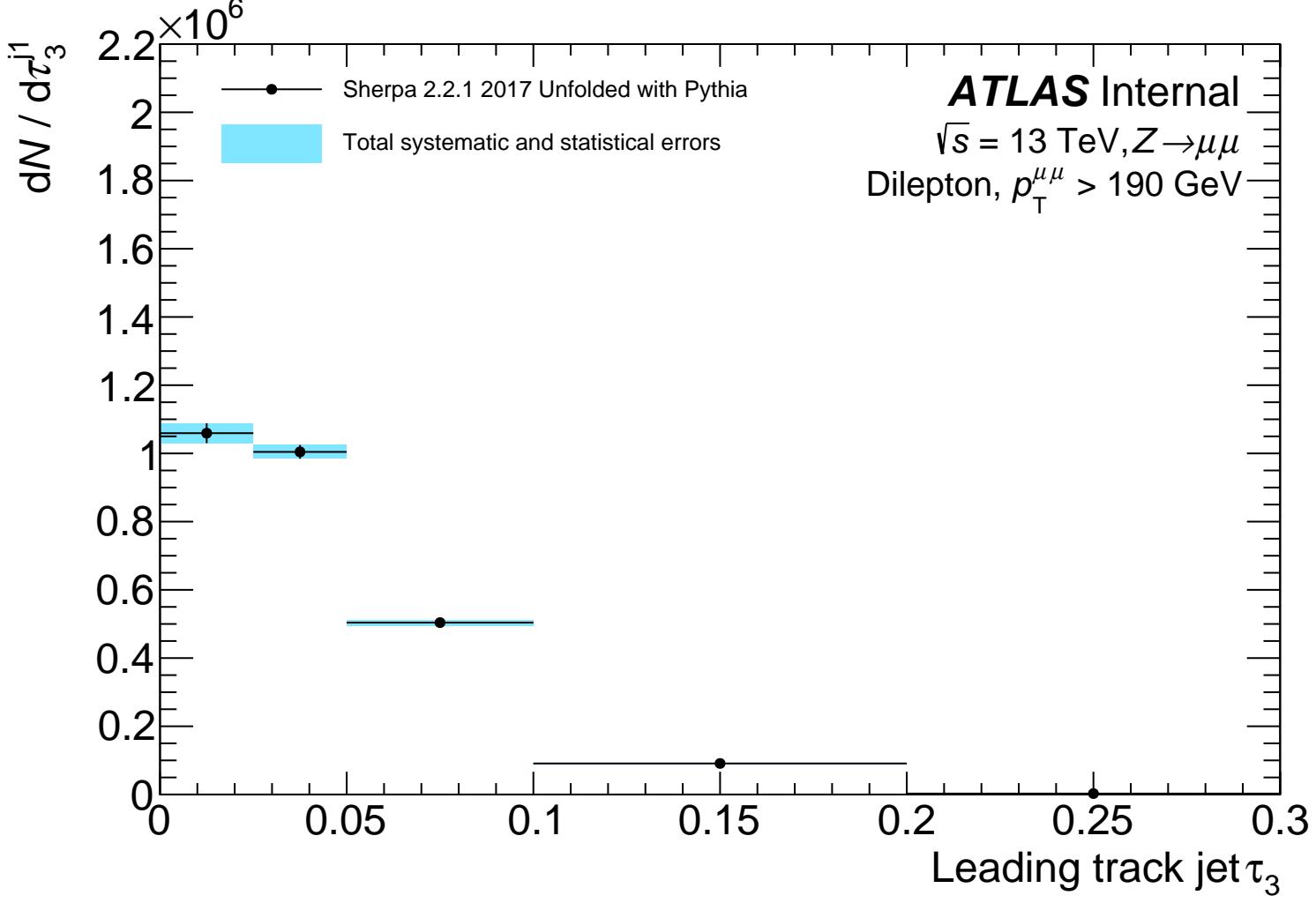












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0.02

0

-0.02

-0.04

-0.06

-0.08

-0.1

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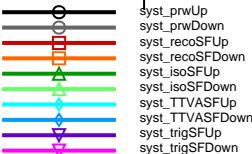
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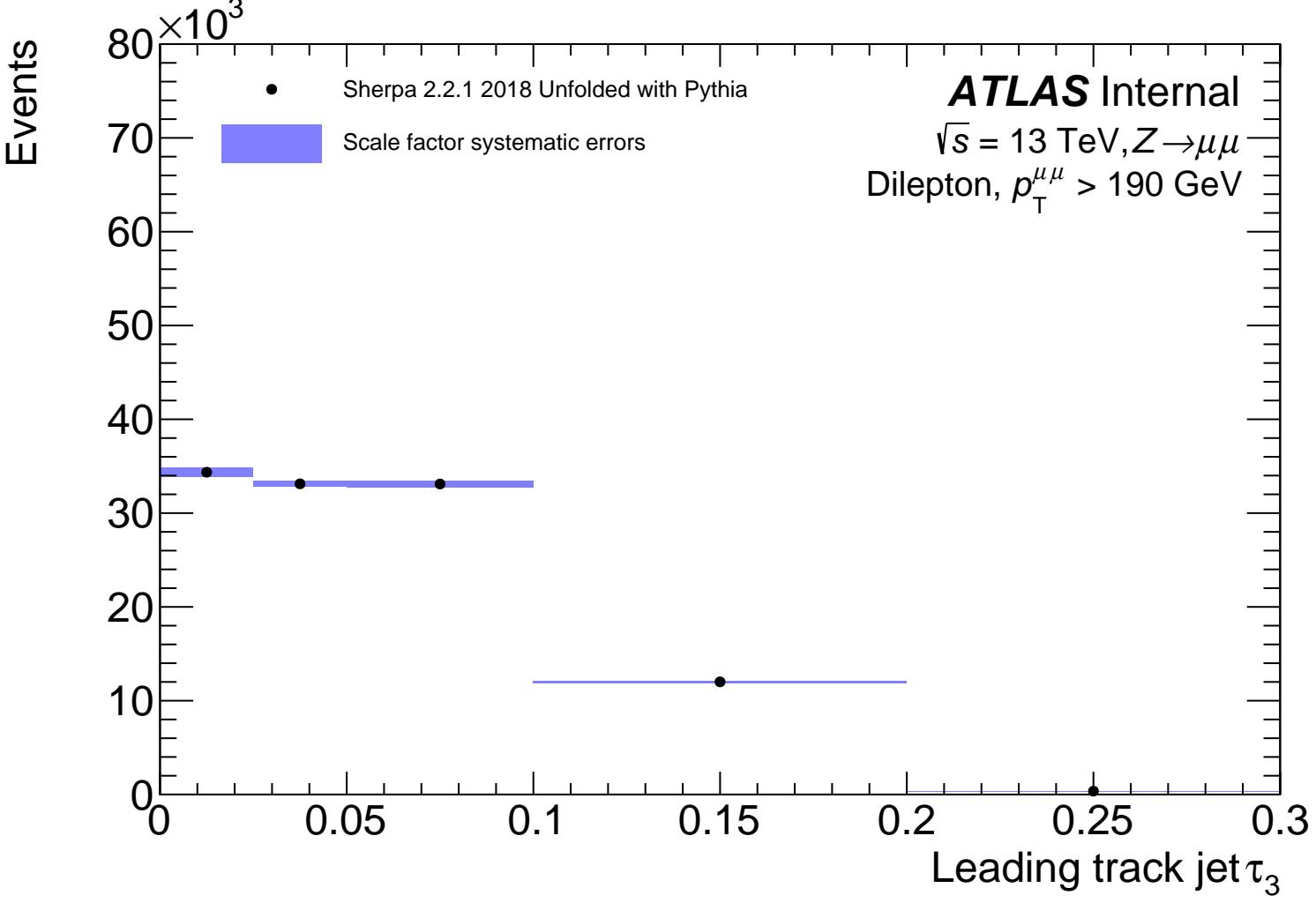
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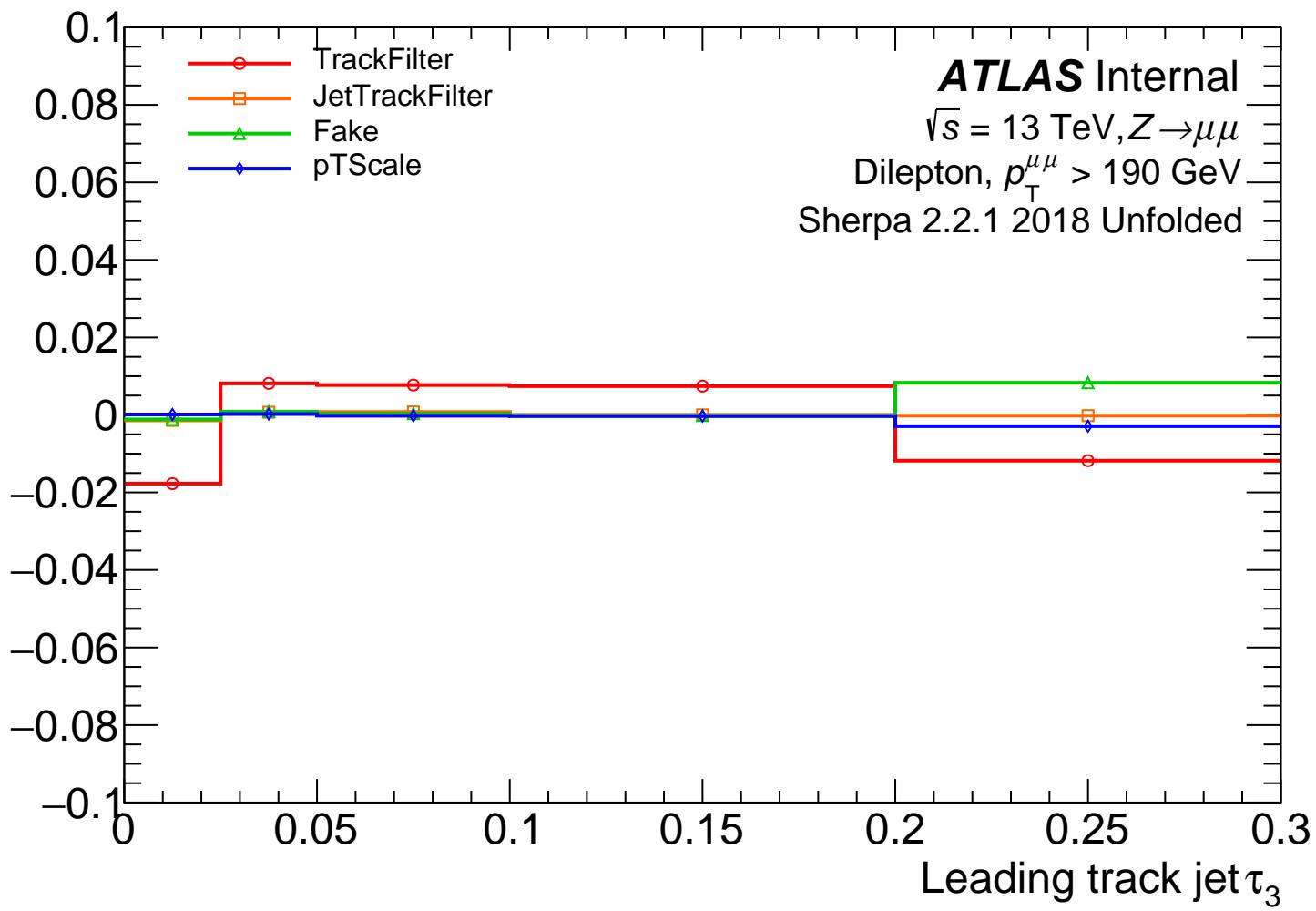
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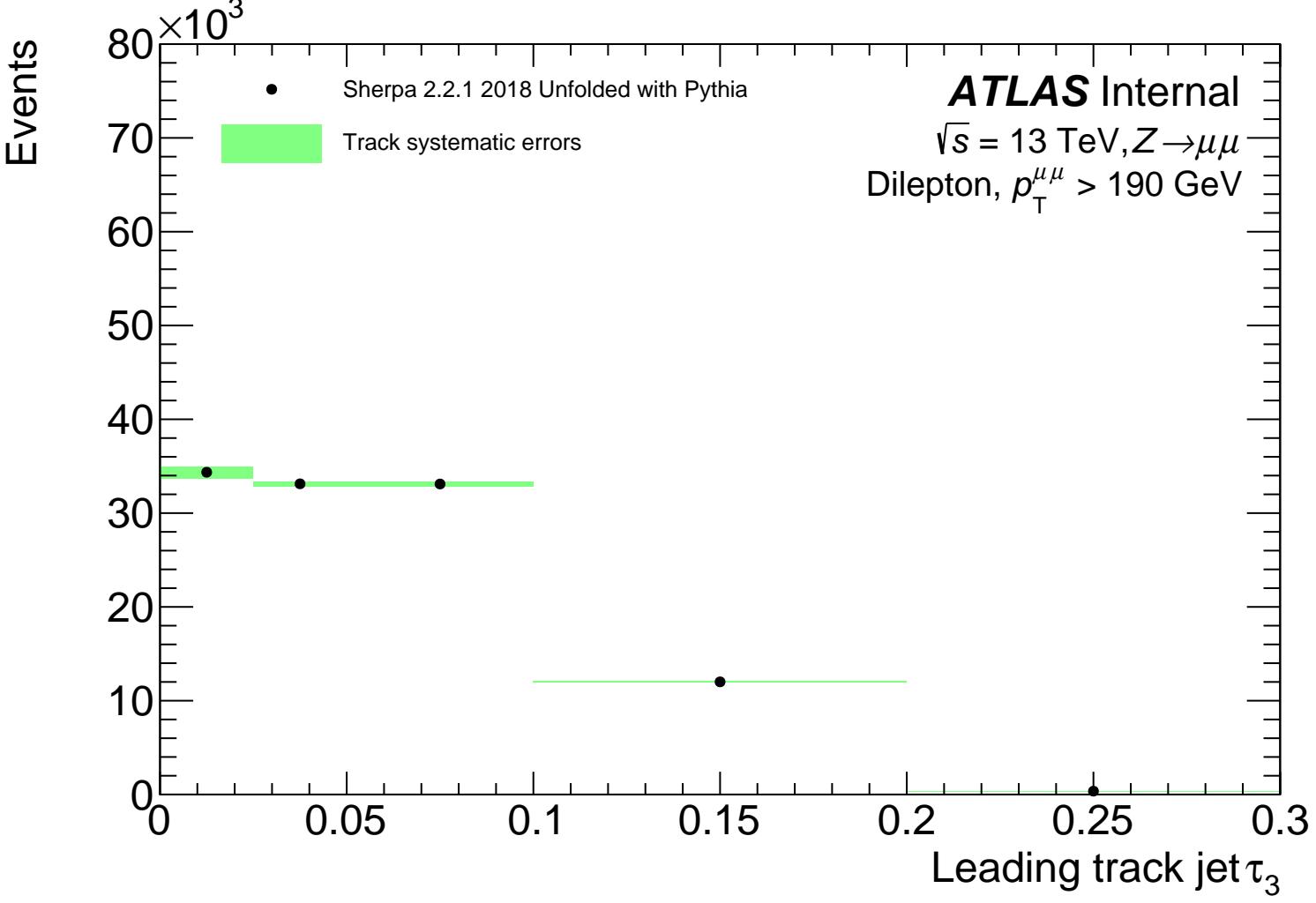
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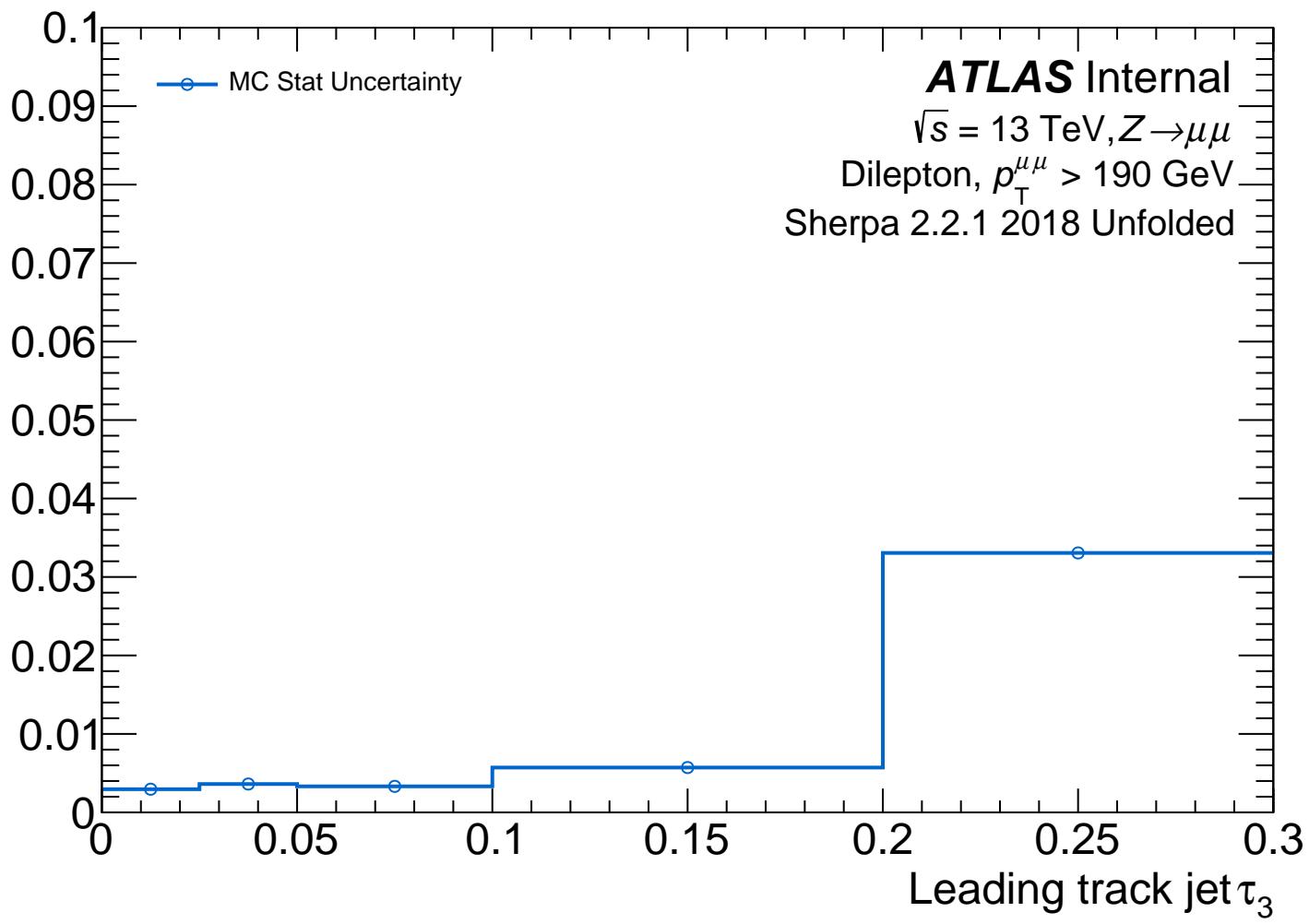
Leading track jet  $\tau_3$ **ATLAS Internal** $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$ Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$ 

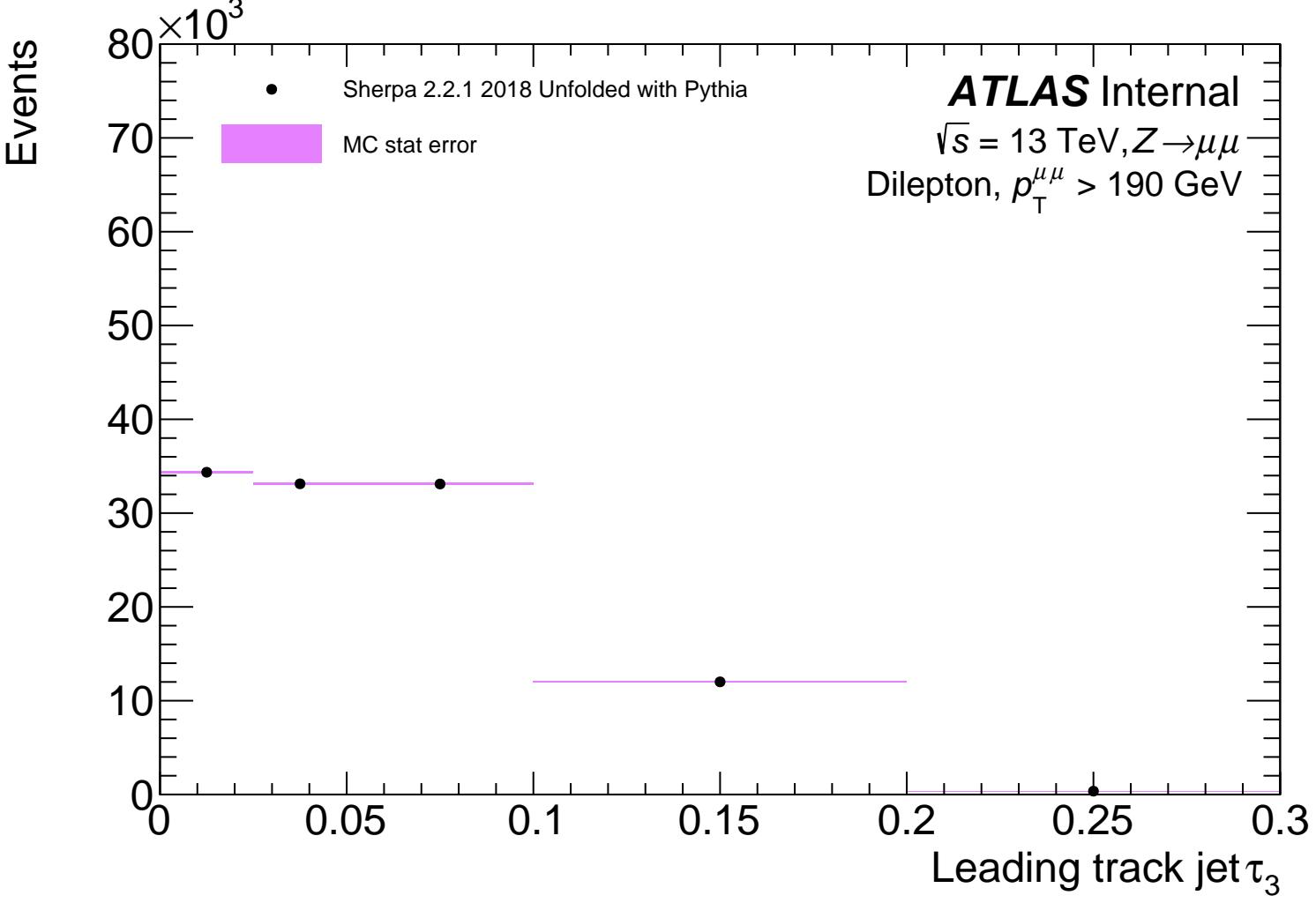
Sherpa 2.2.1 2018 Unfolded

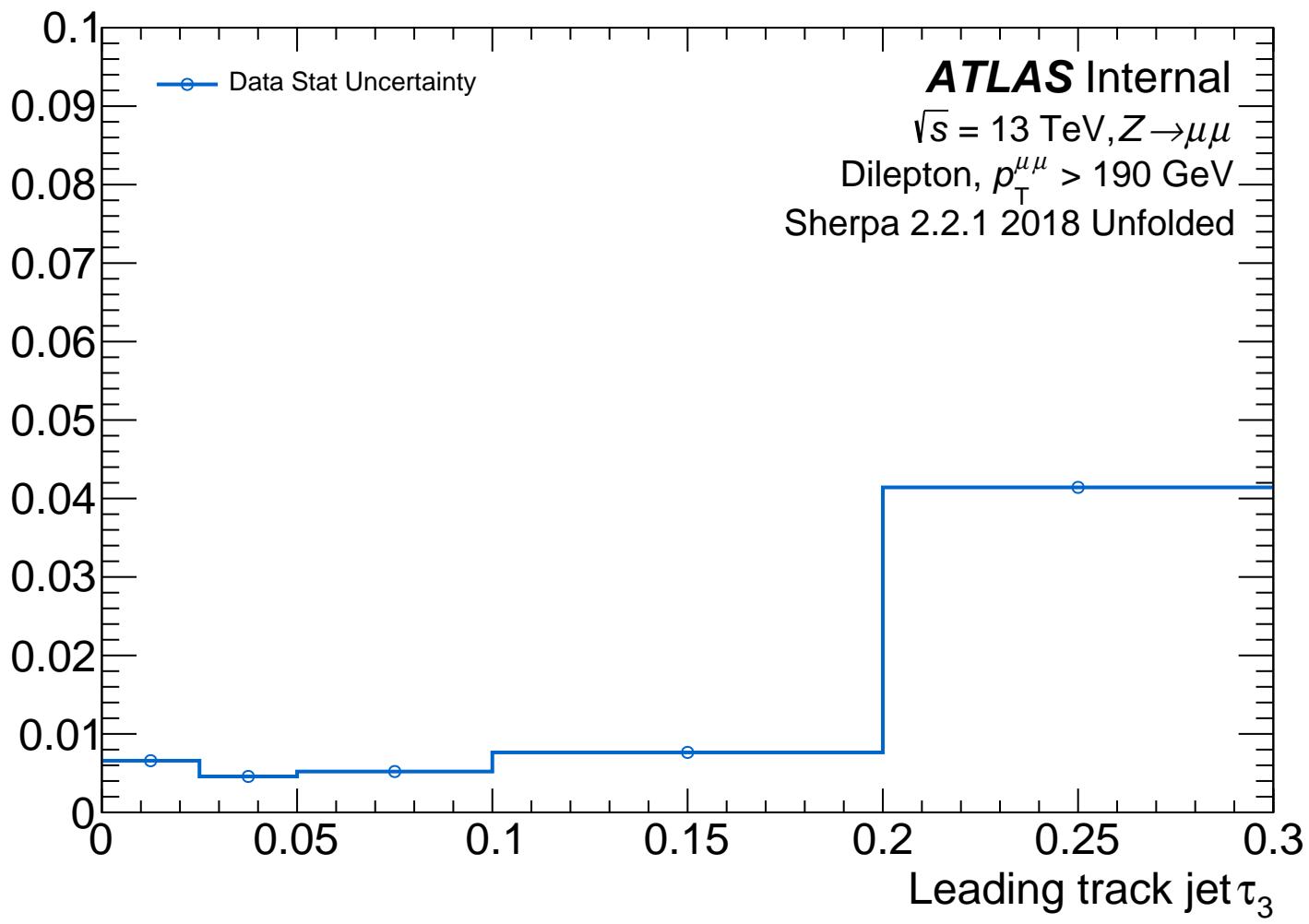


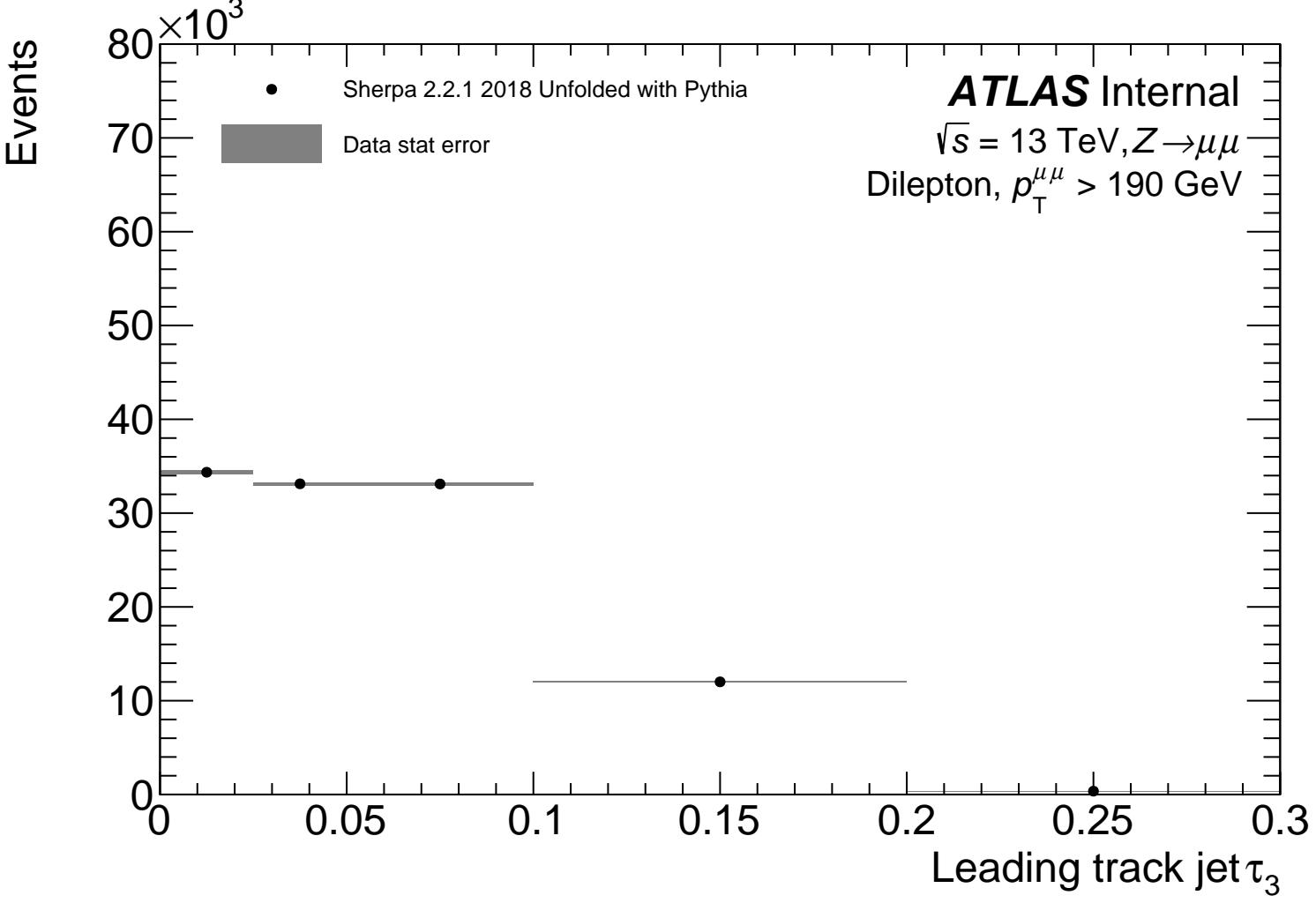


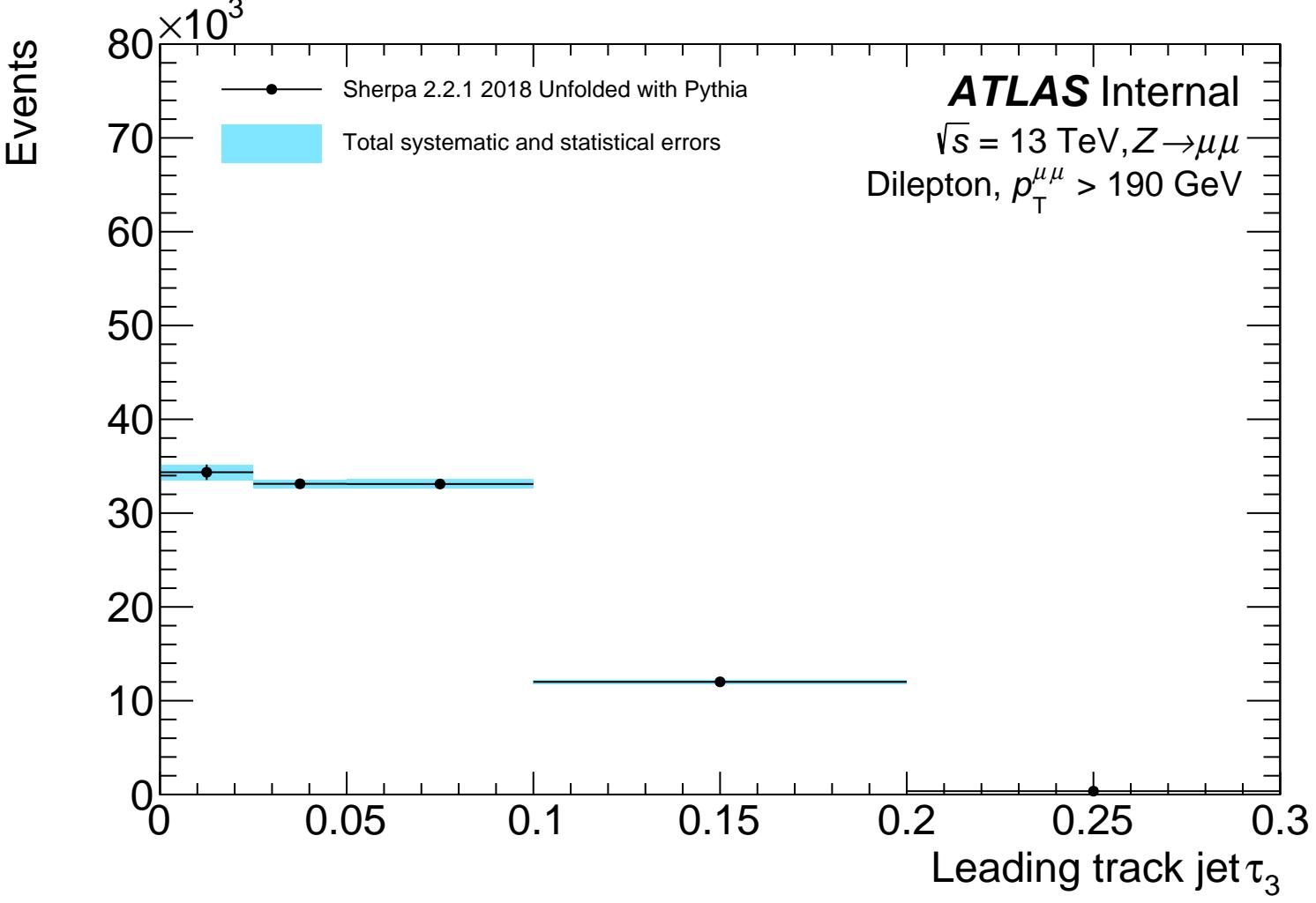


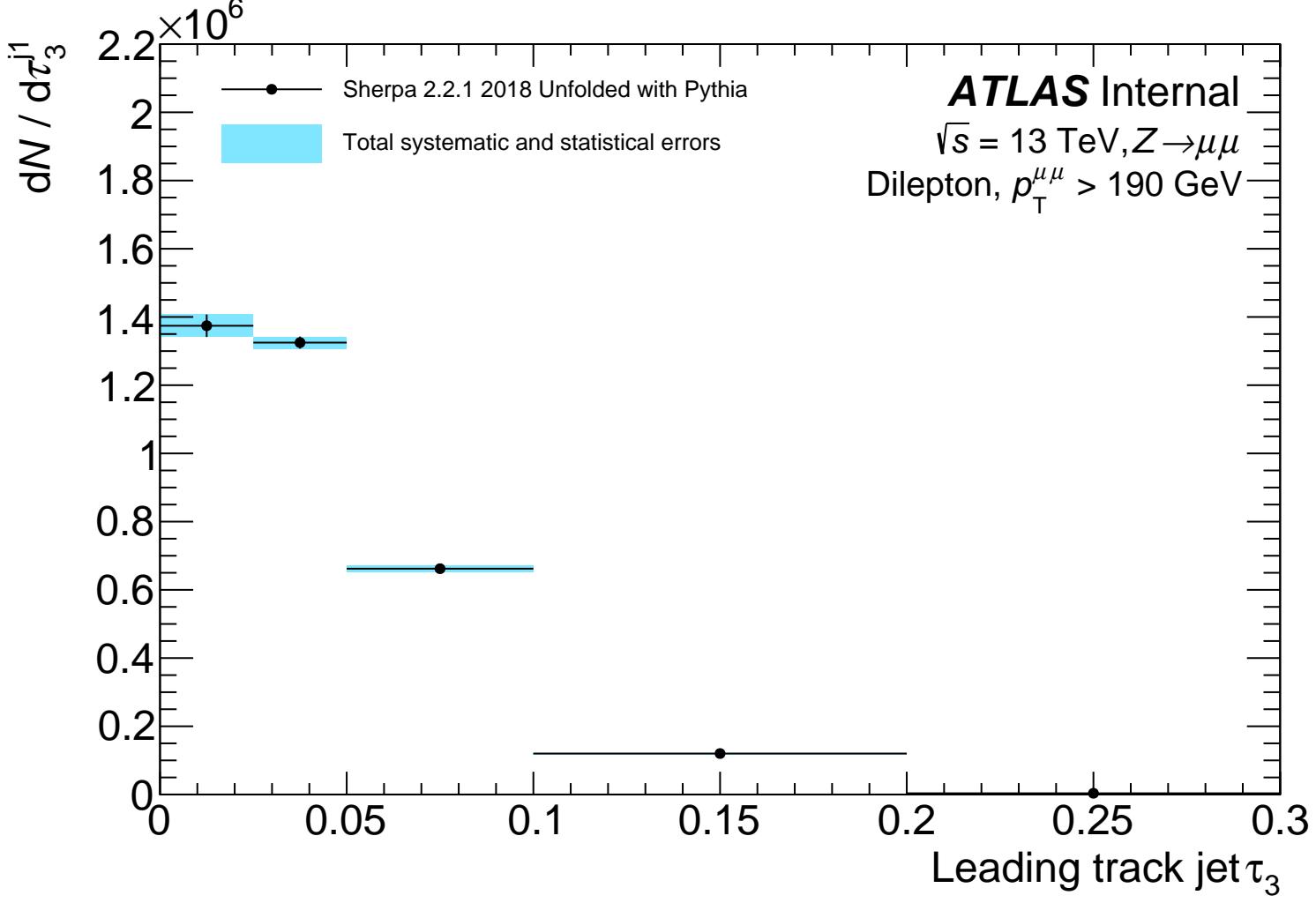












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0.08

0.06

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0.02

0

-0.02

-0.04

-0.06

-0.08

-0.1

0

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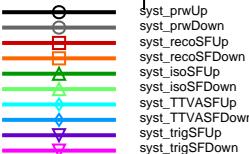
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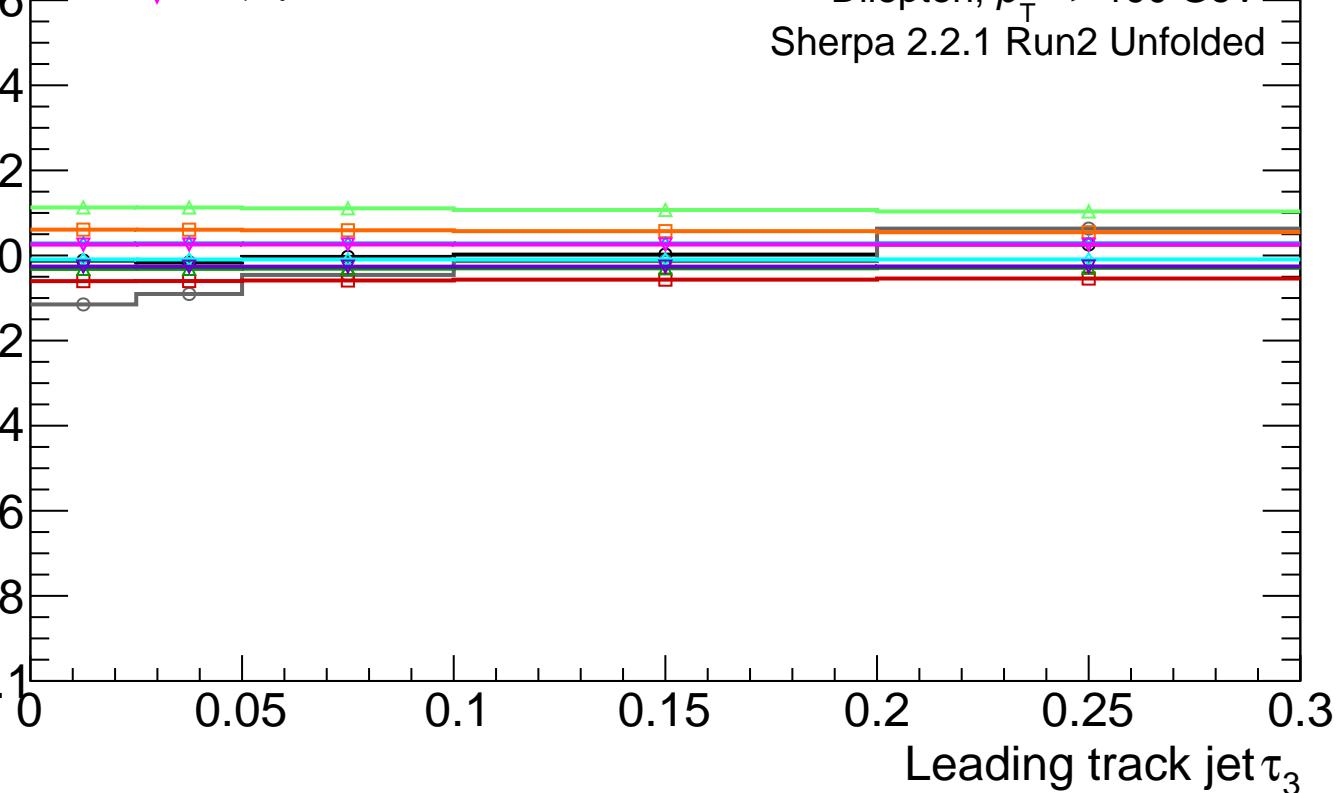
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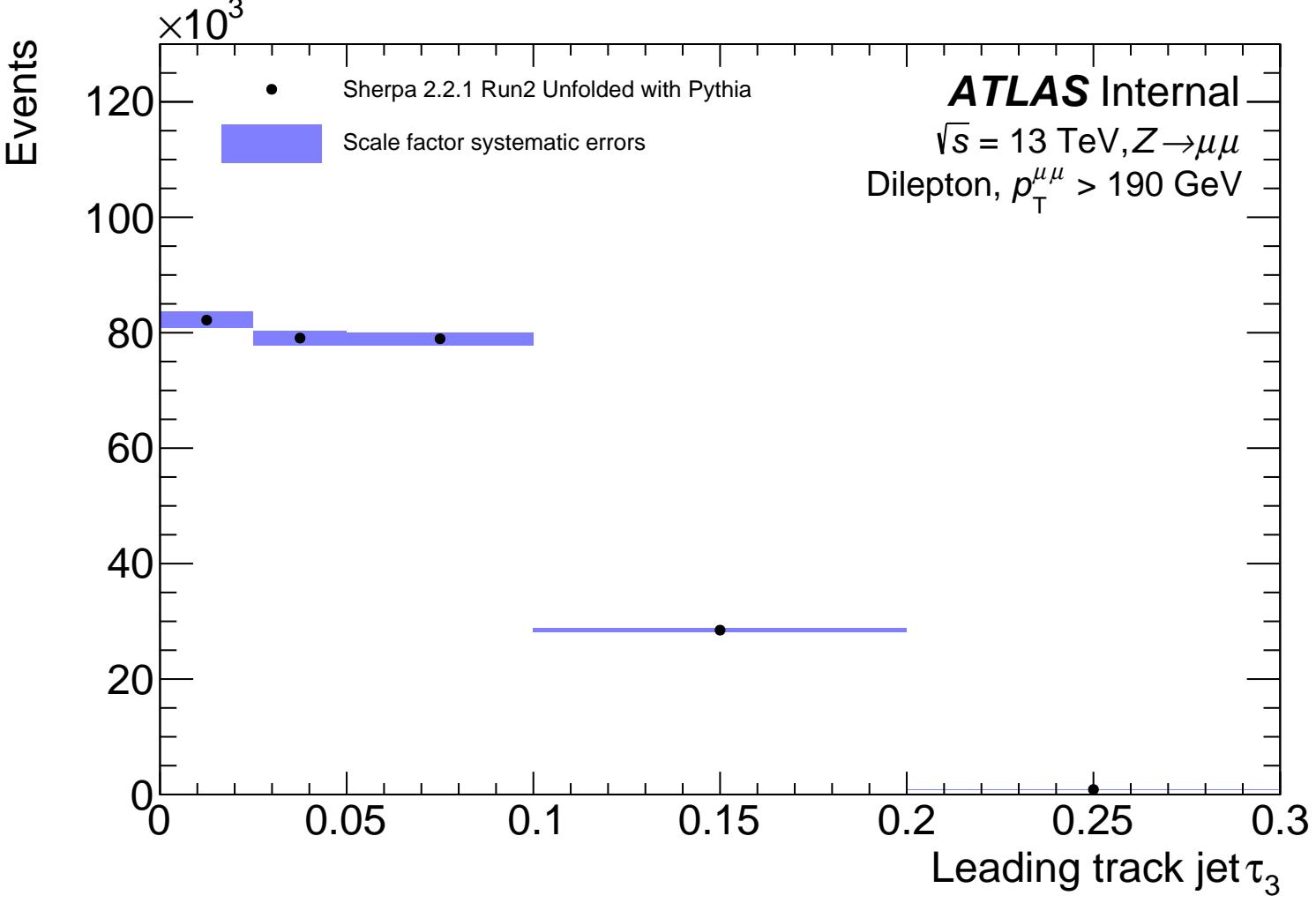
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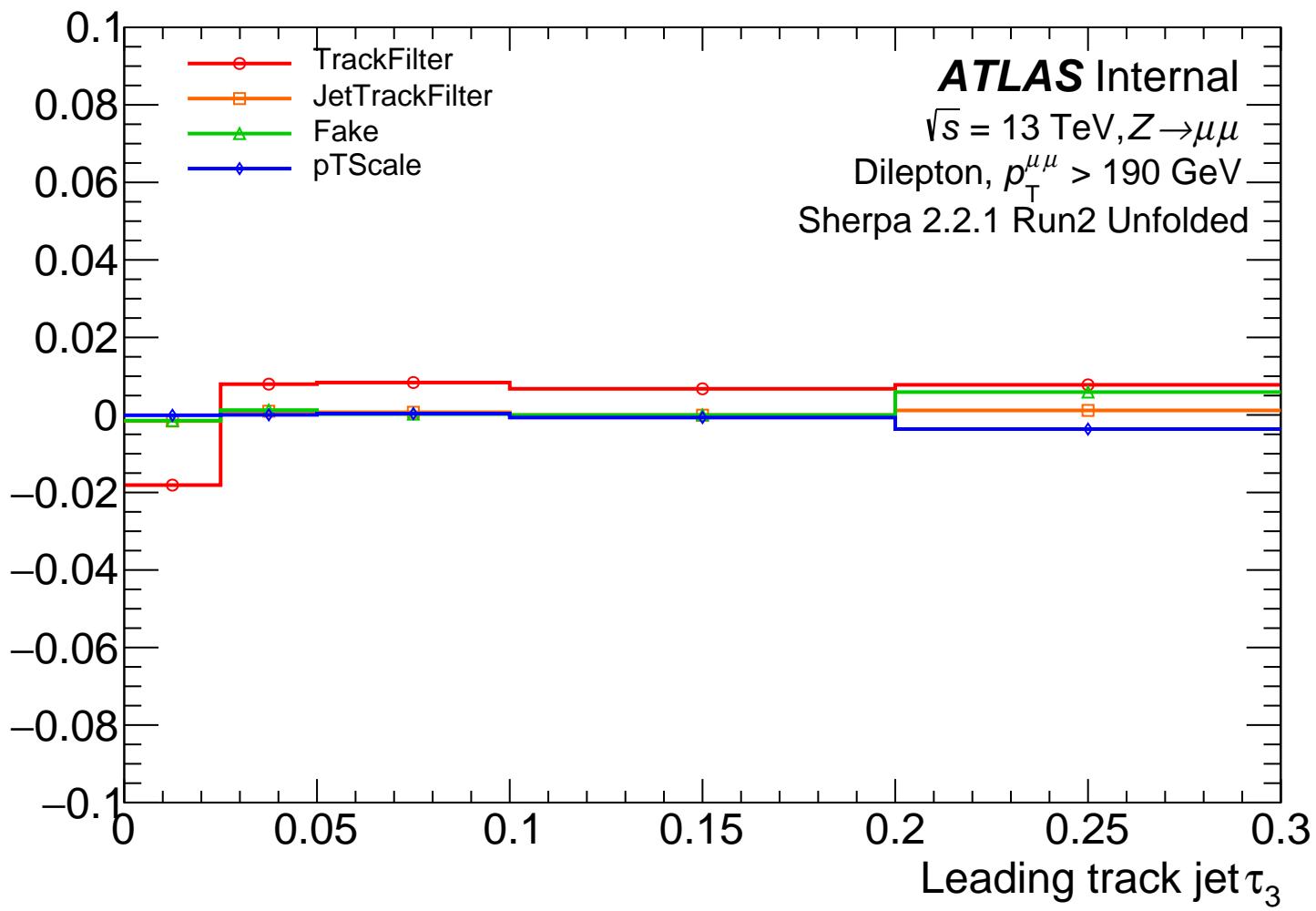
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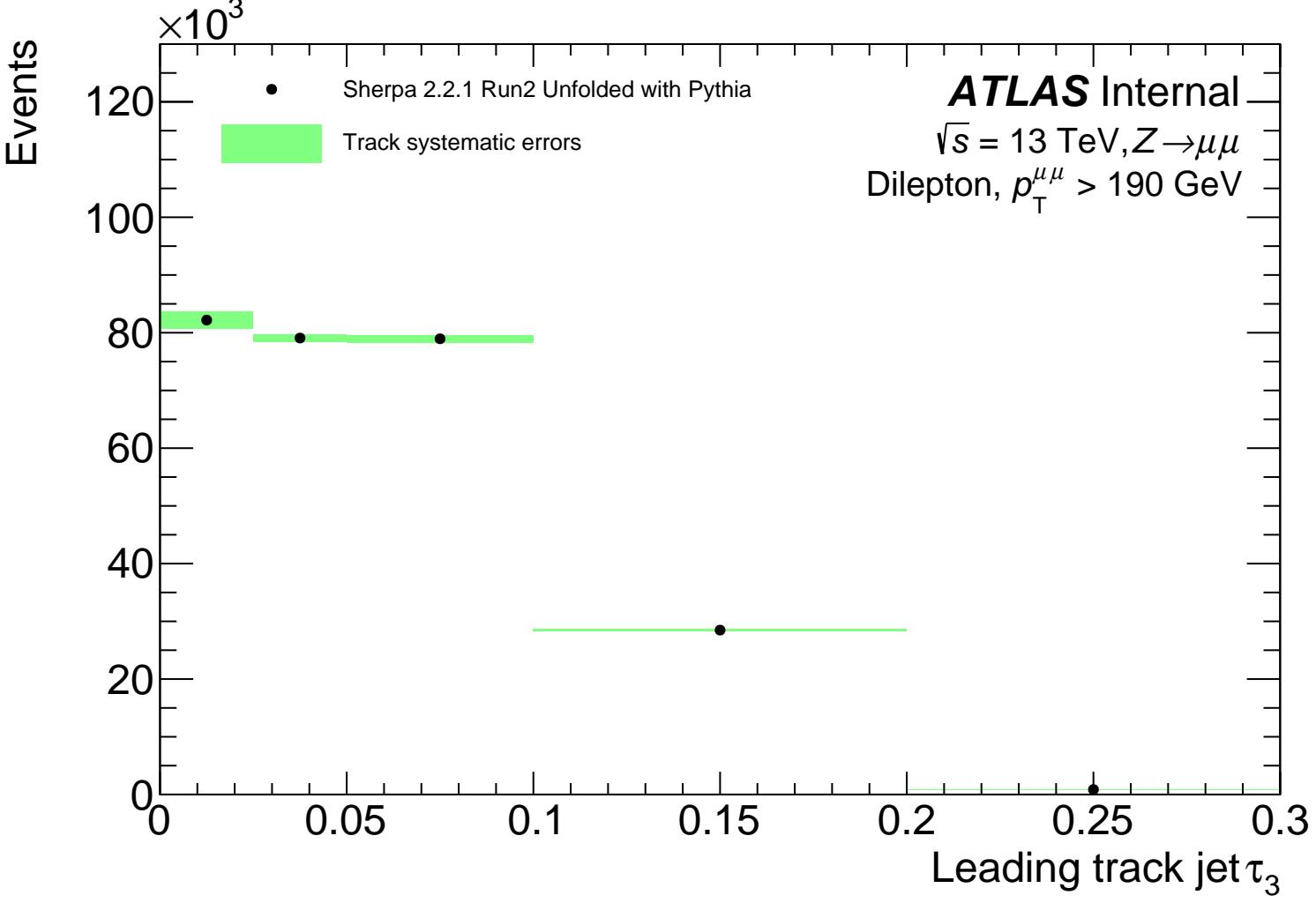
Leading track jet  $\tau_3$ **ATLAS Internal** $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$ Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$ 

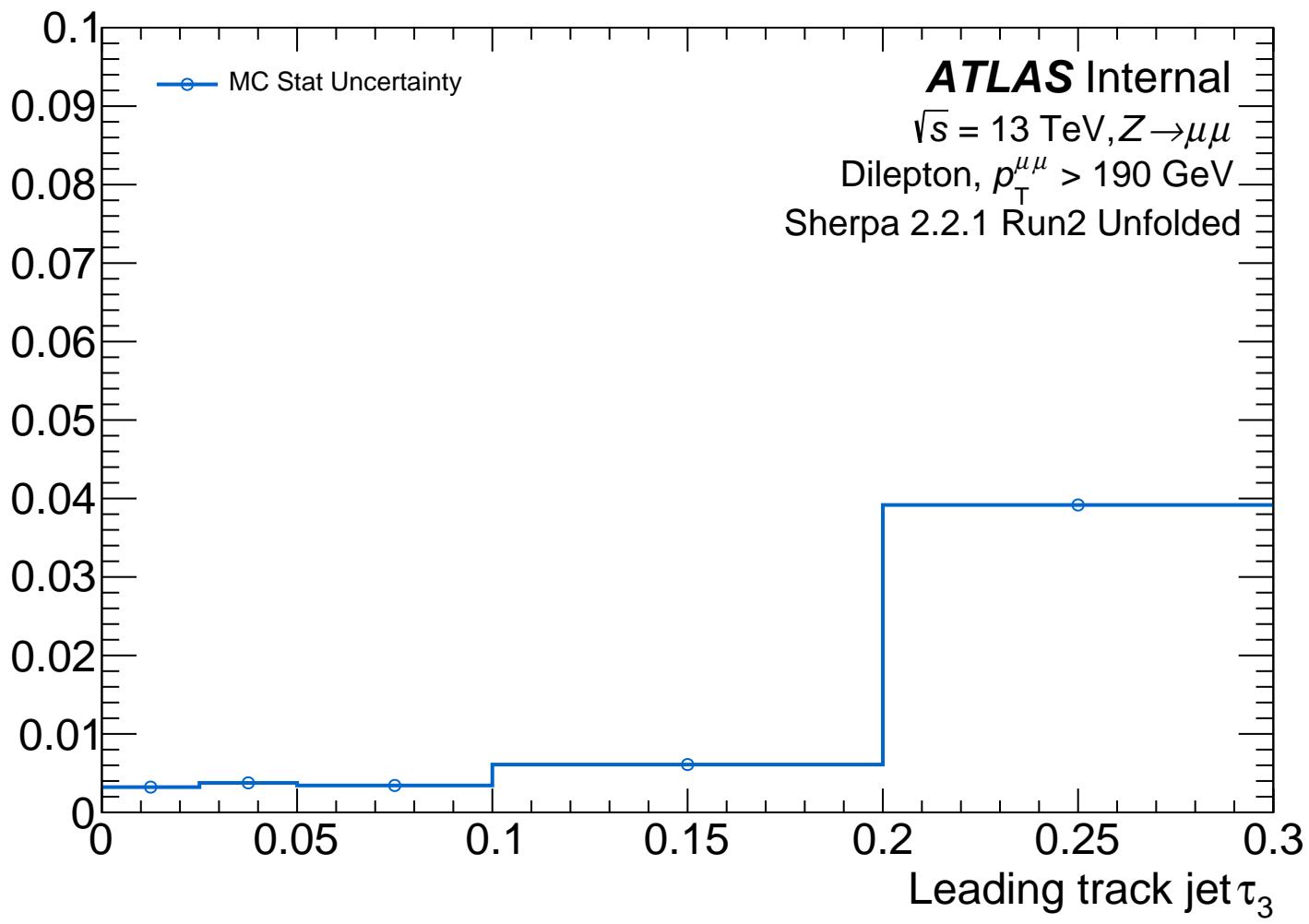
Sherpa 2.2.1 Run2 Unfolded

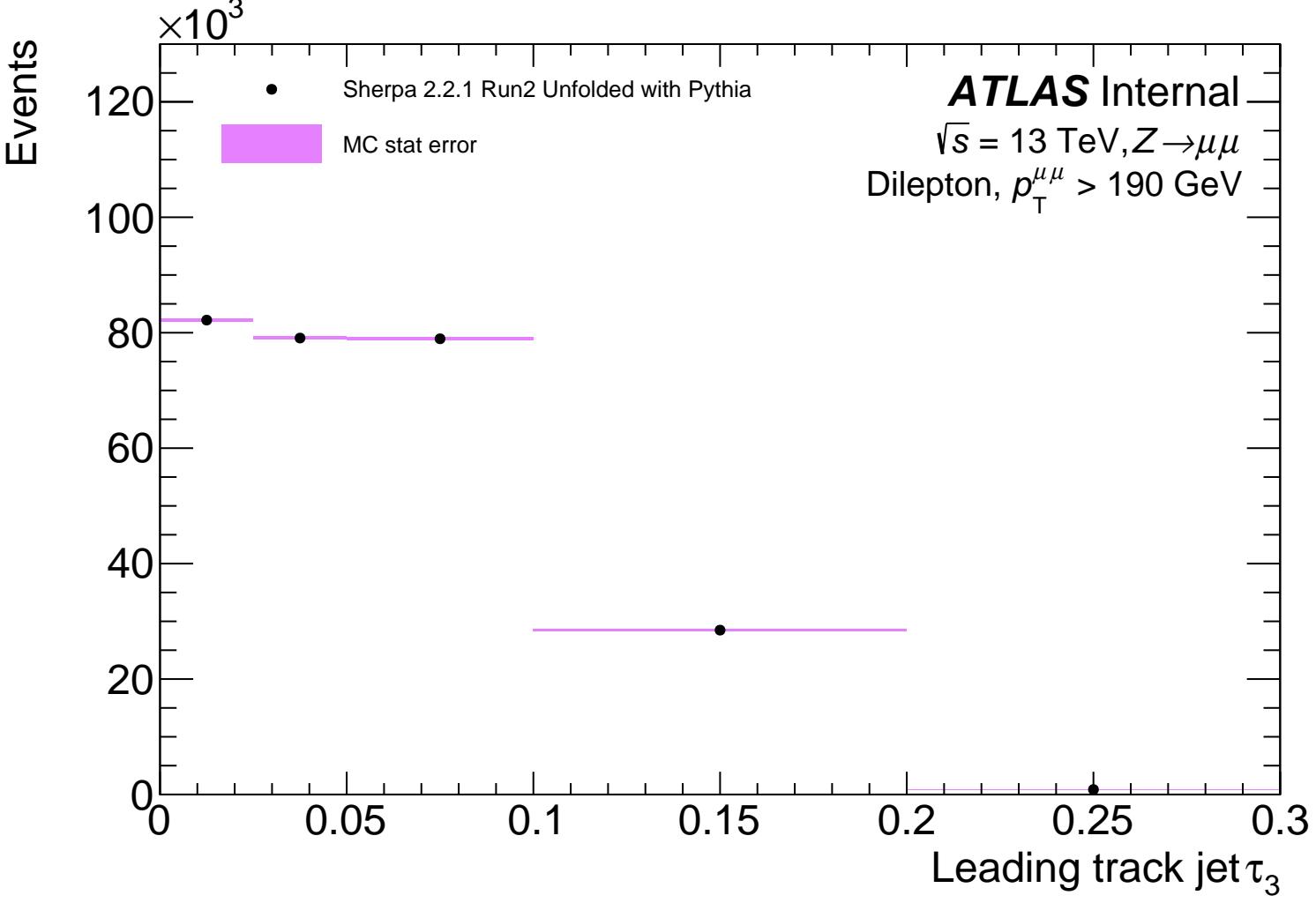


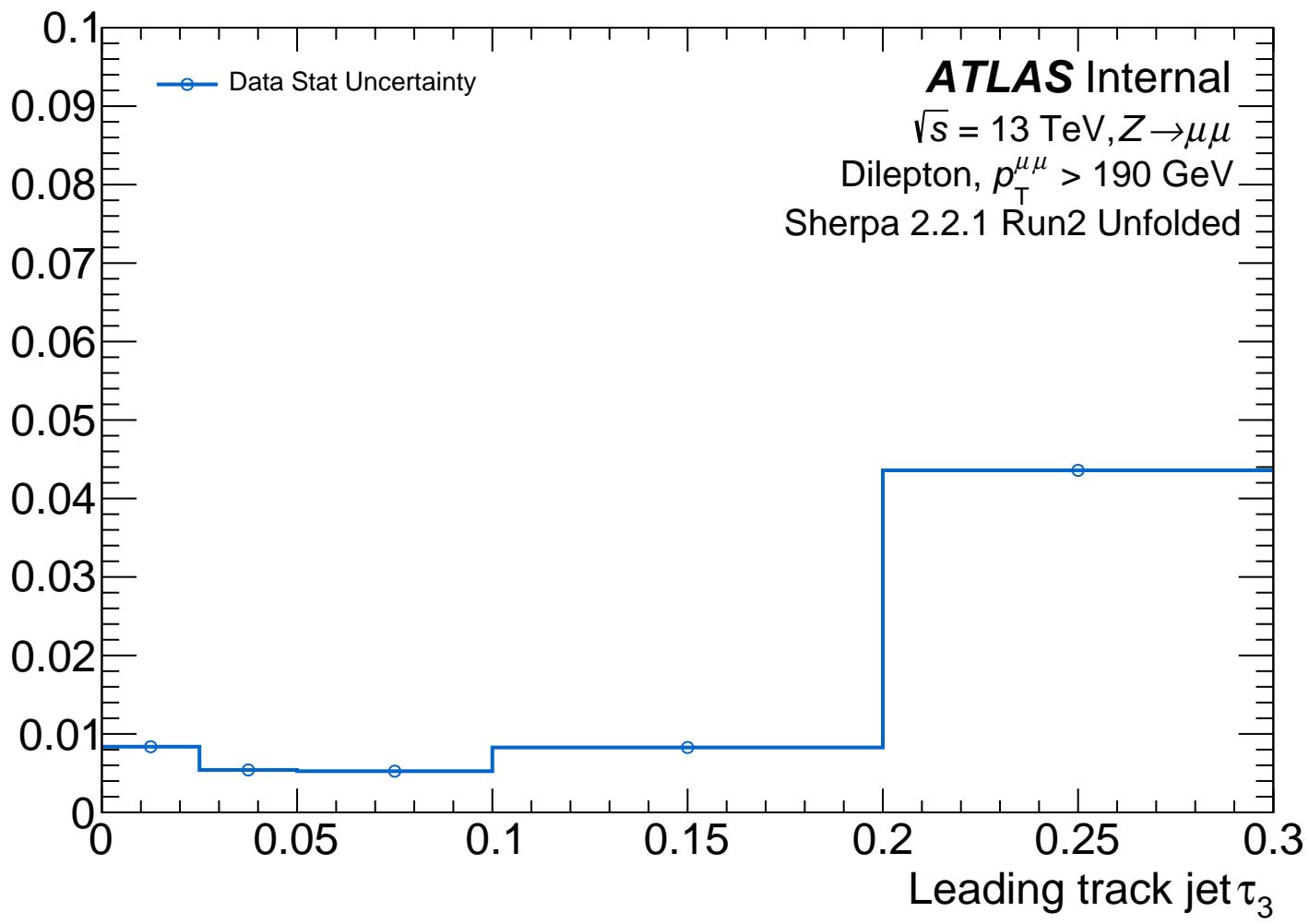


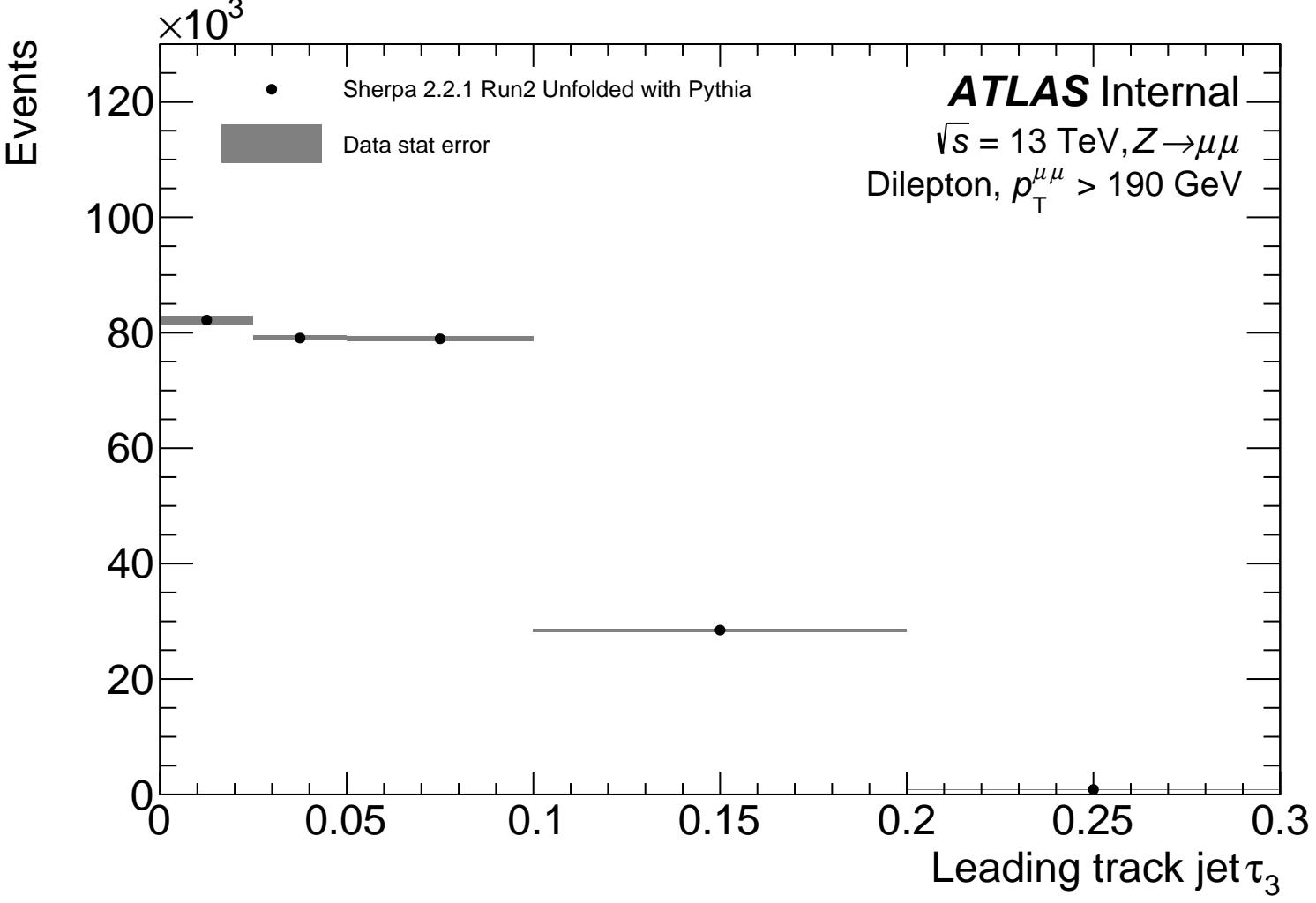


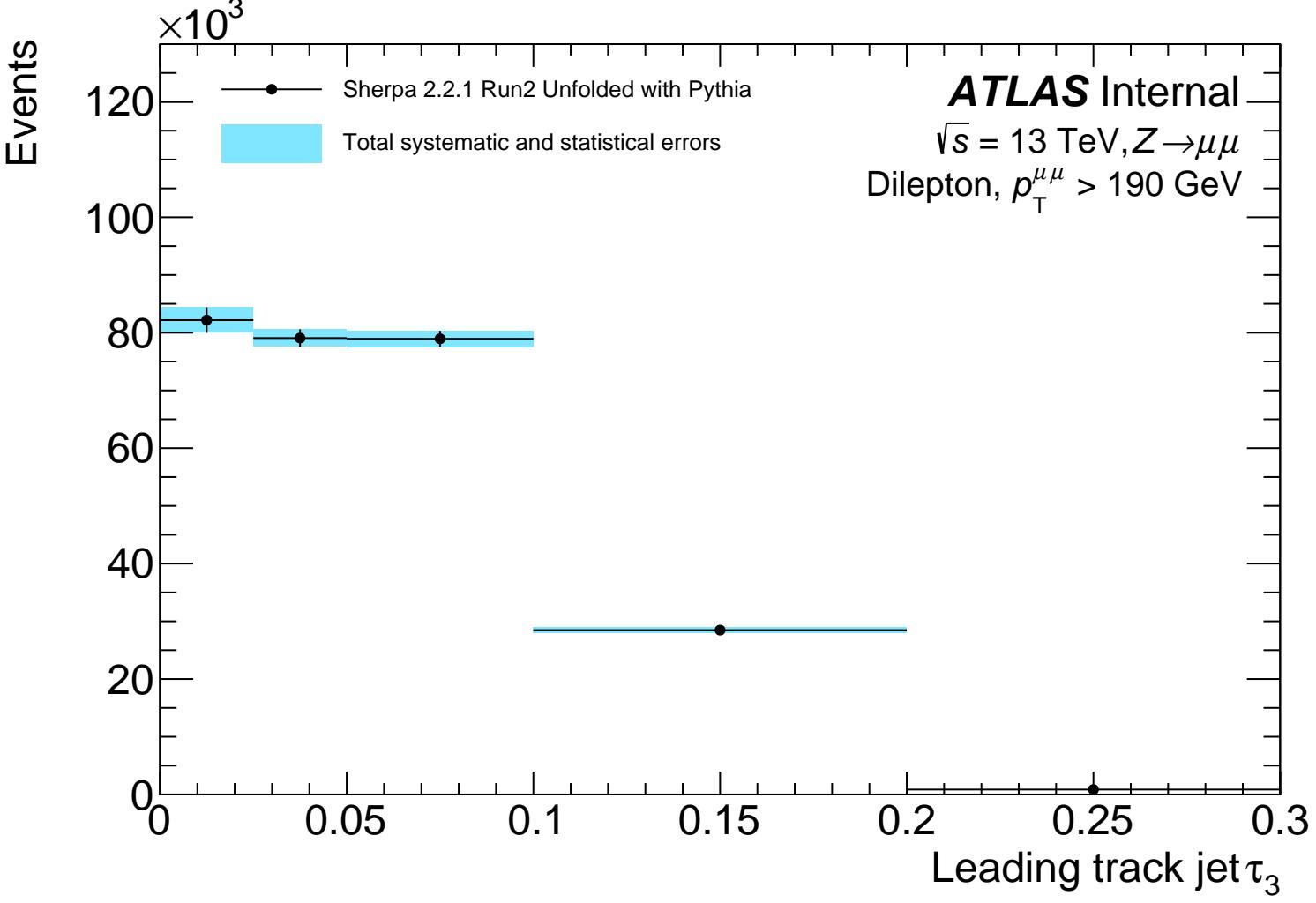


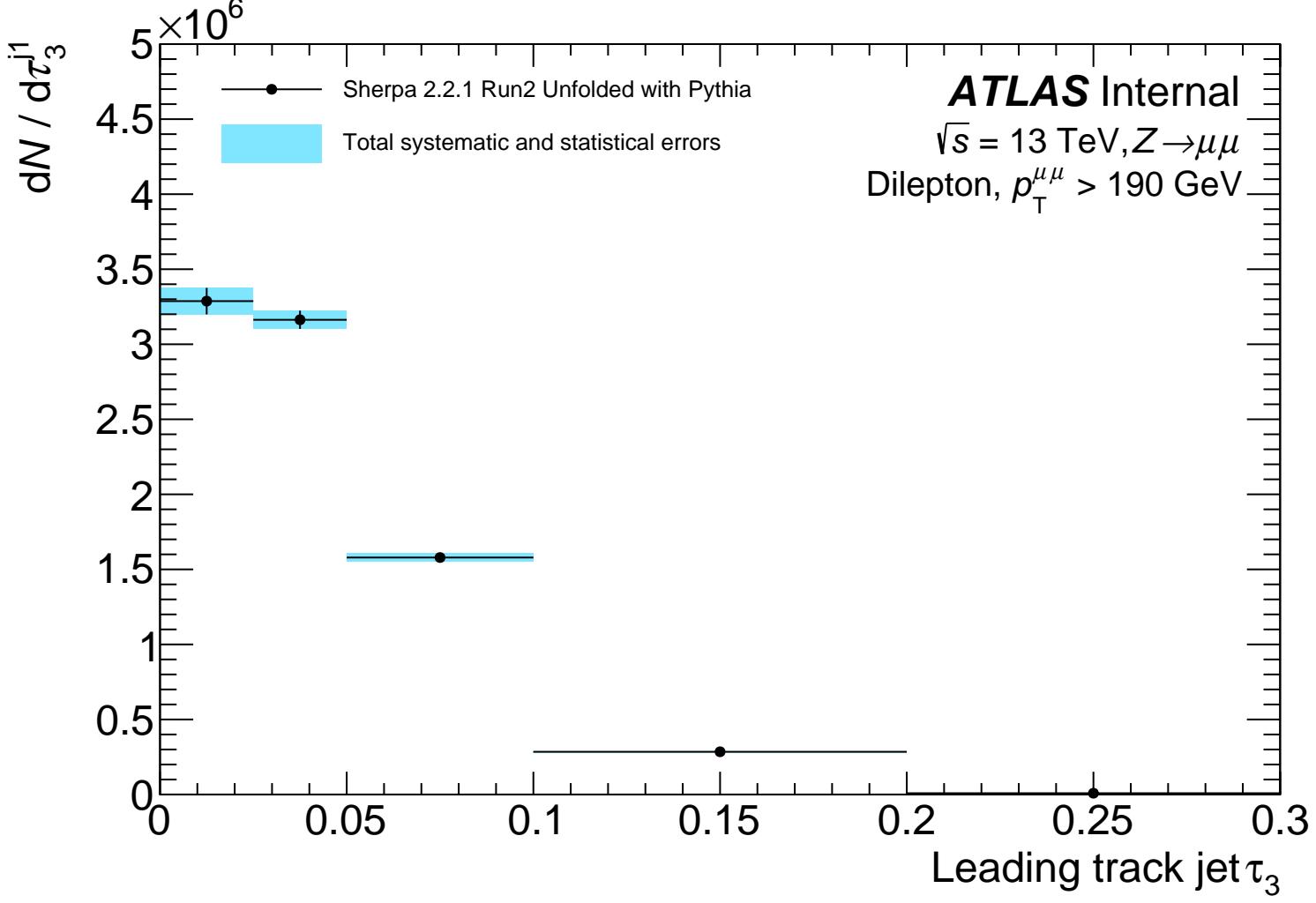










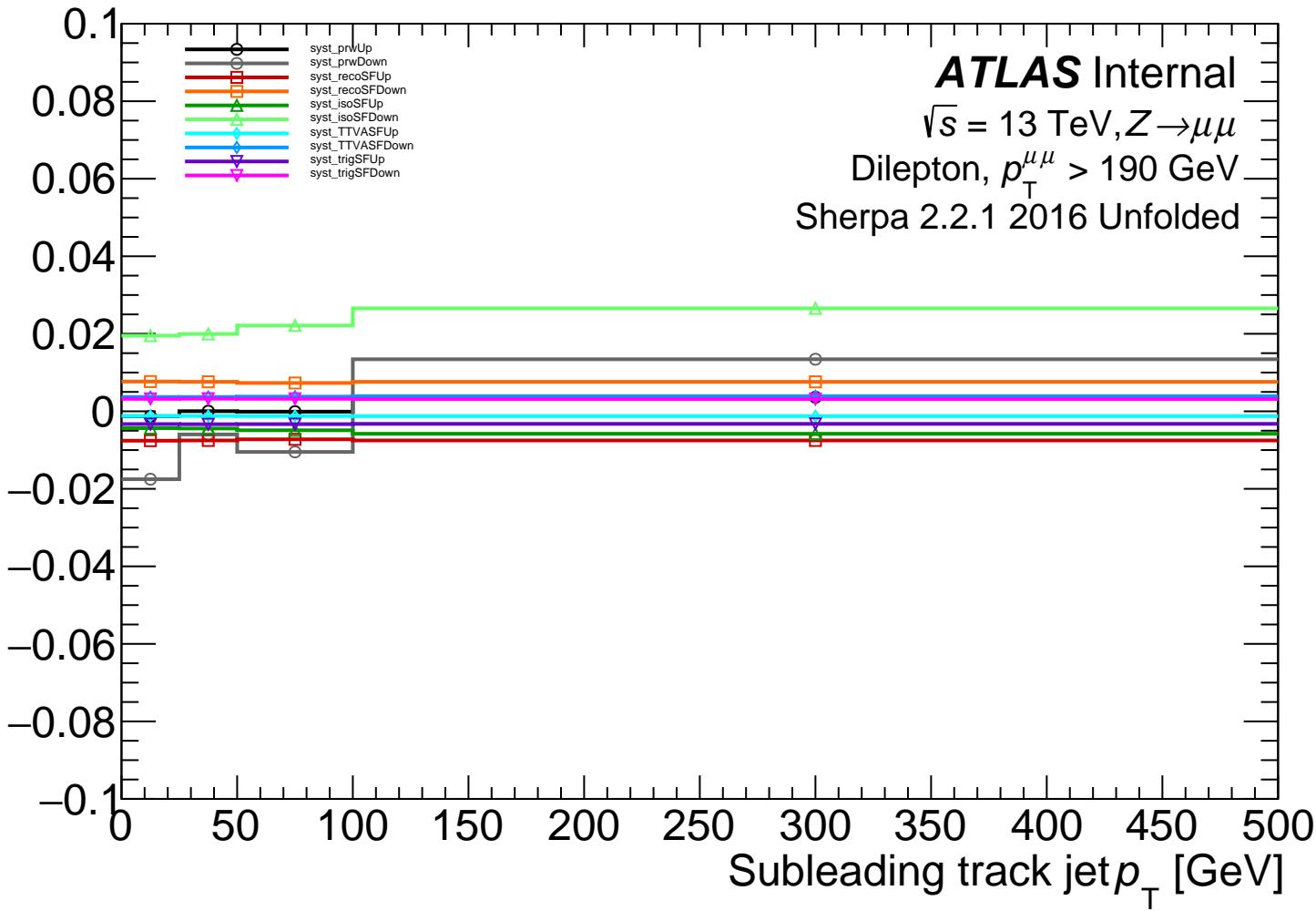


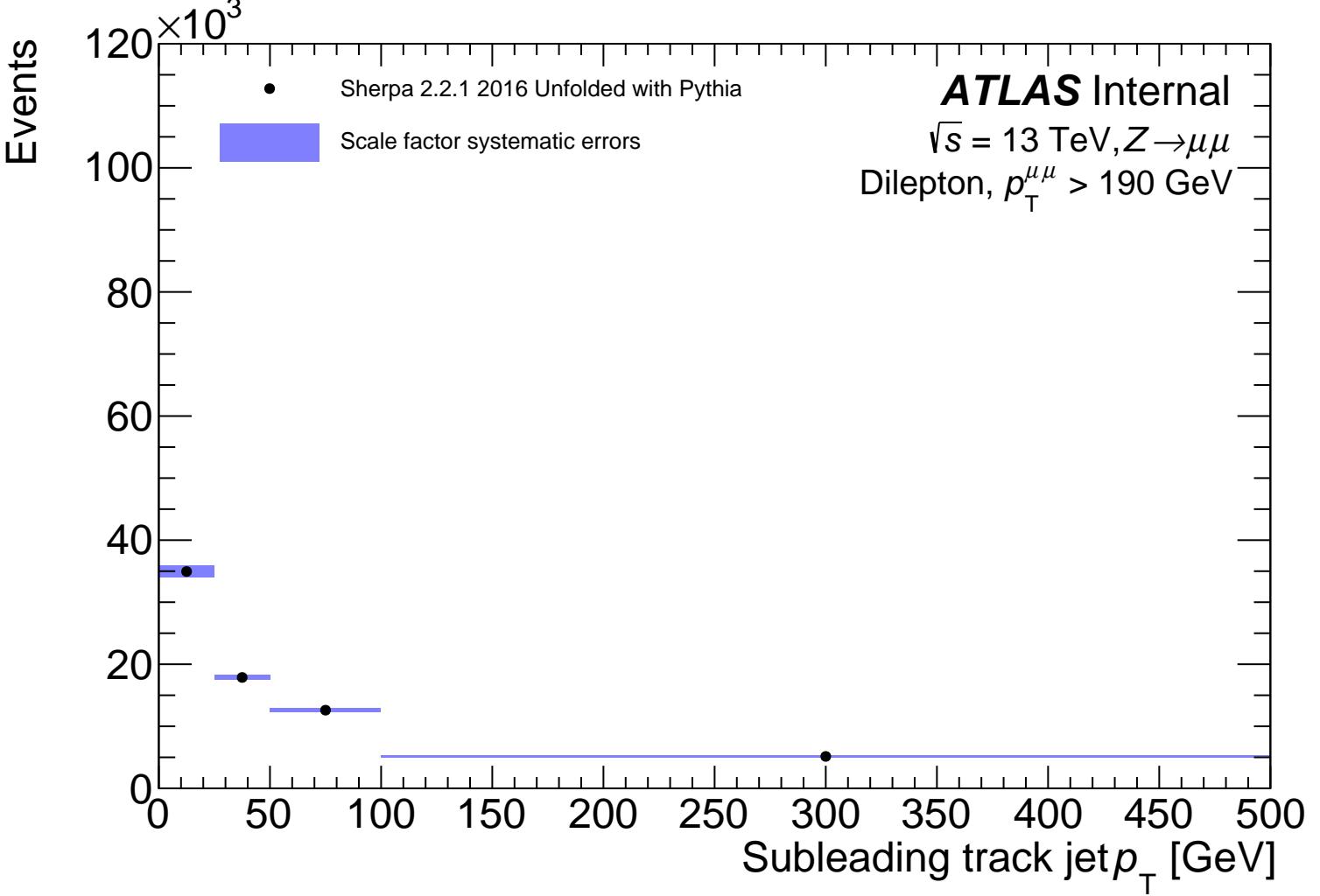
**ATLAS Internal**

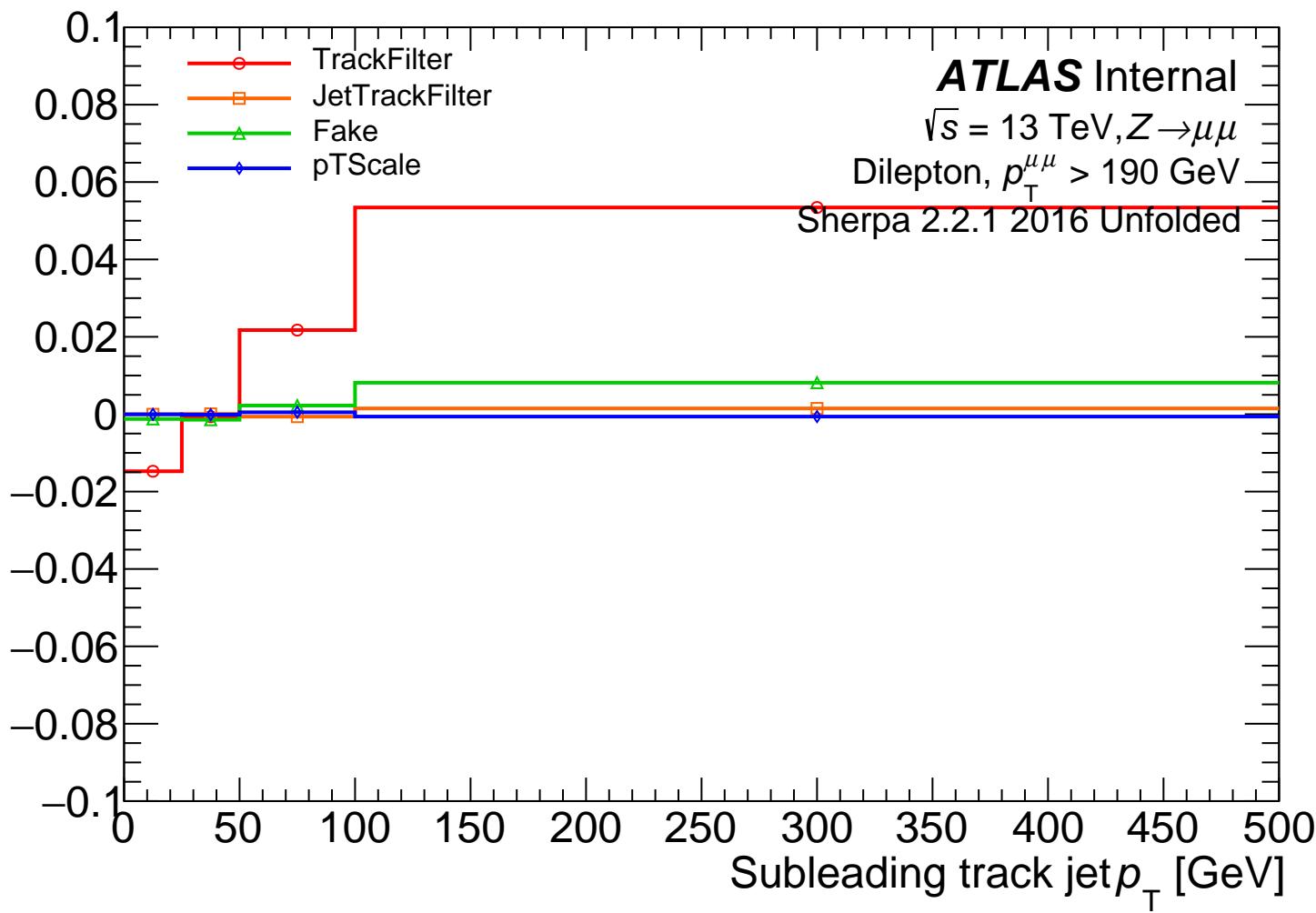
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

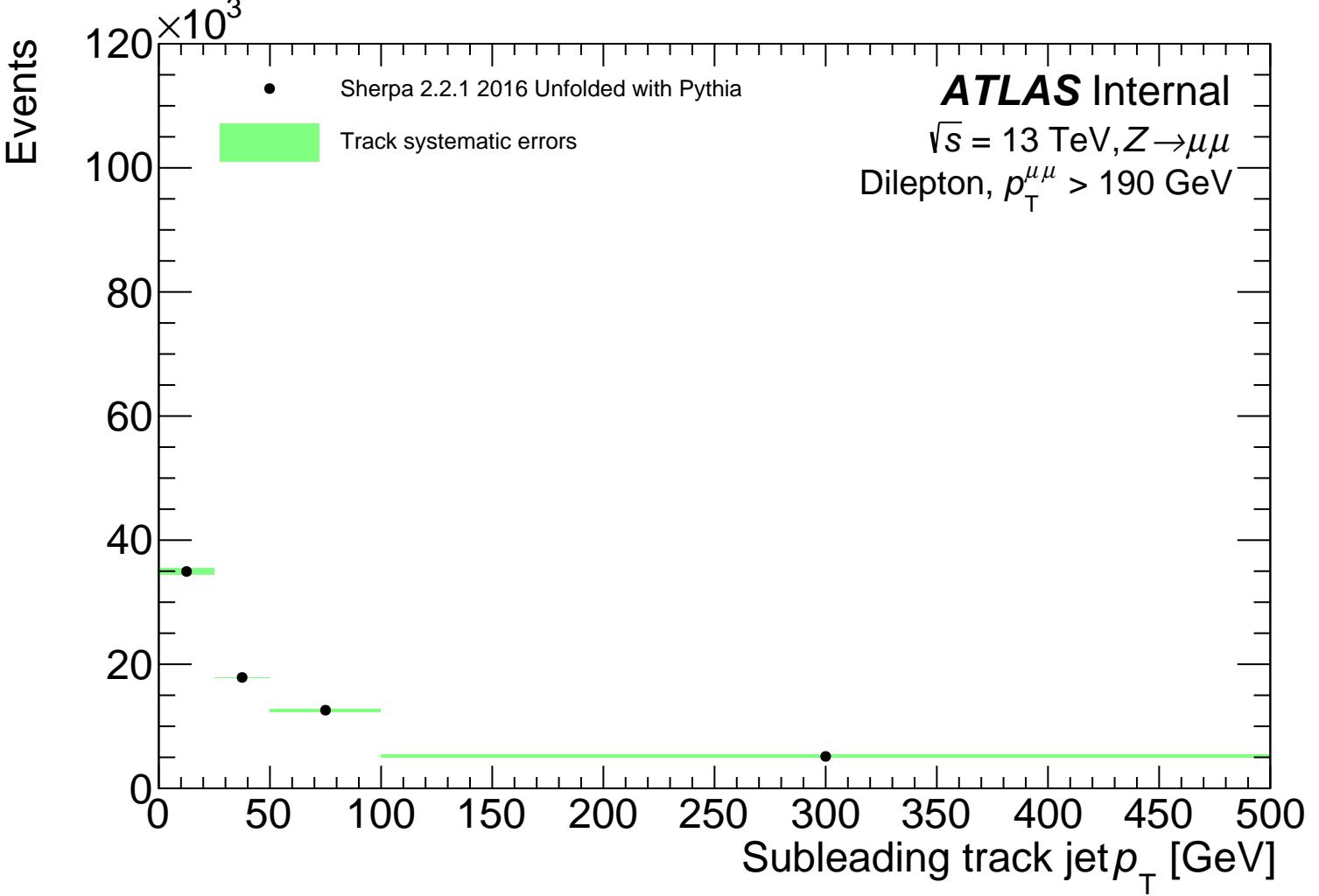
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

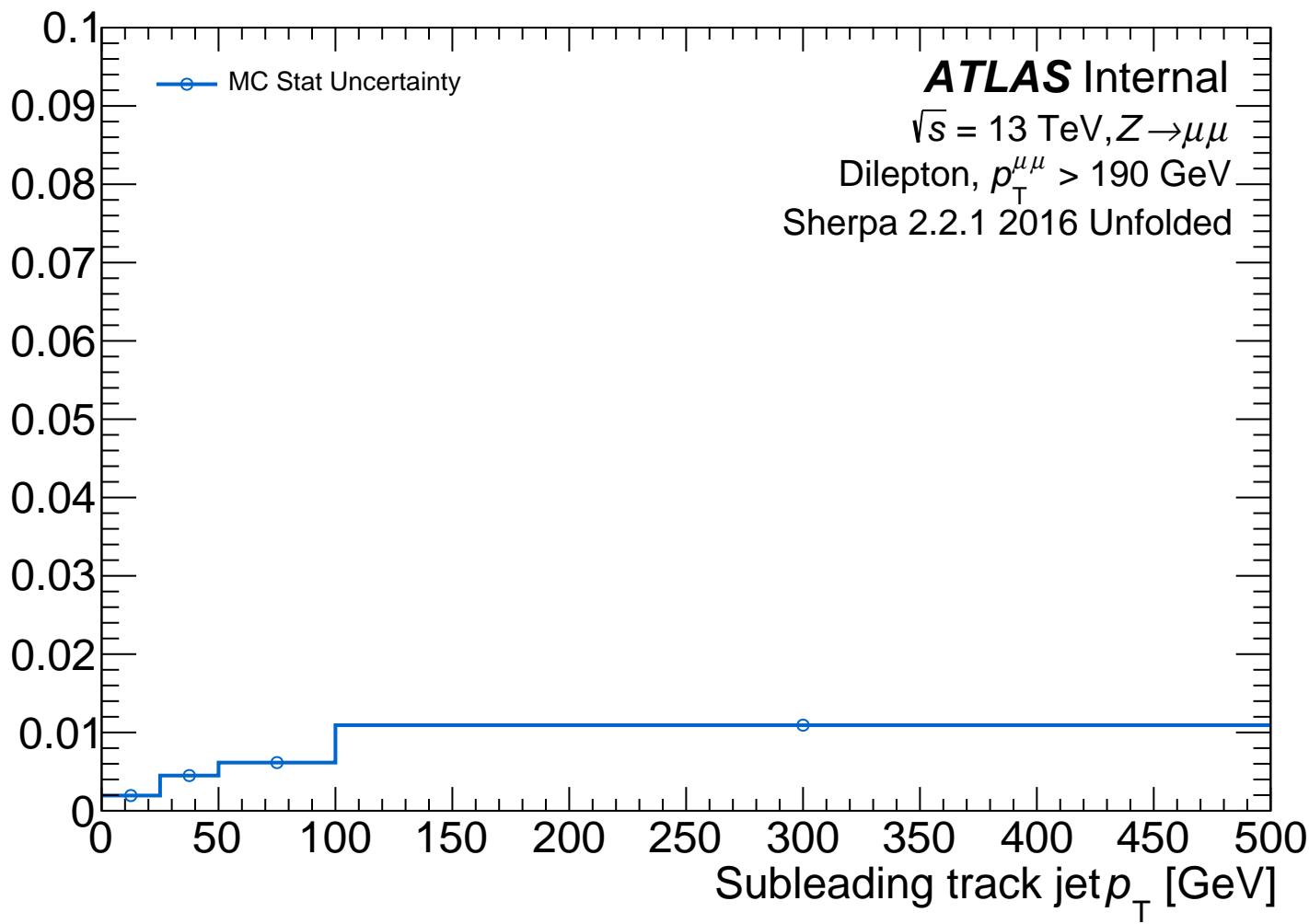
Sherpa 2.2.1 2016 Unfolded

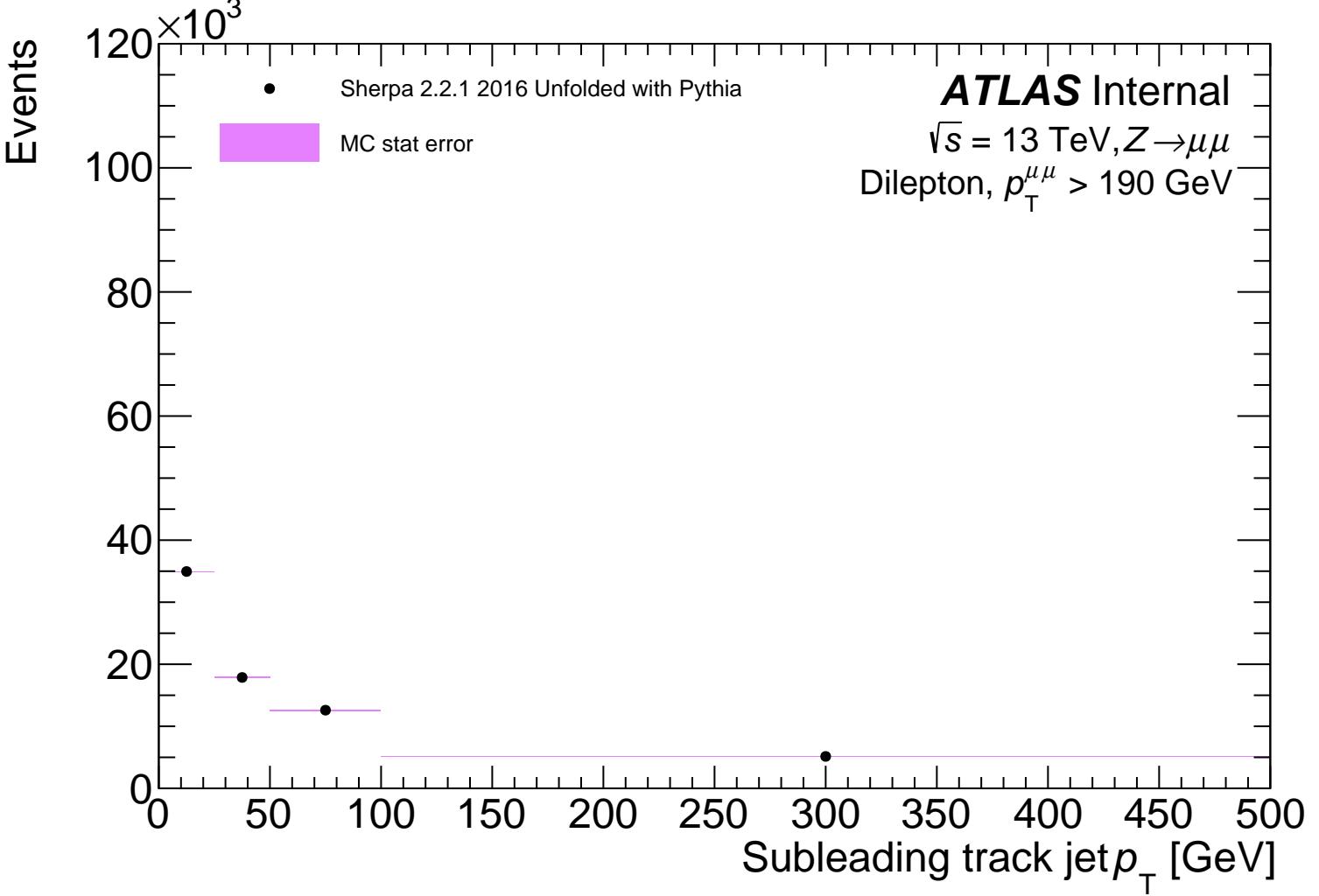


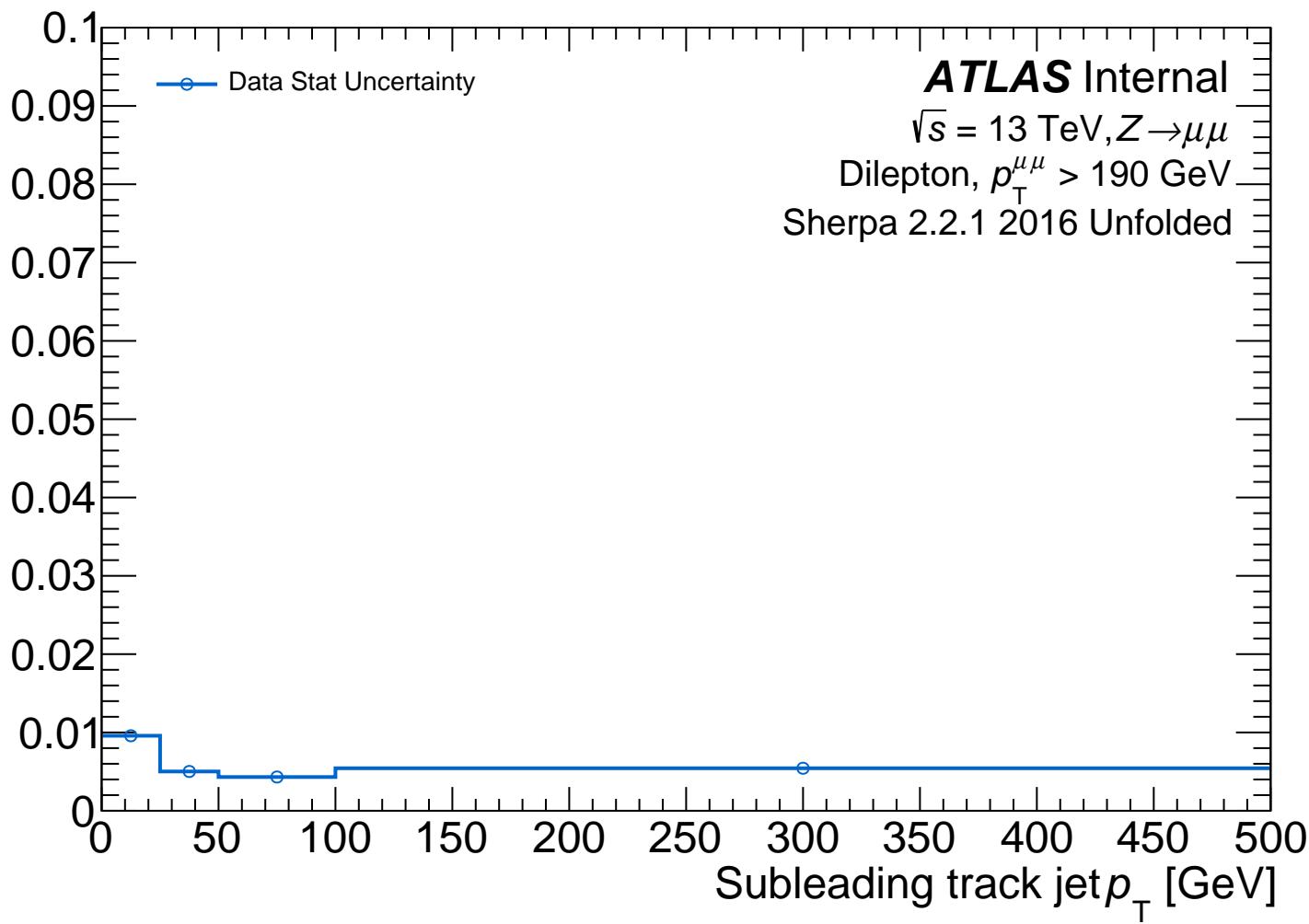


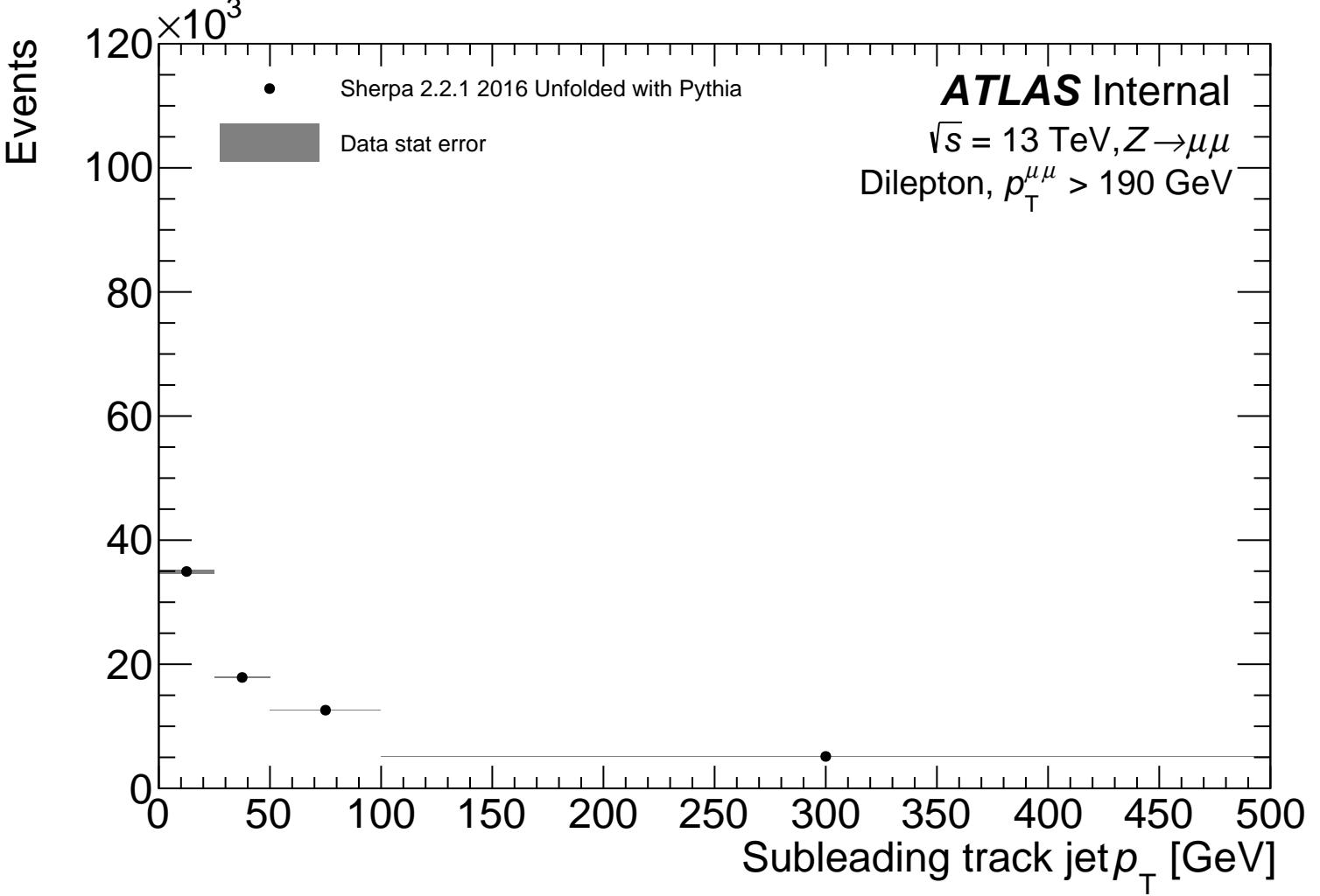


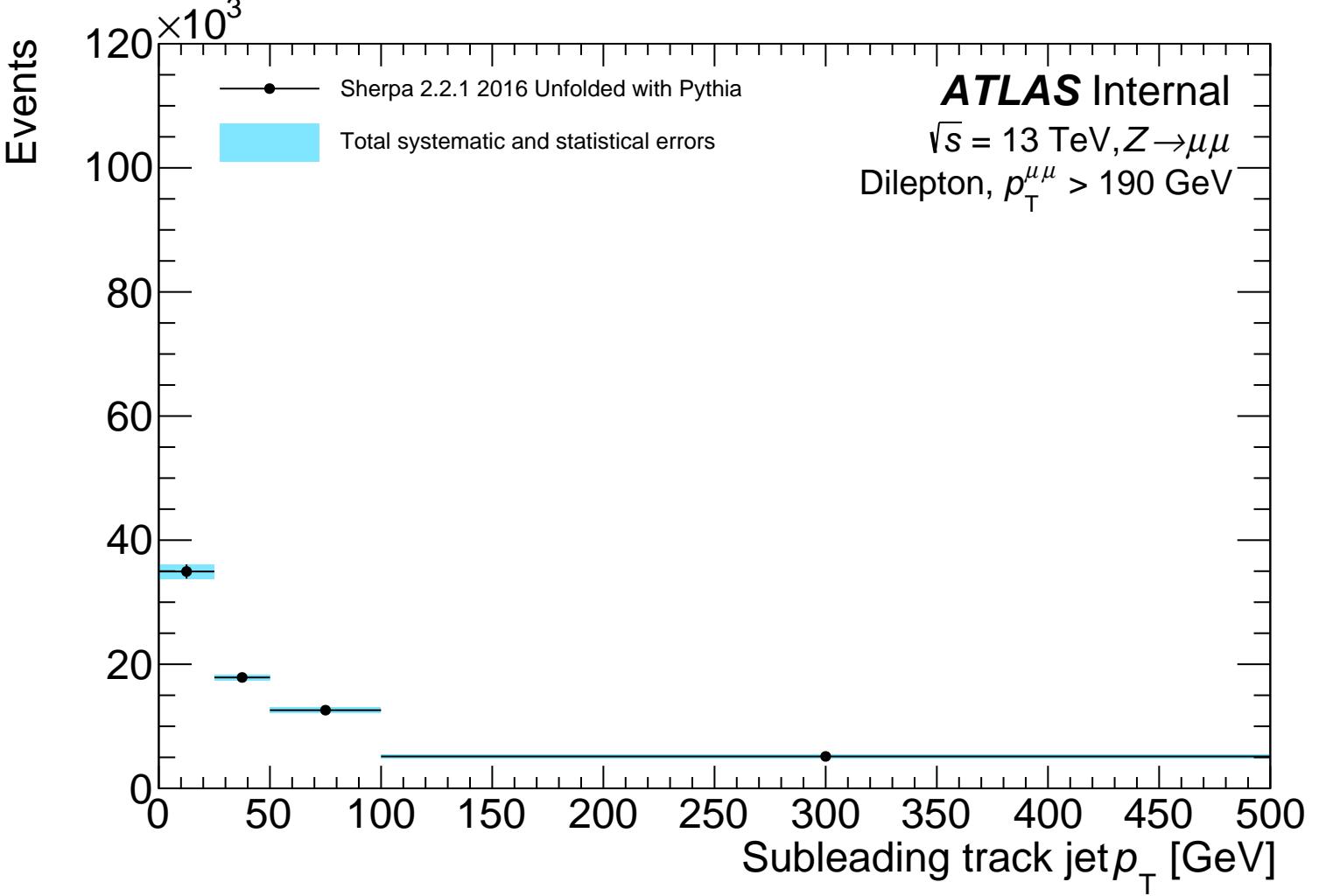


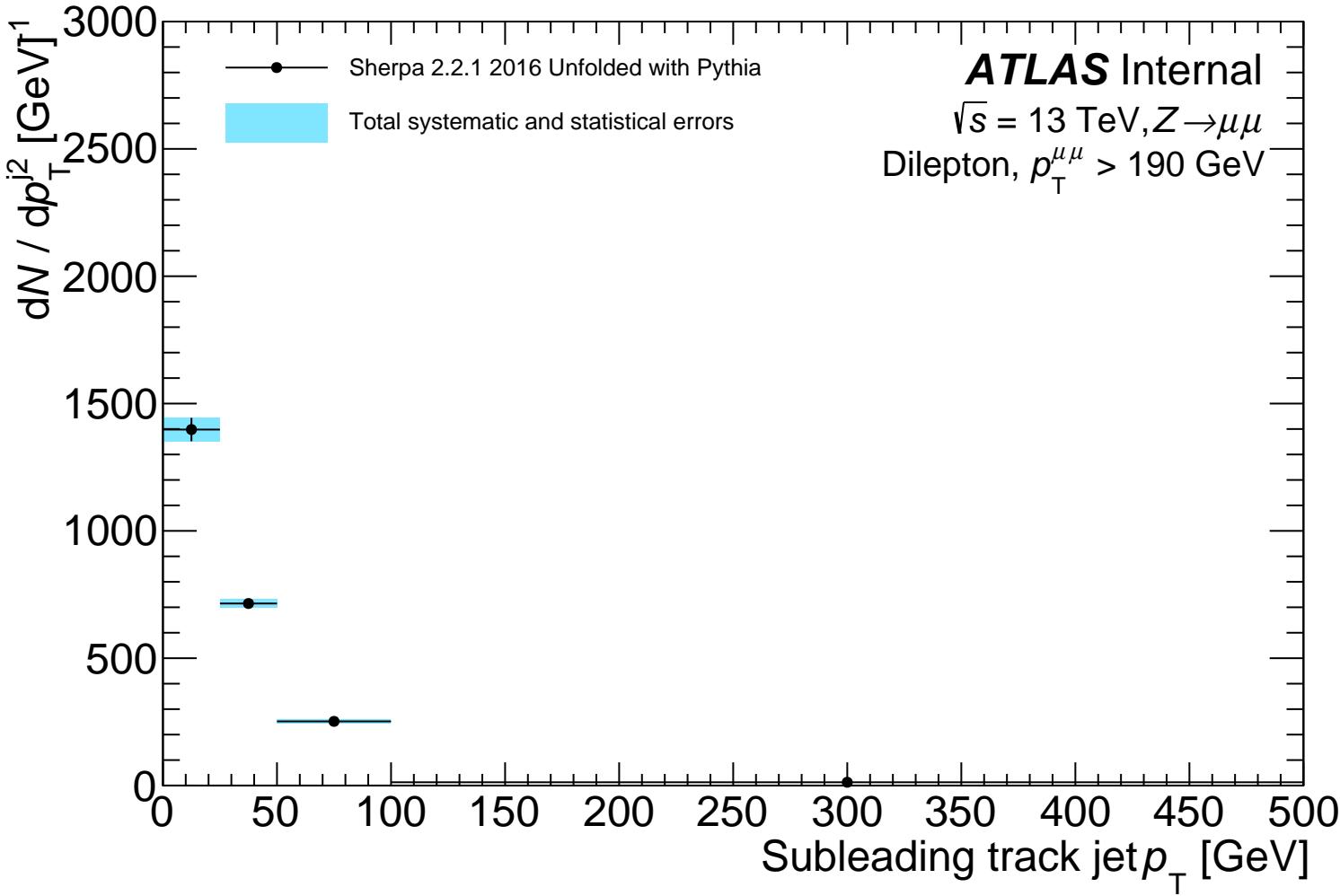


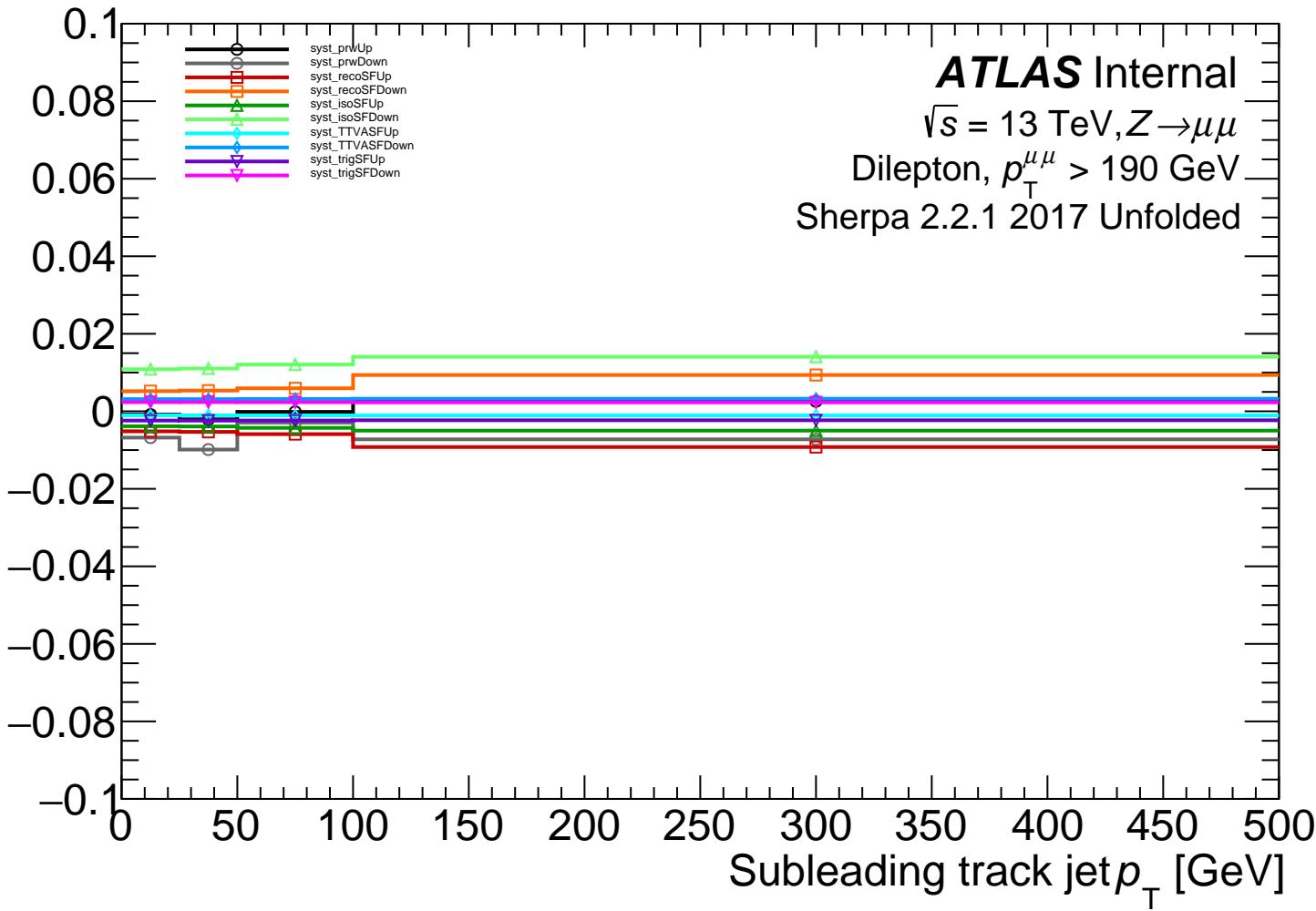


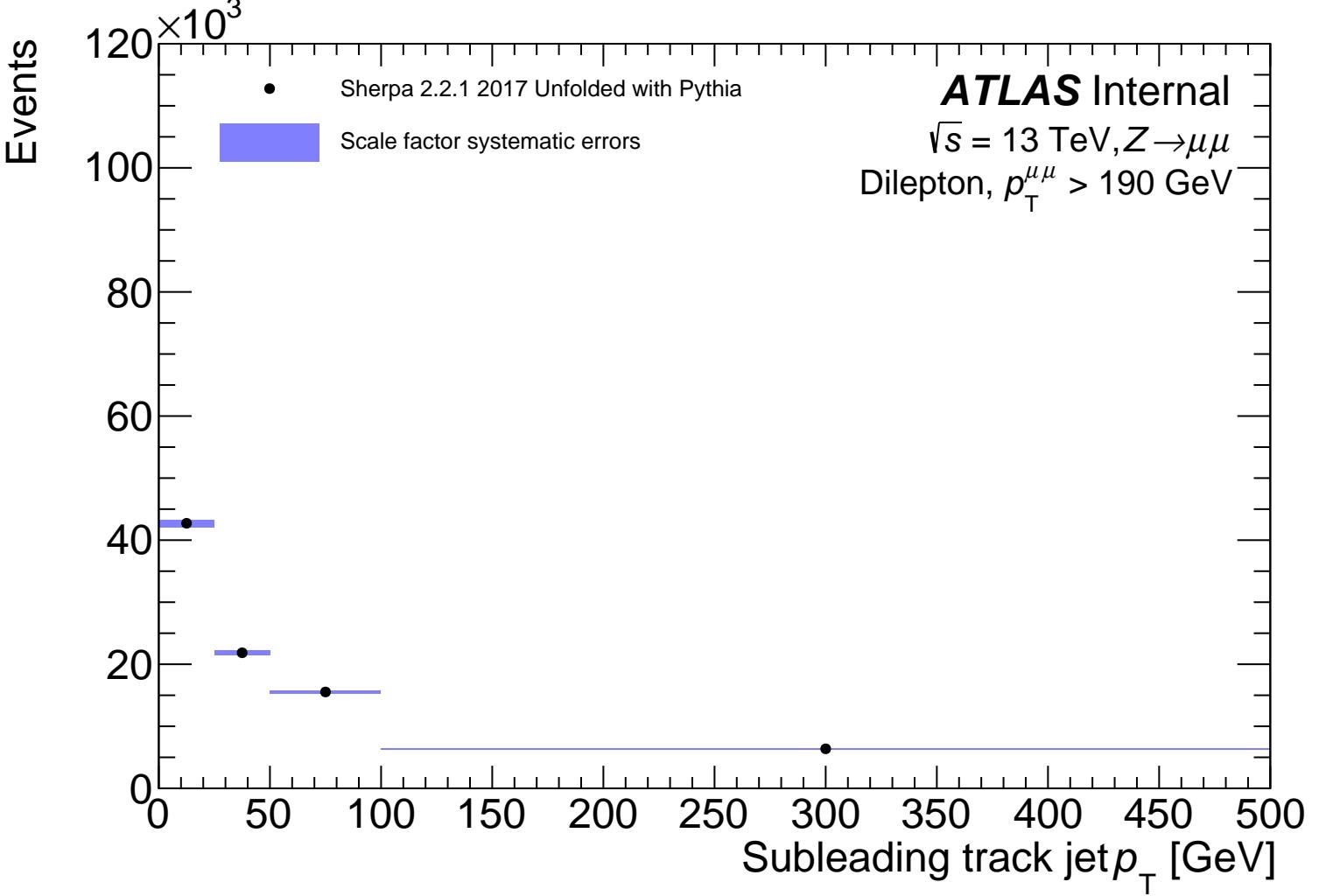


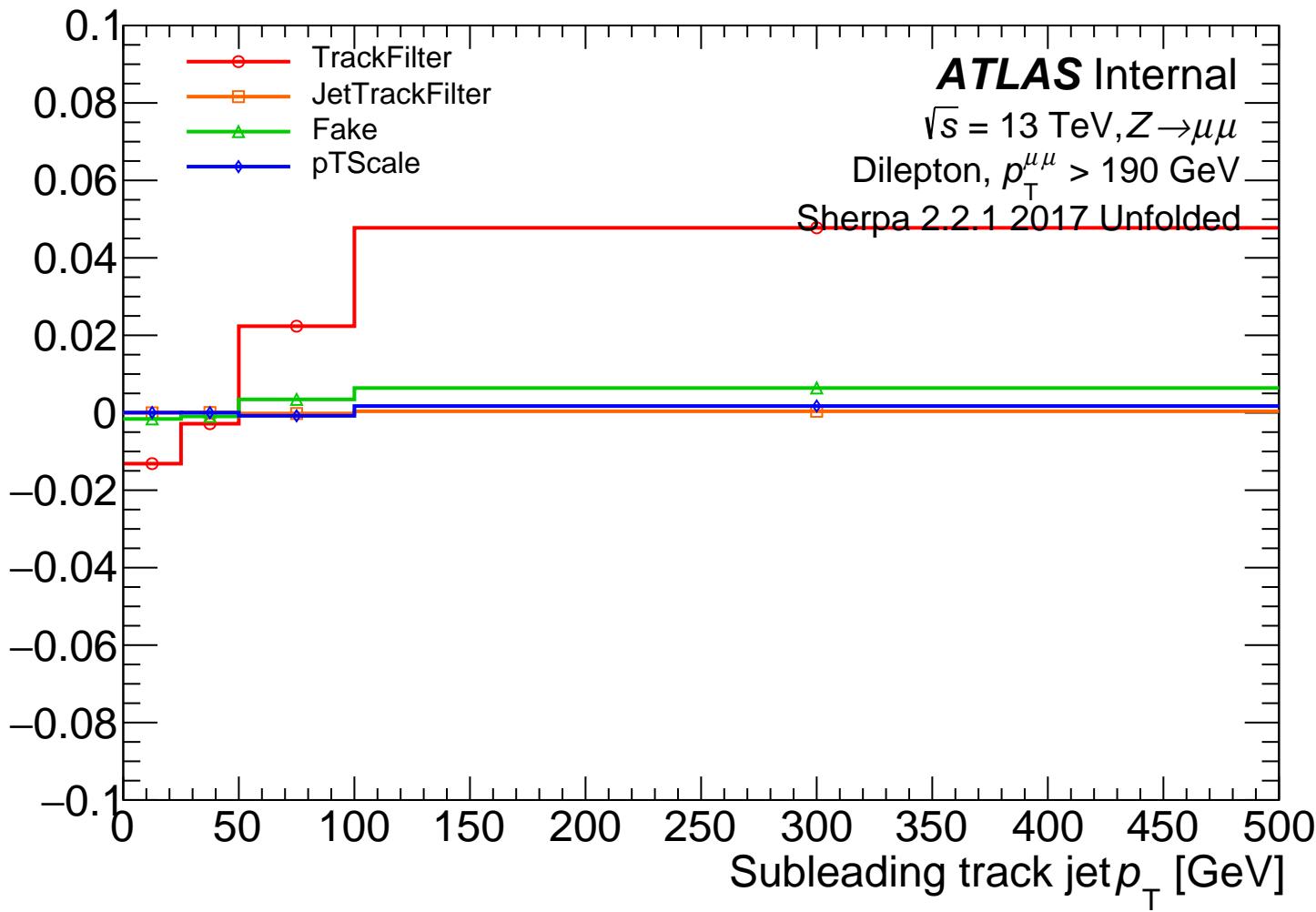


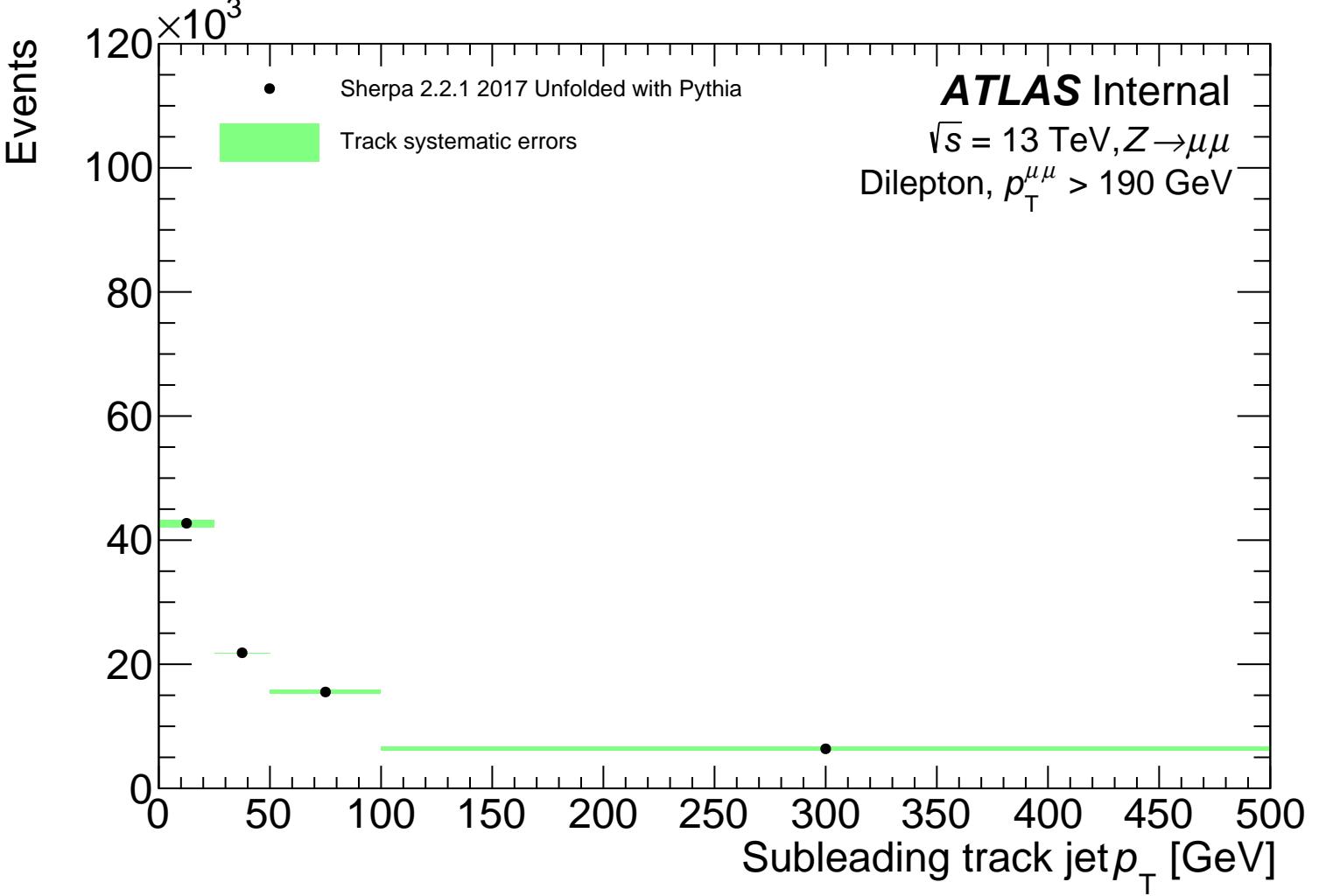


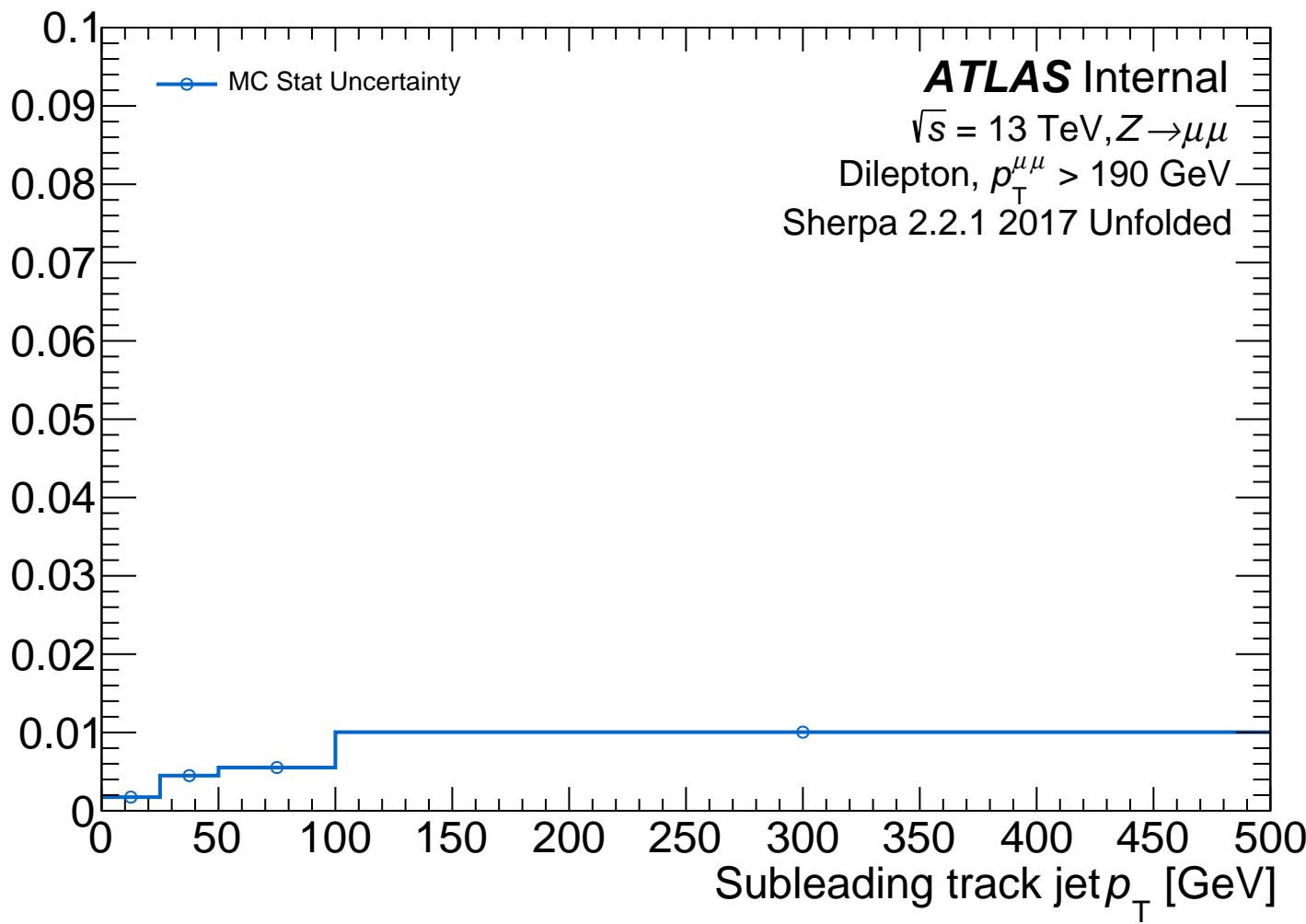


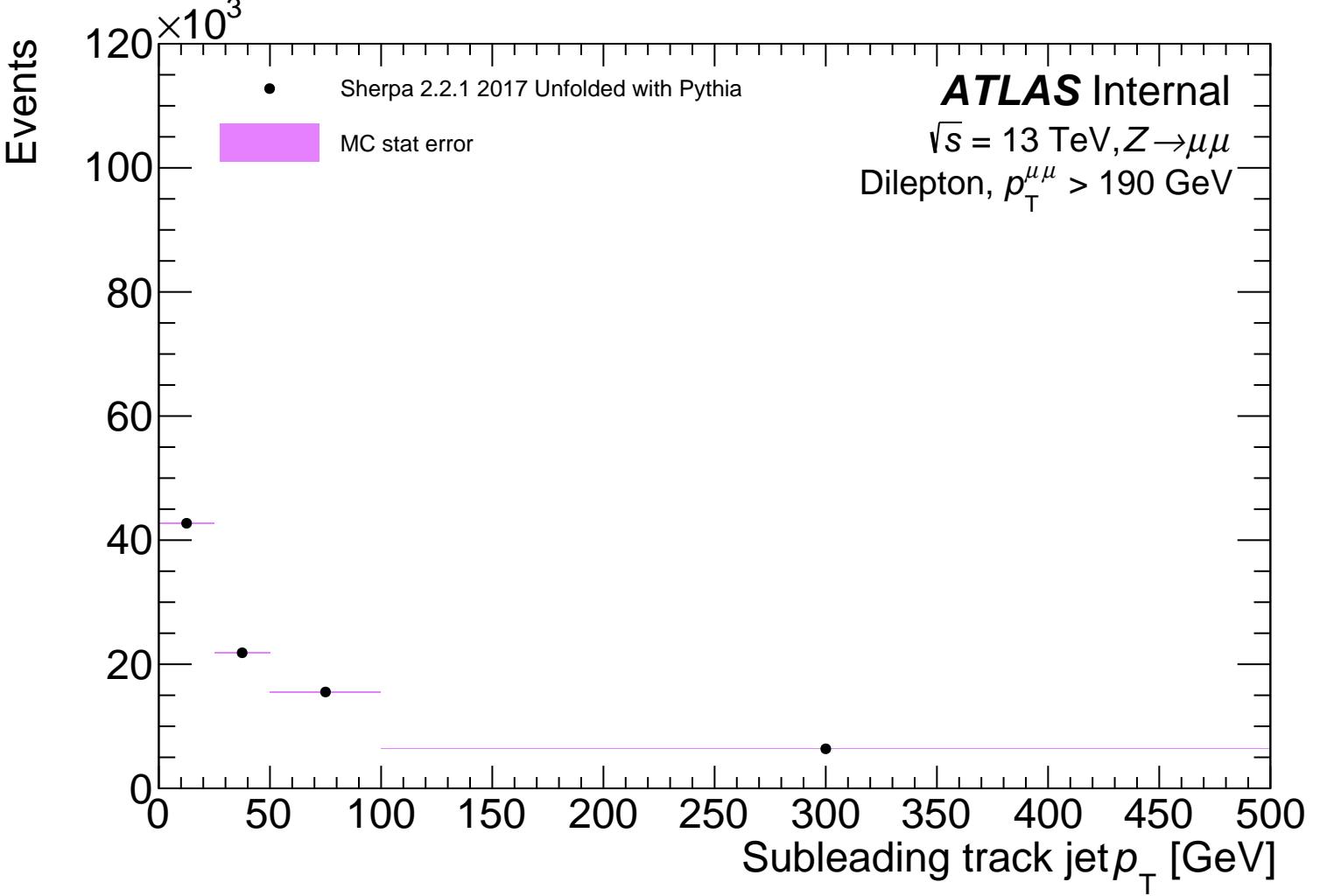


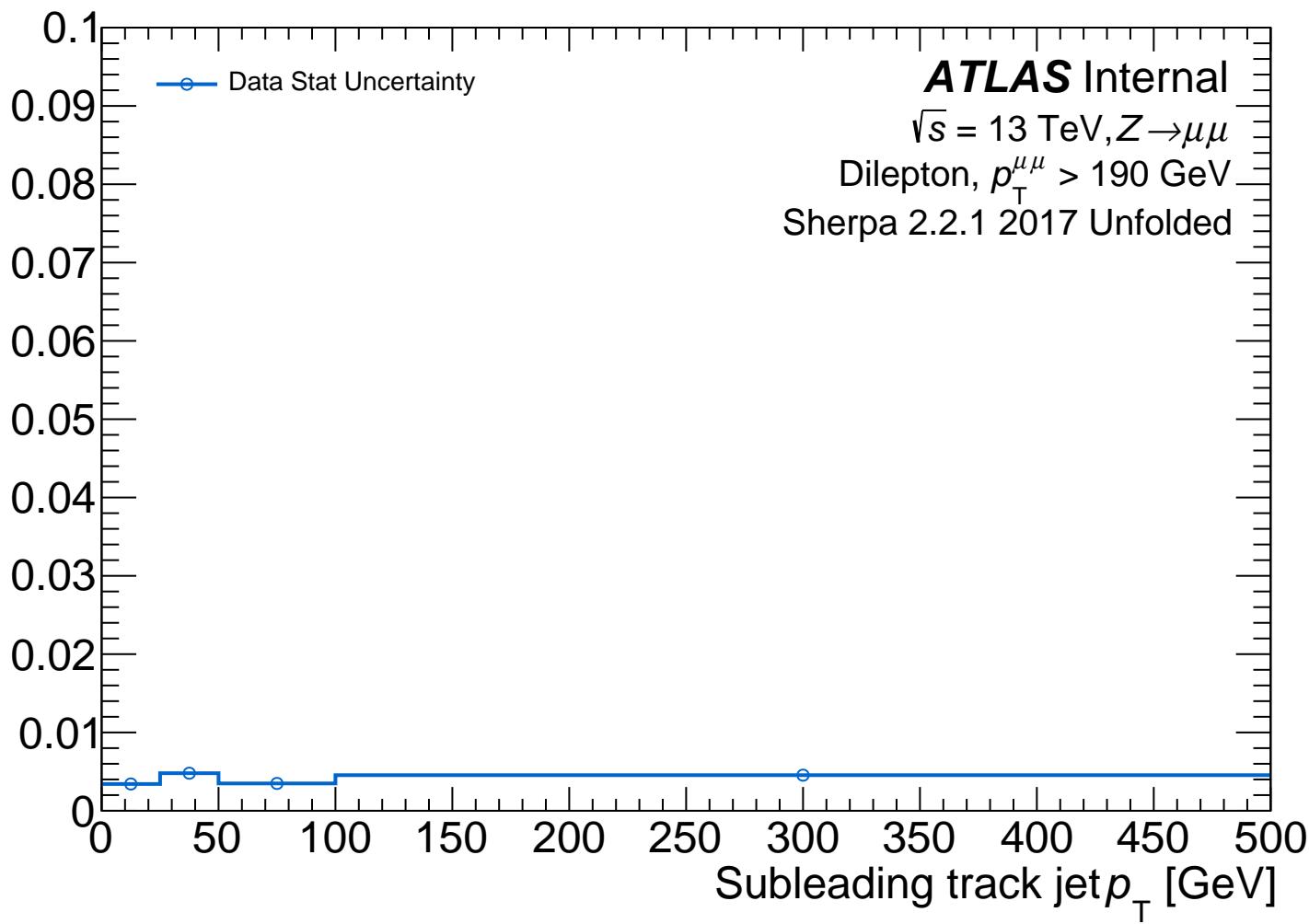


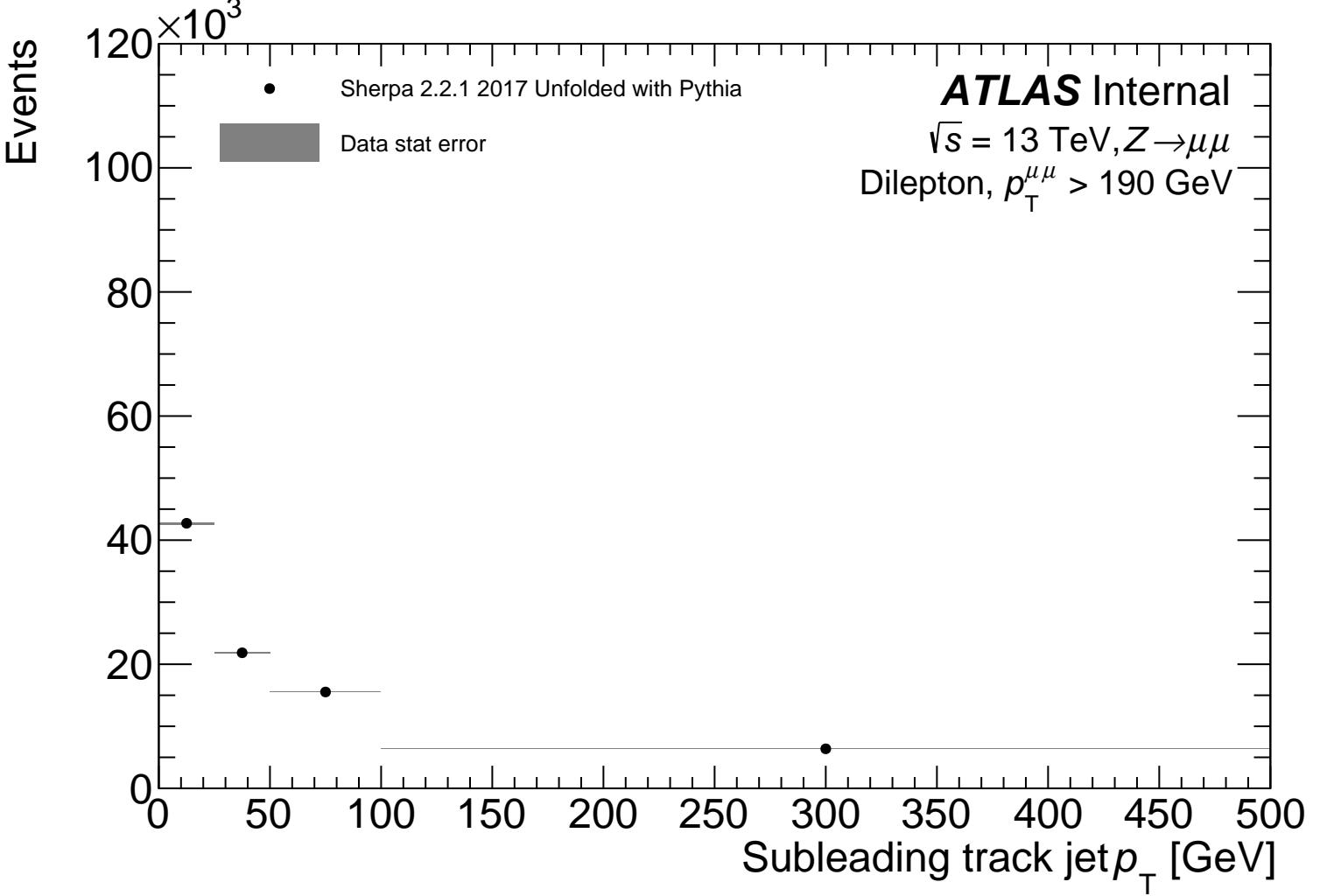


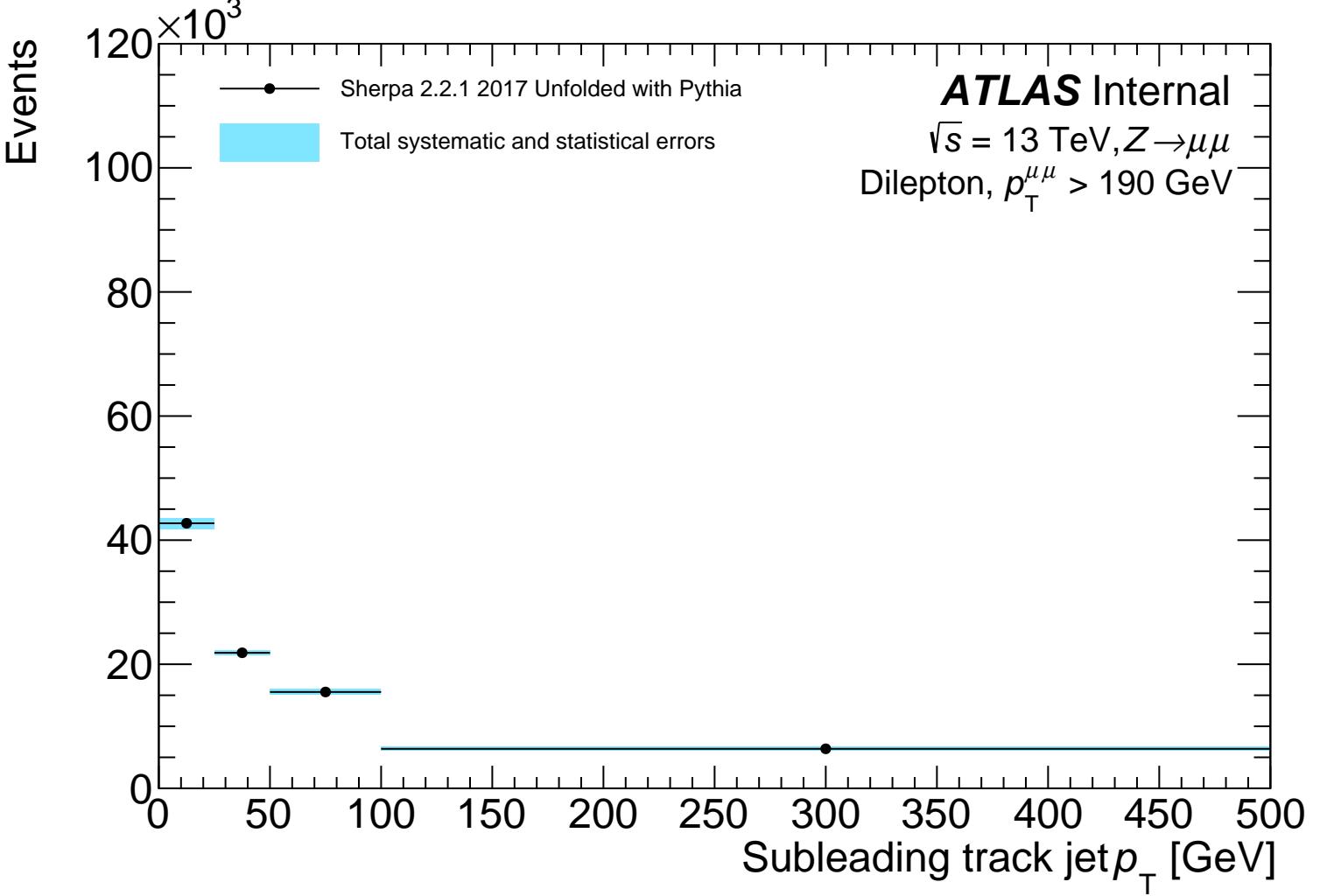


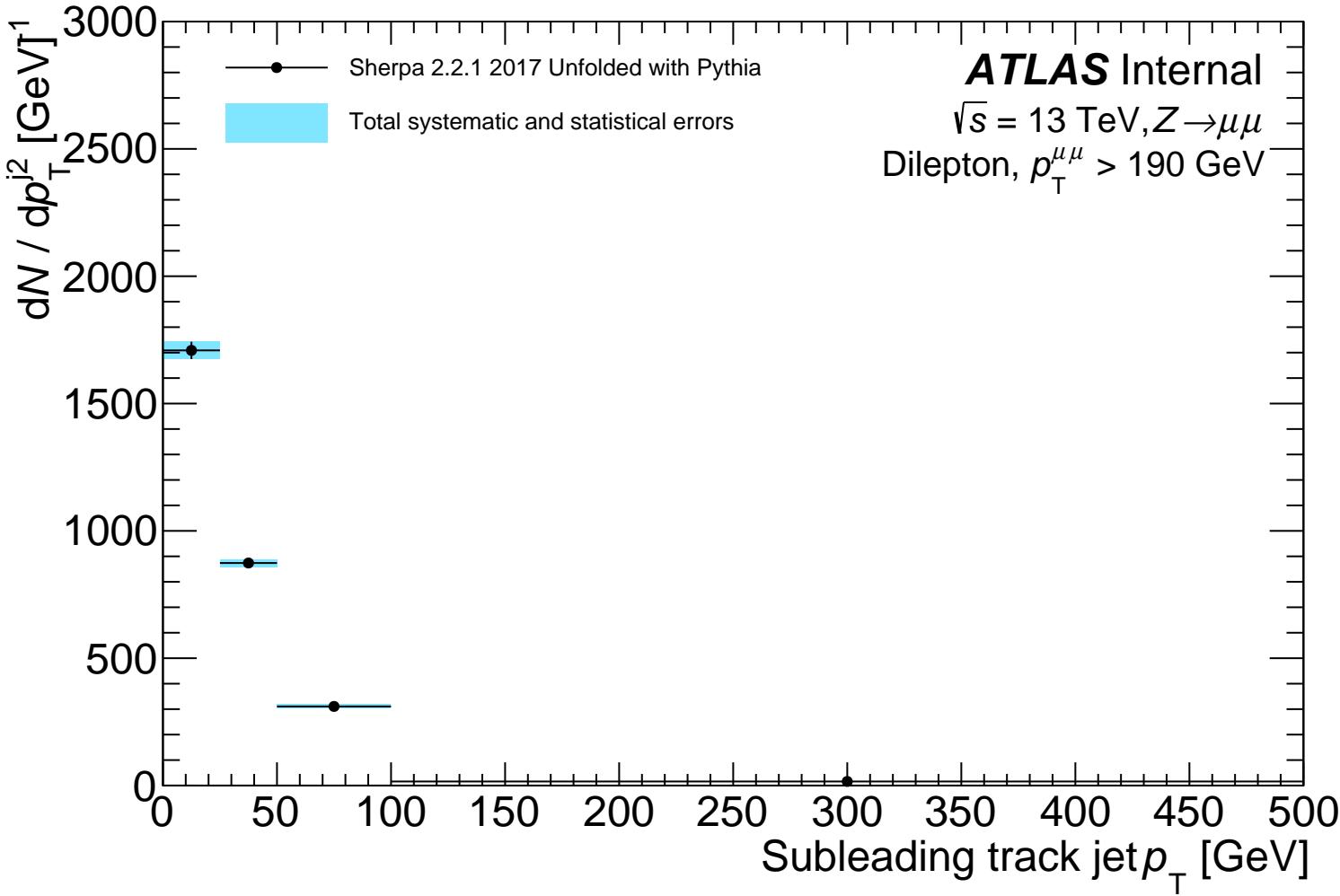










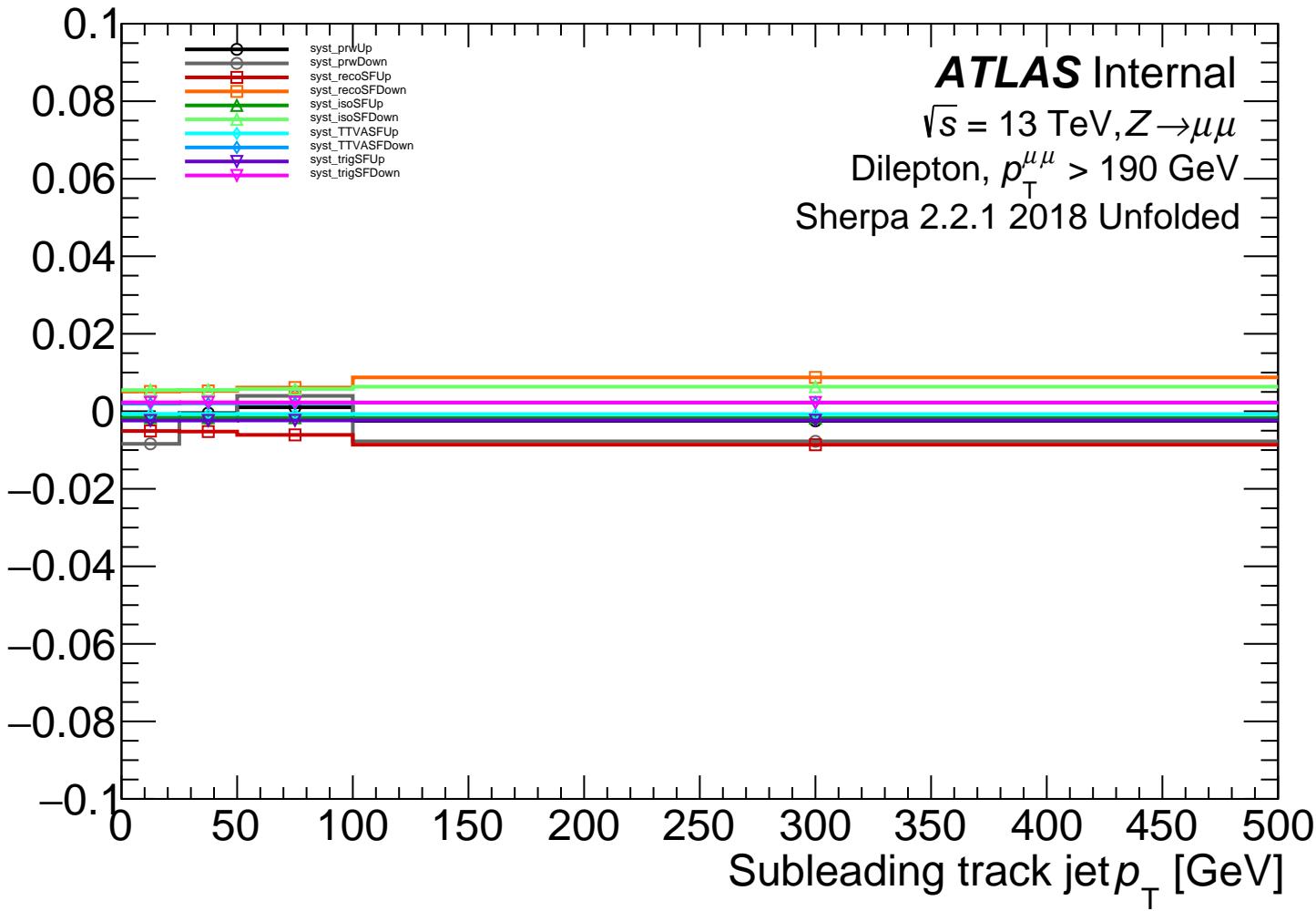


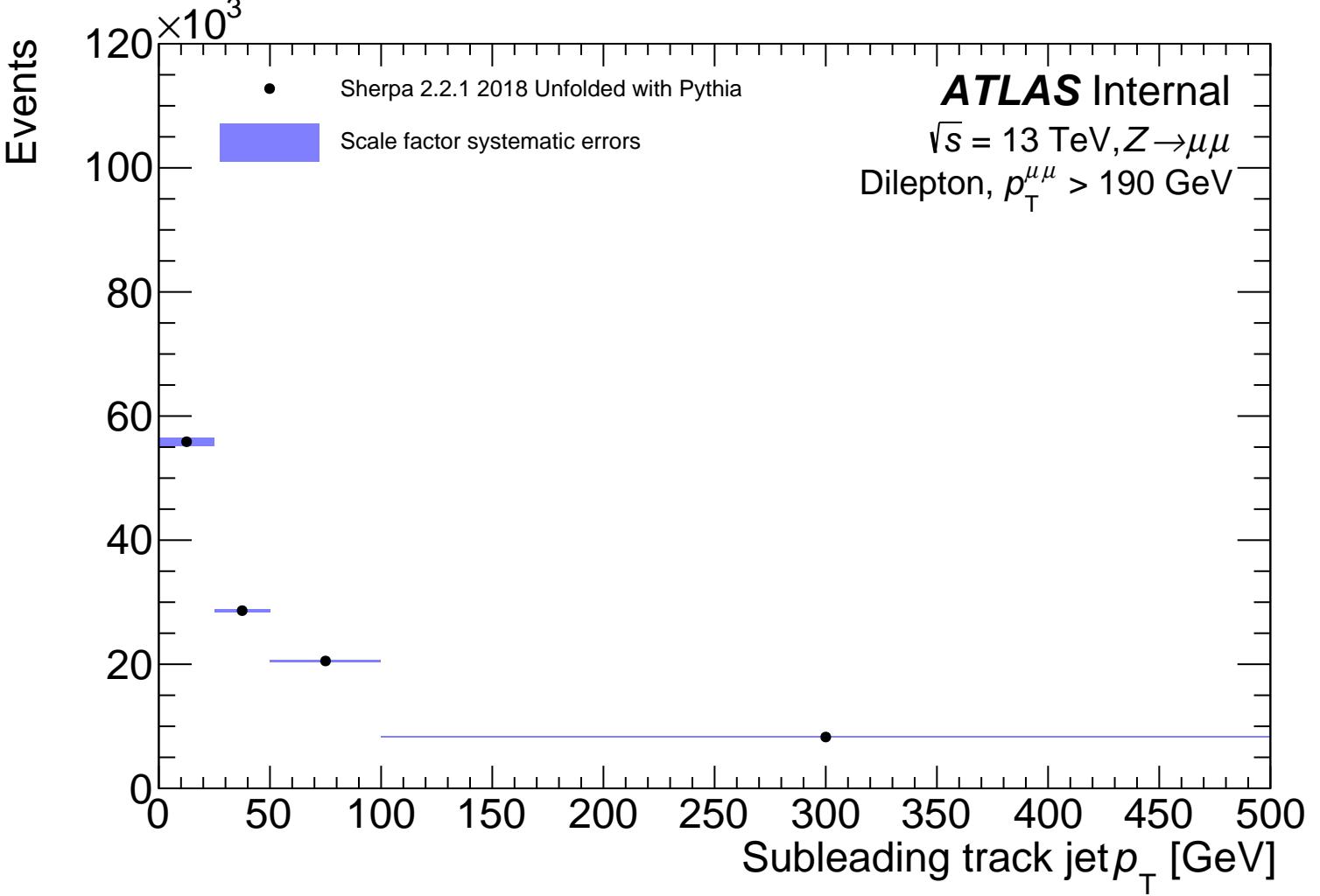
**ATLAS Internal**

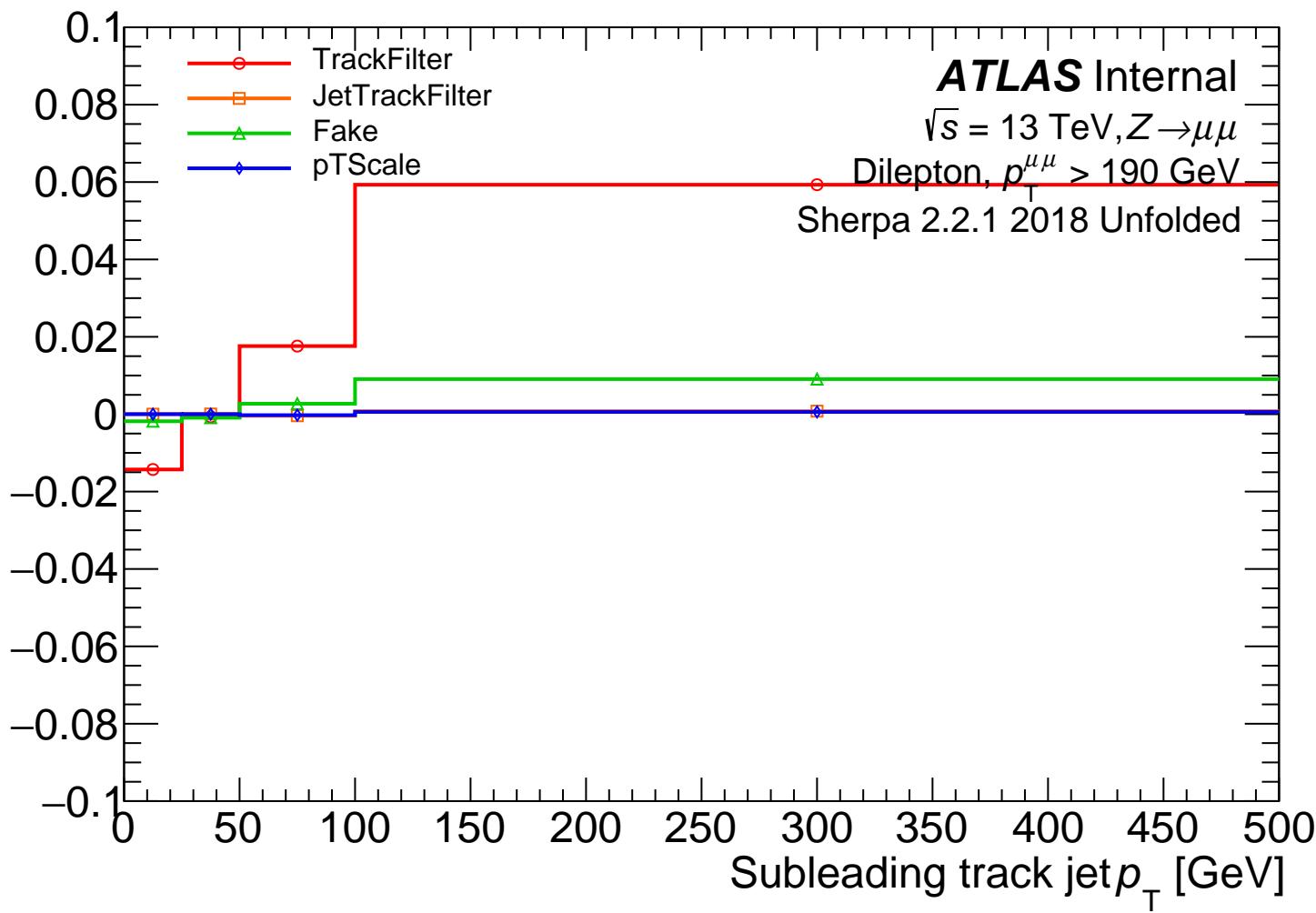
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

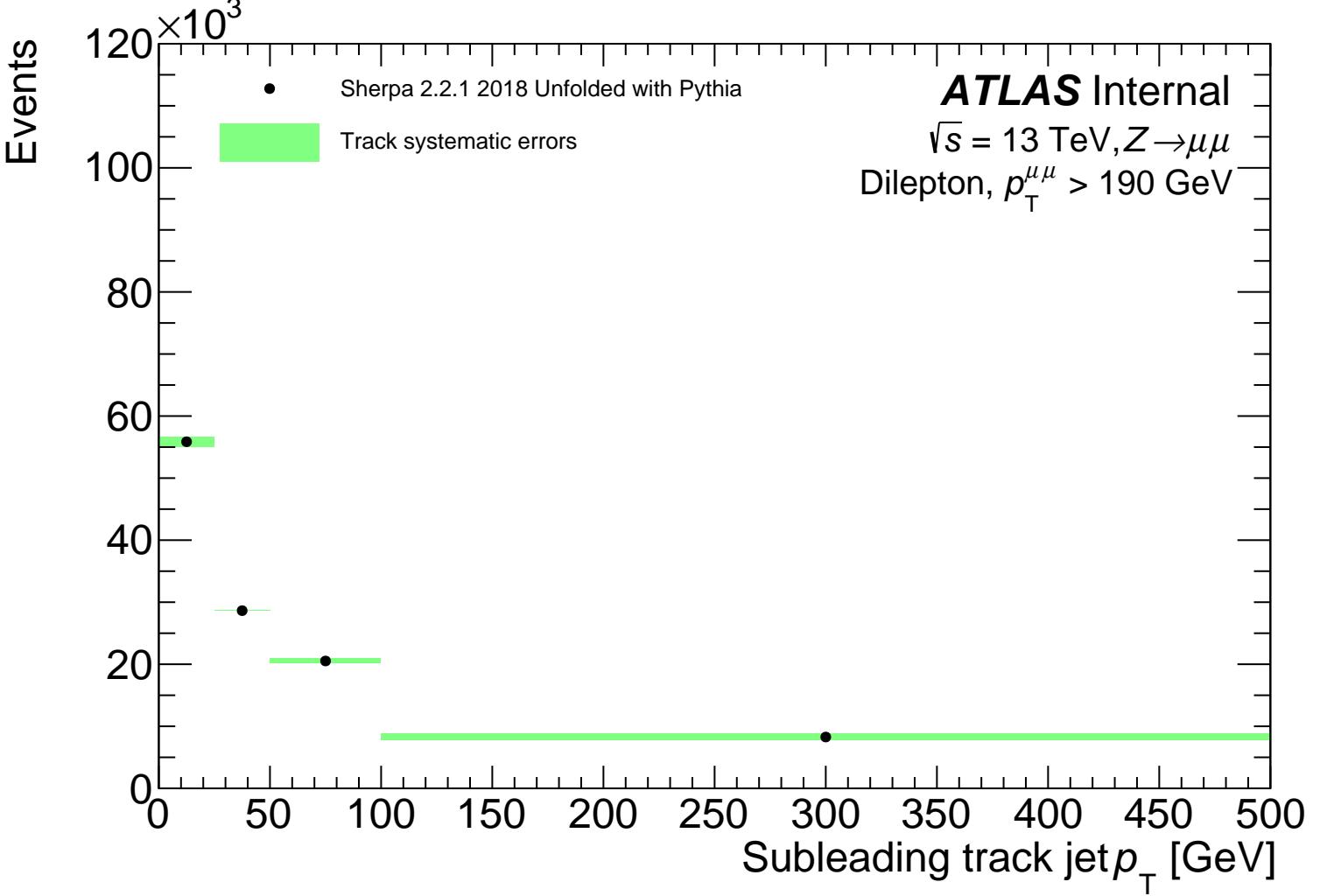
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

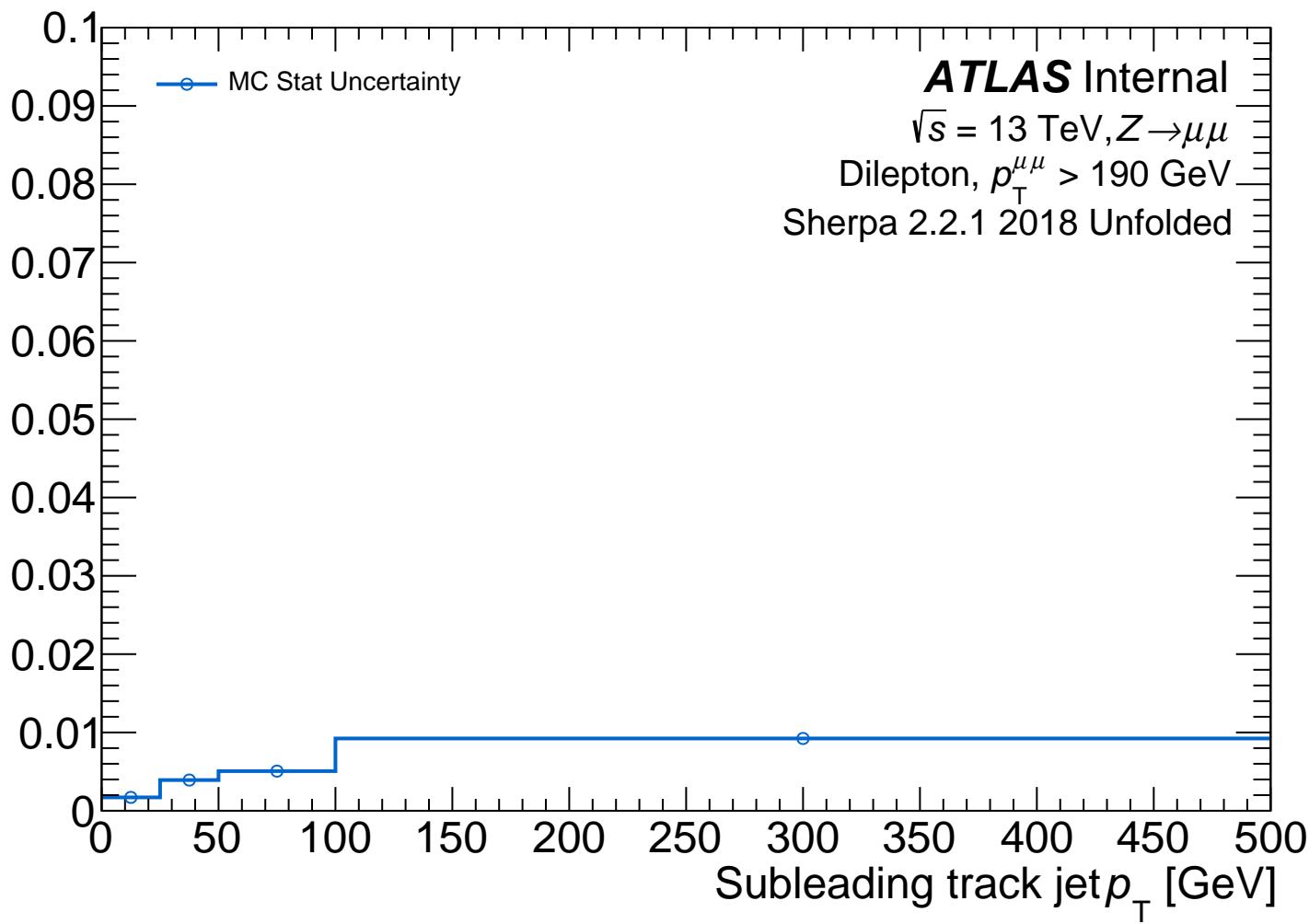
Sherpa 2.2.1 2018 Unfolded

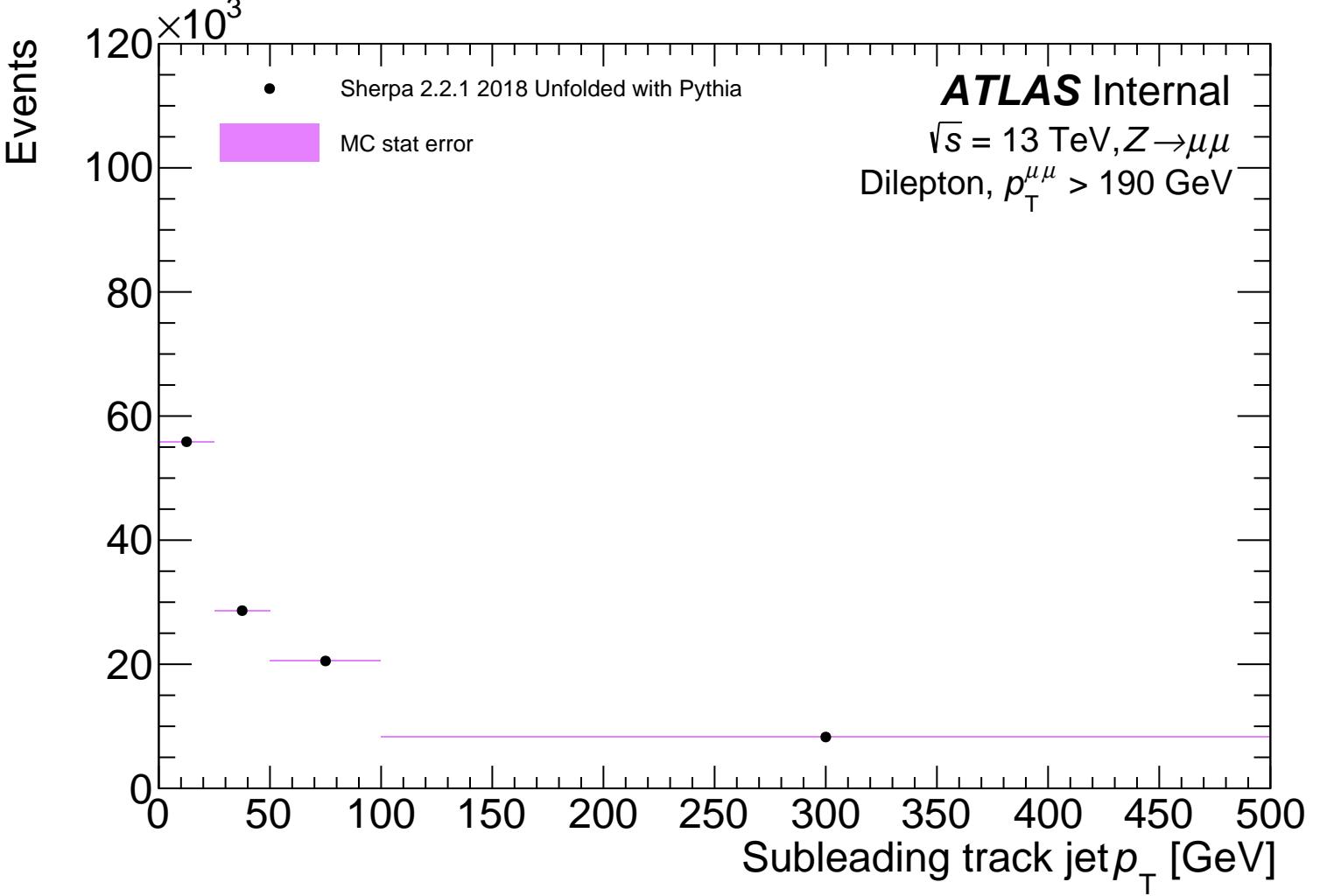


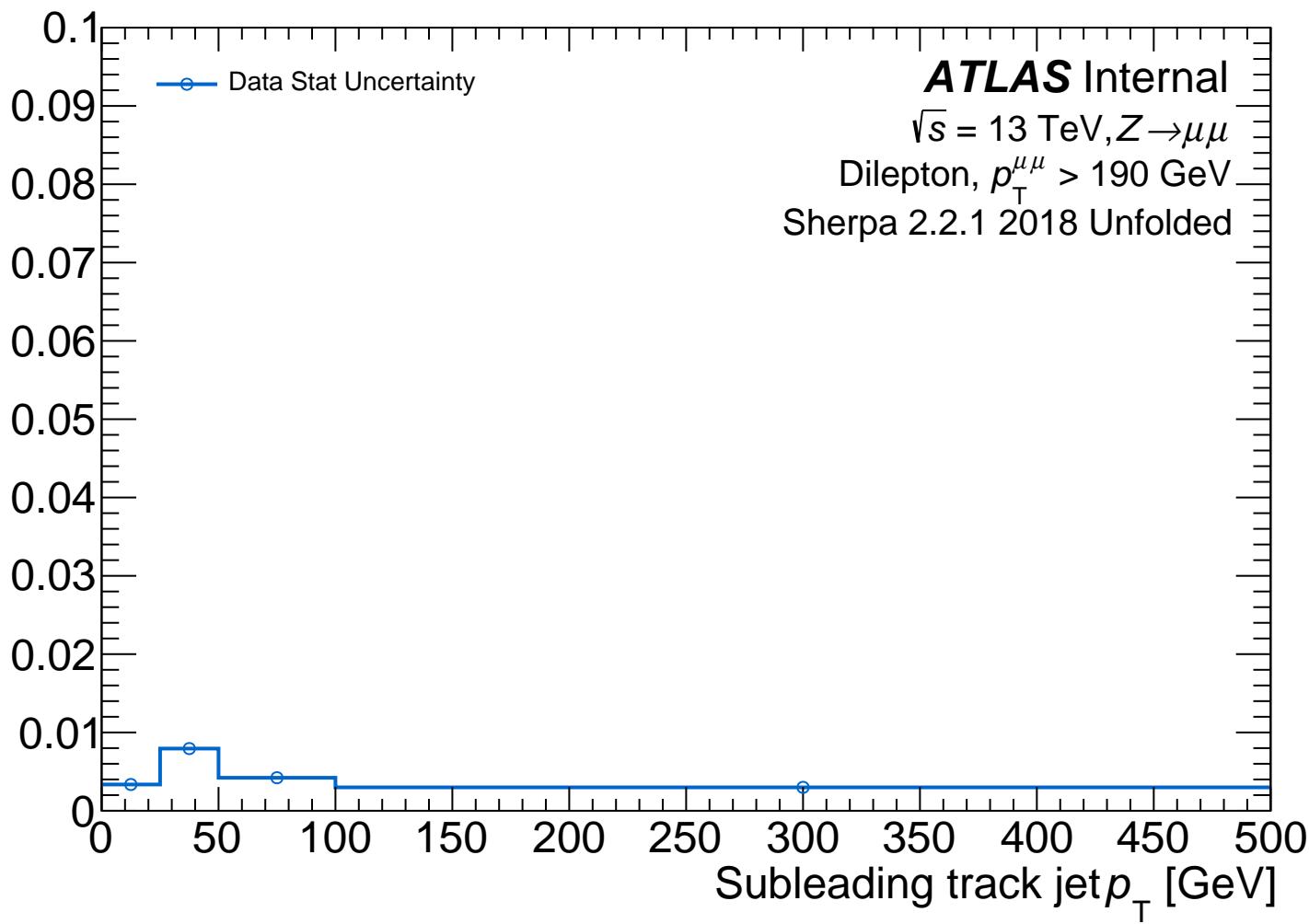


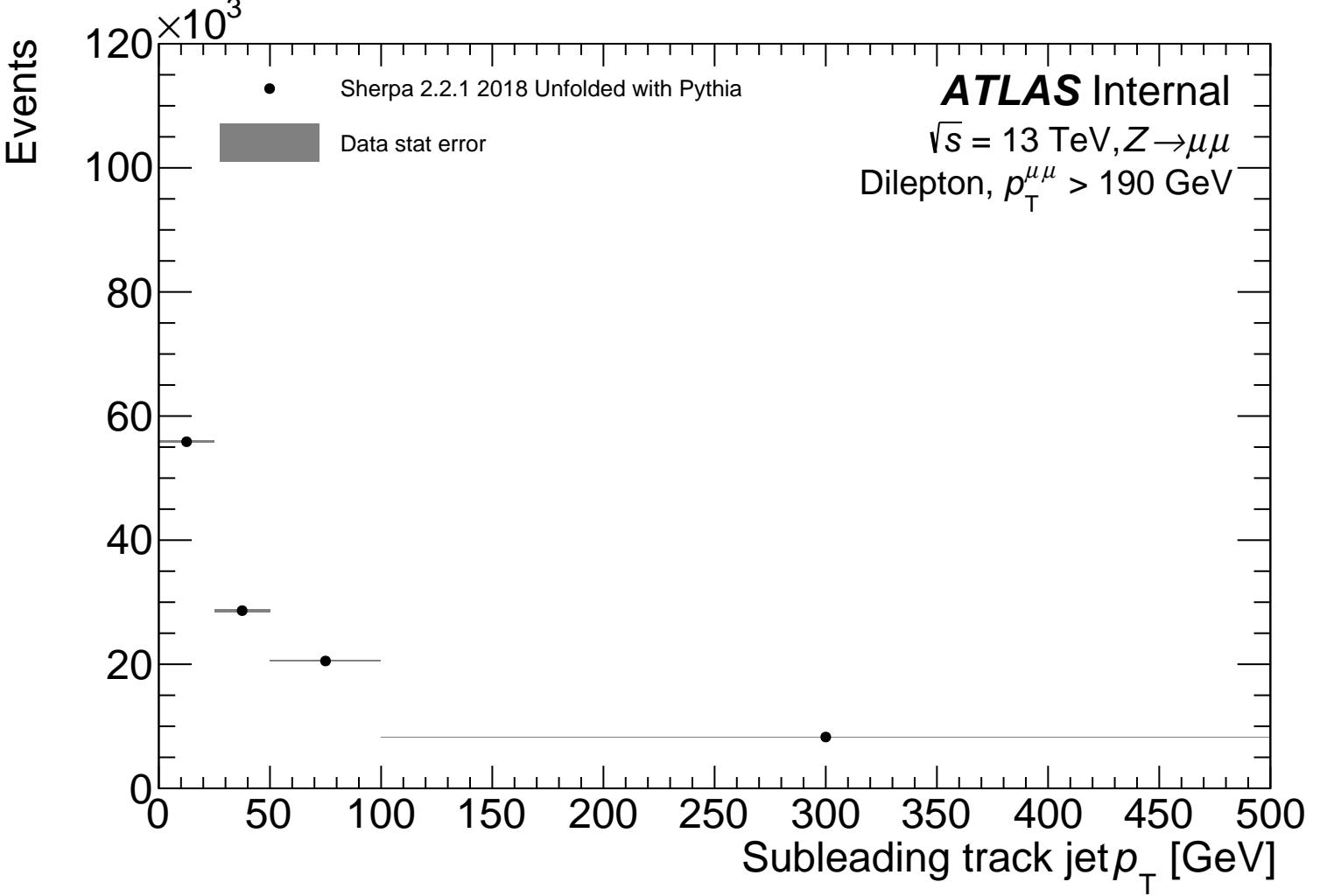


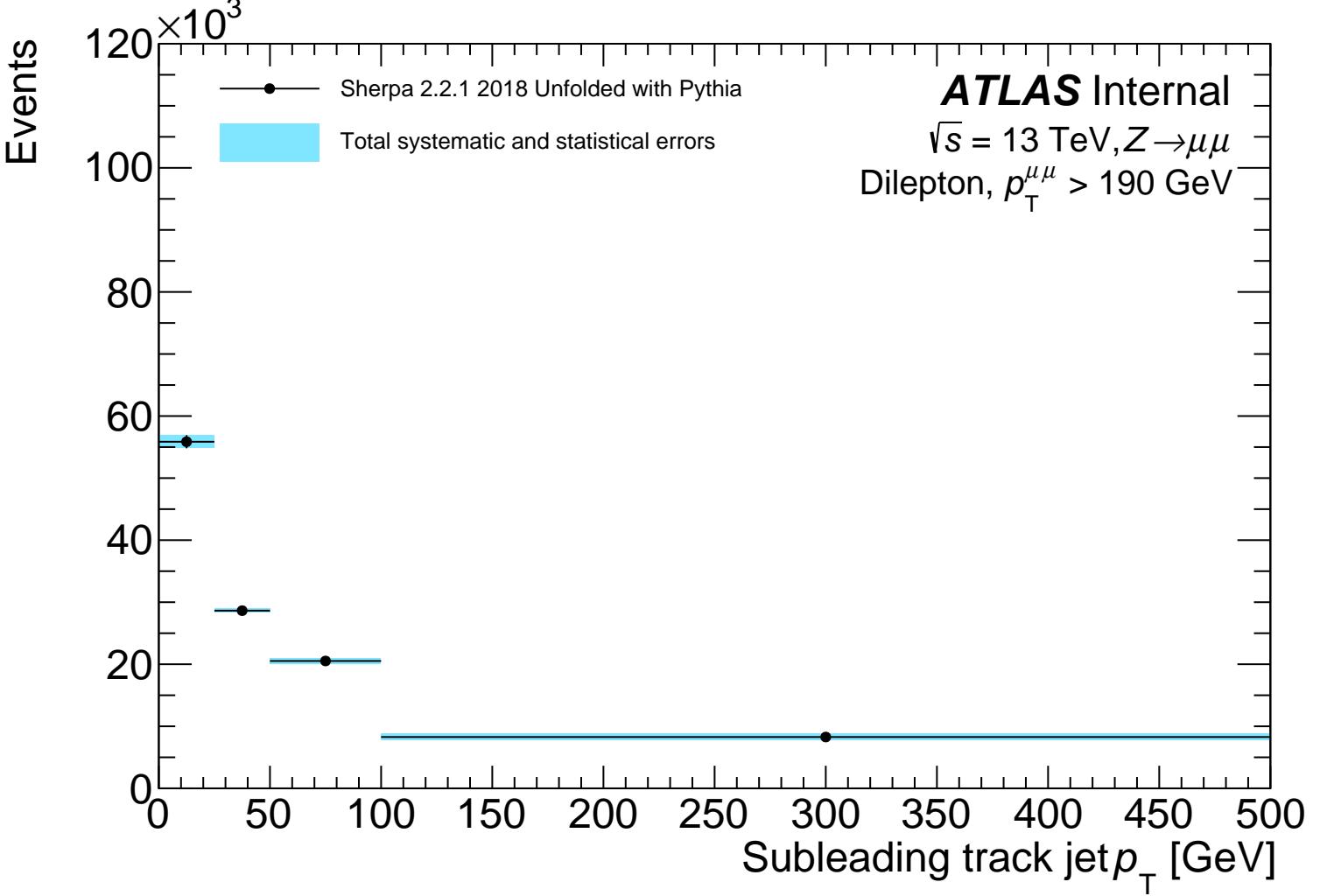


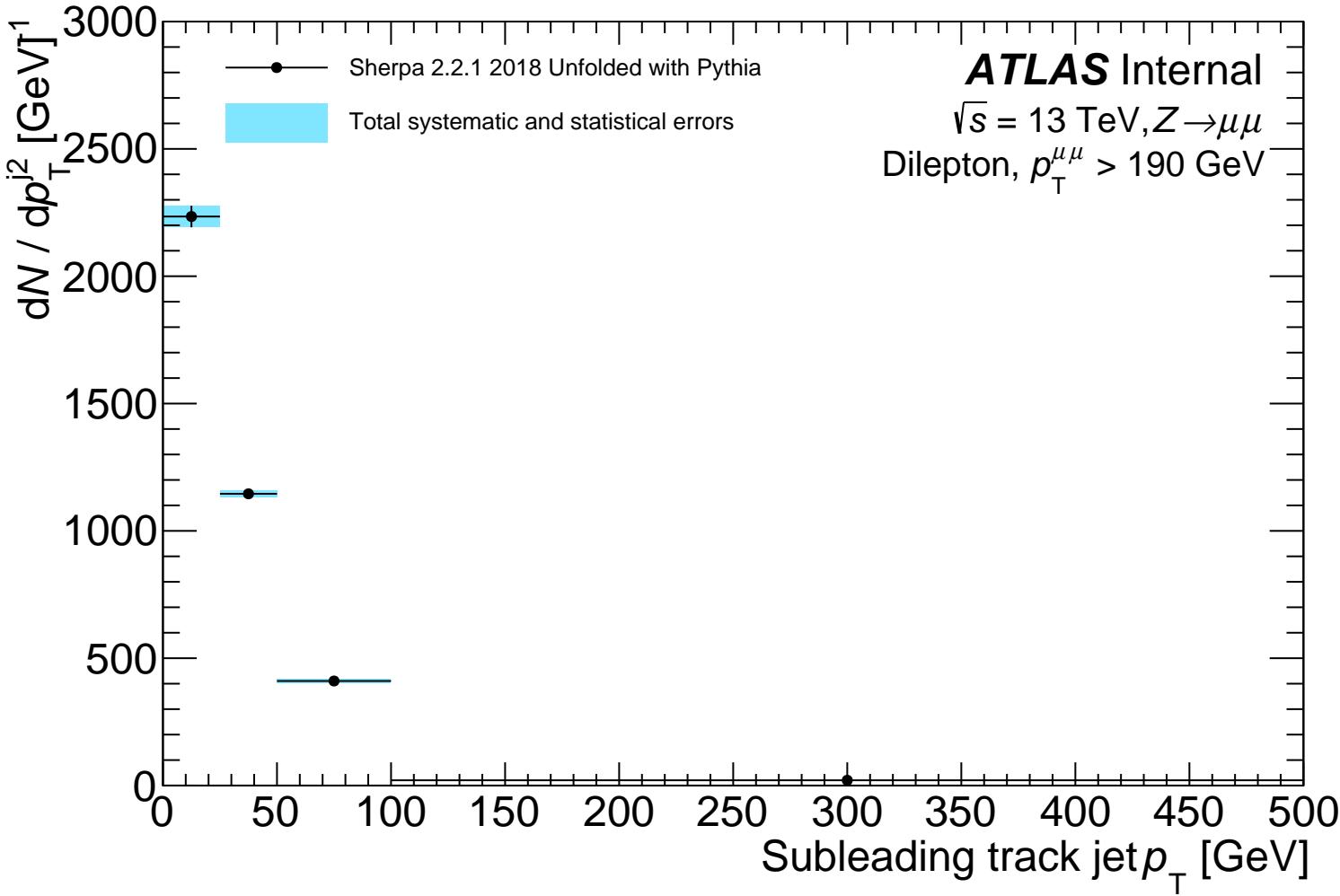










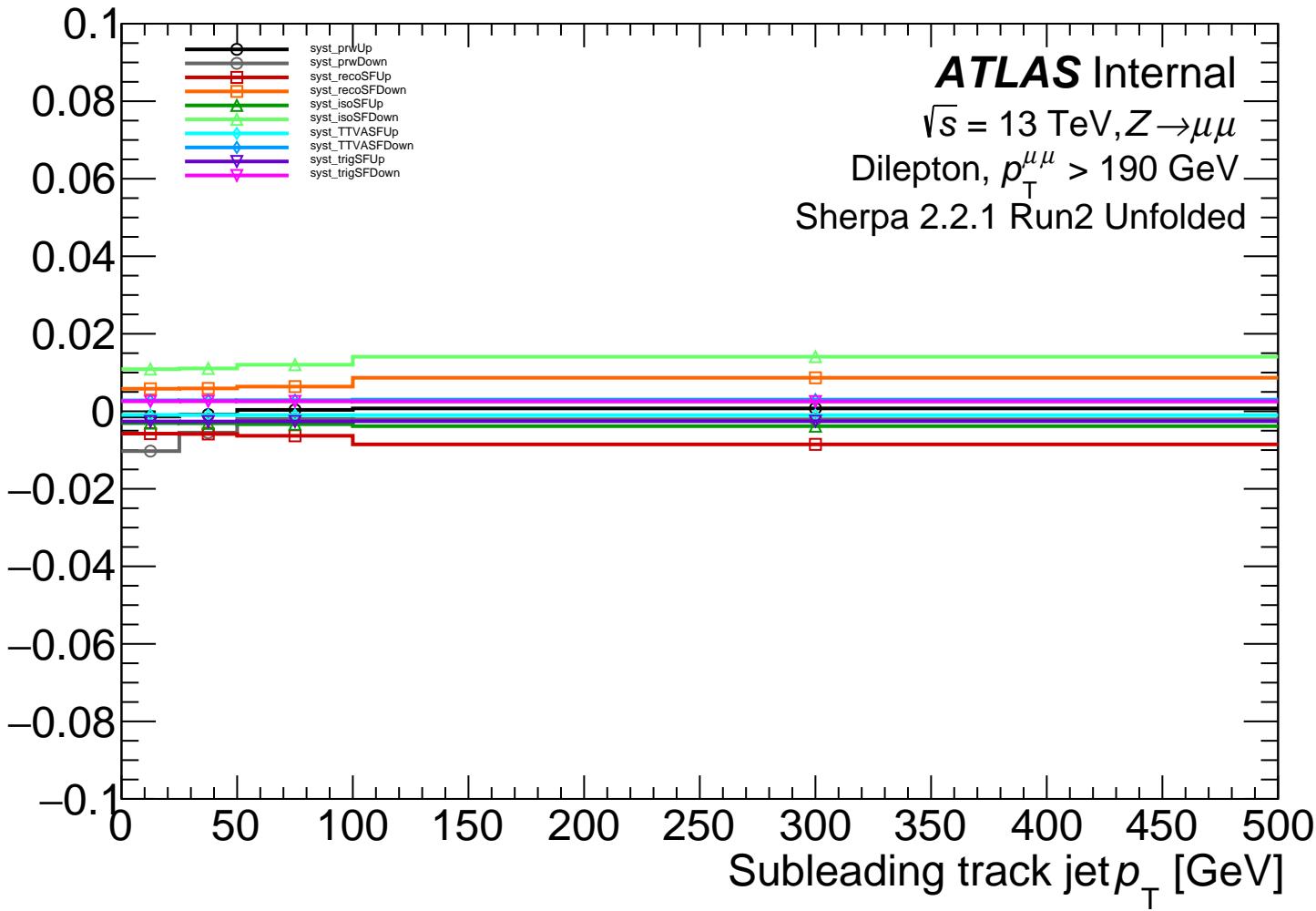


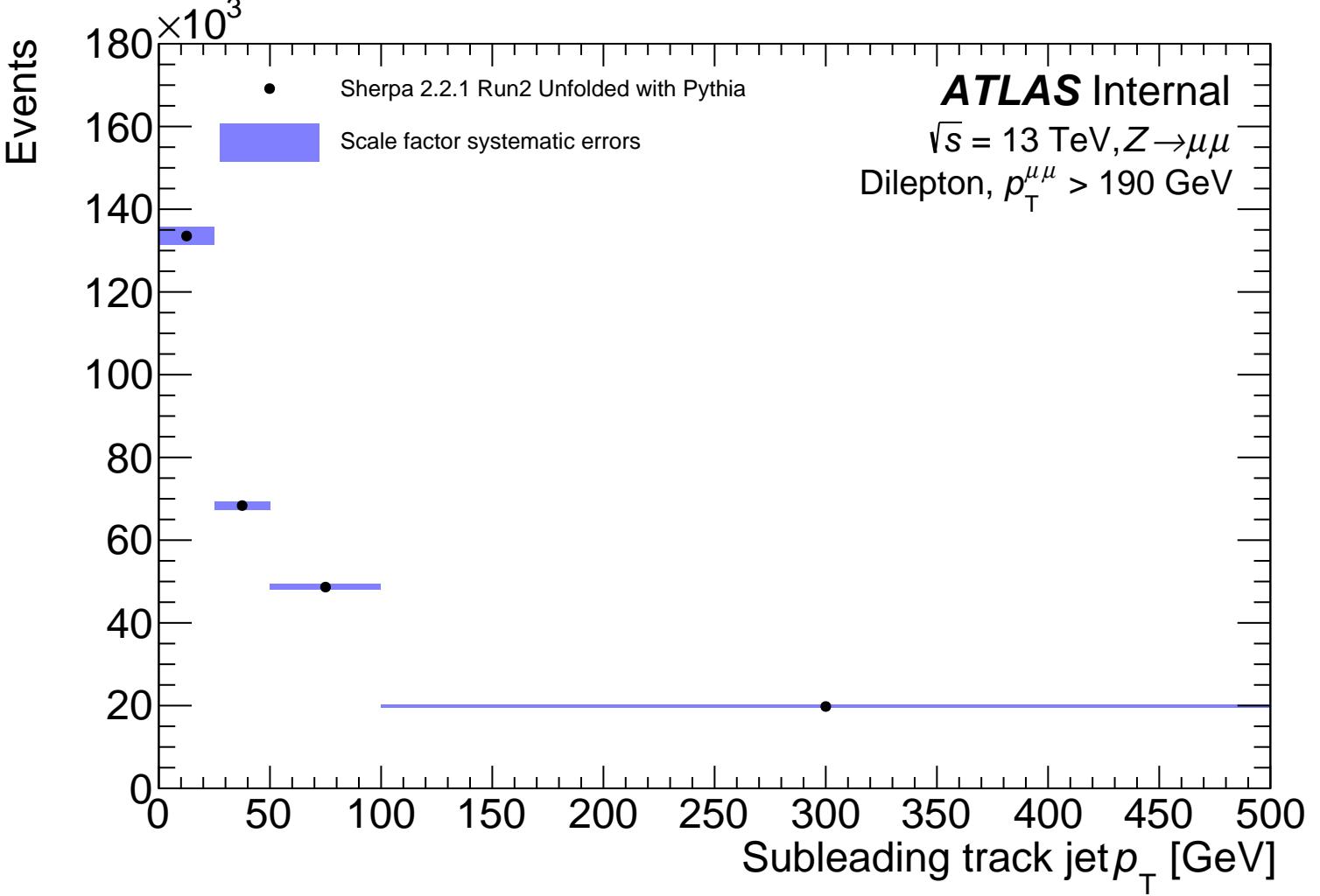
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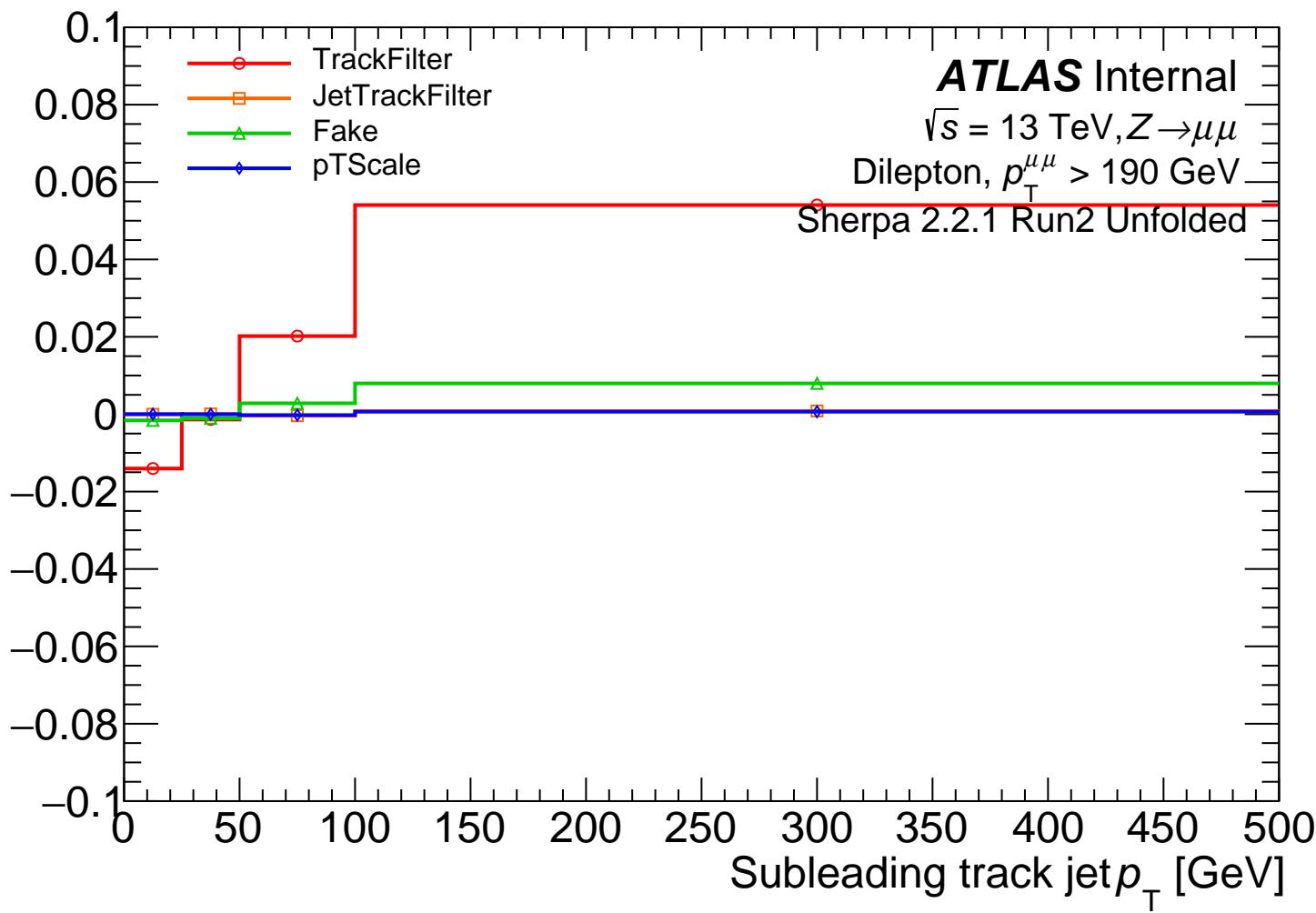
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

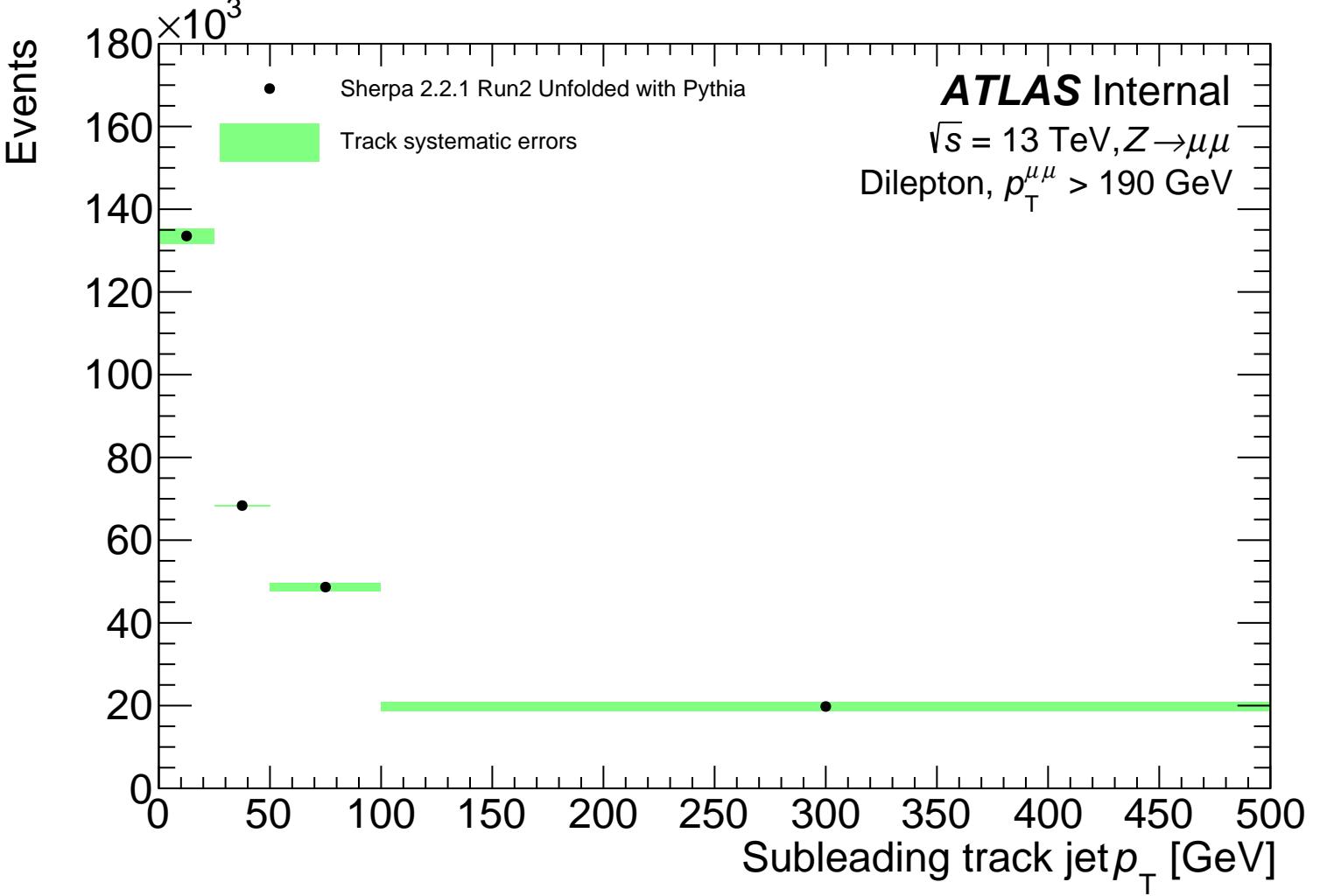
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

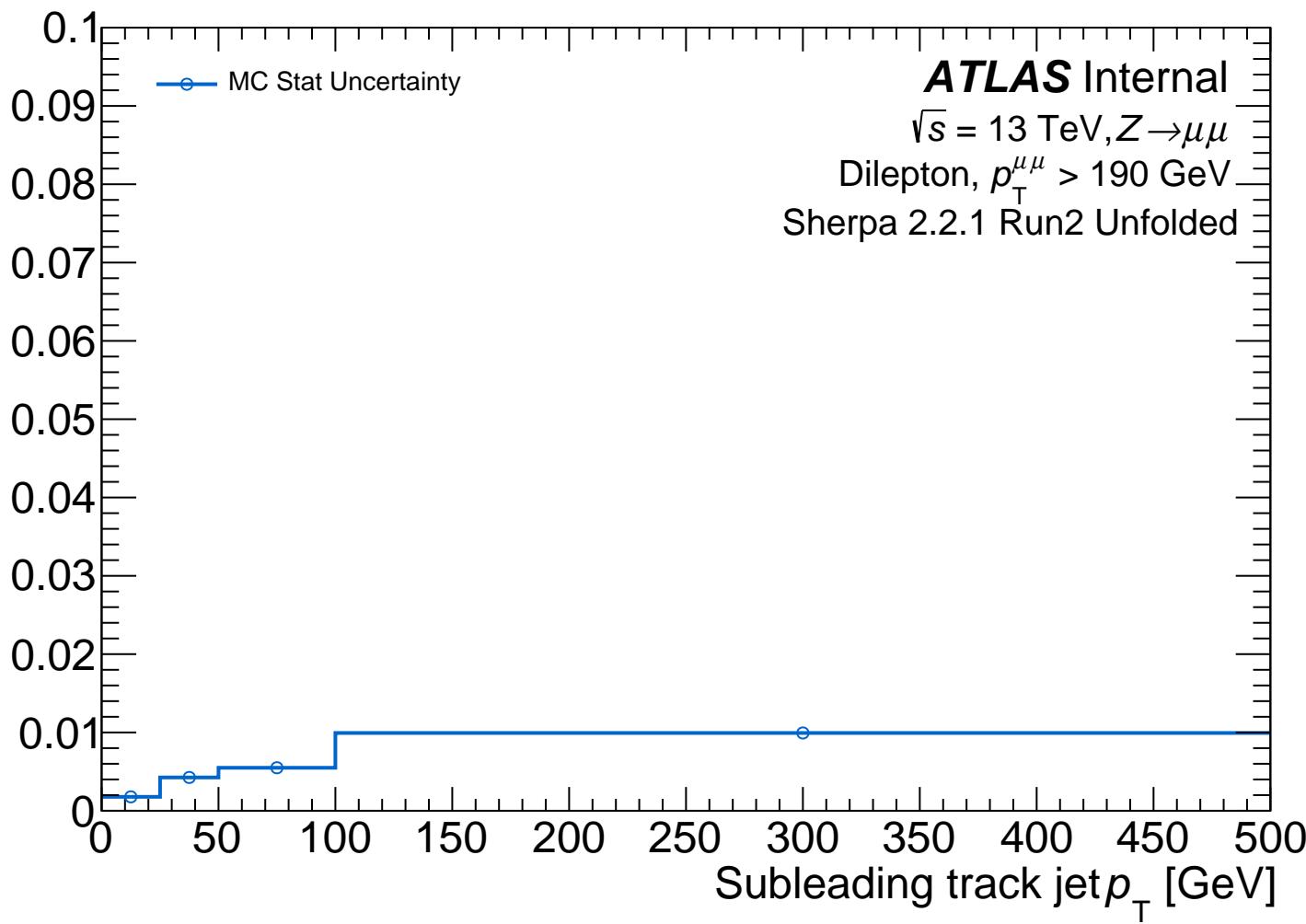
Sherpa 2.2.1 Run2 Unfolded

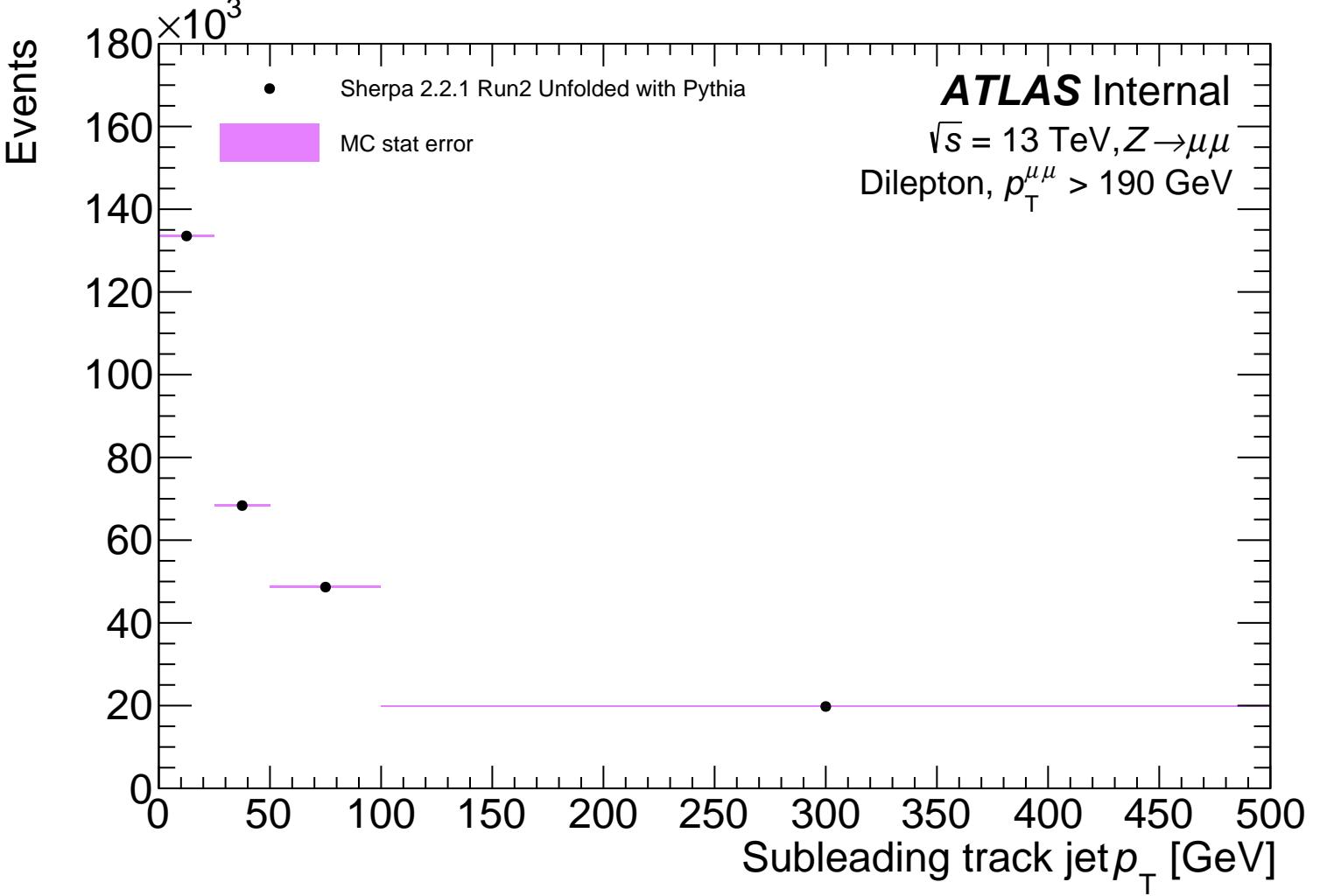


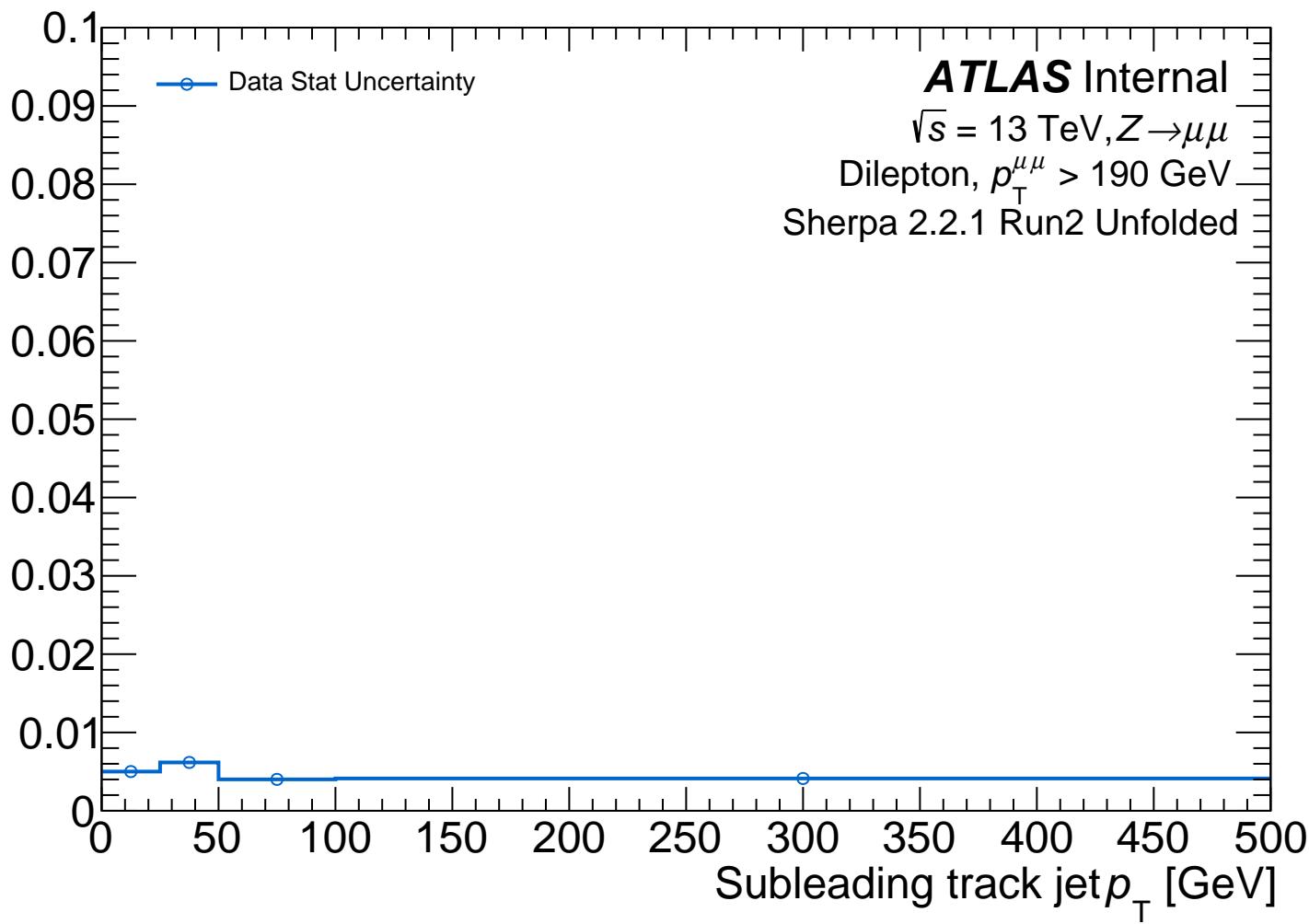


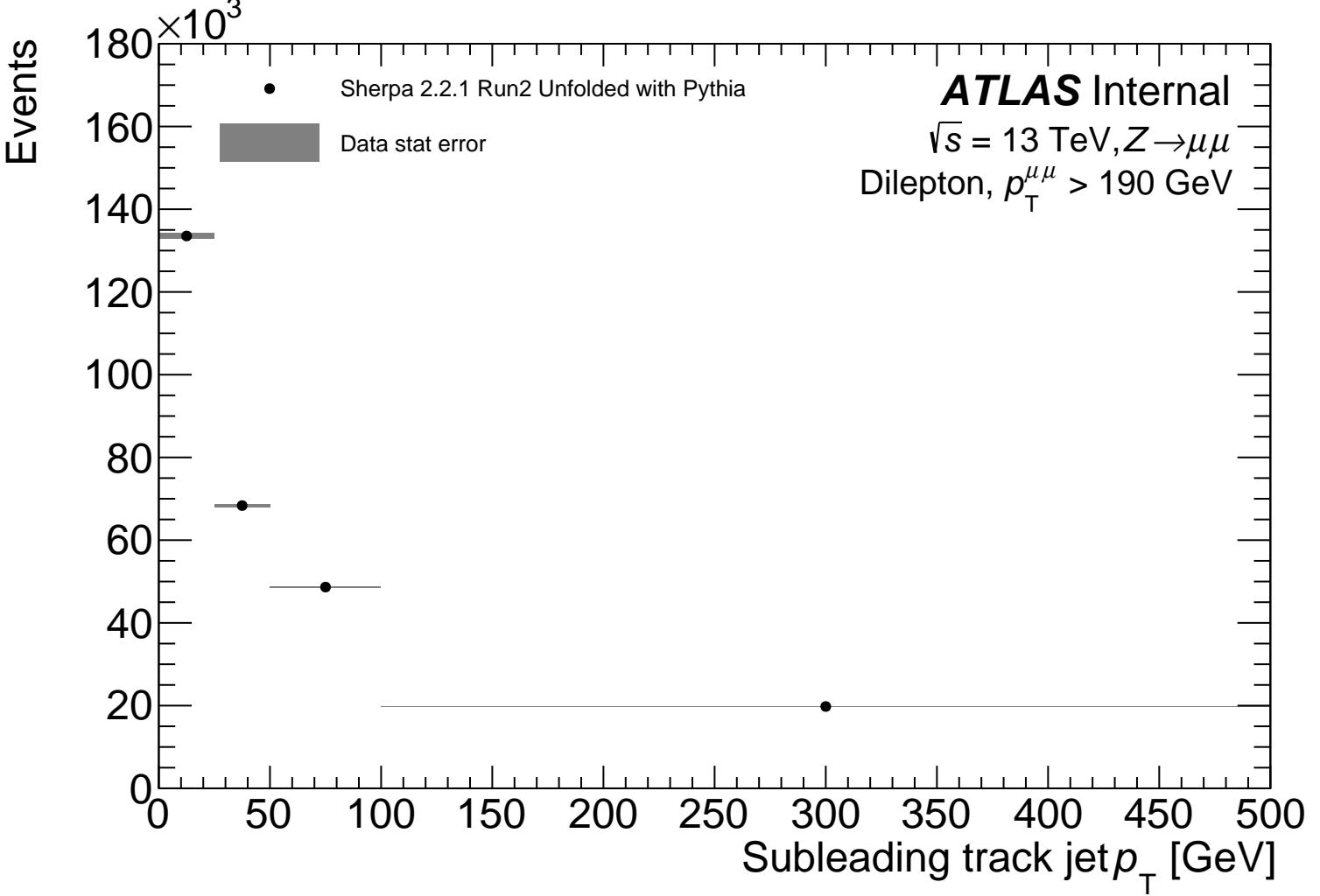


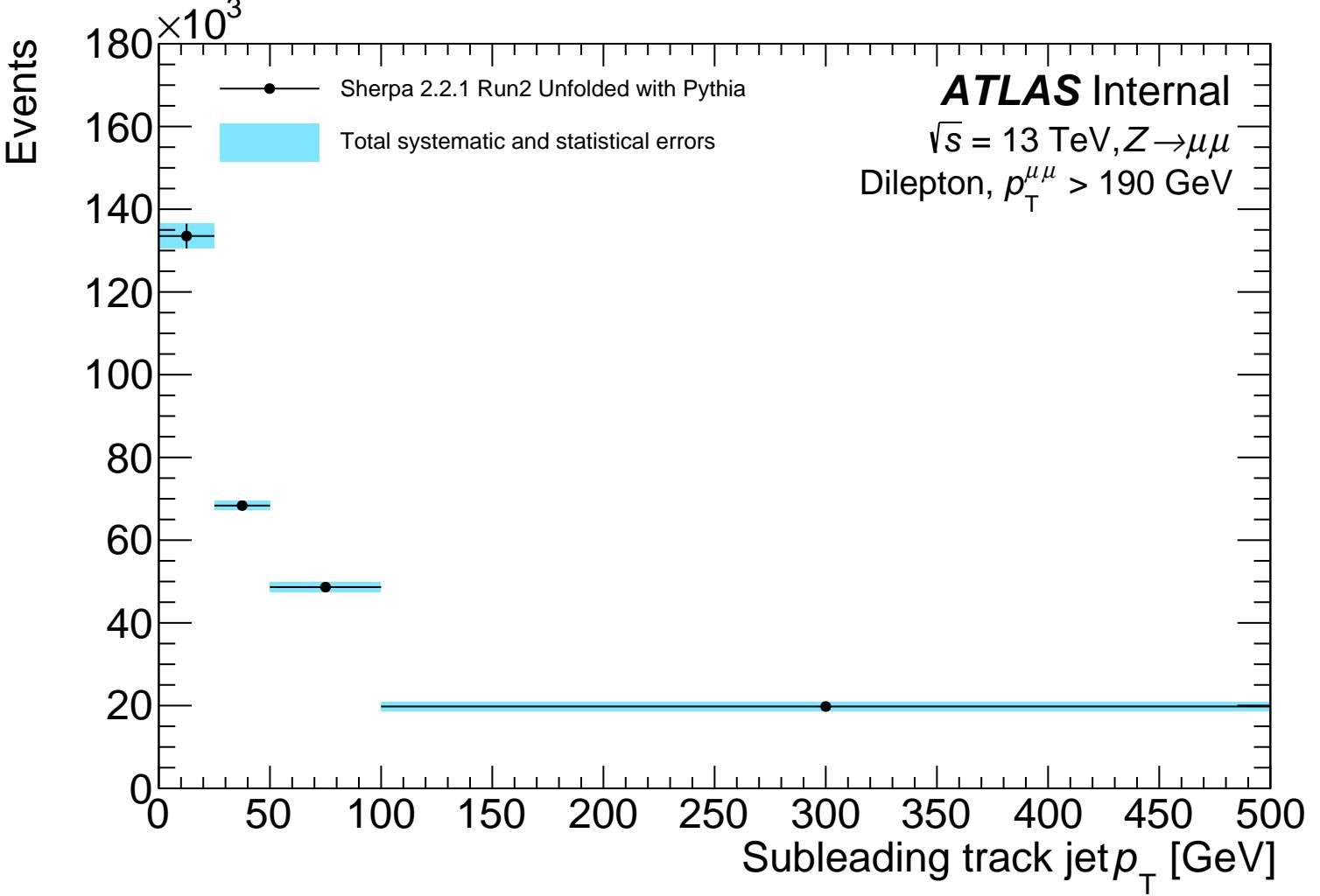


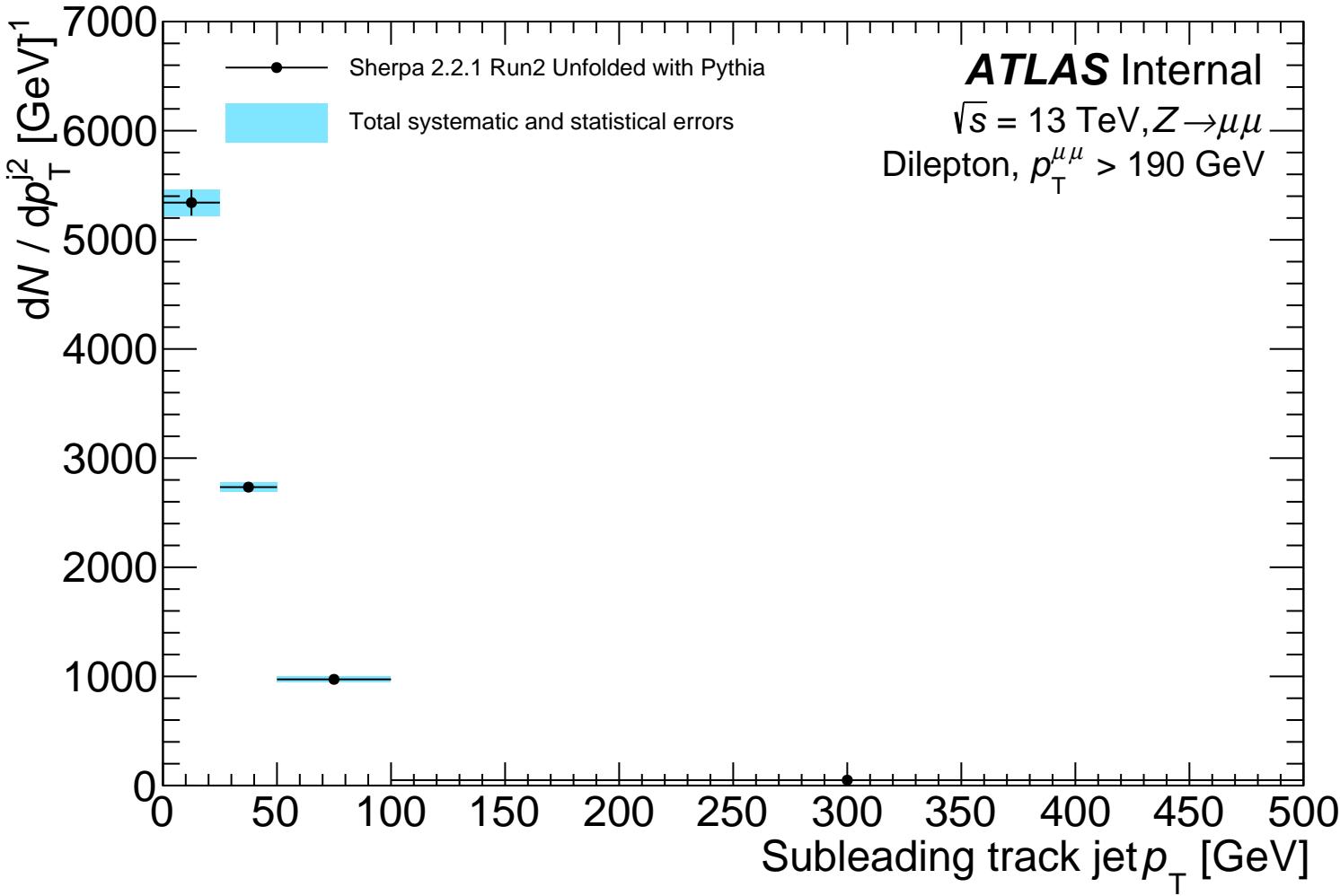










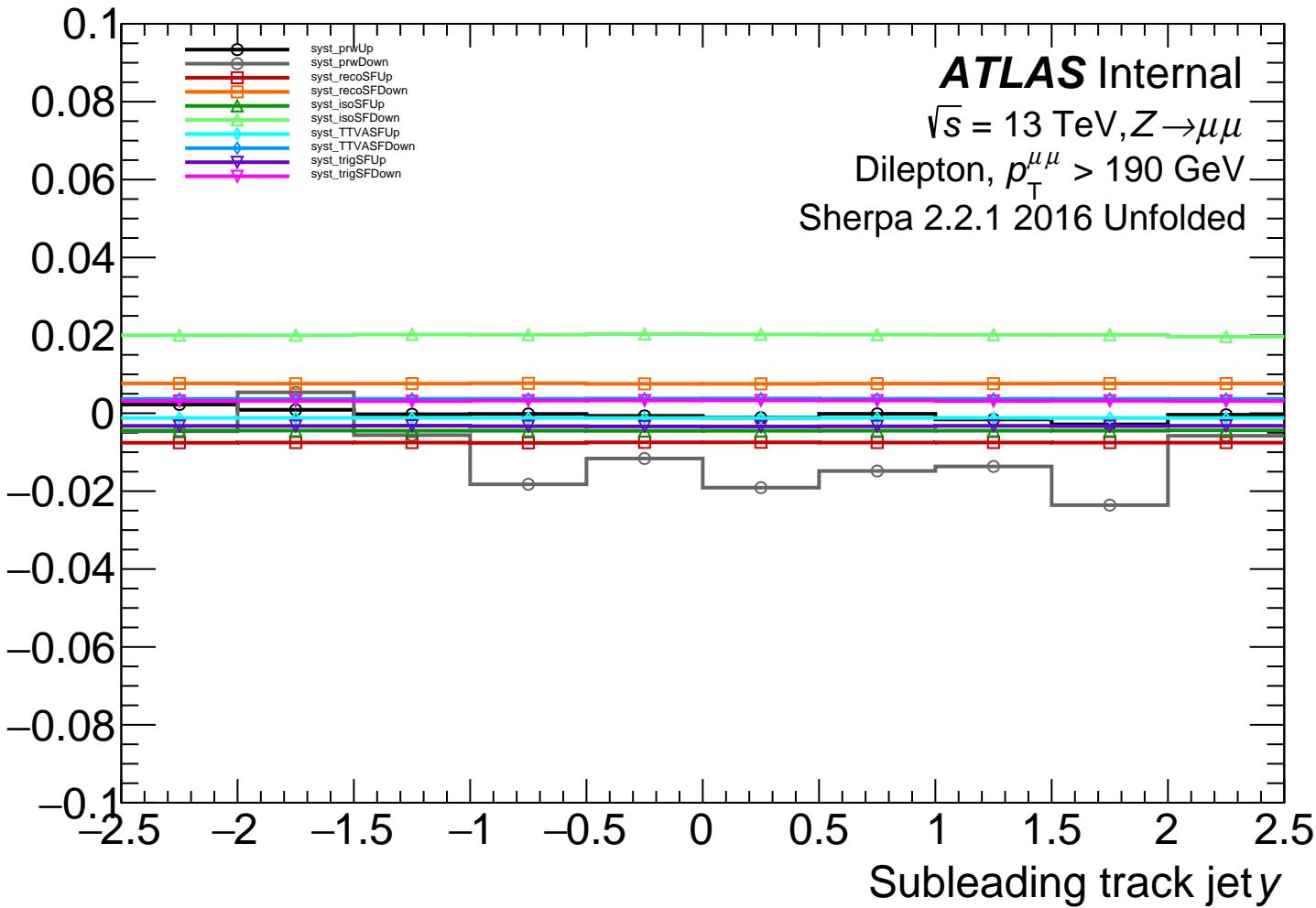


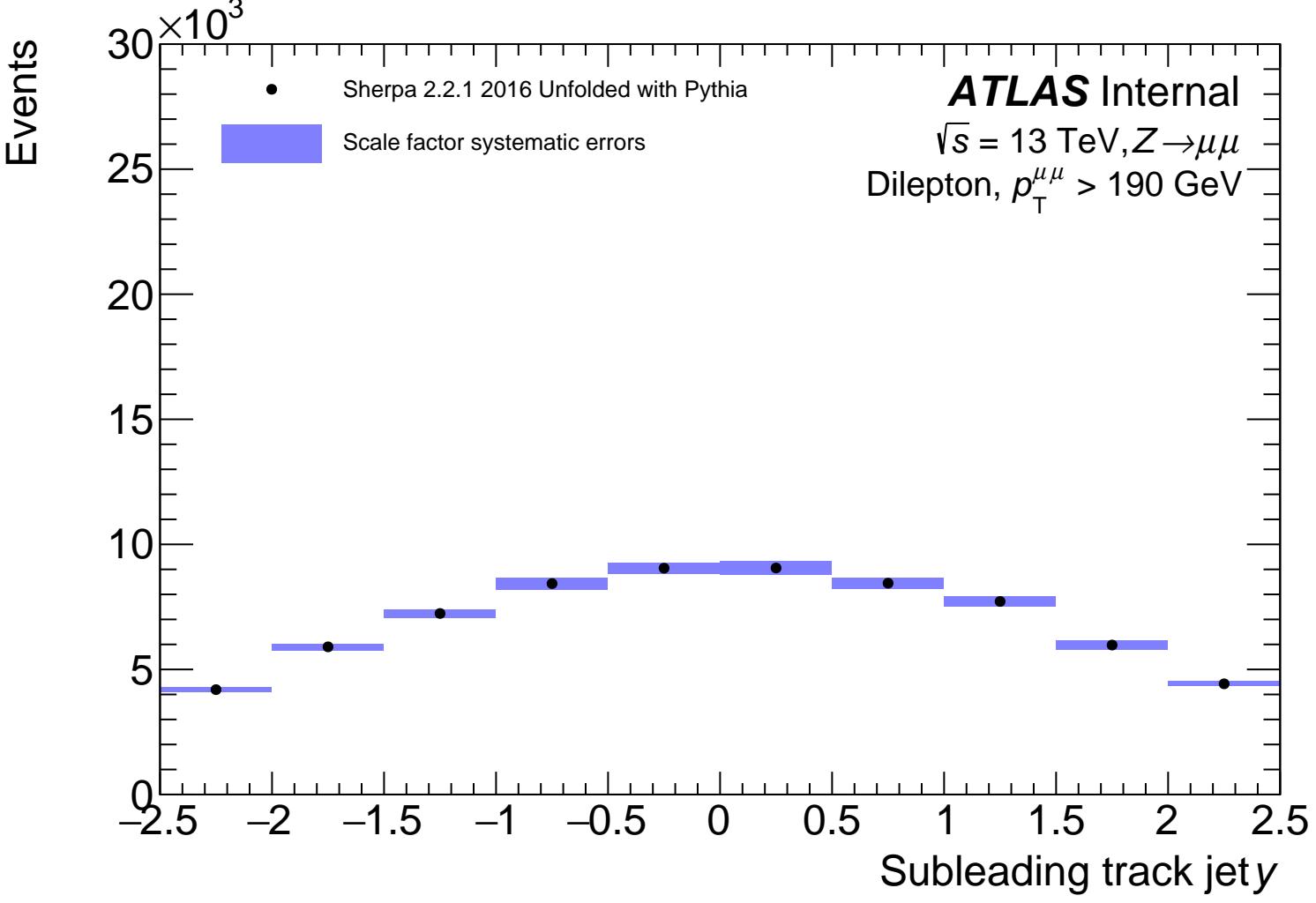
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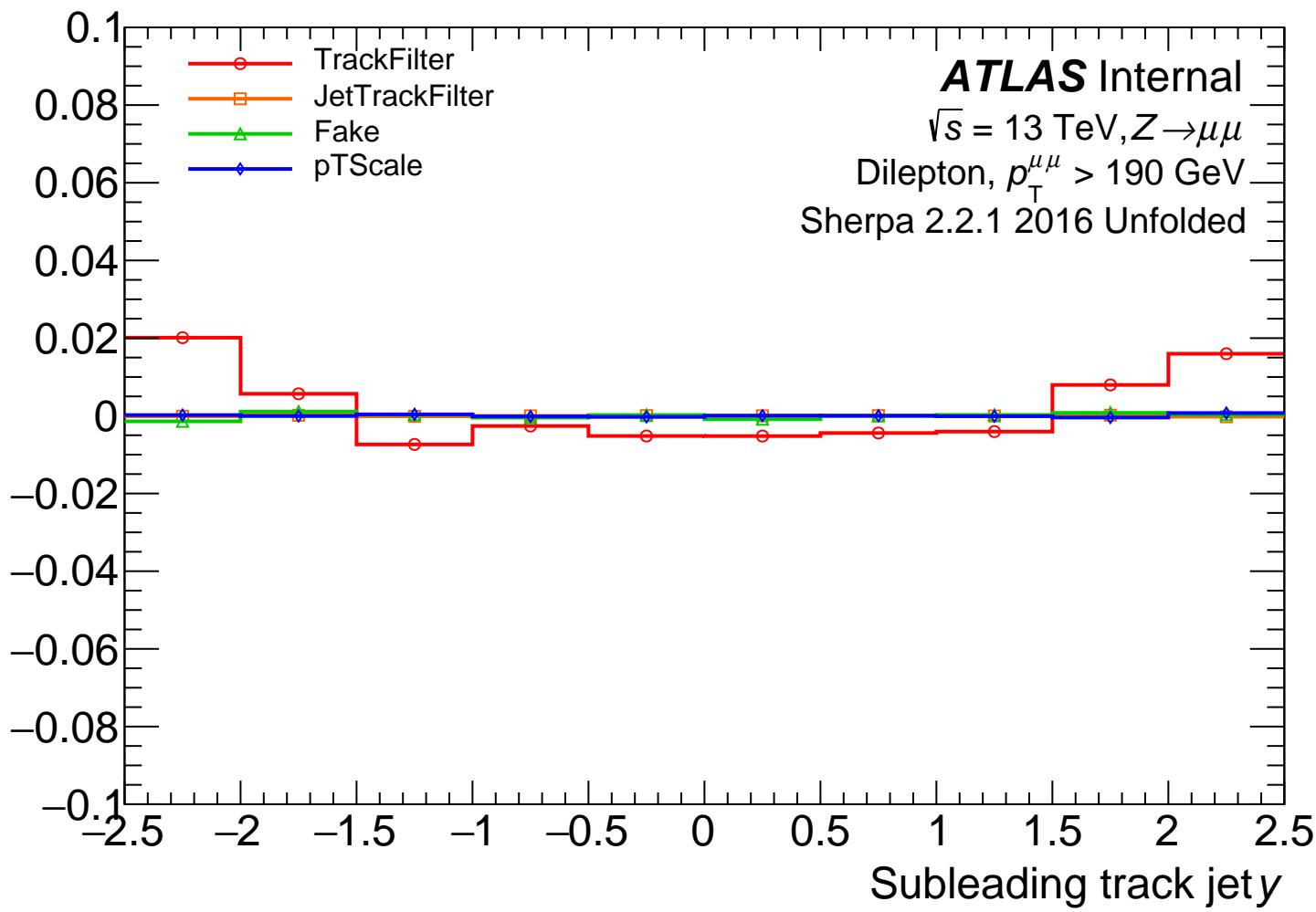
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

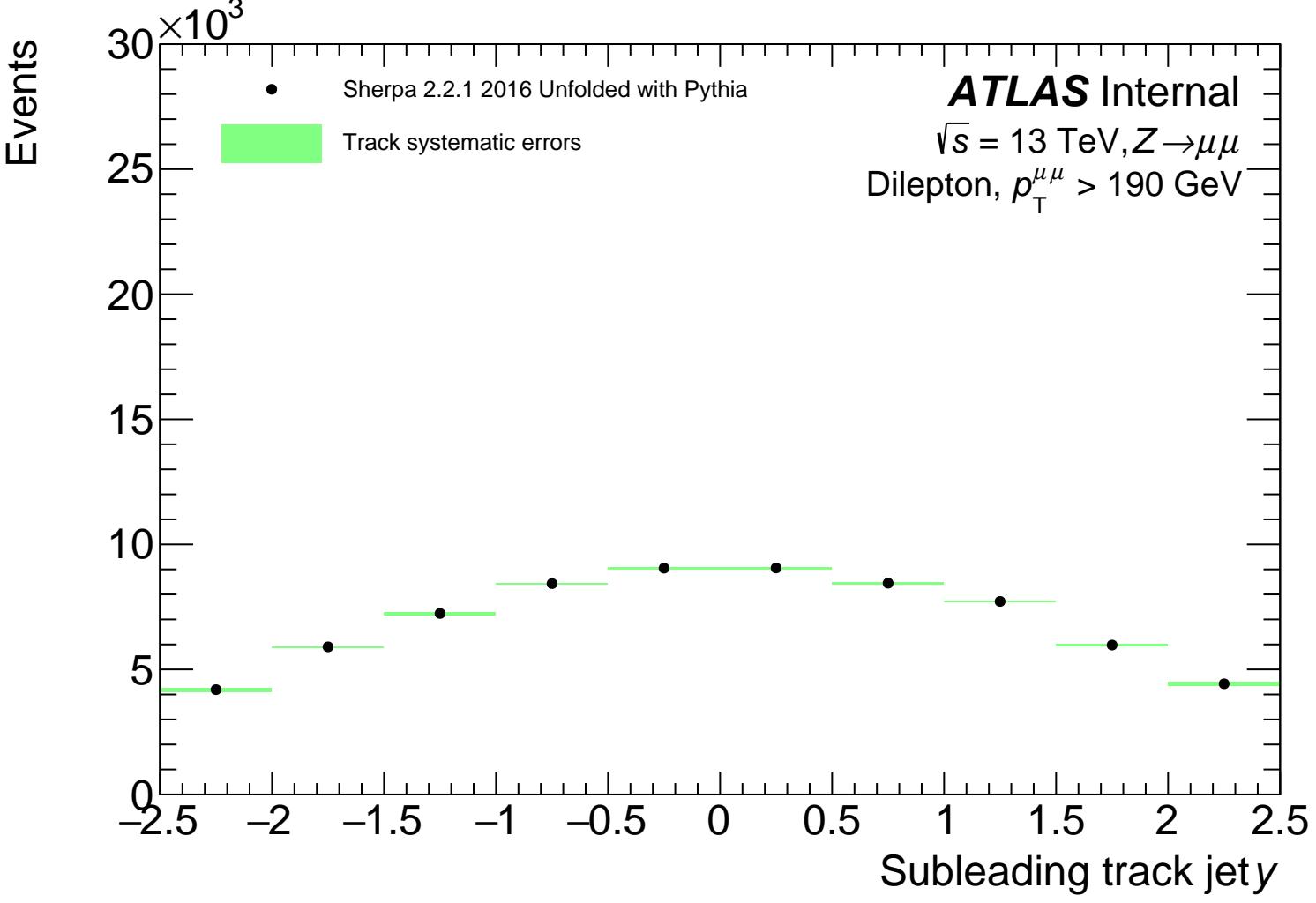
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

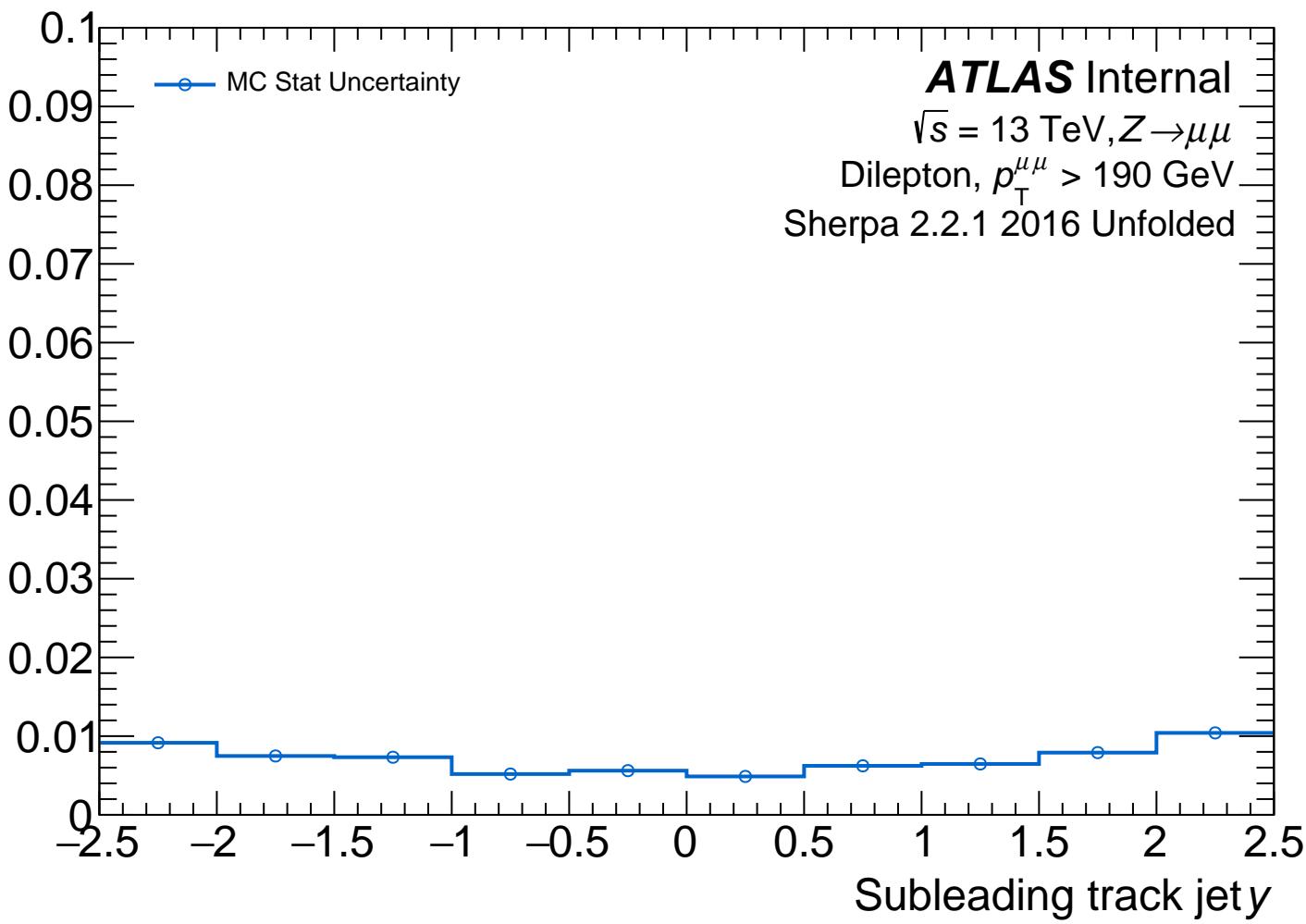
Sherpa 2.2.1 2016 Unfolded

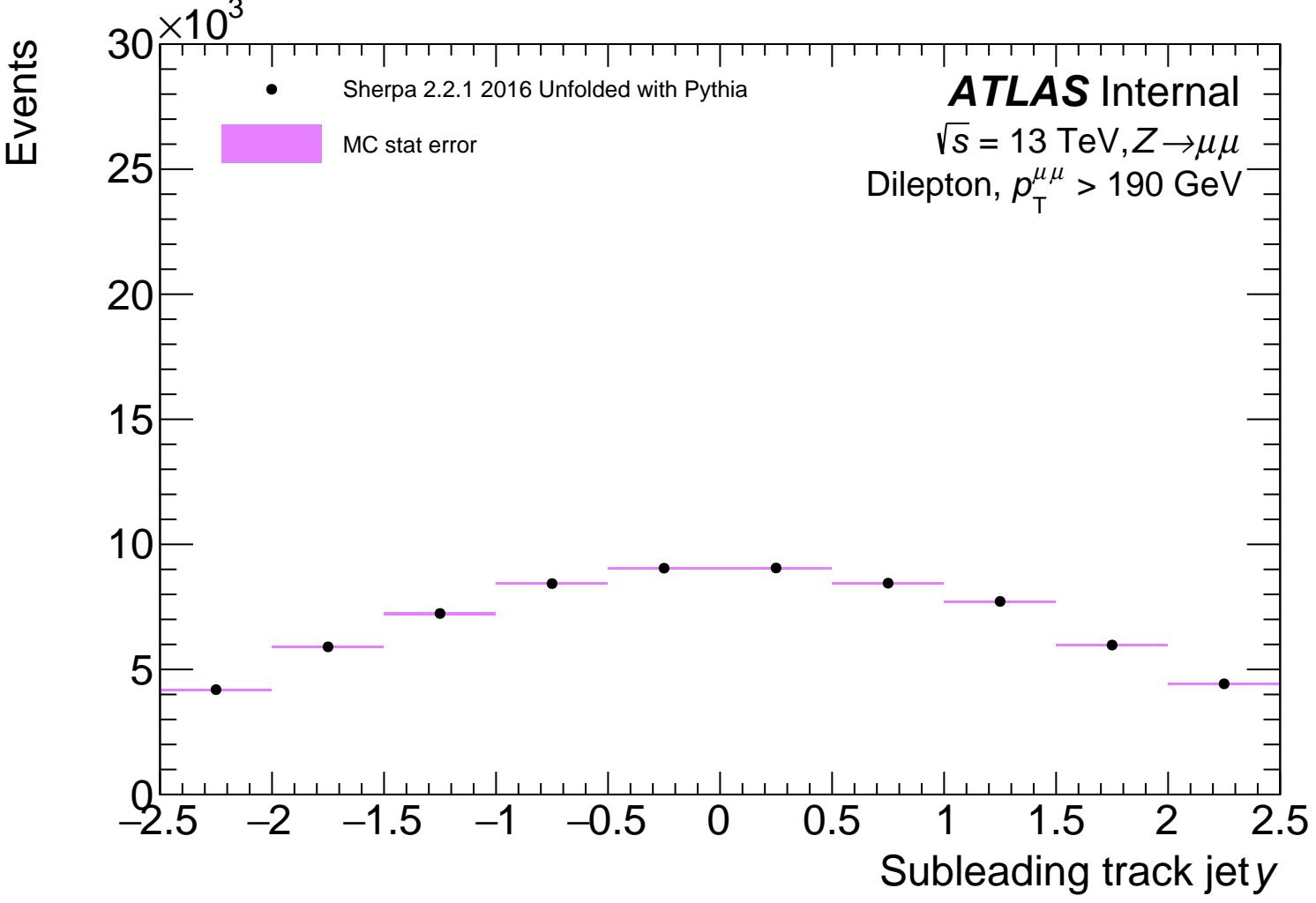


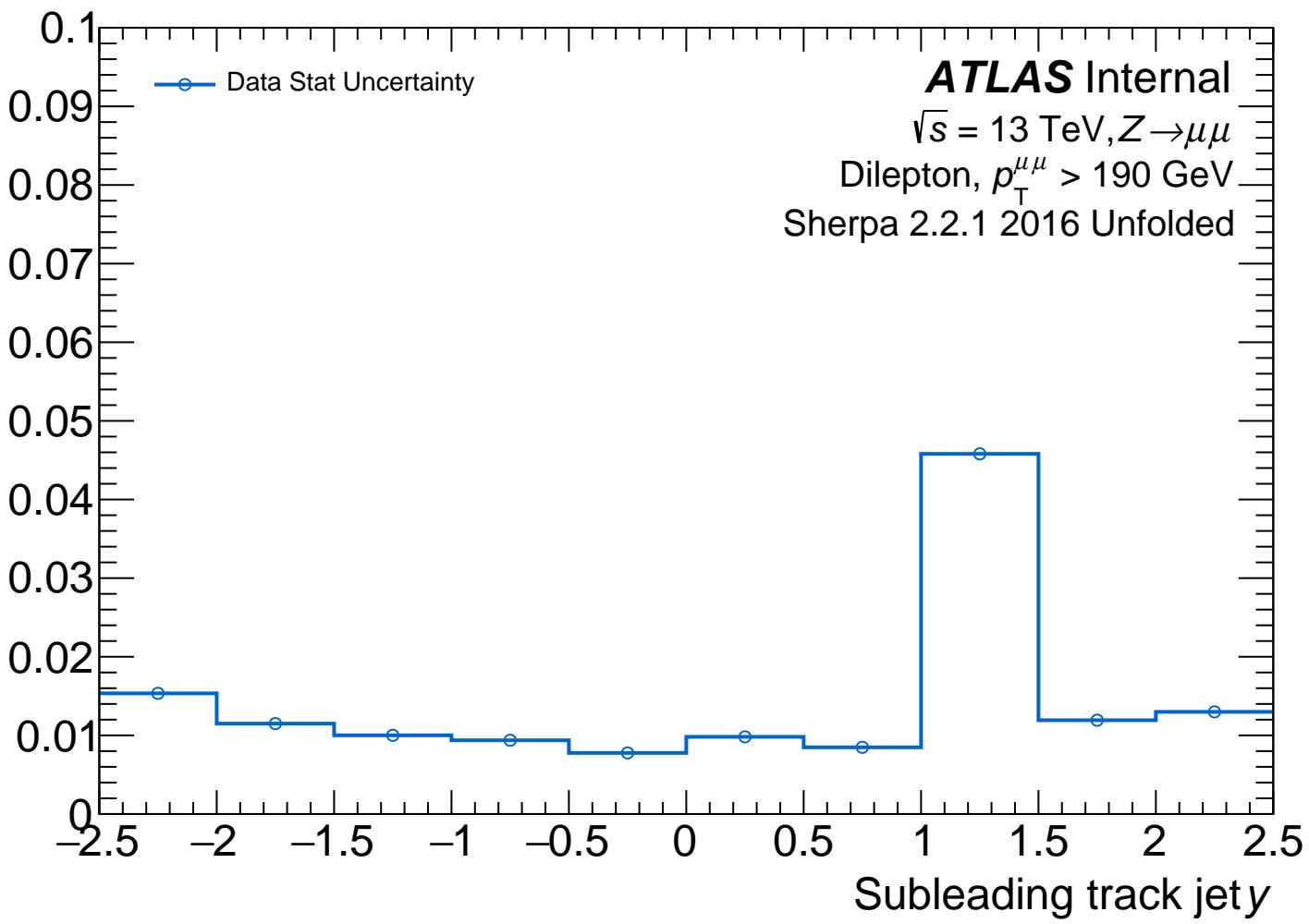


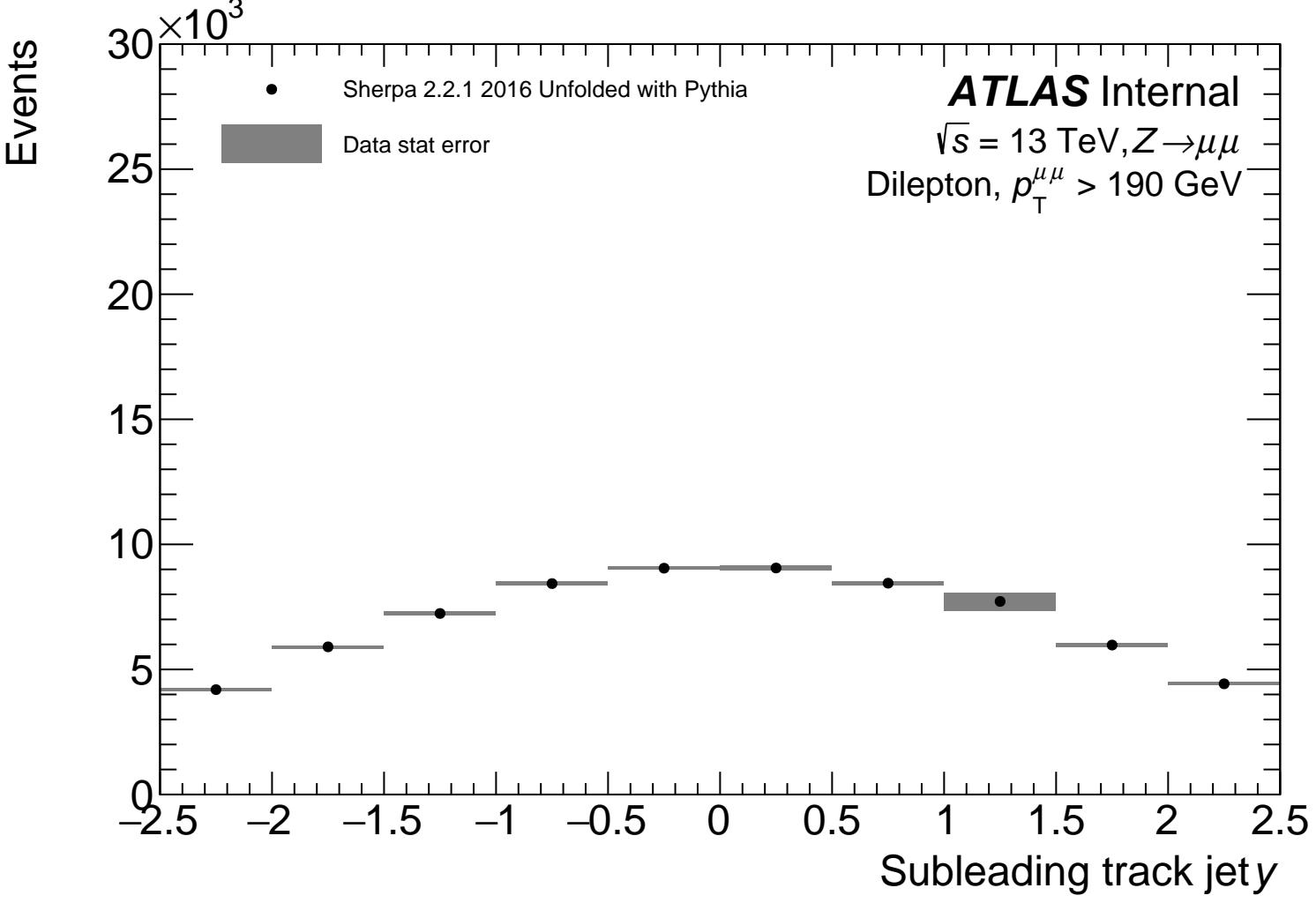


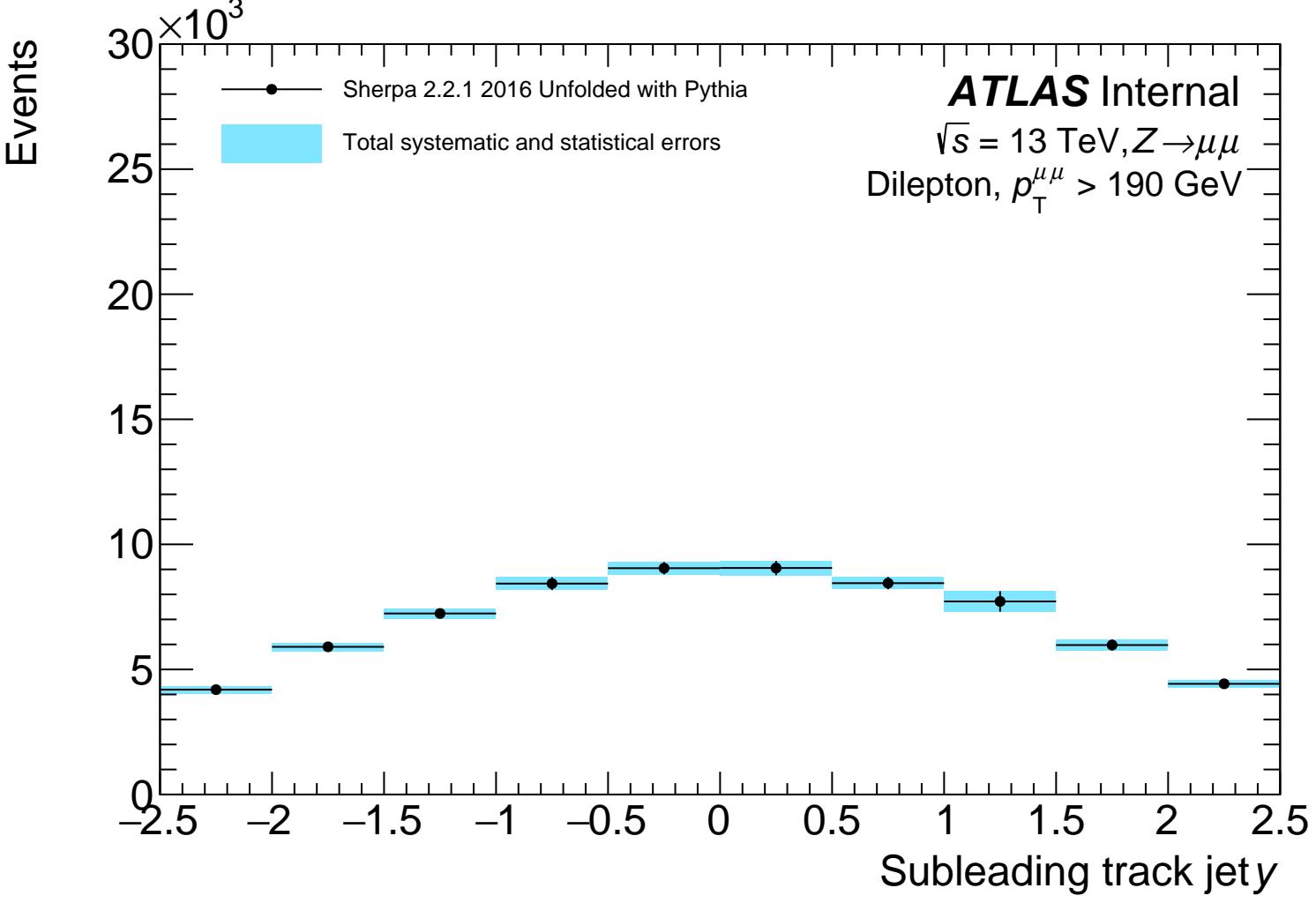


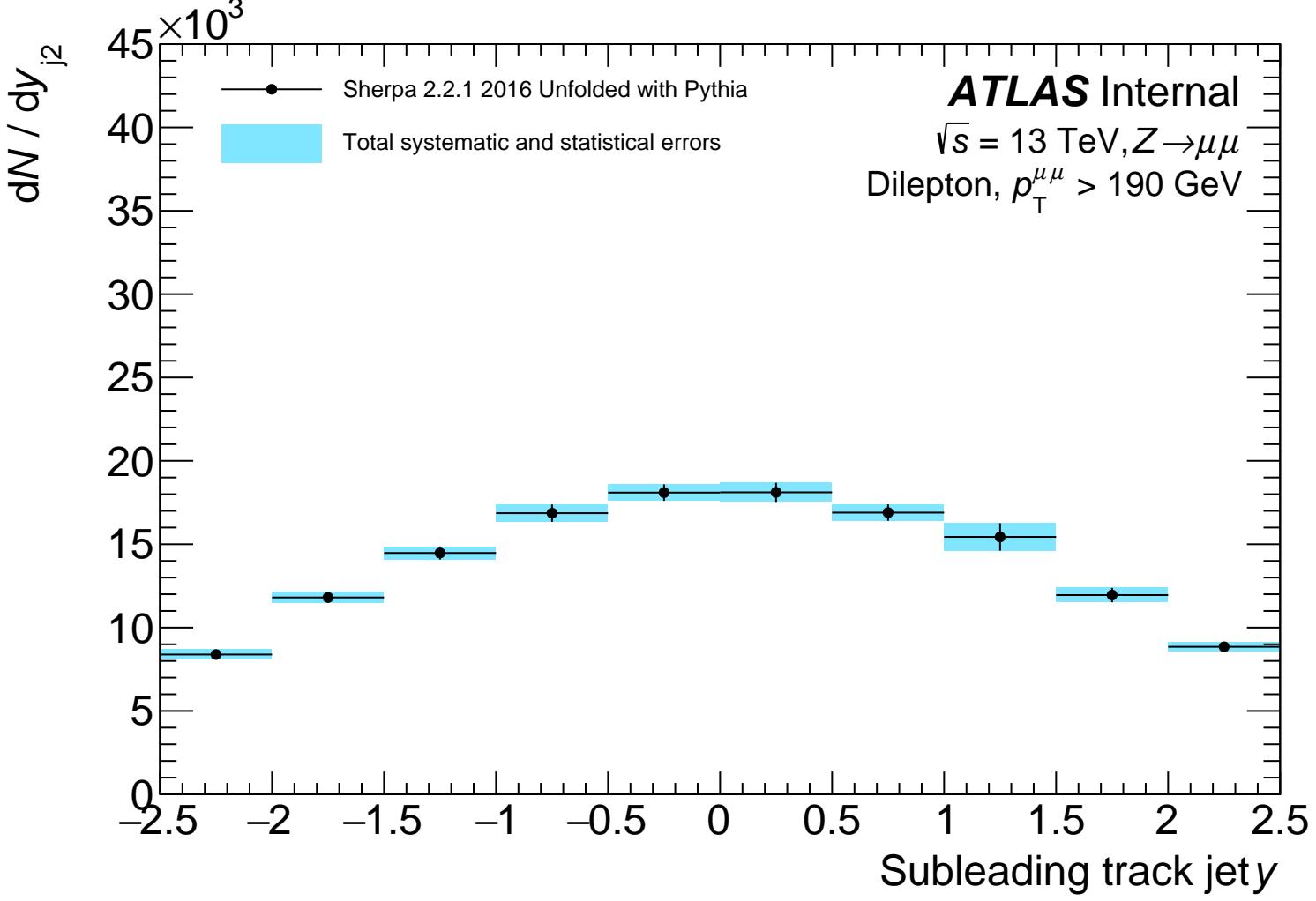










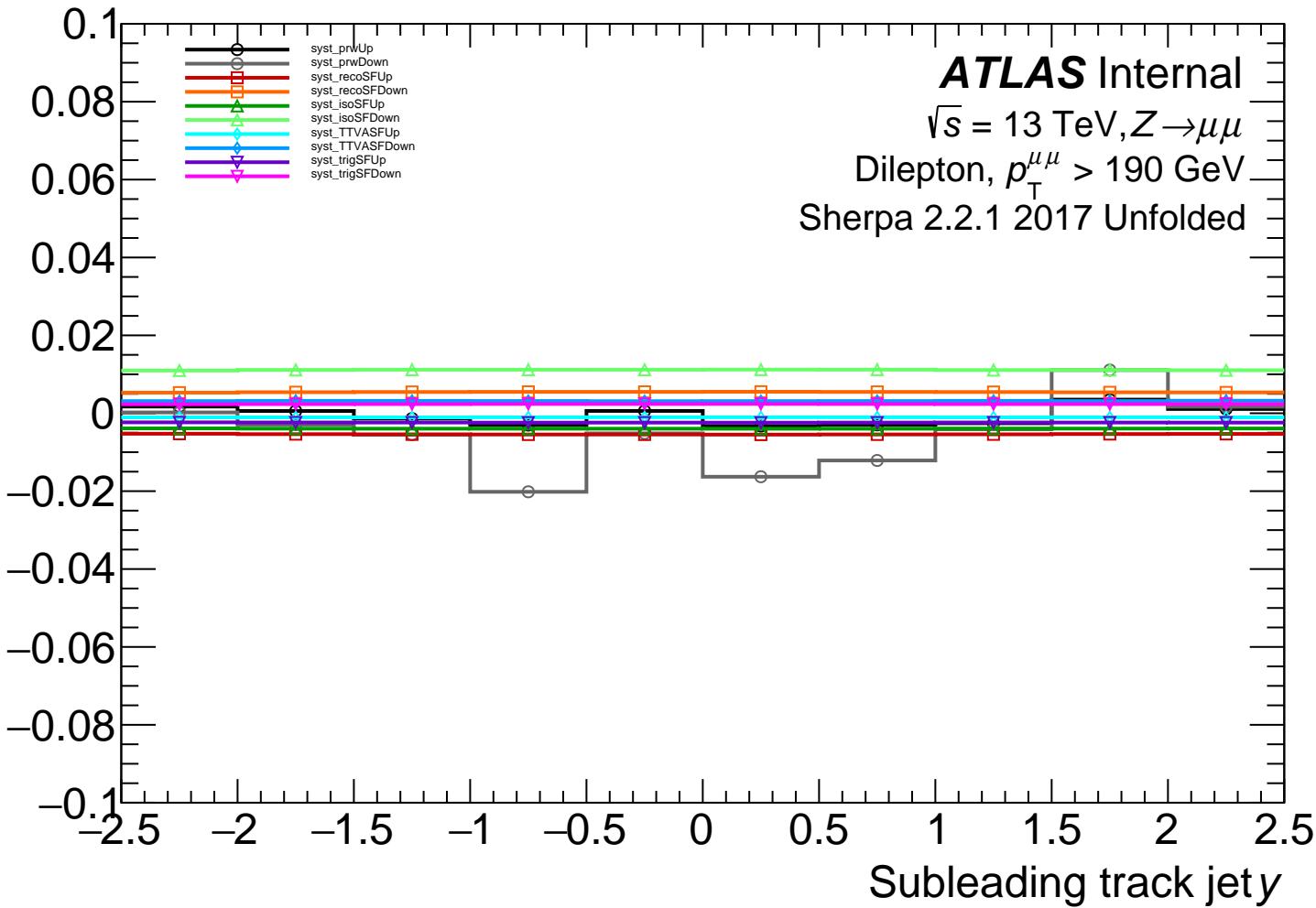


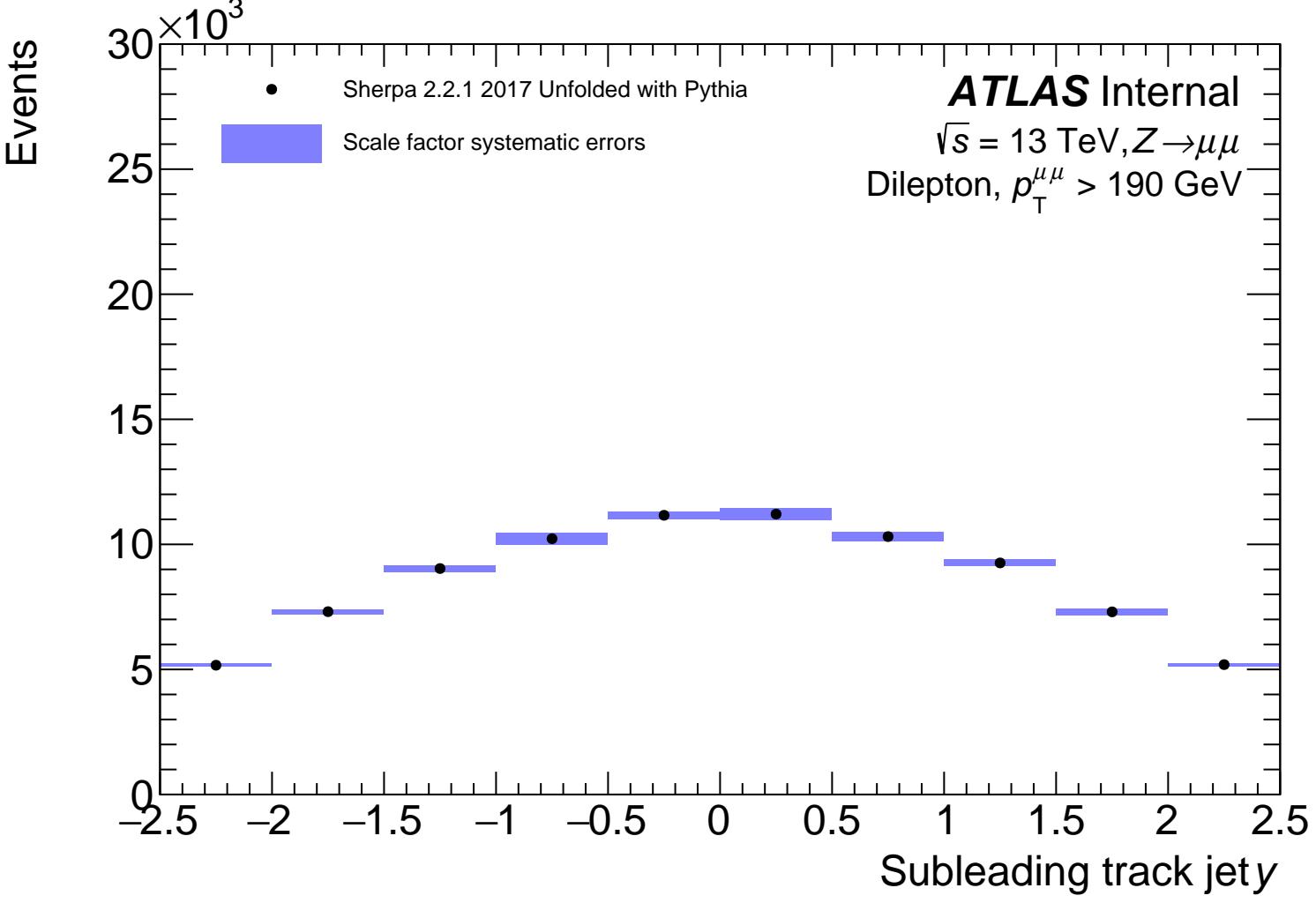
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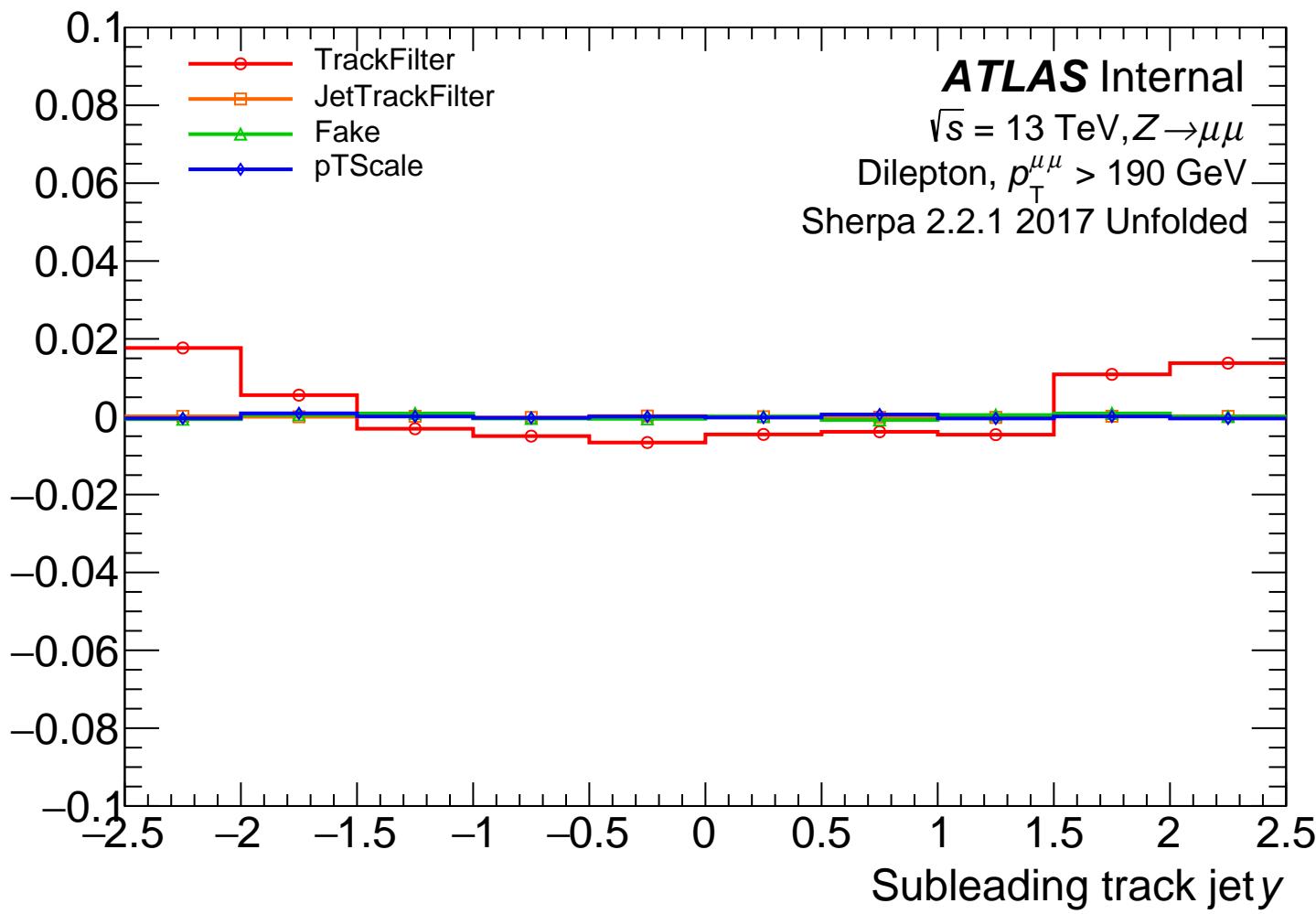
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

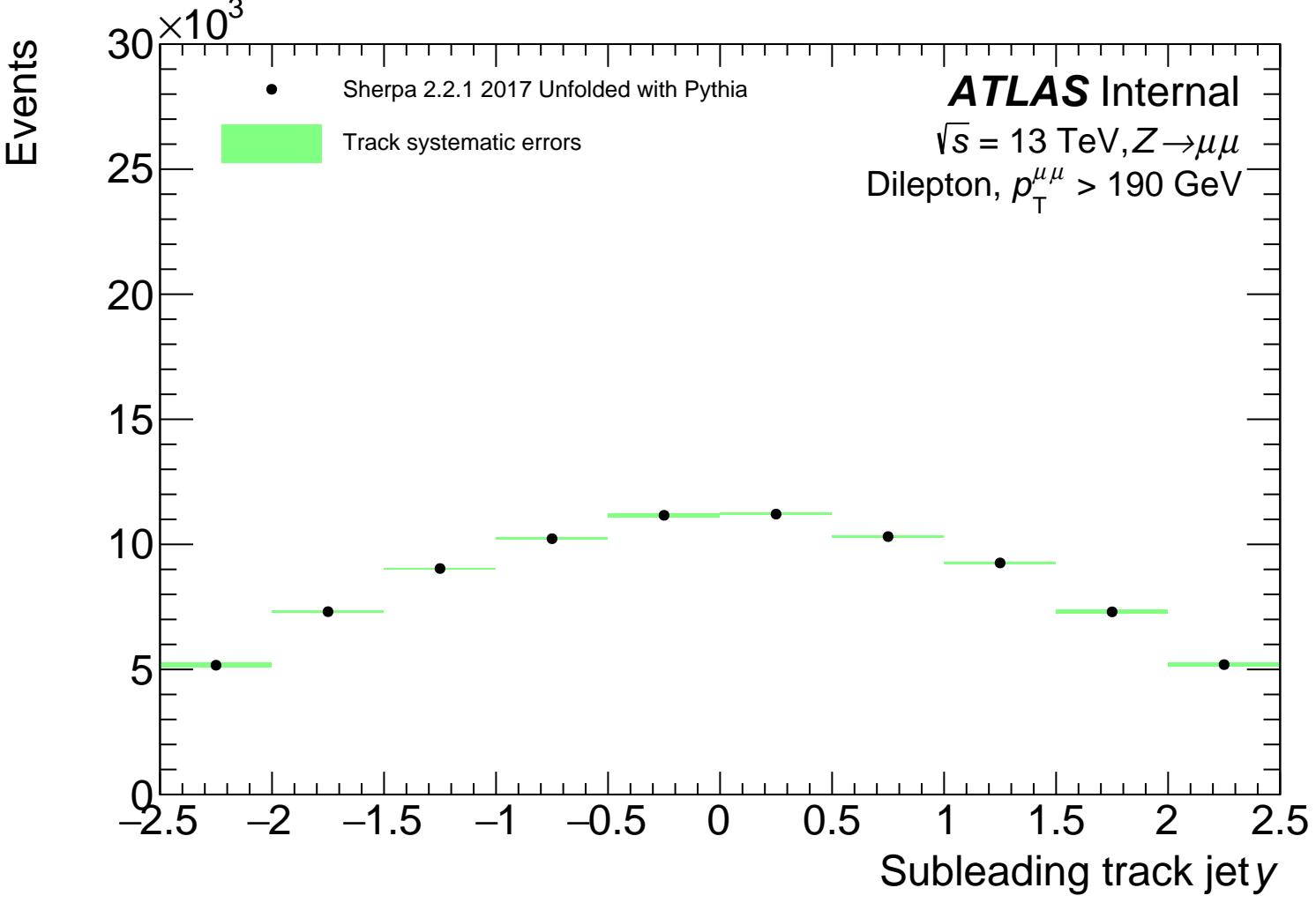
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

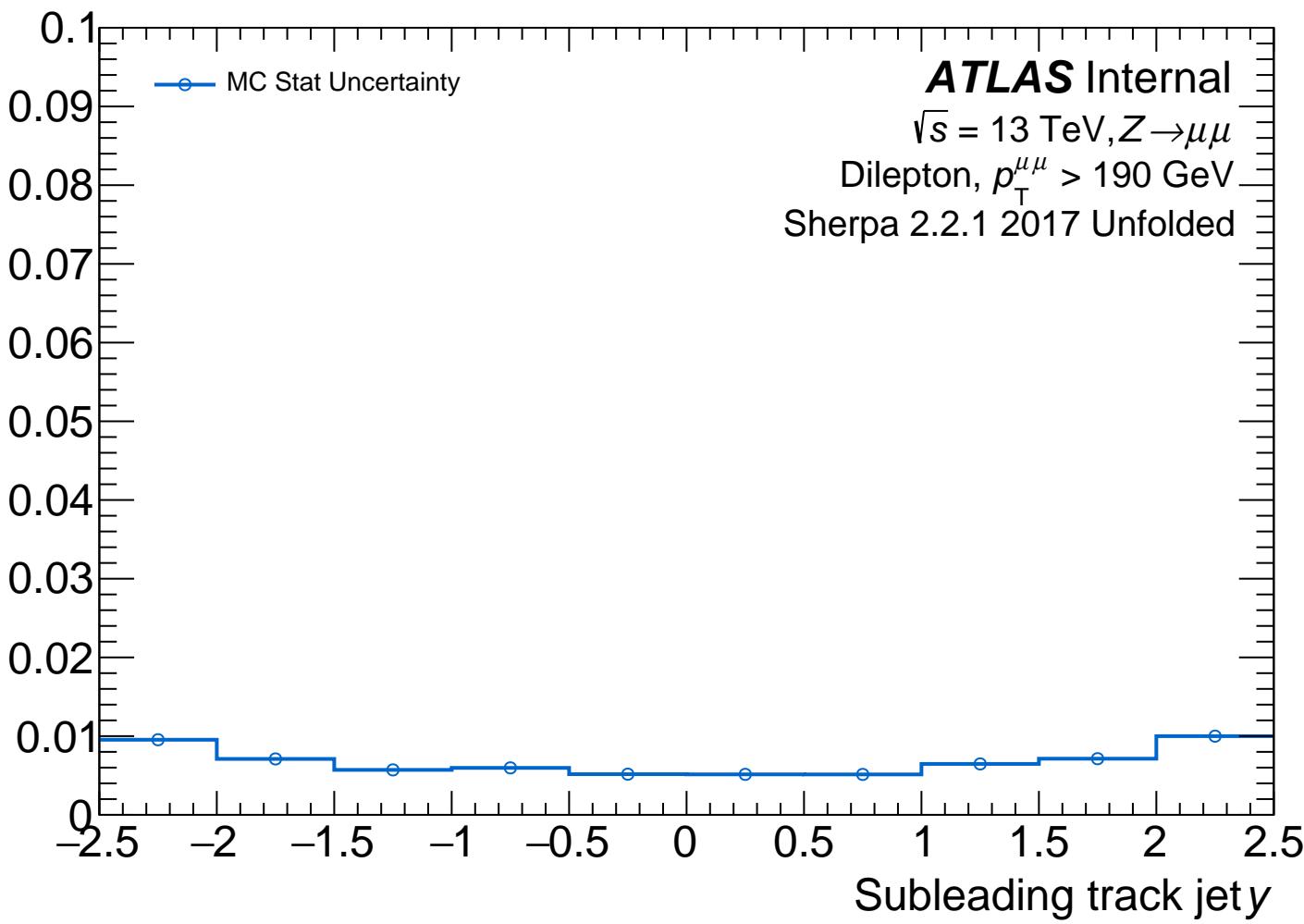
Sherpa 2.2.1 2017 Unfolded

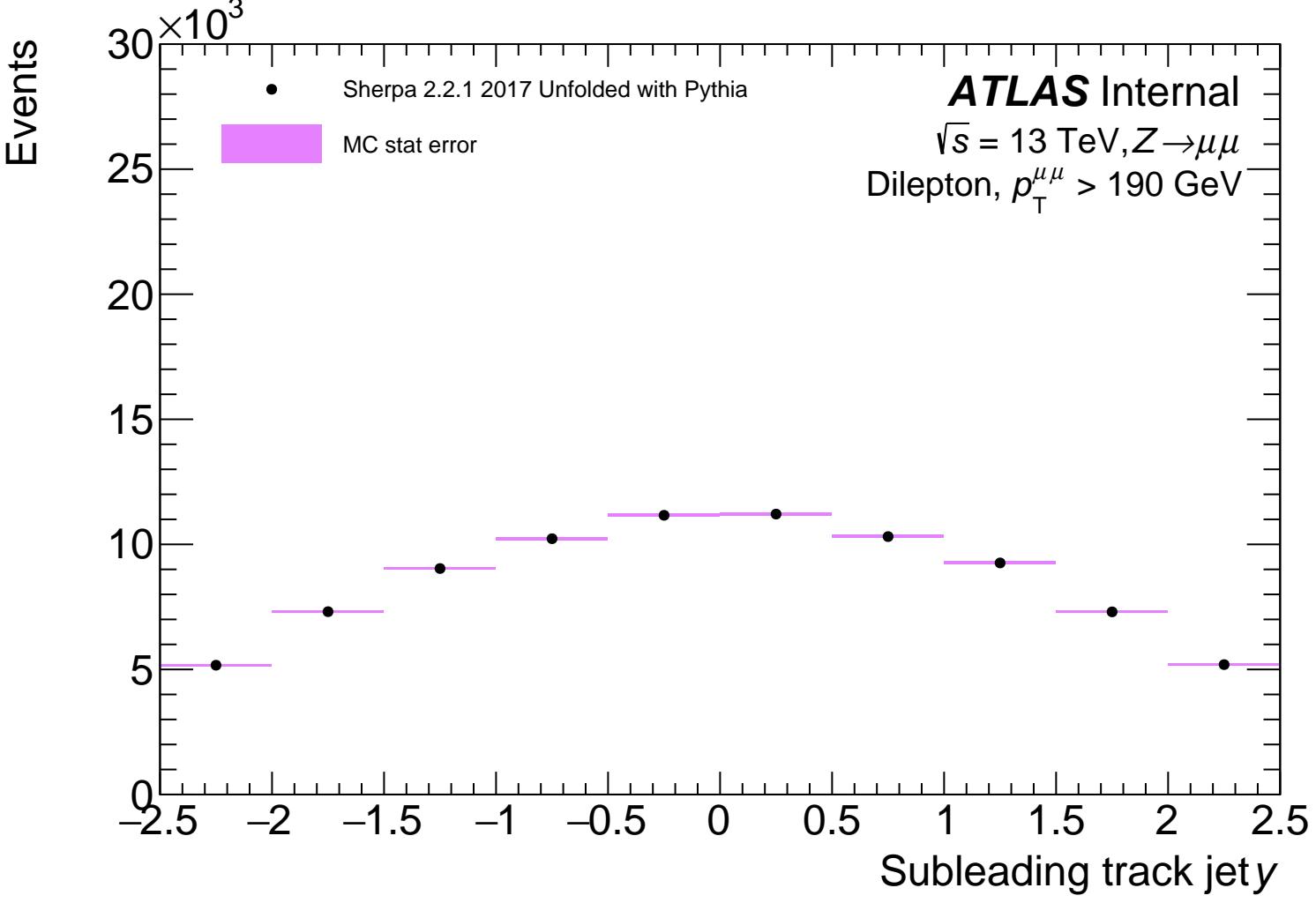


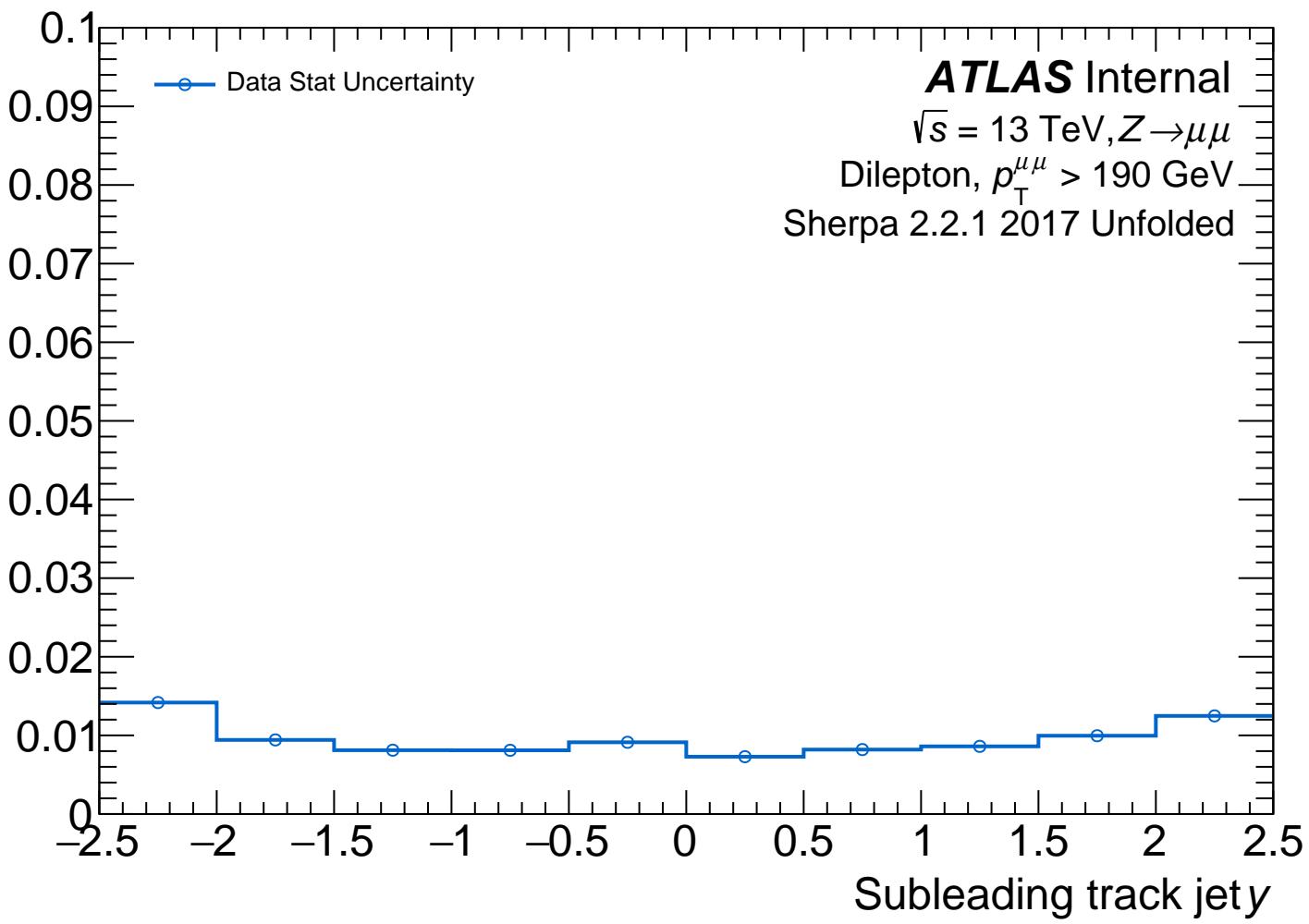


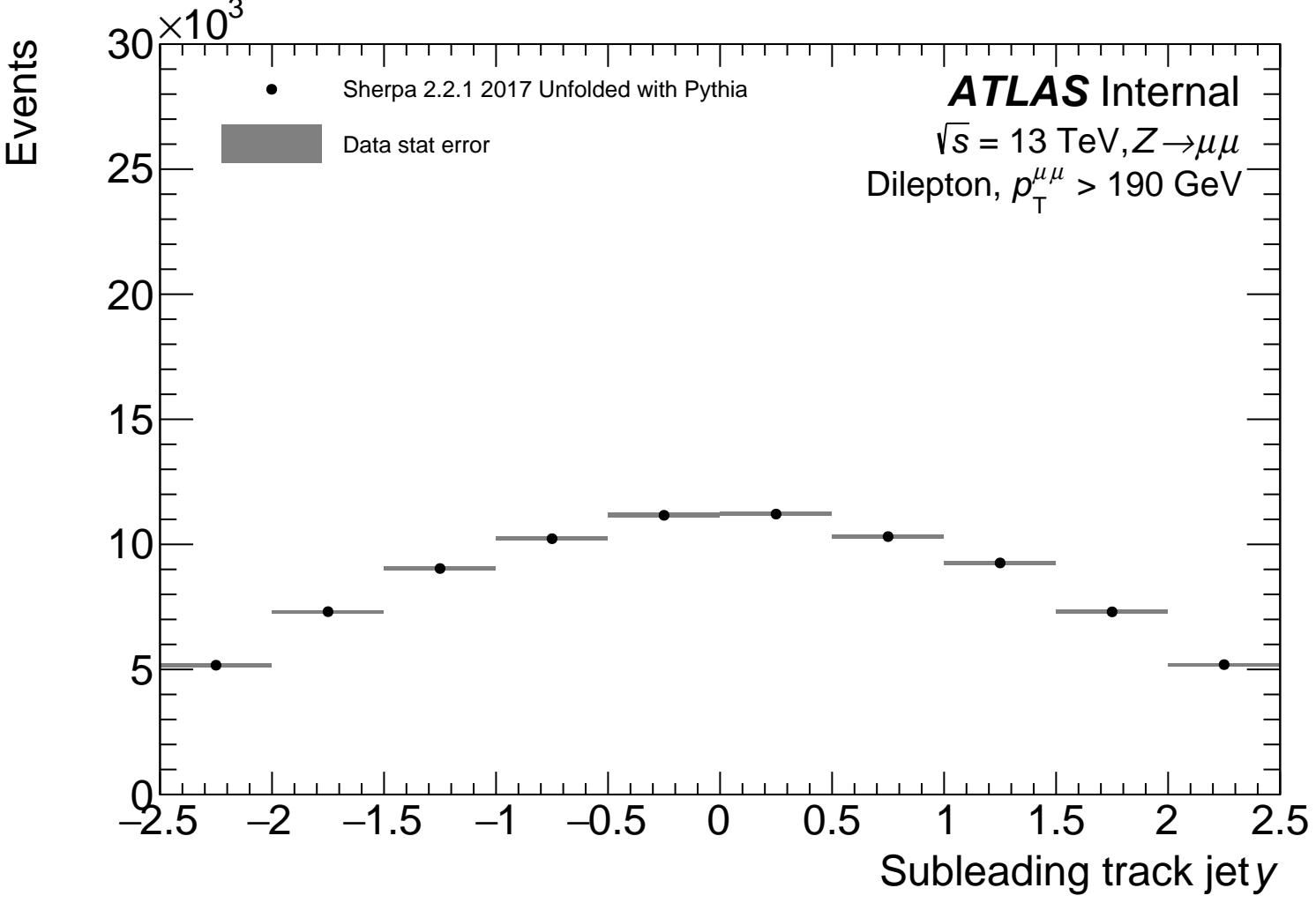


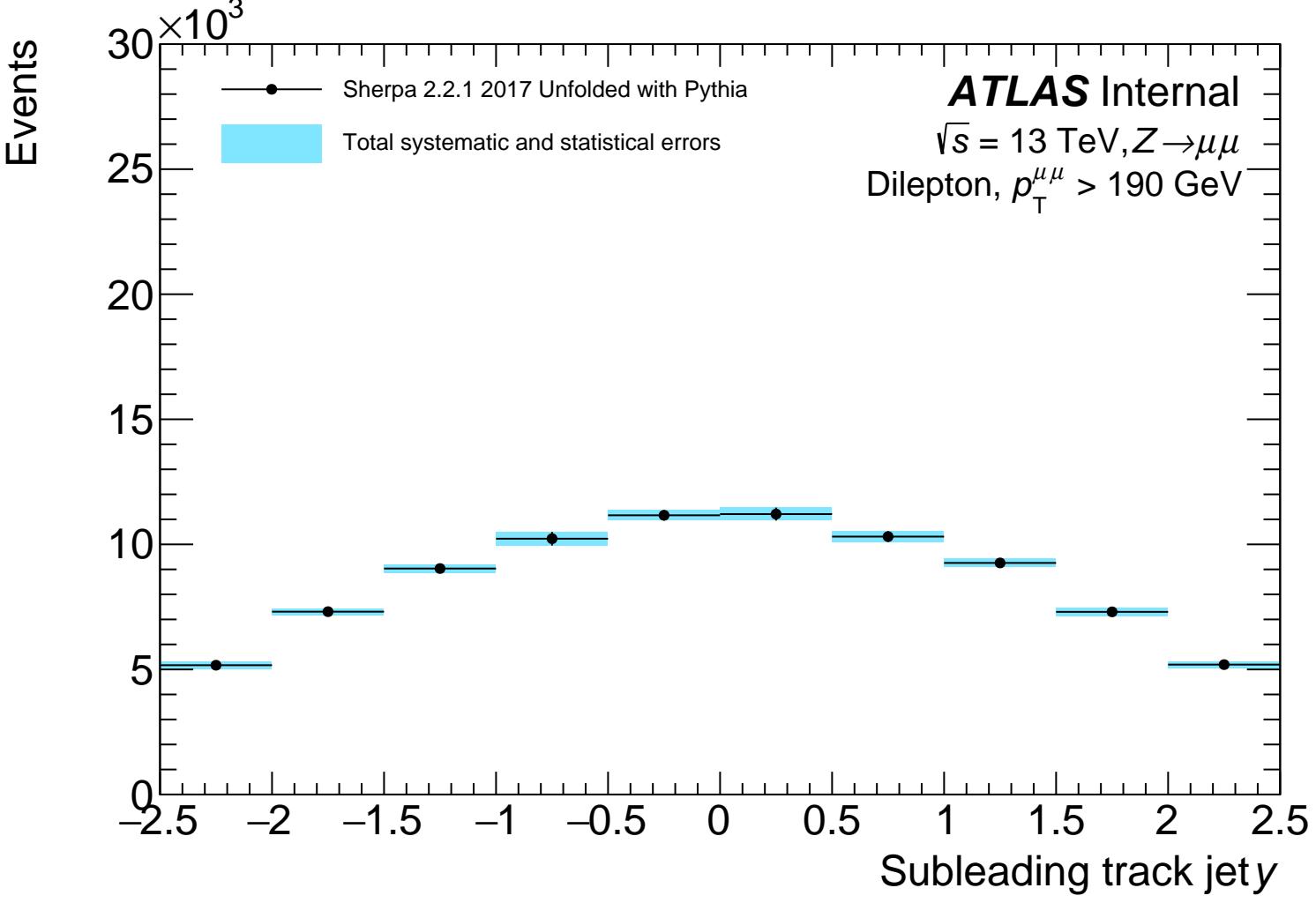


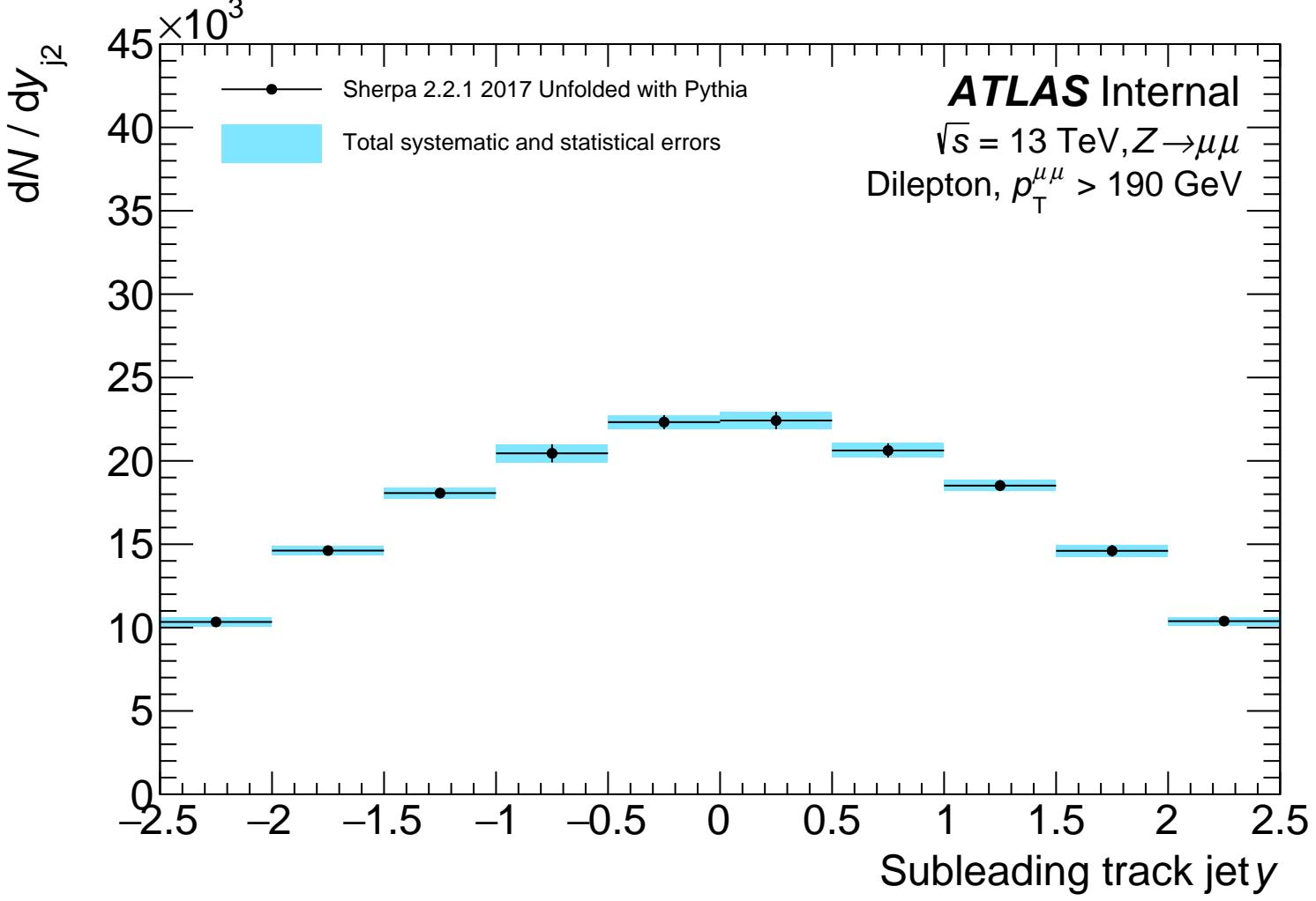










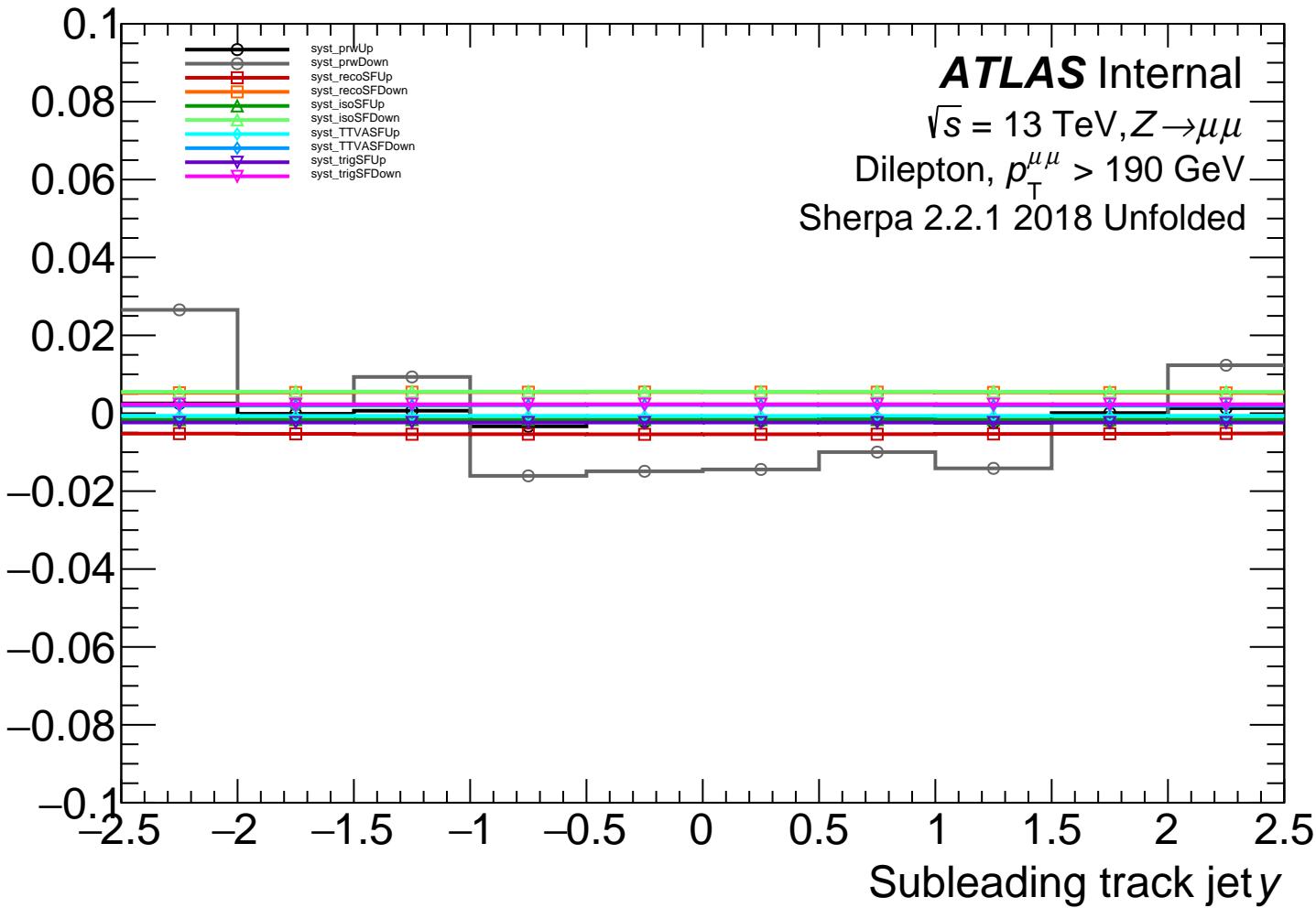


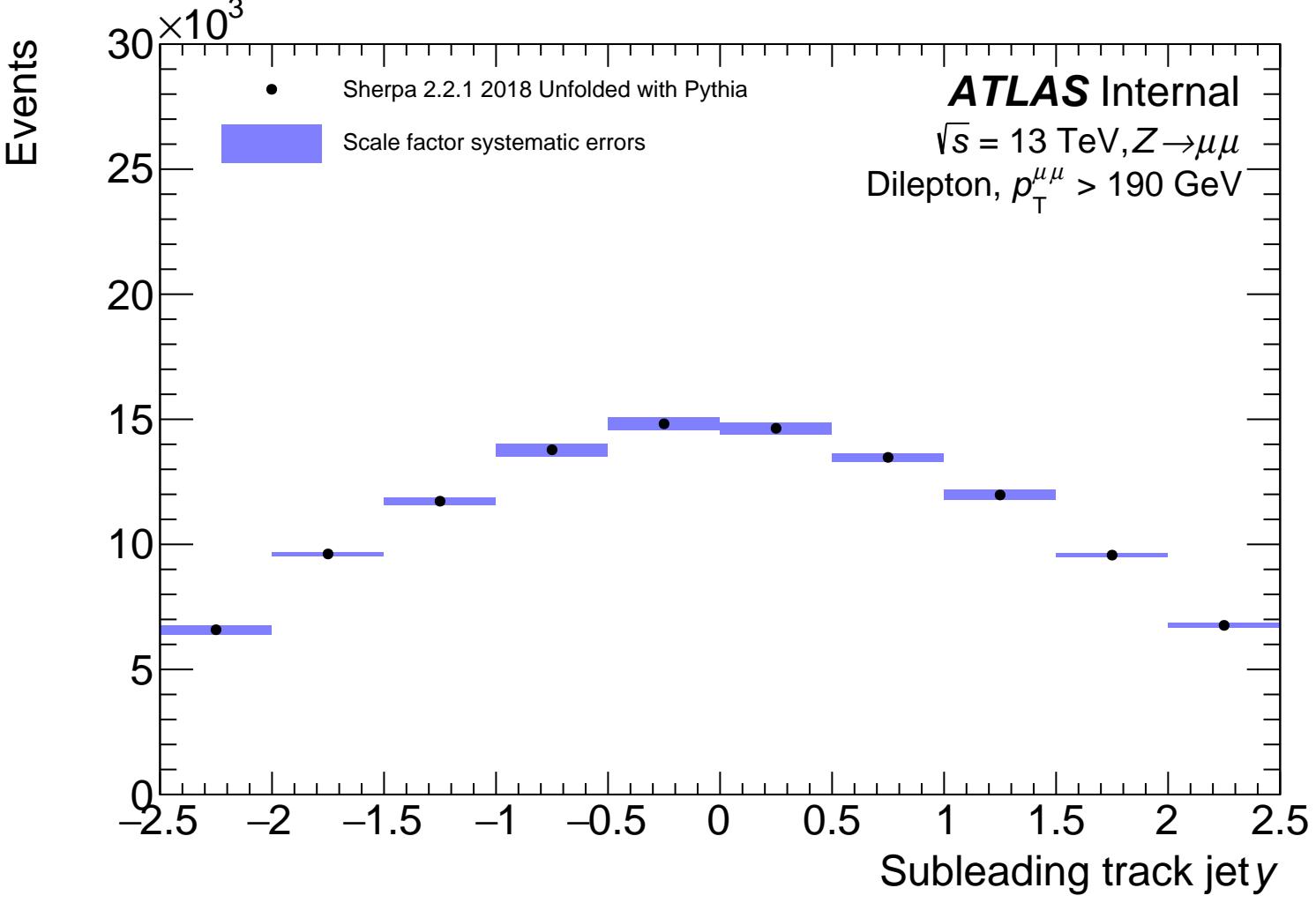
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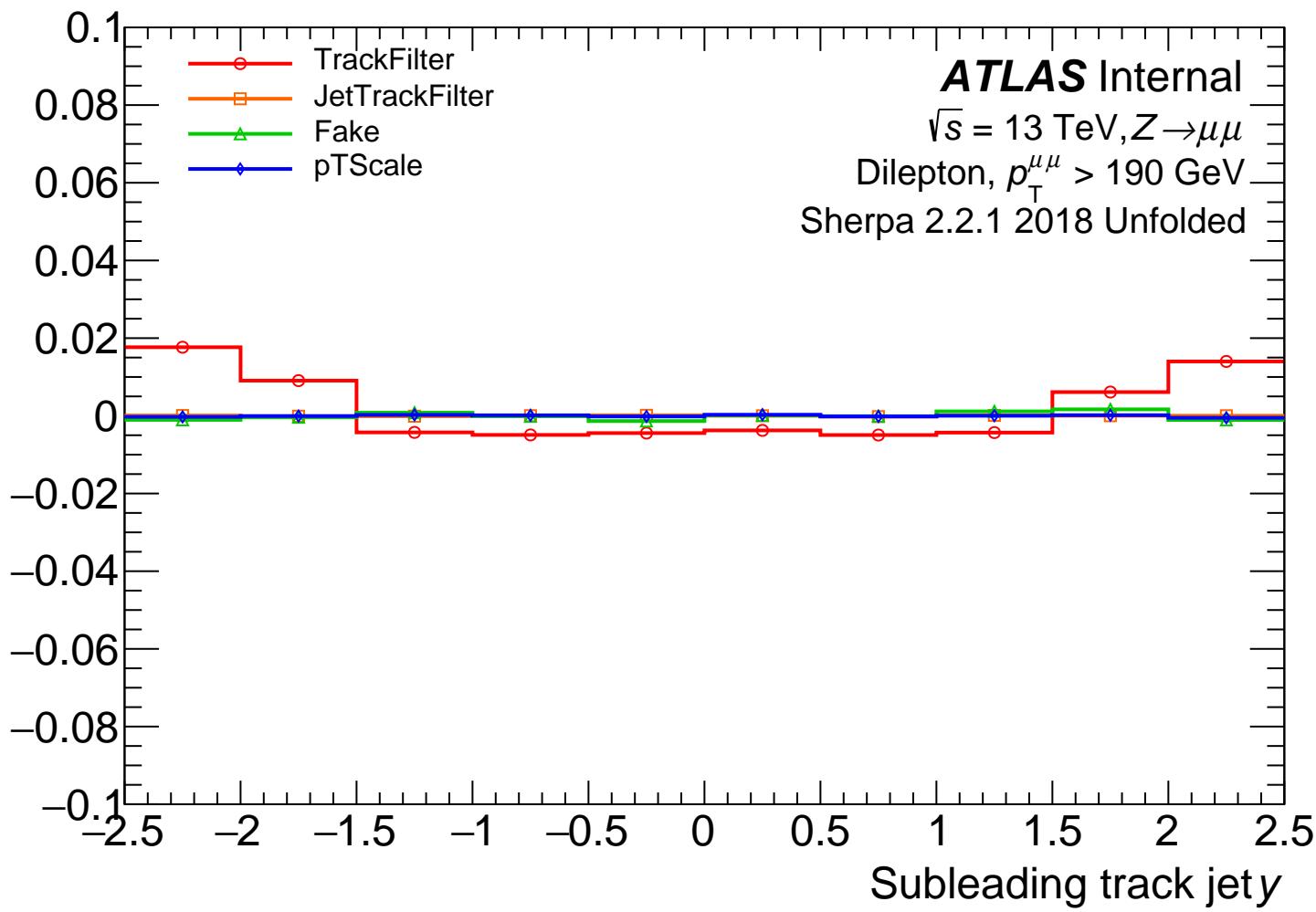
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

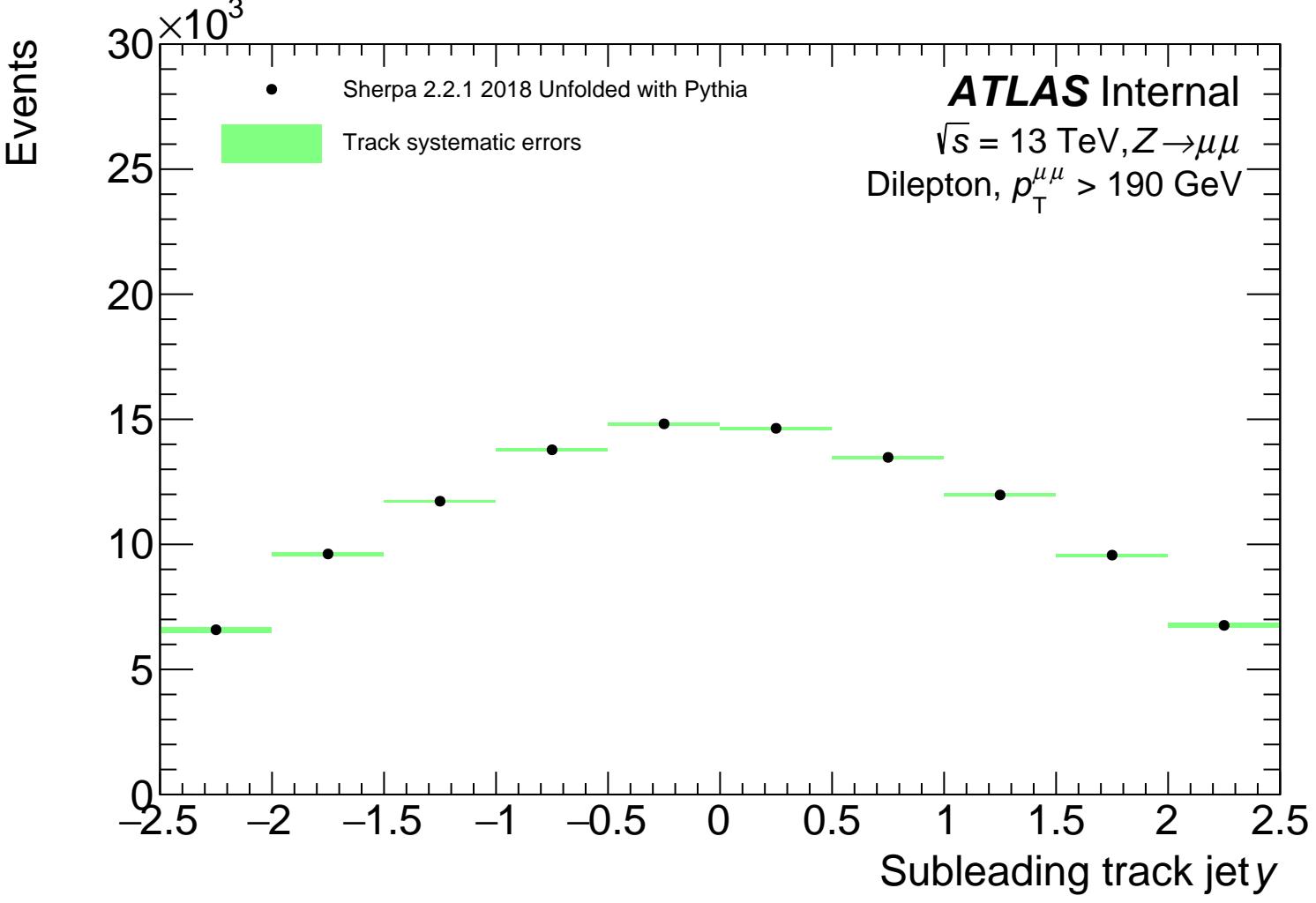
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

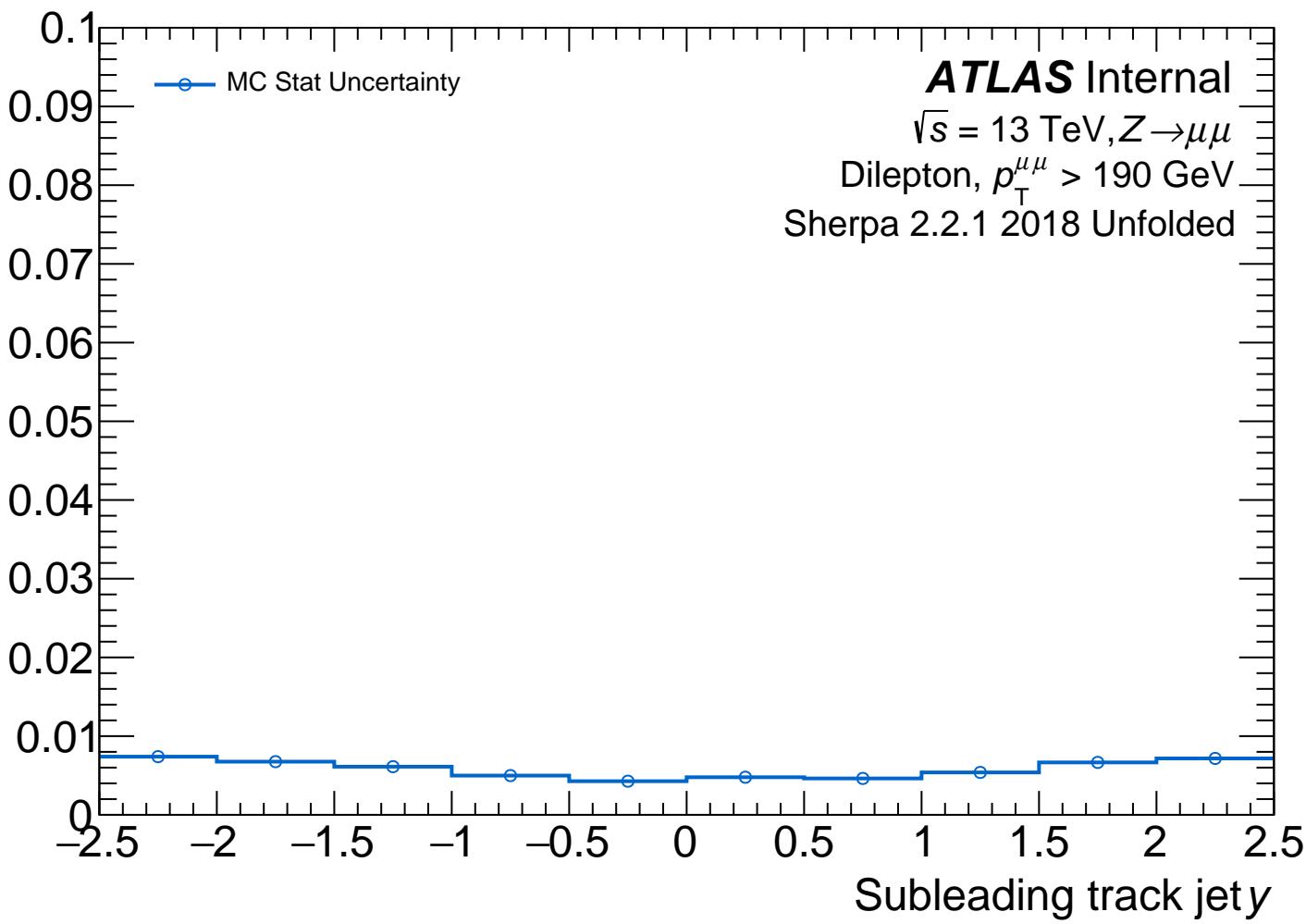
Sherpa 2.2.1 2018 Unfolded

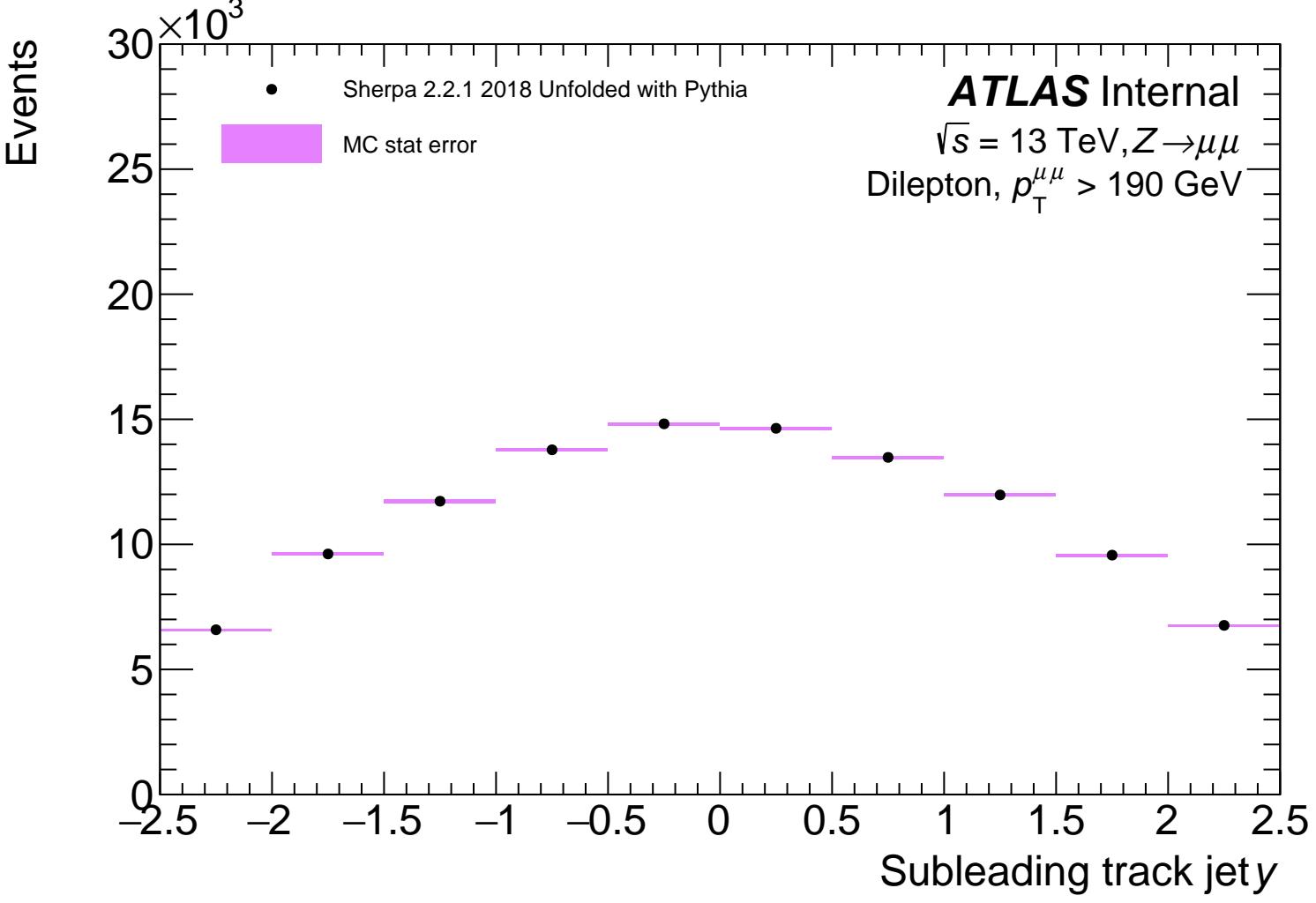


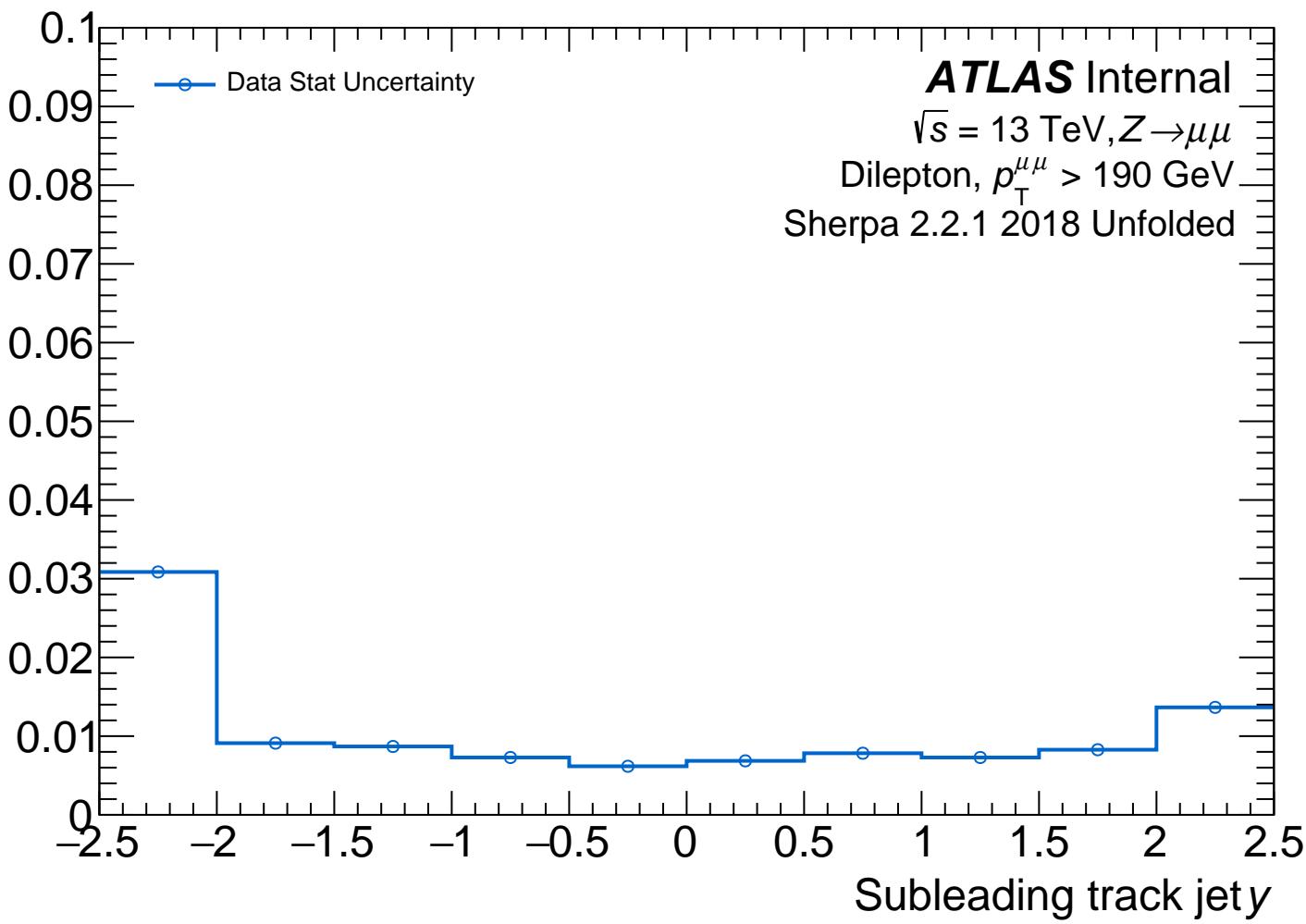


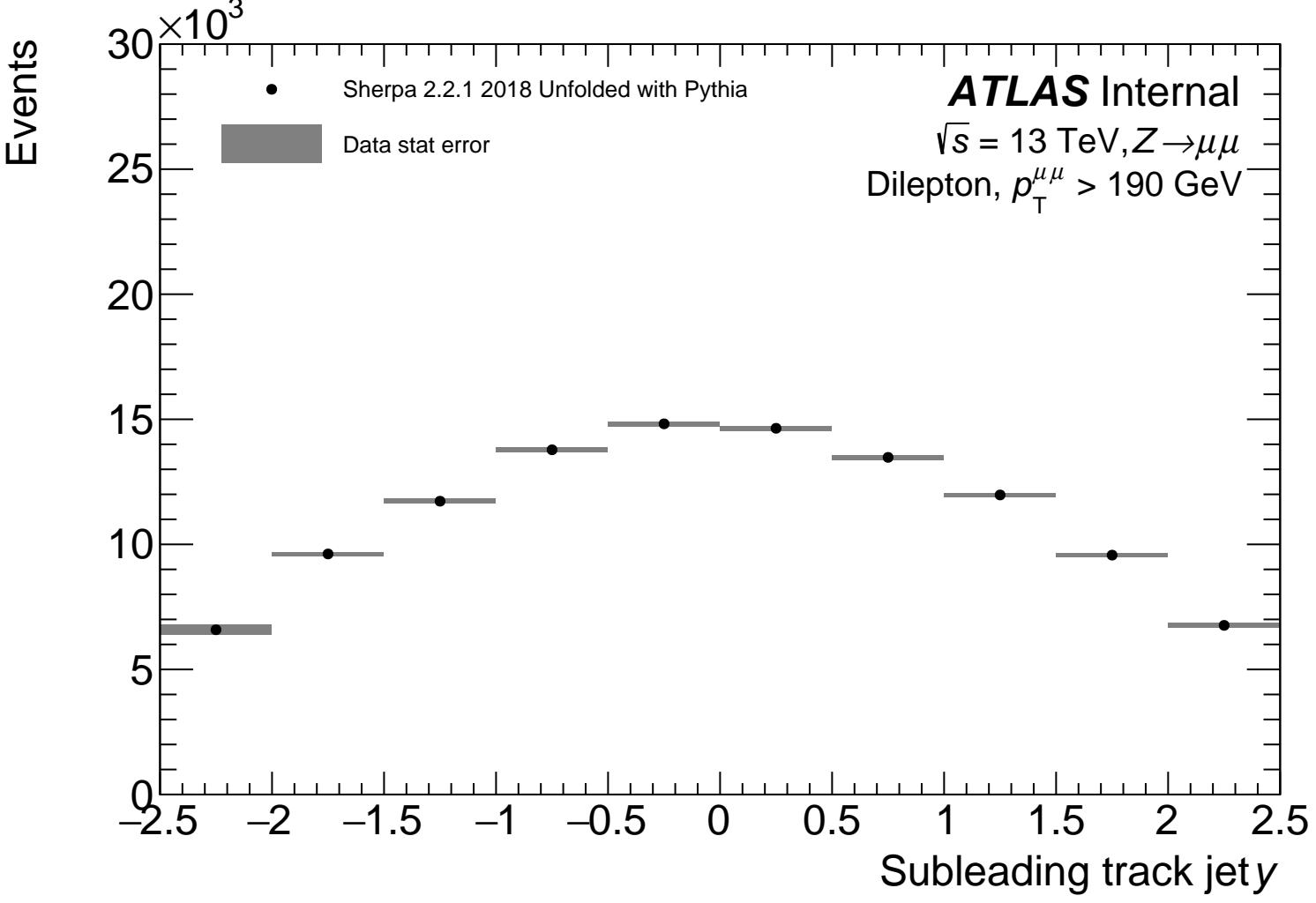


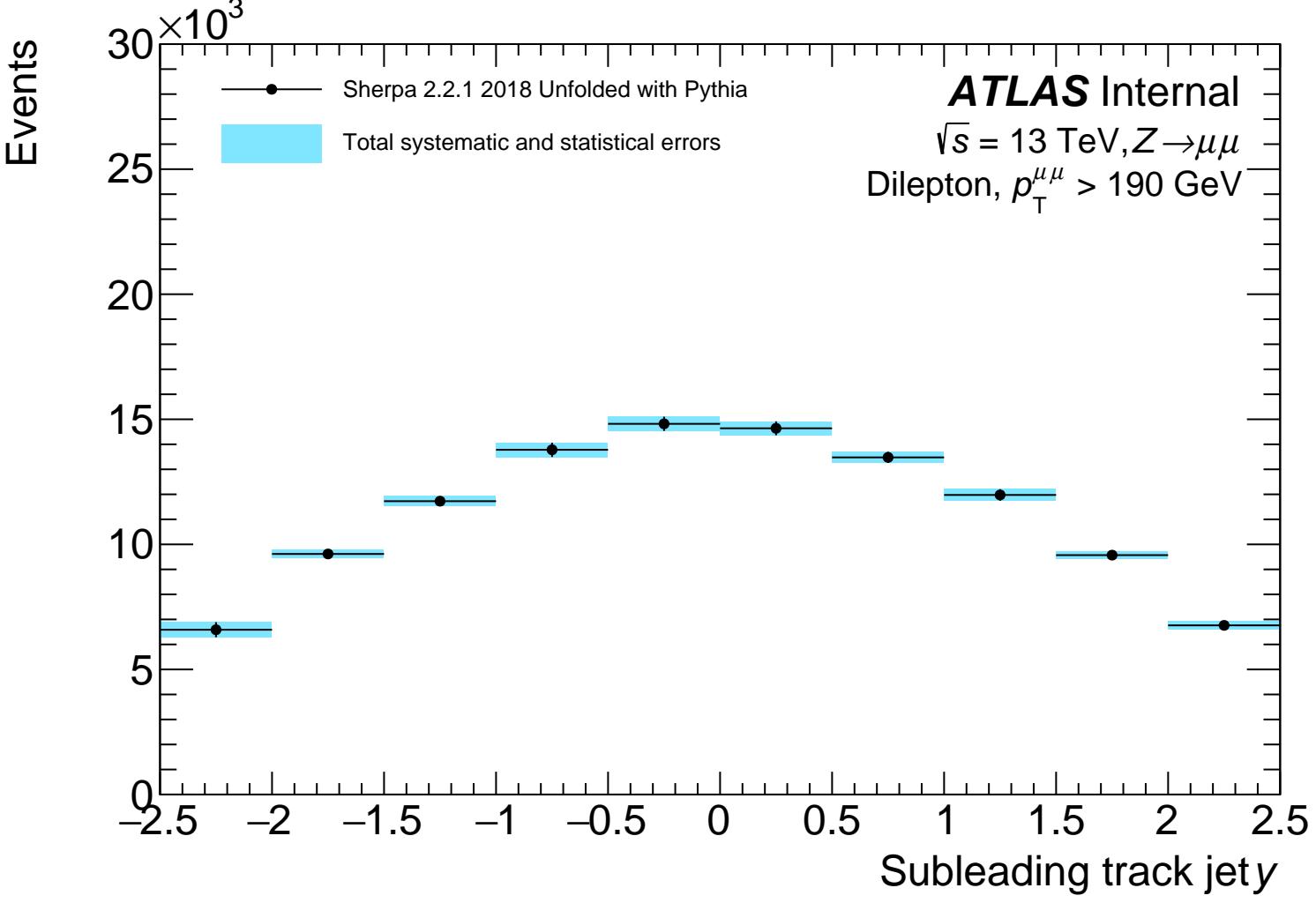


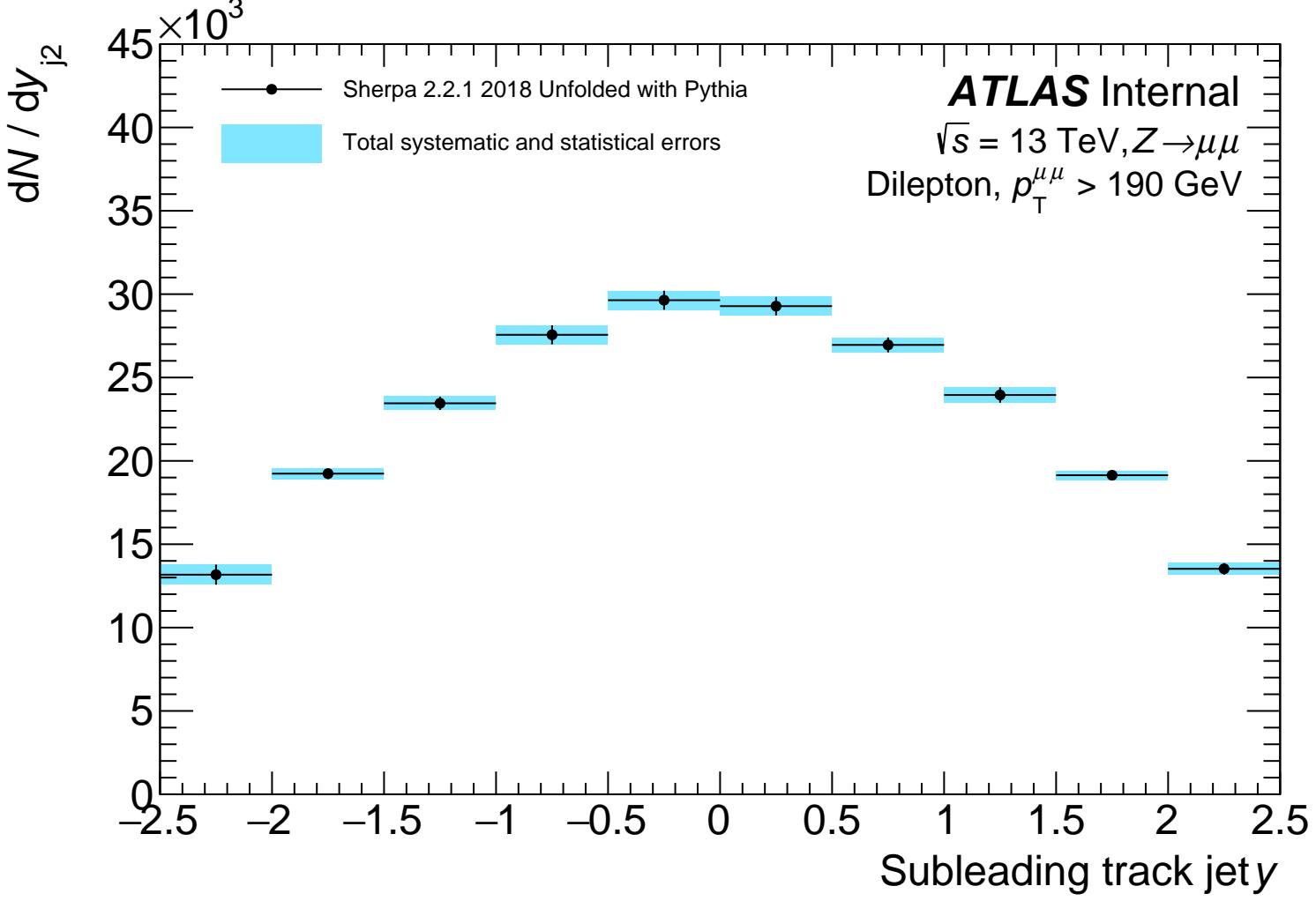


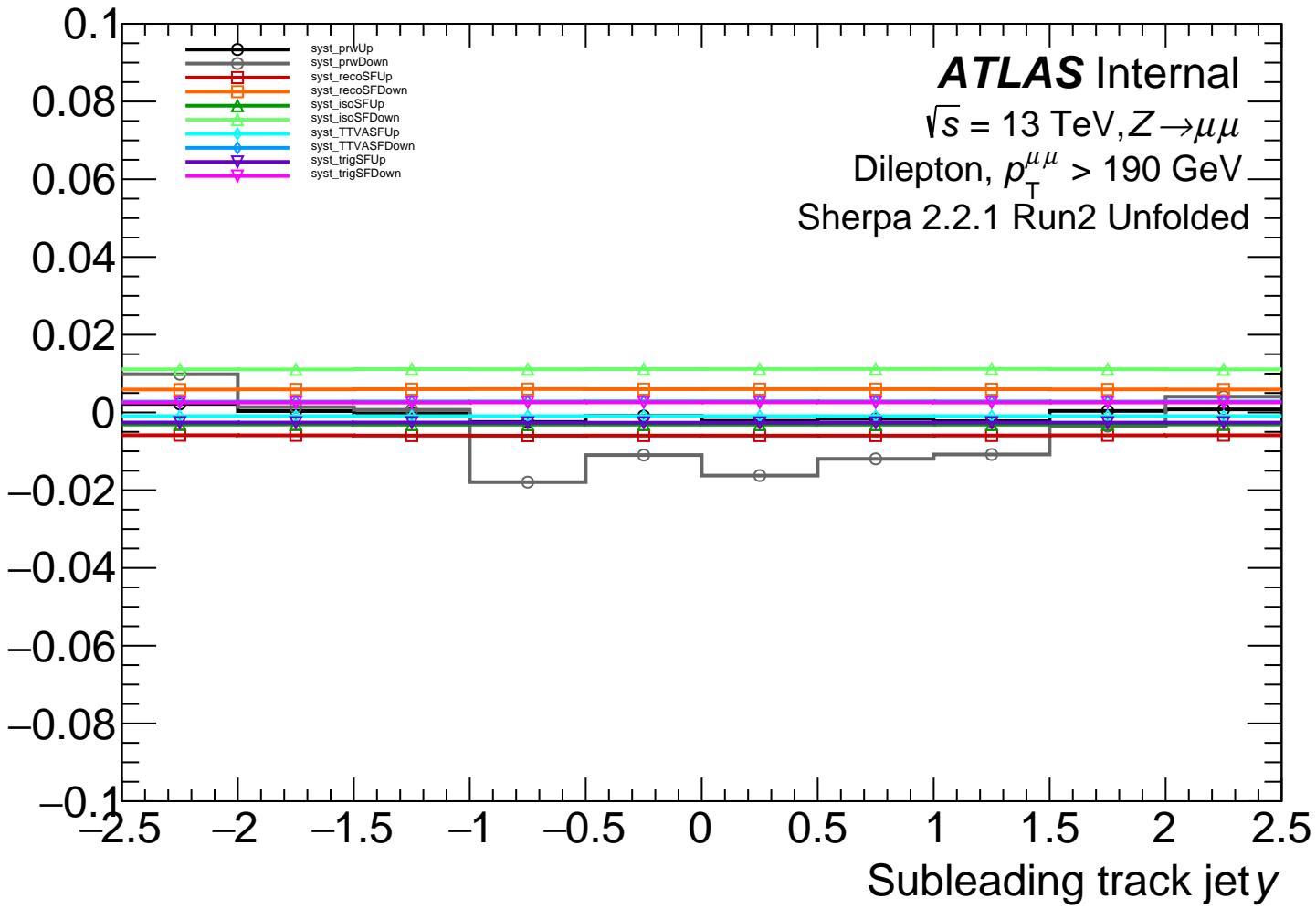


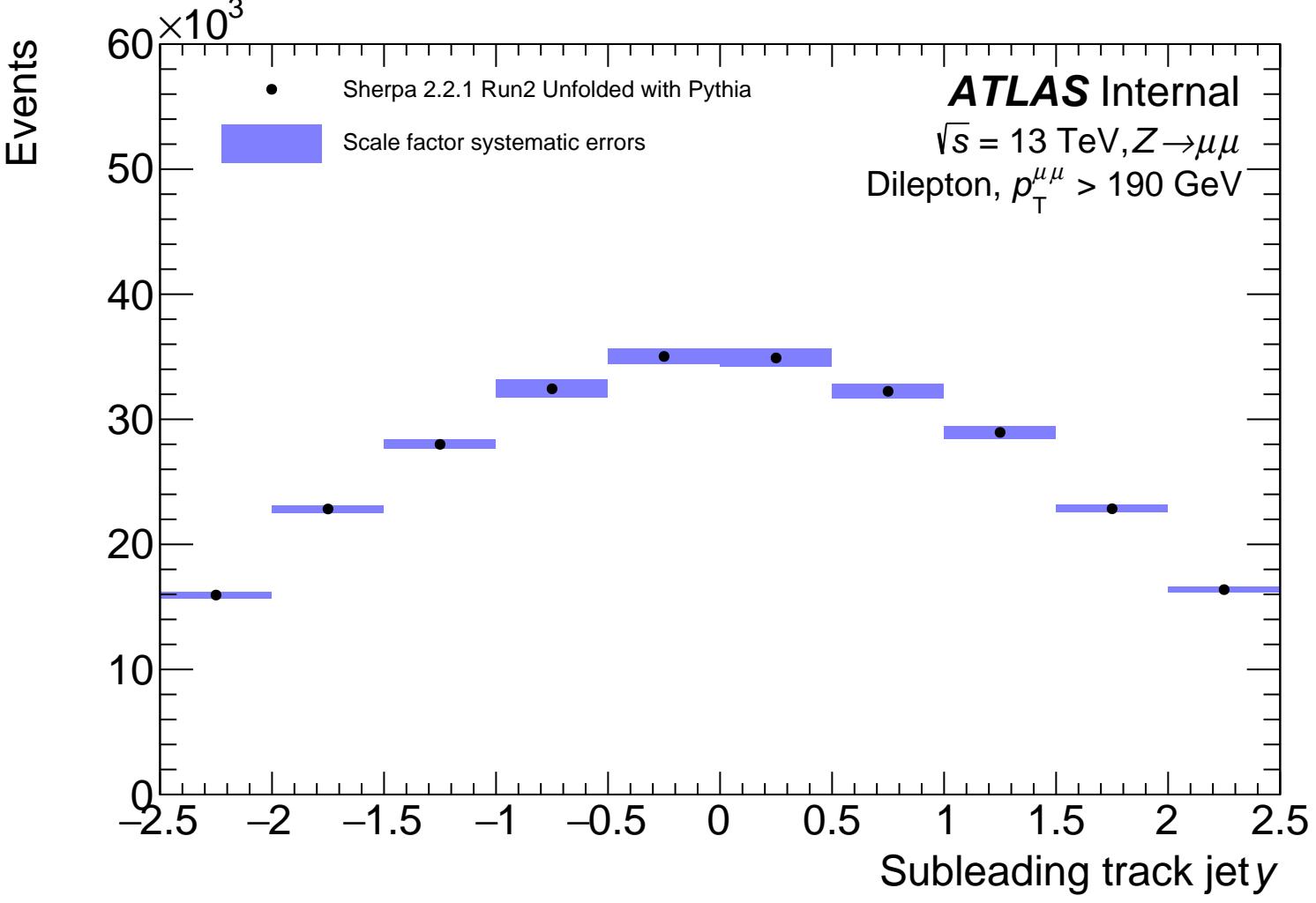


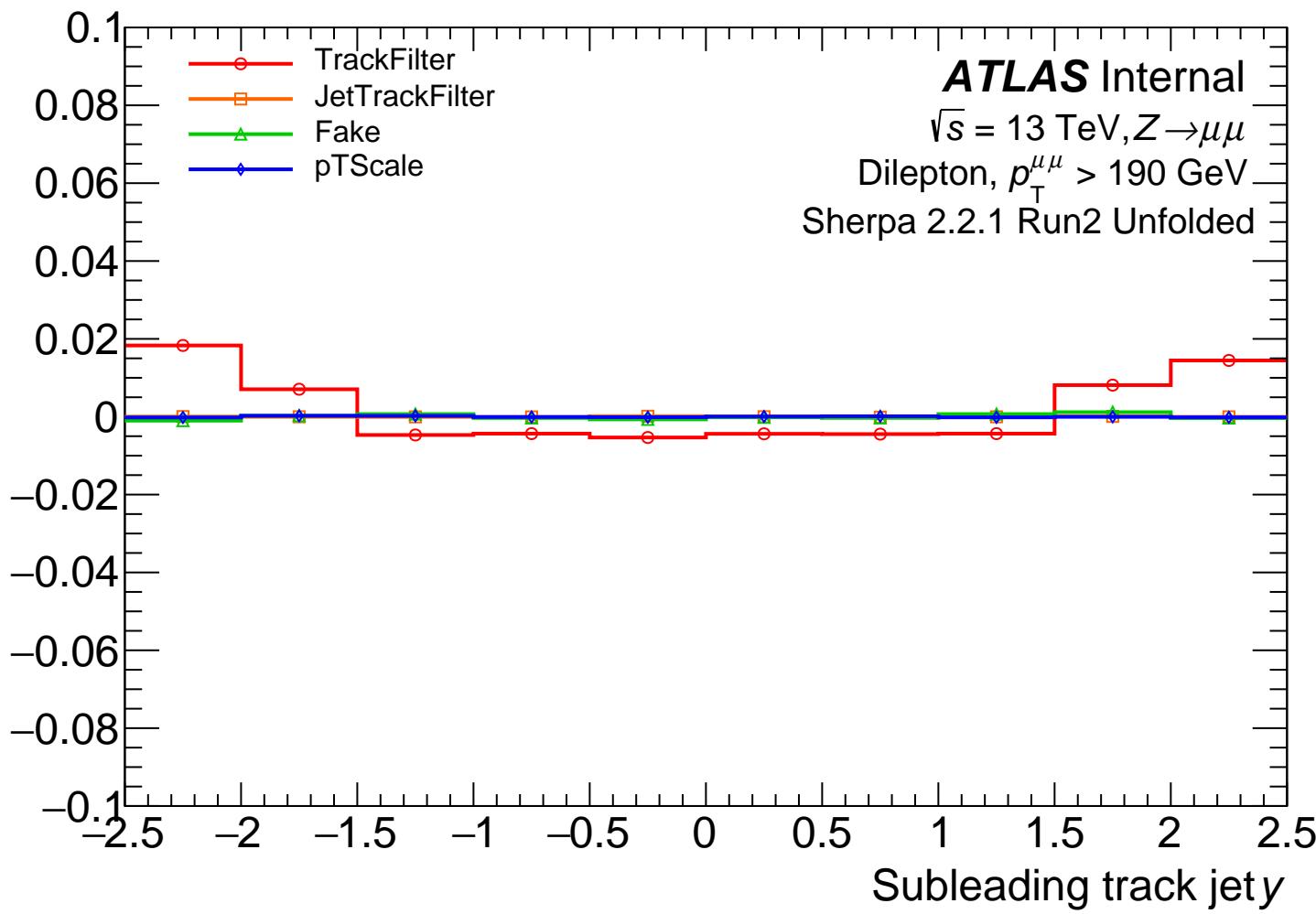


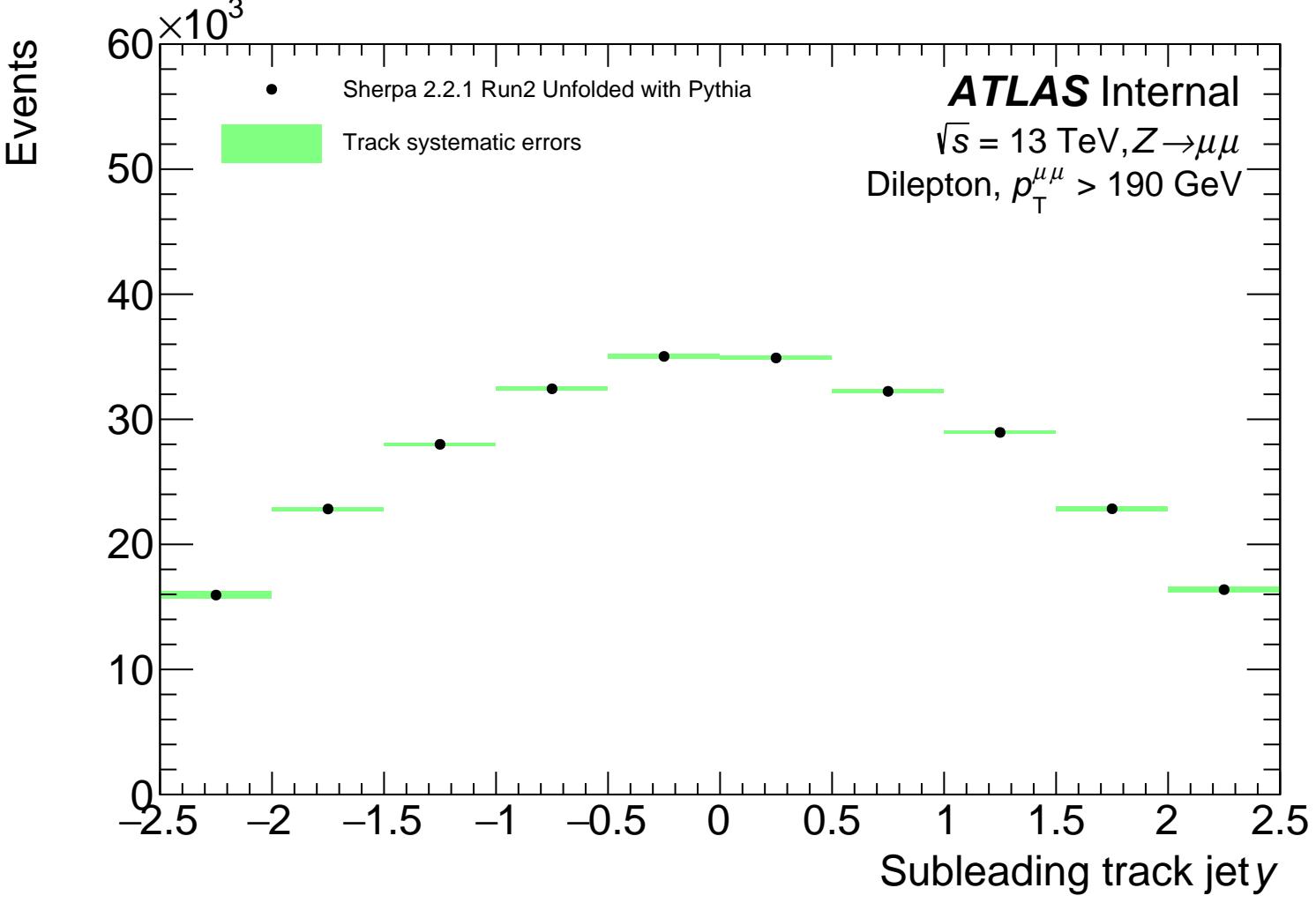


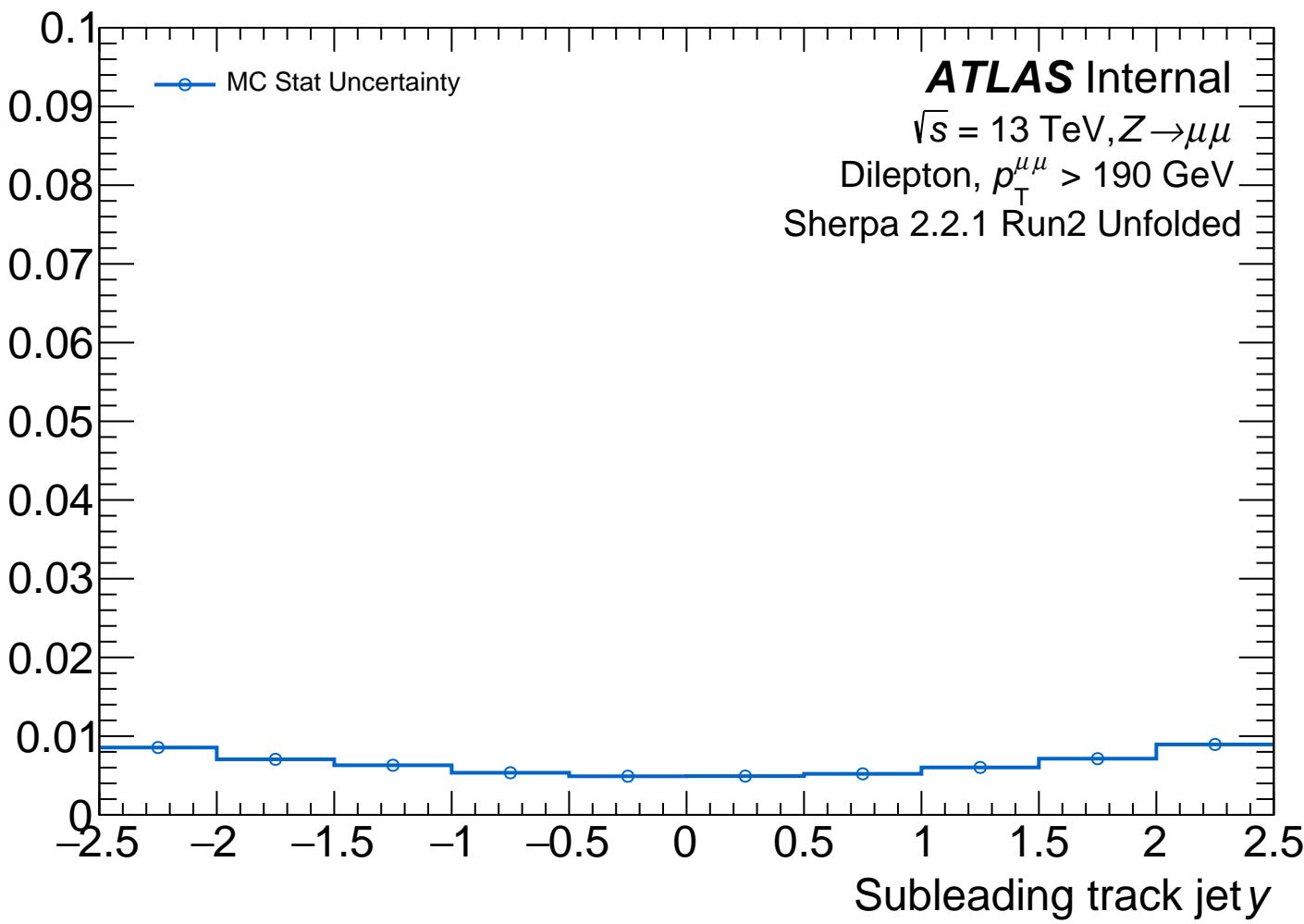


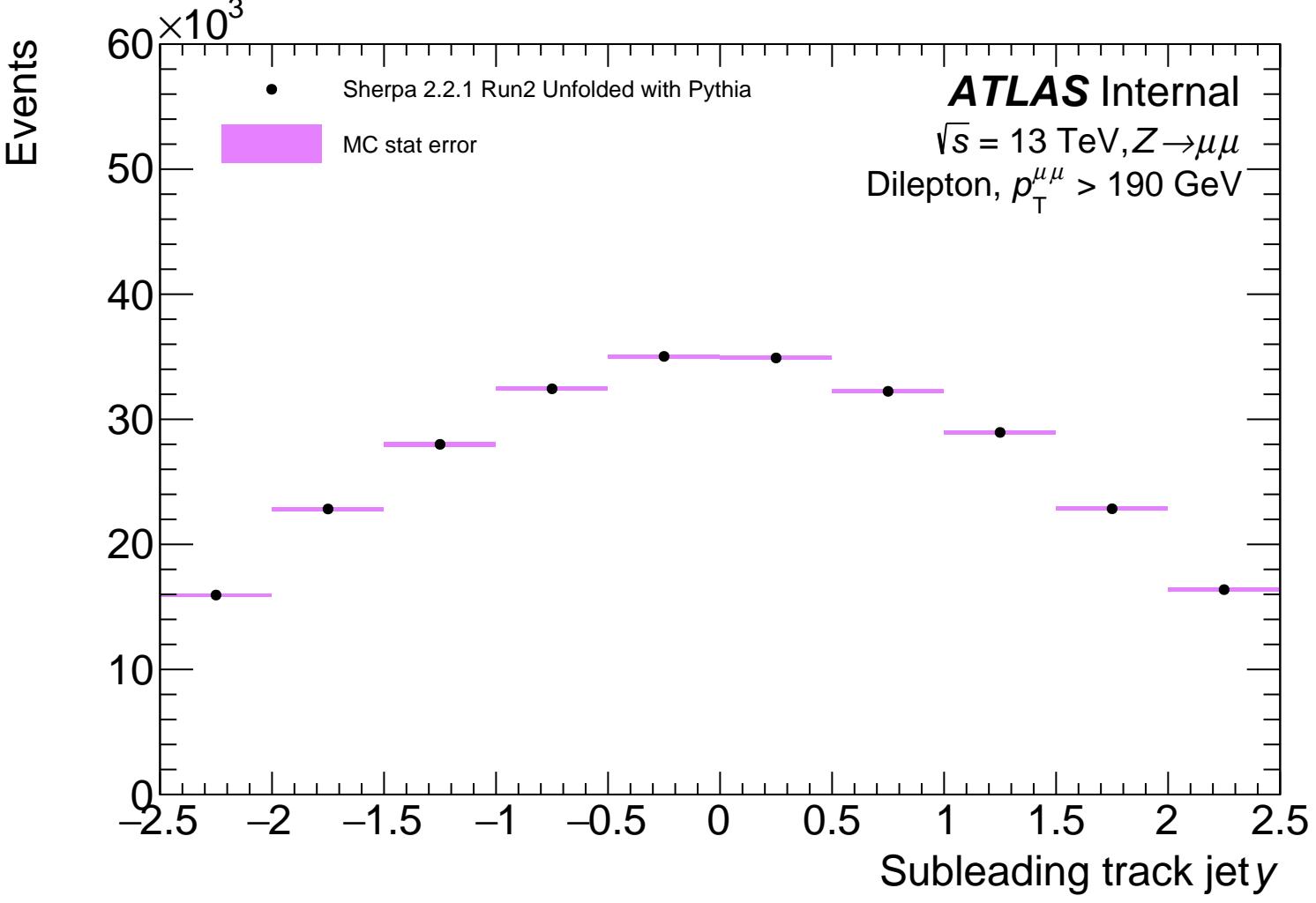


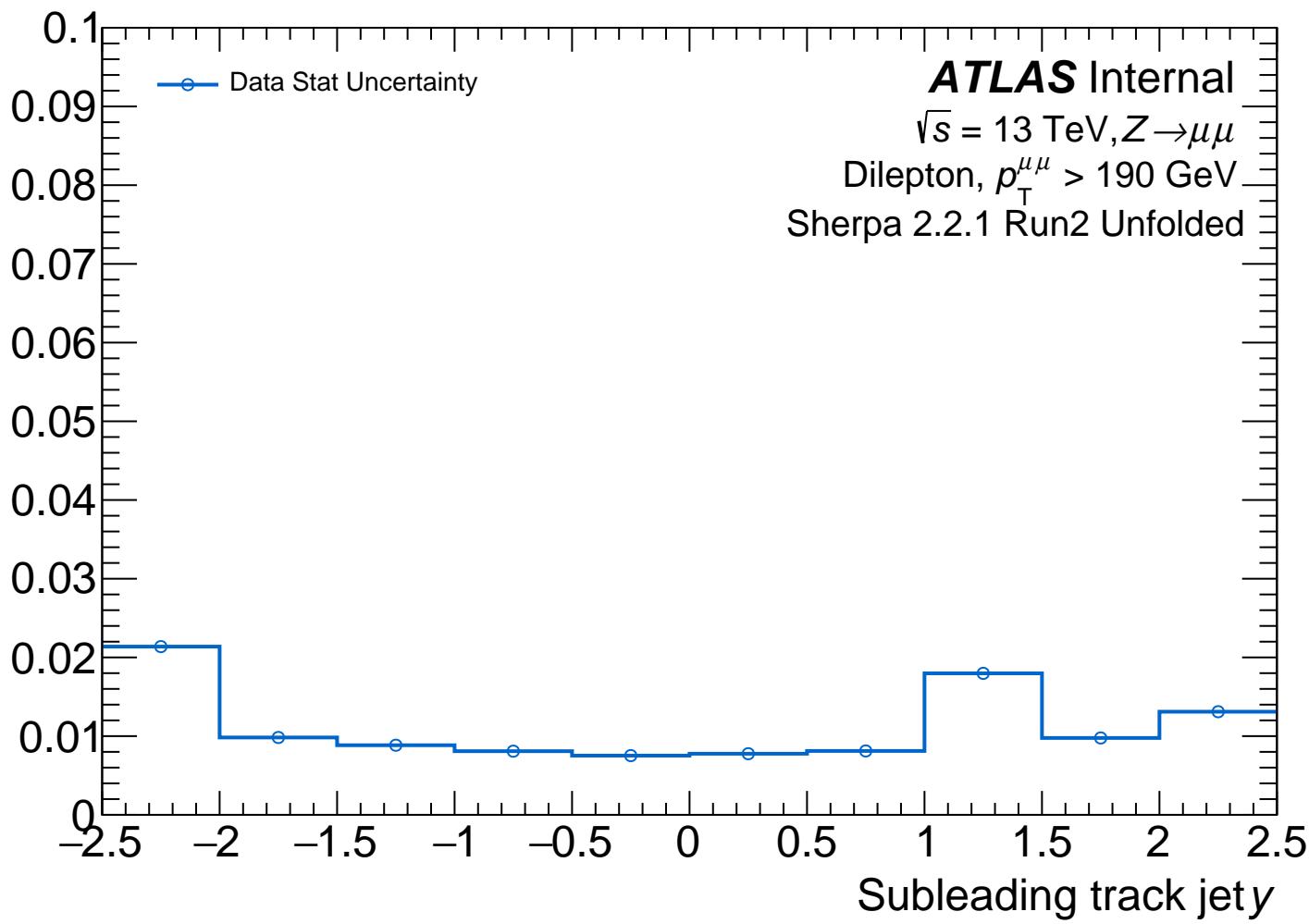


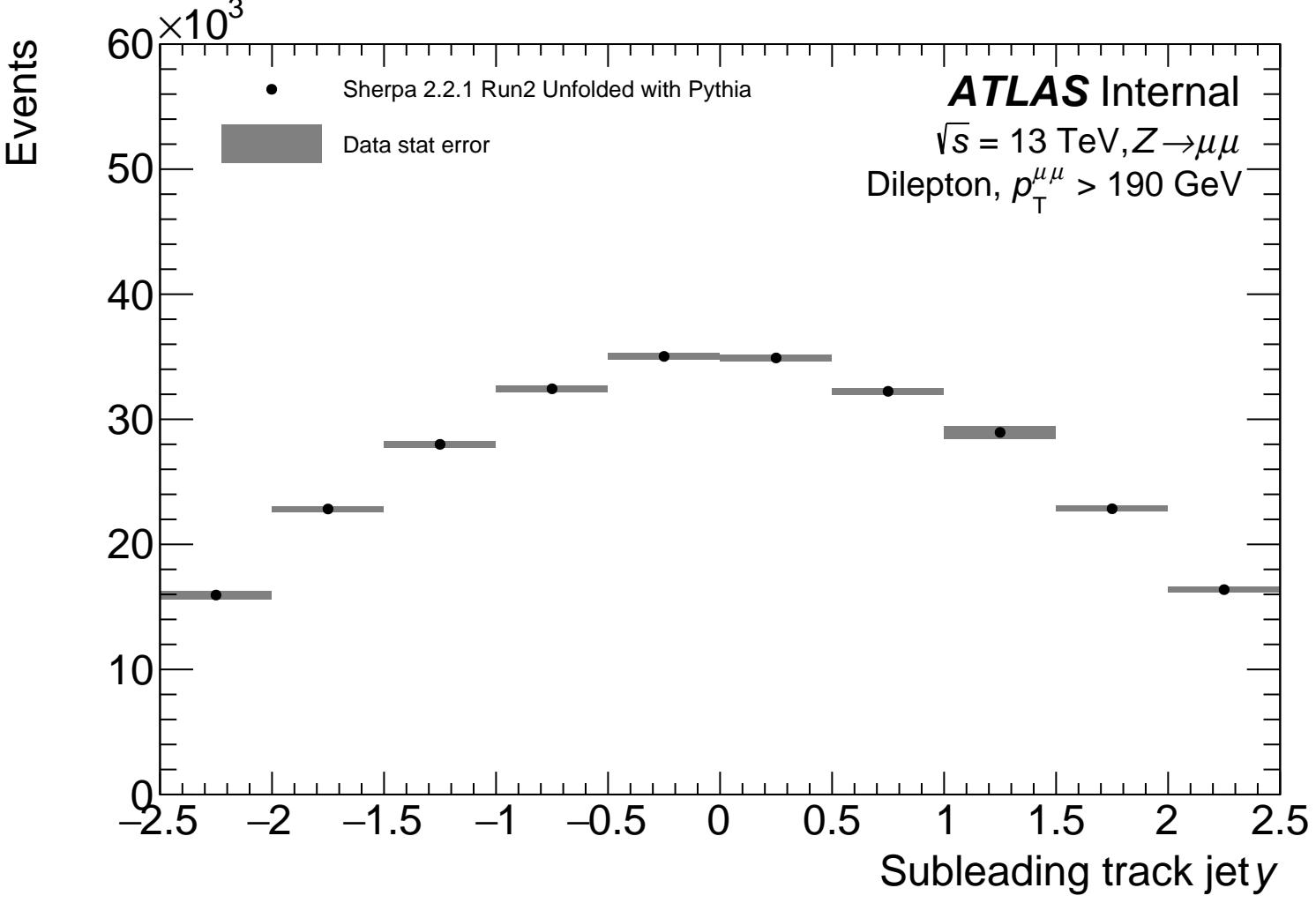


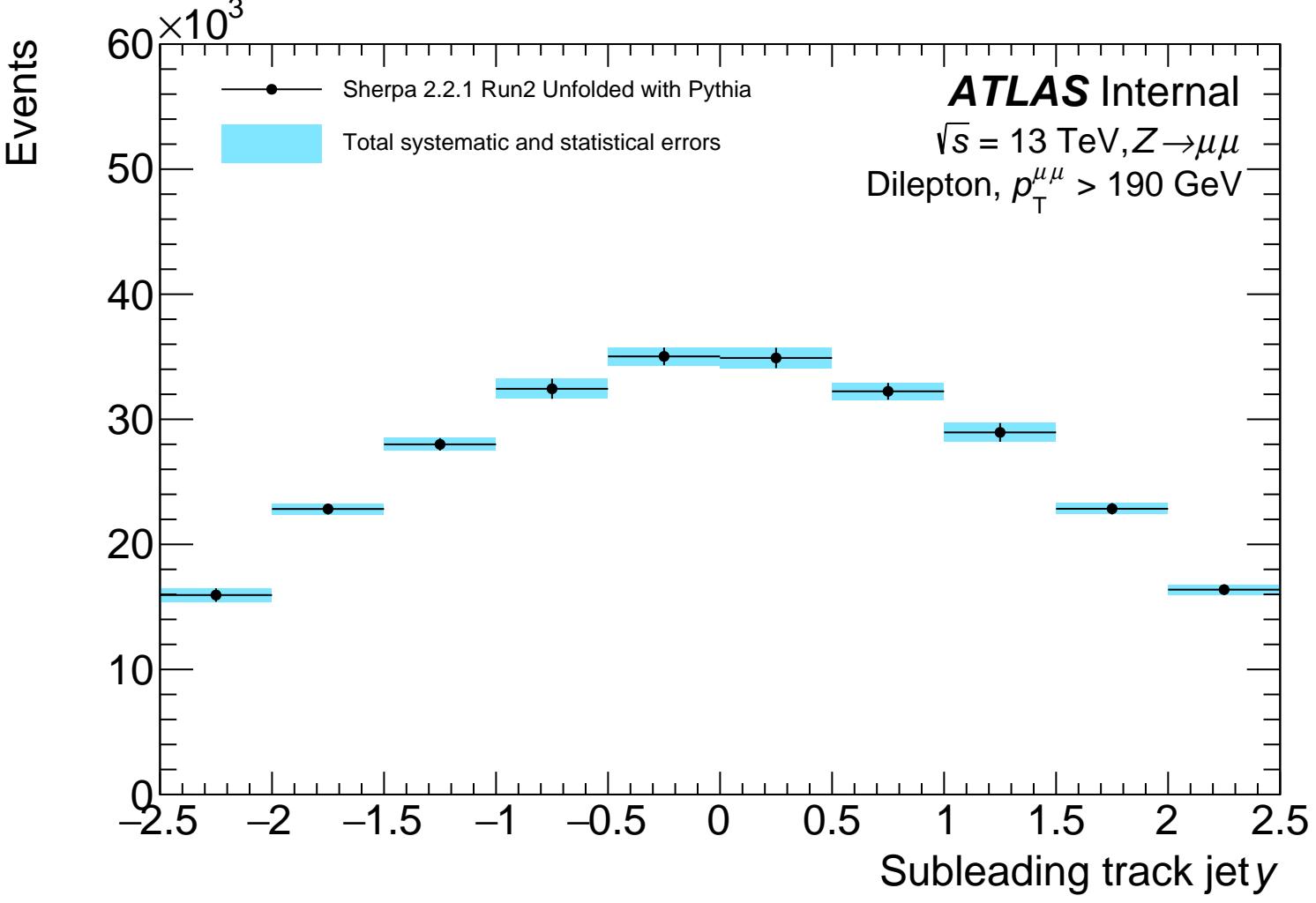


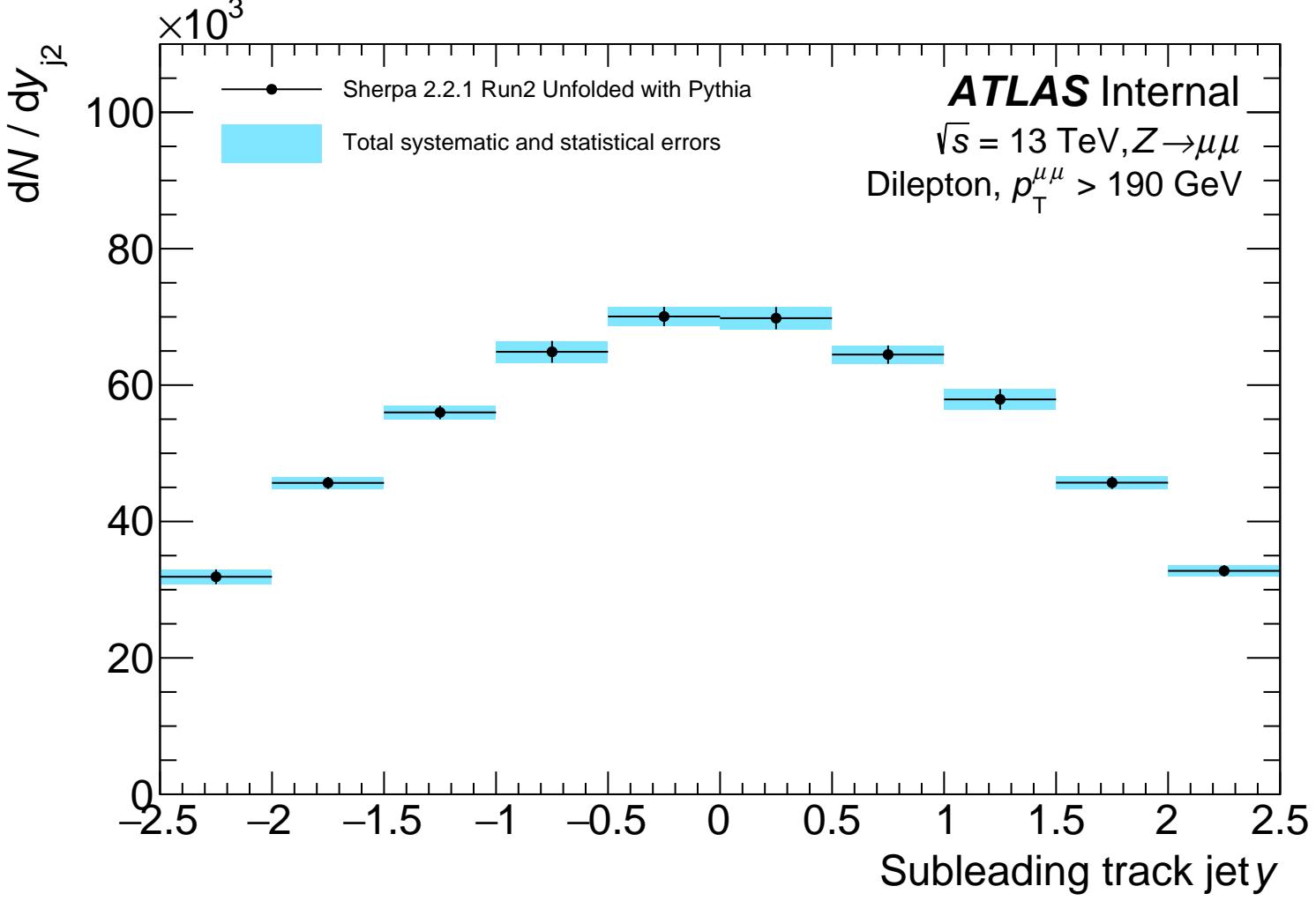


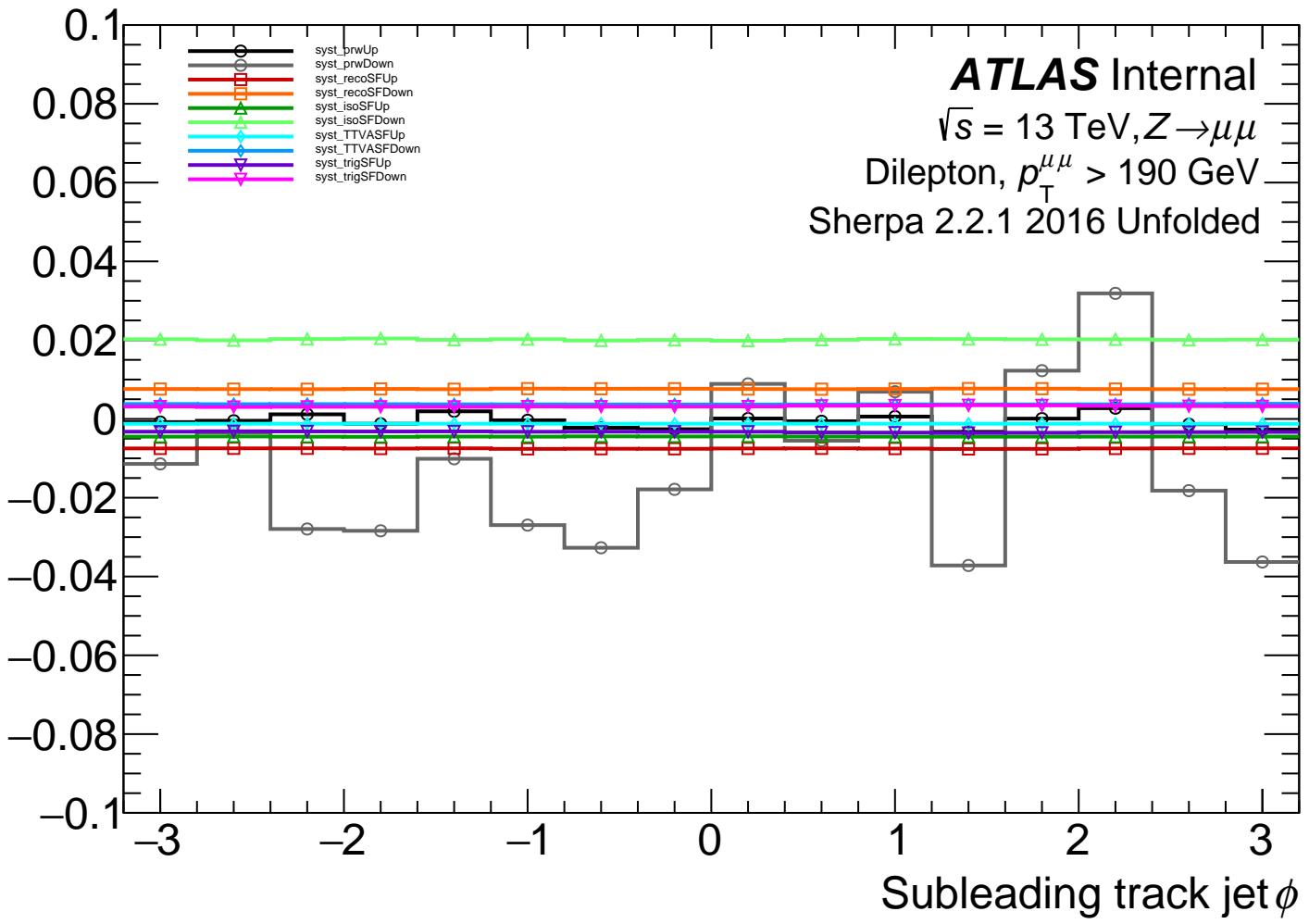


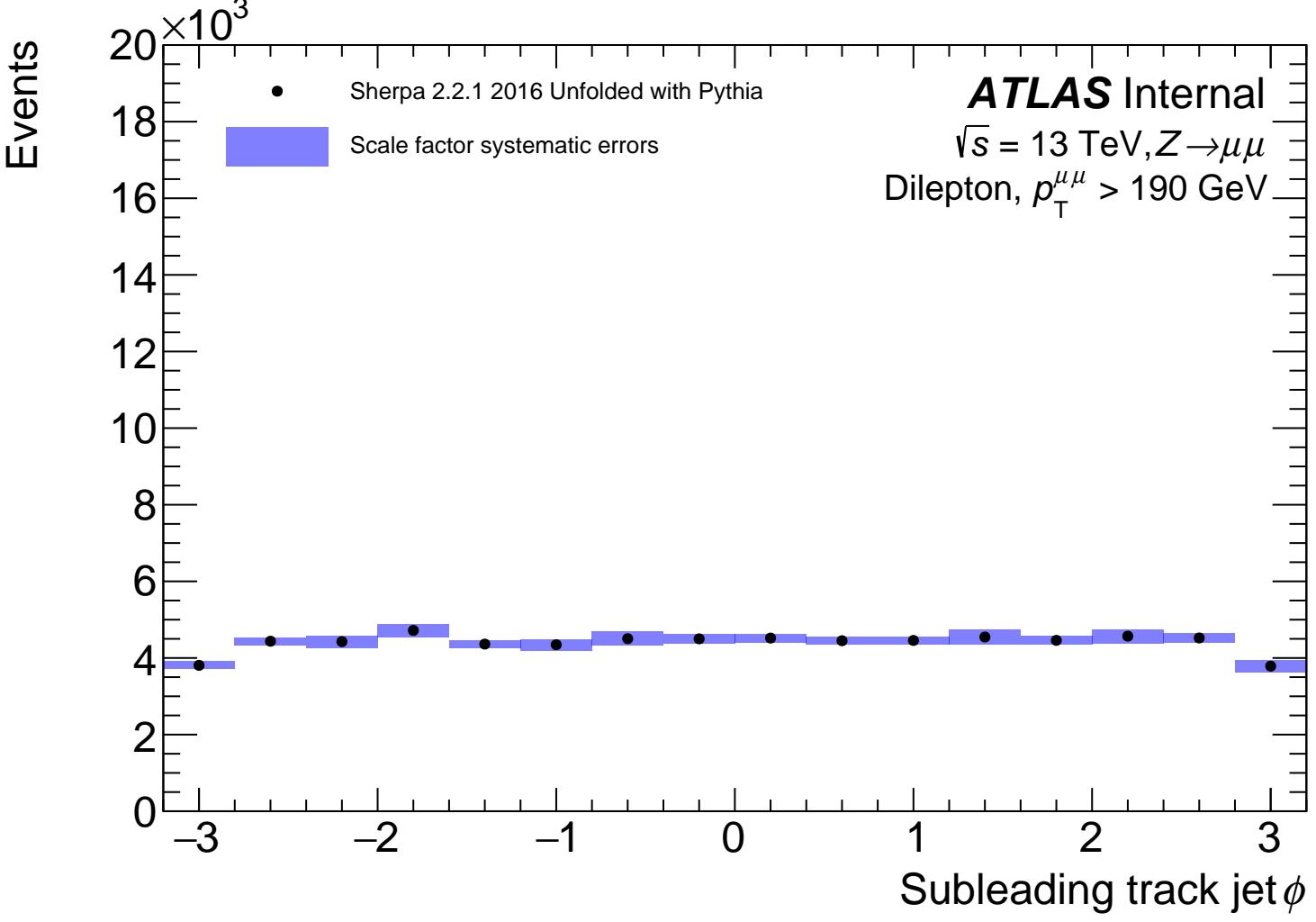


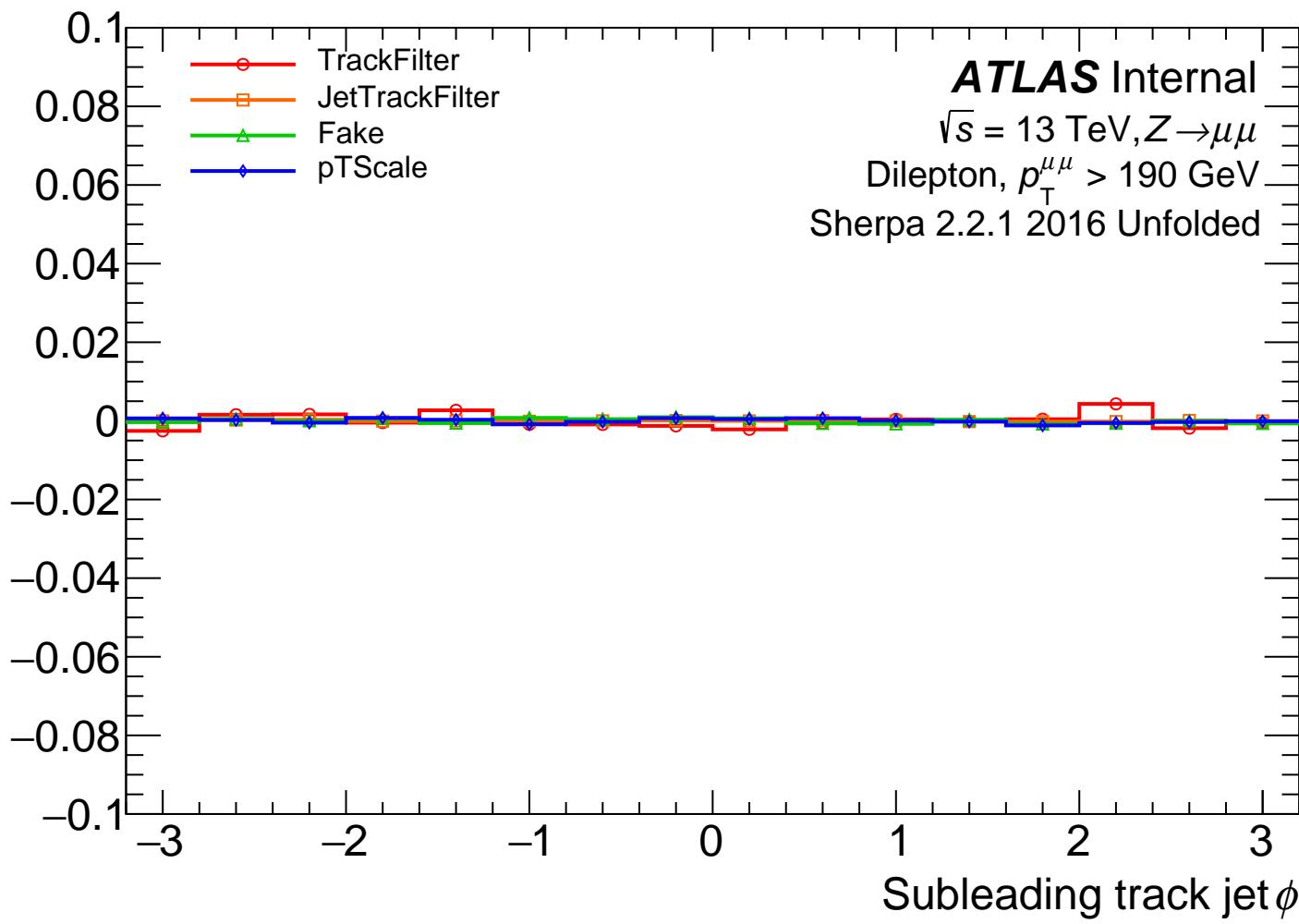


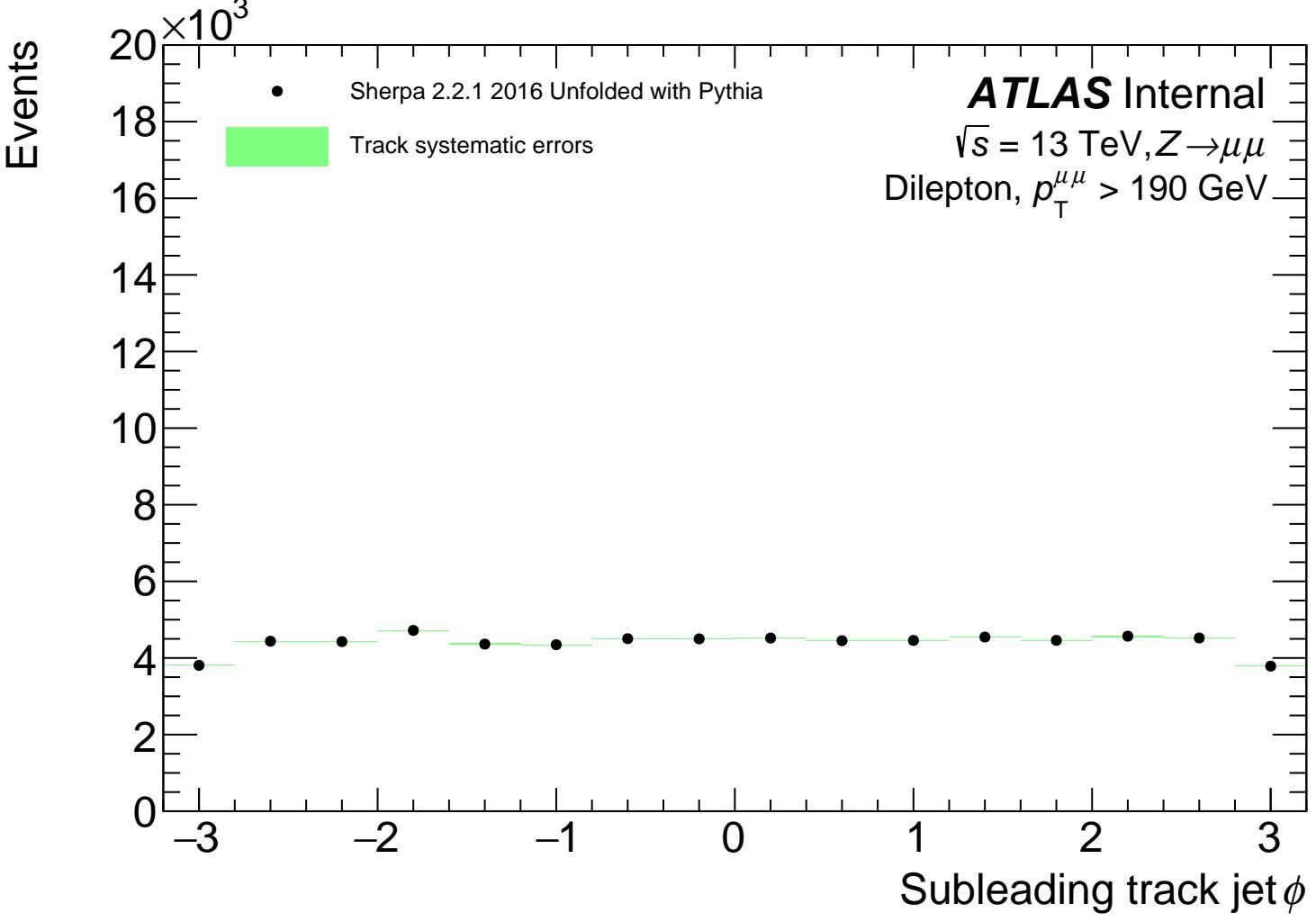


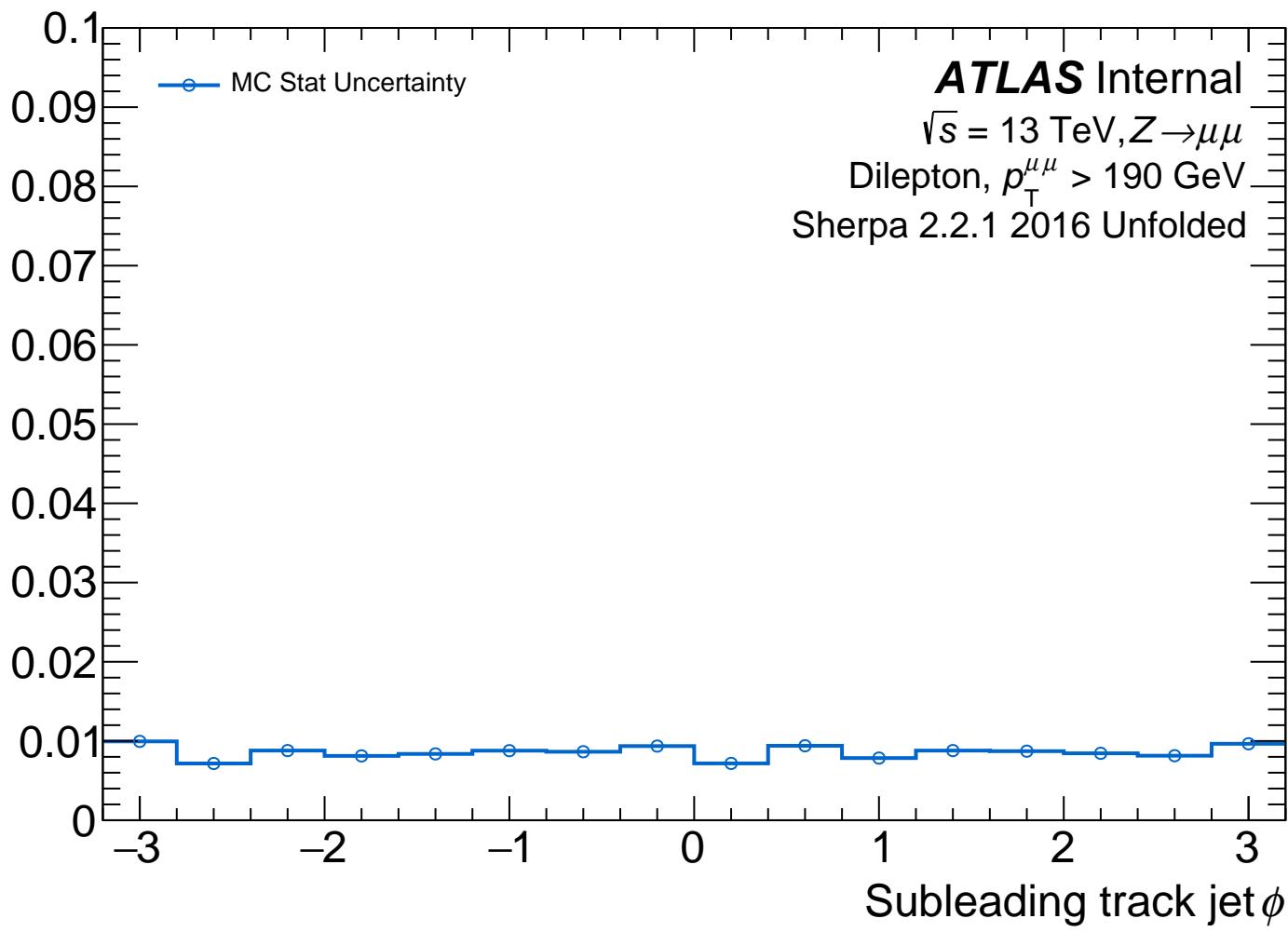


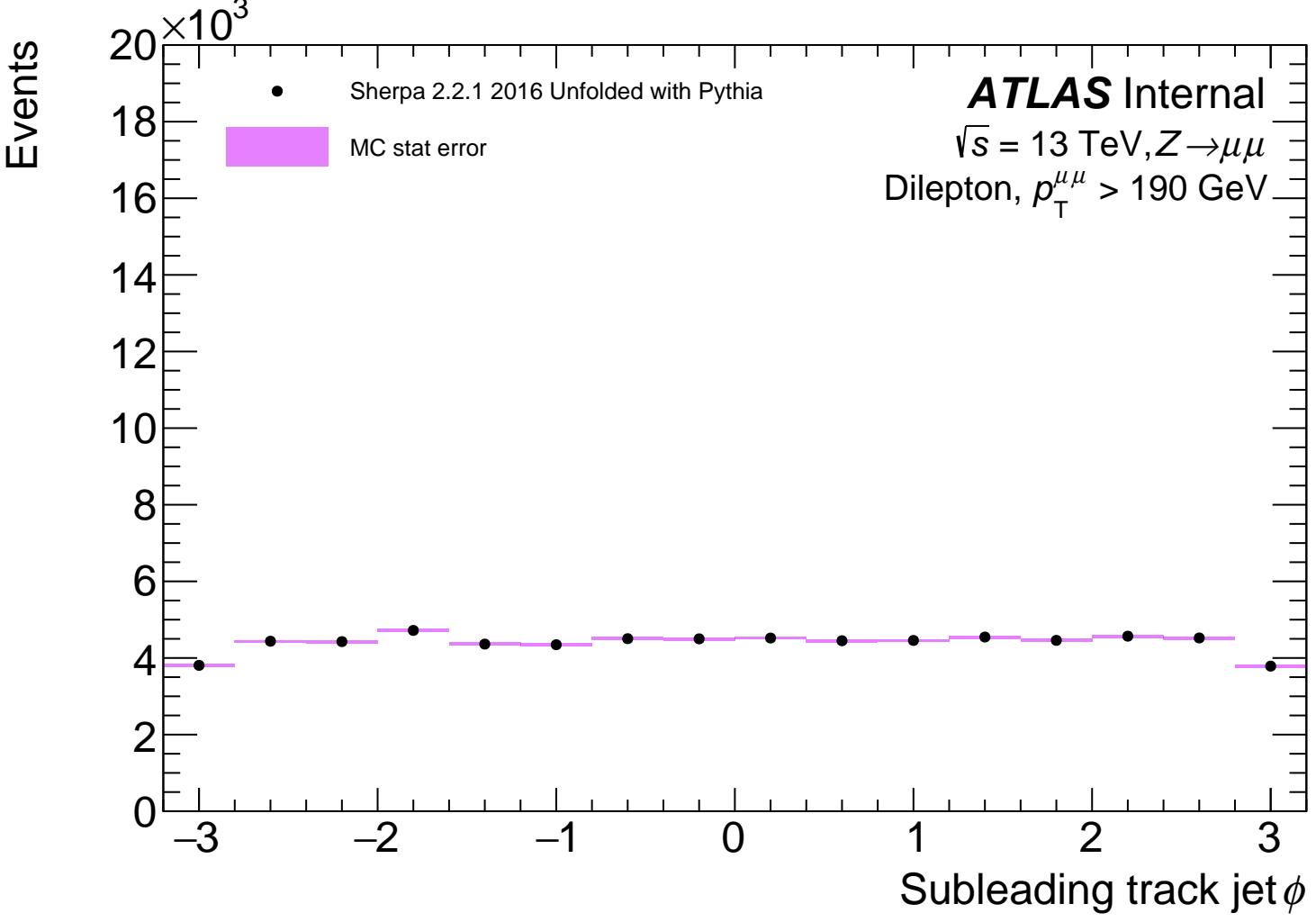


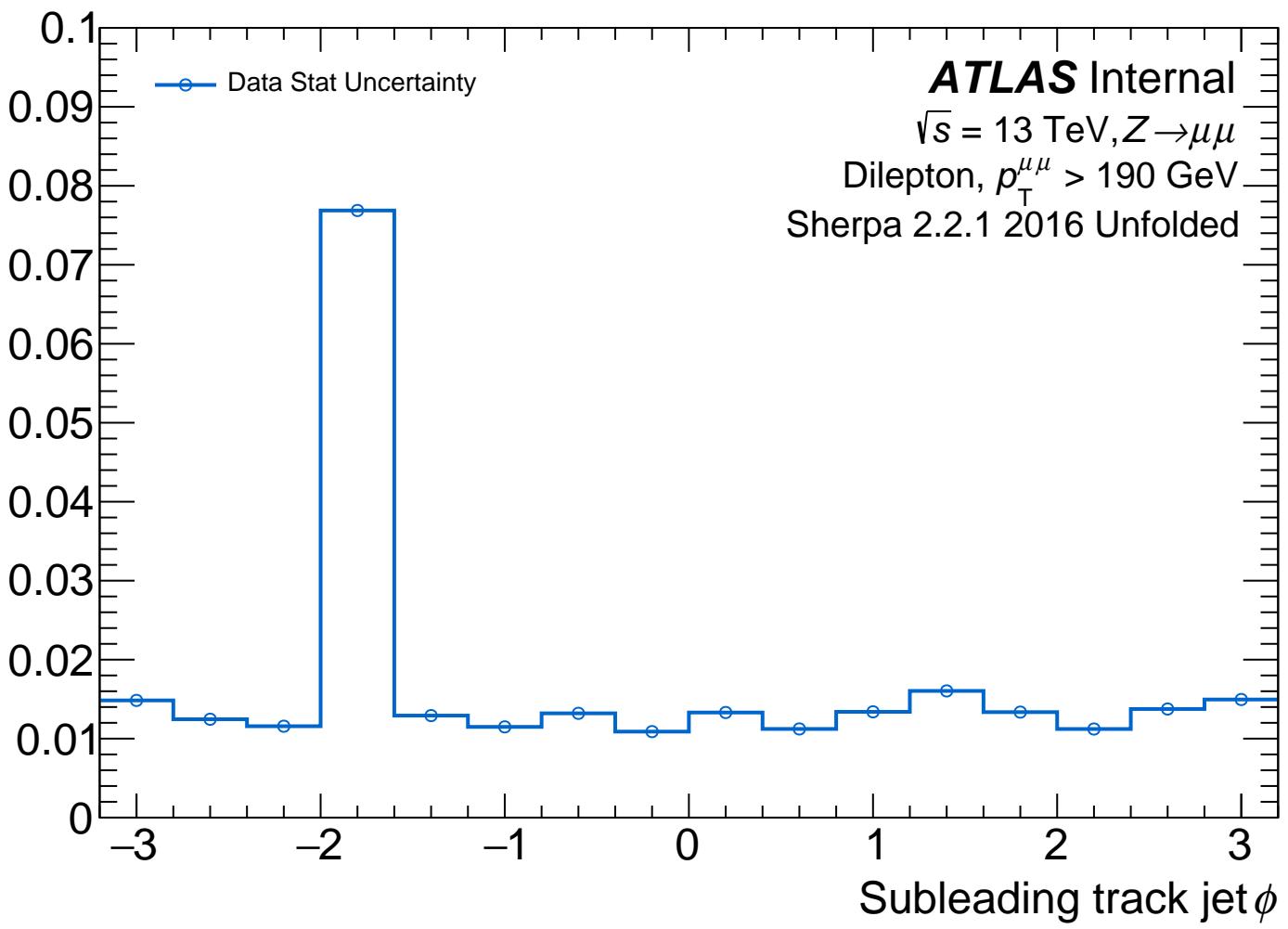


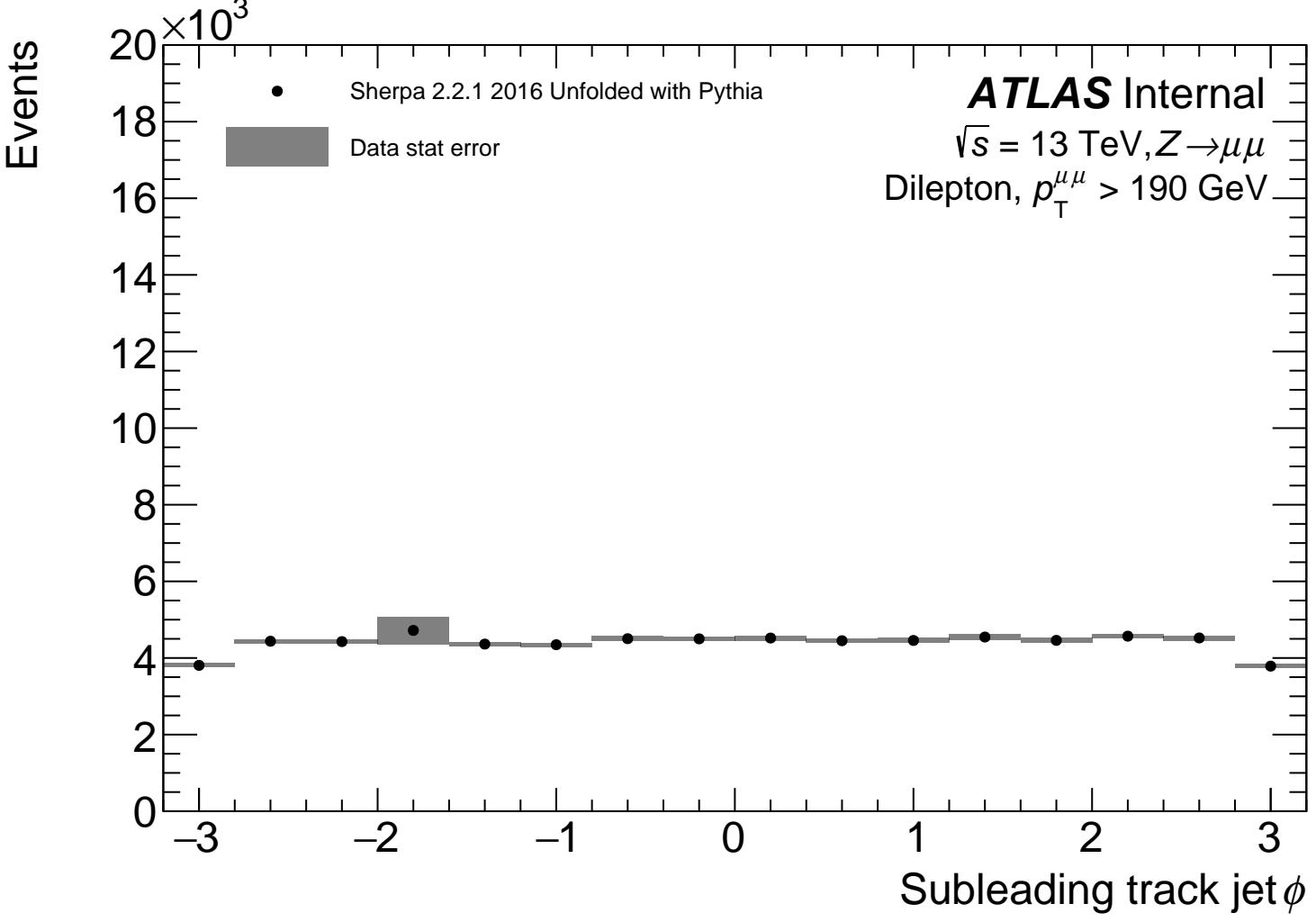


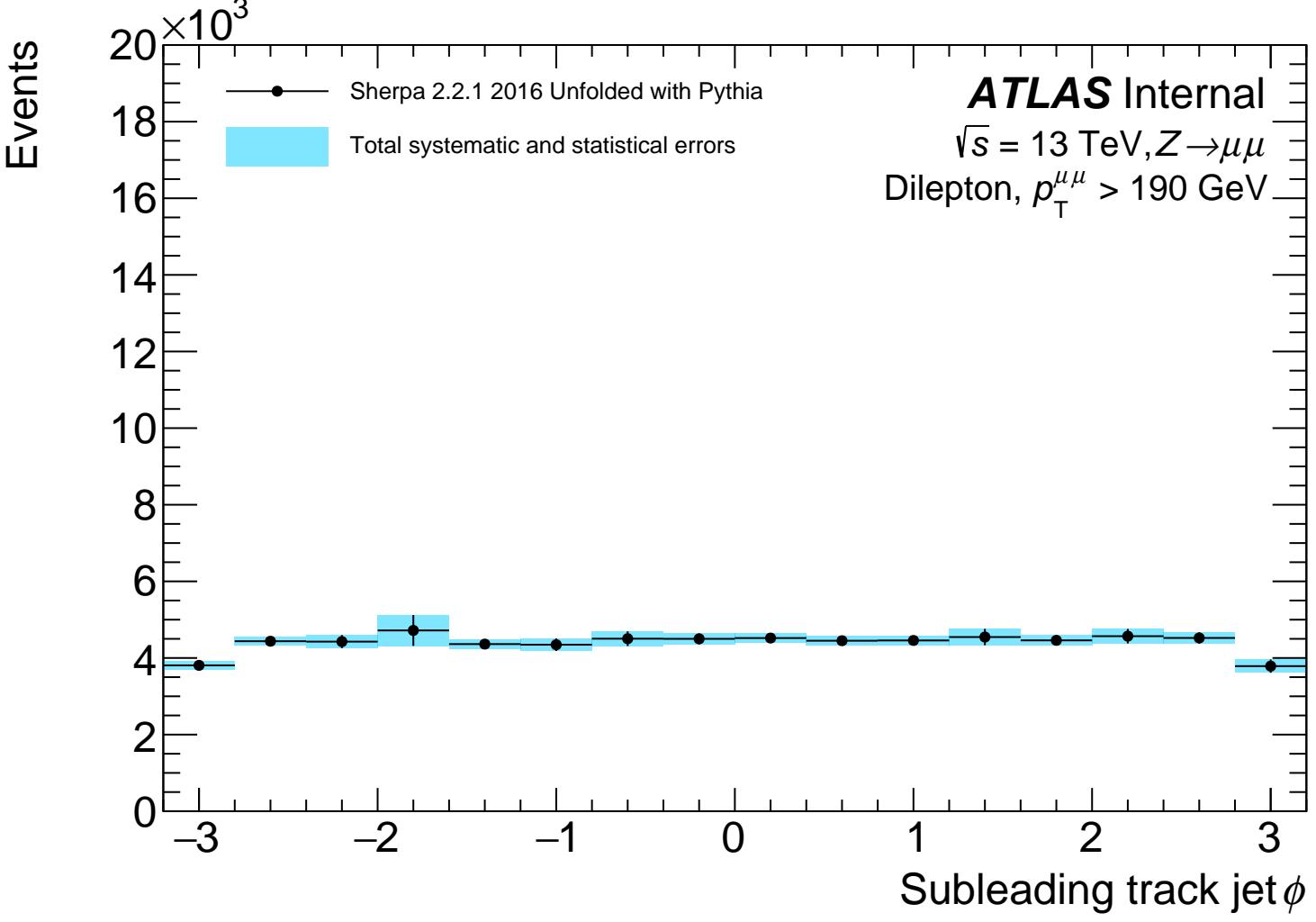


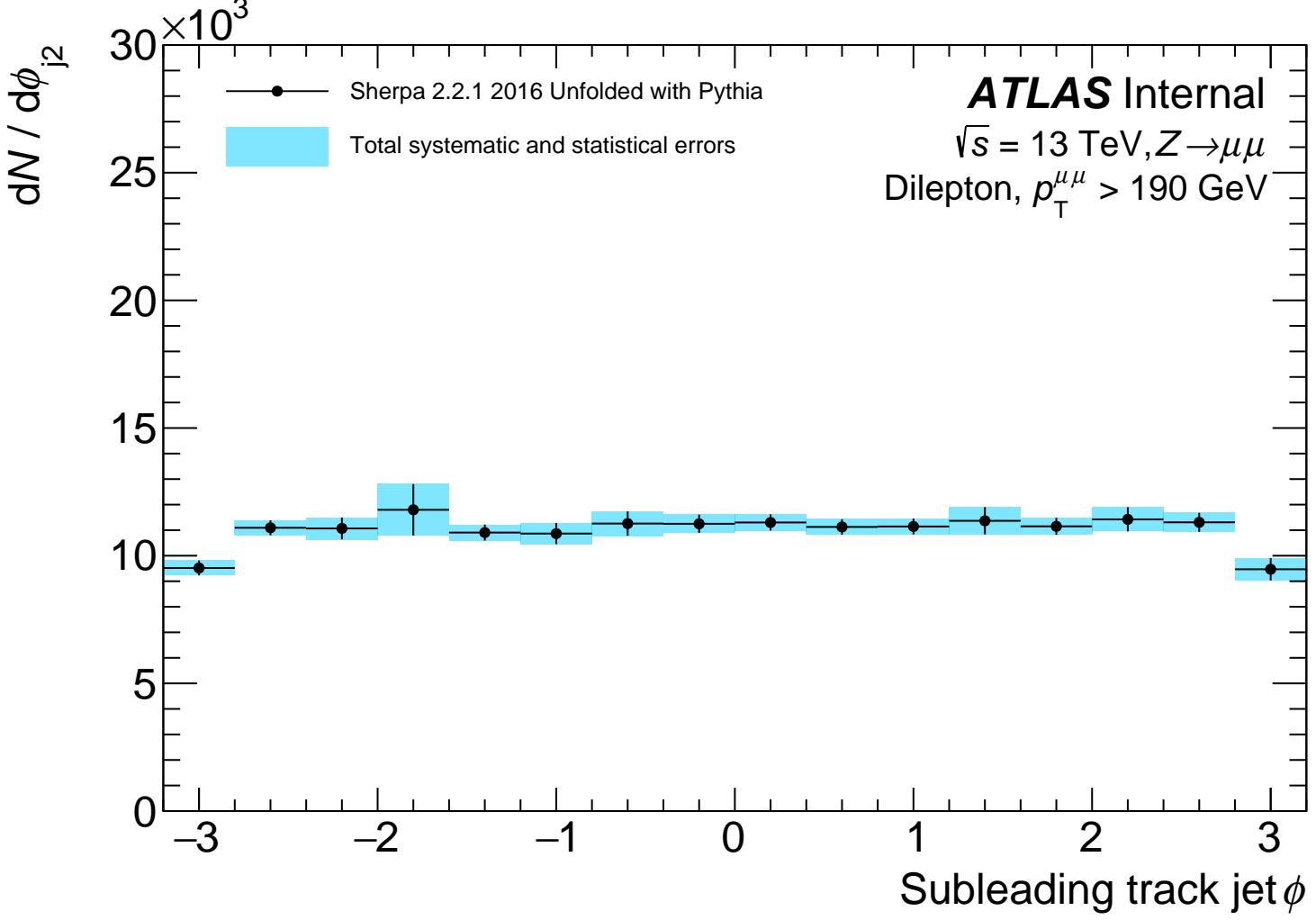










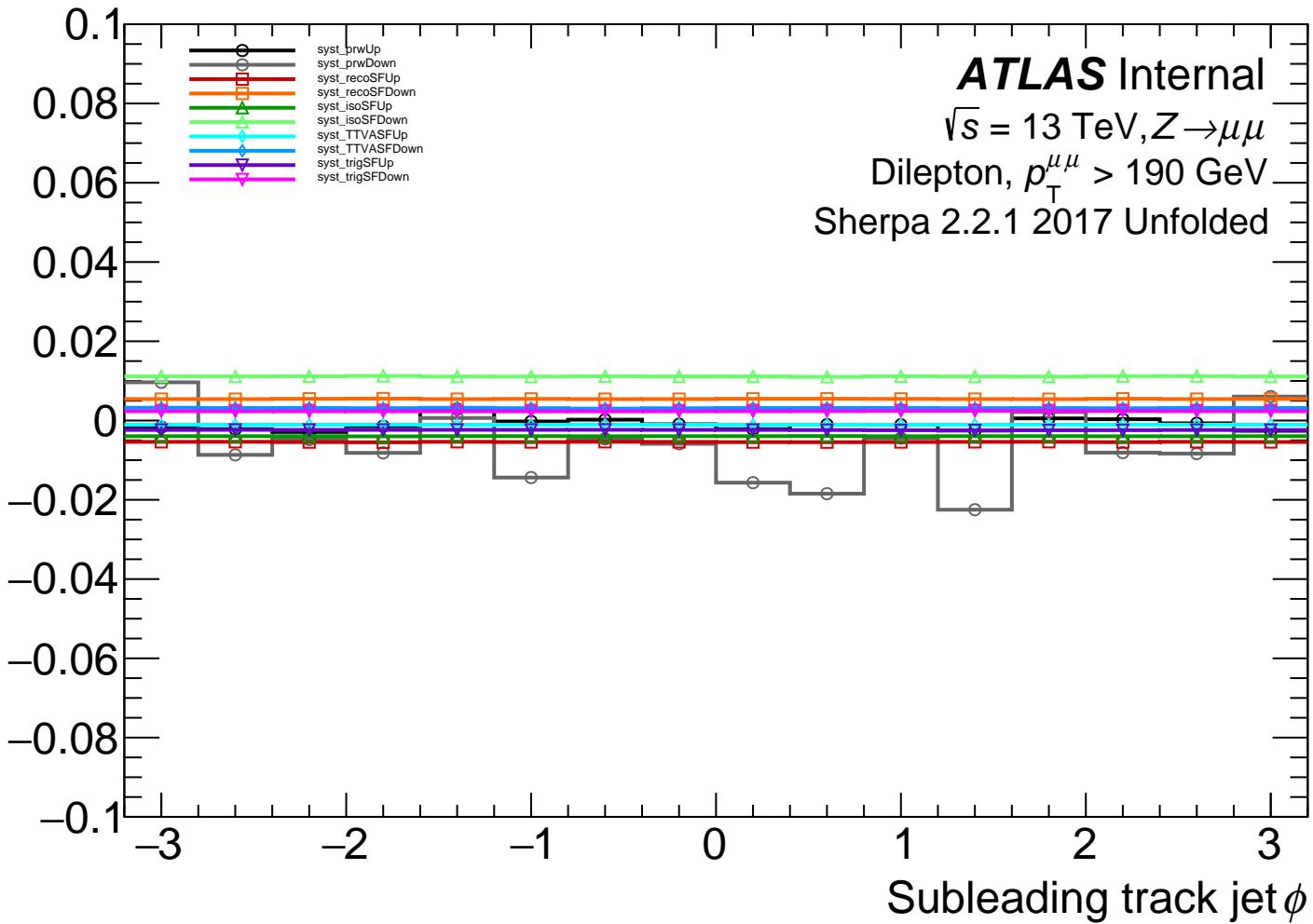


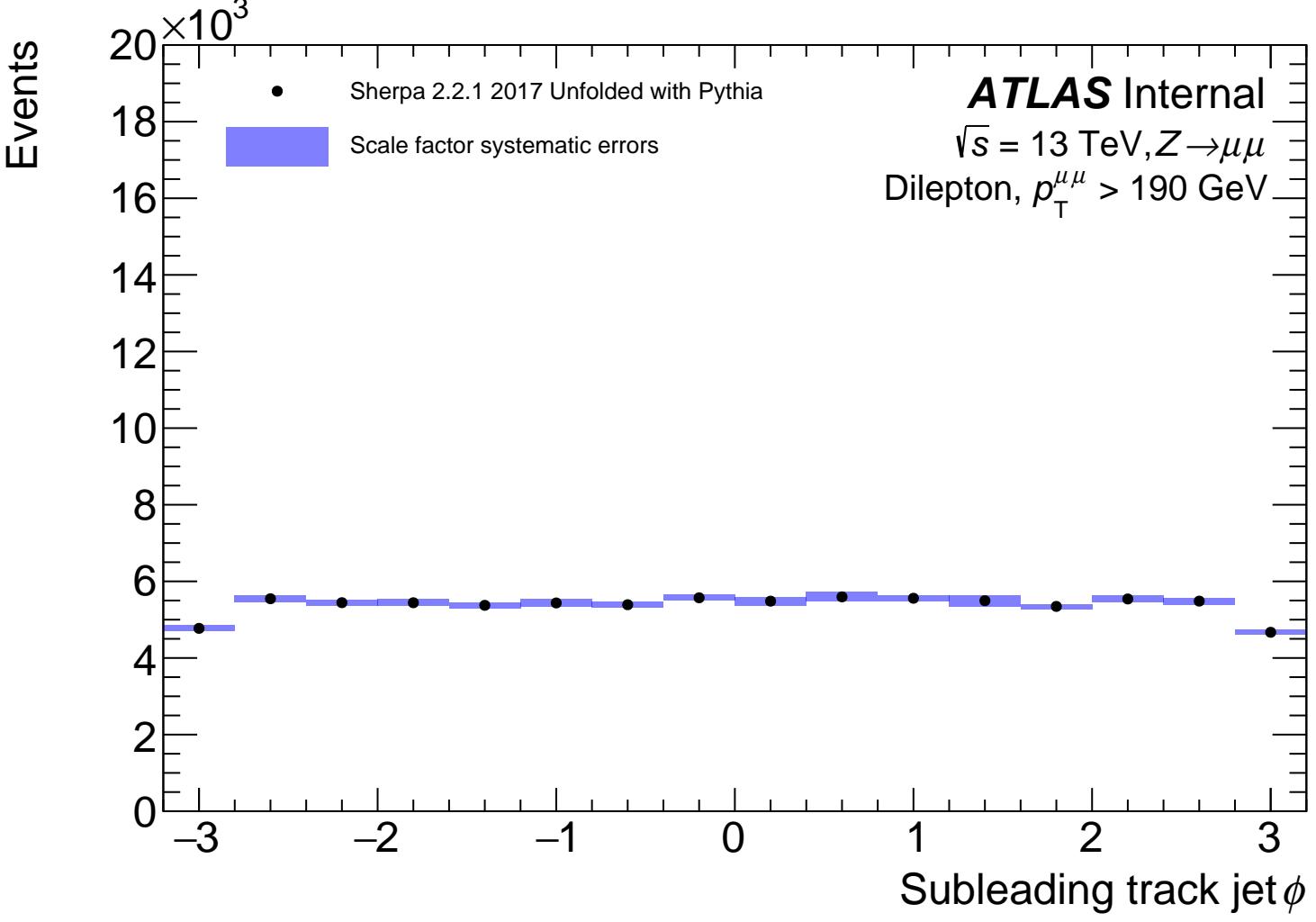
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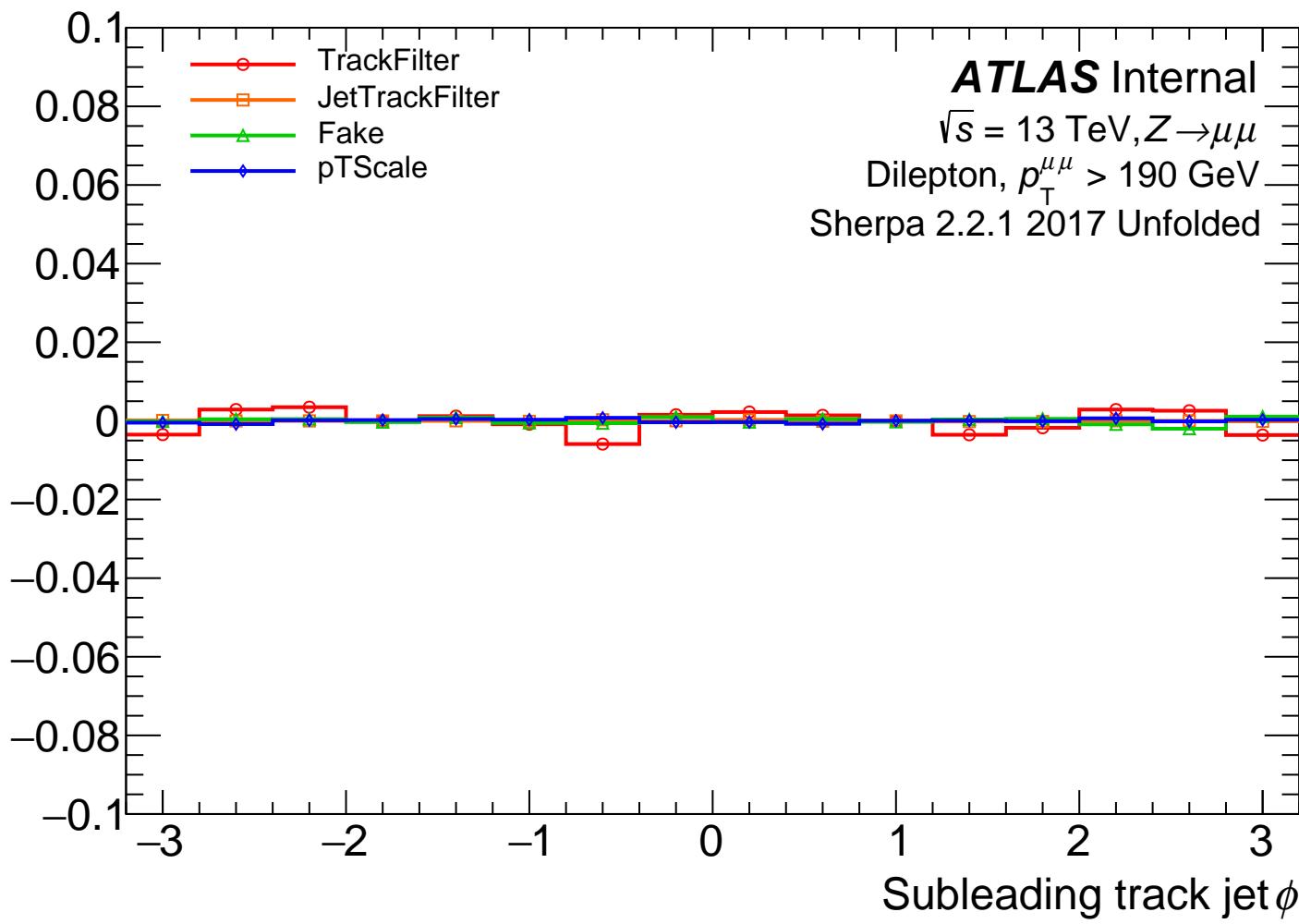
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

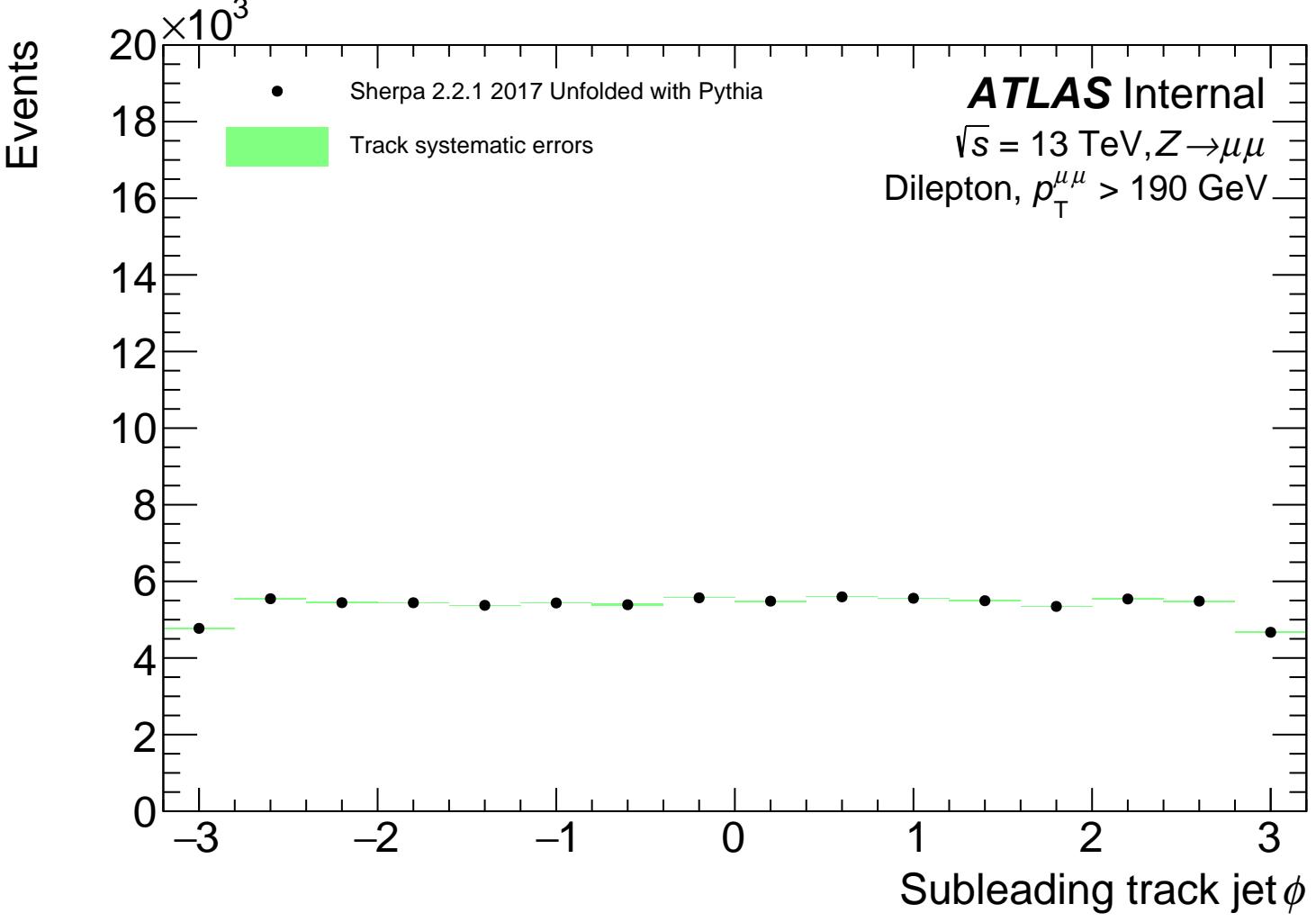
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

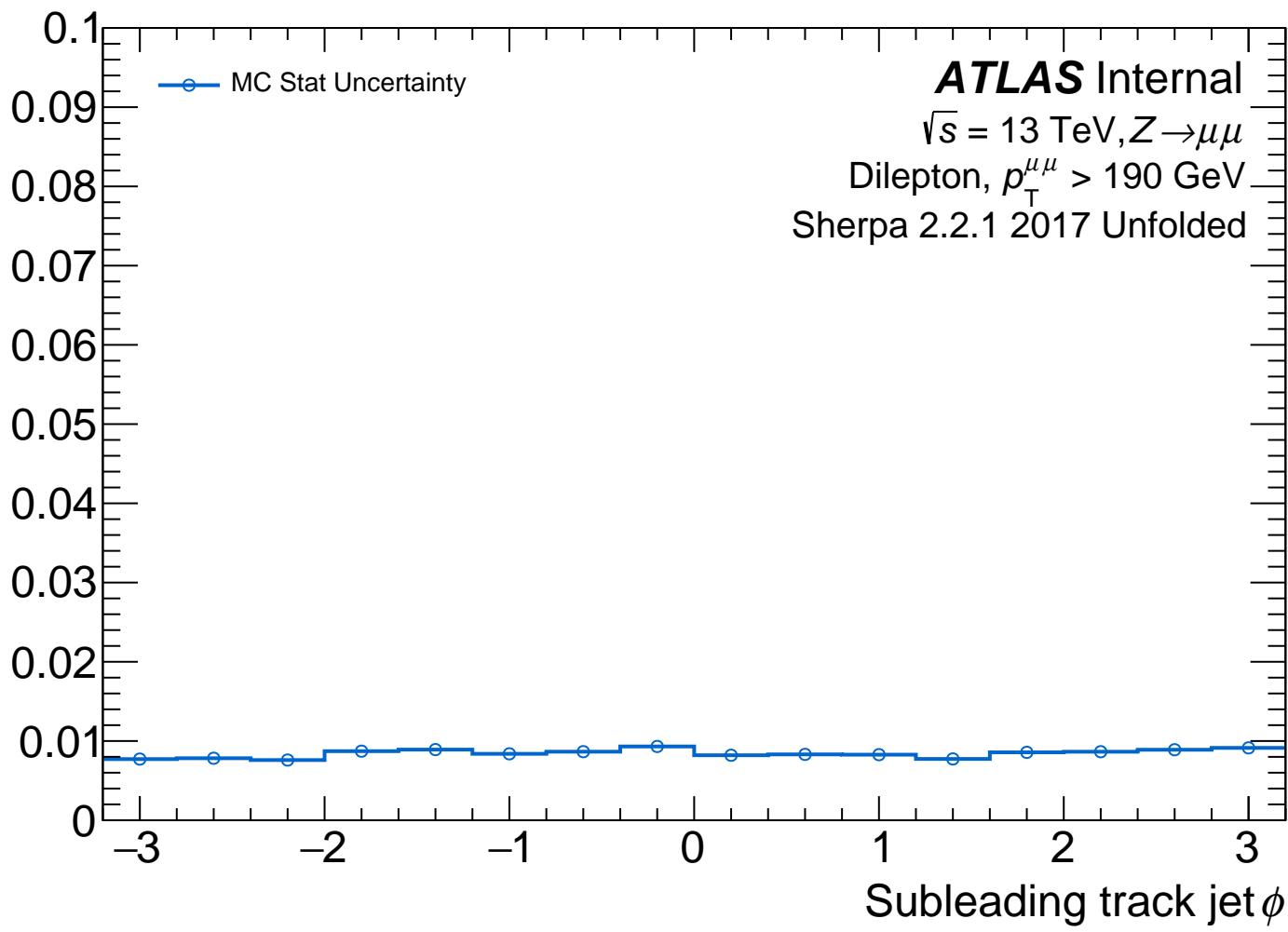
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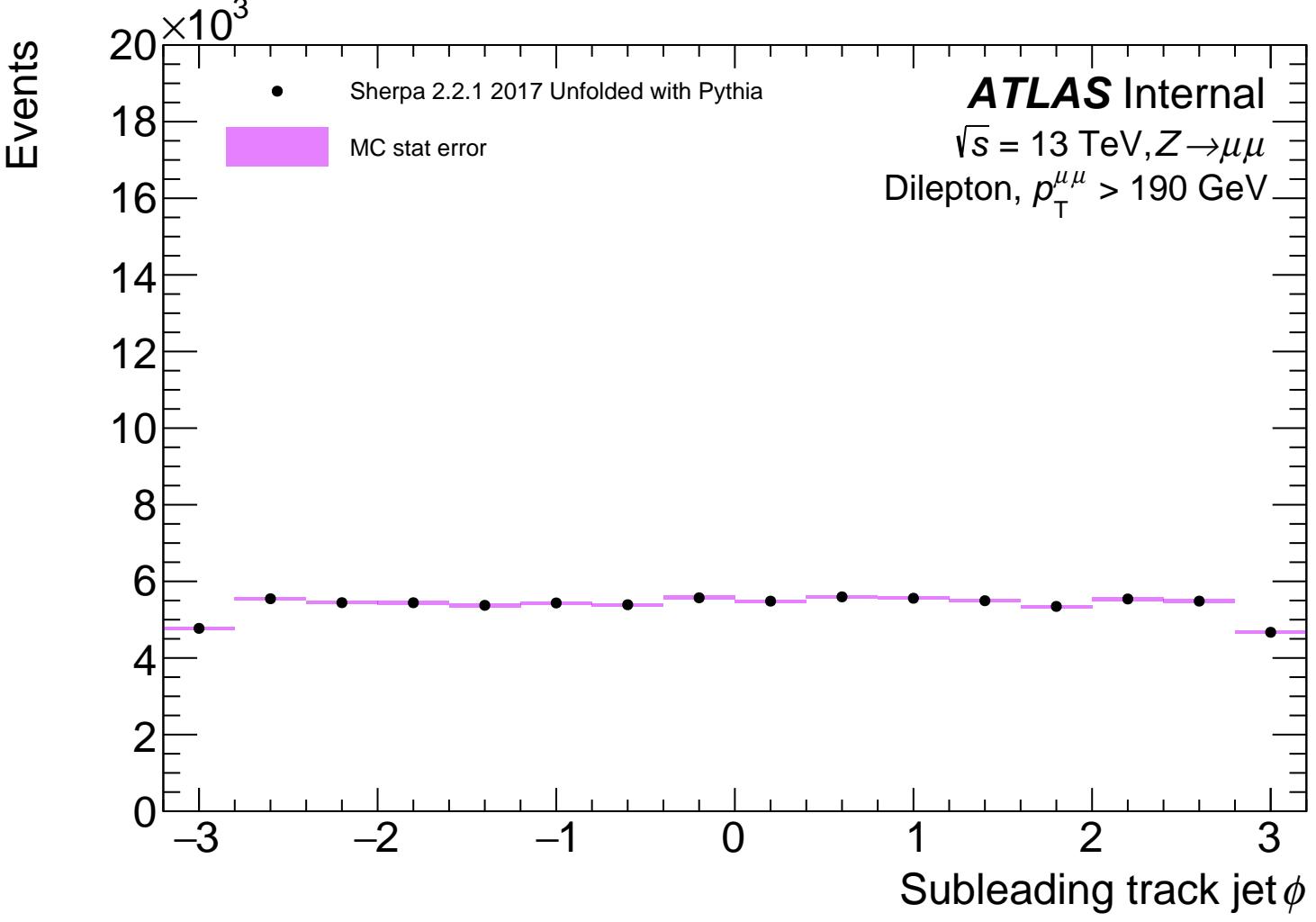


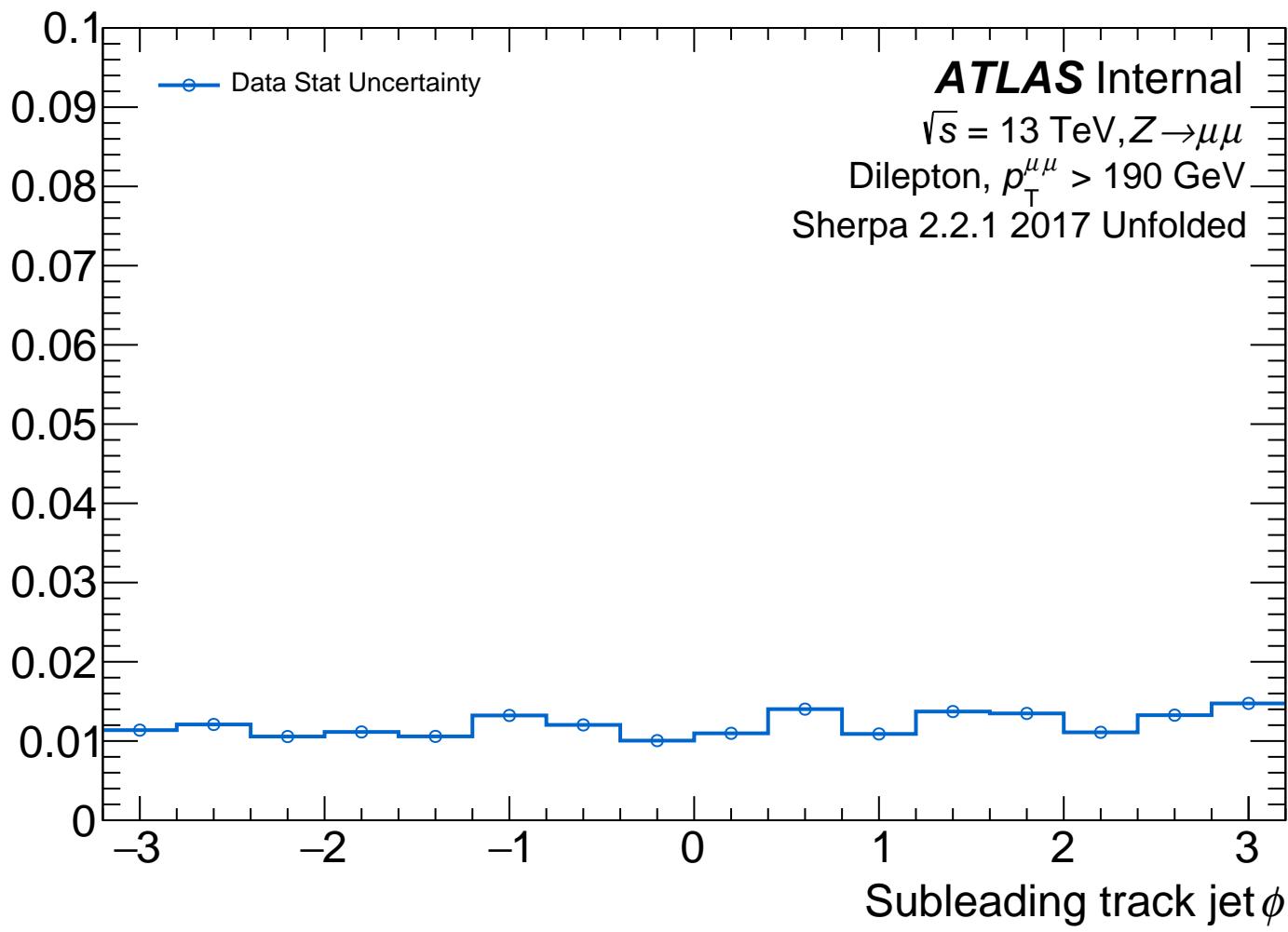


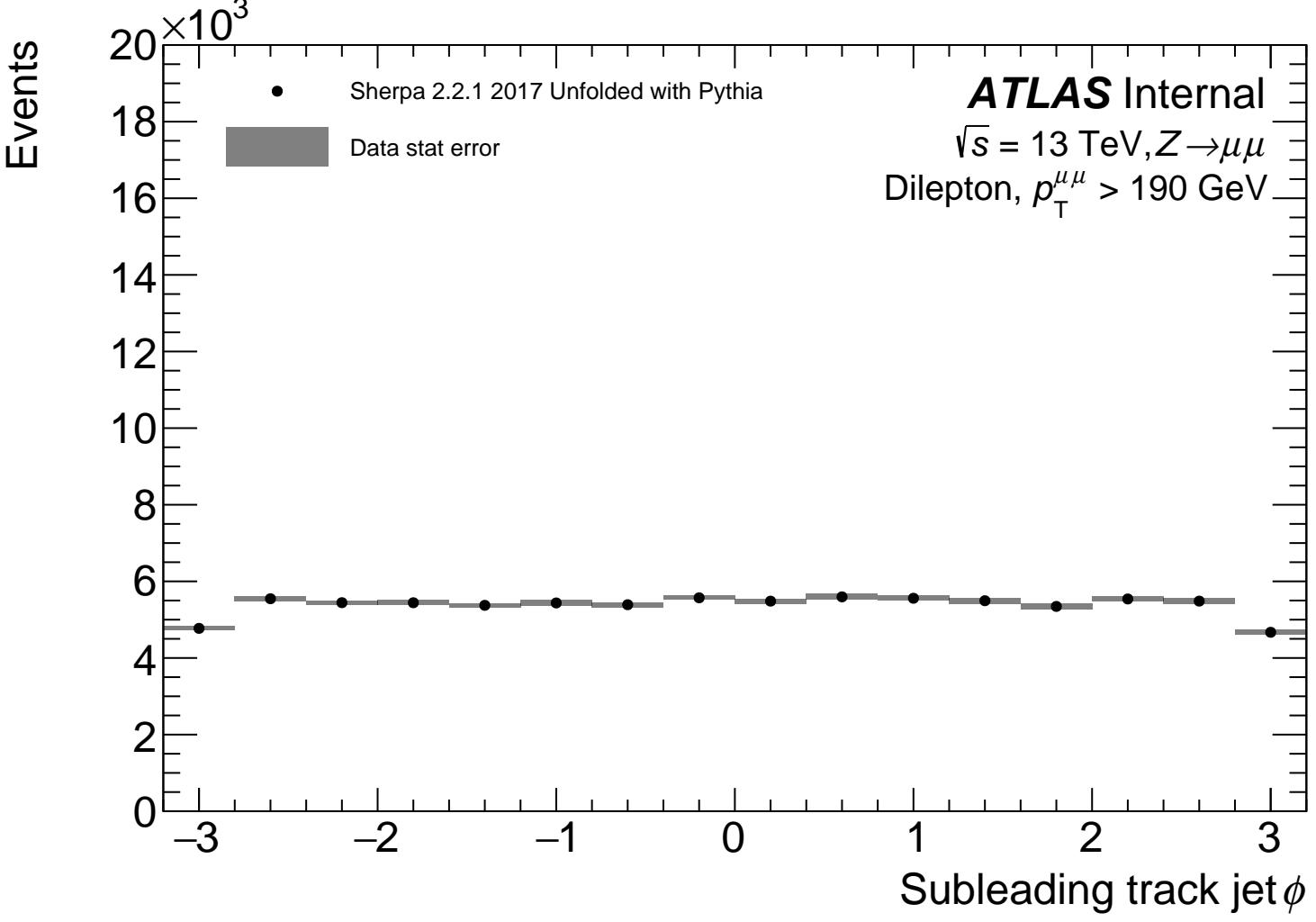


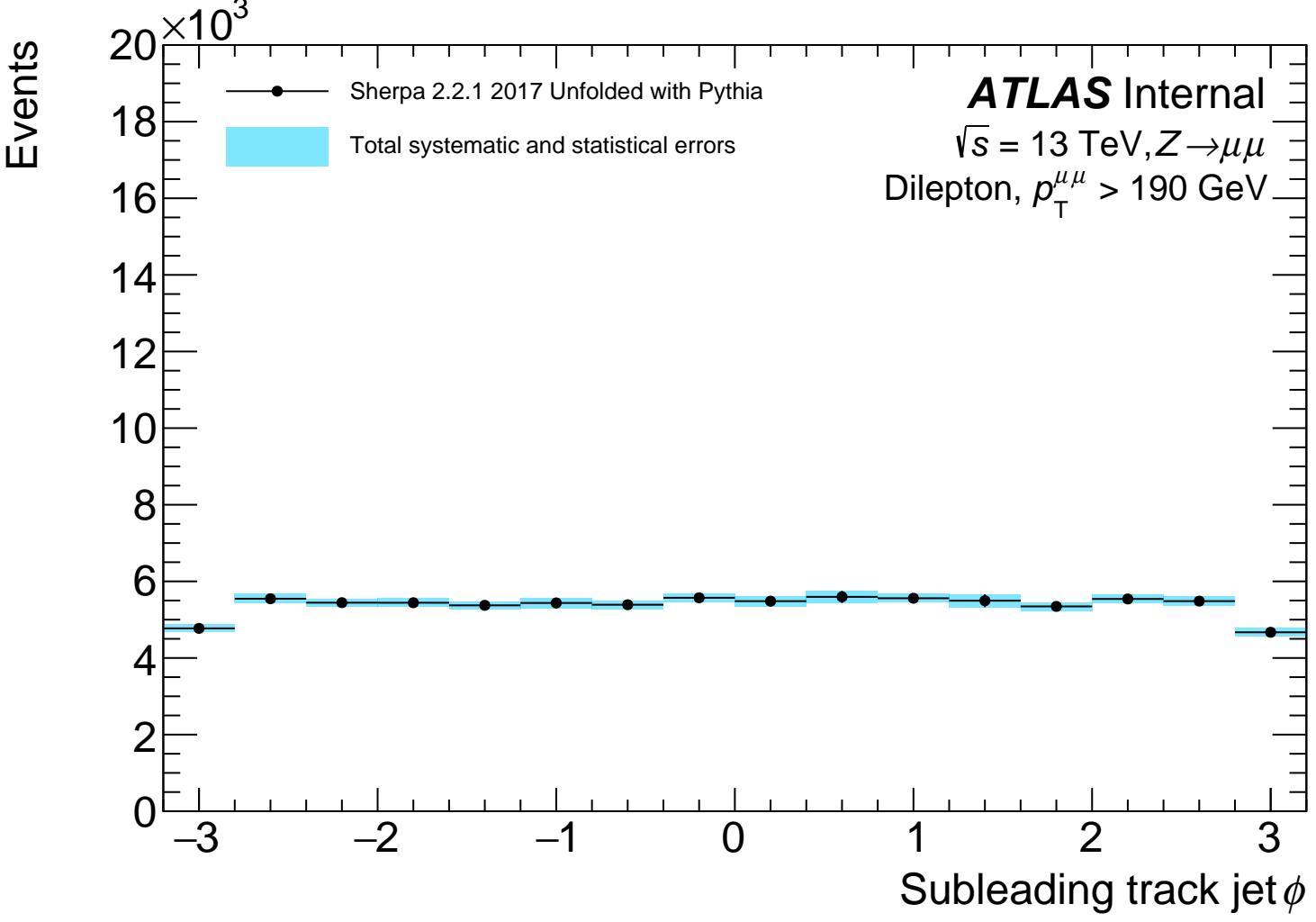


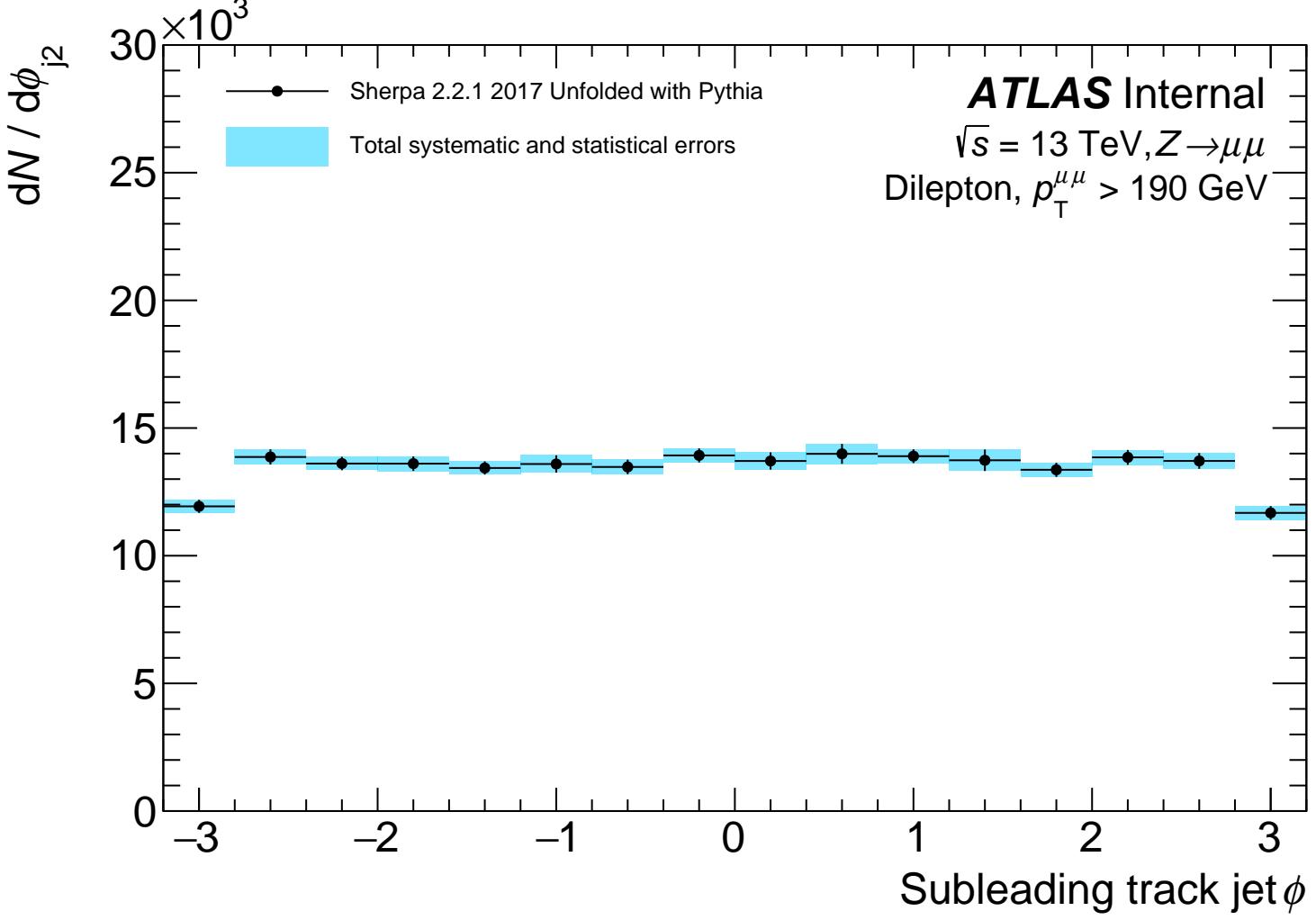










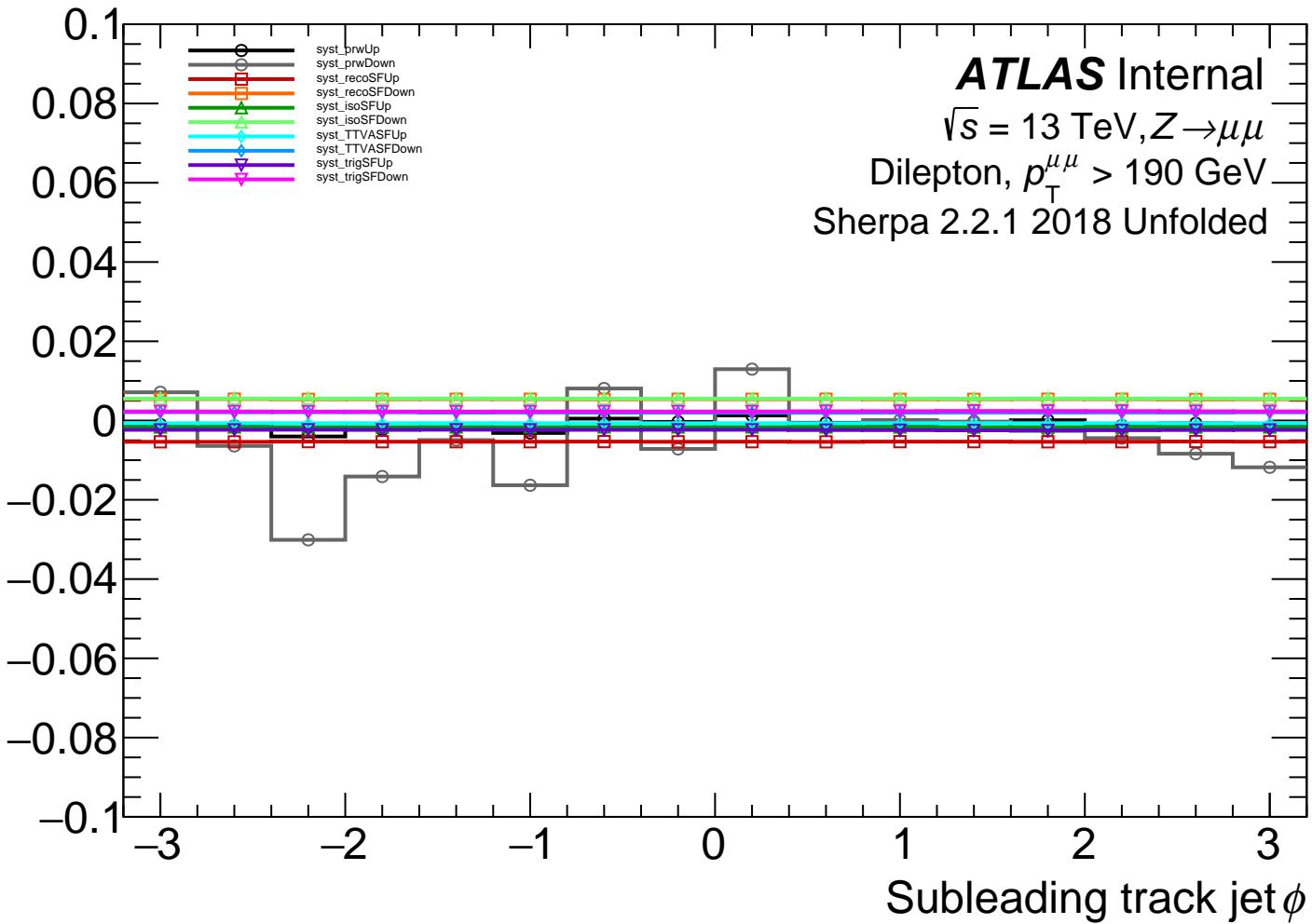


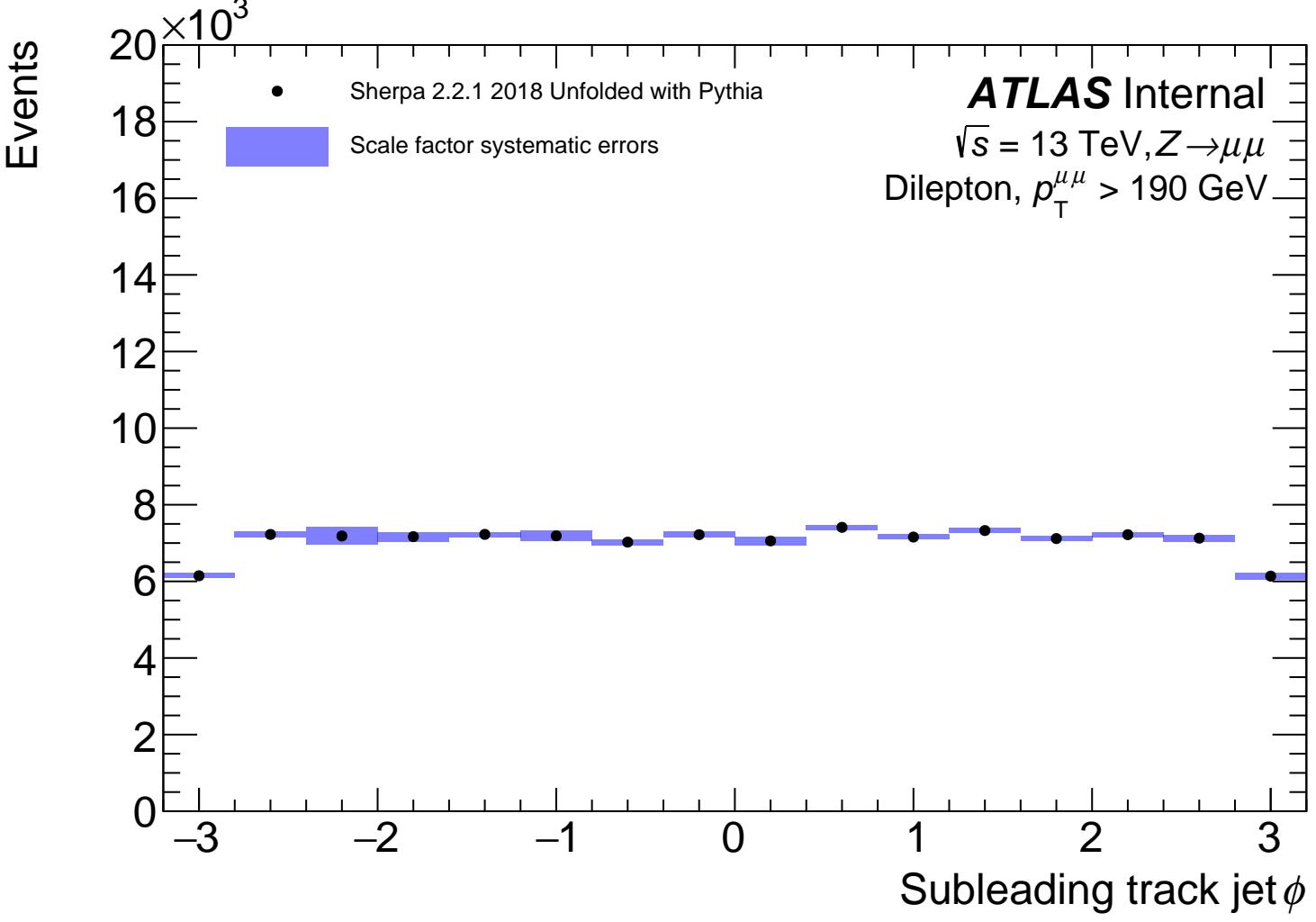
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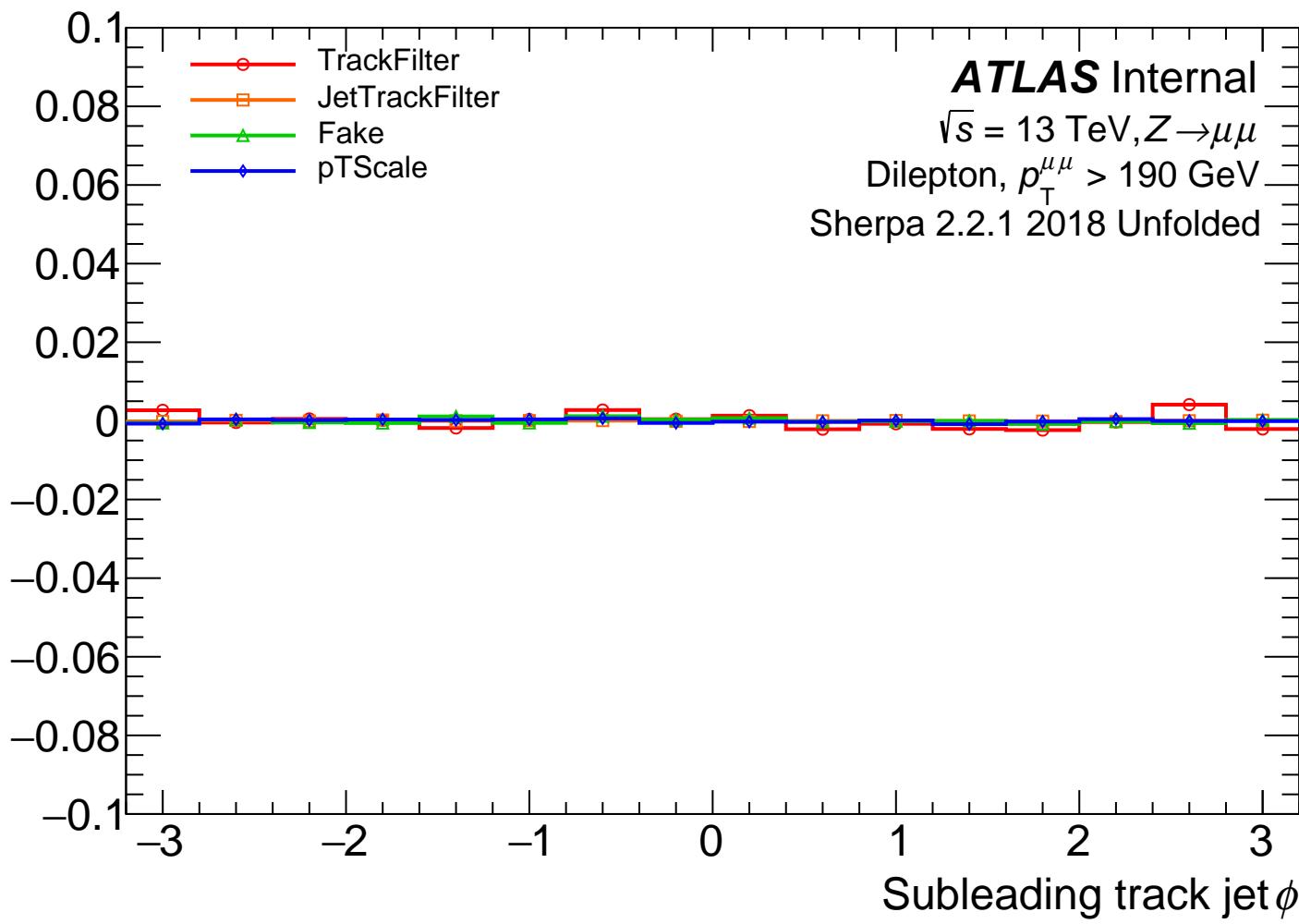
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

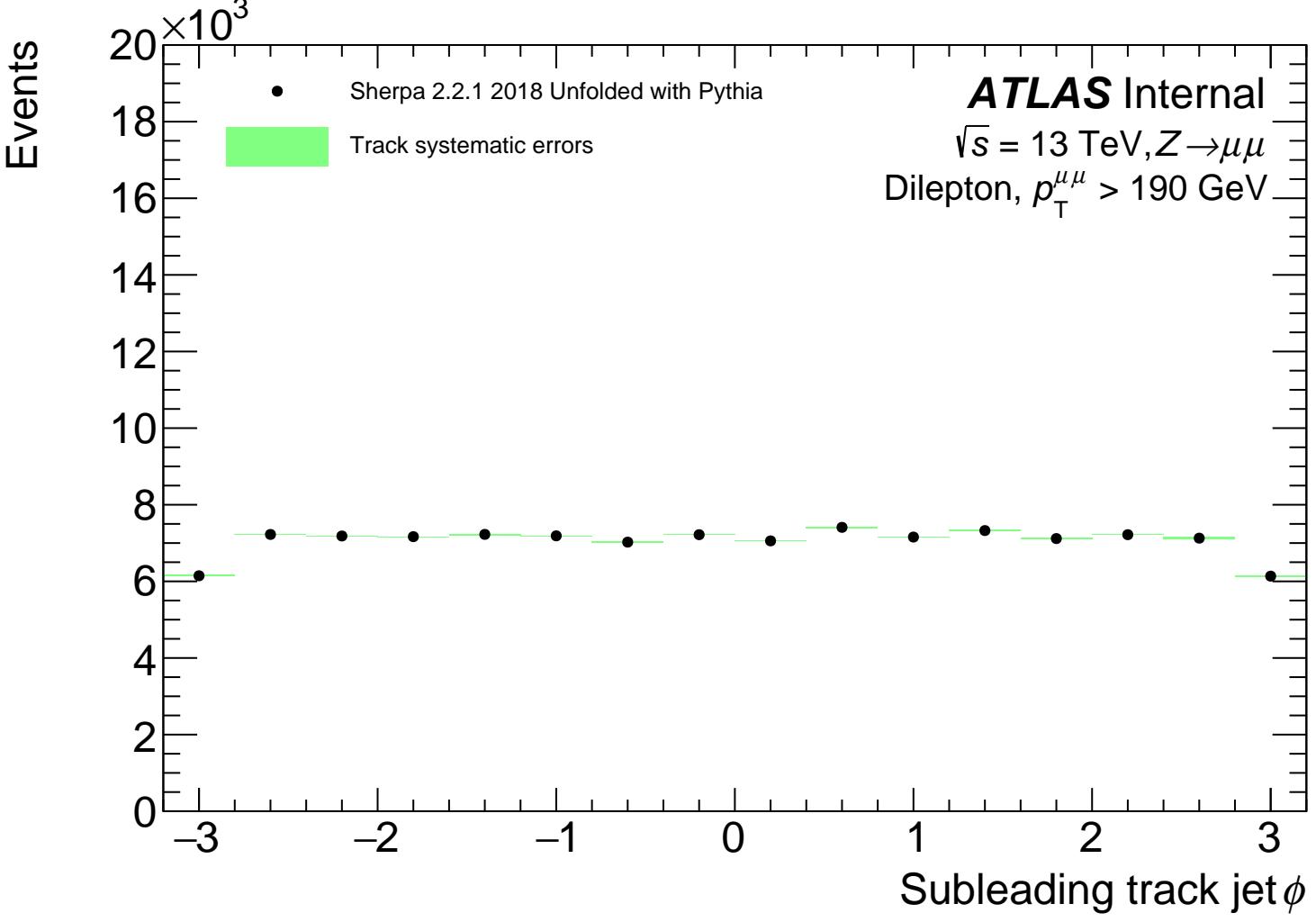
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

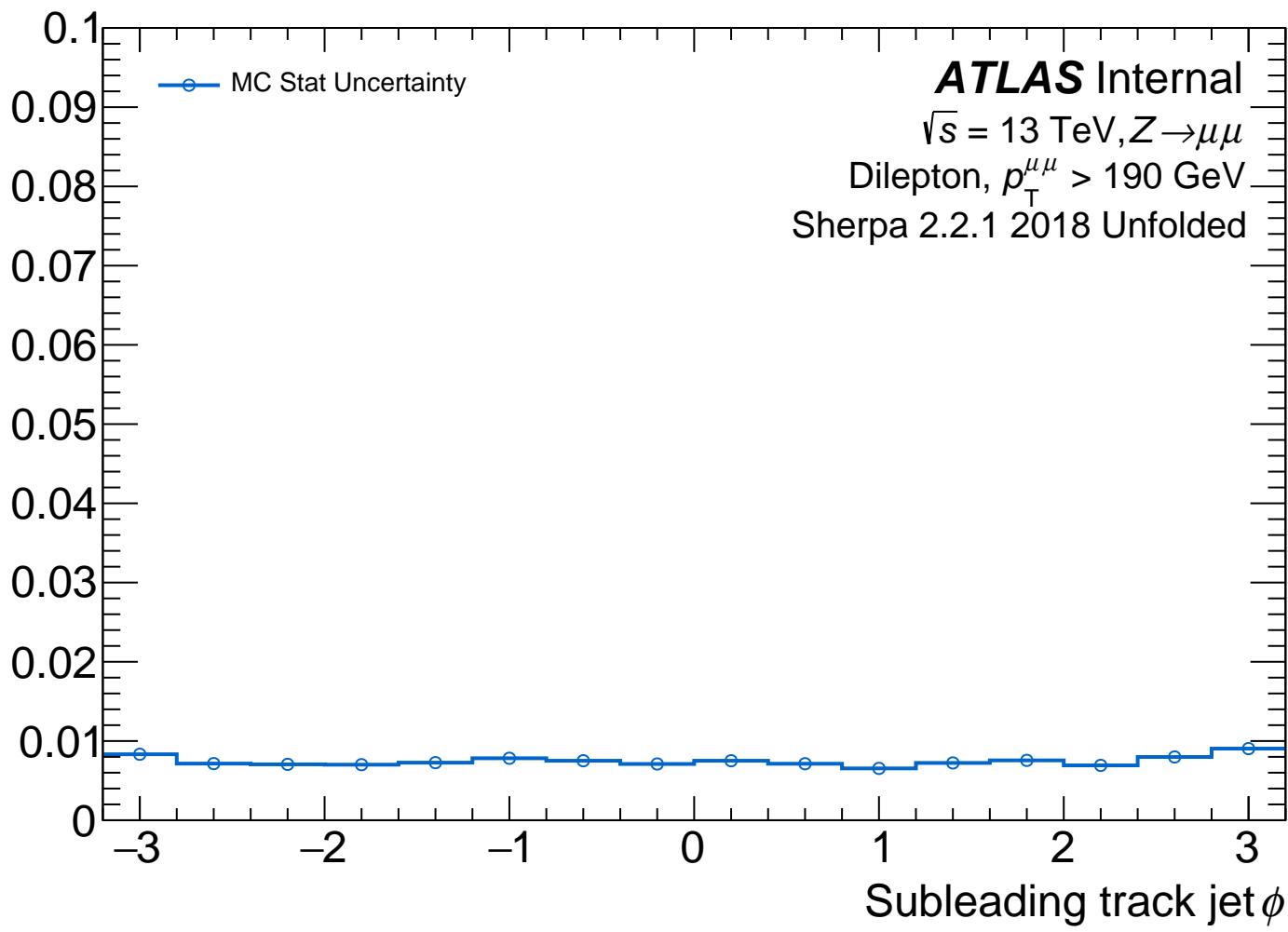
Sherpa 2.2.1 2018 Unfolded

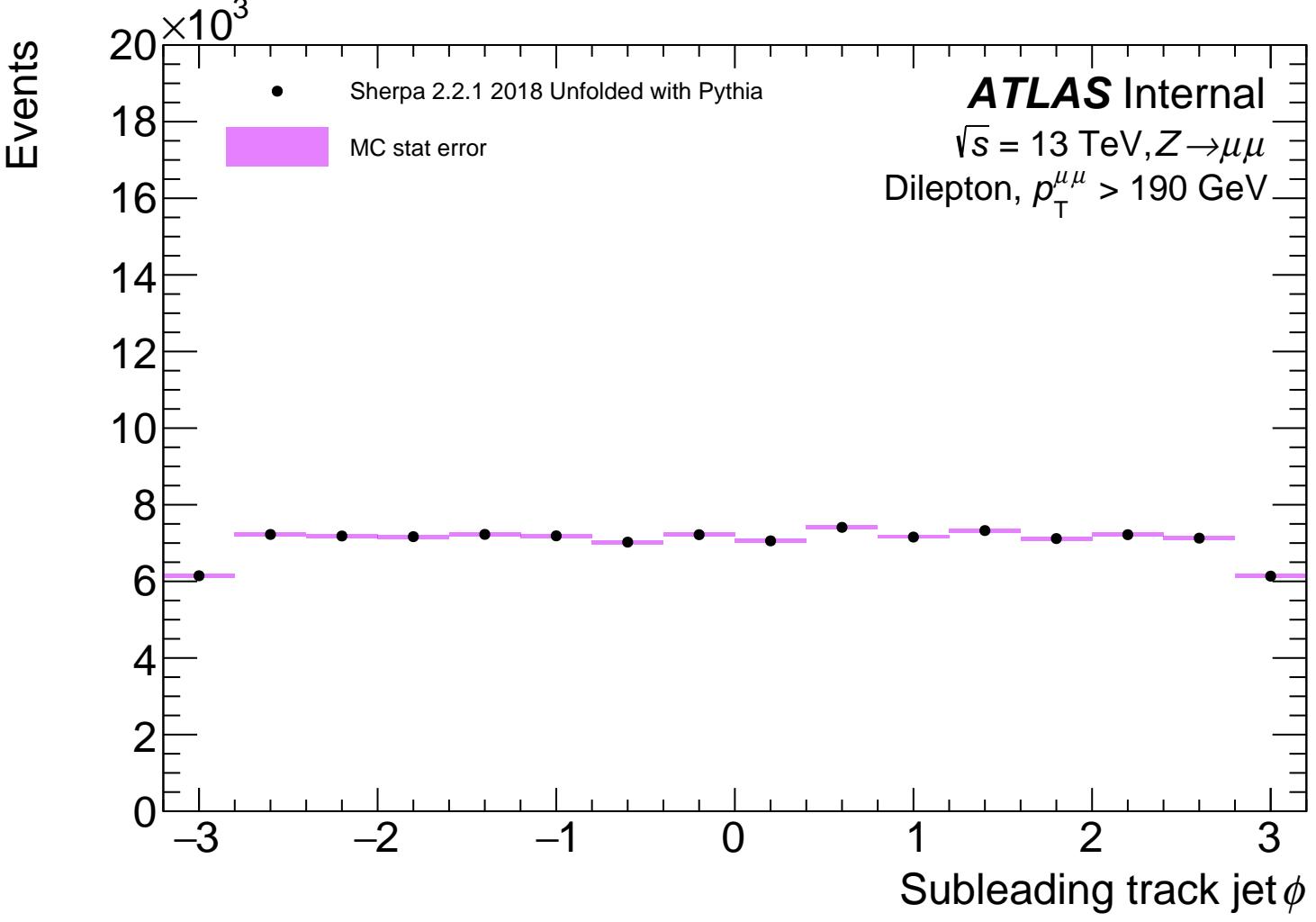


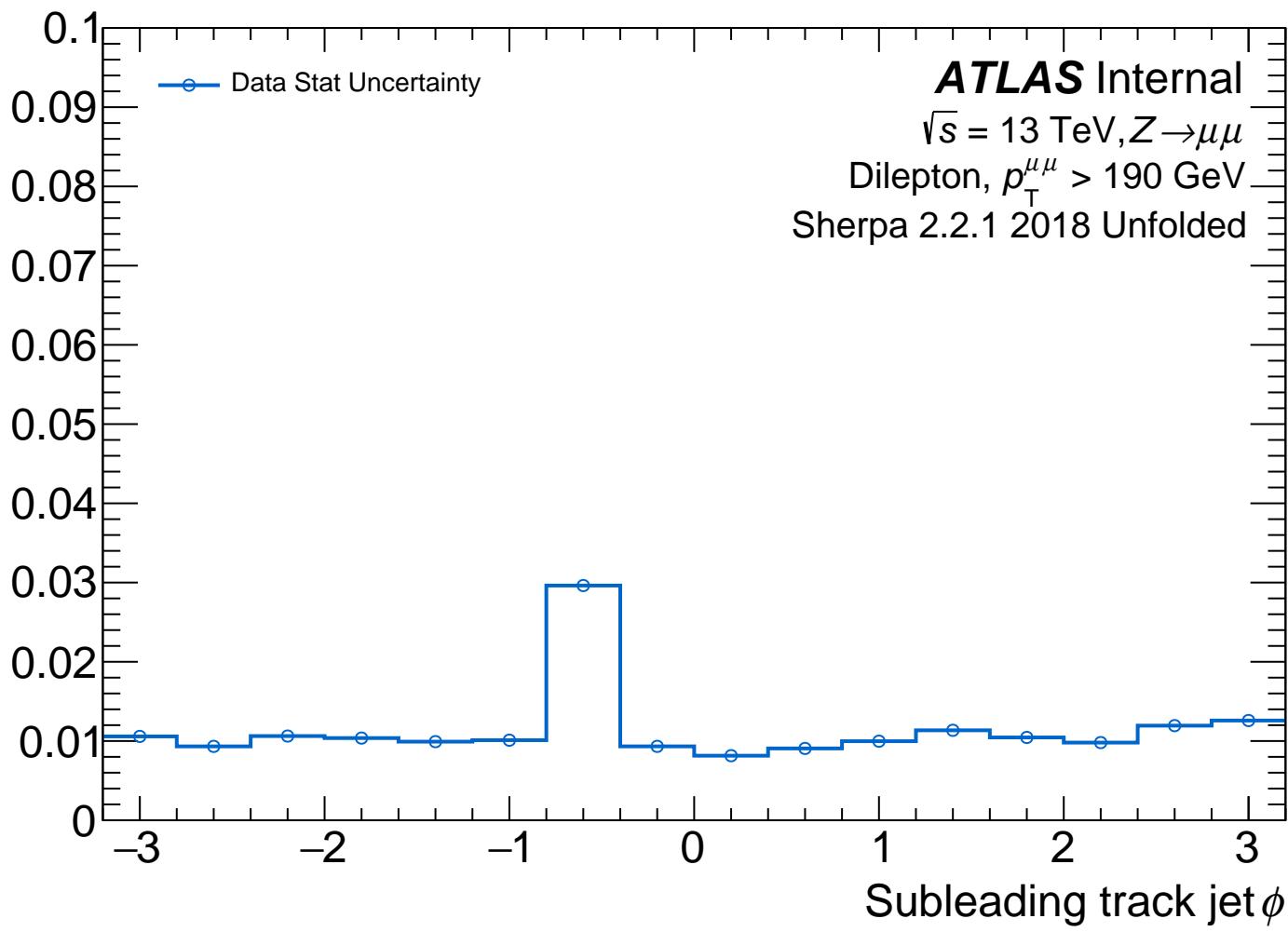


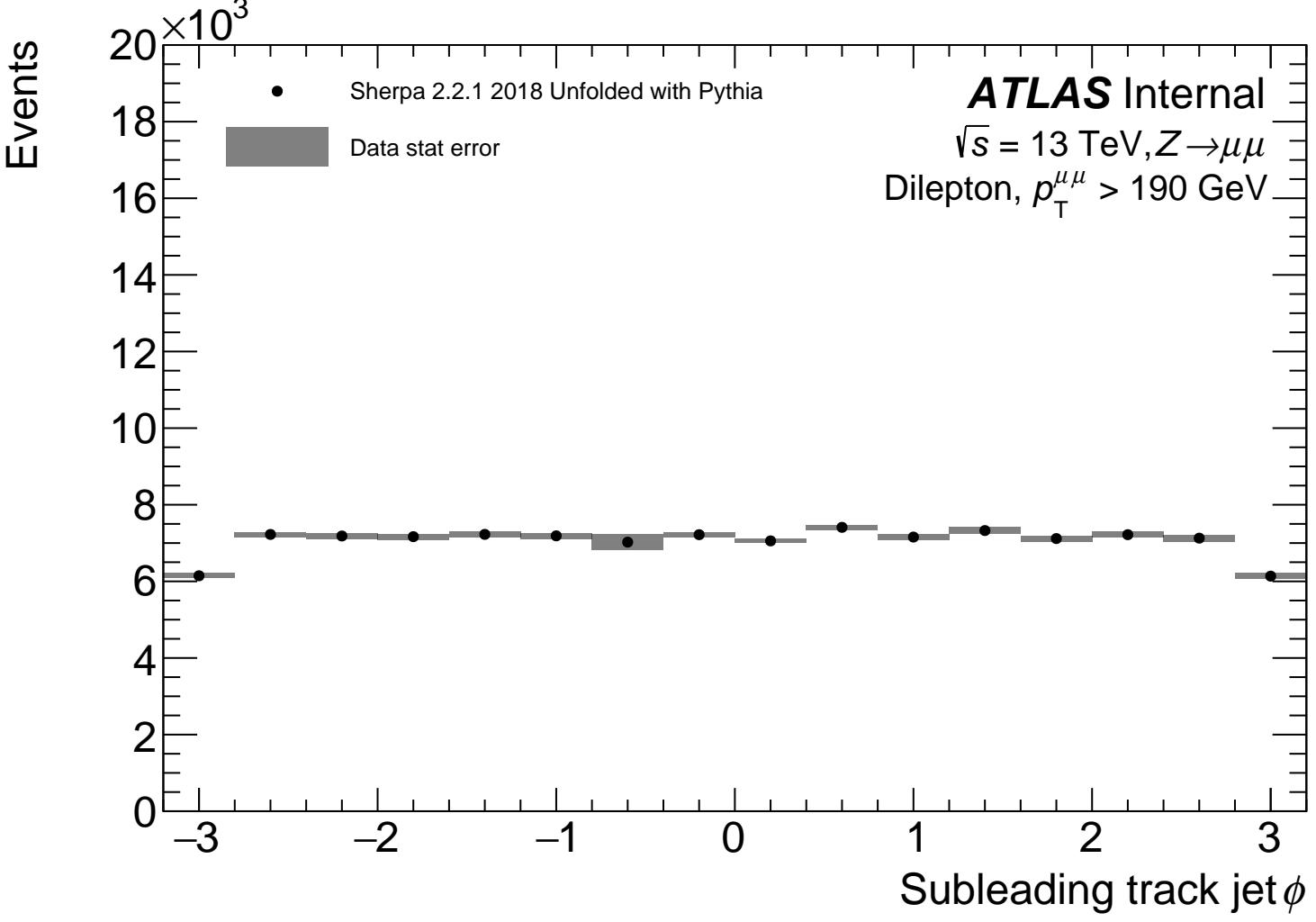


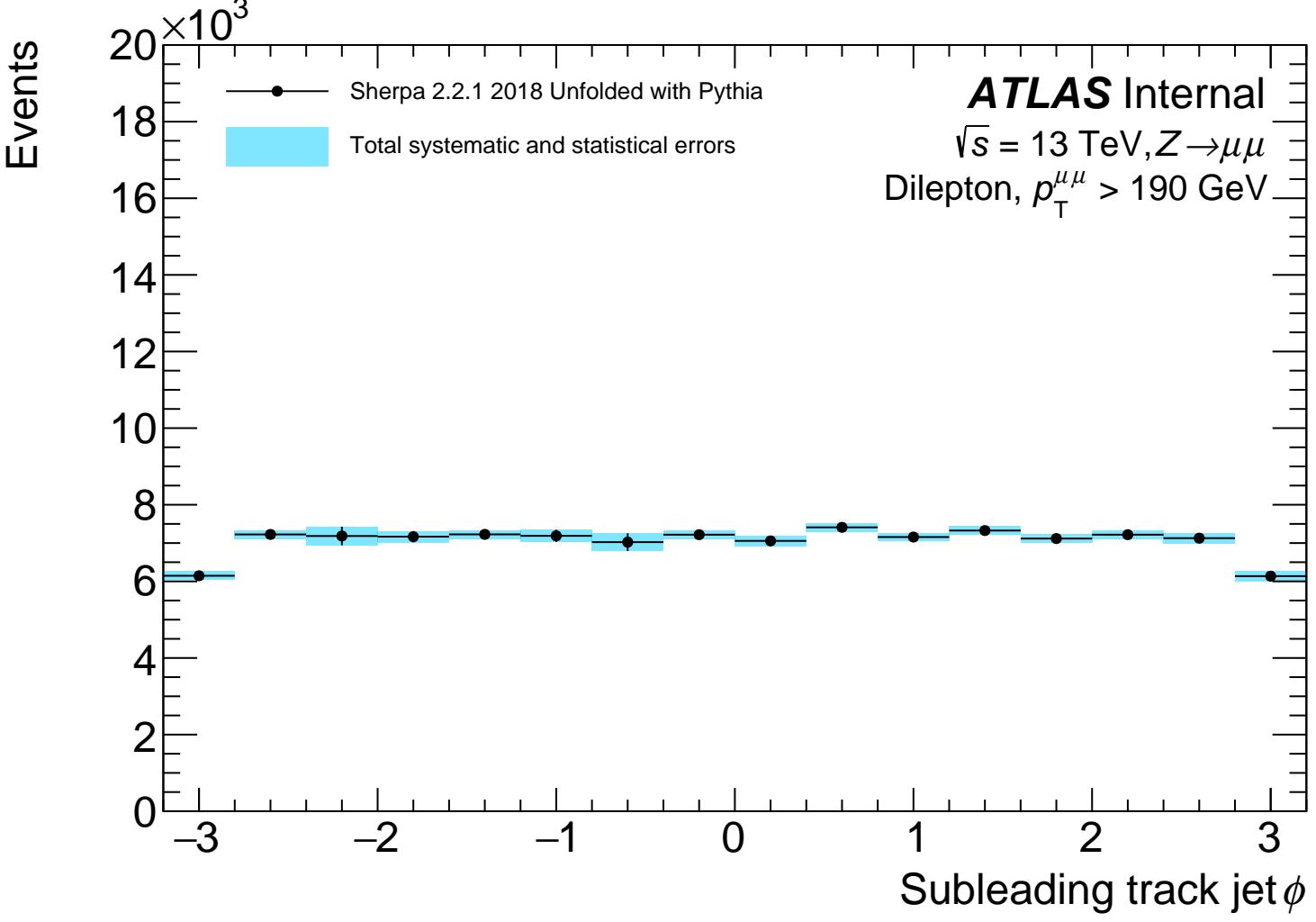


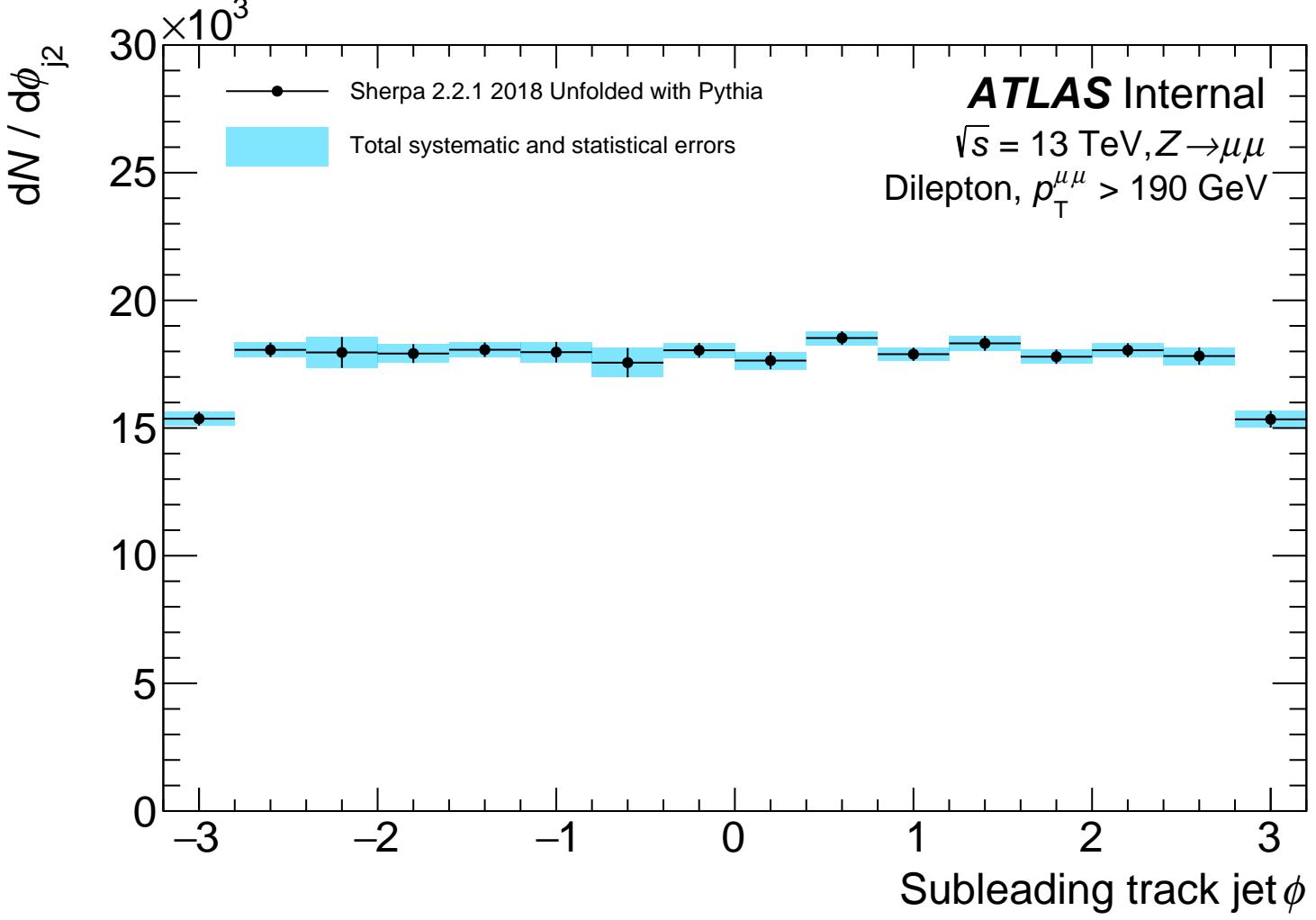










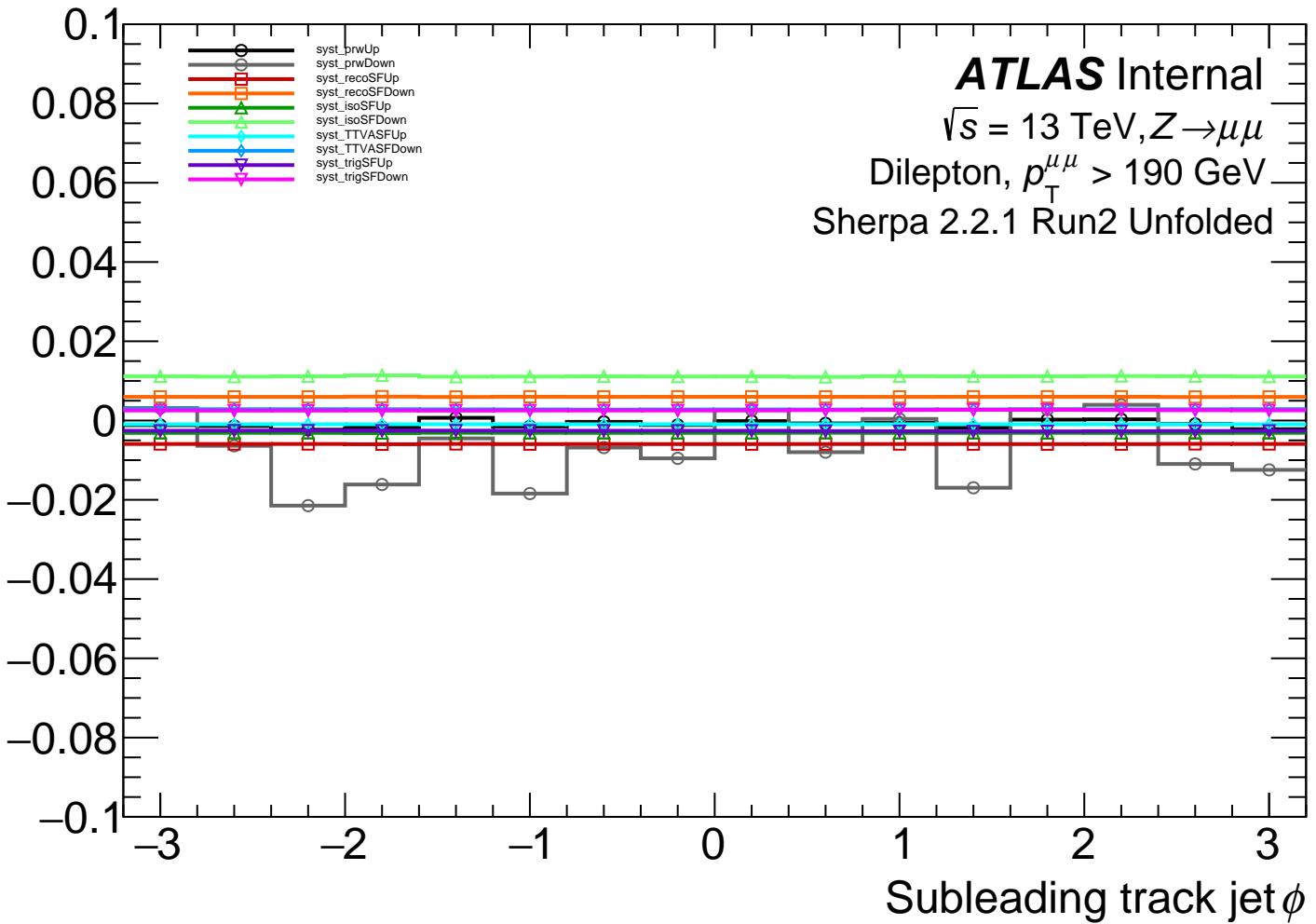


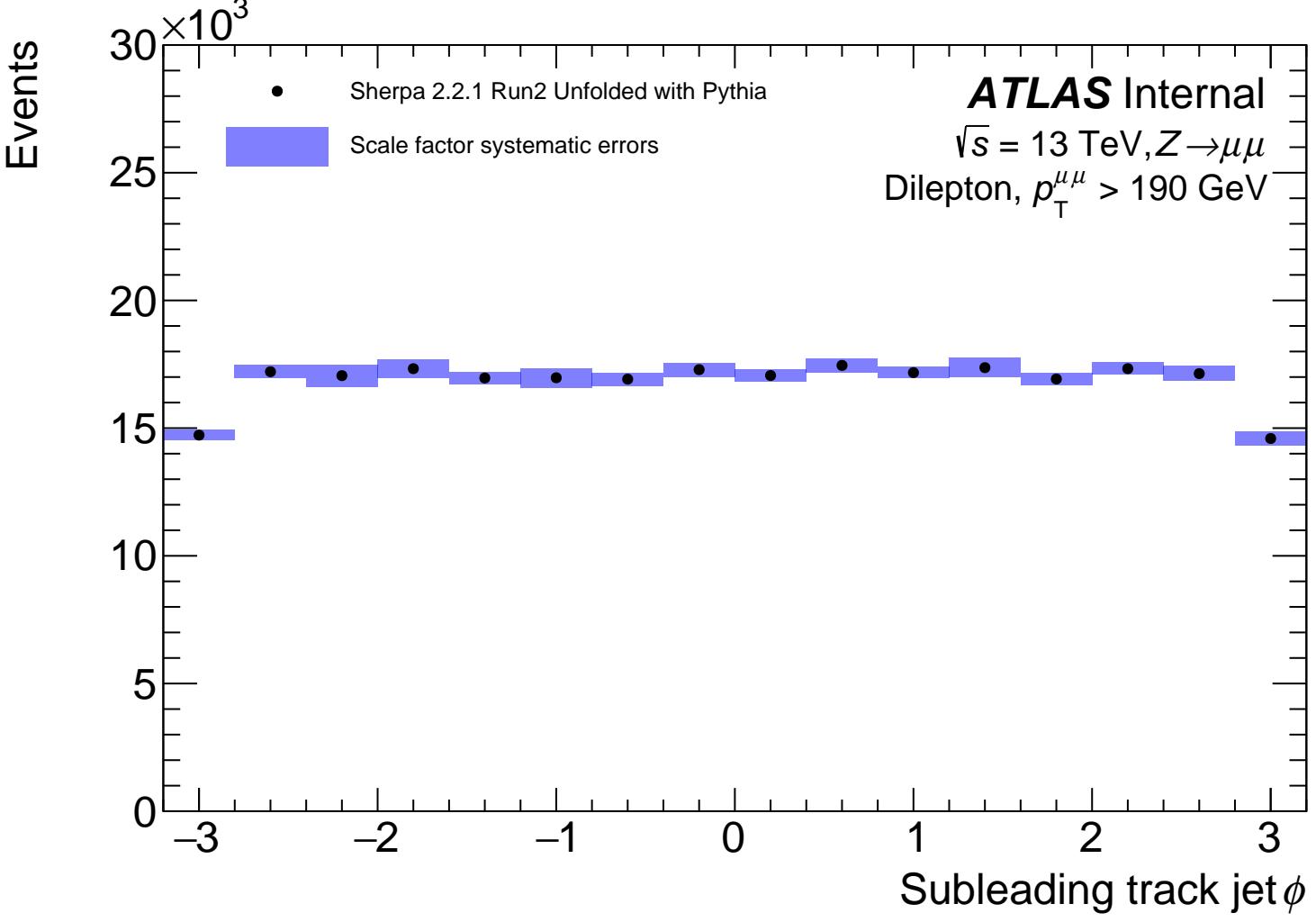
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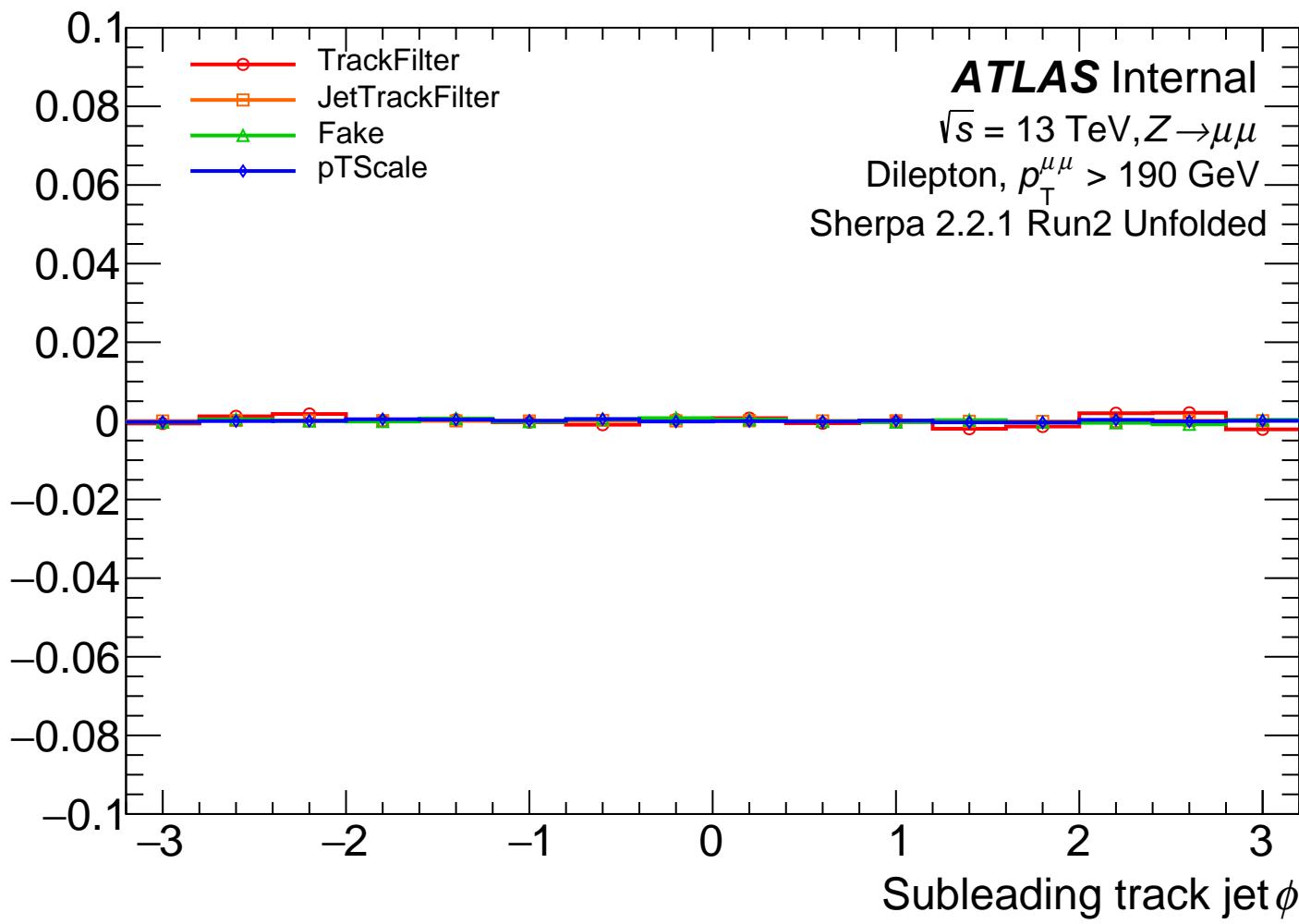
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

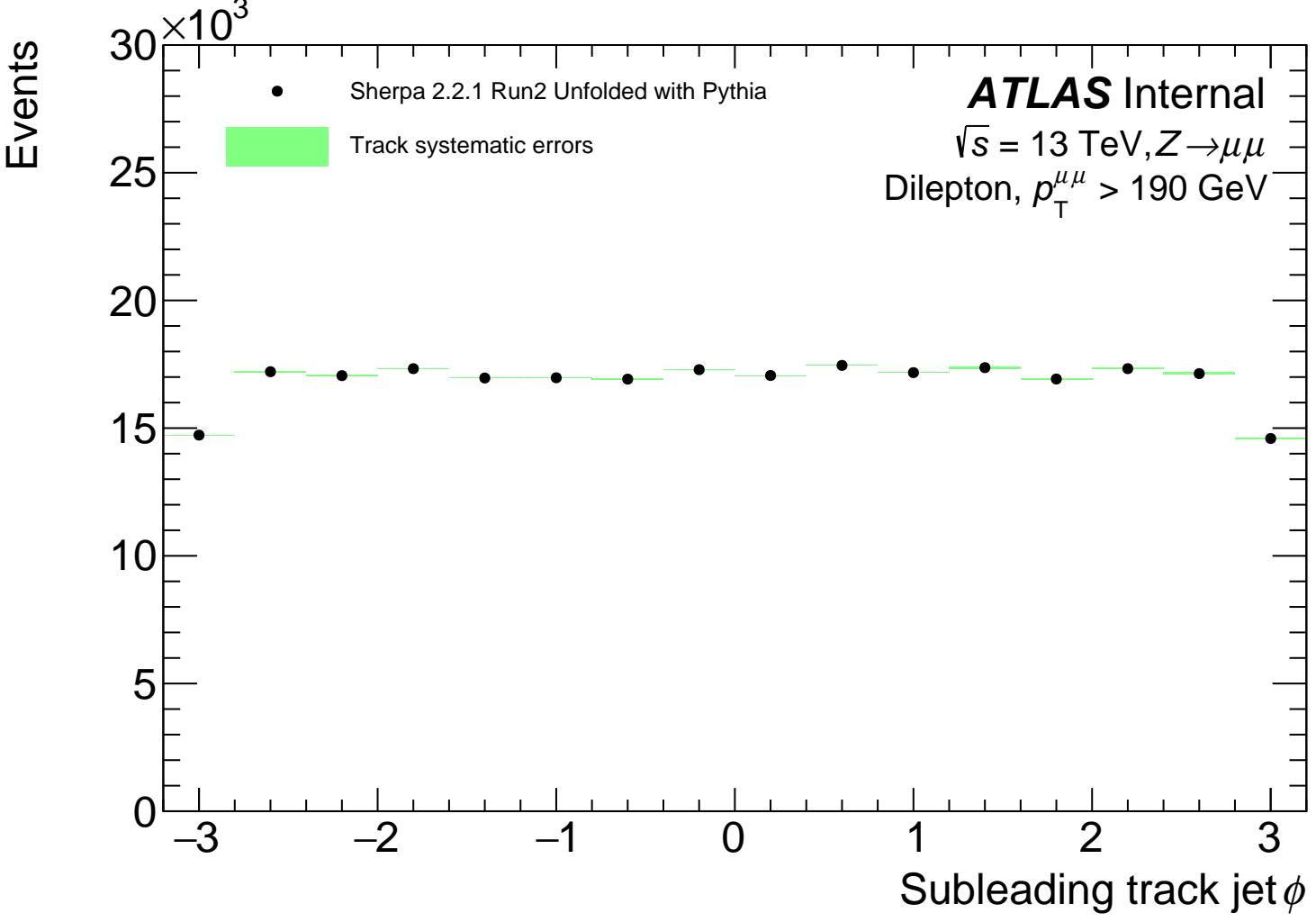
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

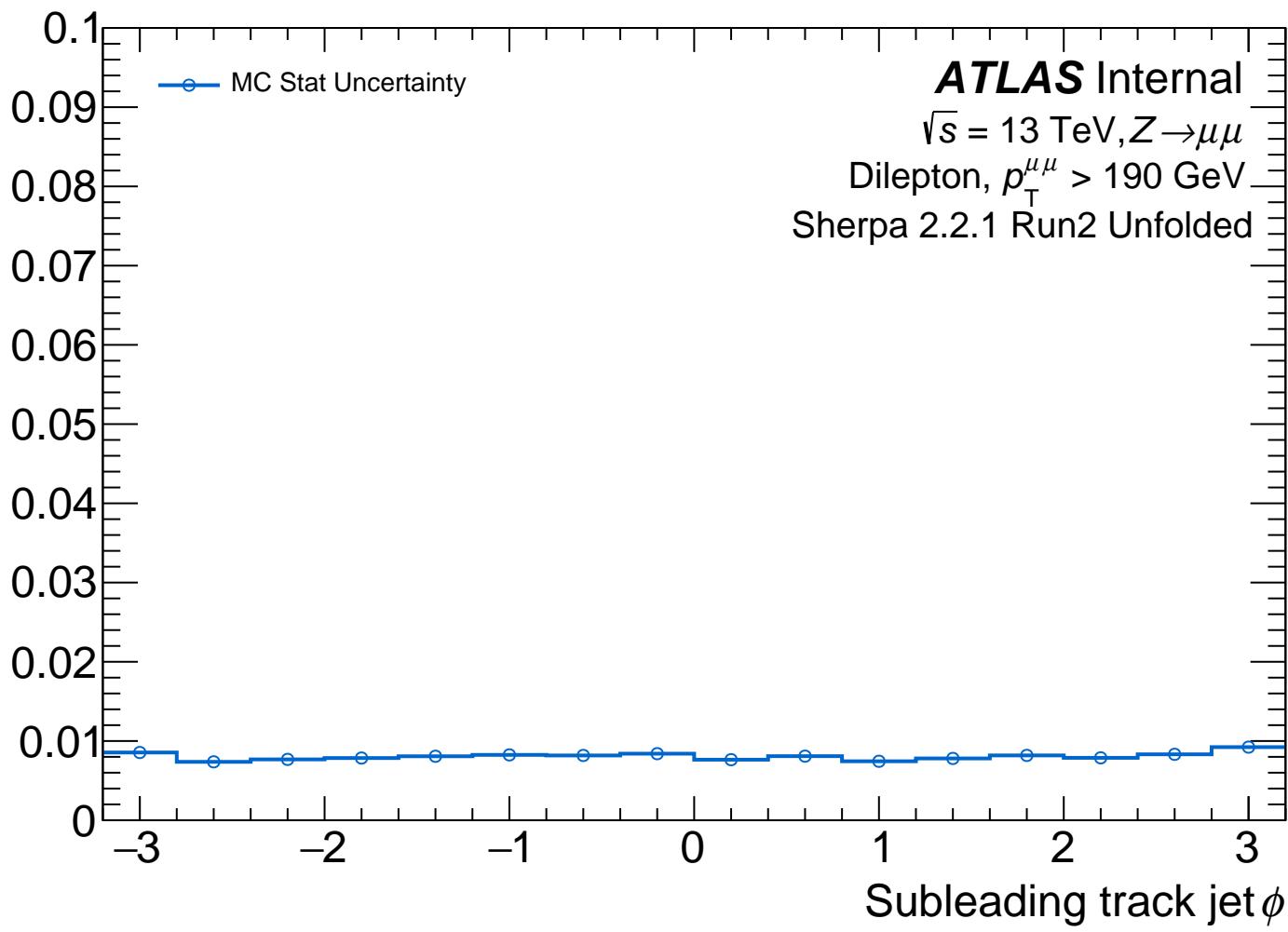
Sherpa 2.2.1 Run2 Unfolded

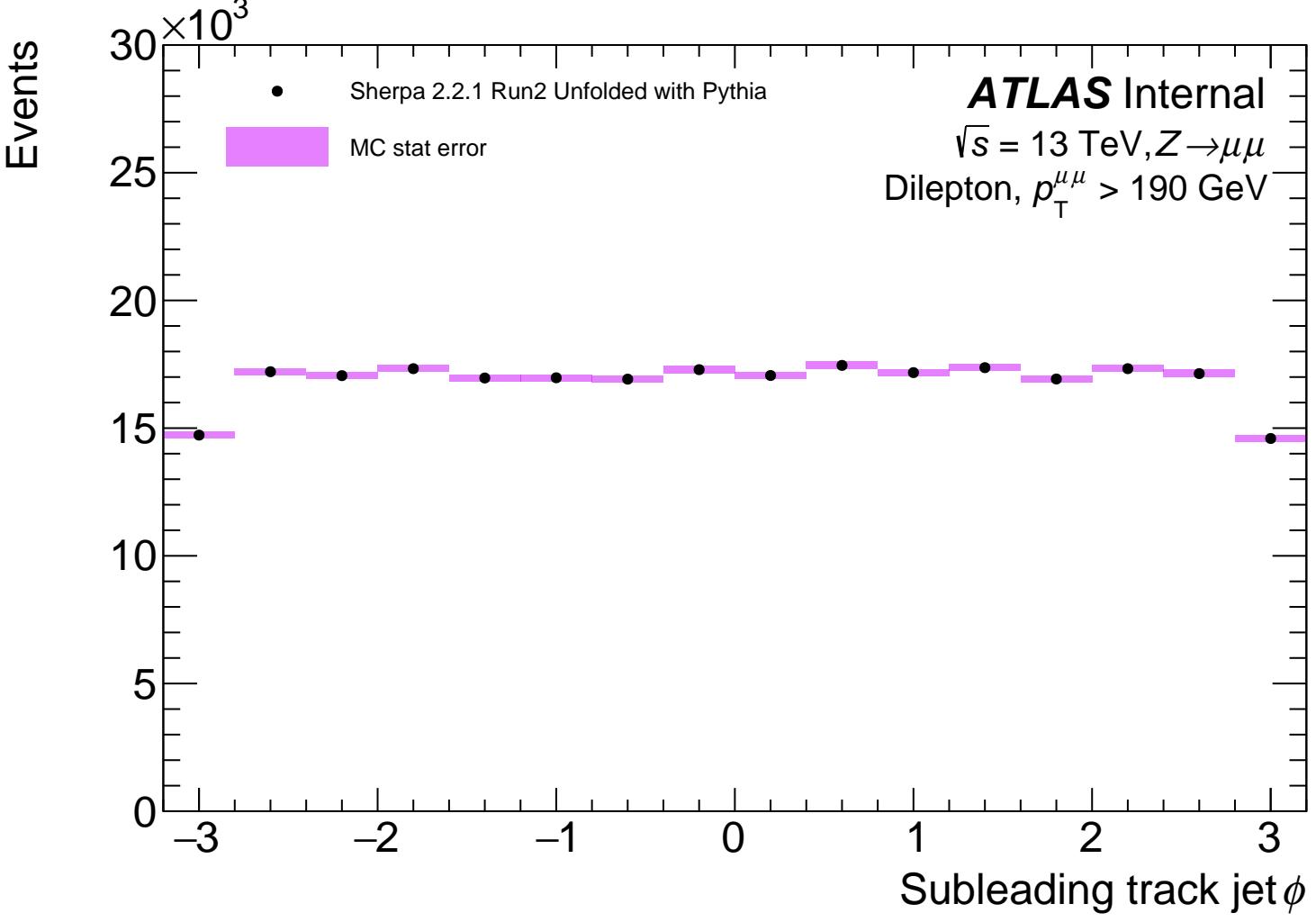


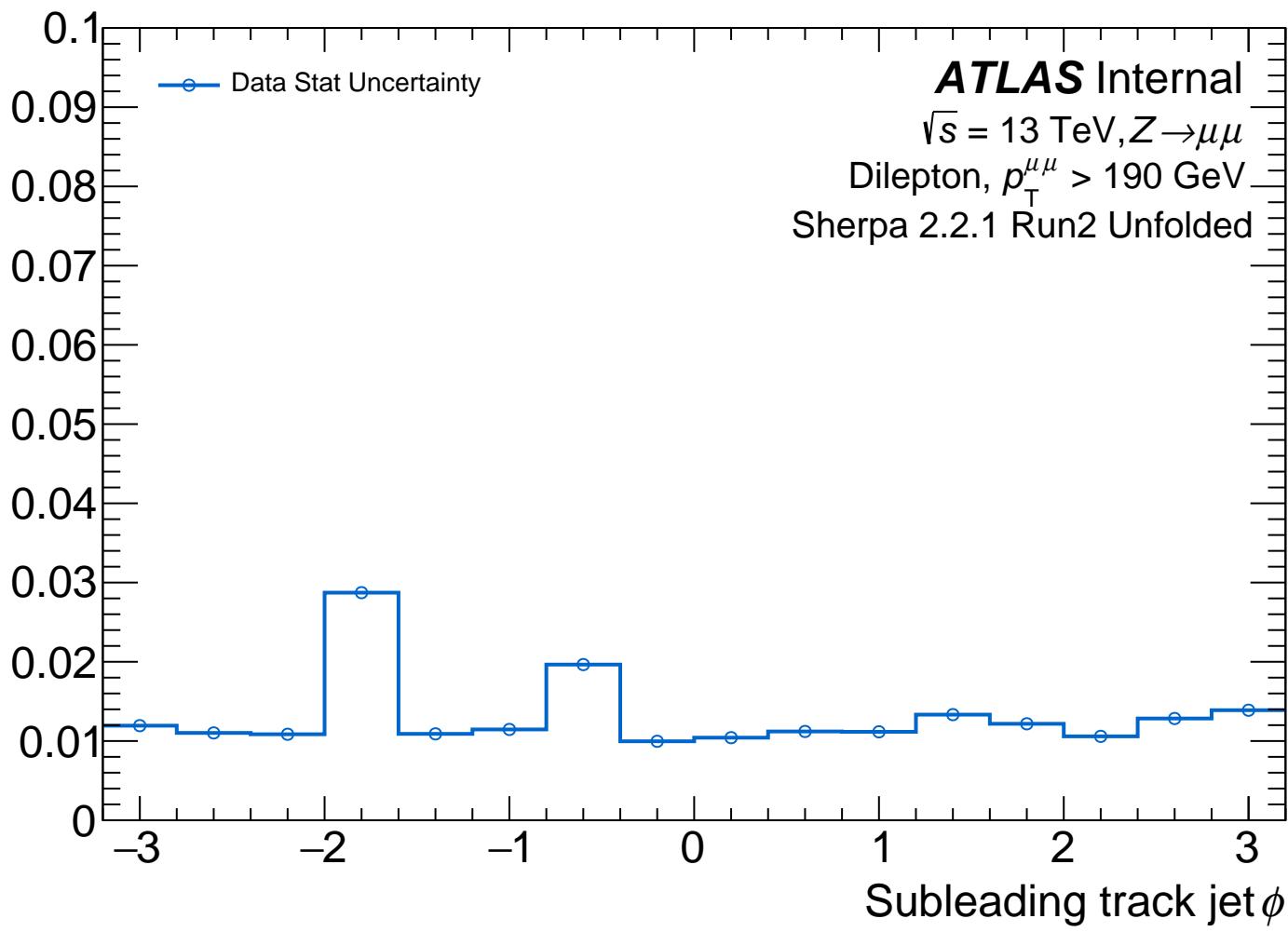


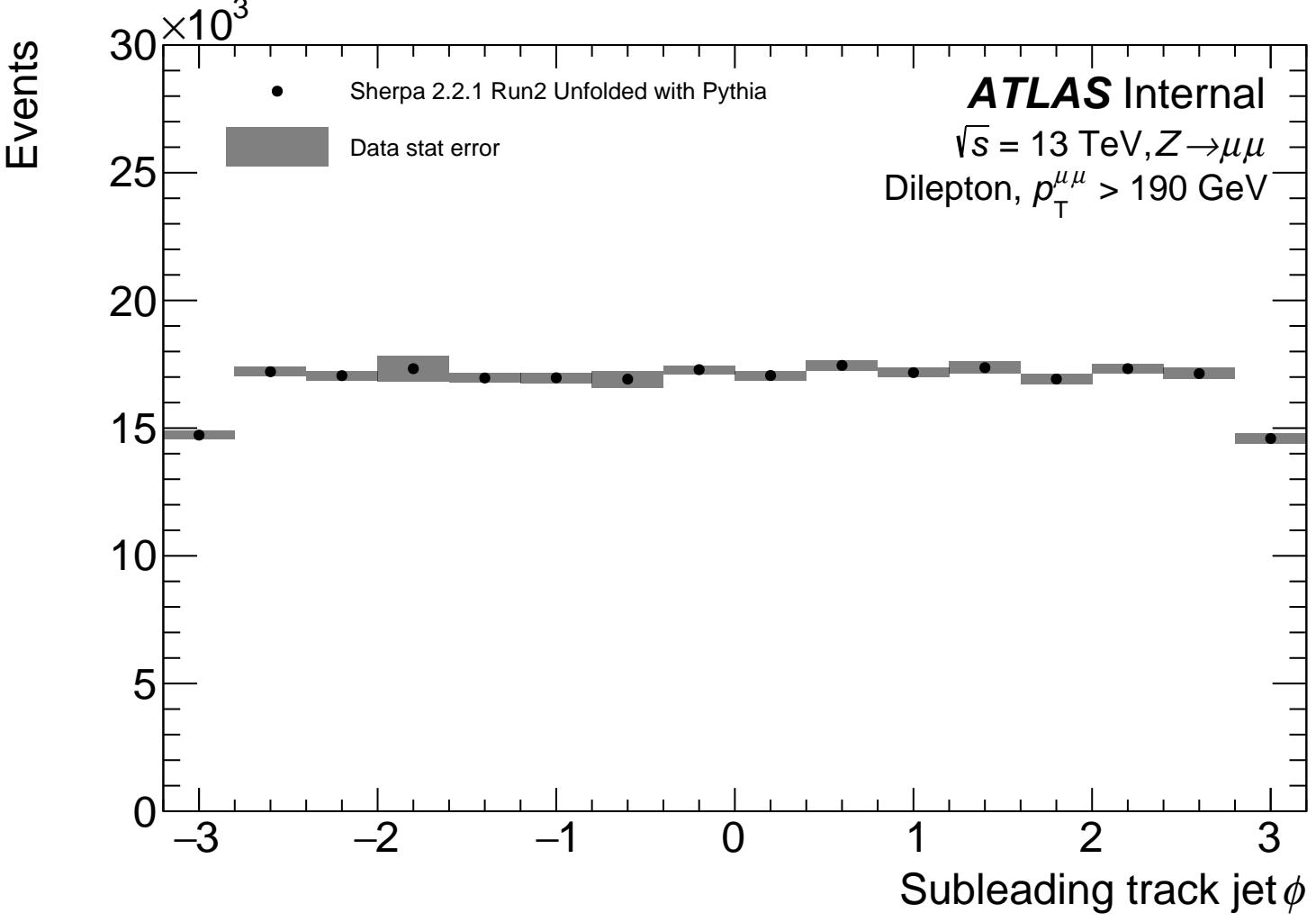


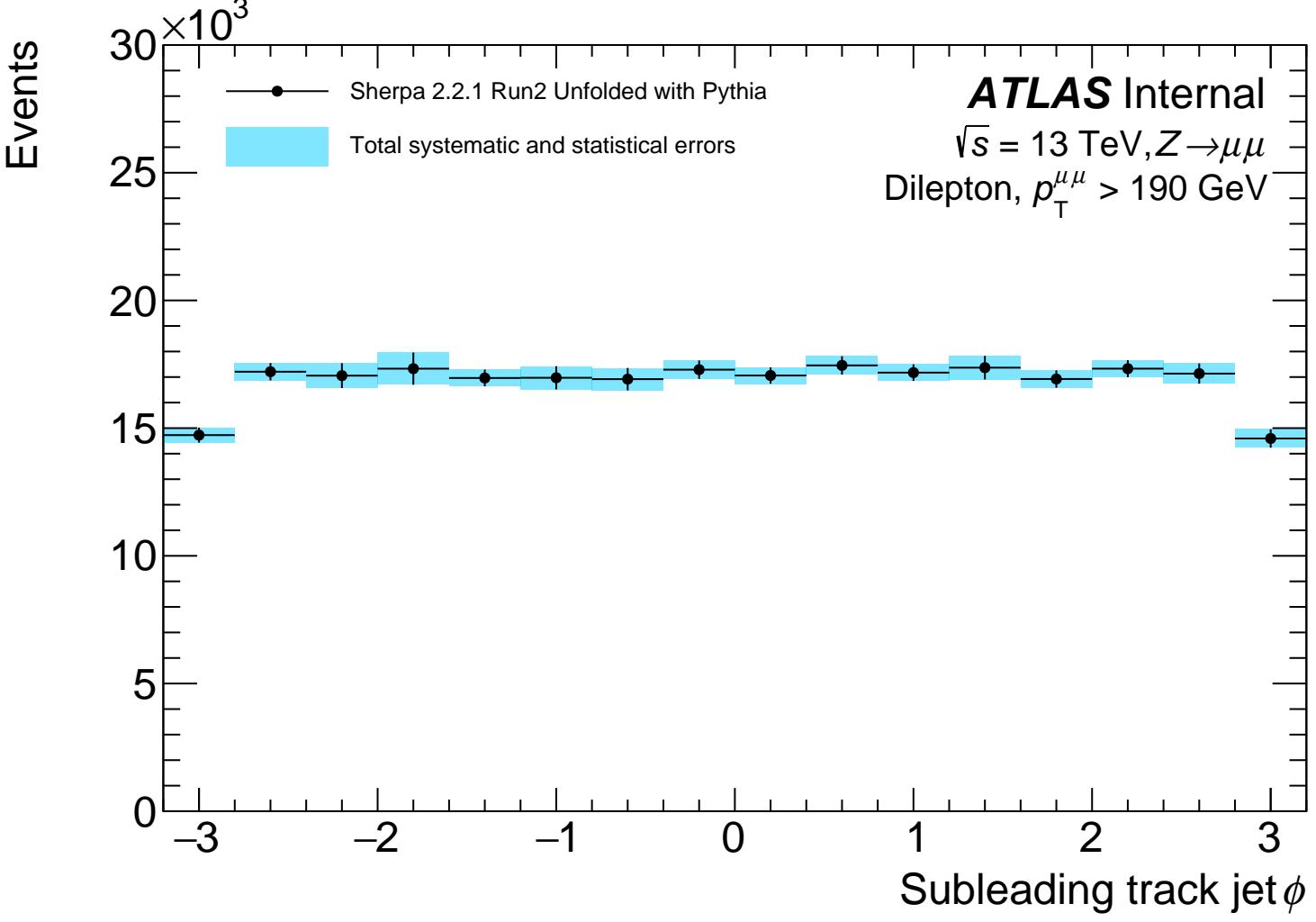


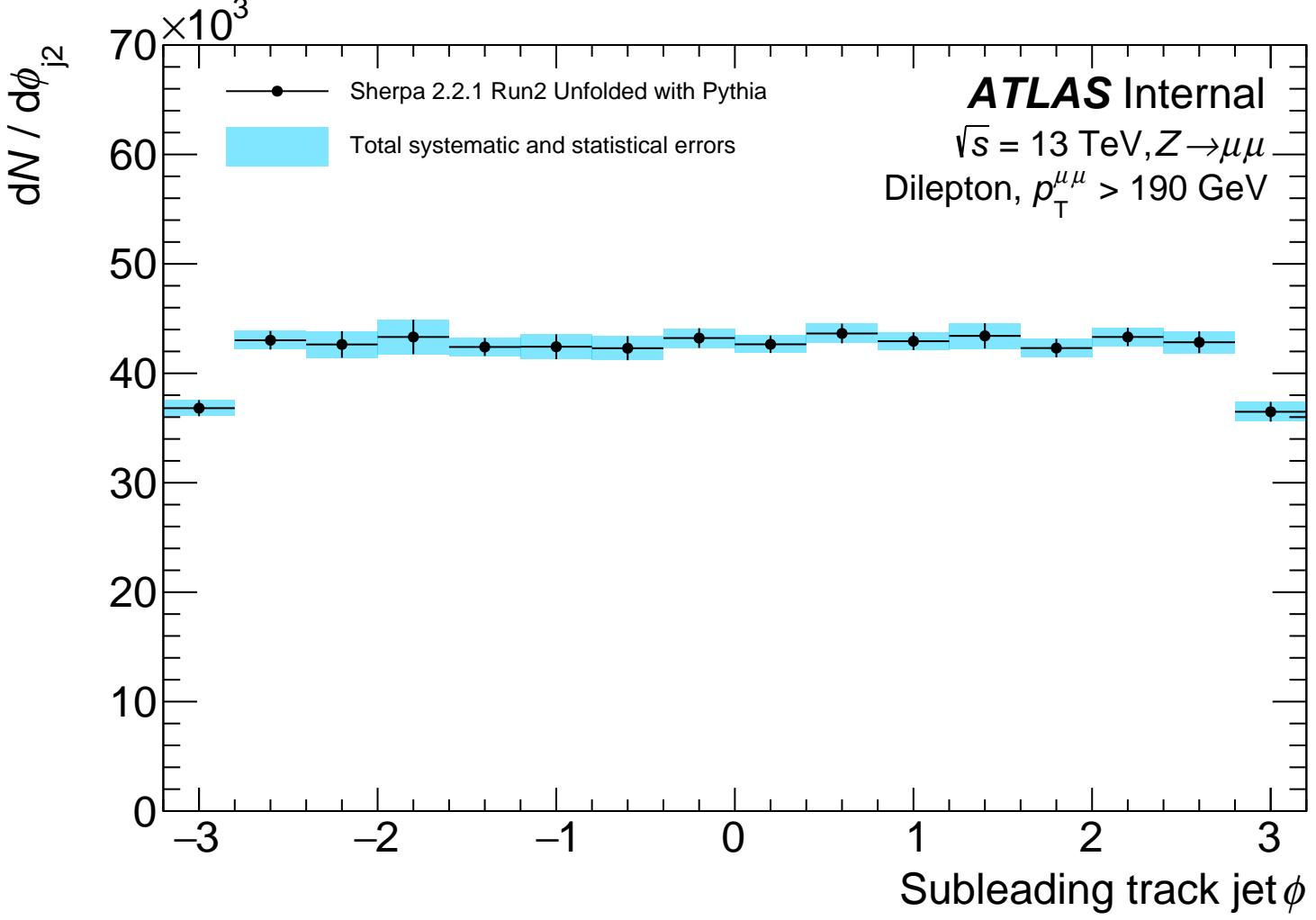


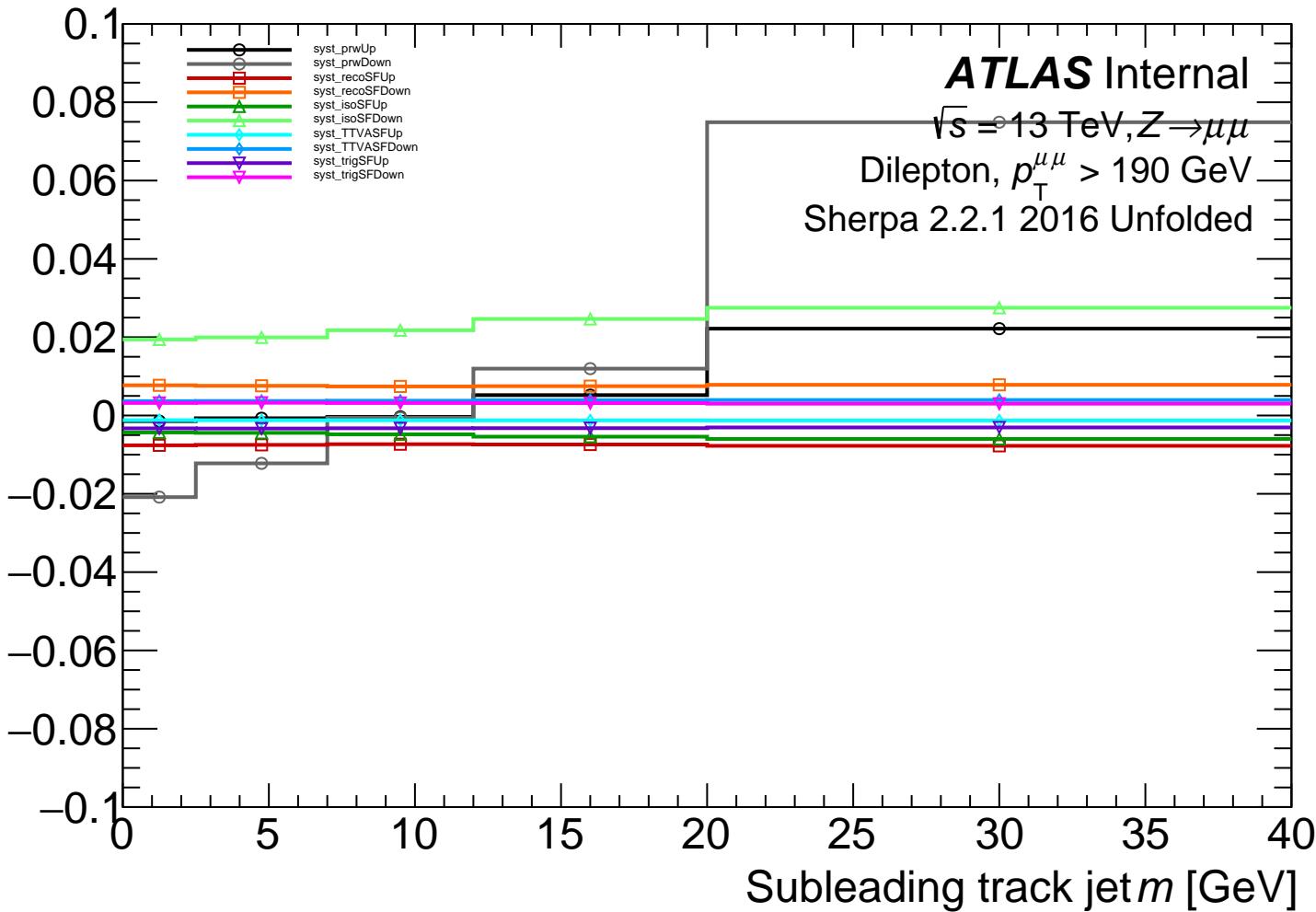


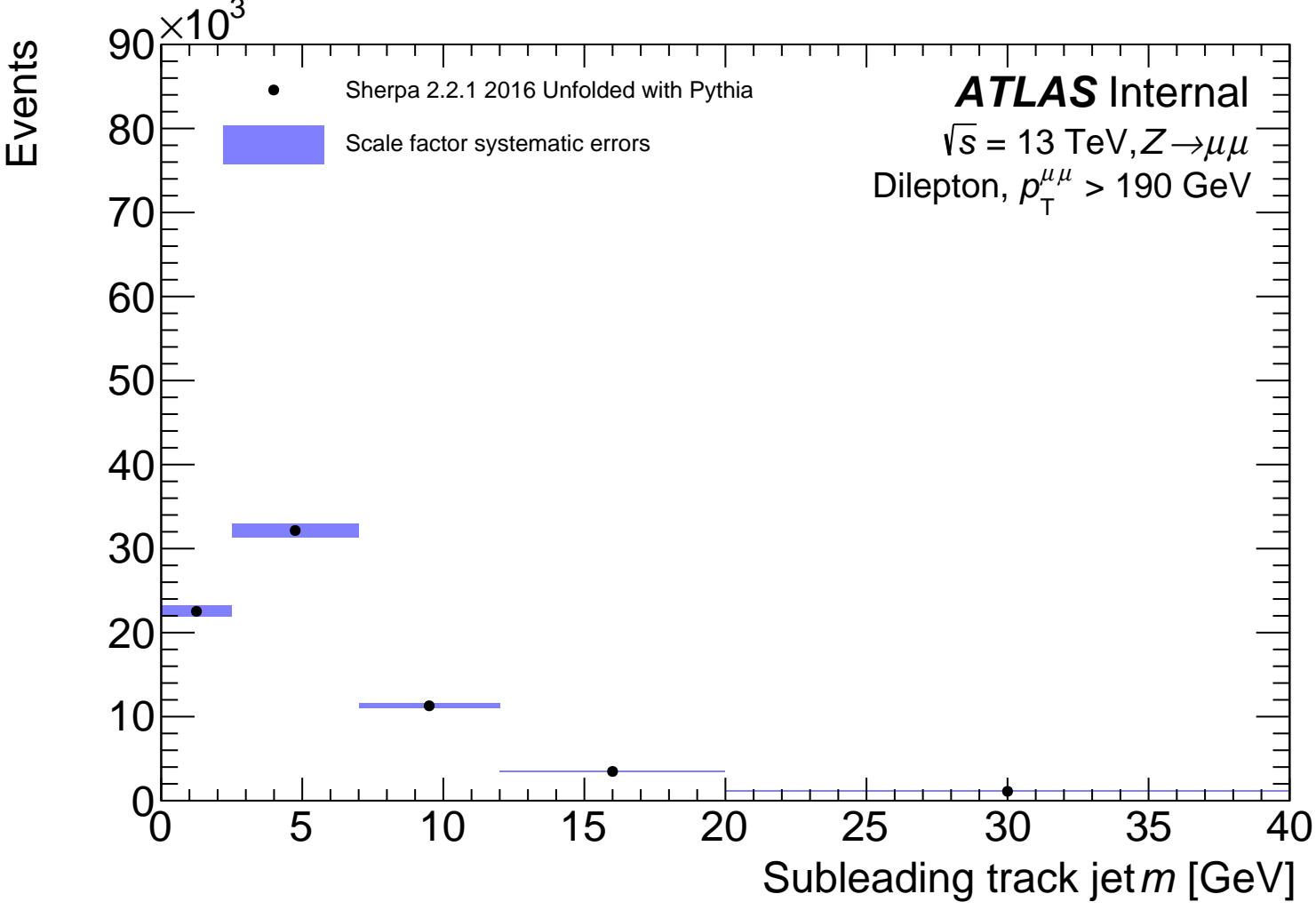


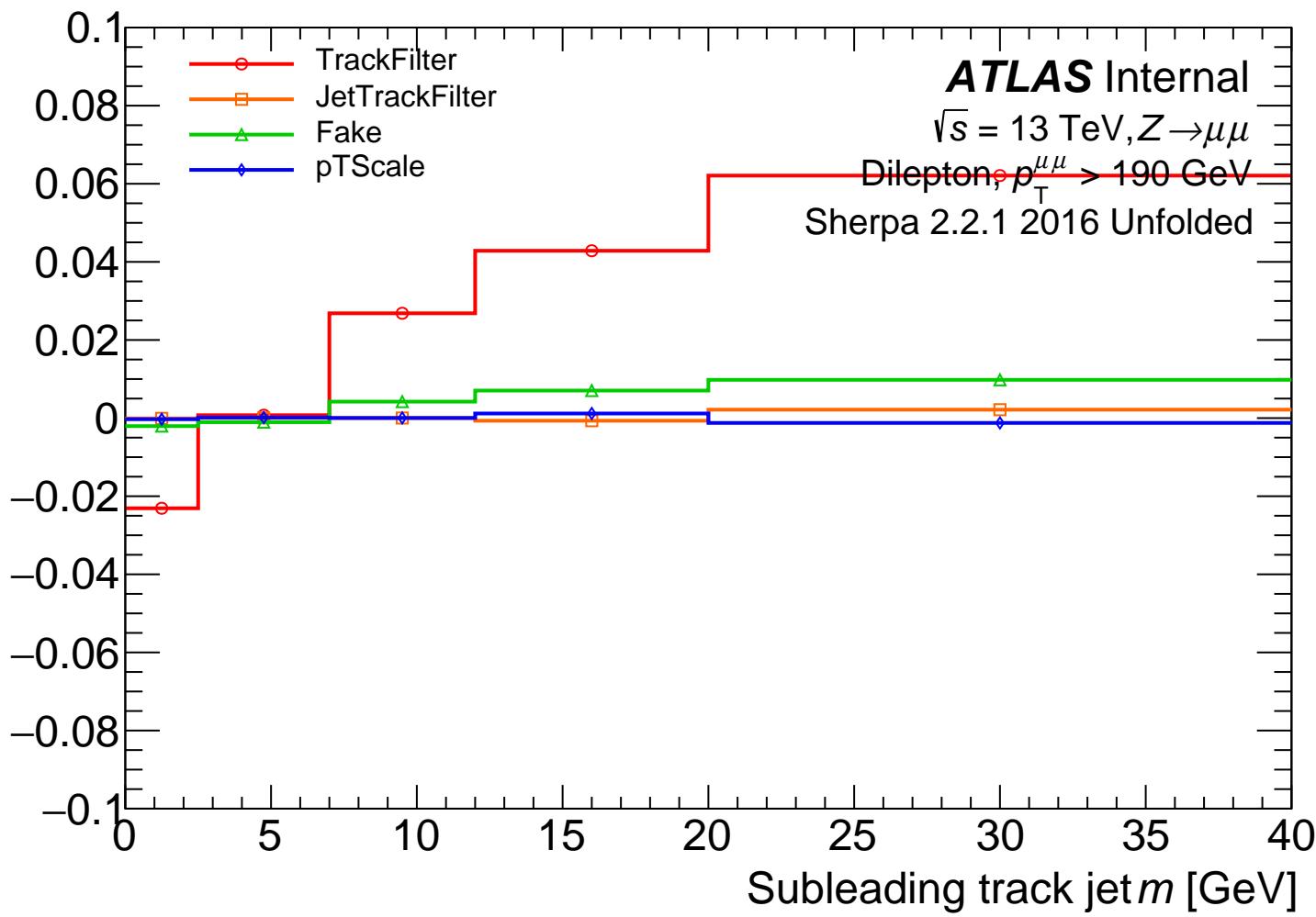


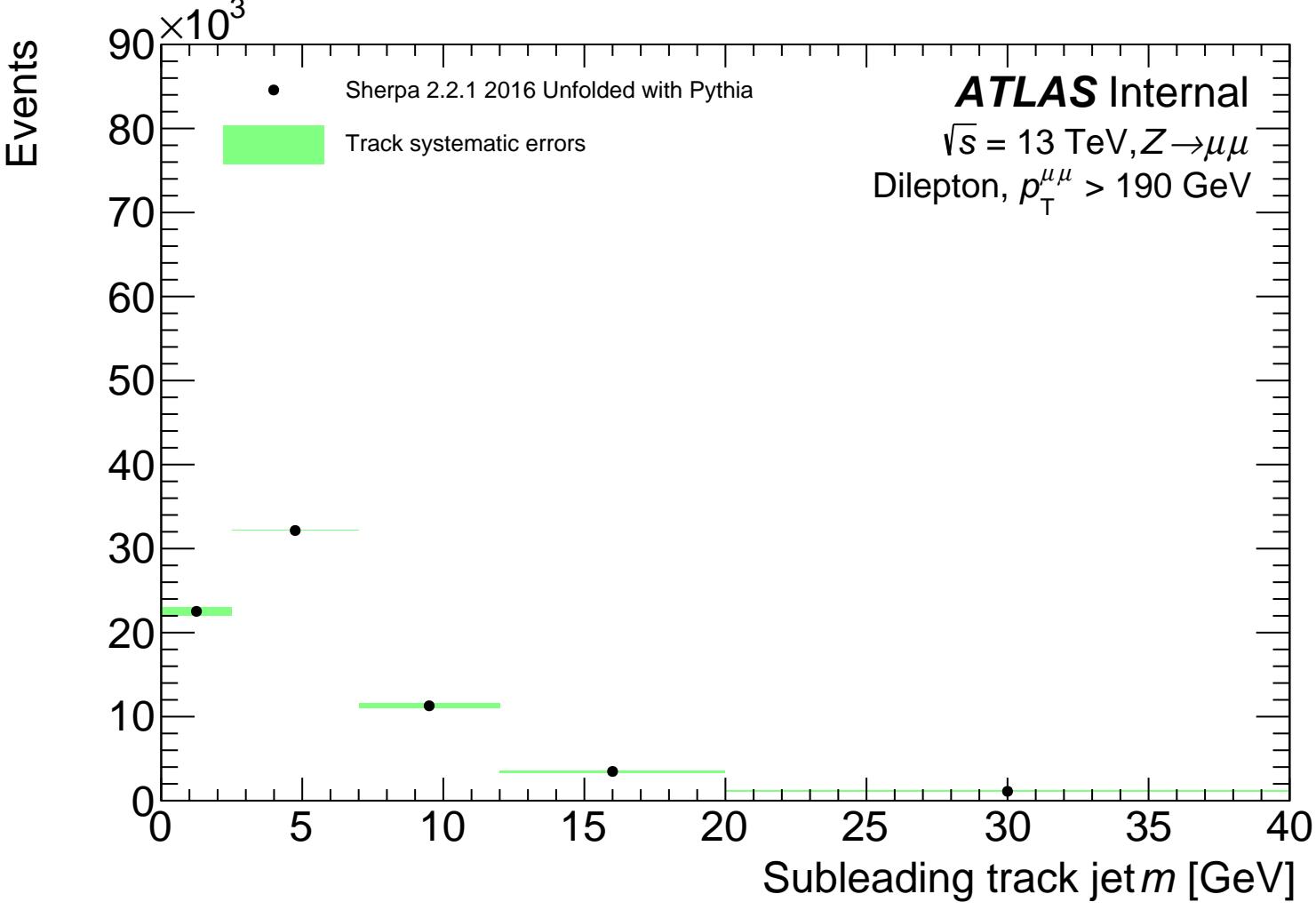


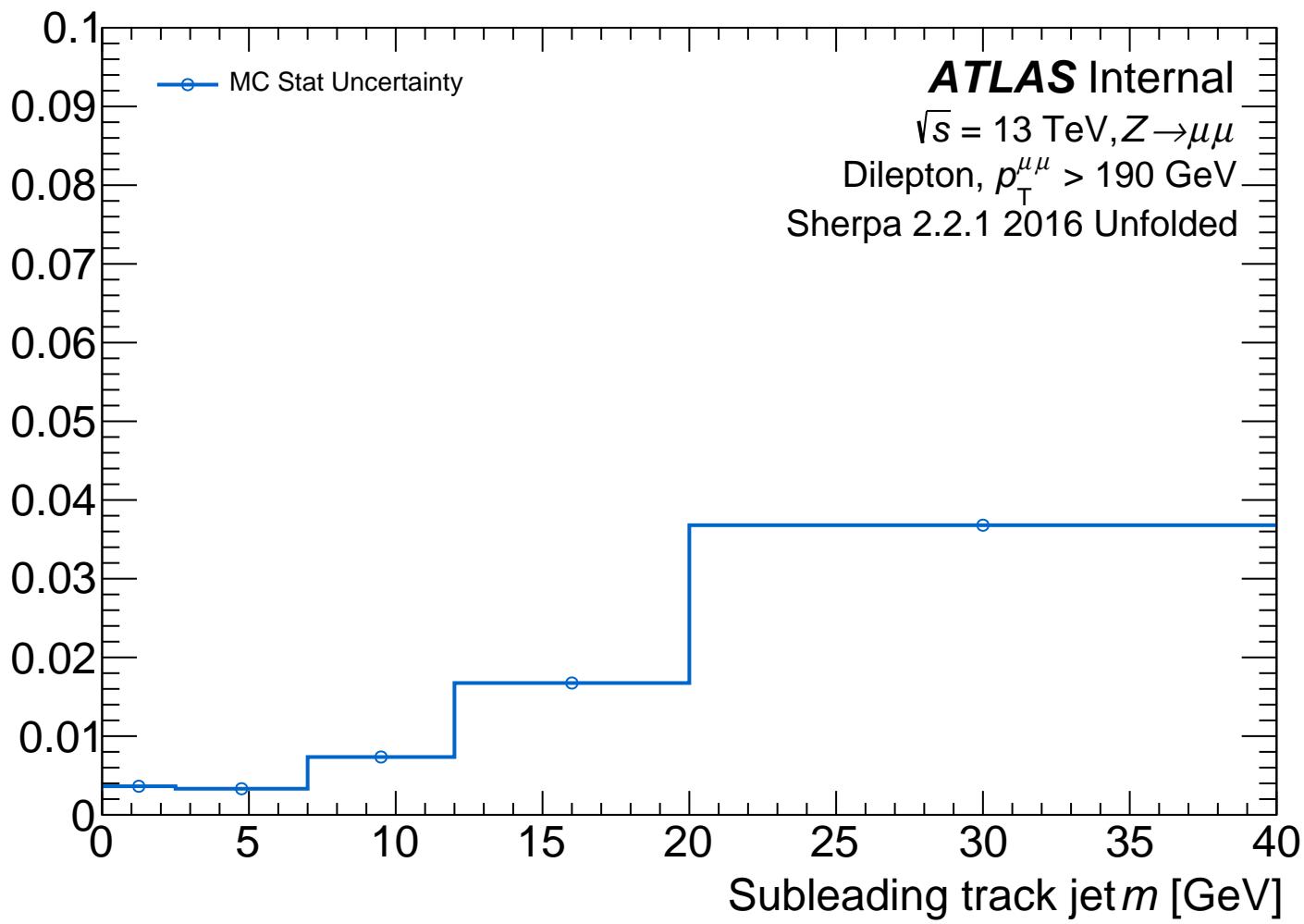


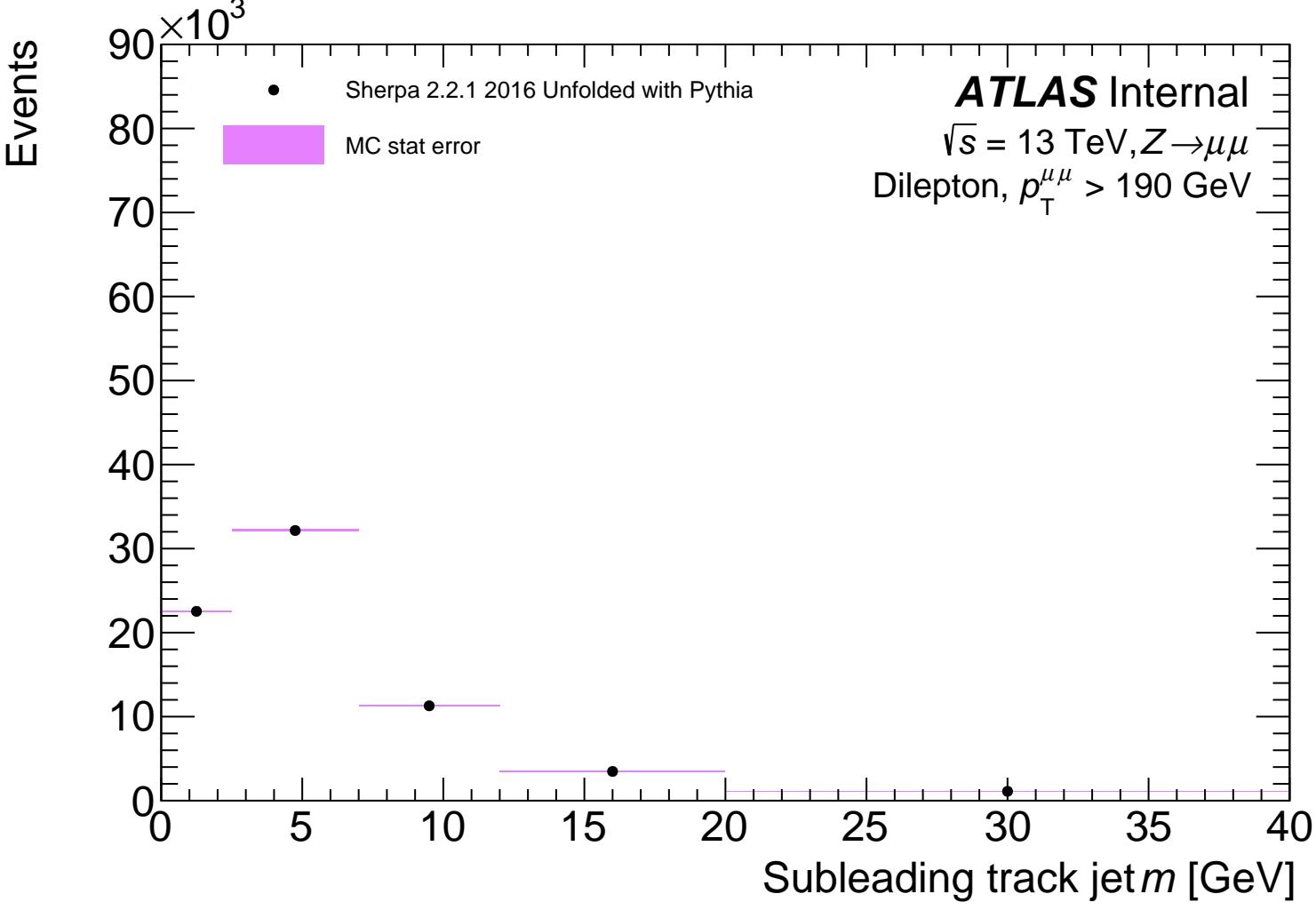


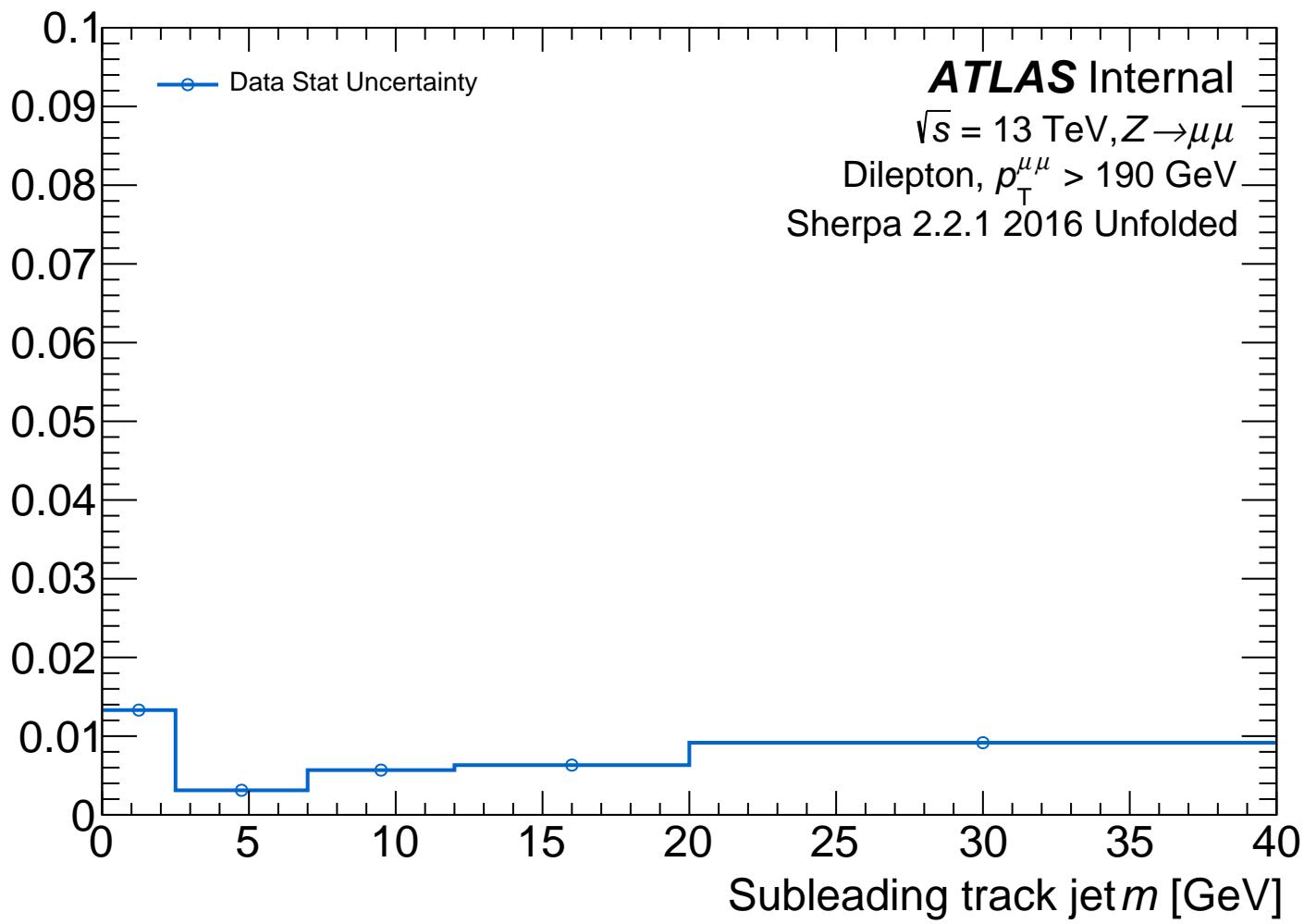


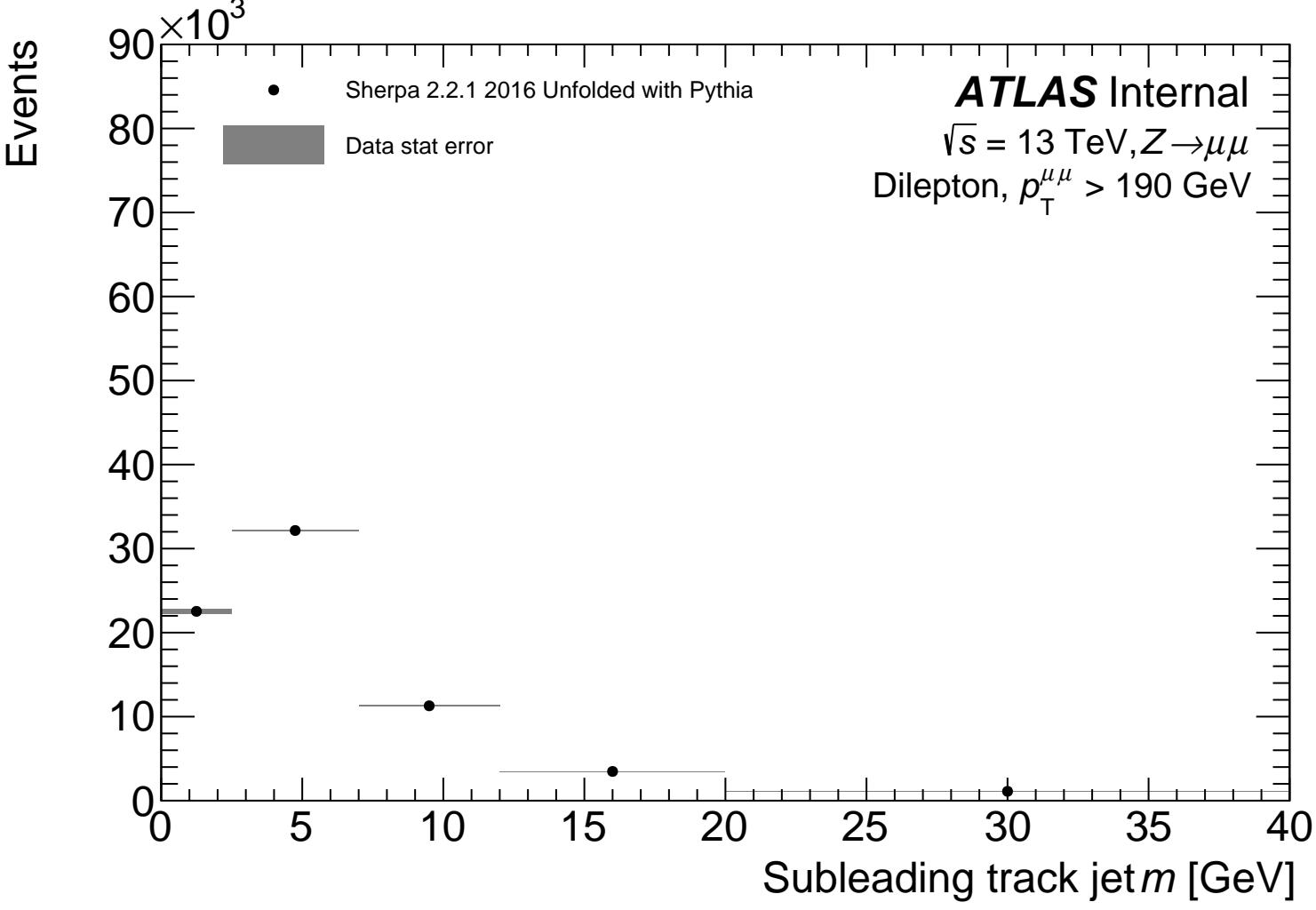


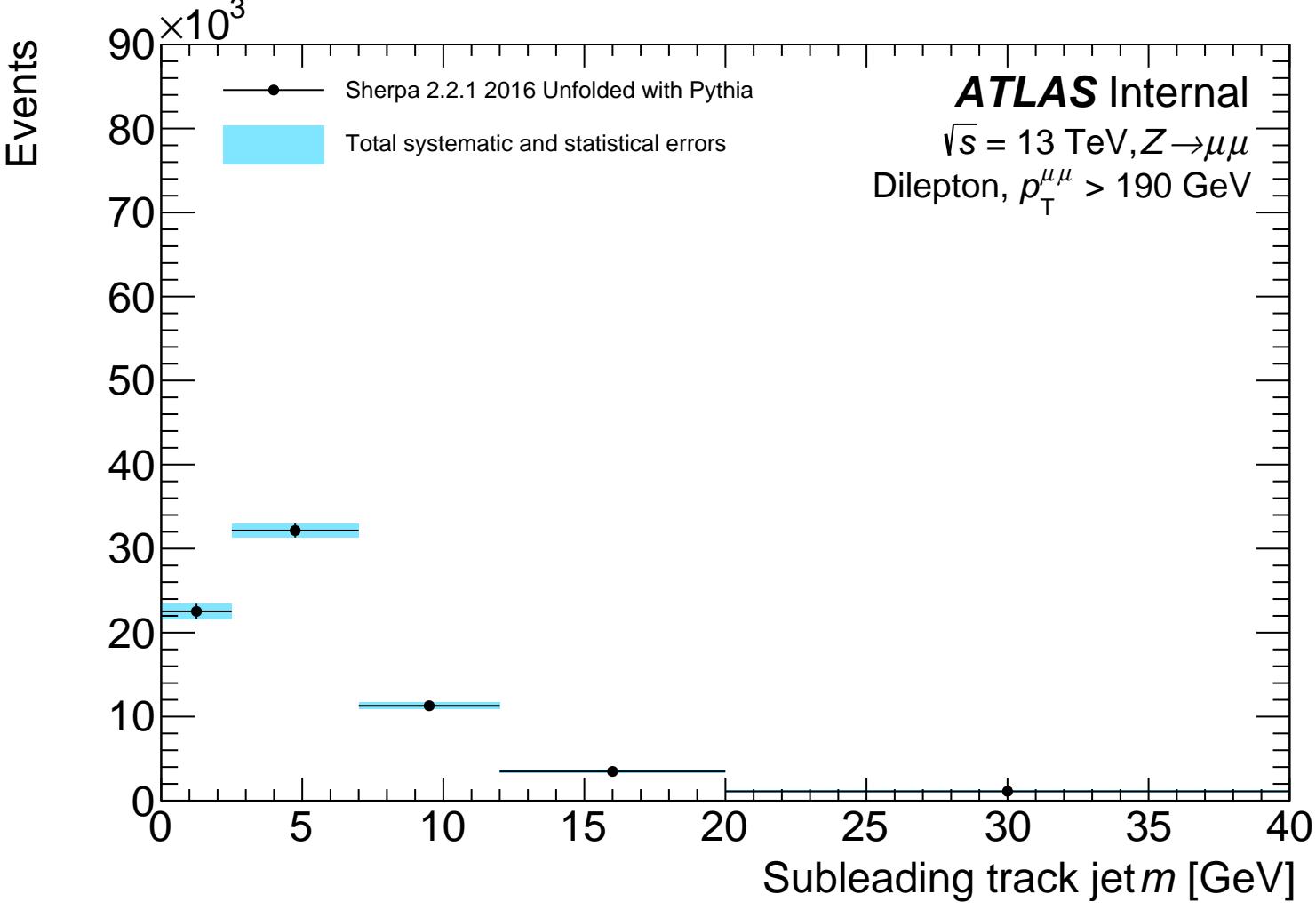


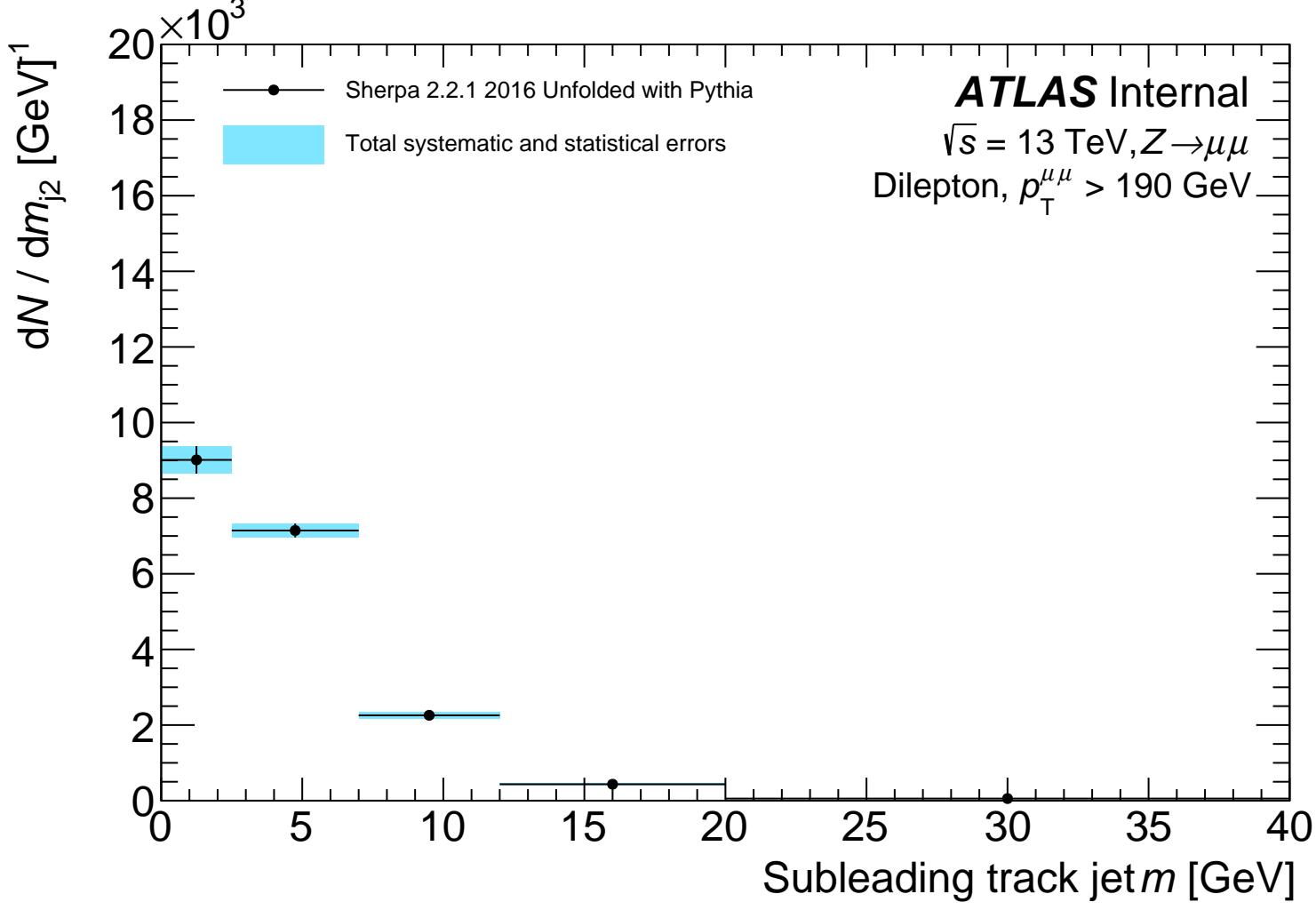










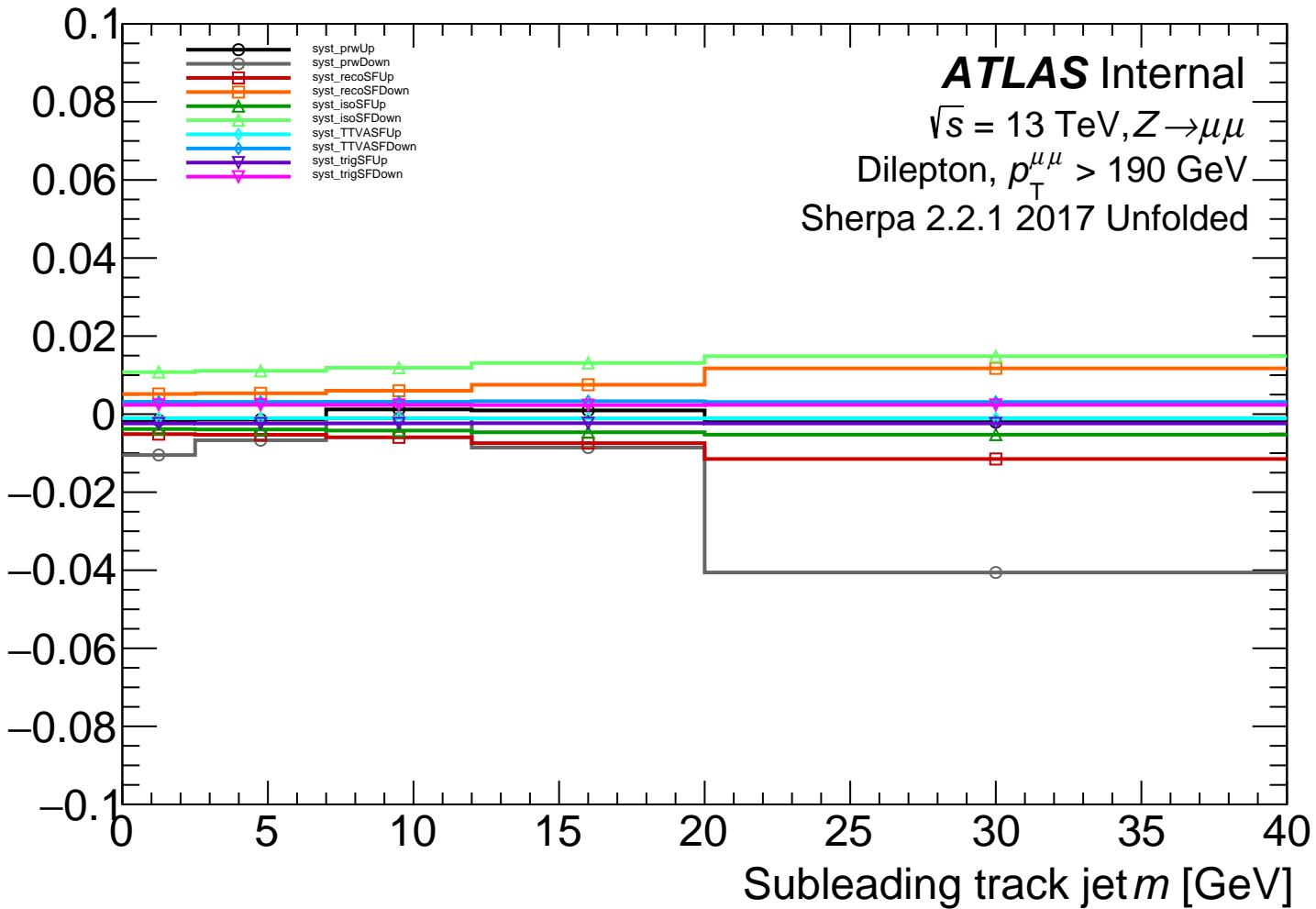


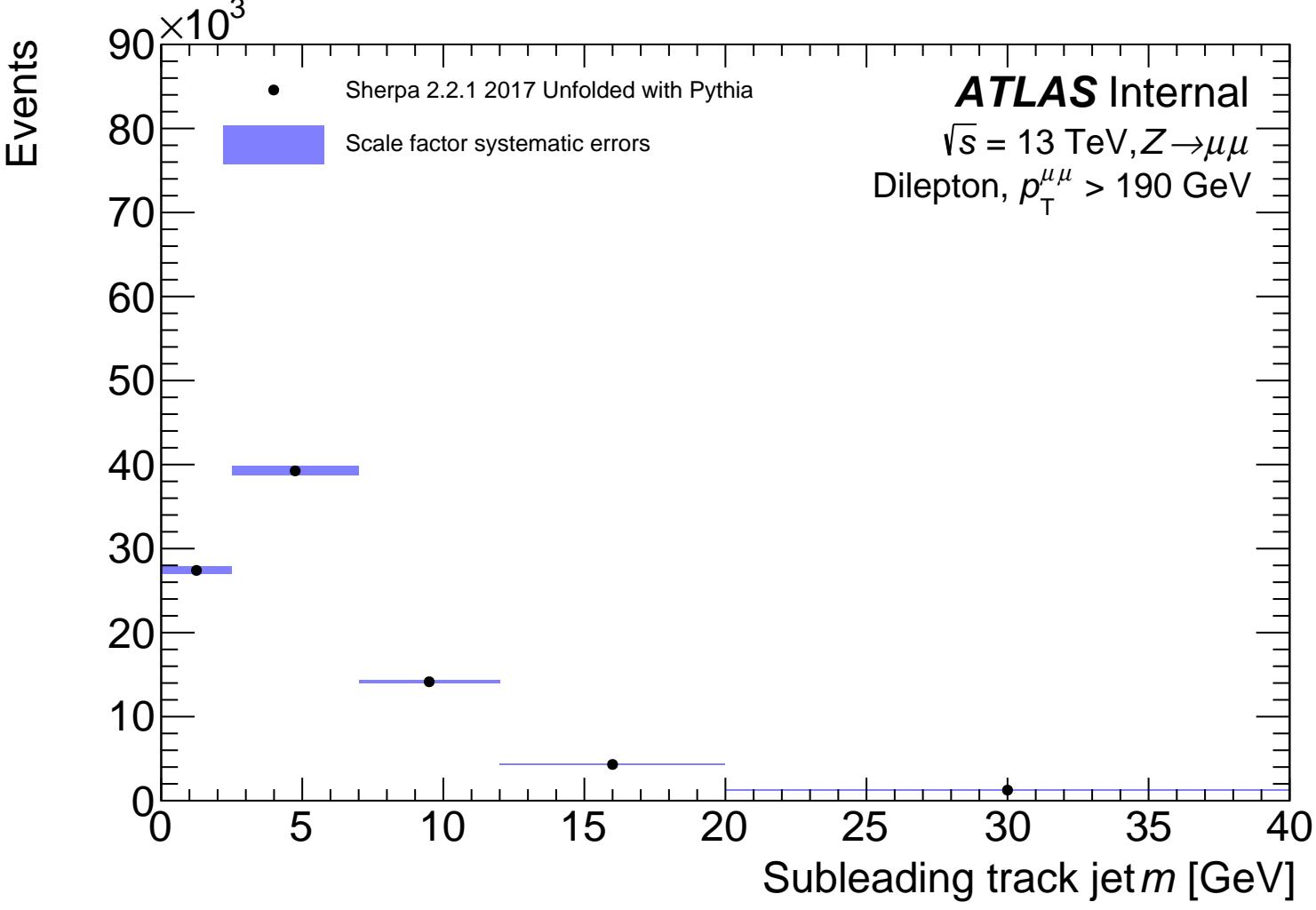
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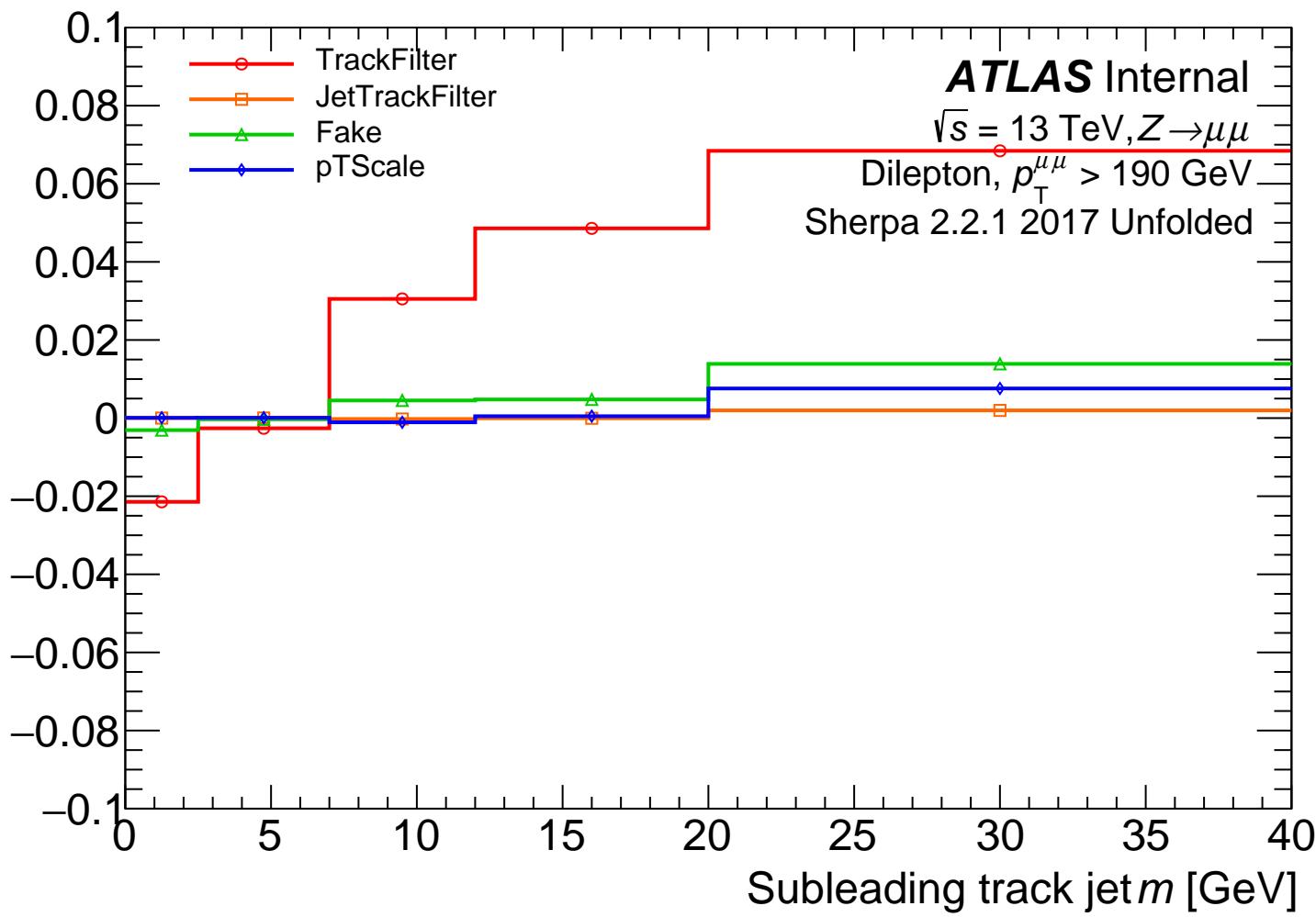
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

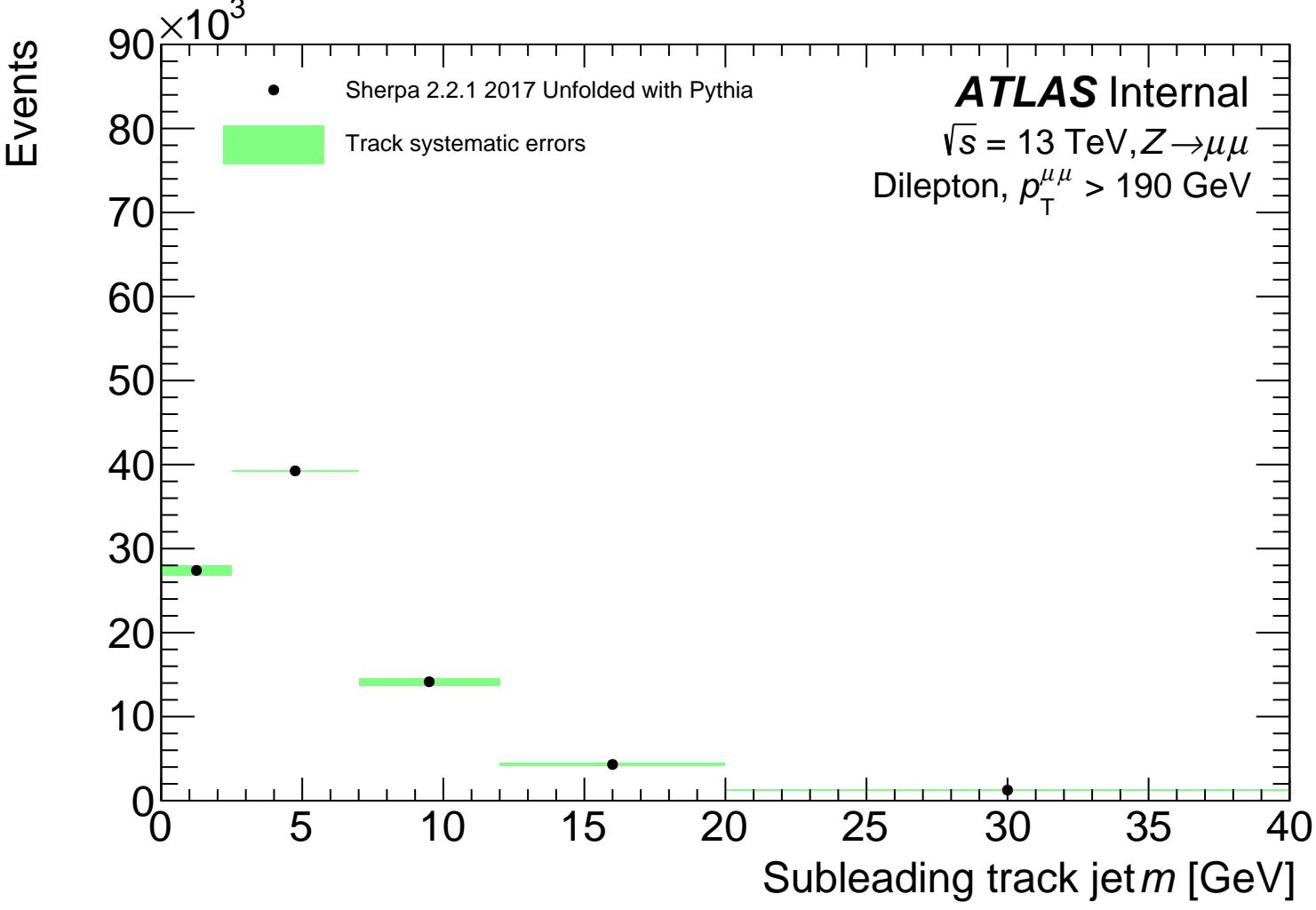
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

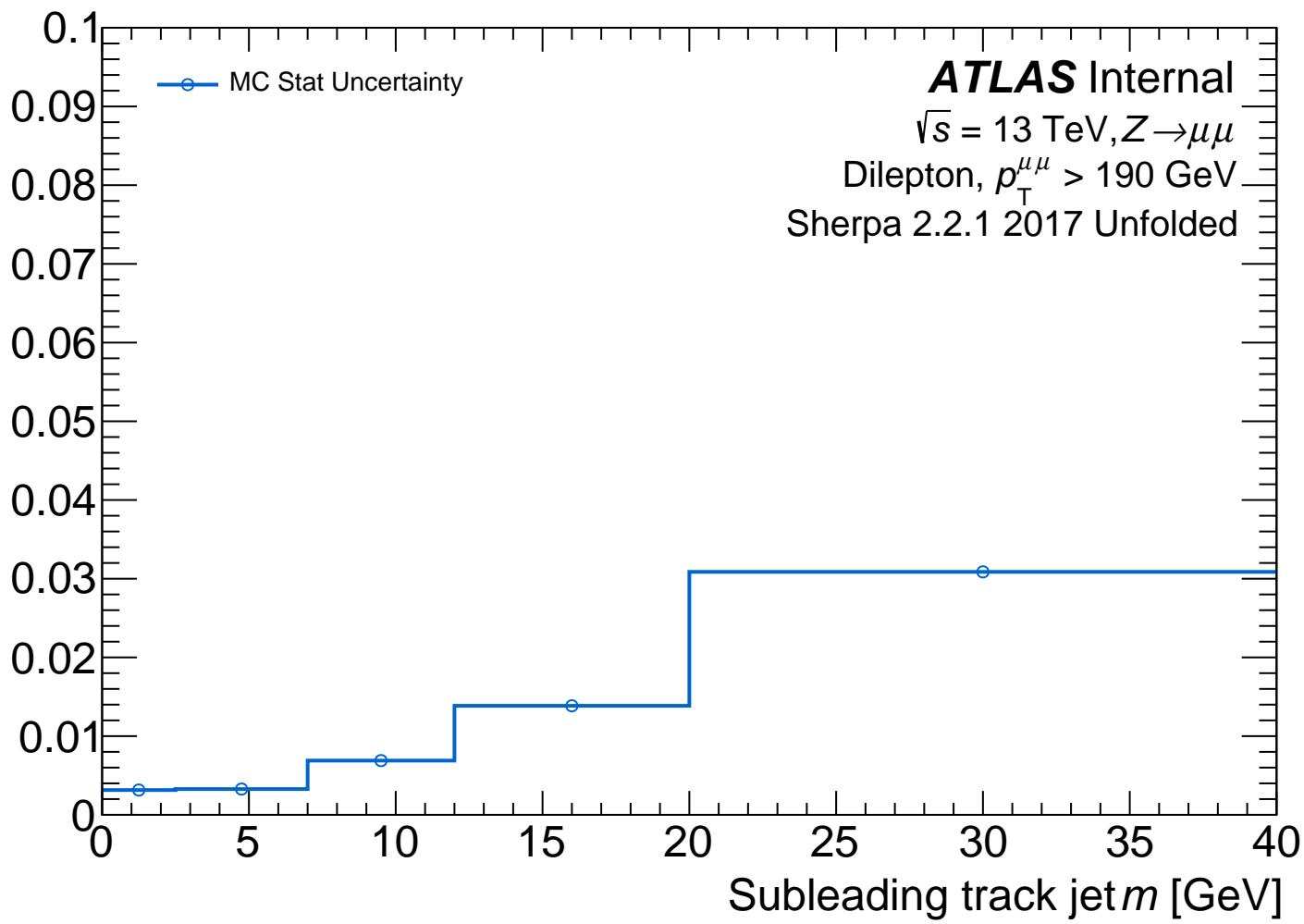
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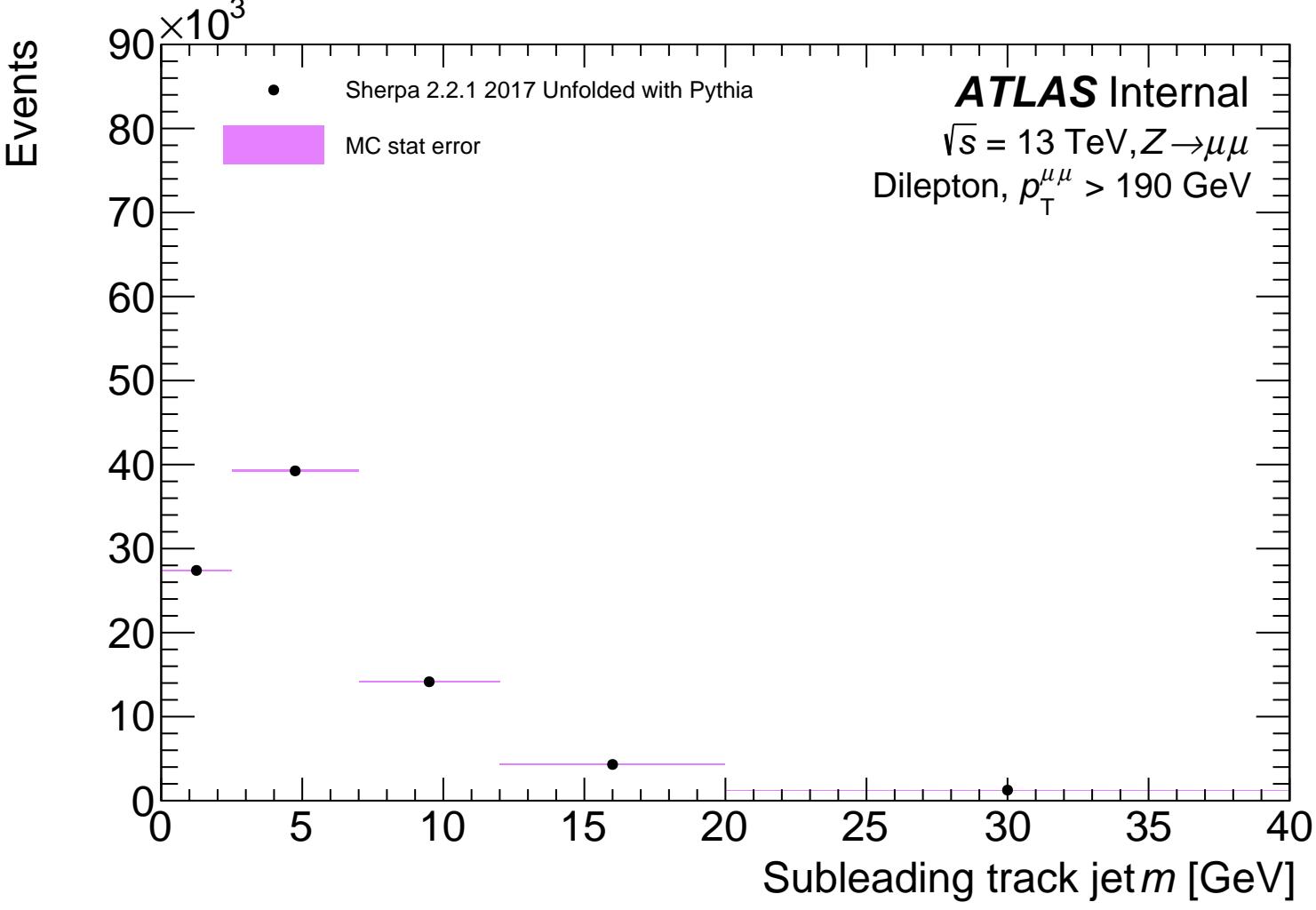


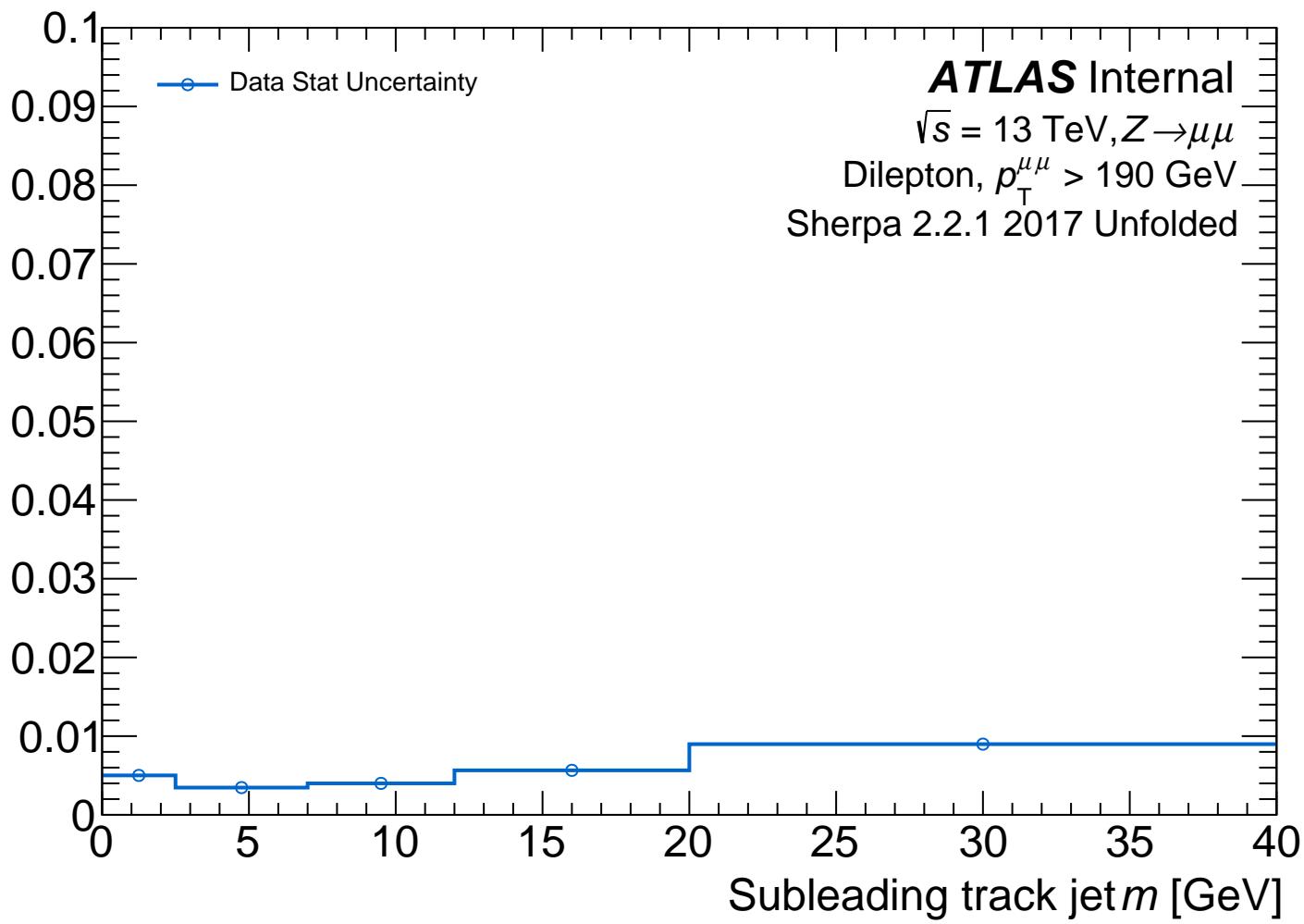


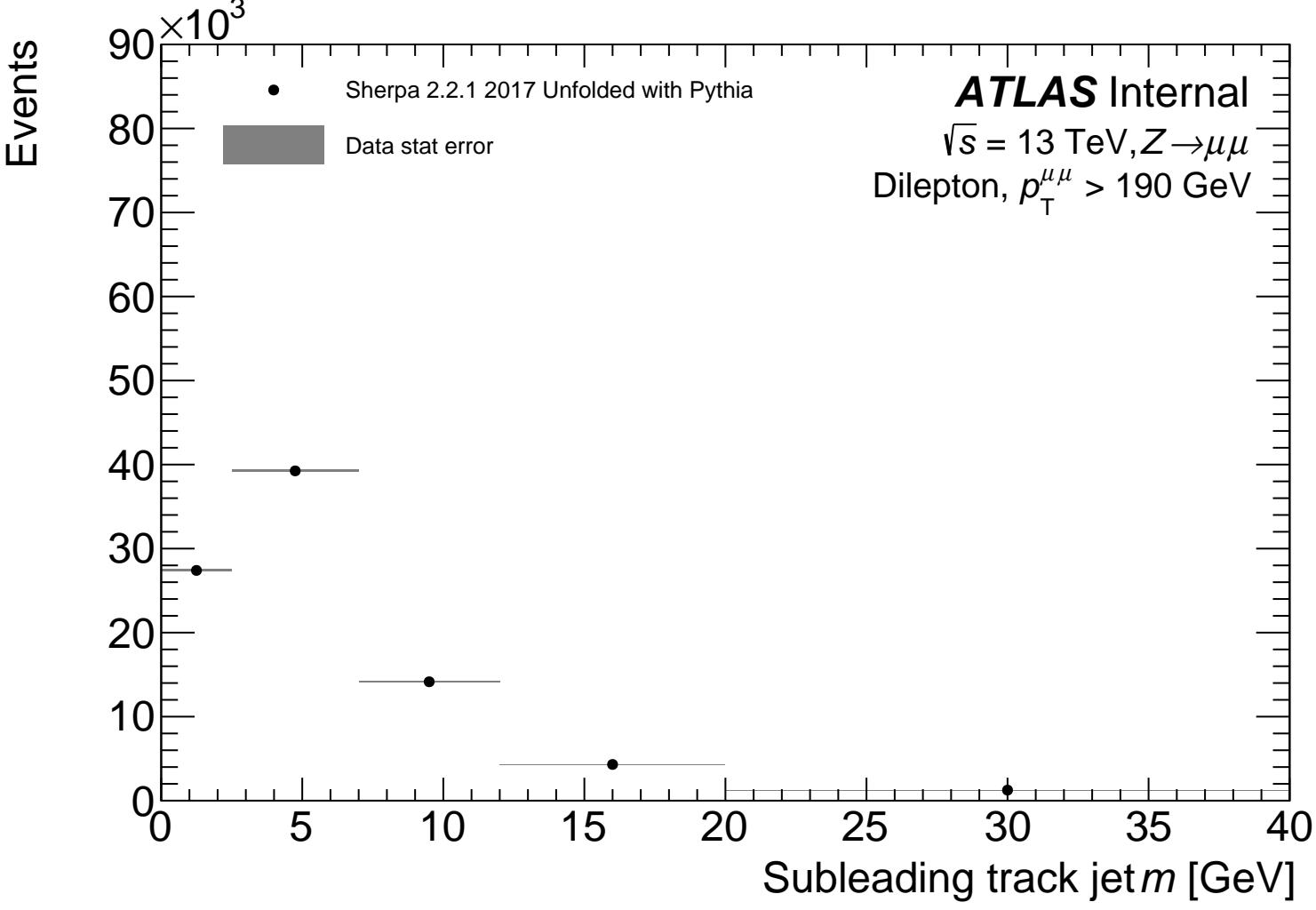


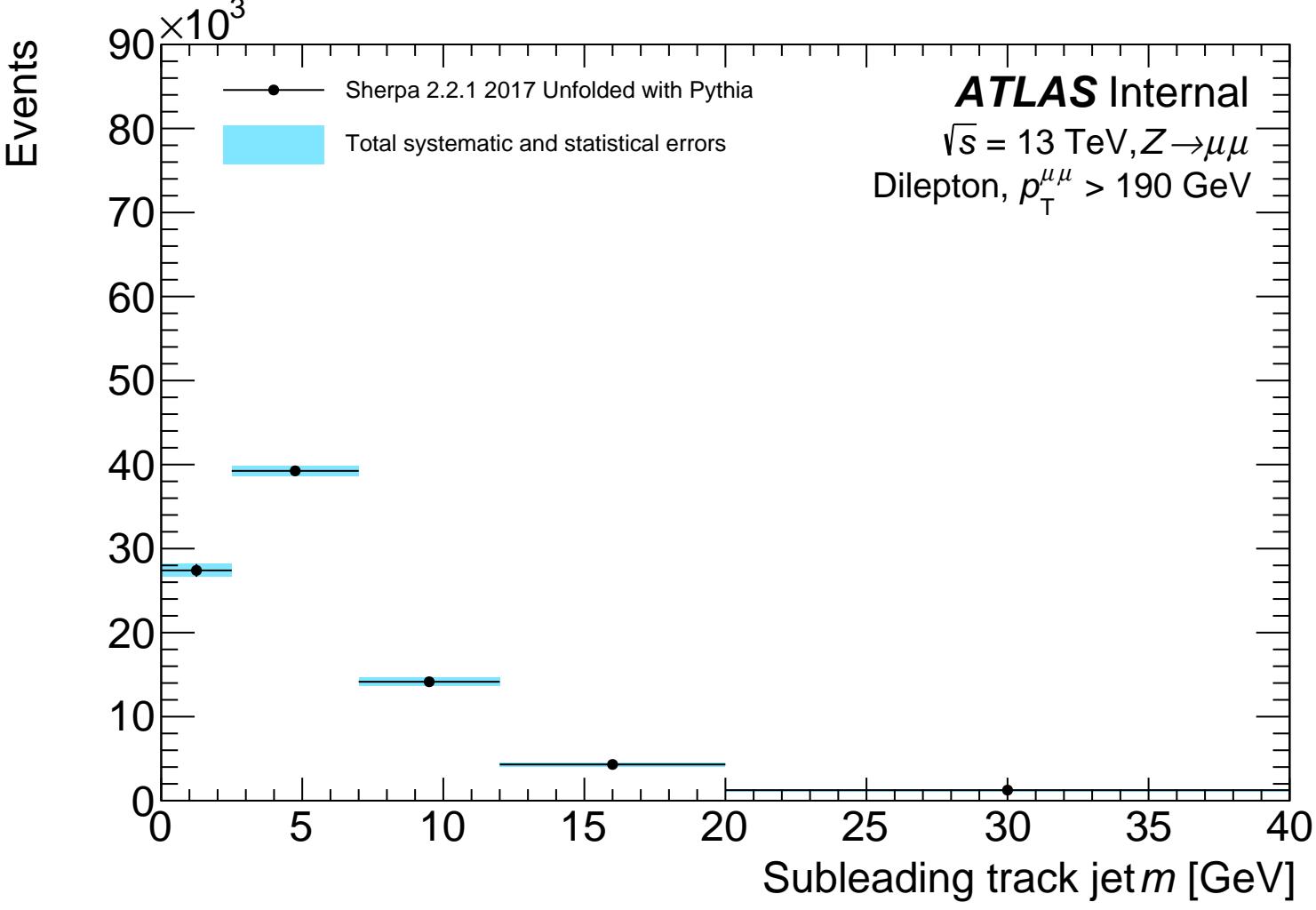


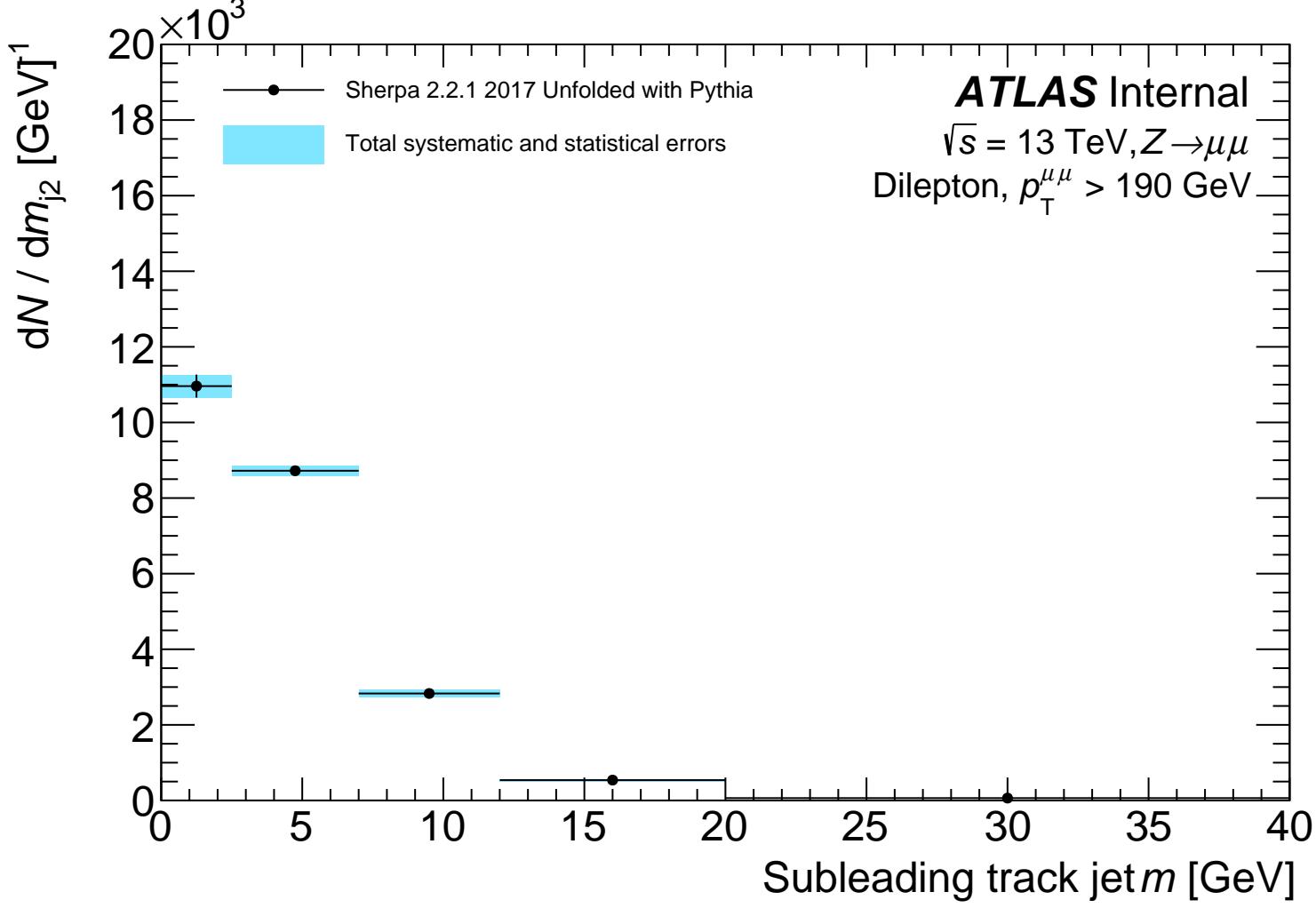










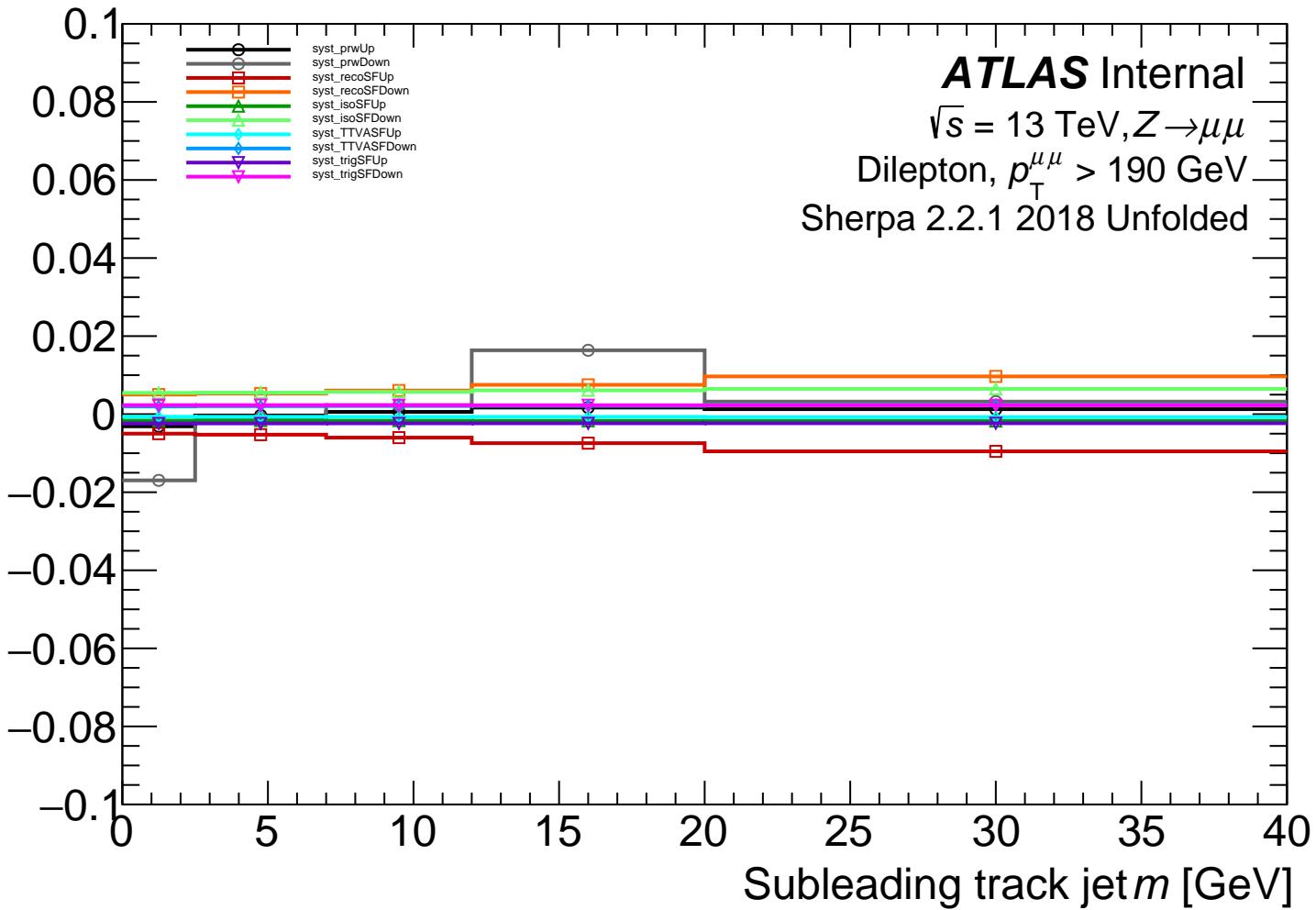


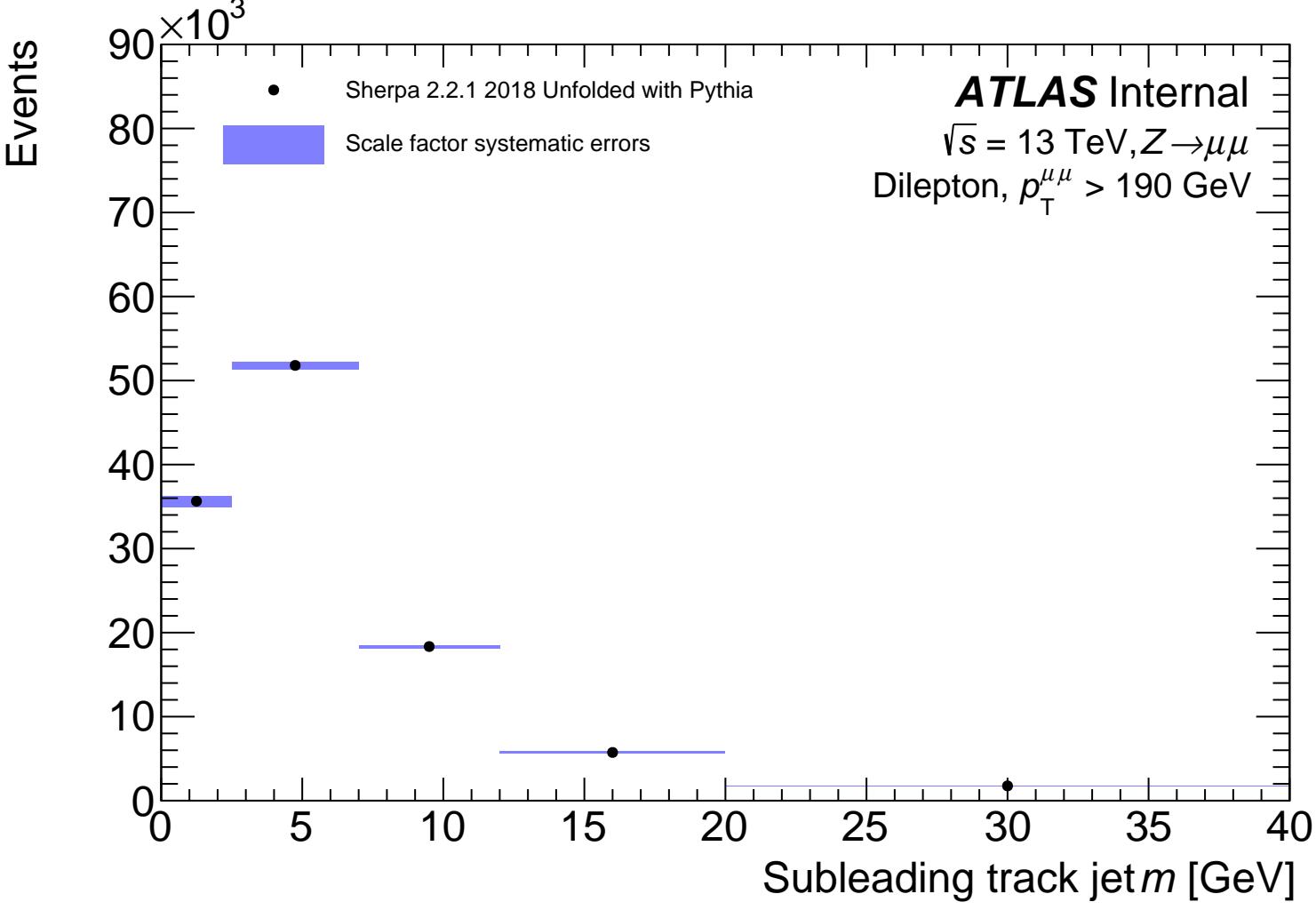
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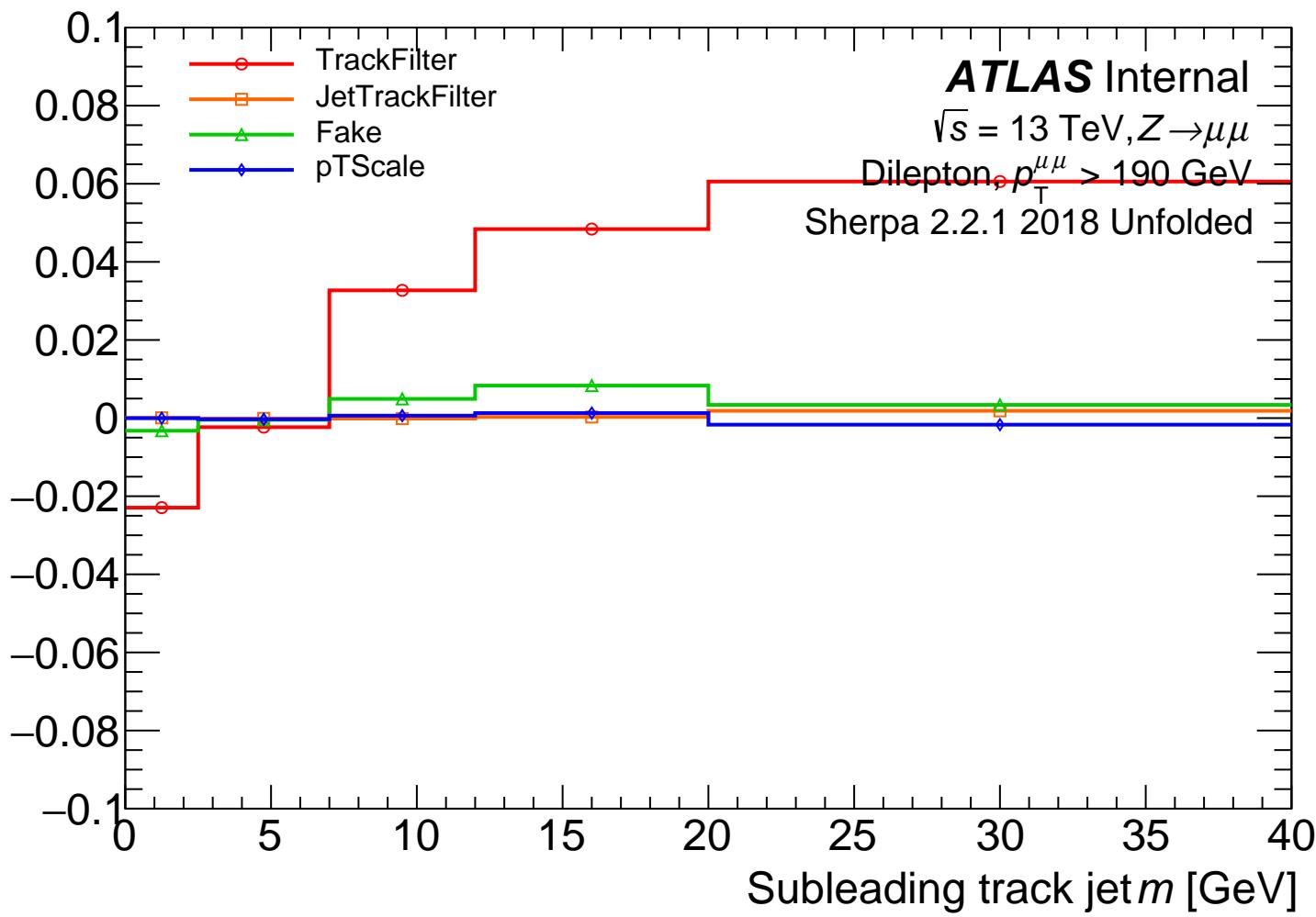
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

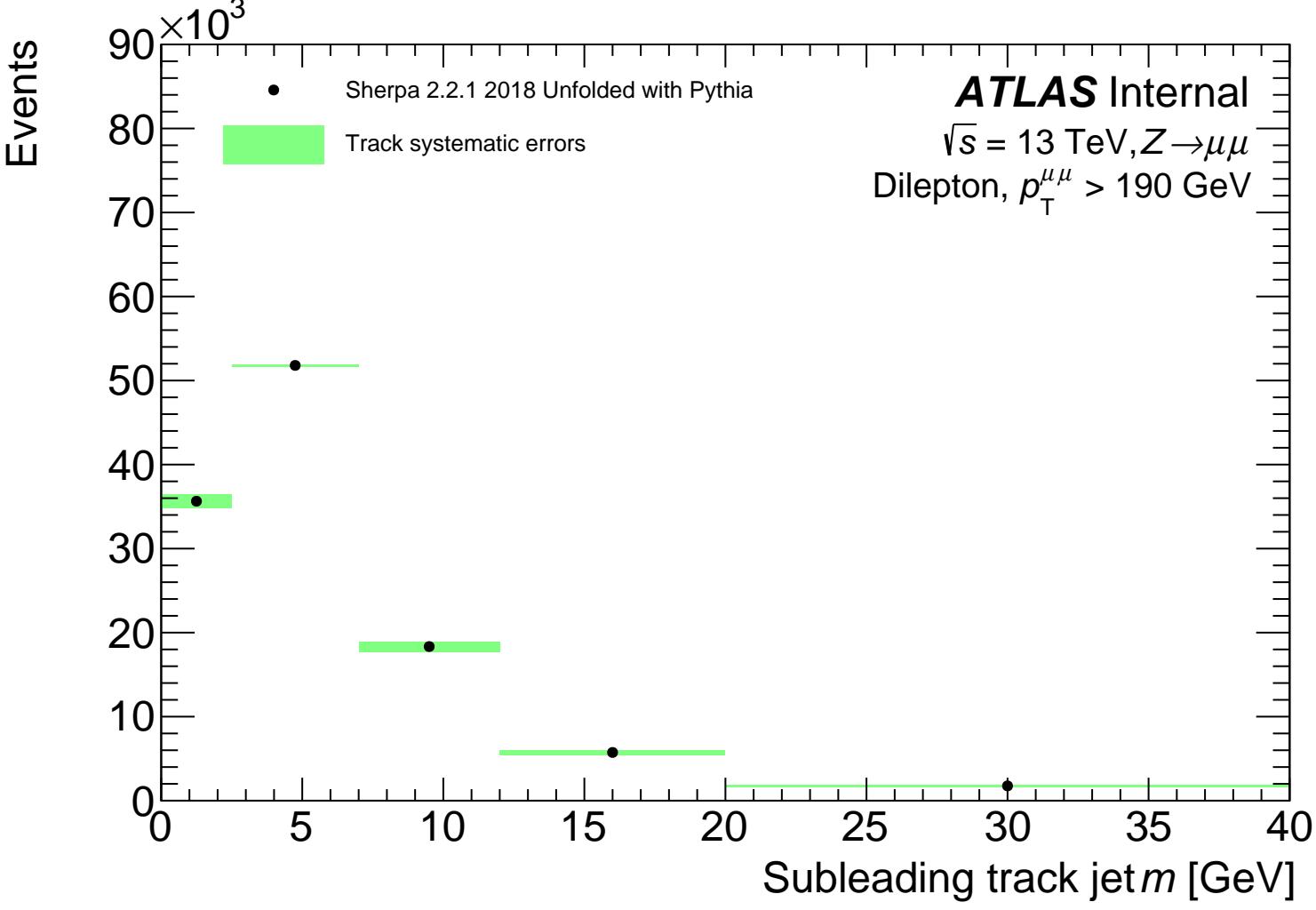
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

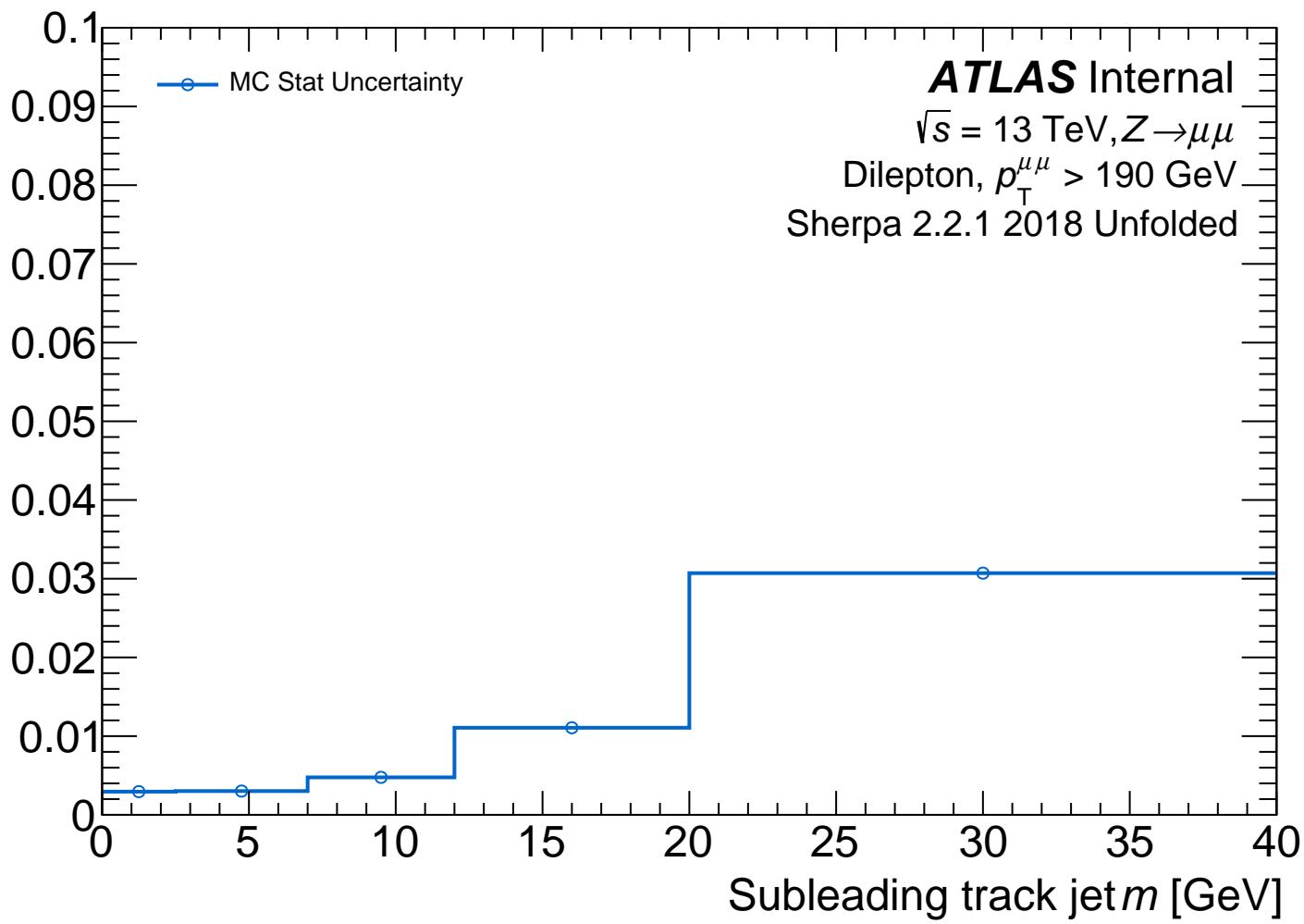
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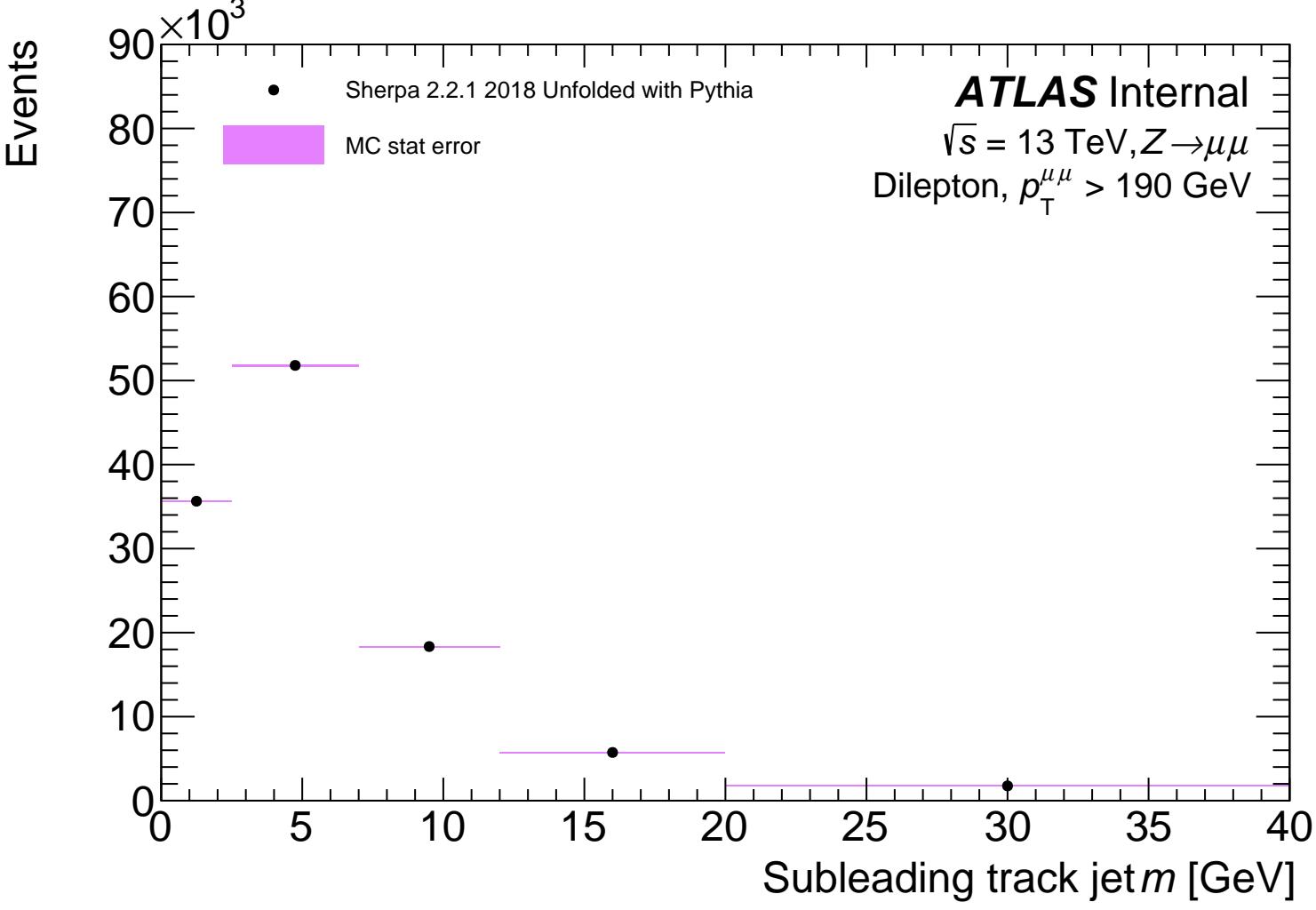


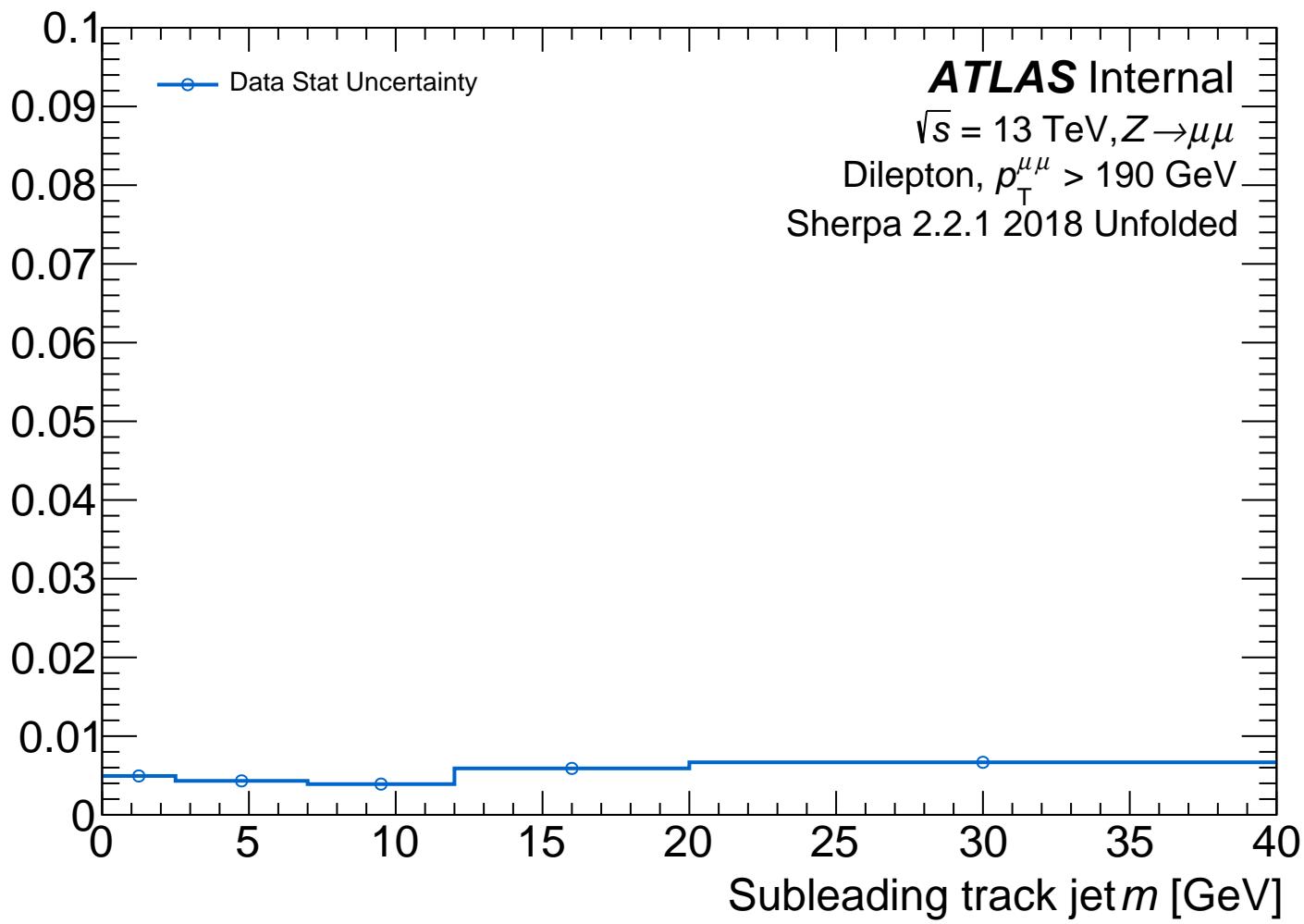


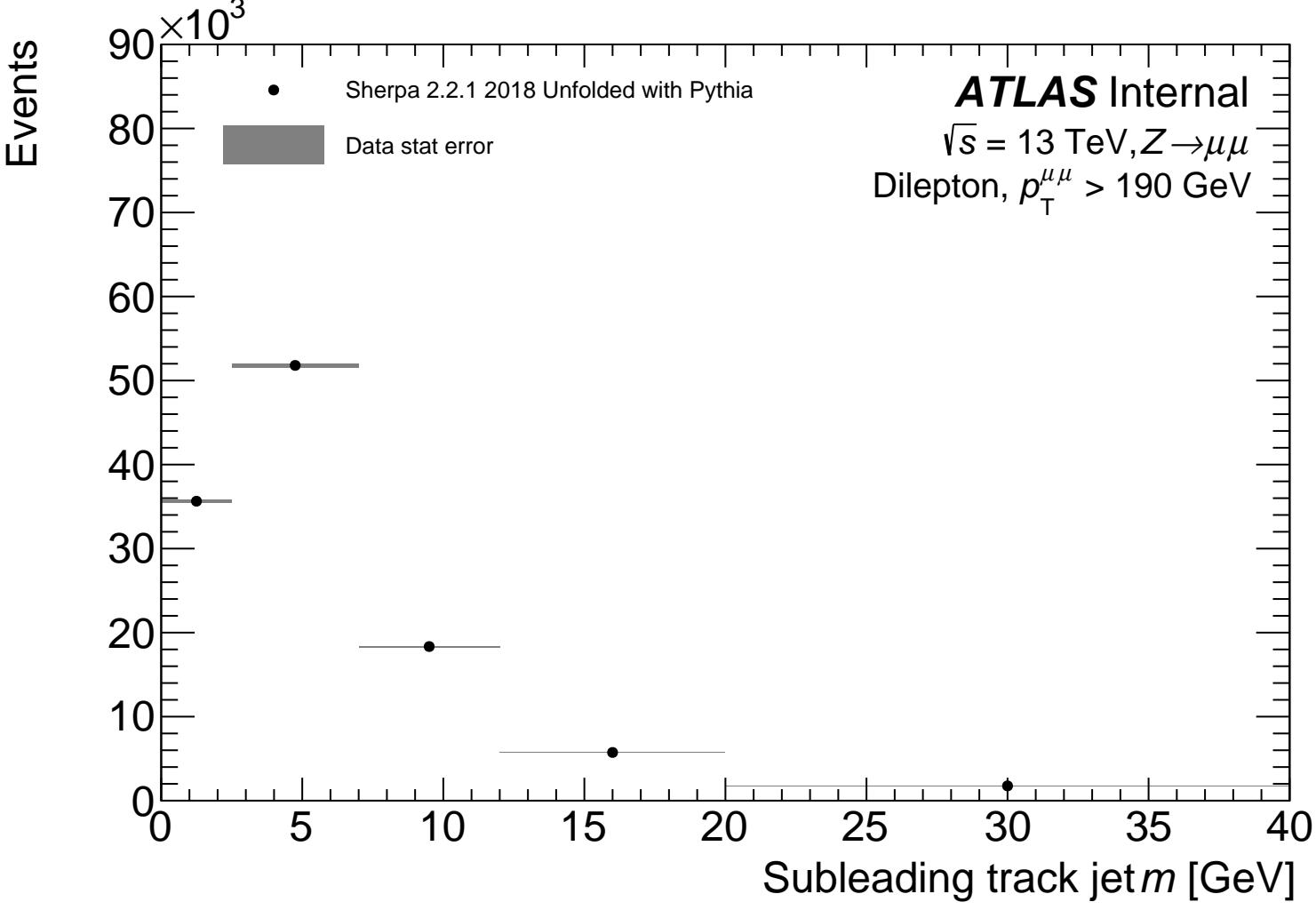


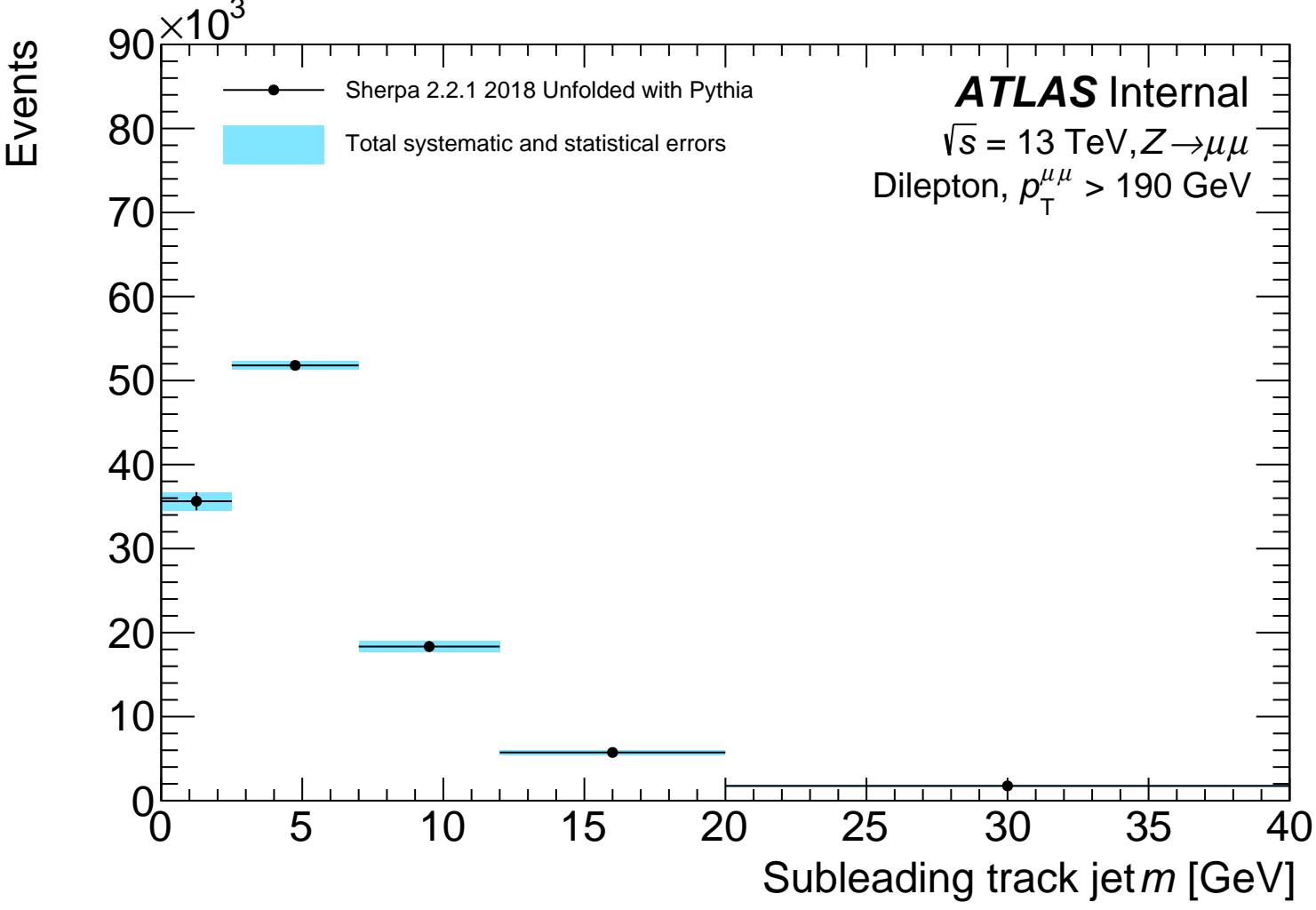


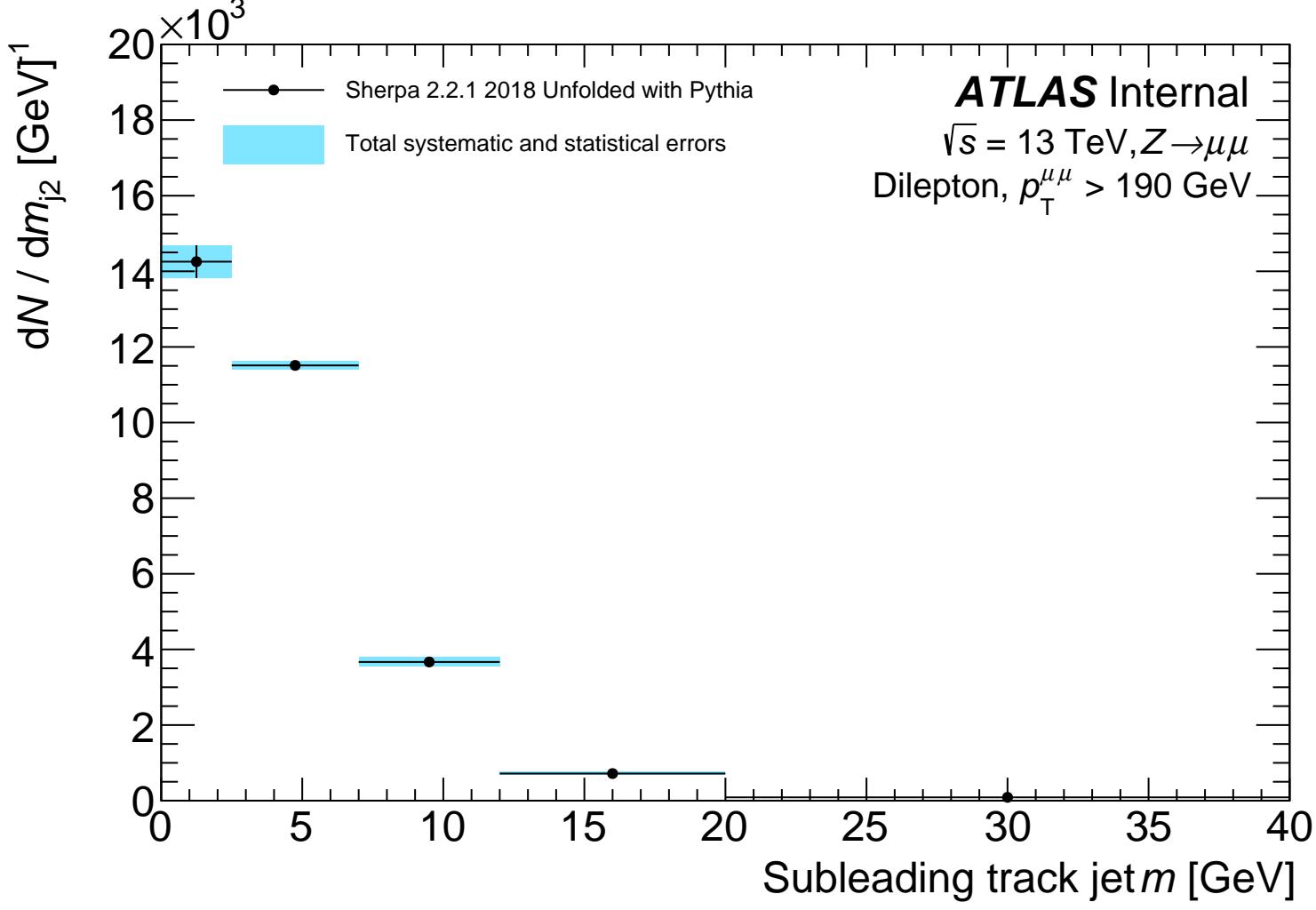


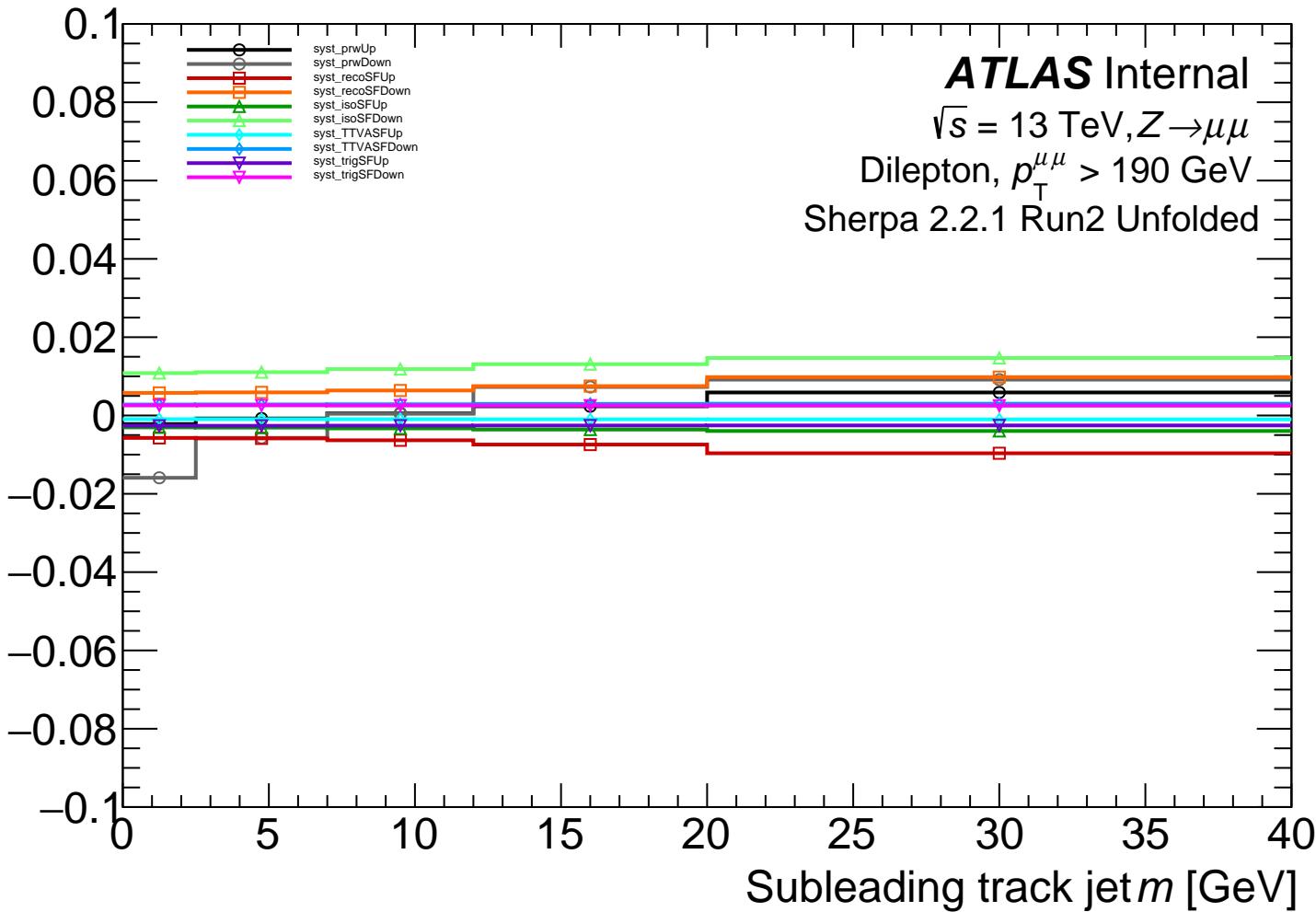


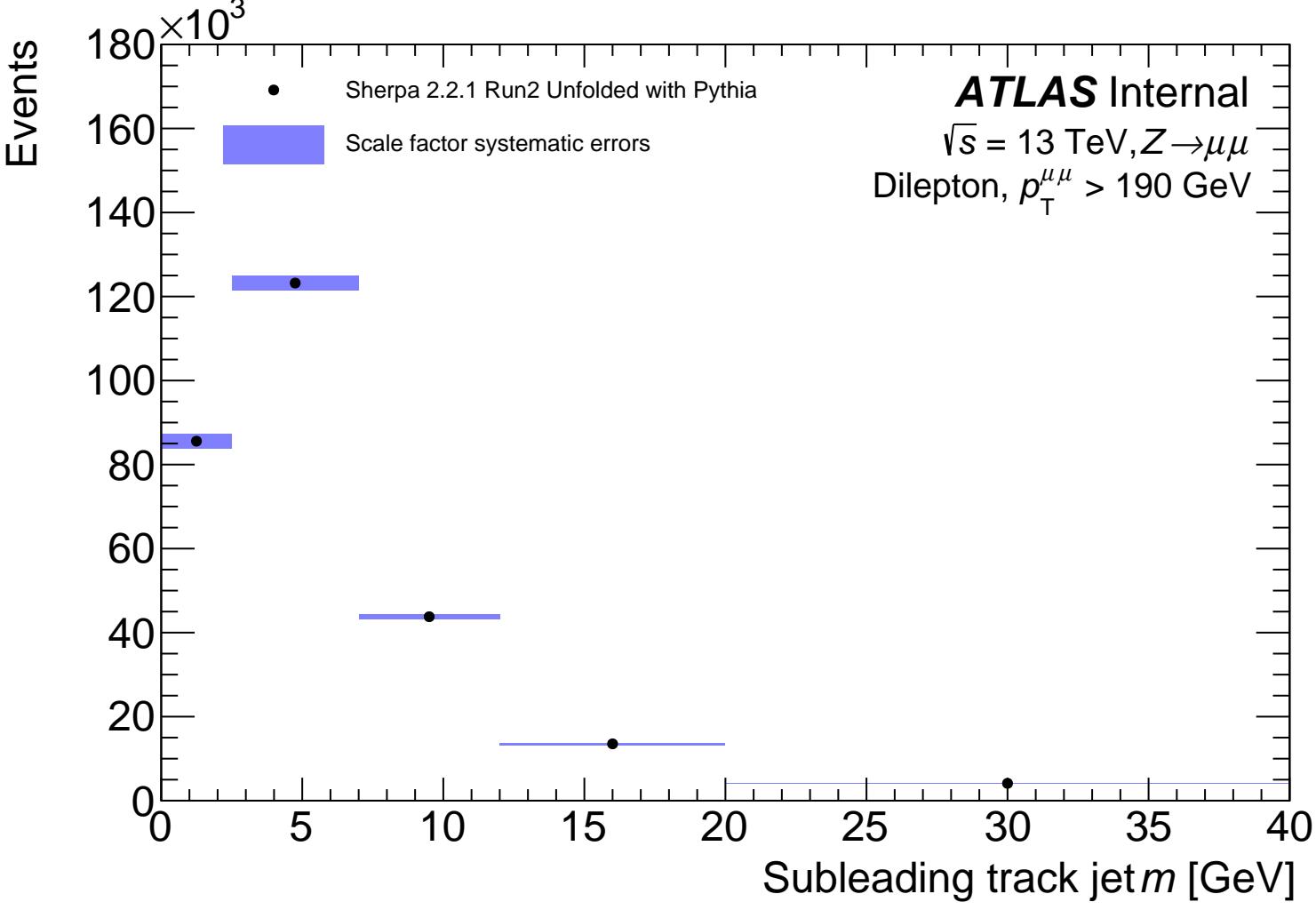


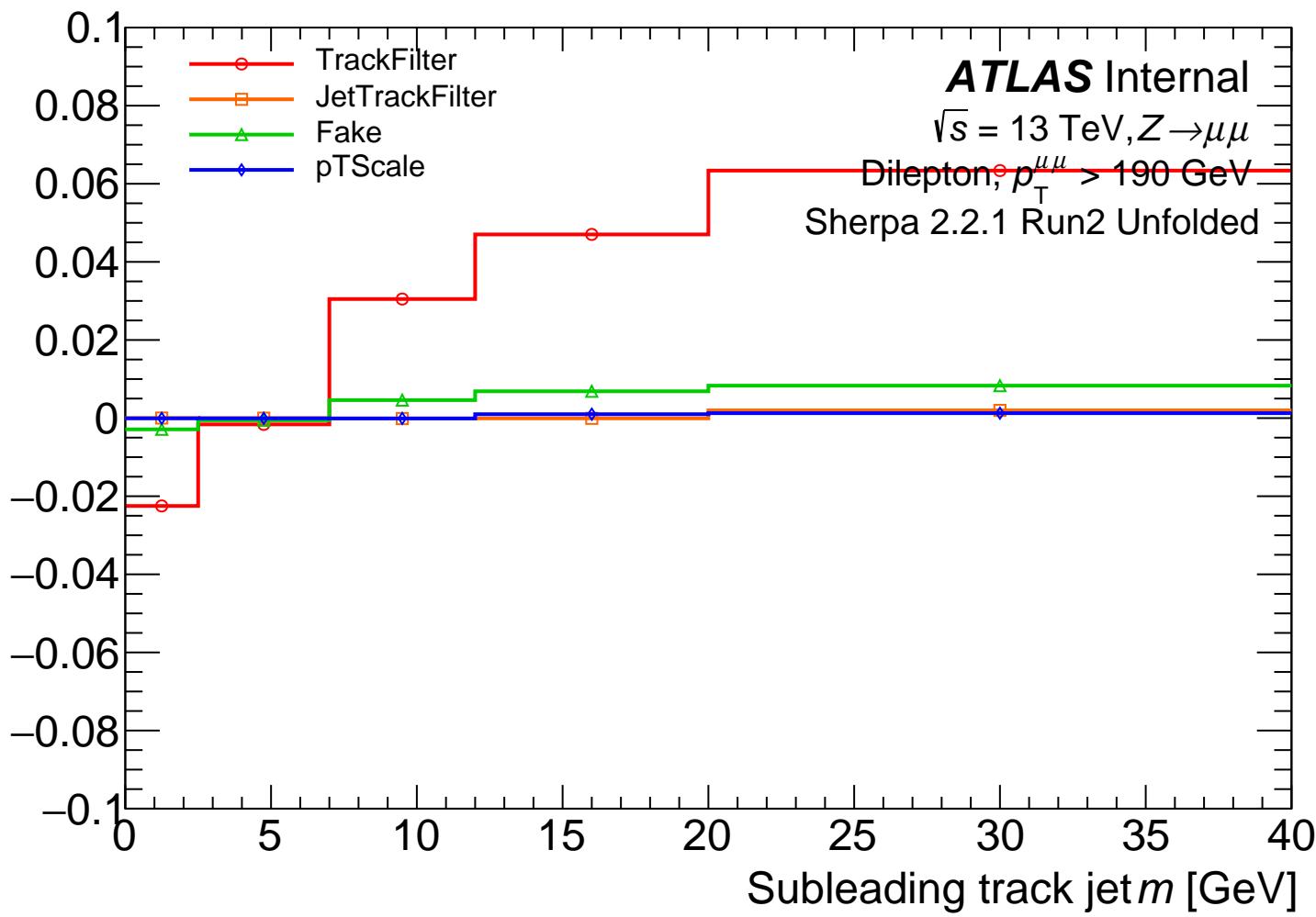


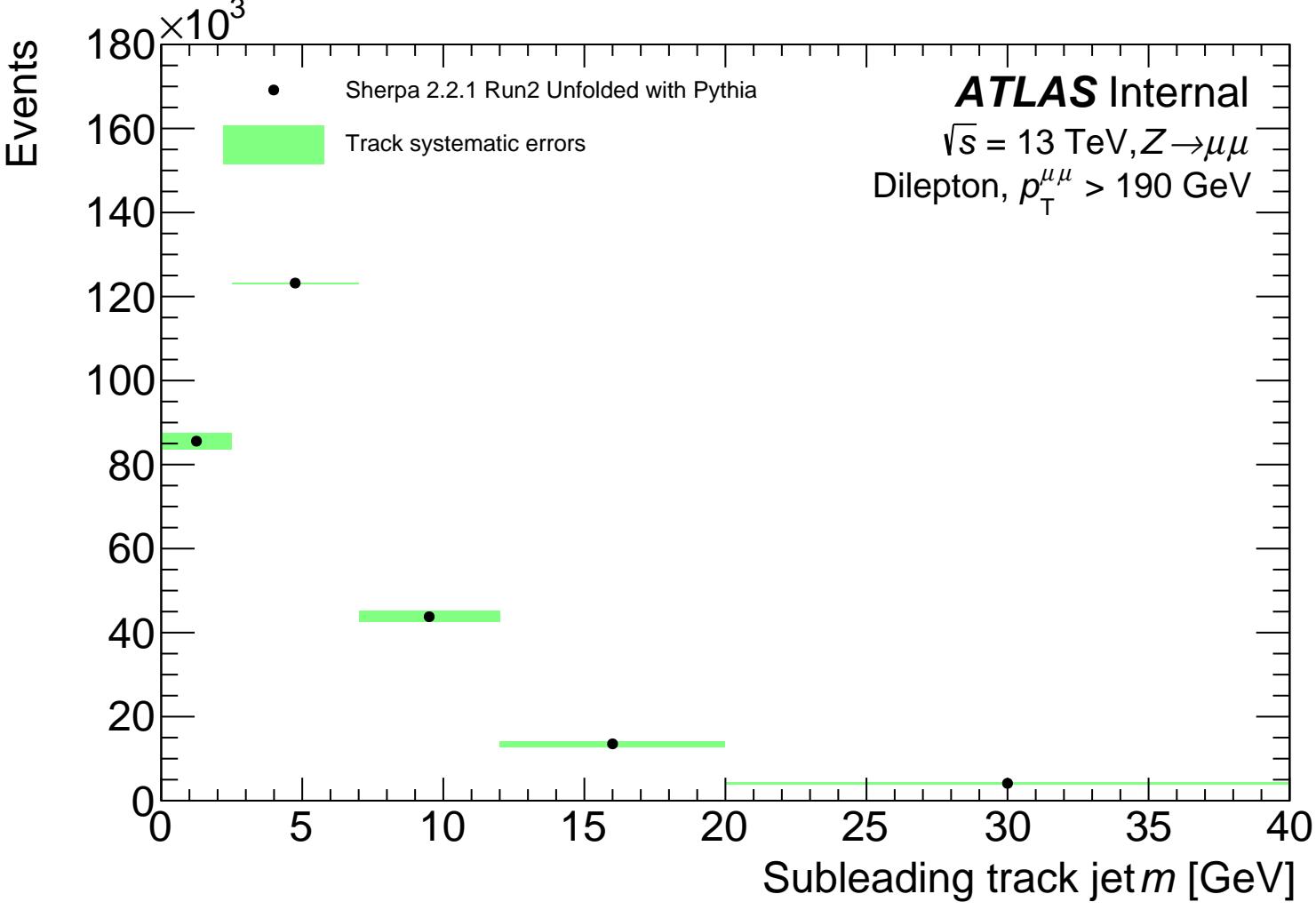


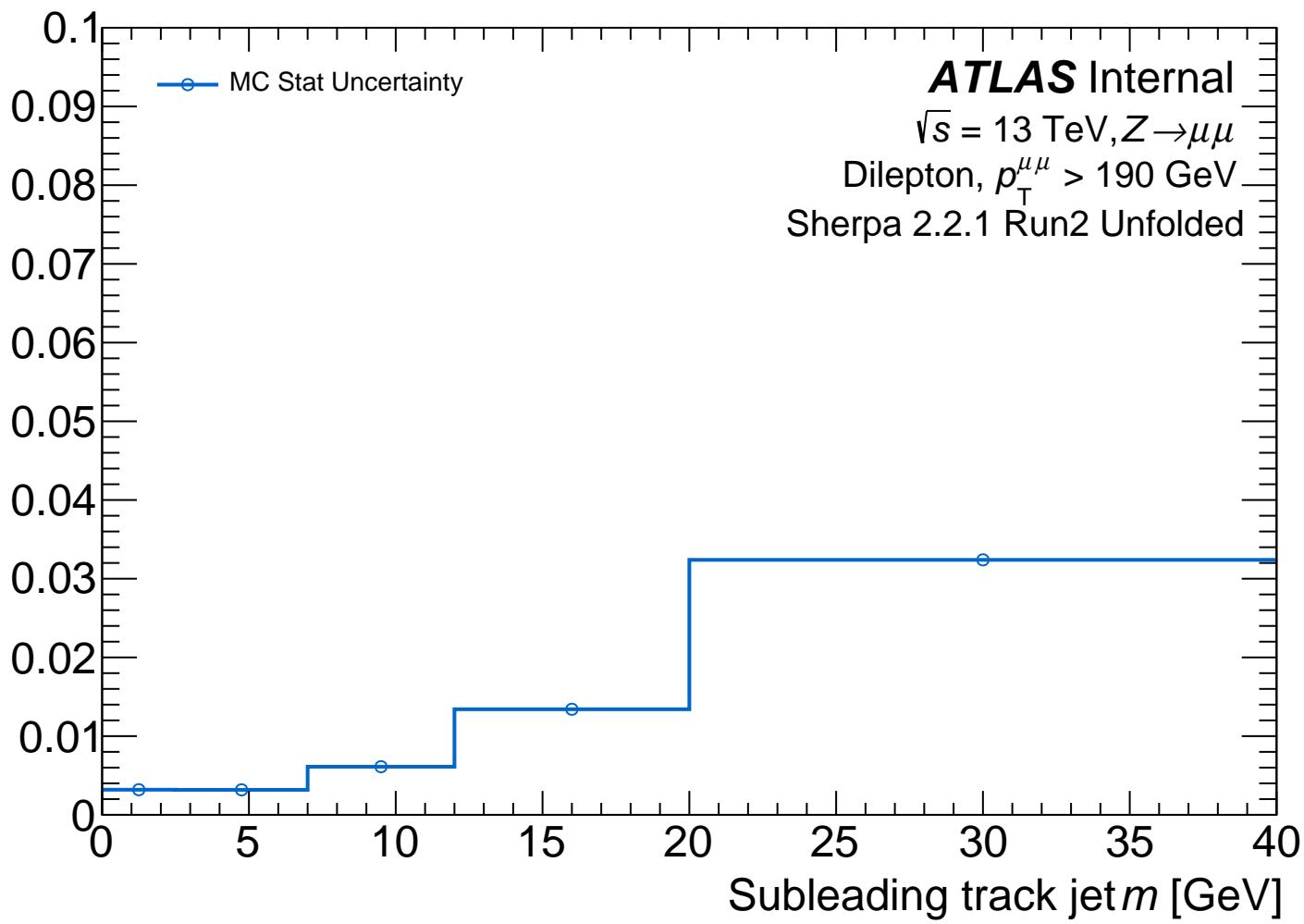


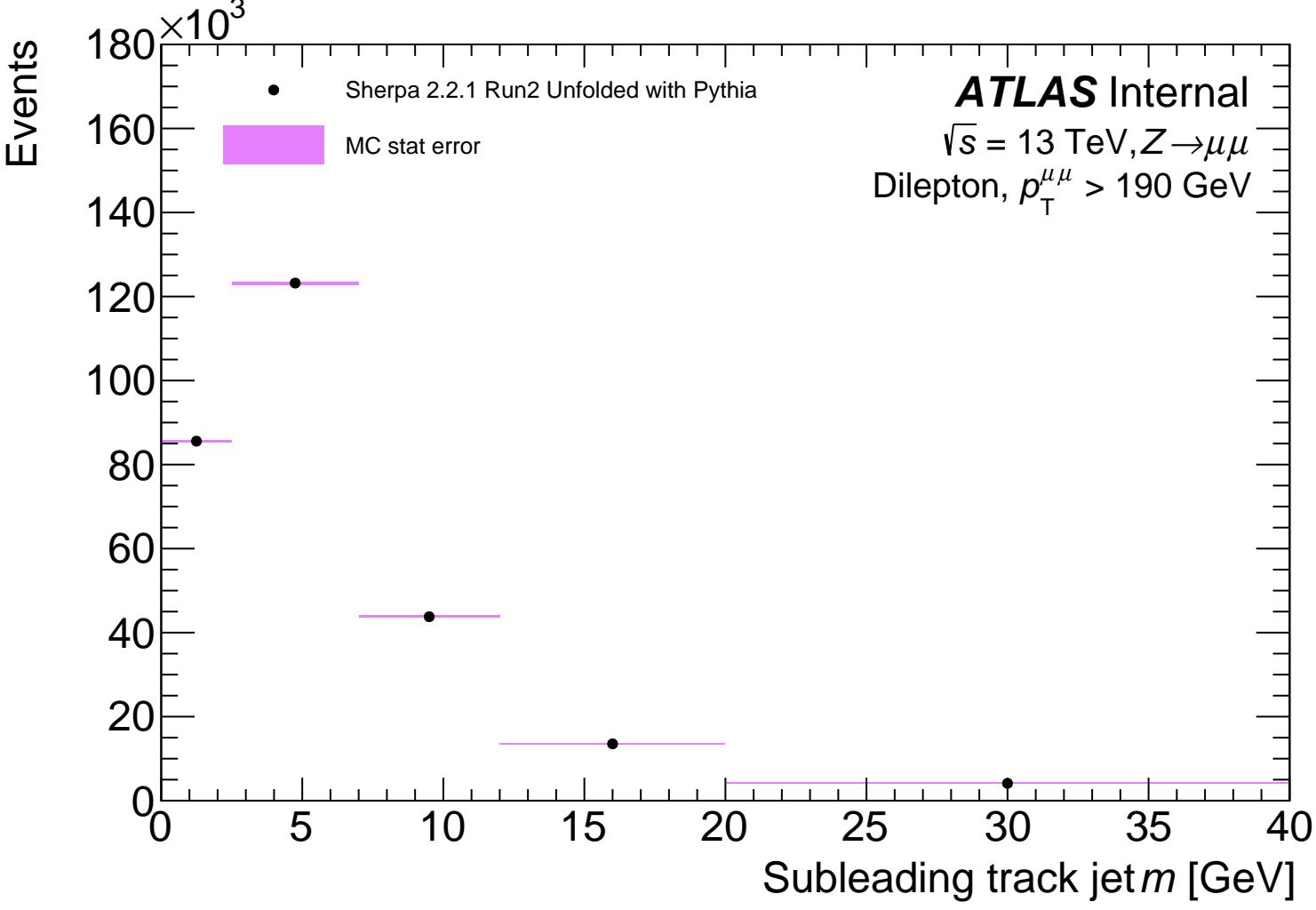


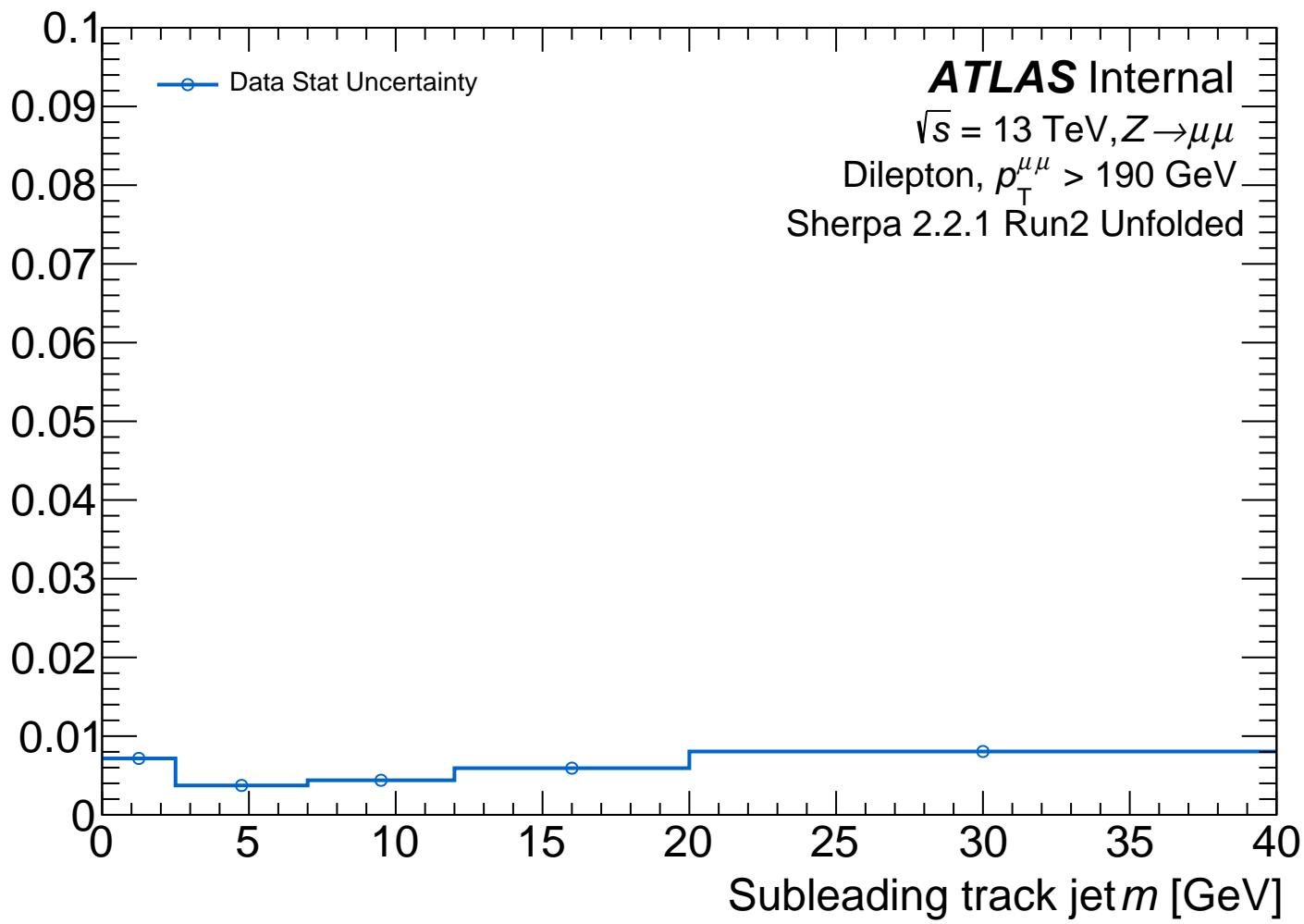


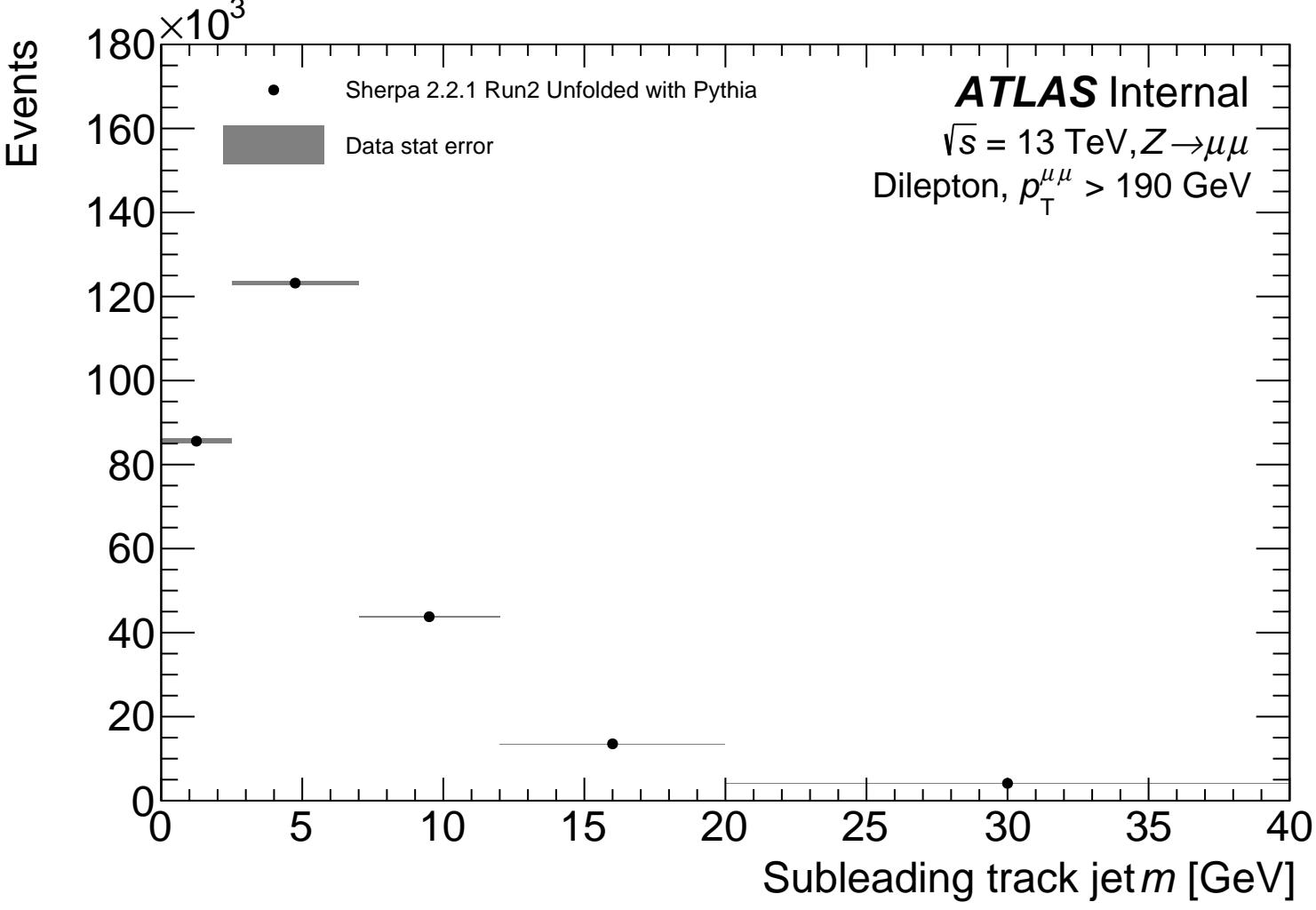


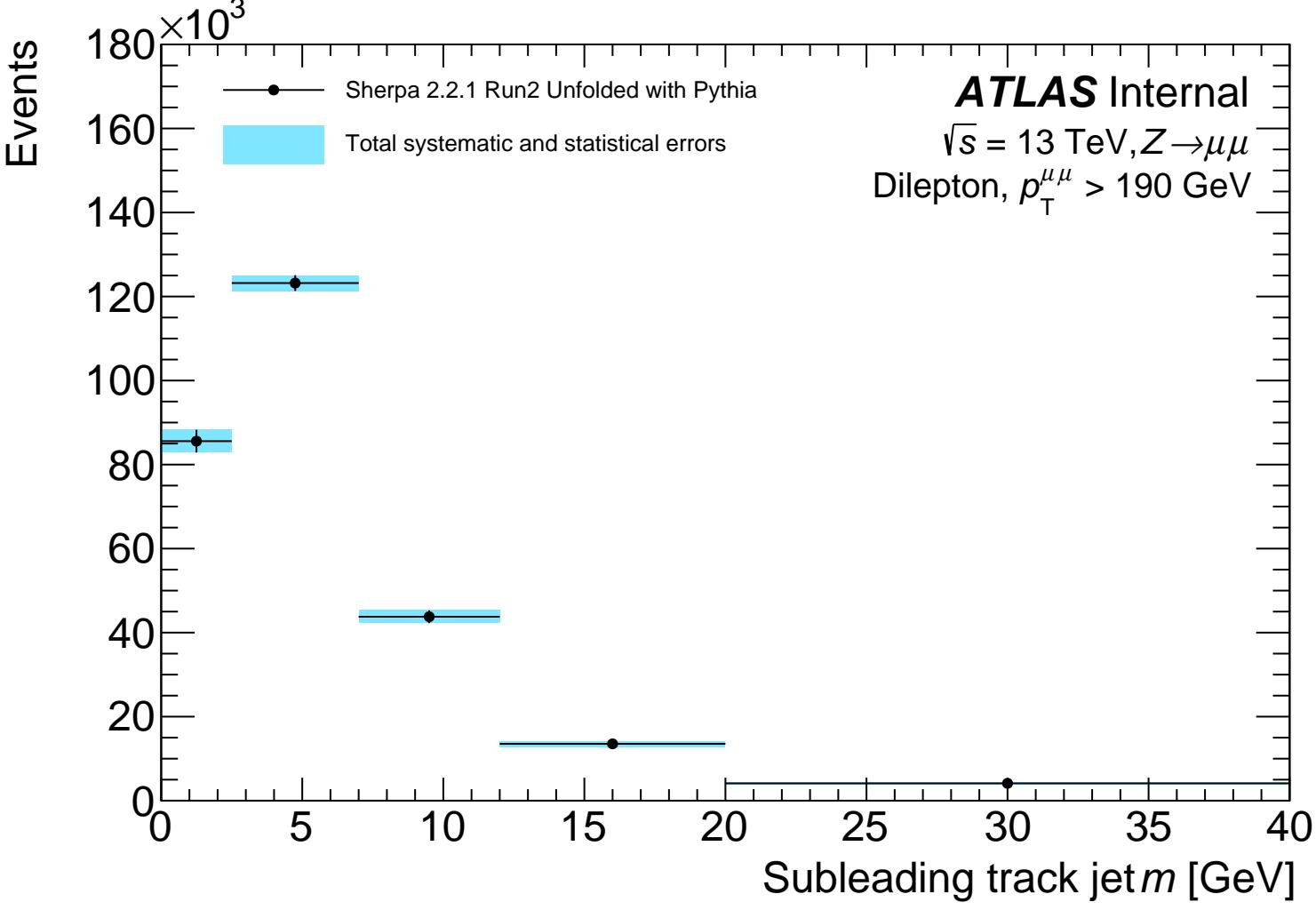


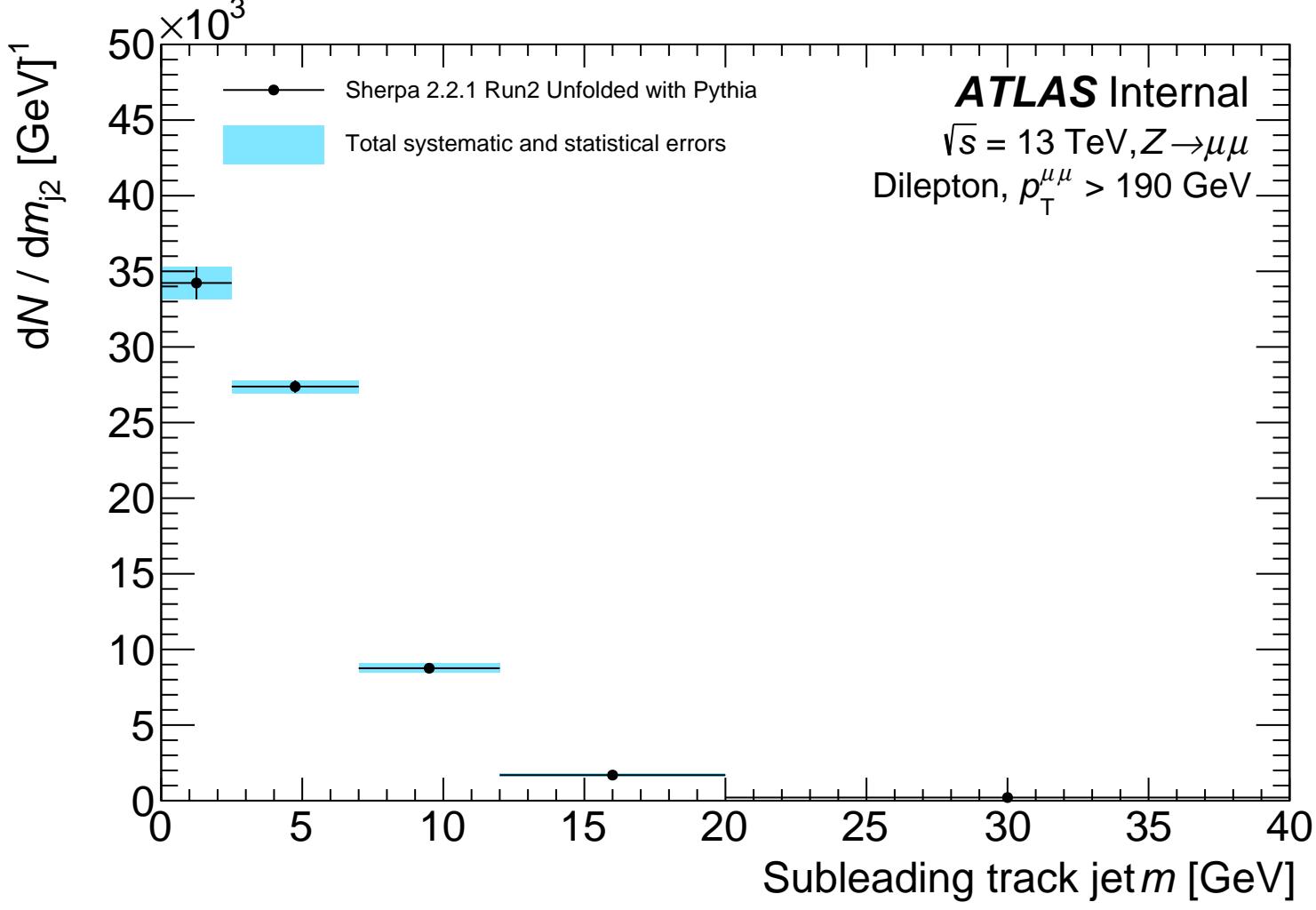










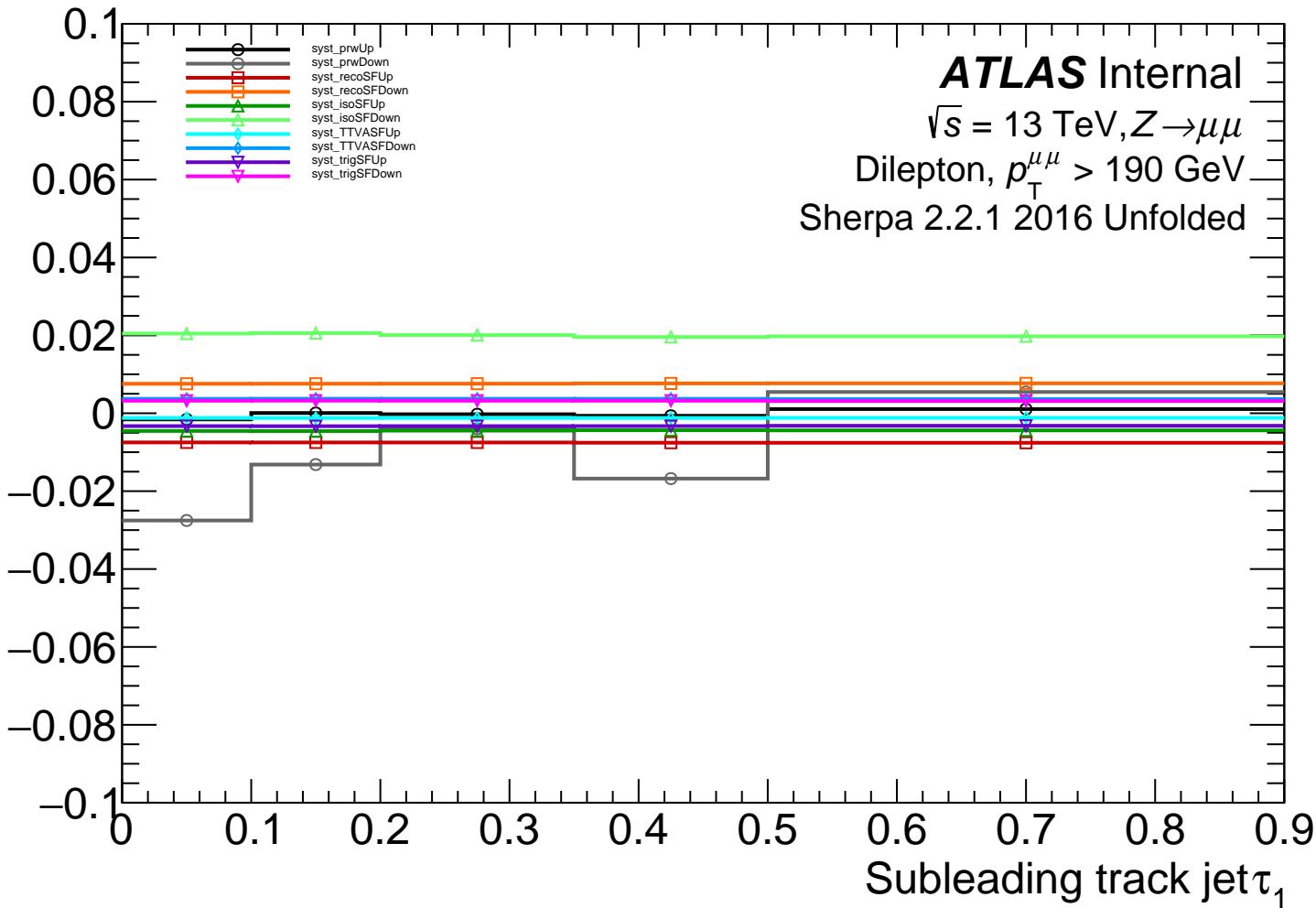


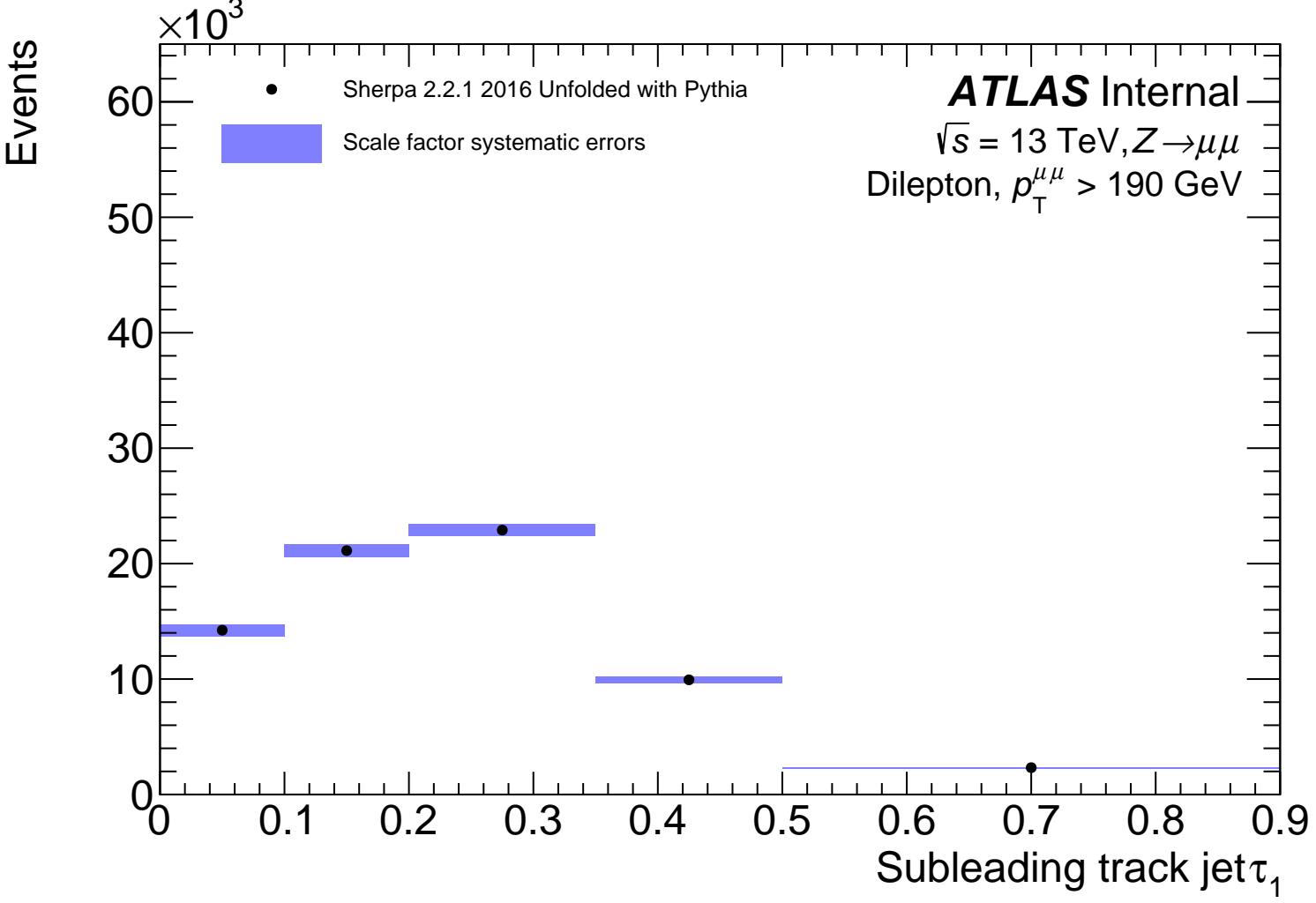
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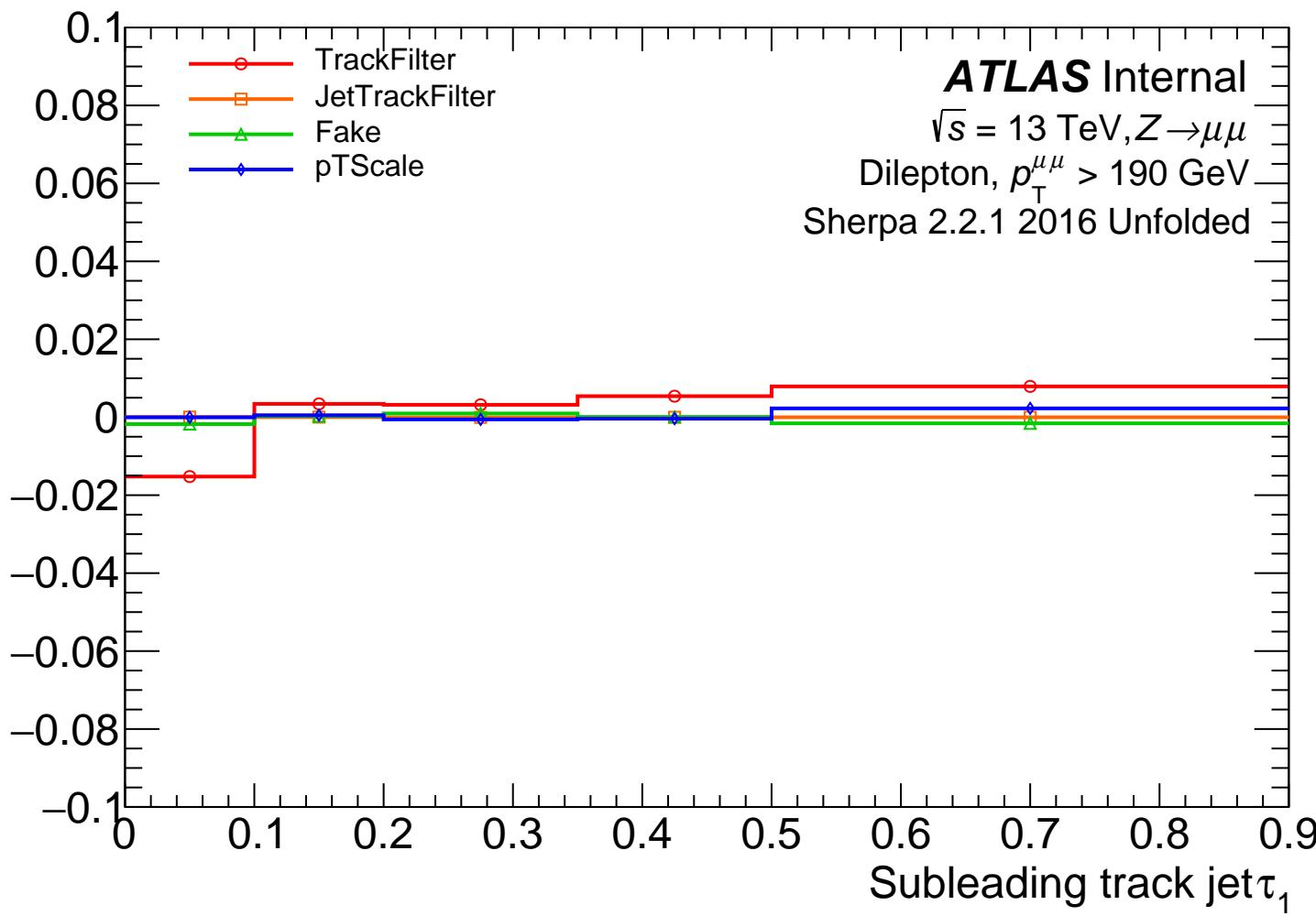
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

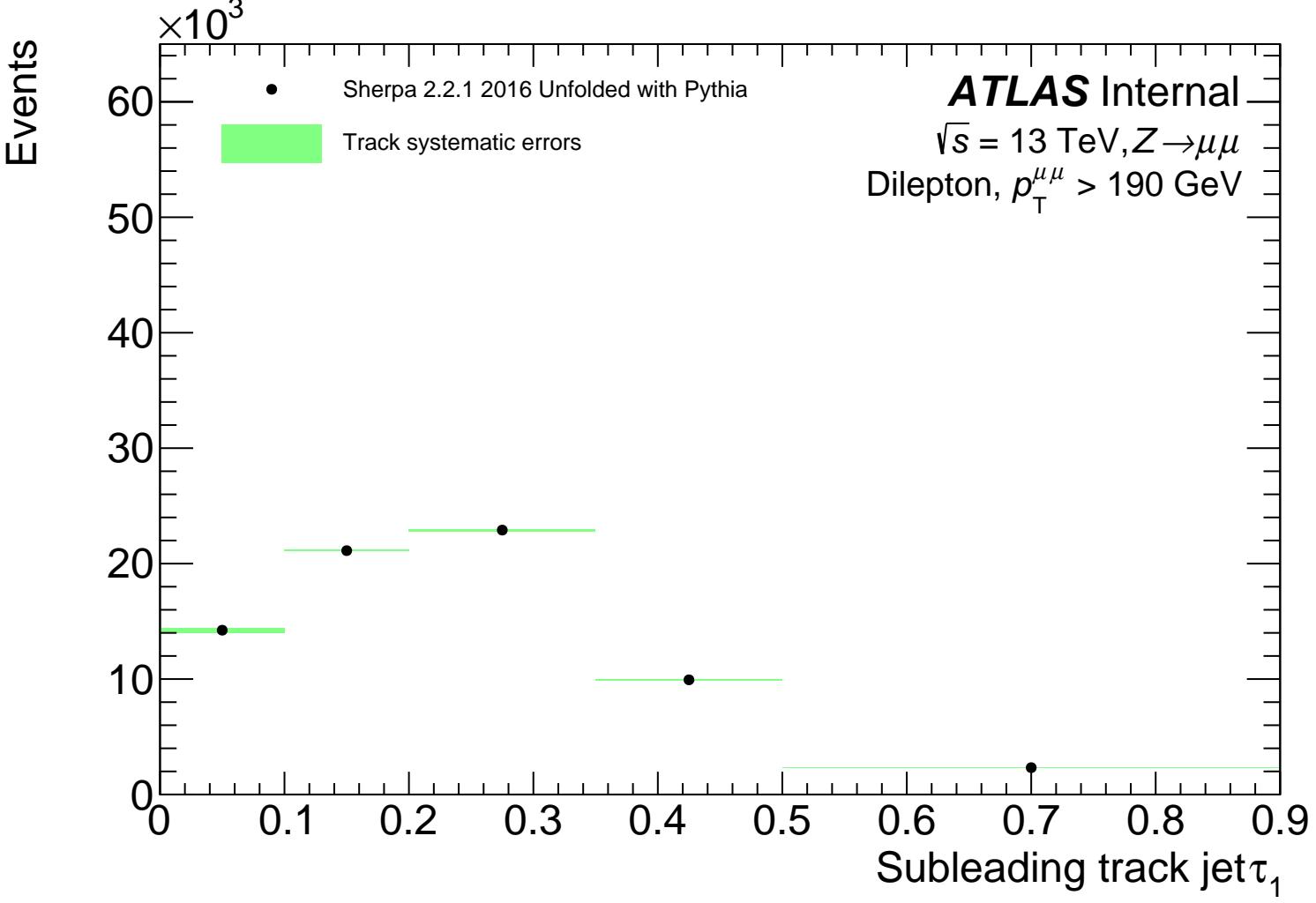
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

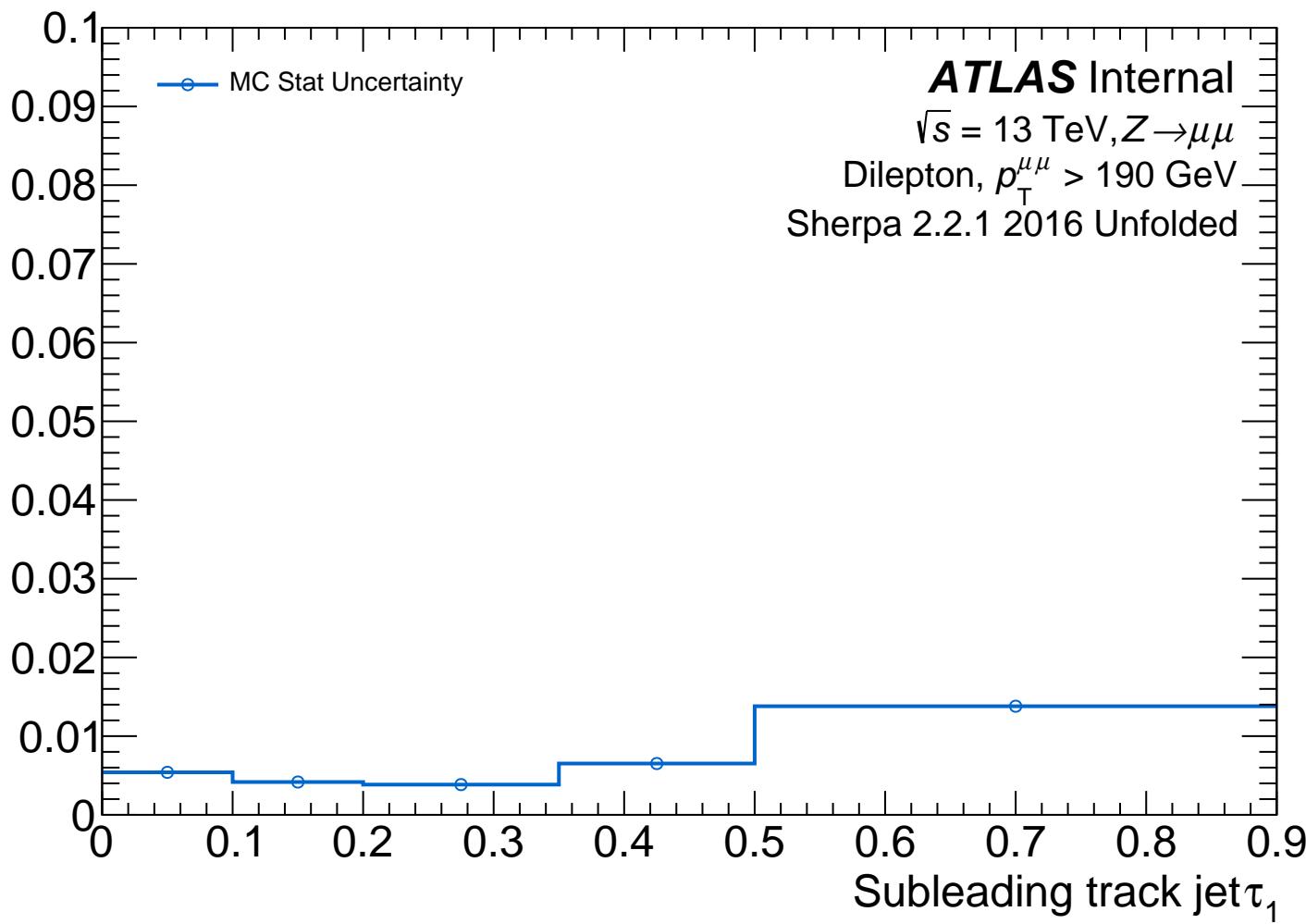
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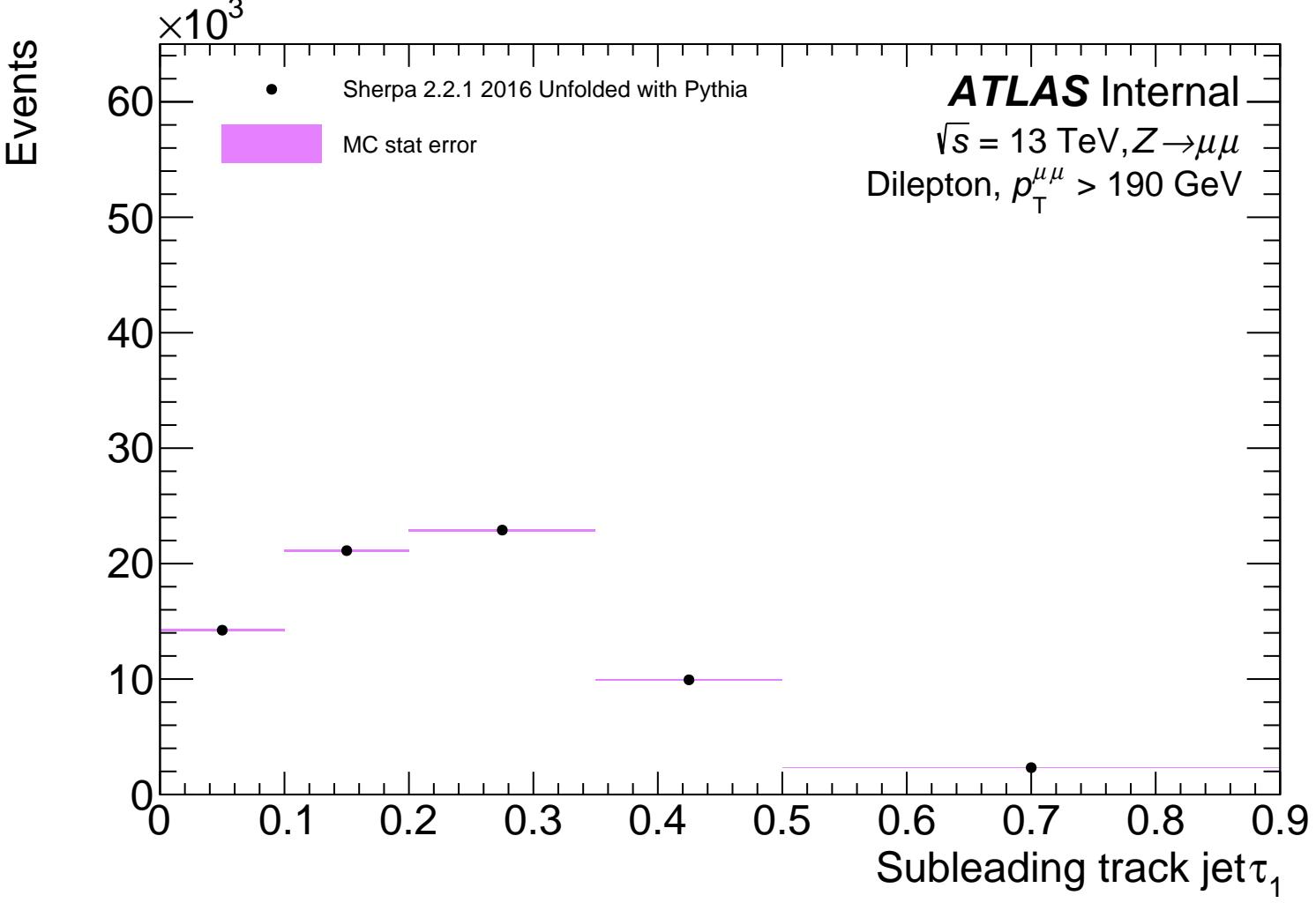


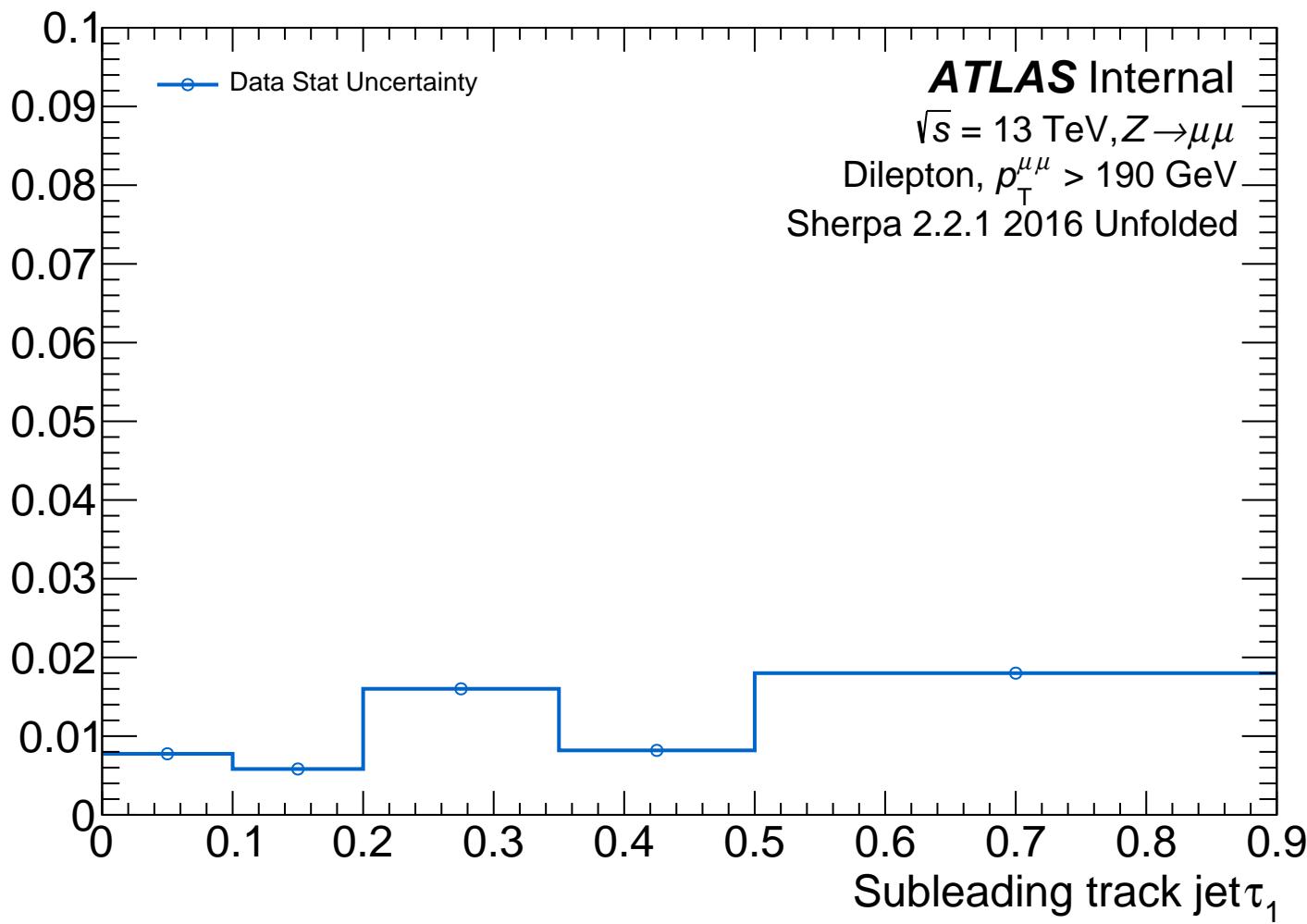


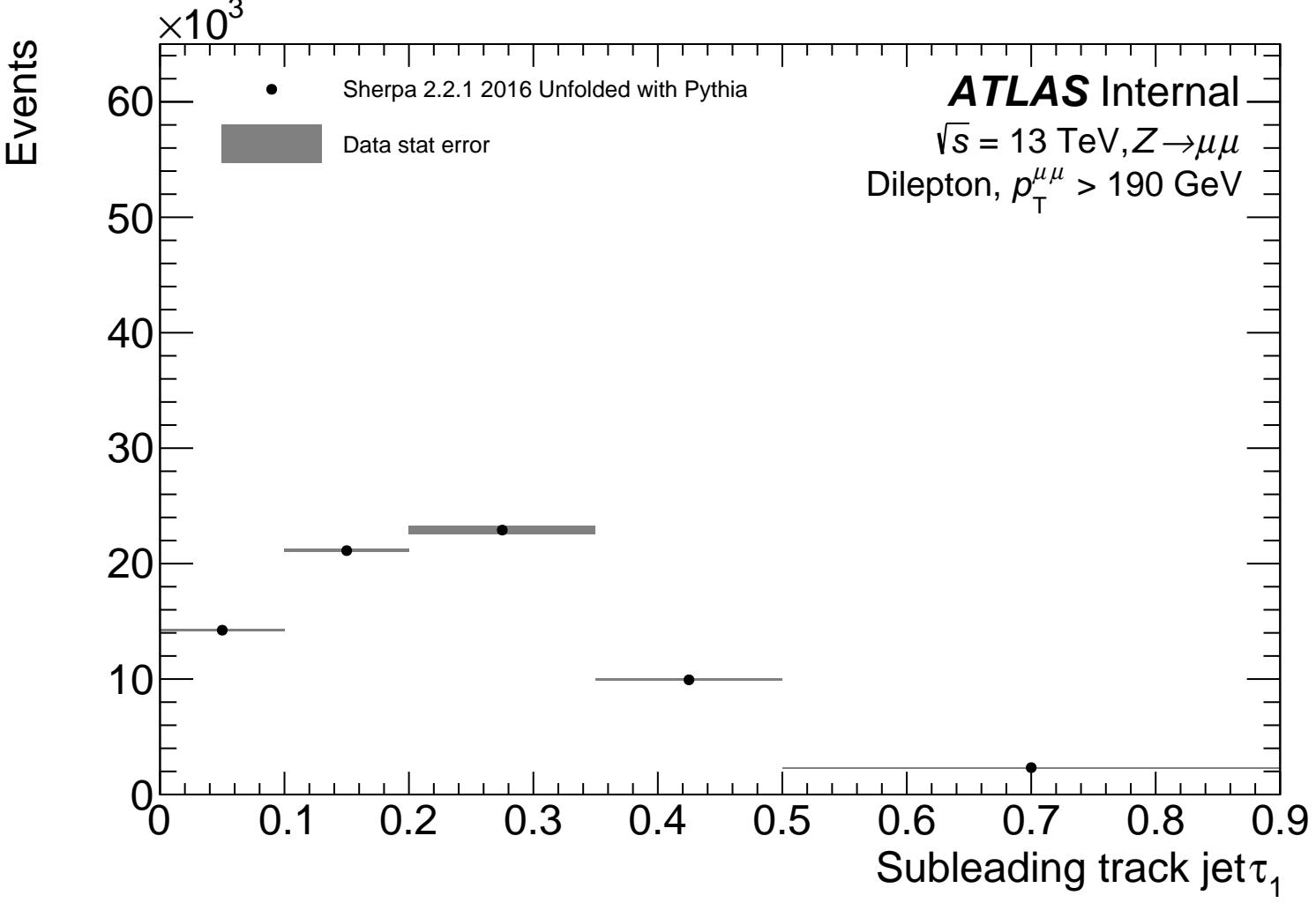


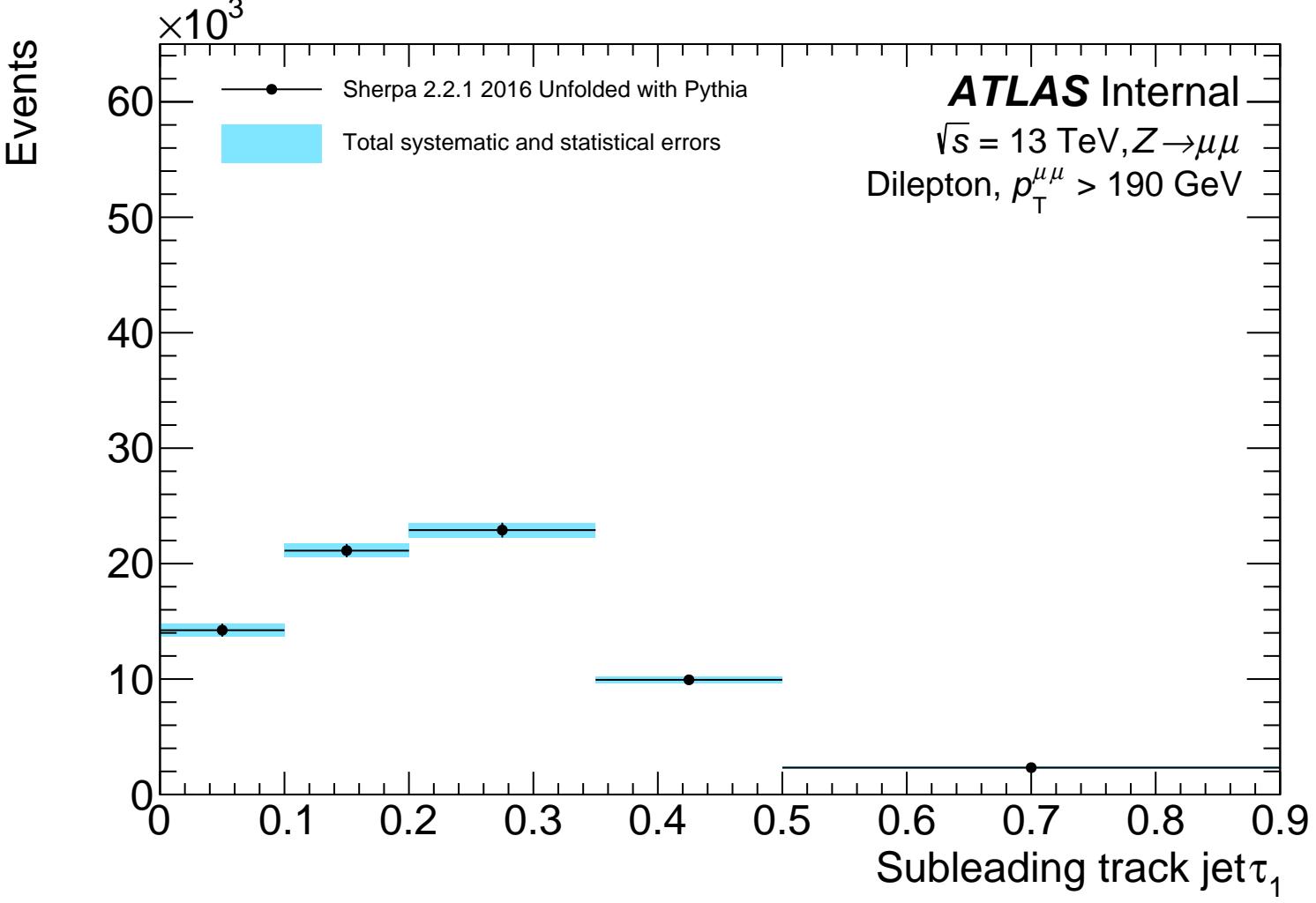


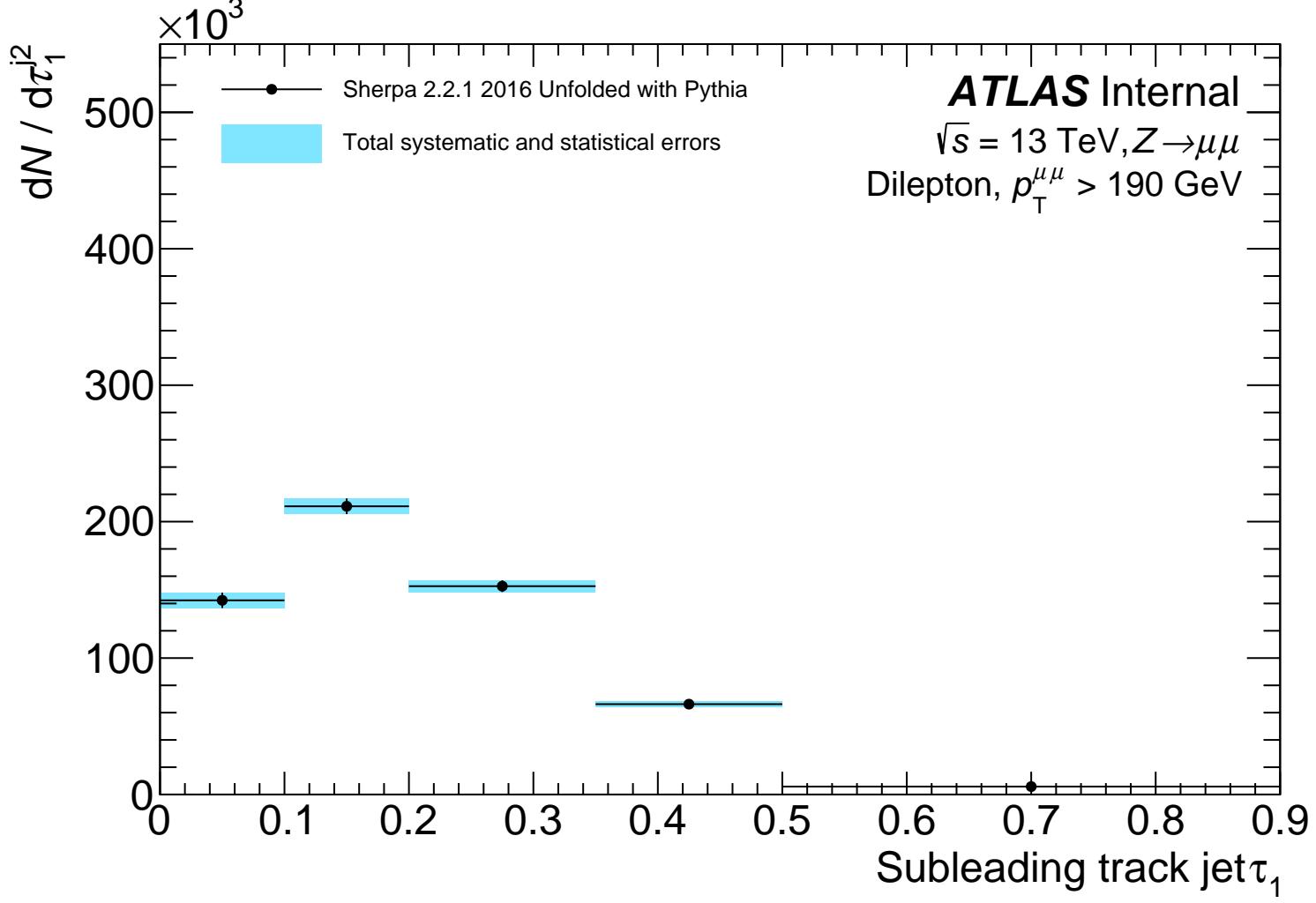


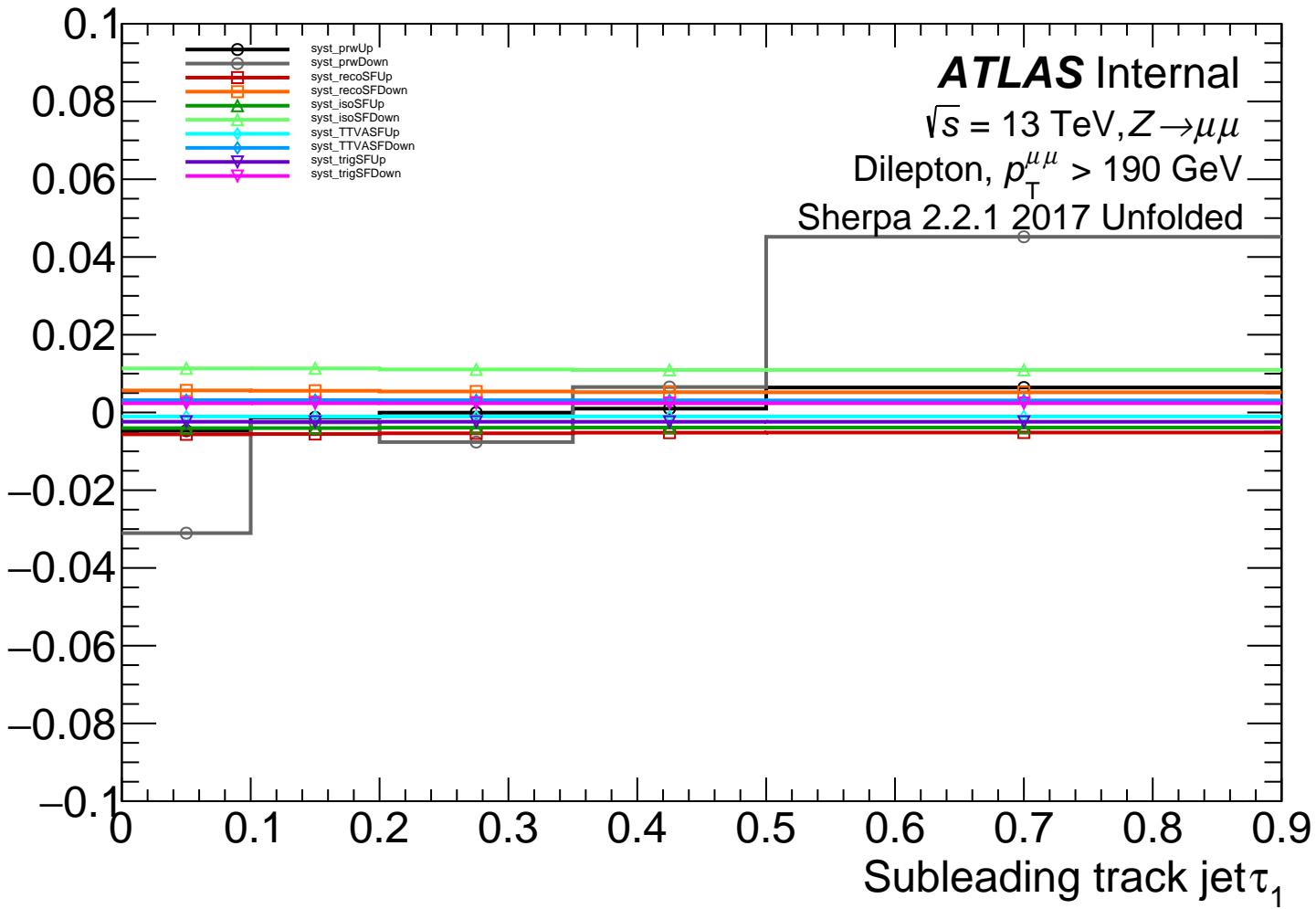


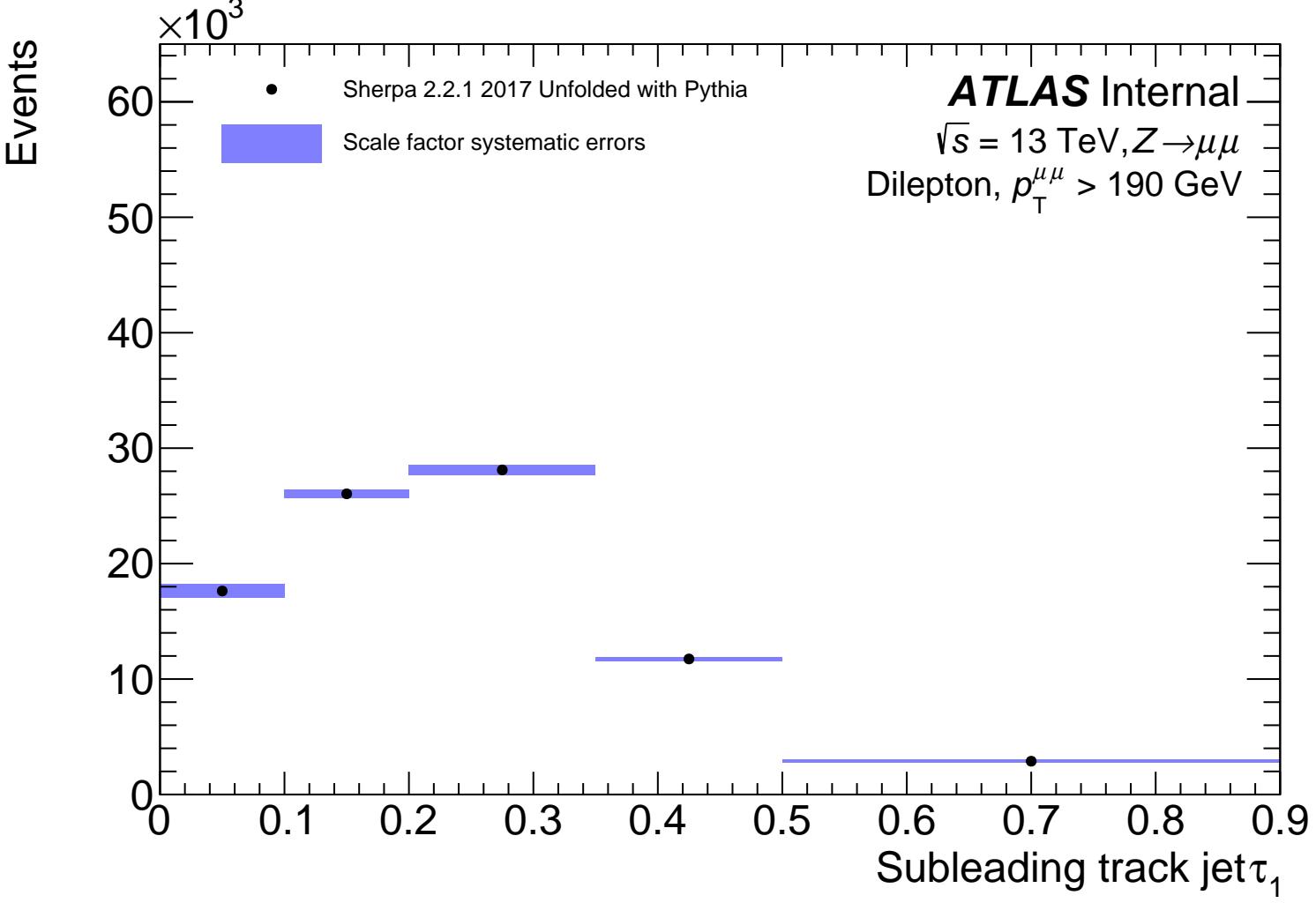


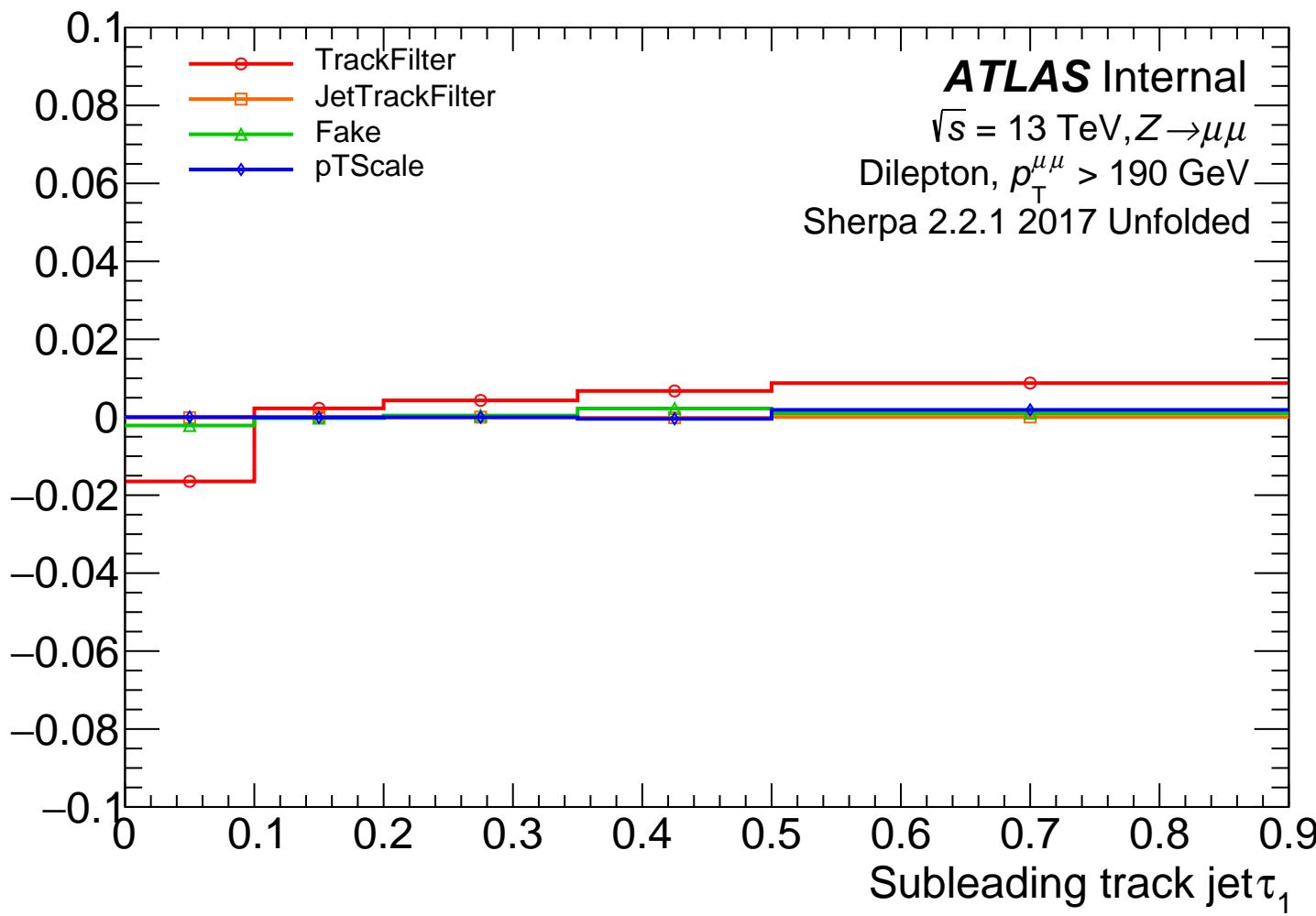


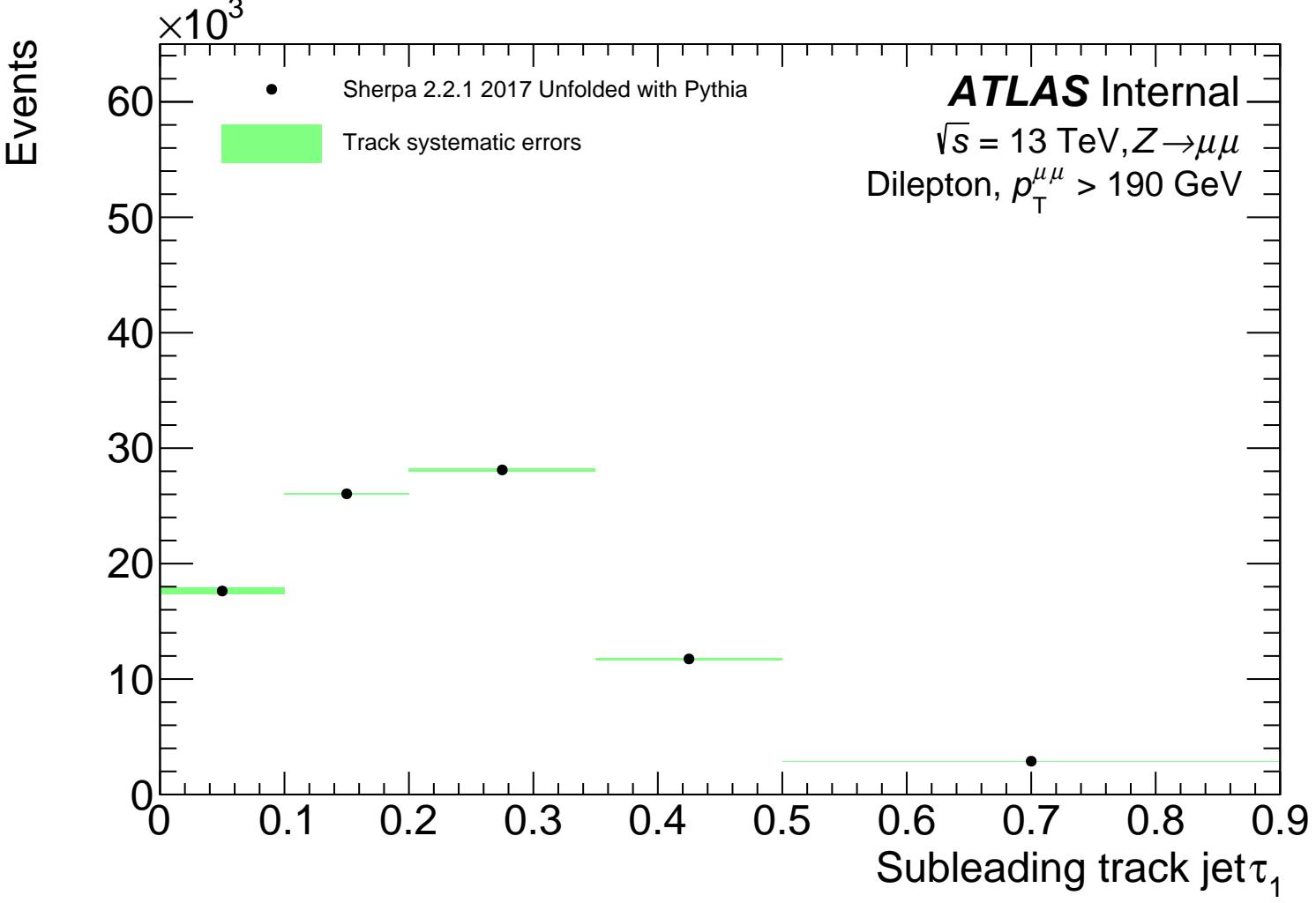


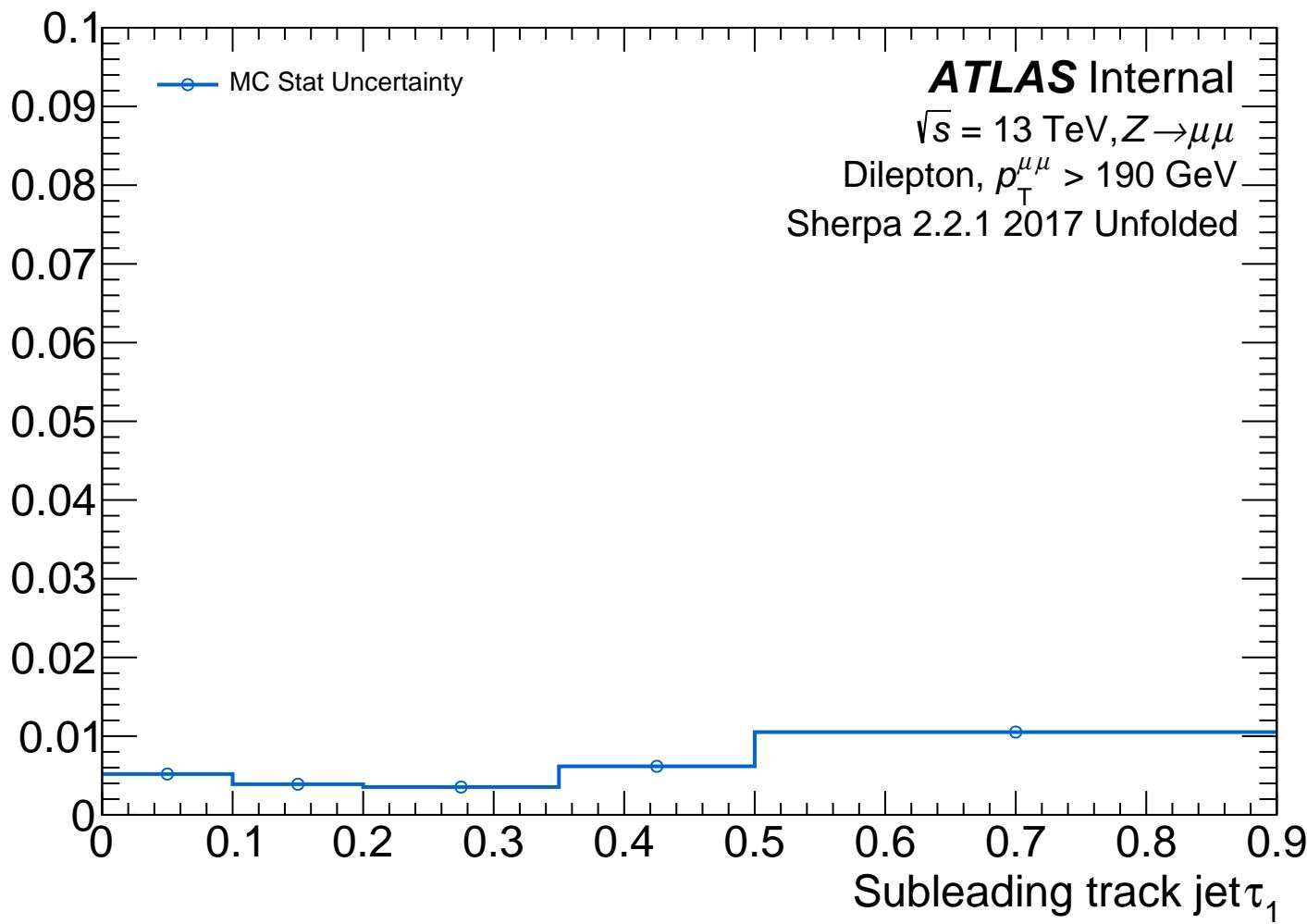


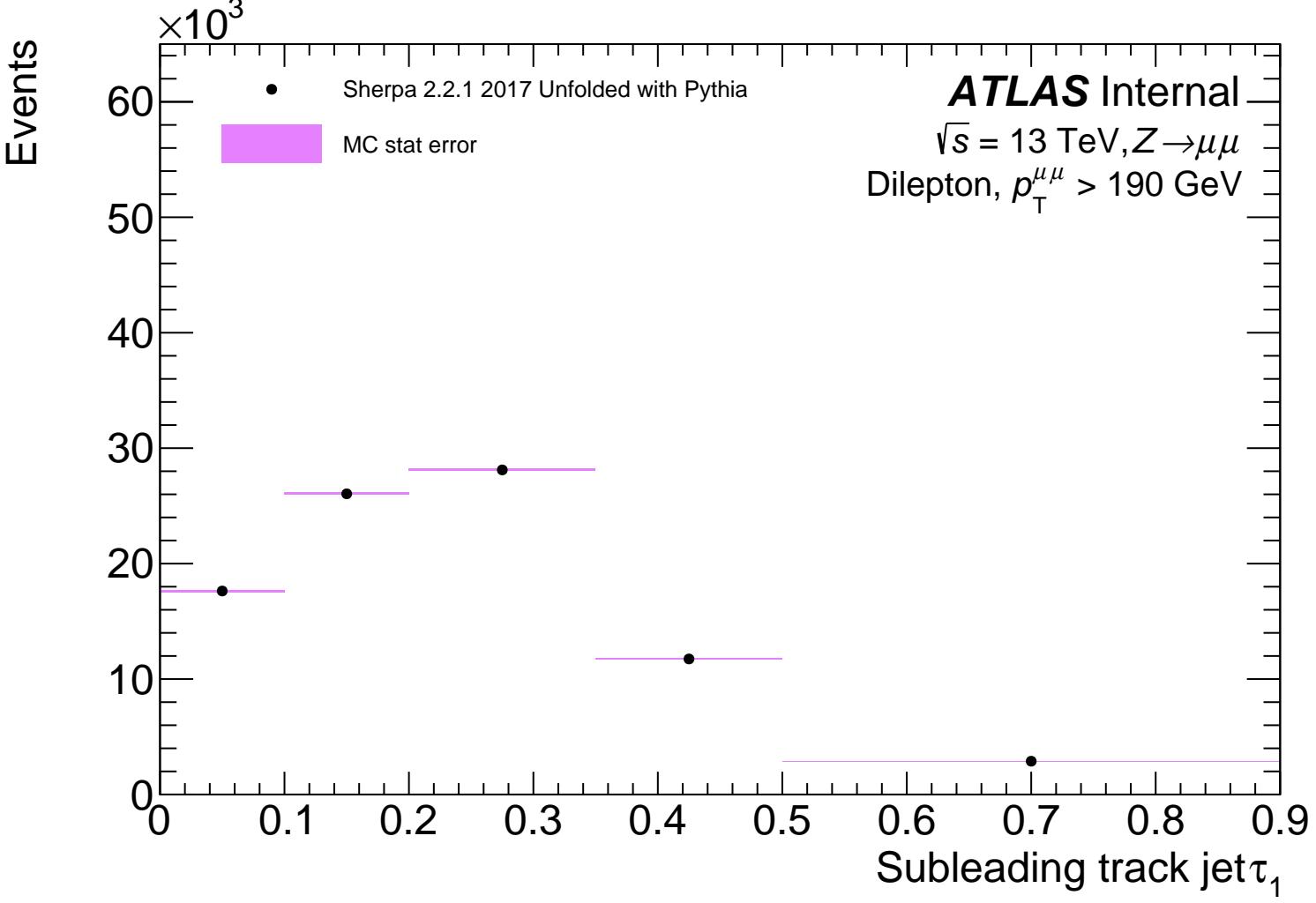


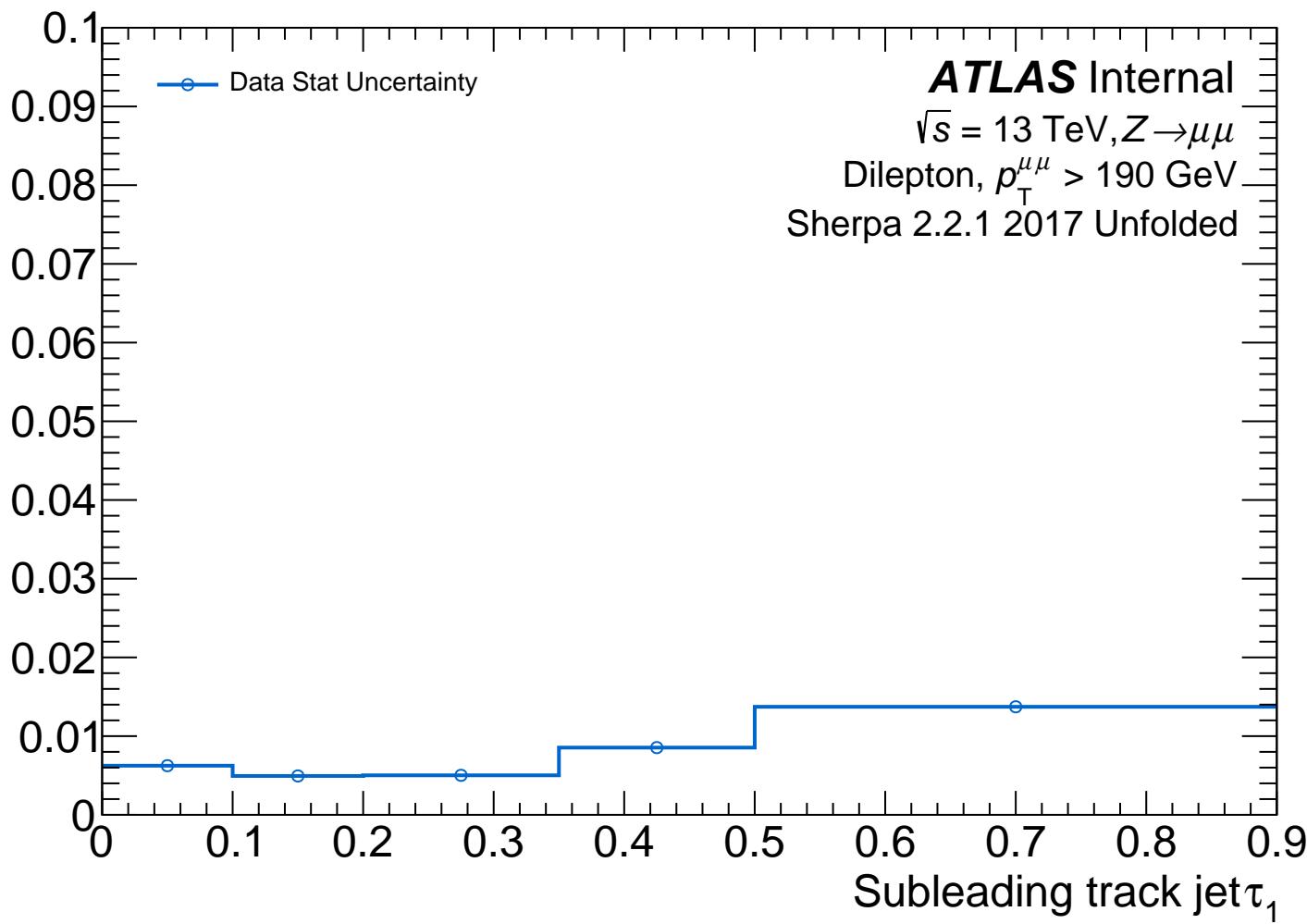


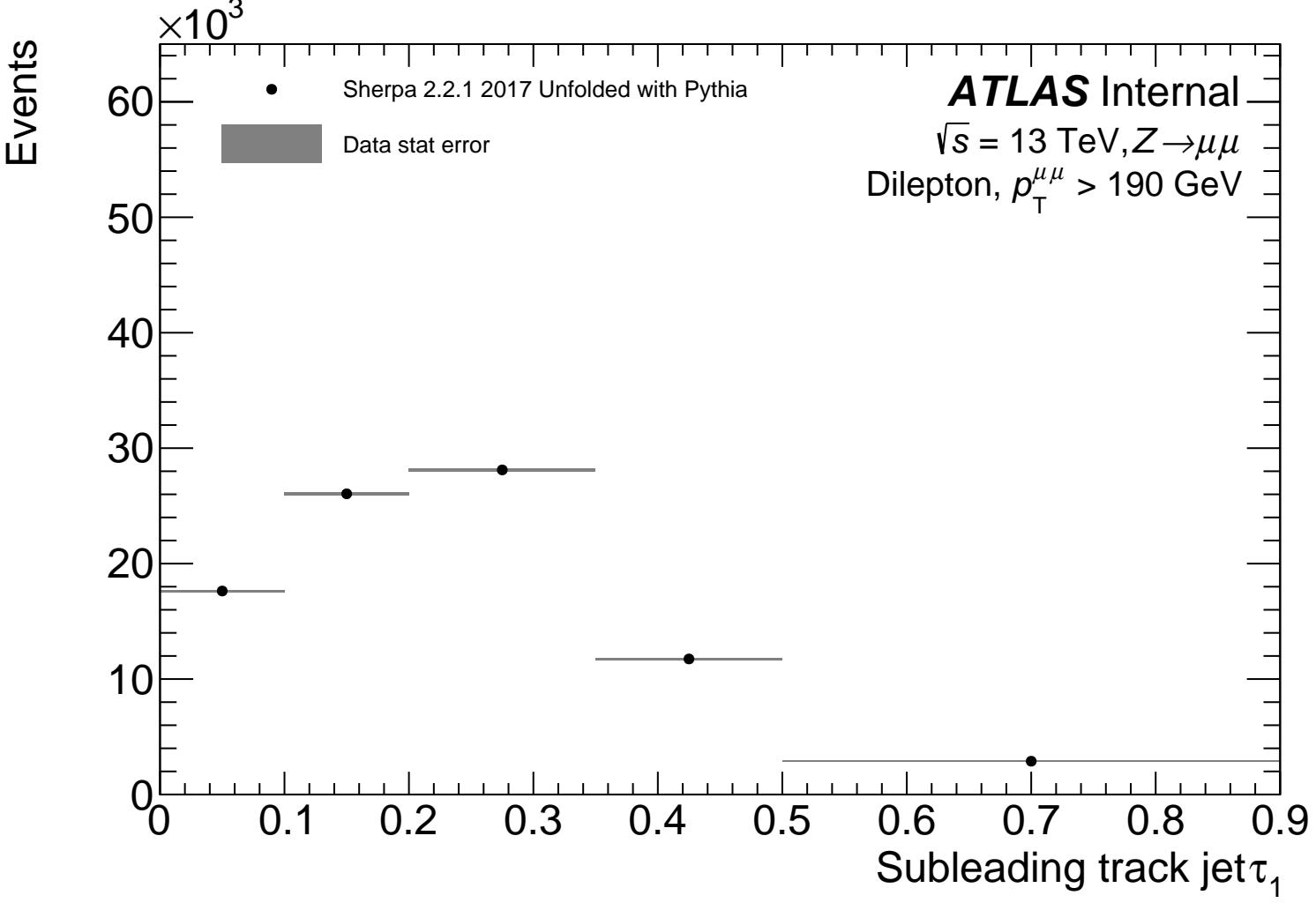


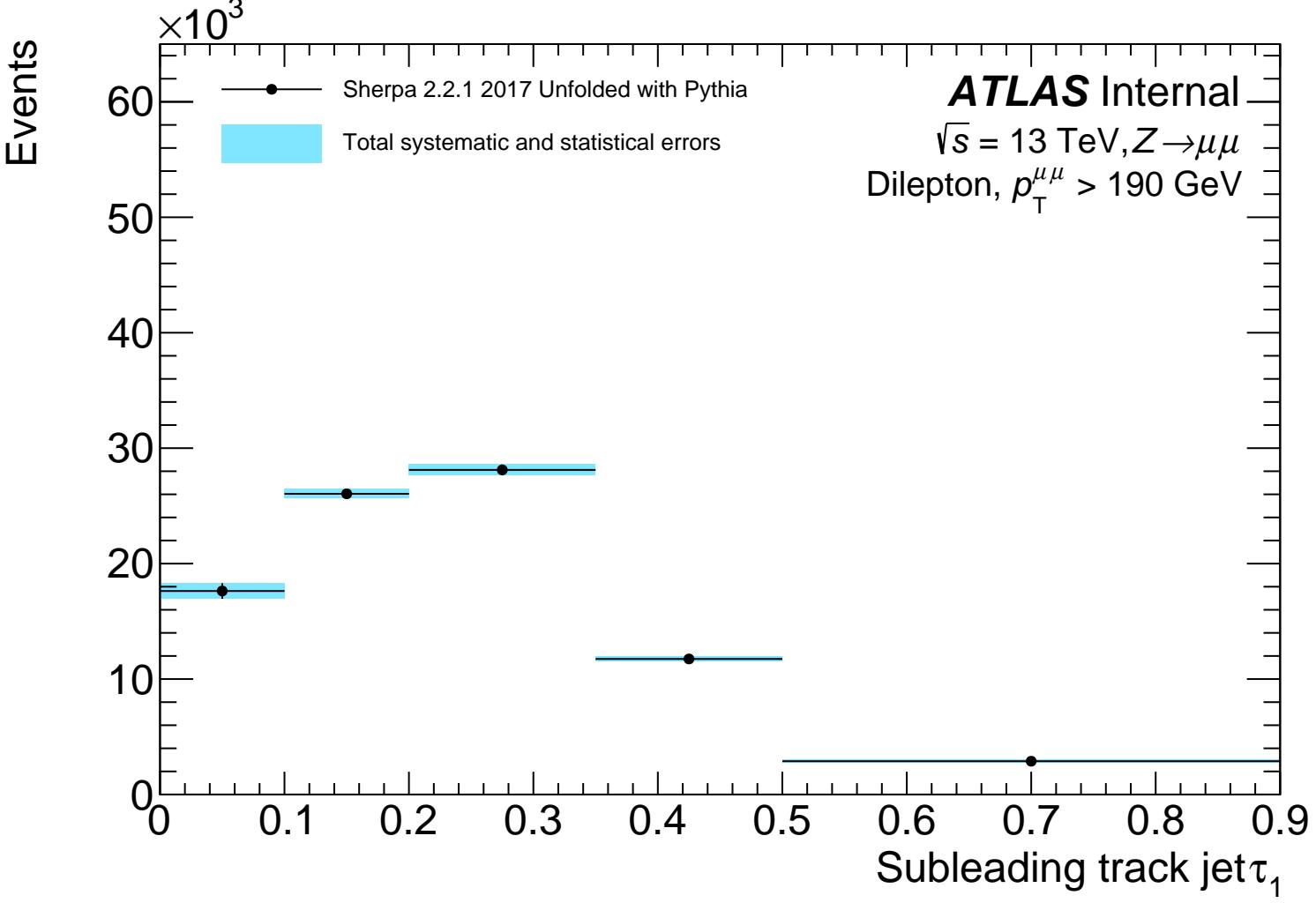


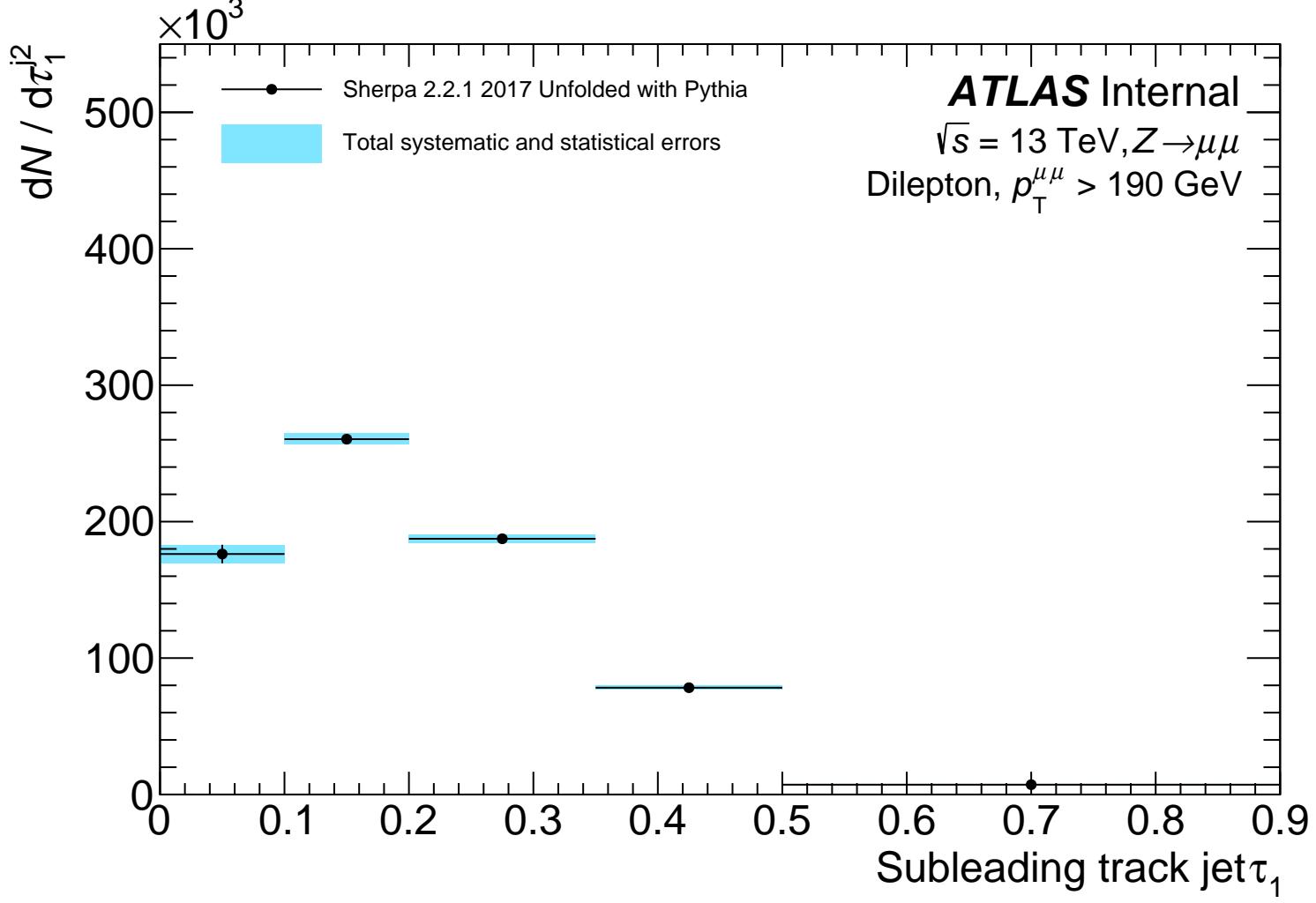










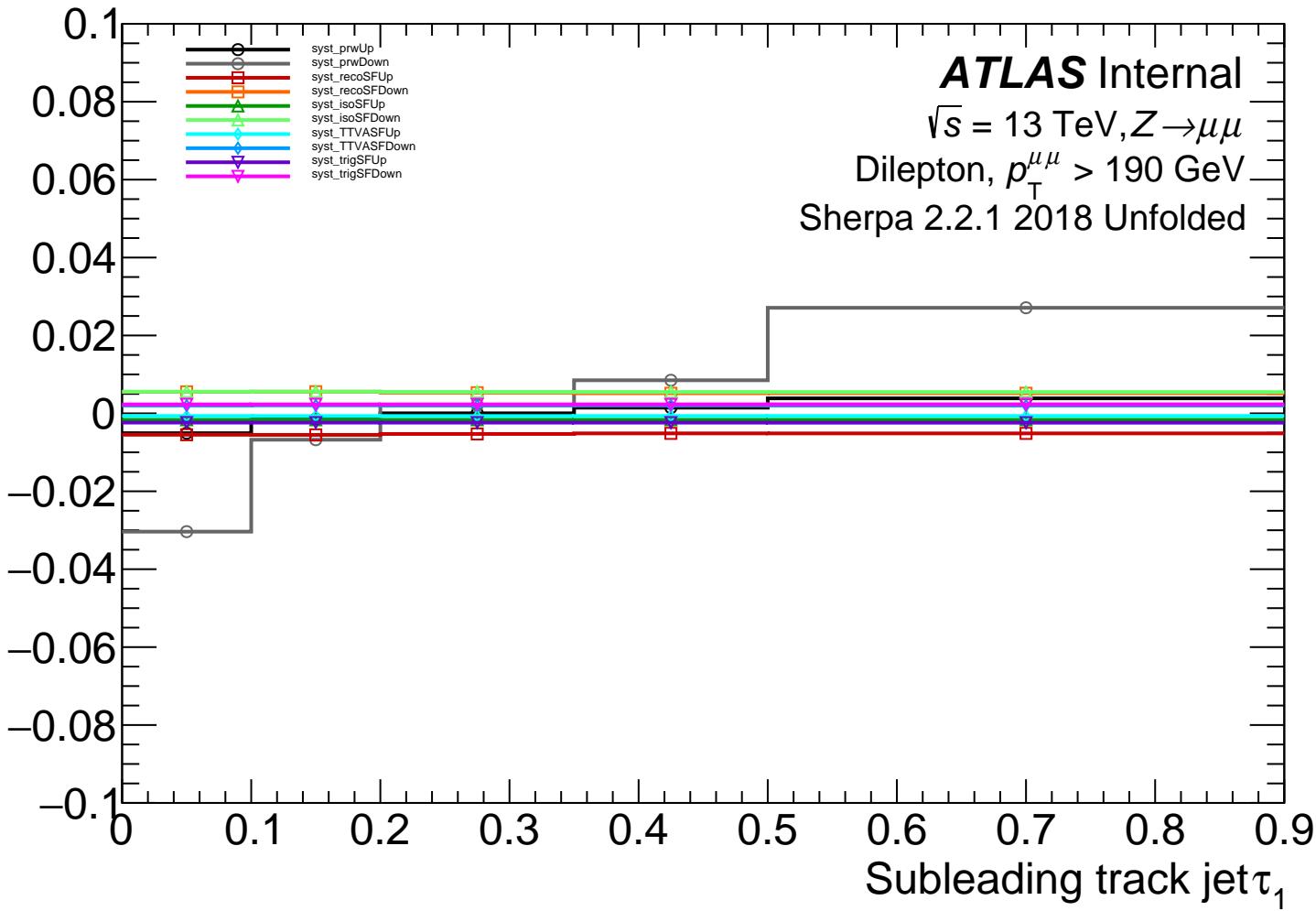


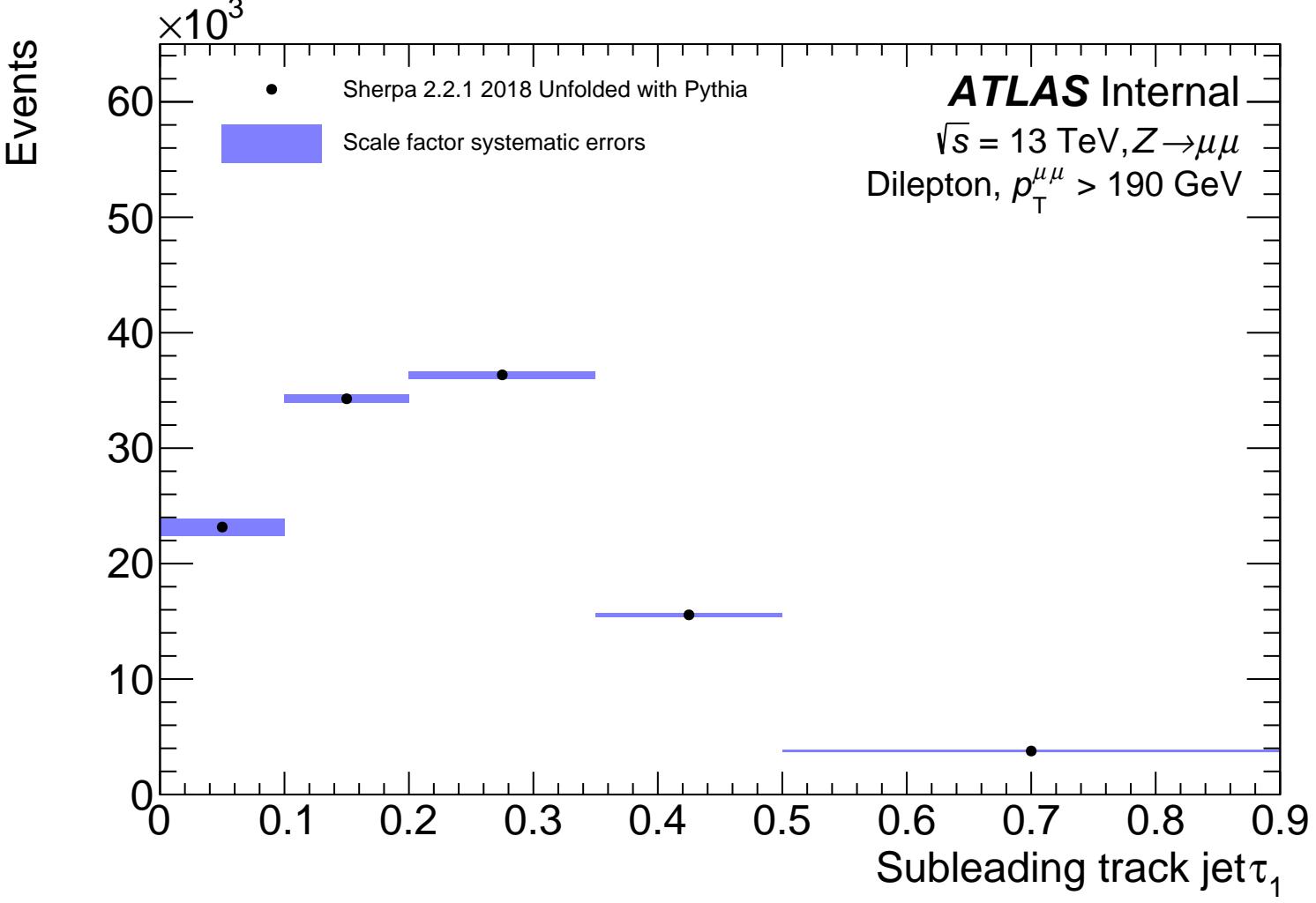
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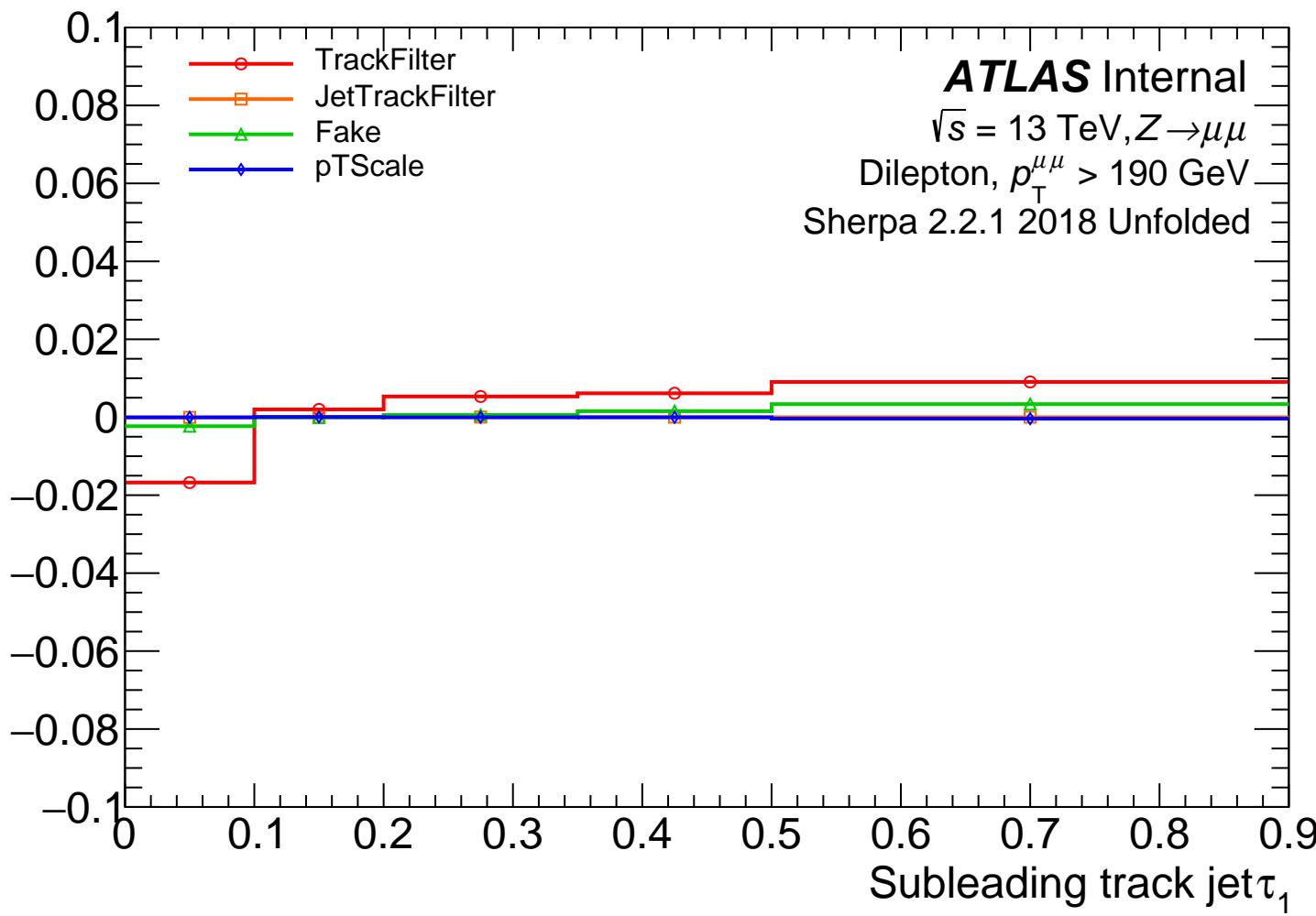
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

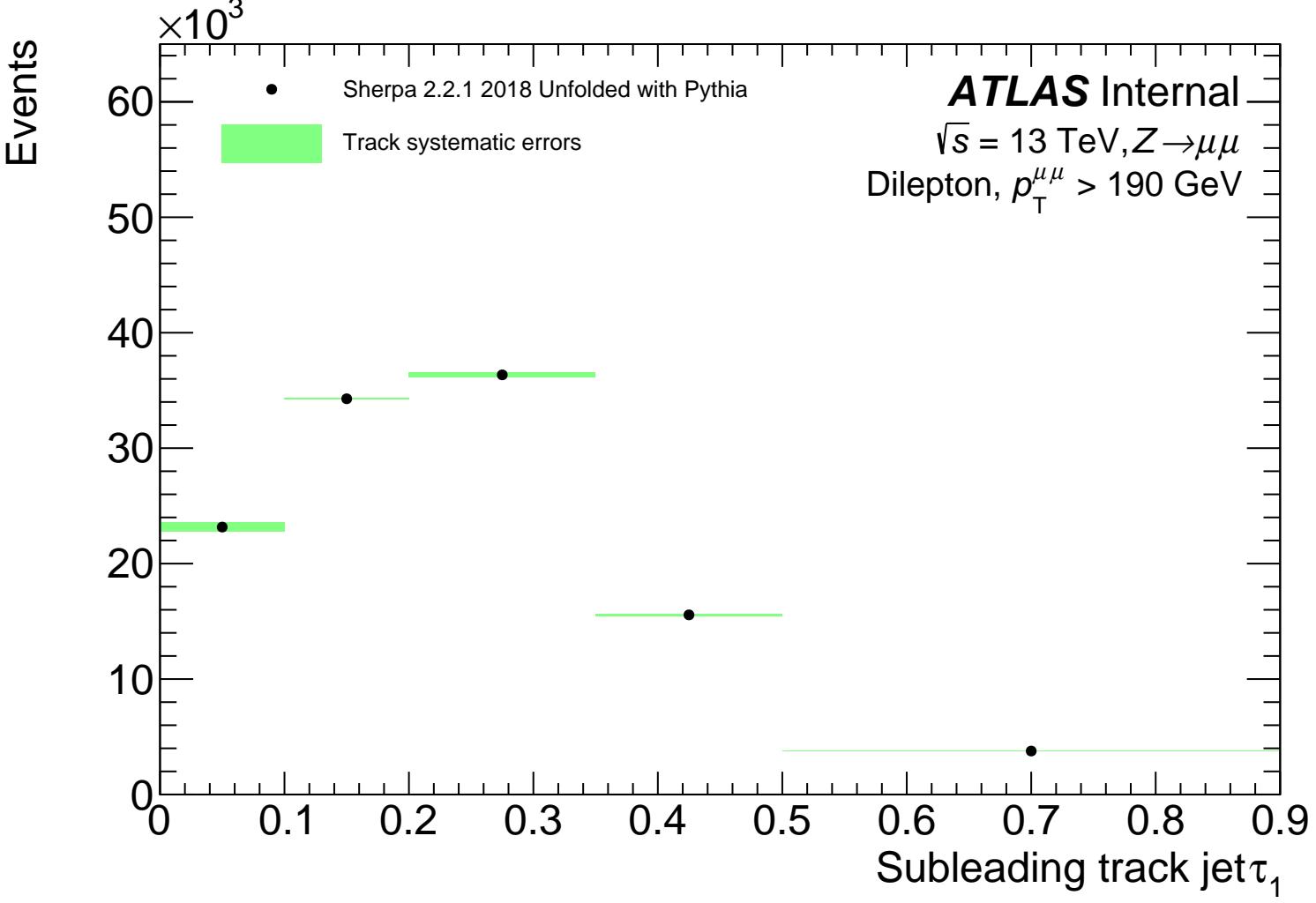
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

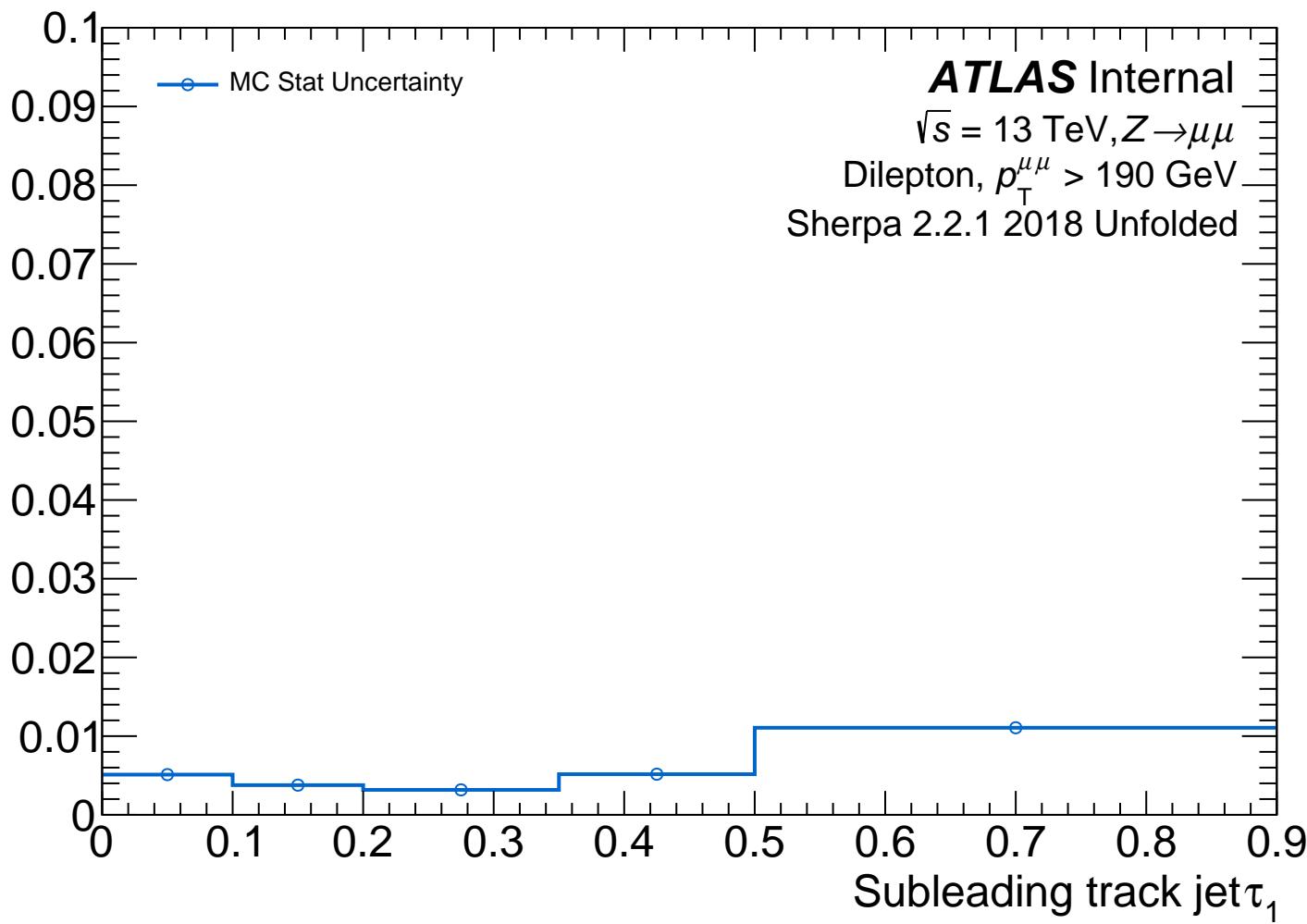
Sherpa 2.2.1 2018 Unfolded

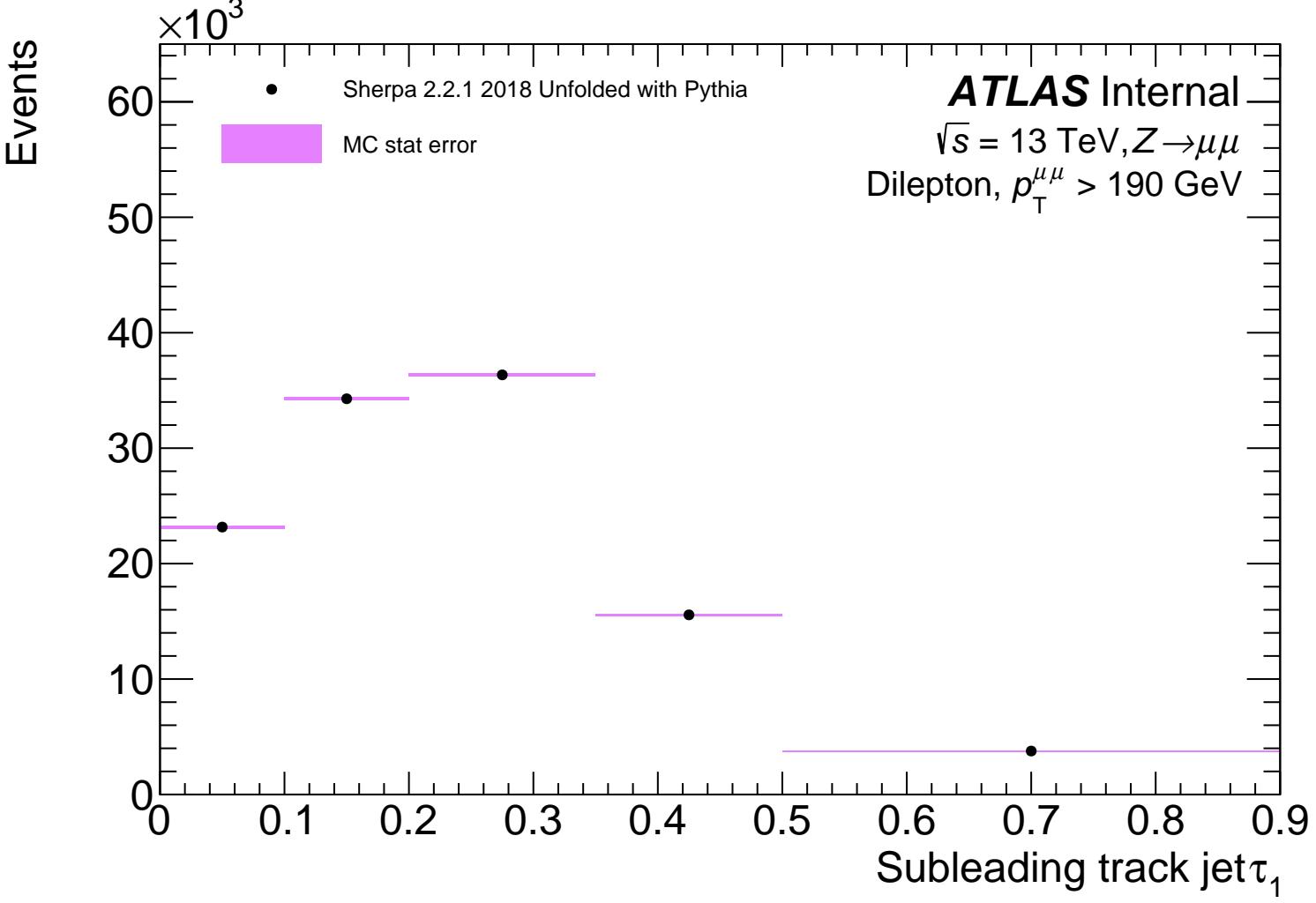


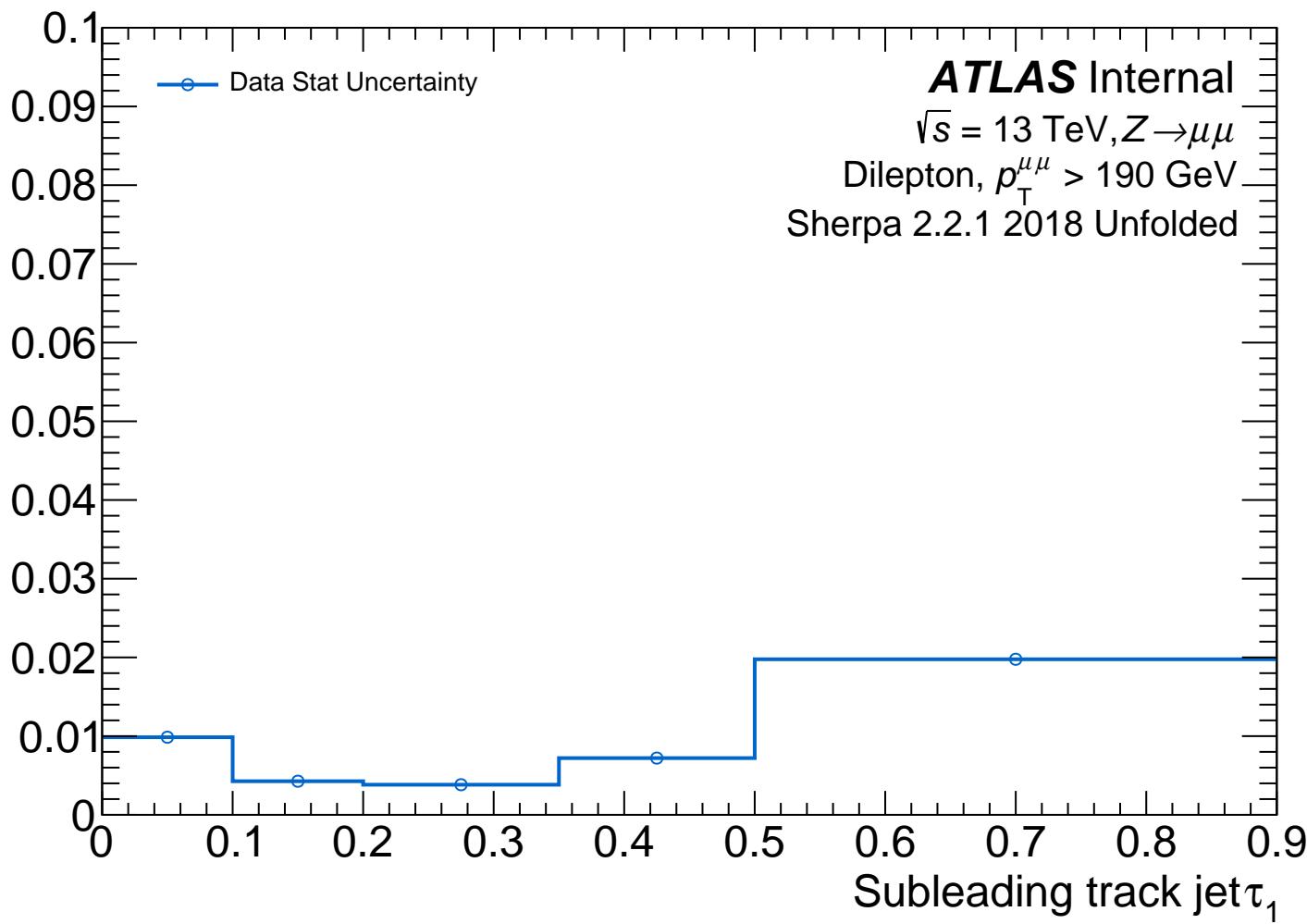


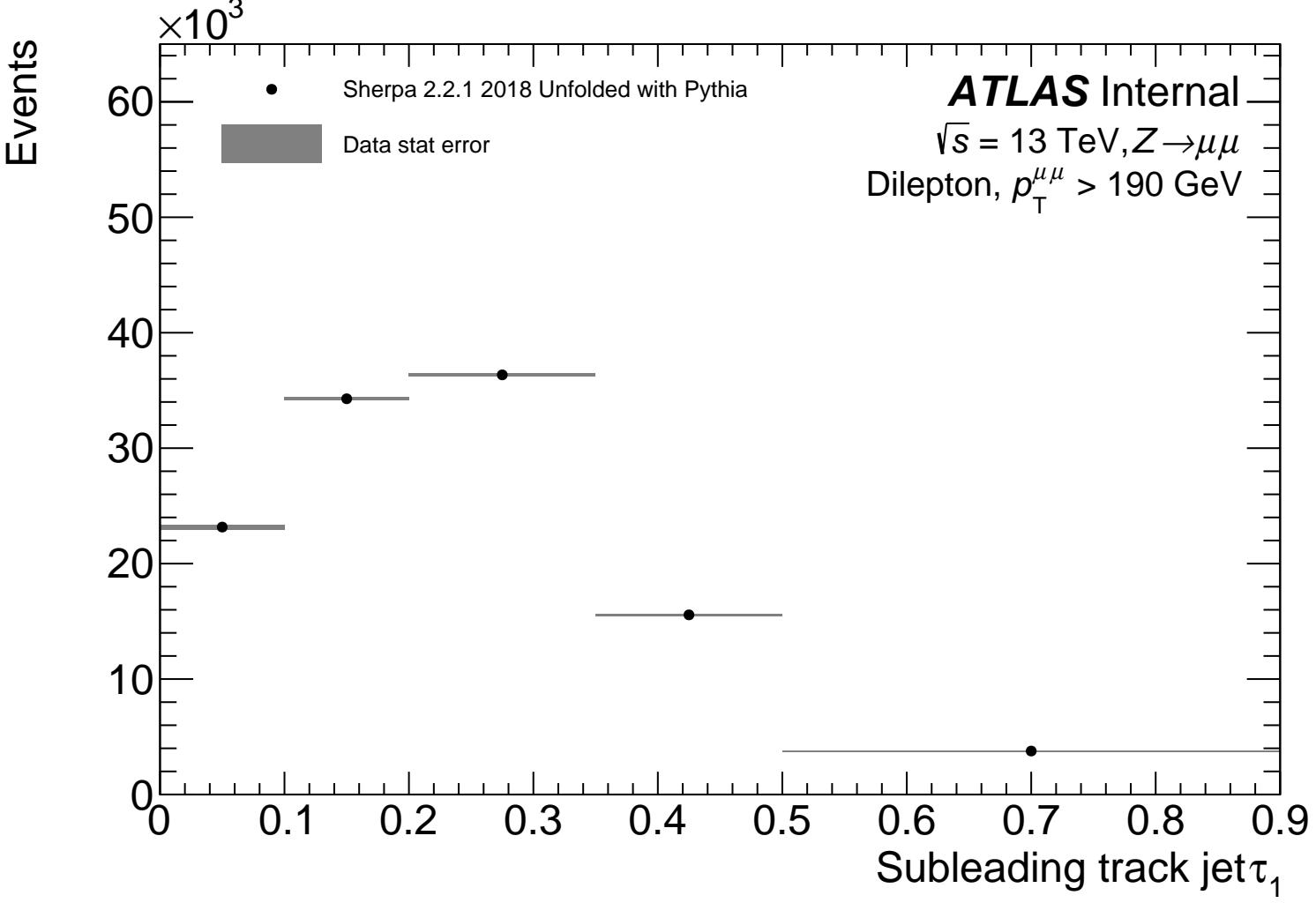


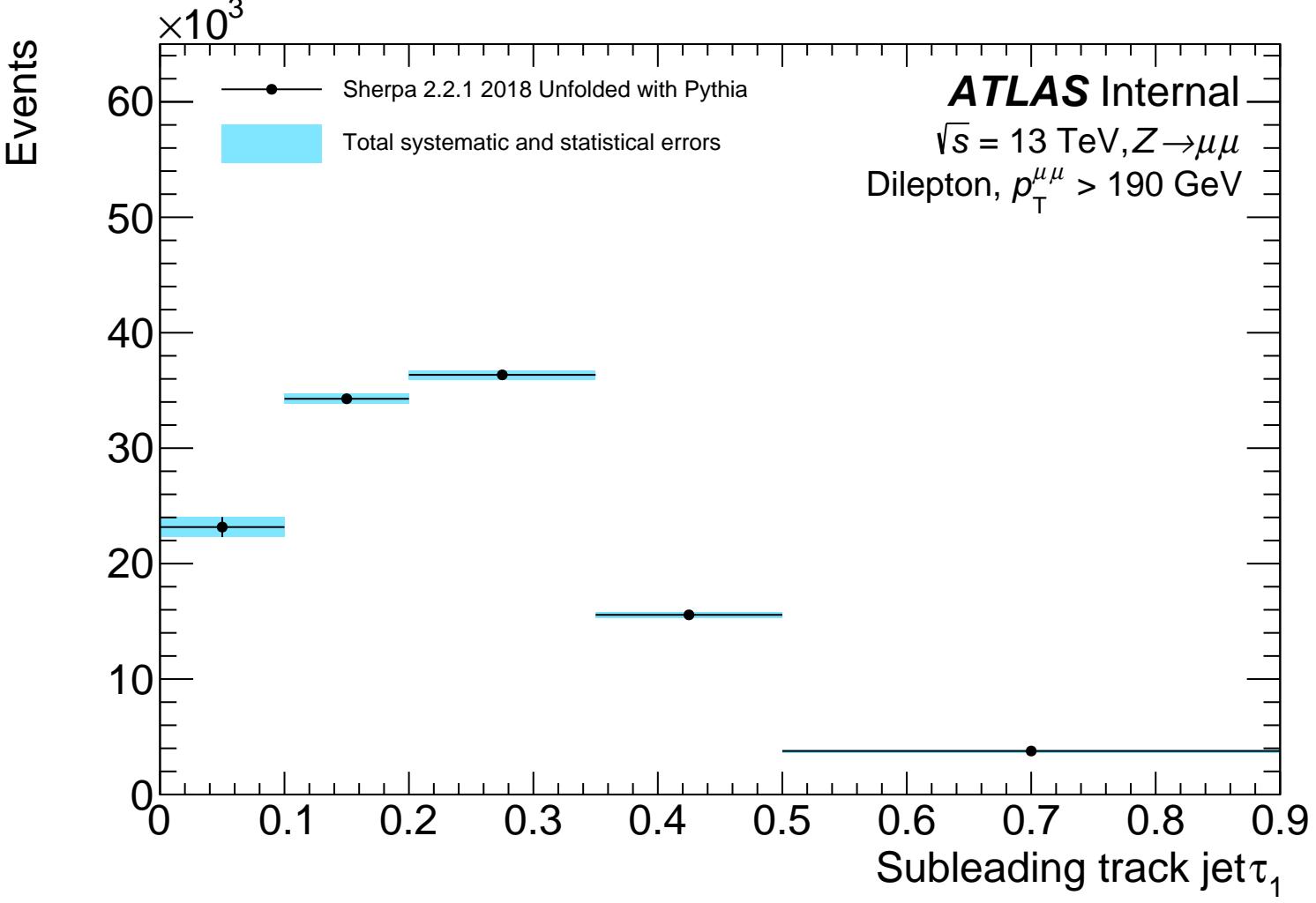


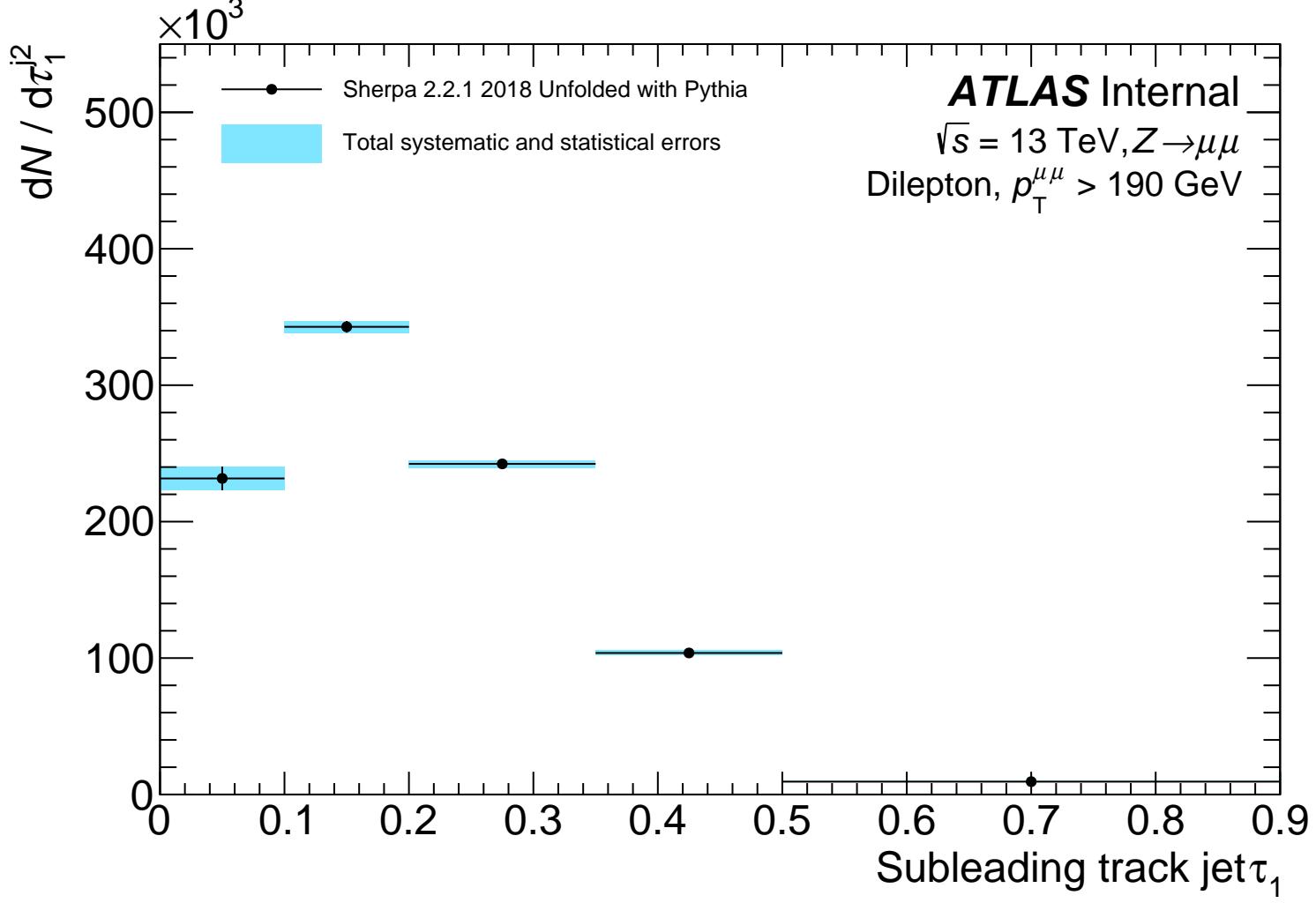










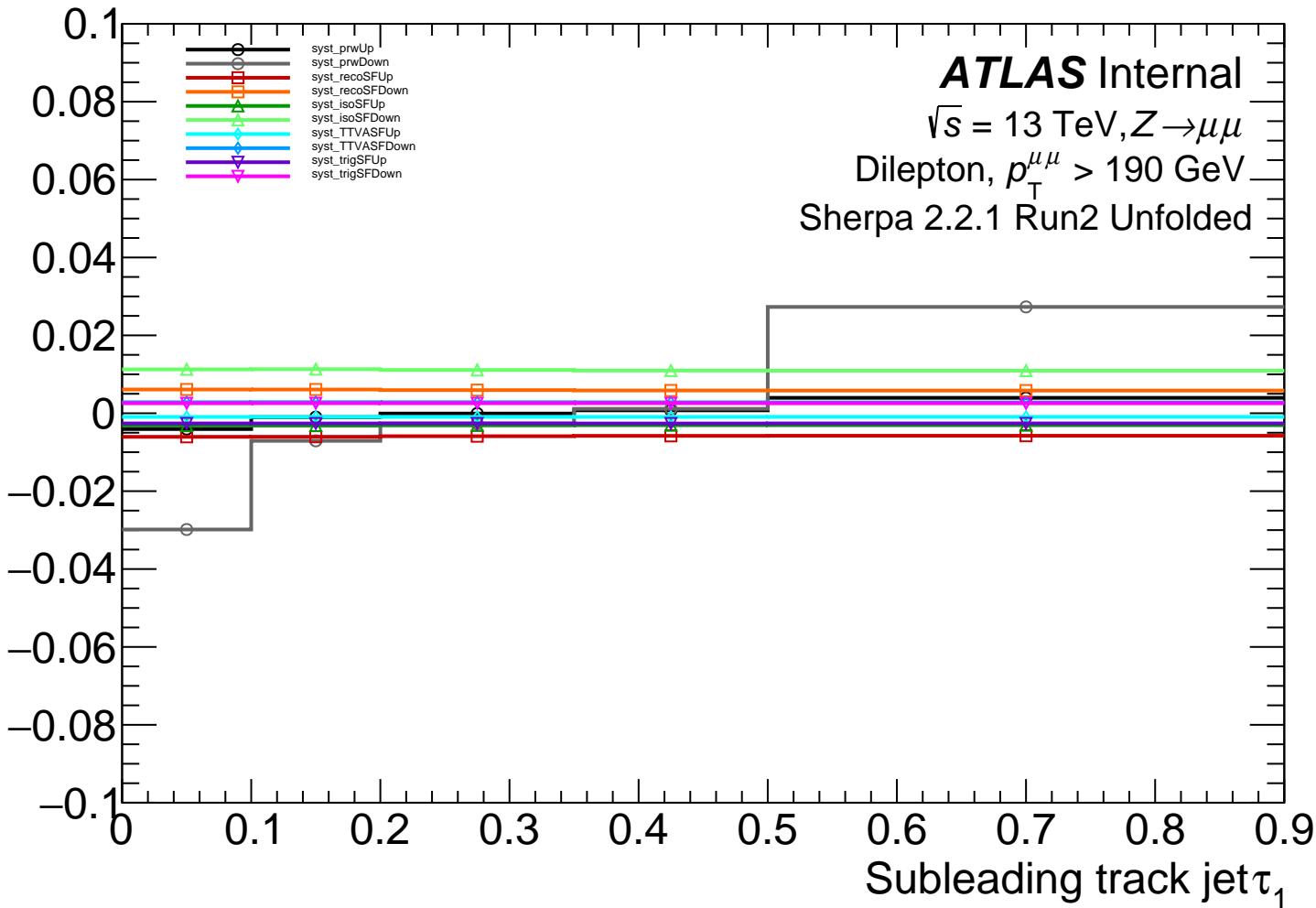


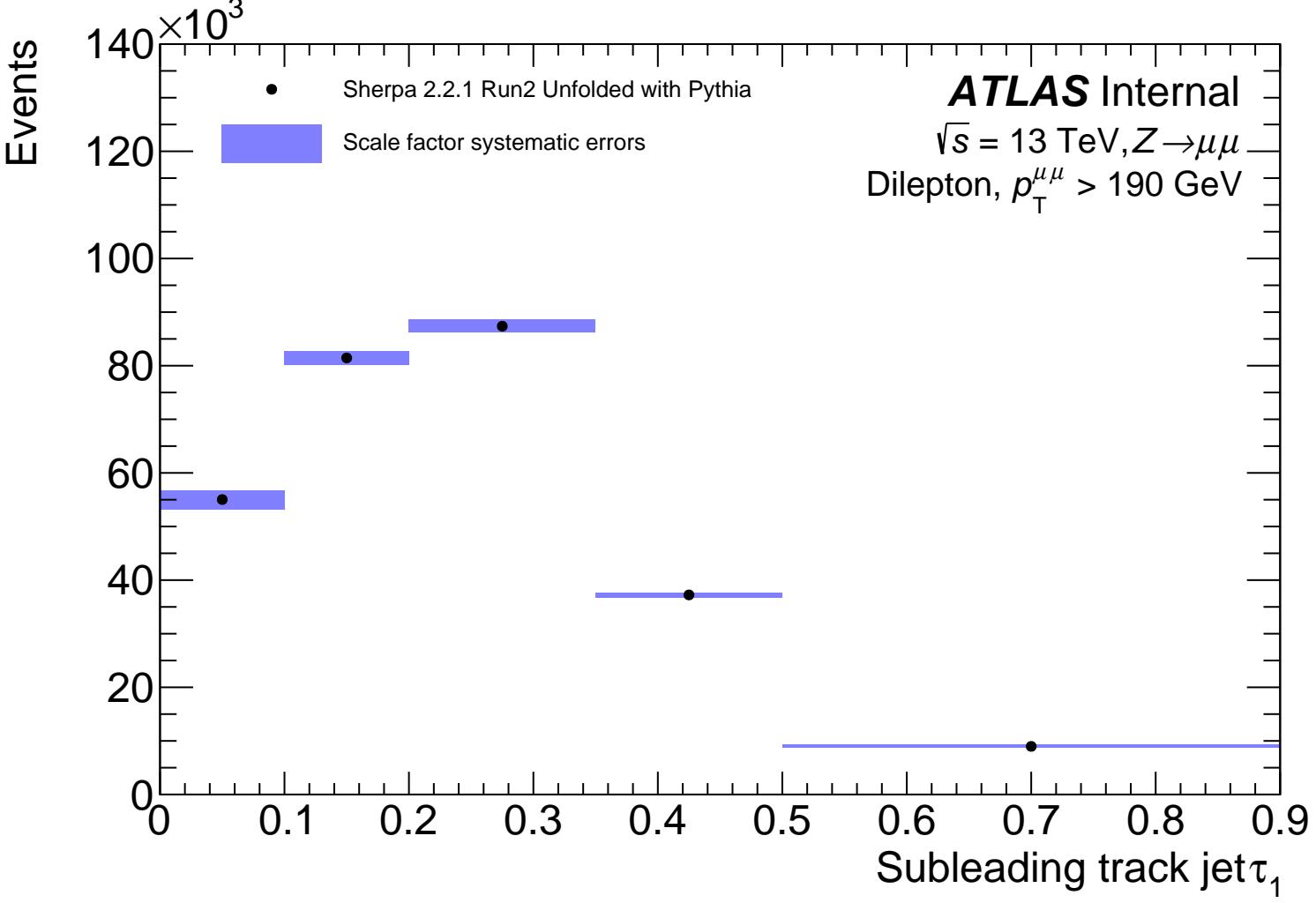
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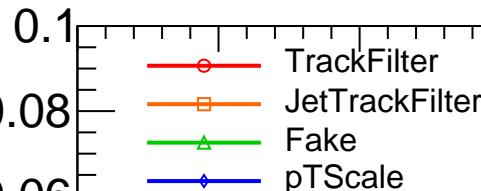
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

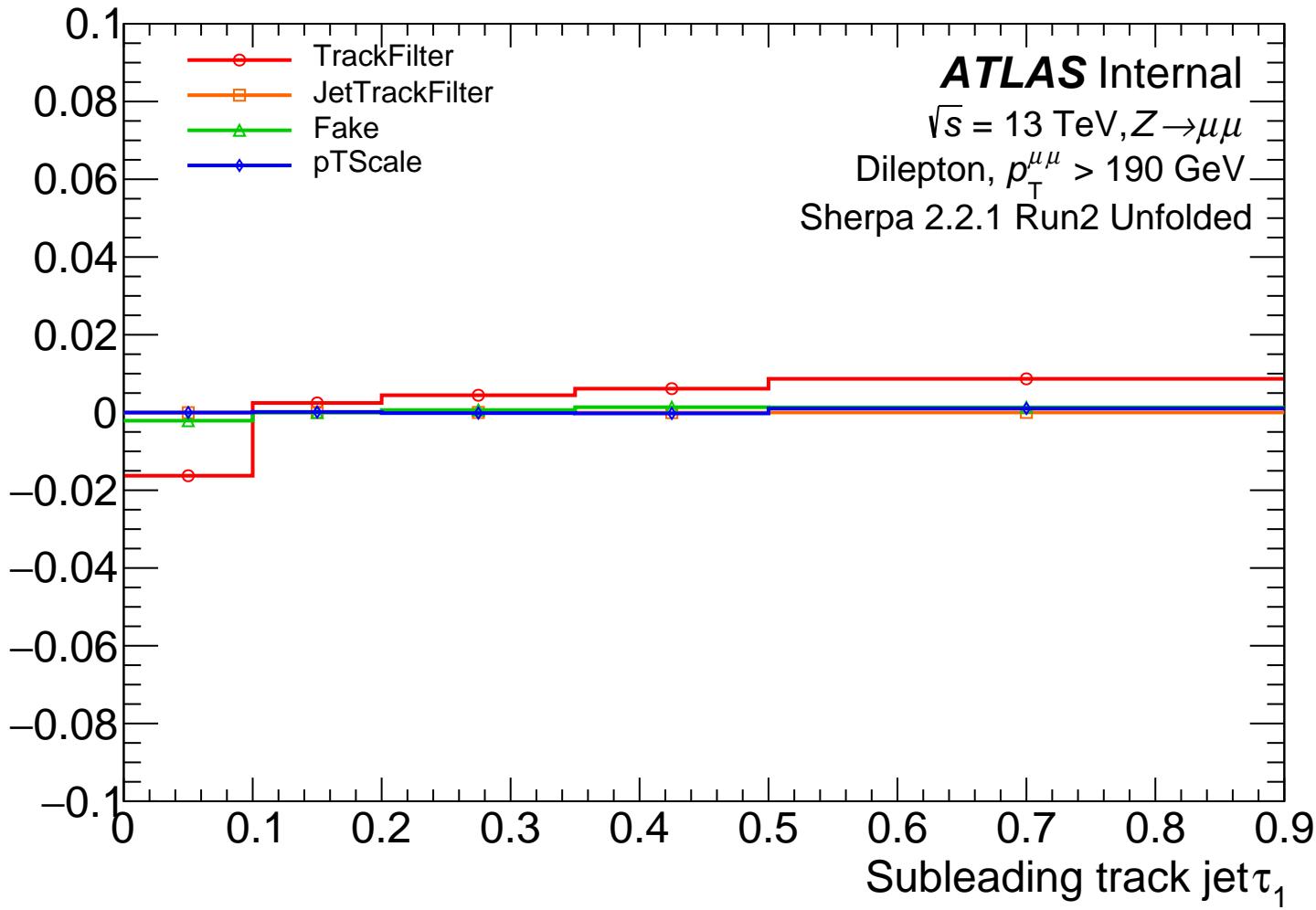
Sherpa 2.2.1 Run2 Unfolded

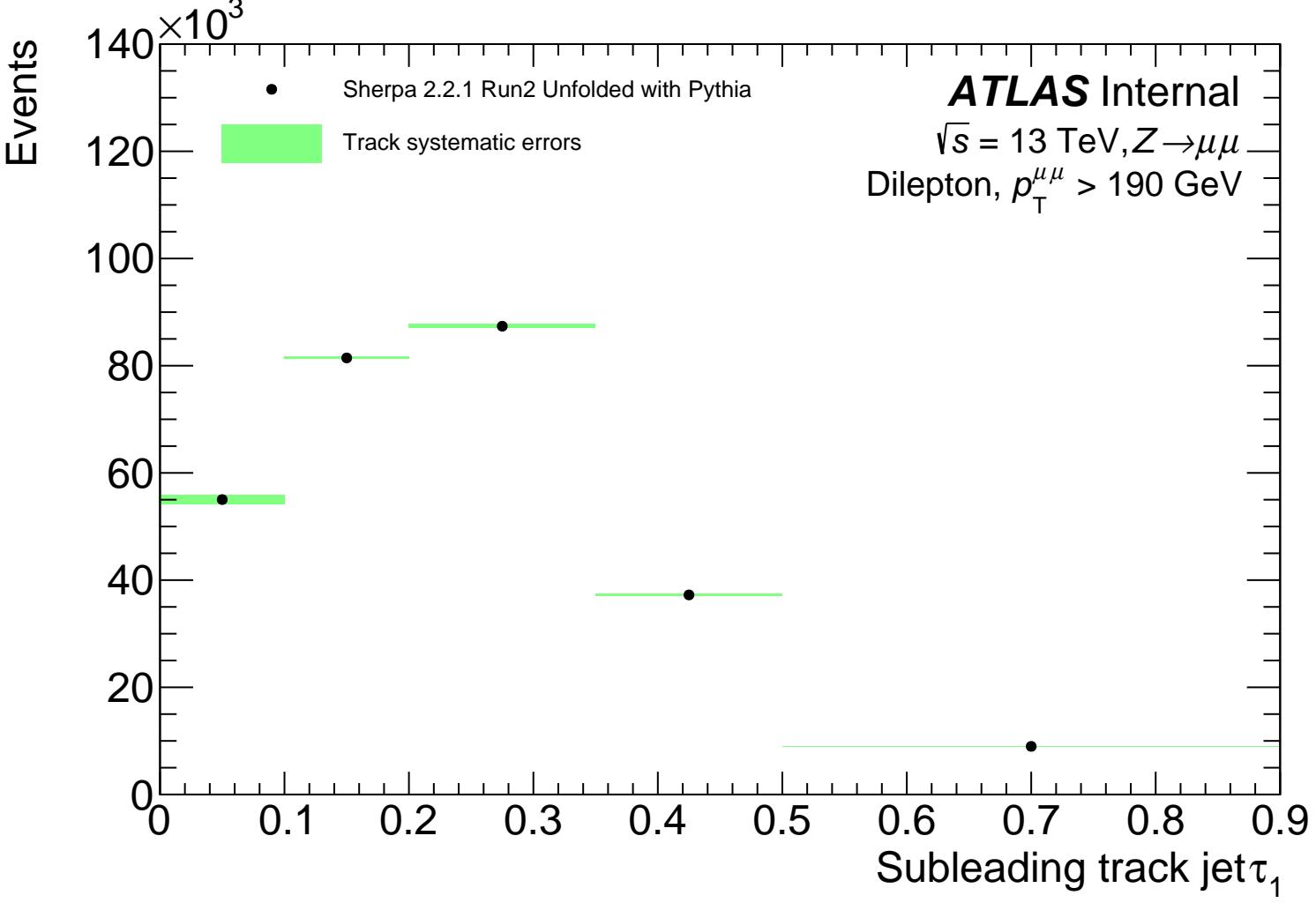


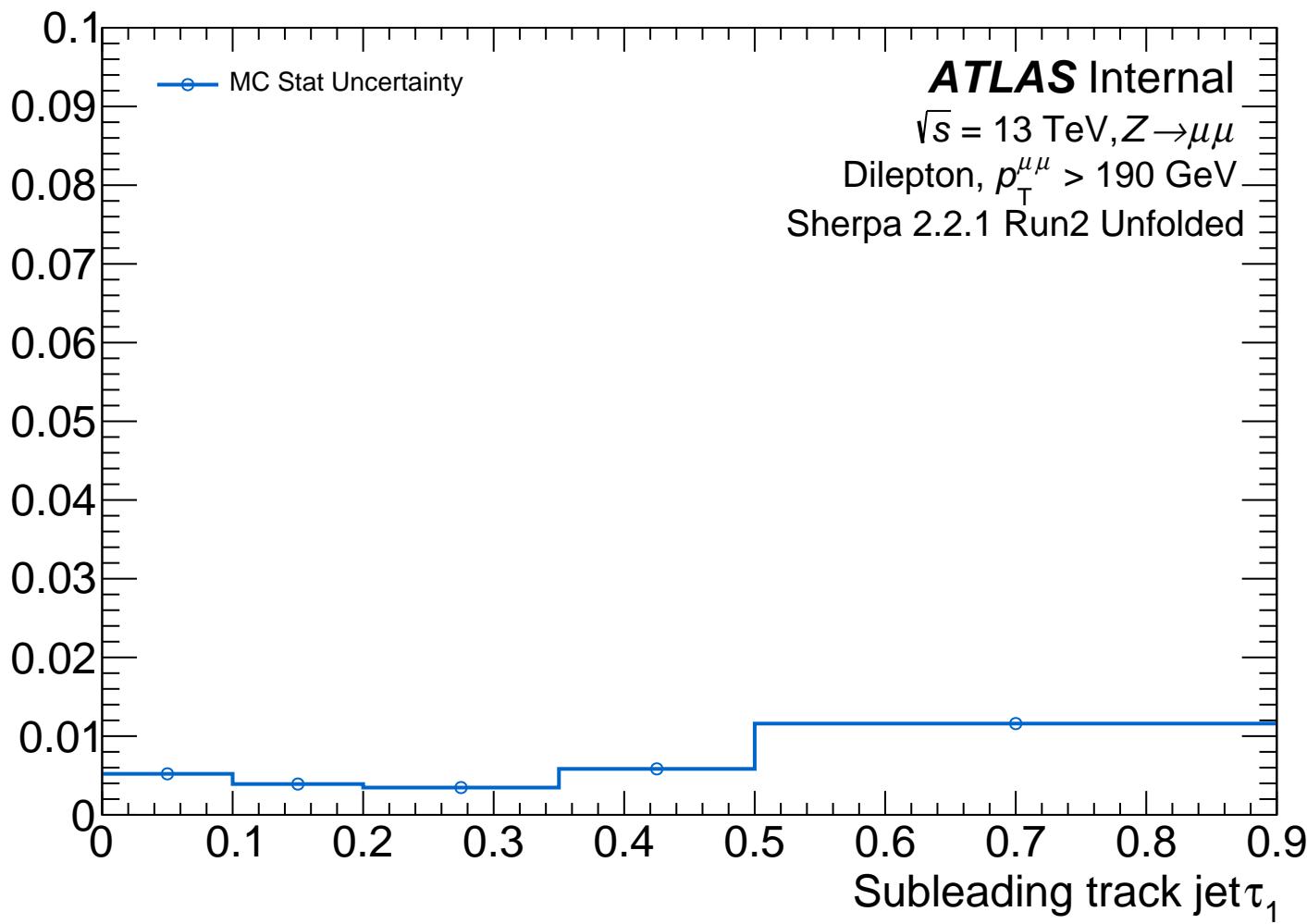


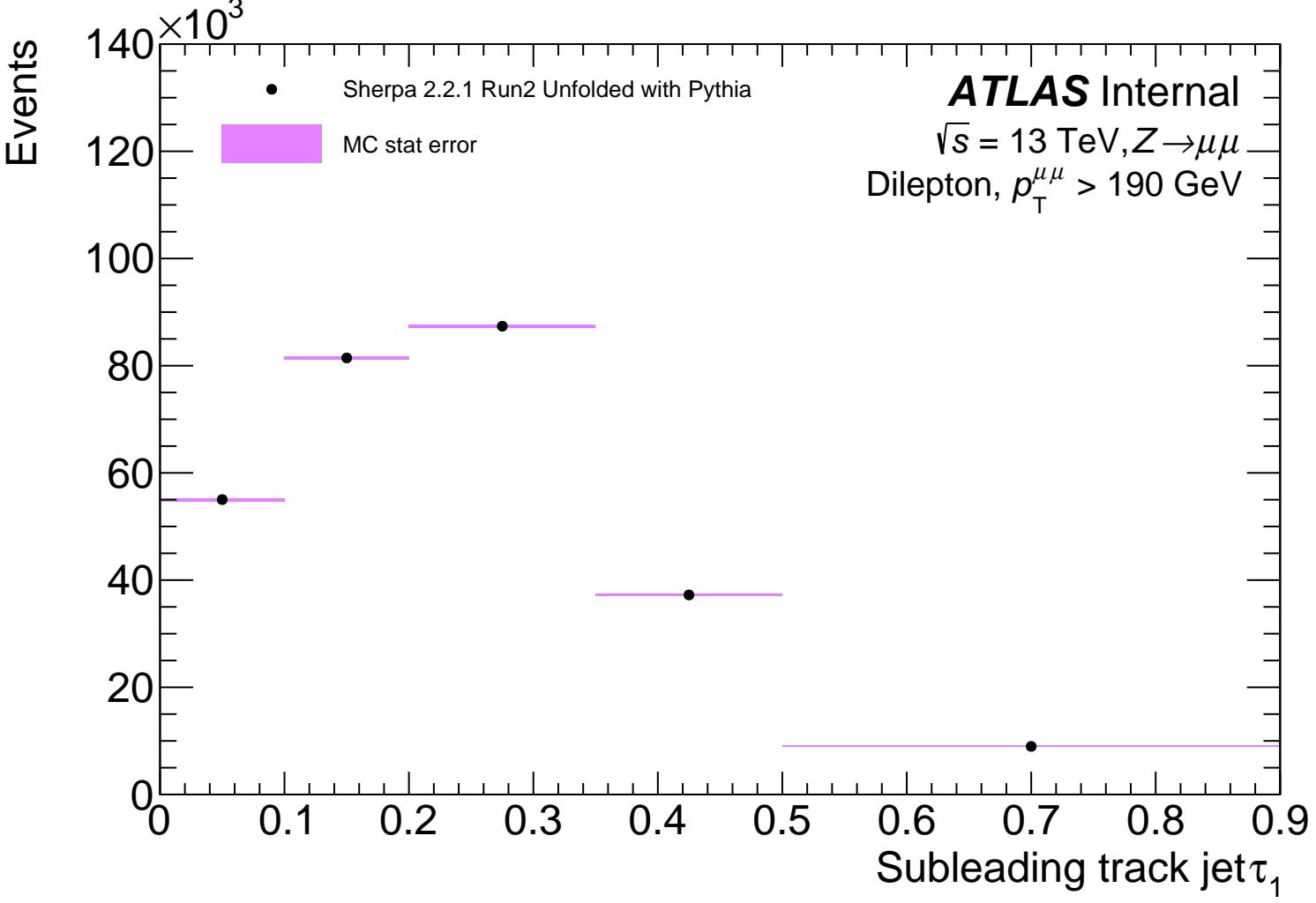


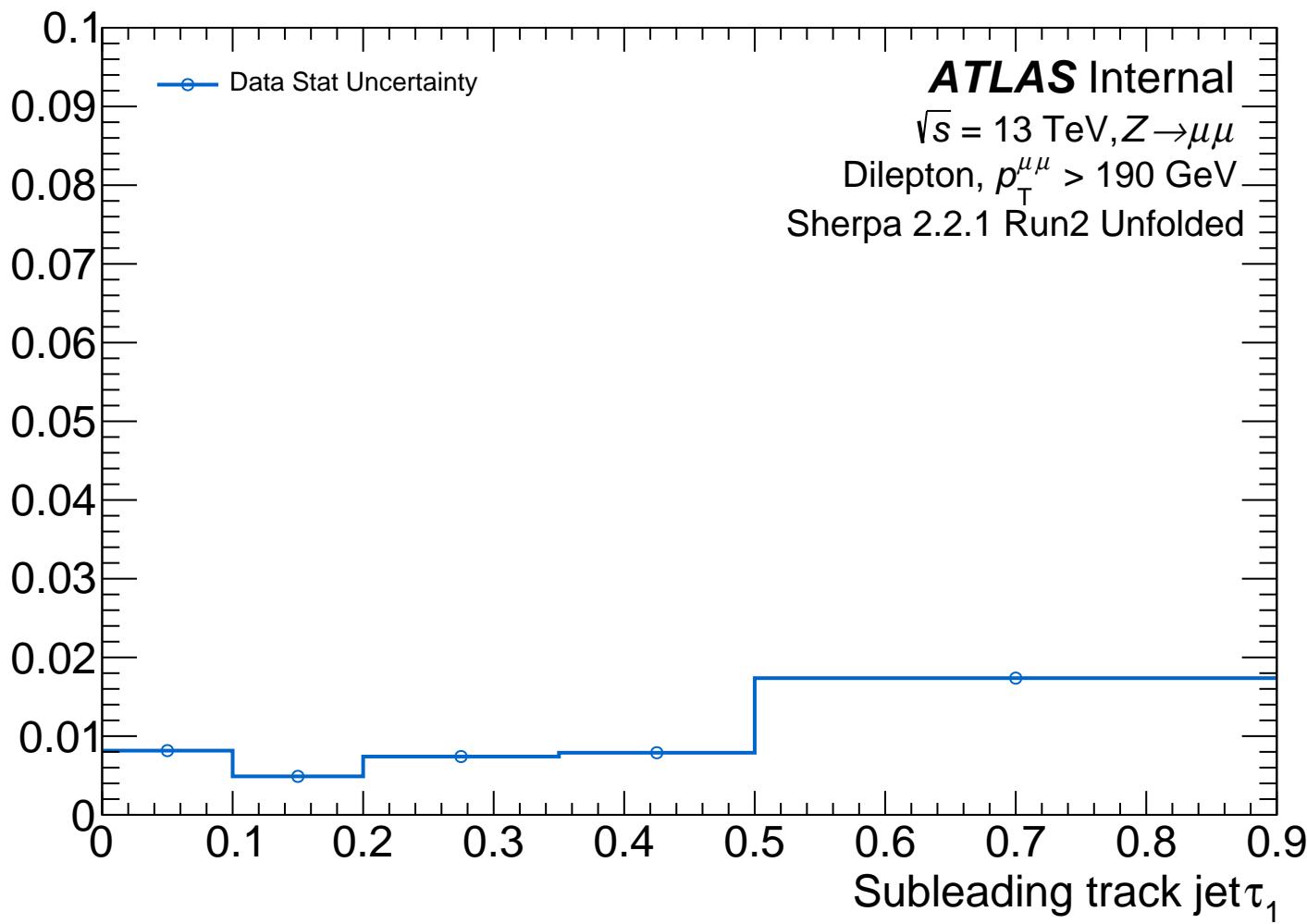
**ATLAS Internal**  
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$   
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$   
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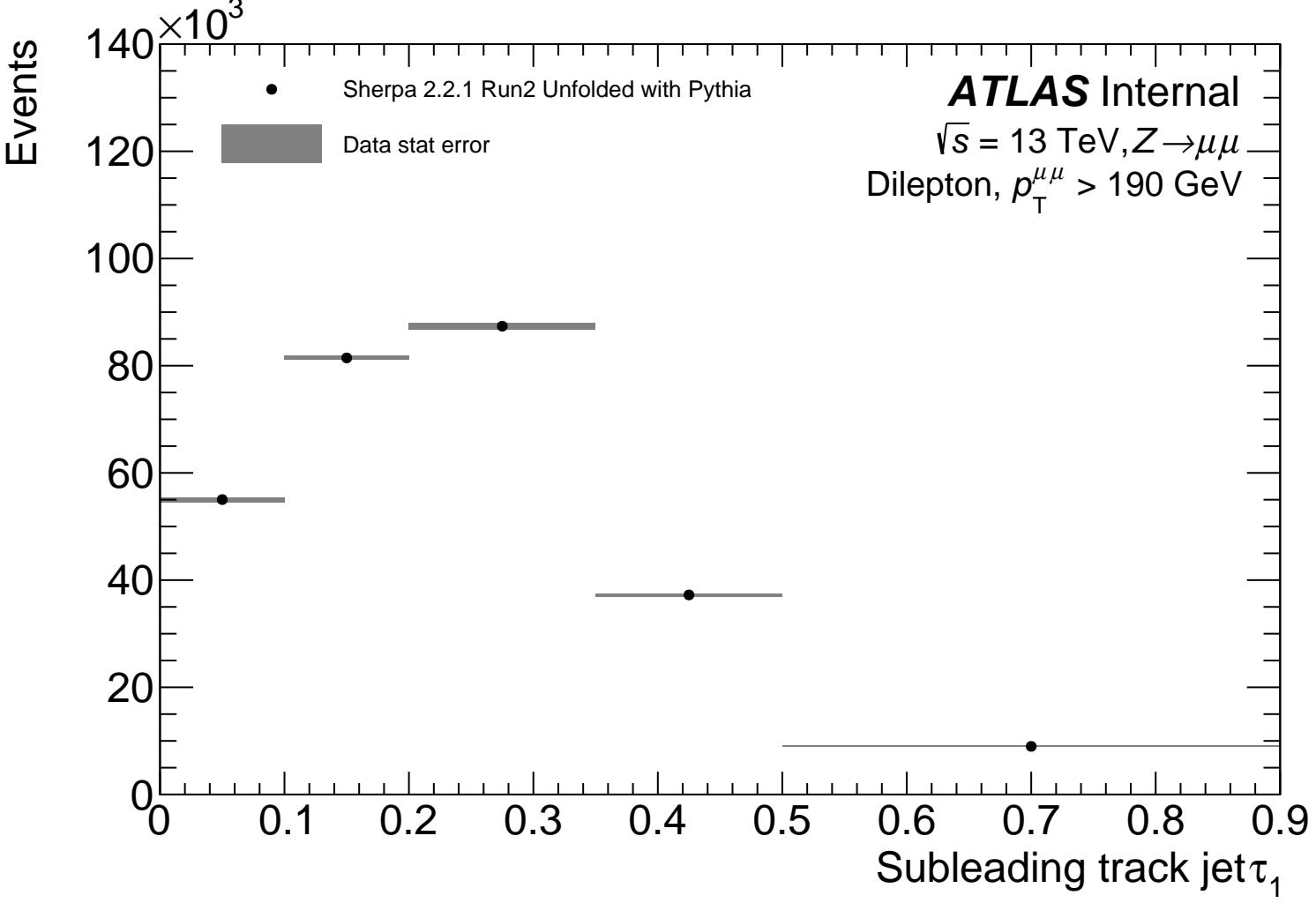


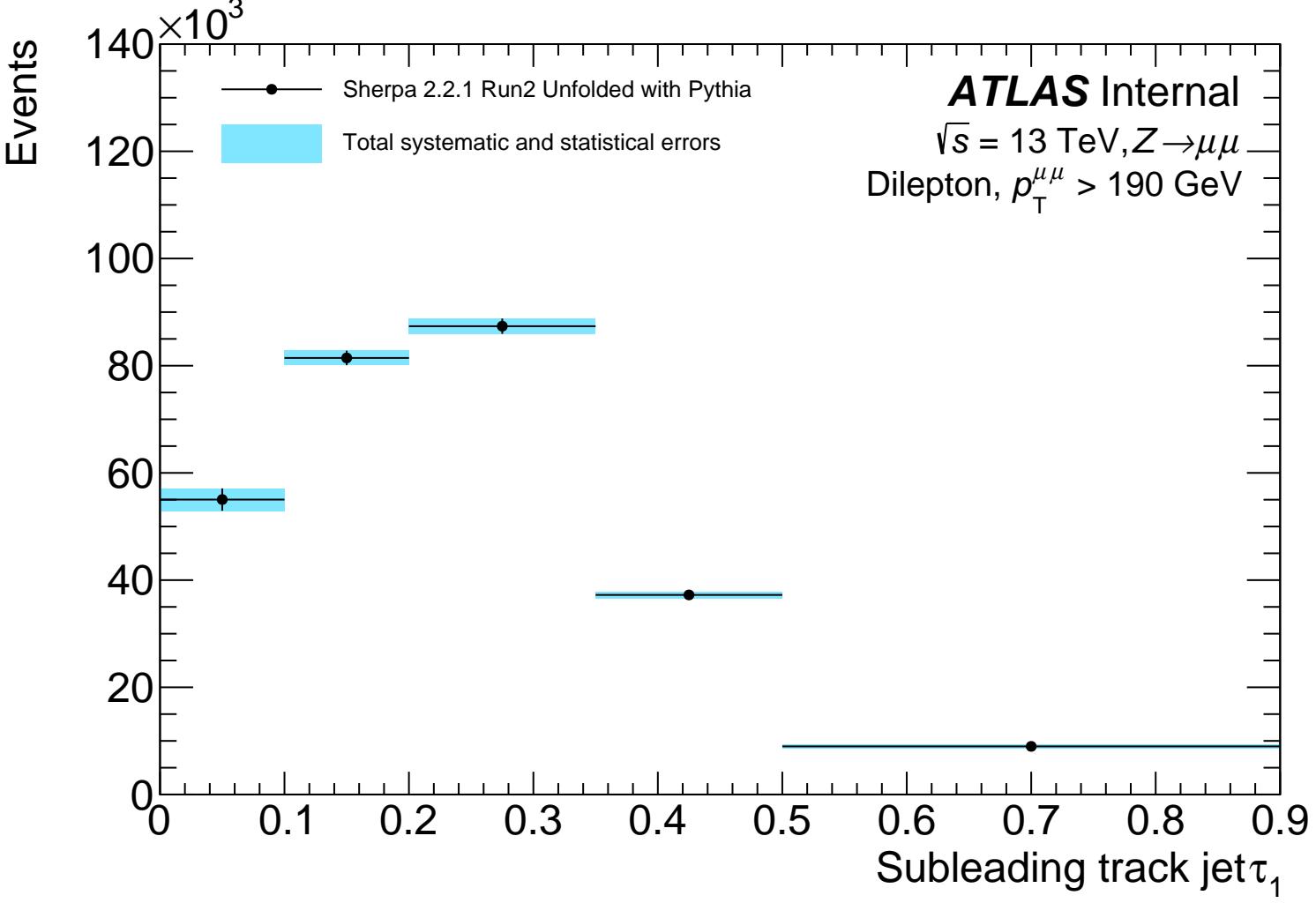


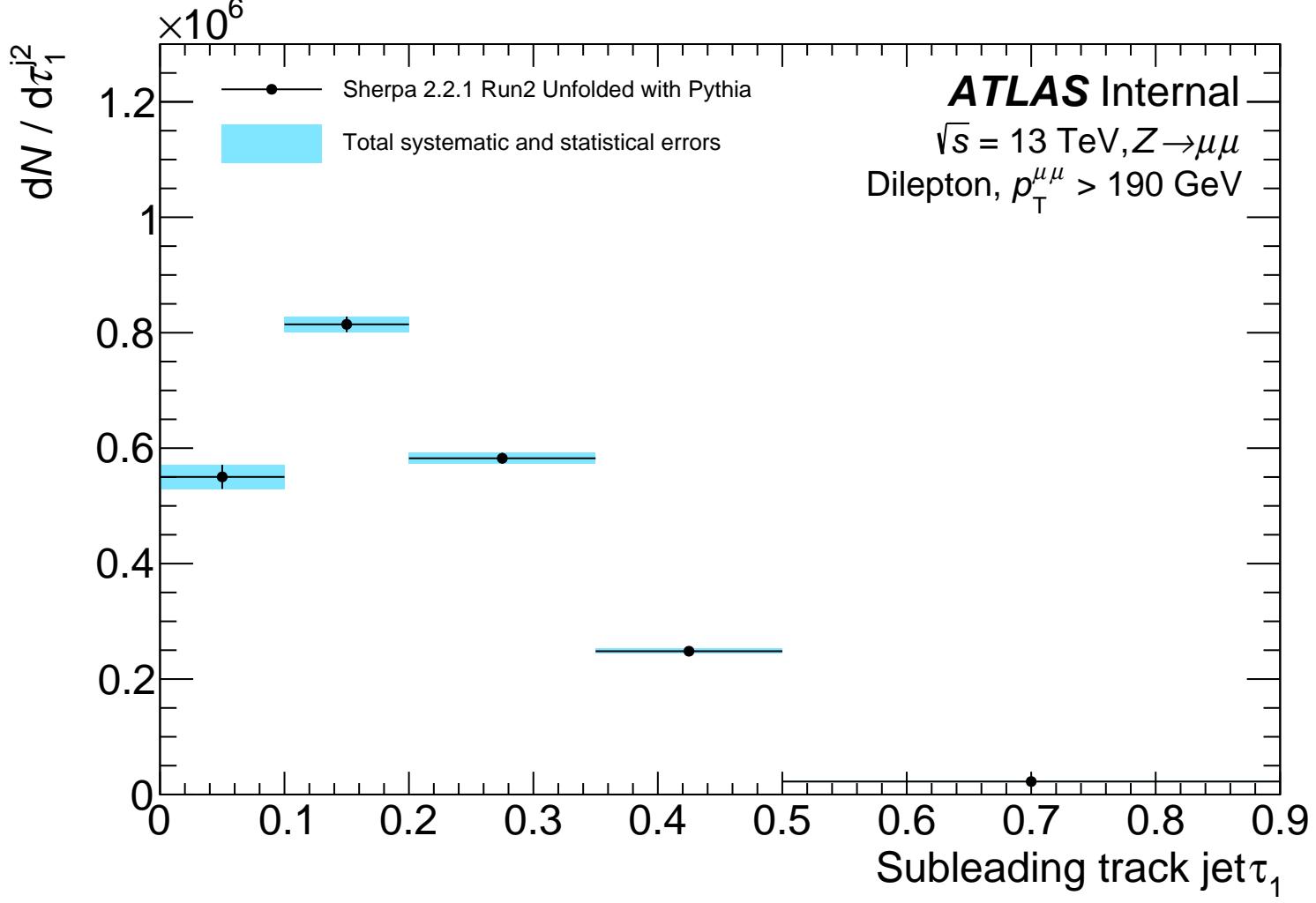










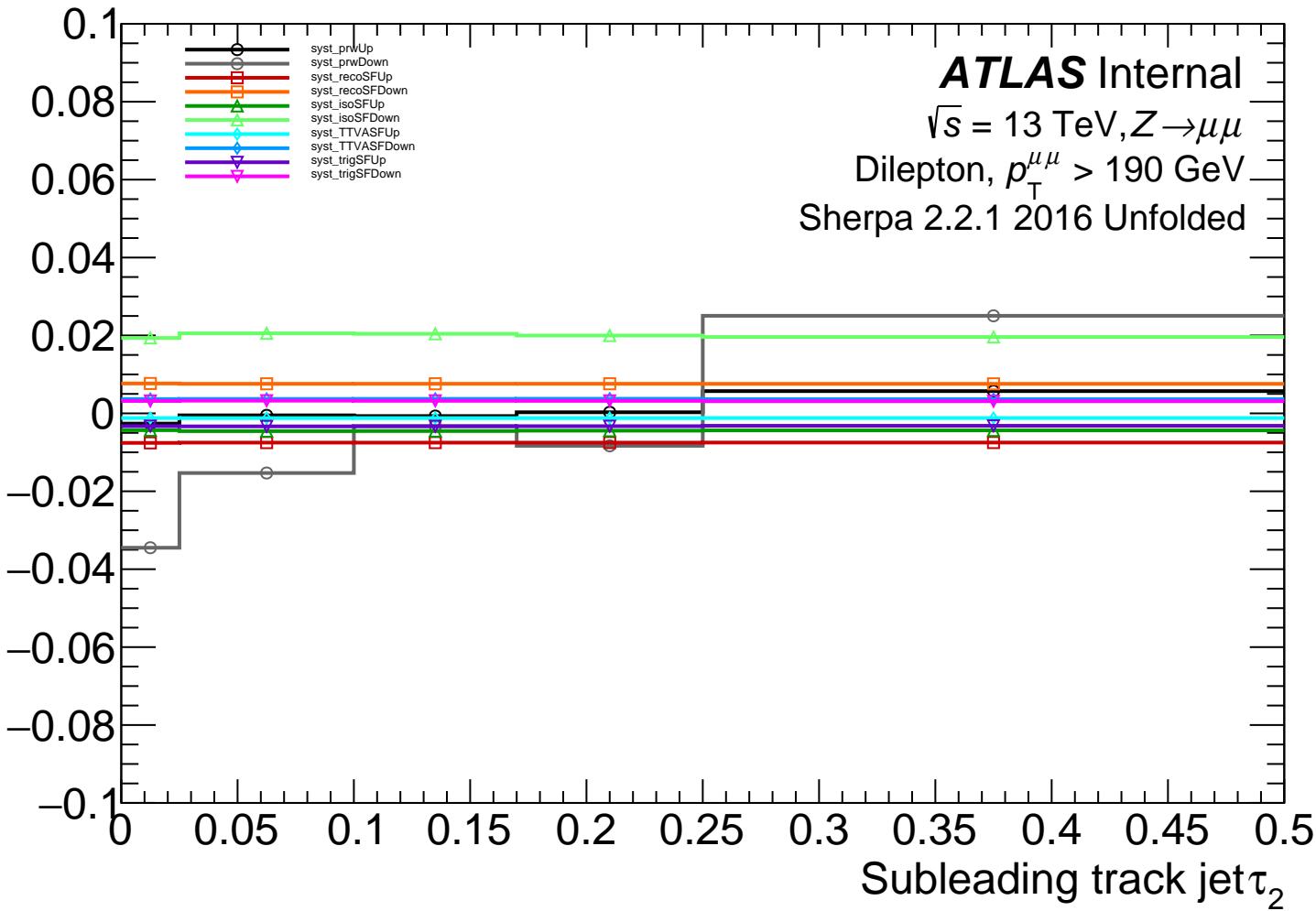


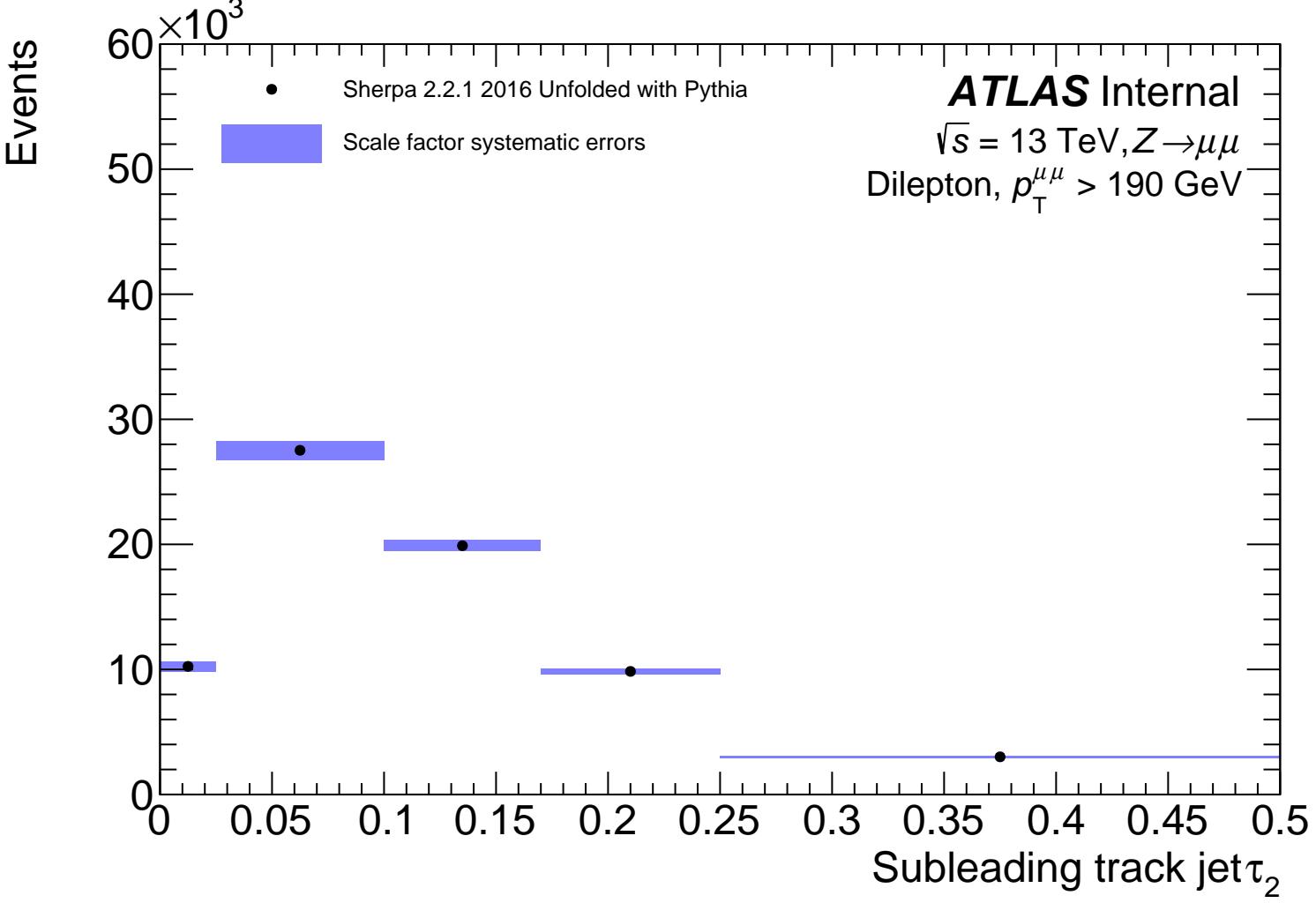
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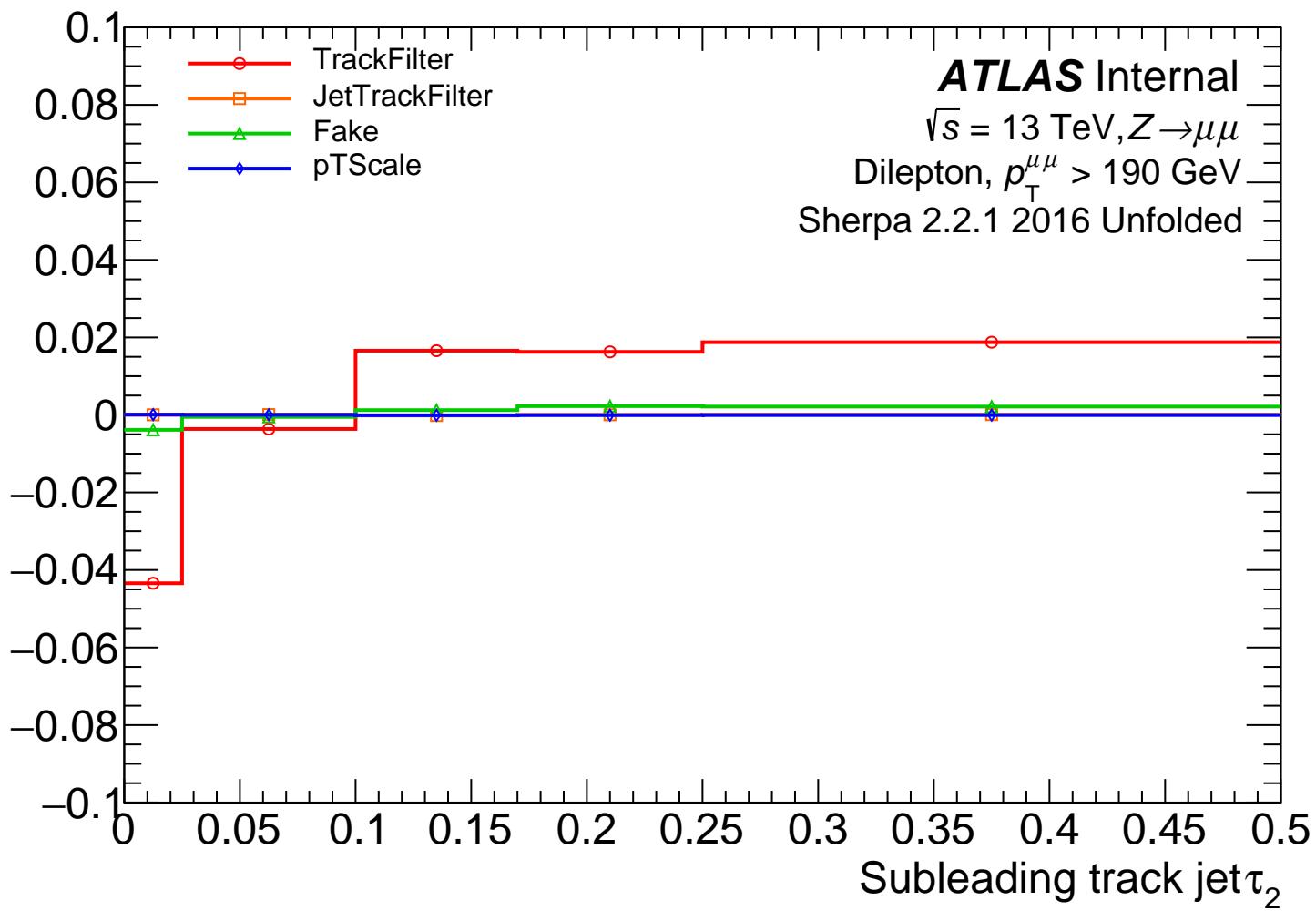
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

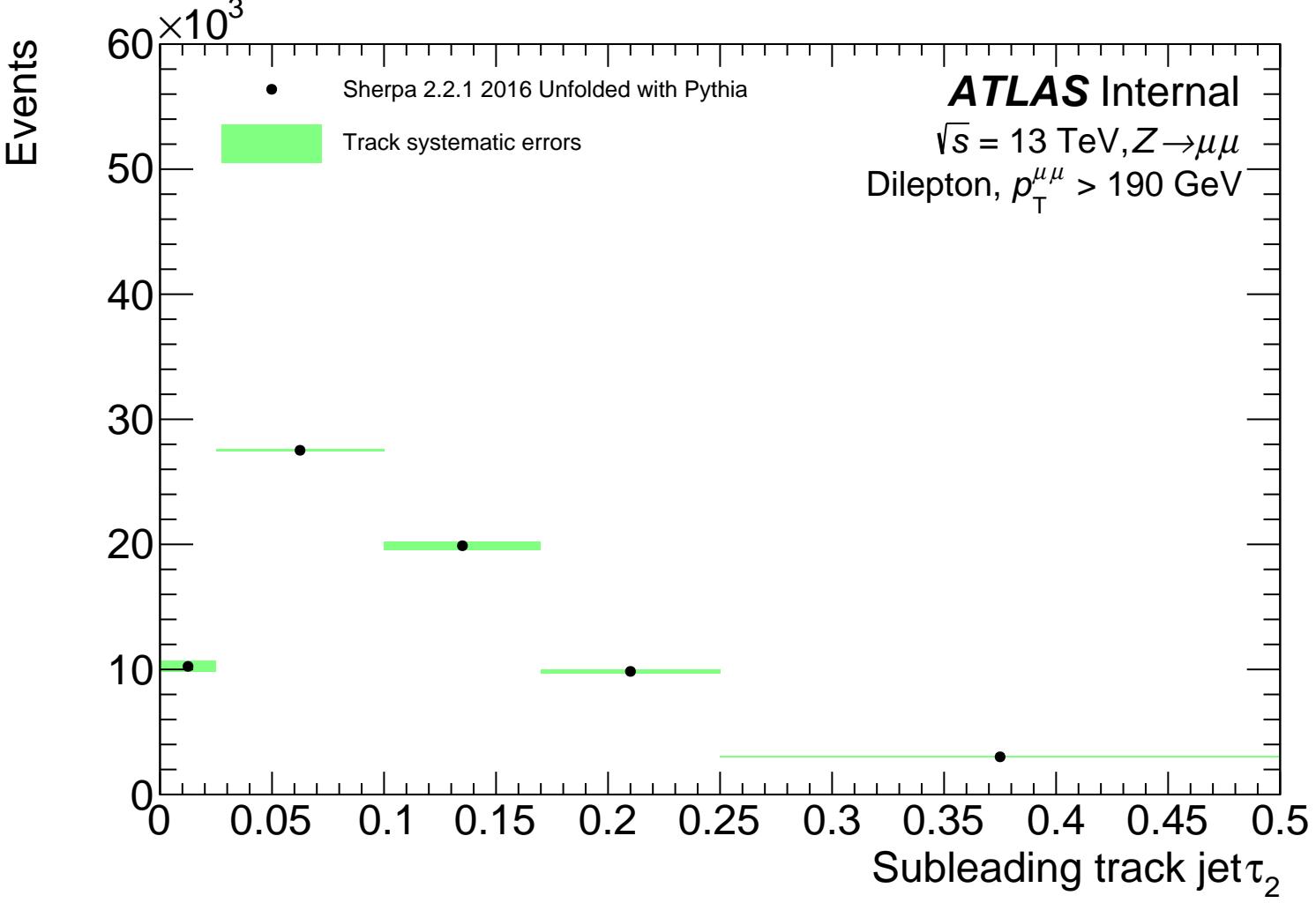
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

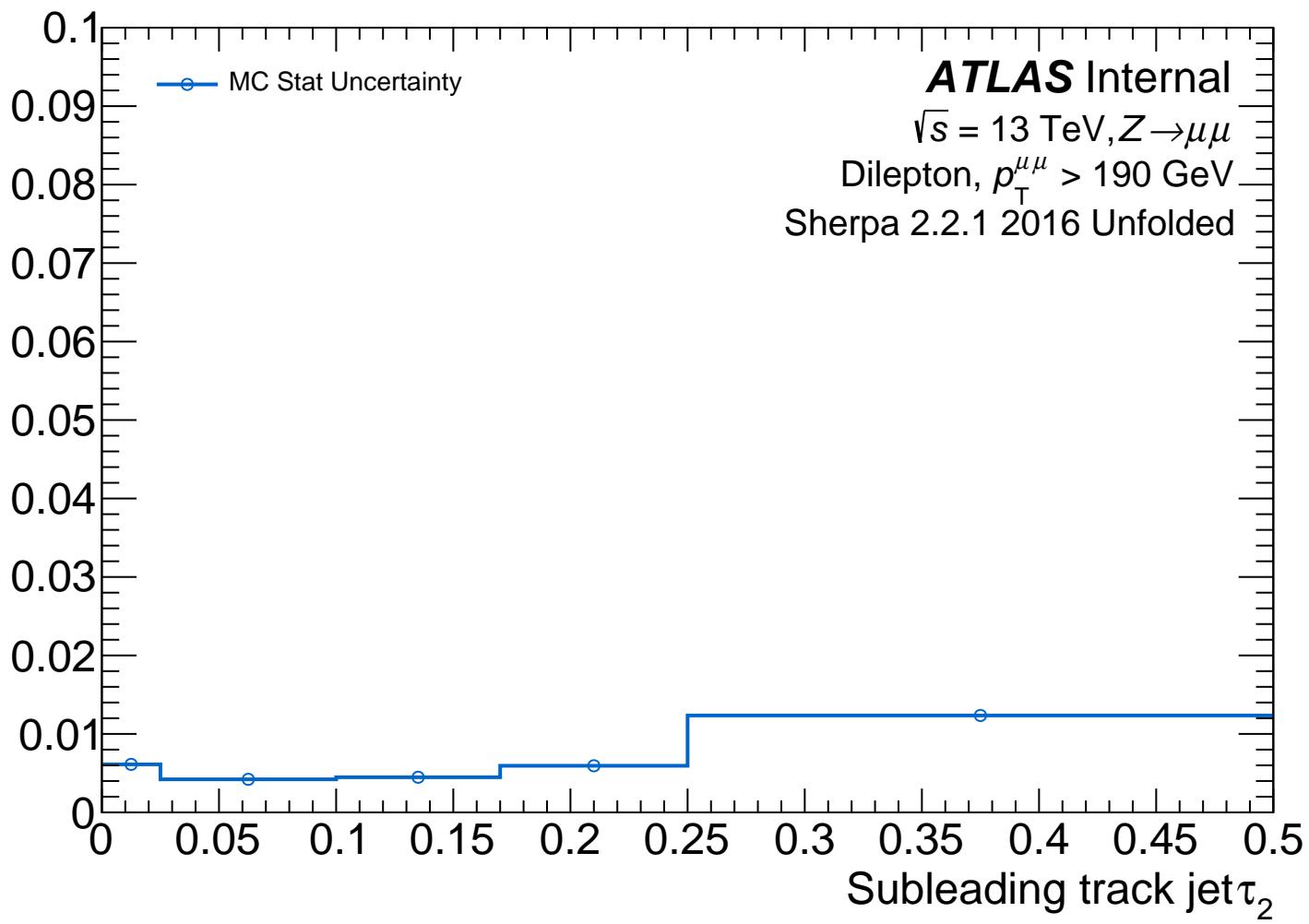
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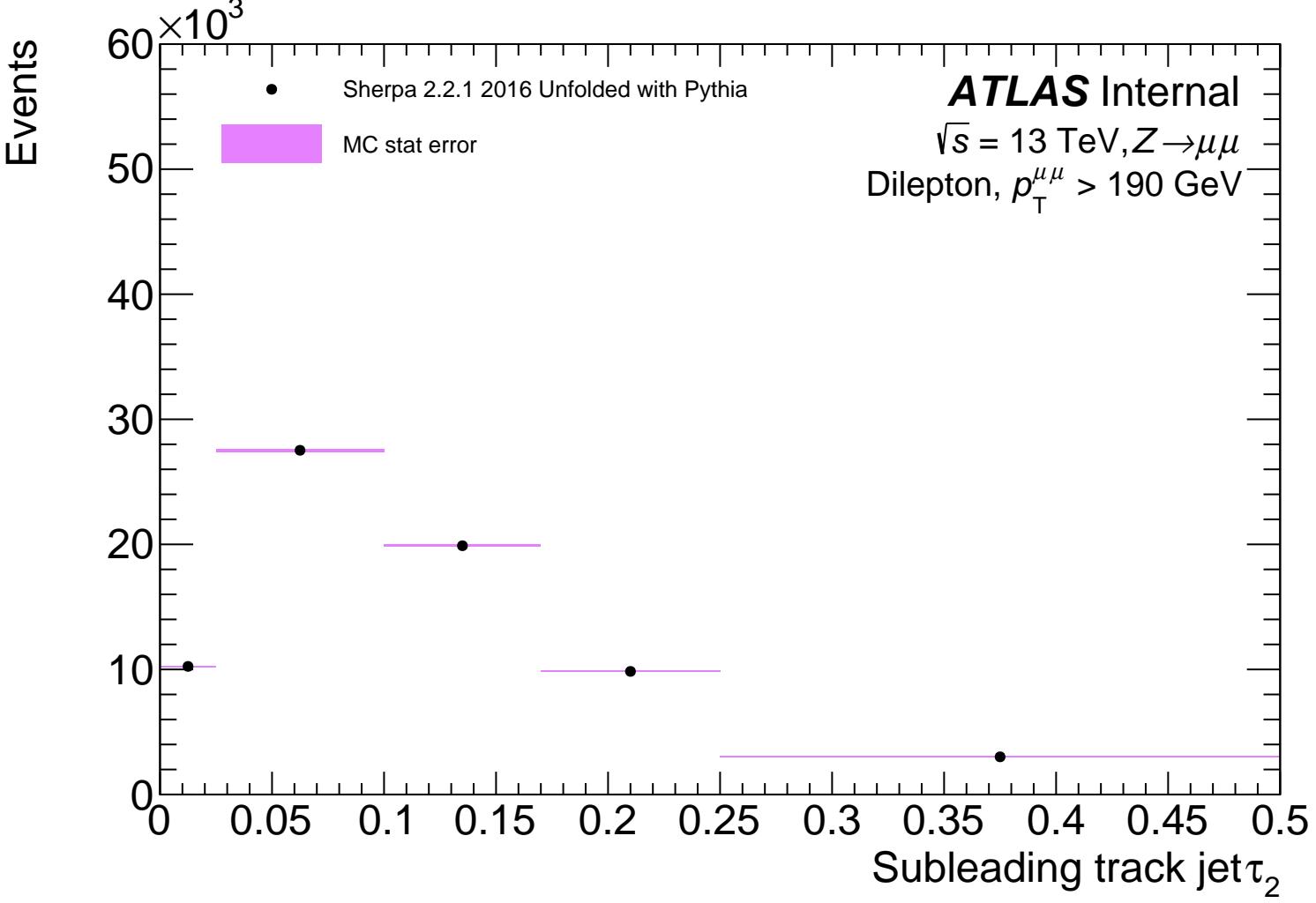


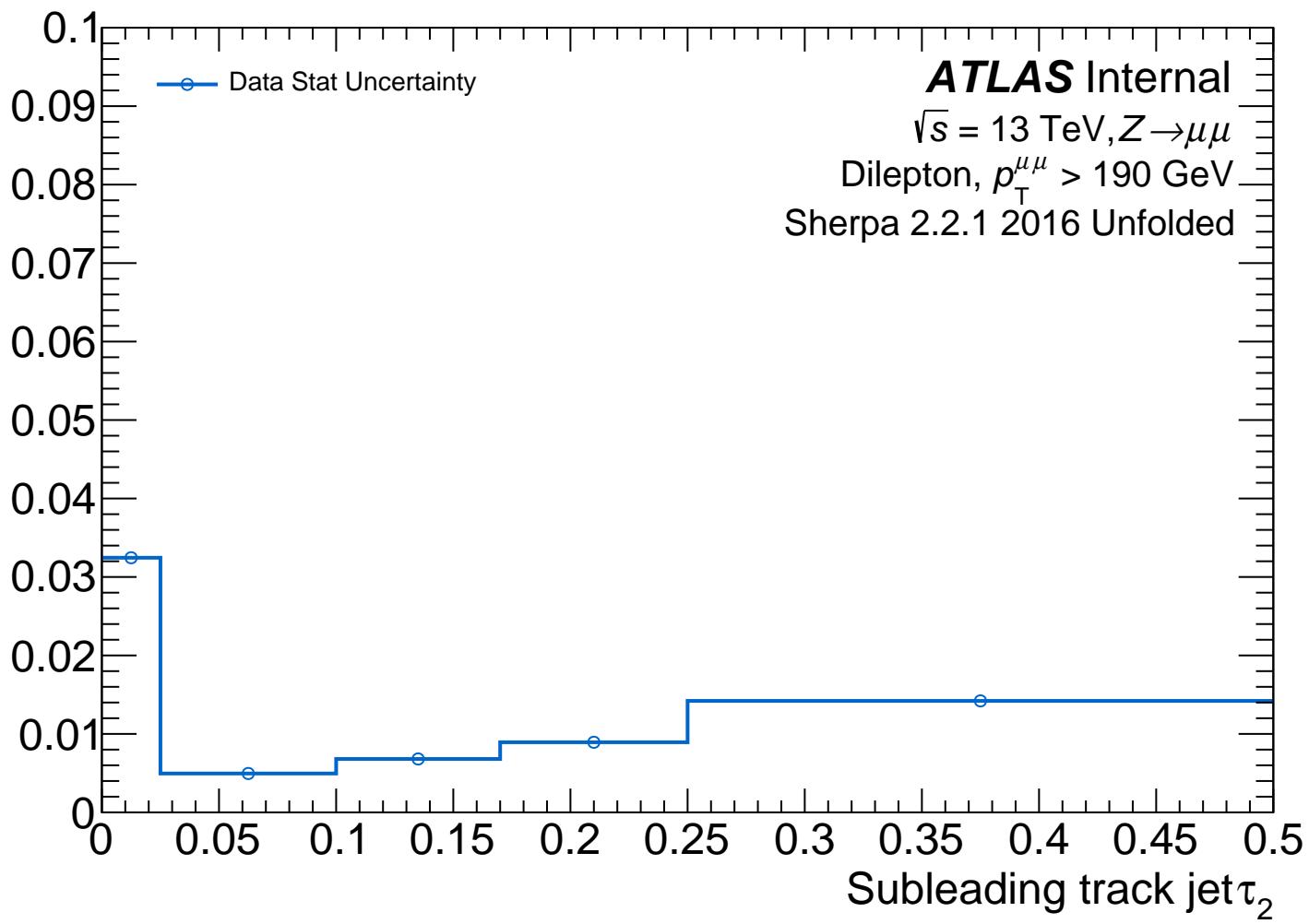


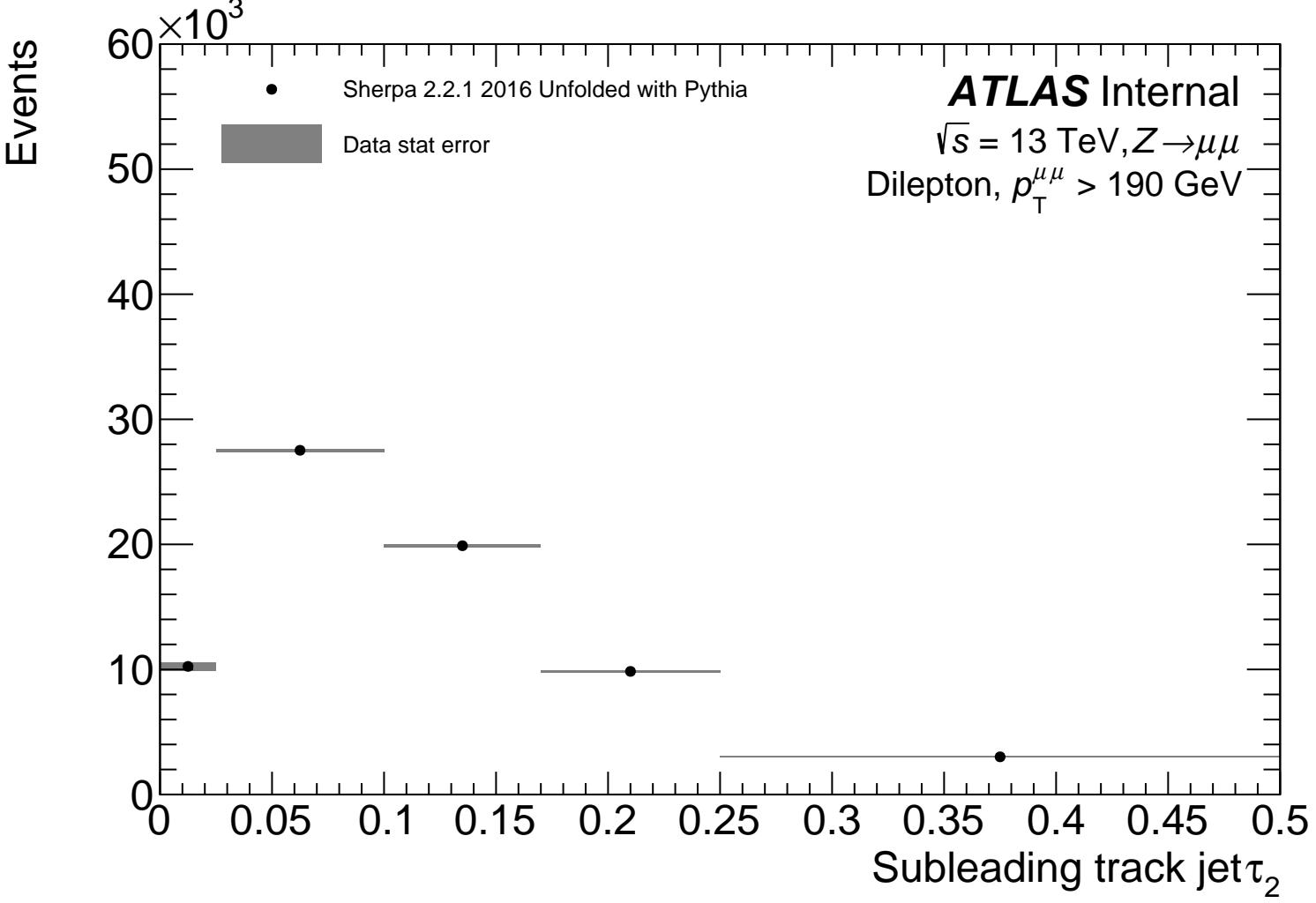


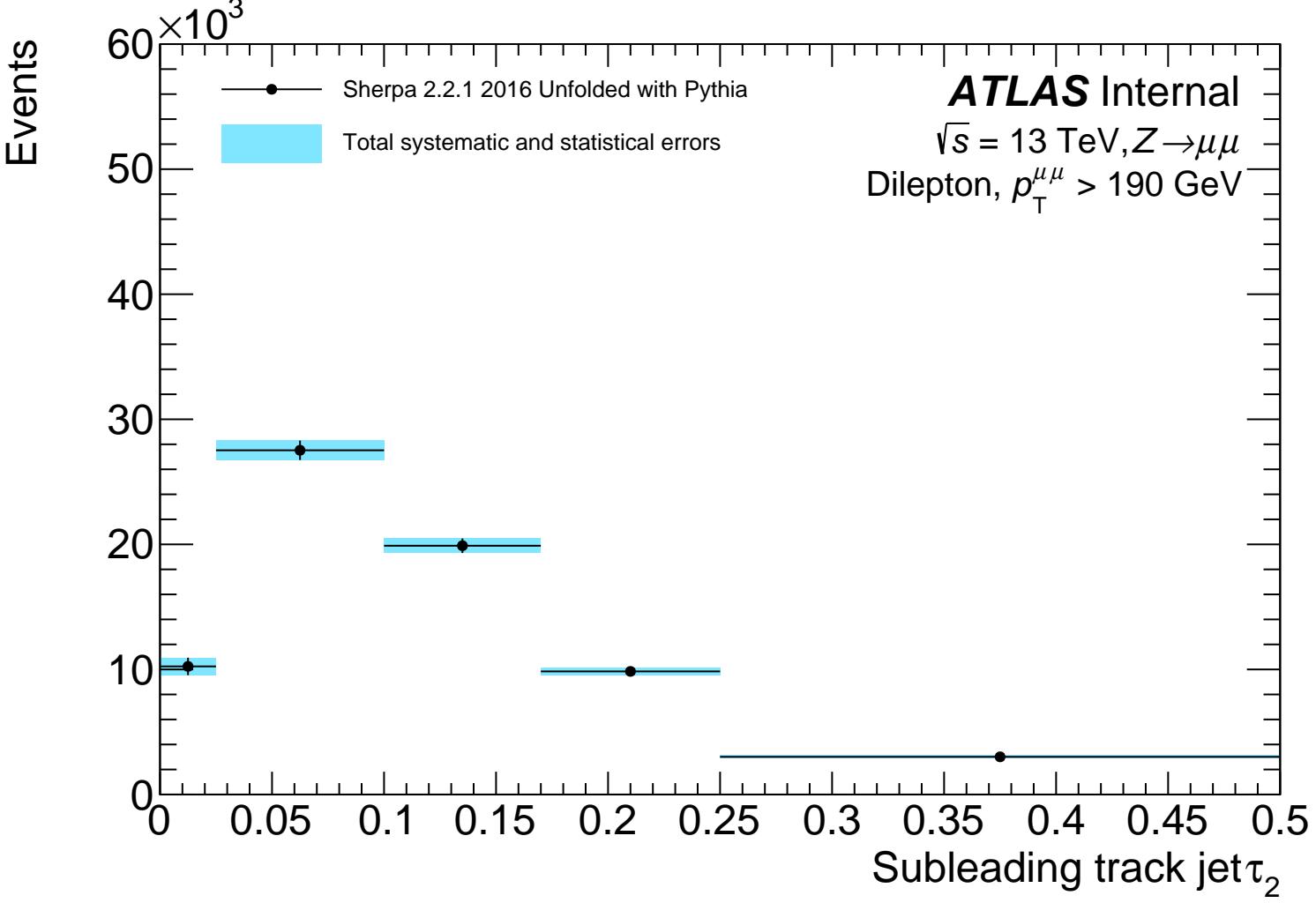


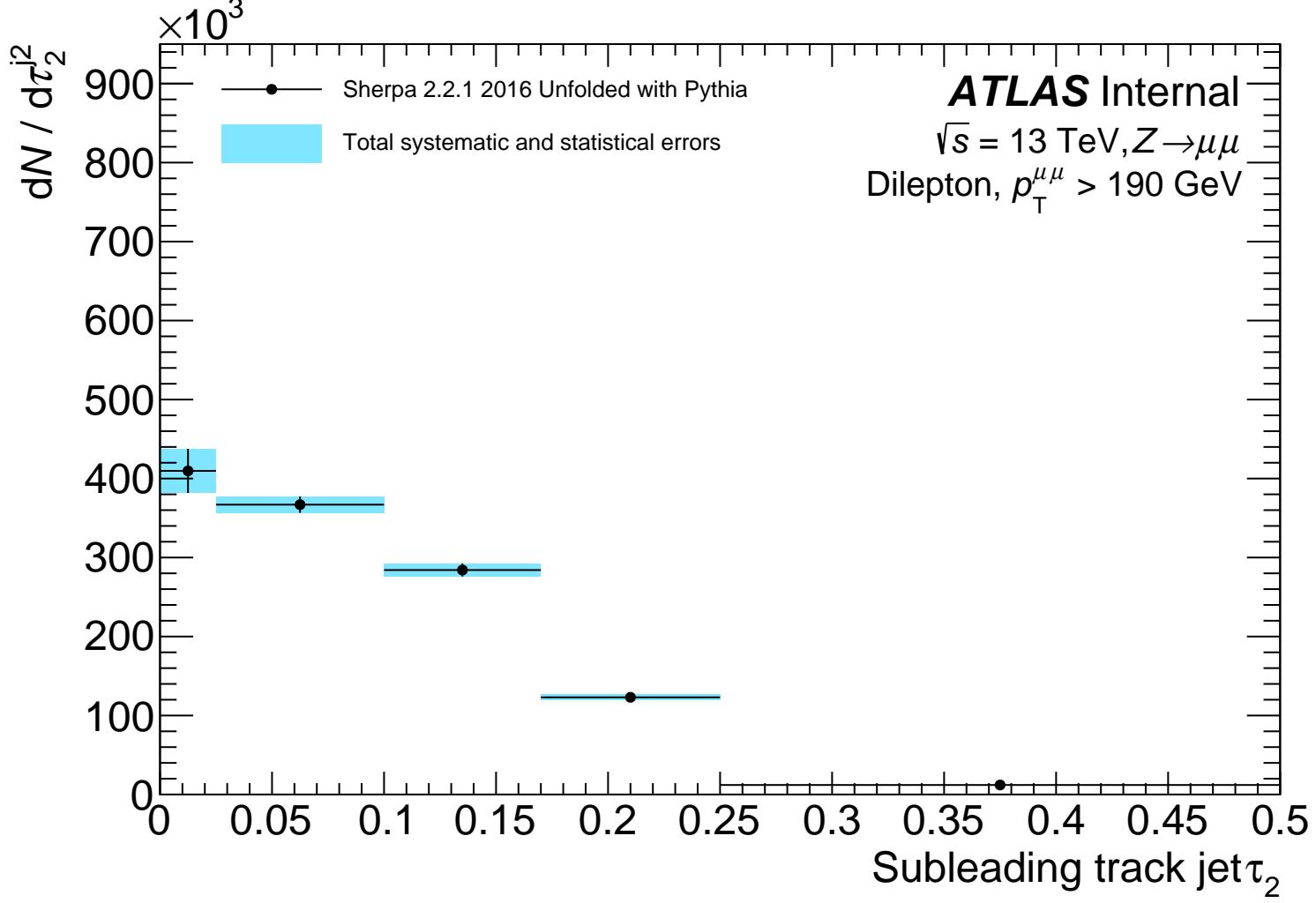


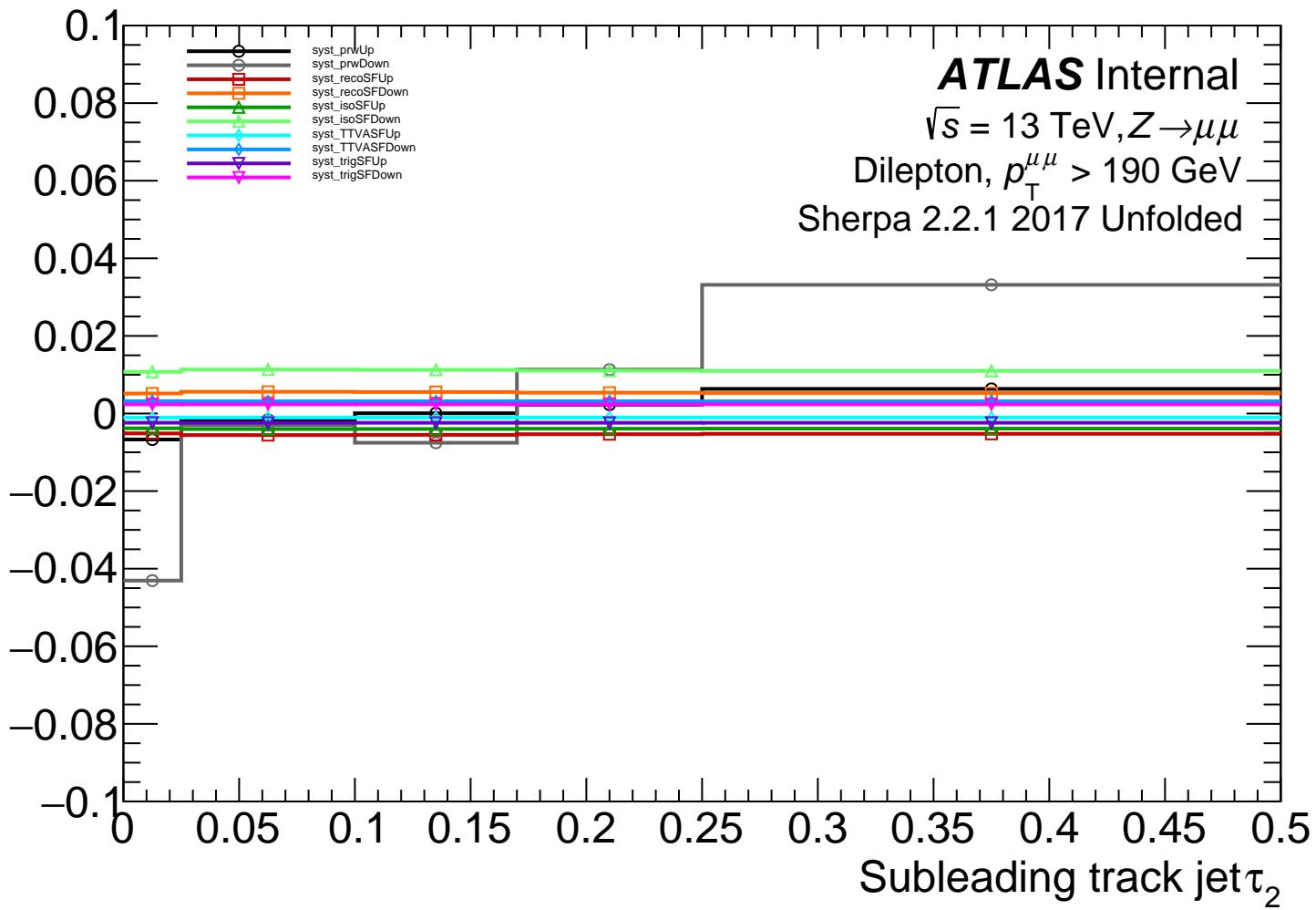


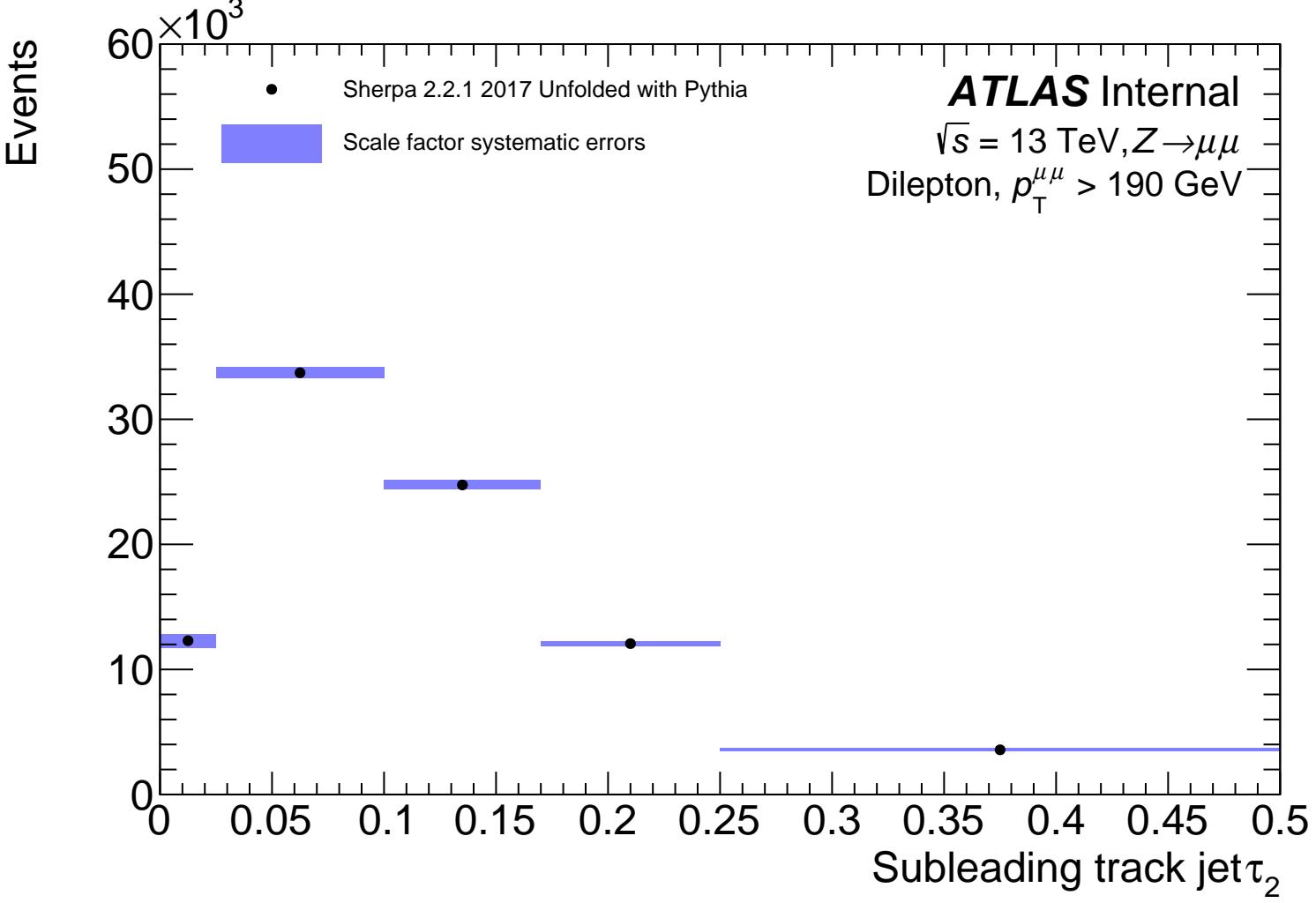


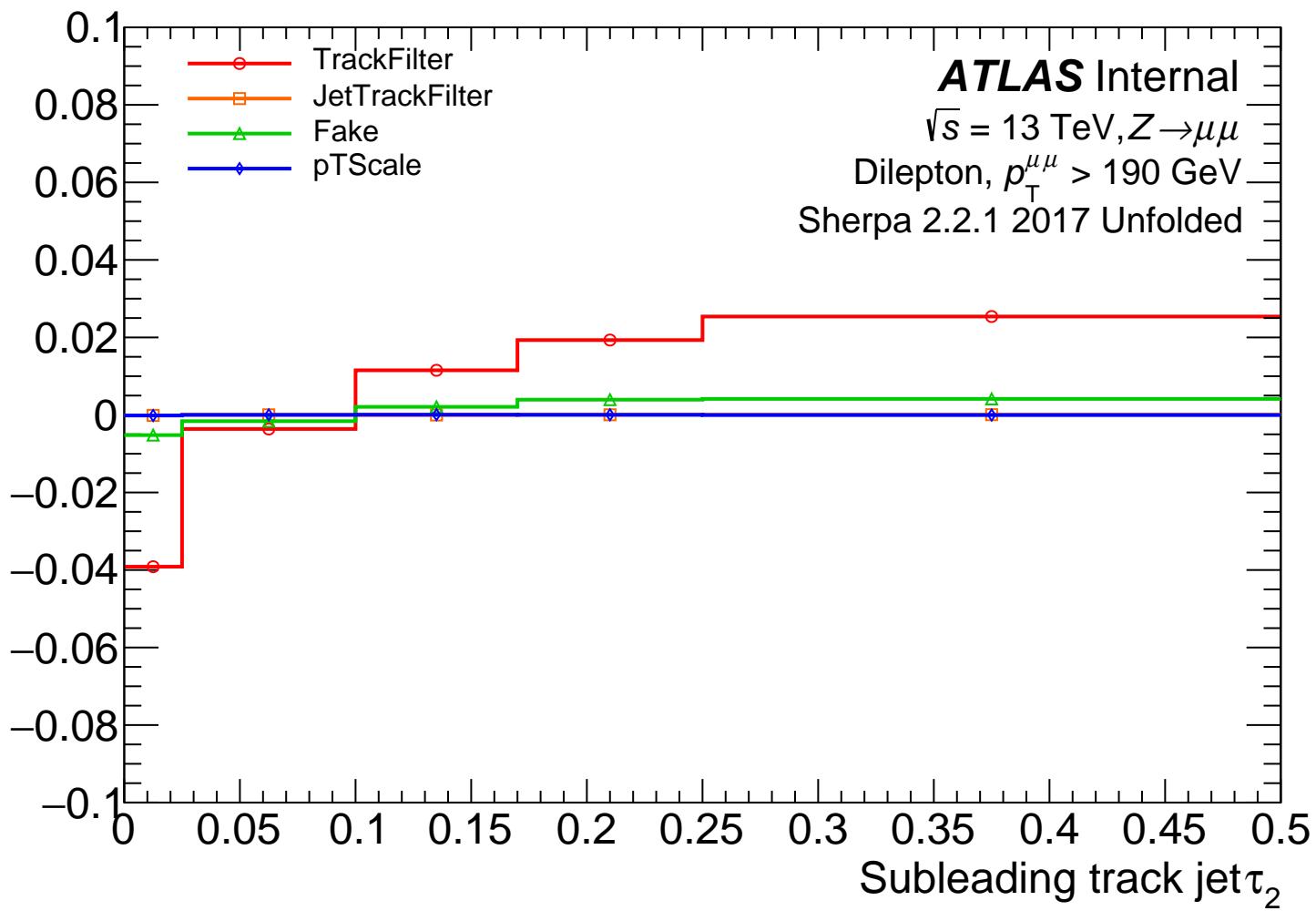


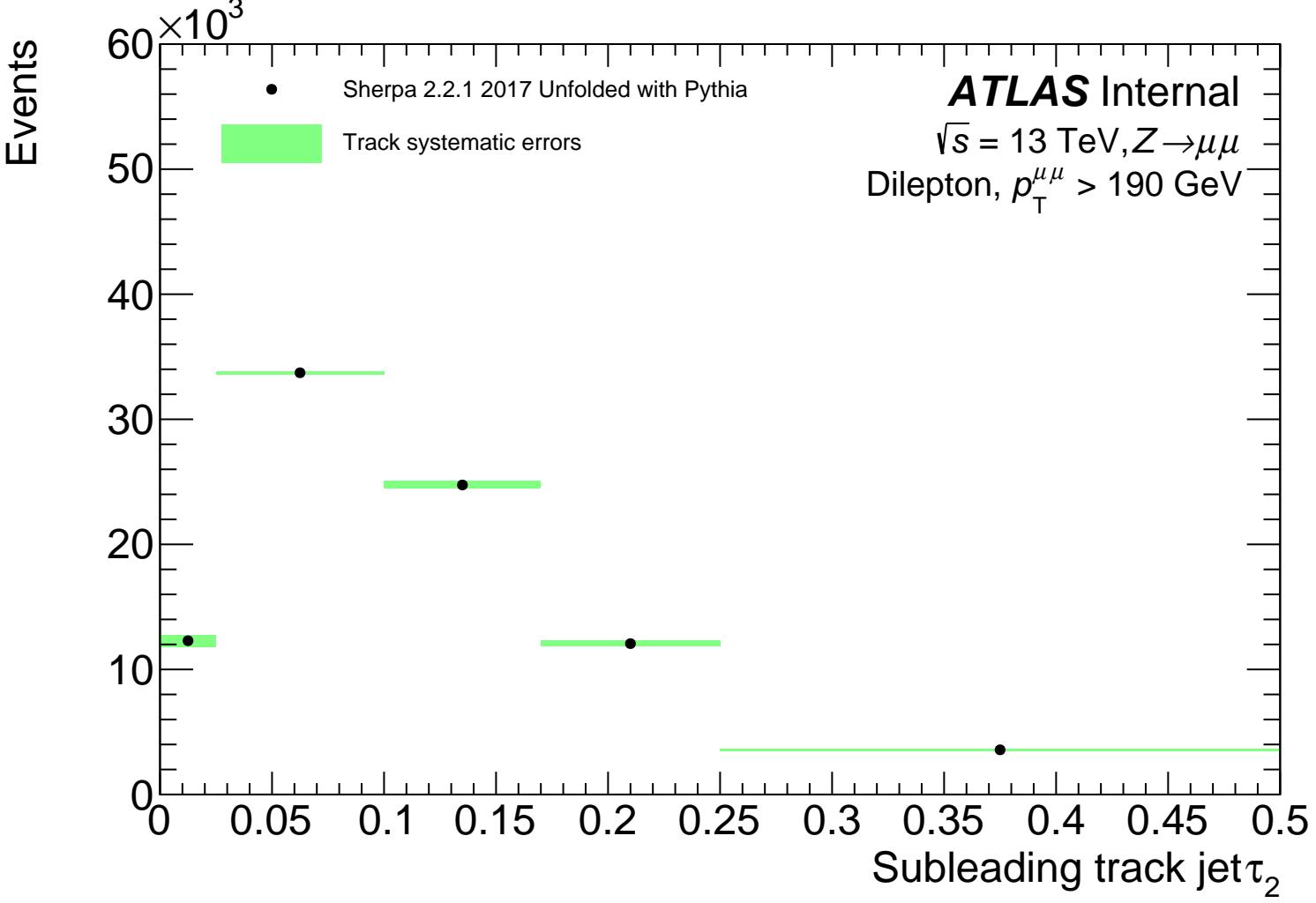


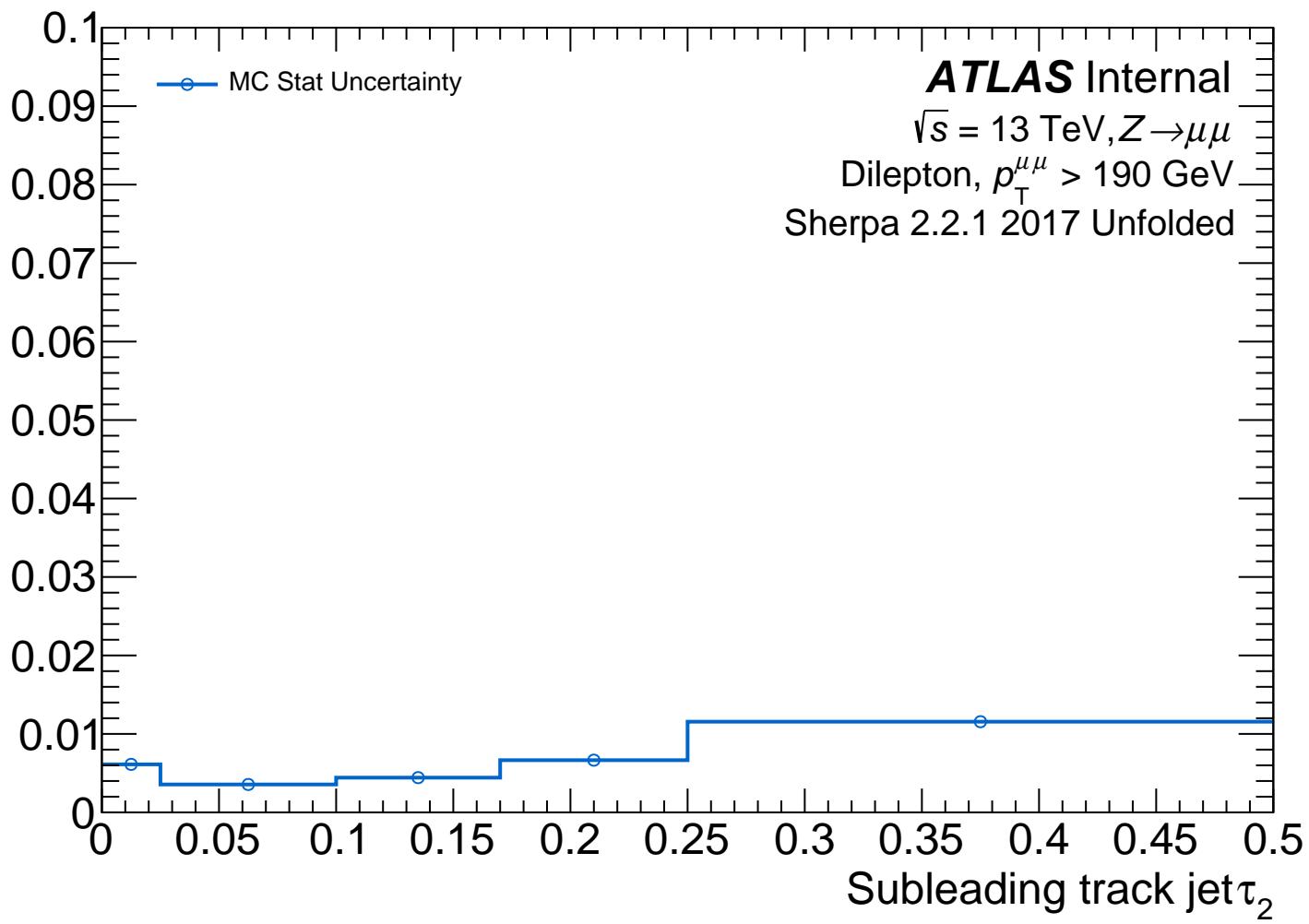


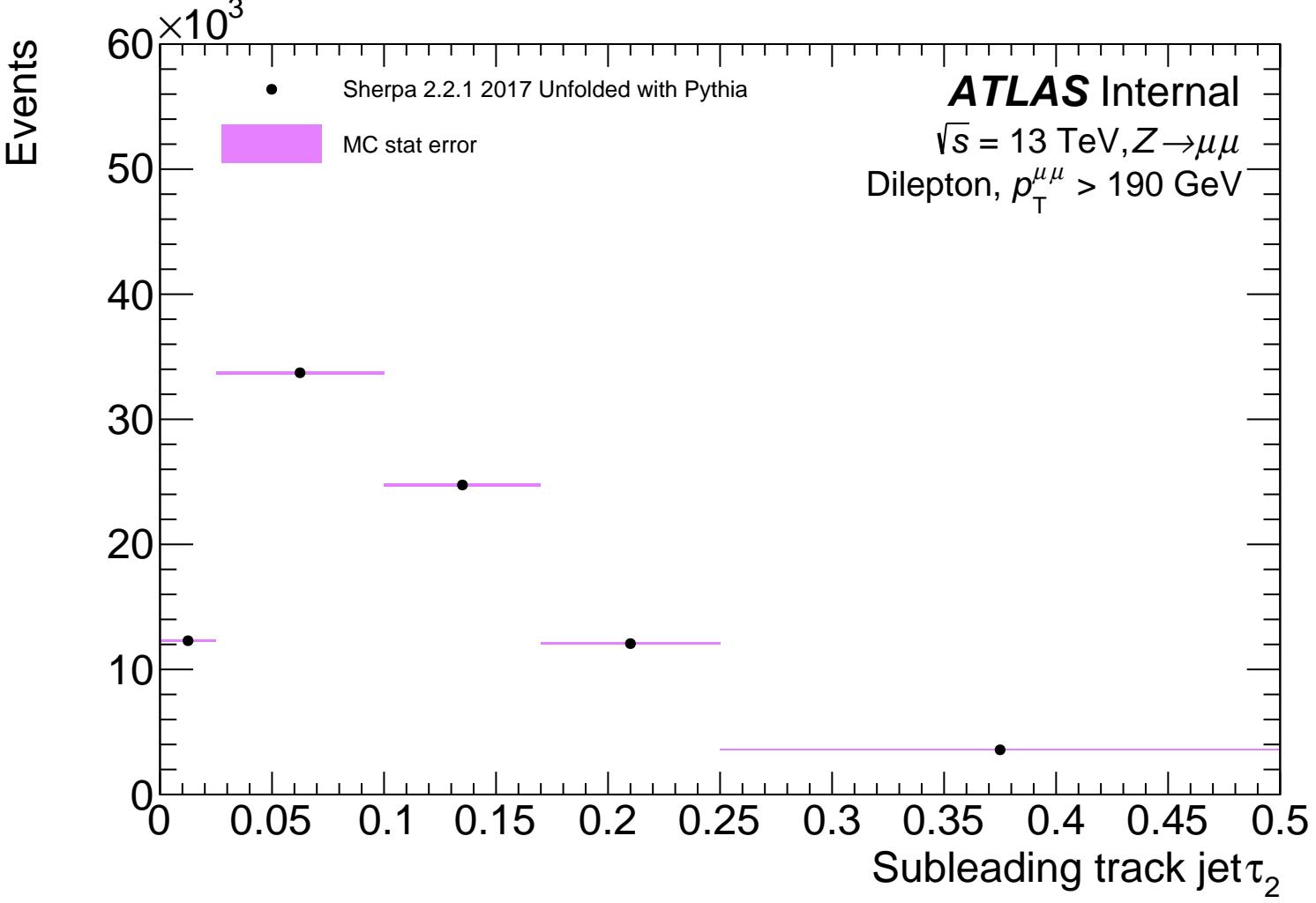


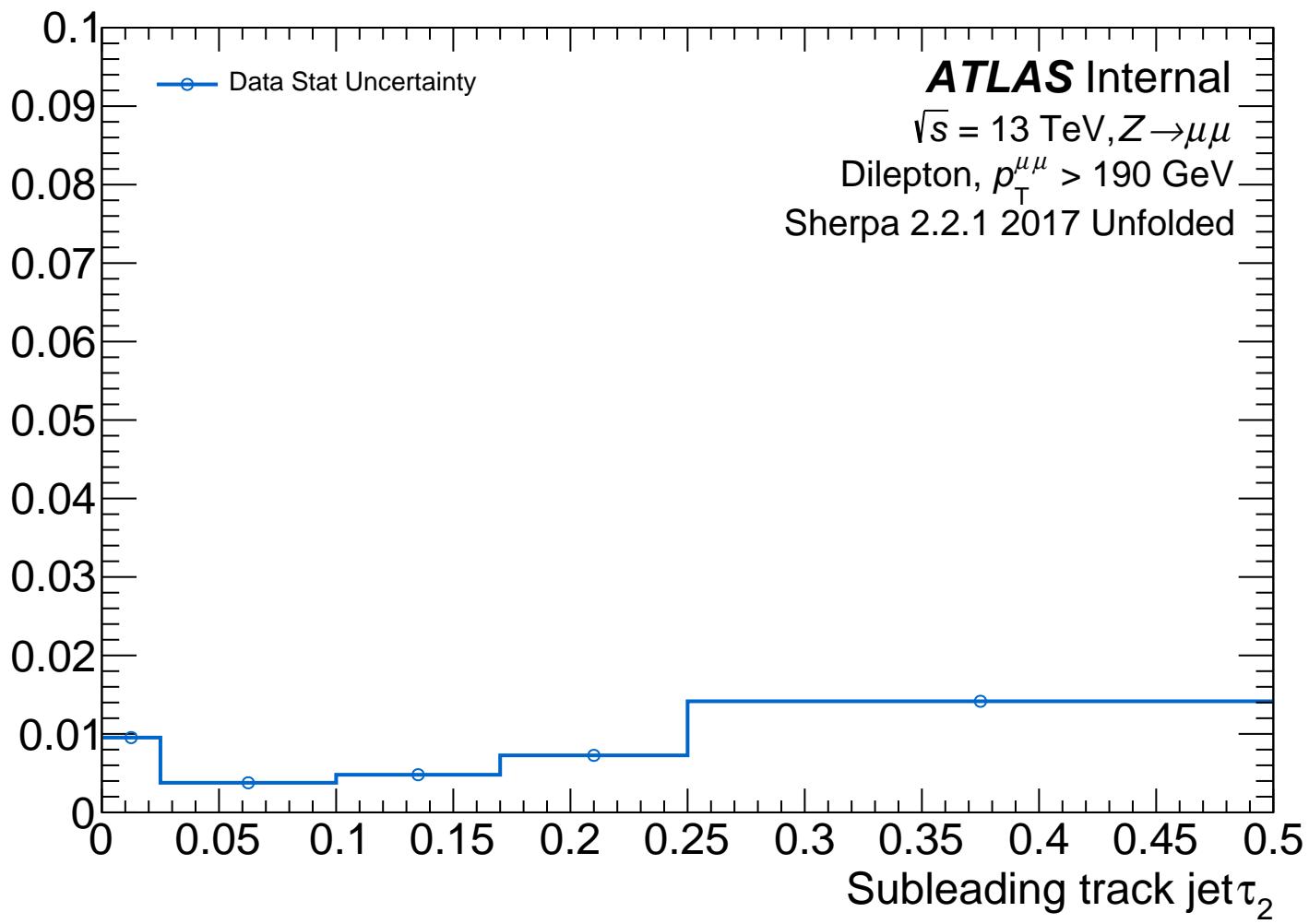


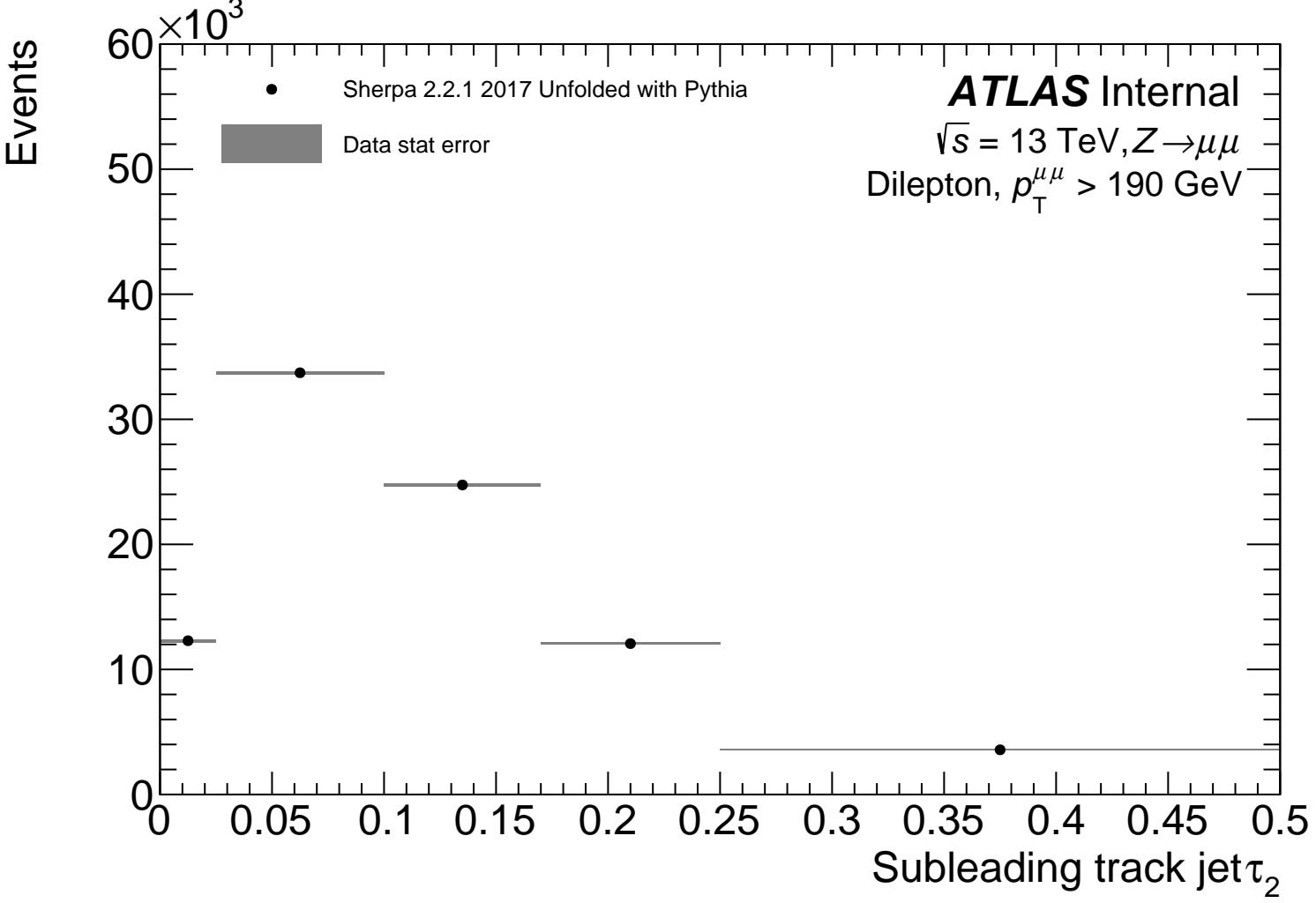


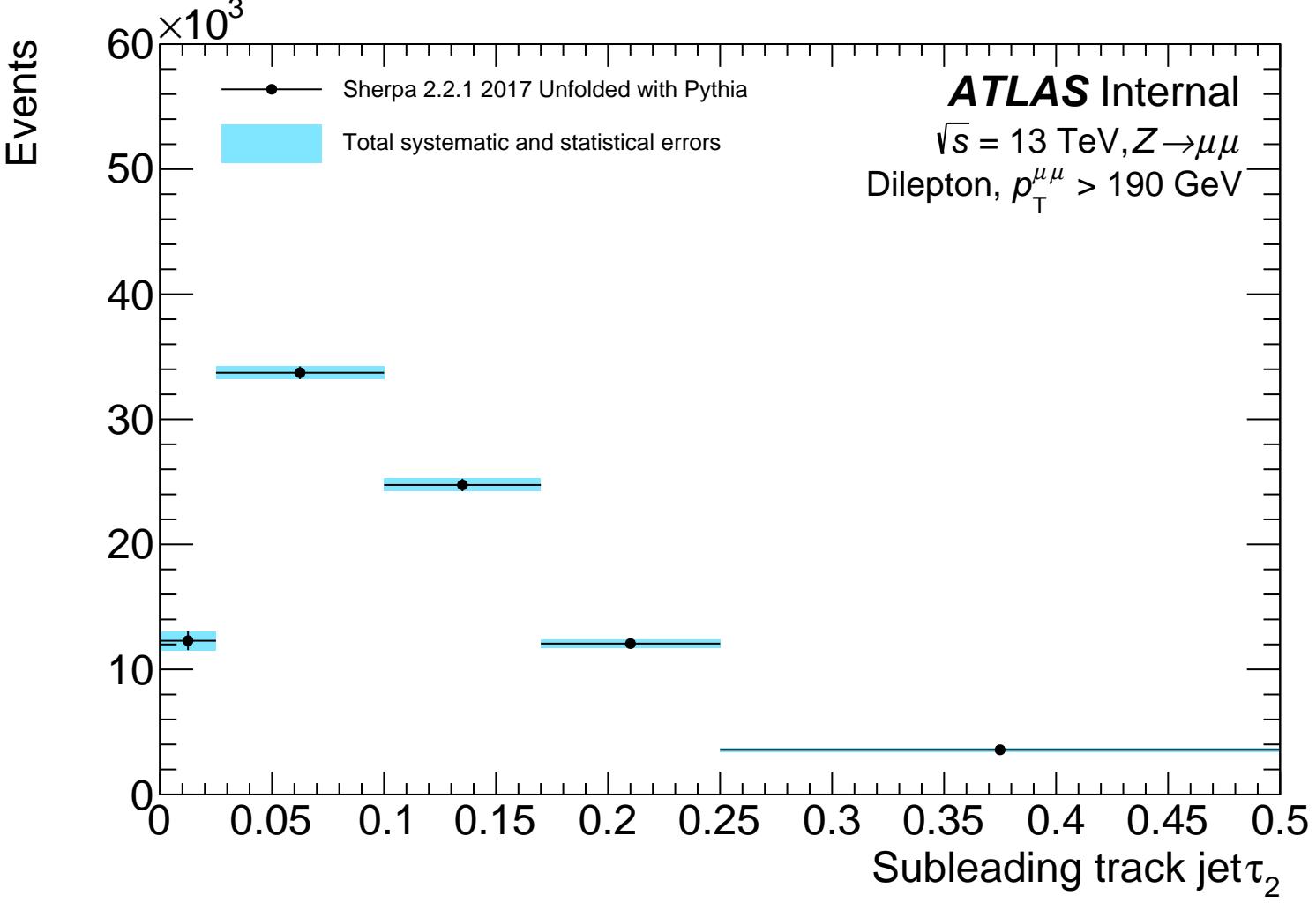


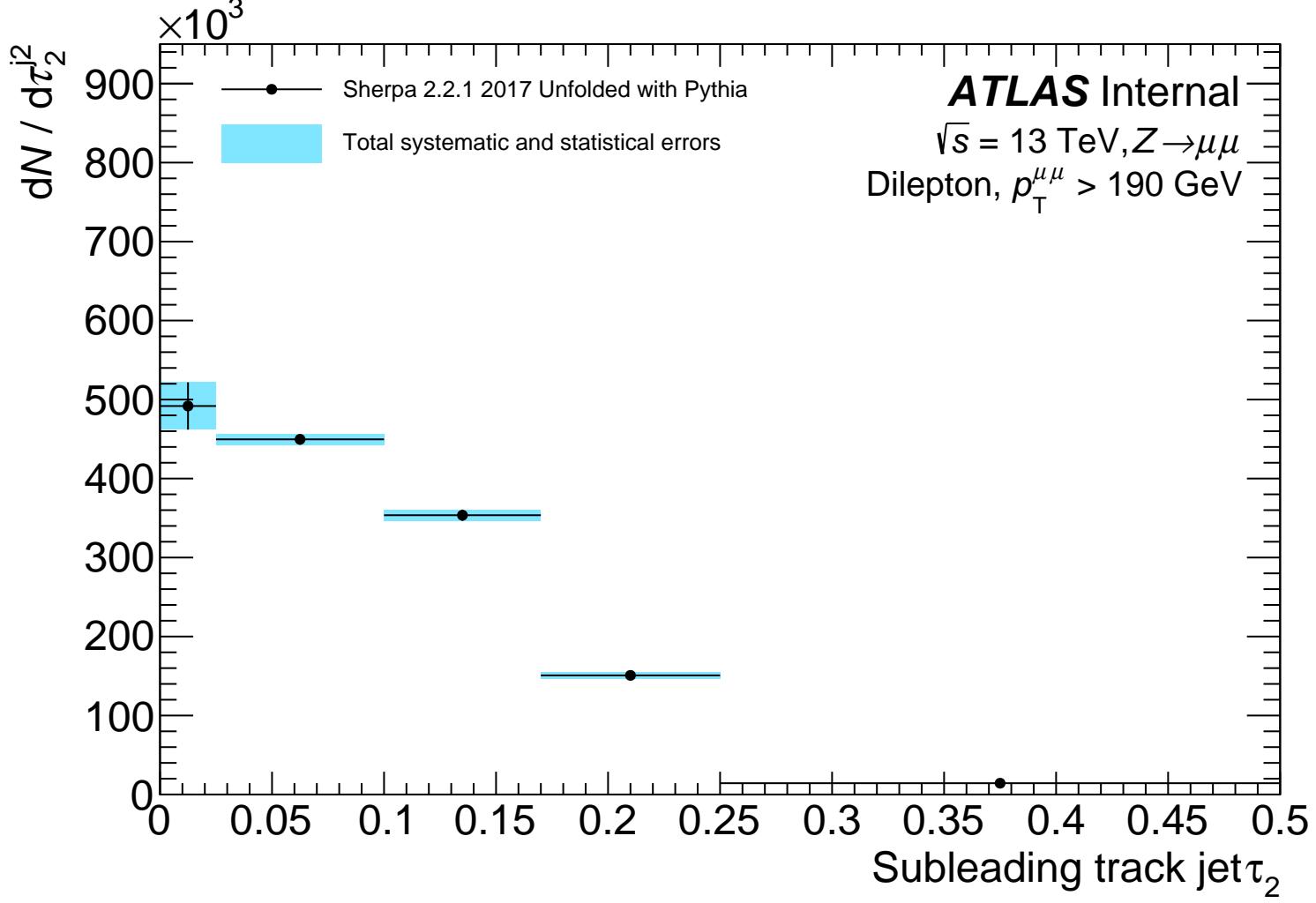










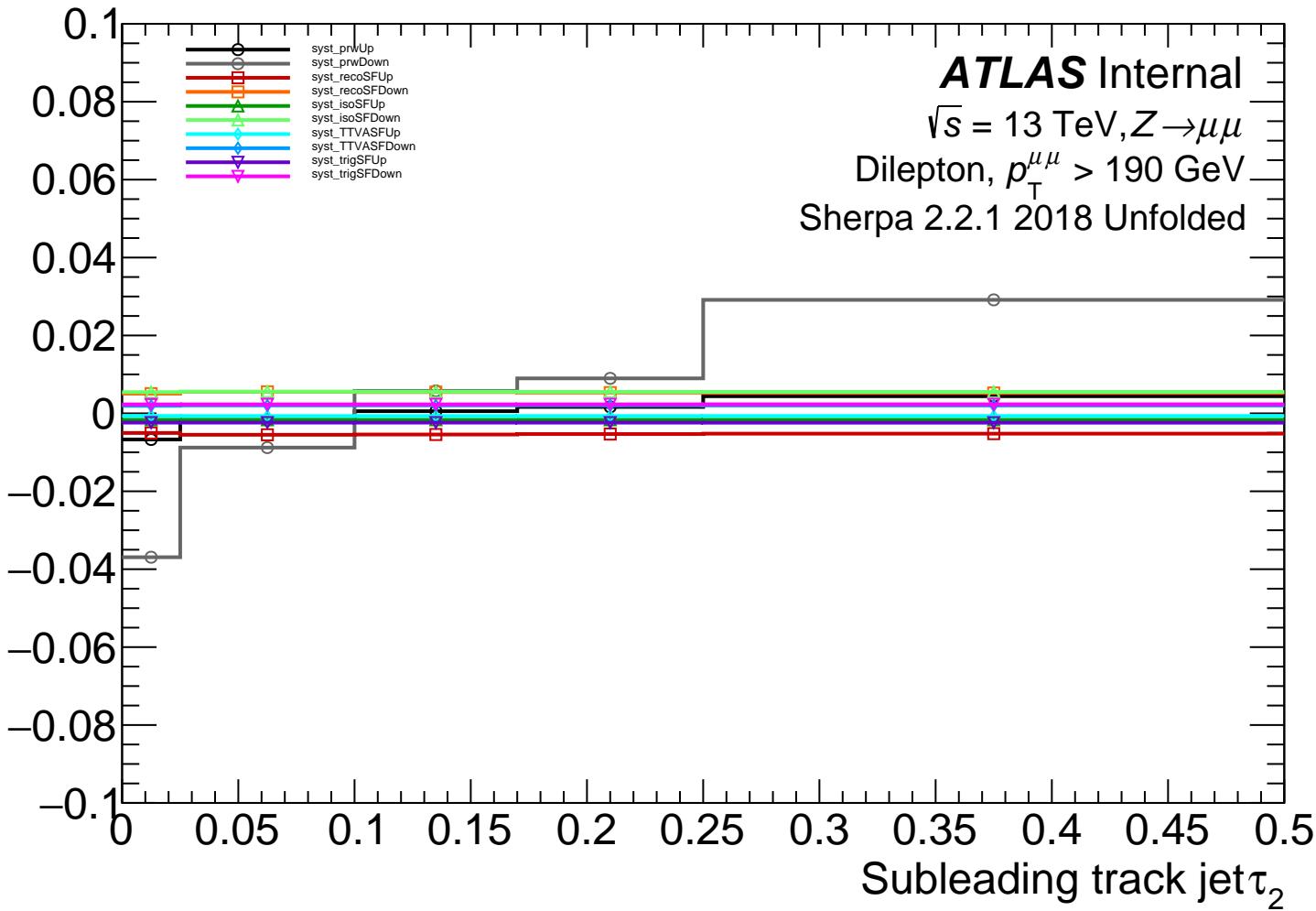


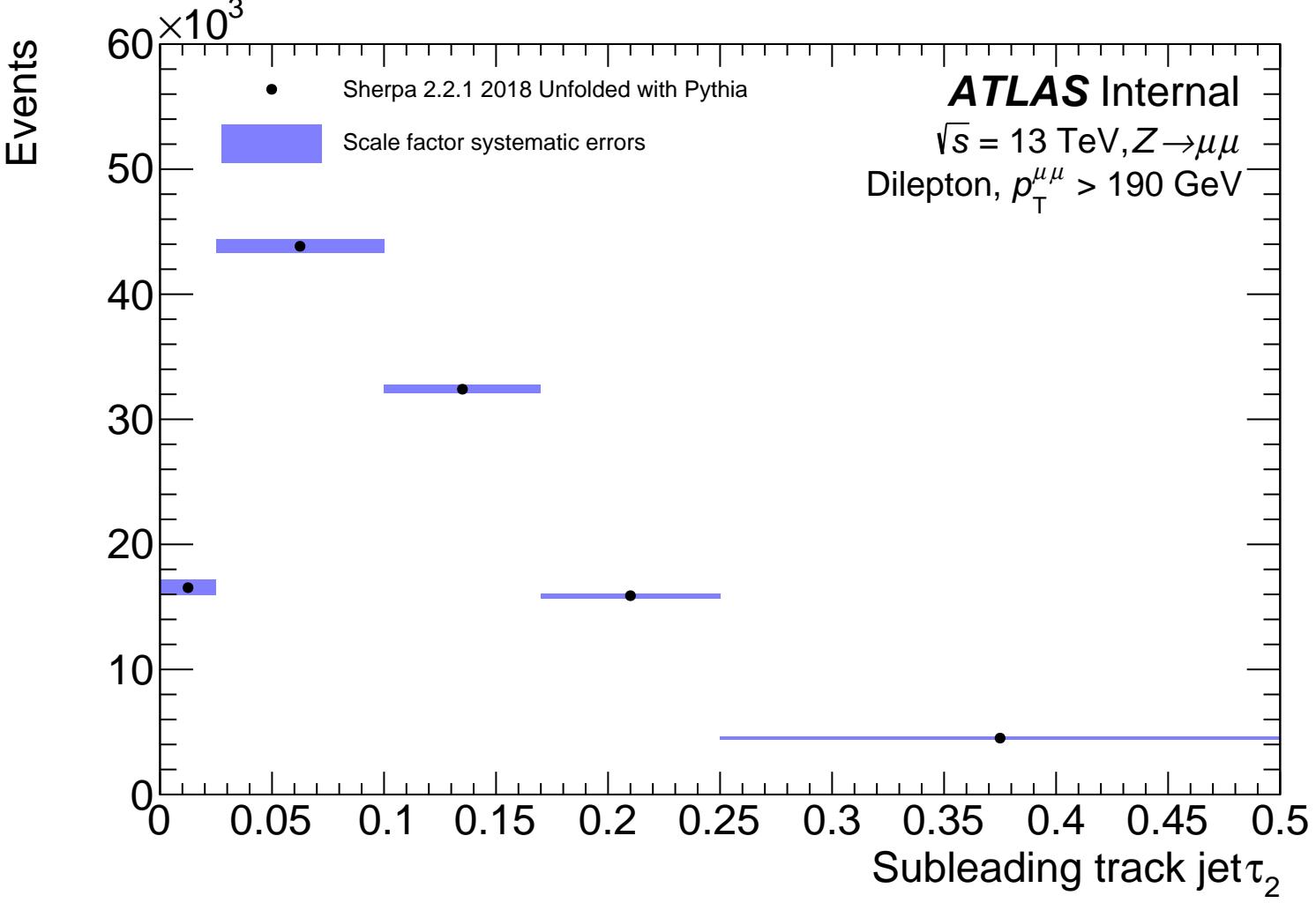
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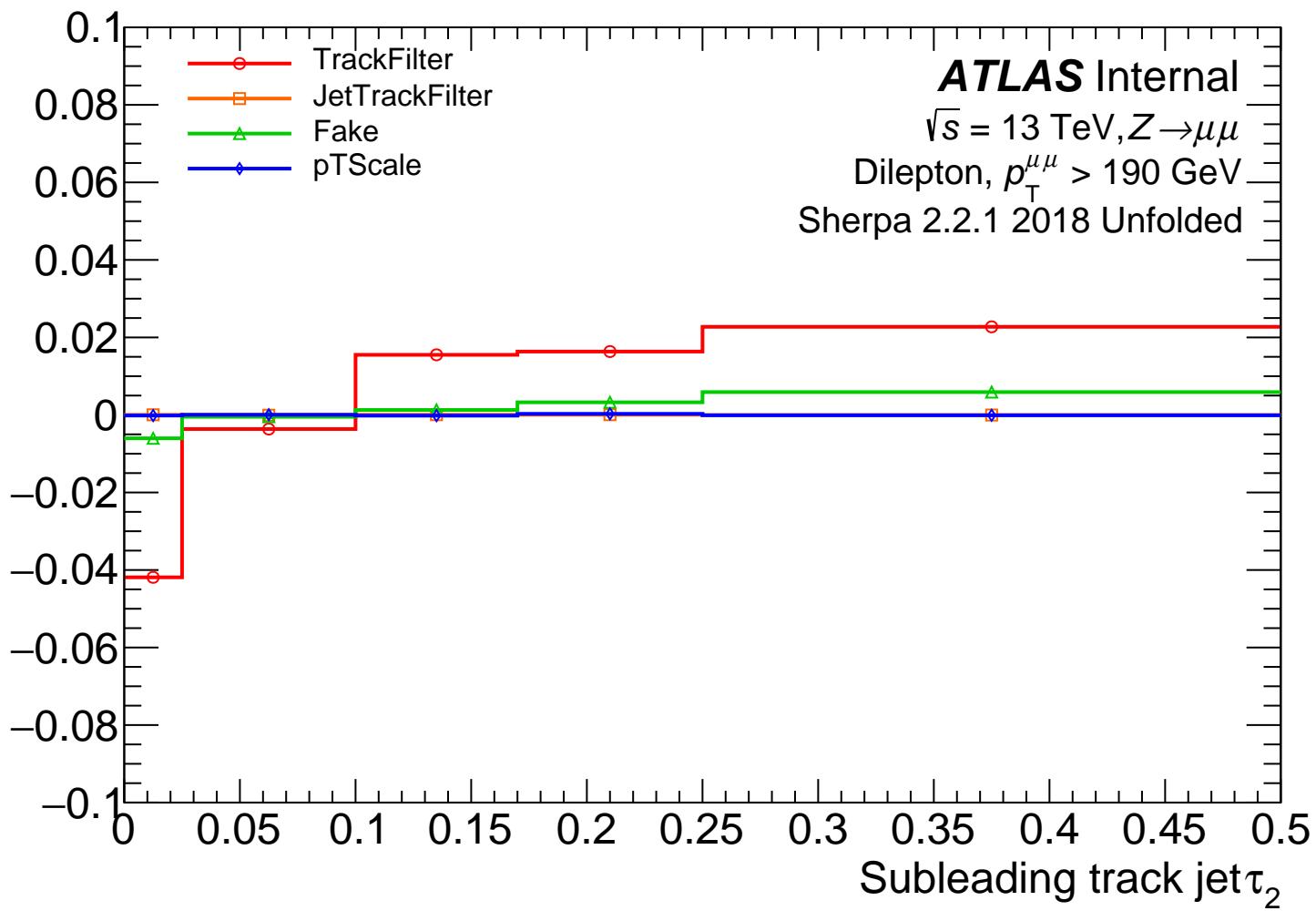
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

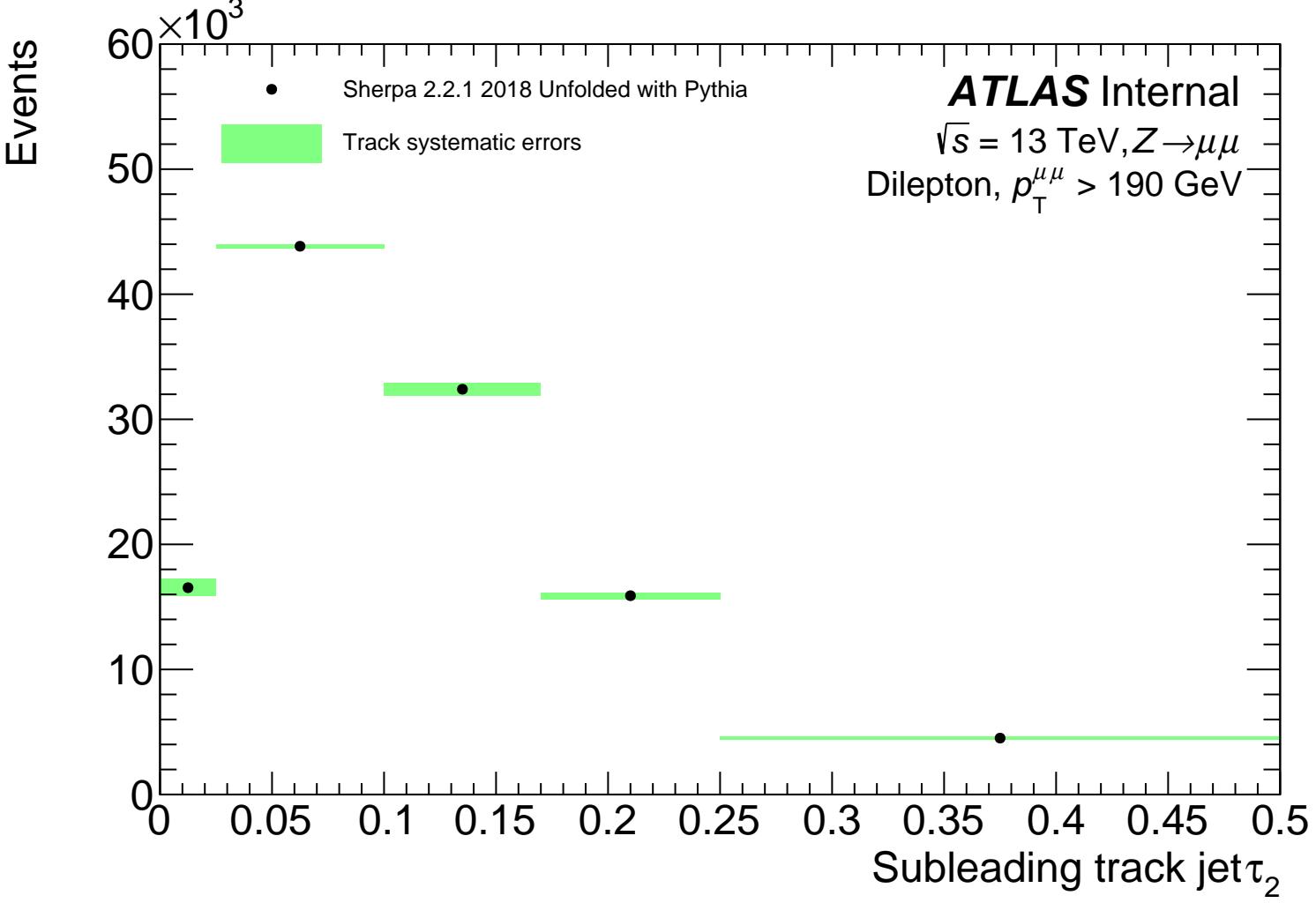
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

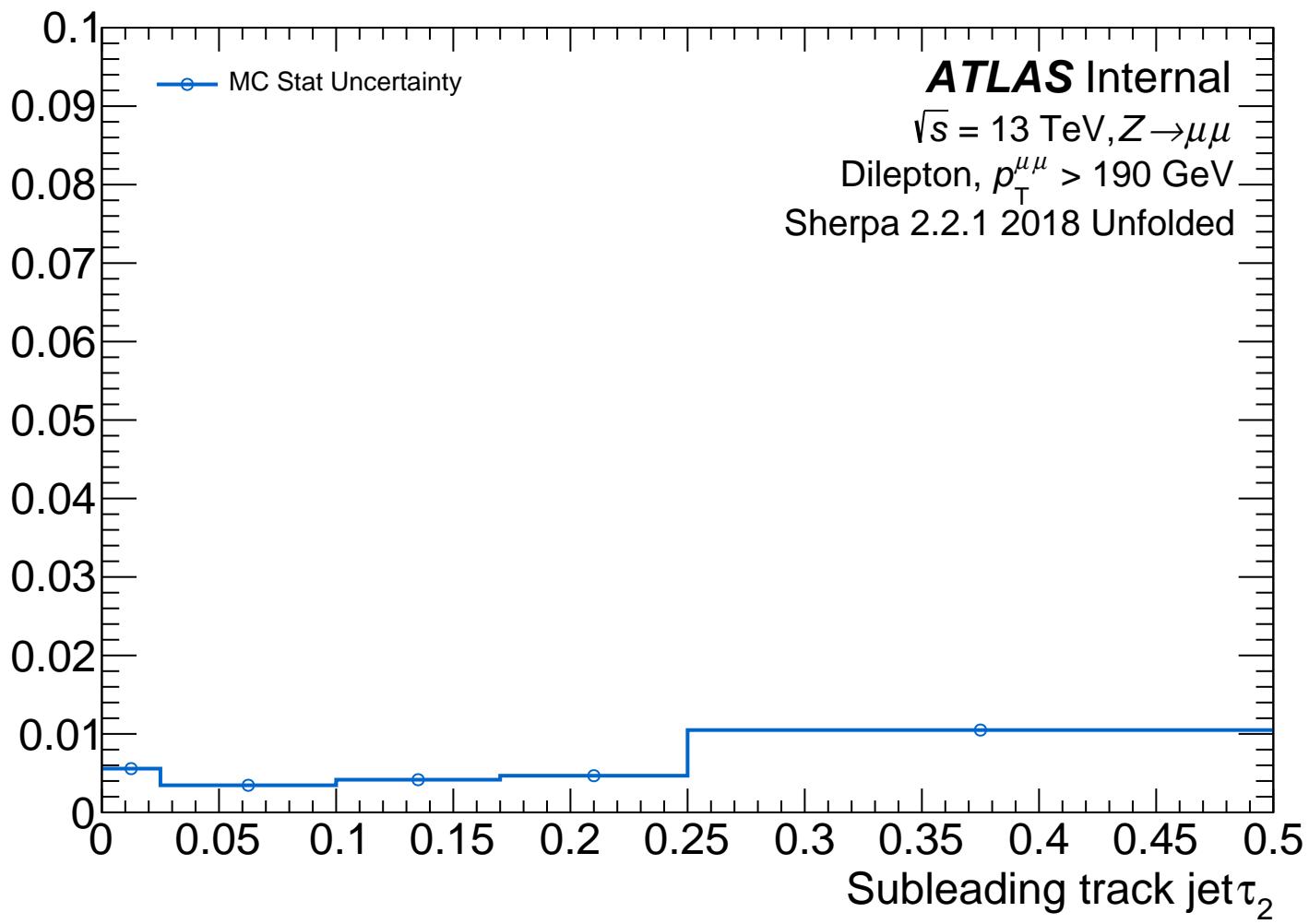
Sherpa 2.2.1 2018 Unfolded

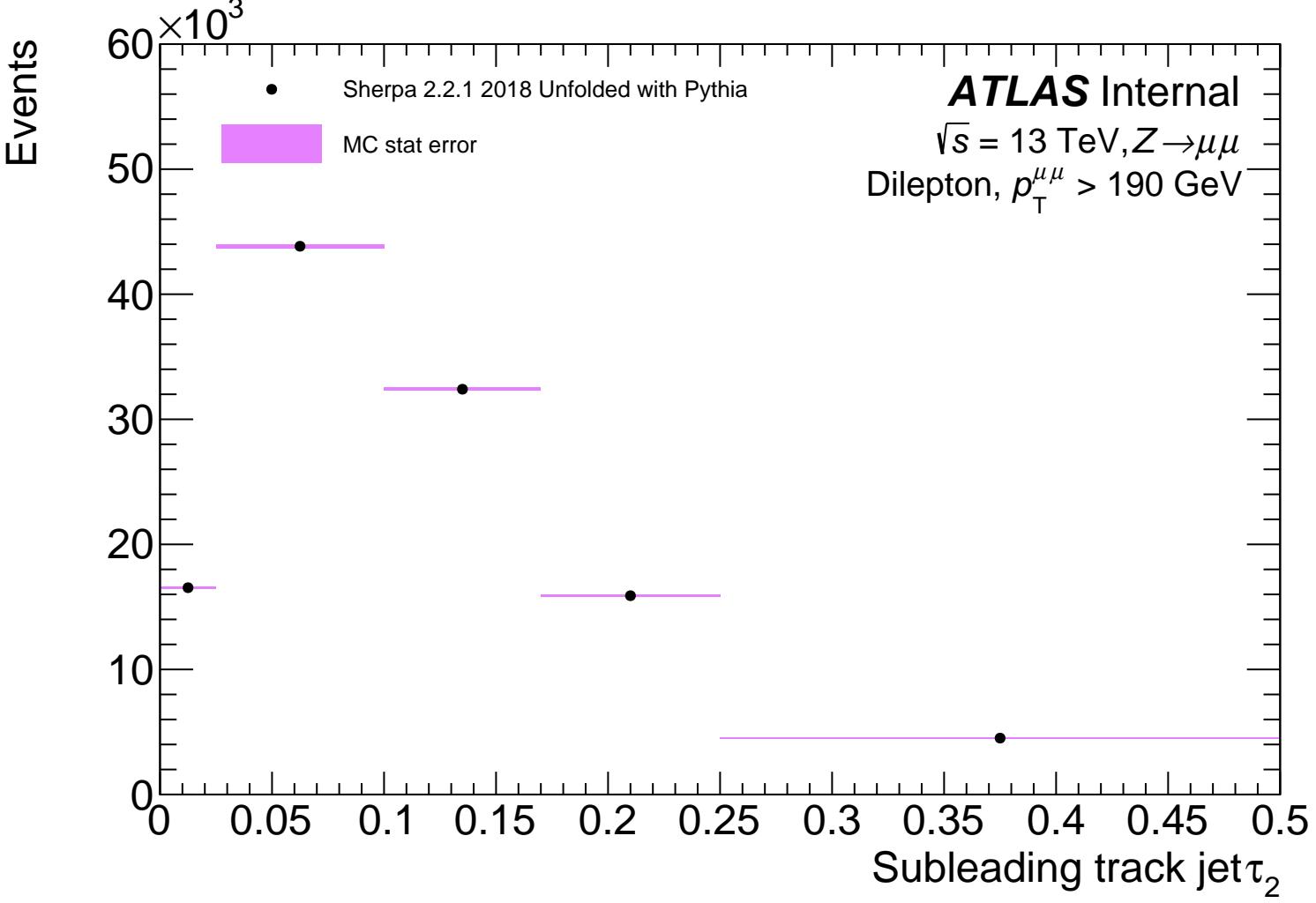


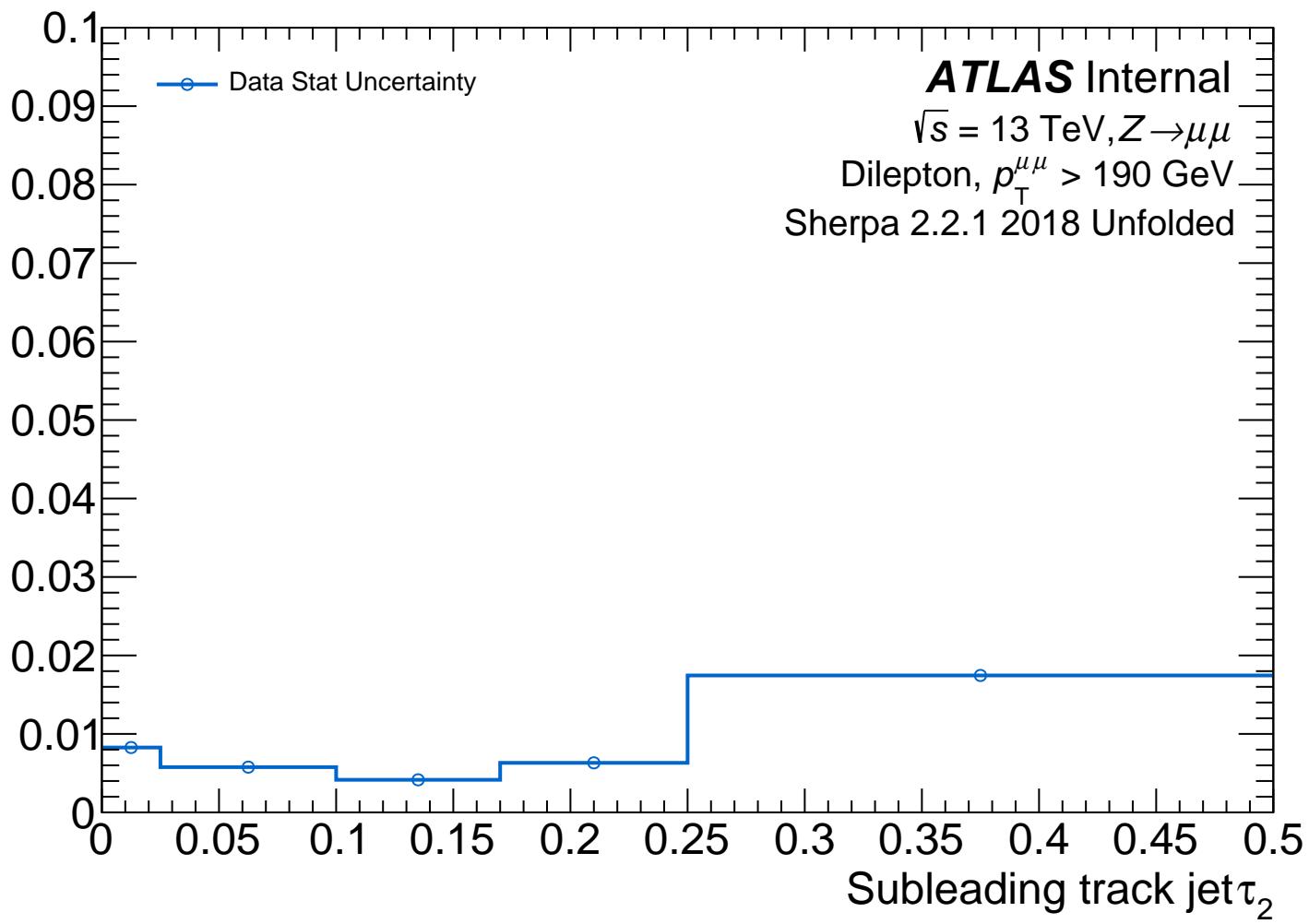


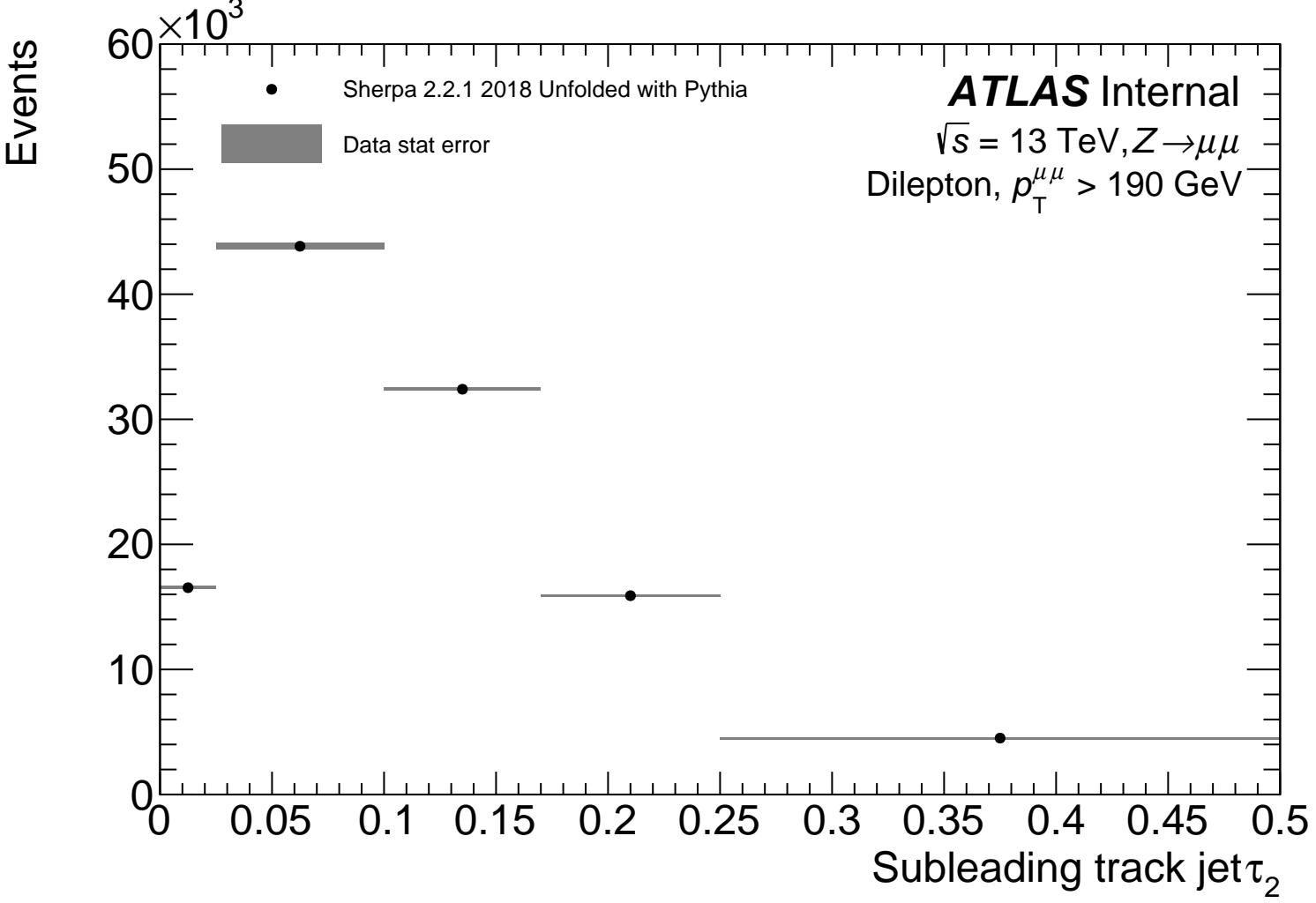


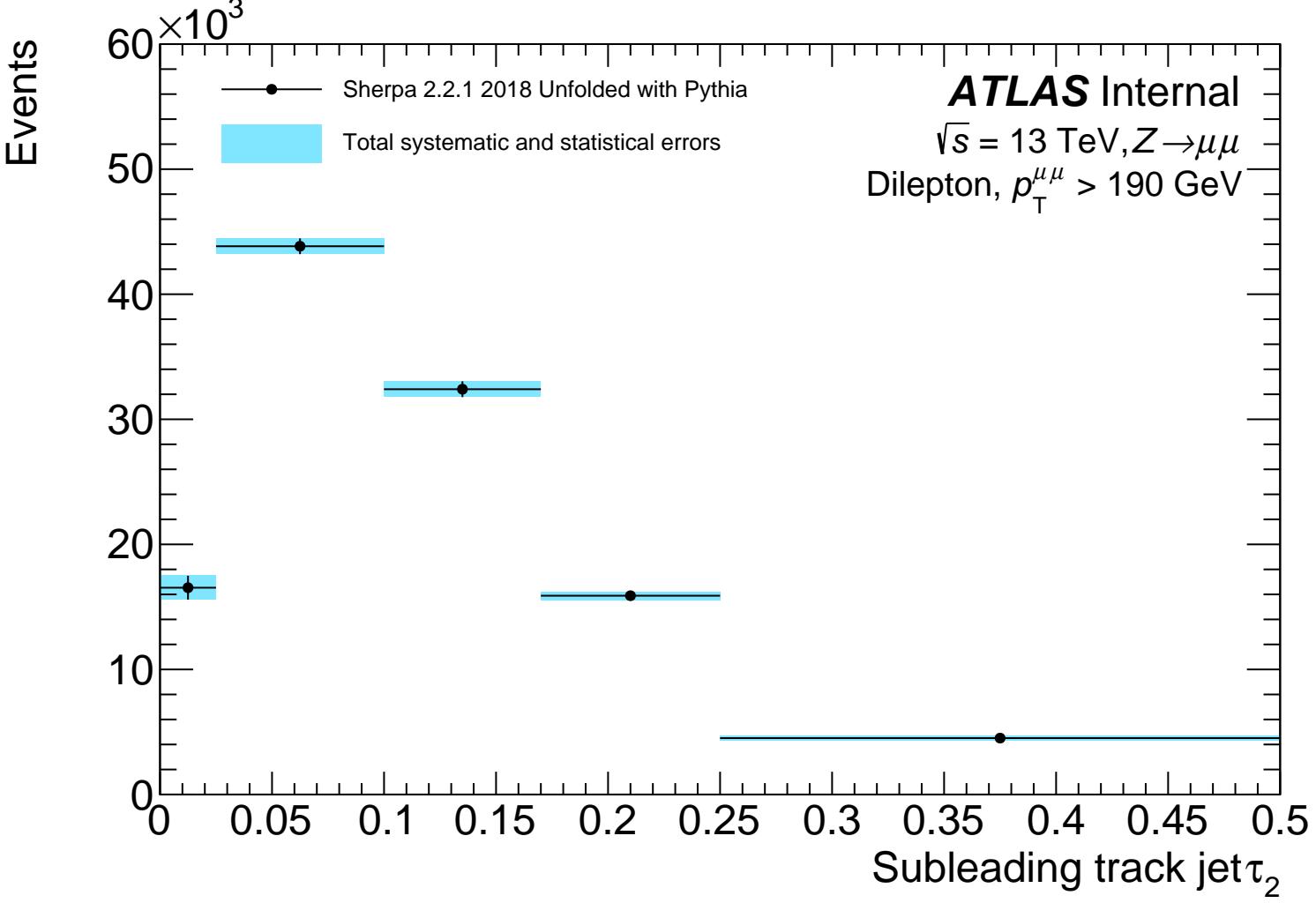


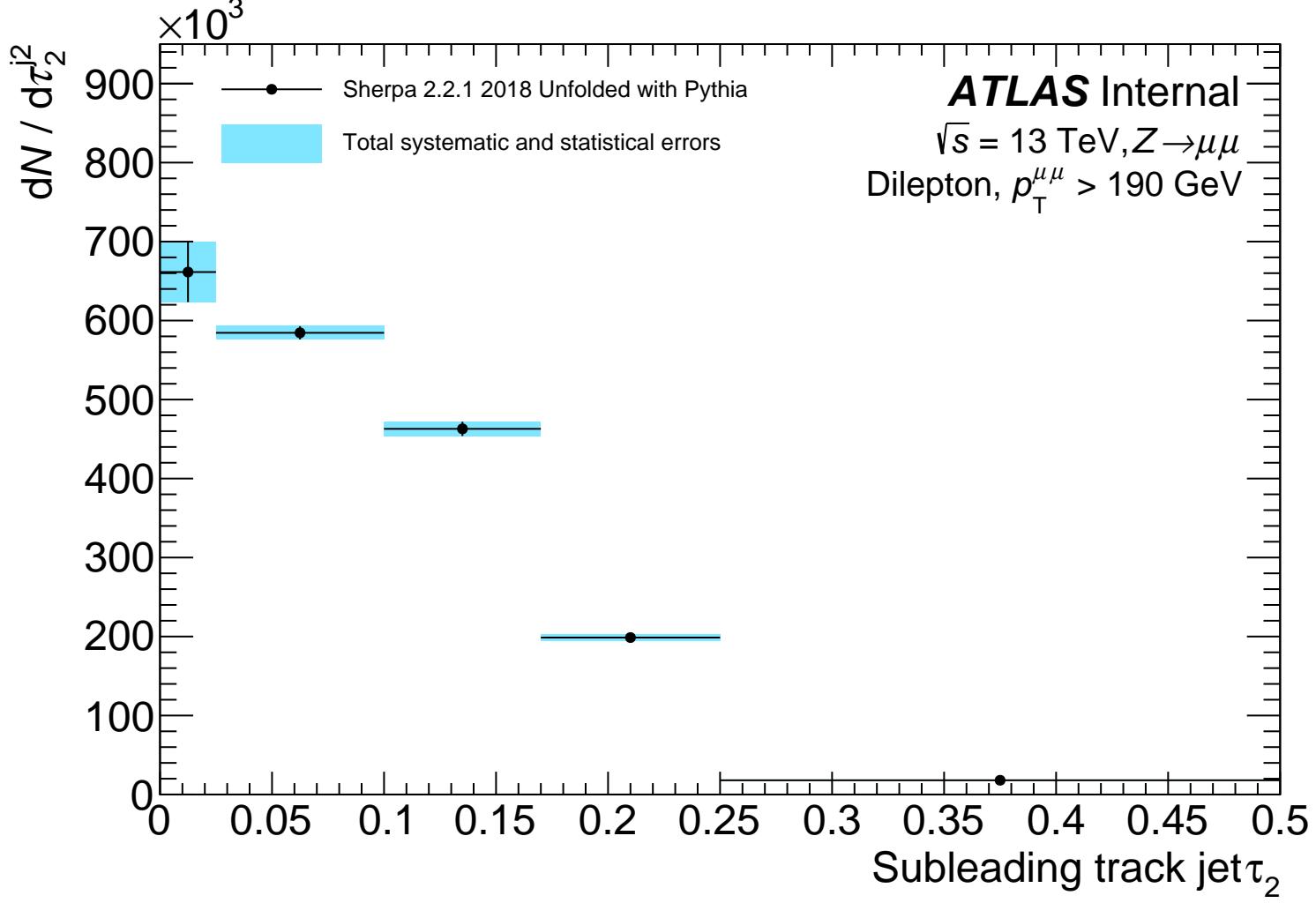


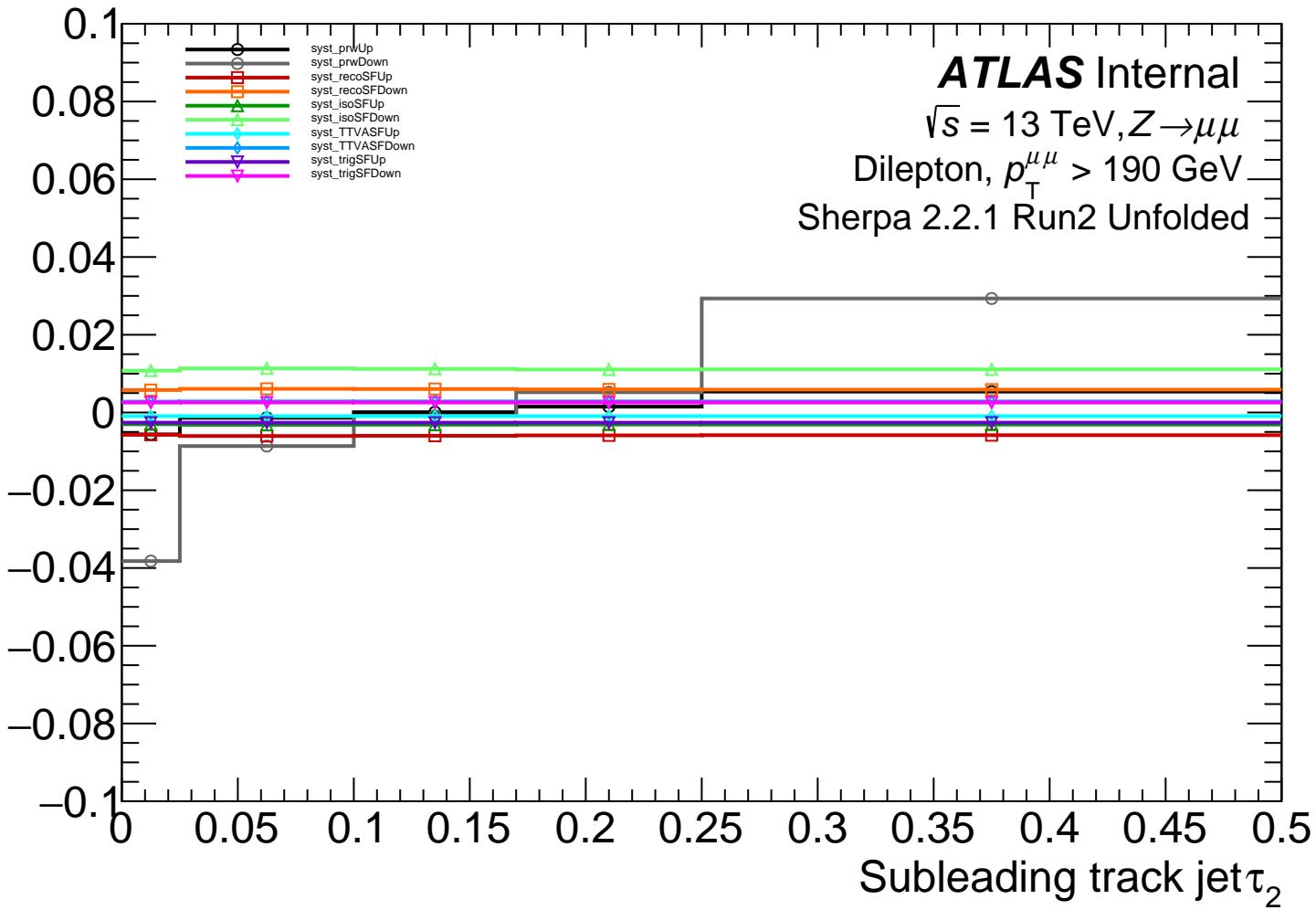


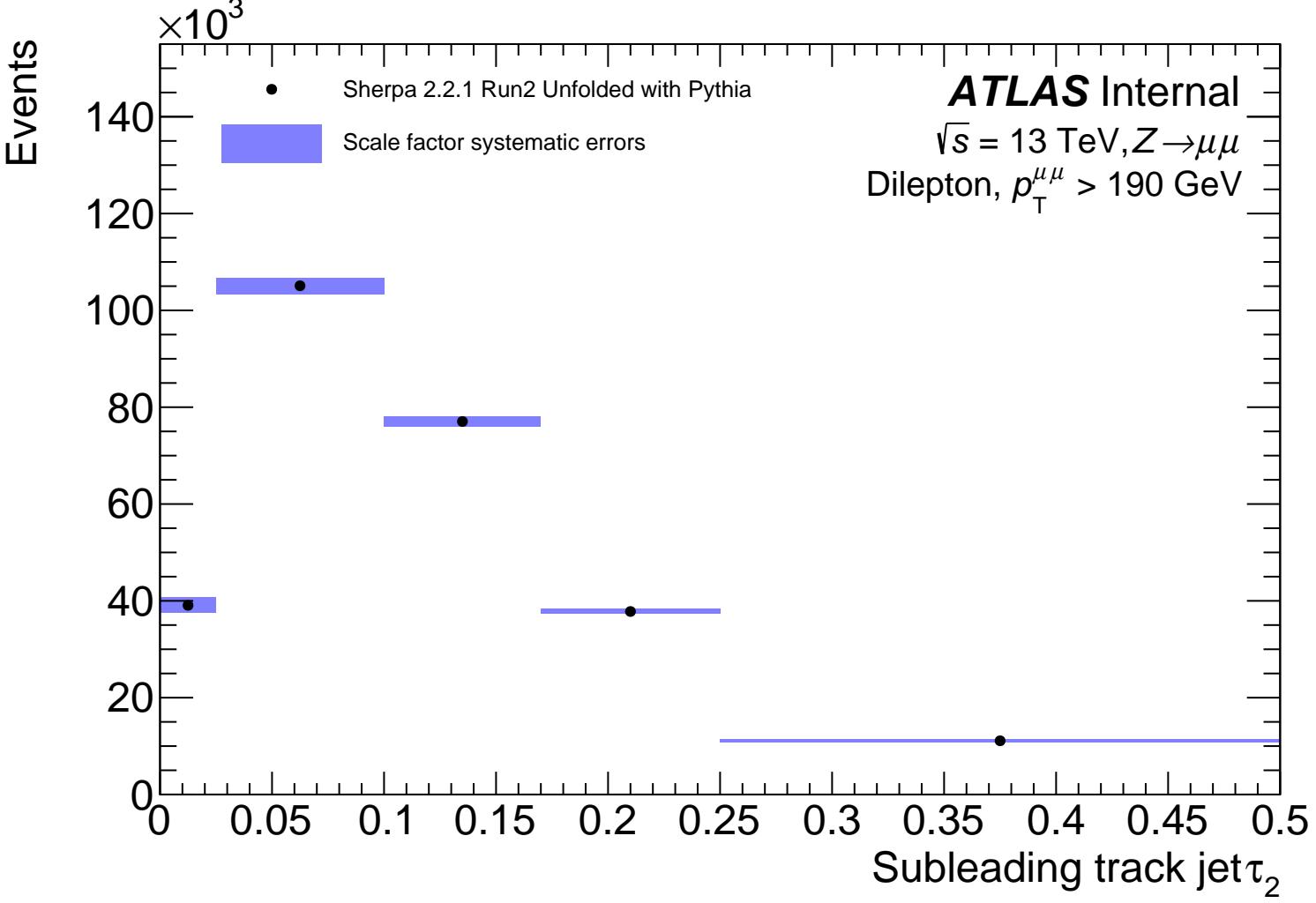


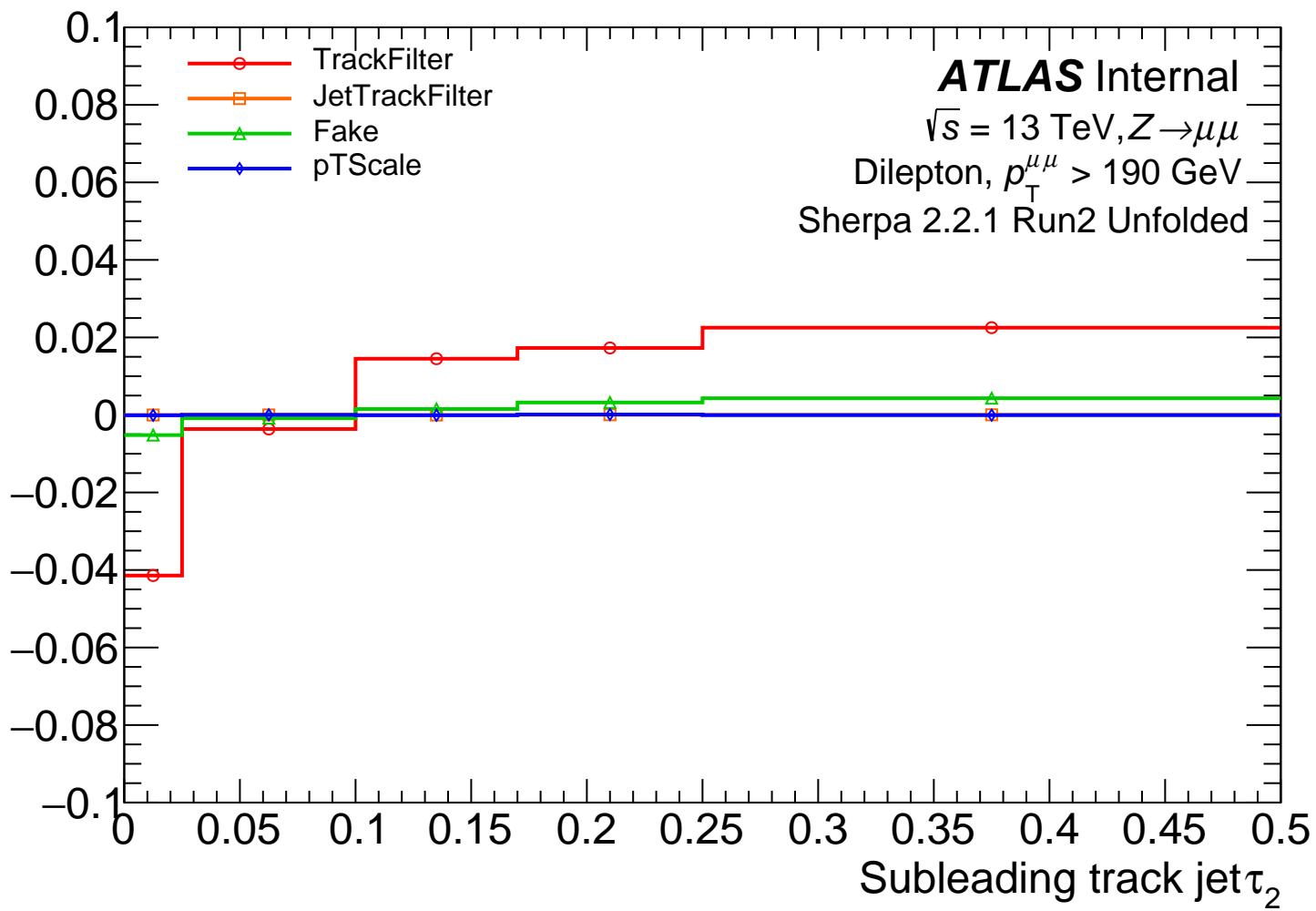


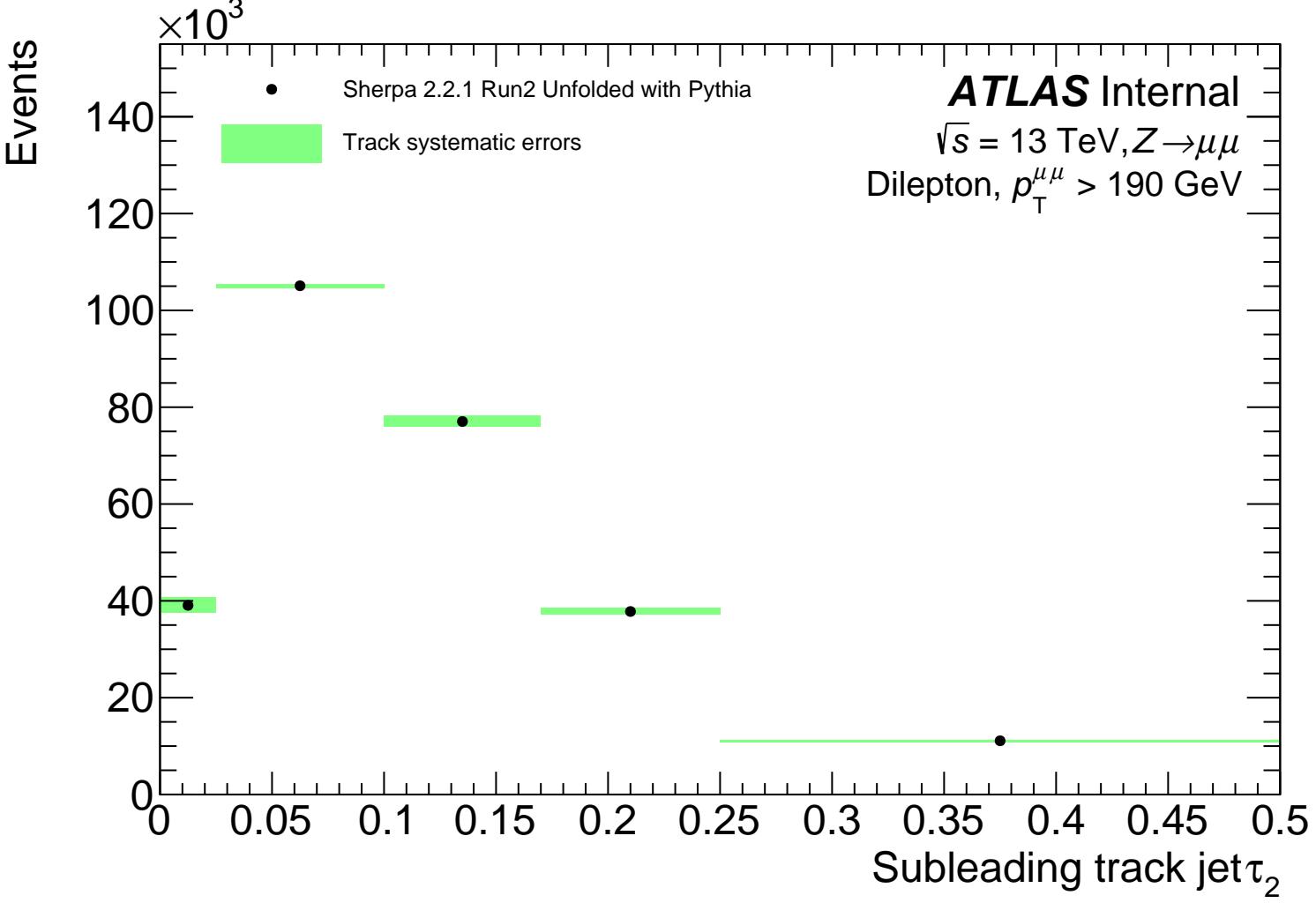


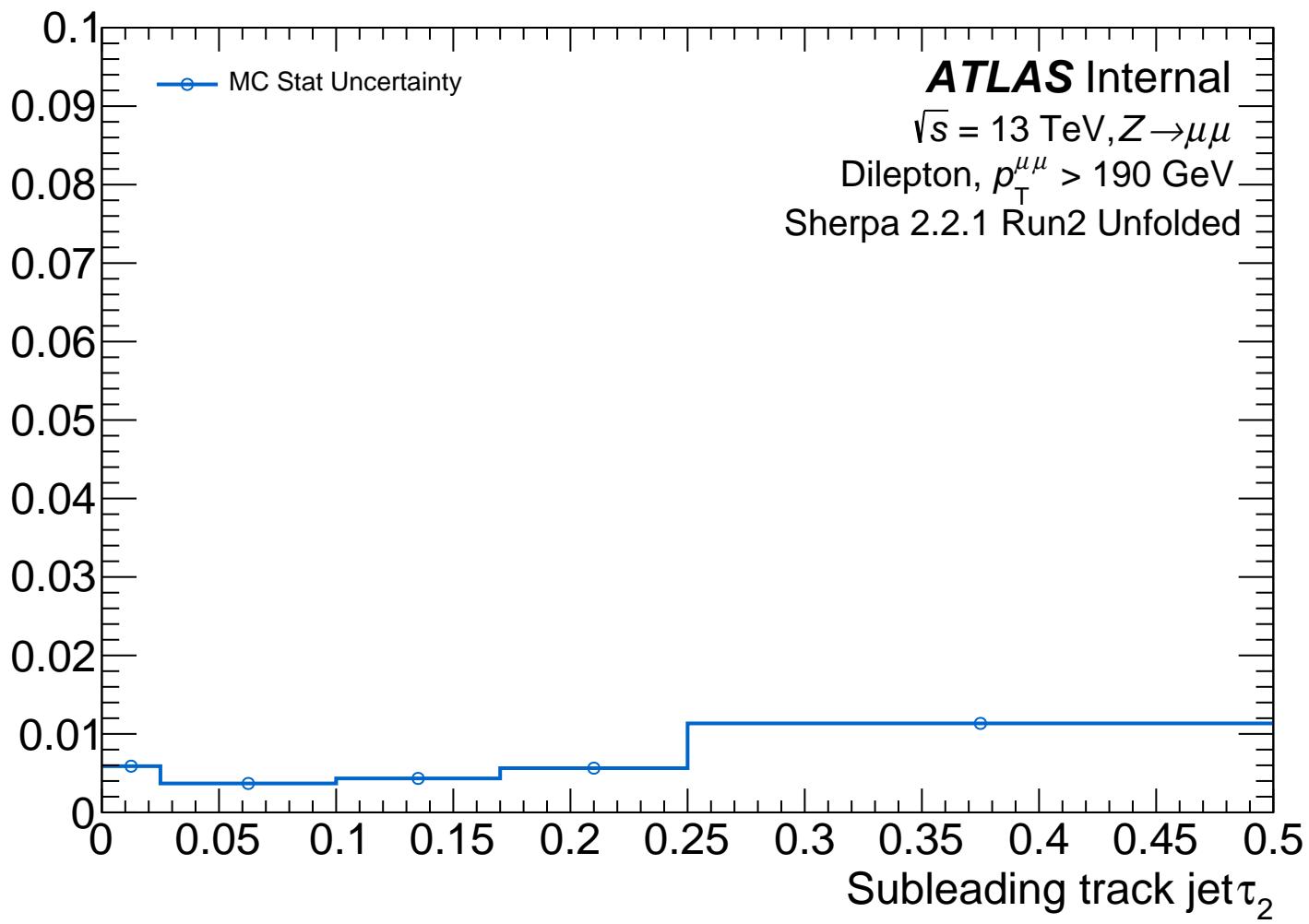


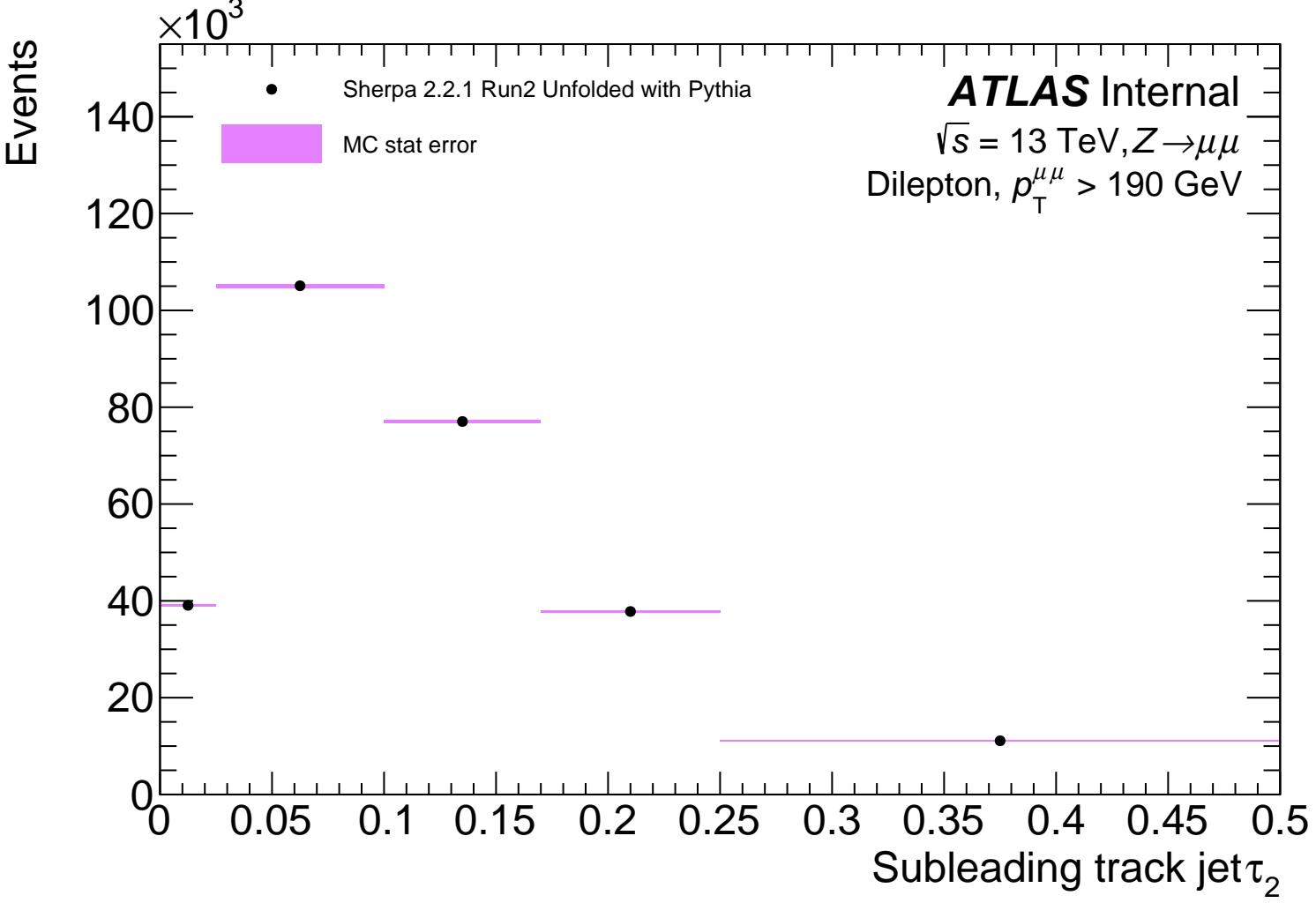


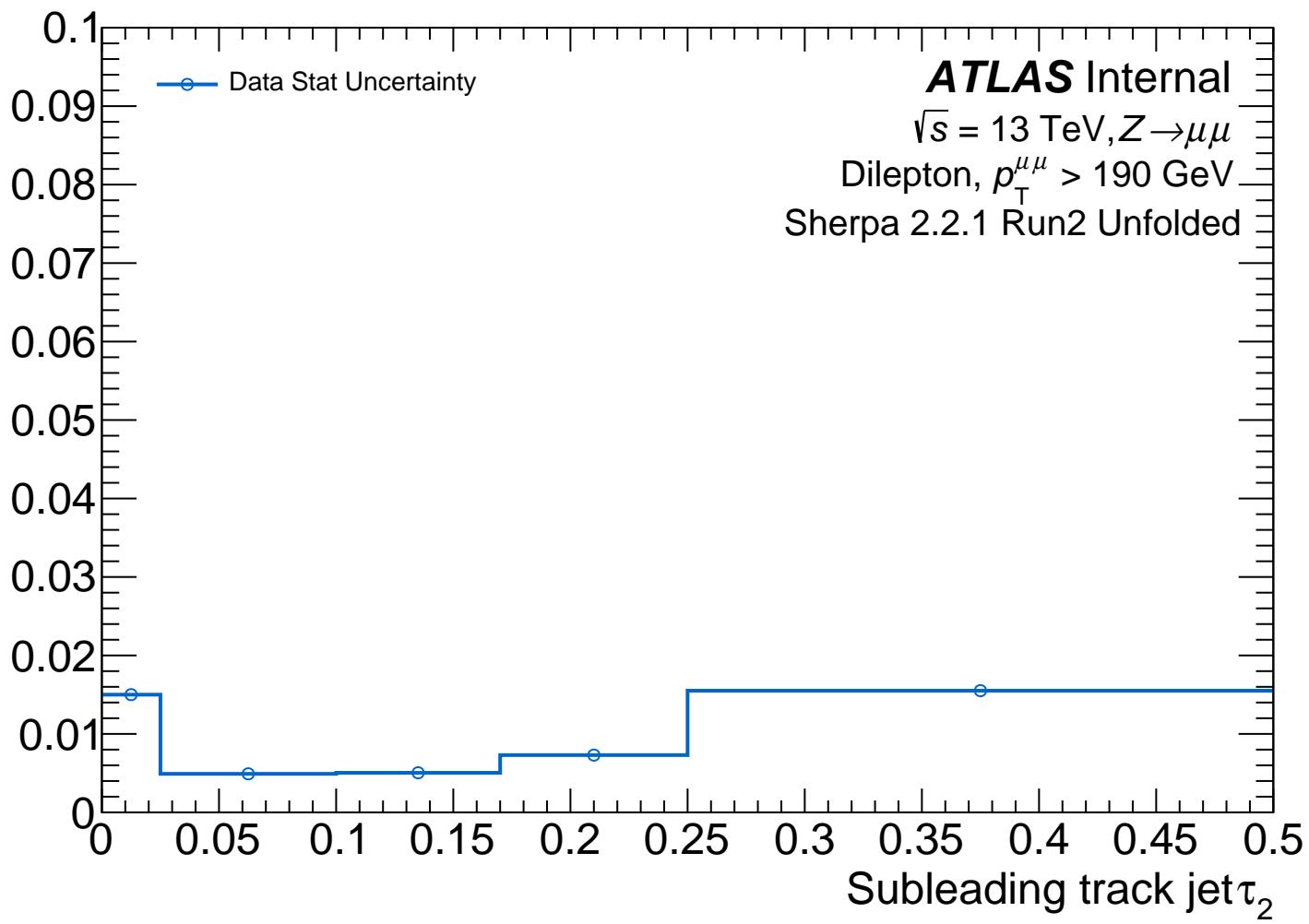


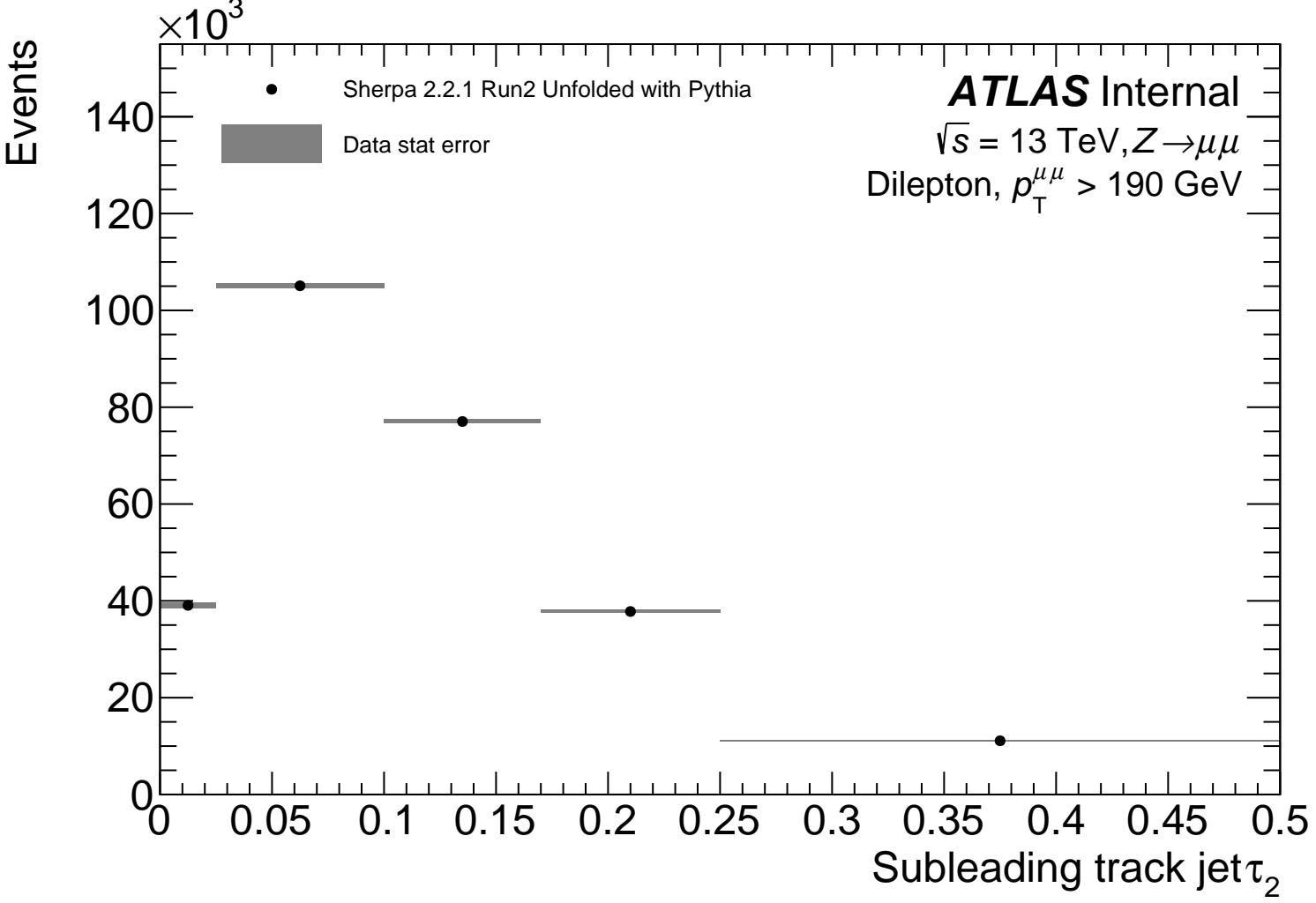


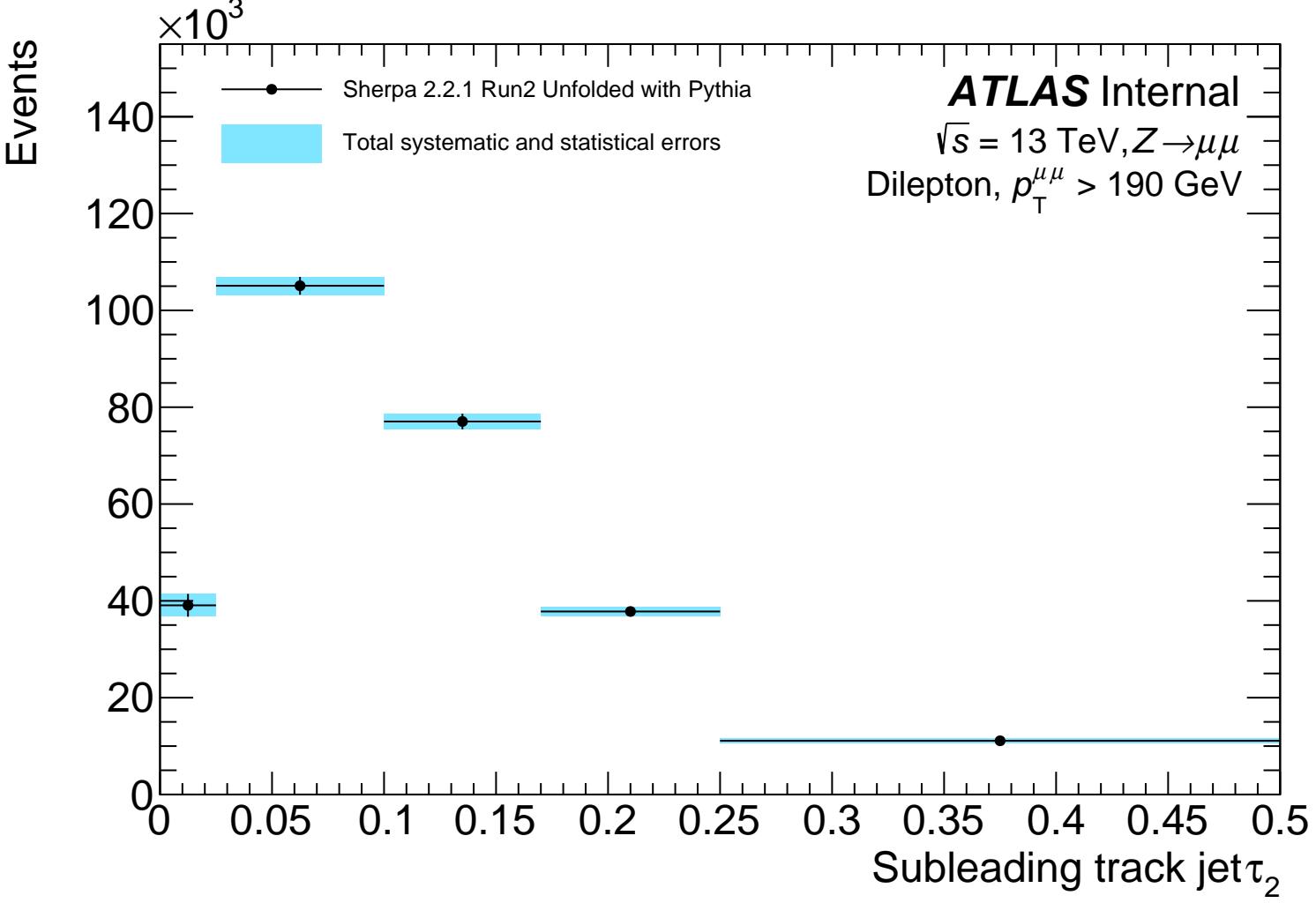


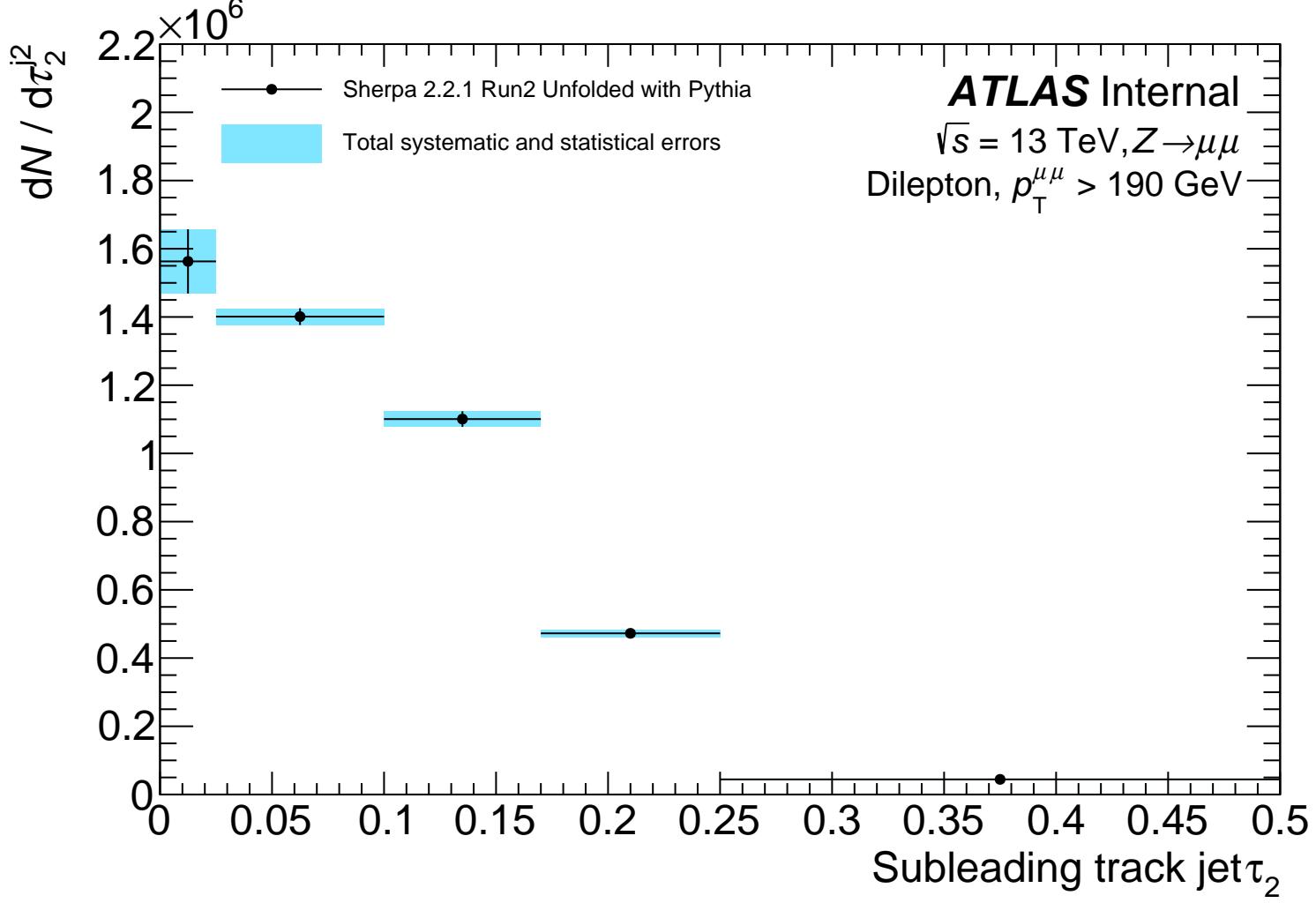


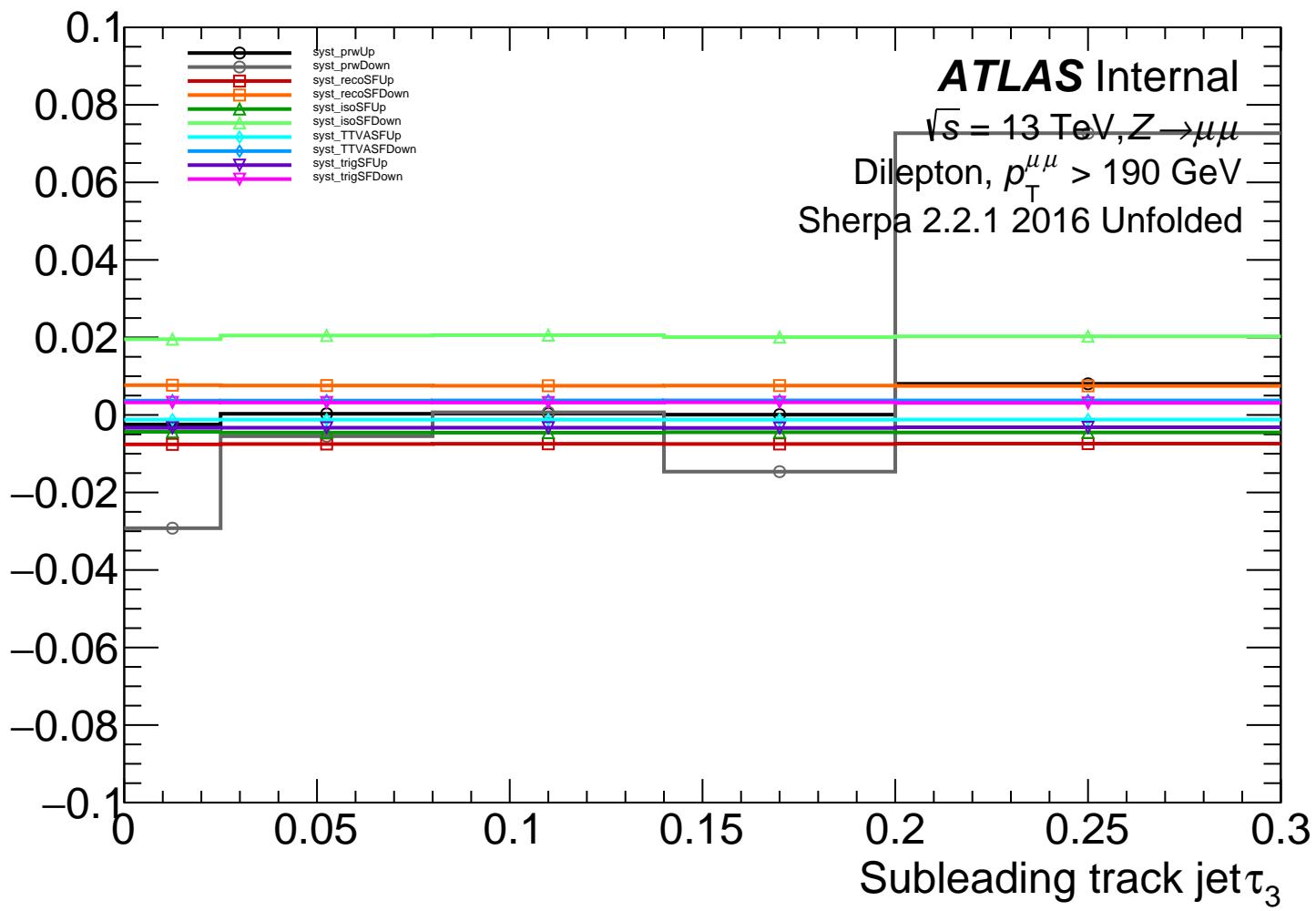


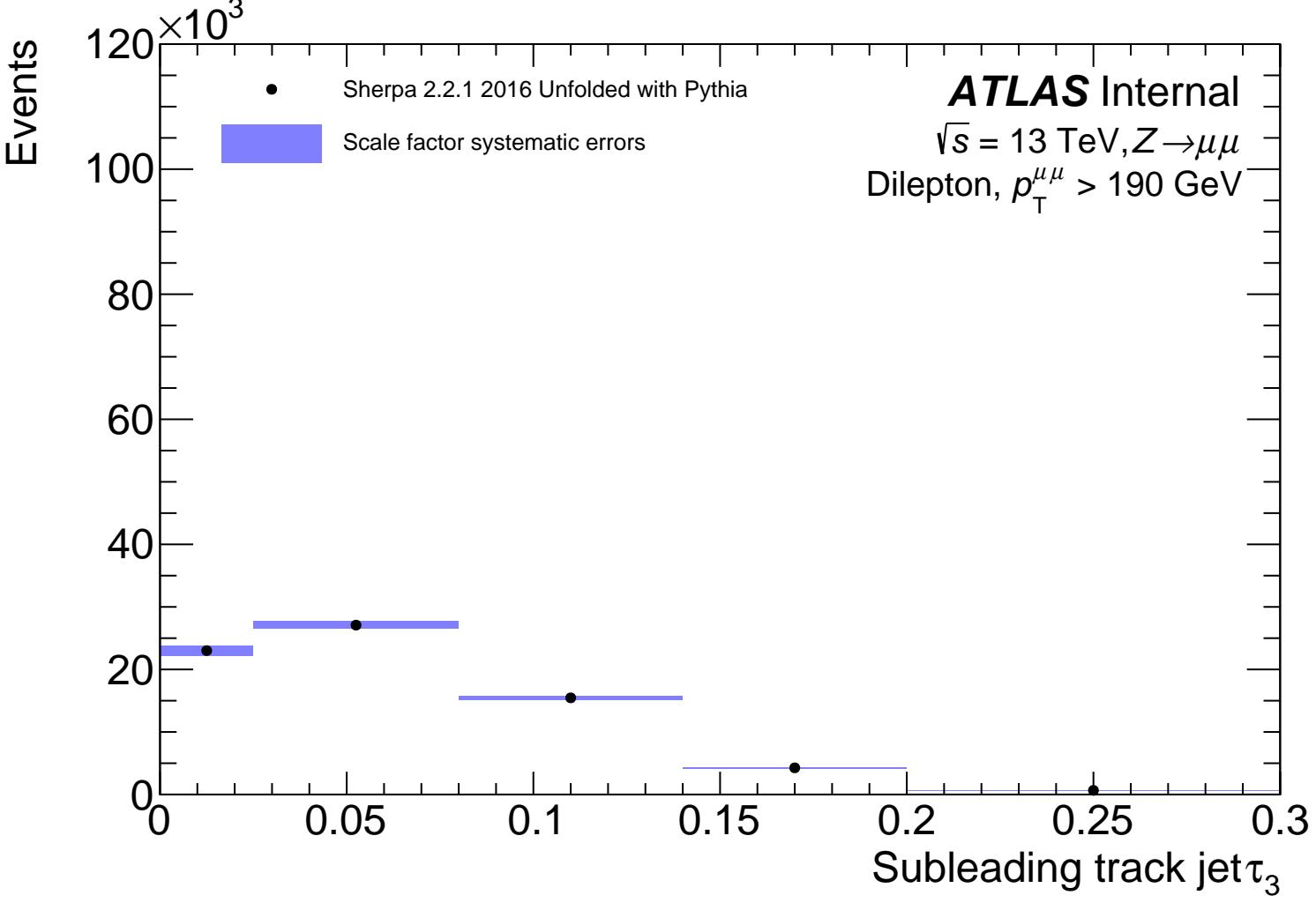


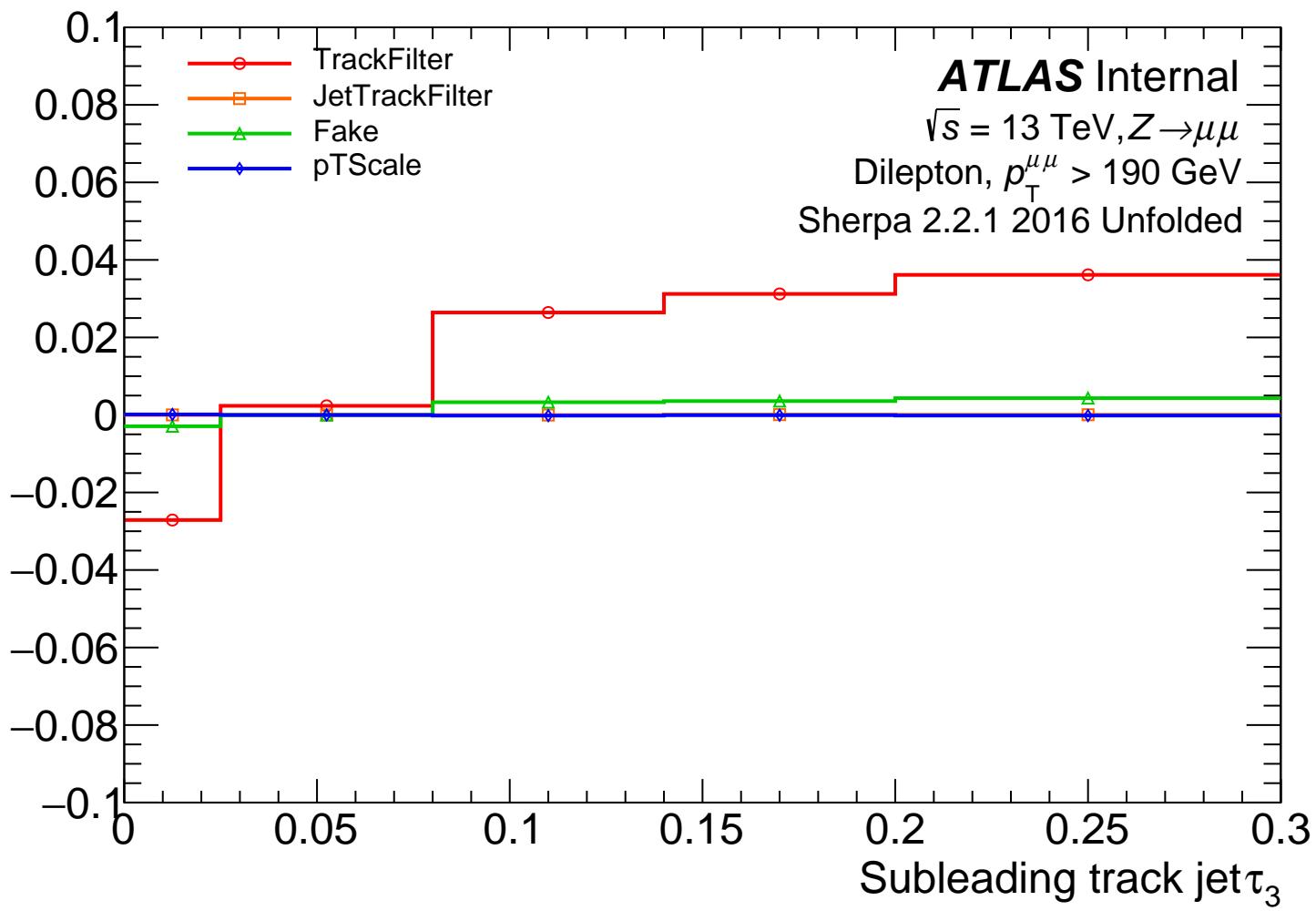


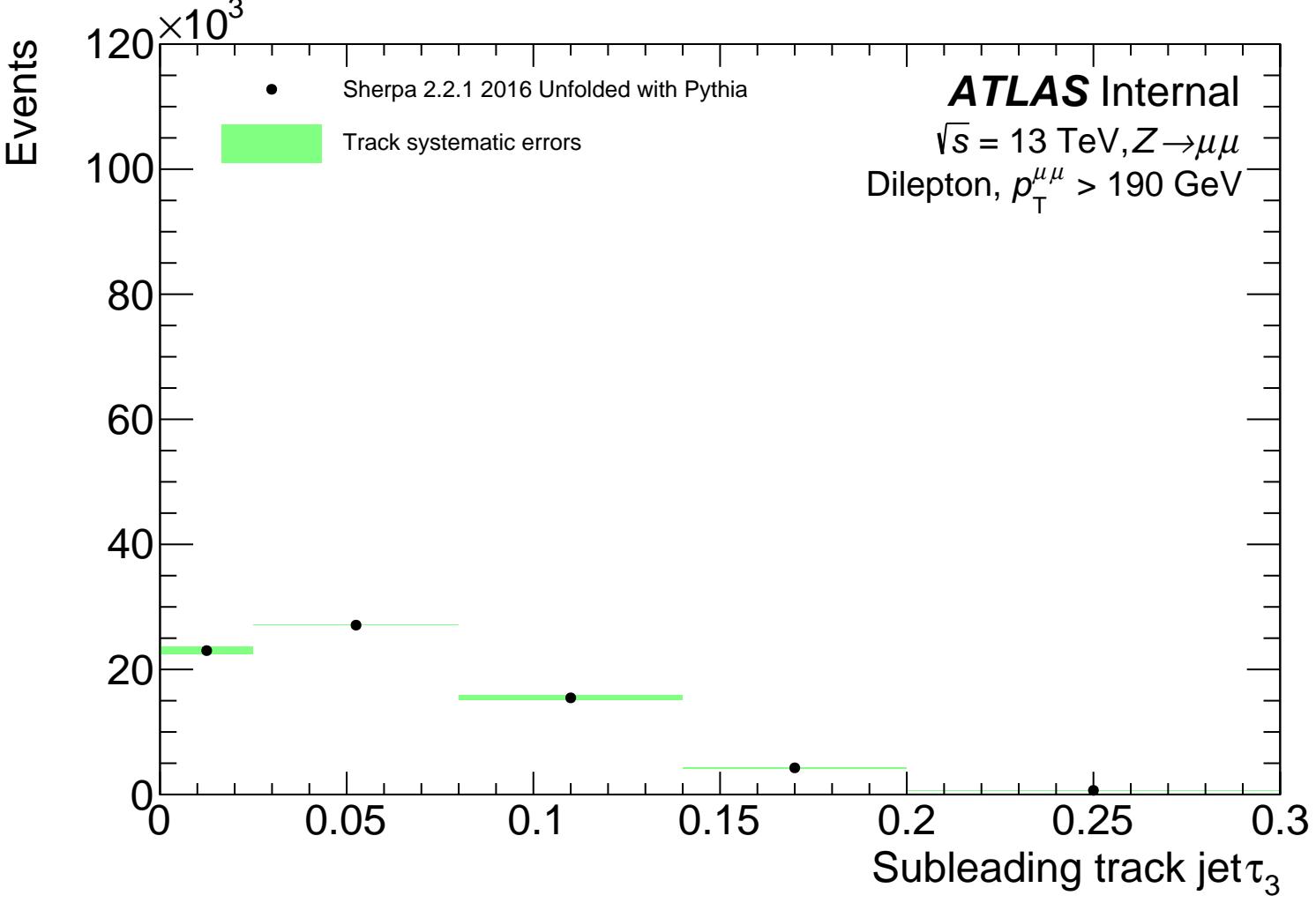


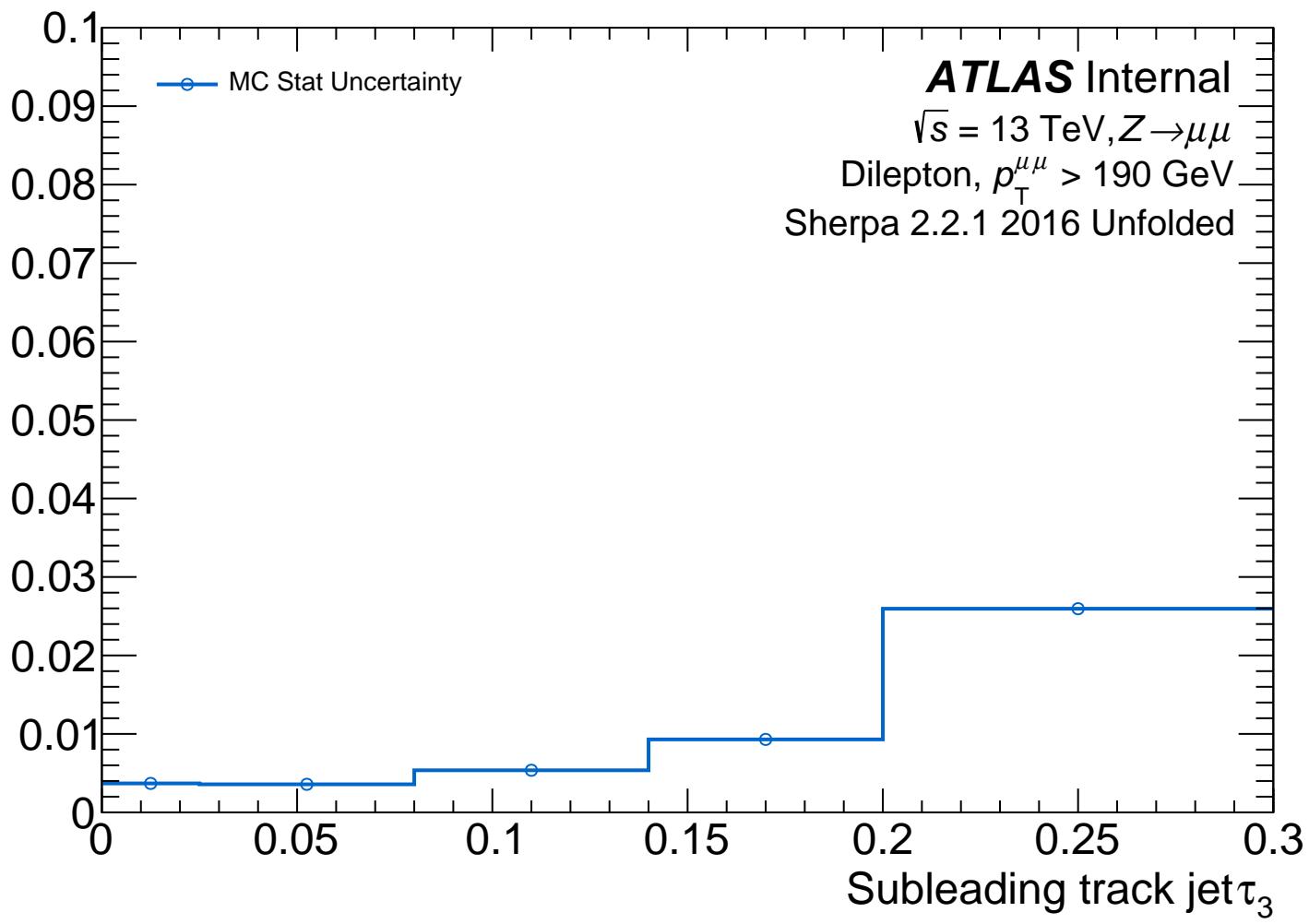


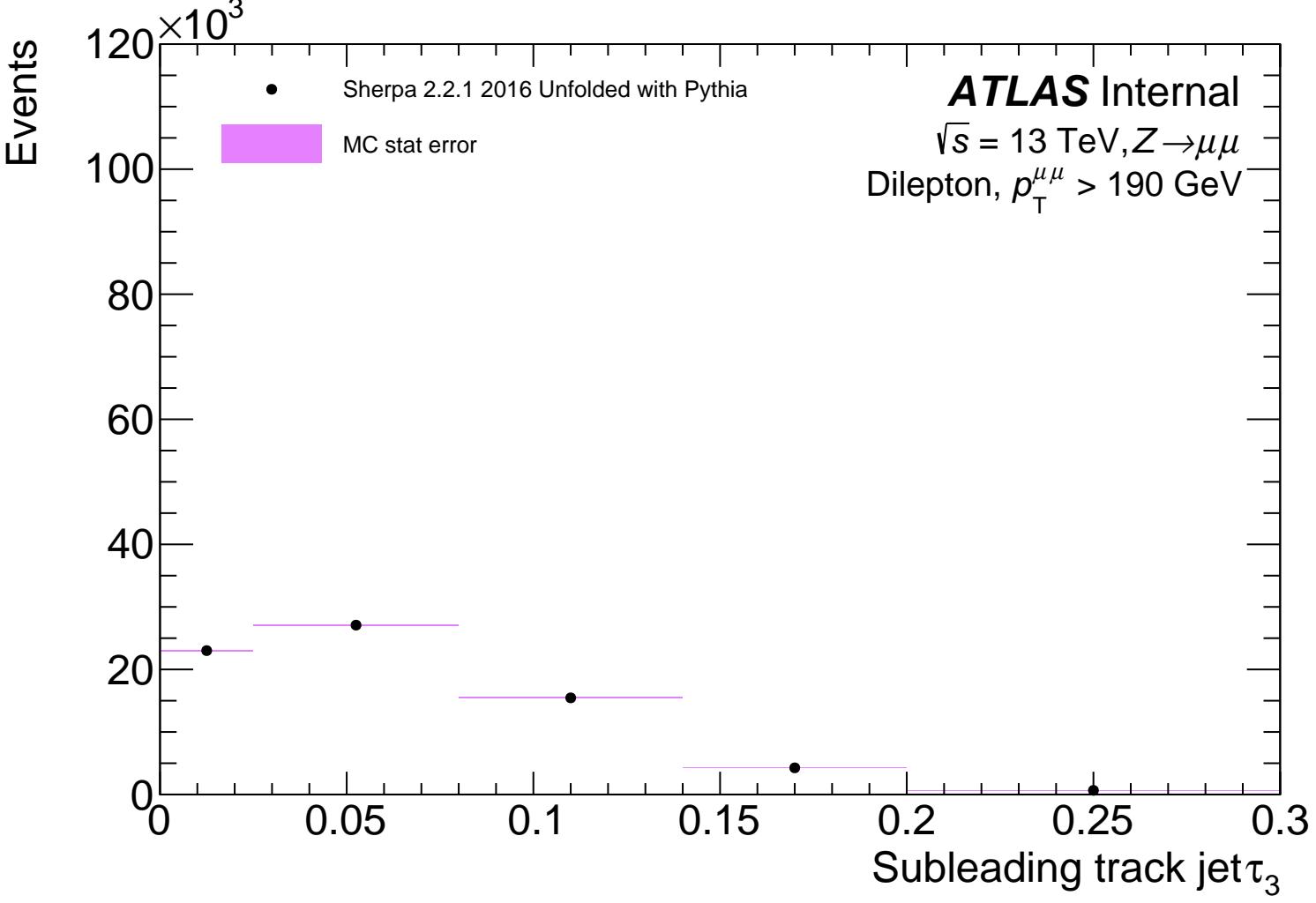


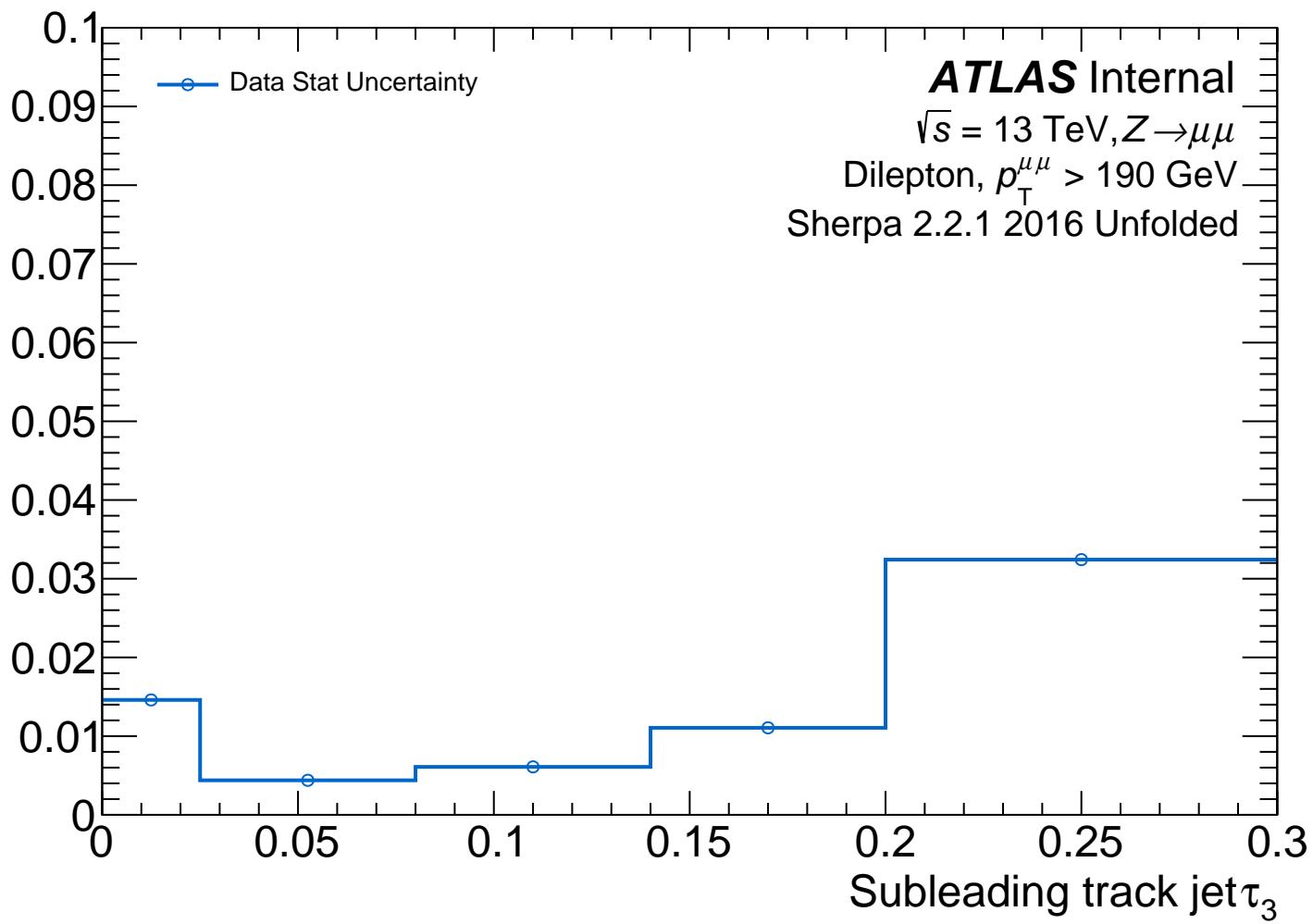


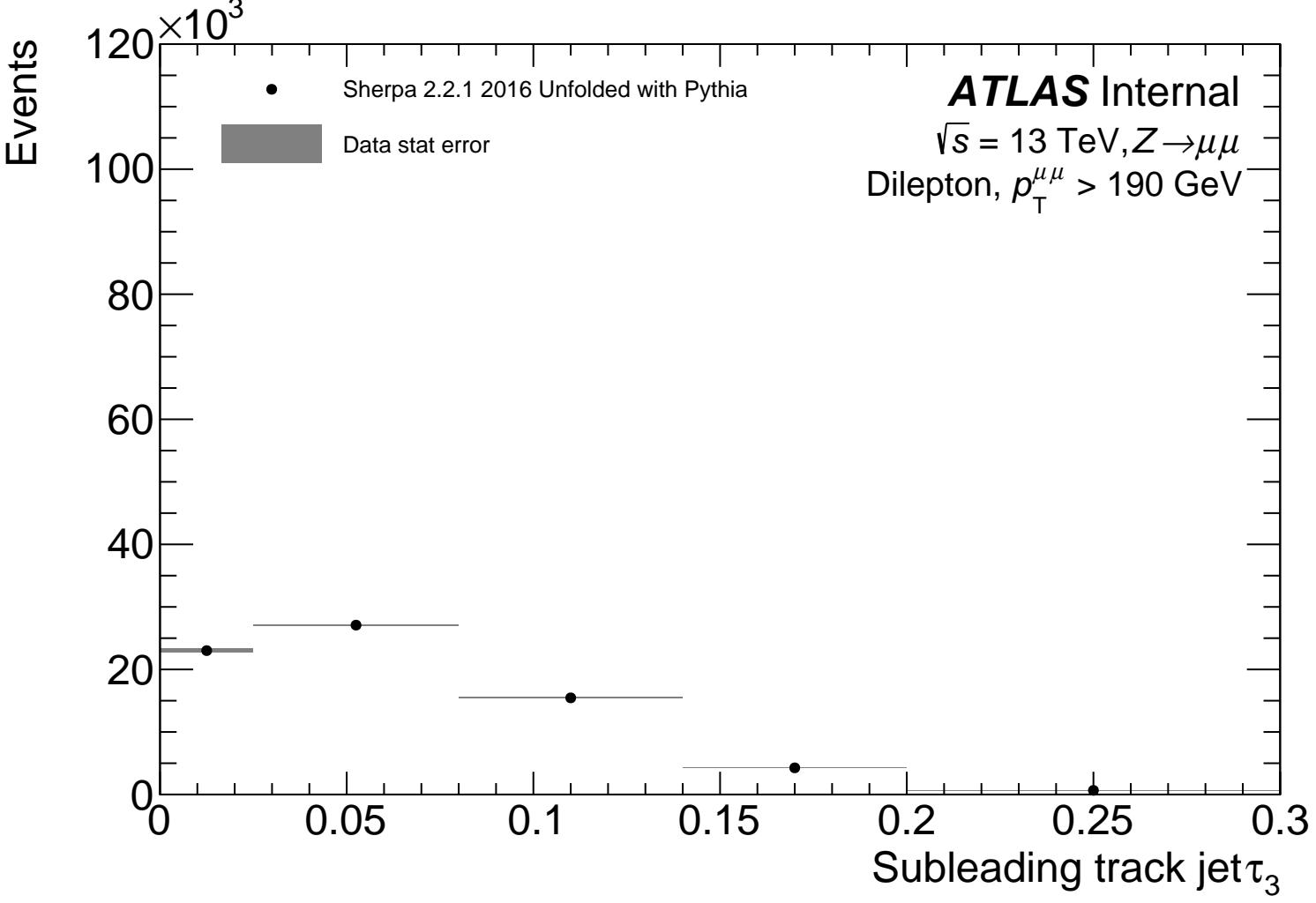


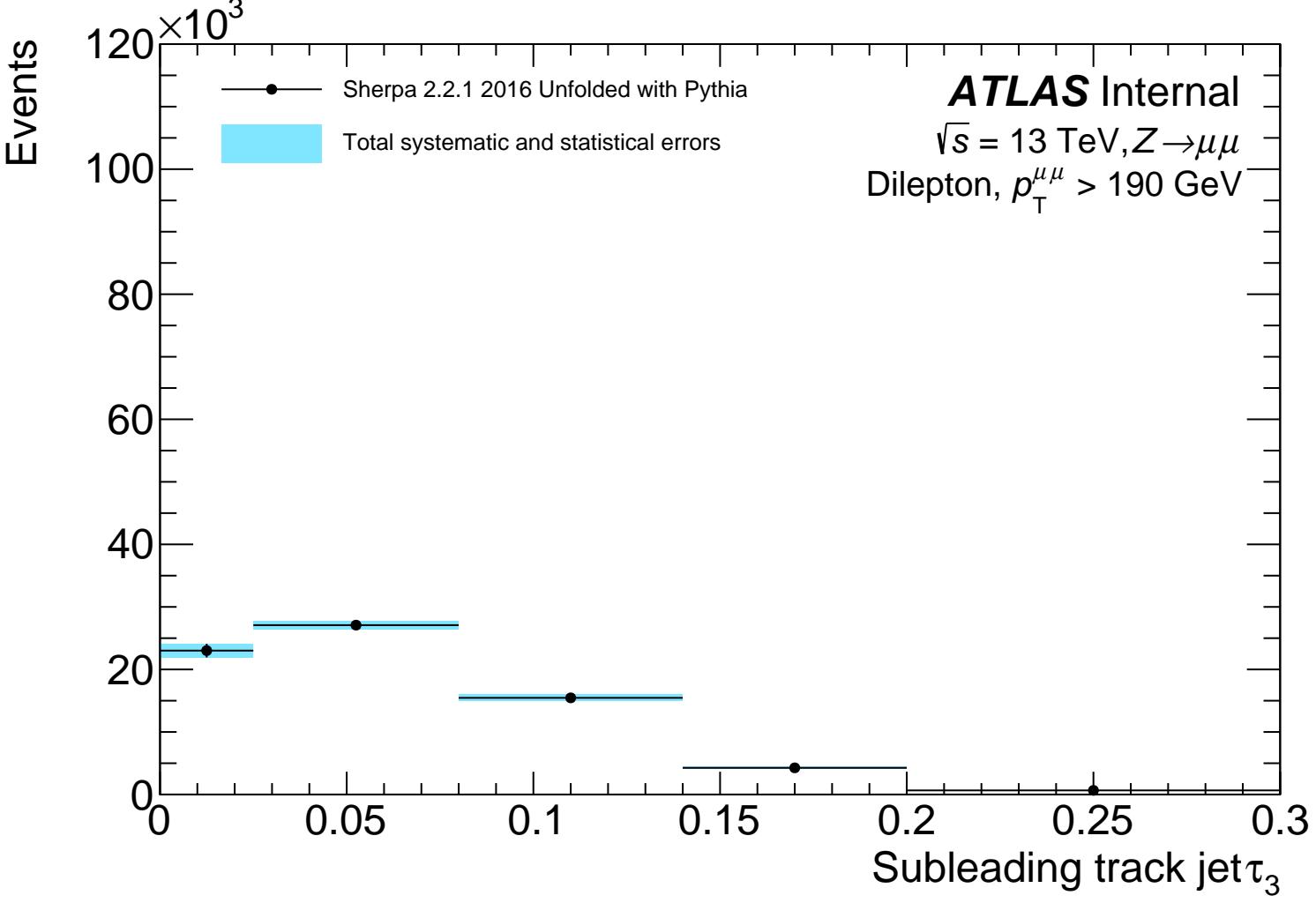


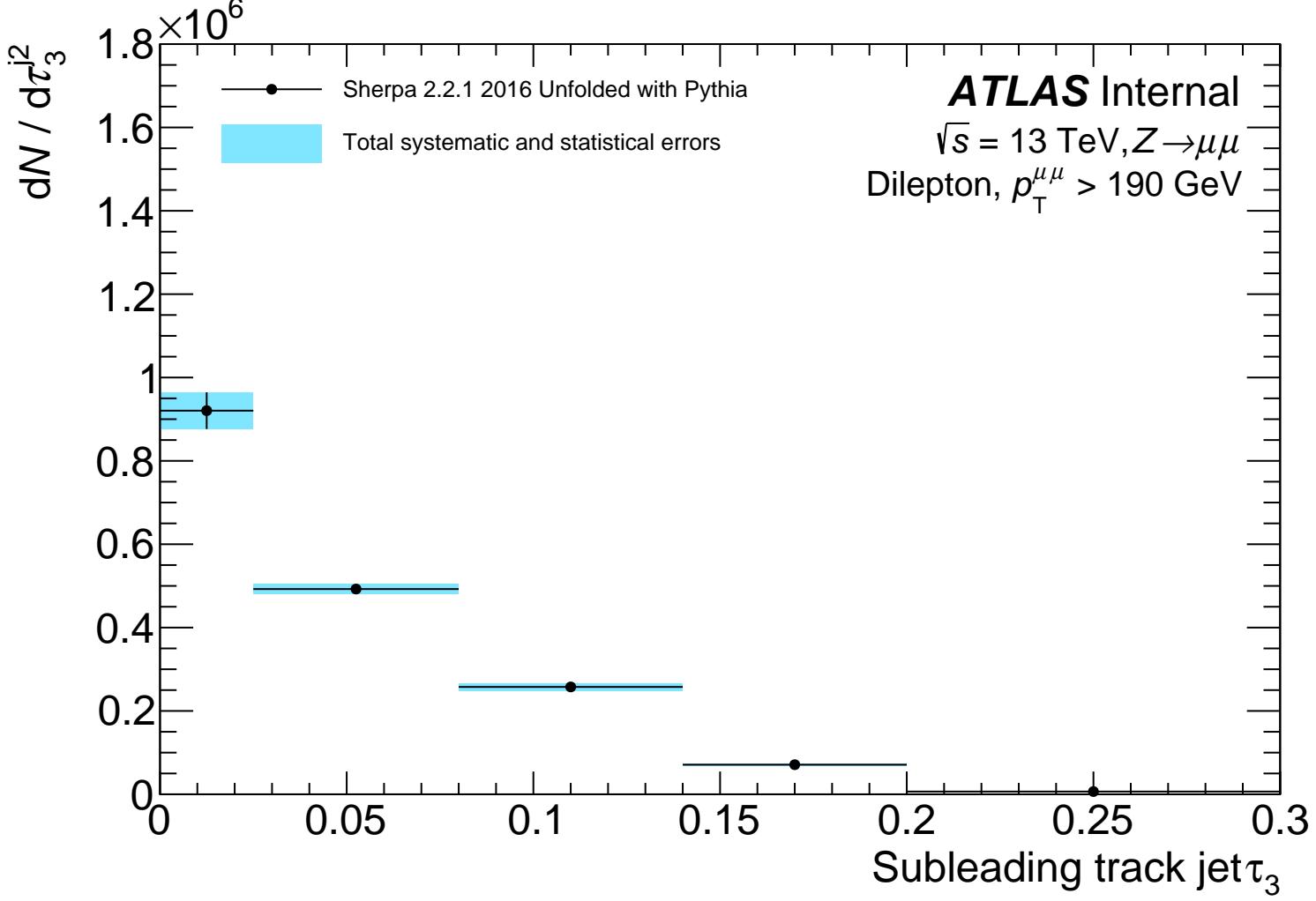


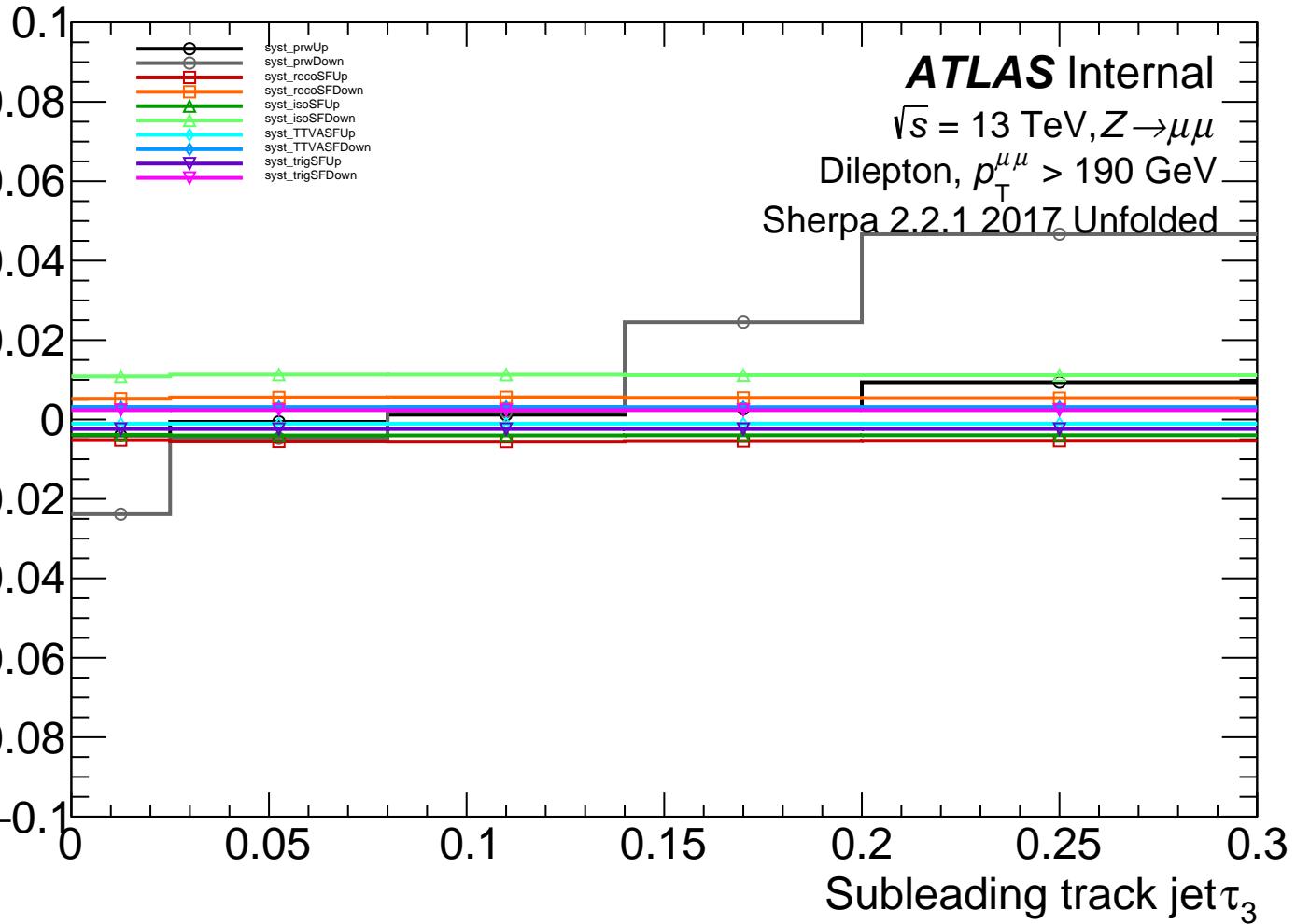


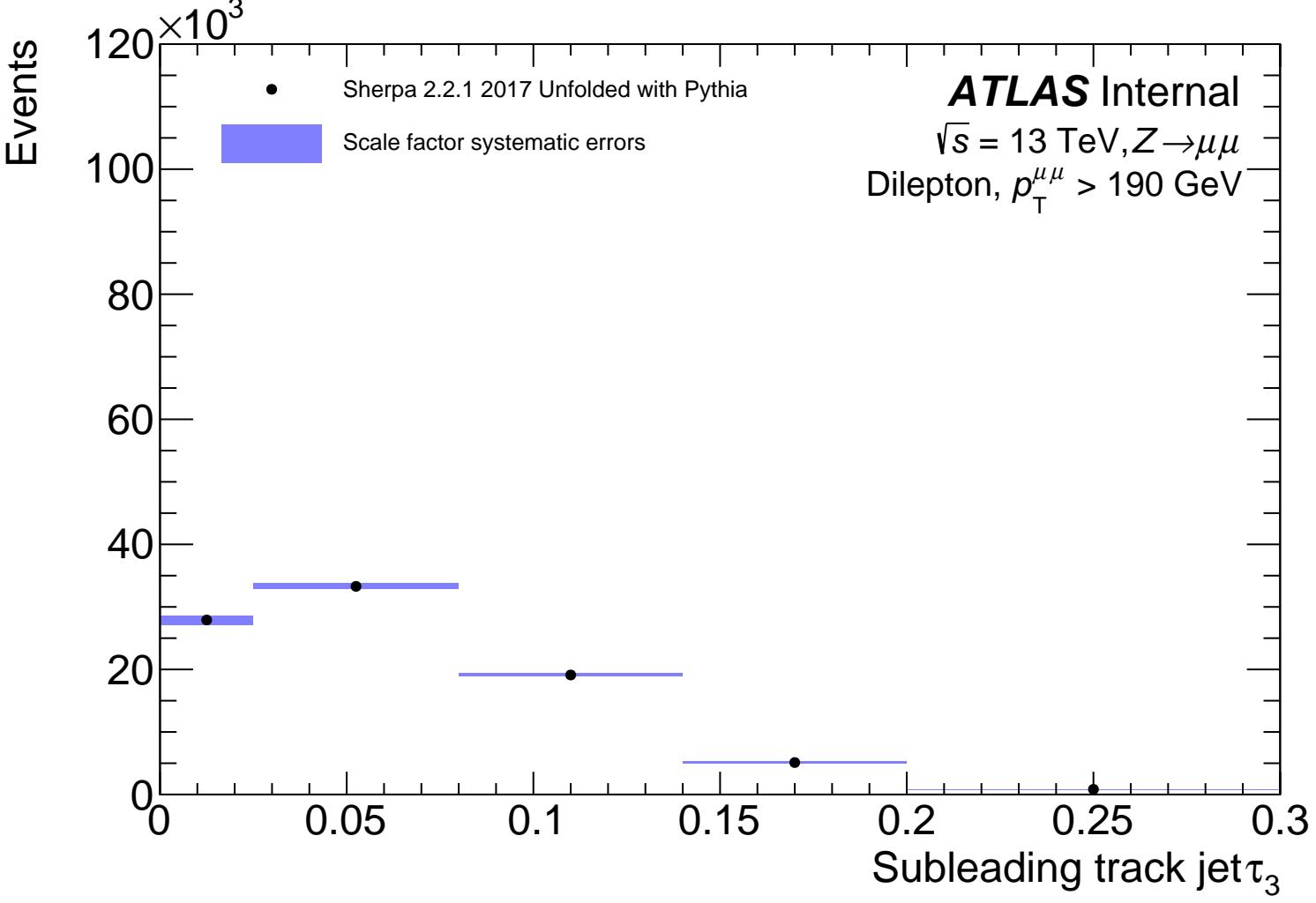


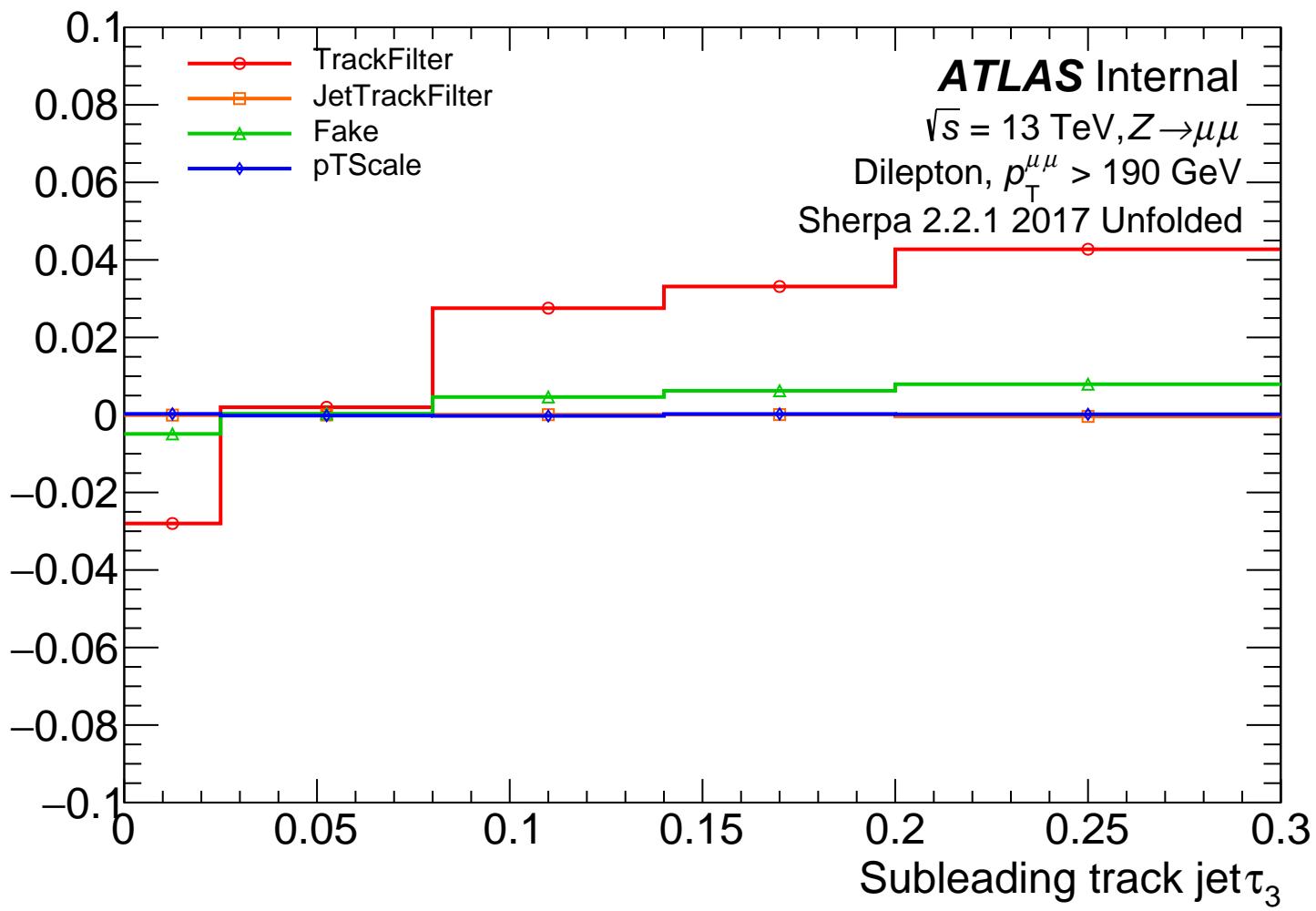


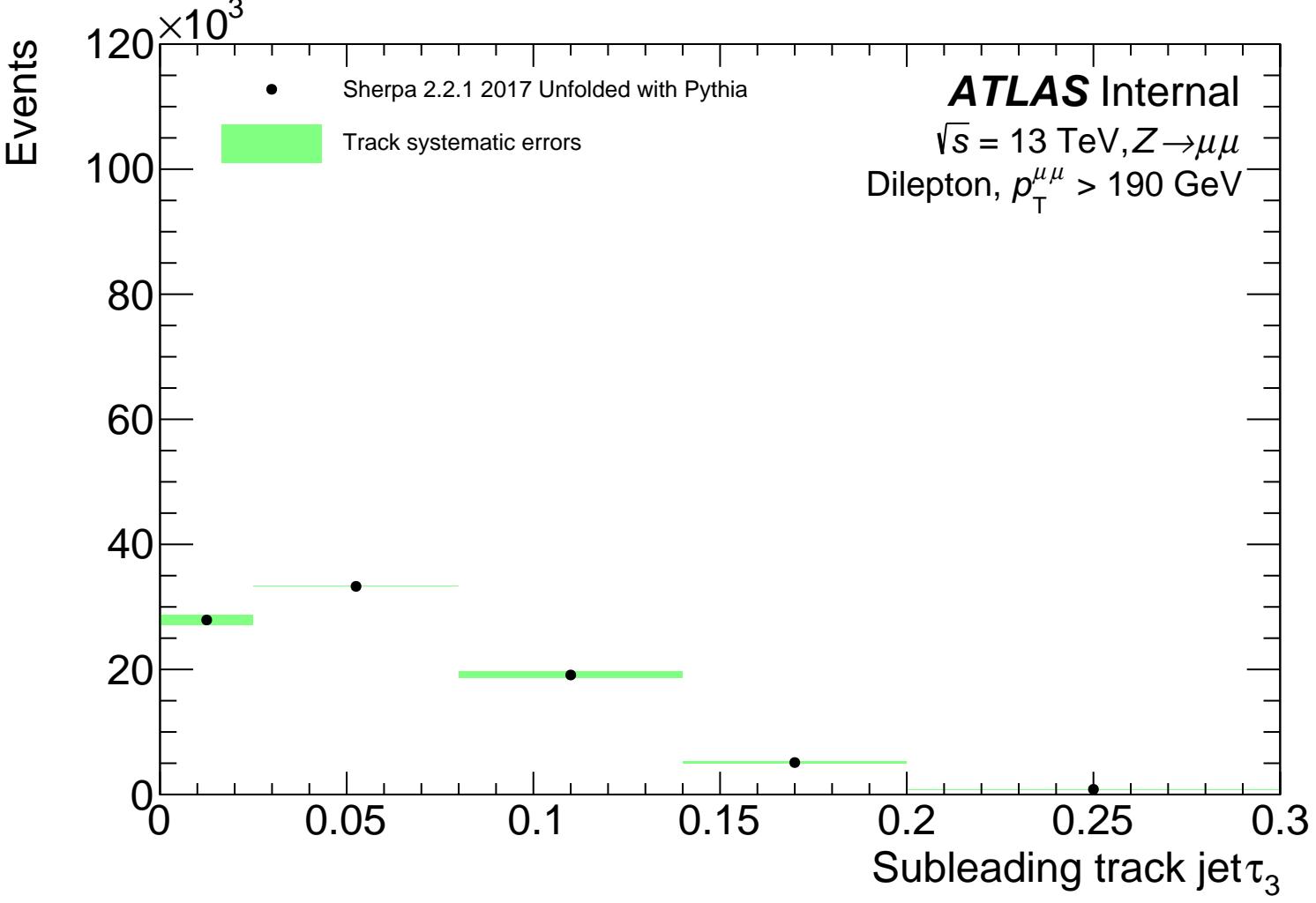


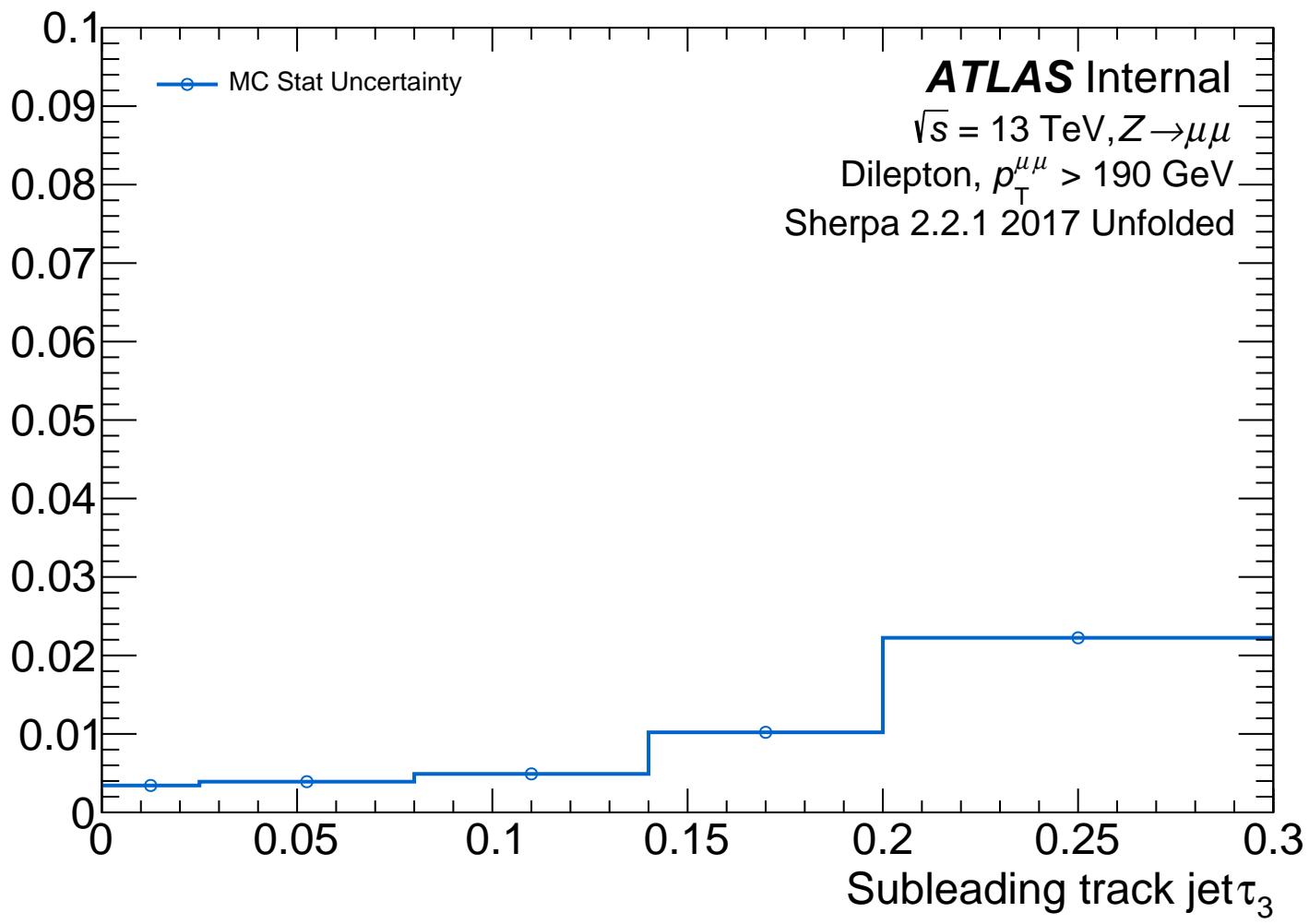


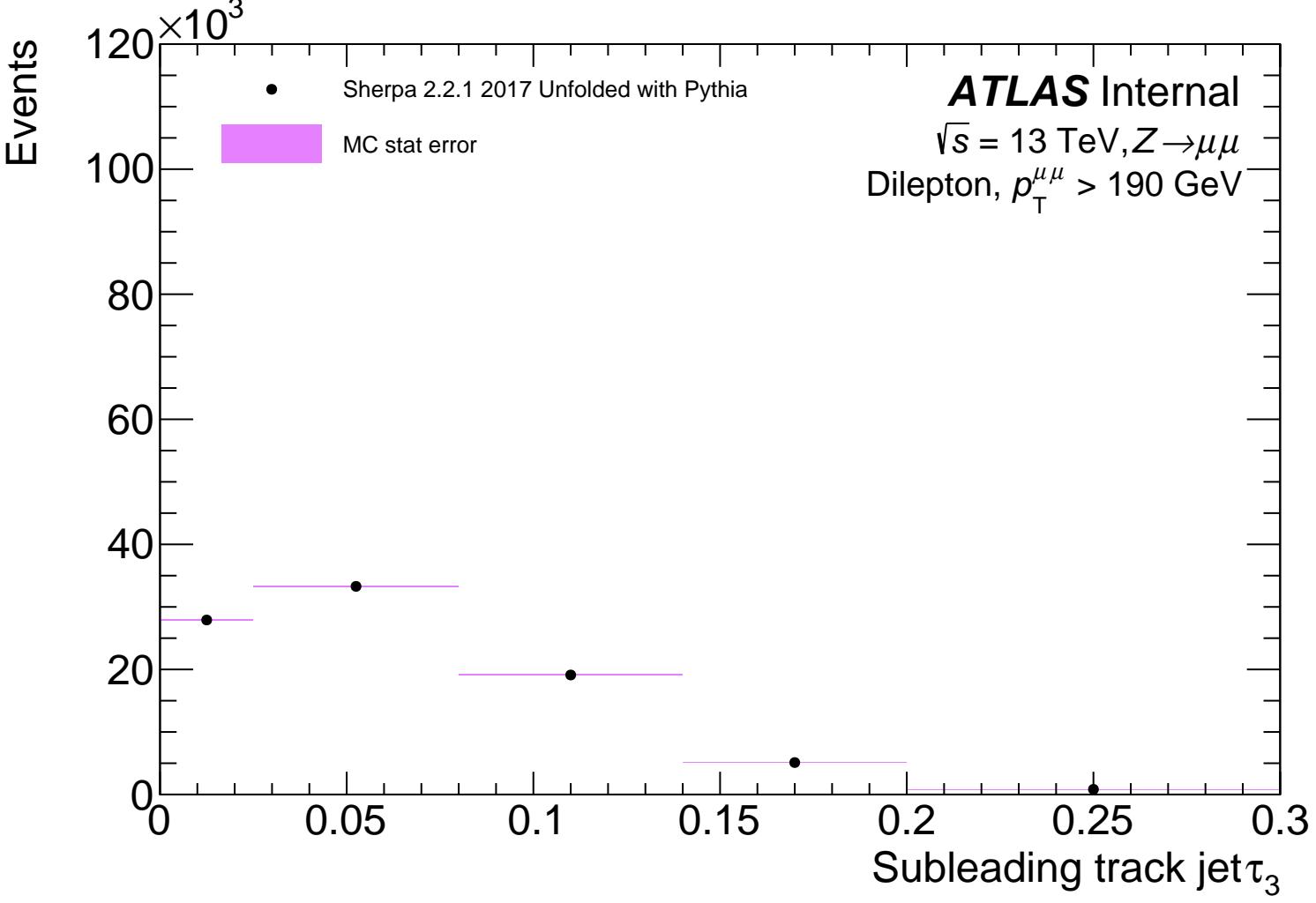


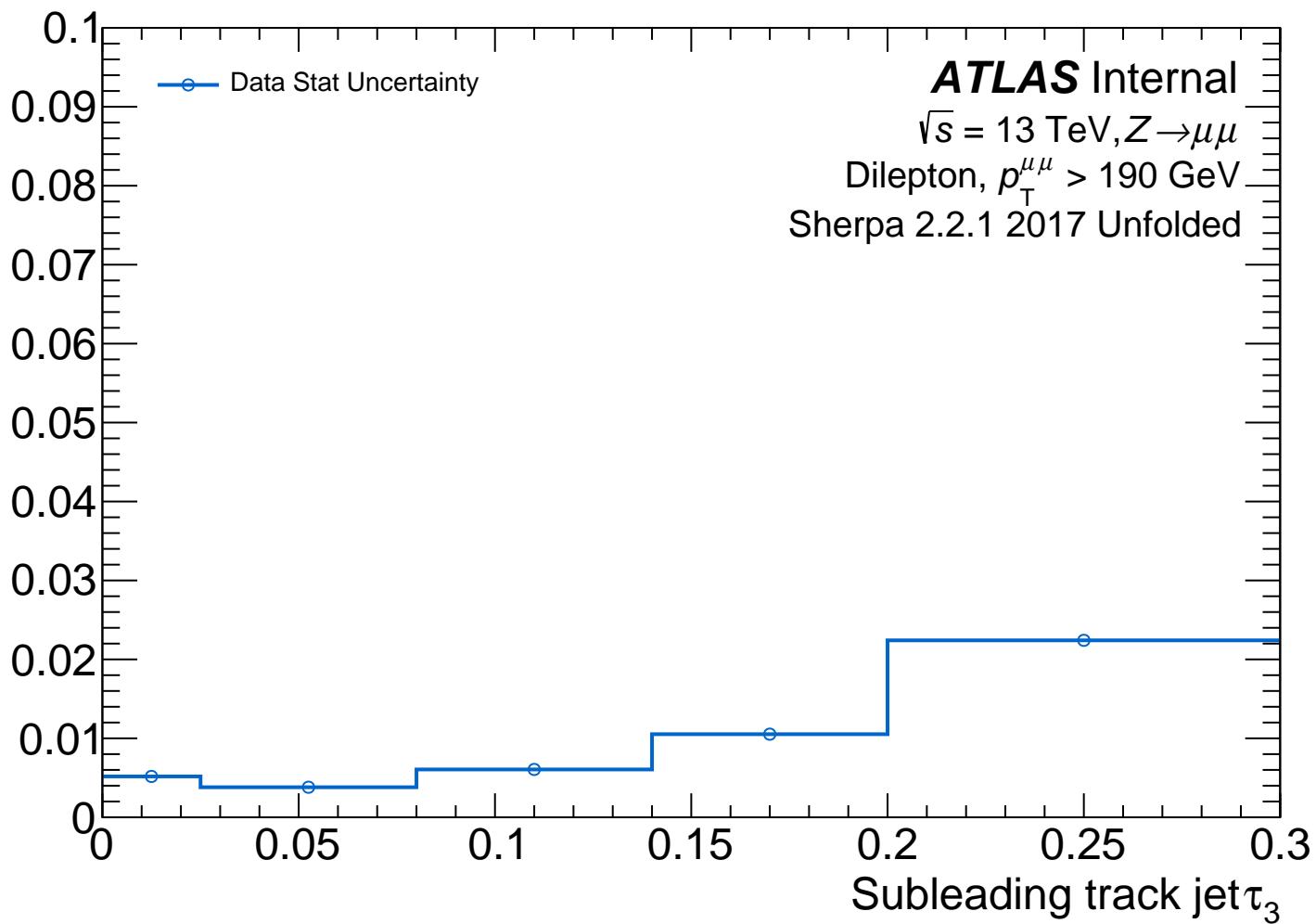


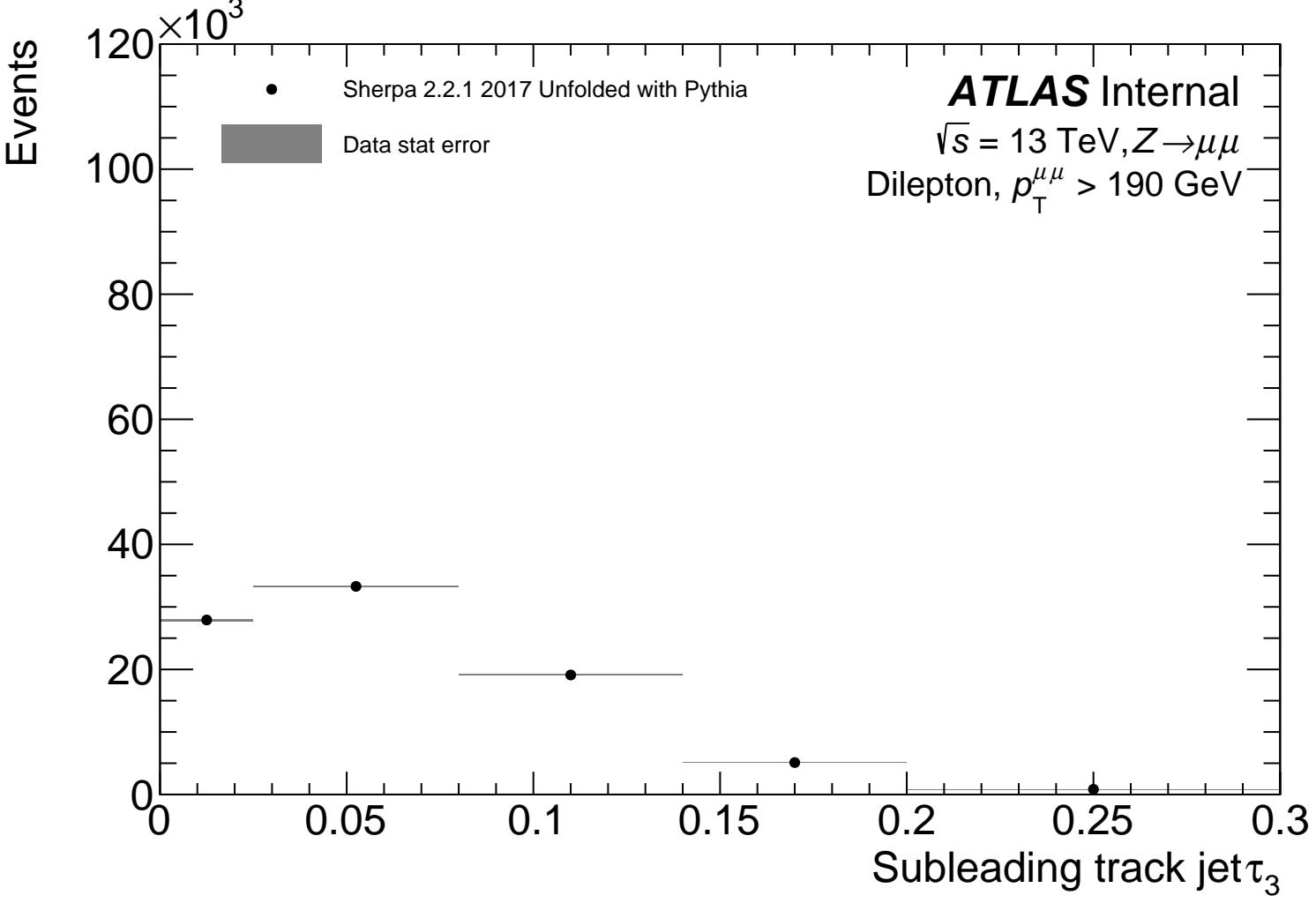


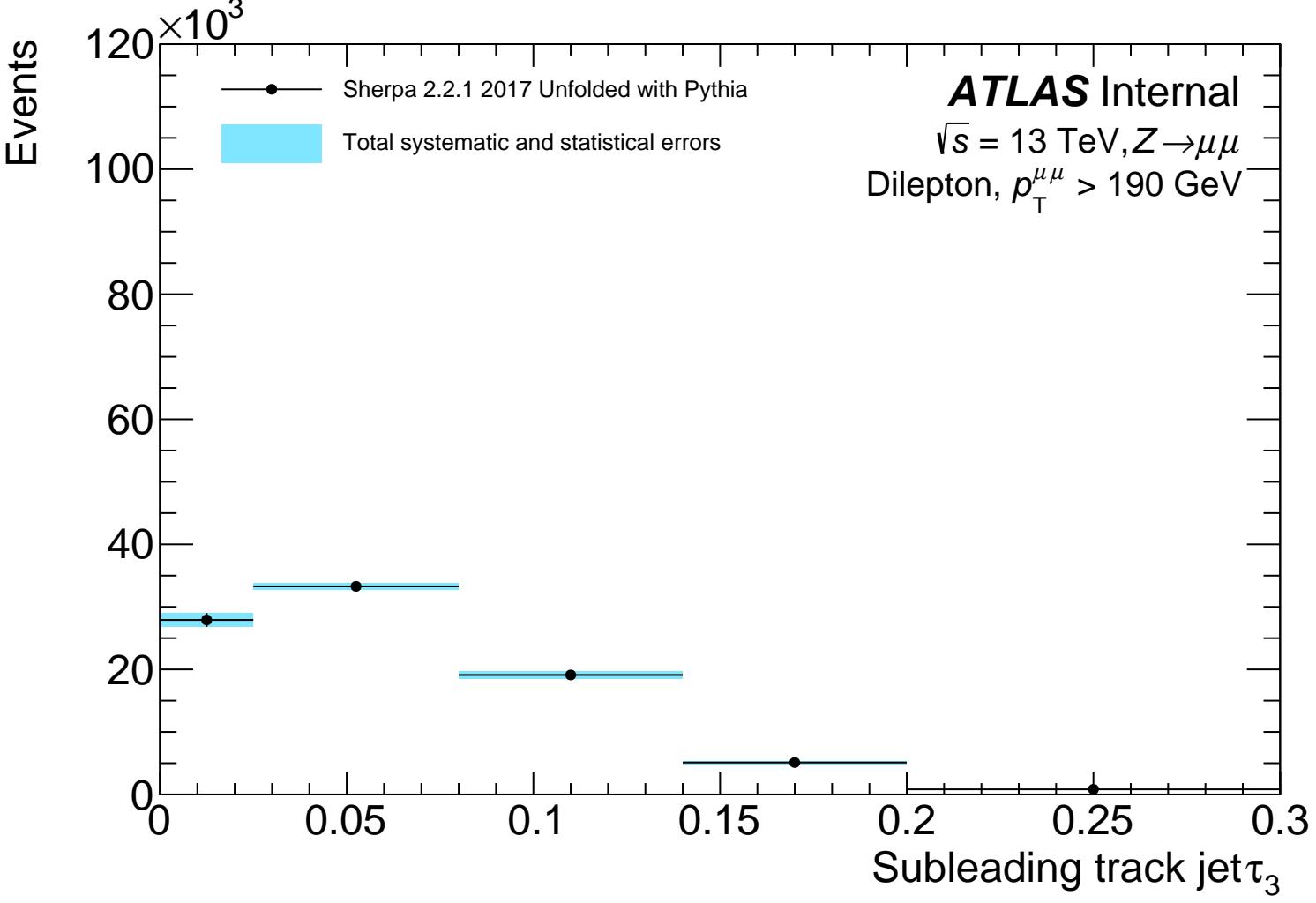


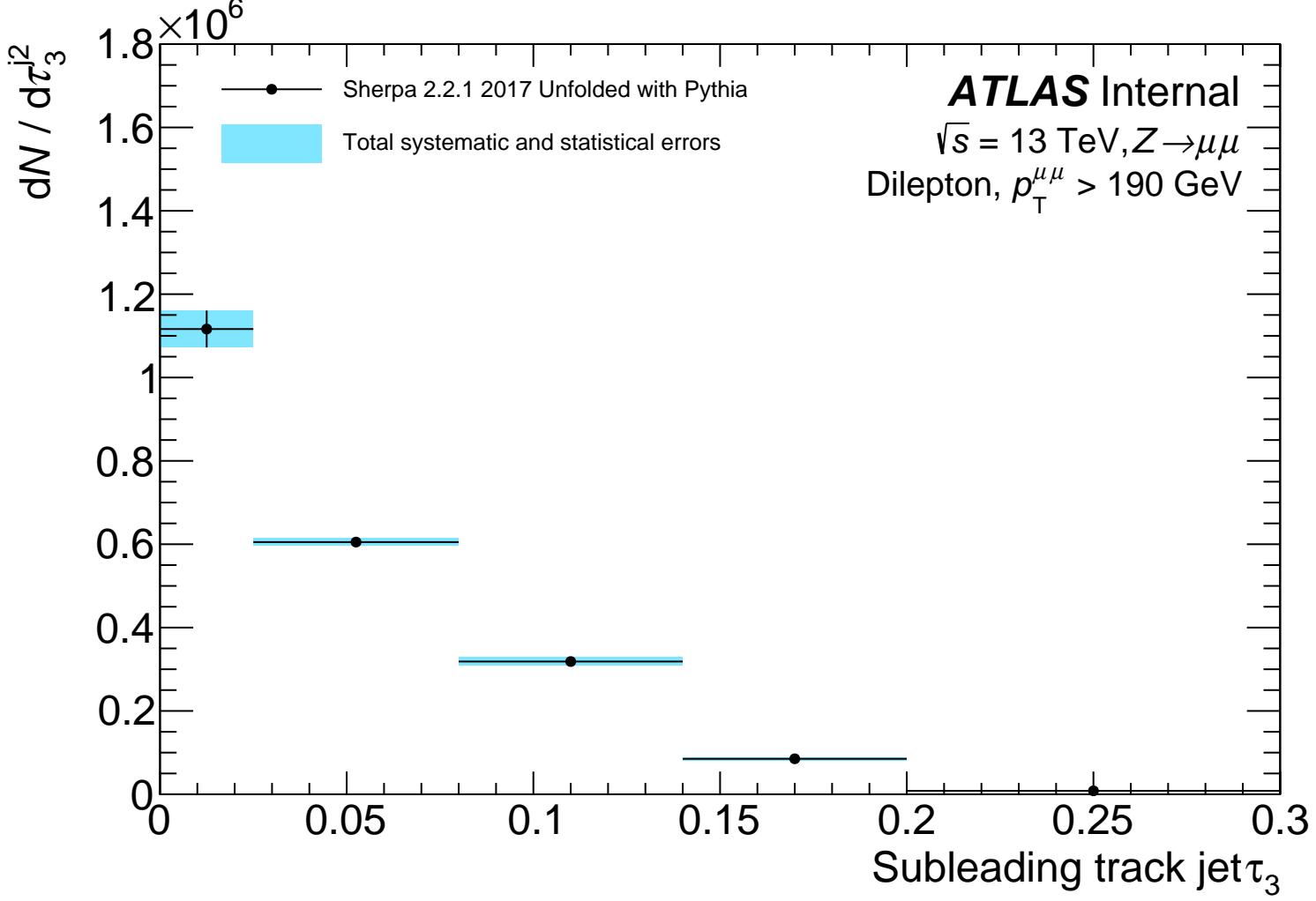


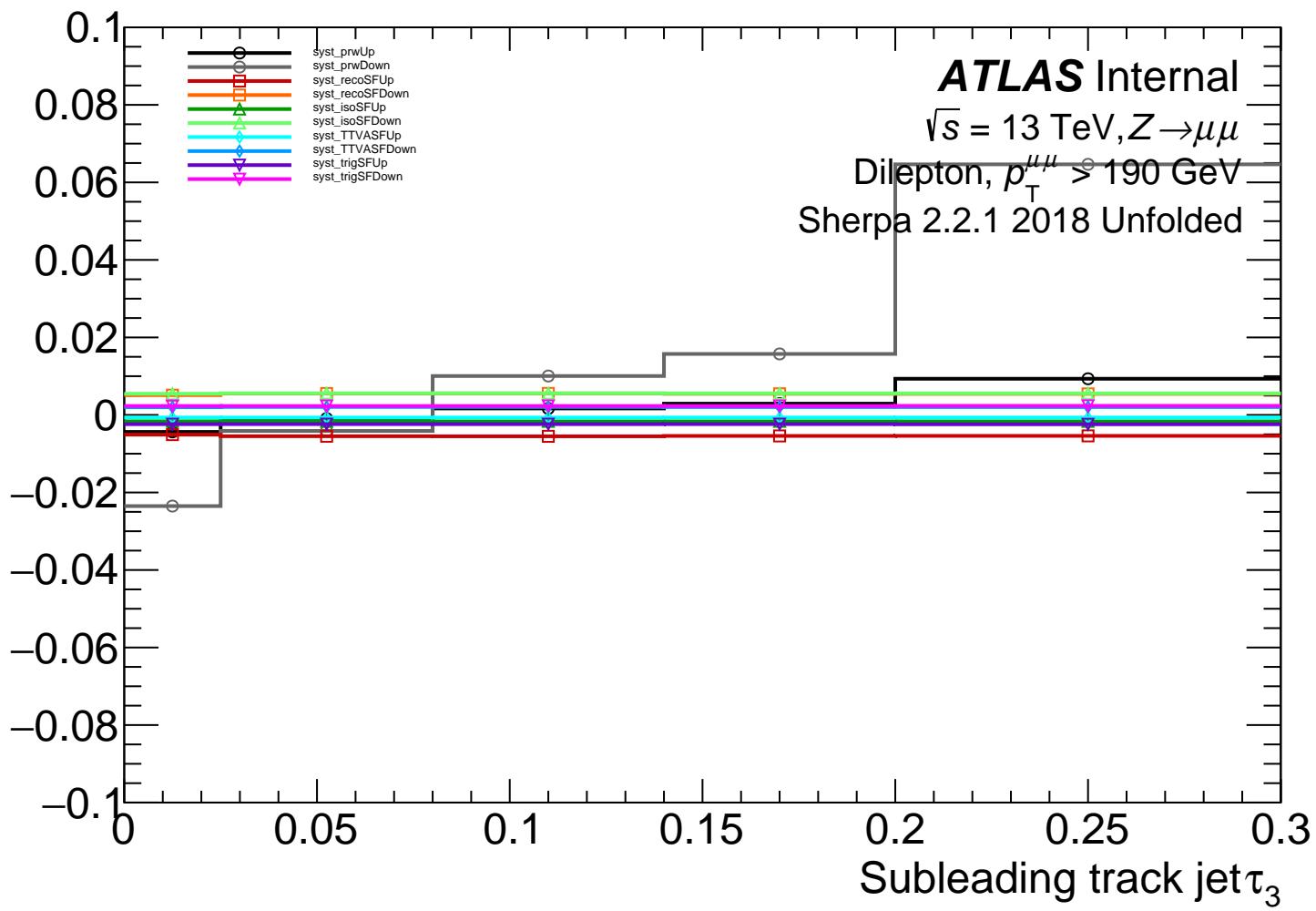


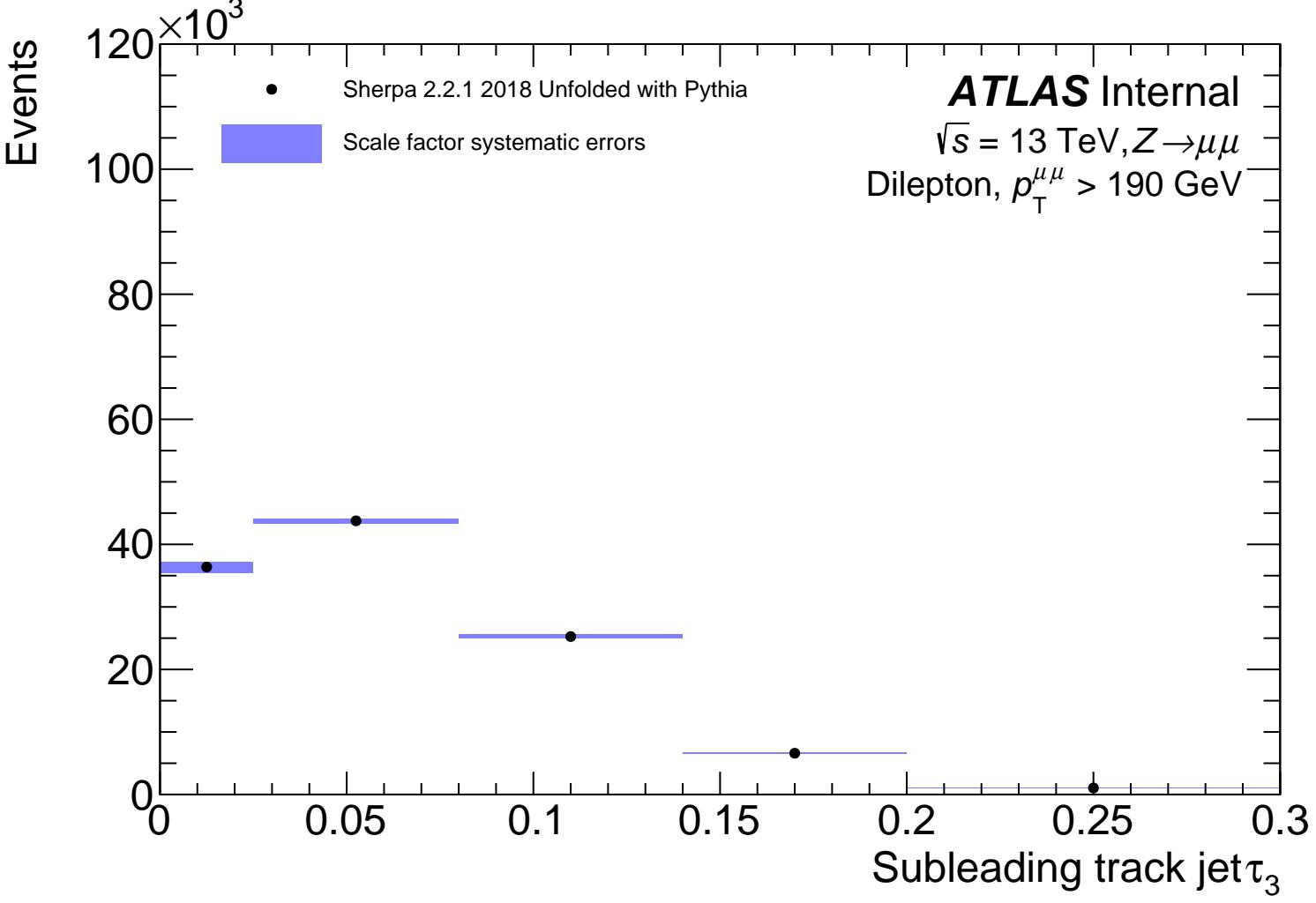


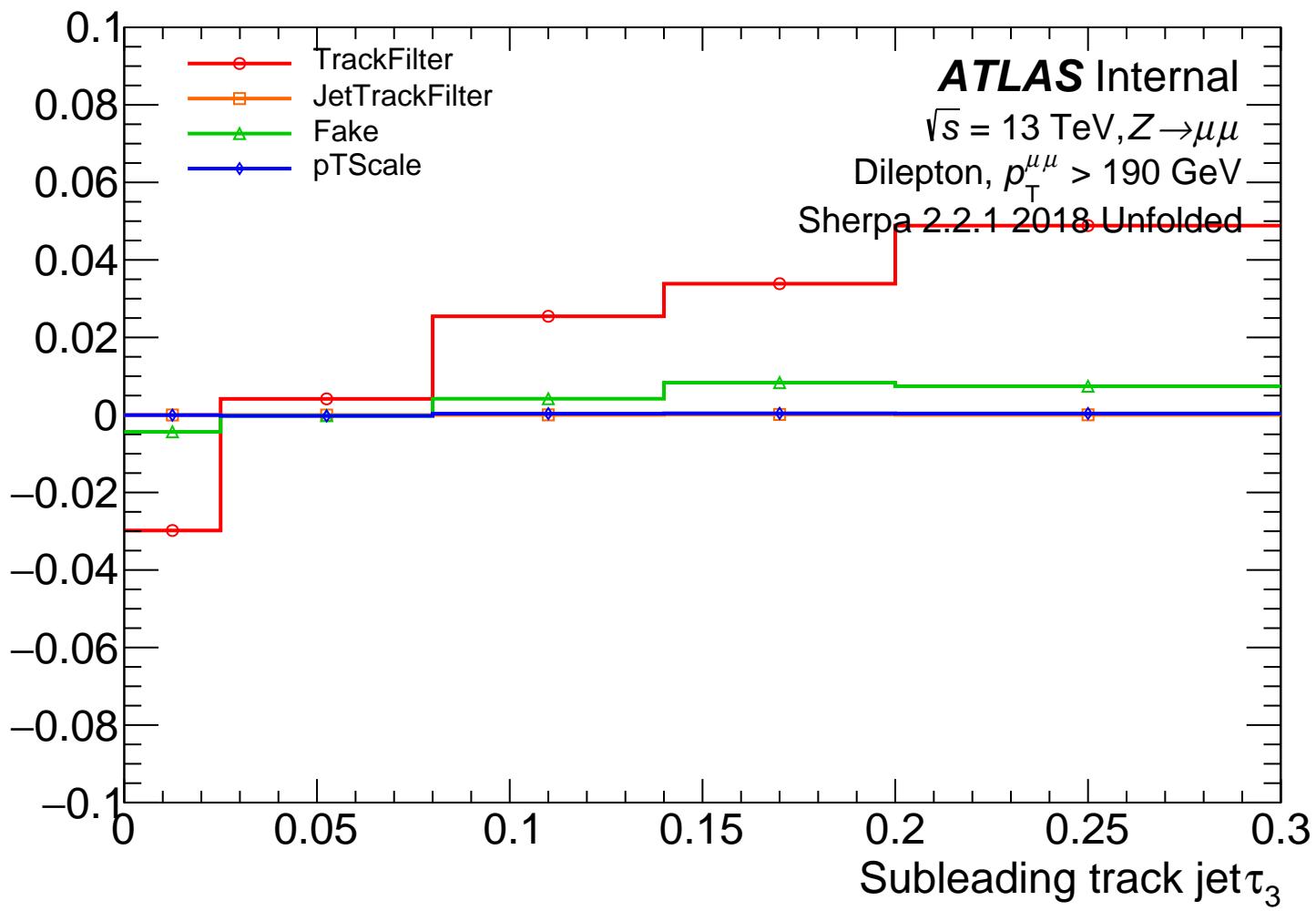


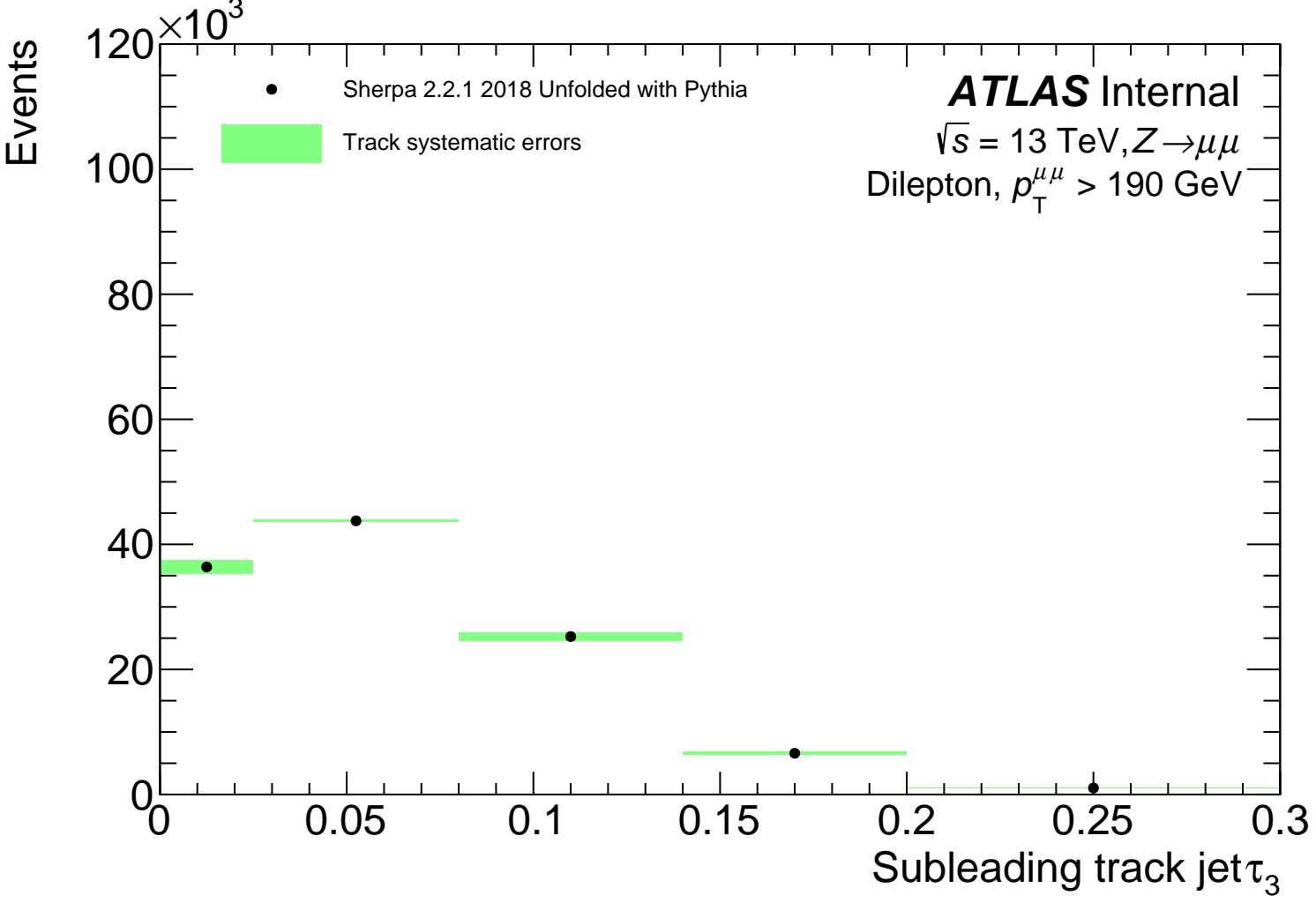


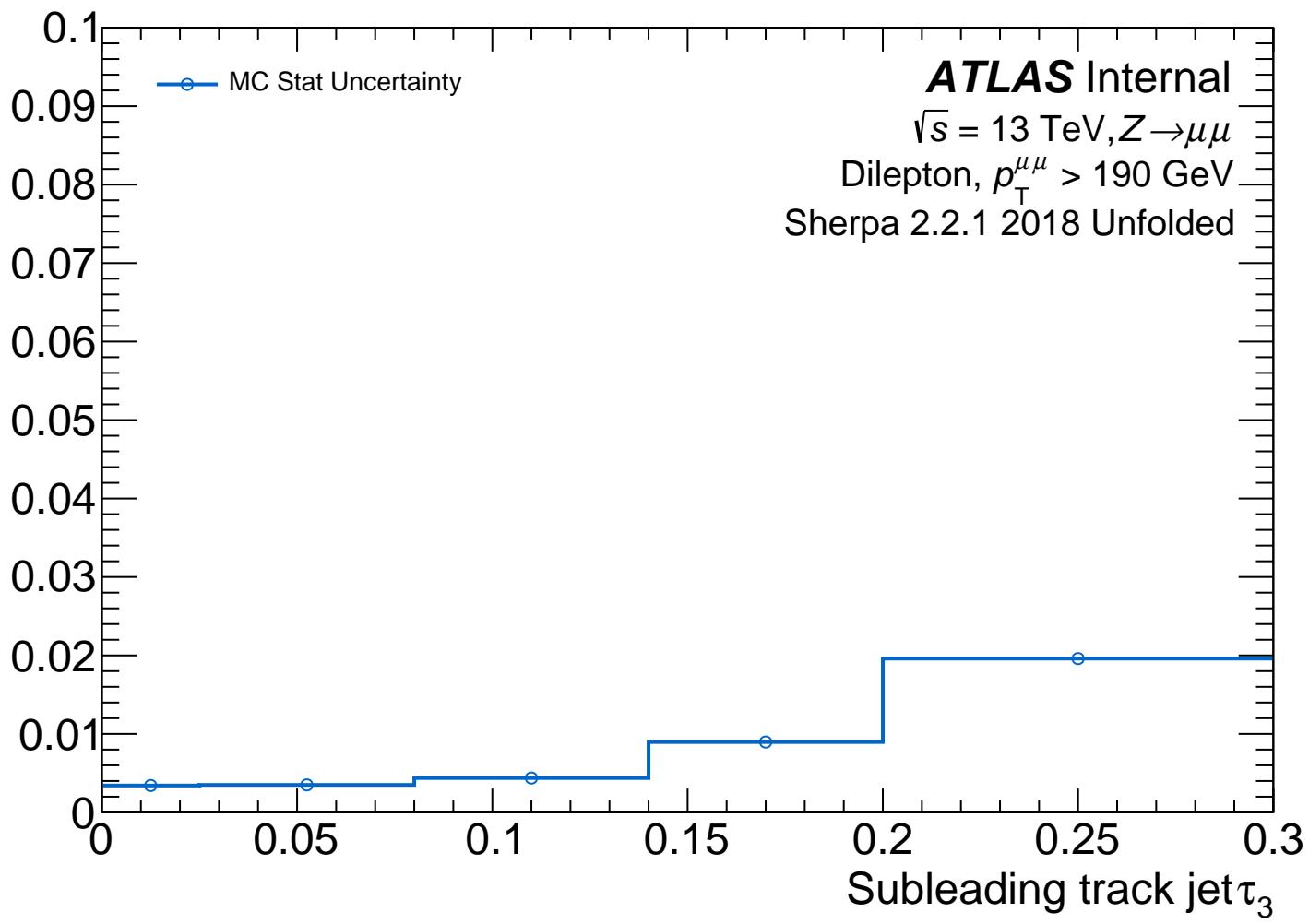


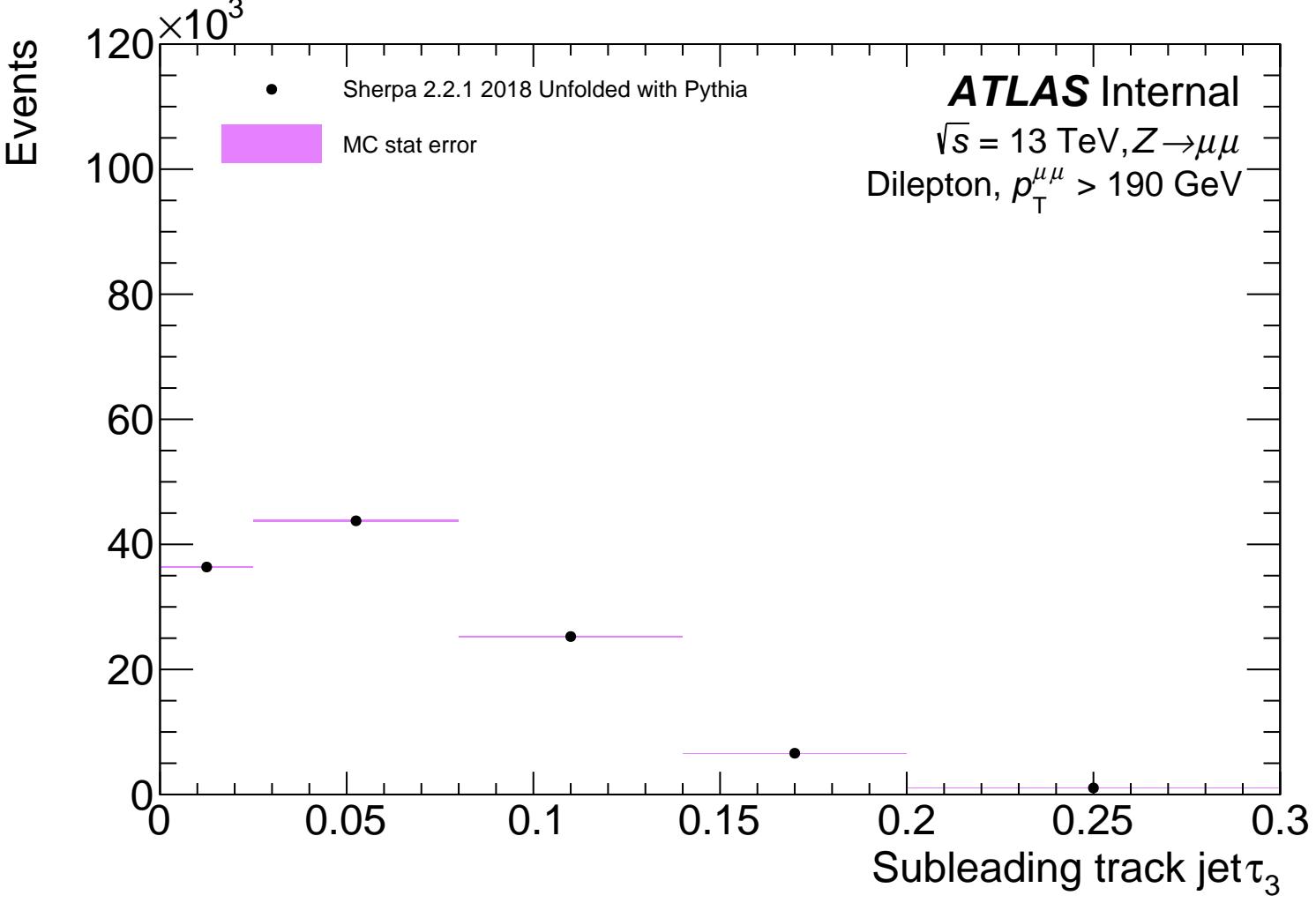


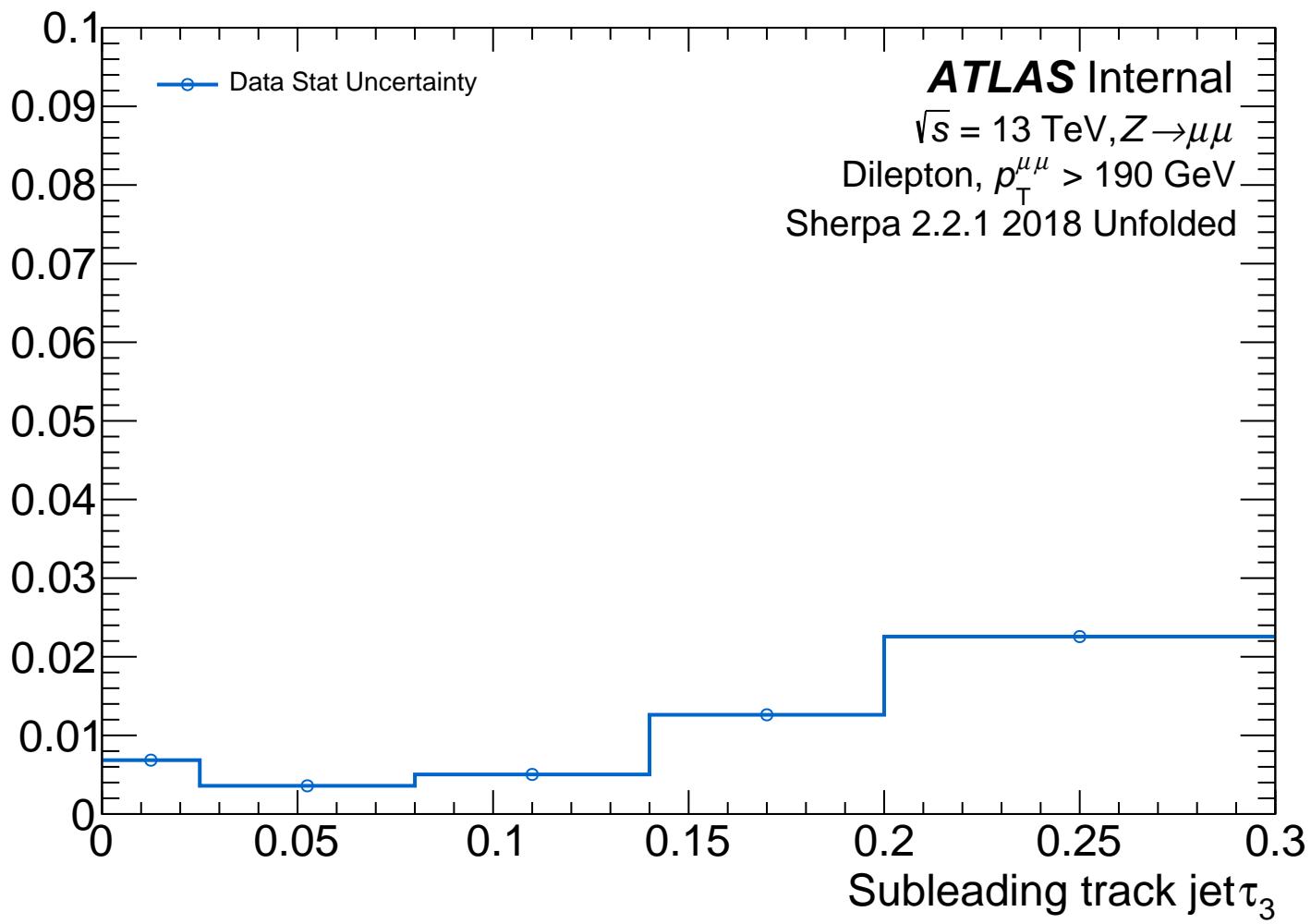


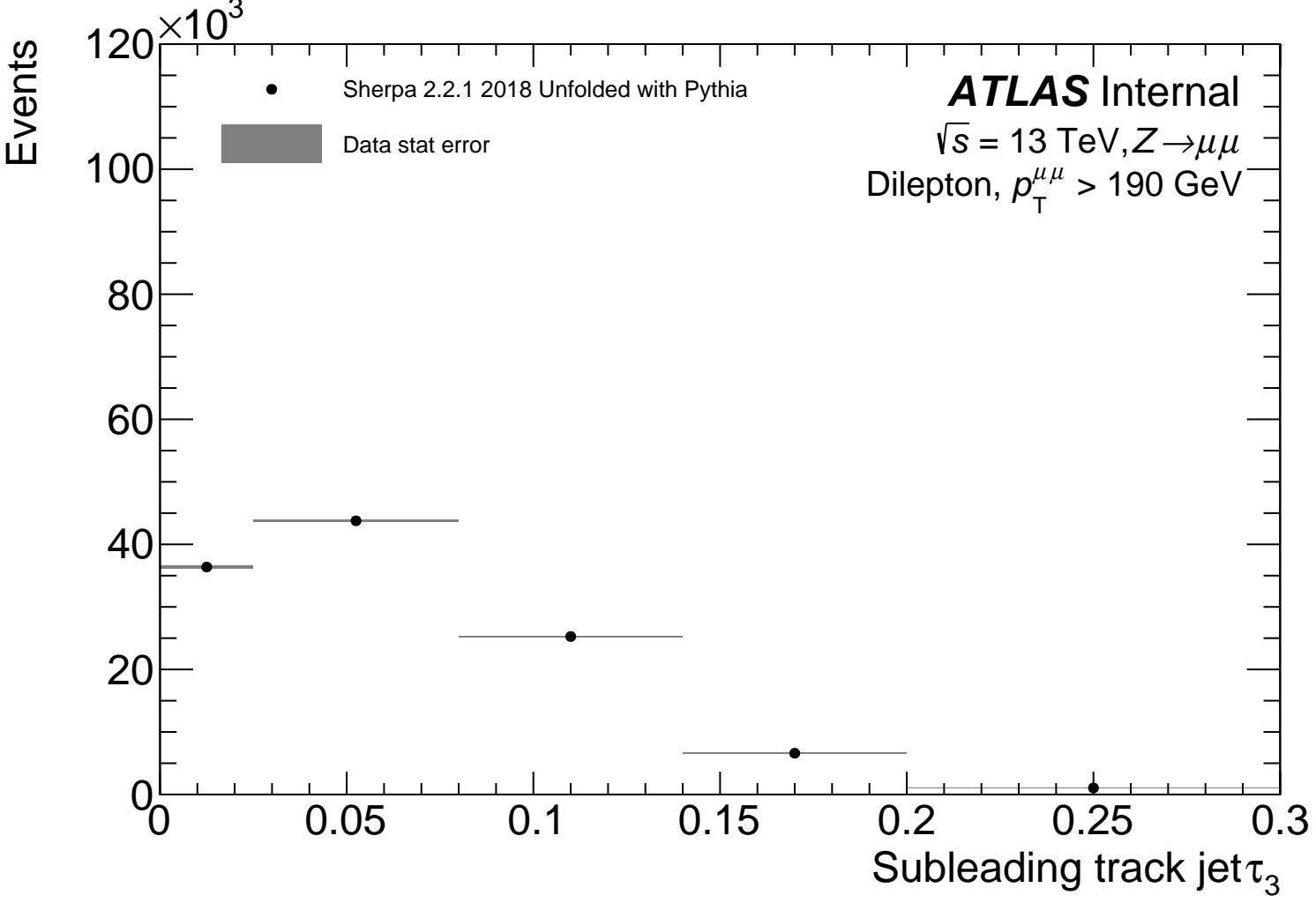


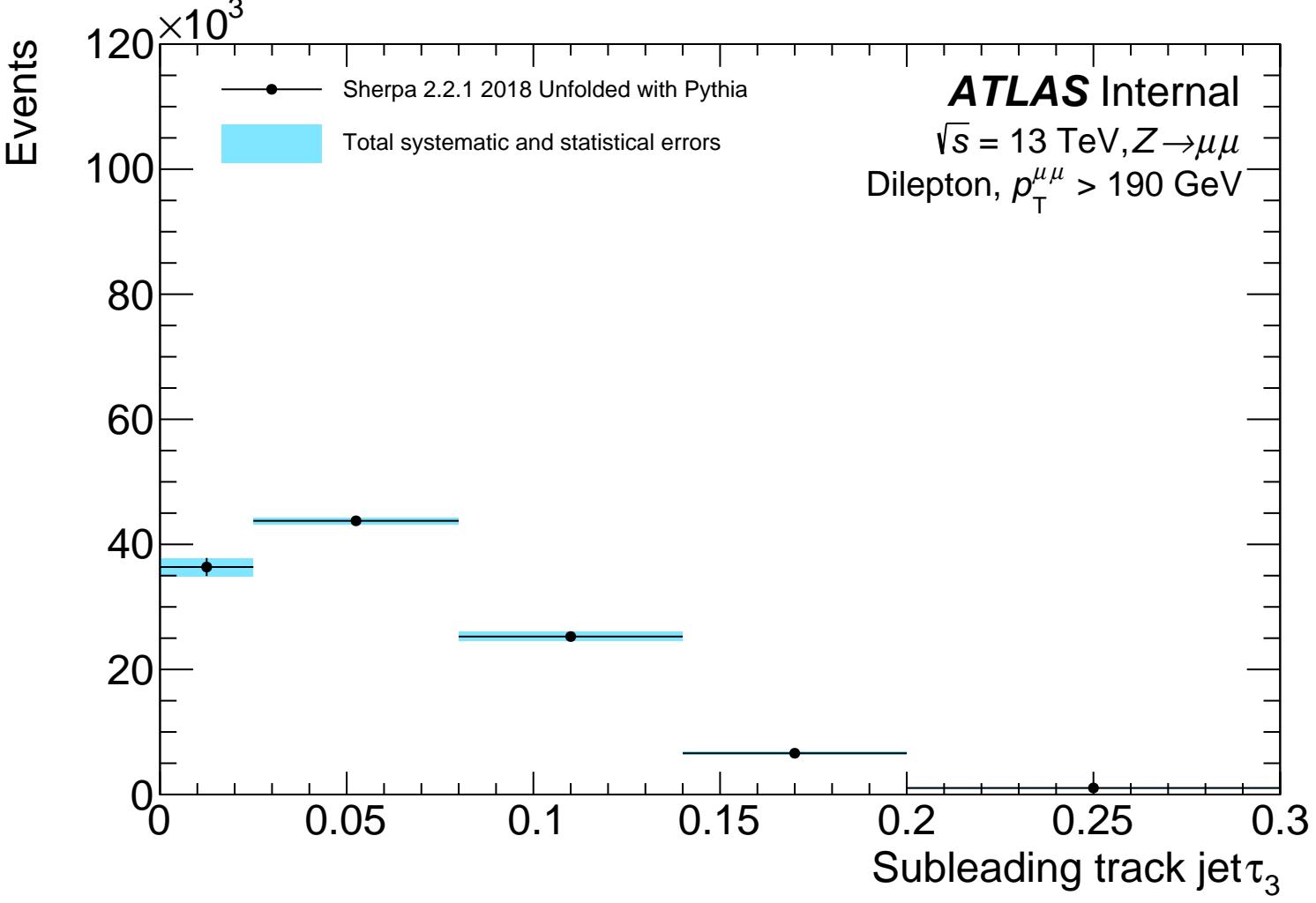


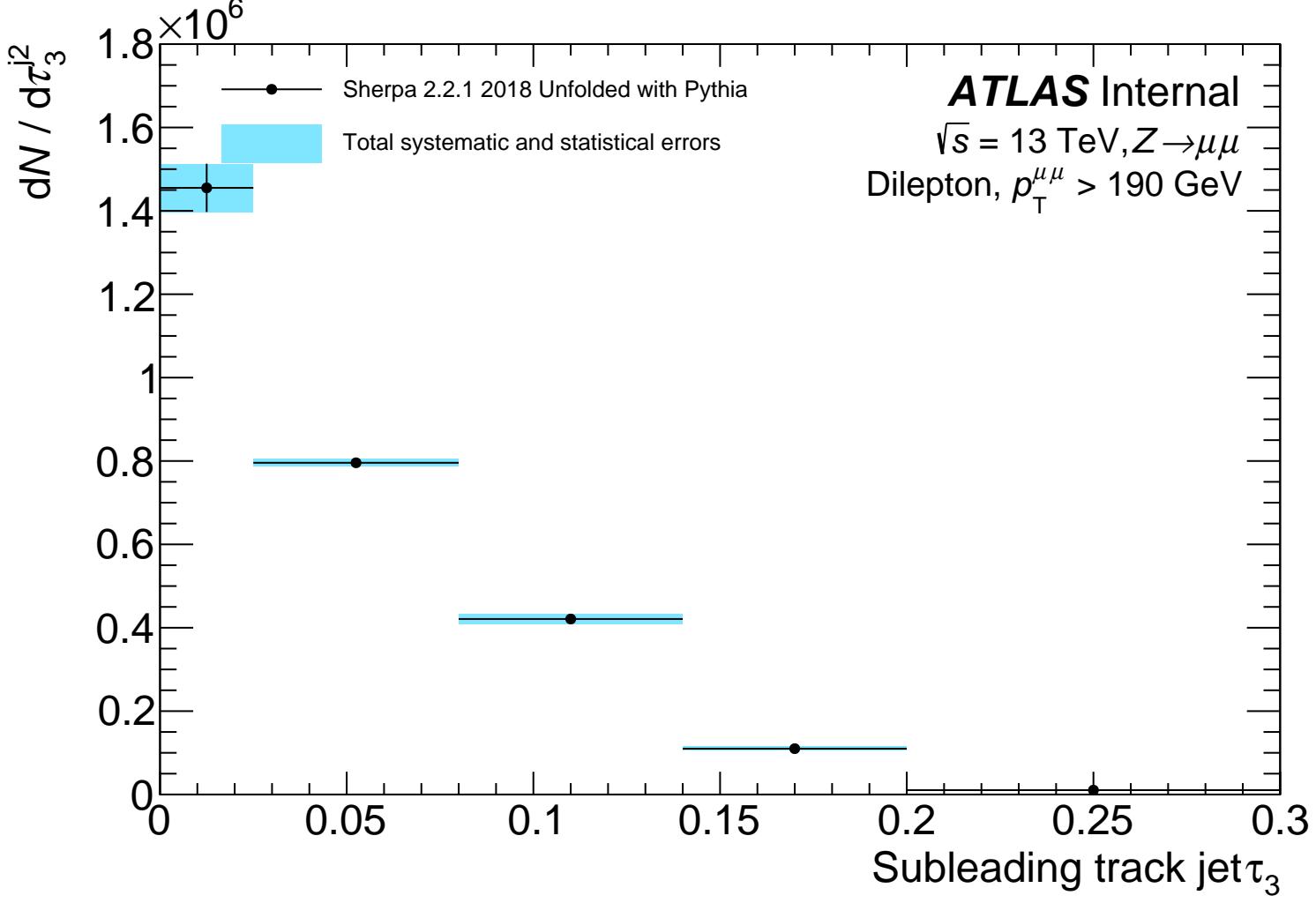










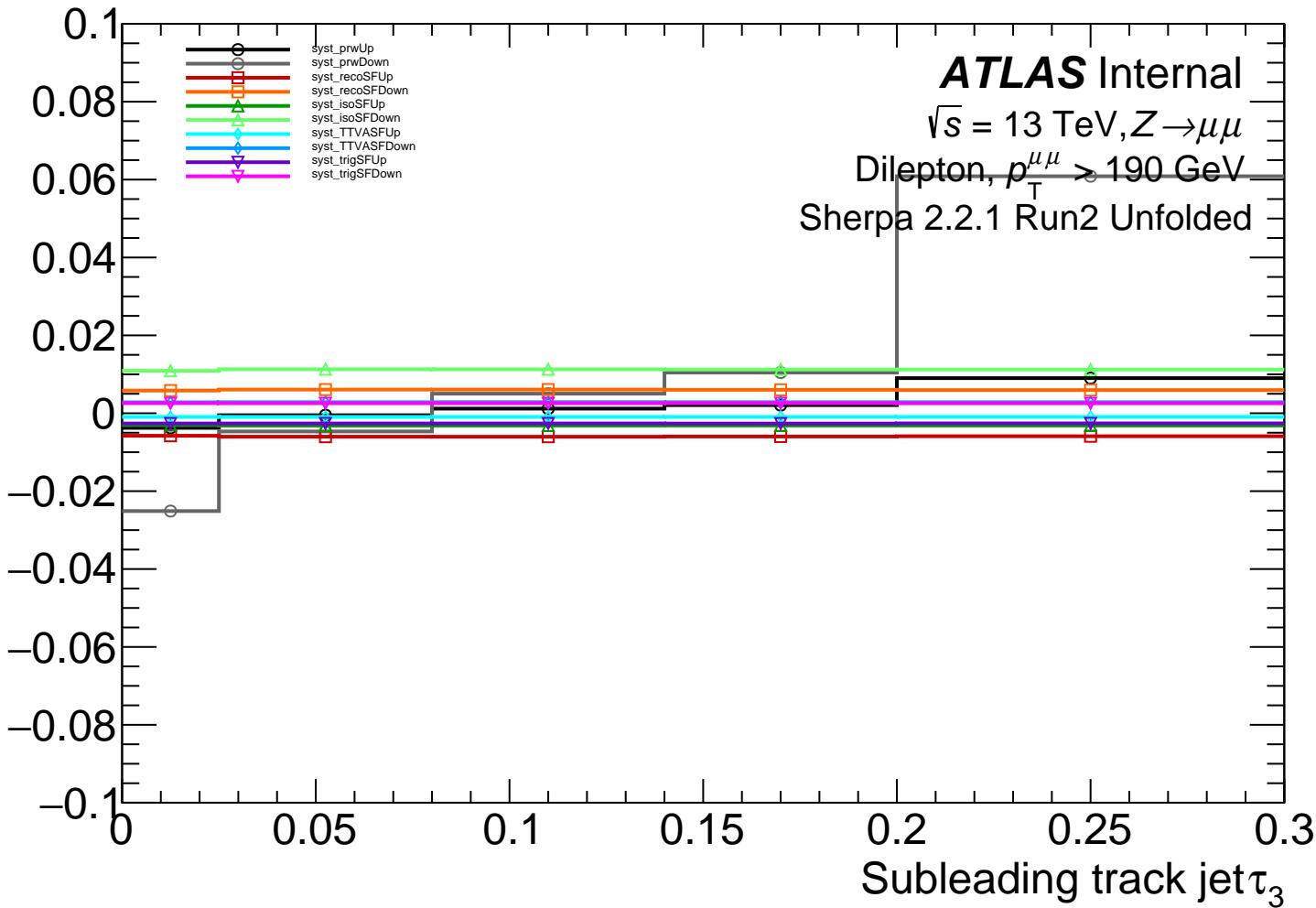


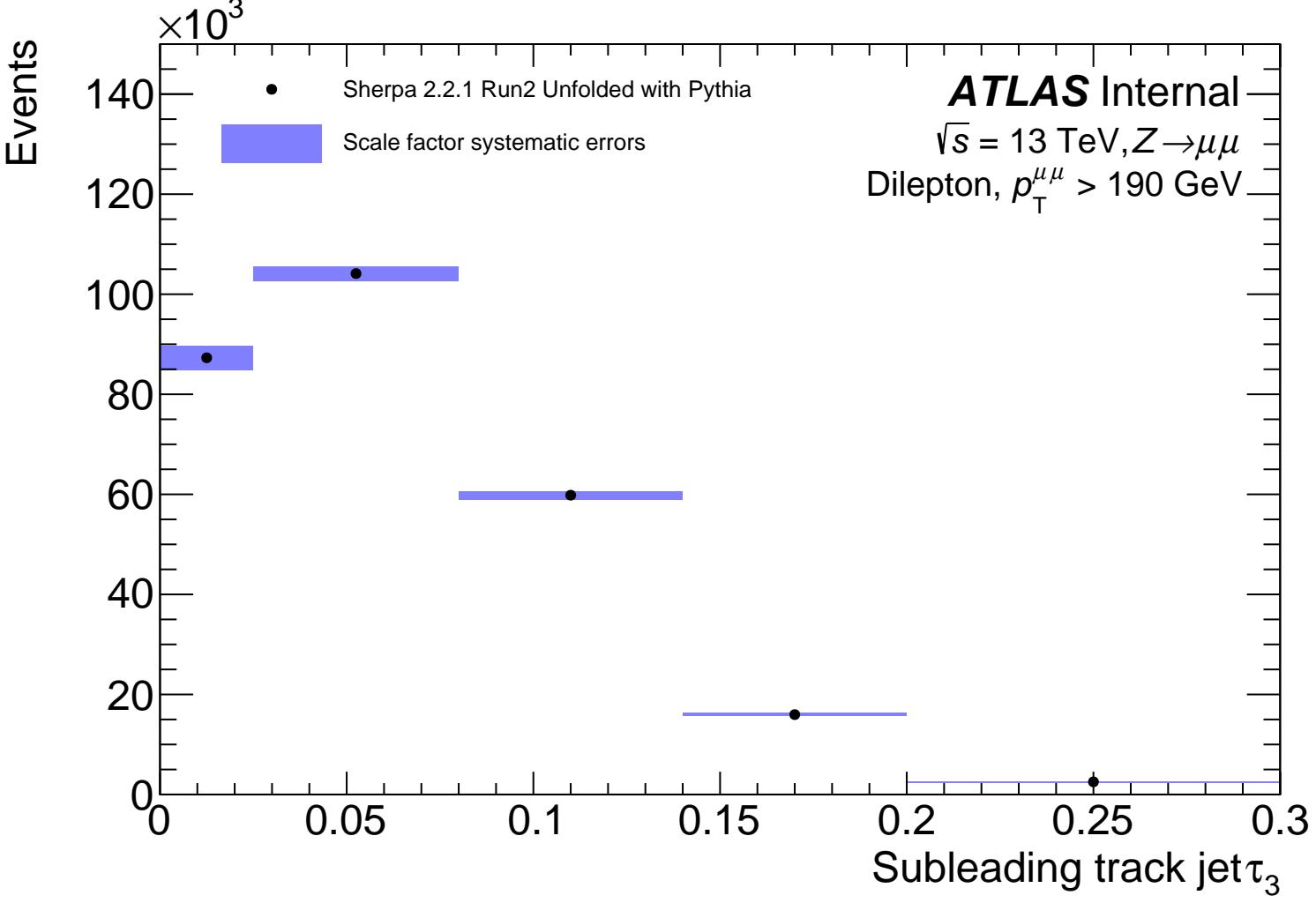
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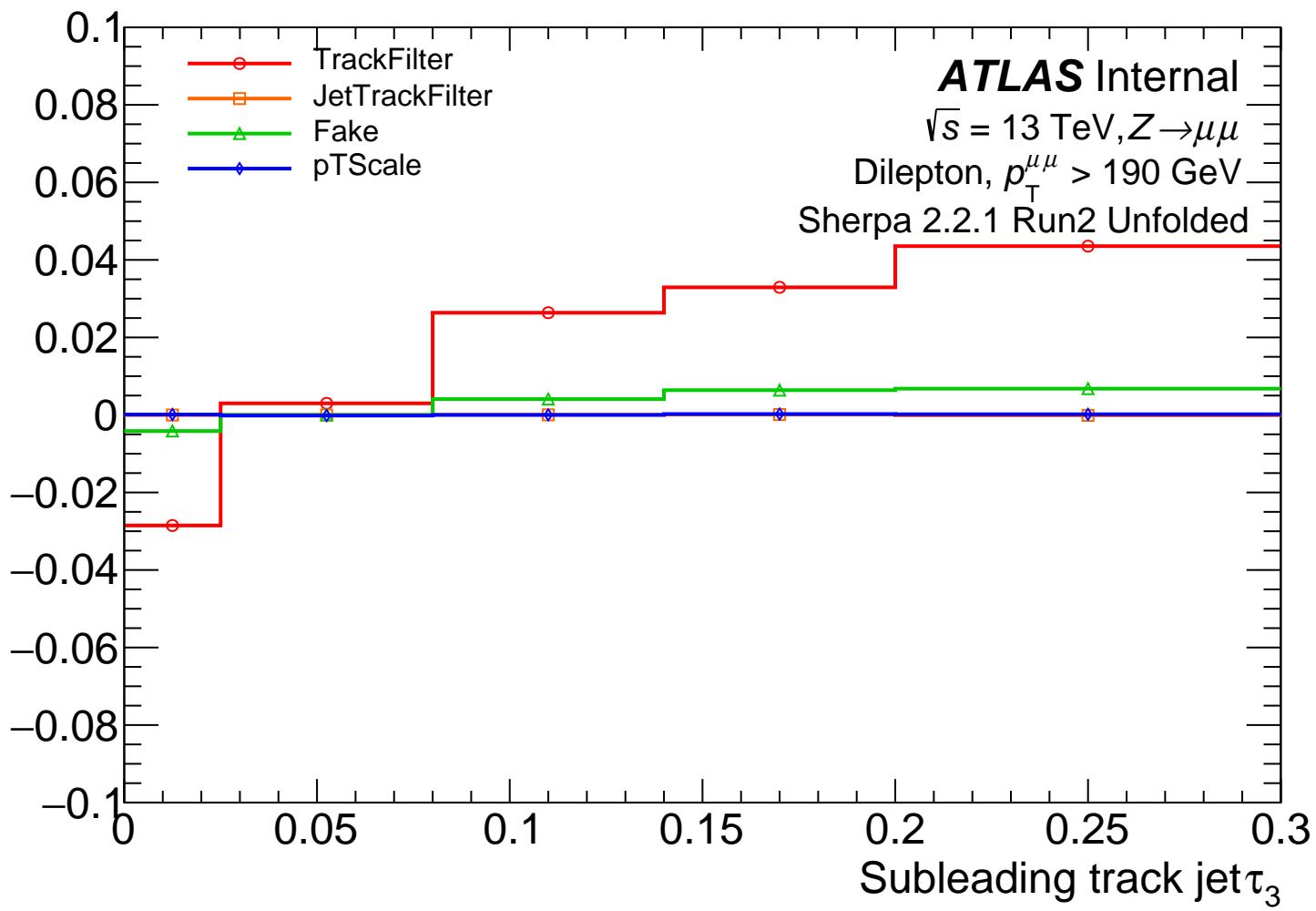
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

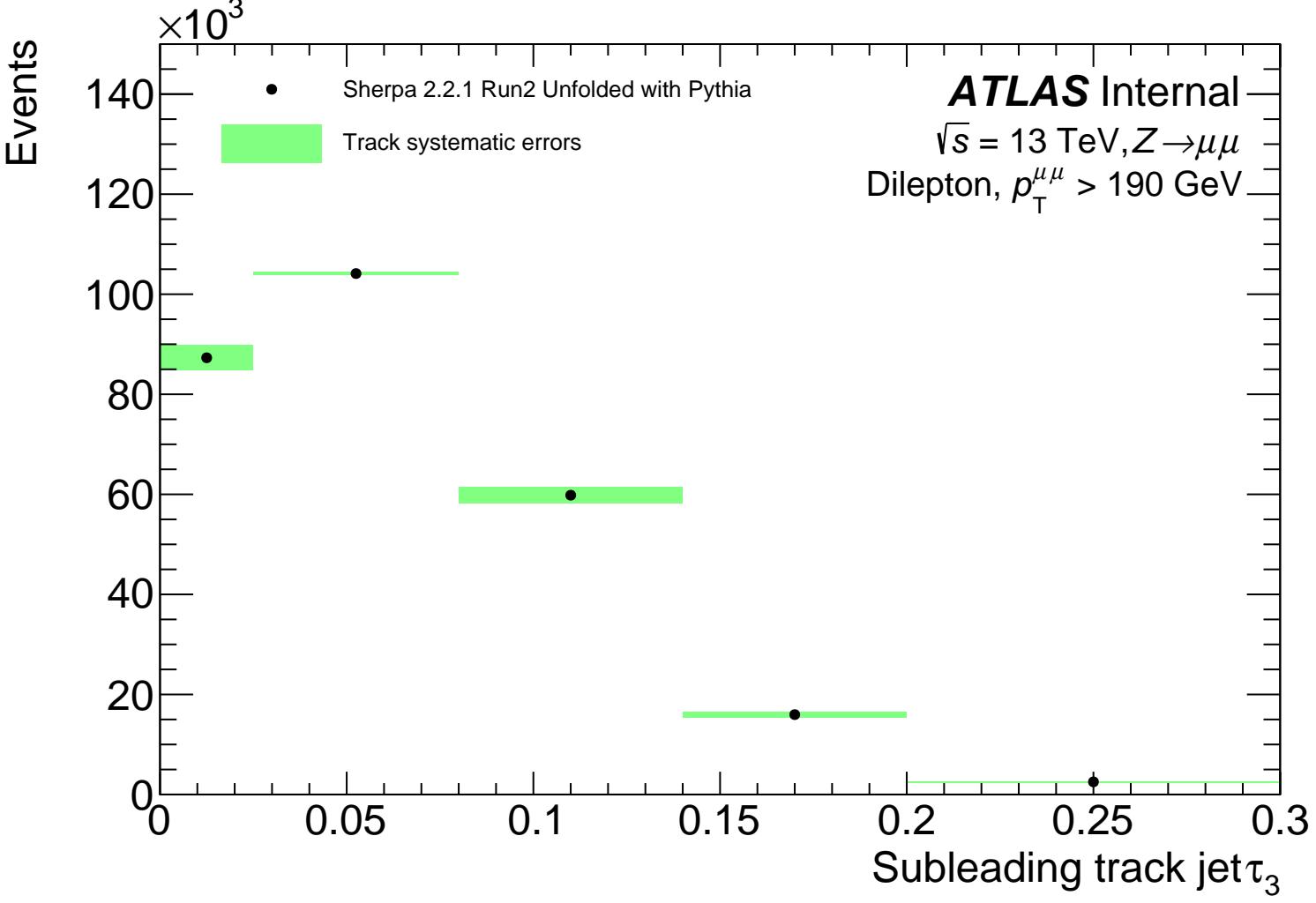
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

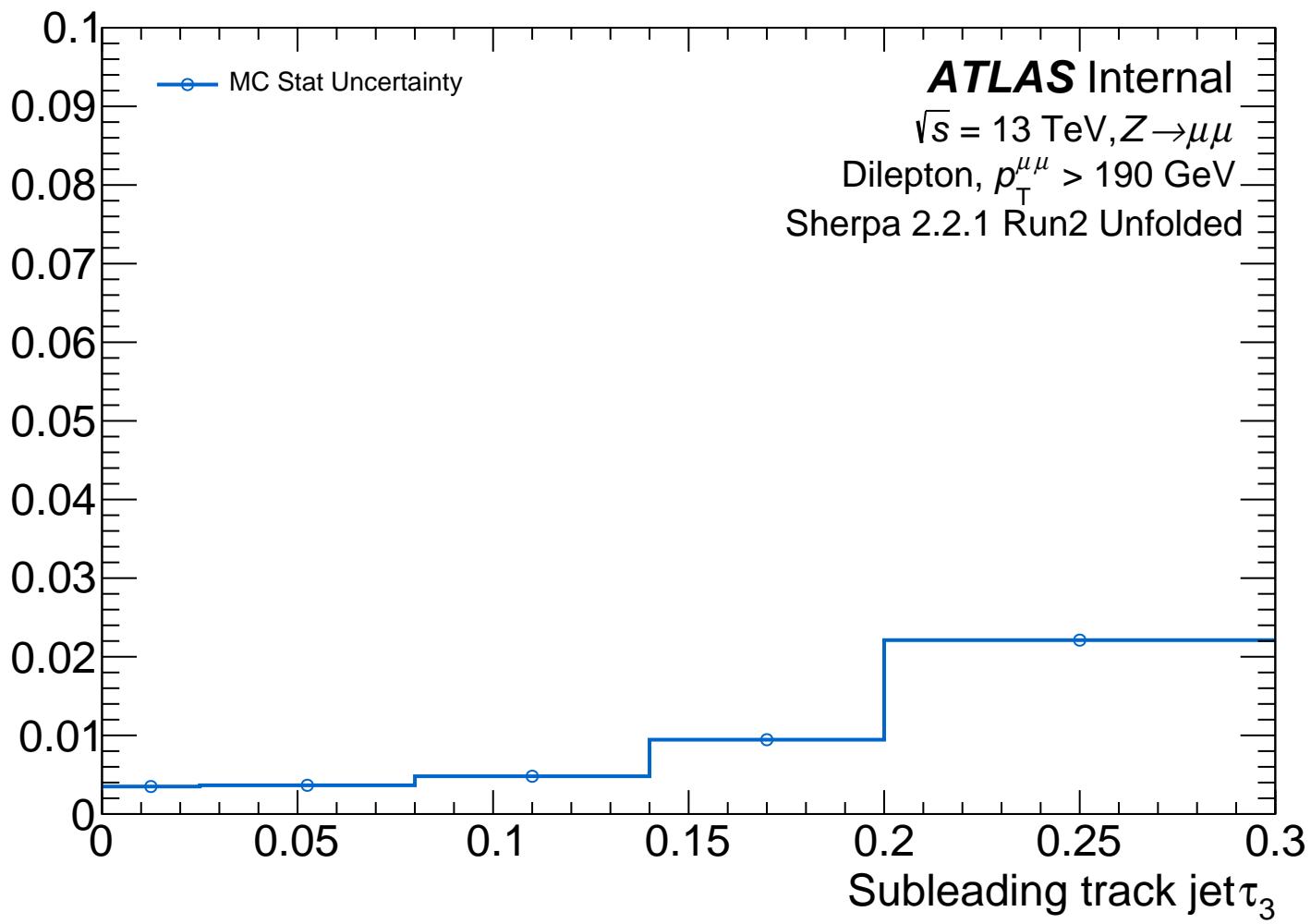
Sherpa 2.2.1 Run2 Unfolded

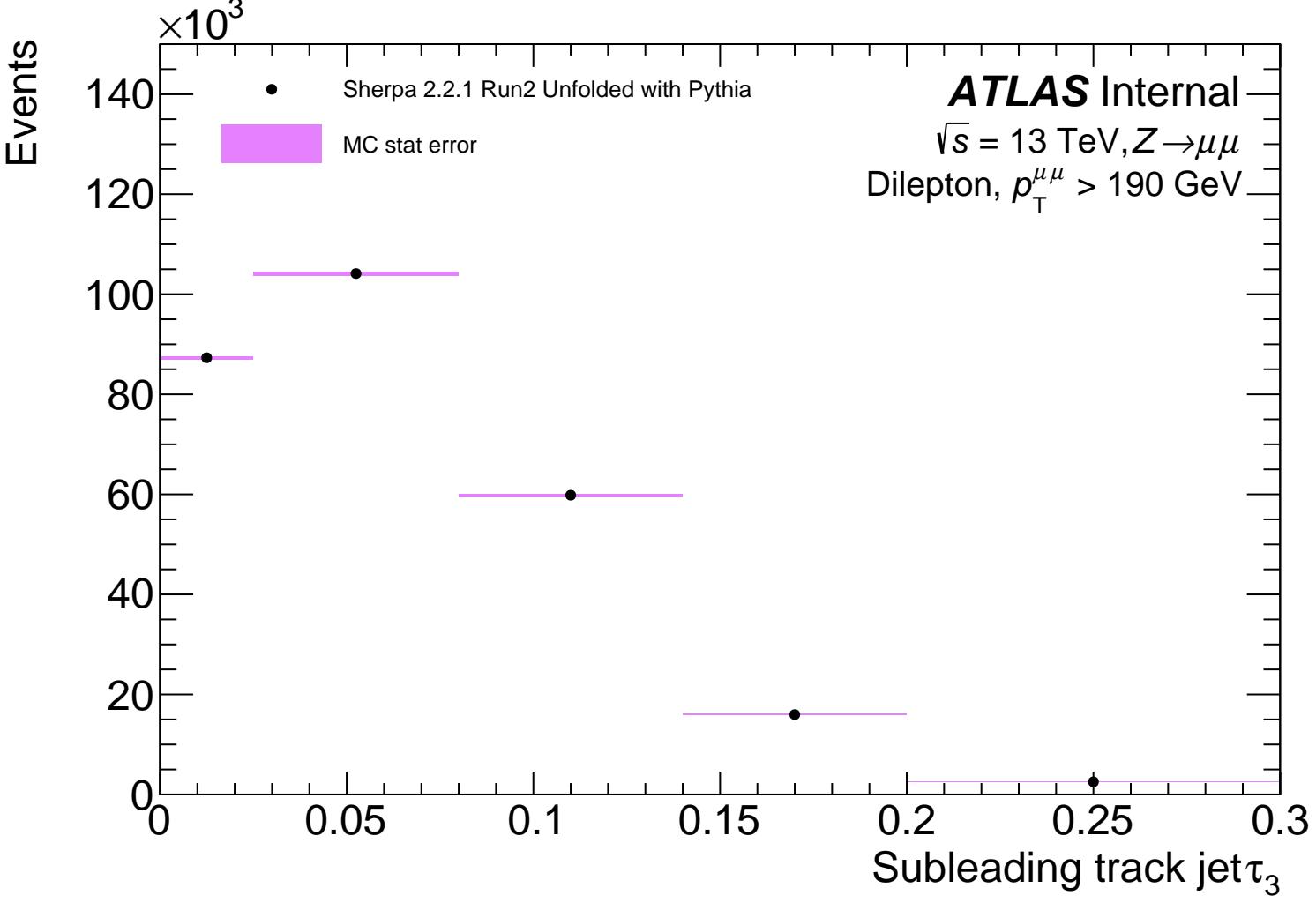


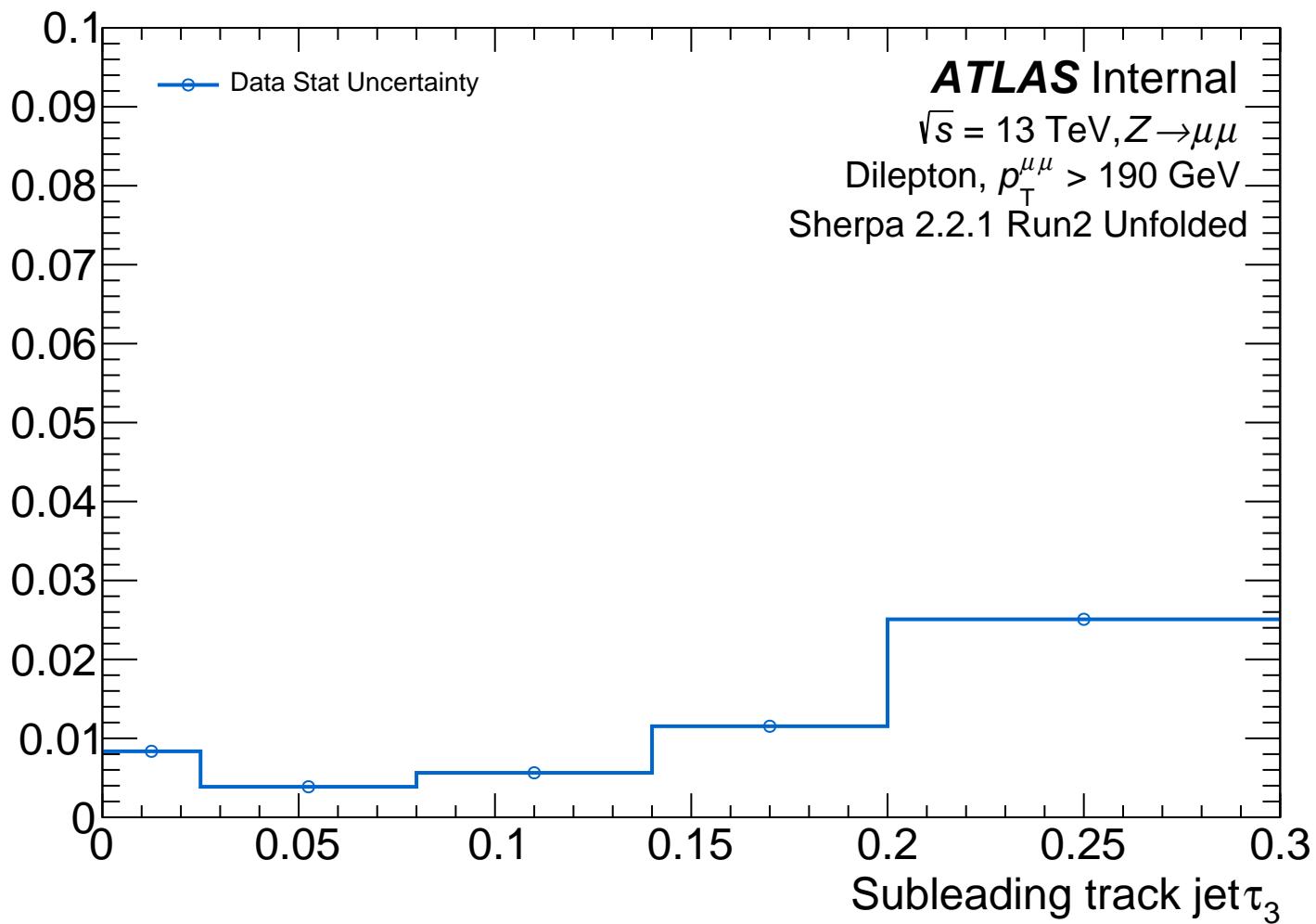


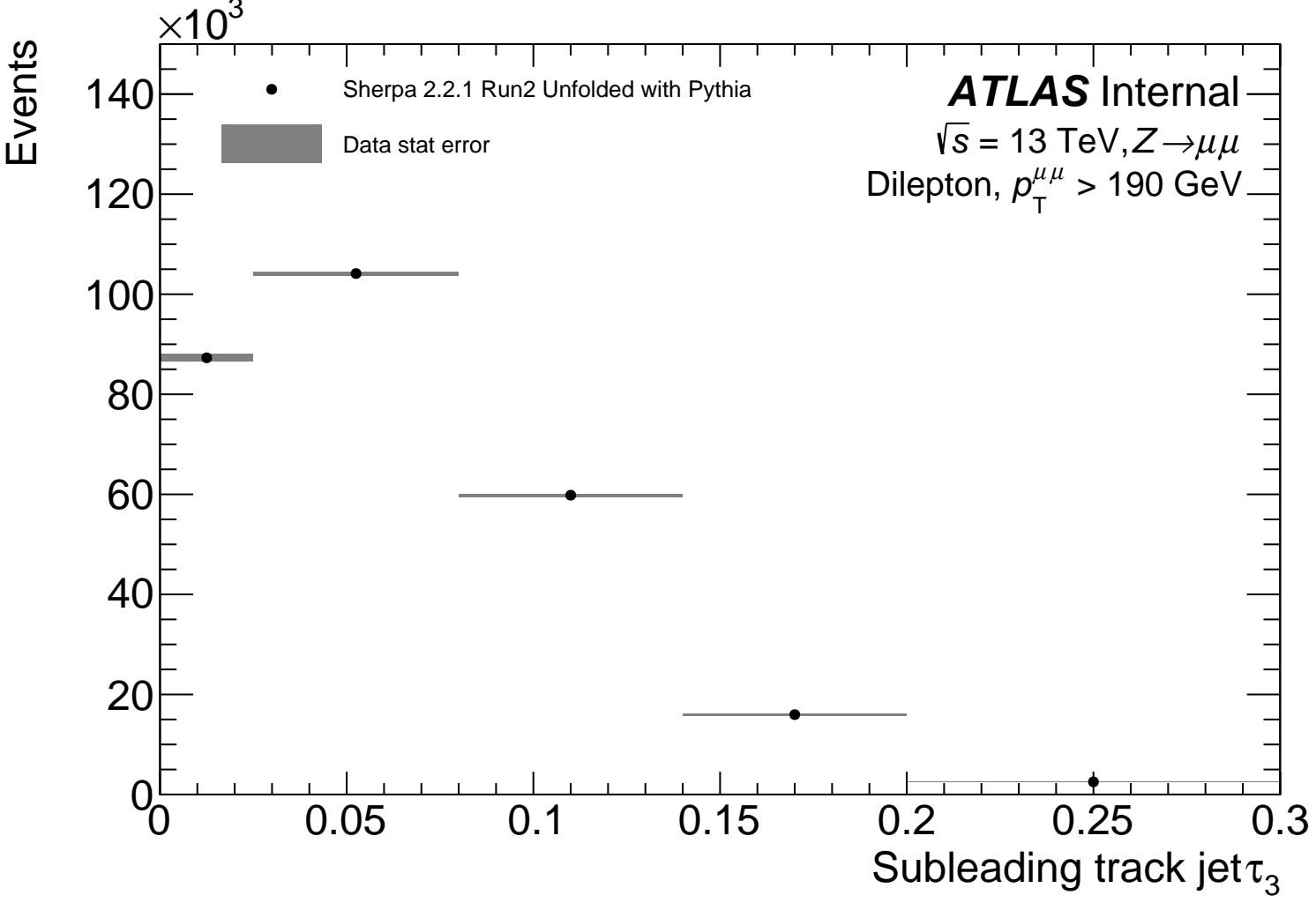


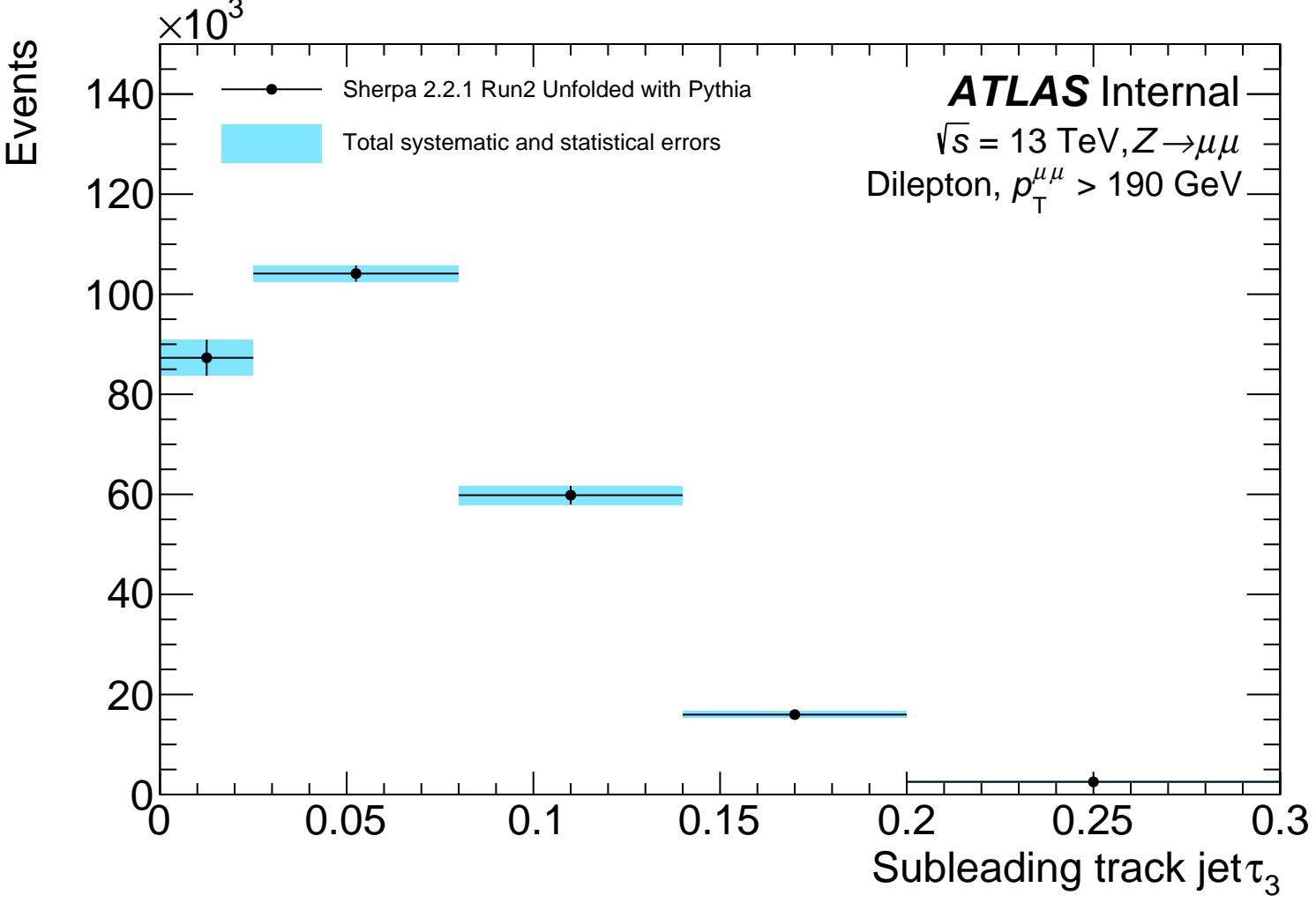


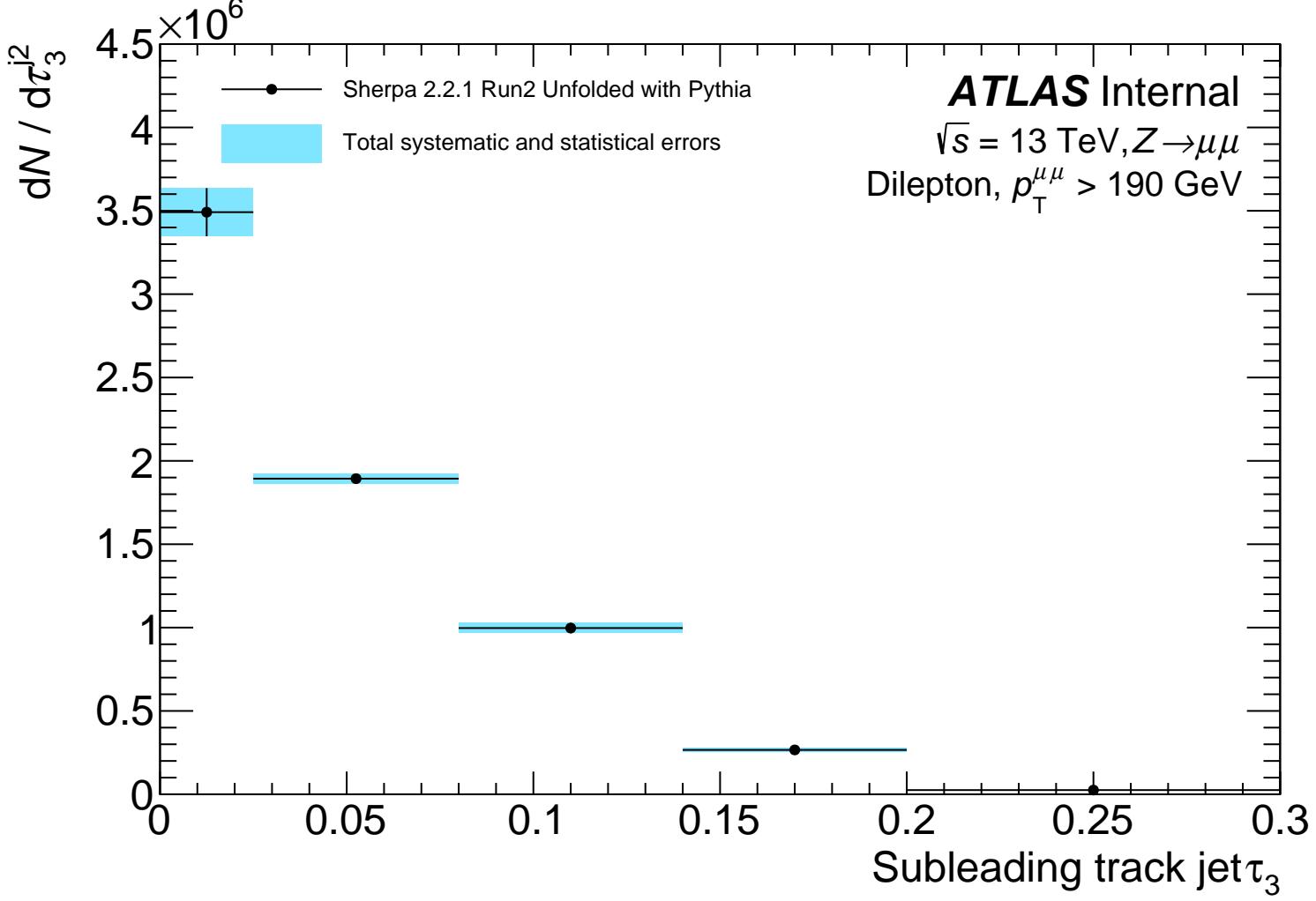










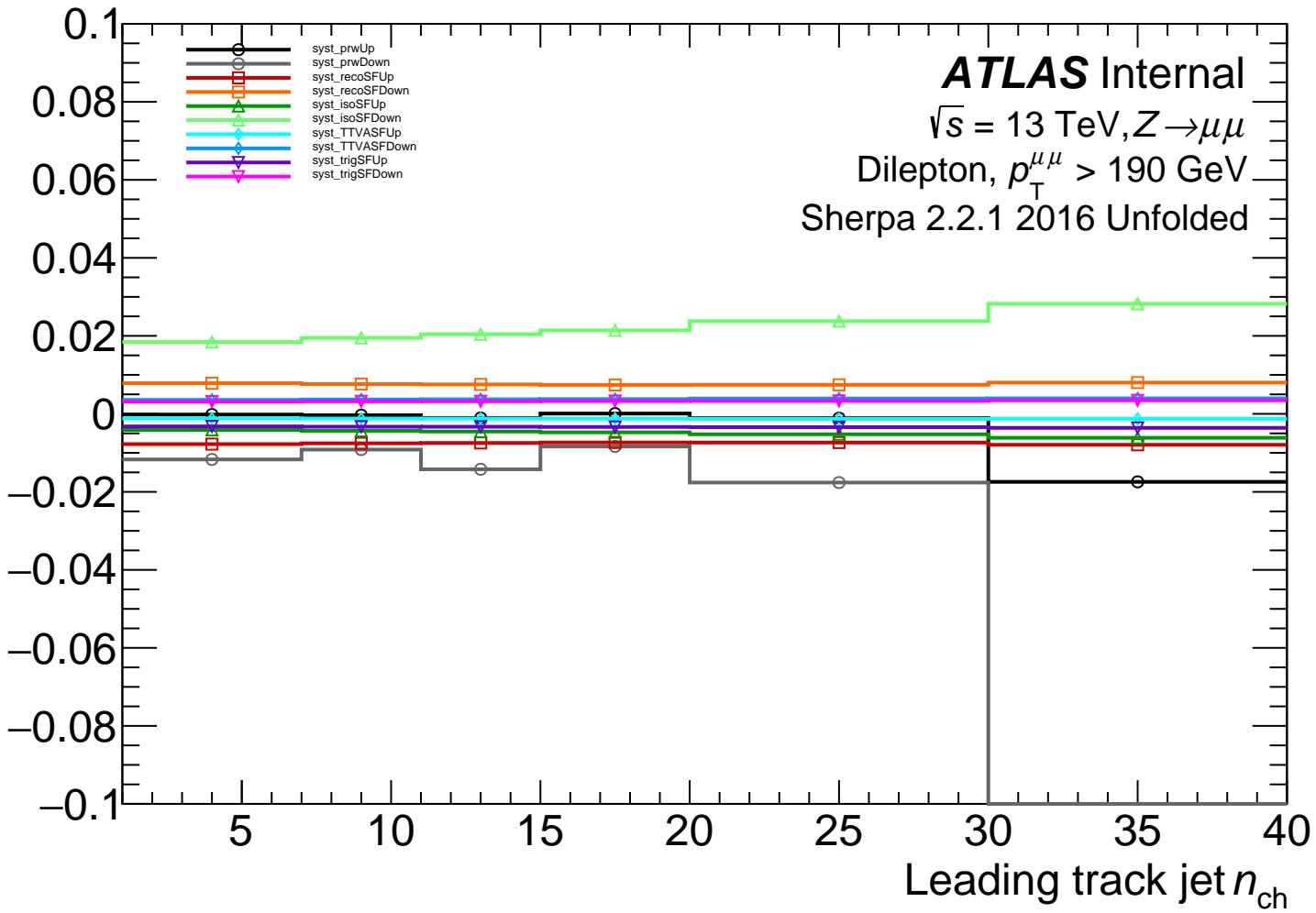


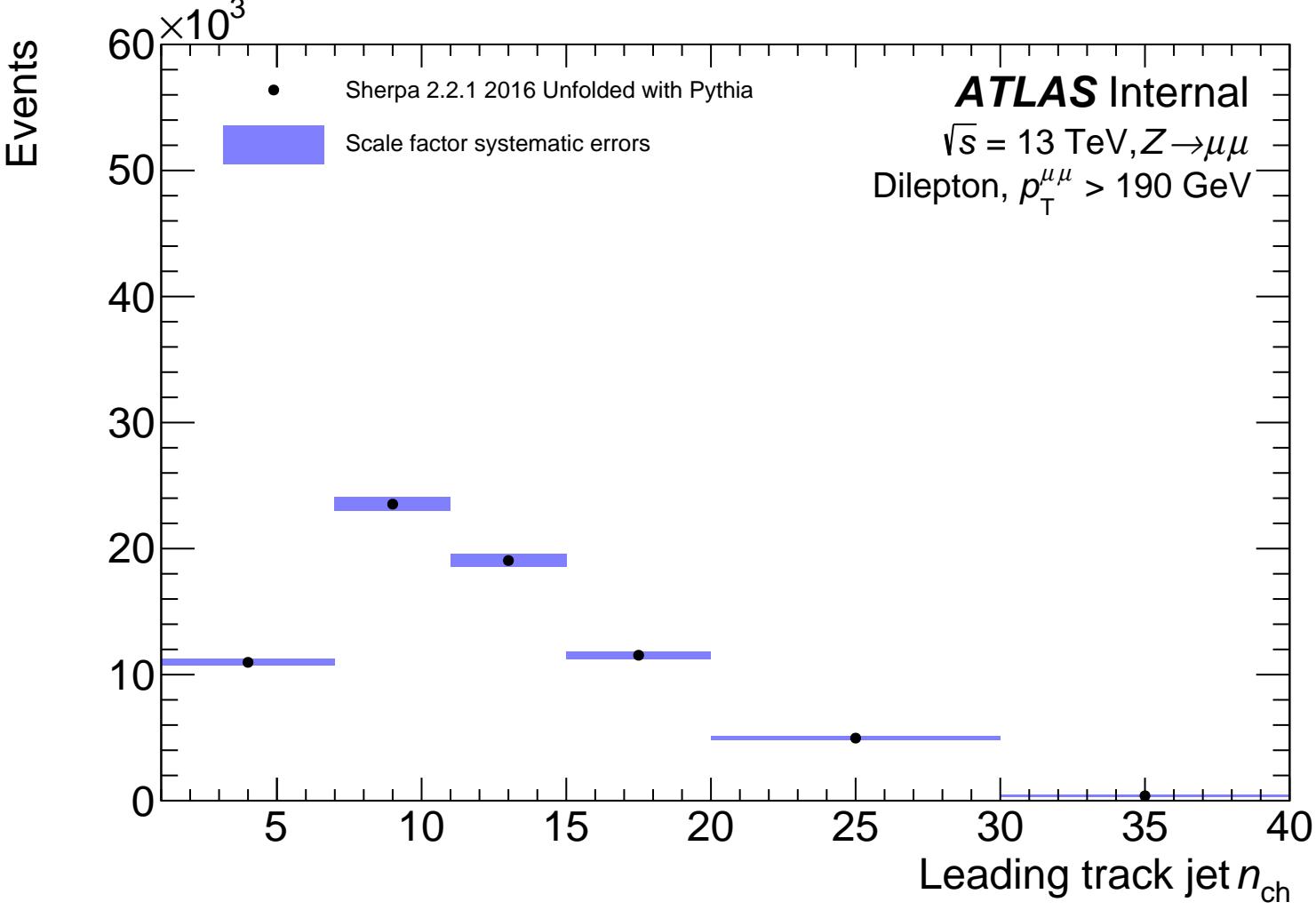
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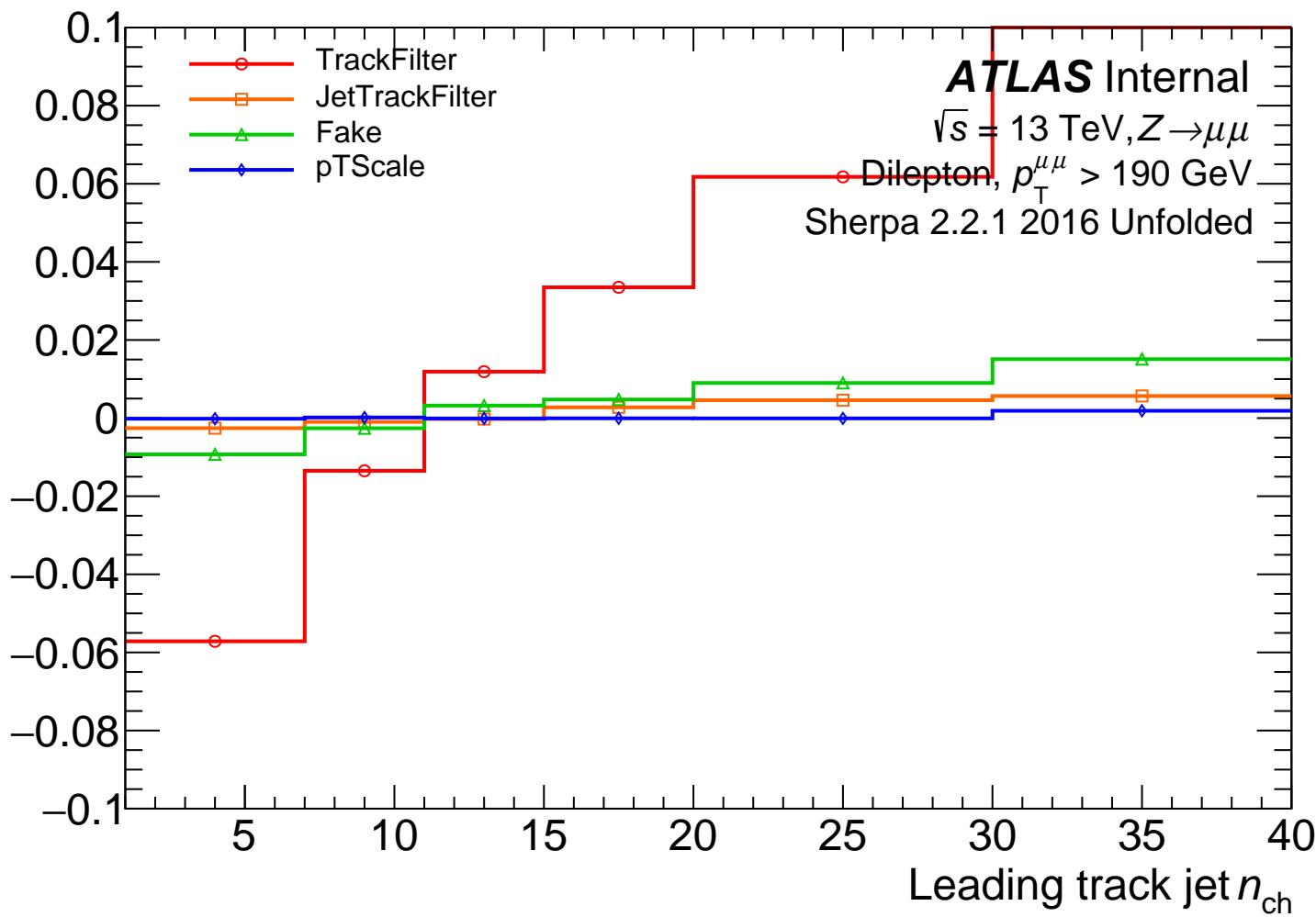
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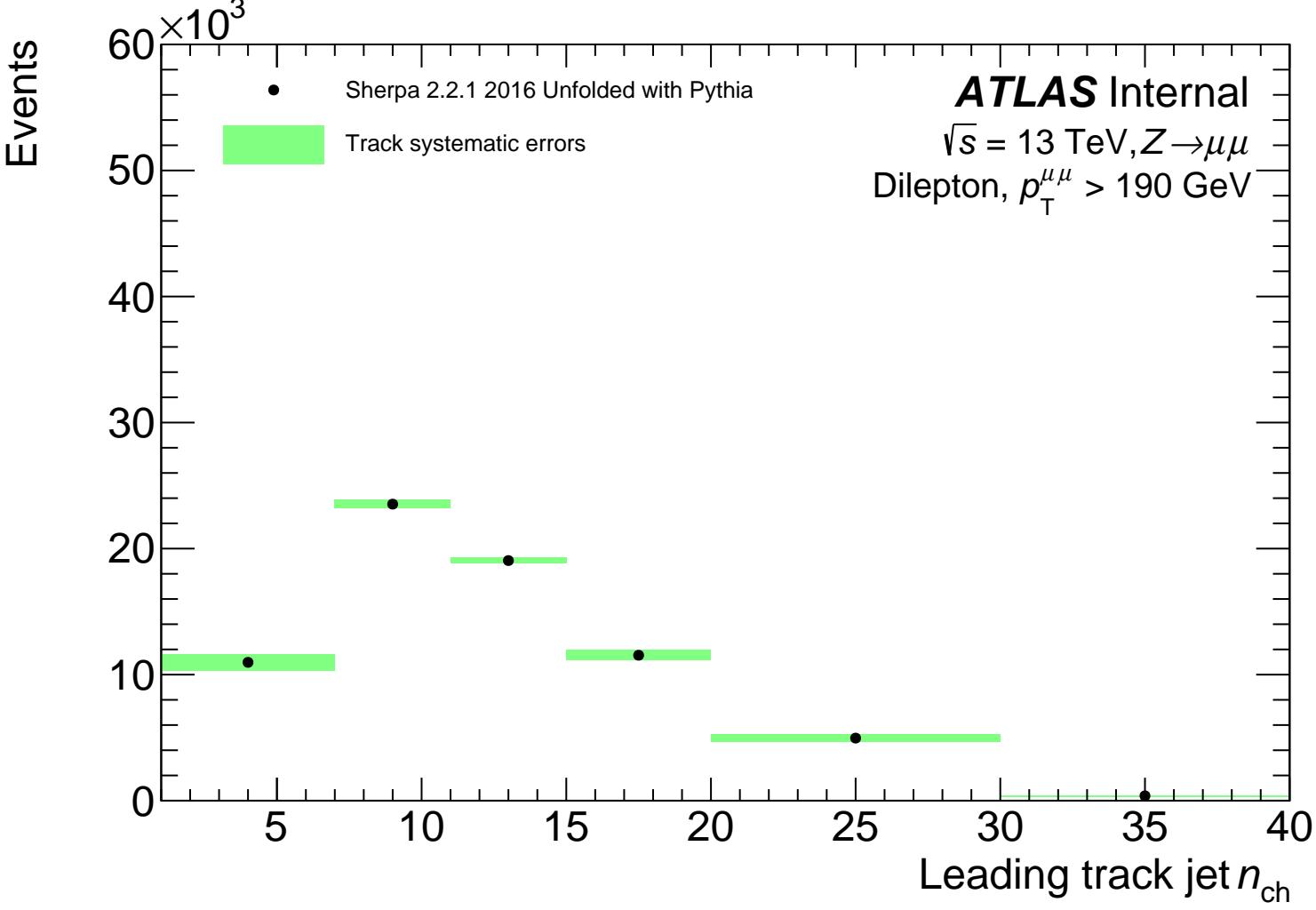
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

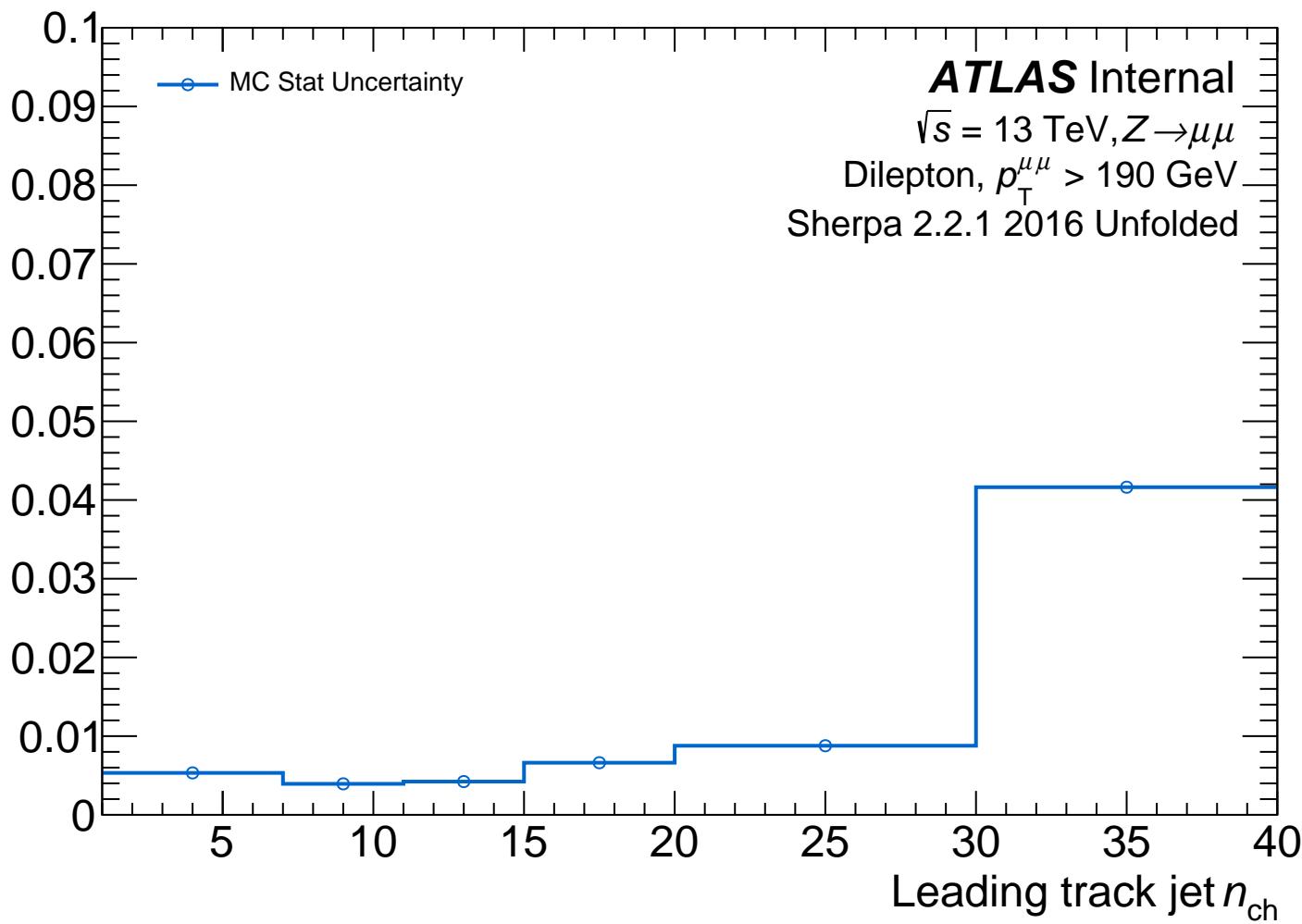
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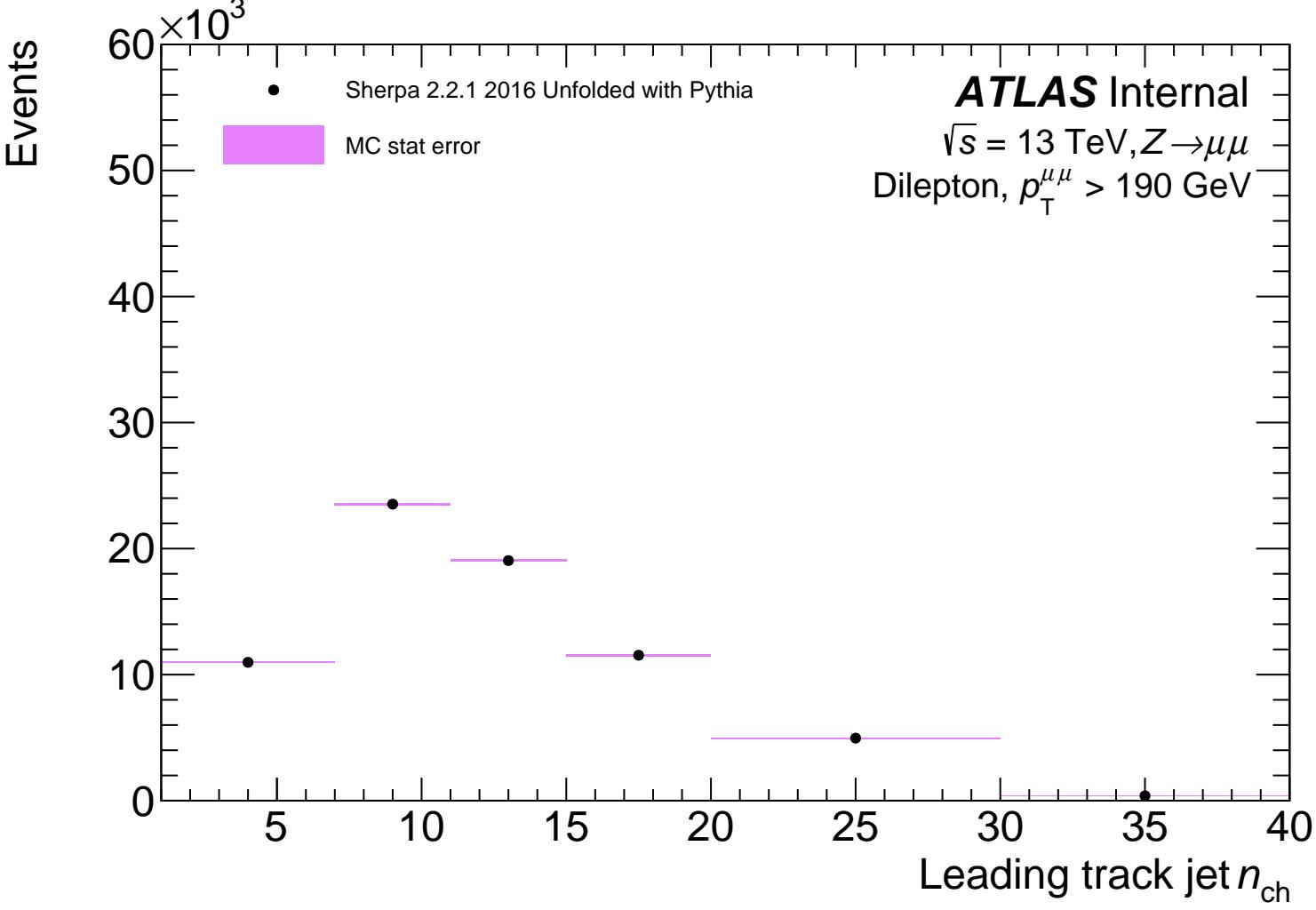


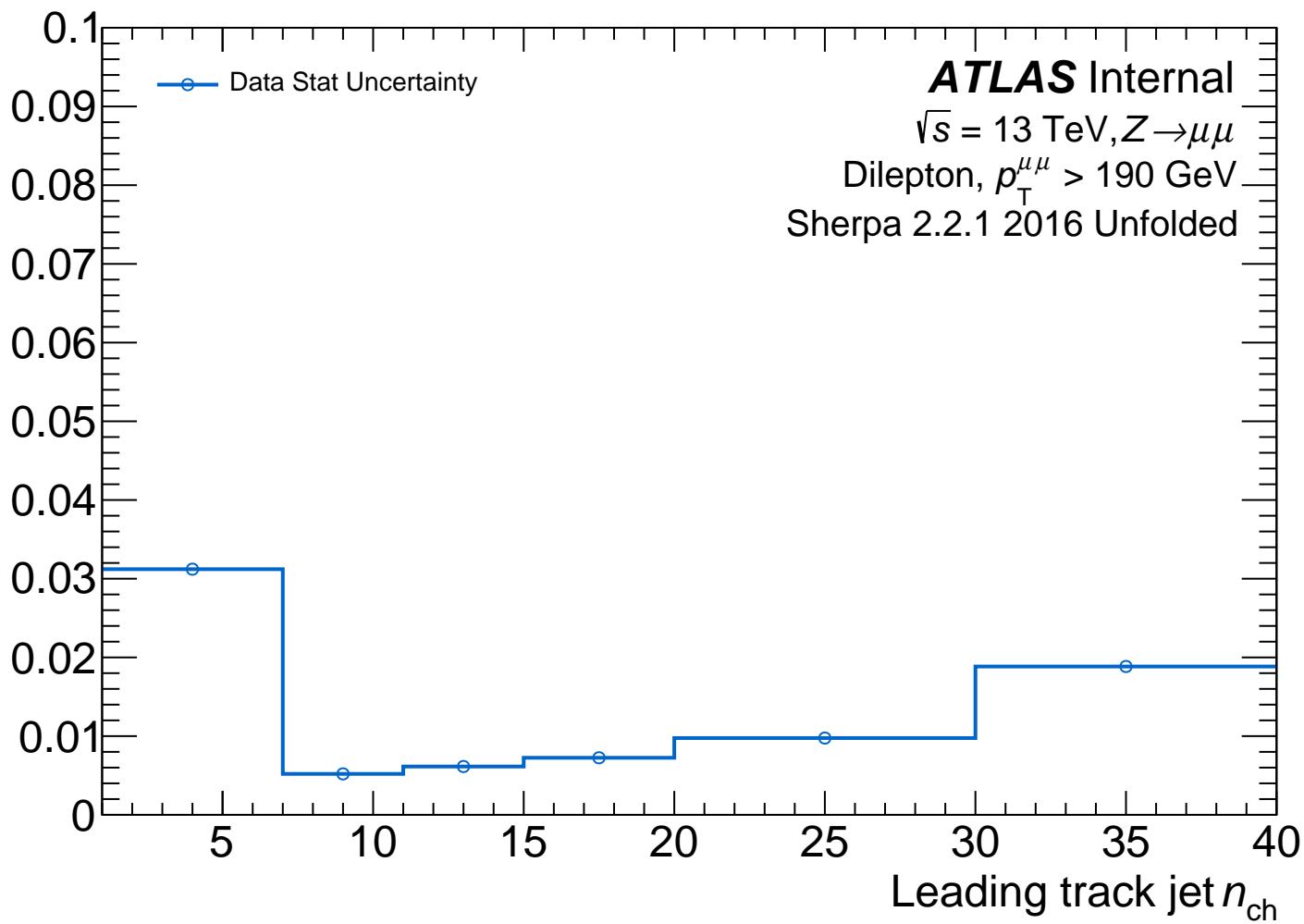


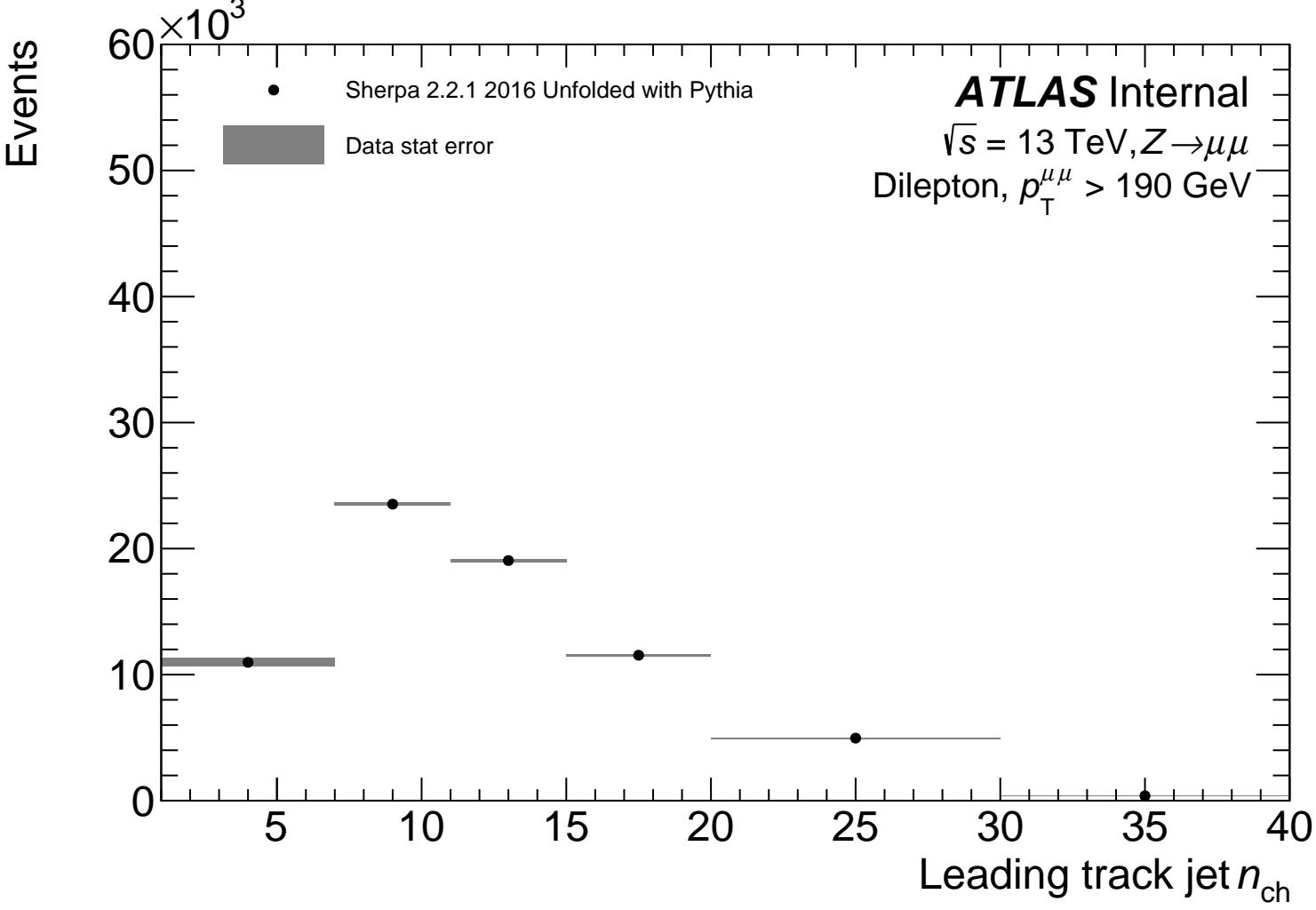


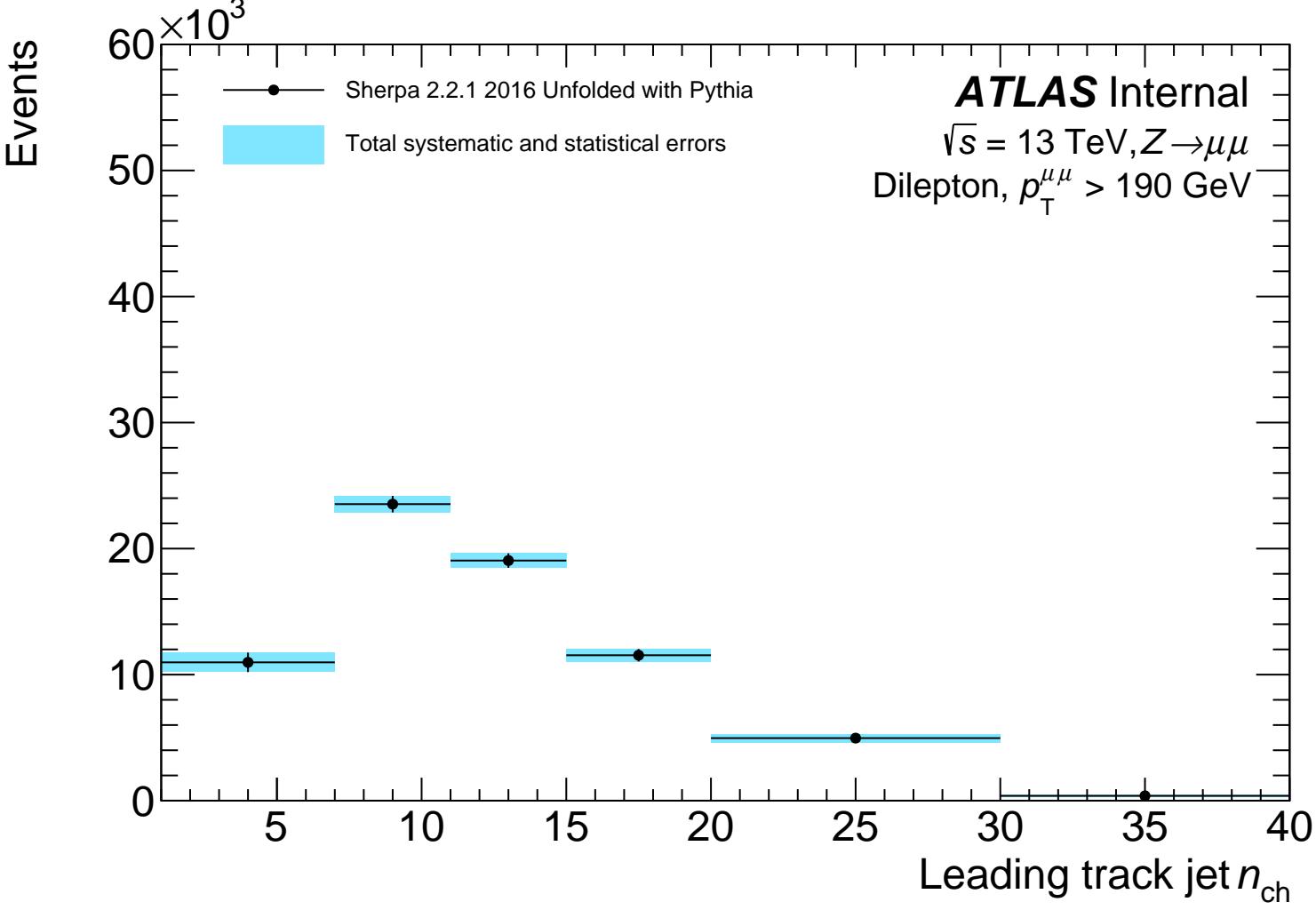


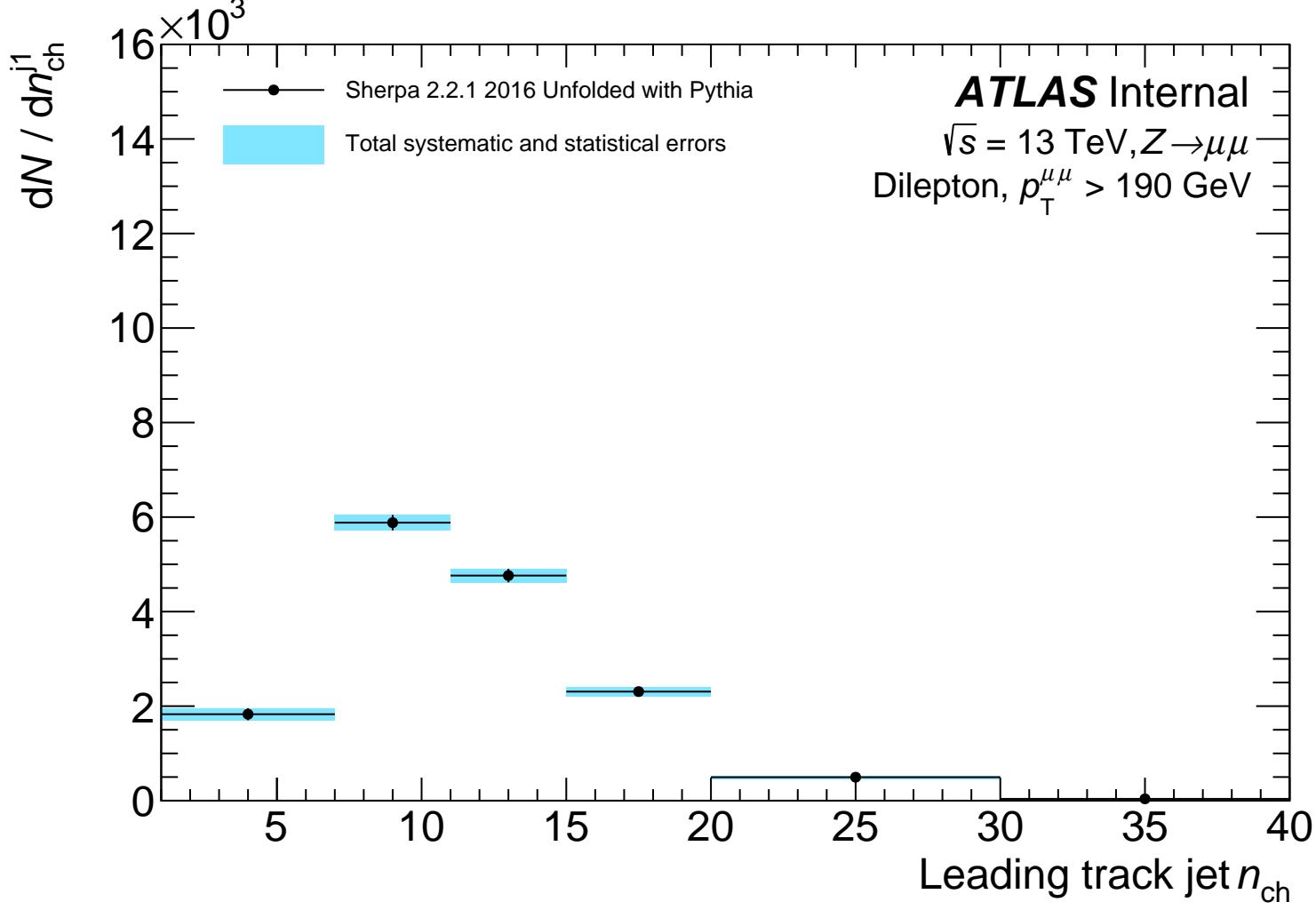










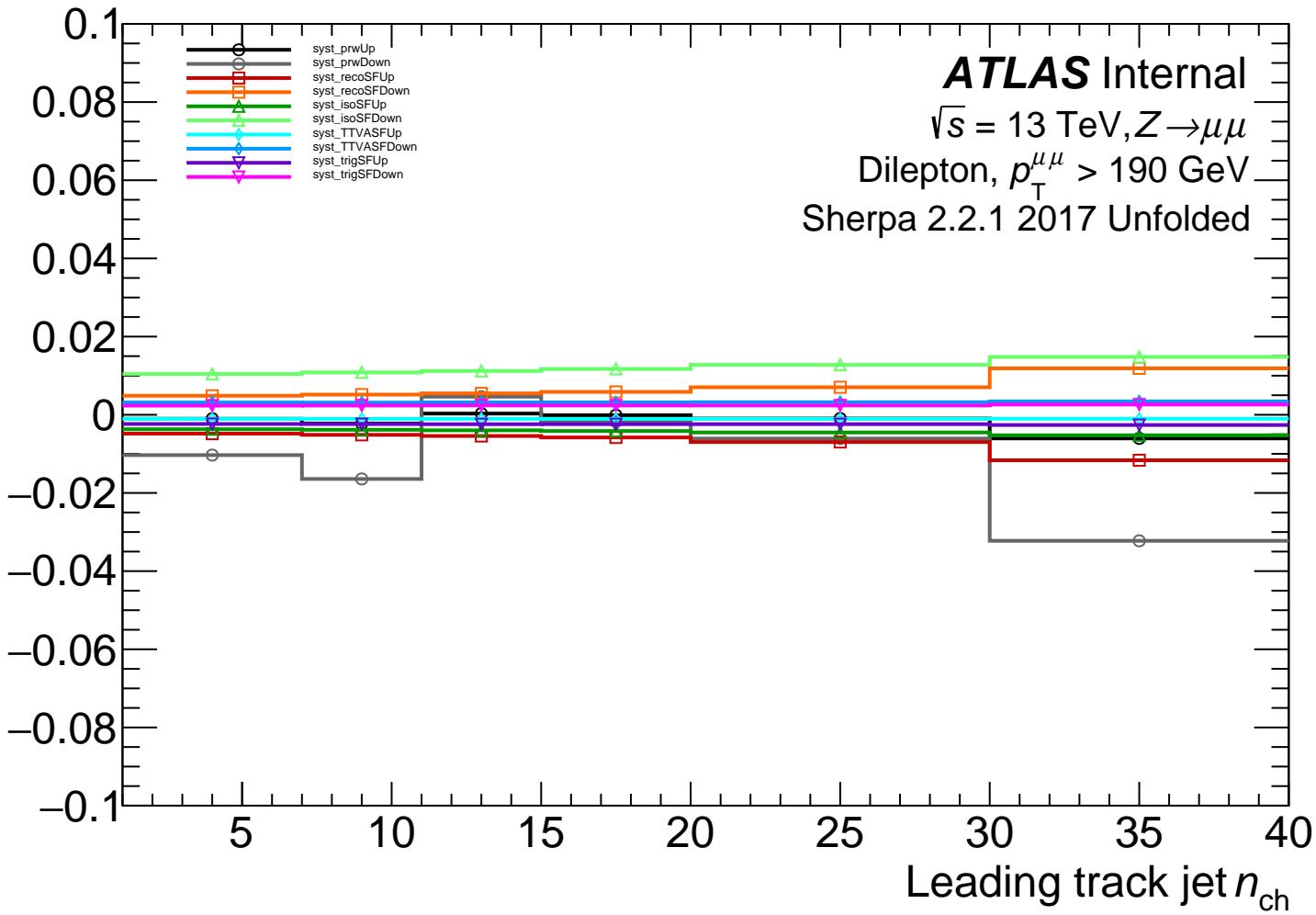


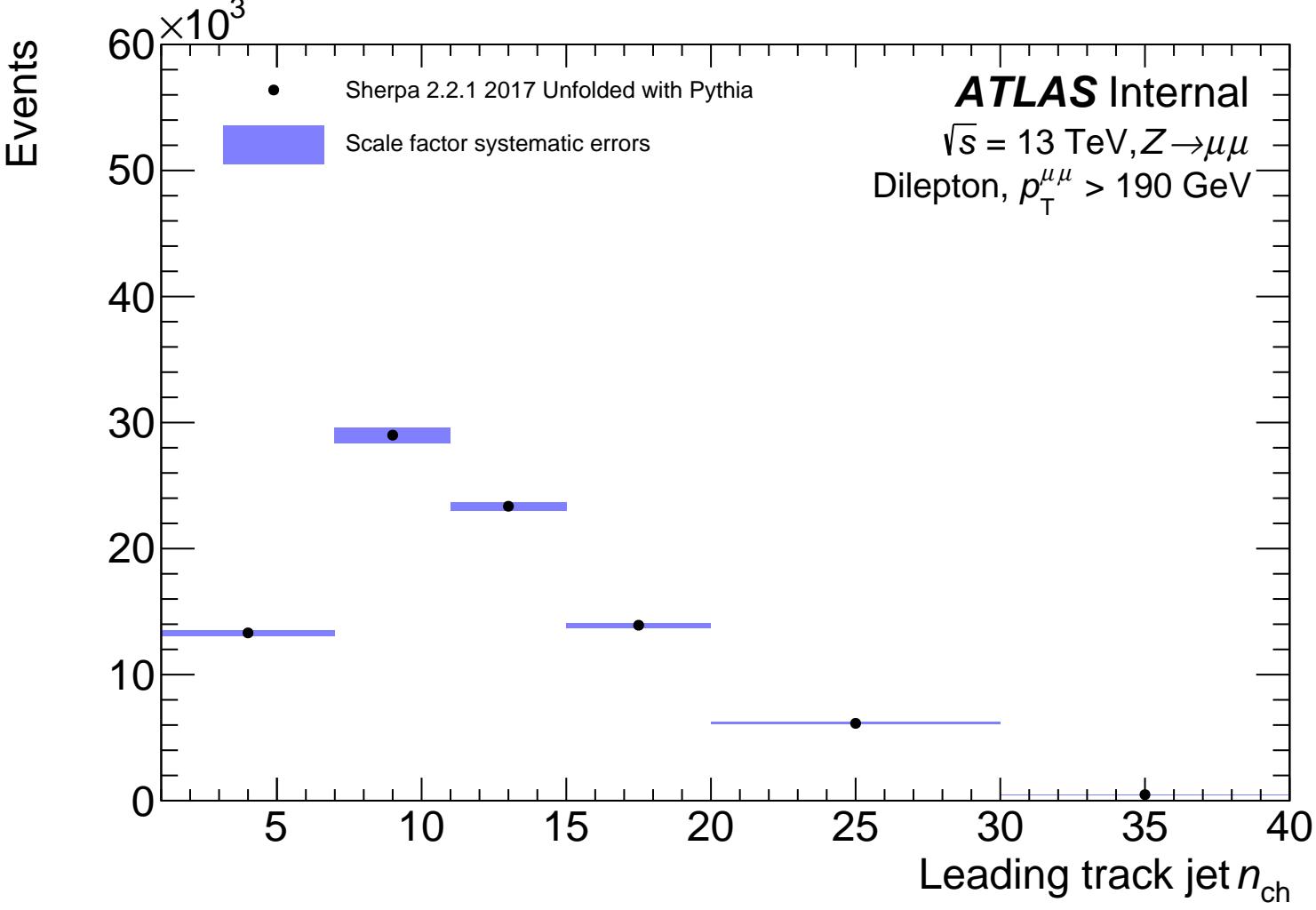
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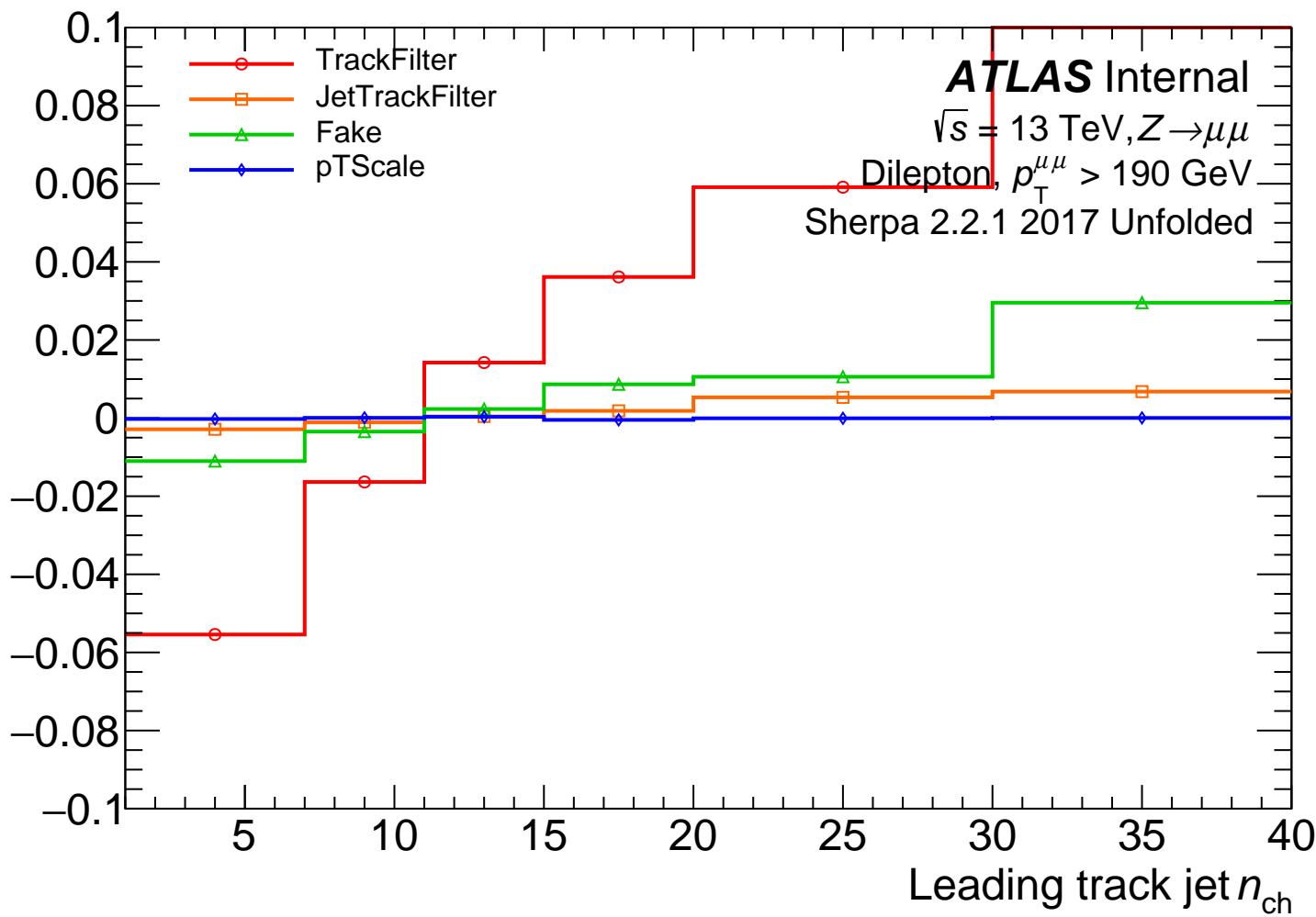
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

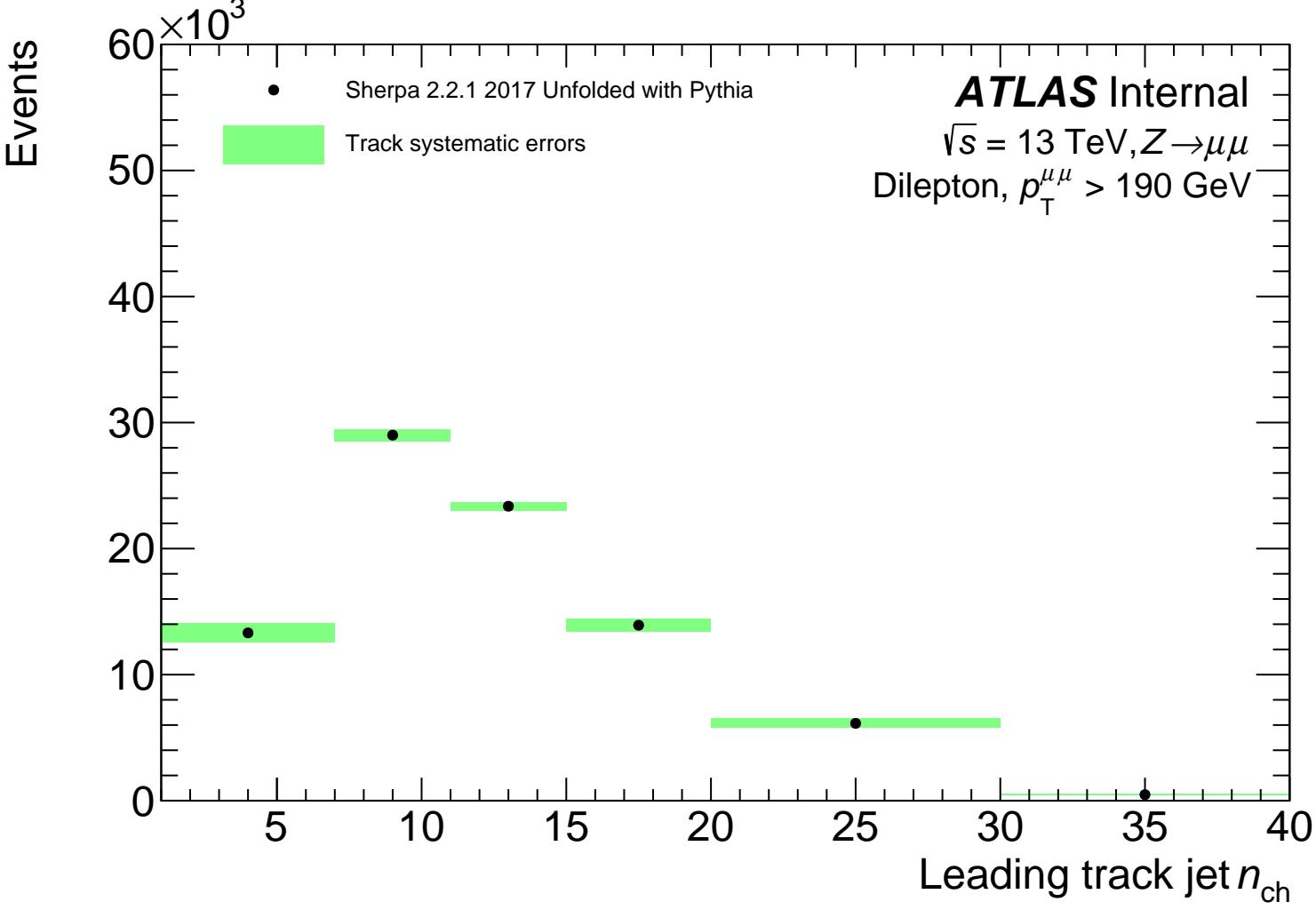
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

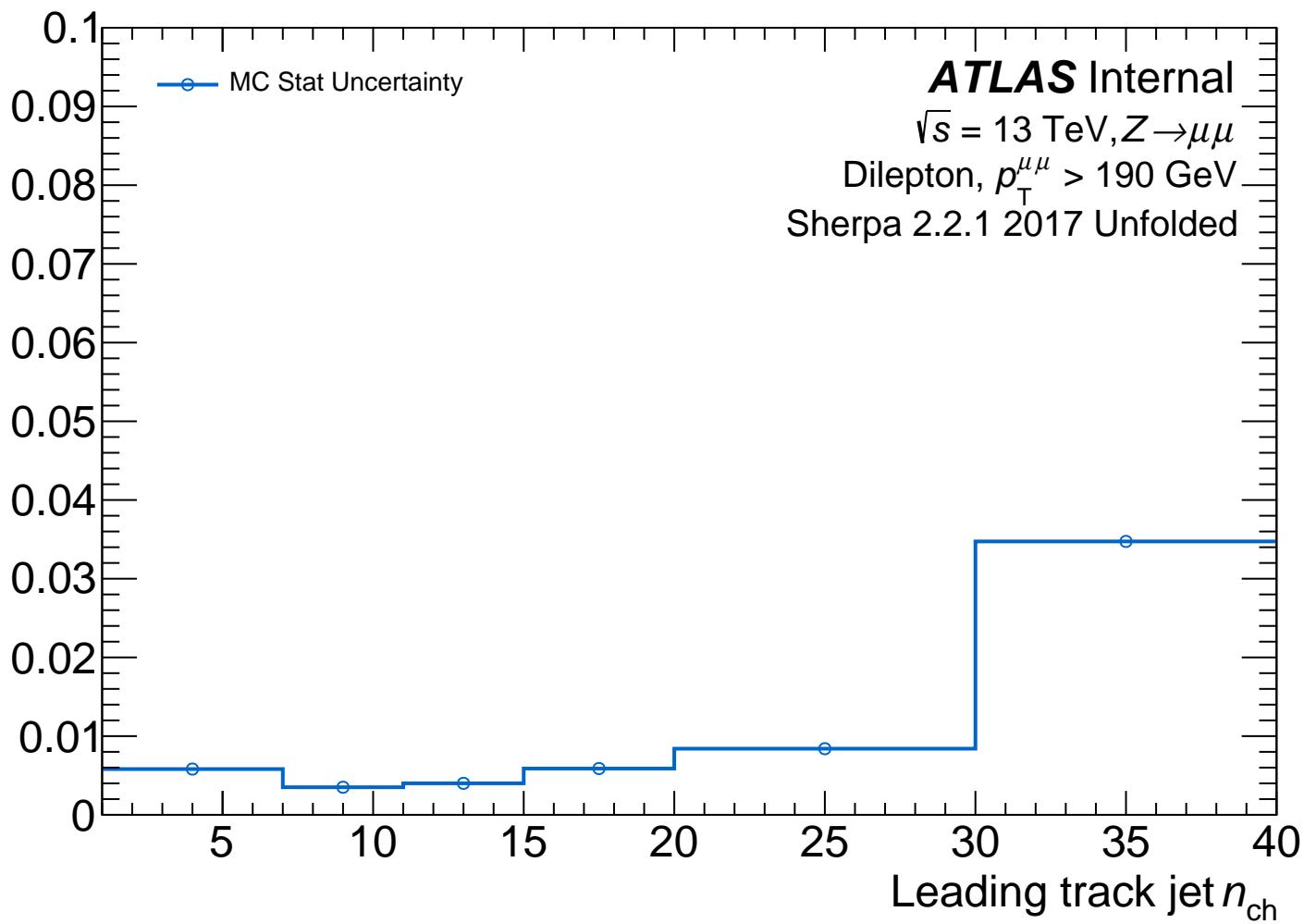
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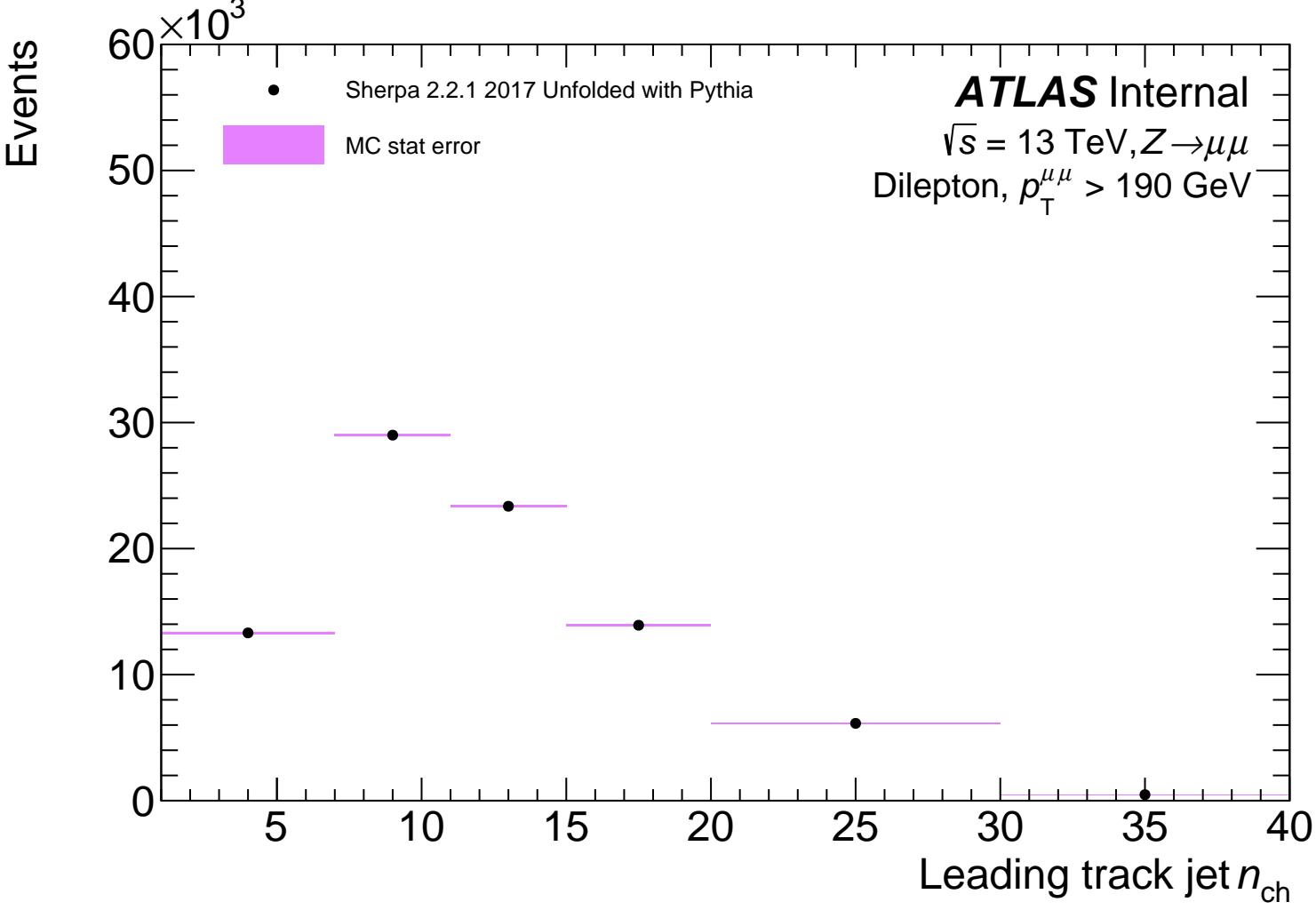


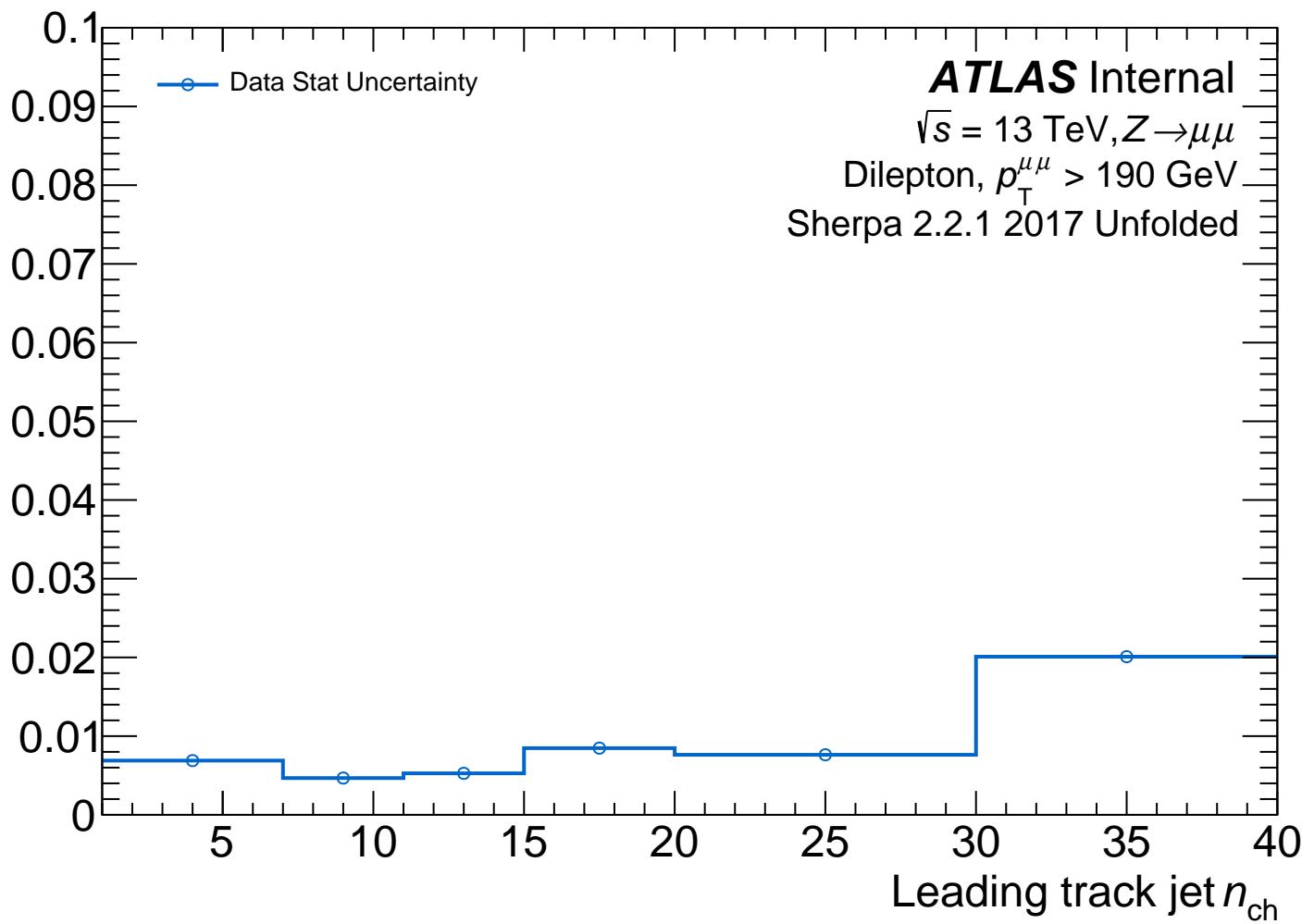


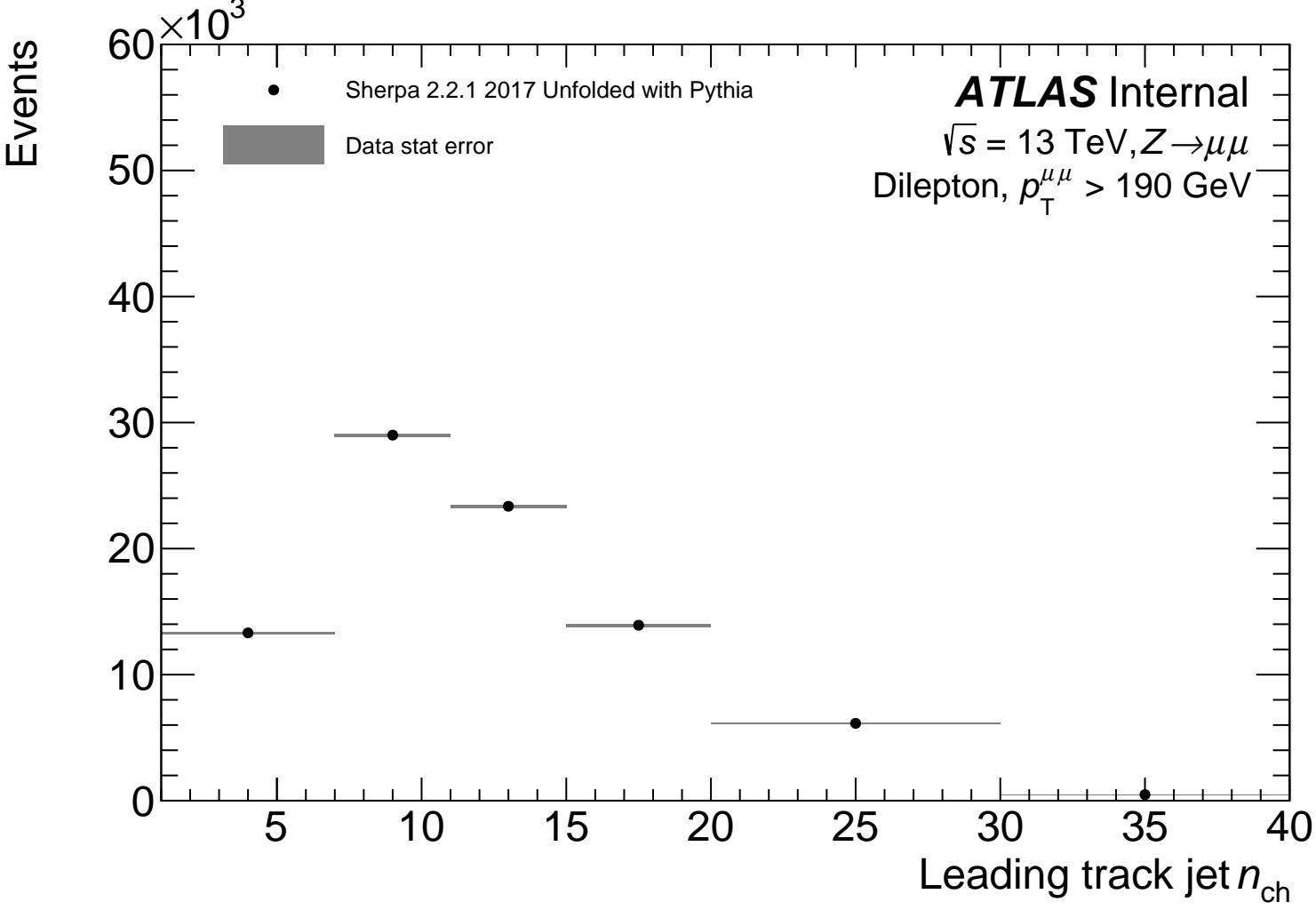


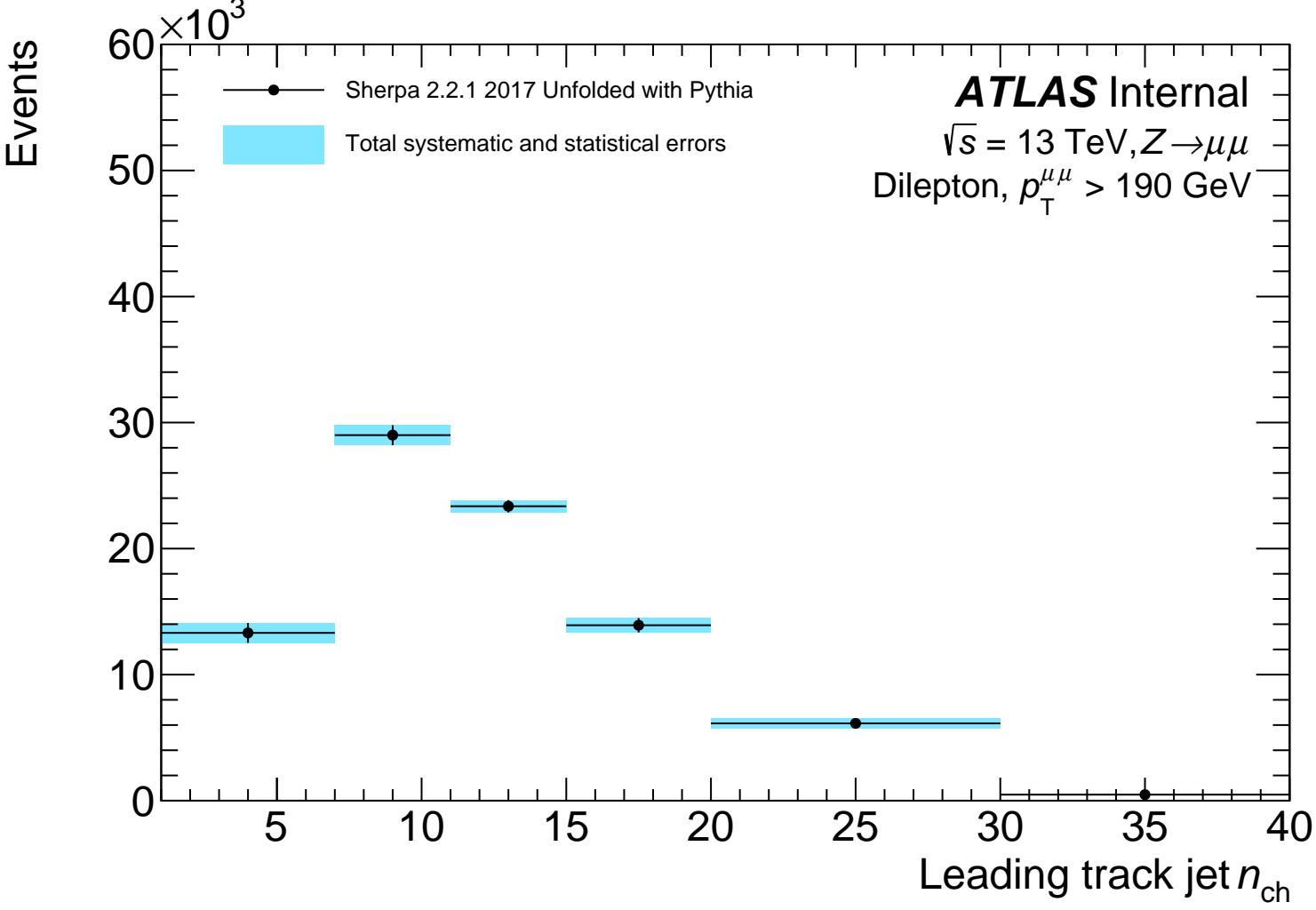


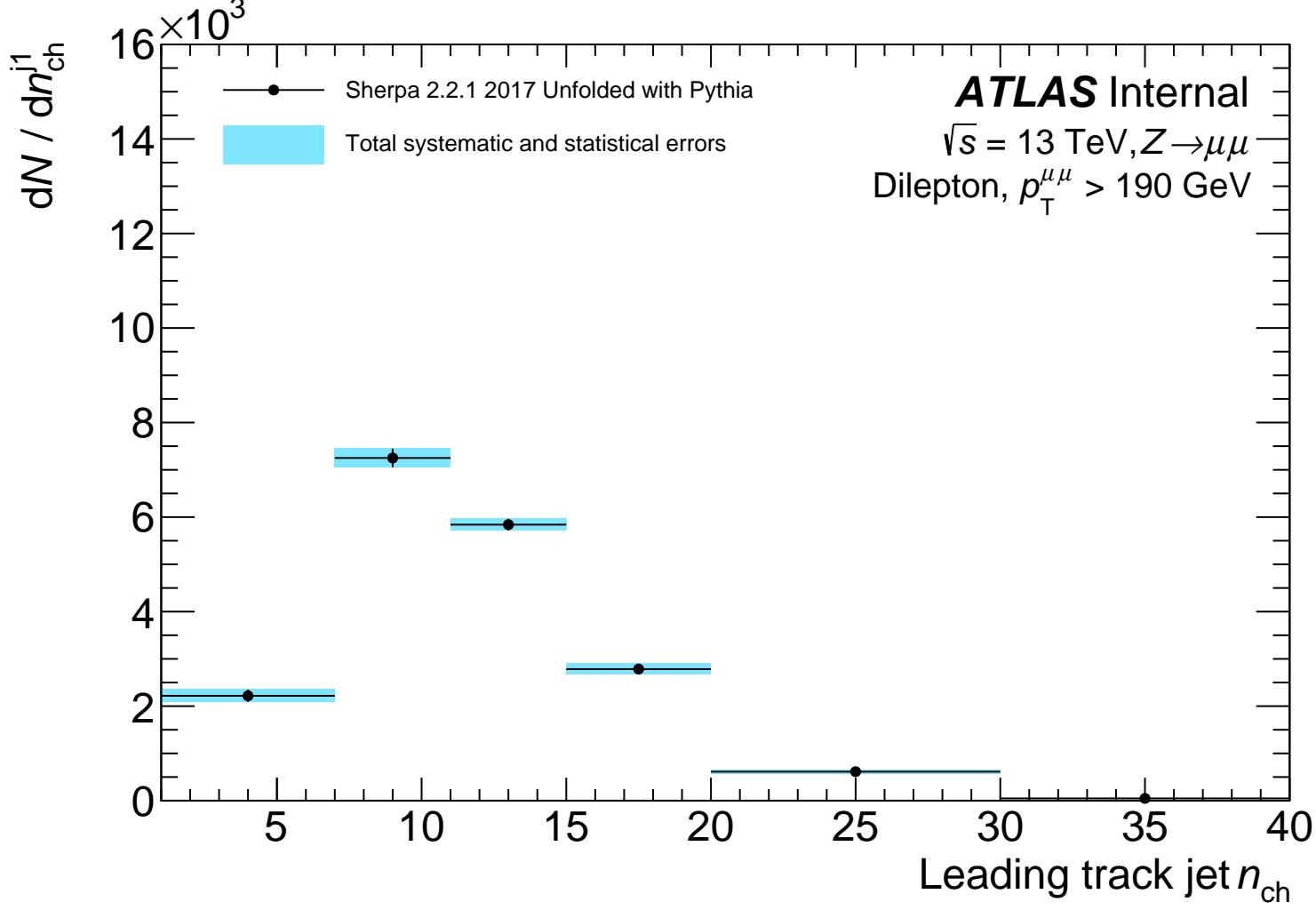










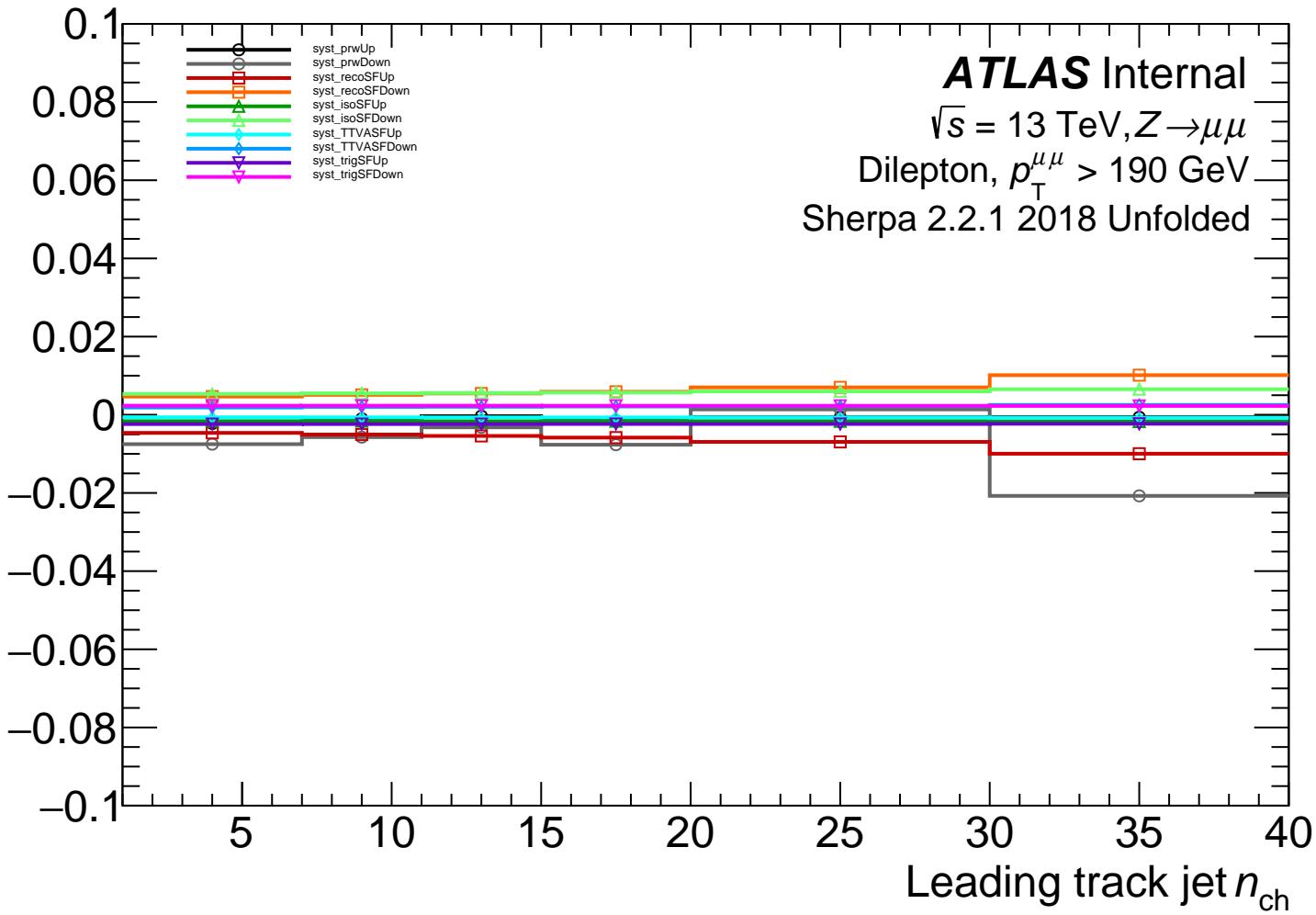


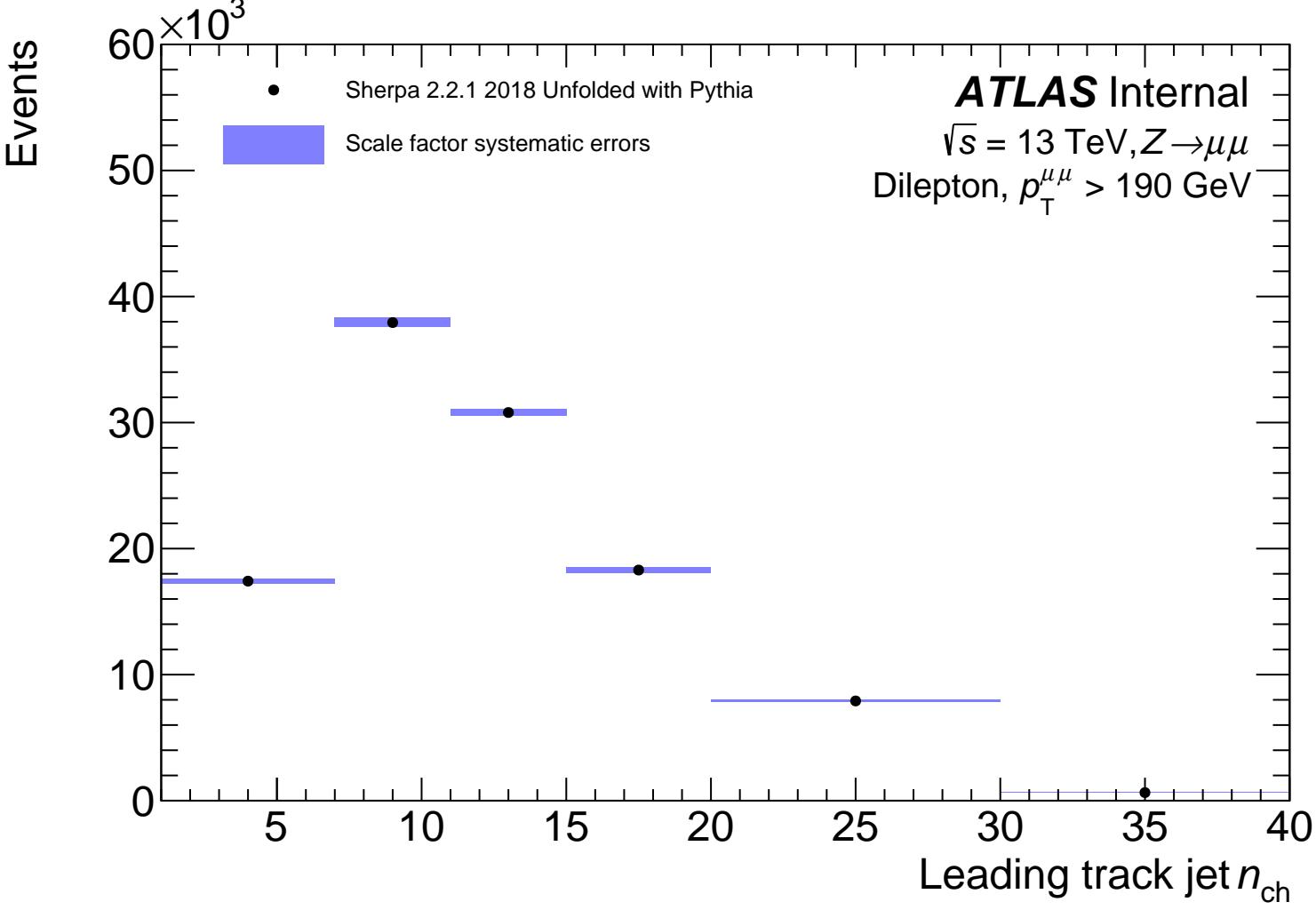
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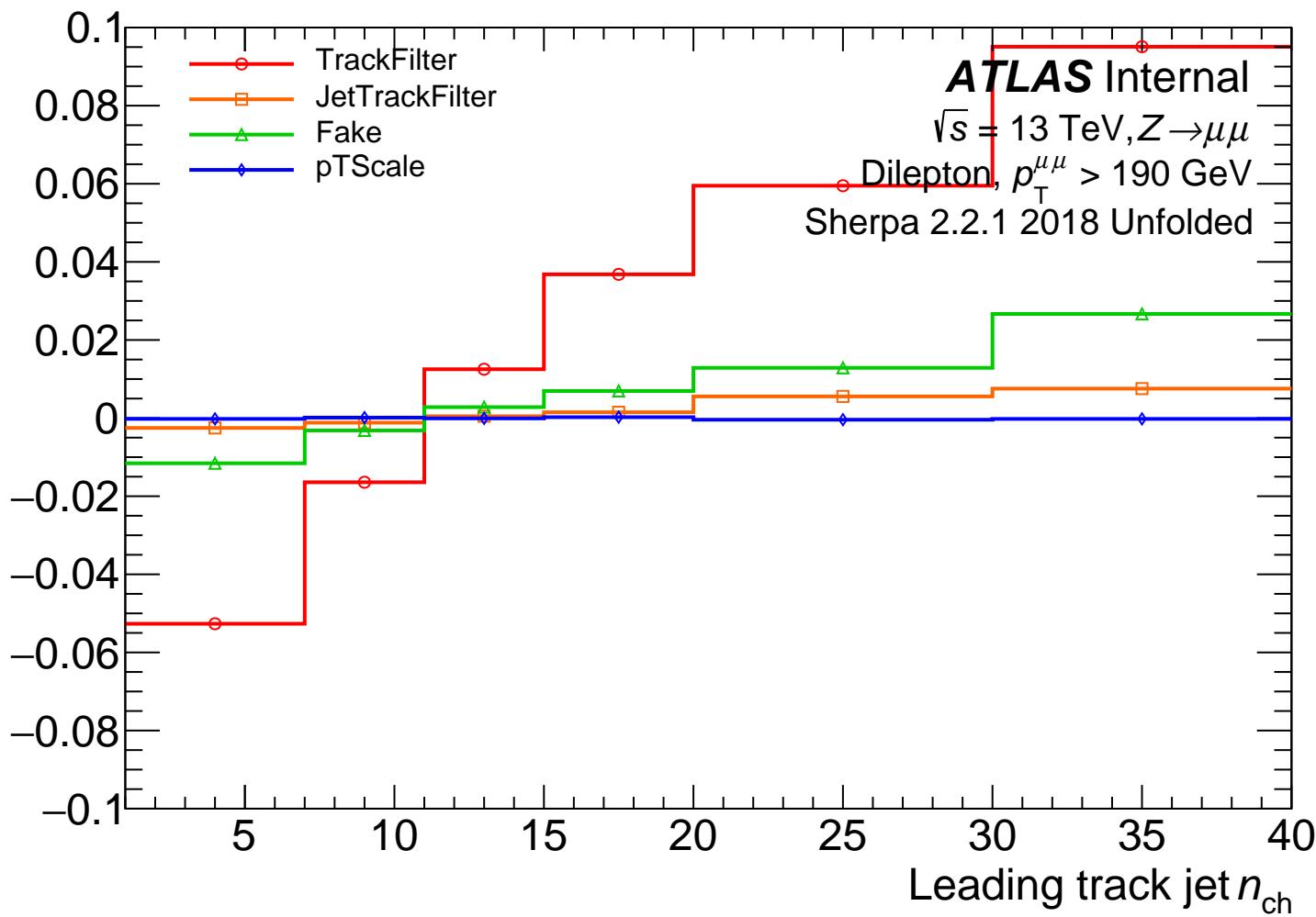
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

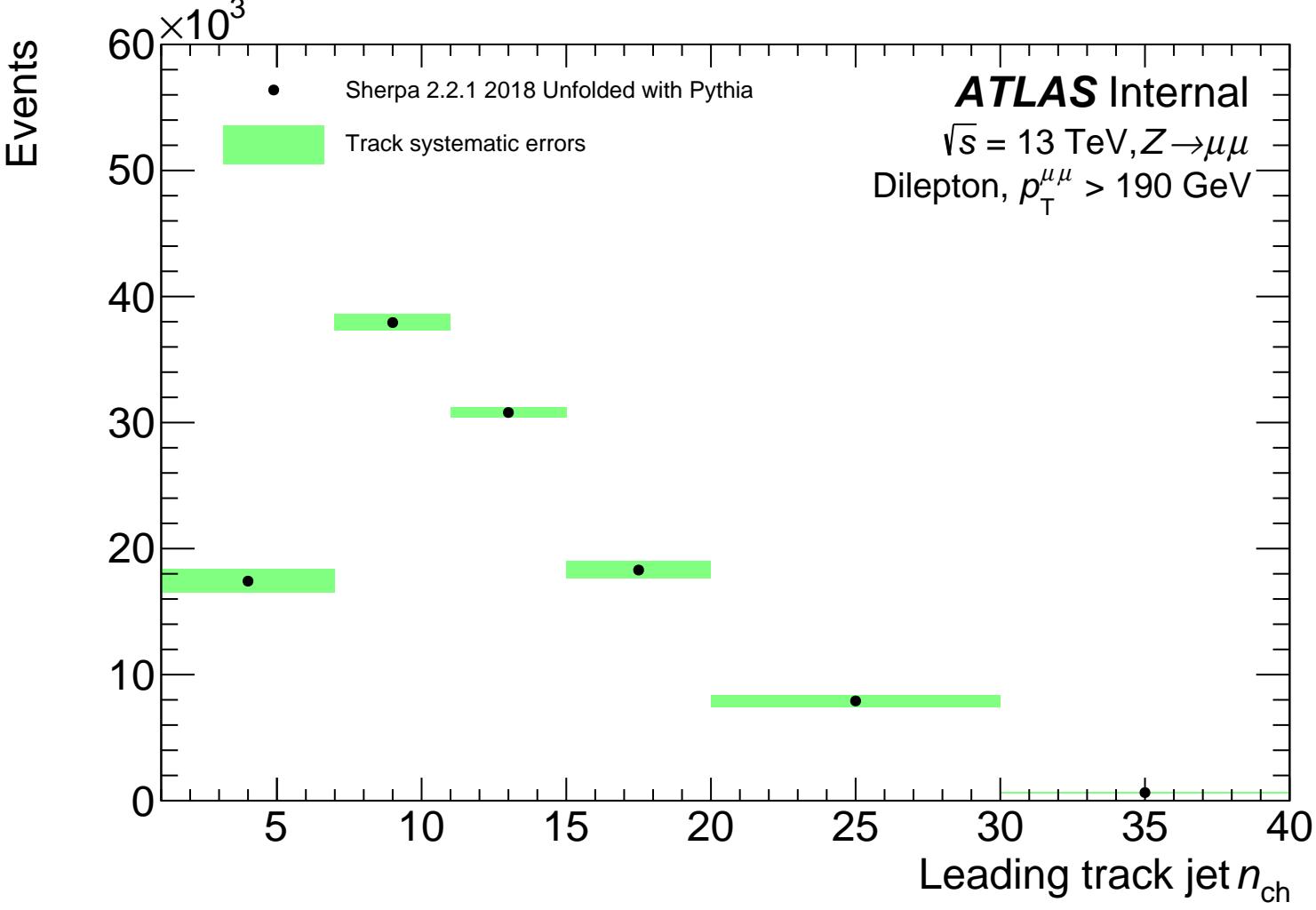
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

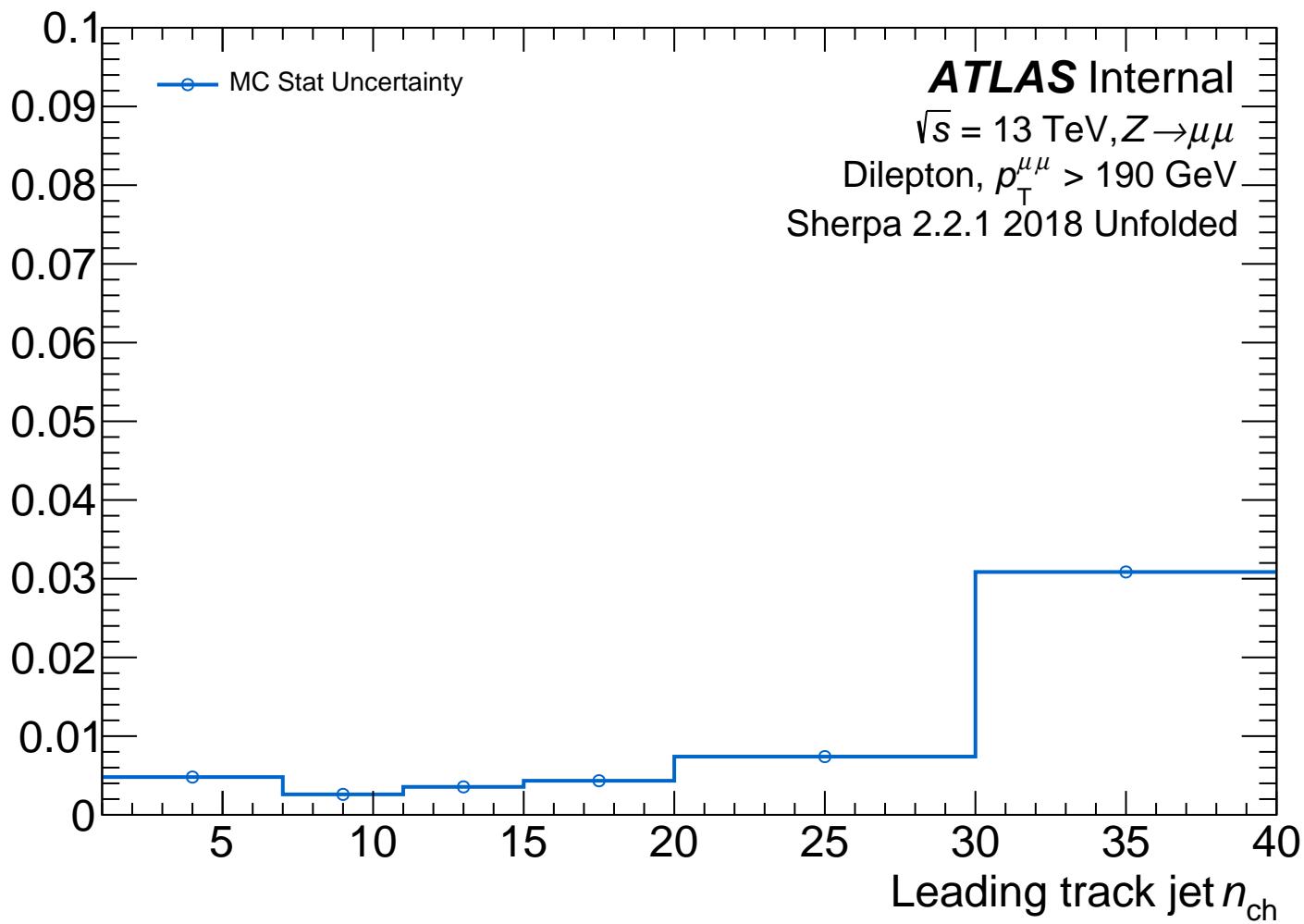
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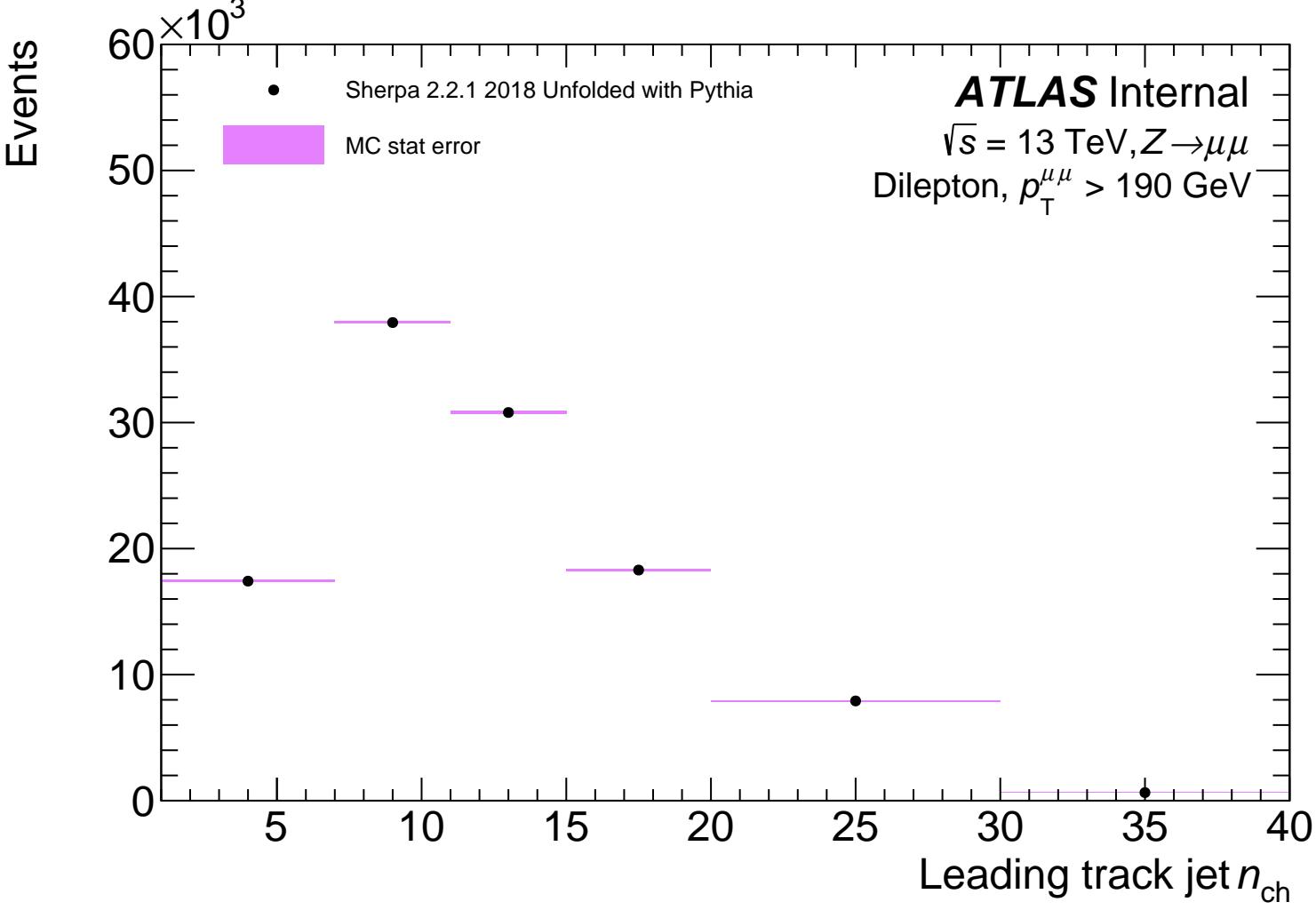


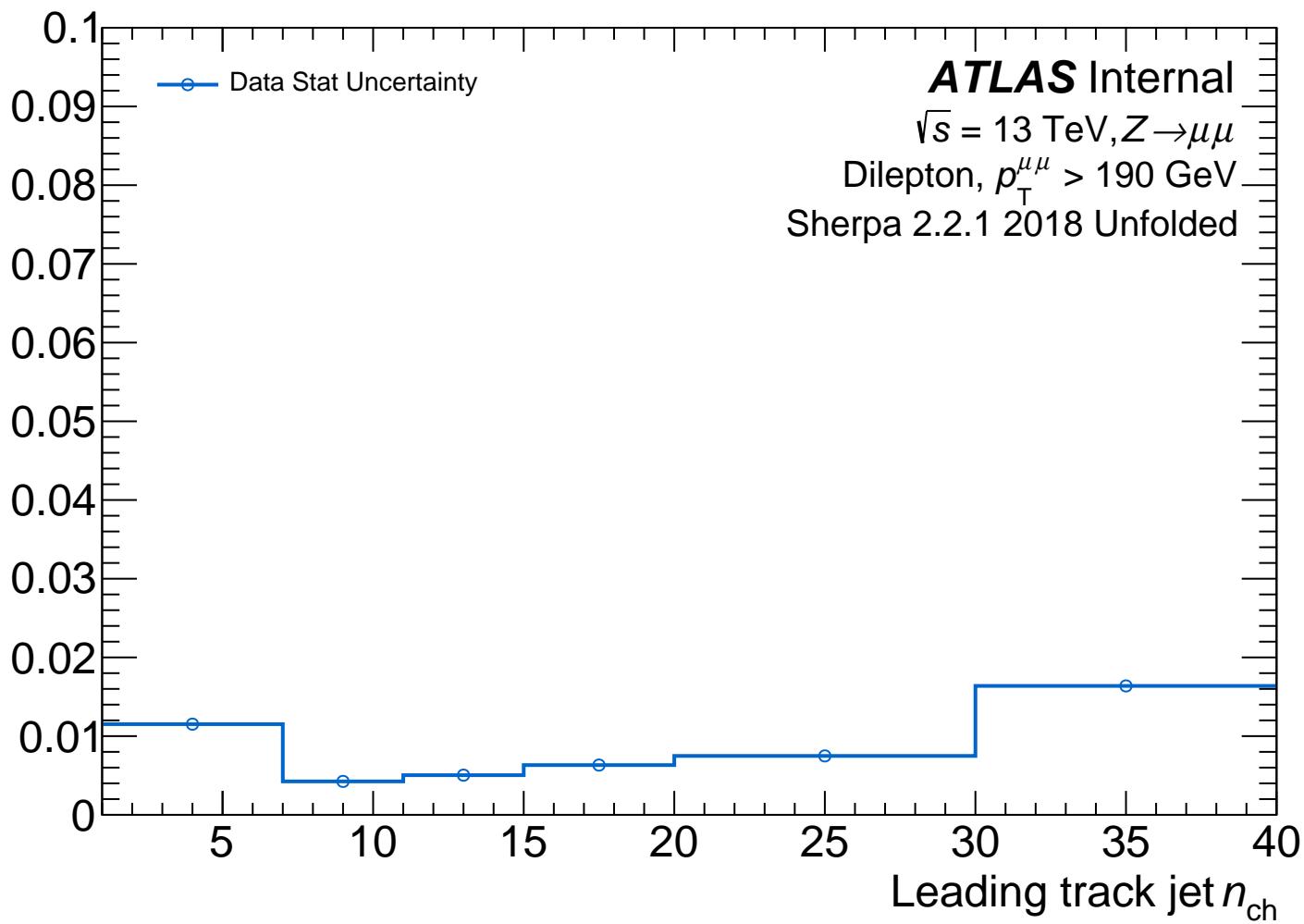


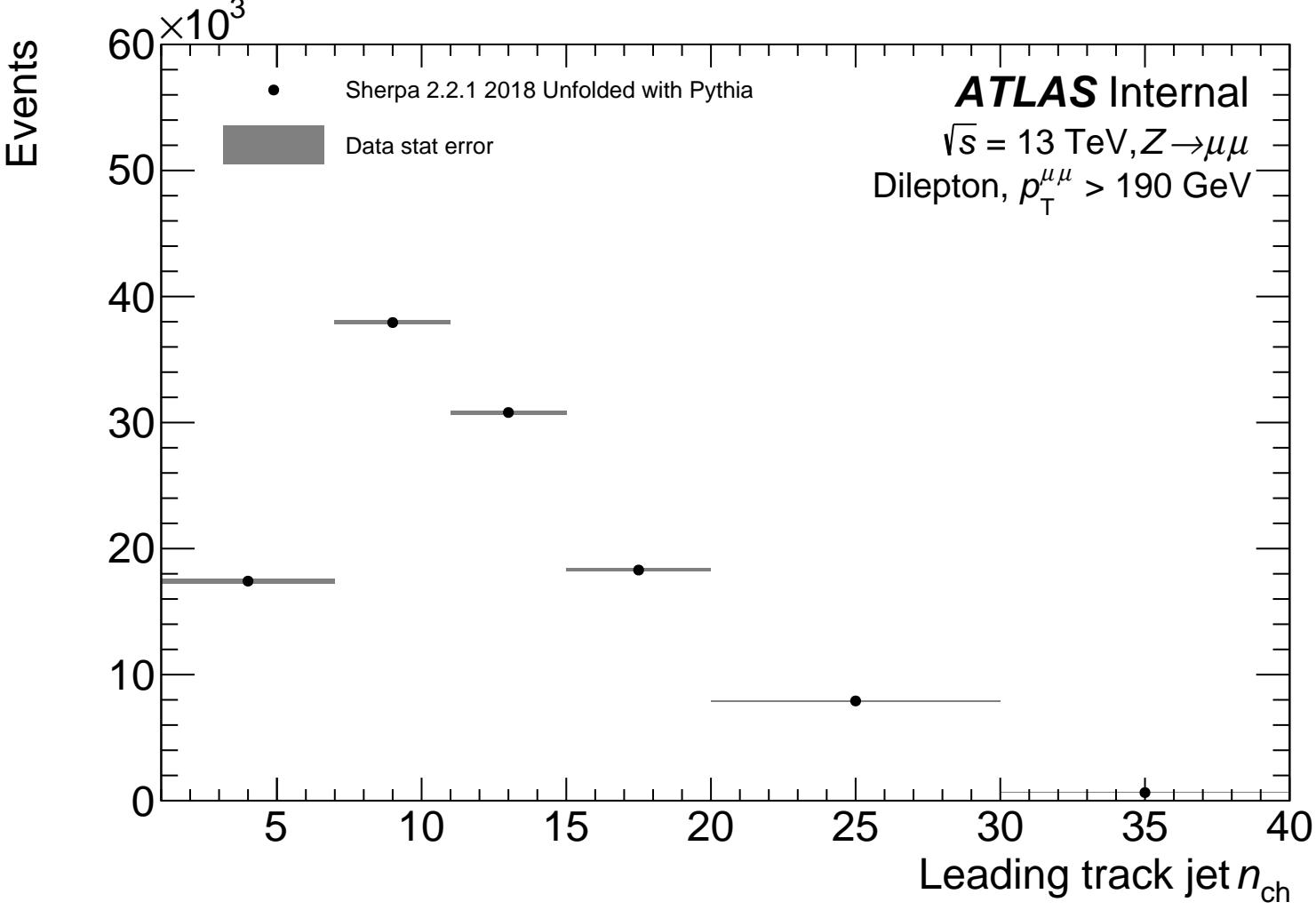


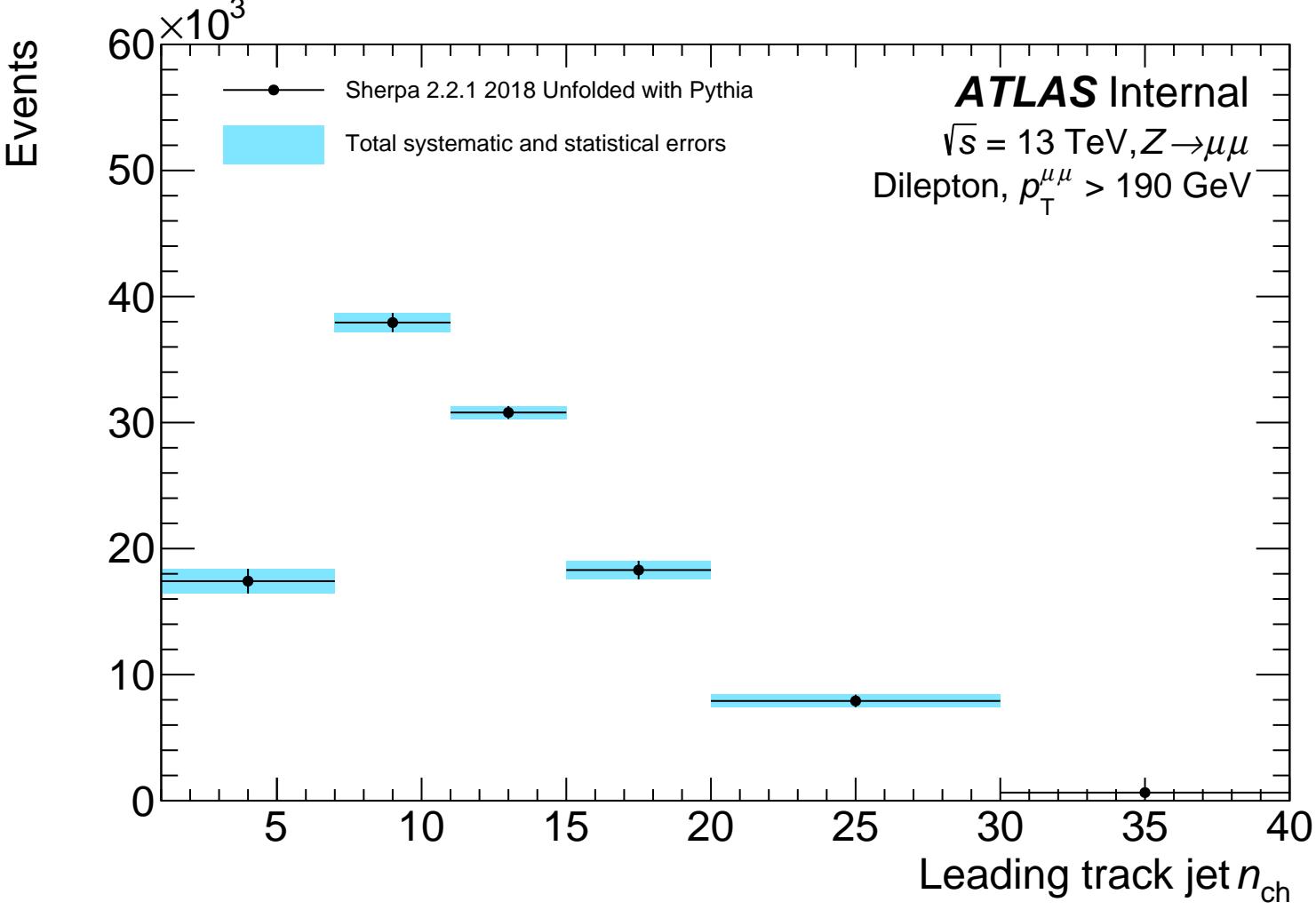


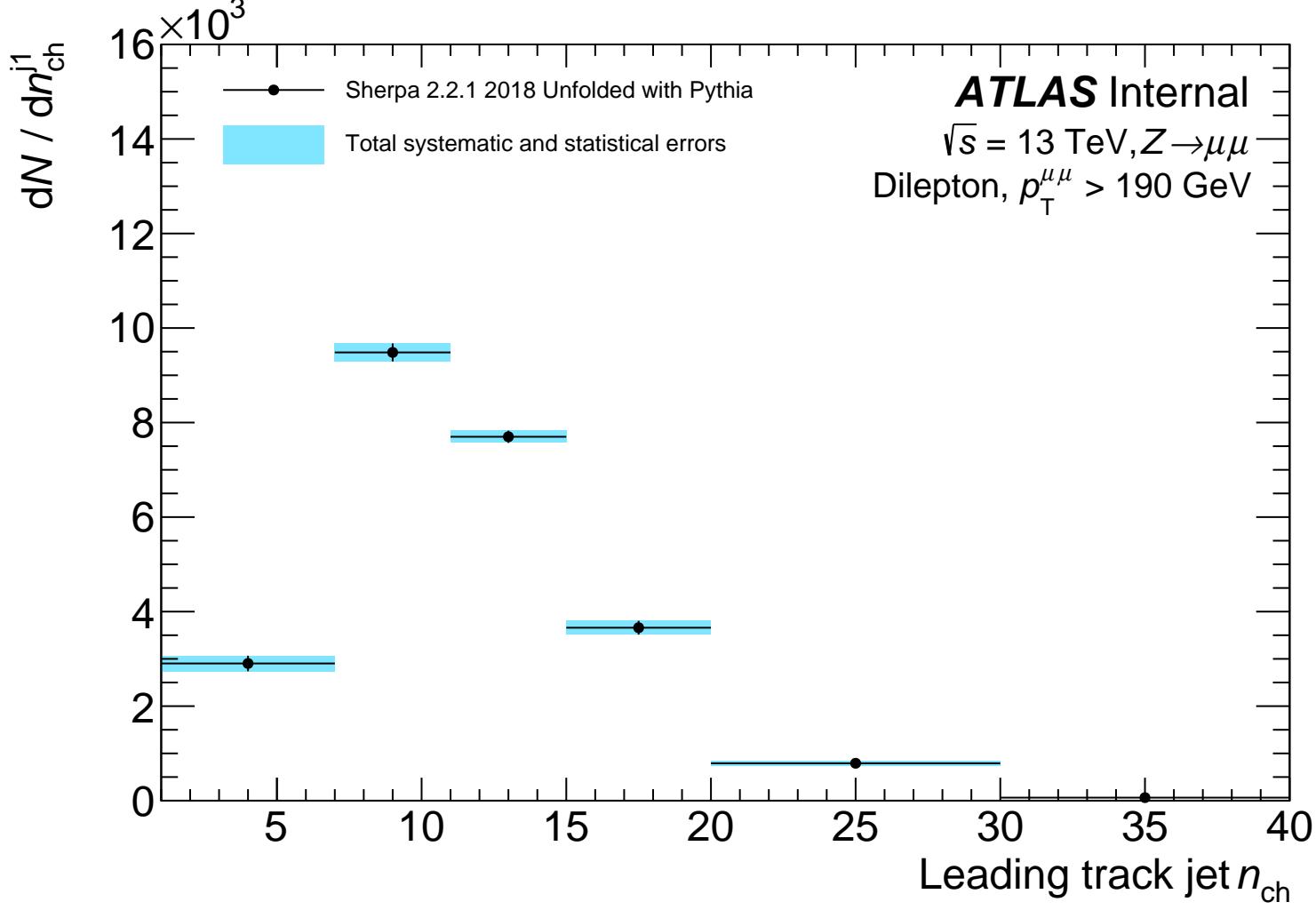










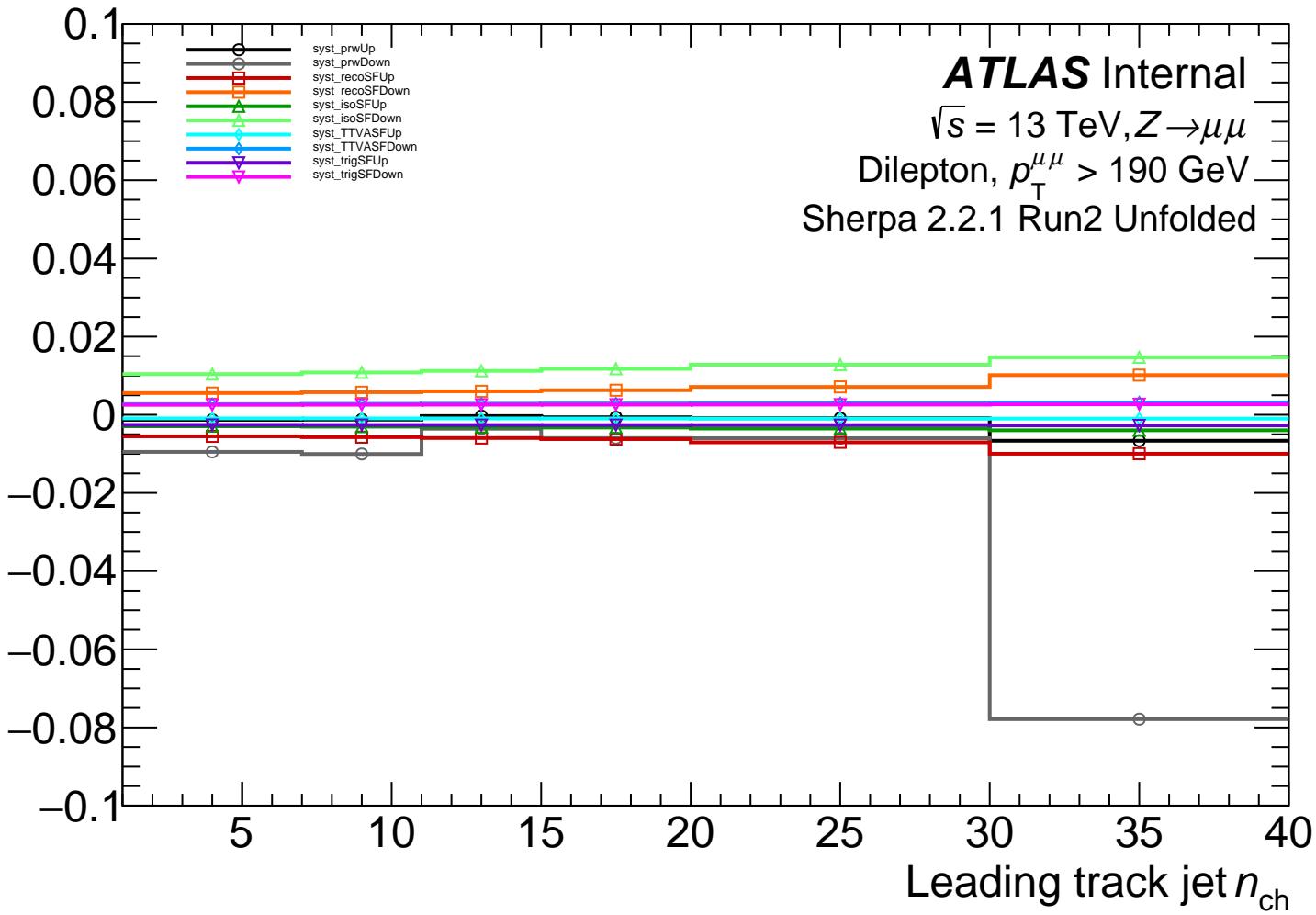


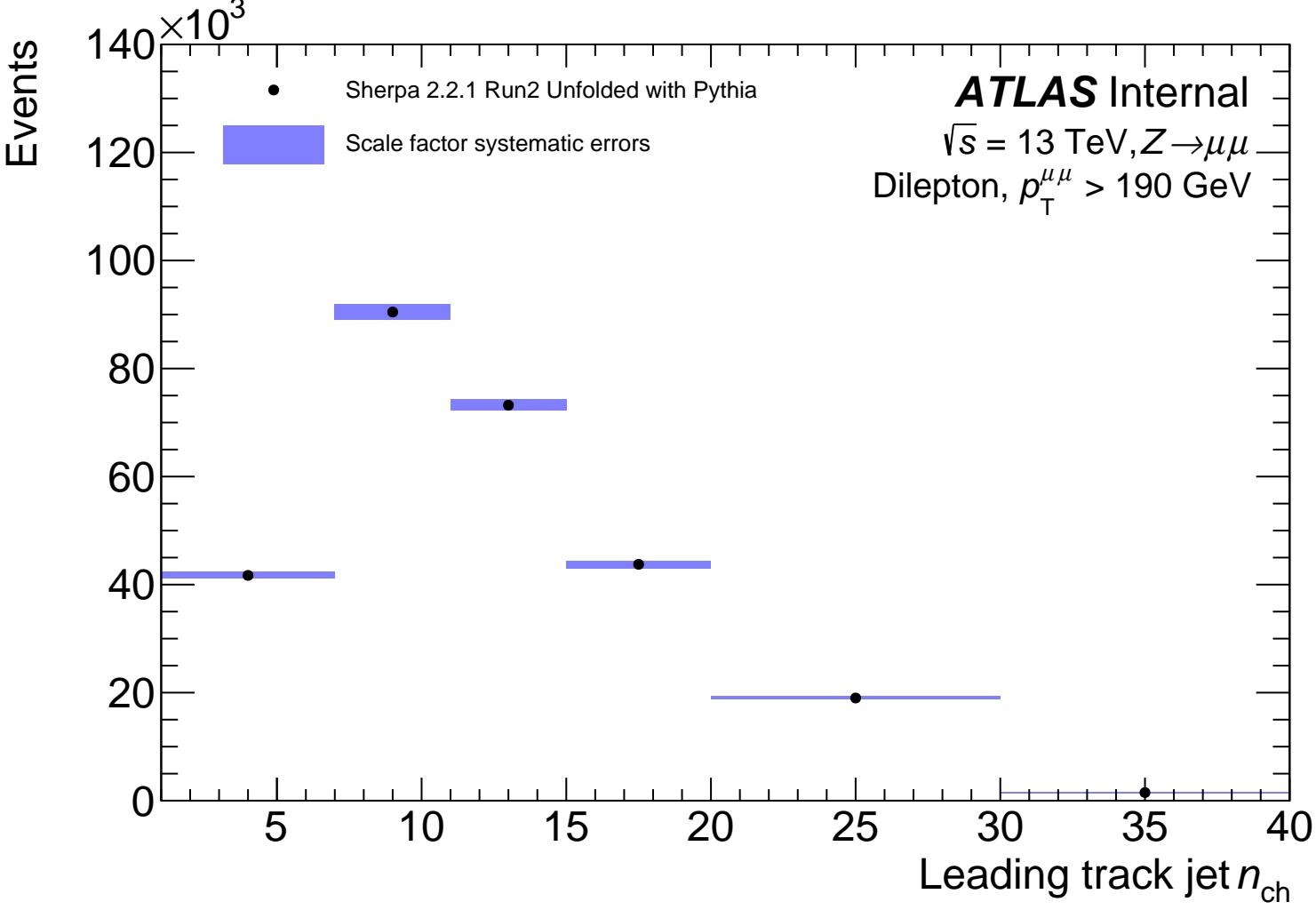
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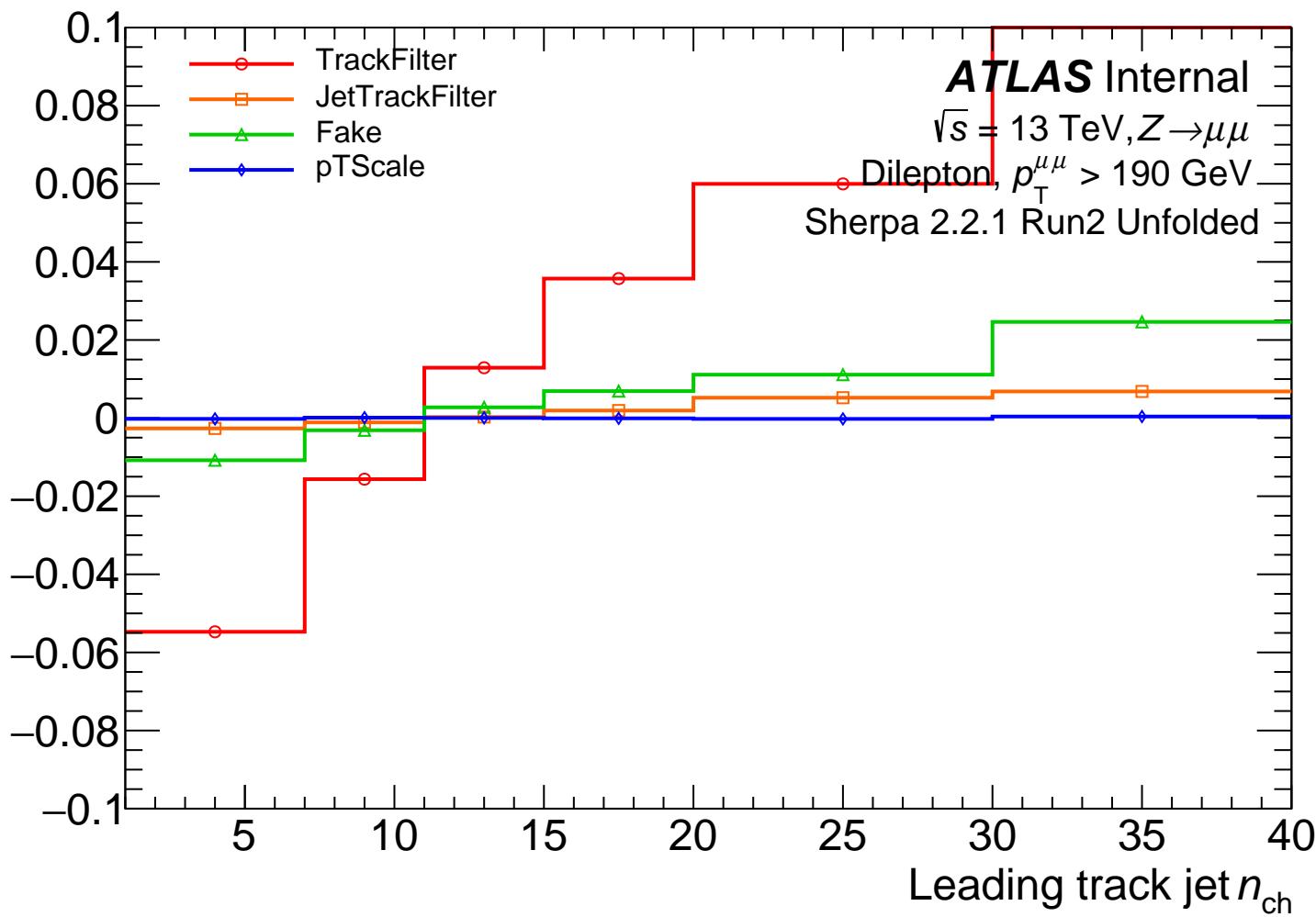
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

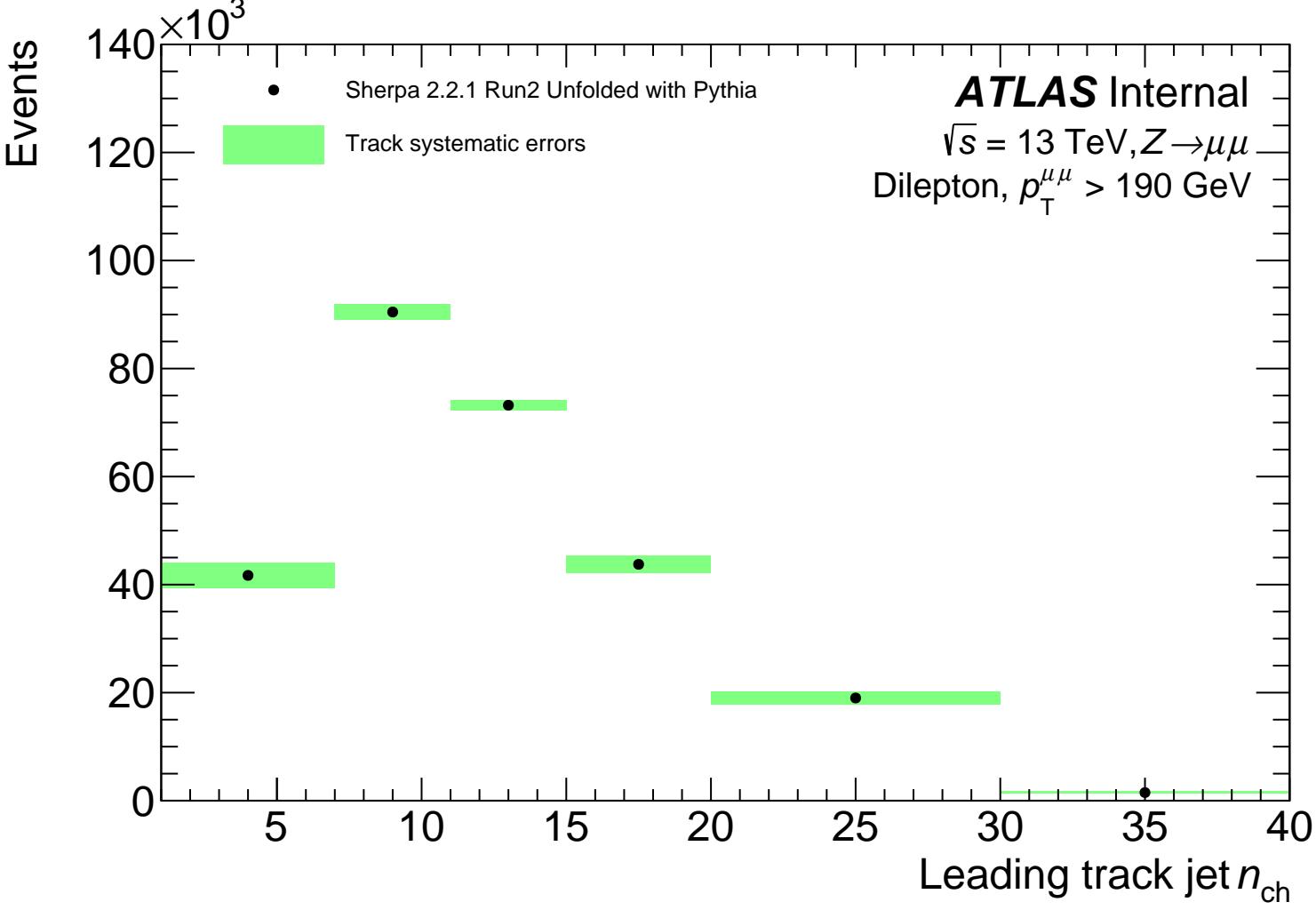
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

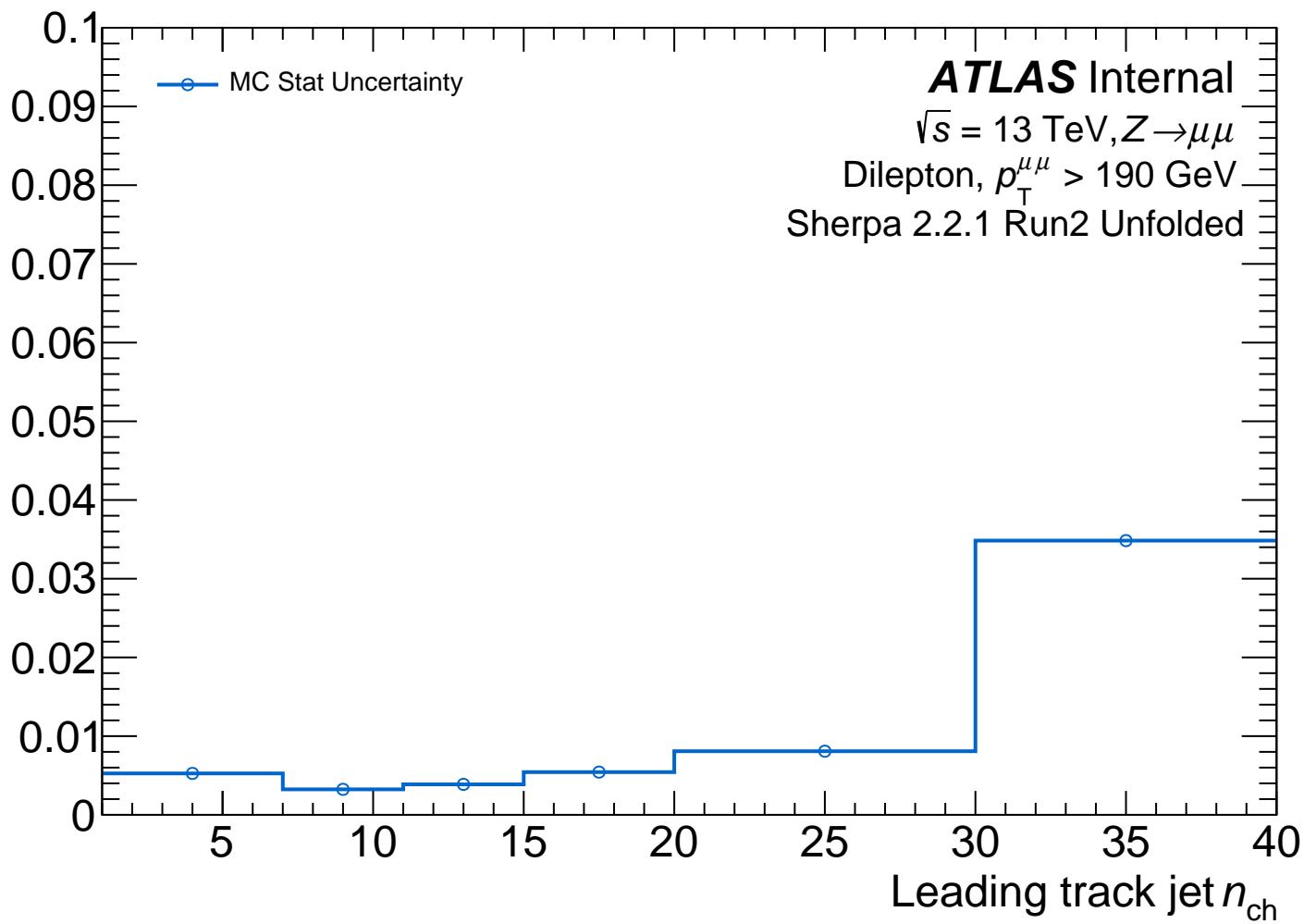
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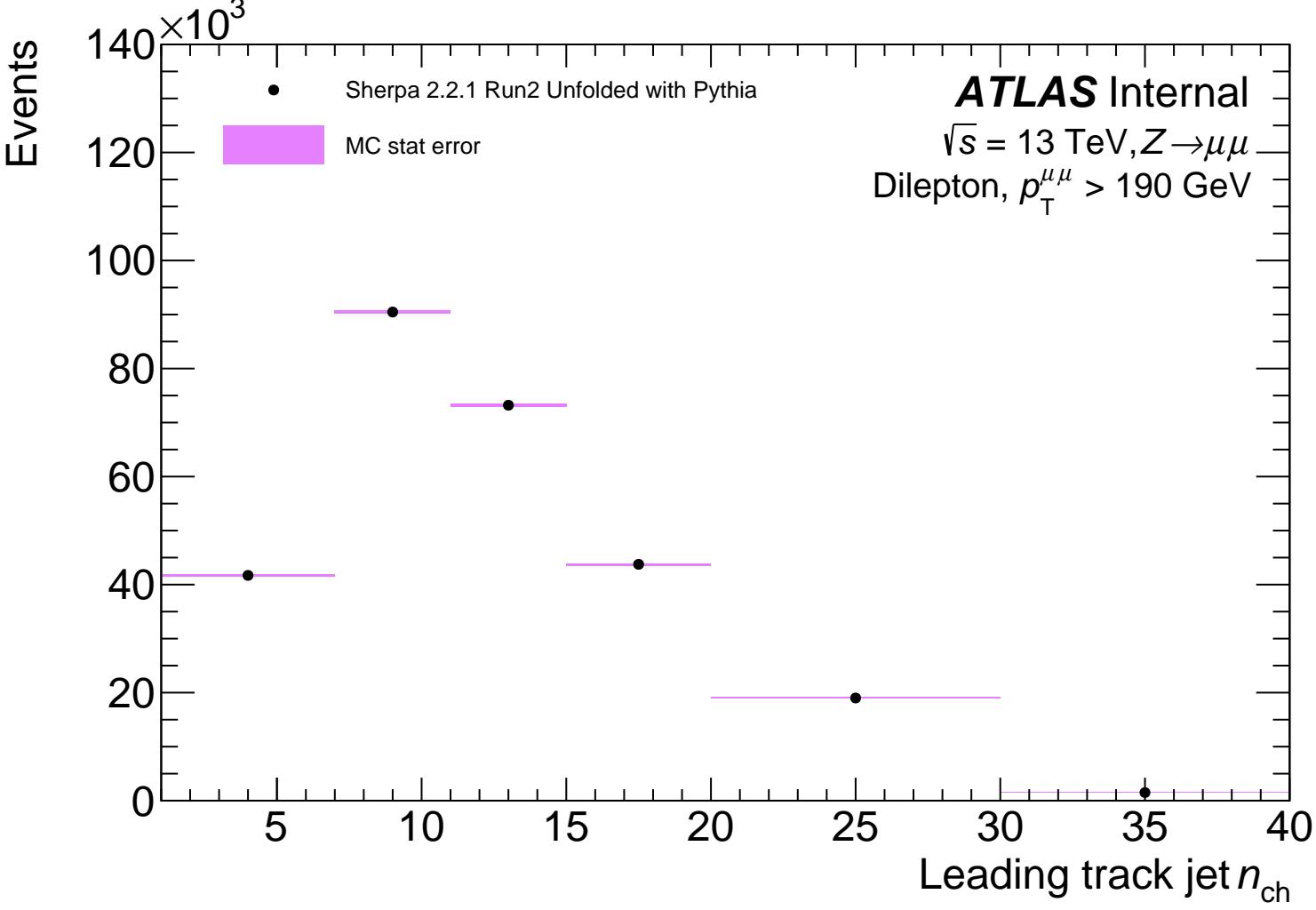


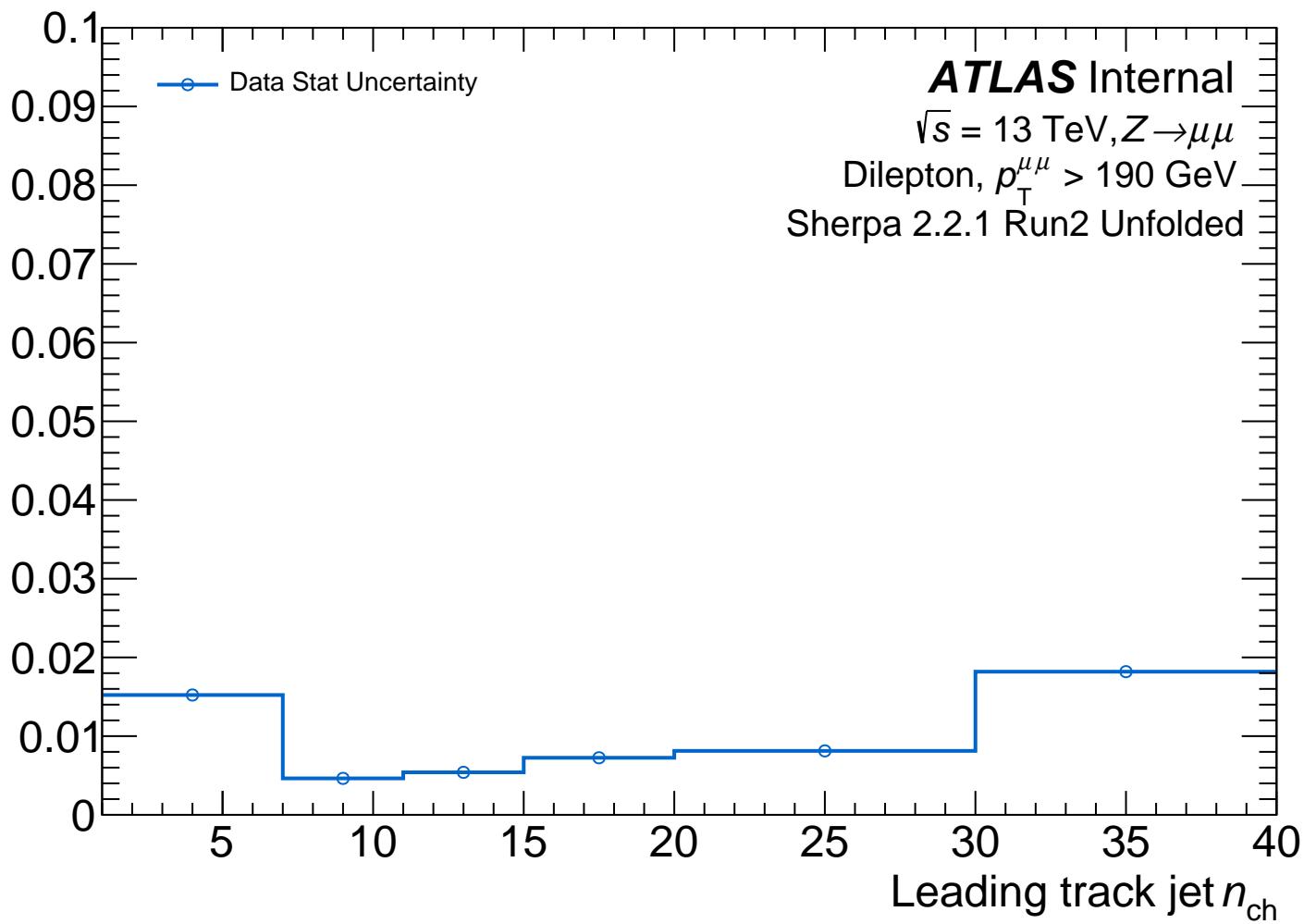


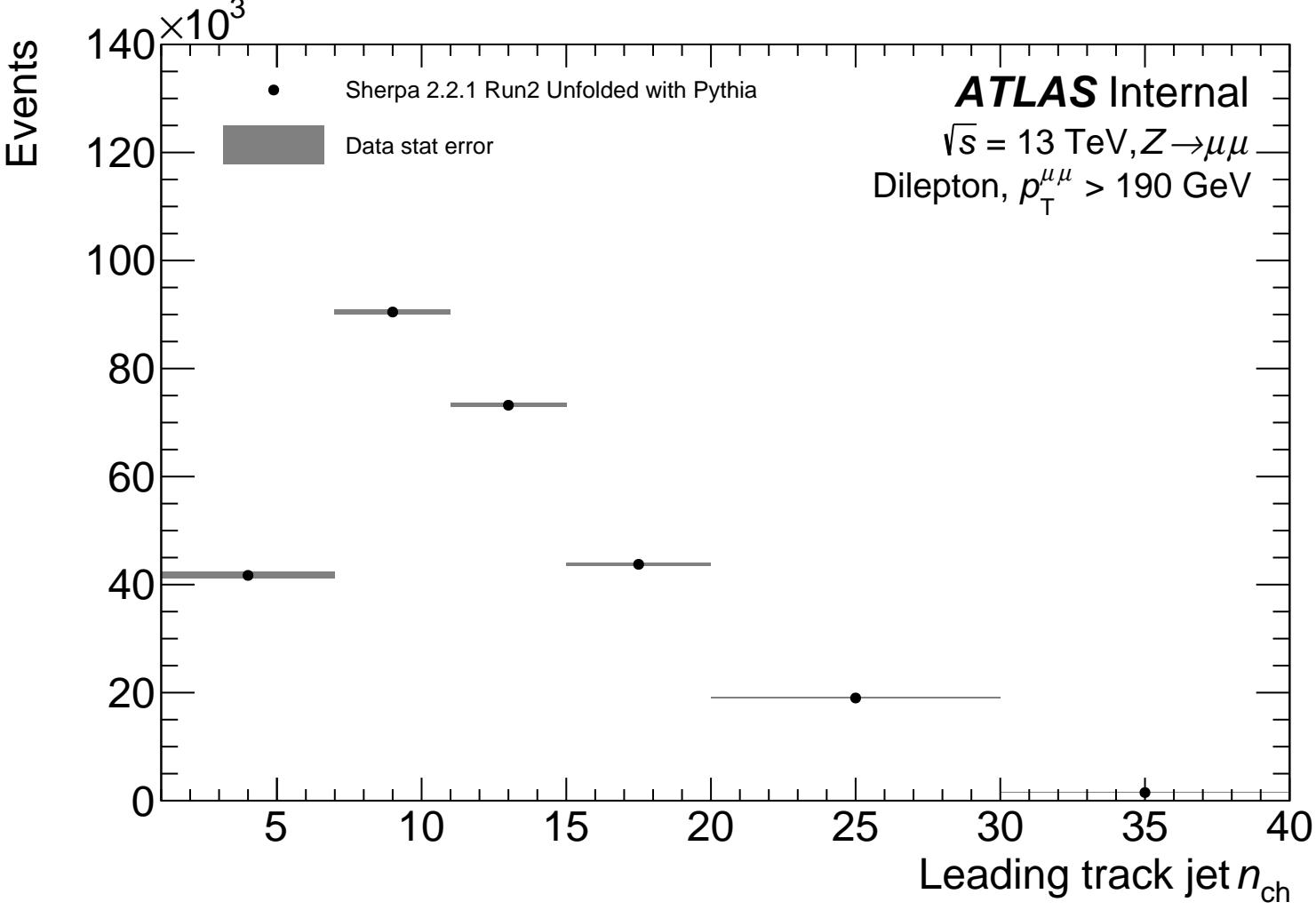


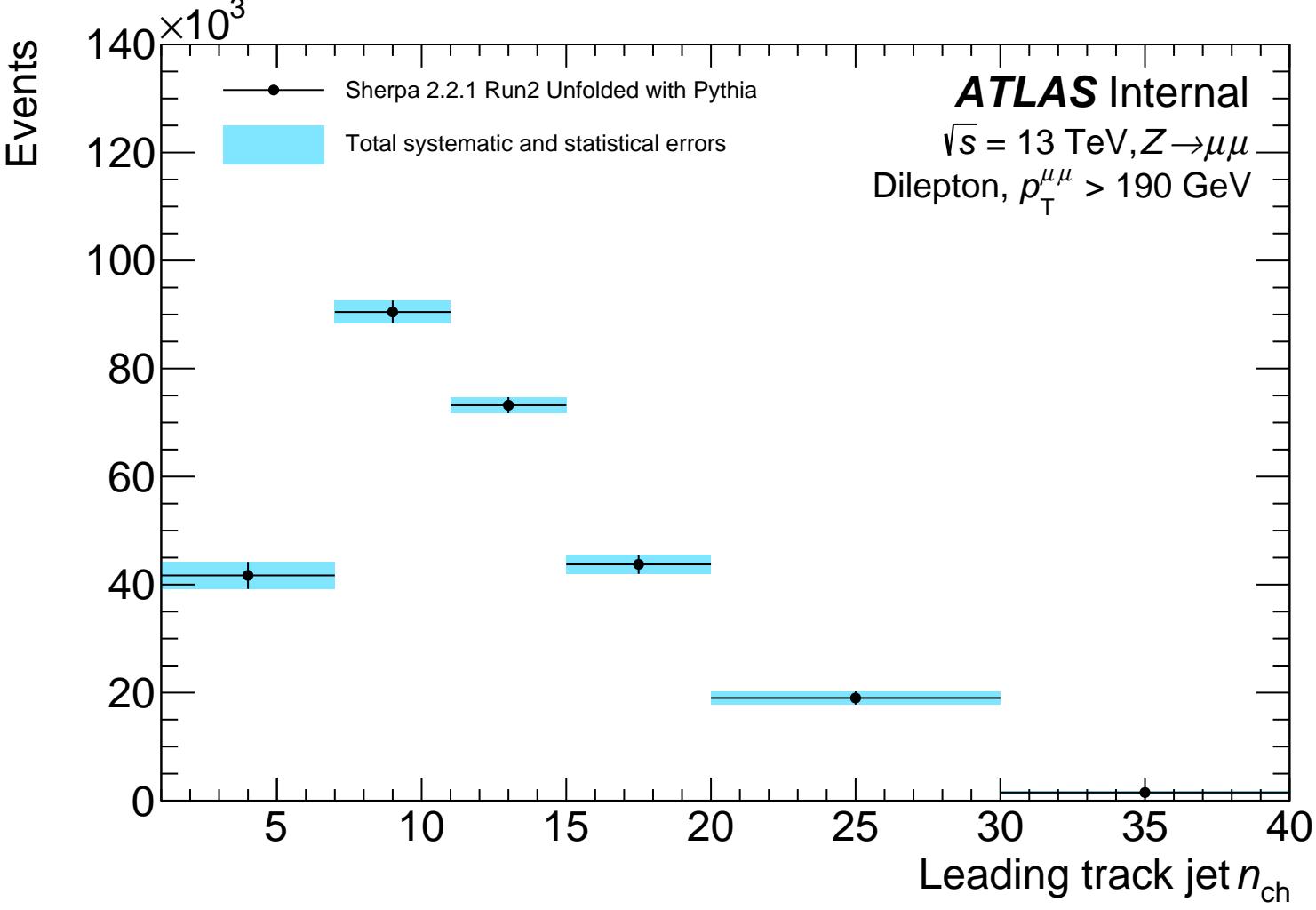


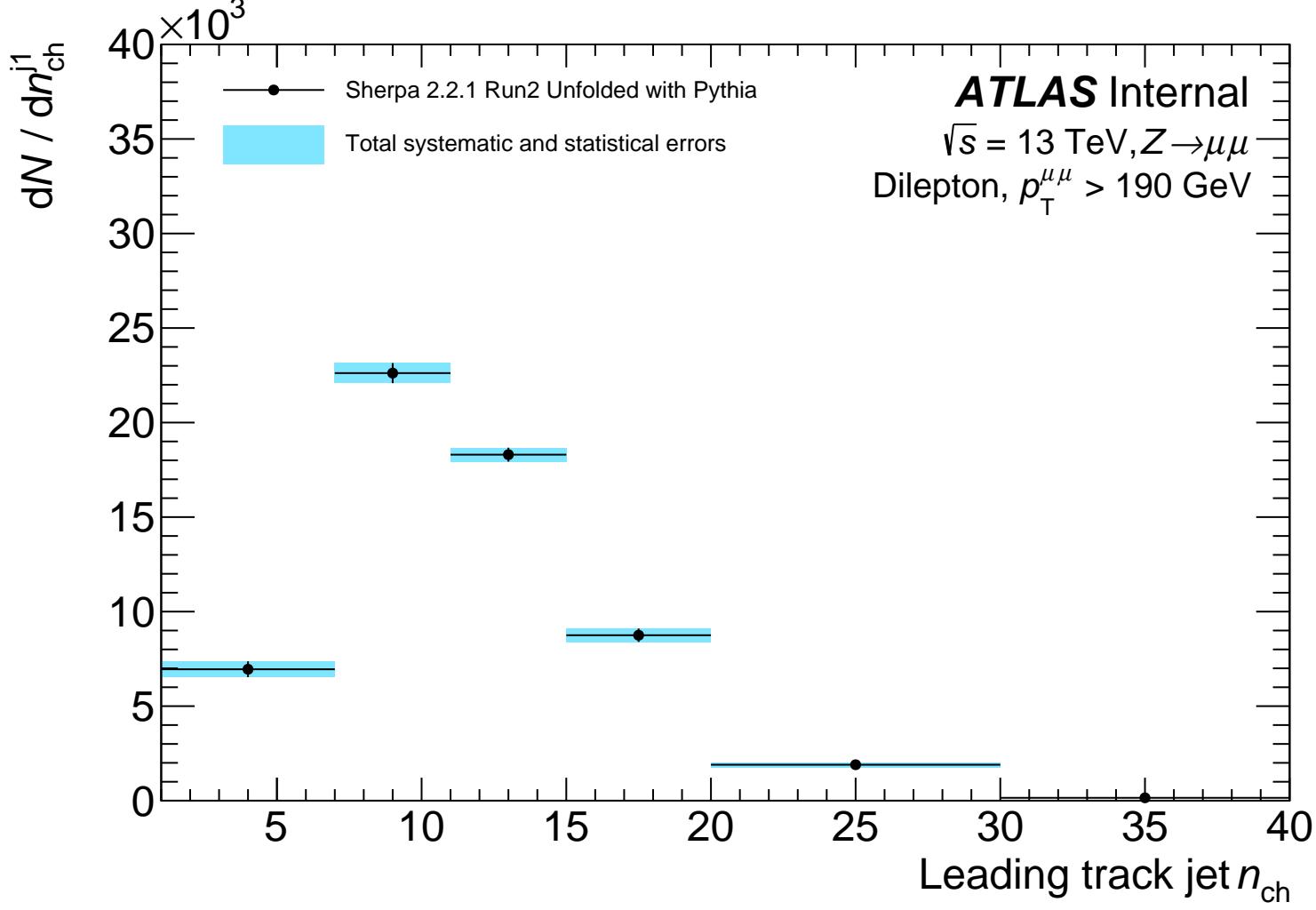


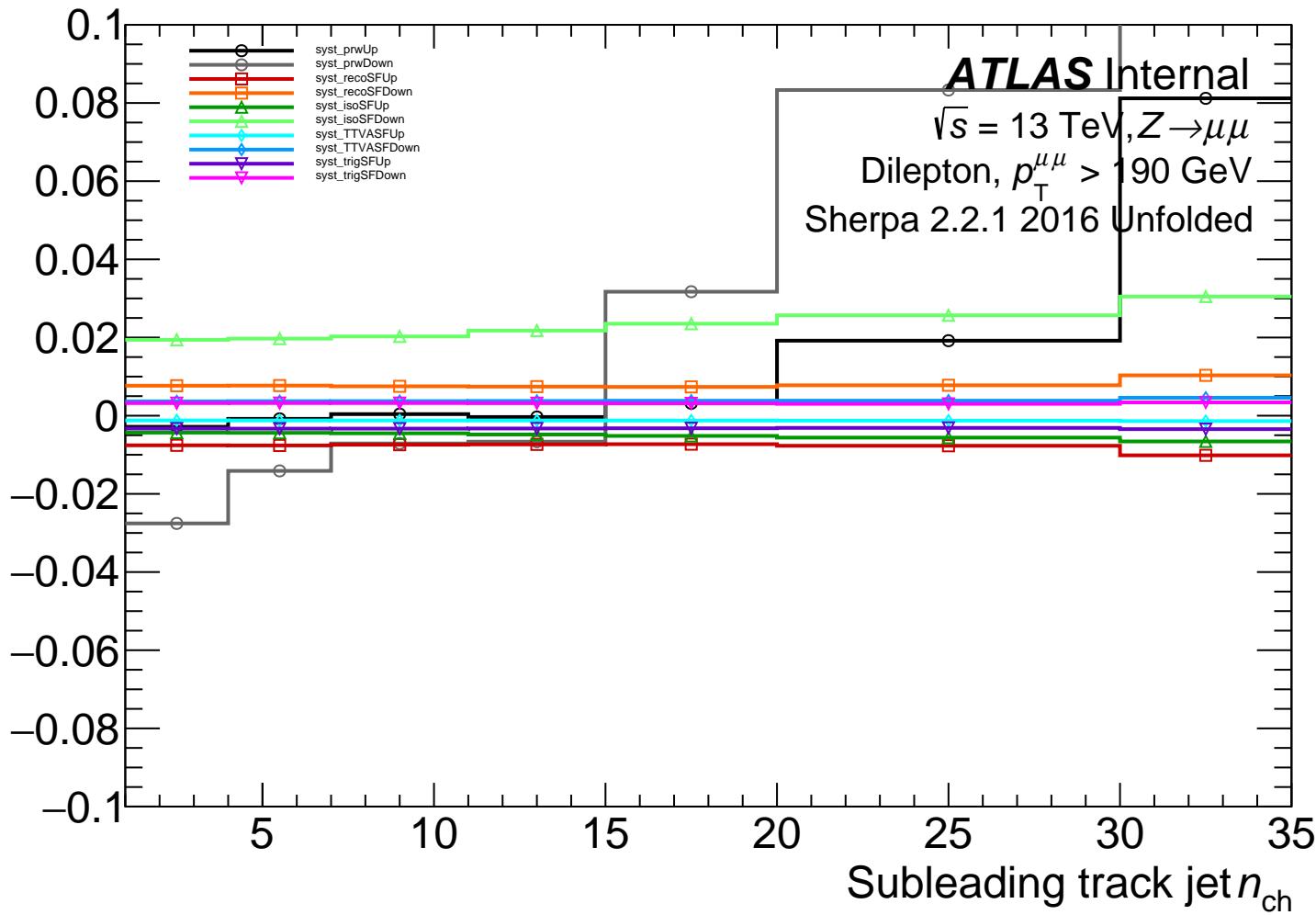


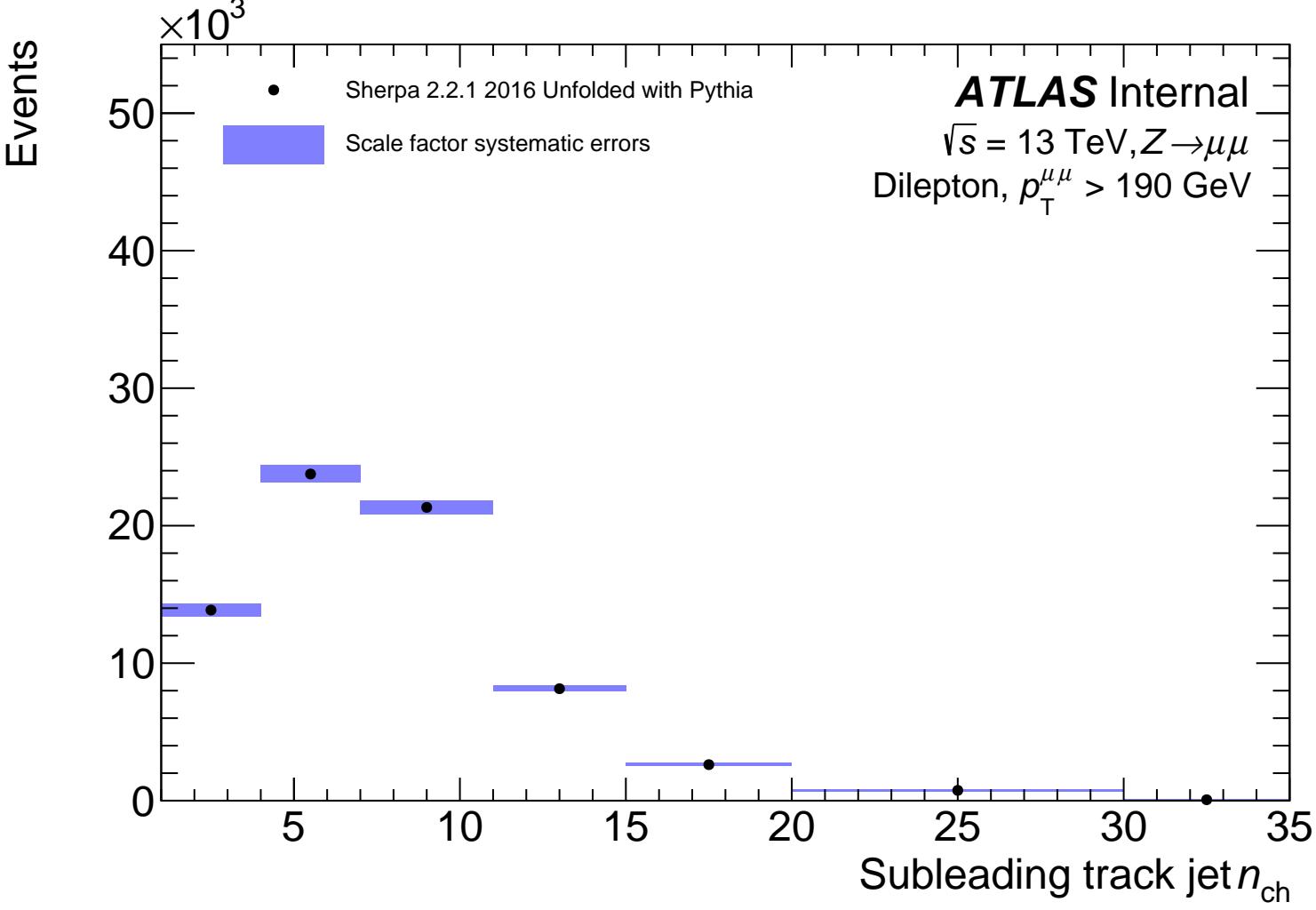


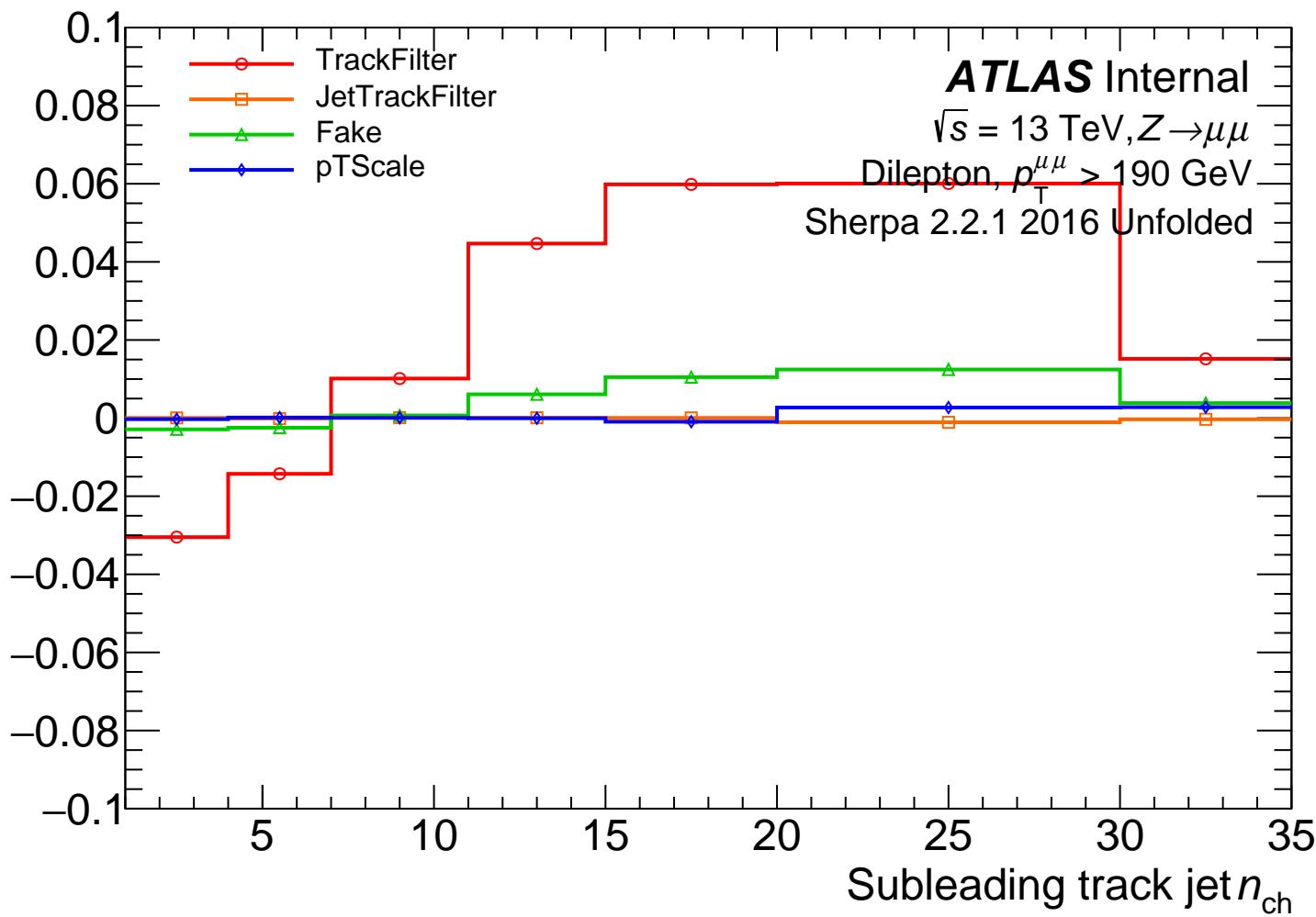


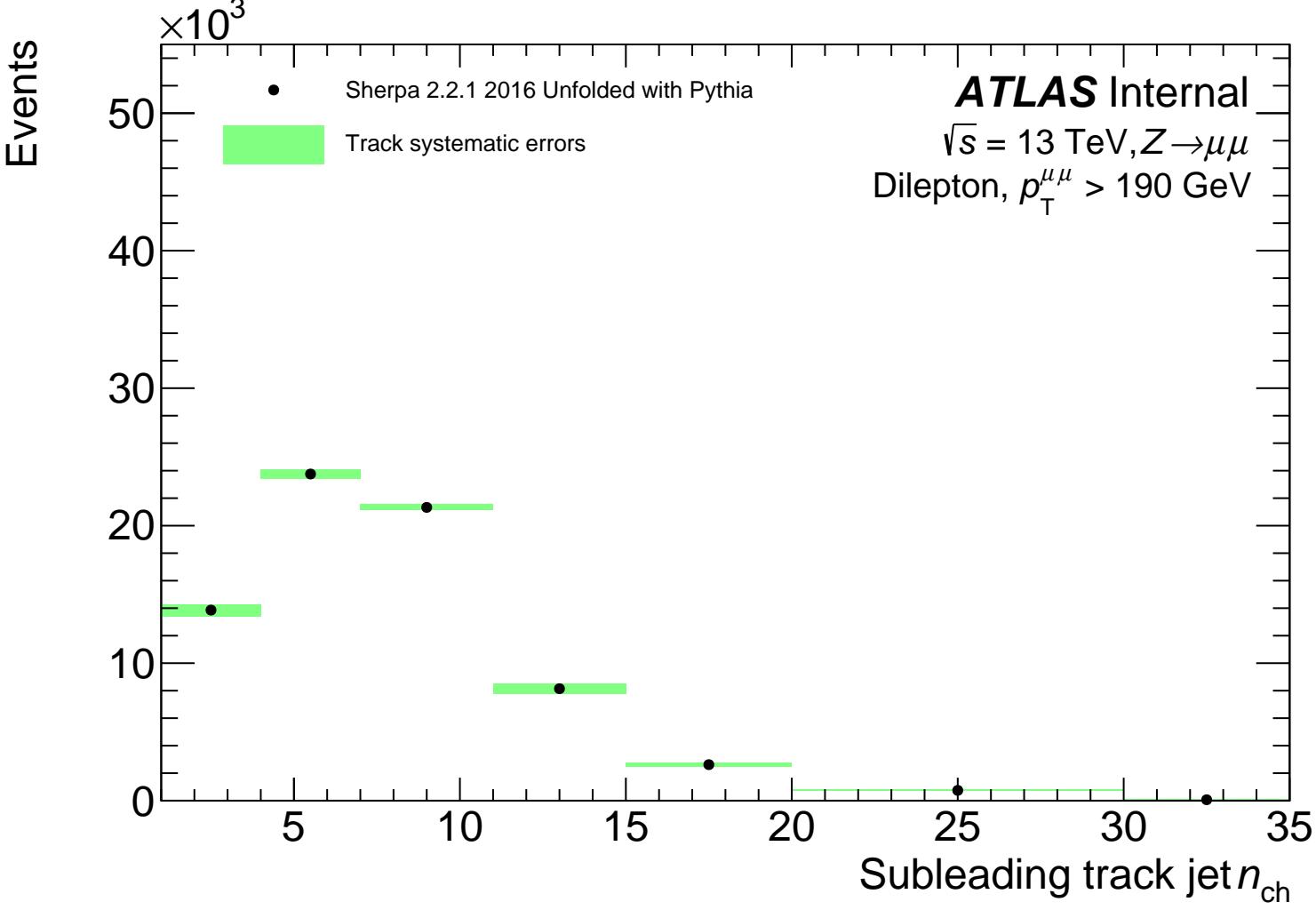


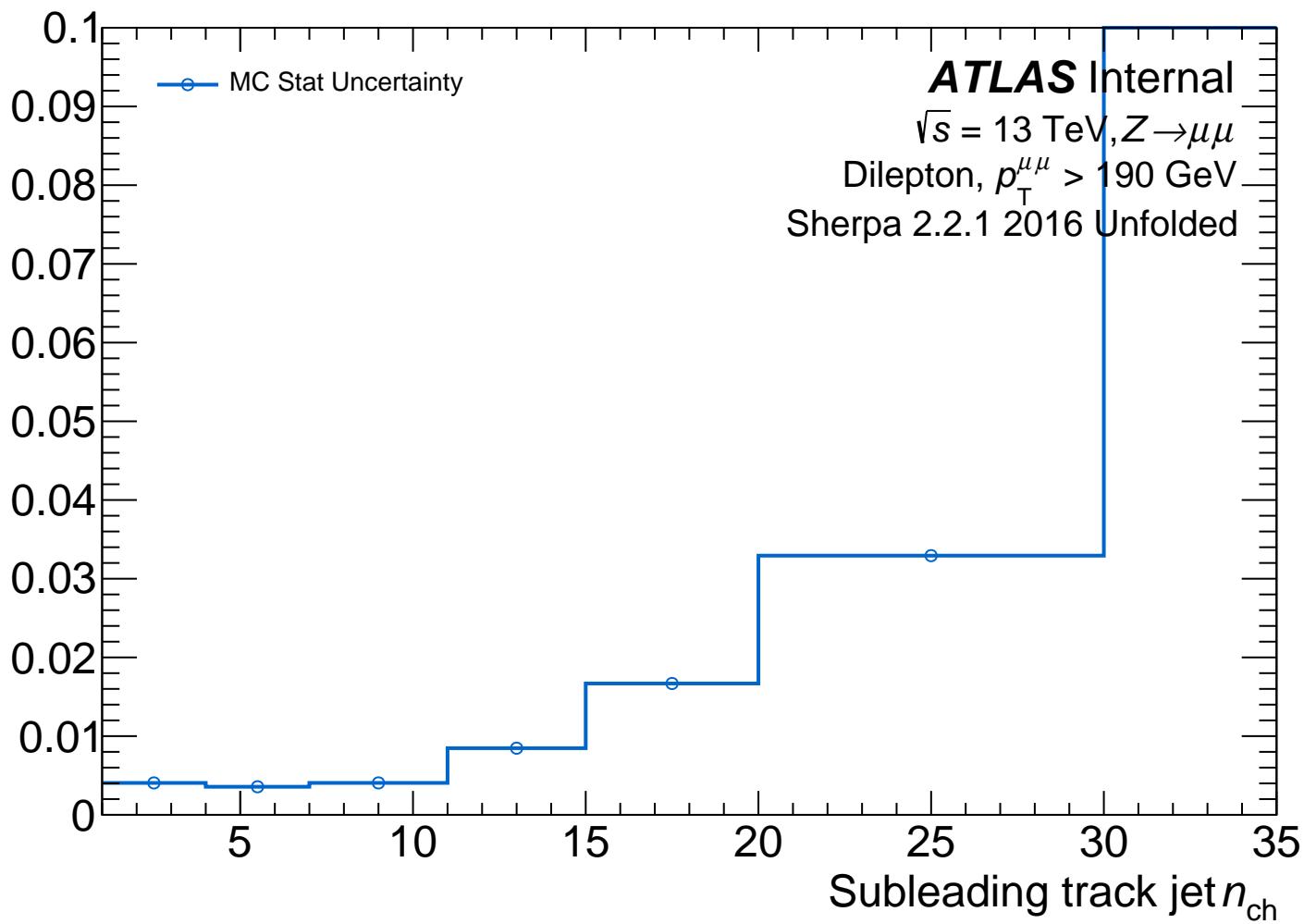


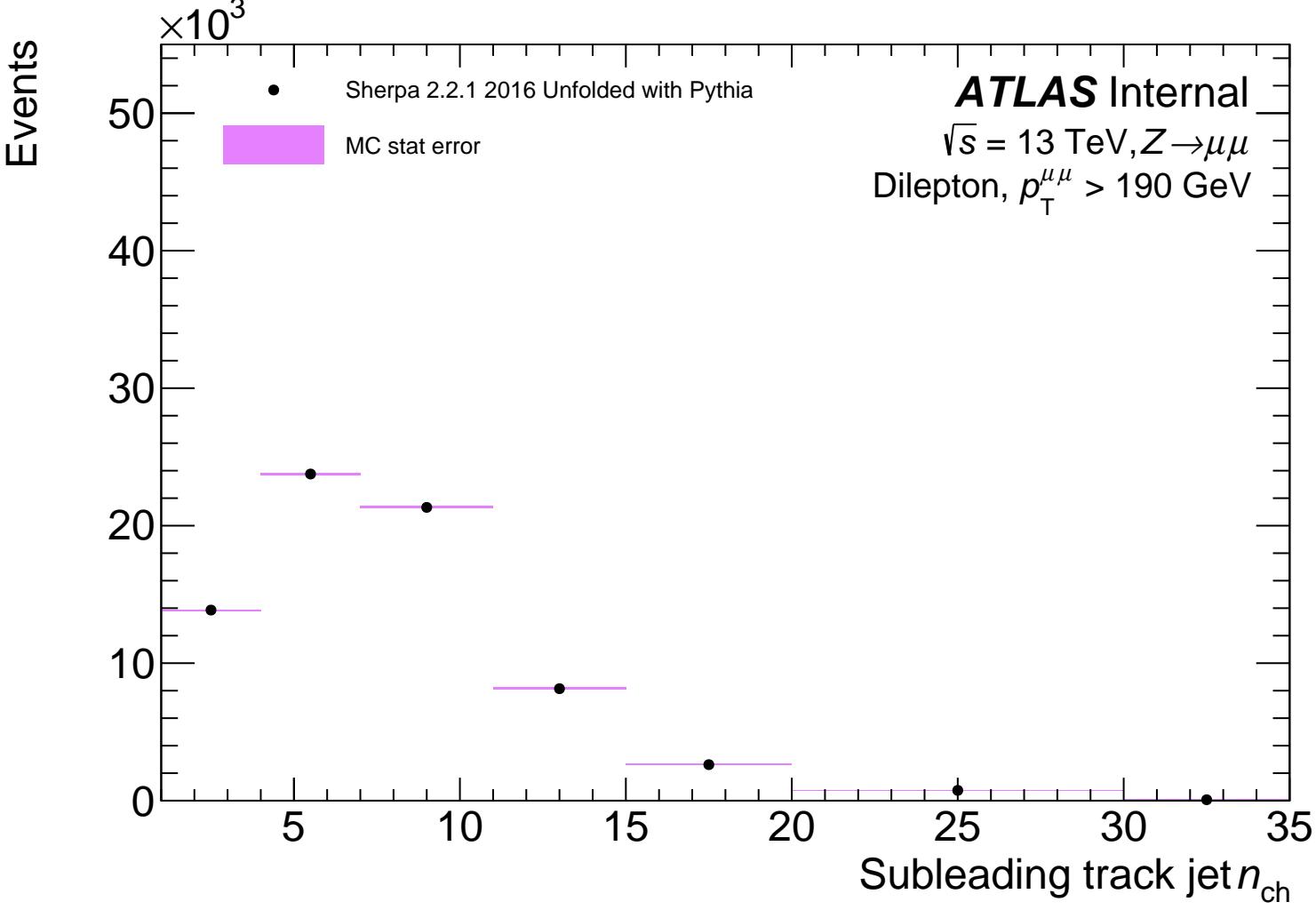


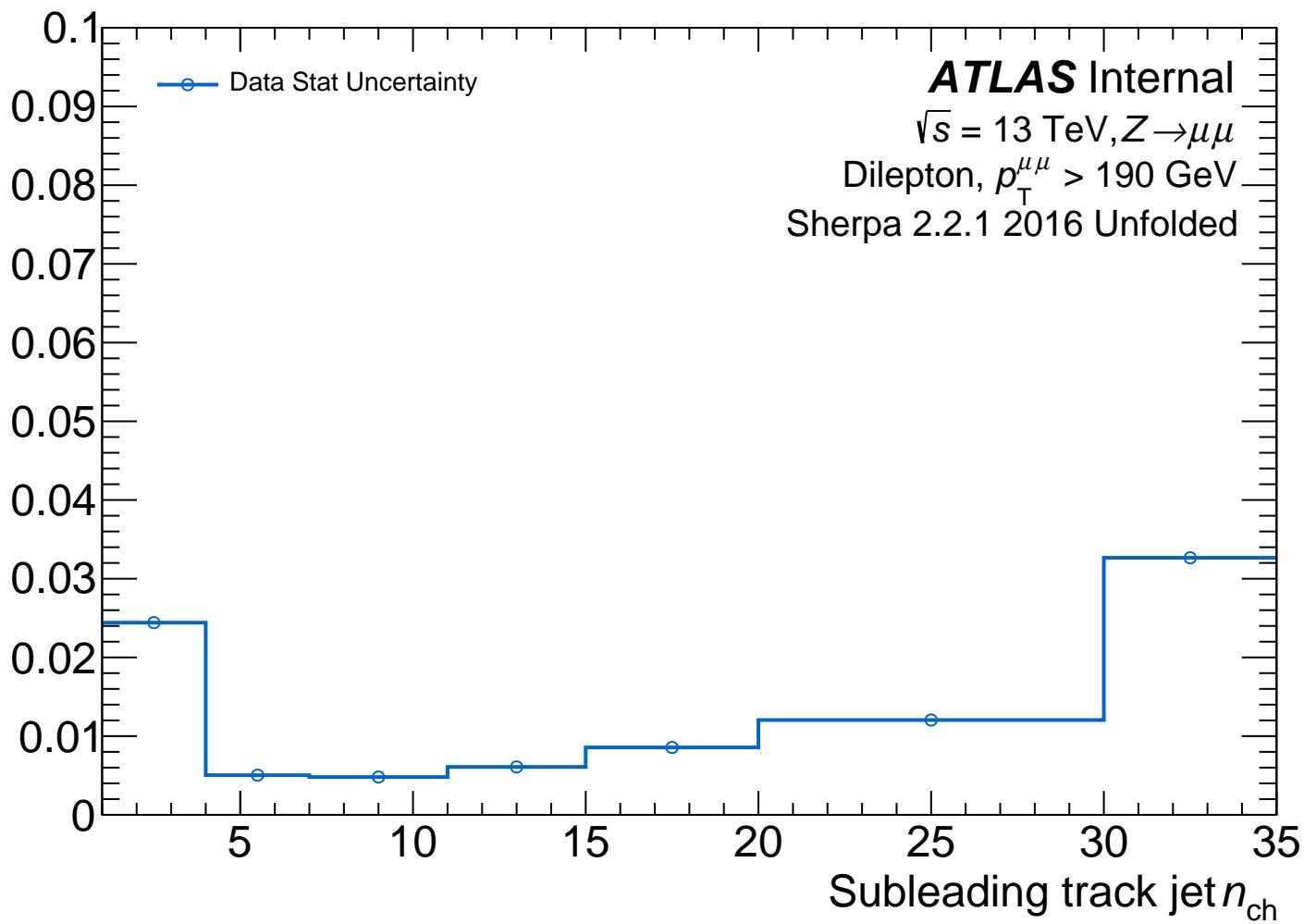


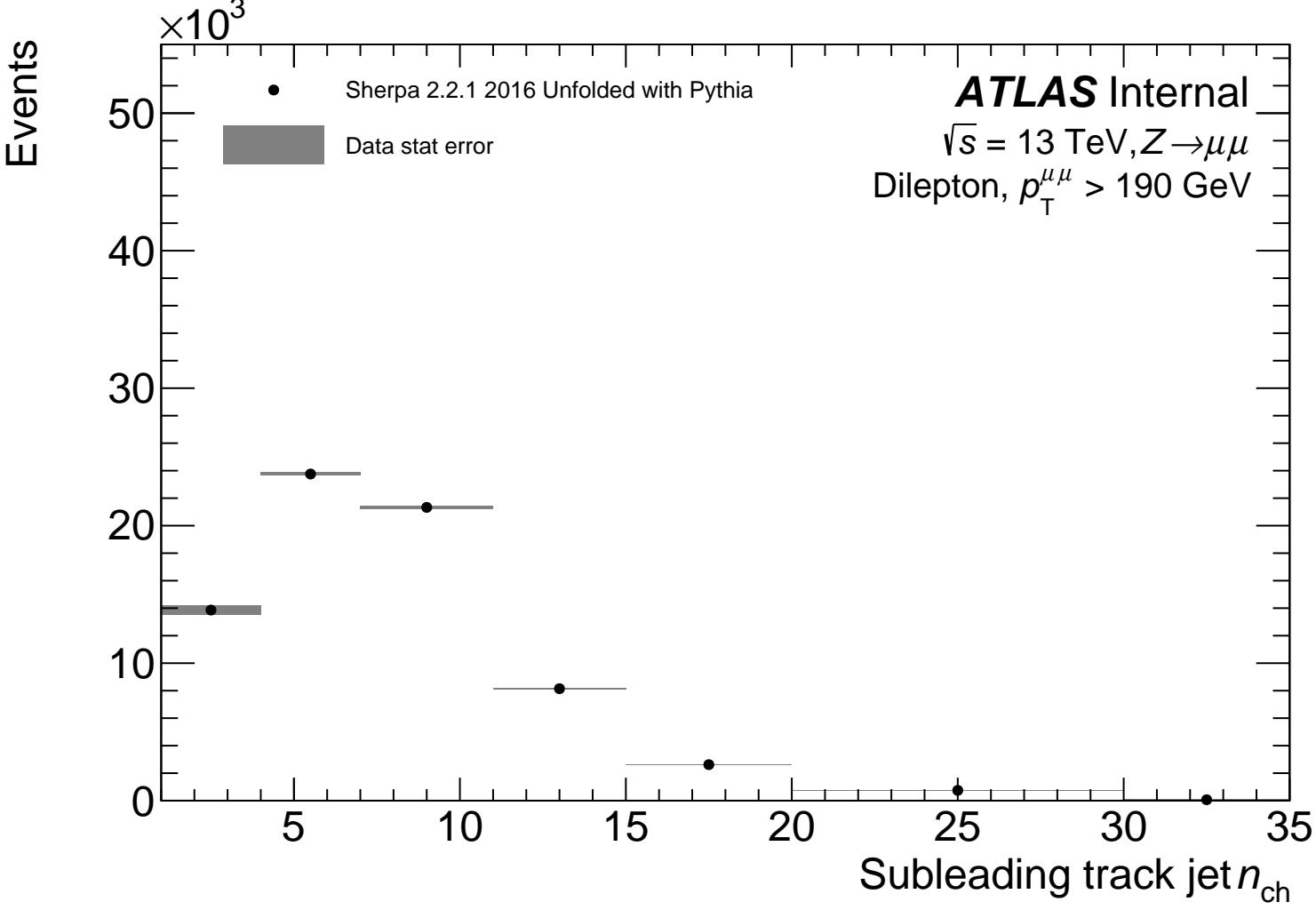


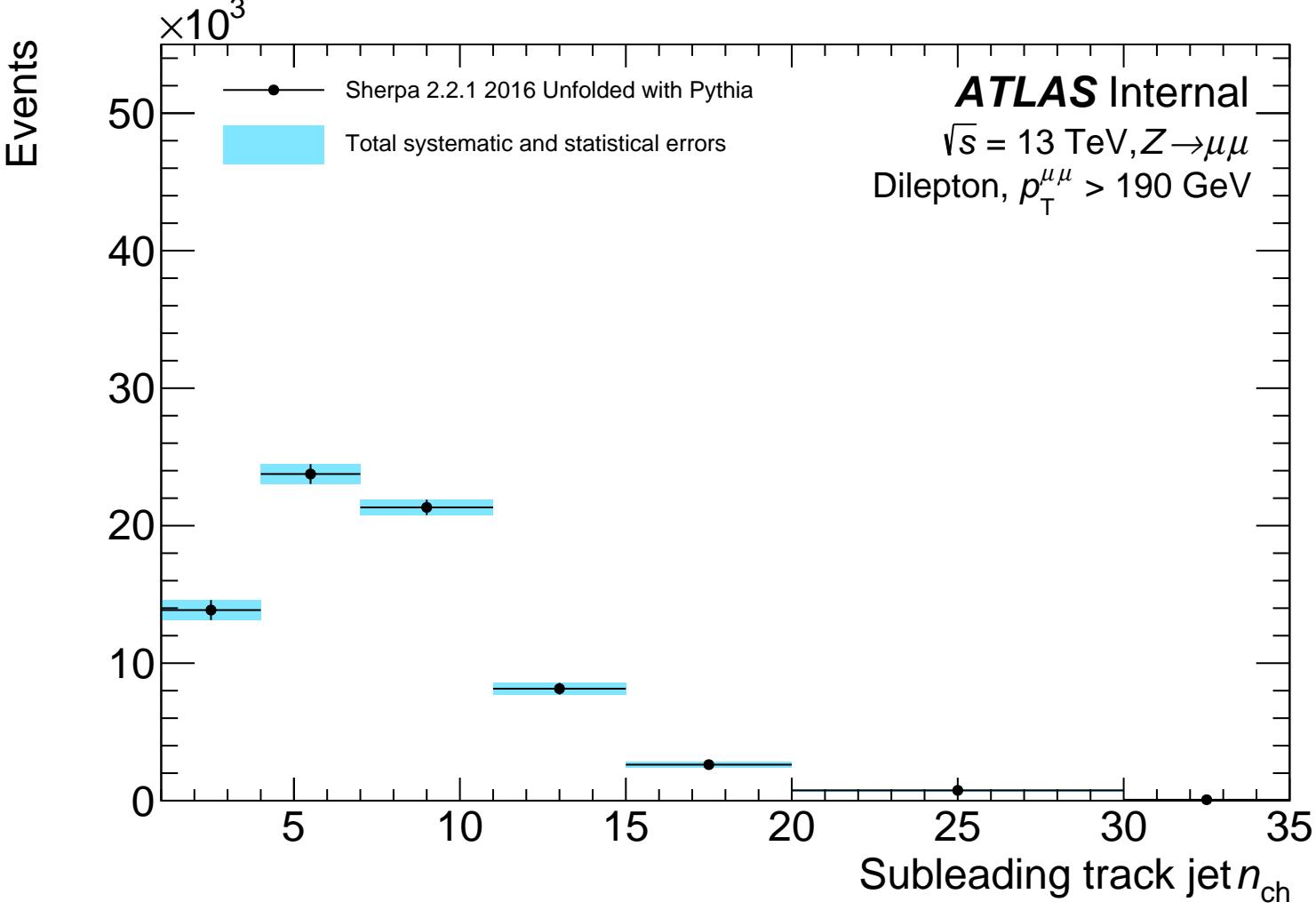


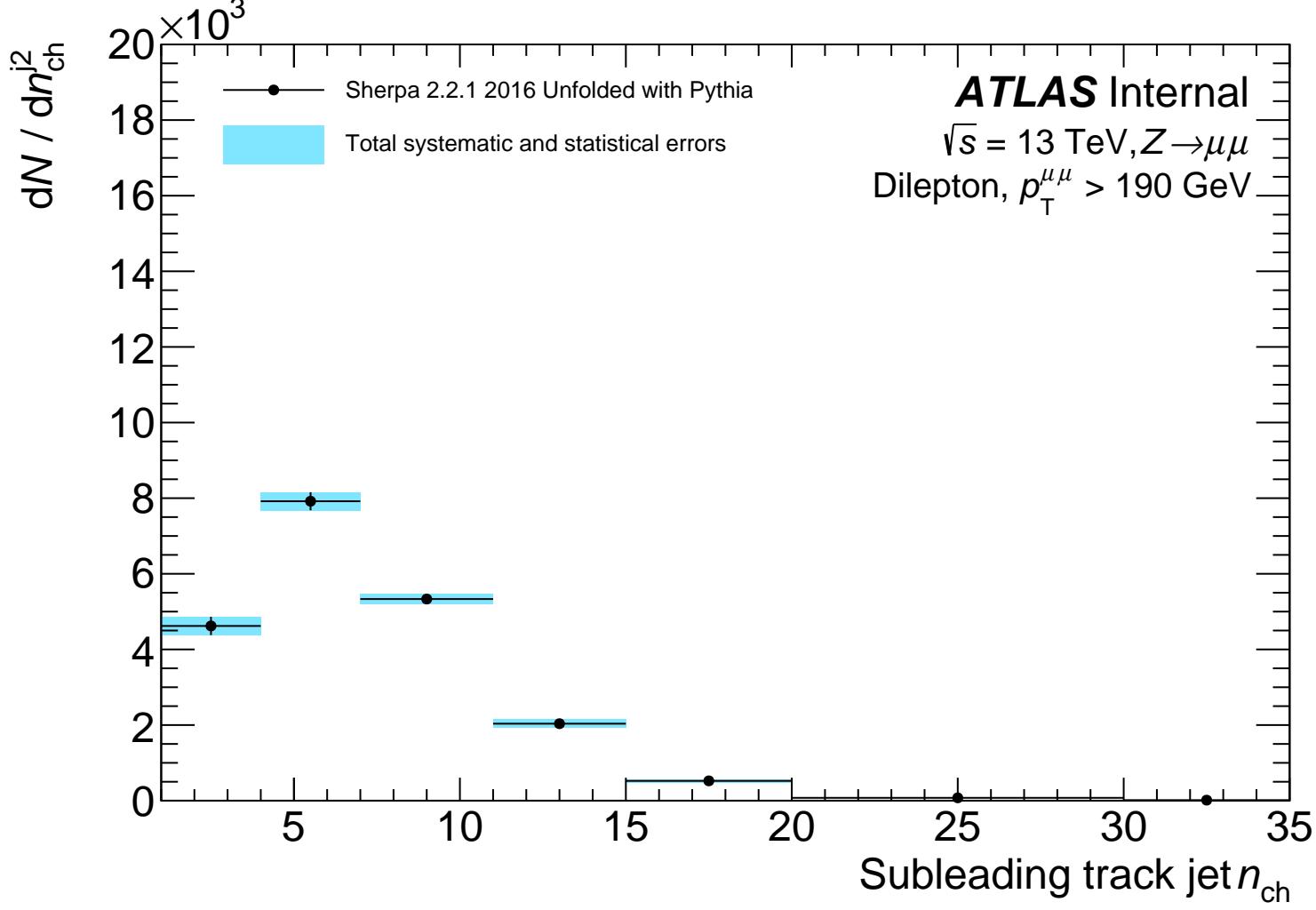


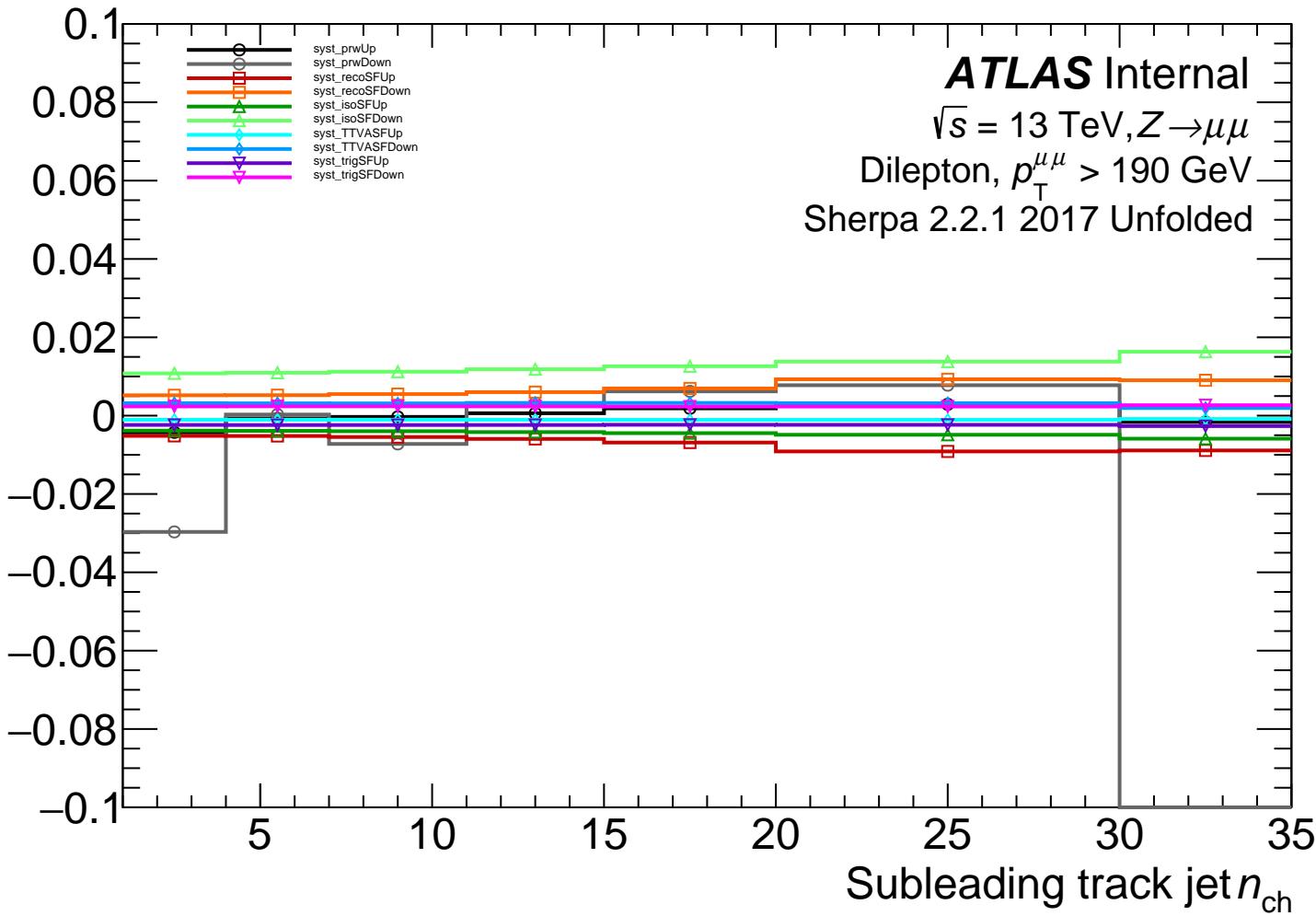


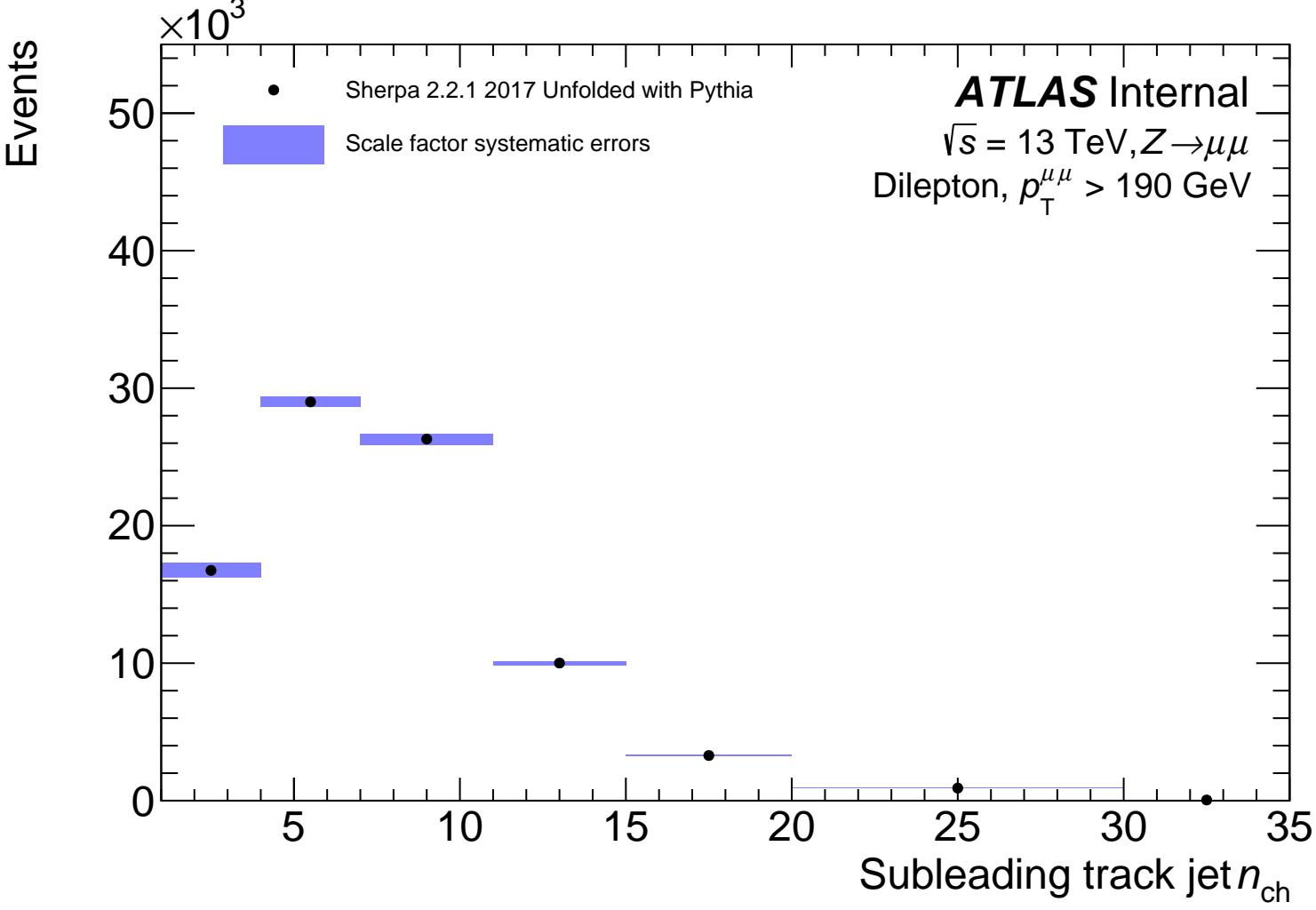


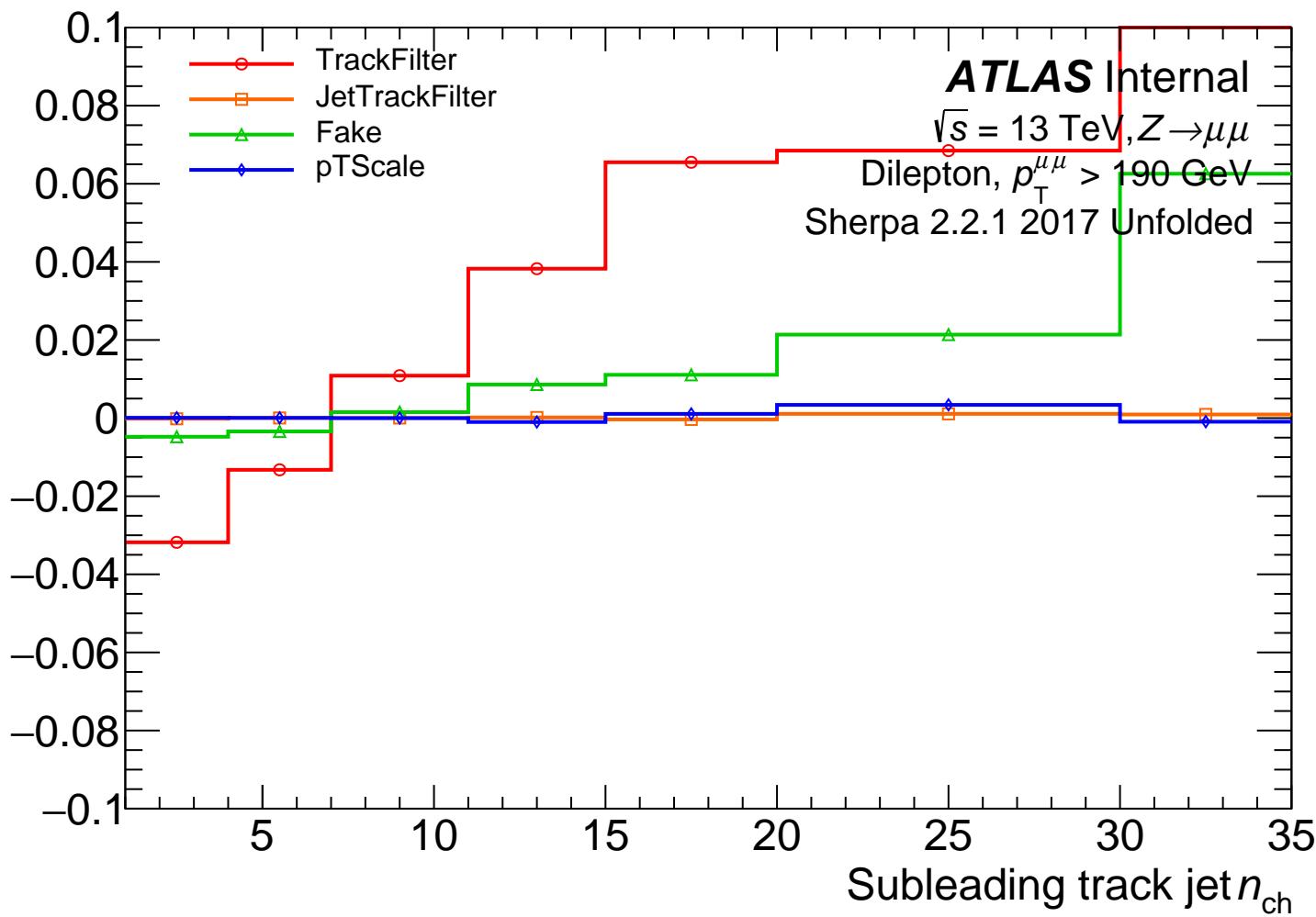


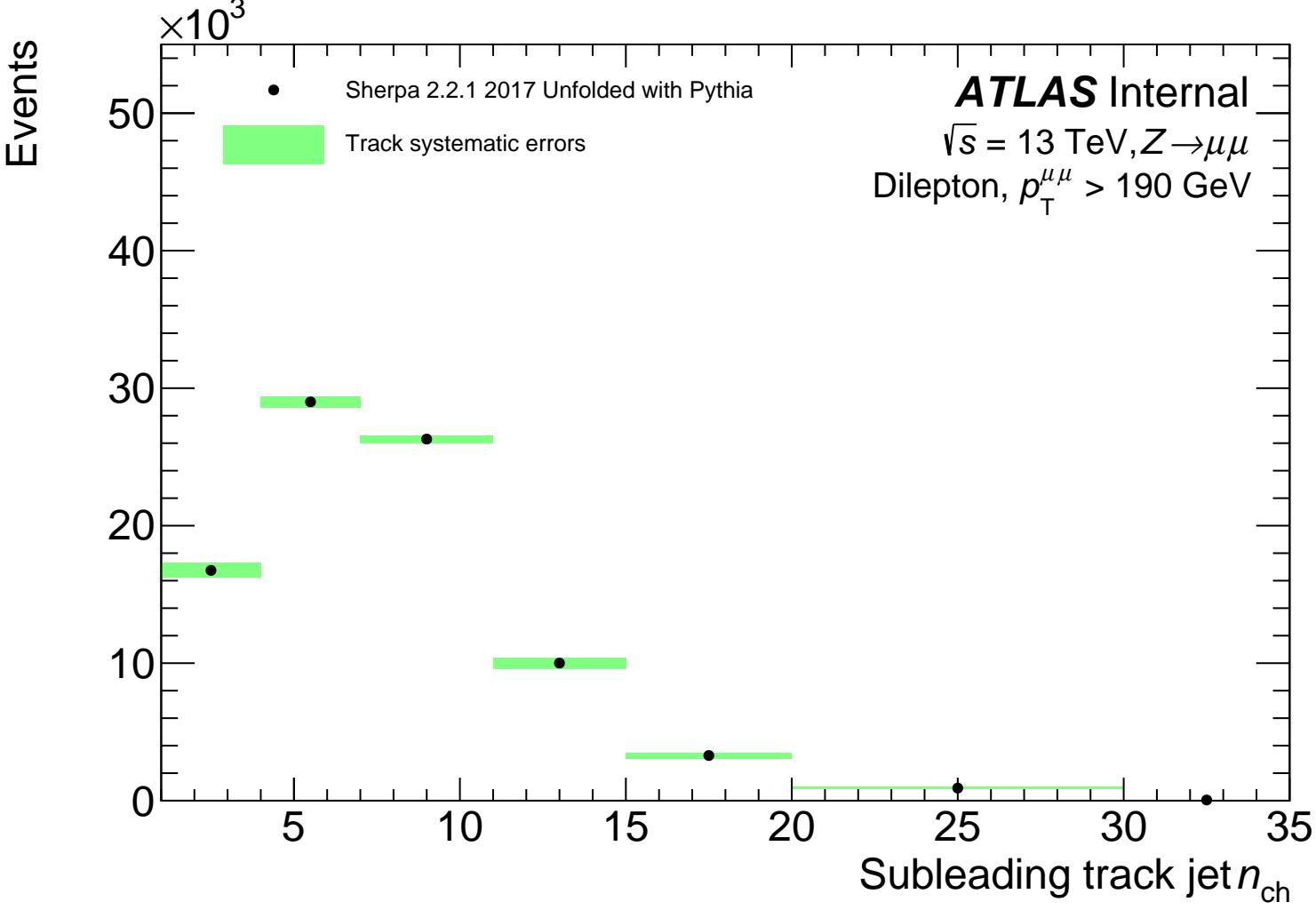


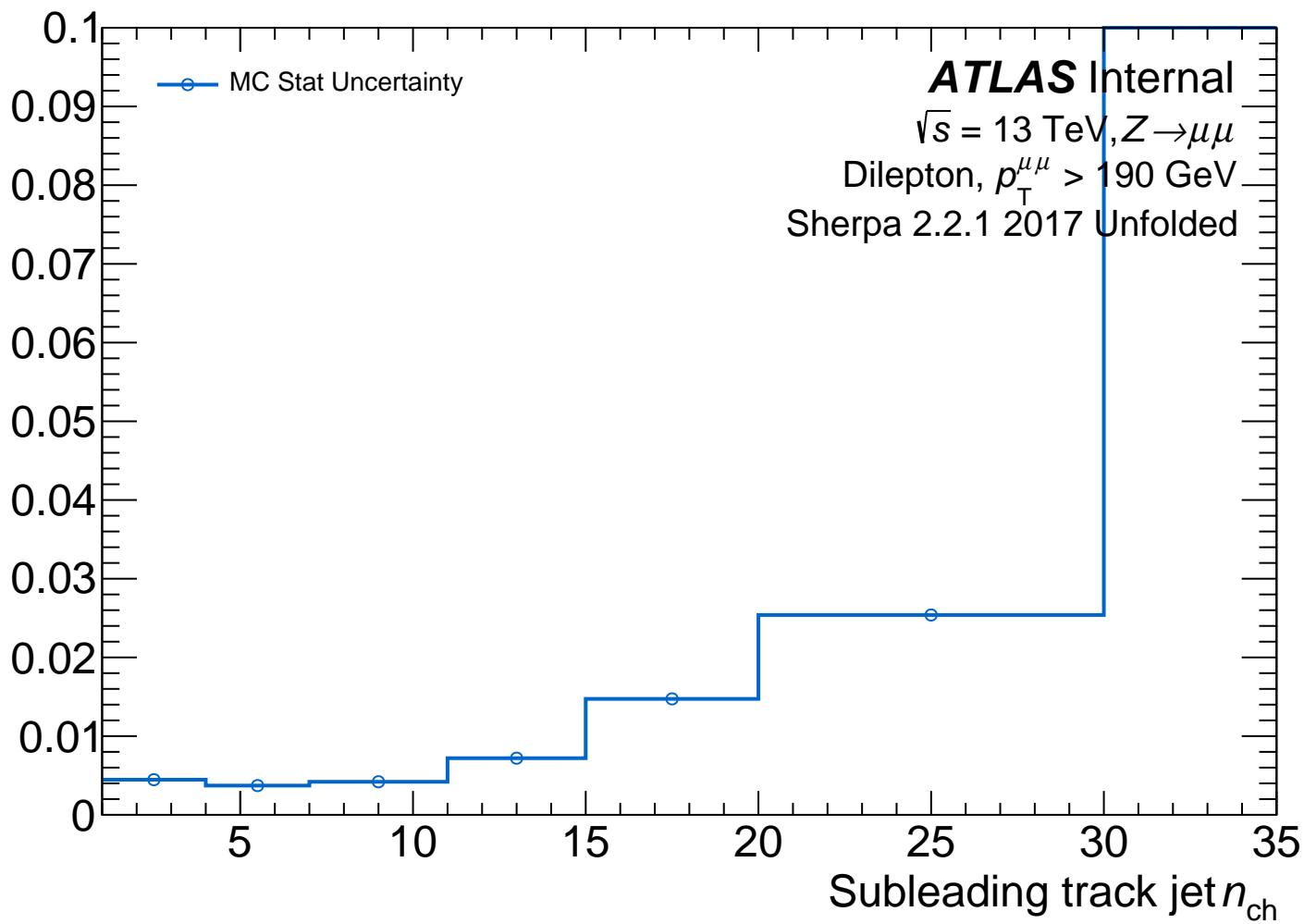


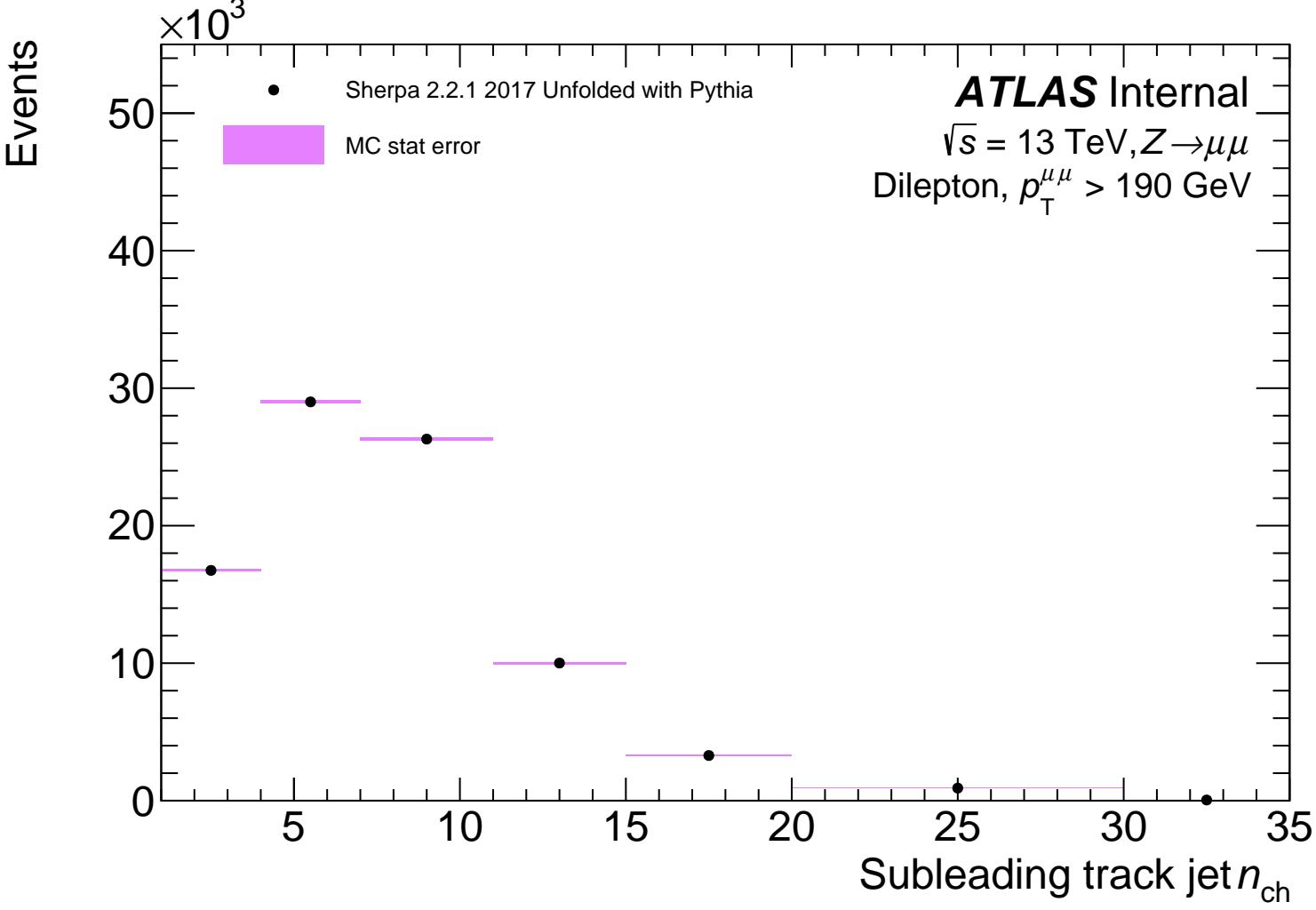


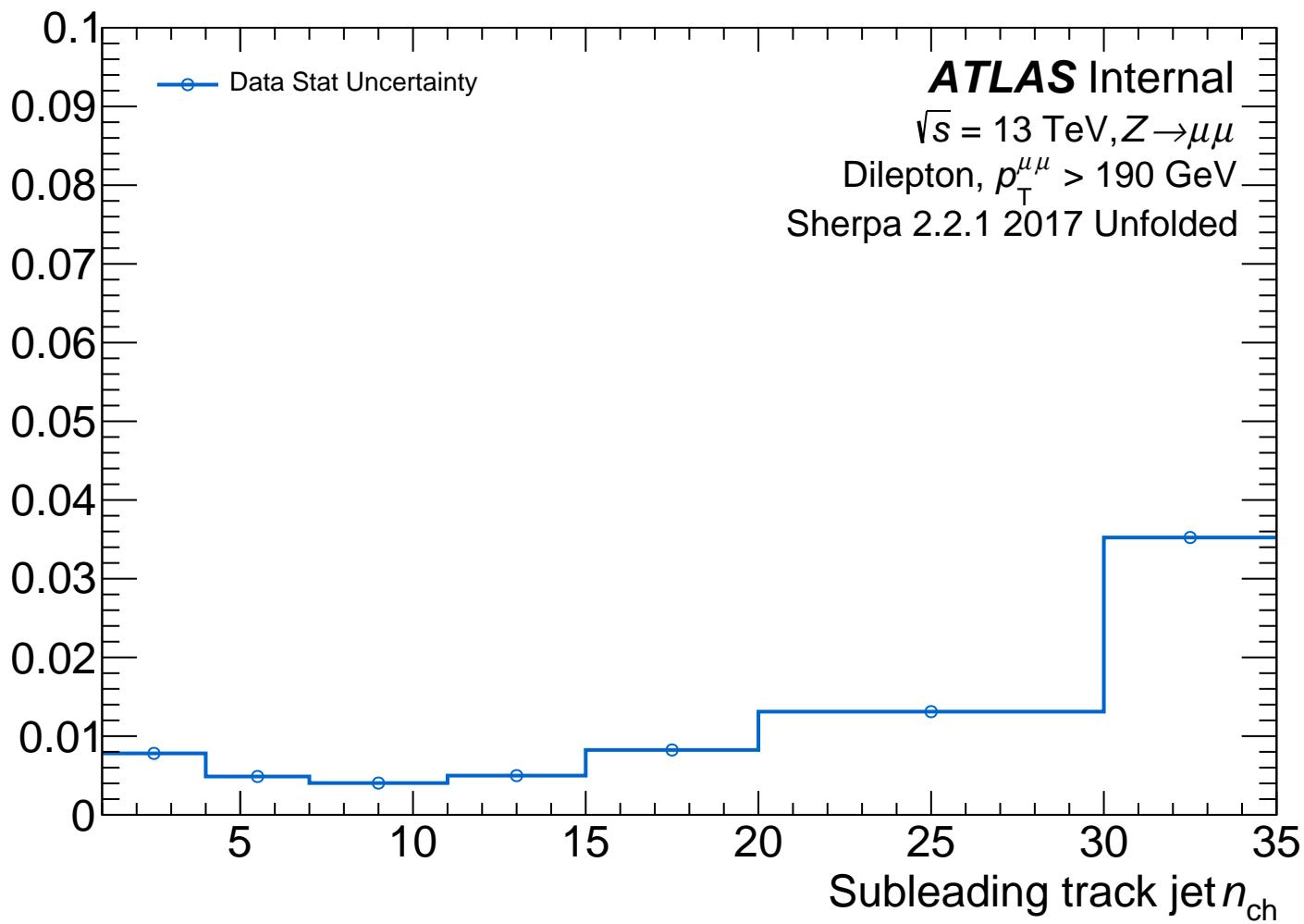


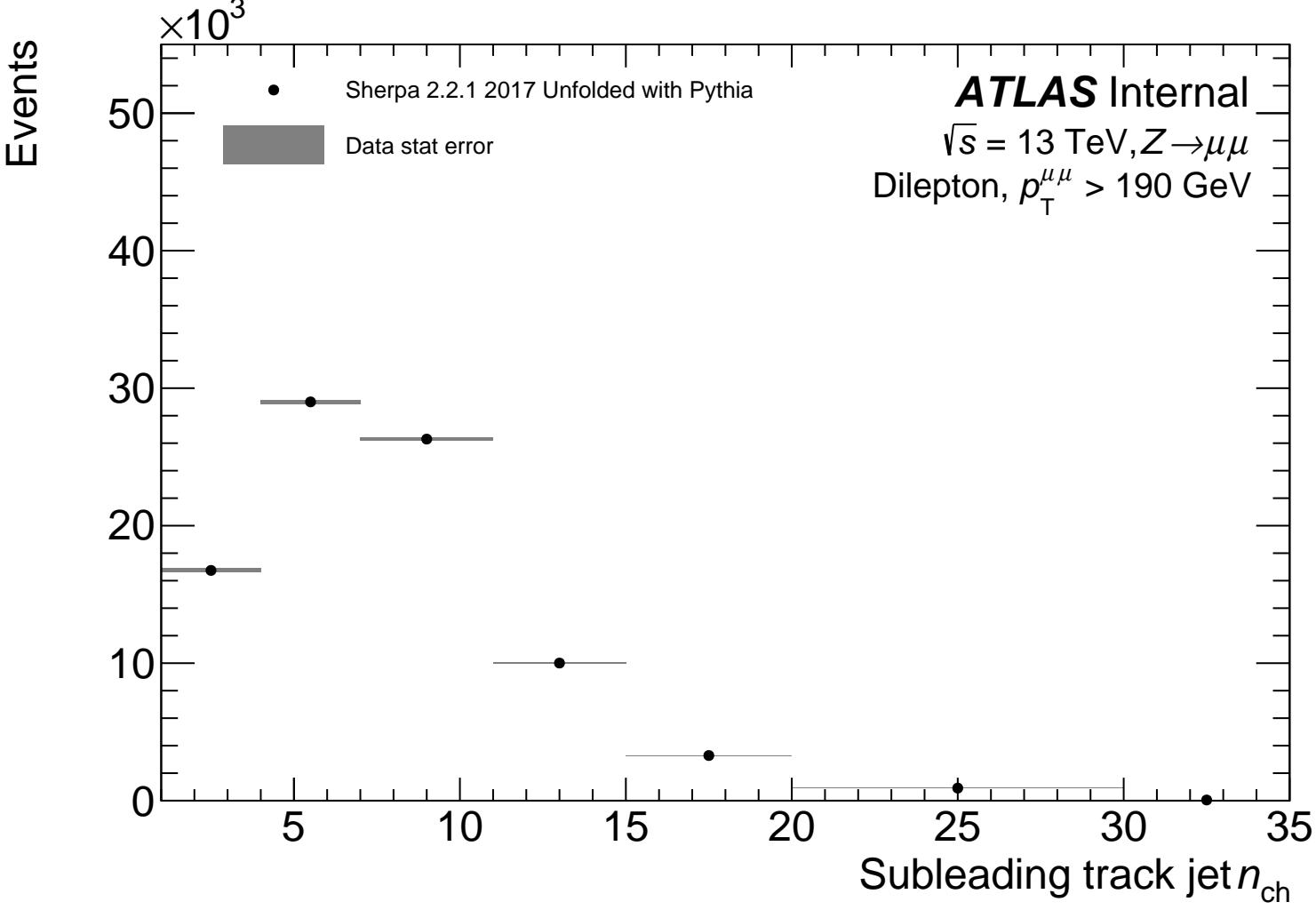


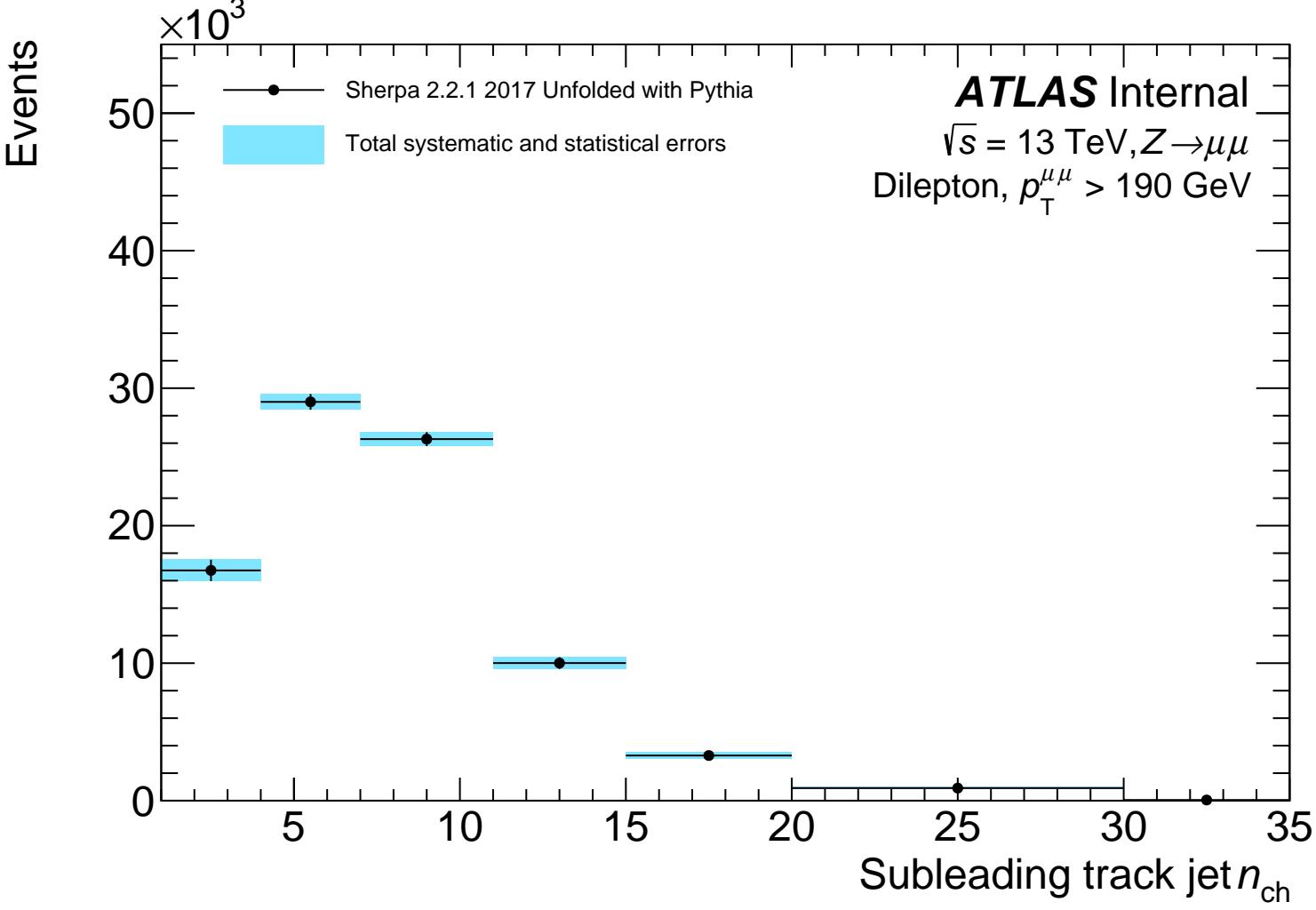


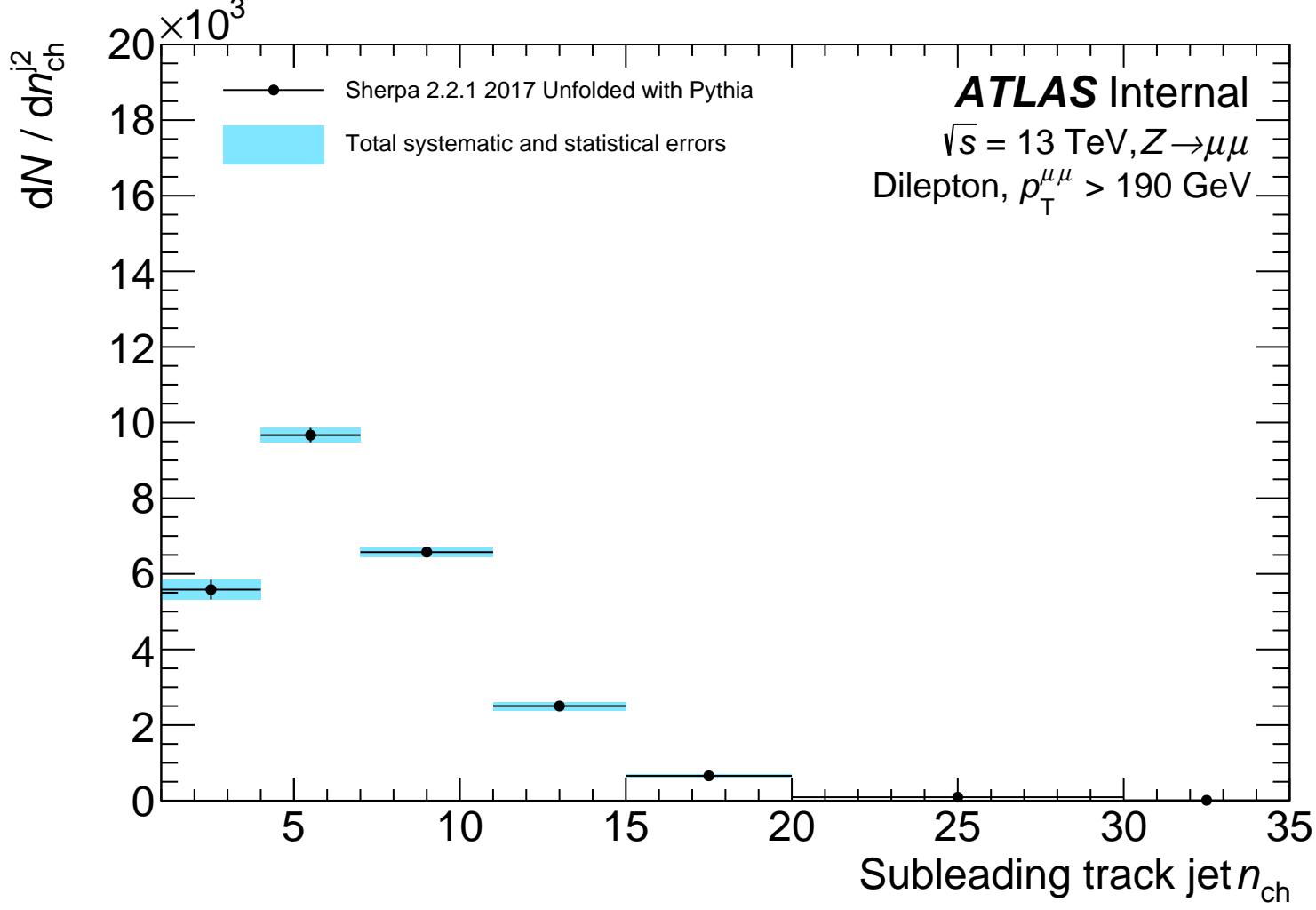










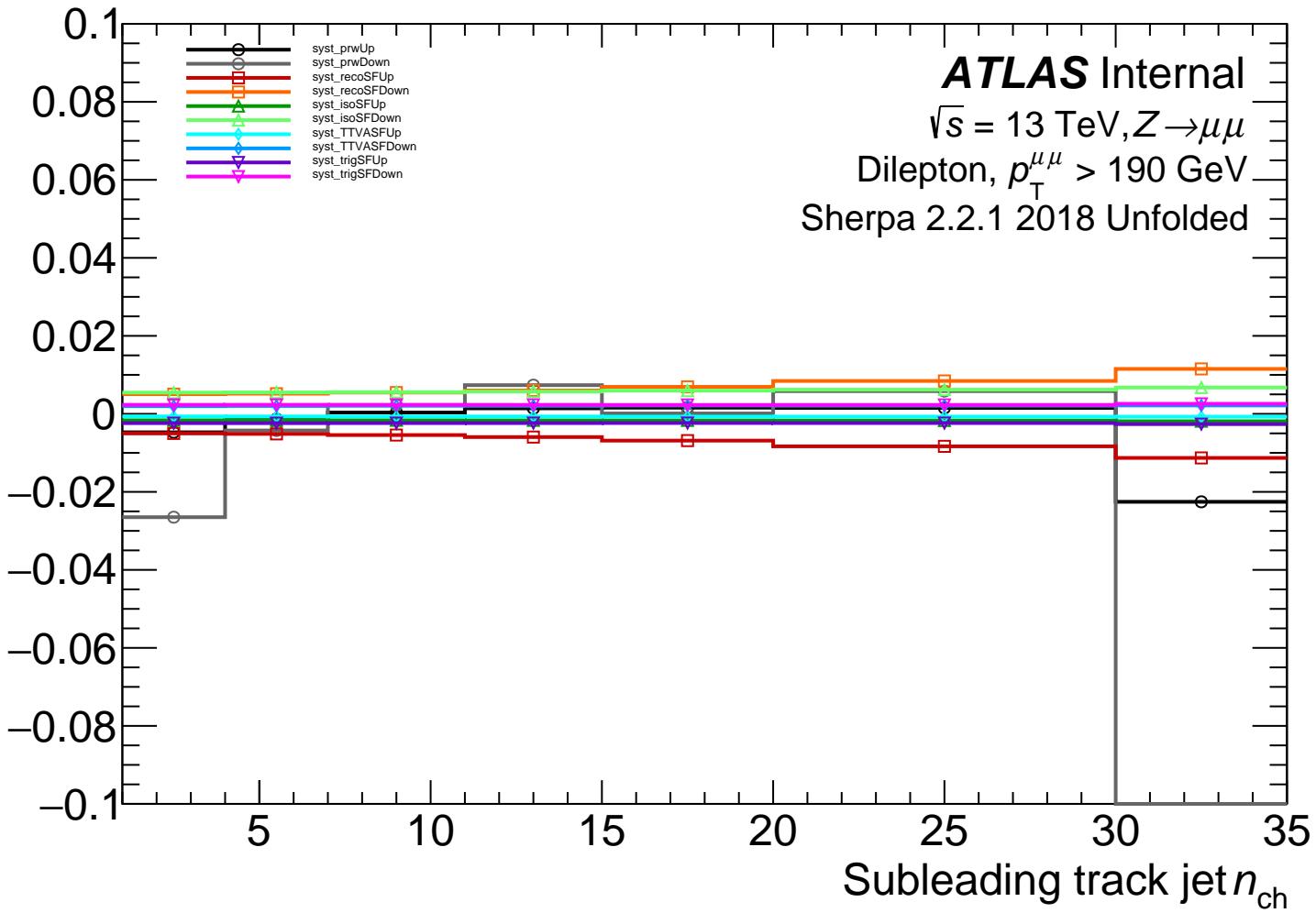


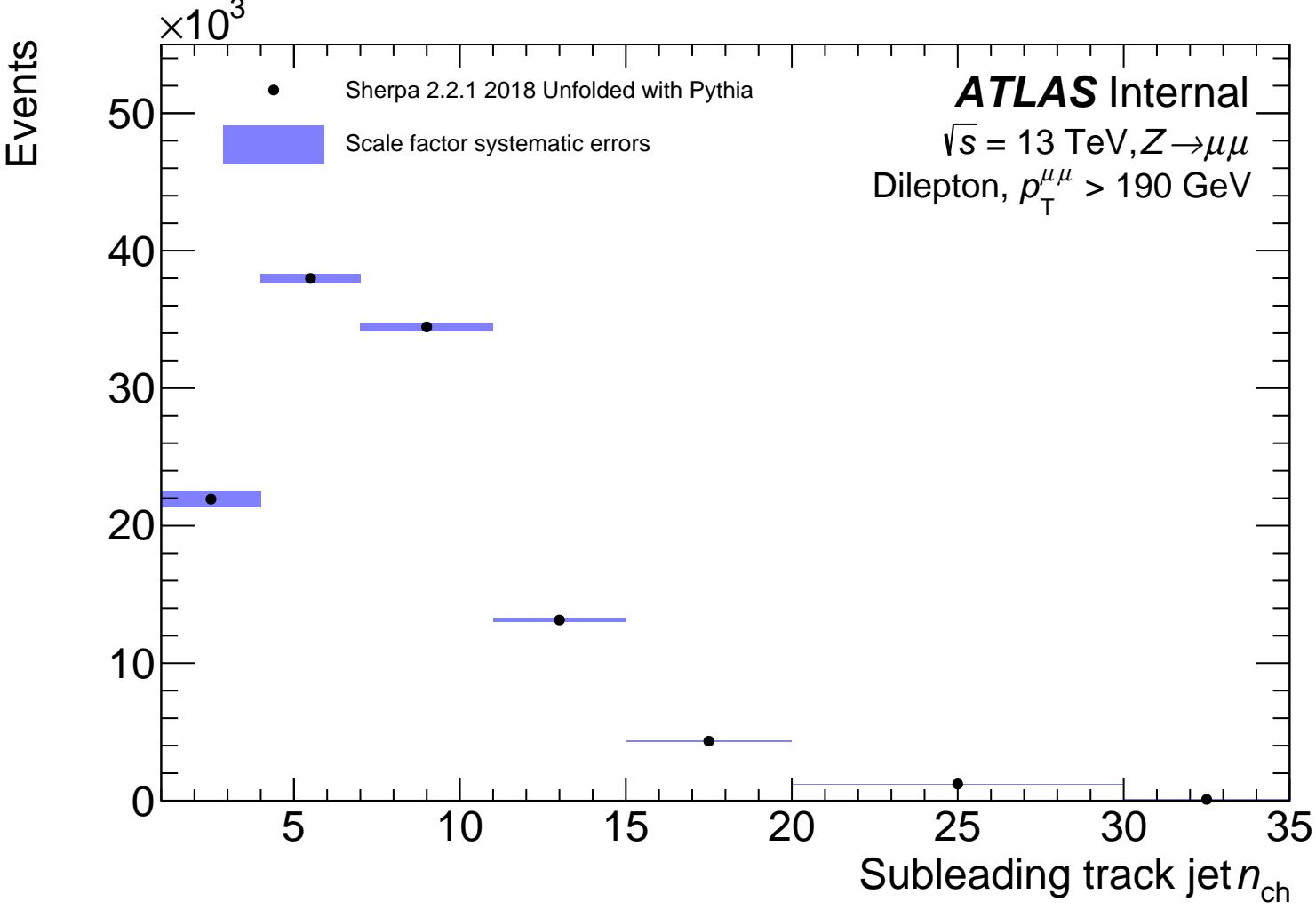
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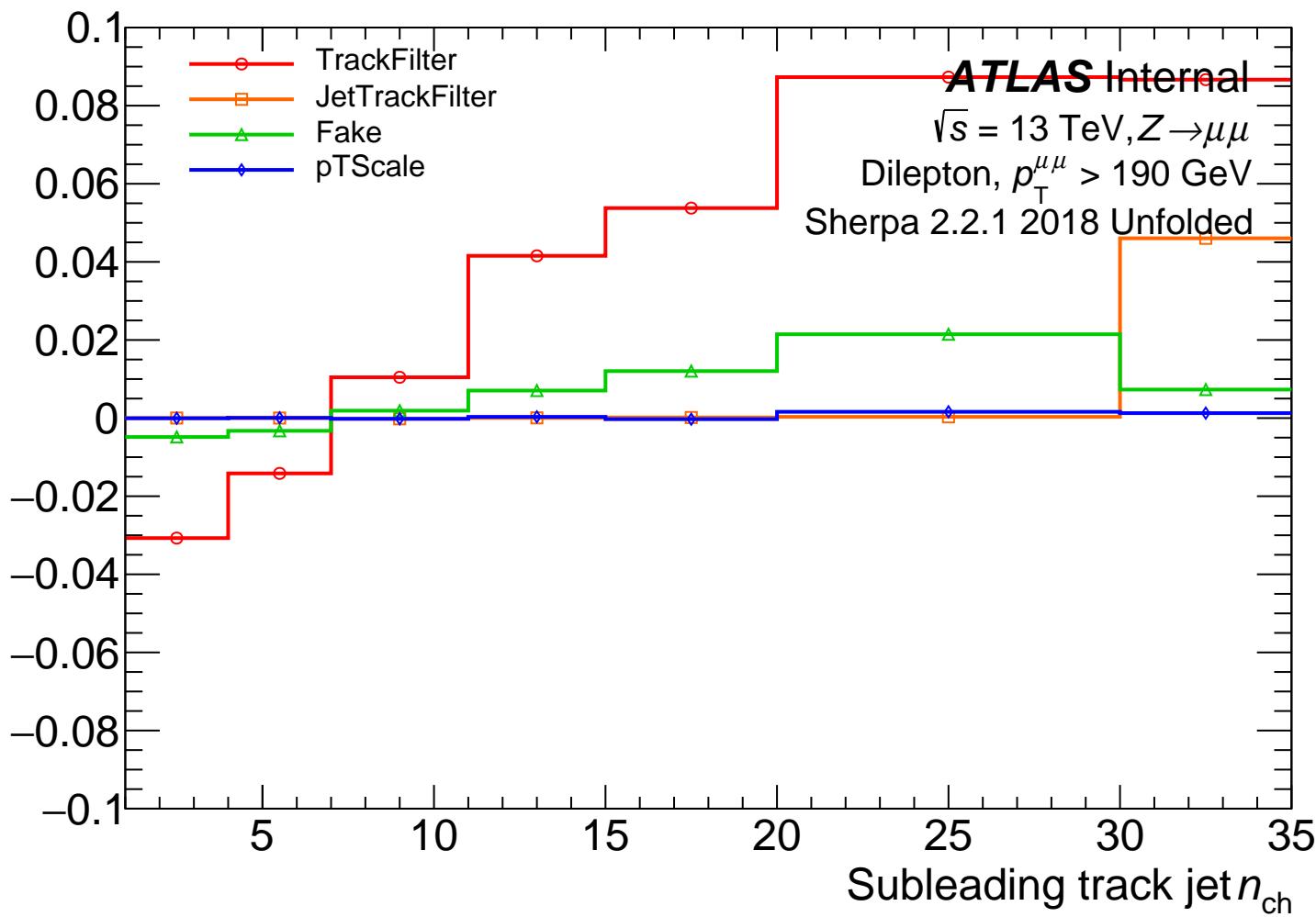
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

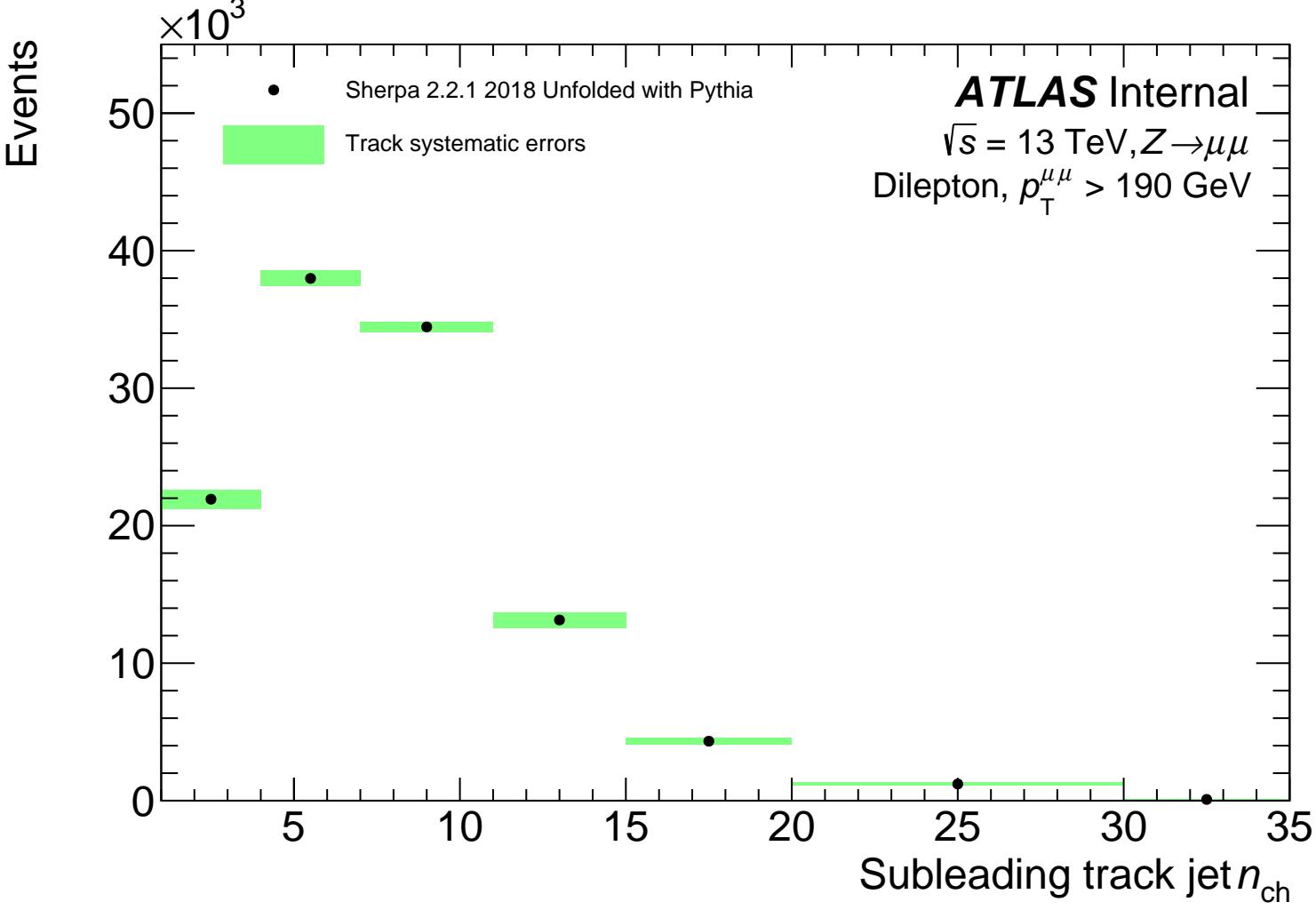
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

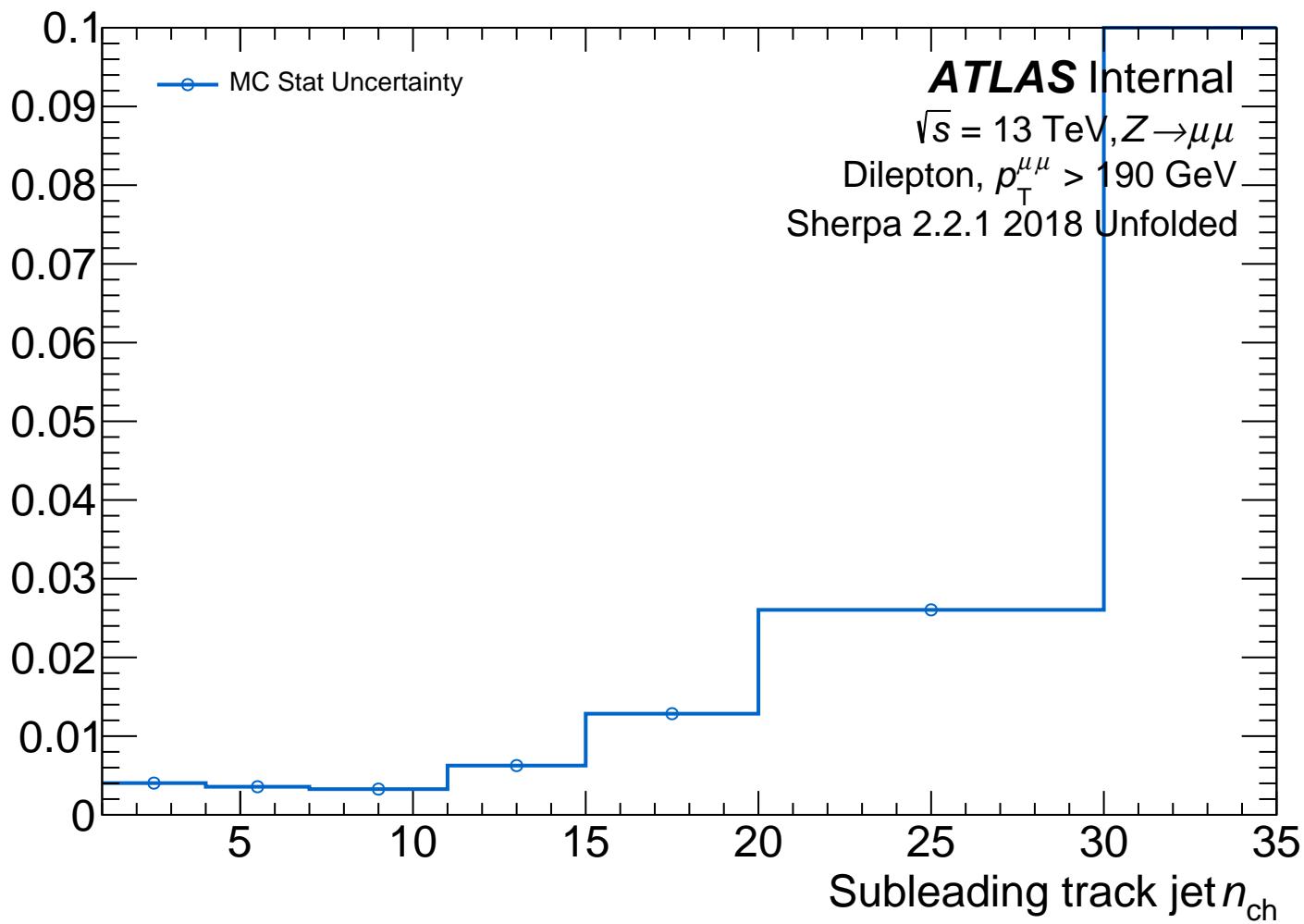
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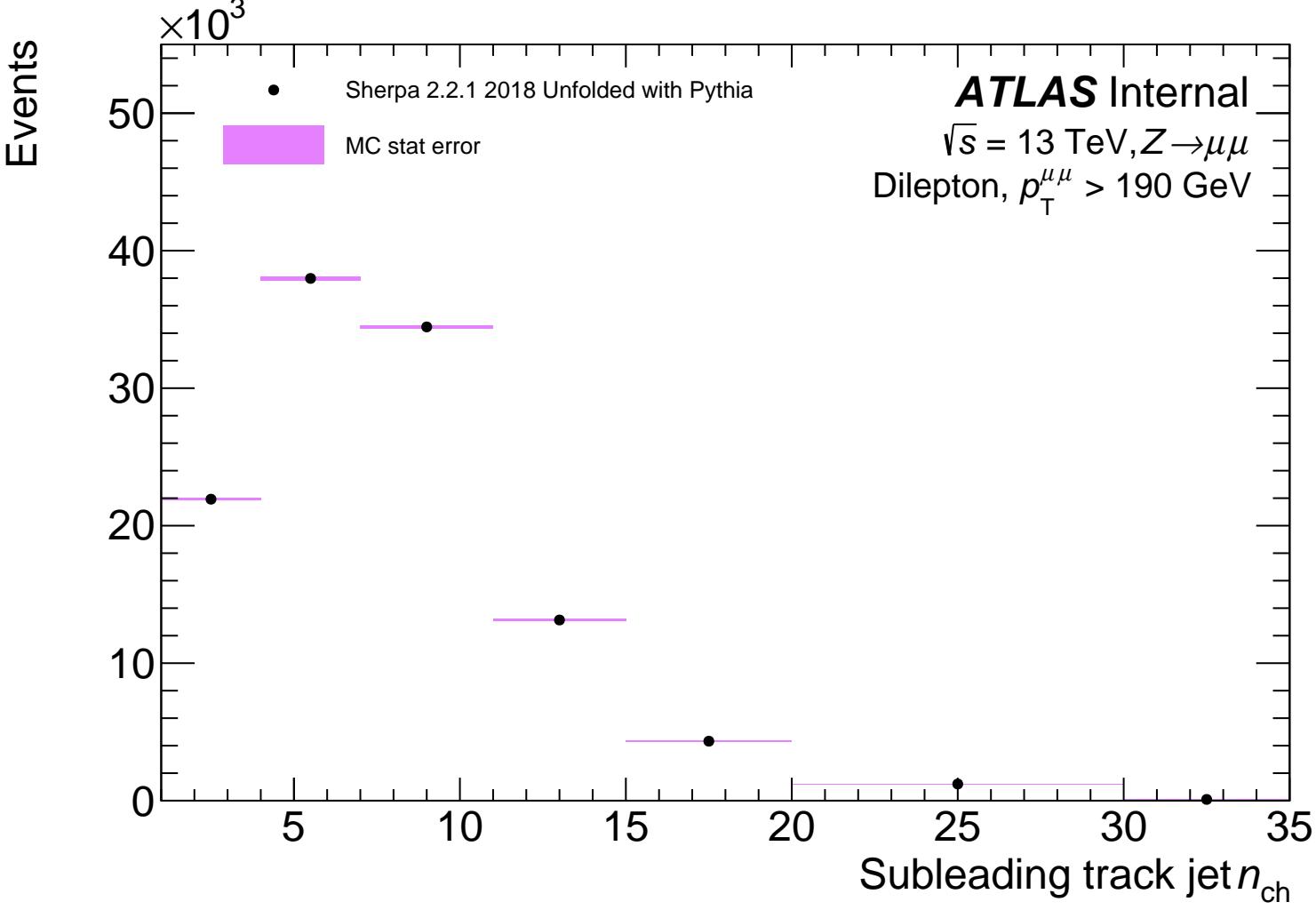


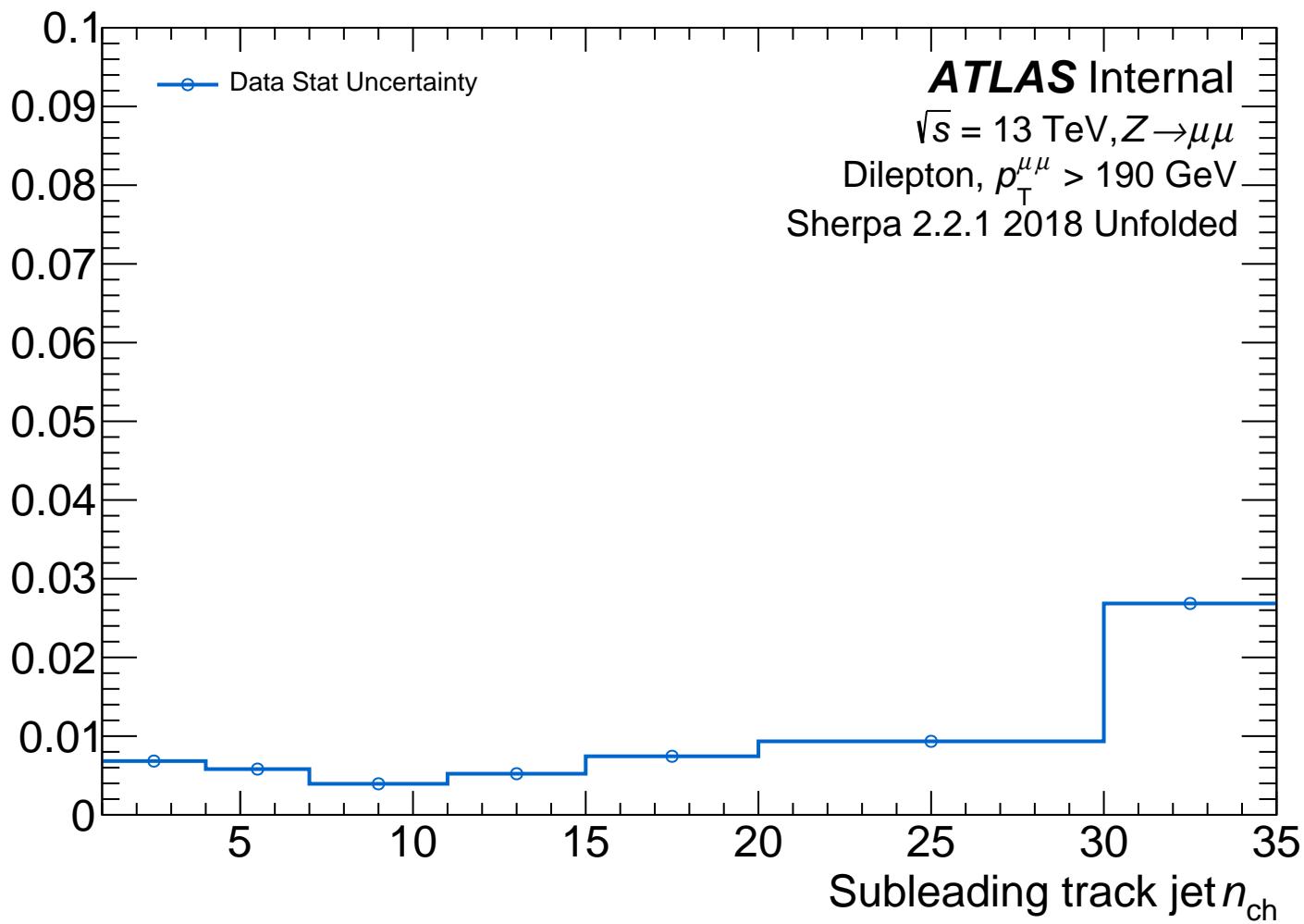


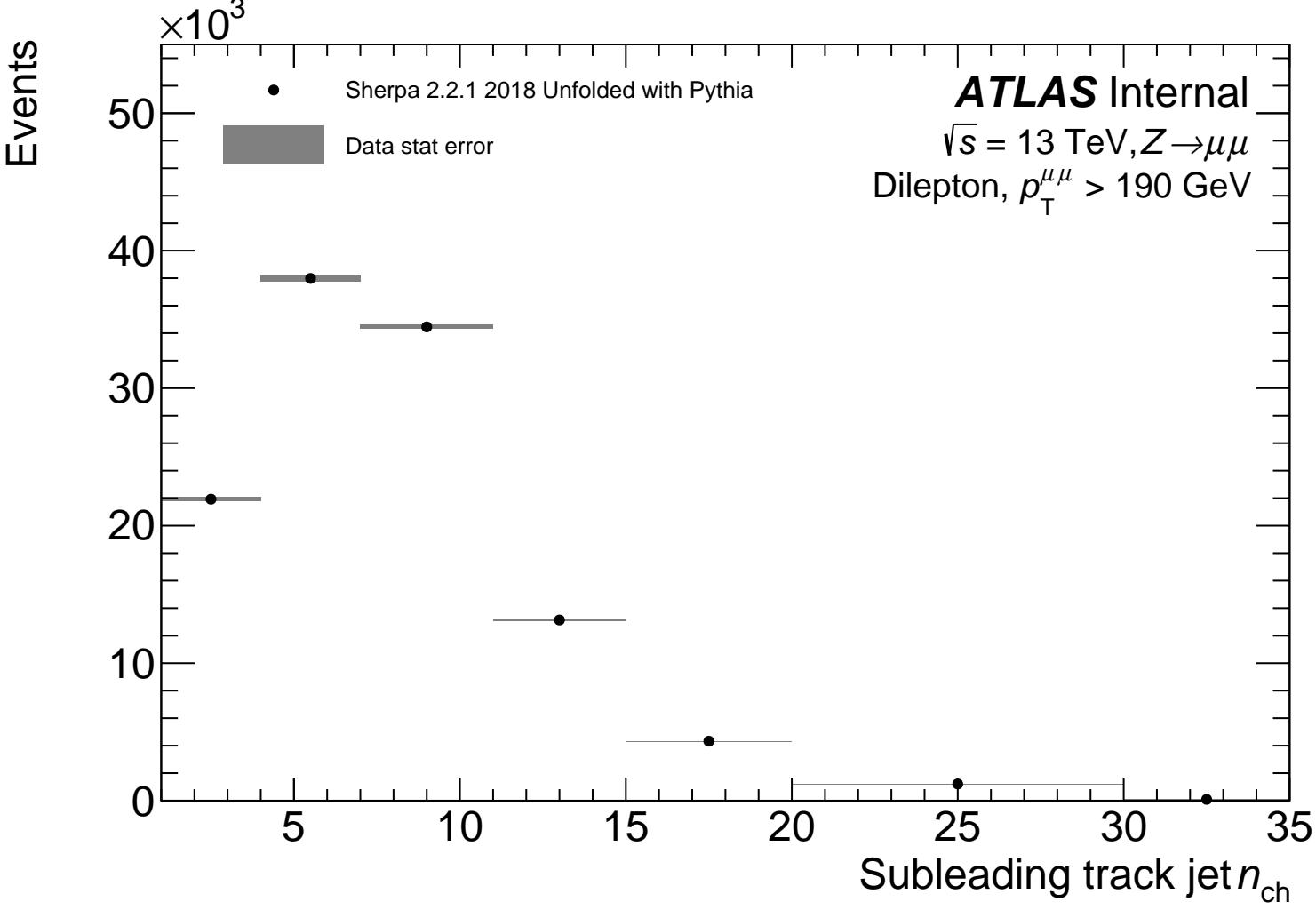


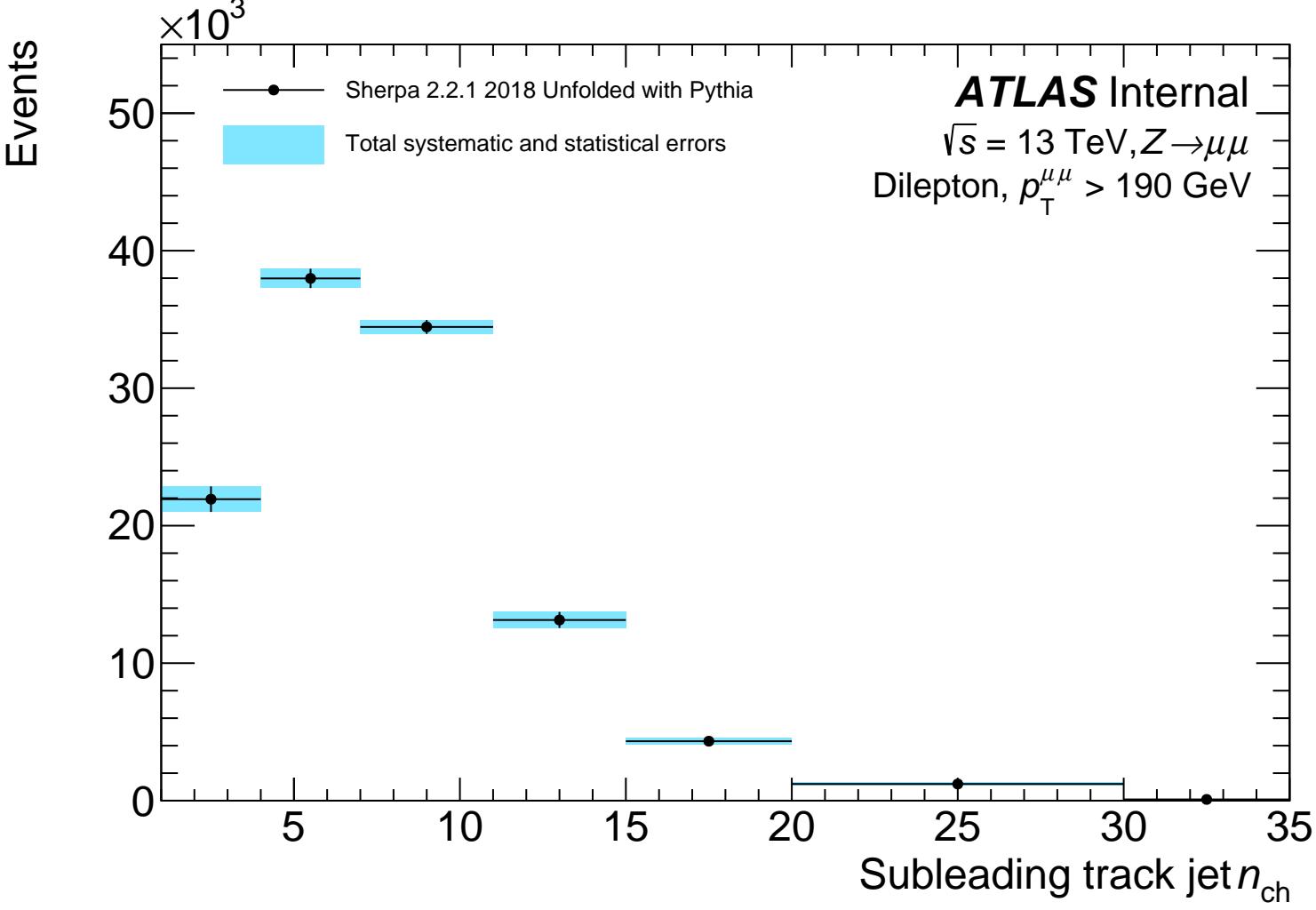


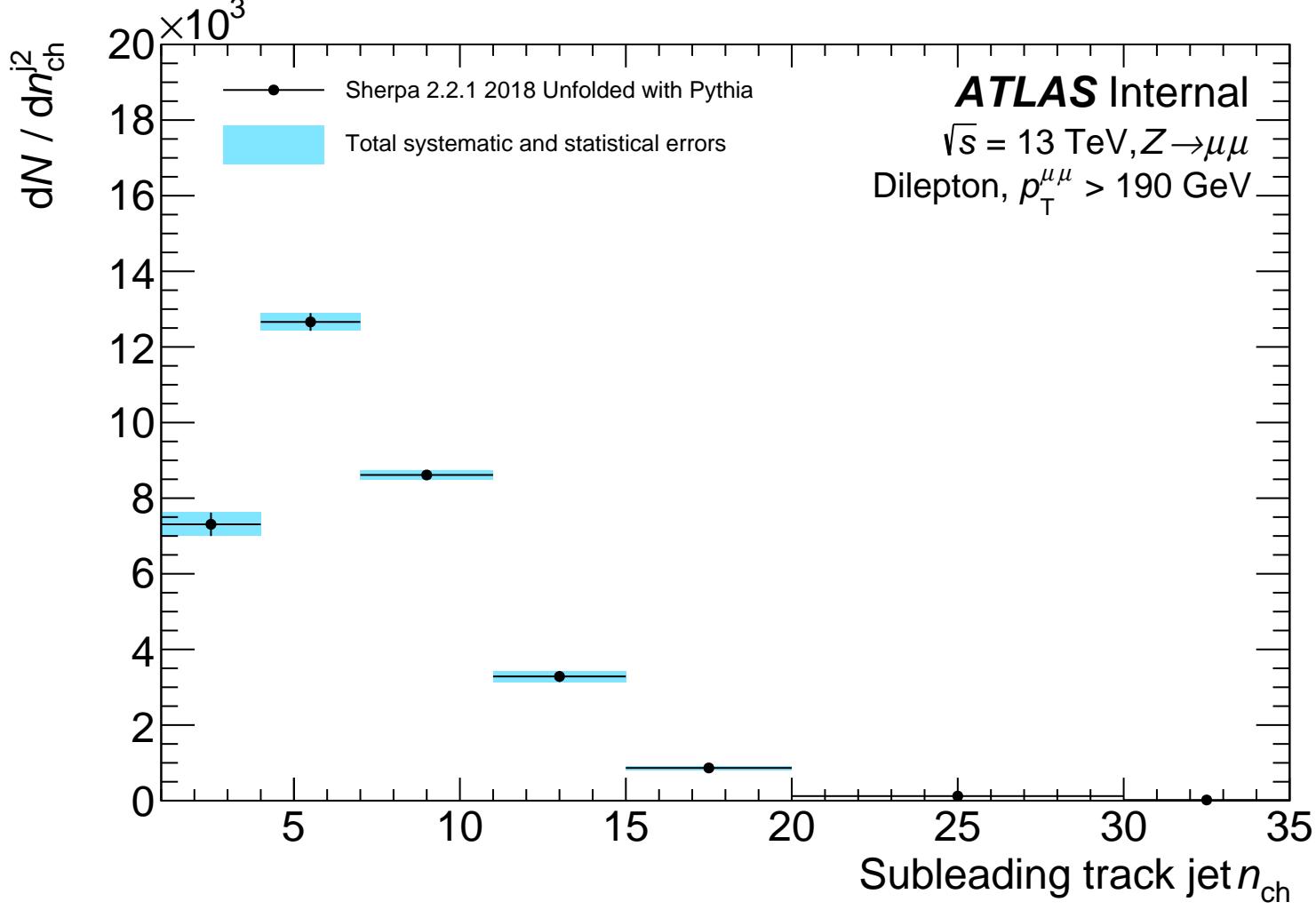


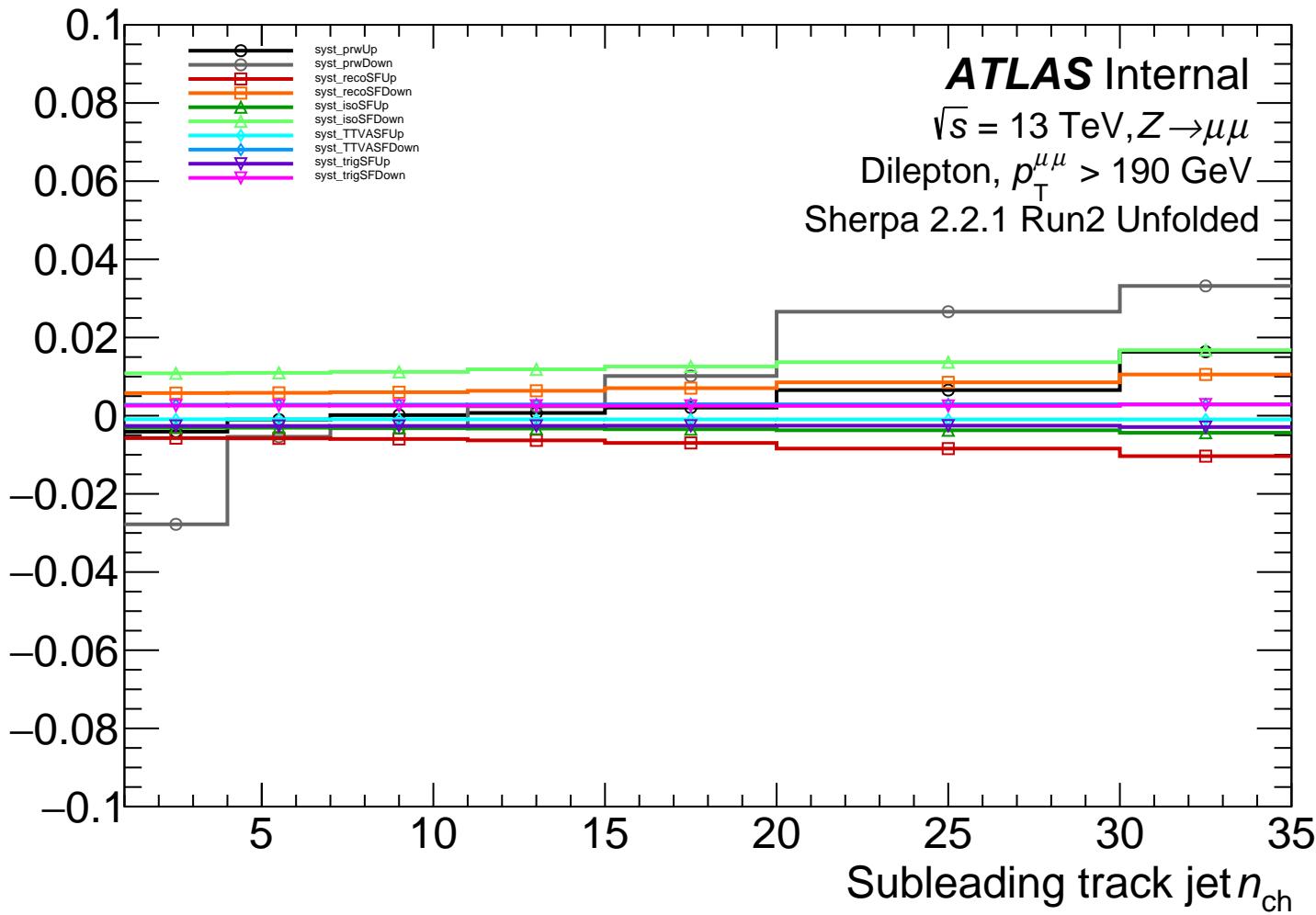


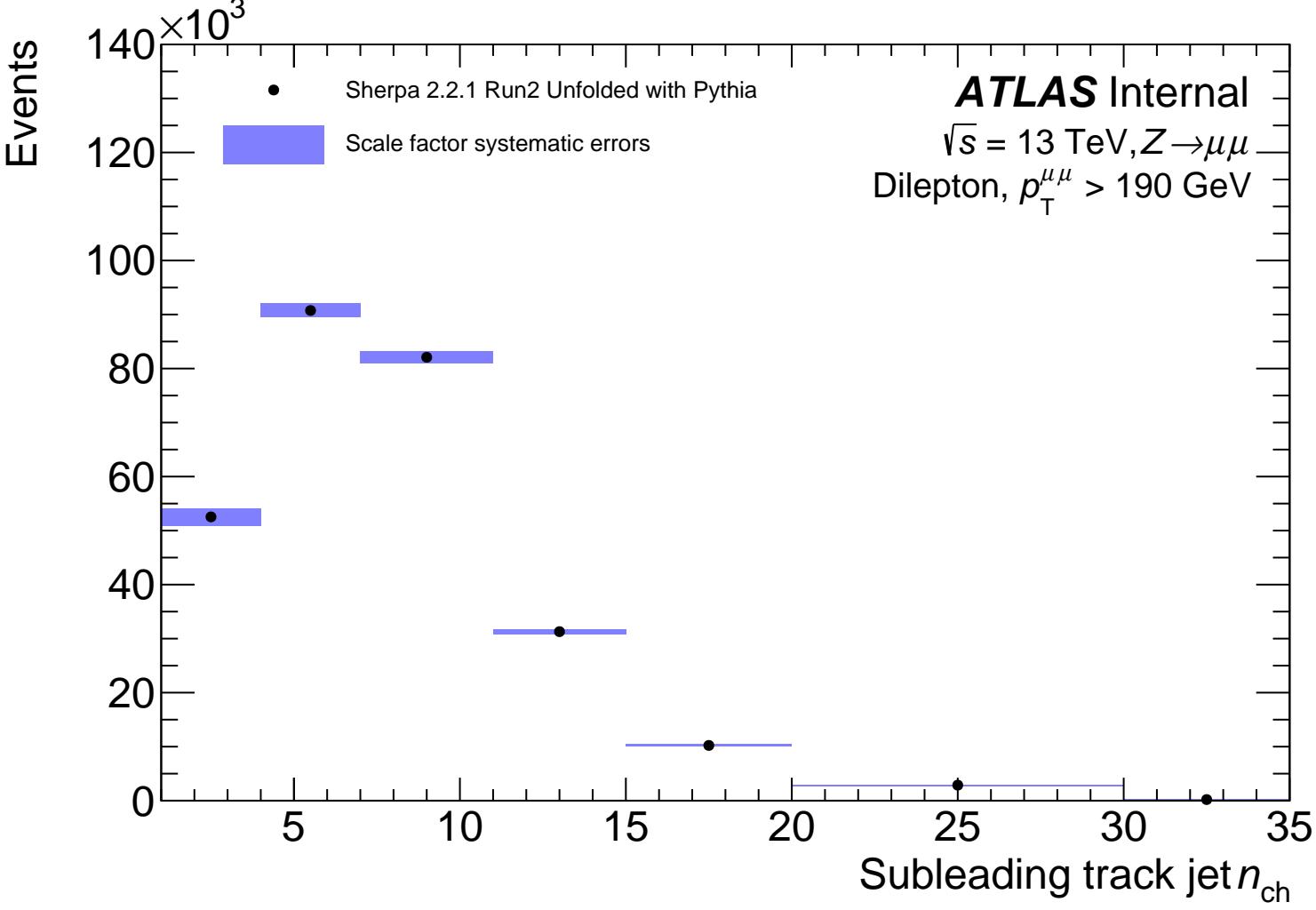


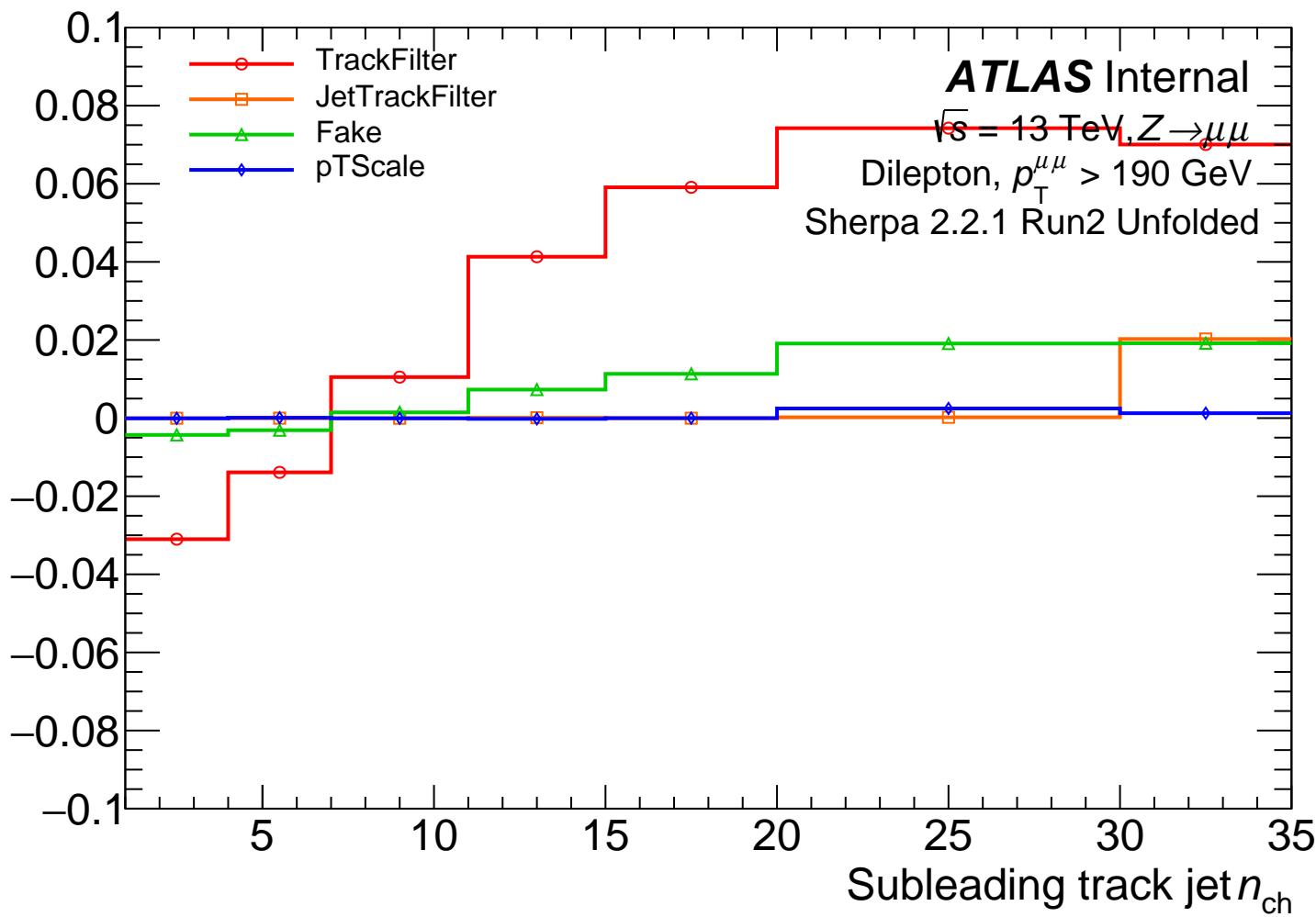


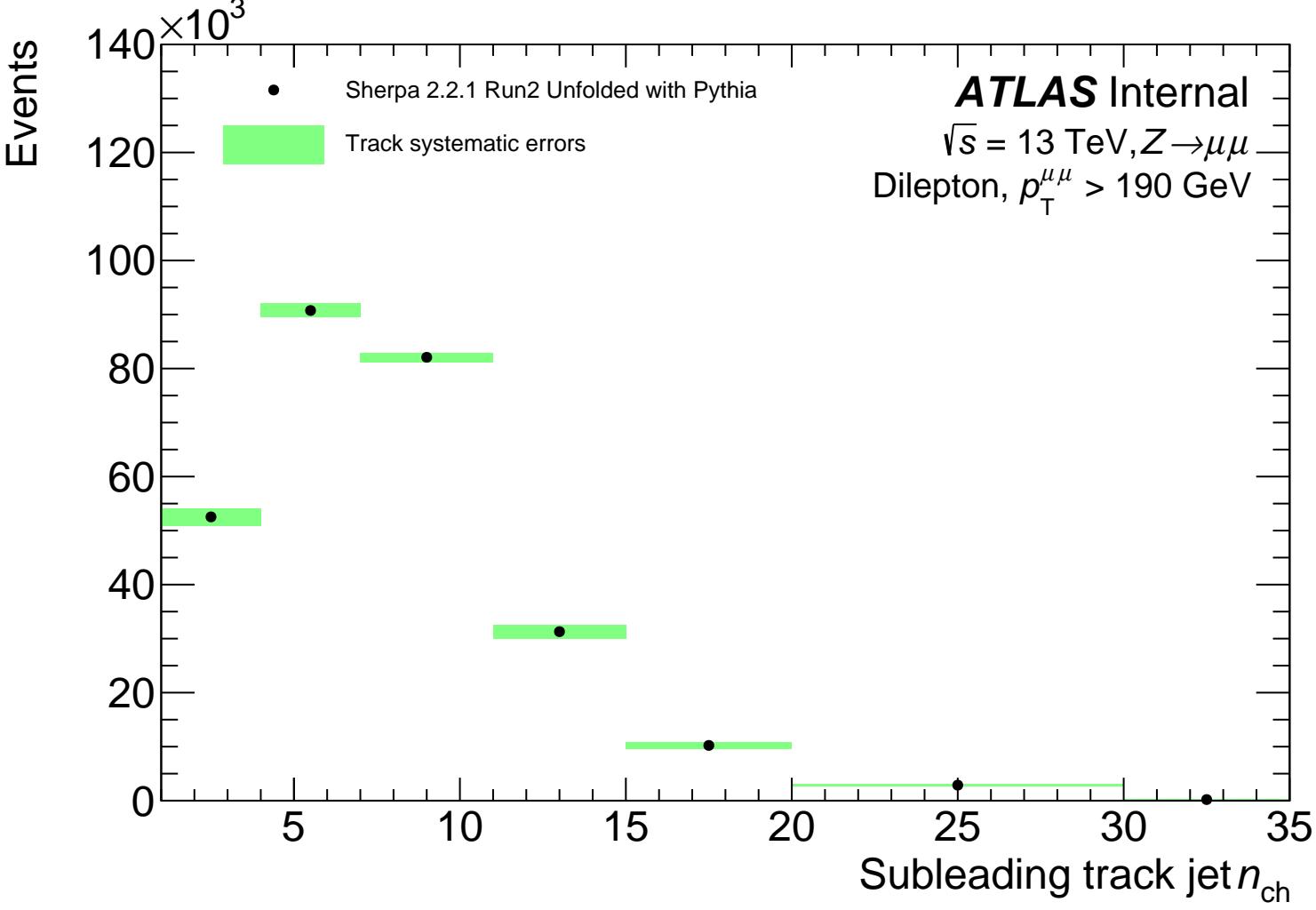


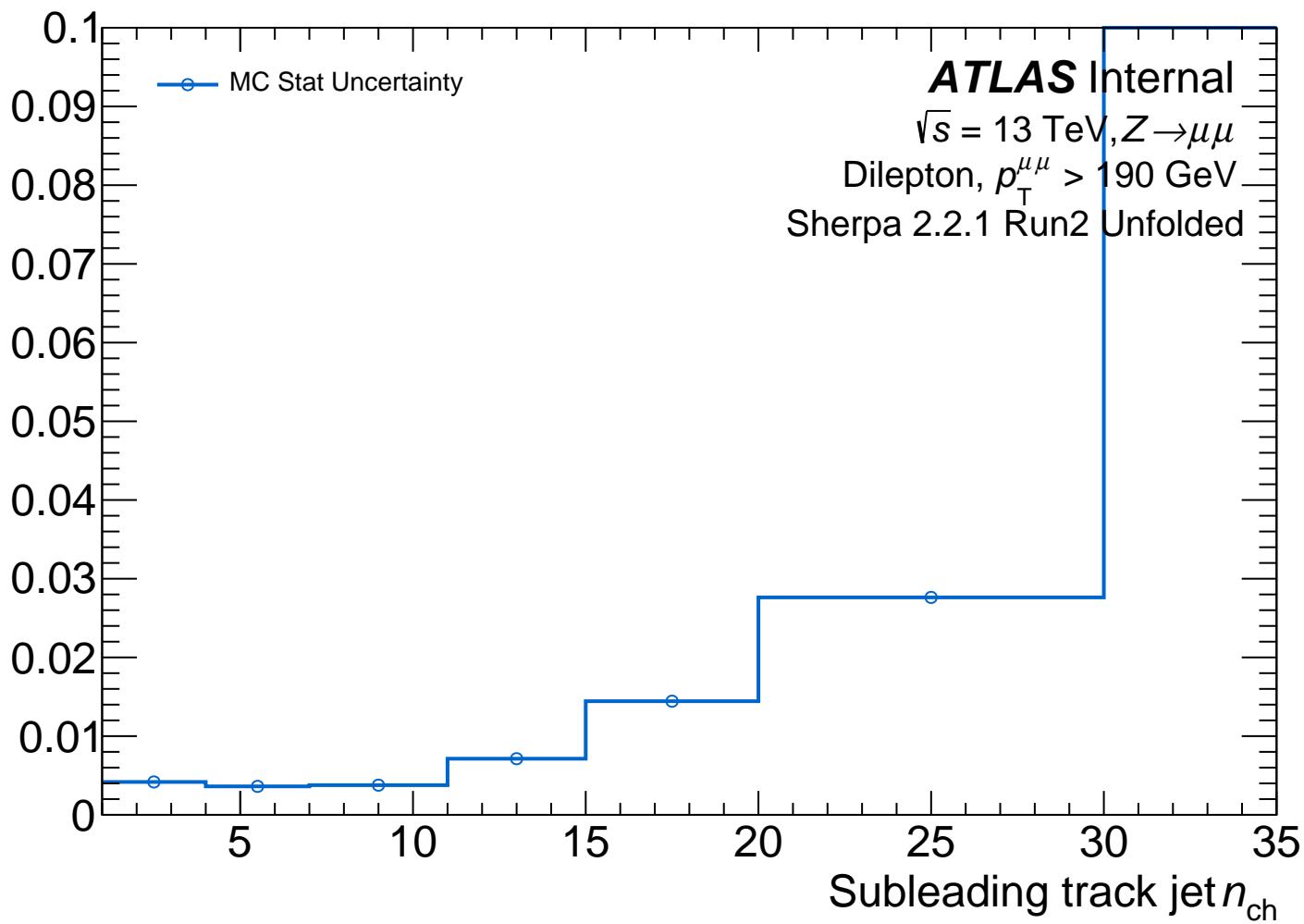


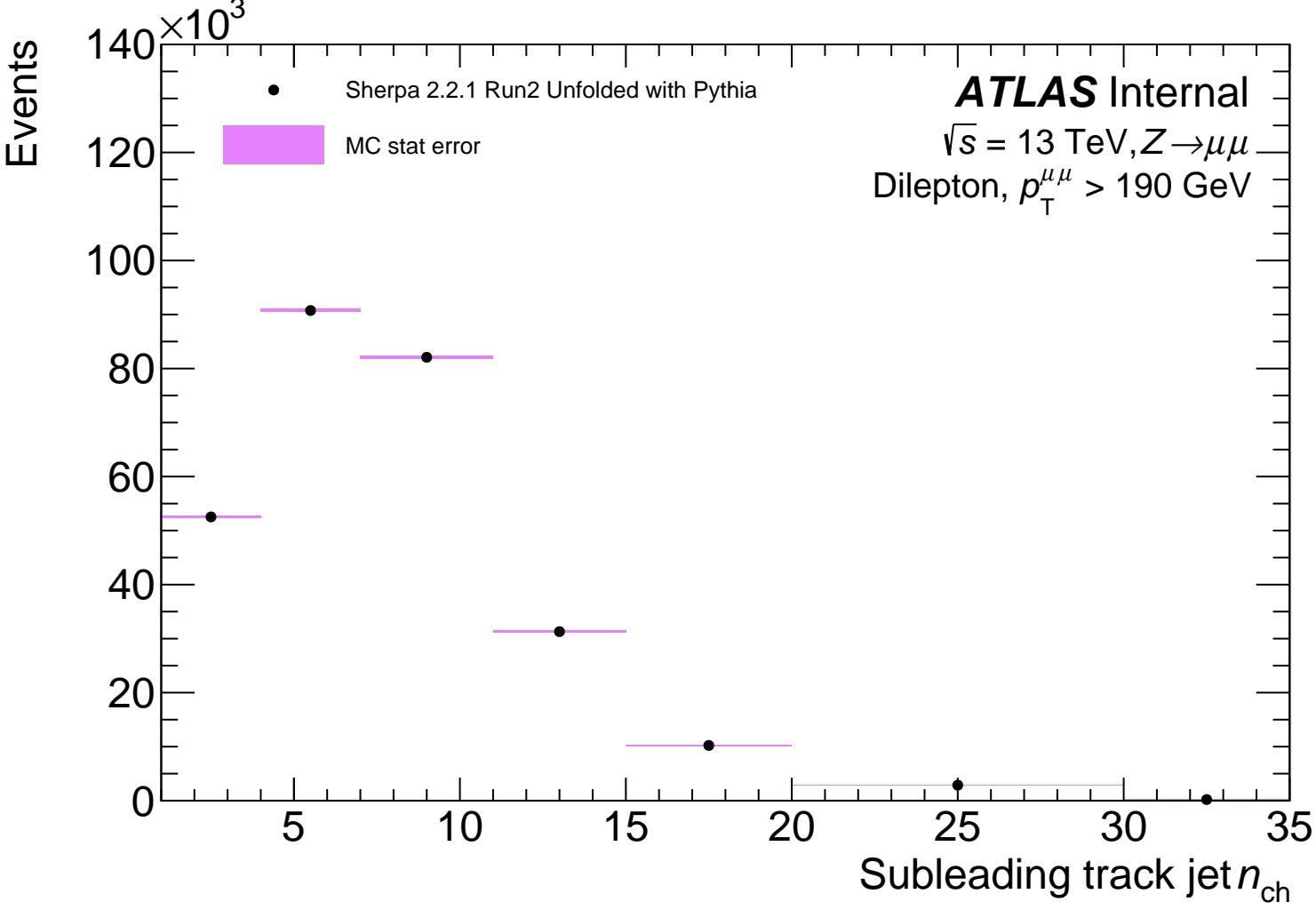


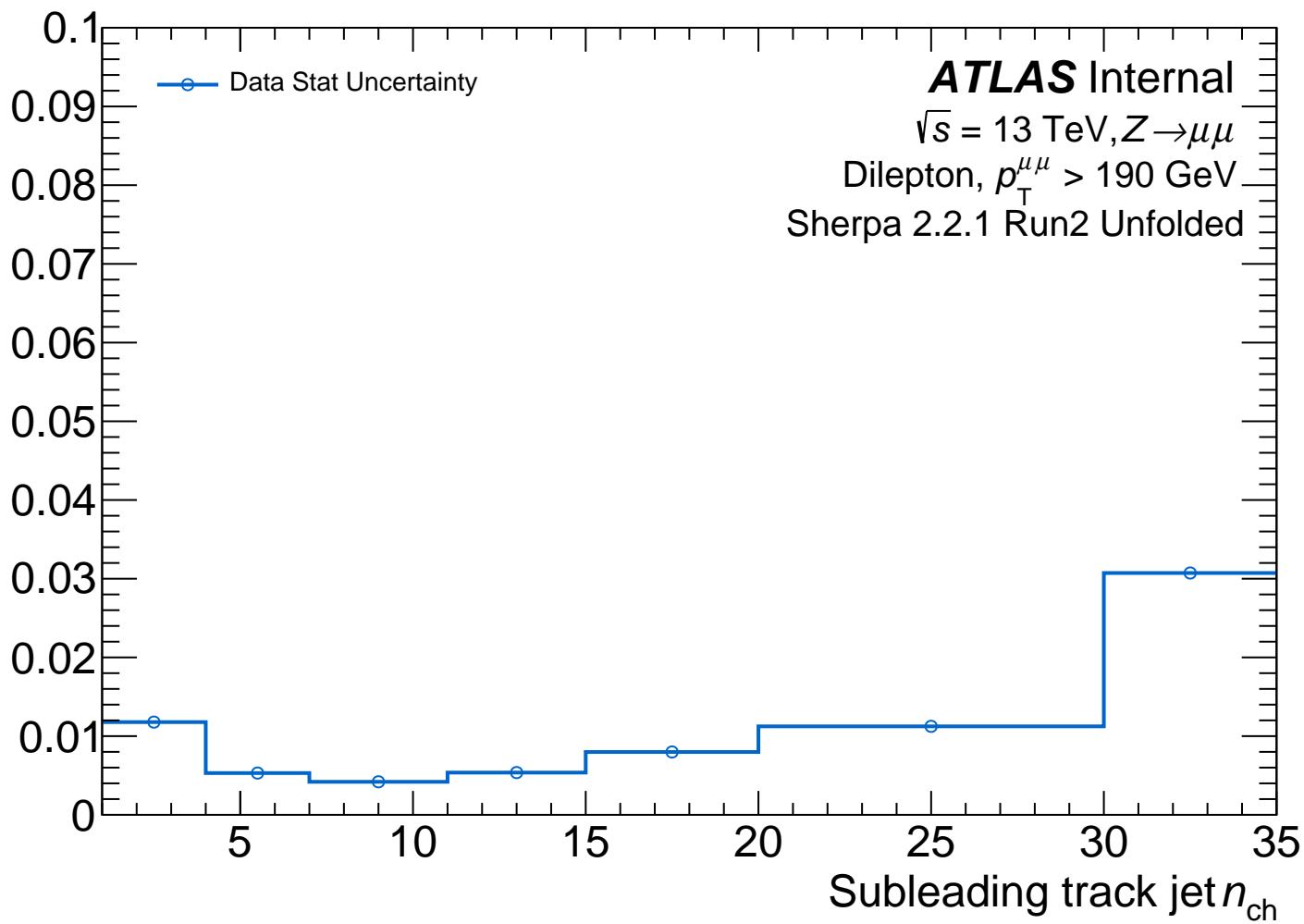


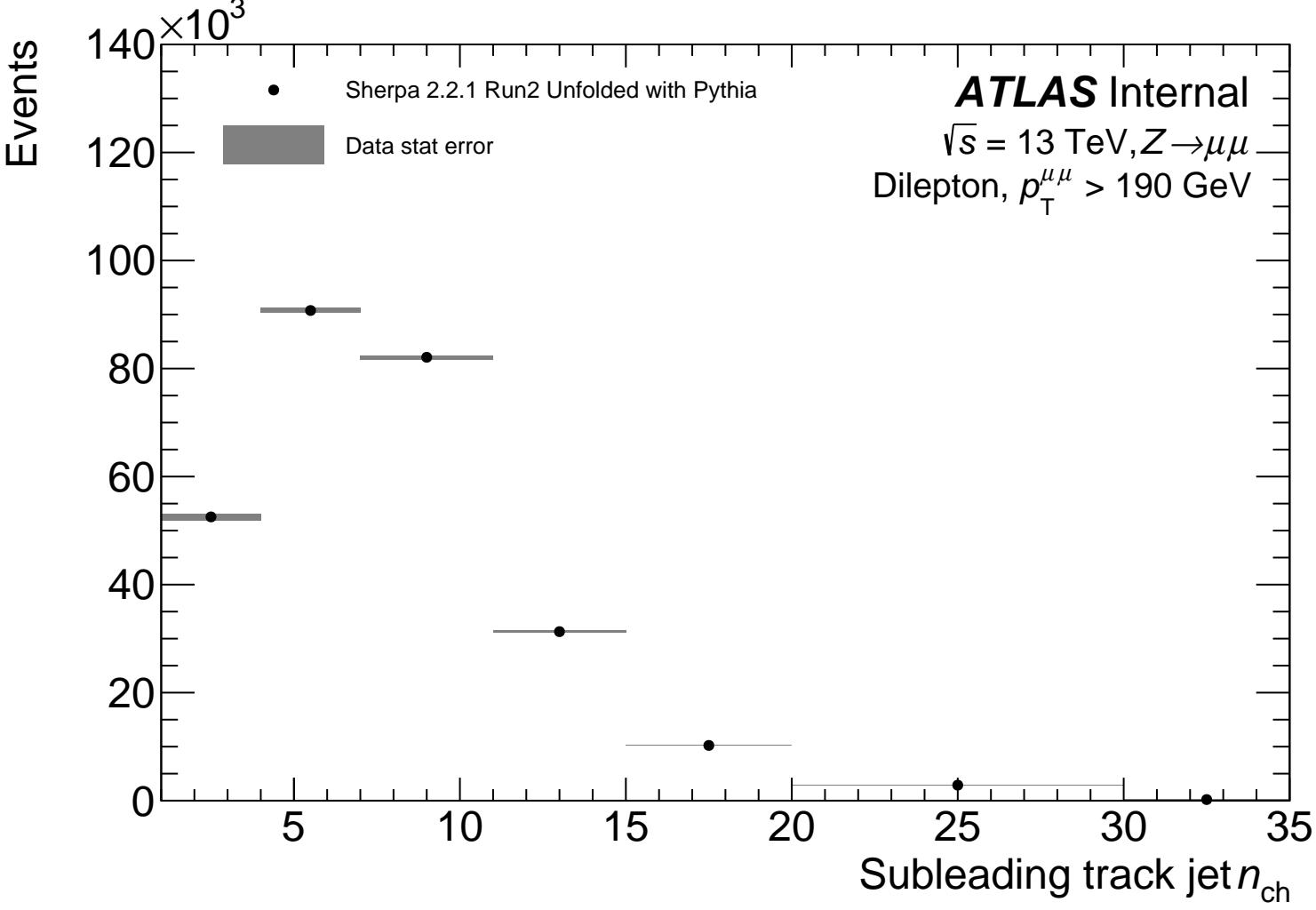


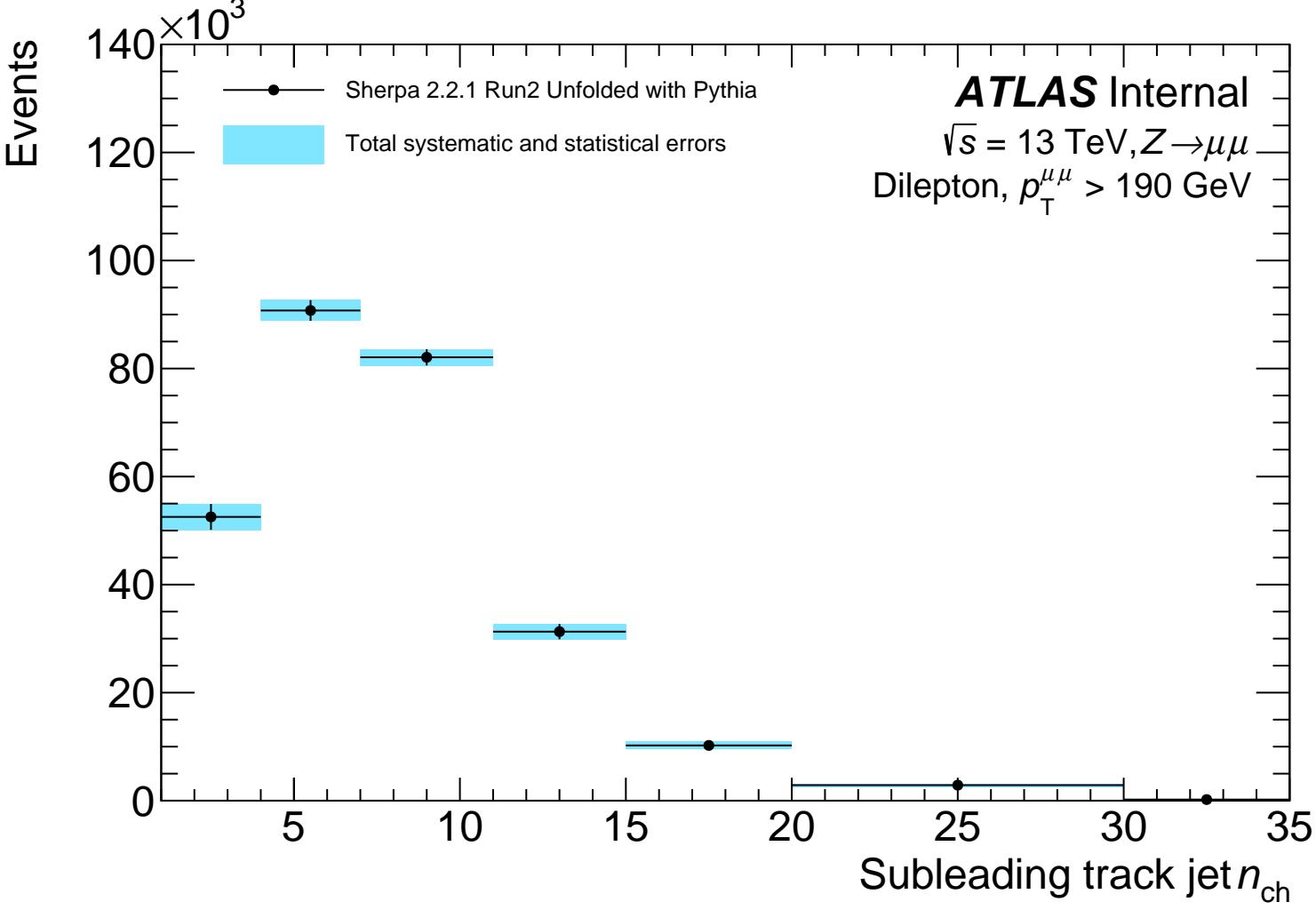


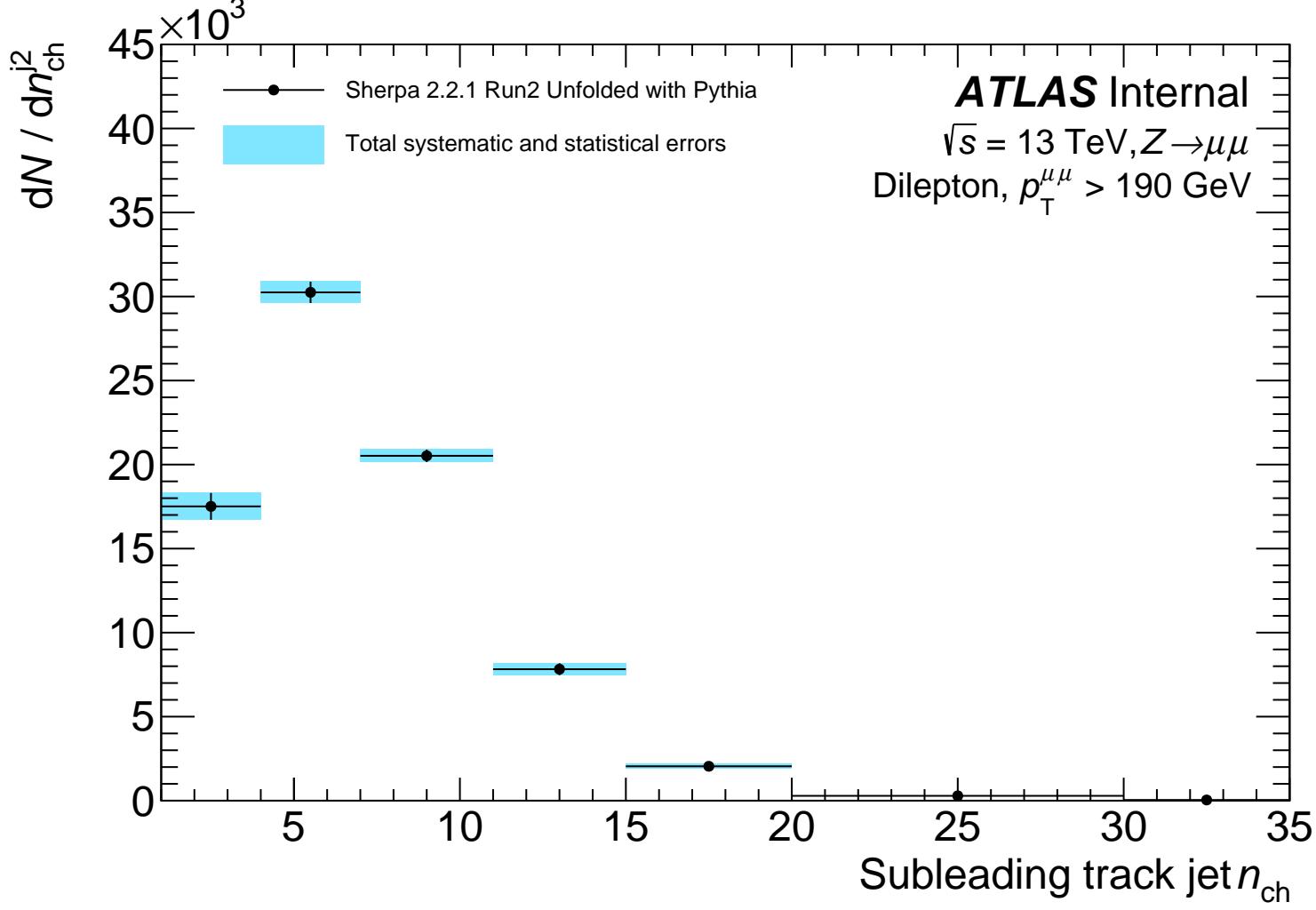










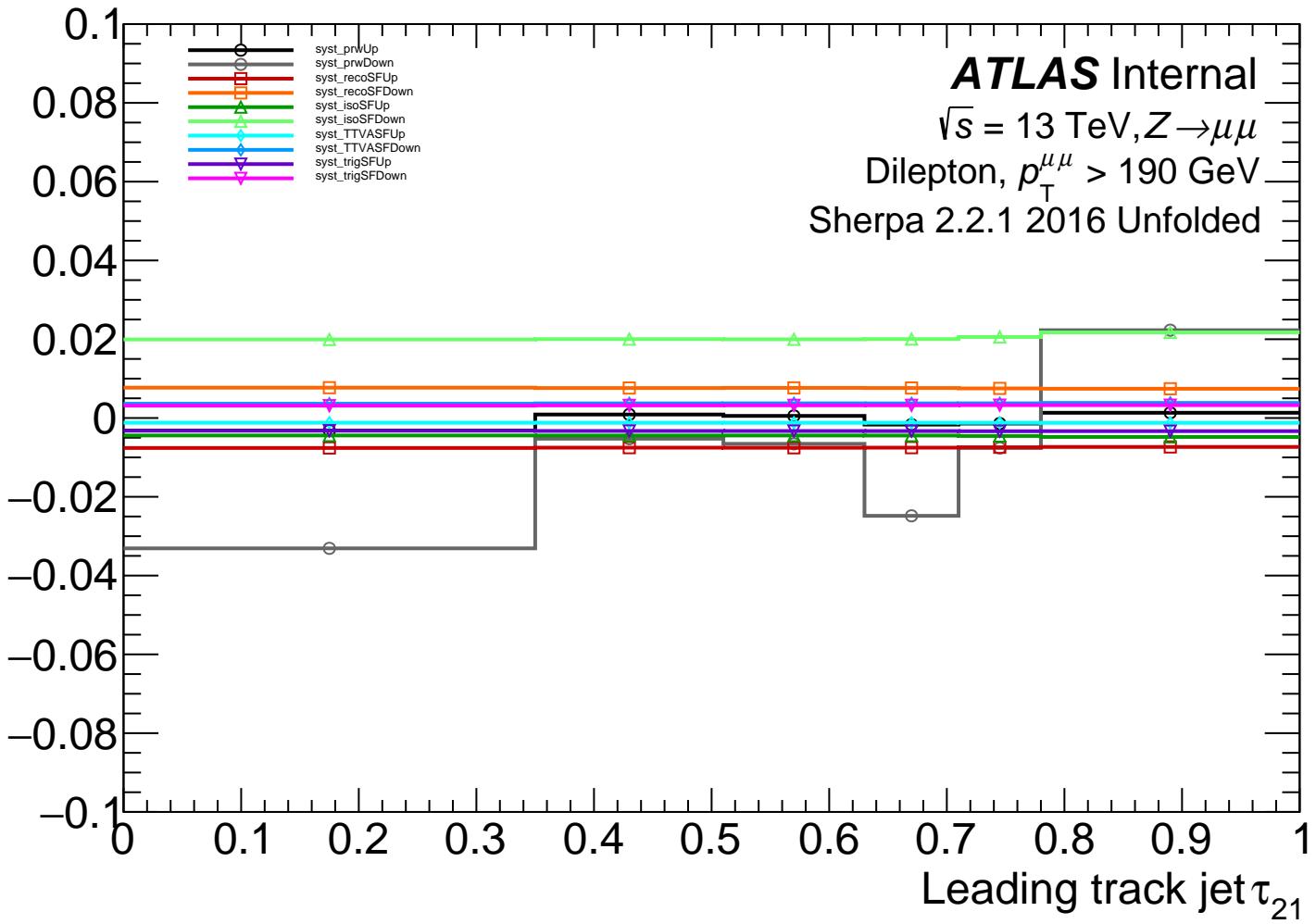


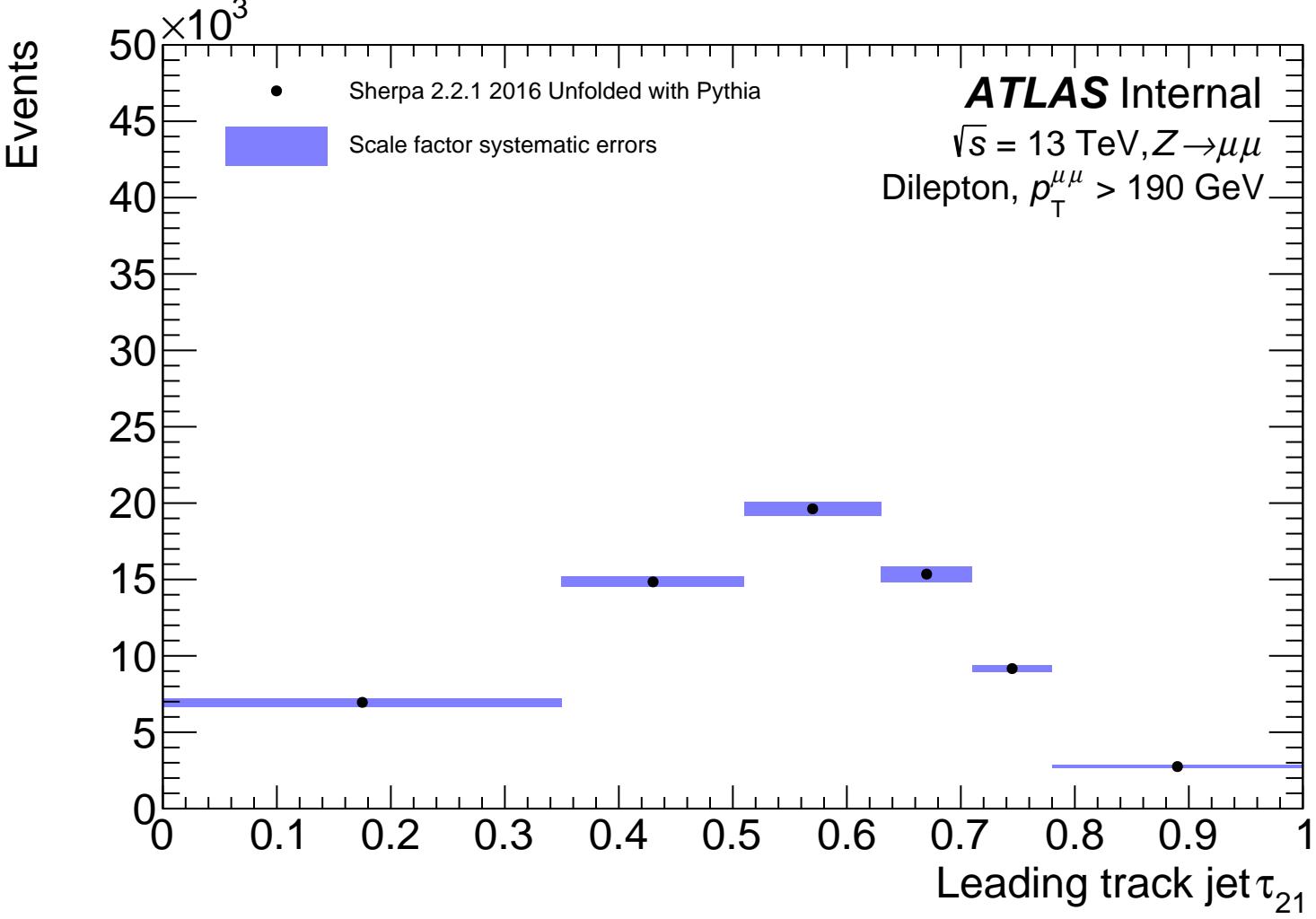
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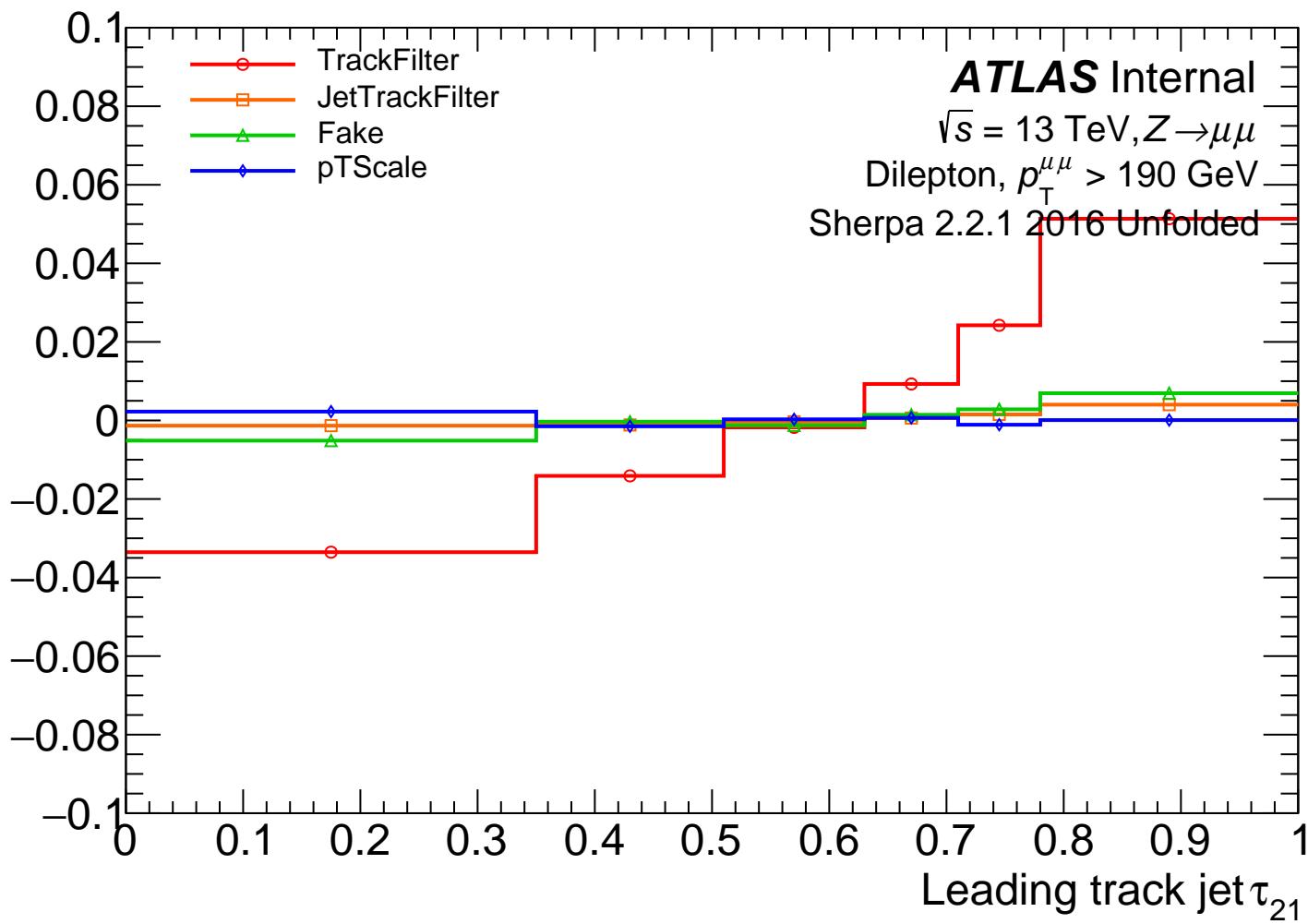
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

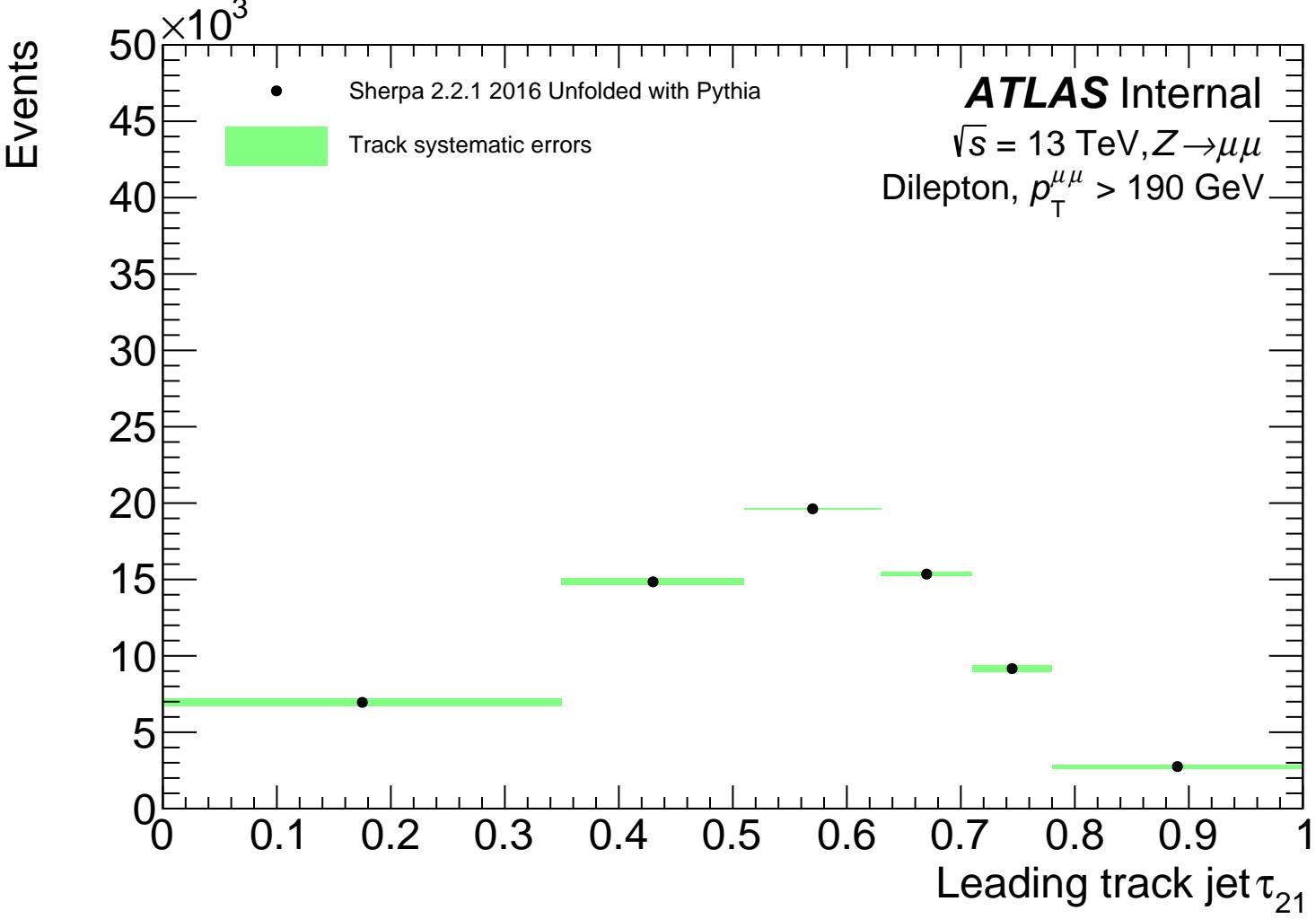
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

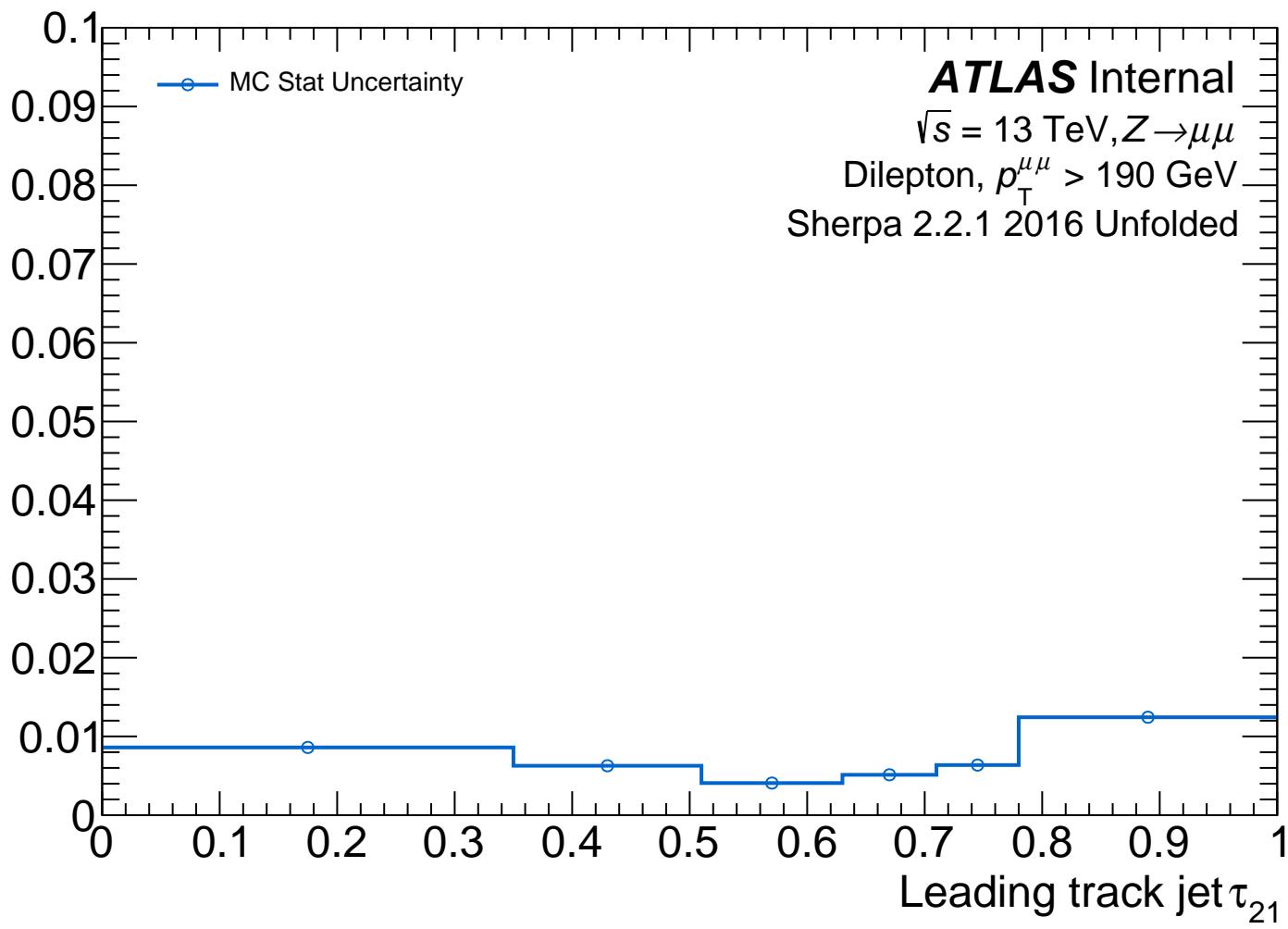
Sherpa 2.2.1 2016 Unfolded

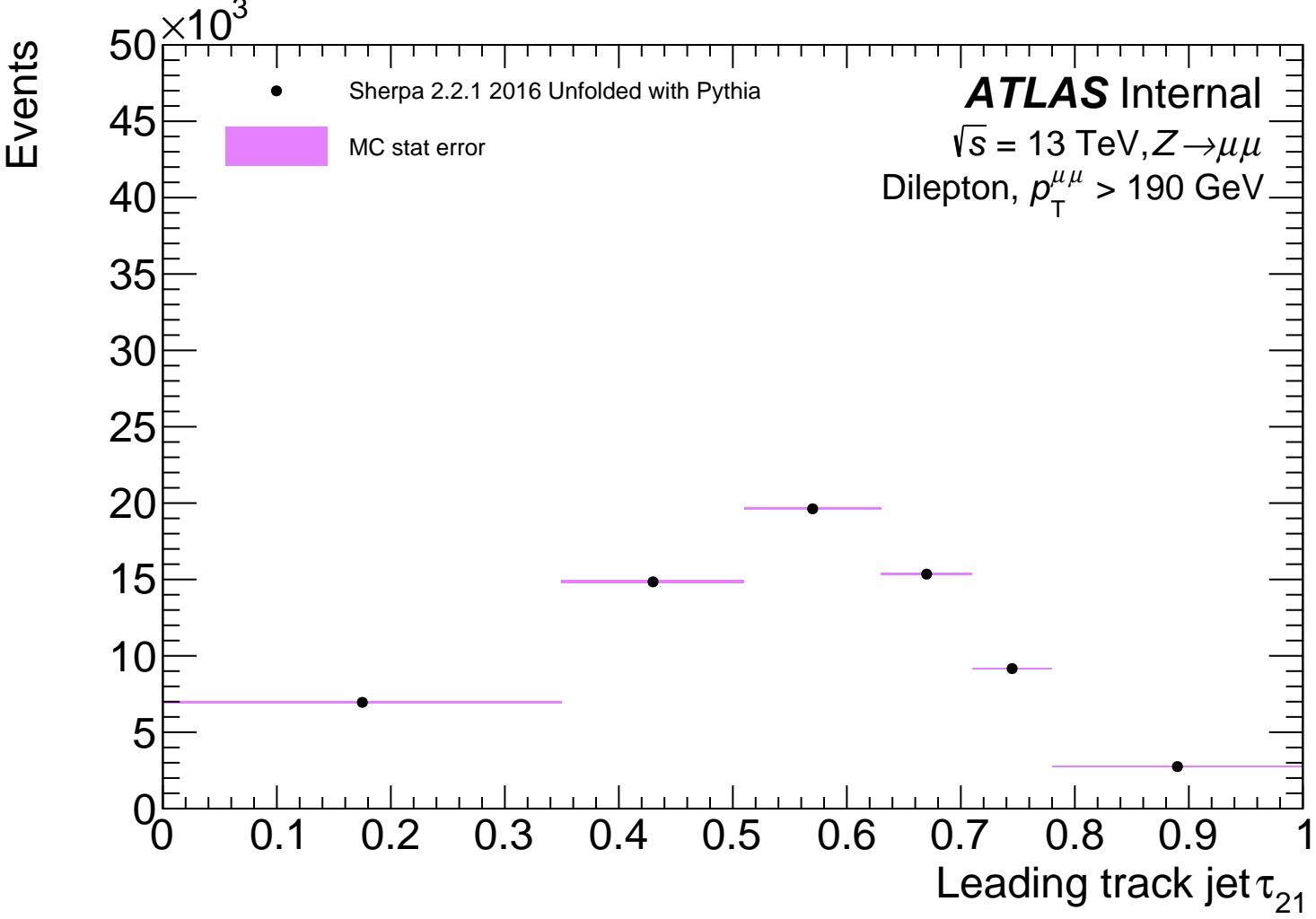


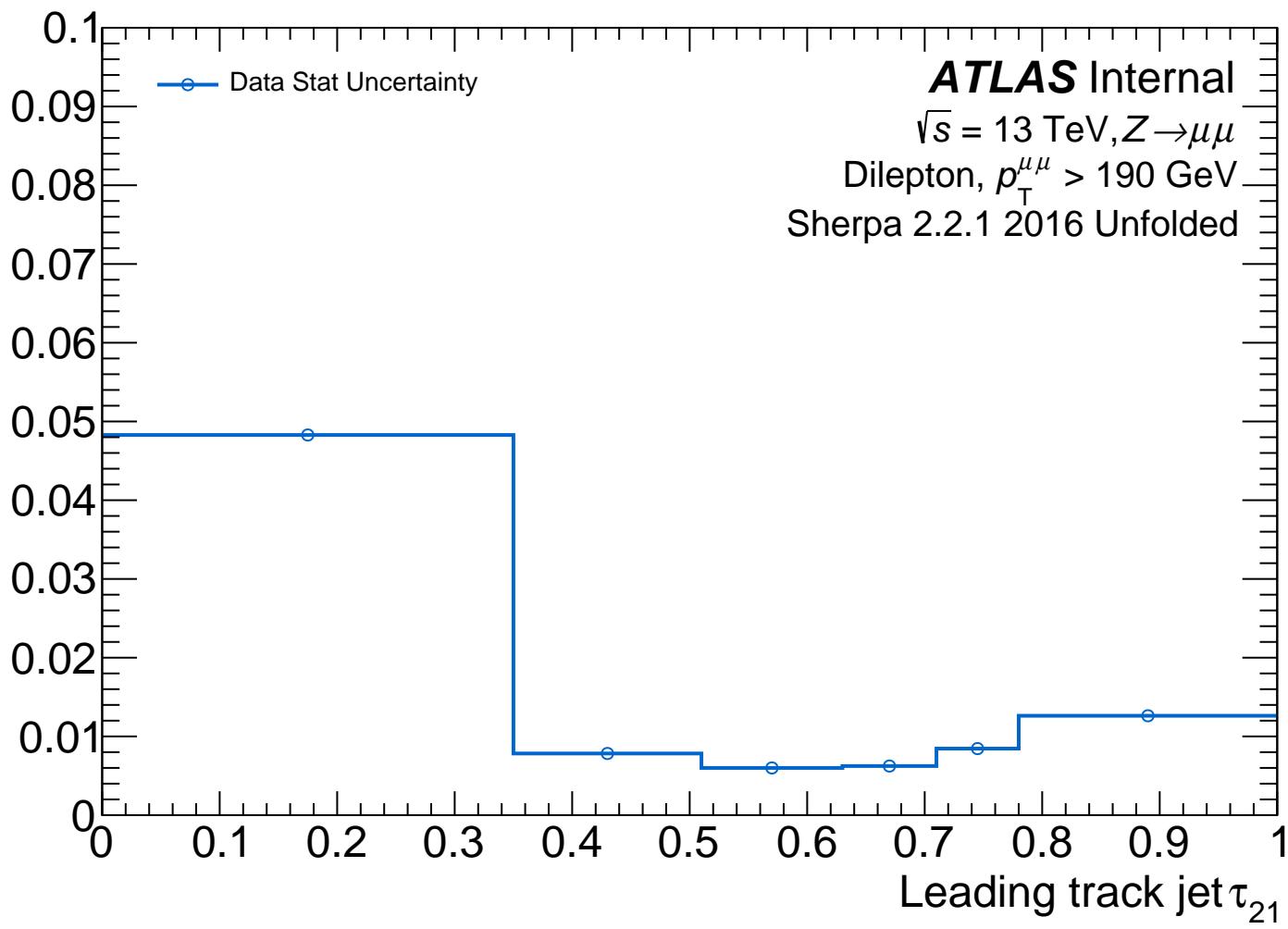


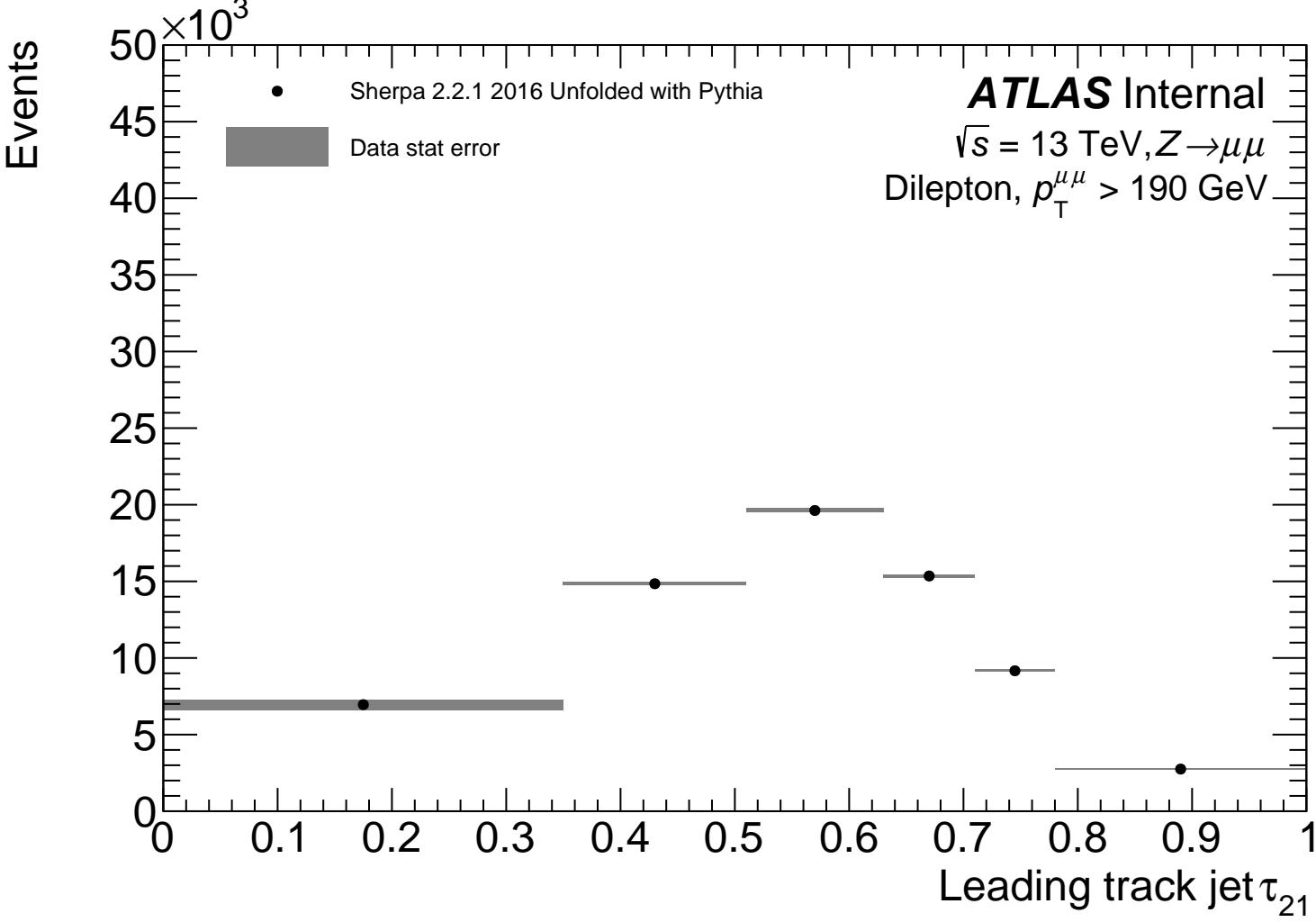


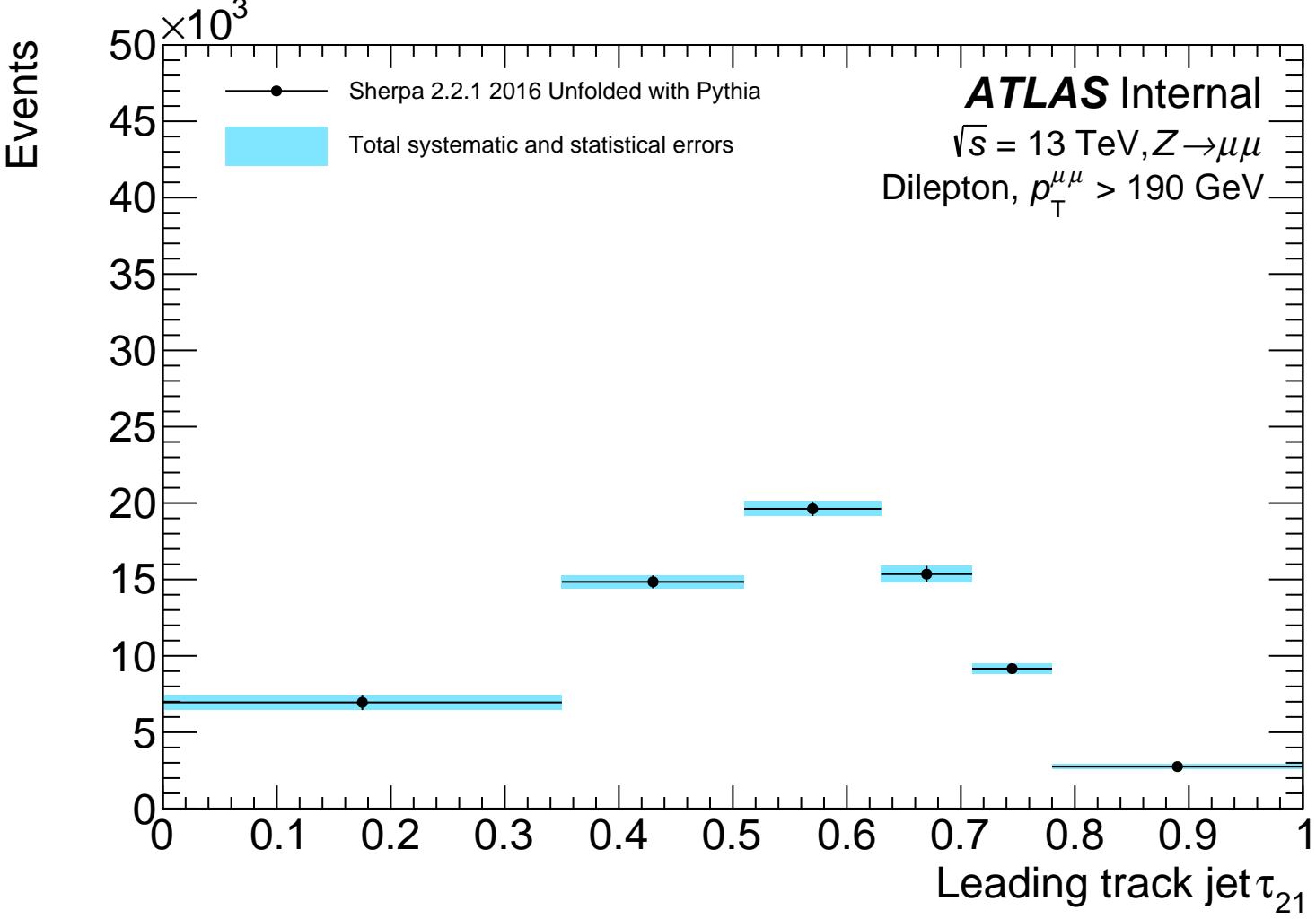


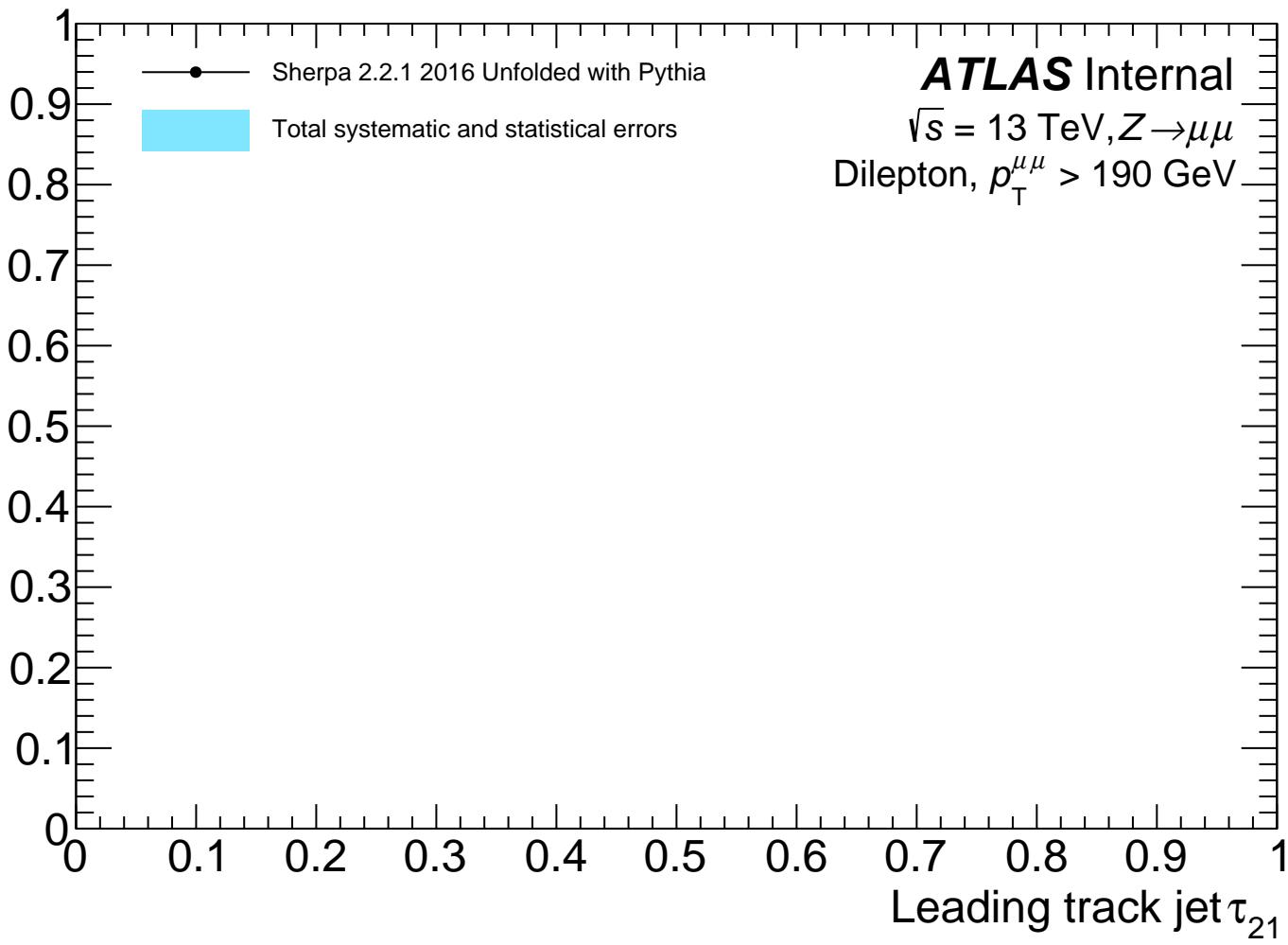










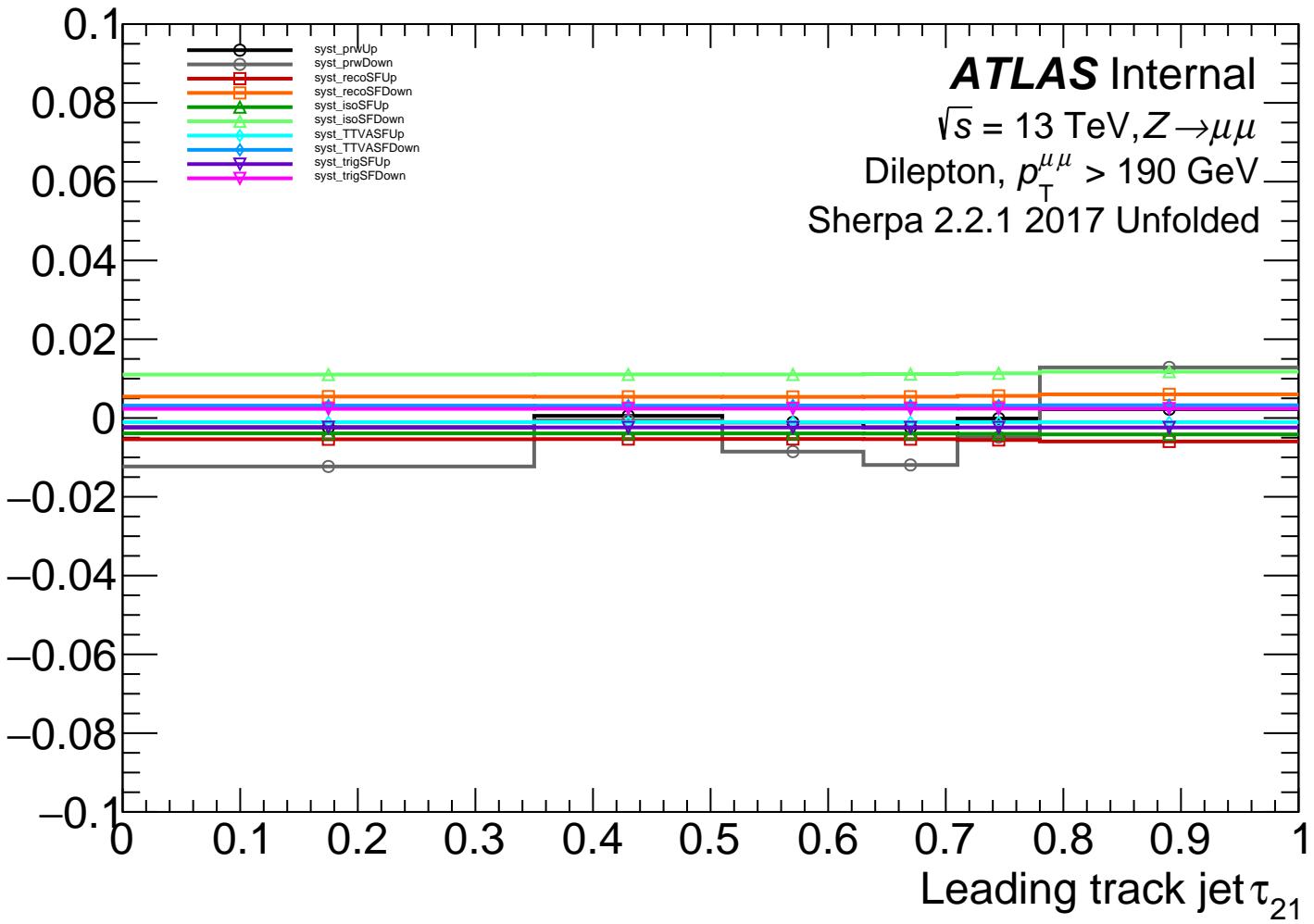


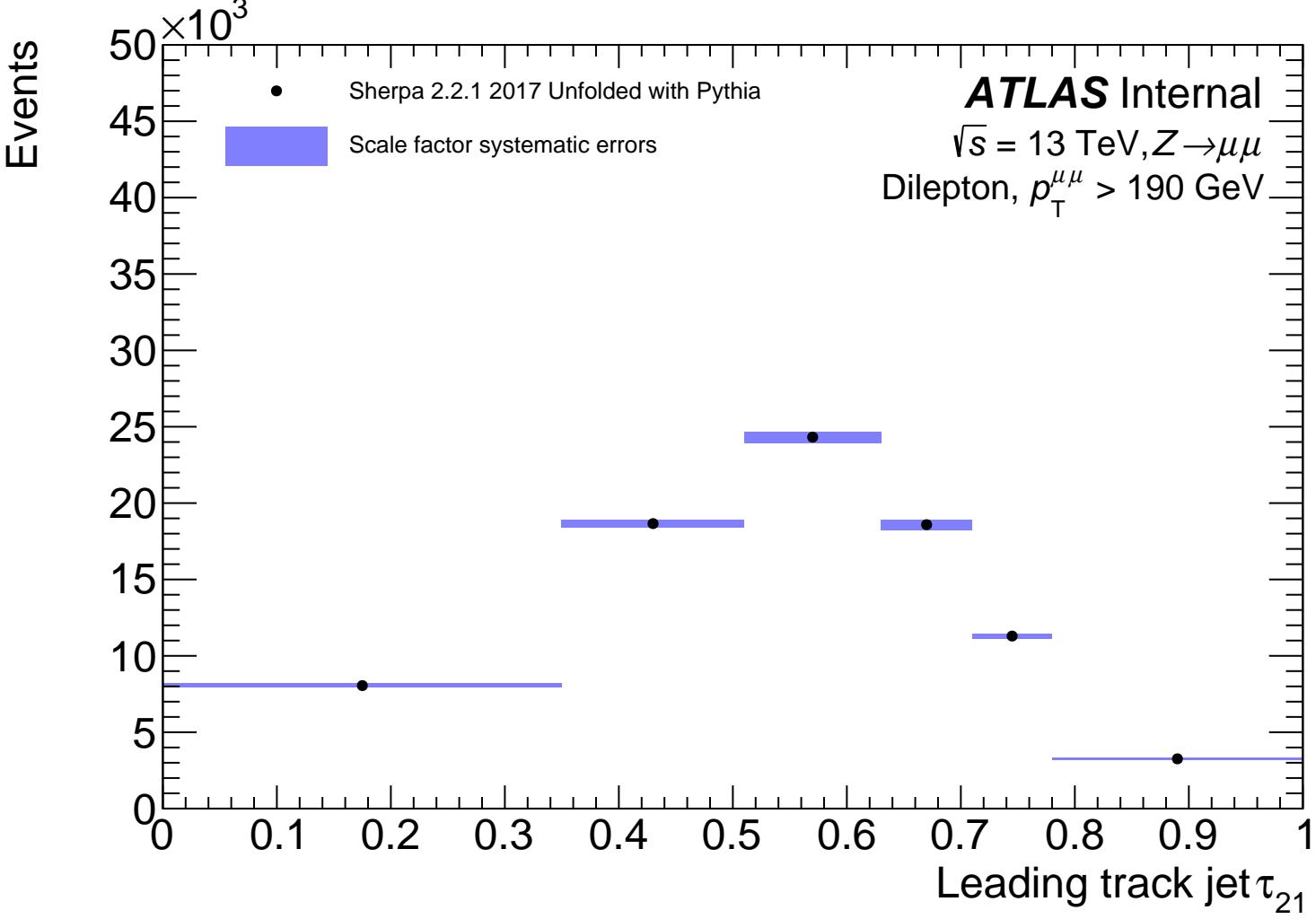
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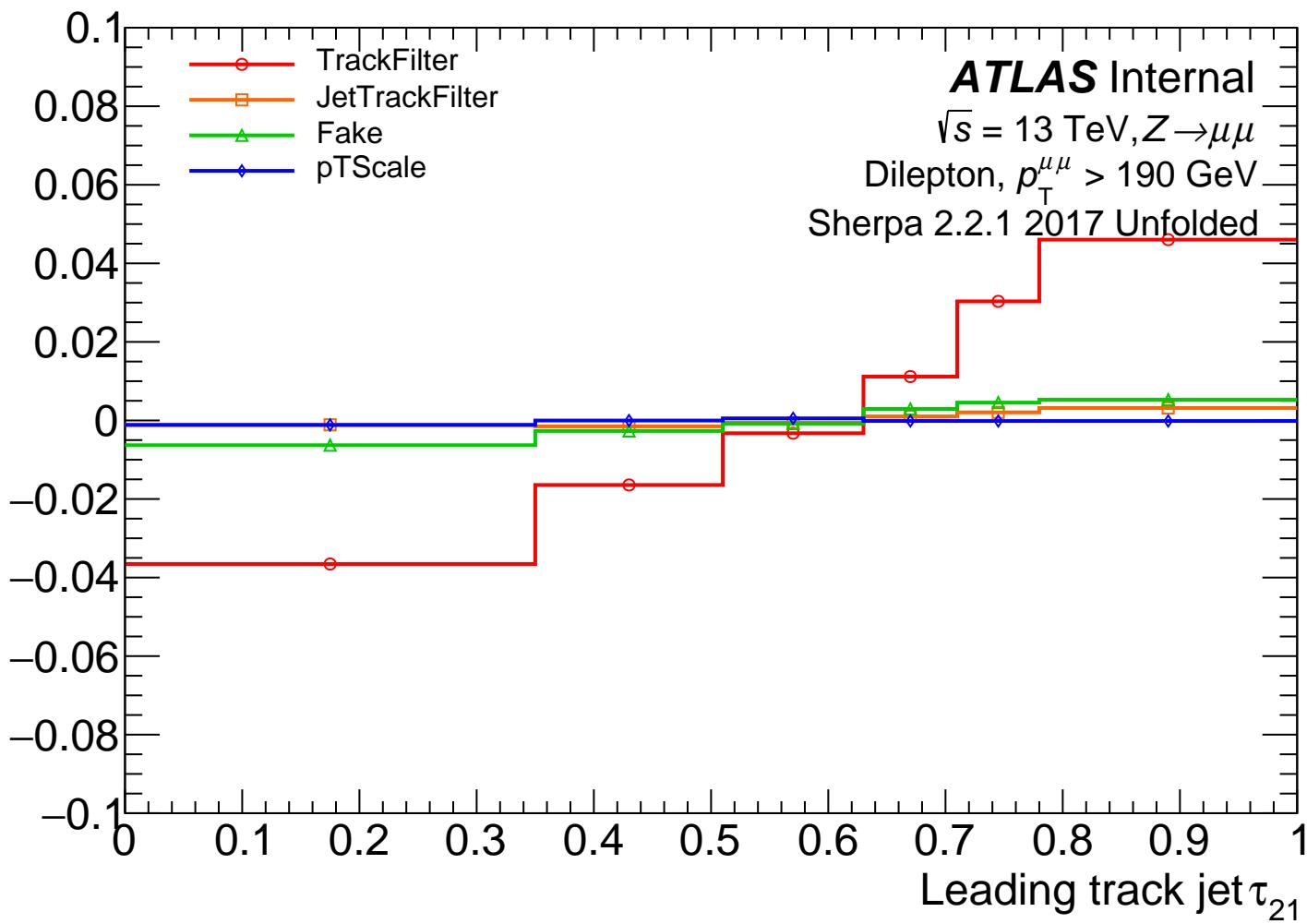
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

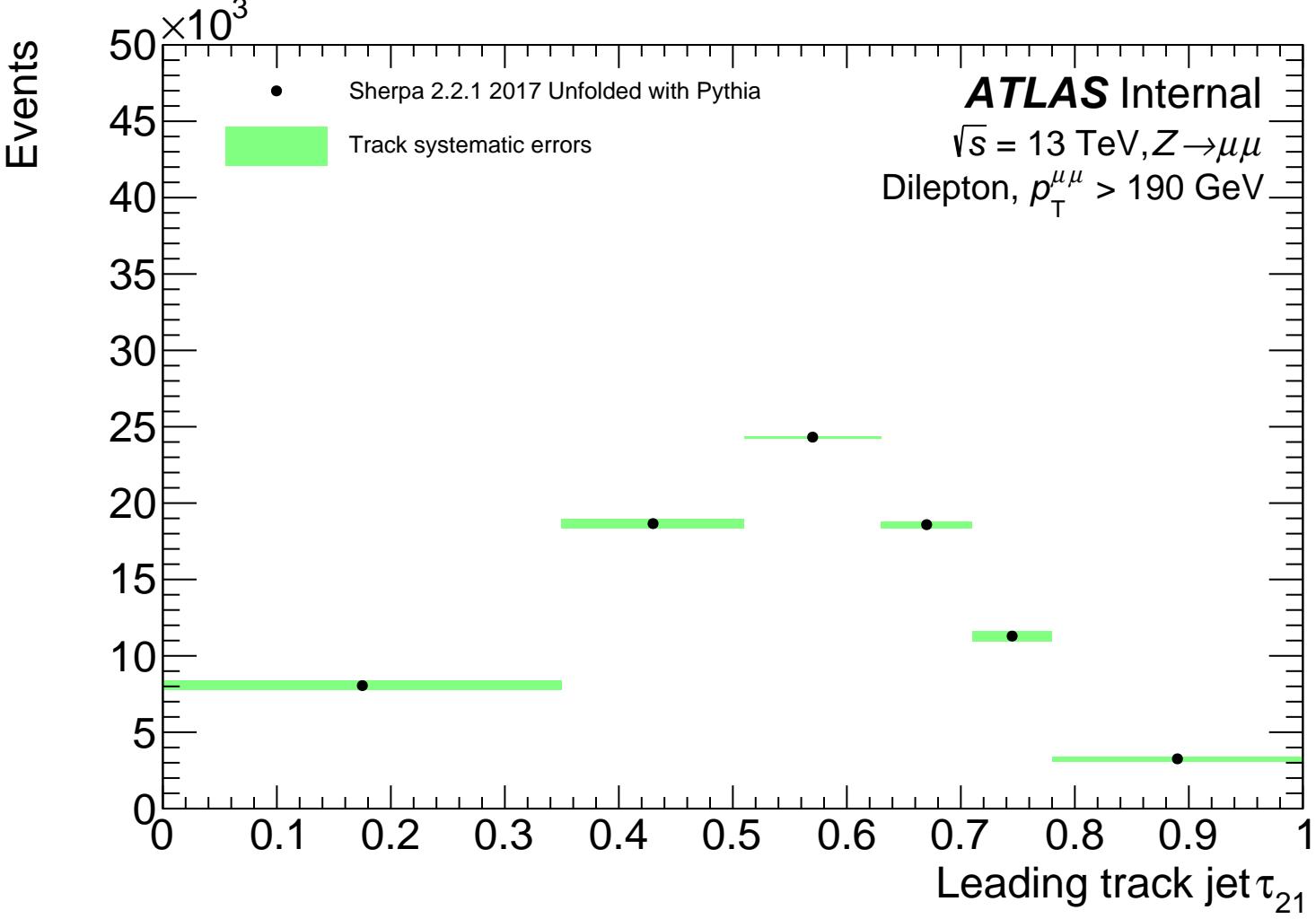
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

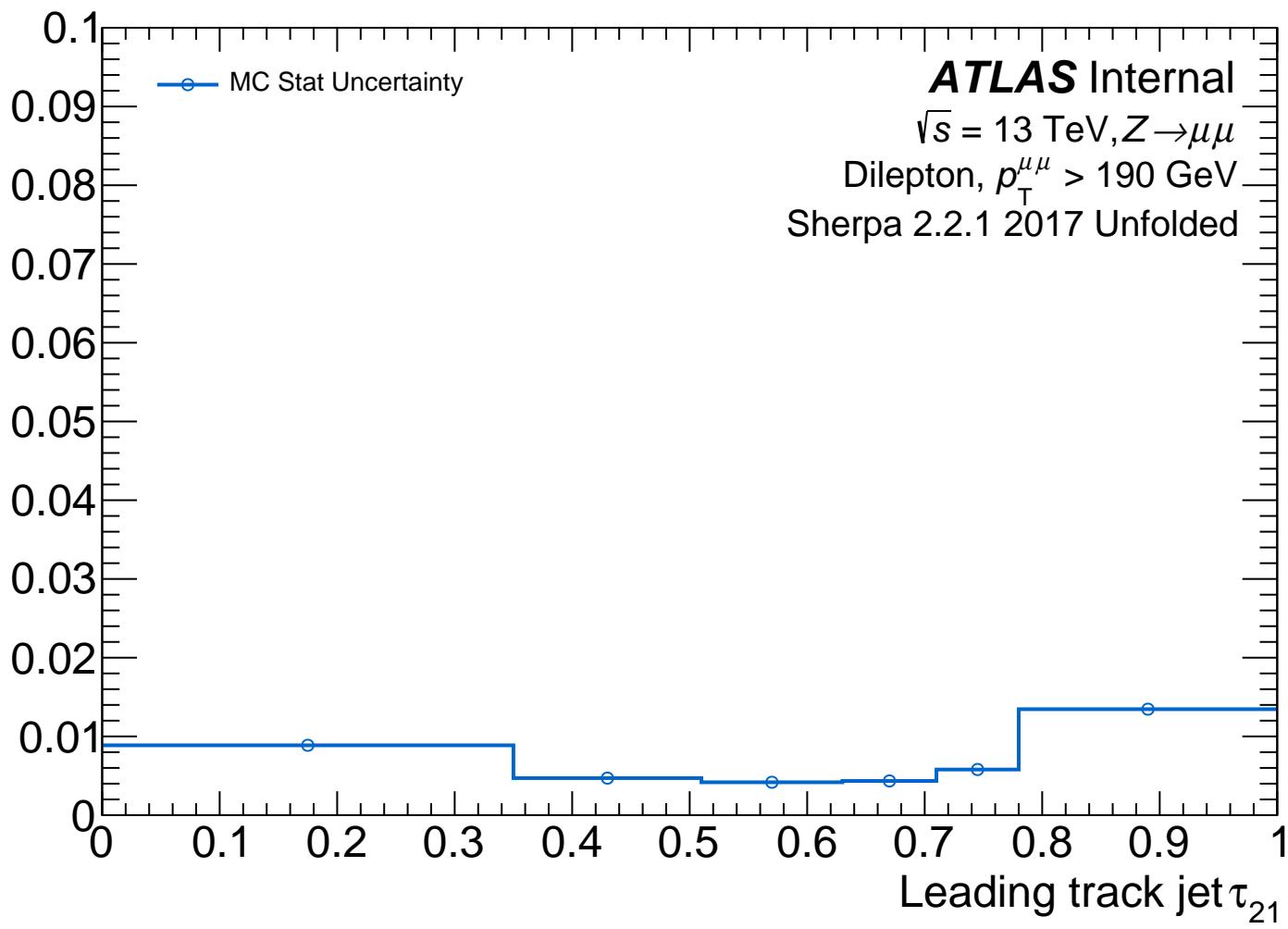
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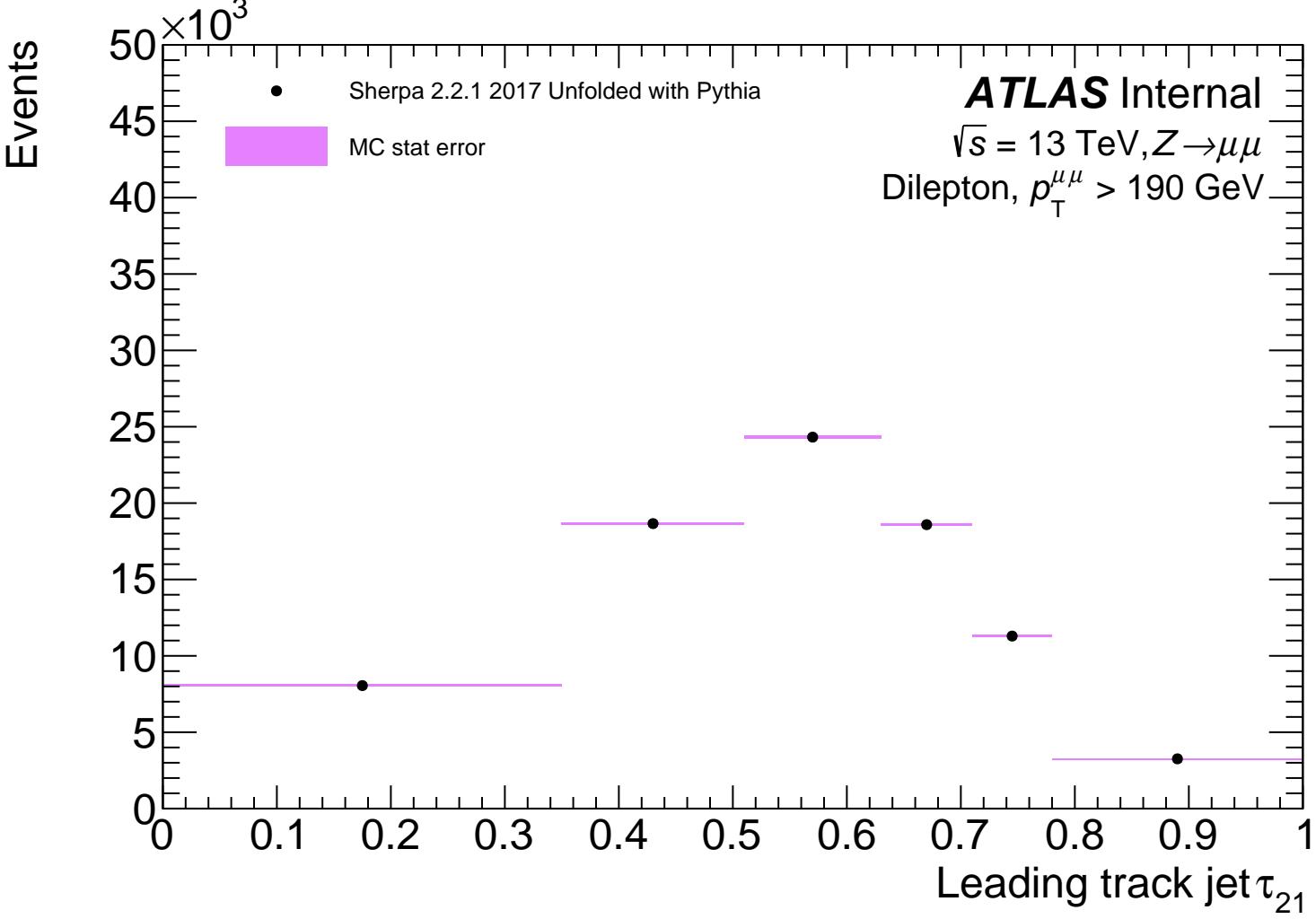


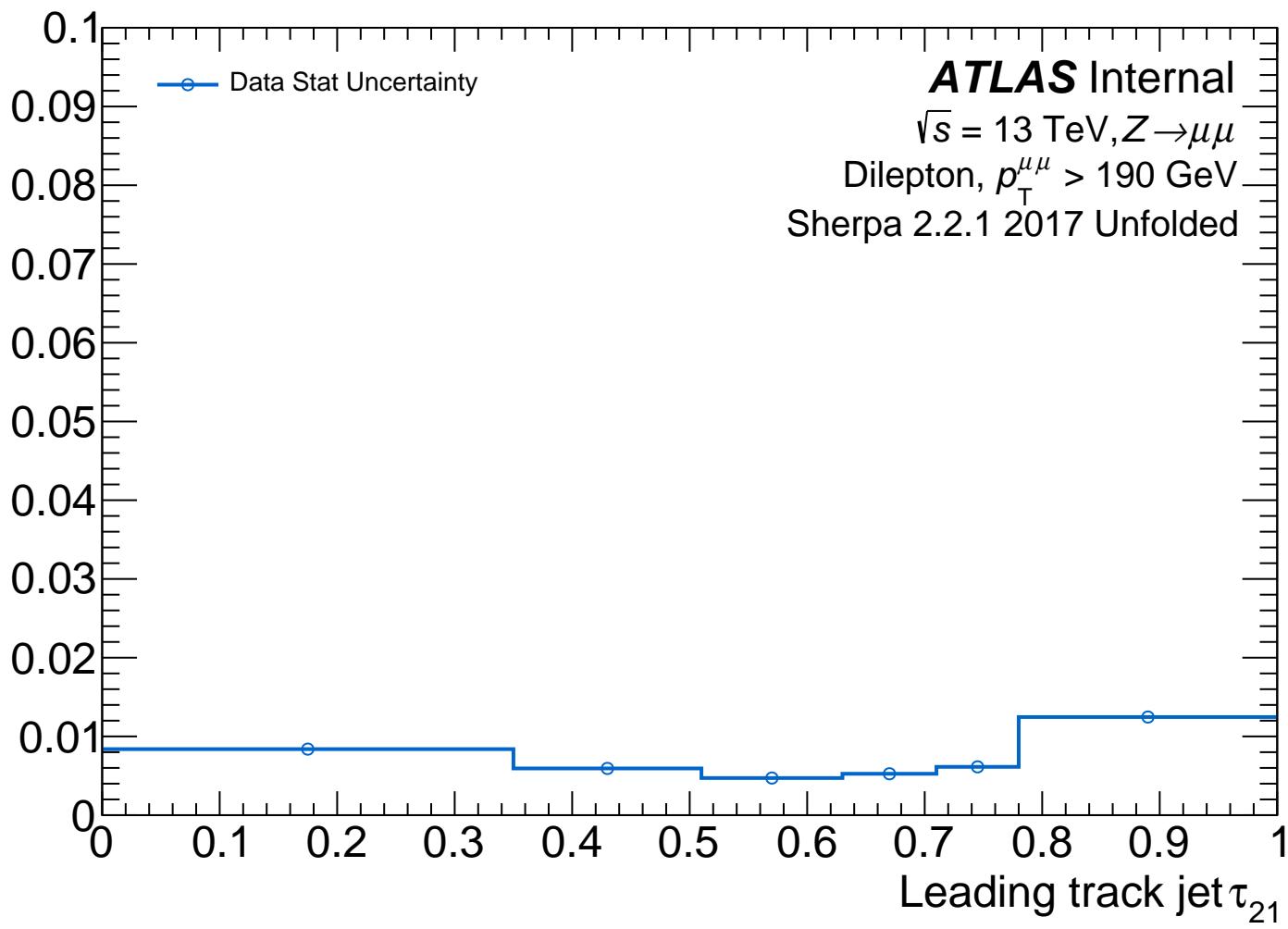


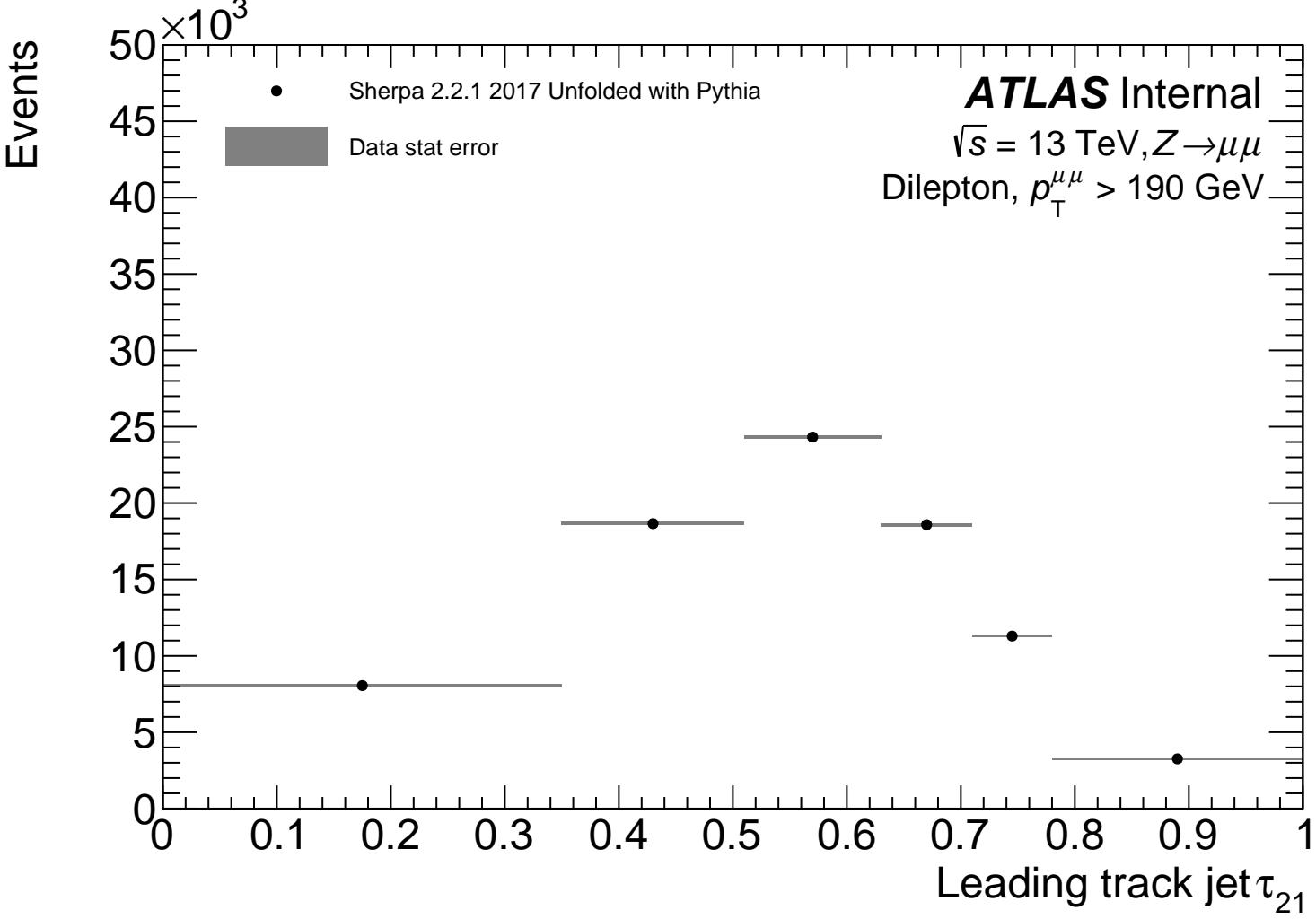


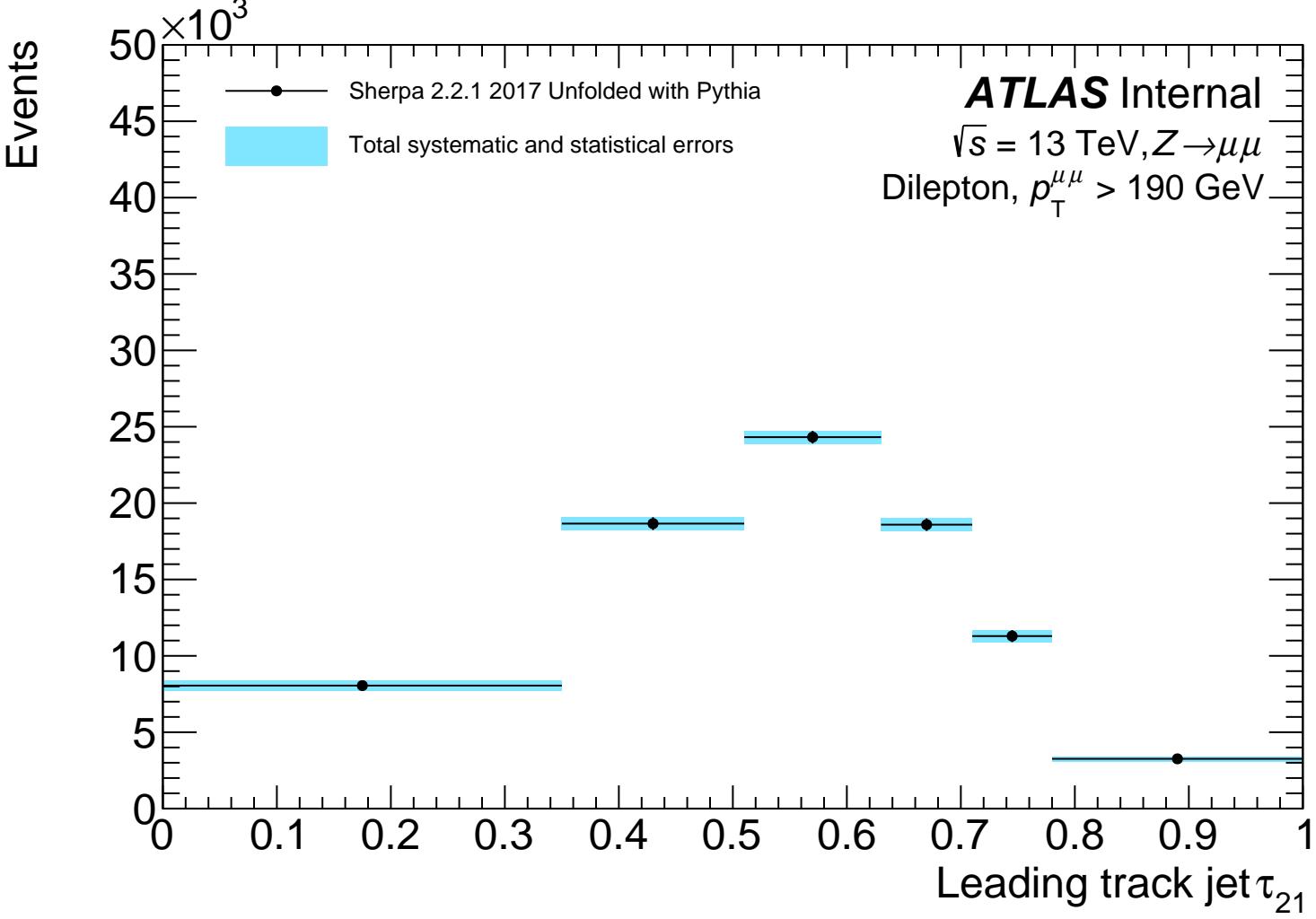


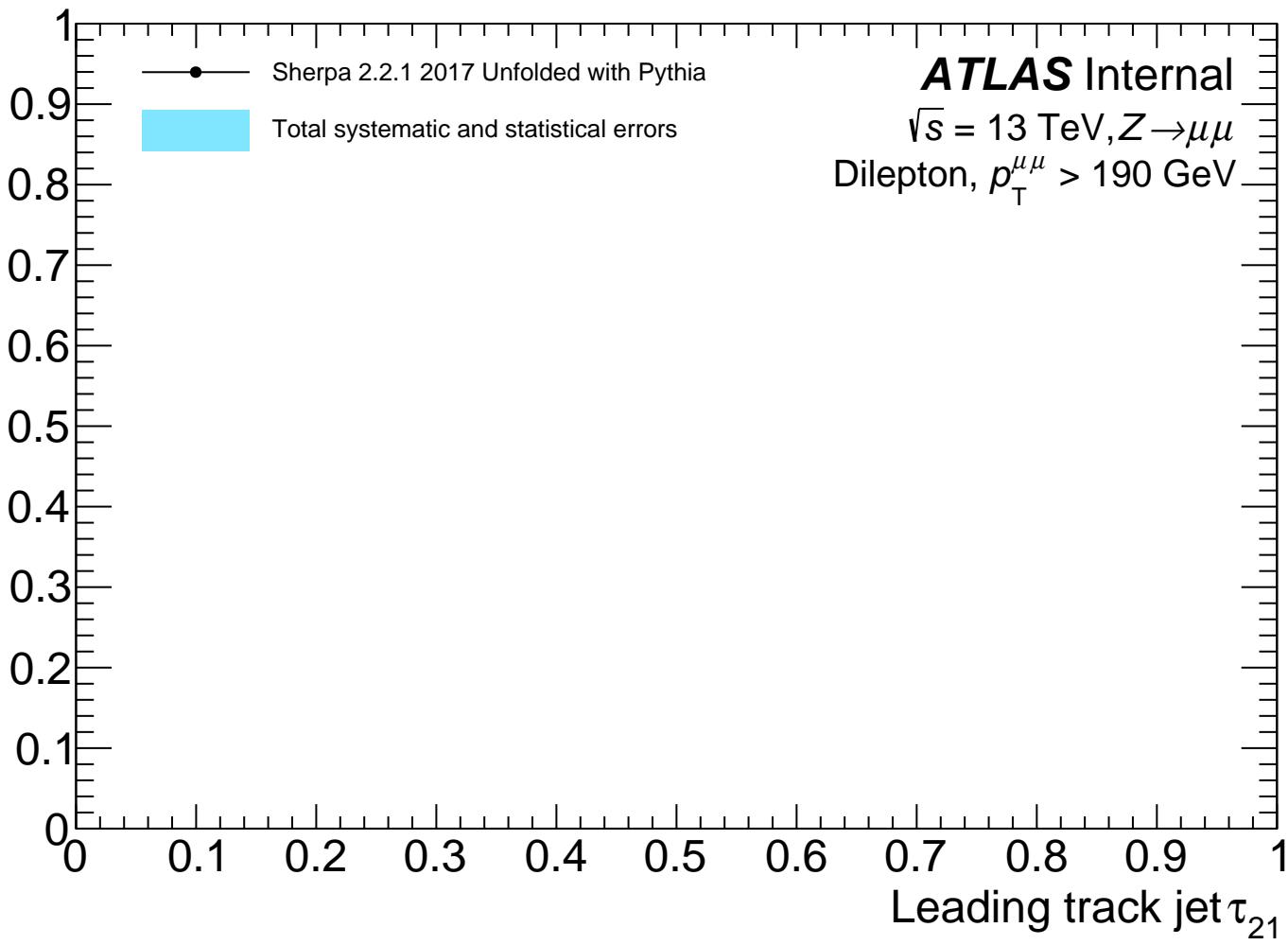










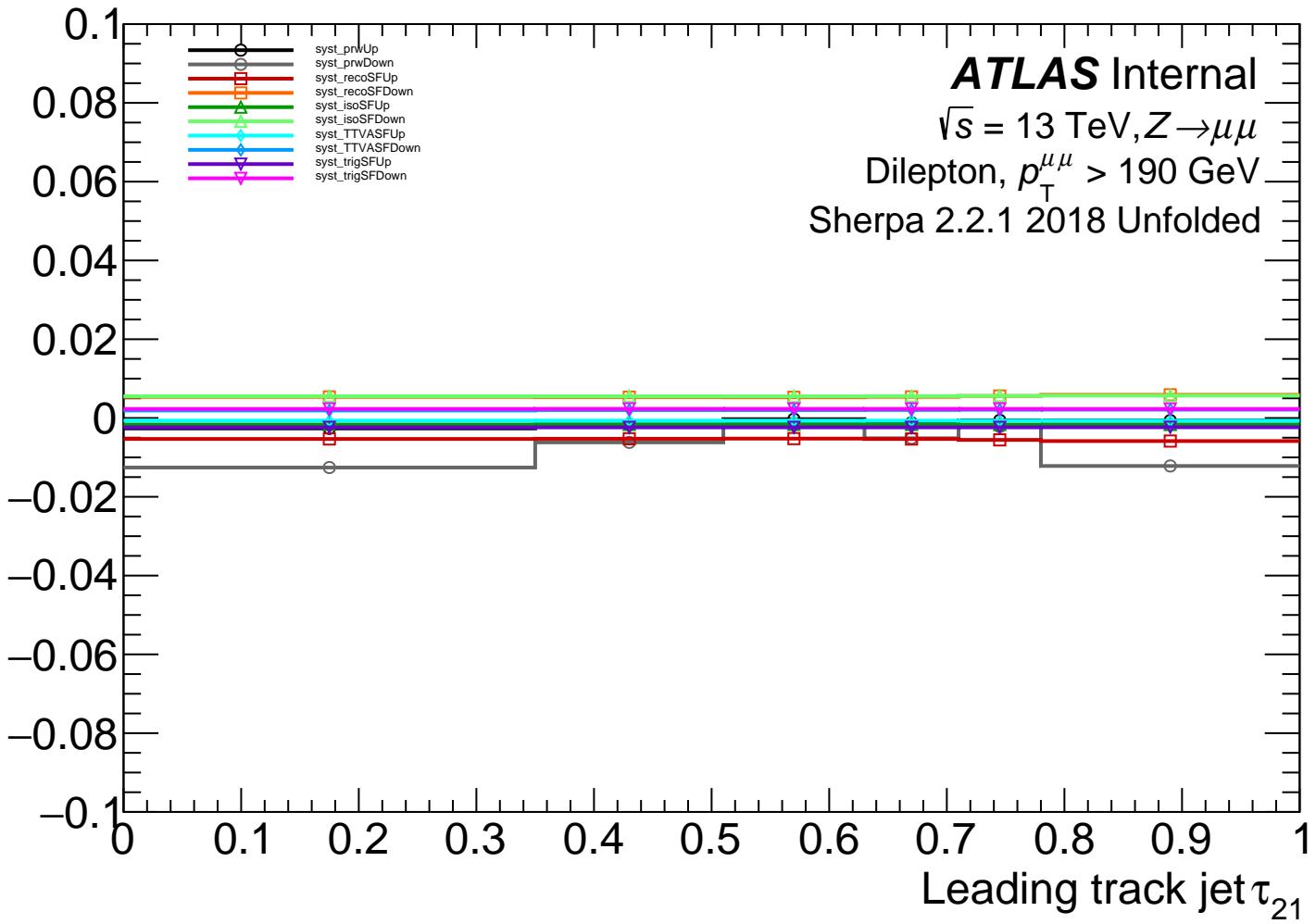


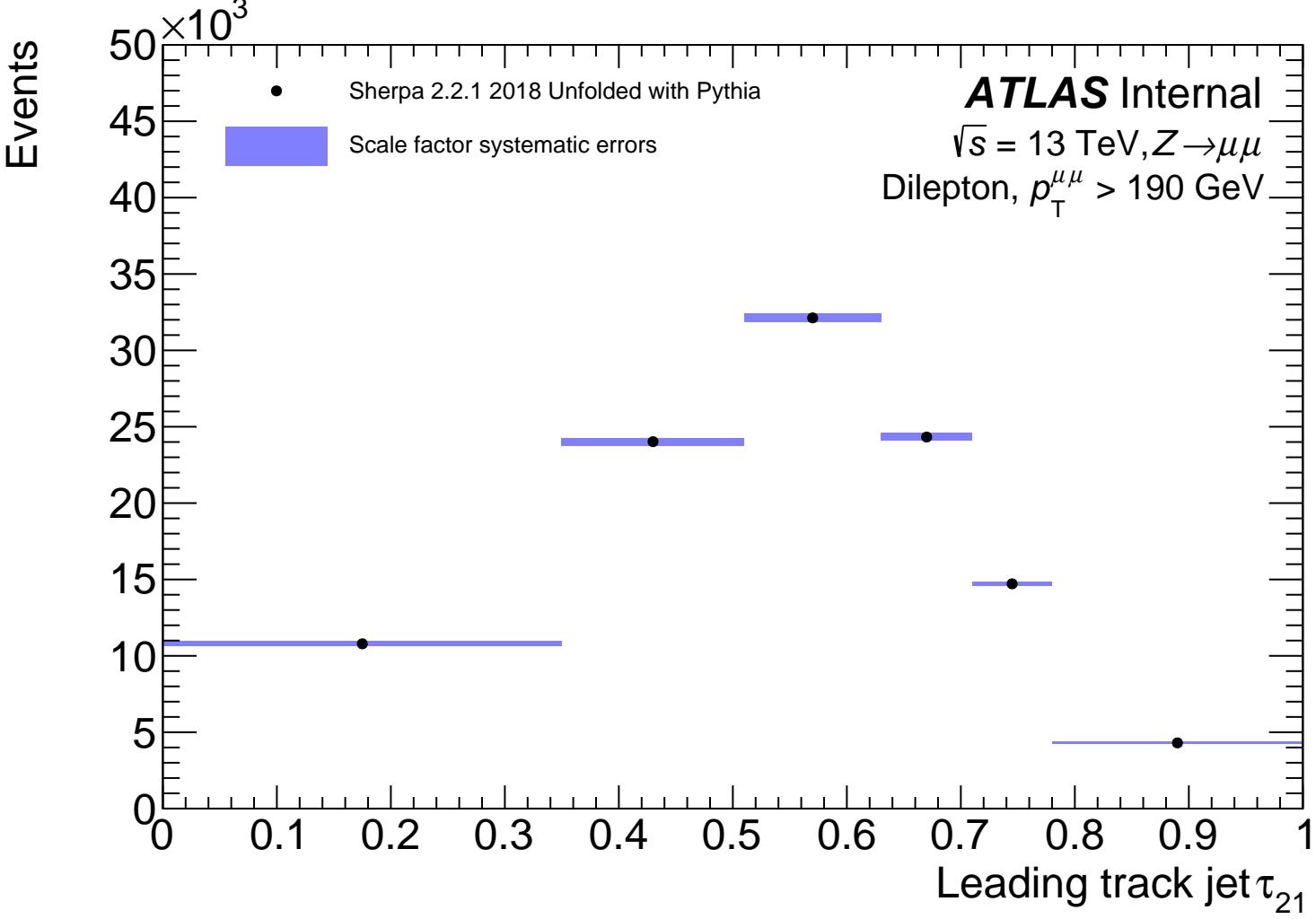
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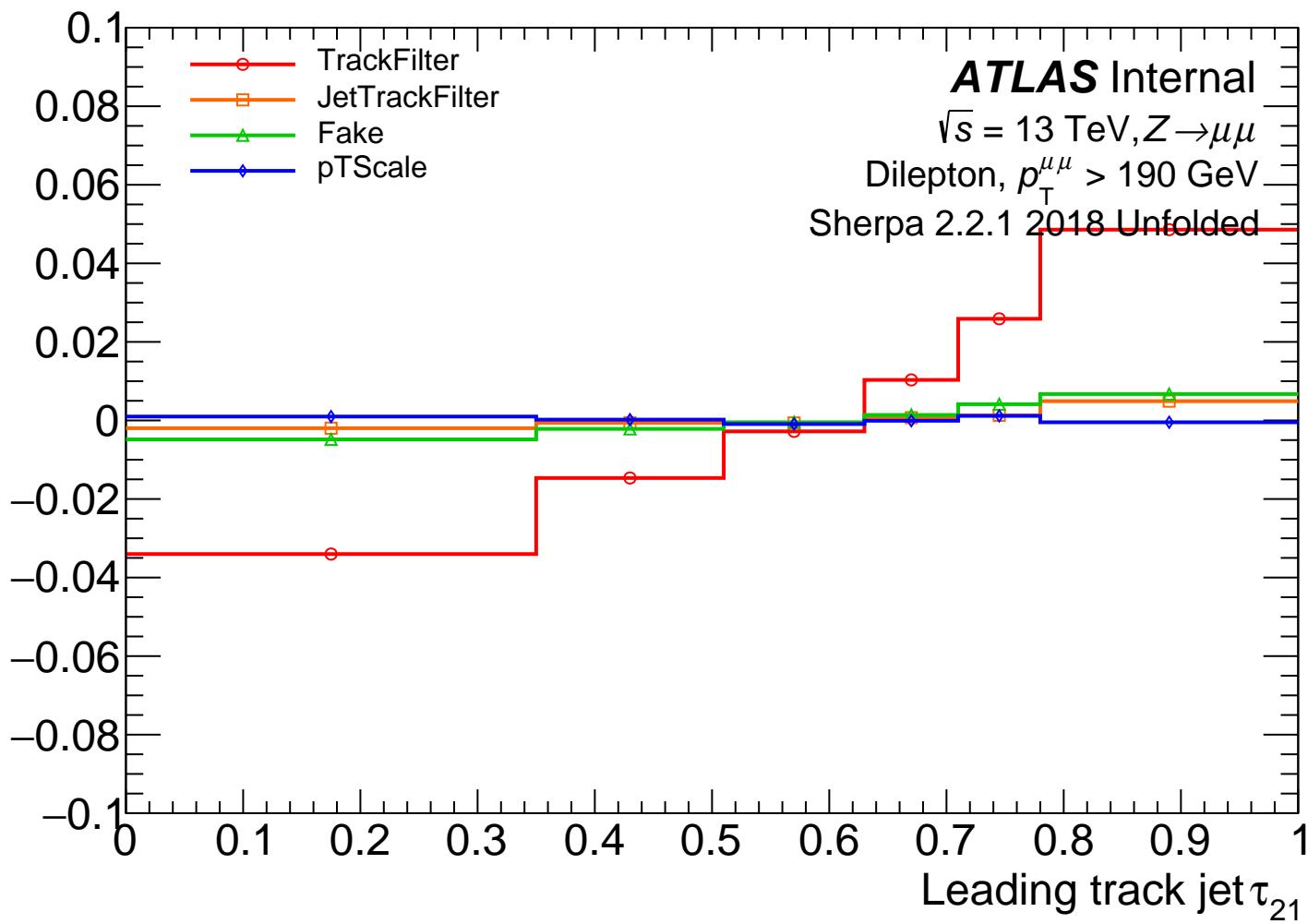
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

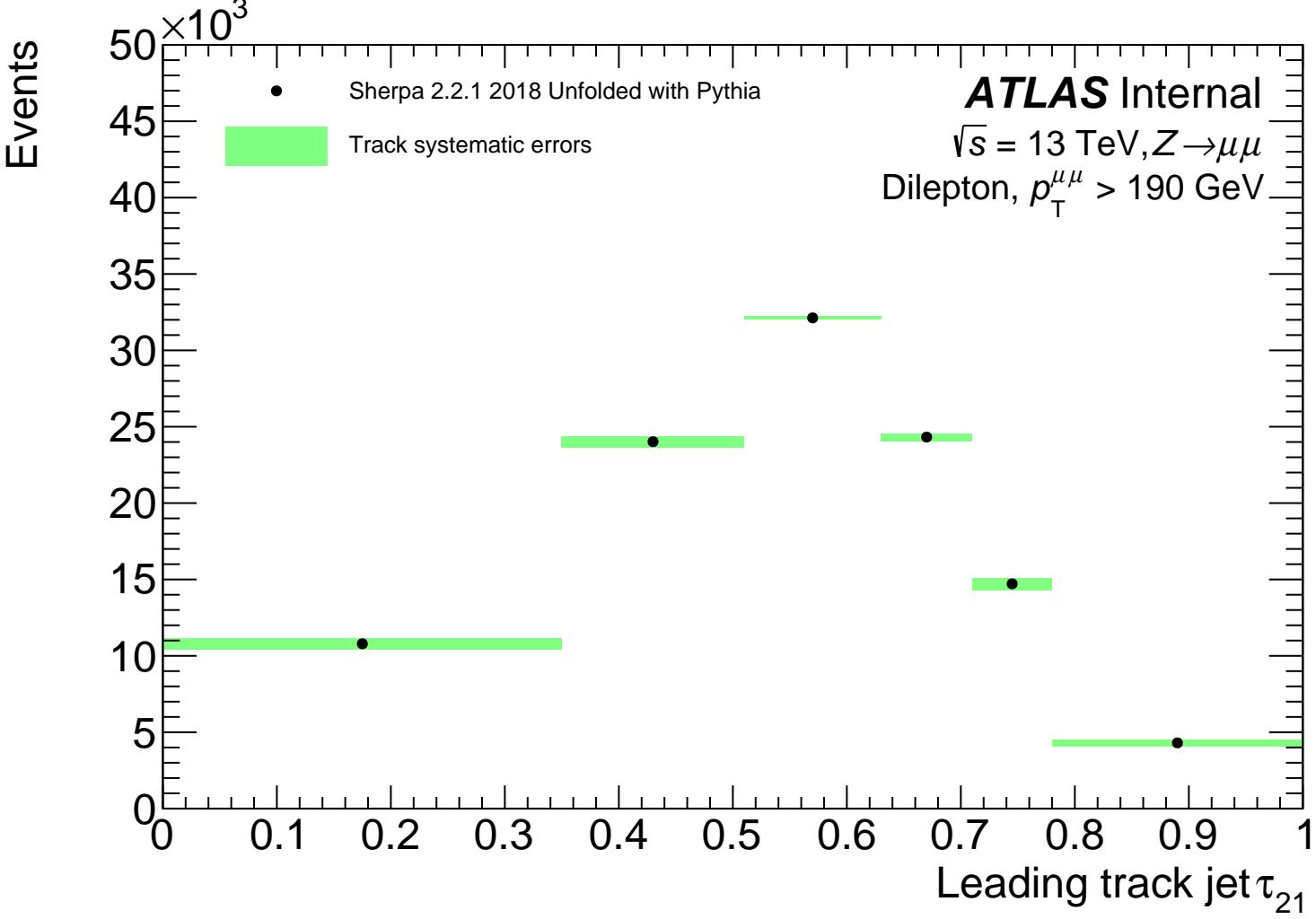
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

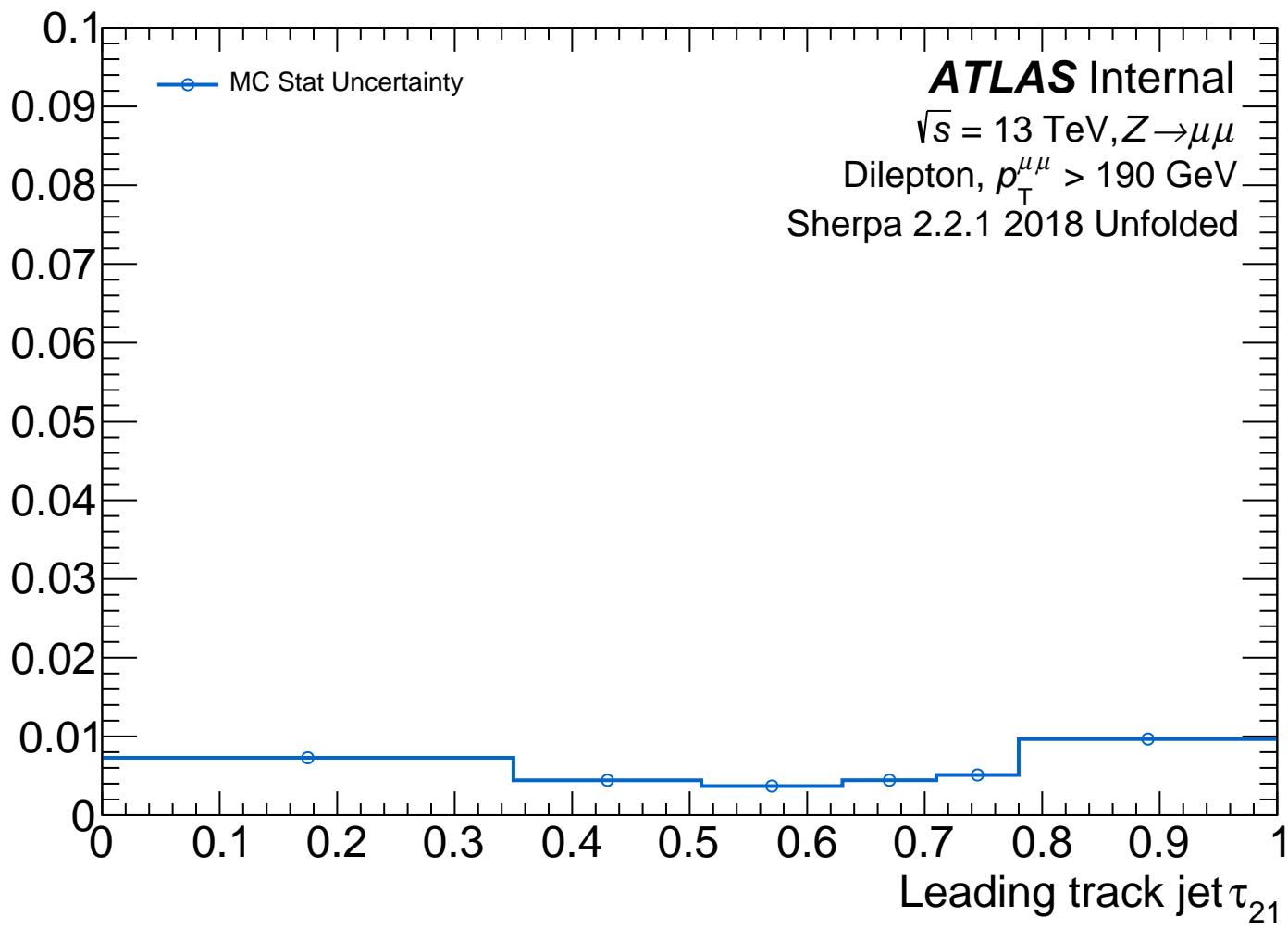
Sherpa 2.2.1 2018 Unfolded

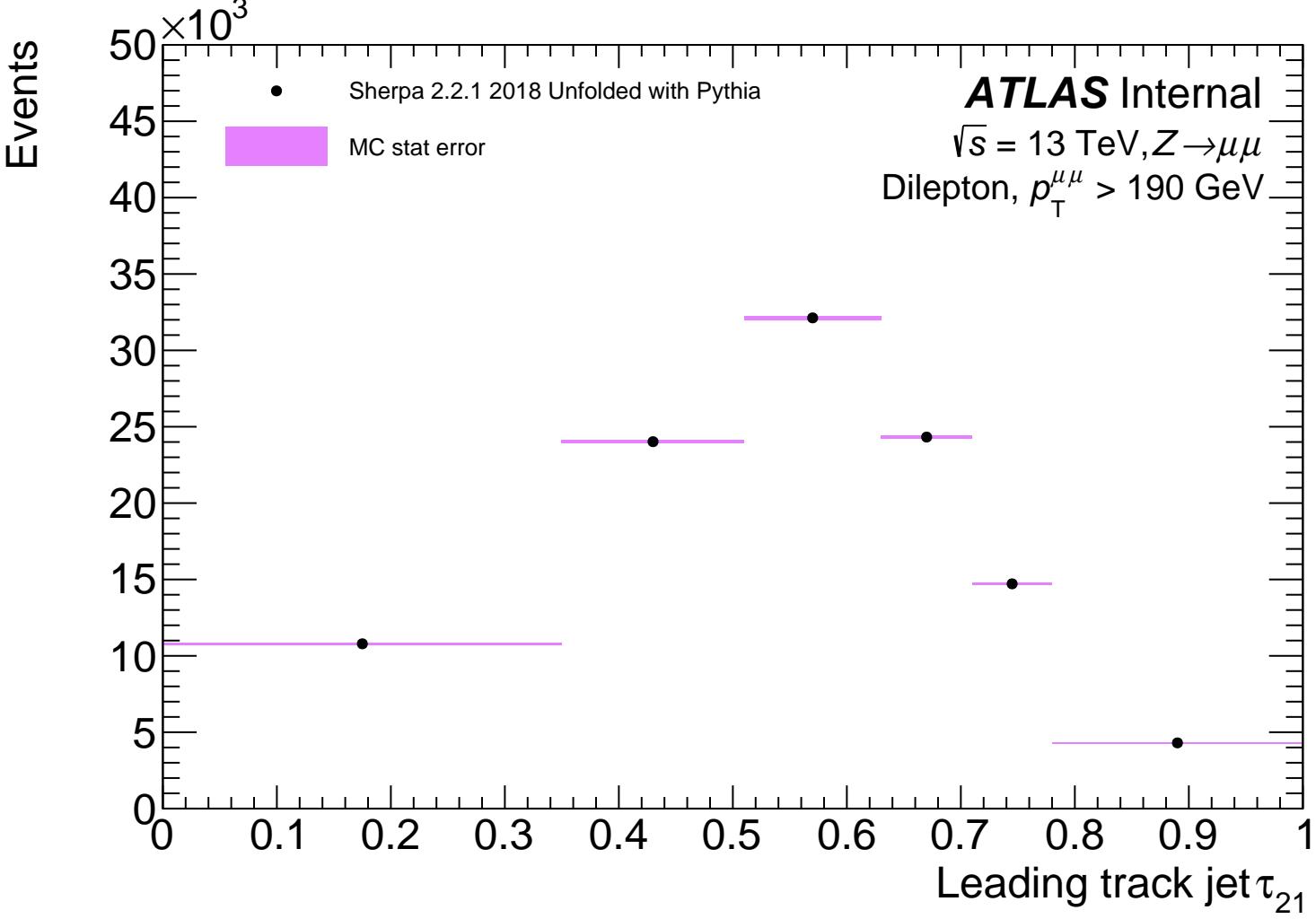


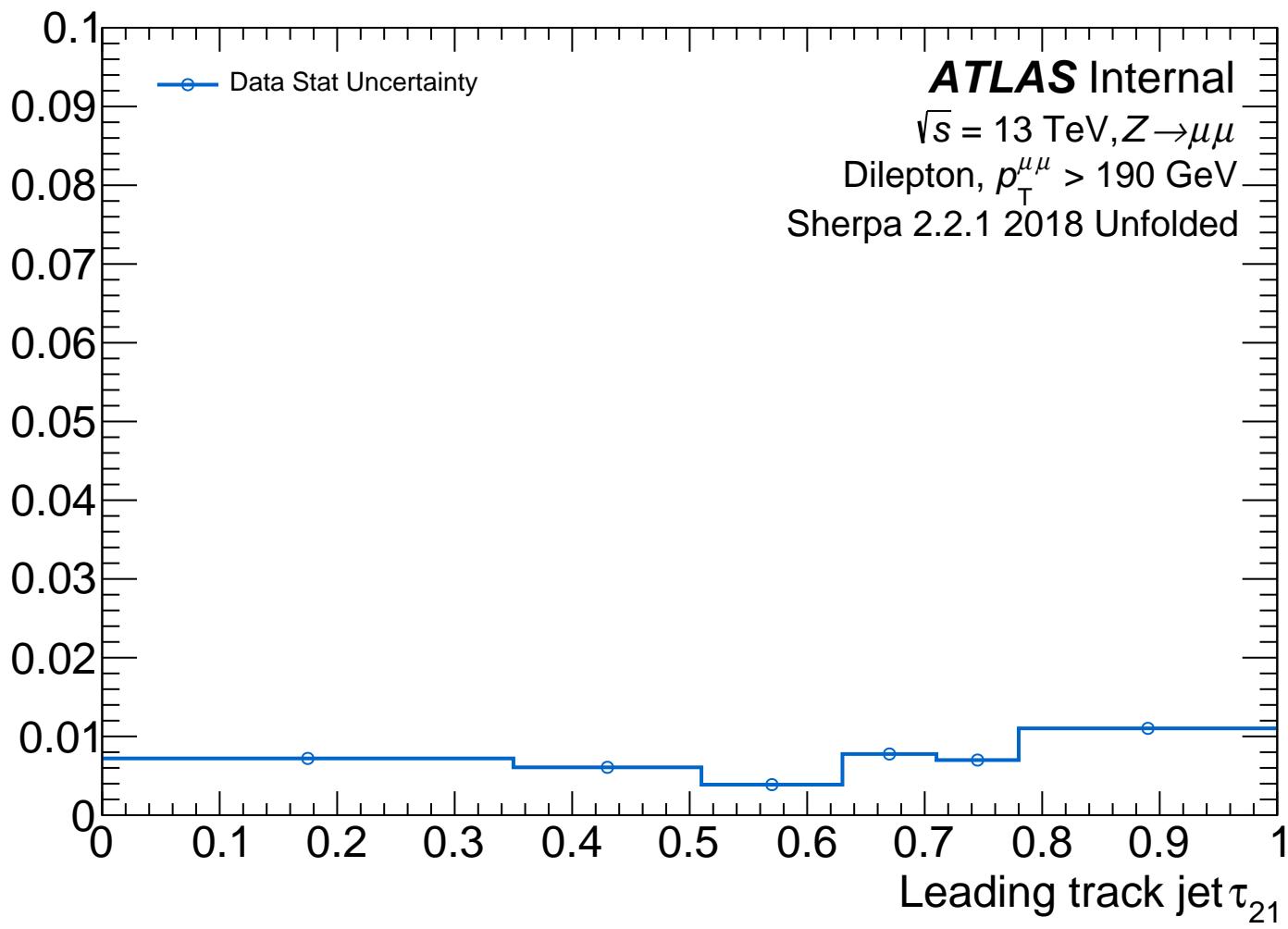


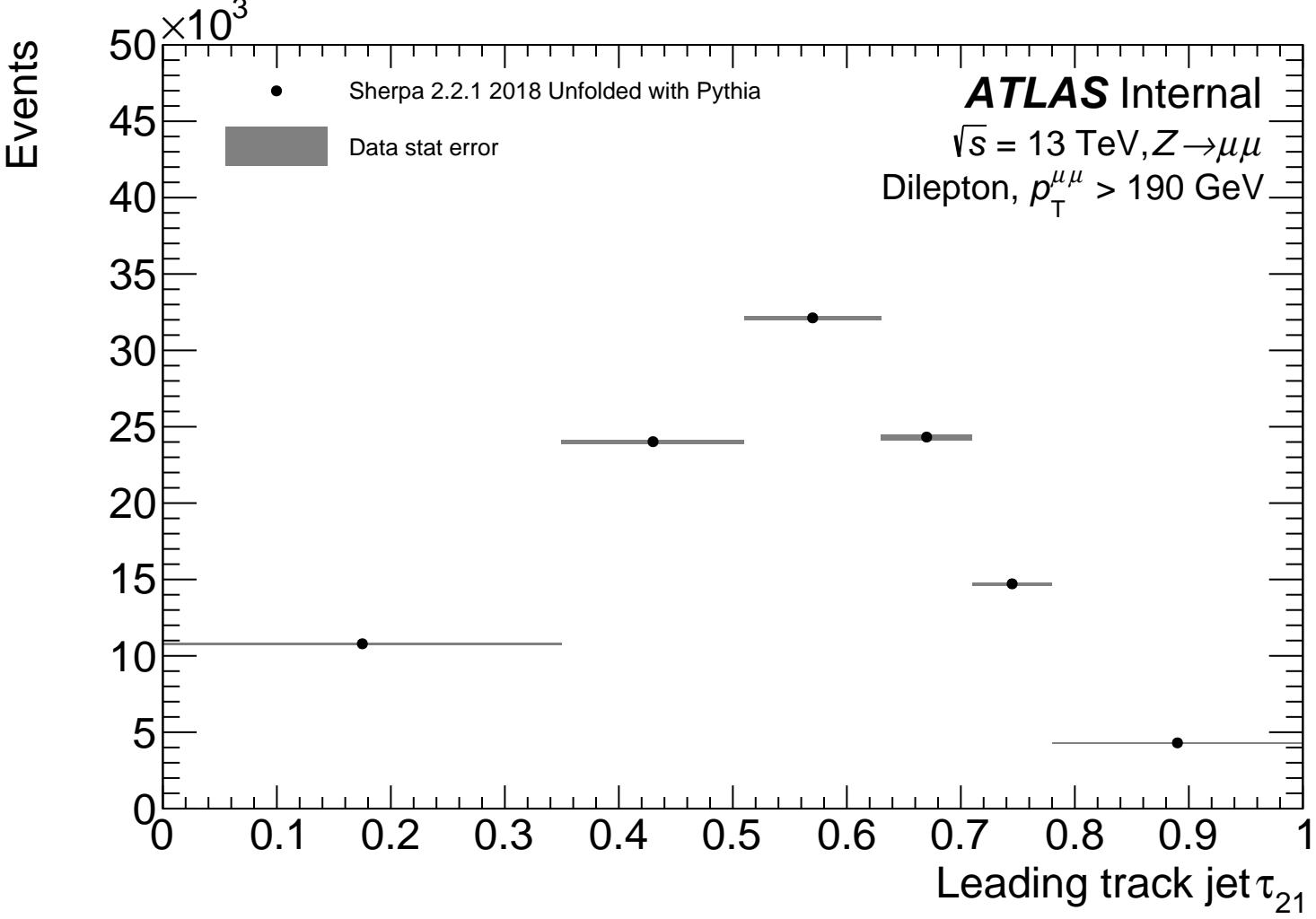


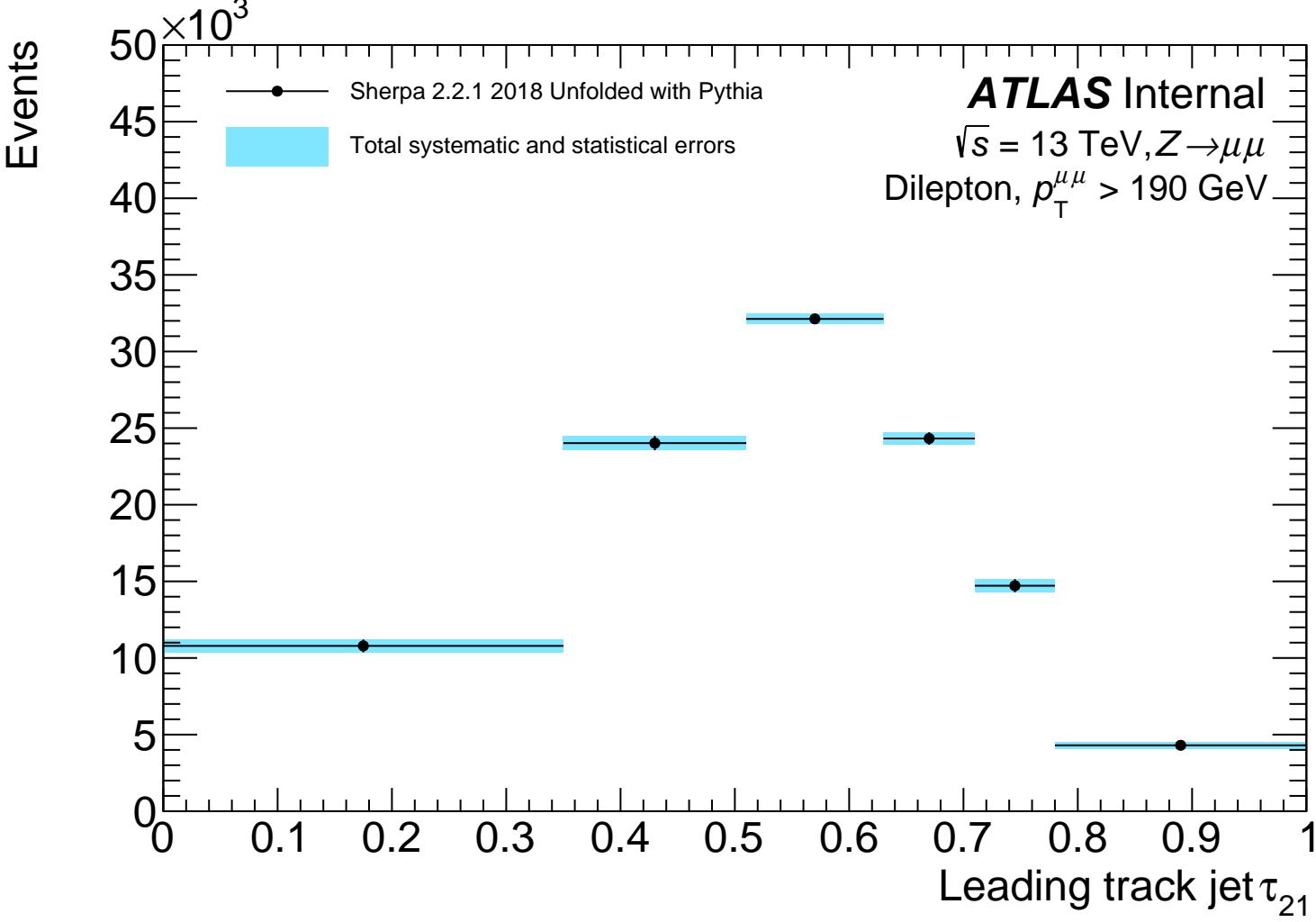


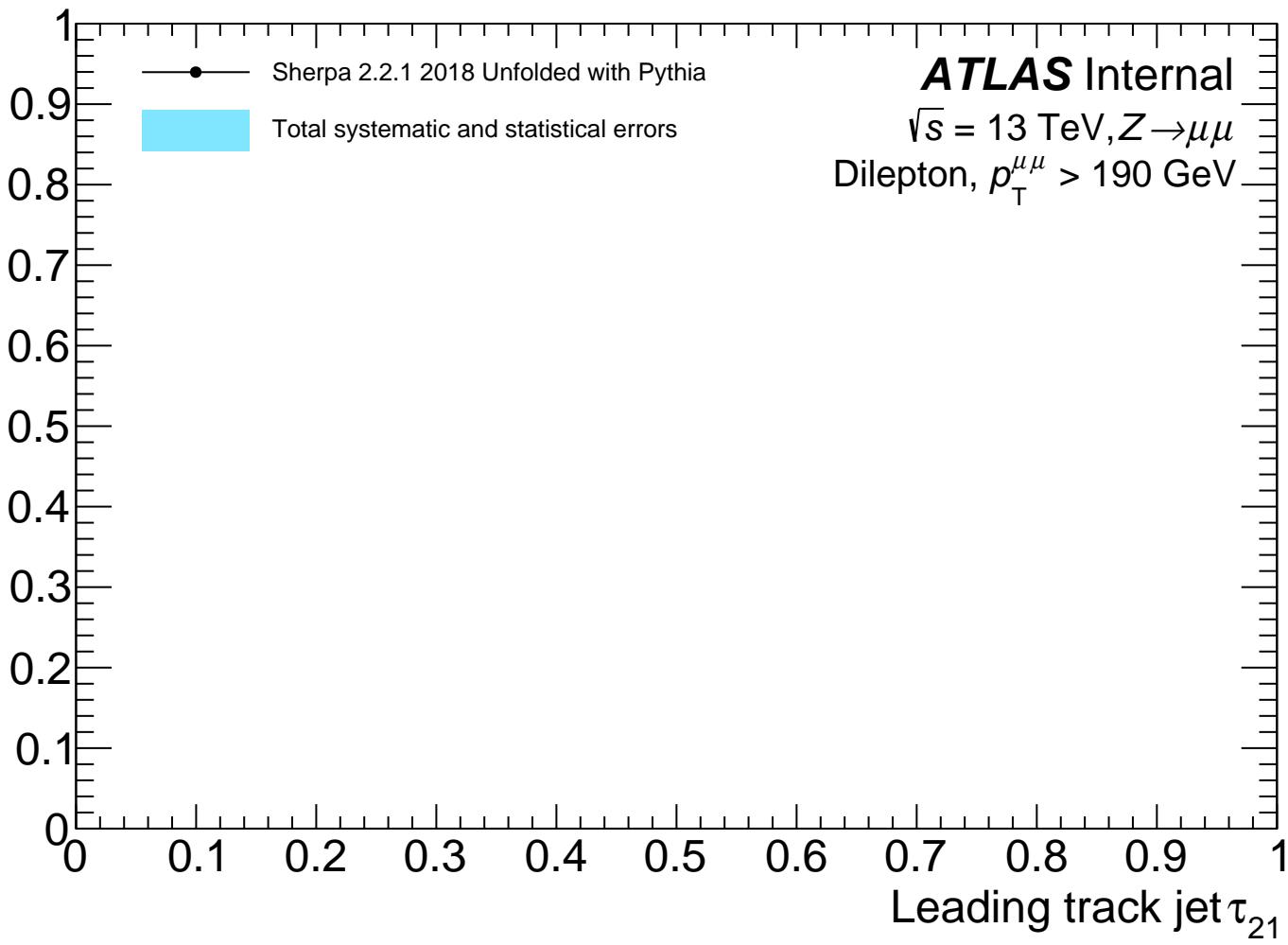










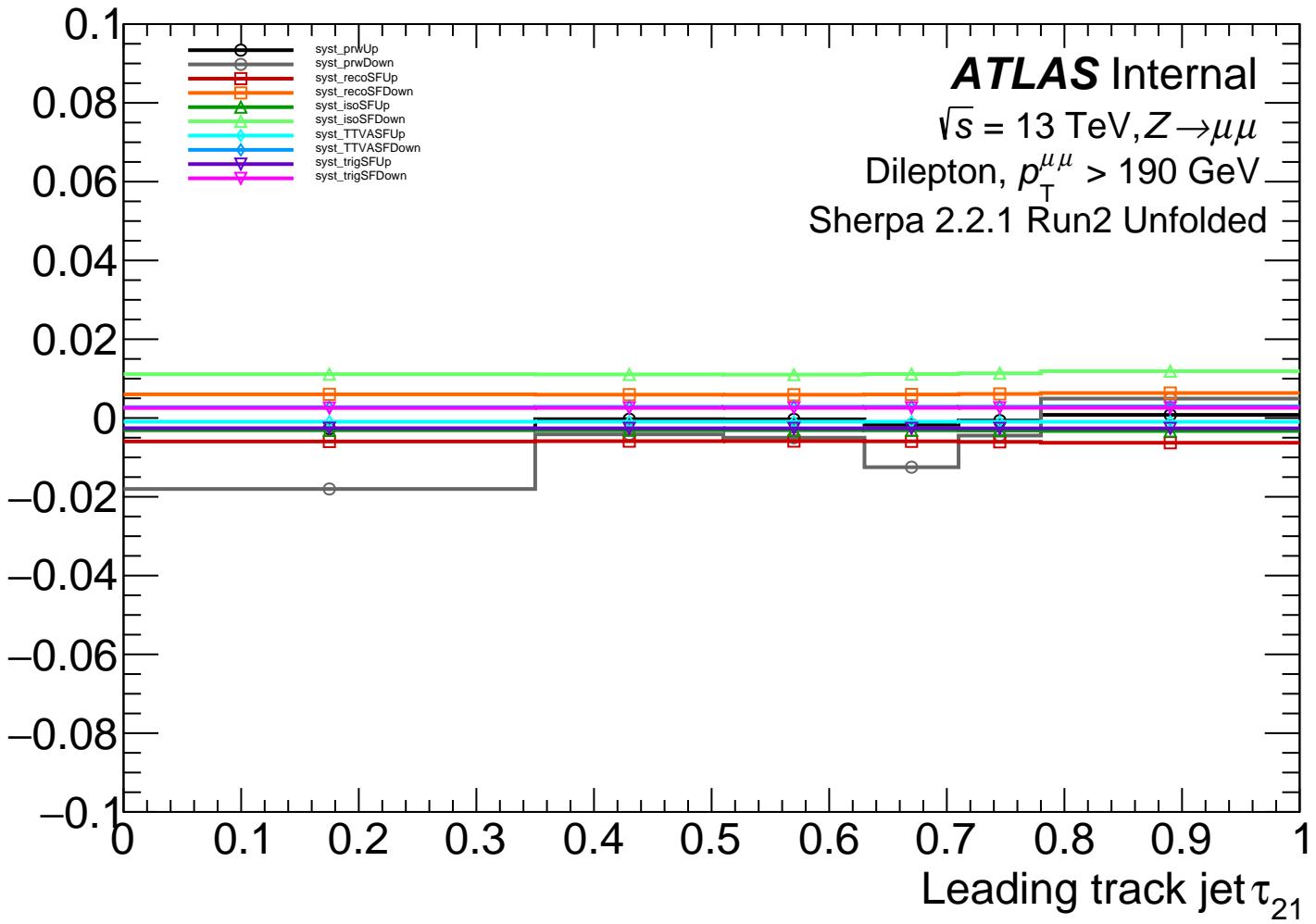


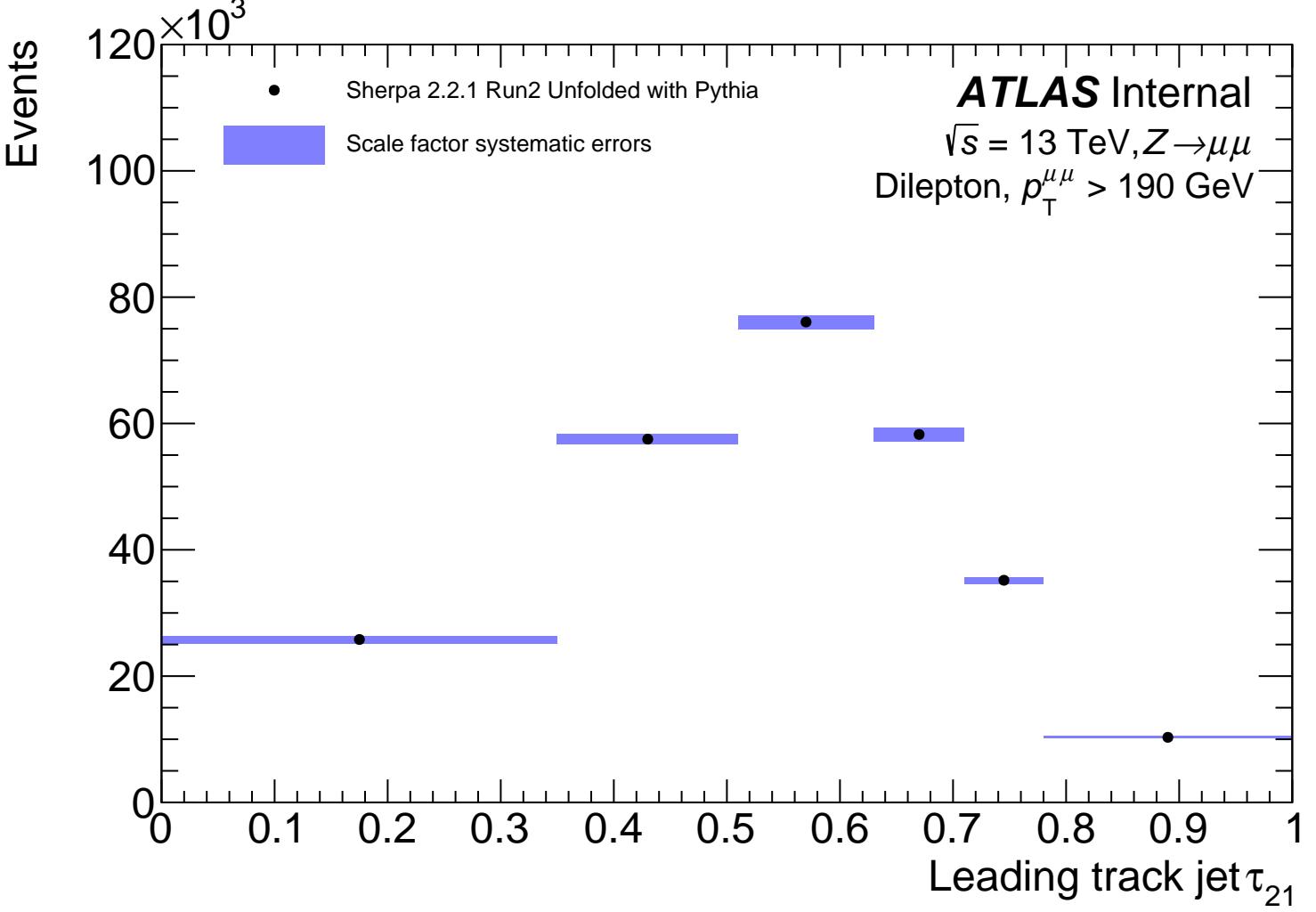
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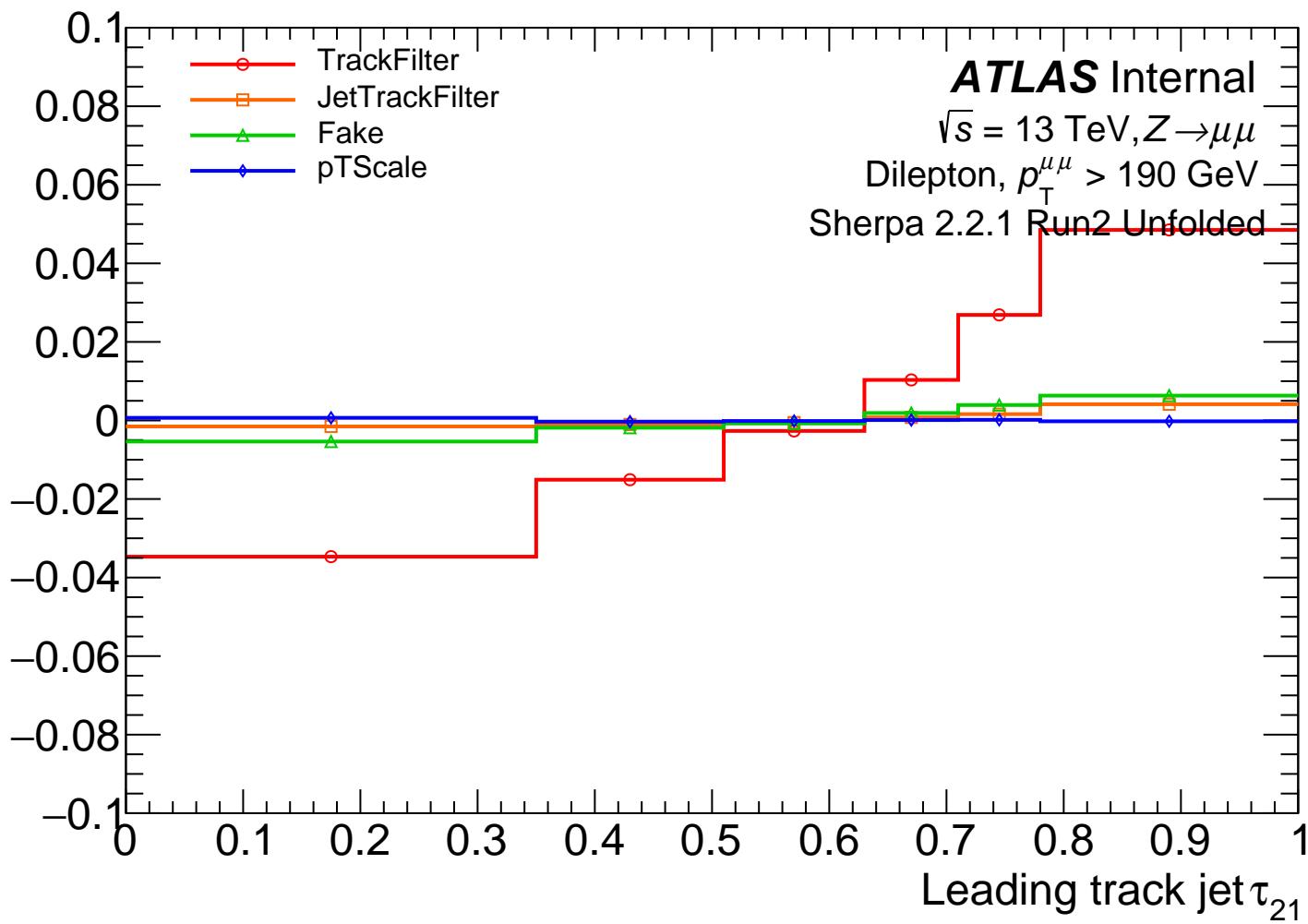
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

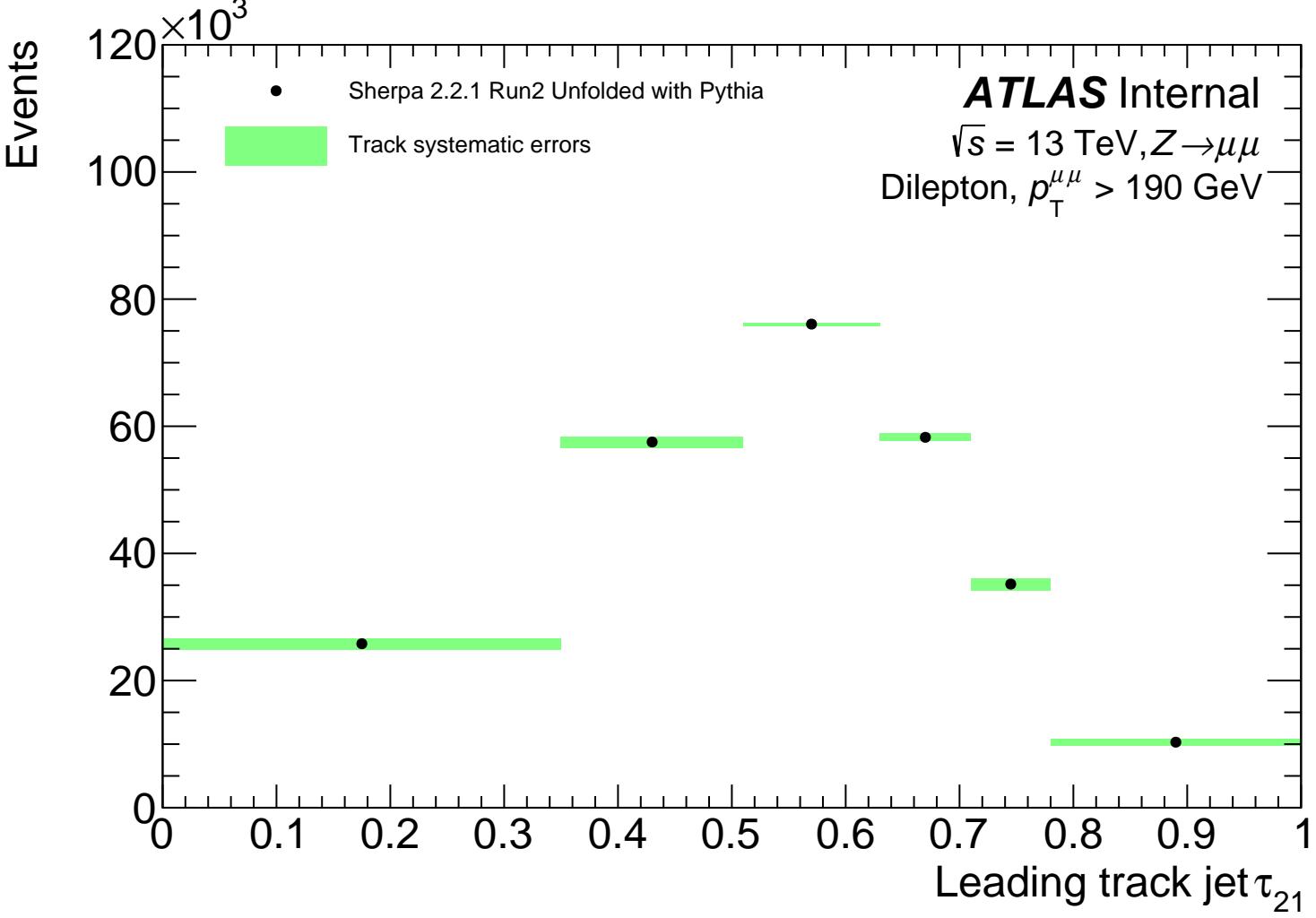
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

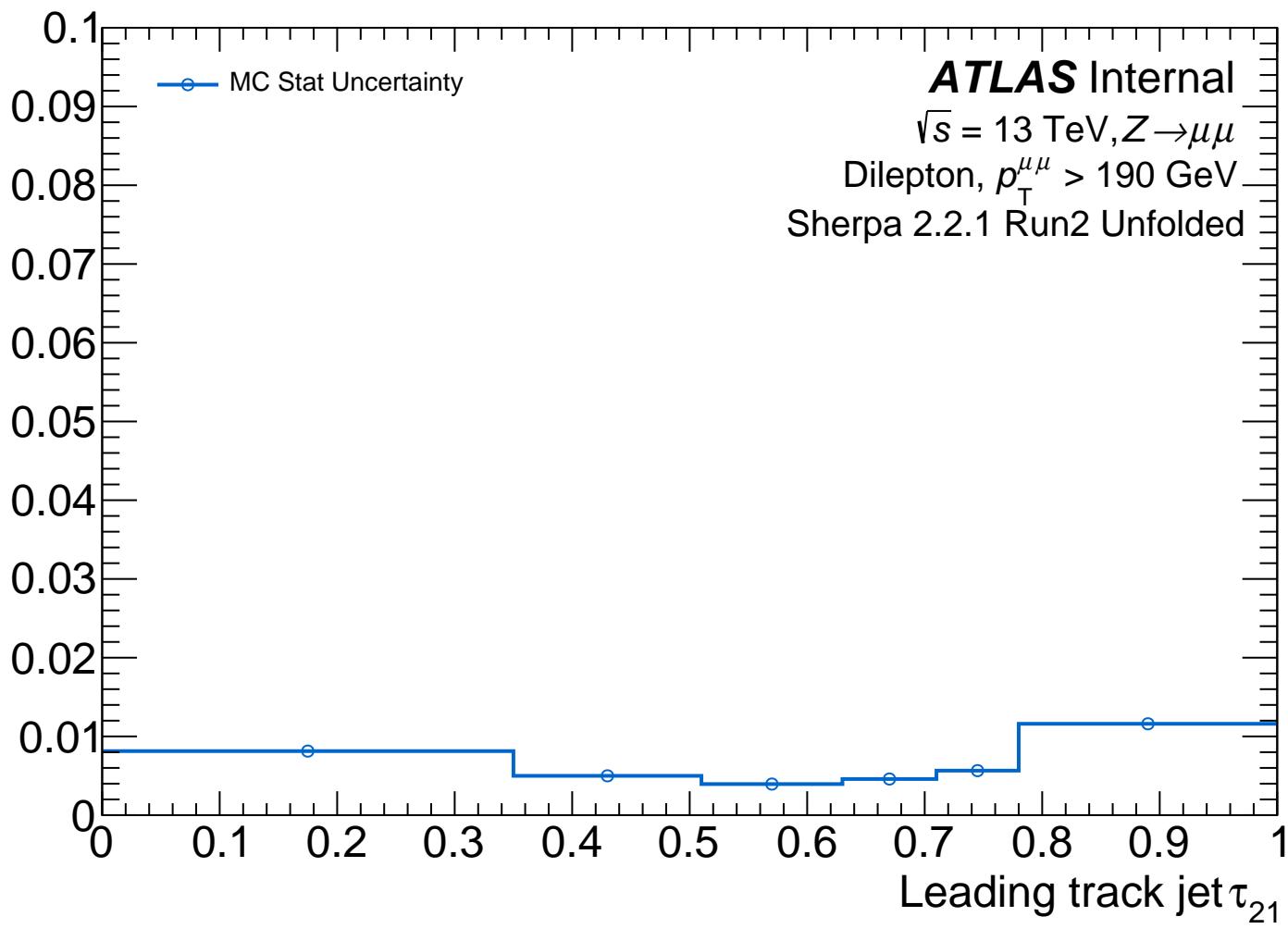
Sherpa 2.2.1 Run2 Unfolded

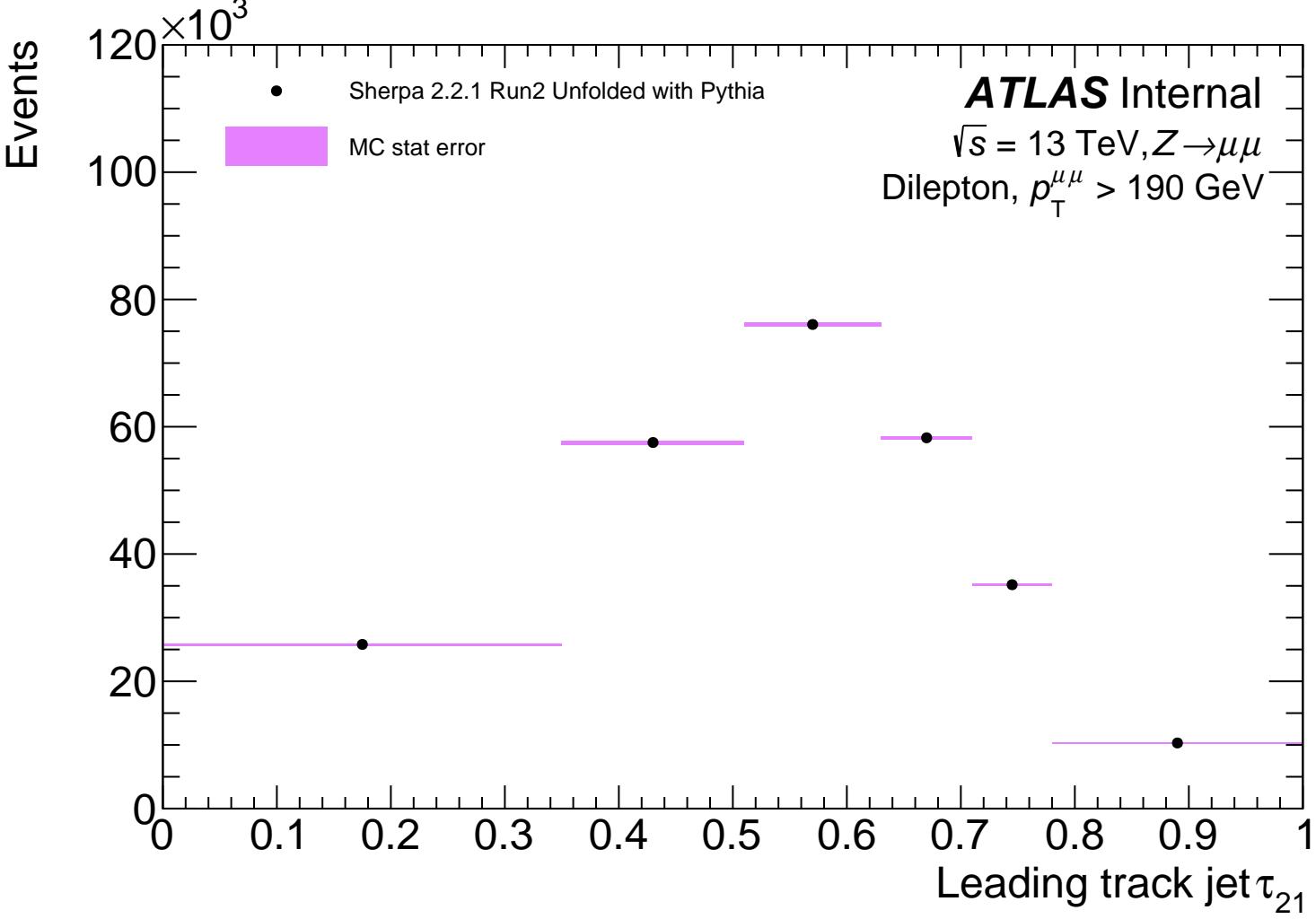


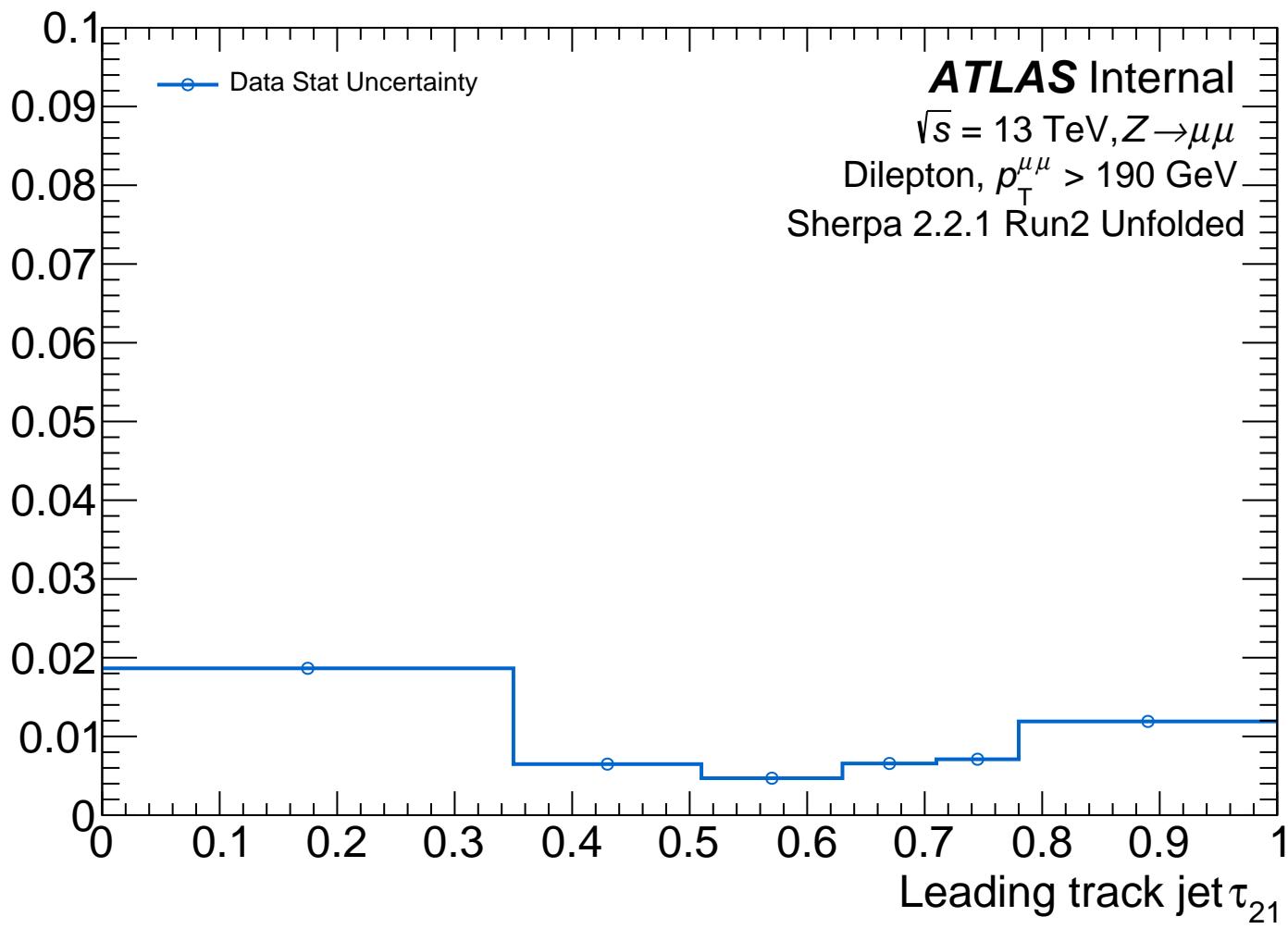


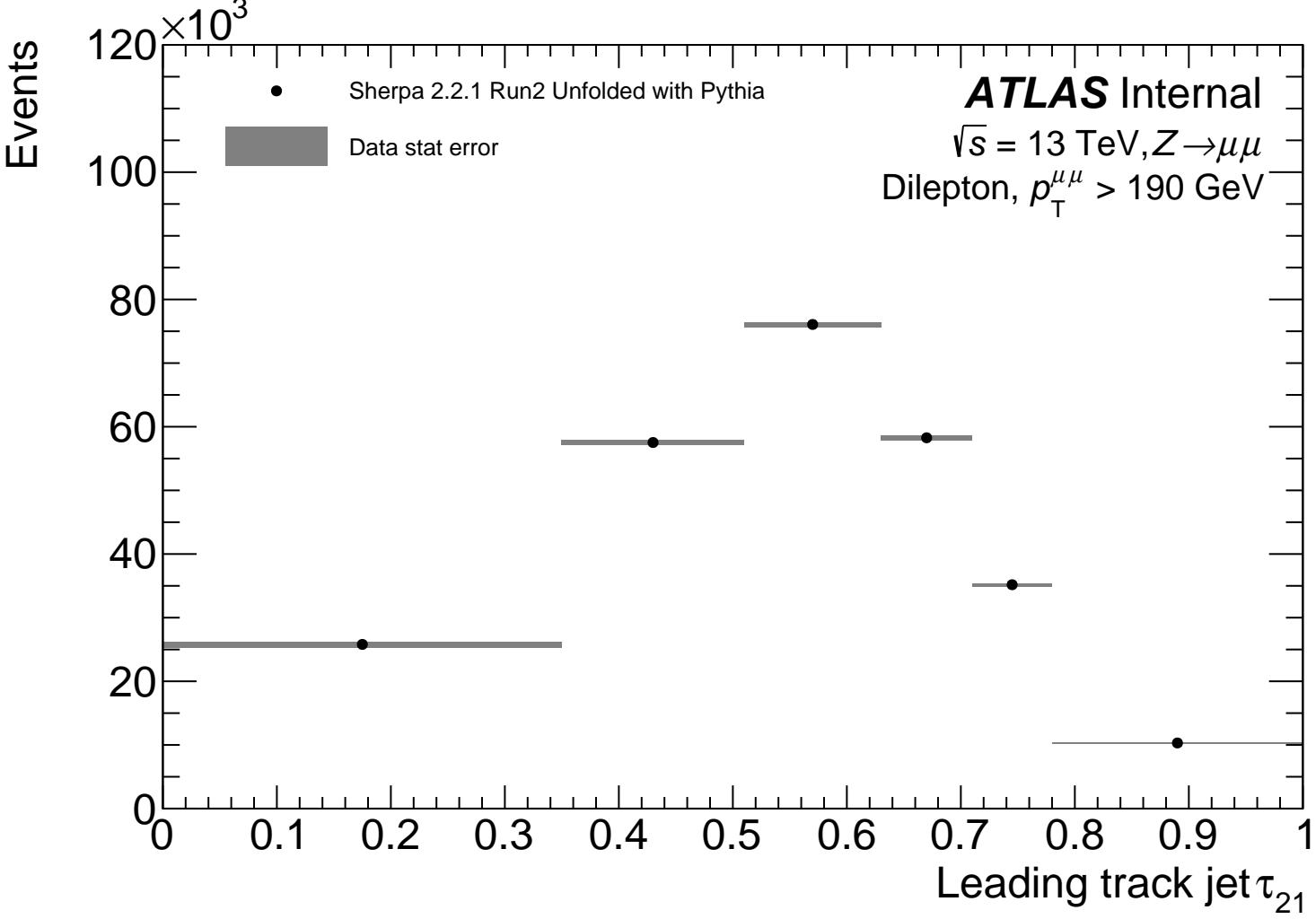


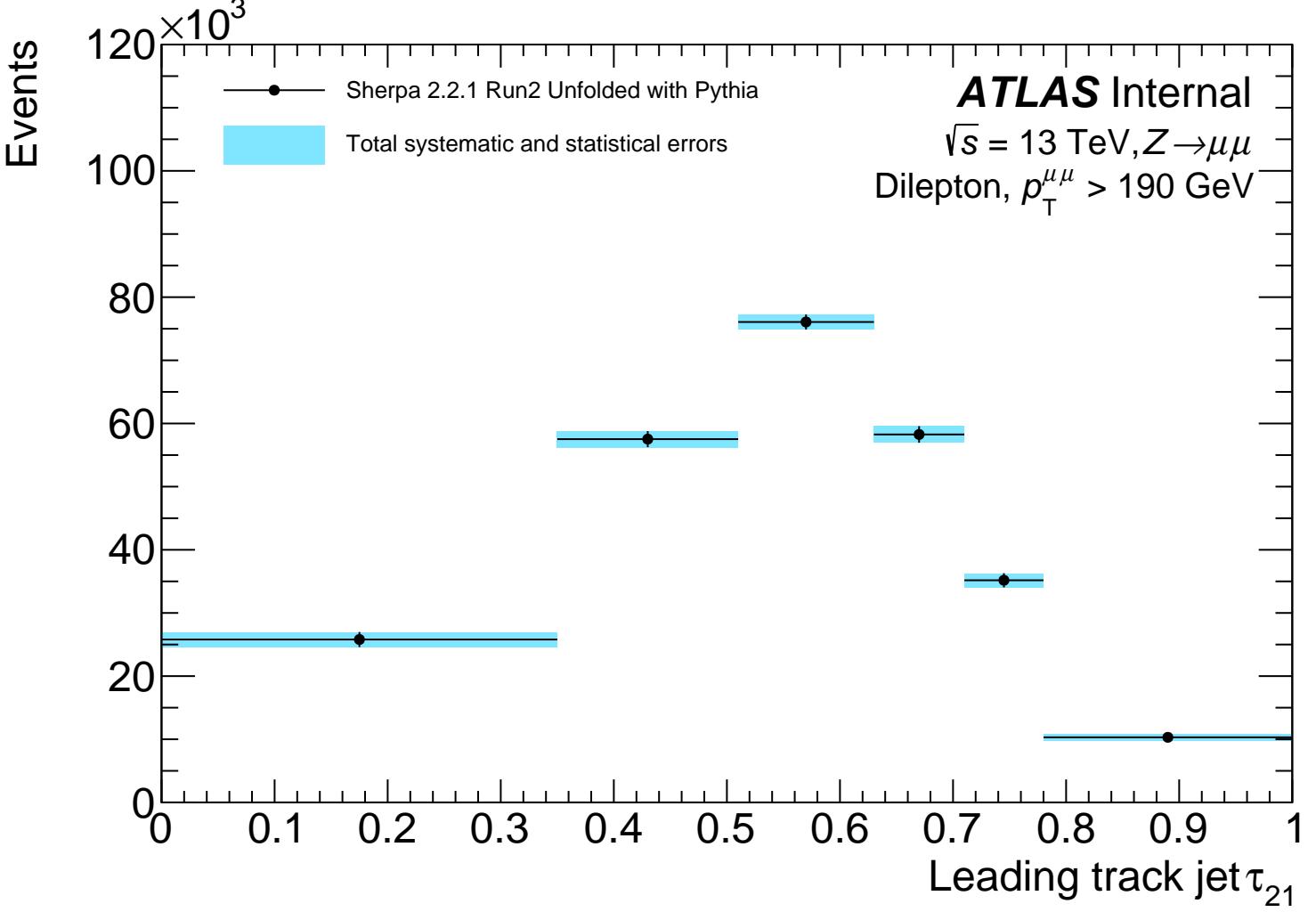


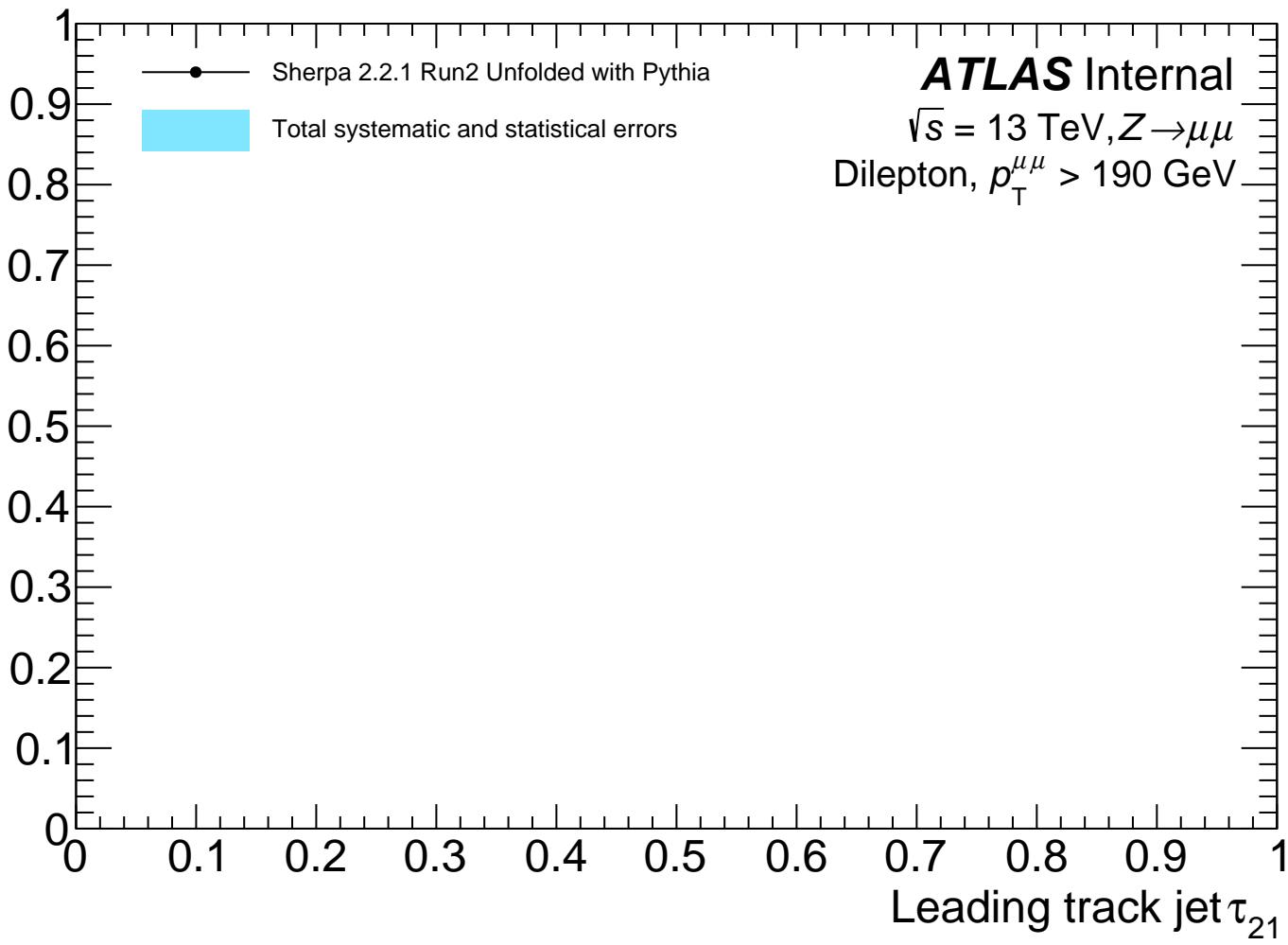










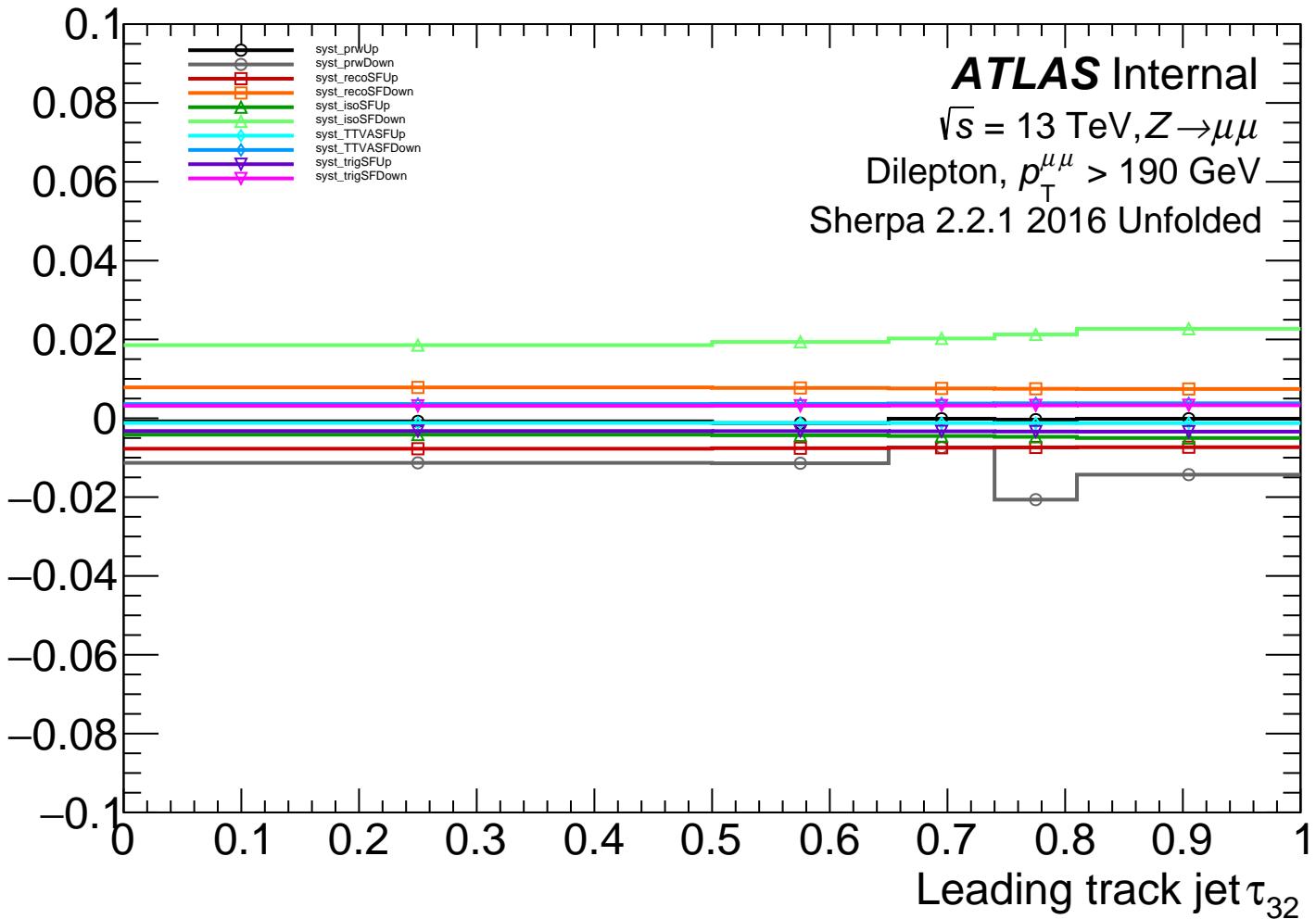


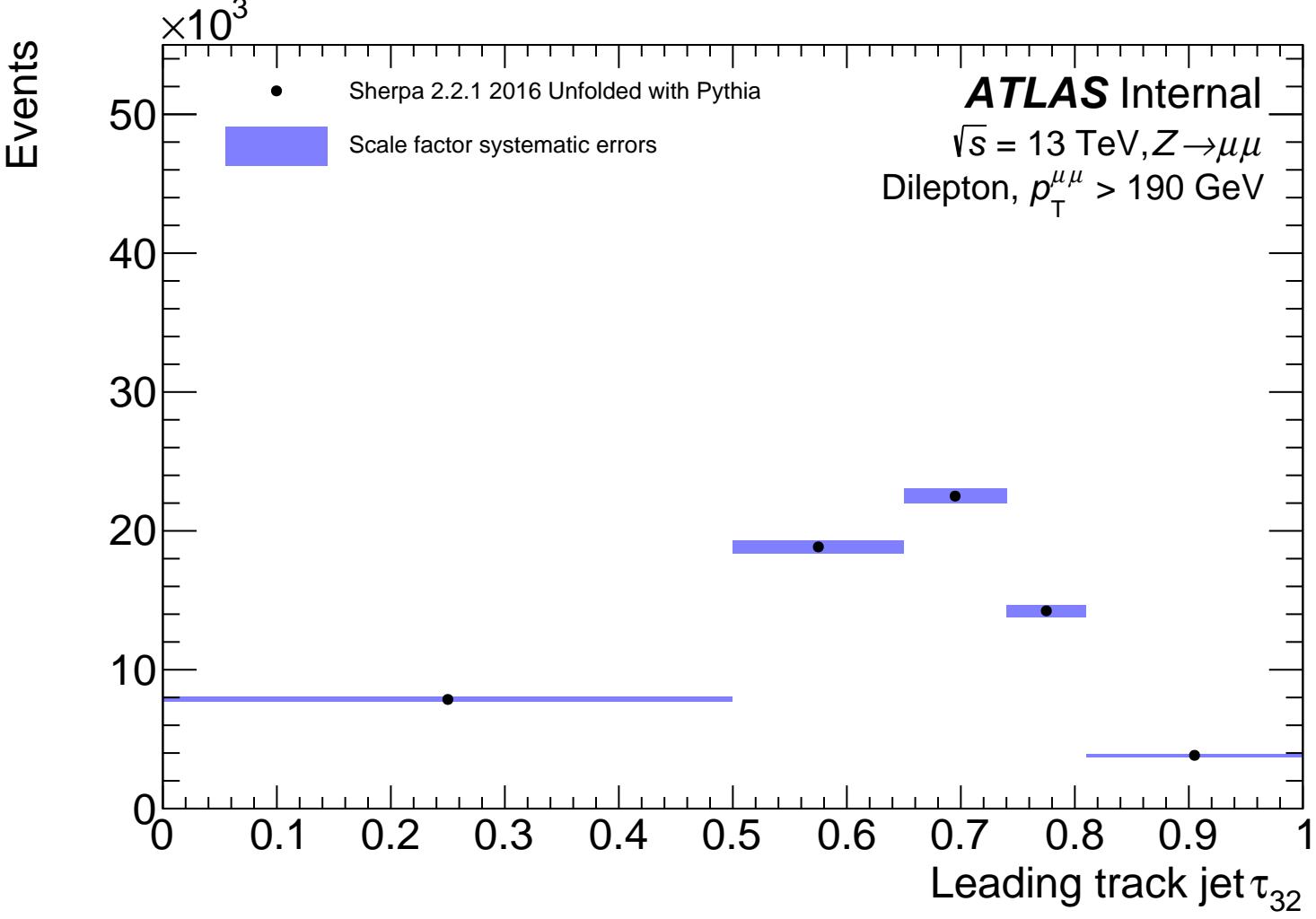
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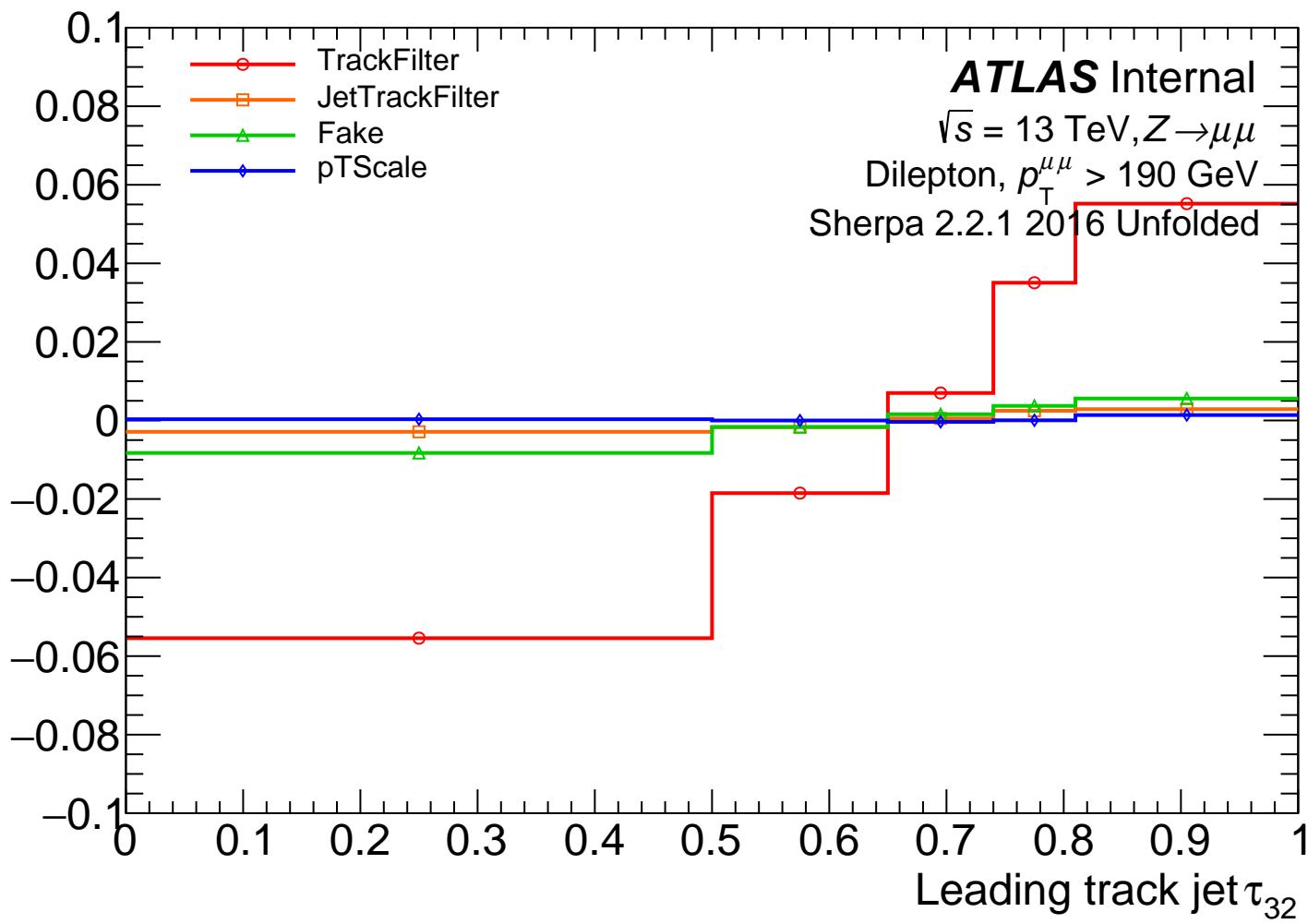
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

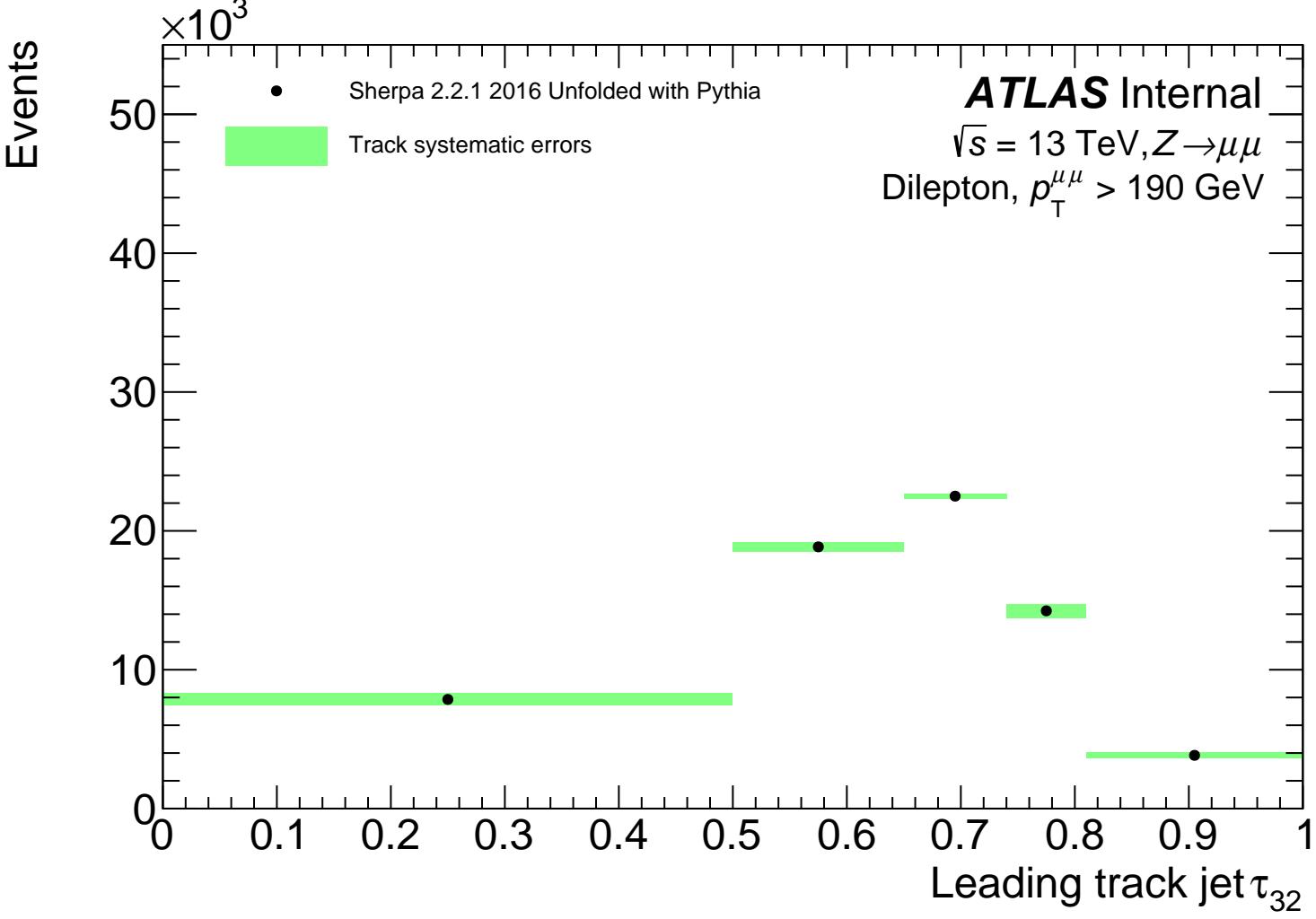
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

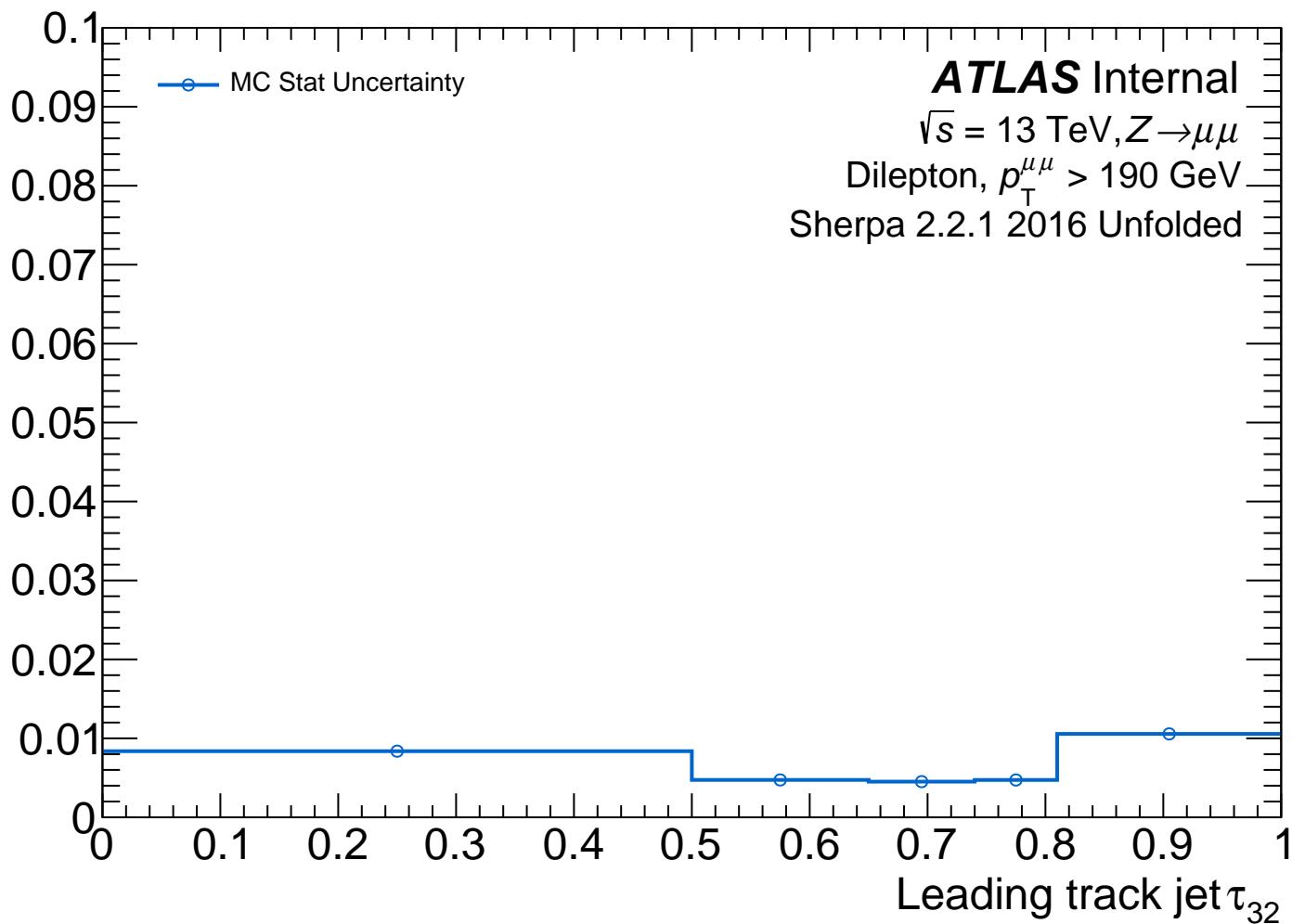
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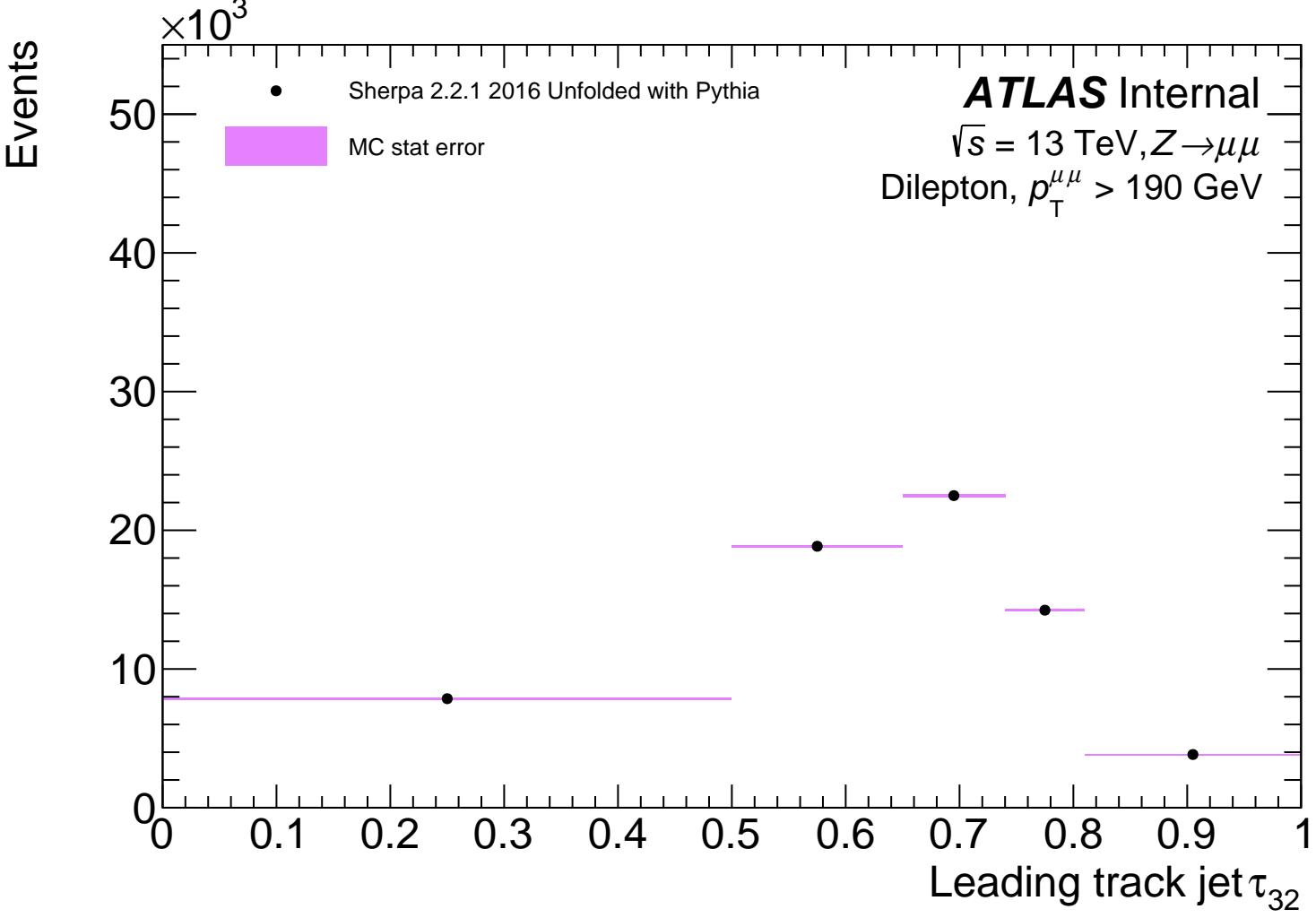


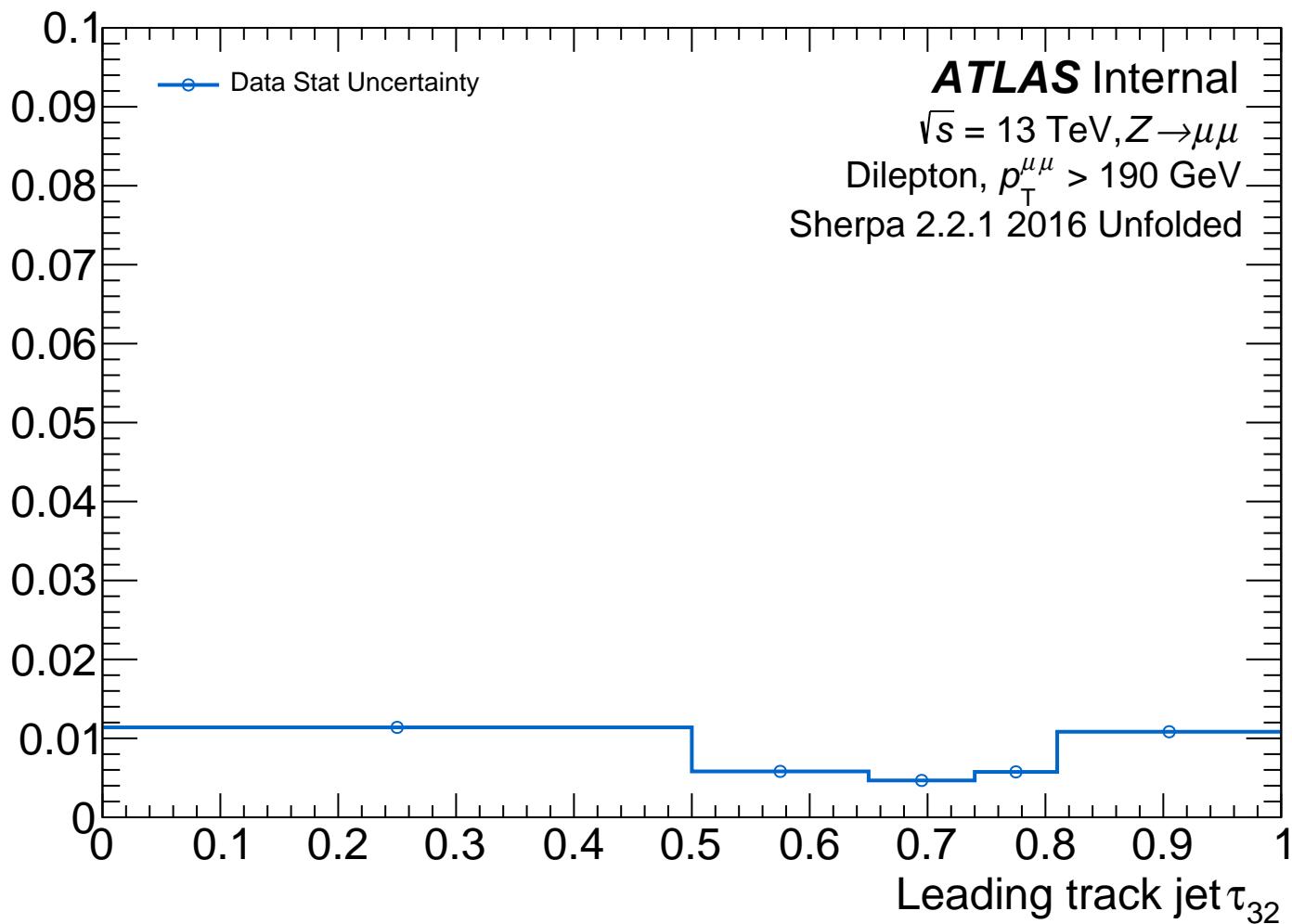


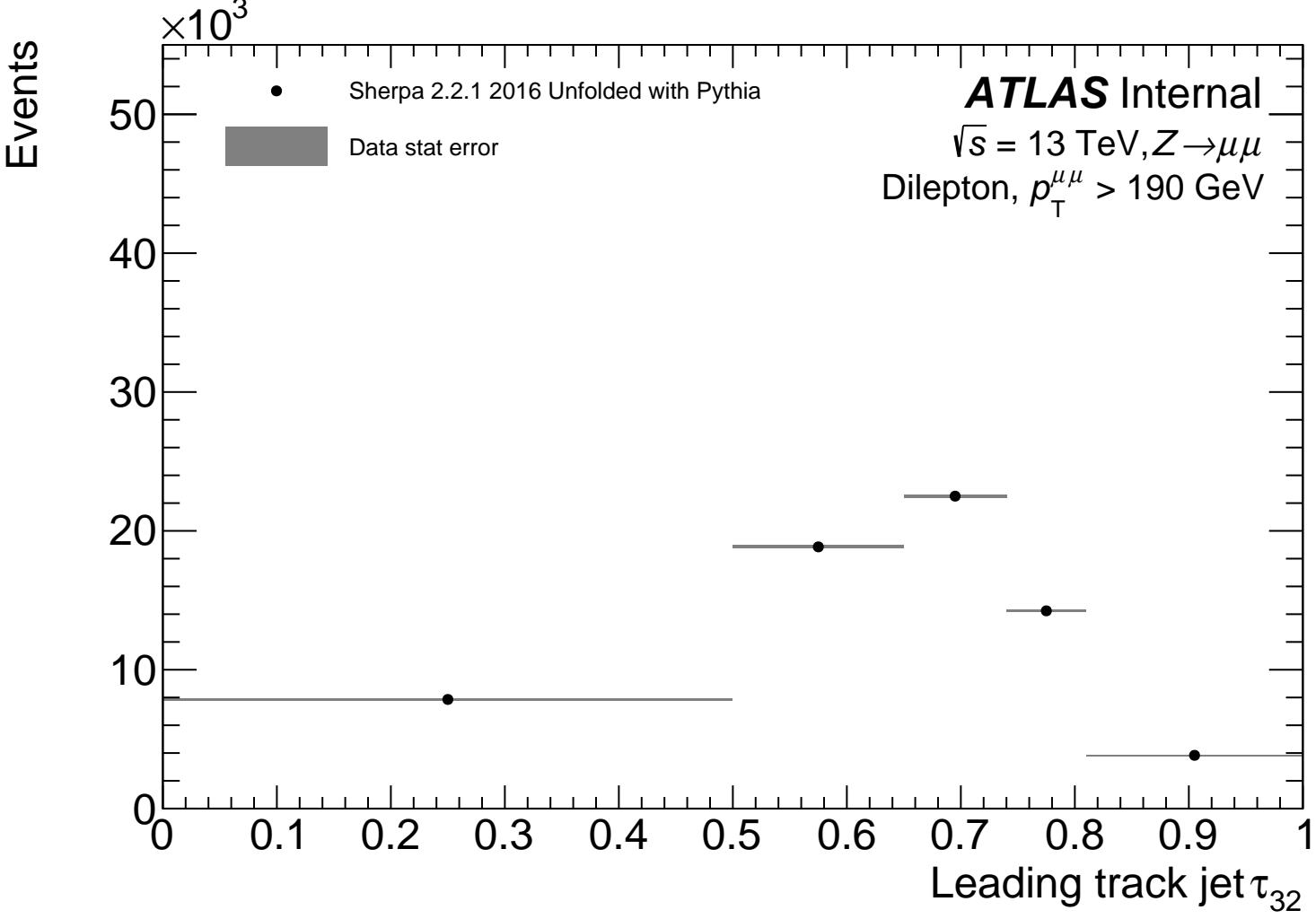


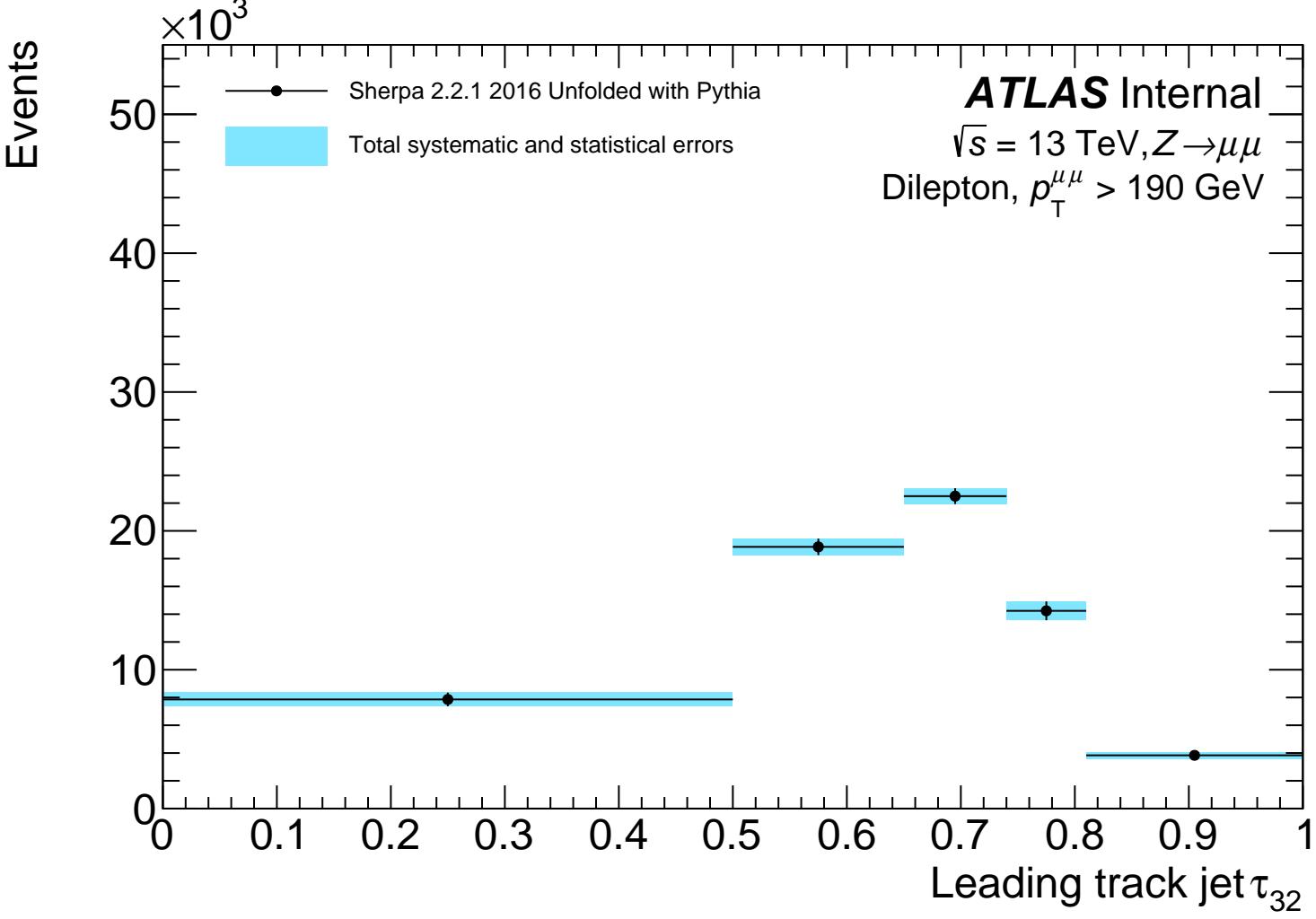


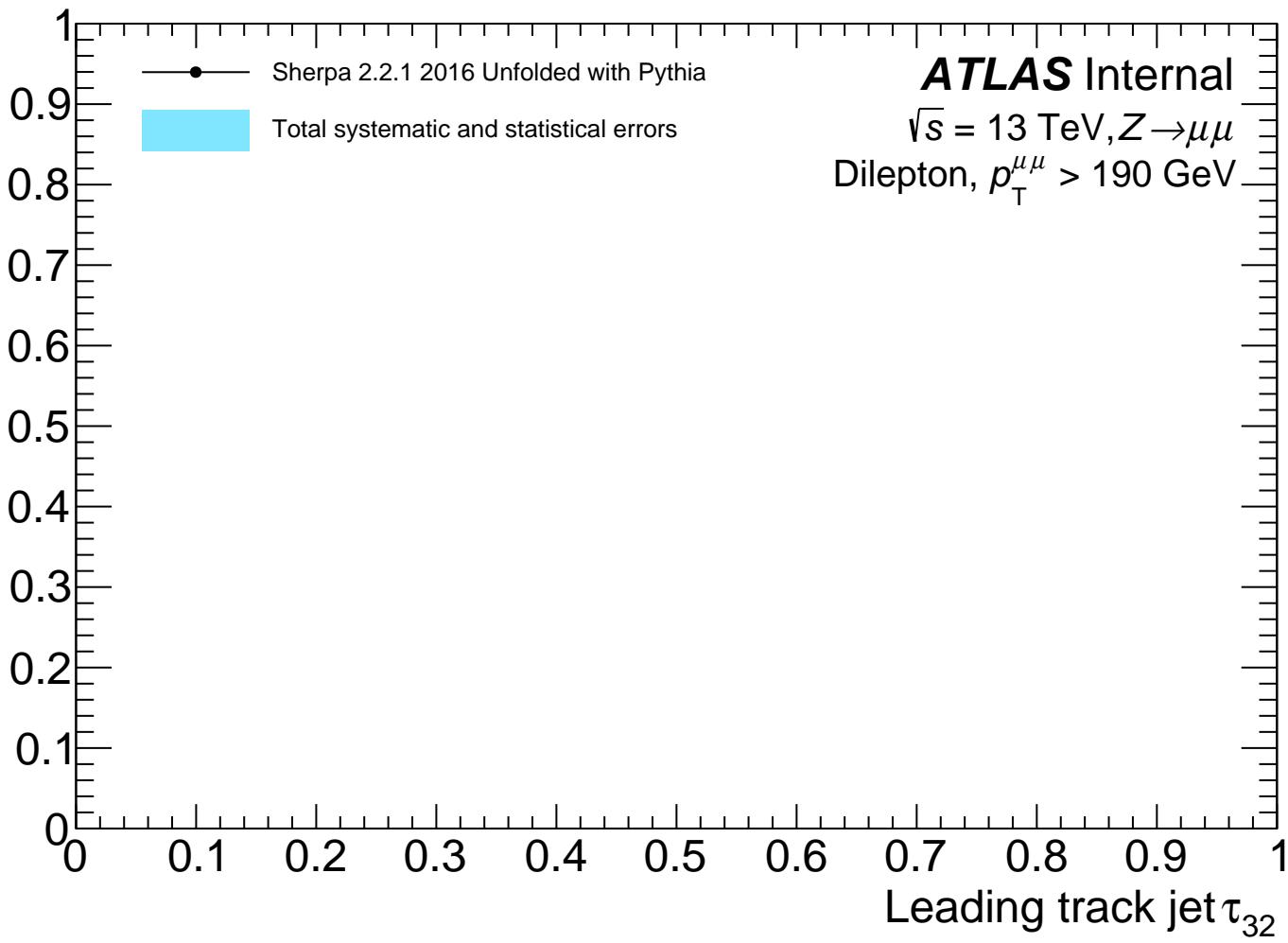










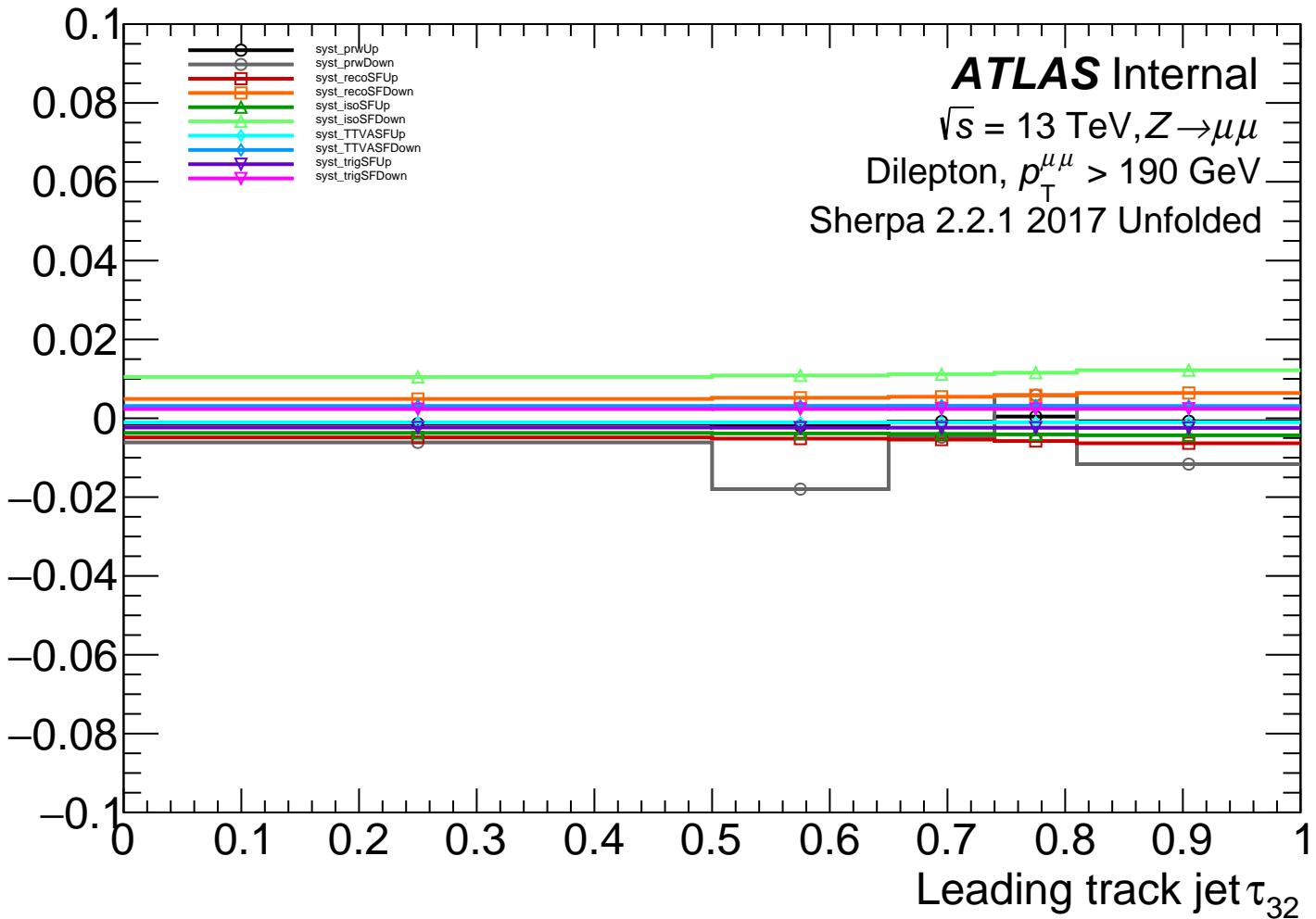


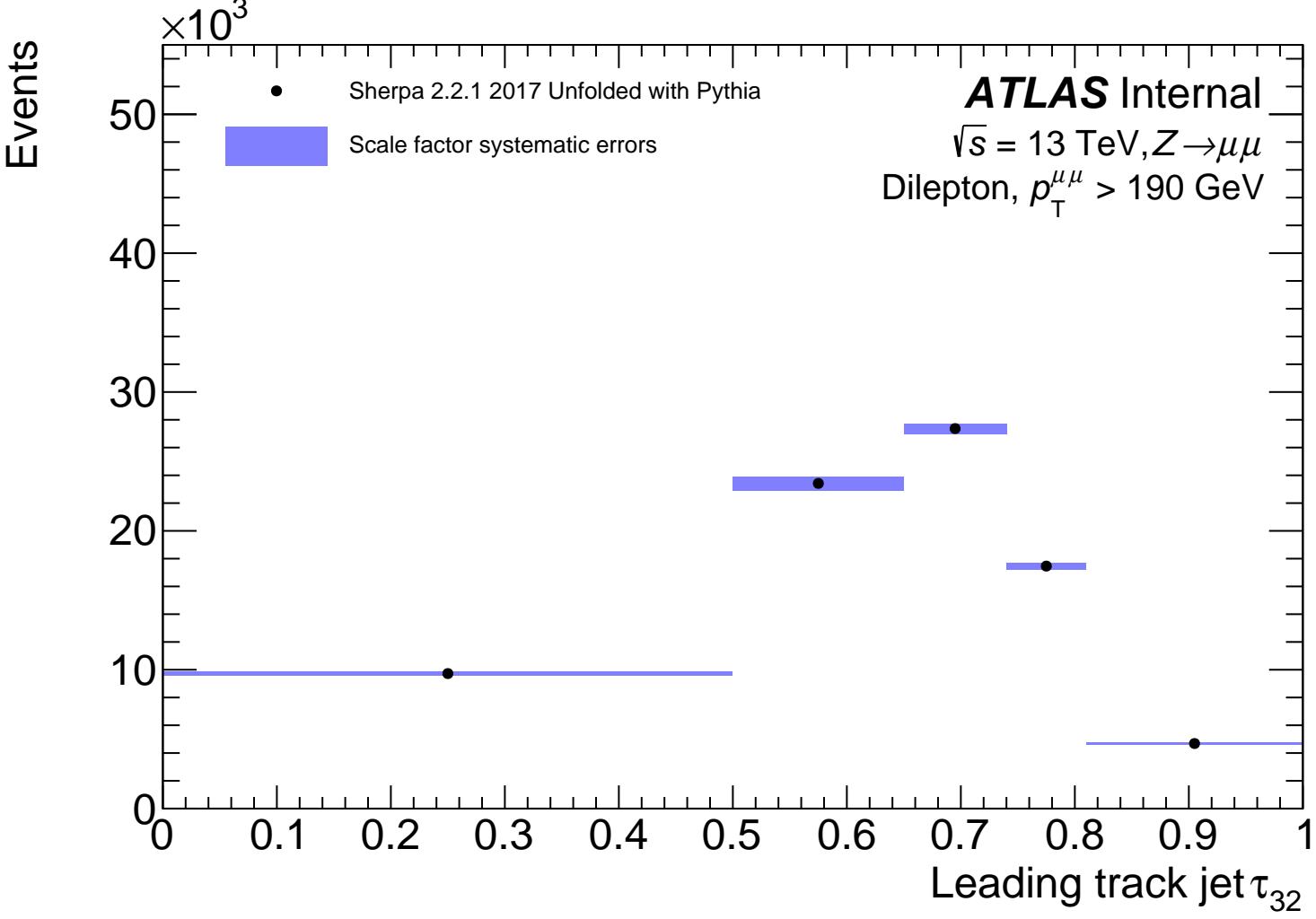
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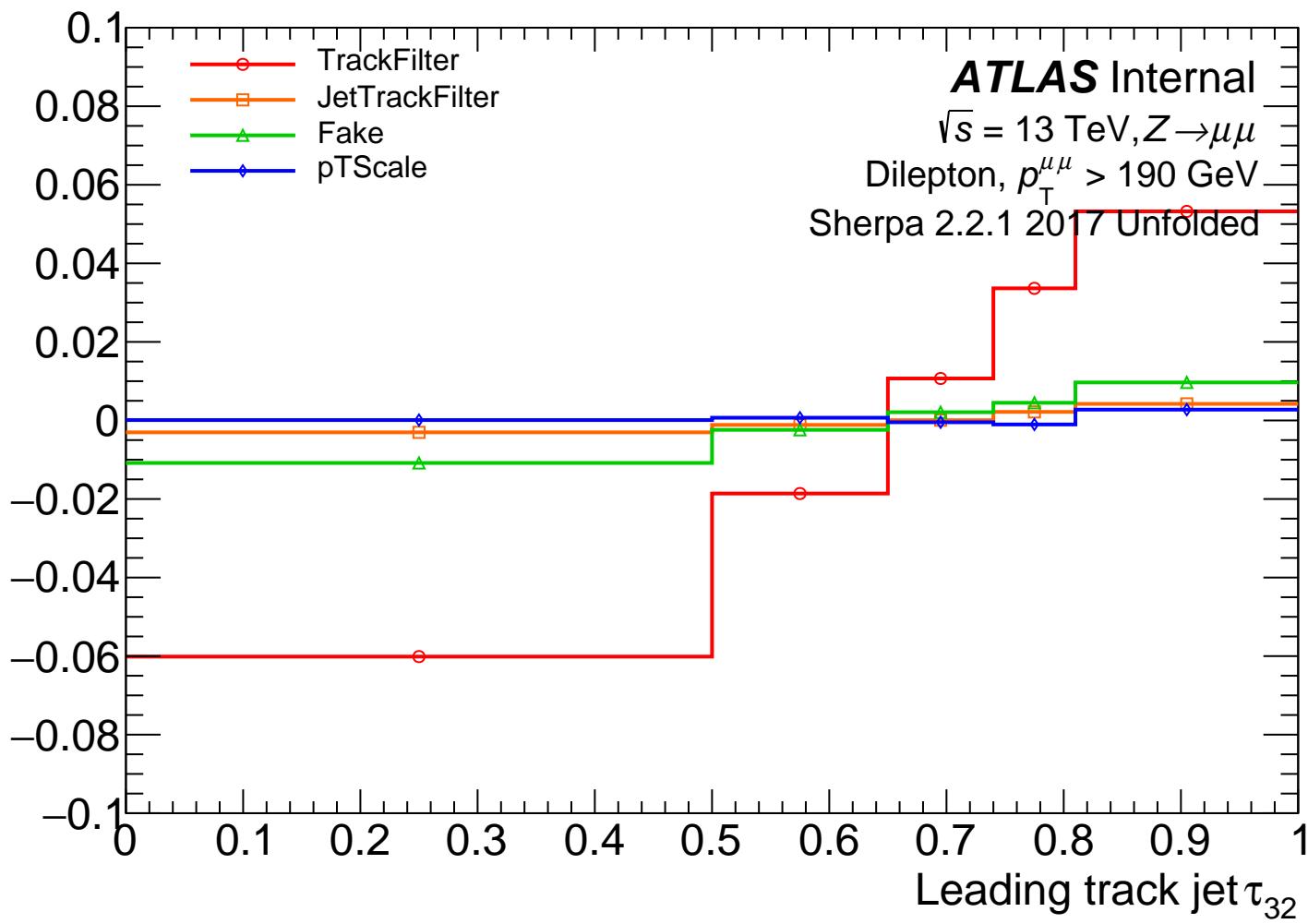
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

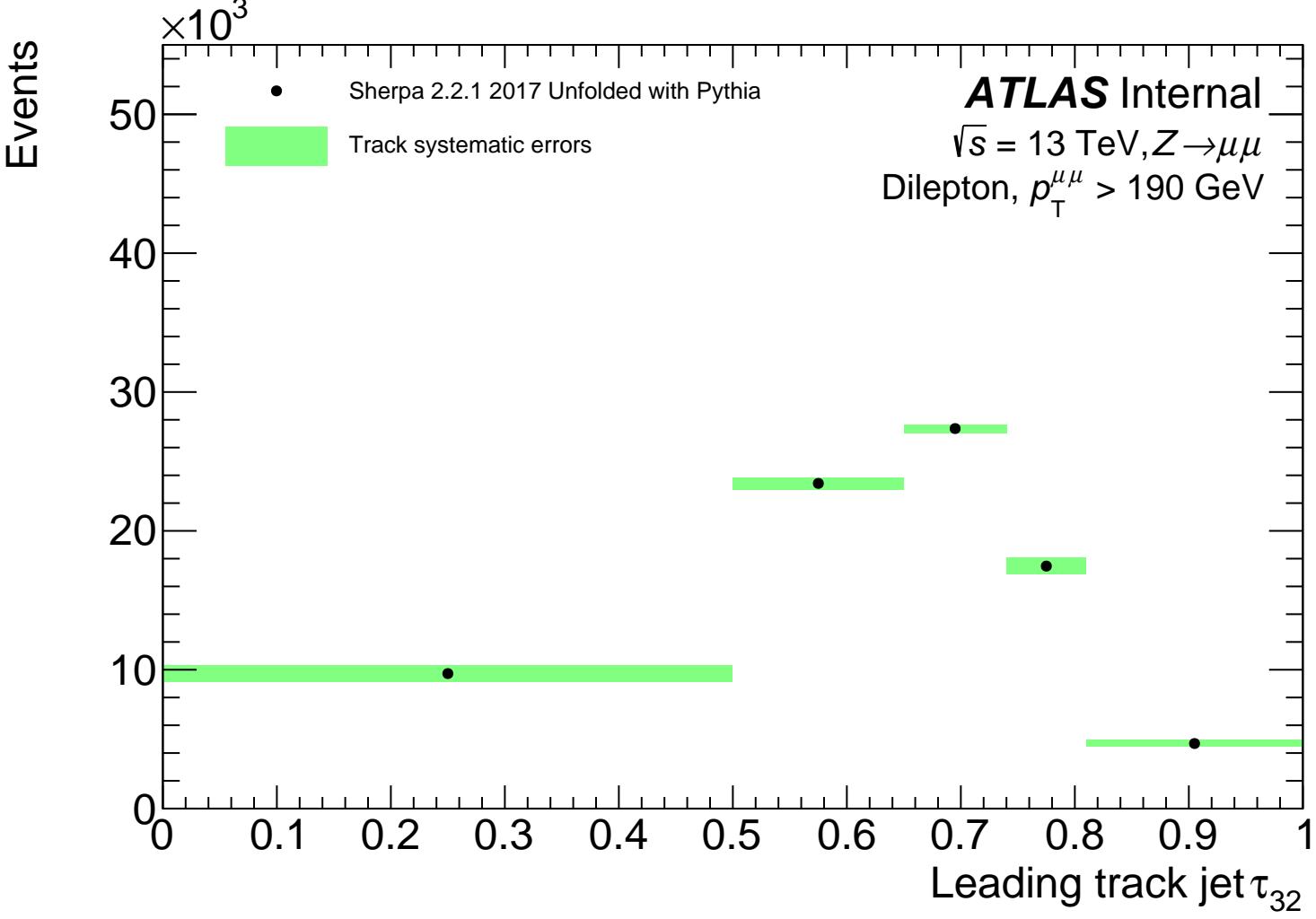
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

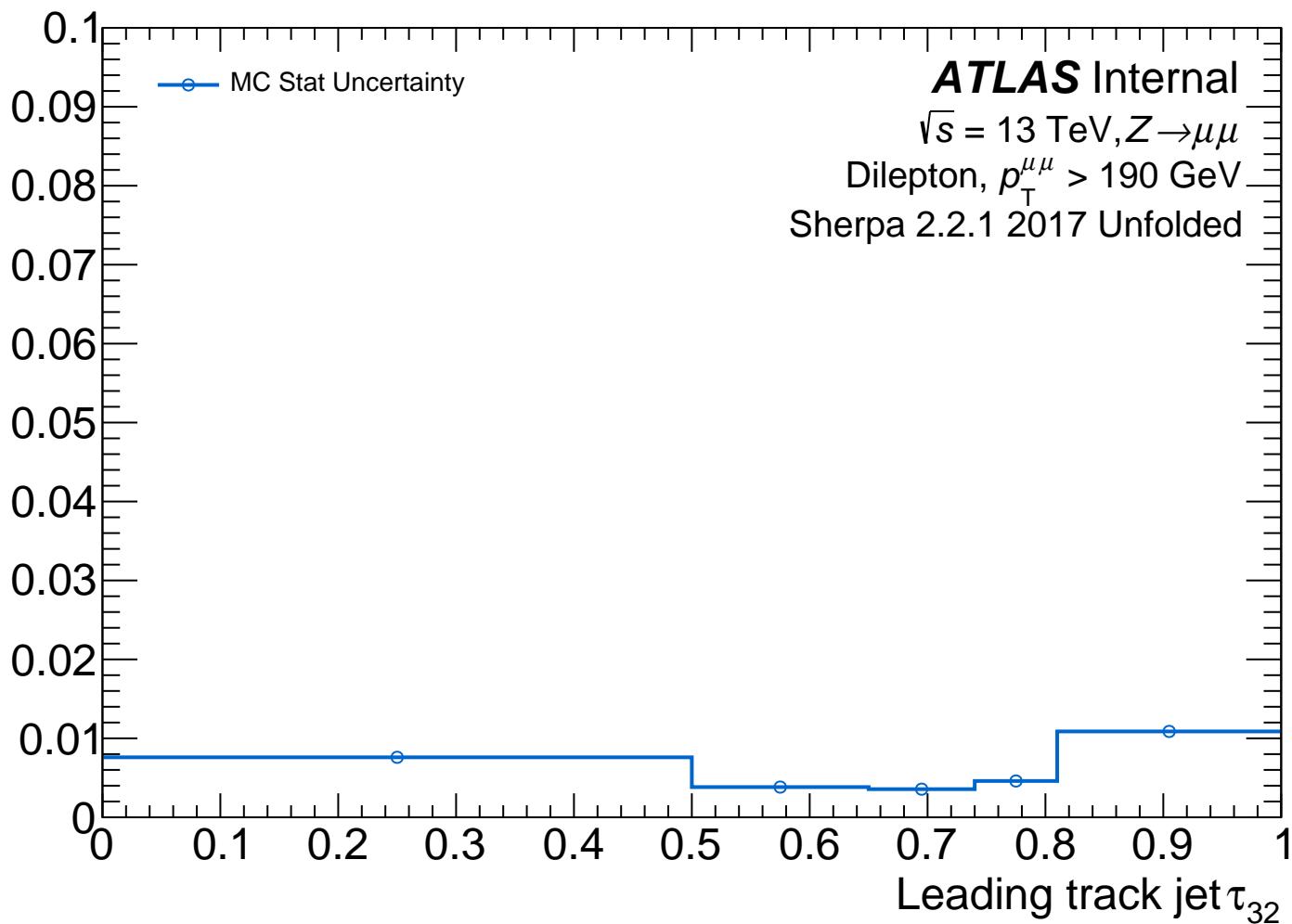
Sherpa 2.2.1 2017 Unfolded

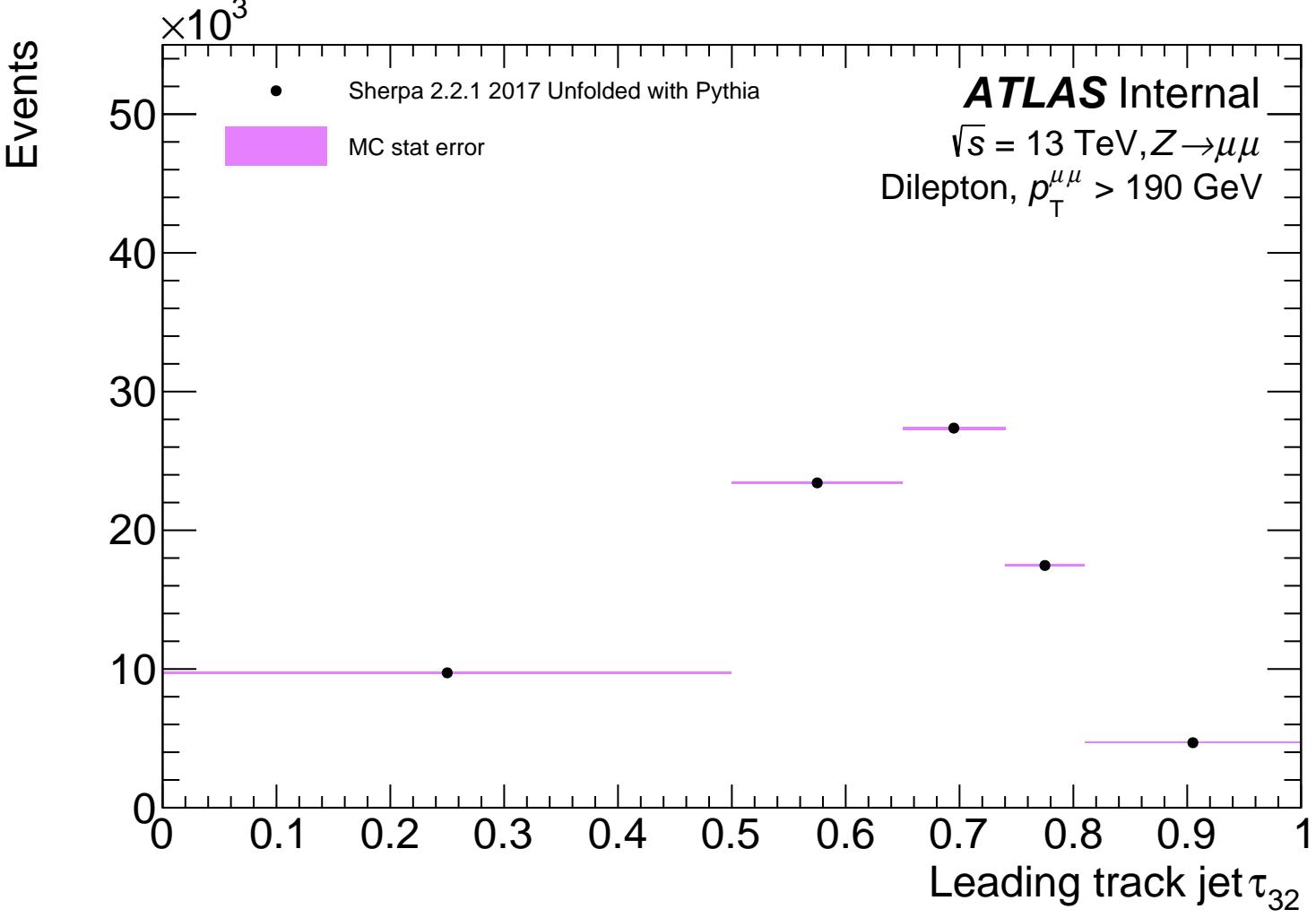


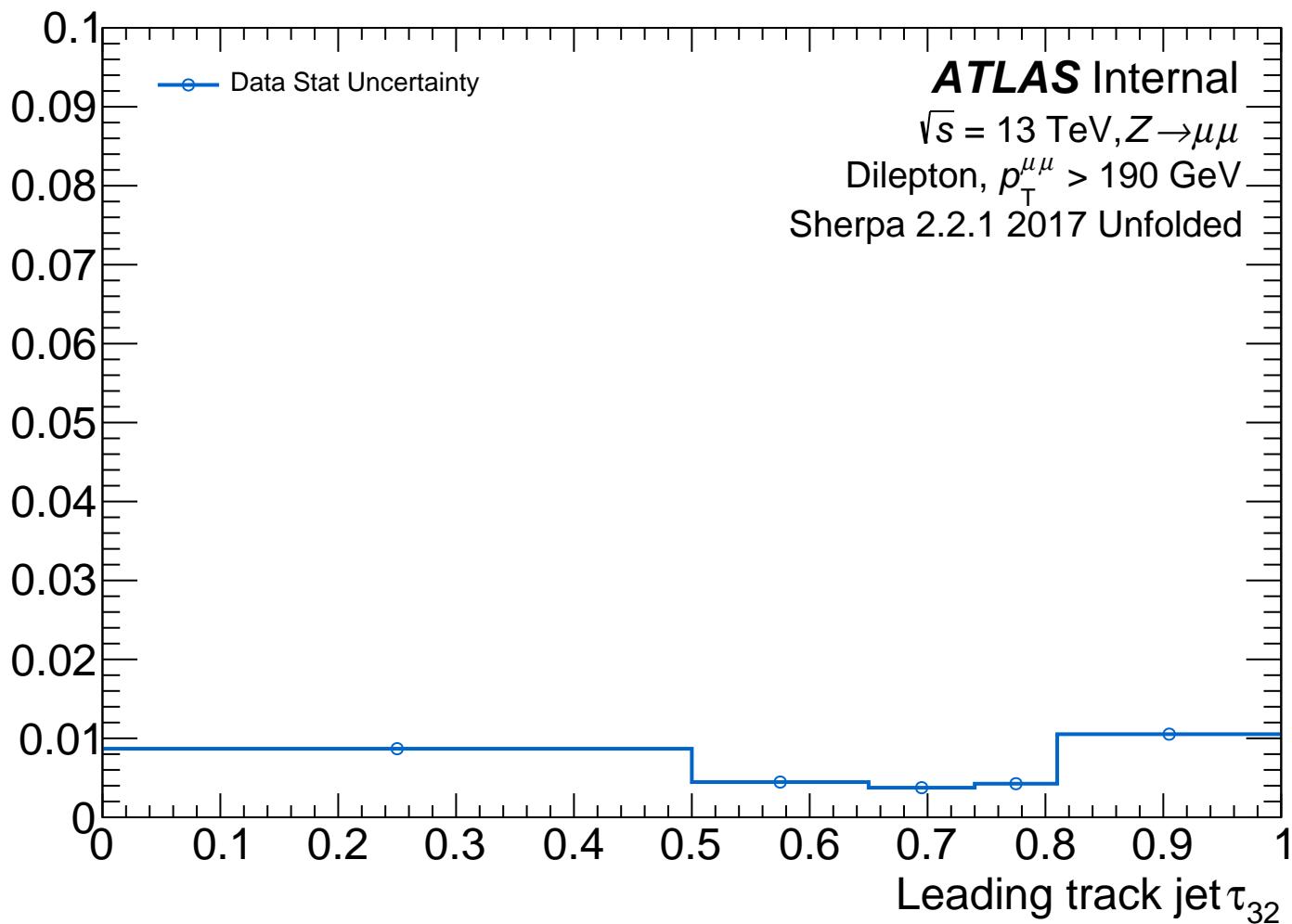


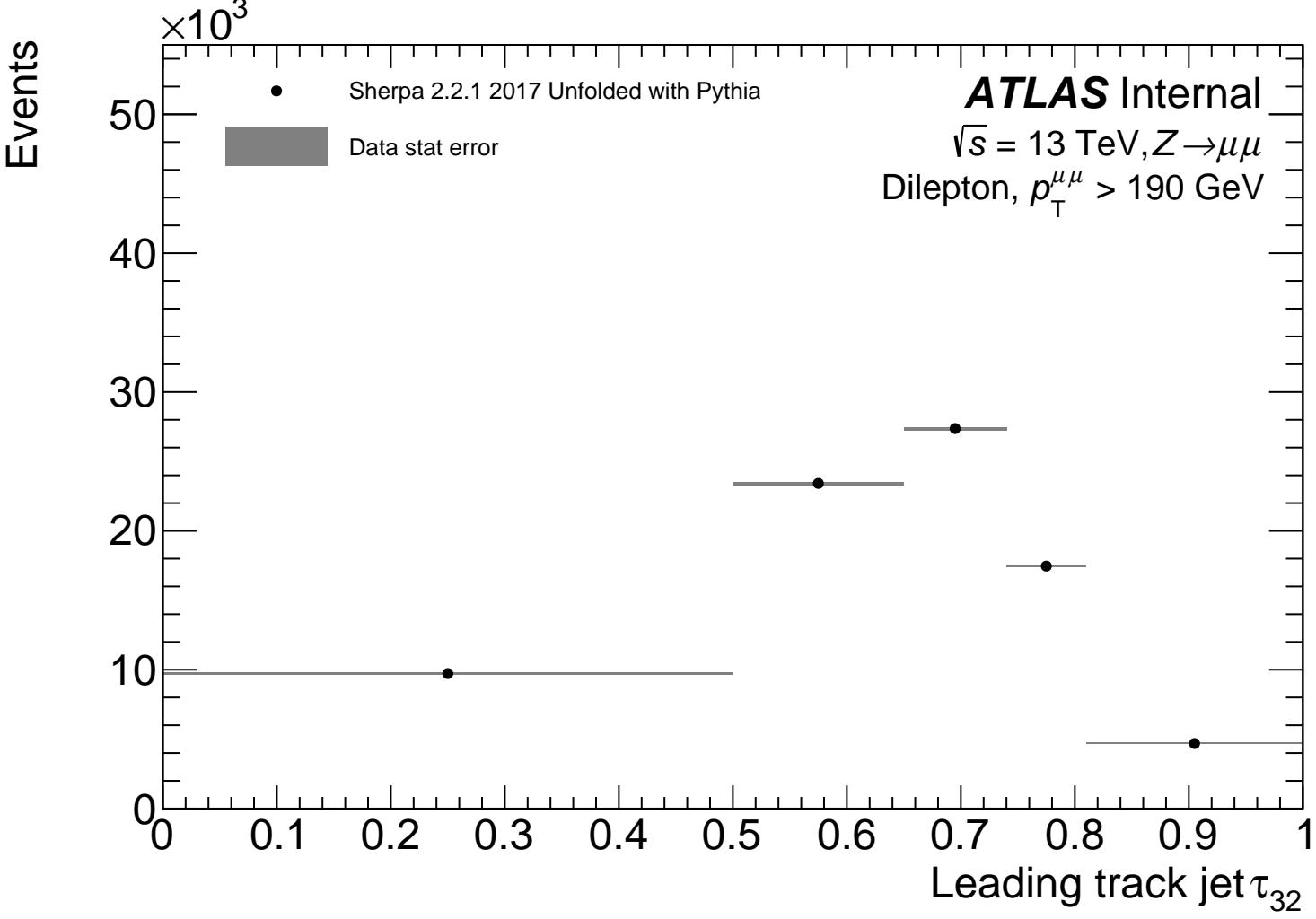


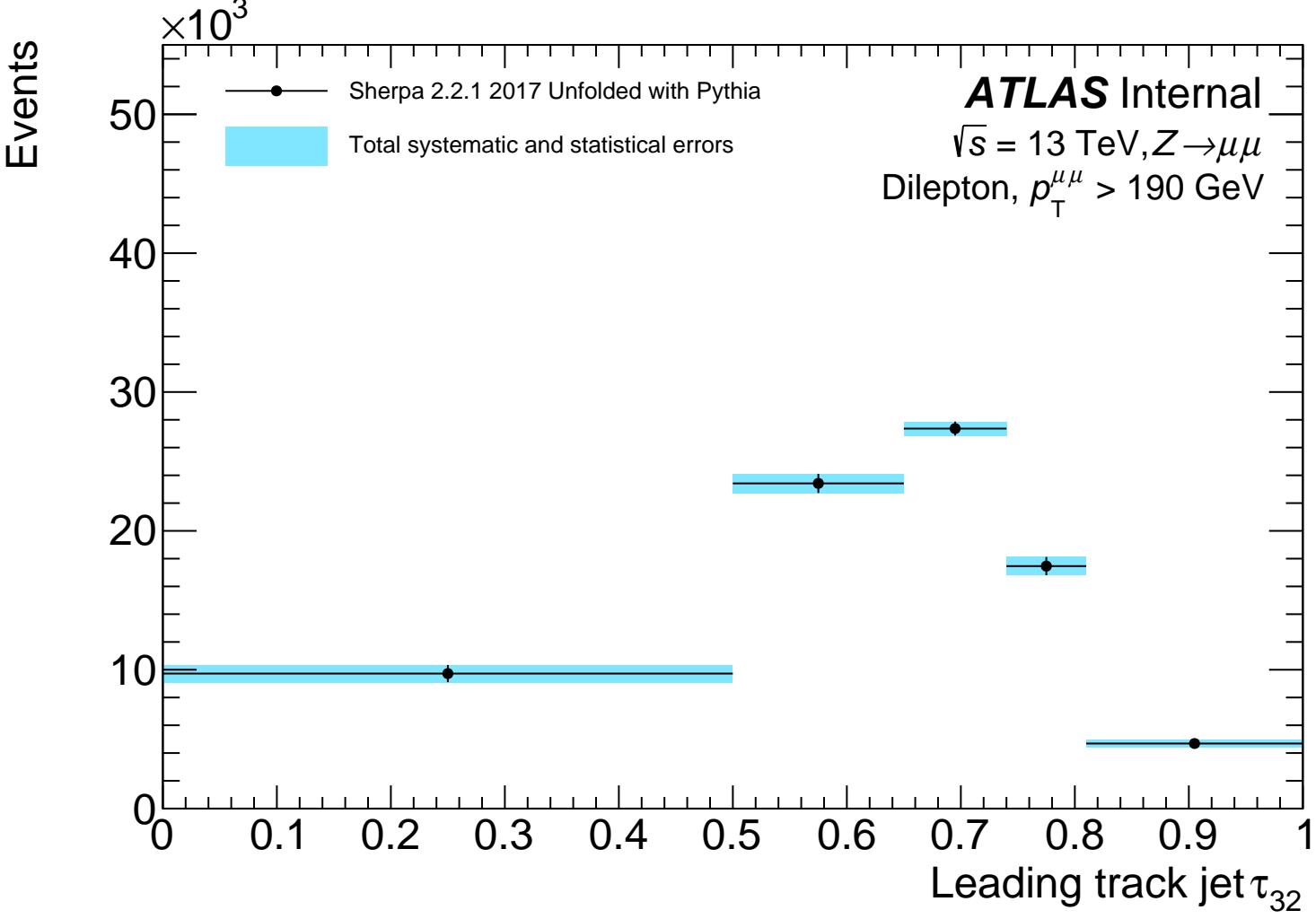


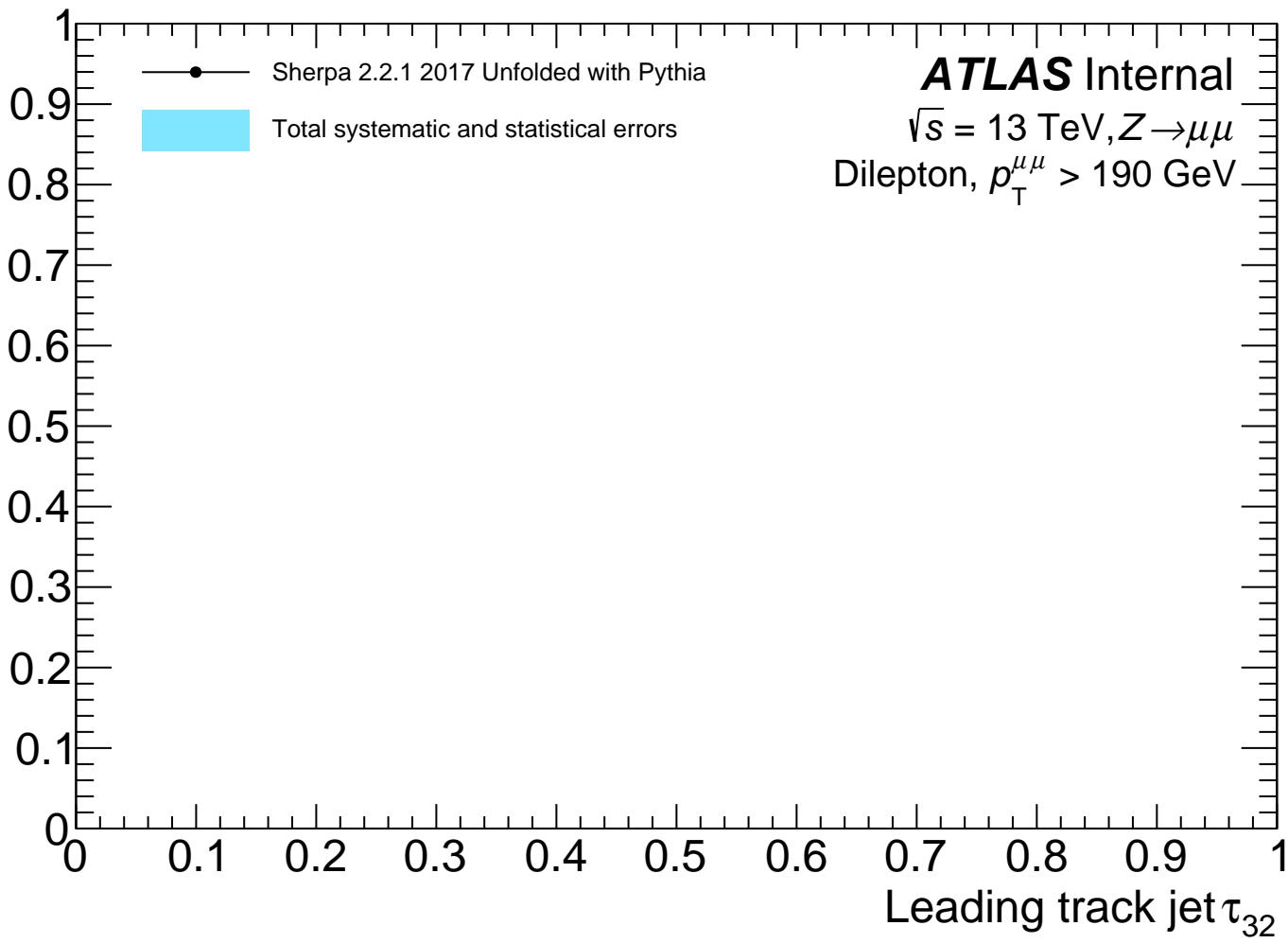










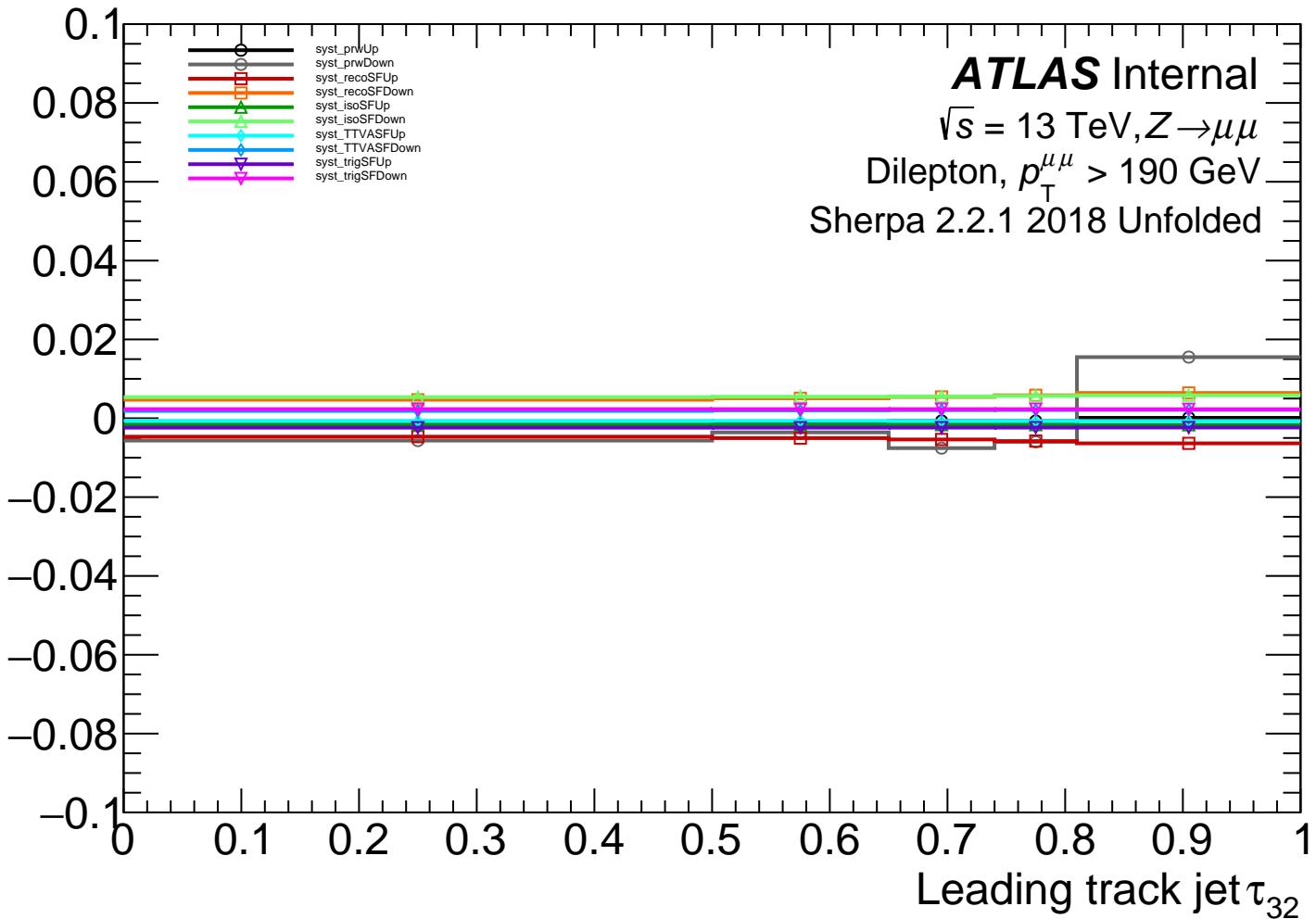


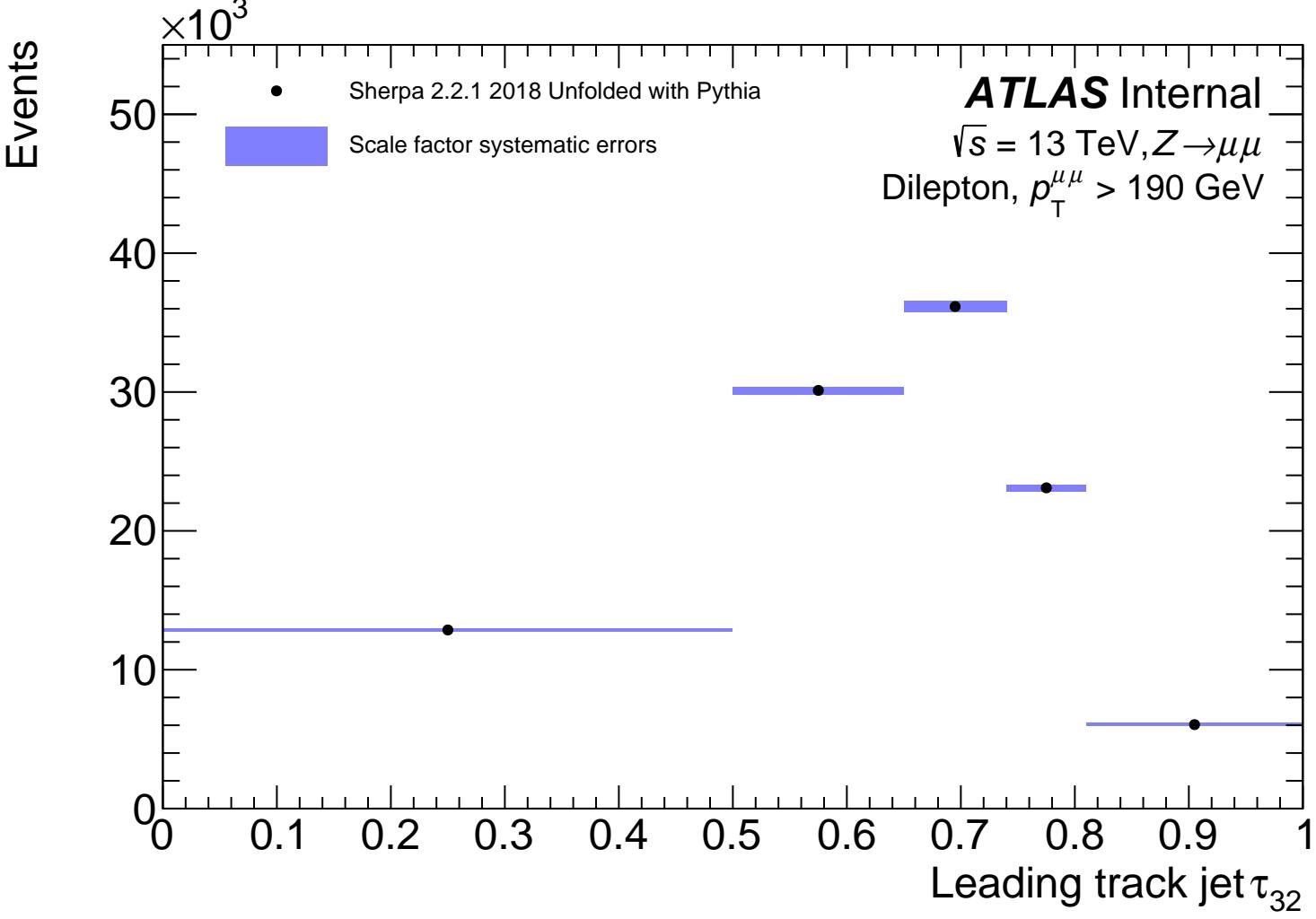
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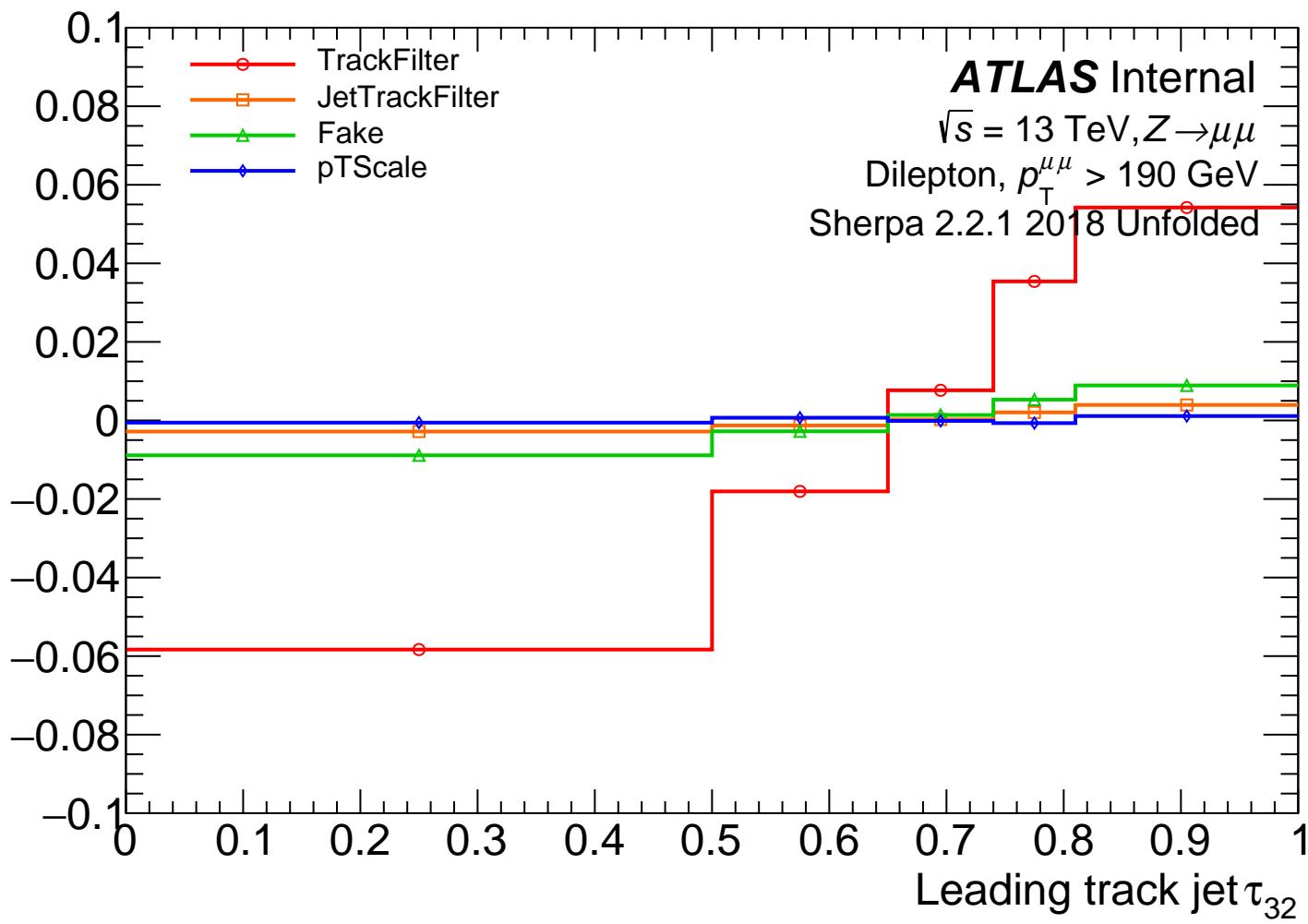
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

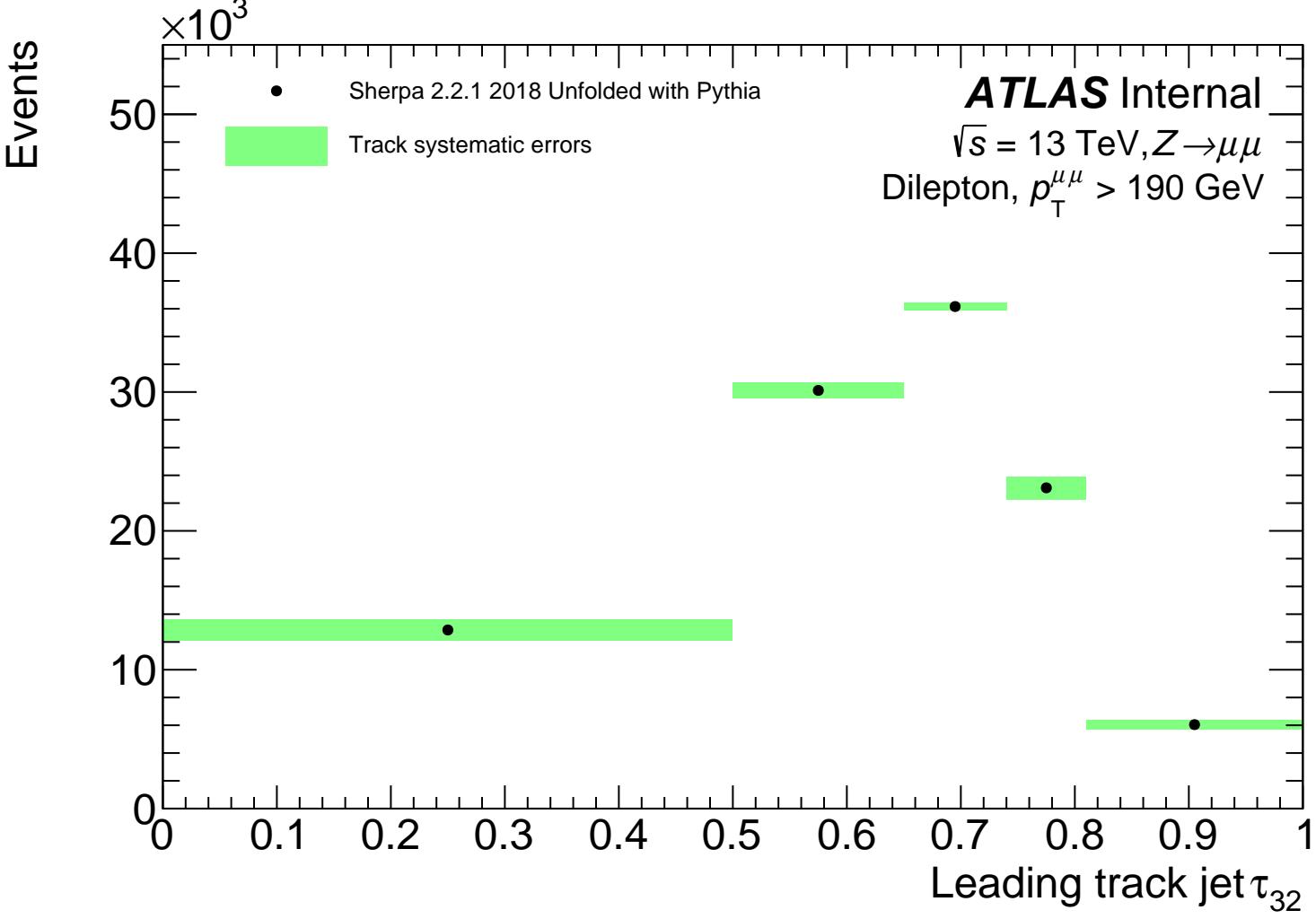
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

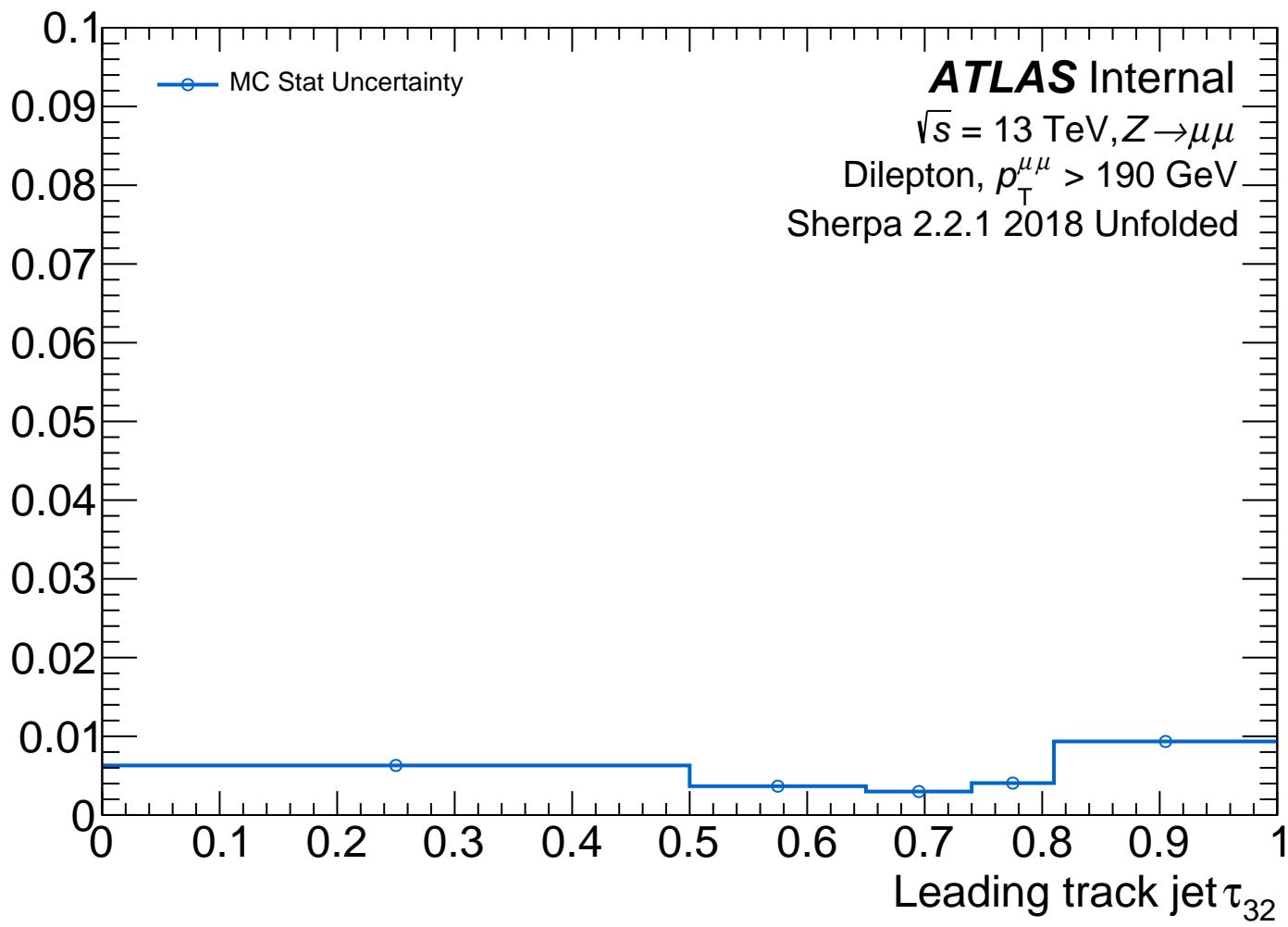
Sherpa 2.2.1 2018 Unfolded

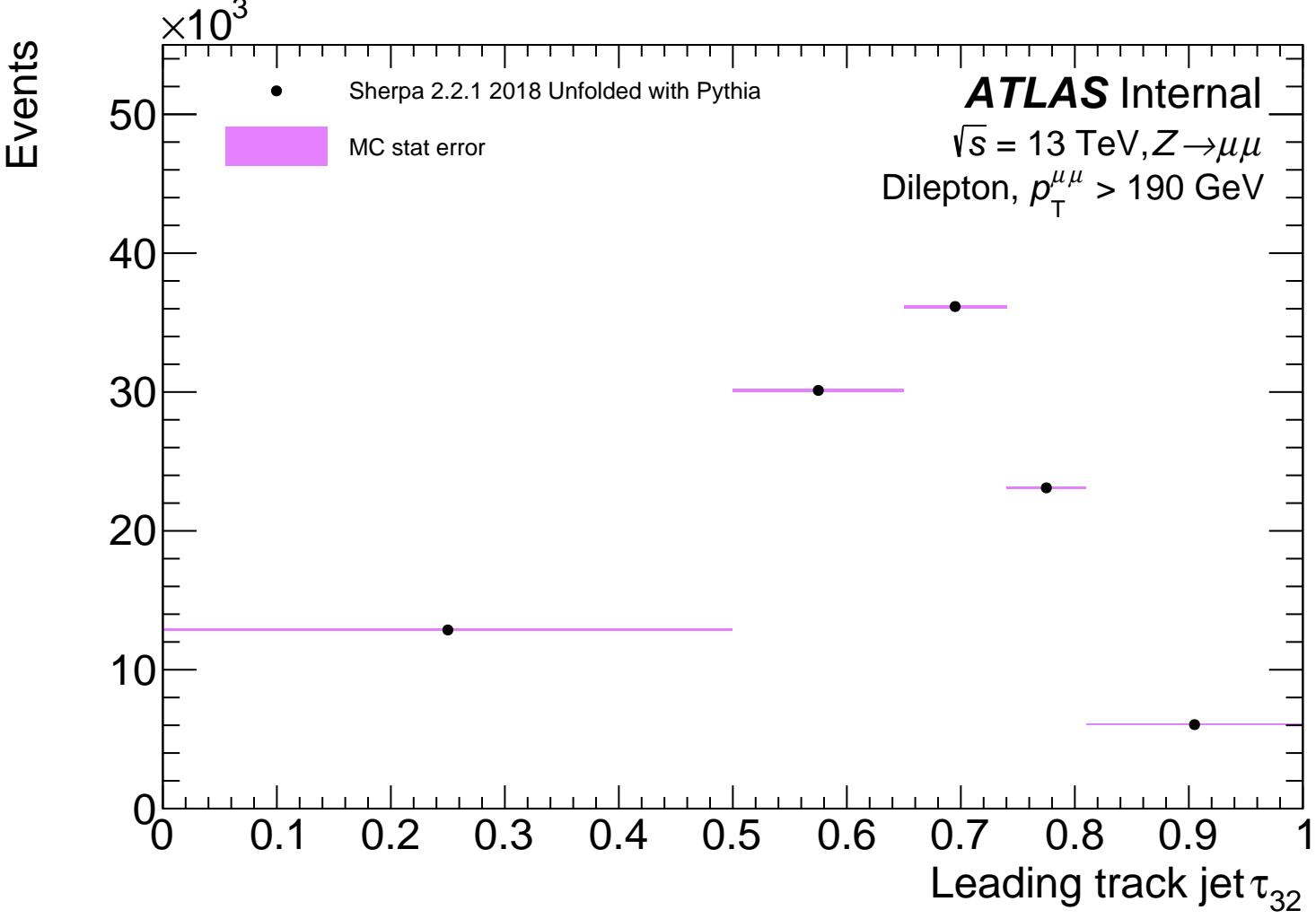


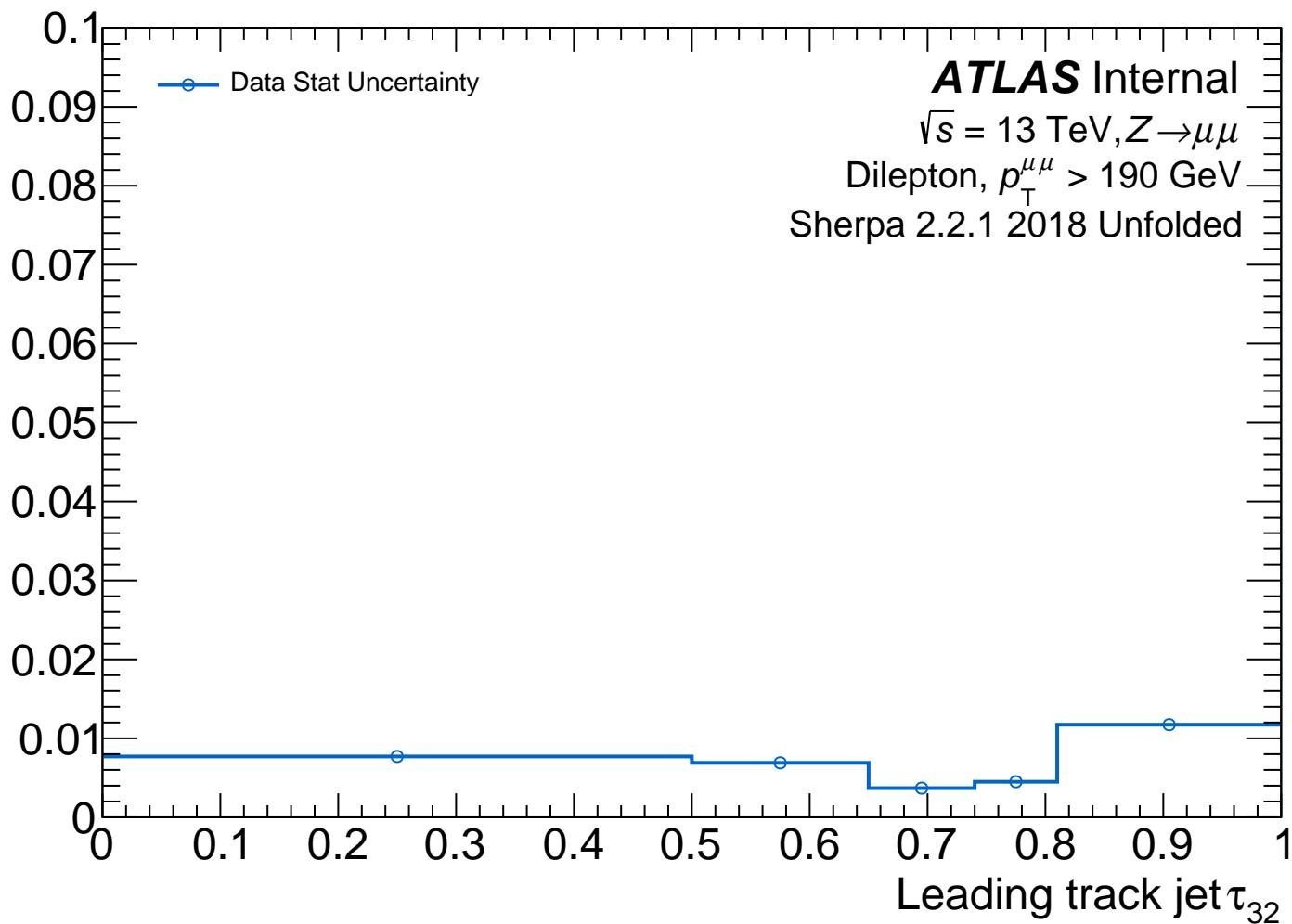


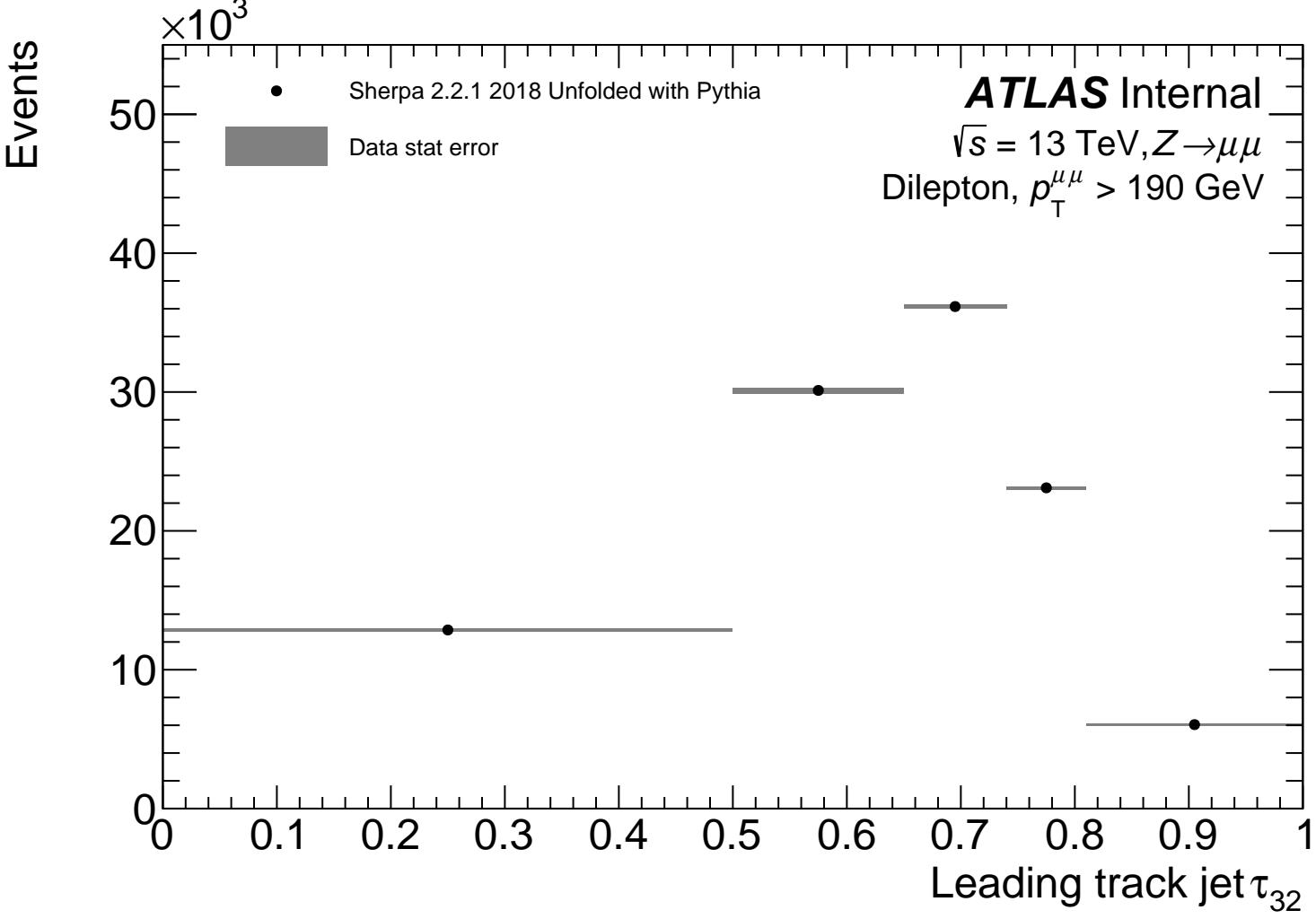


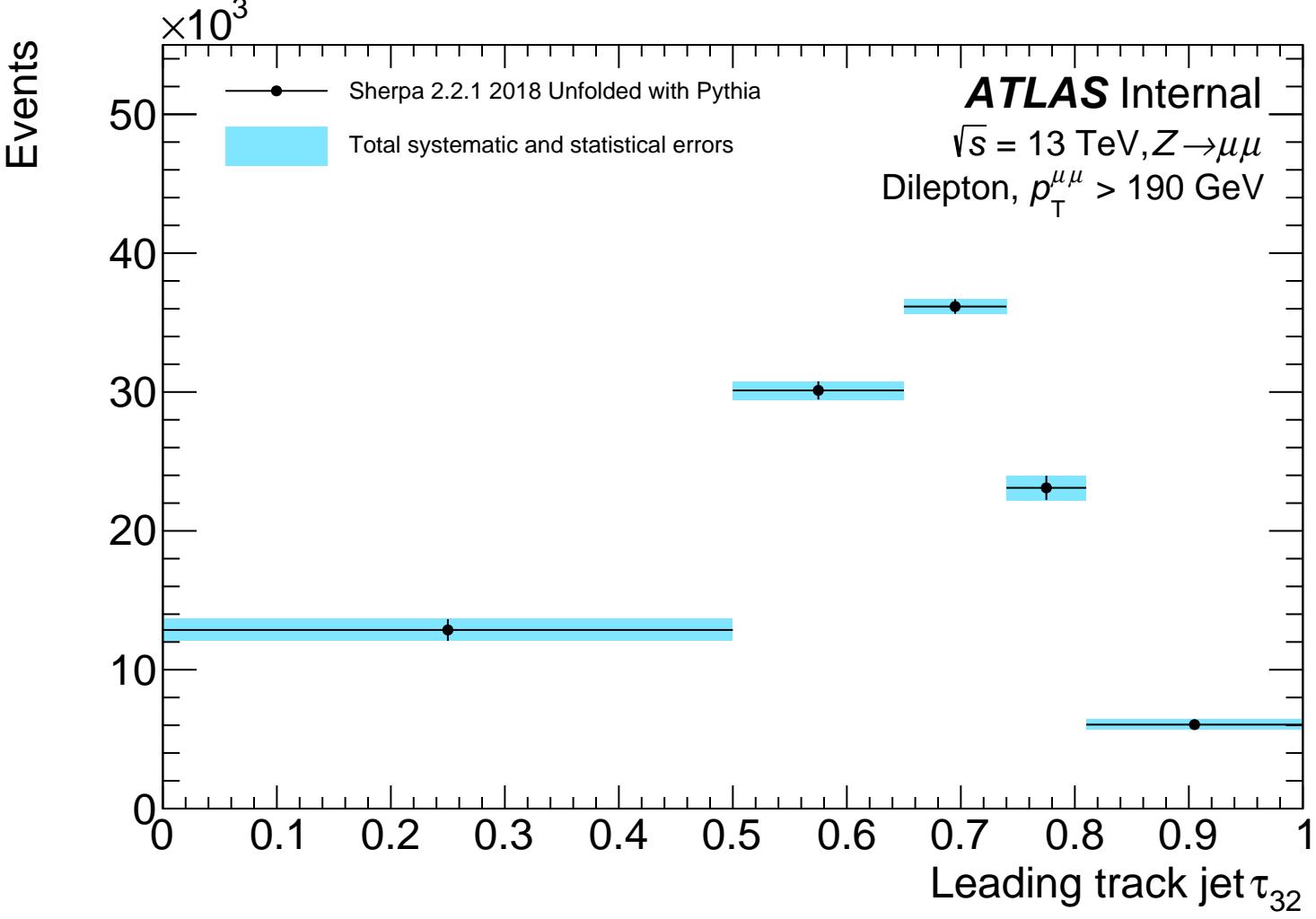


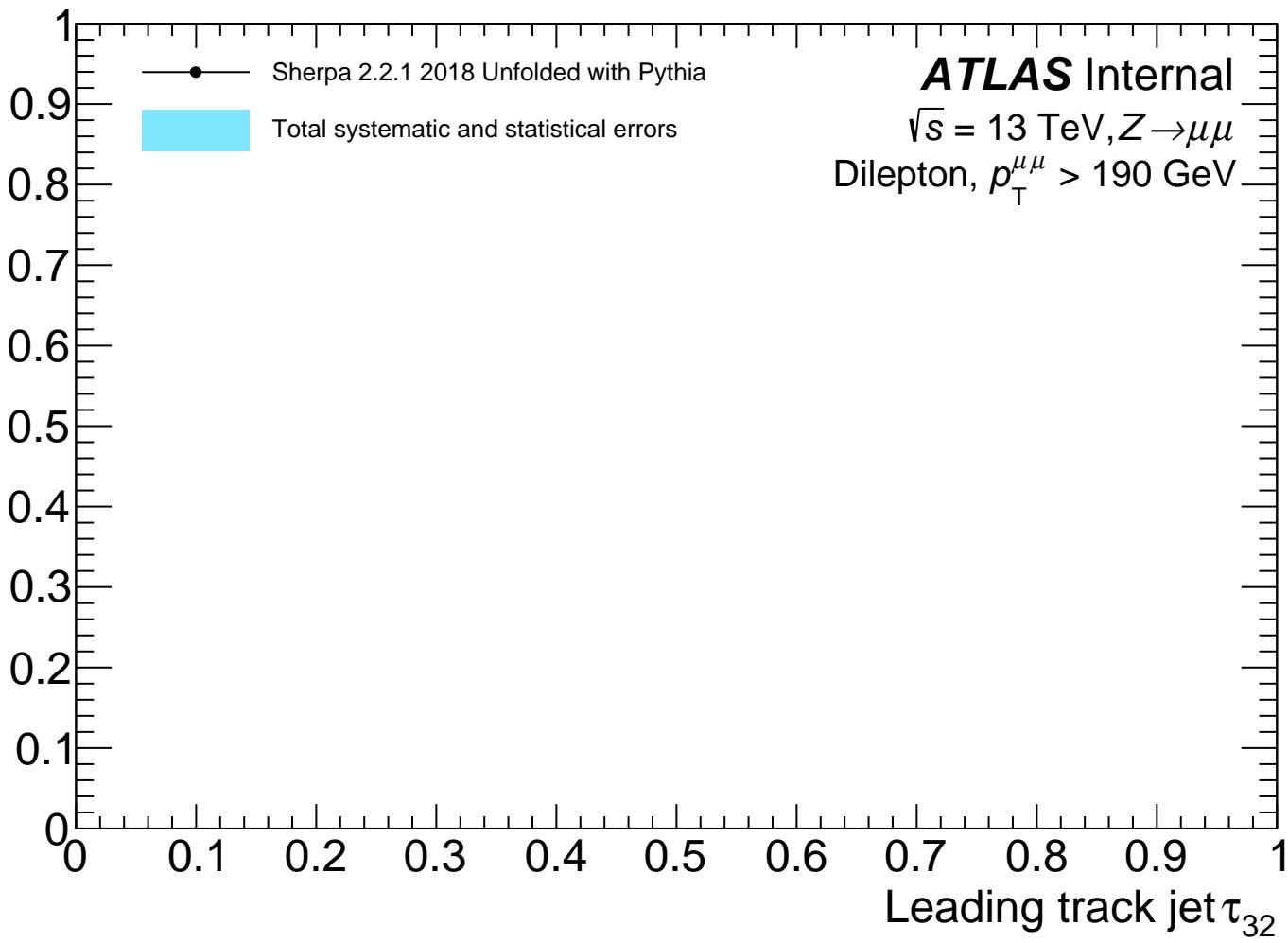


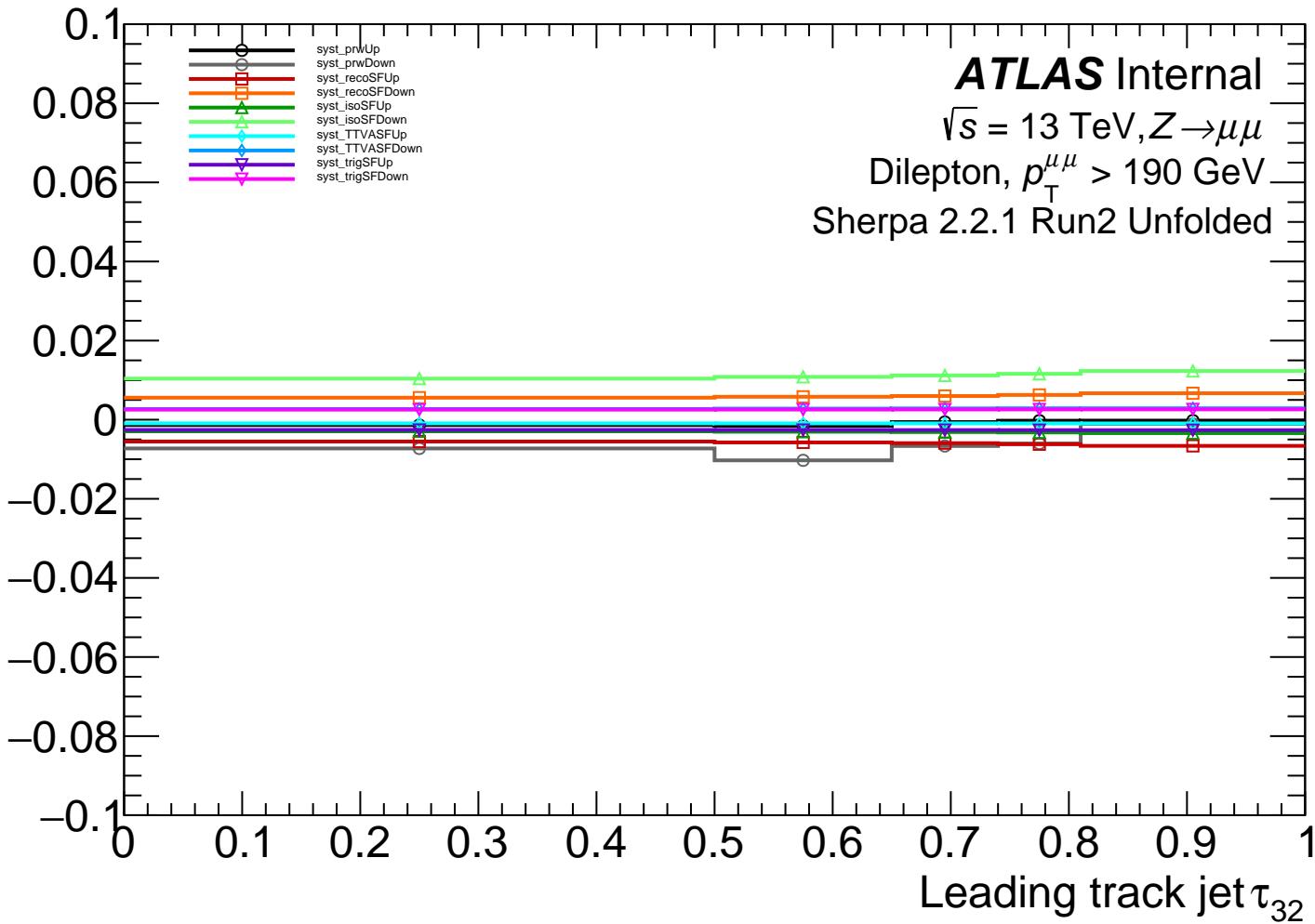


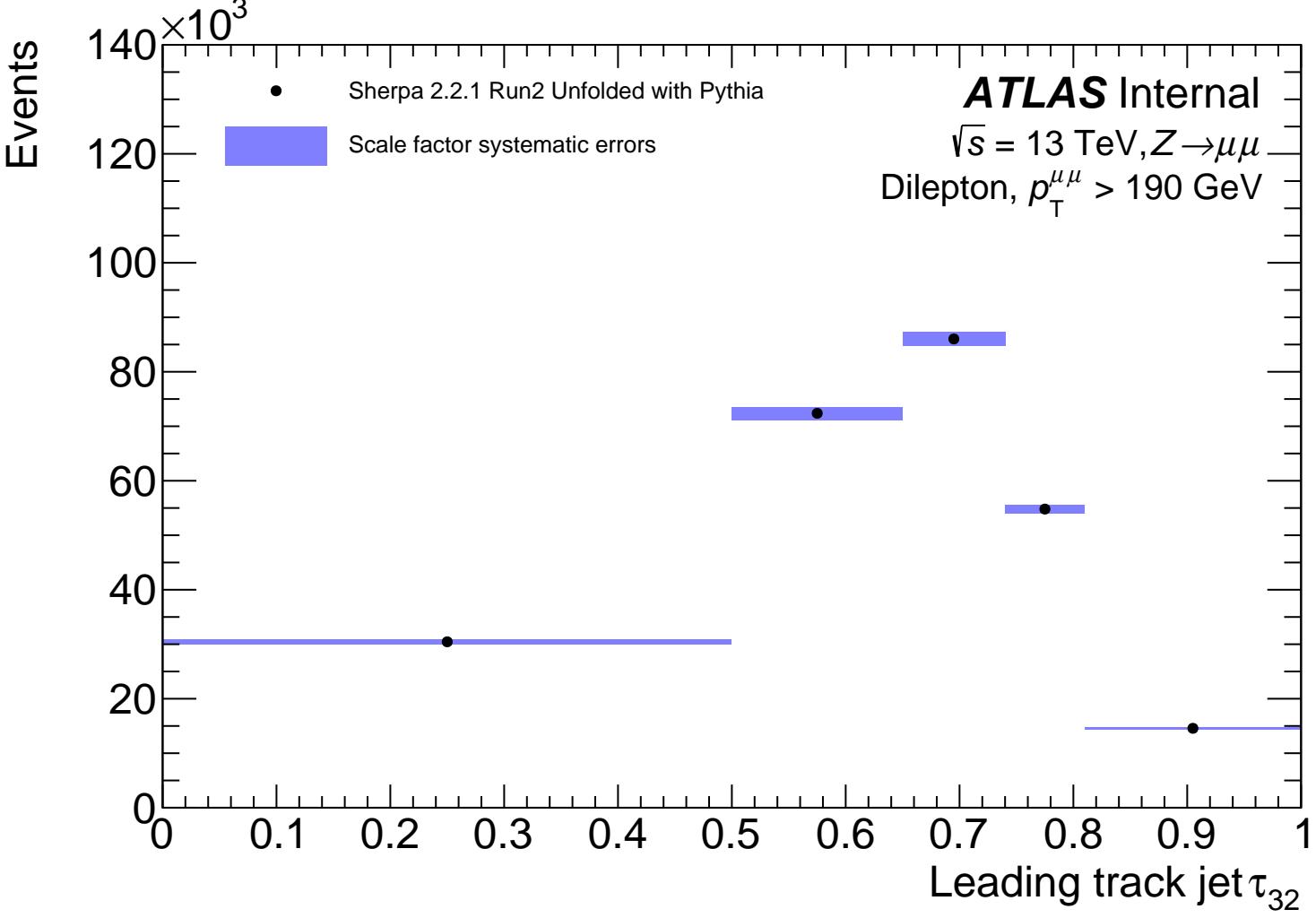


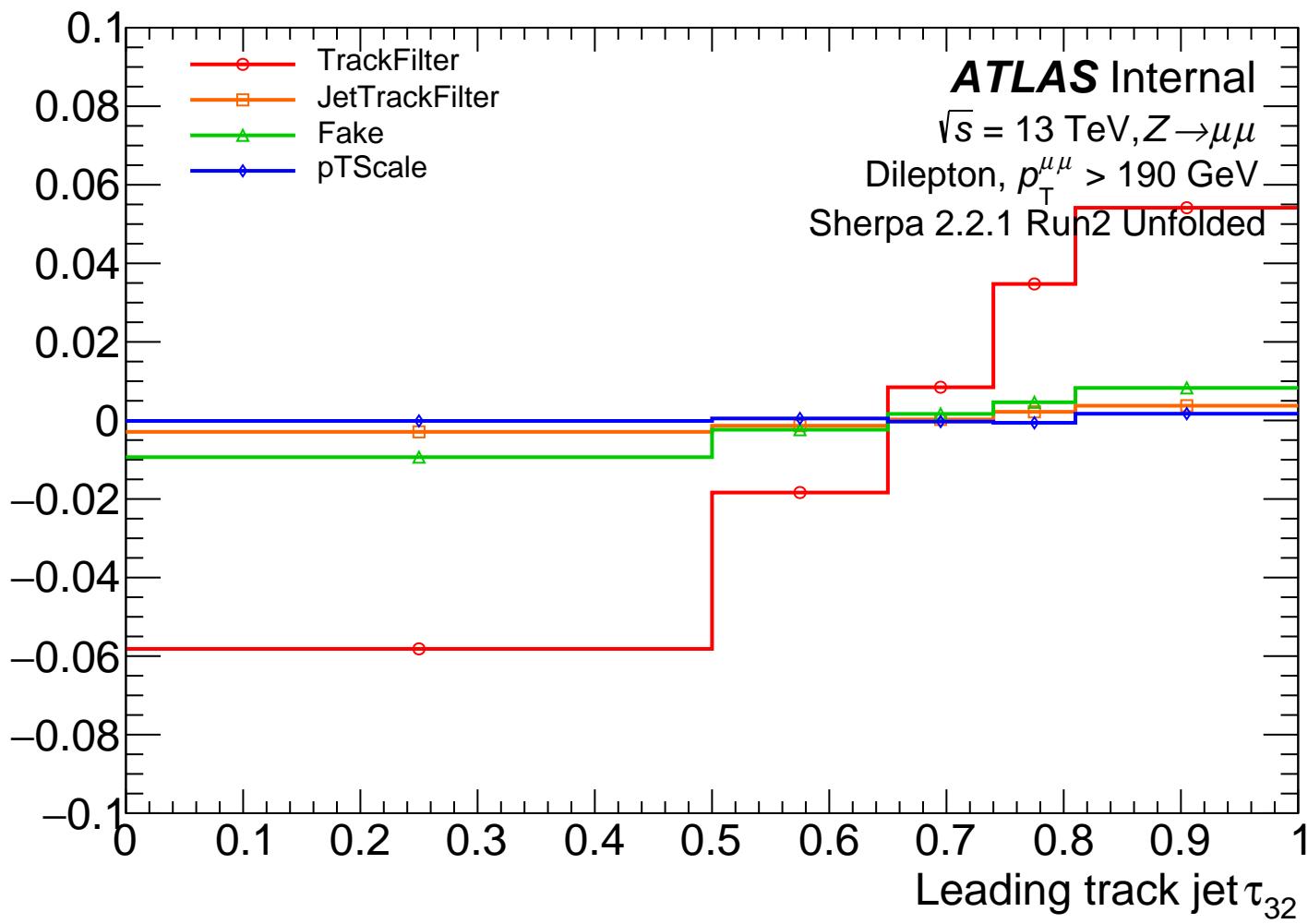


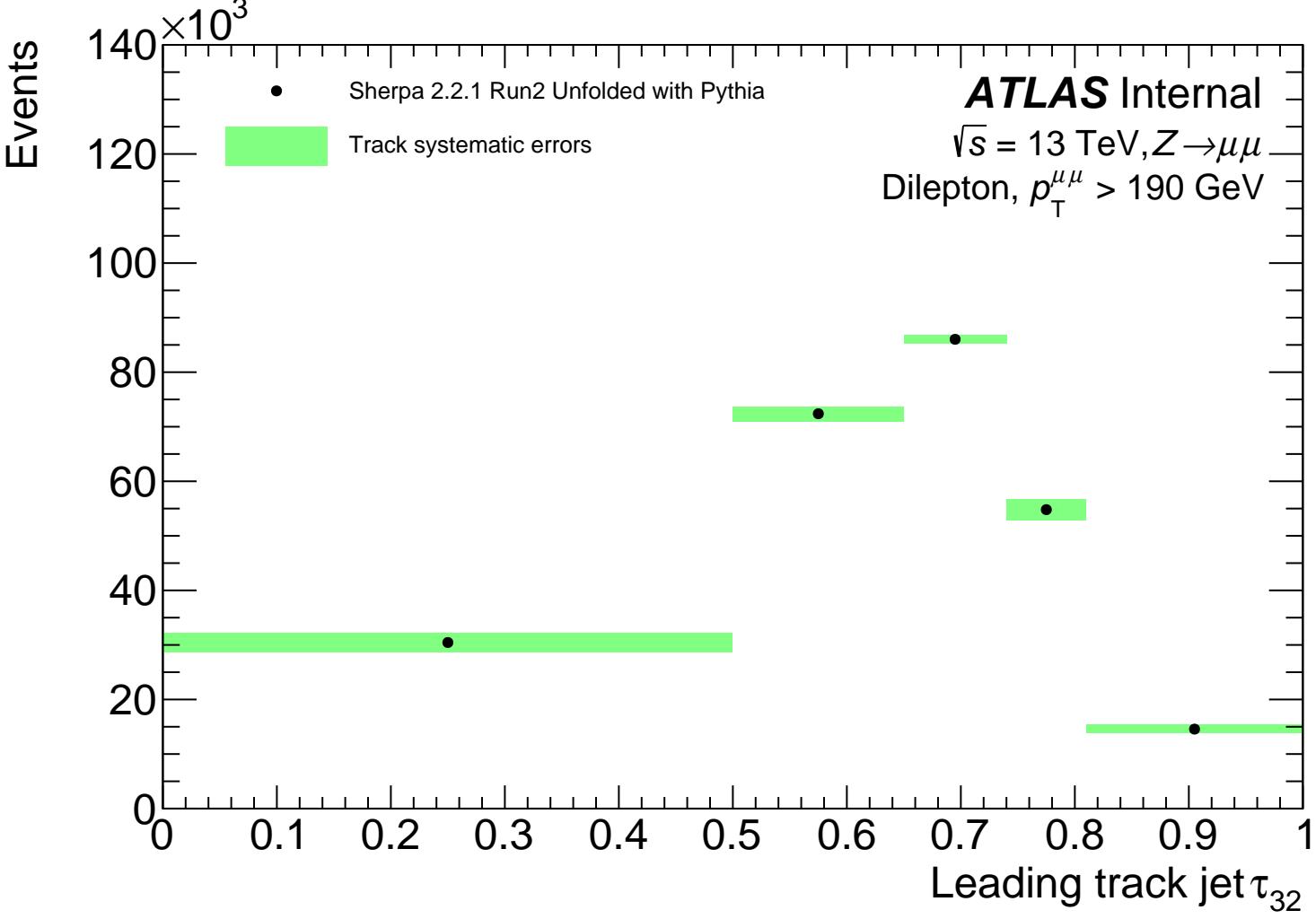


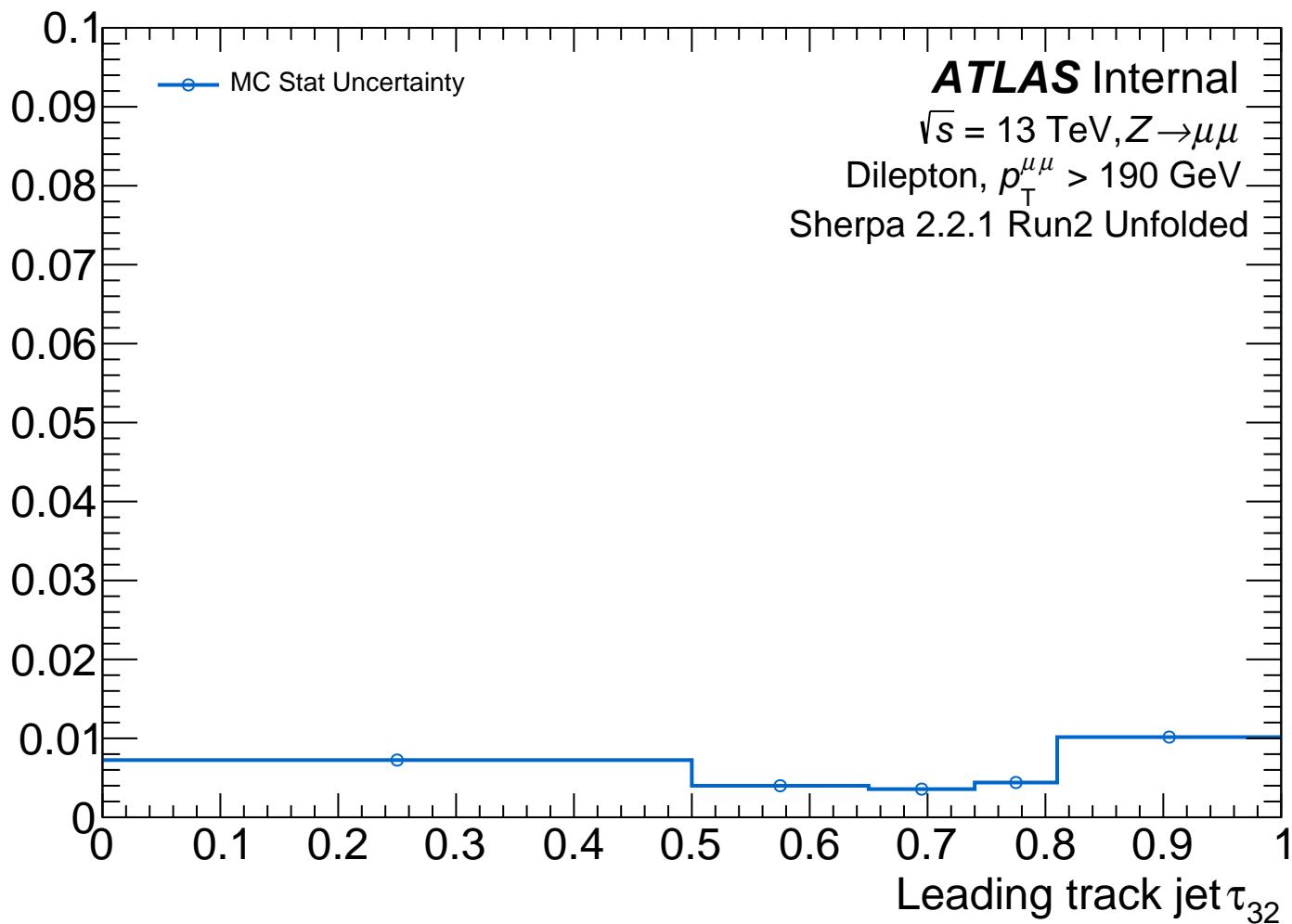


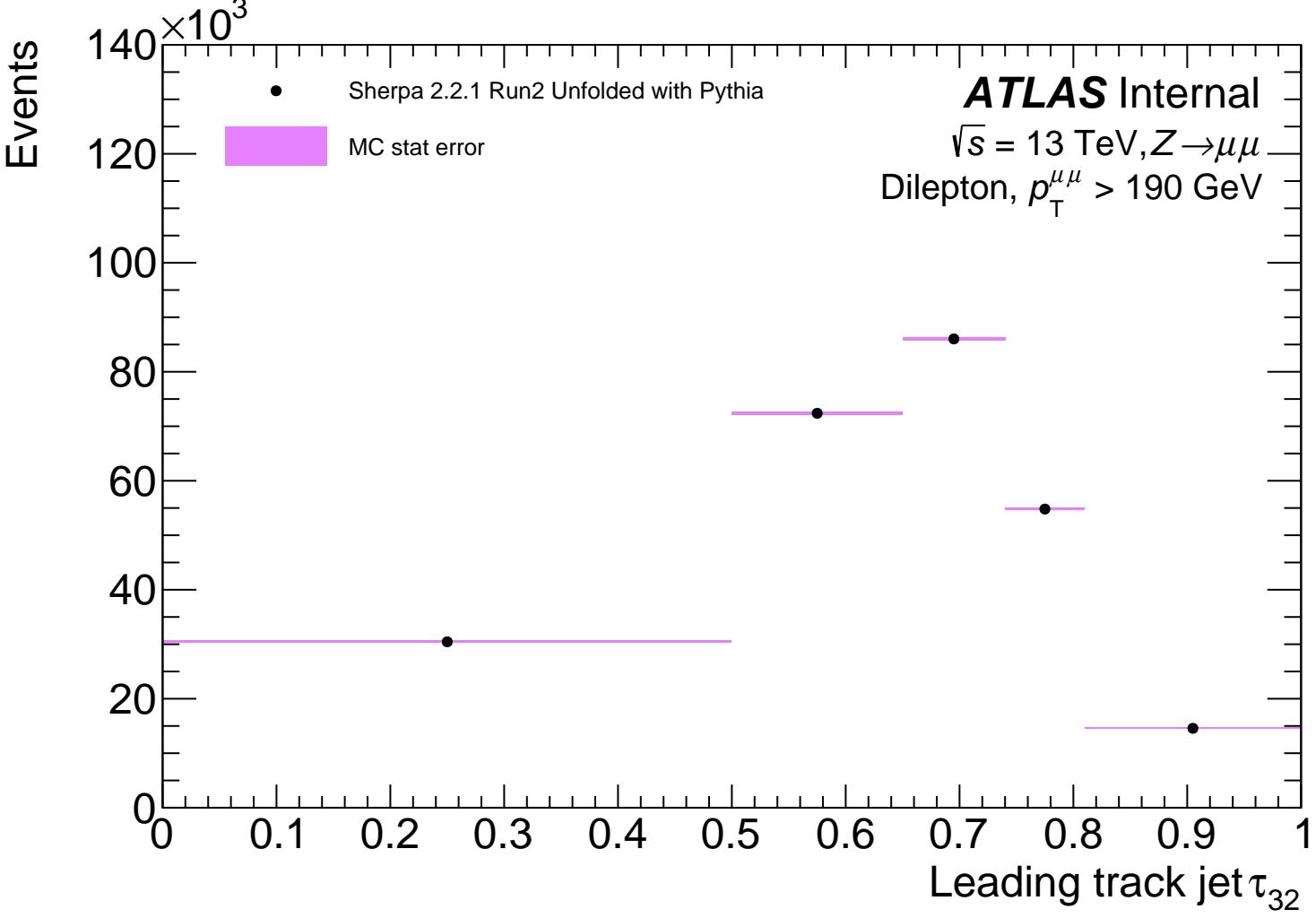


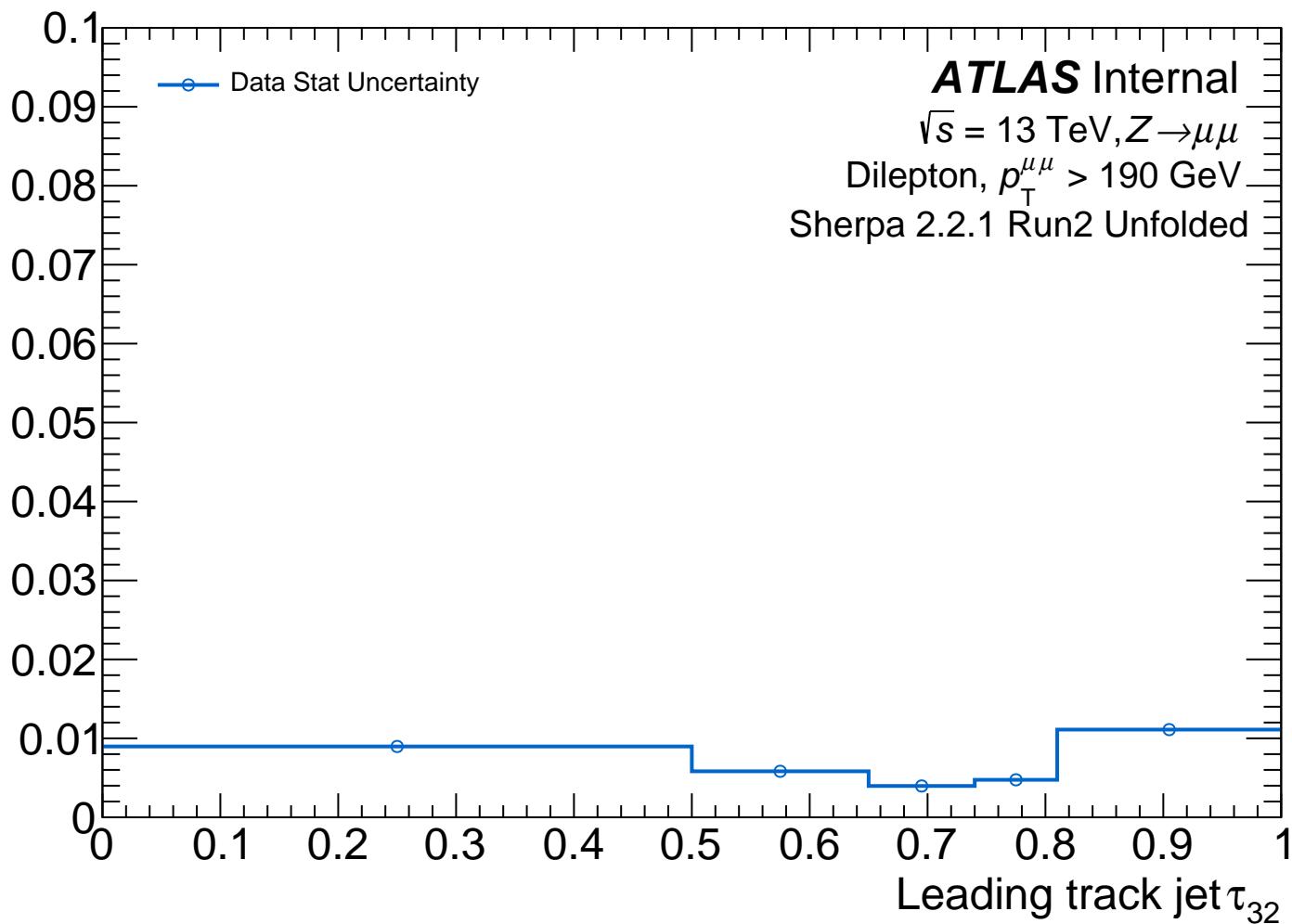


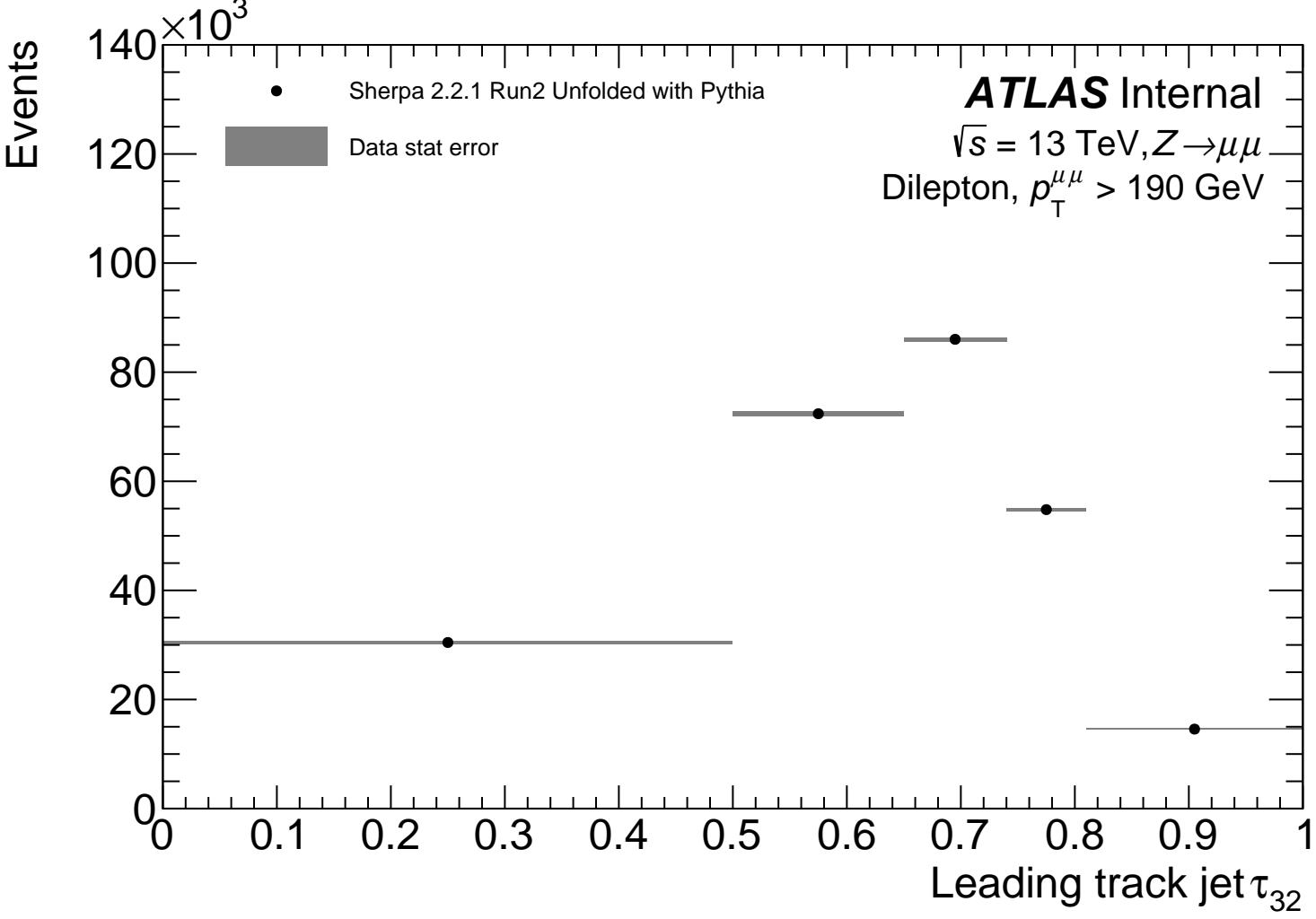


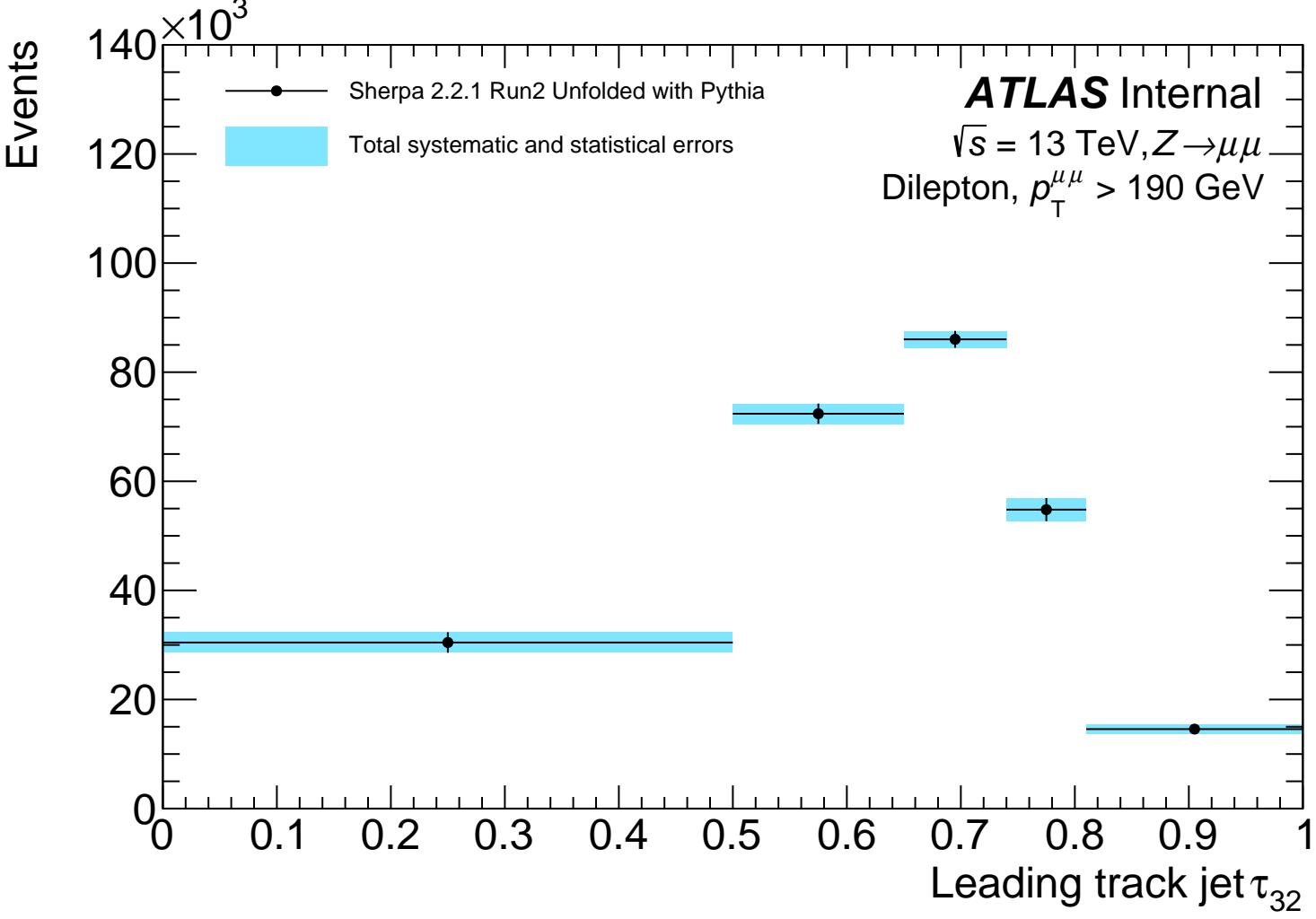


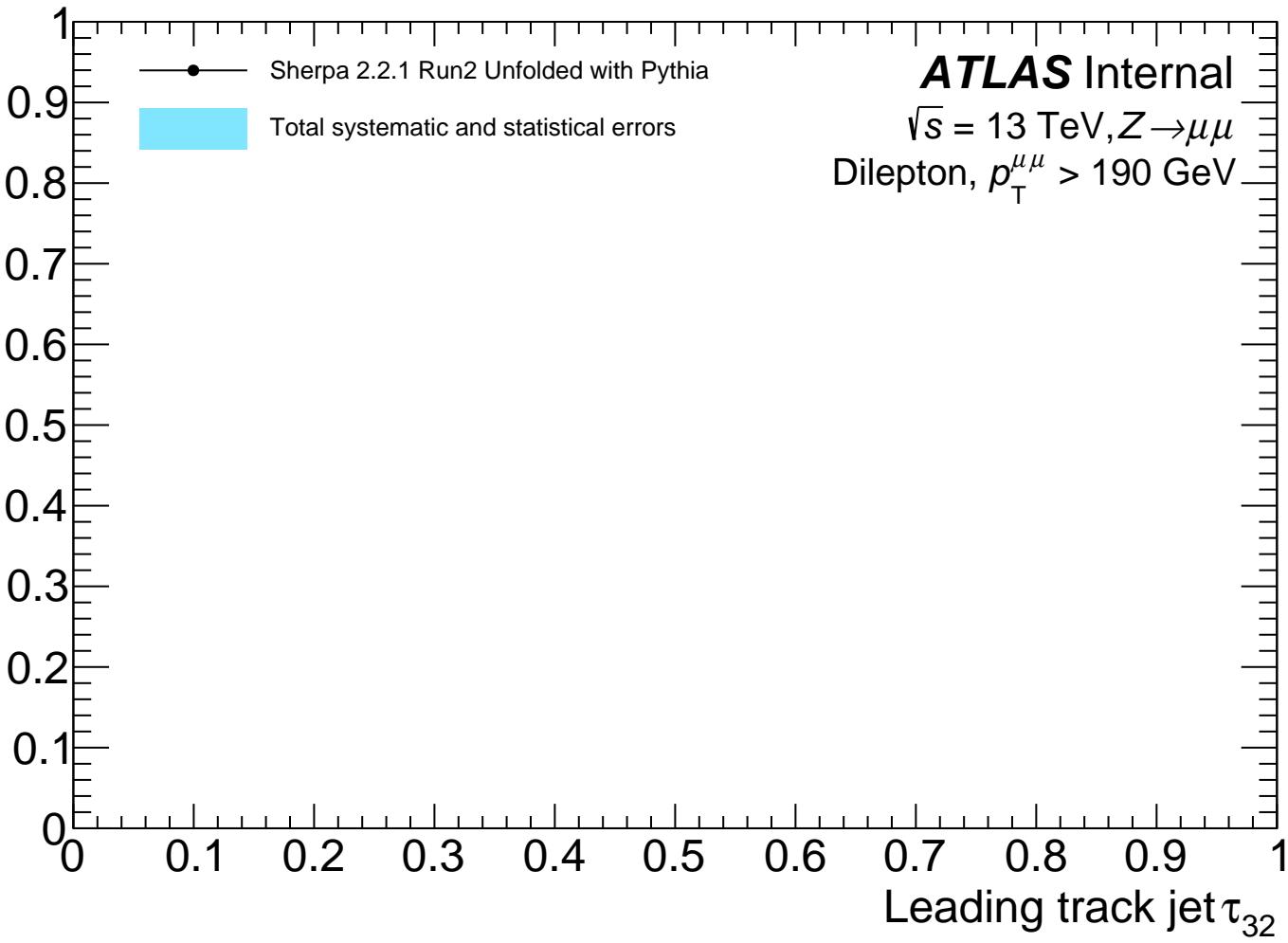










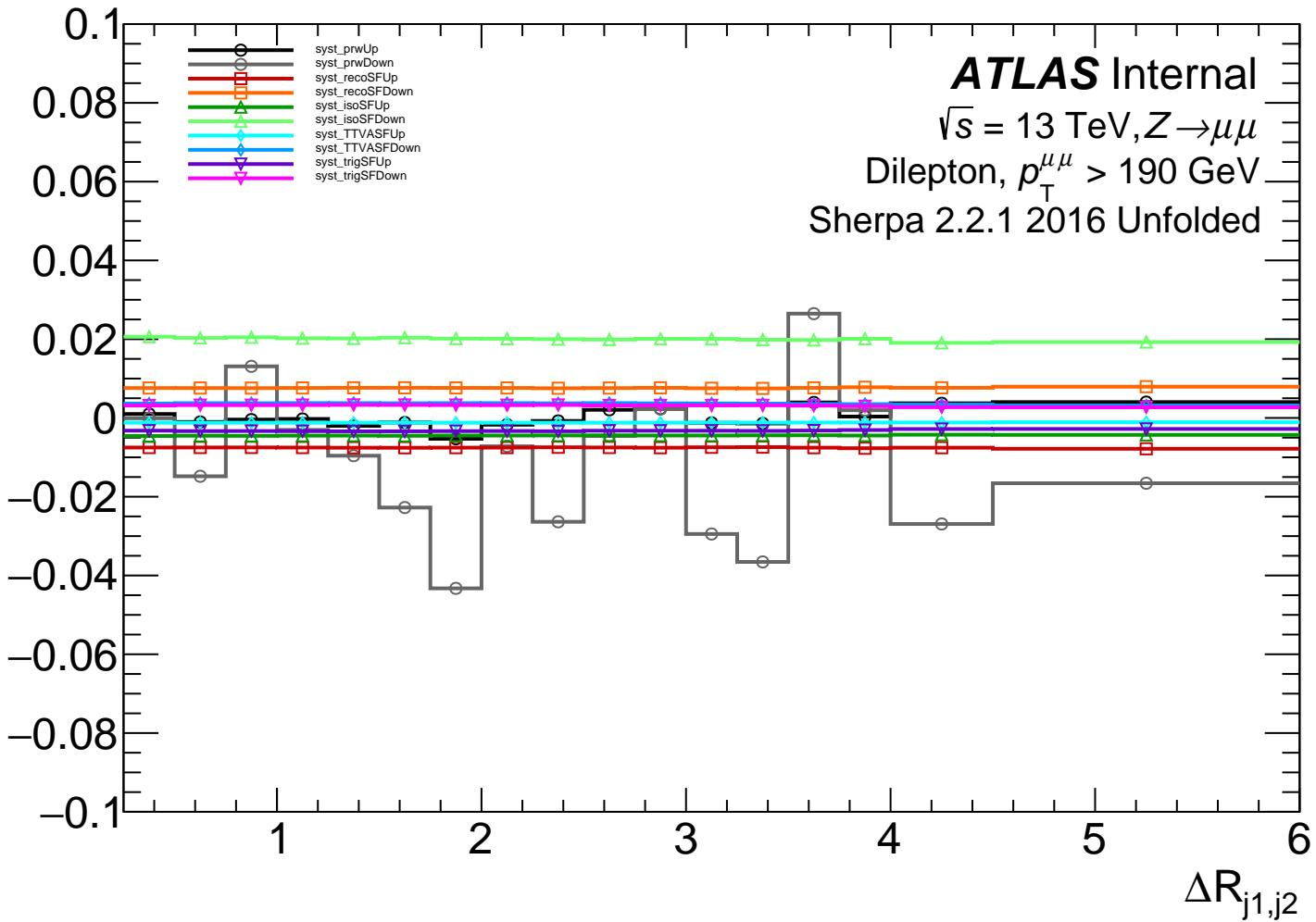


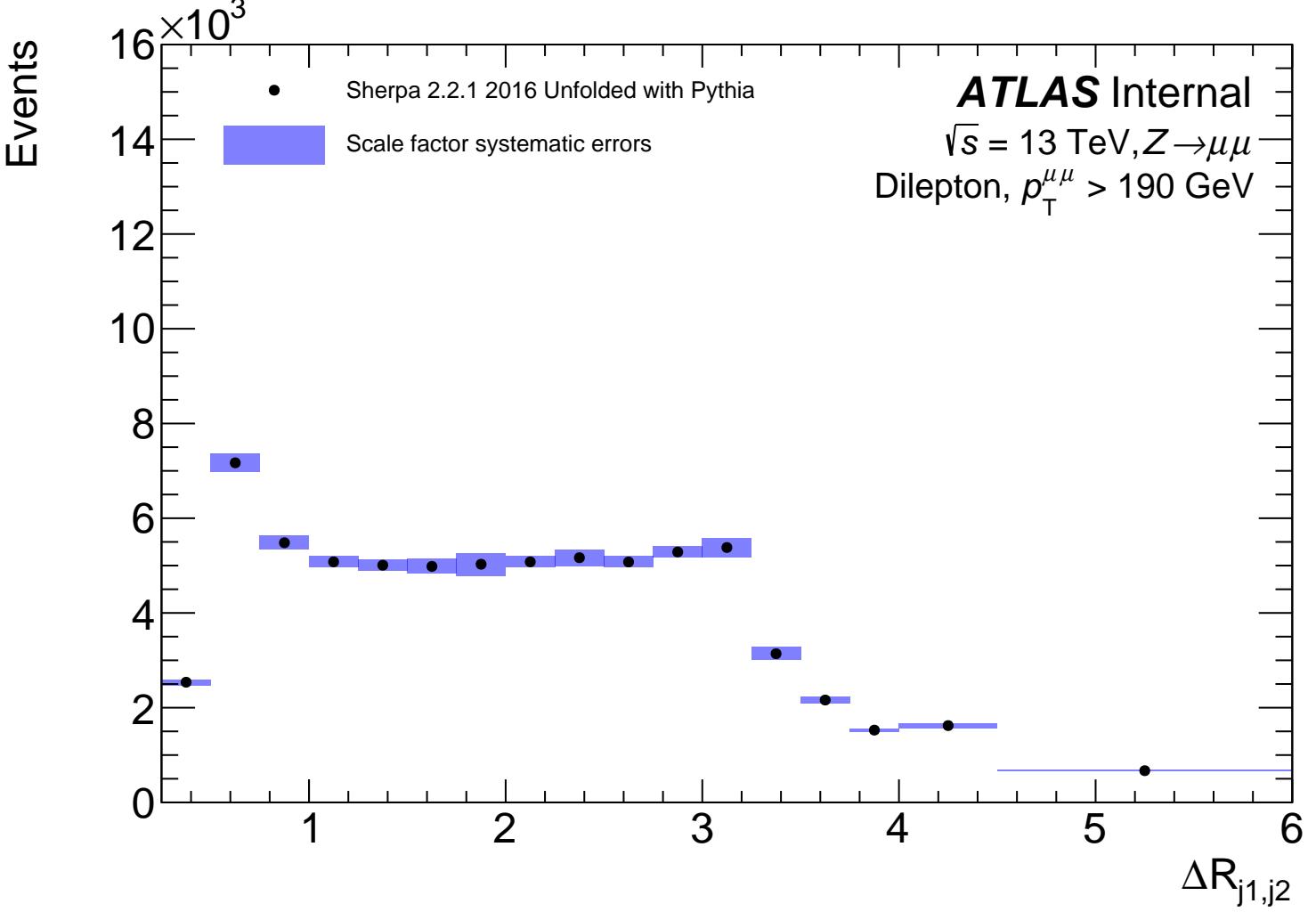
**ATLAS Internal**

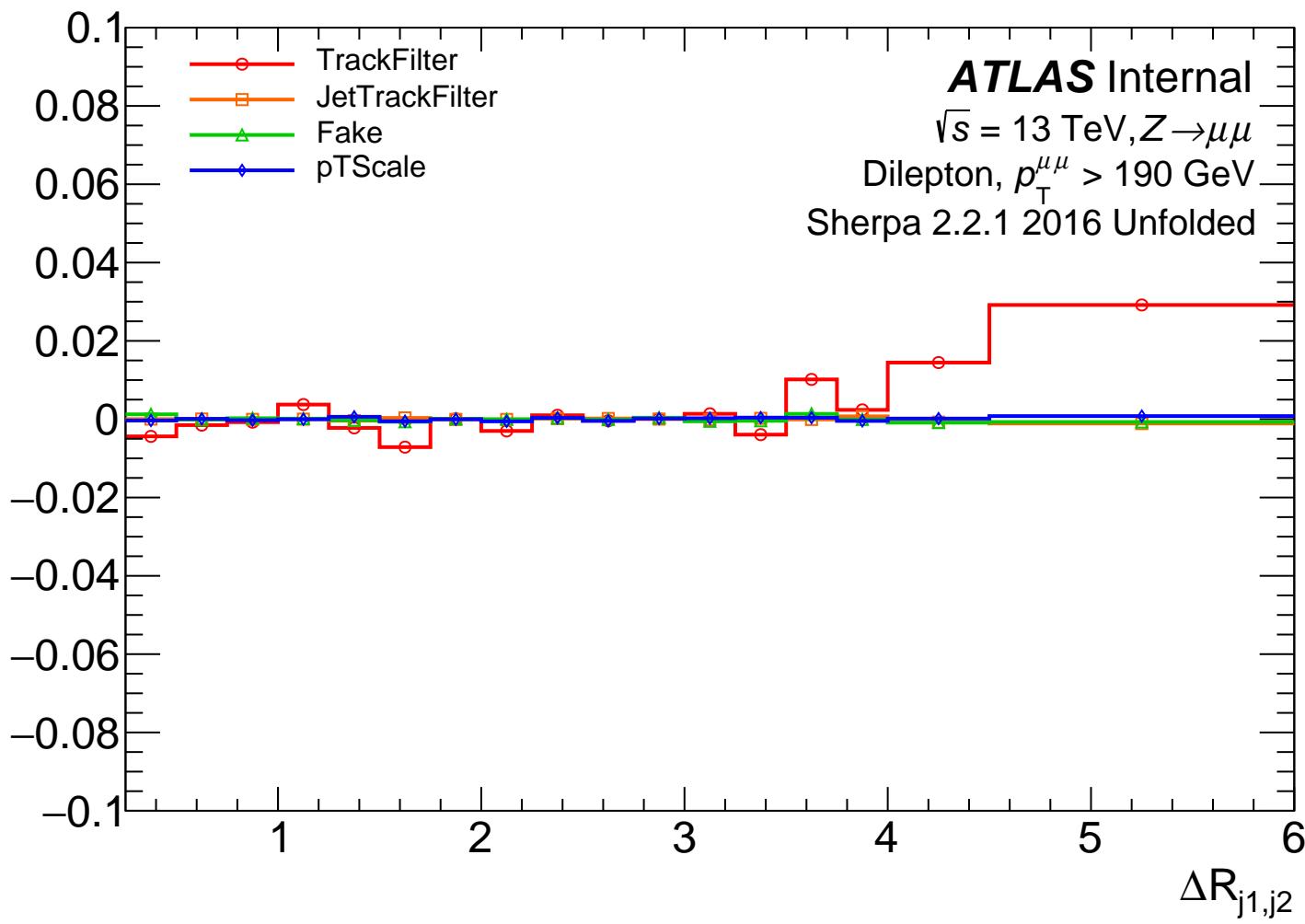
$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

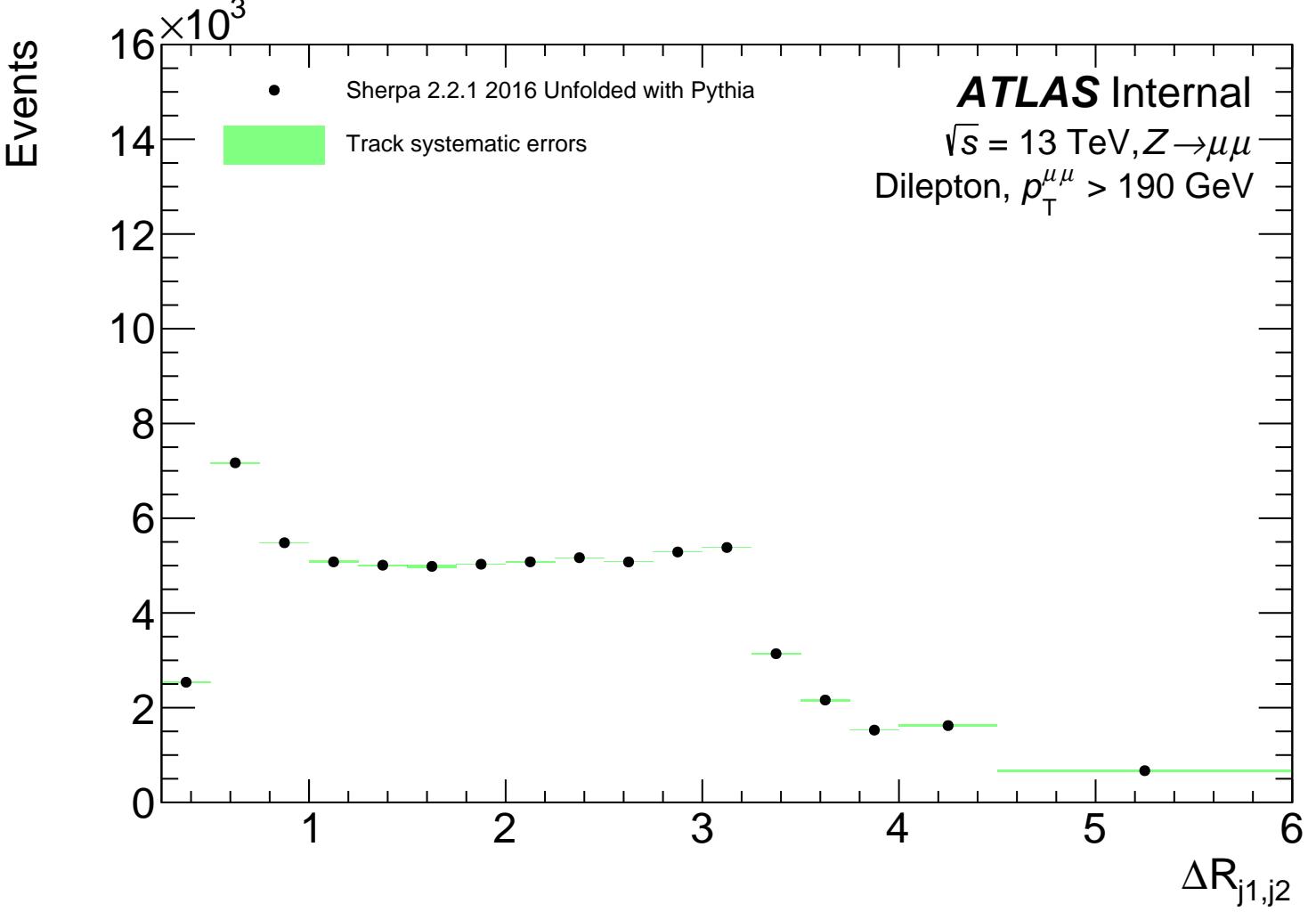
Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

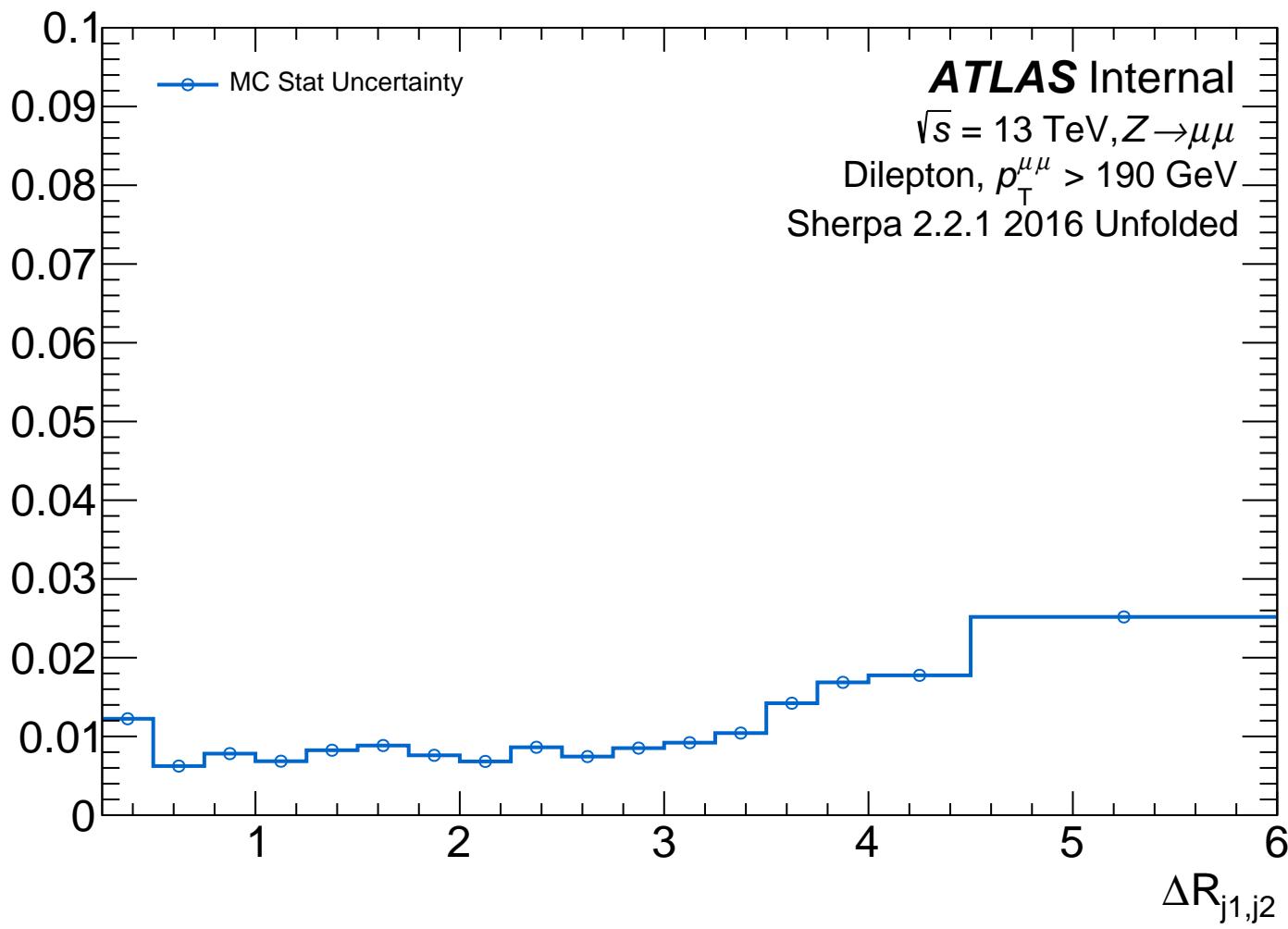
Sherpa 2.2.1 2016 Unfolded

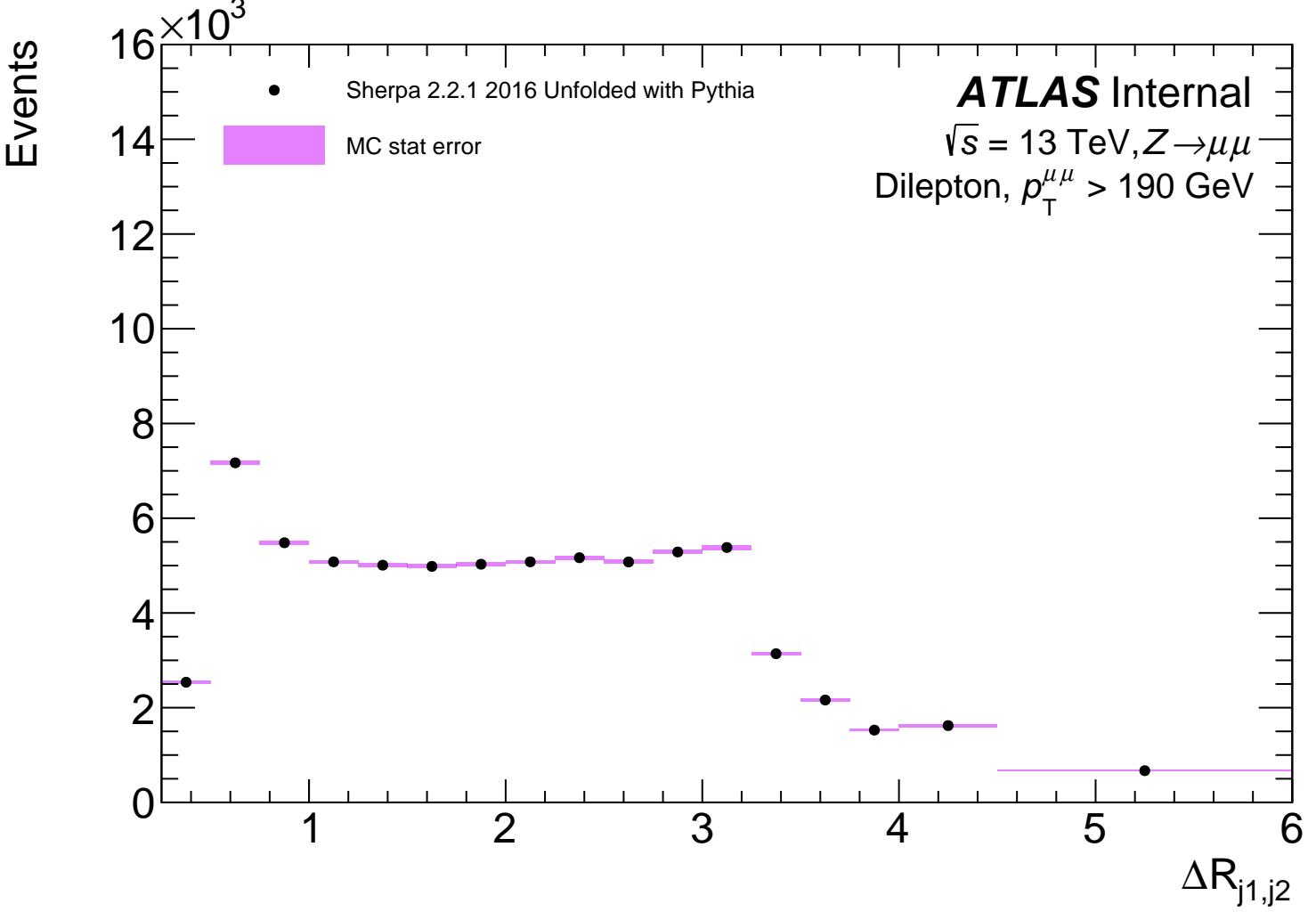


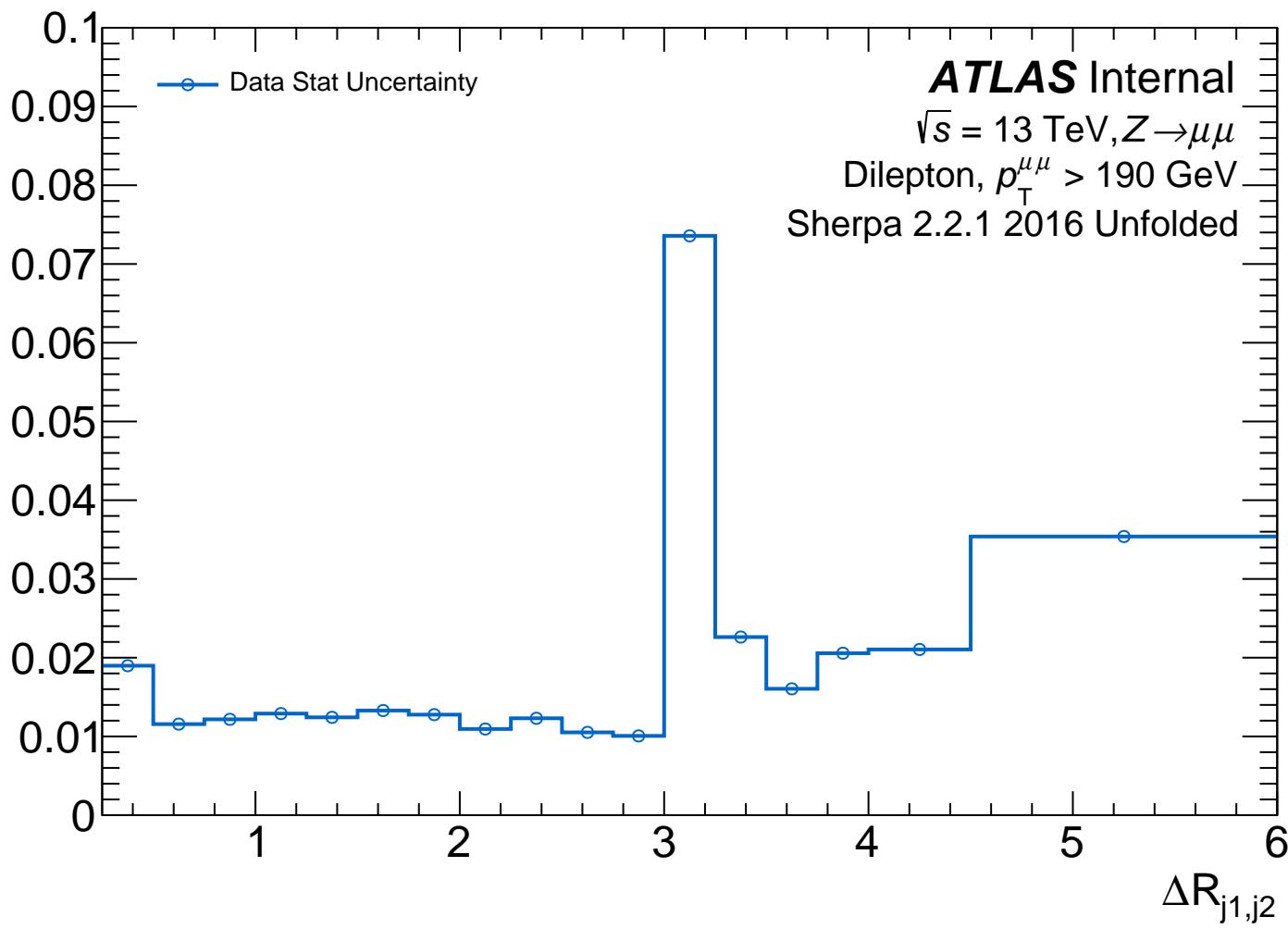


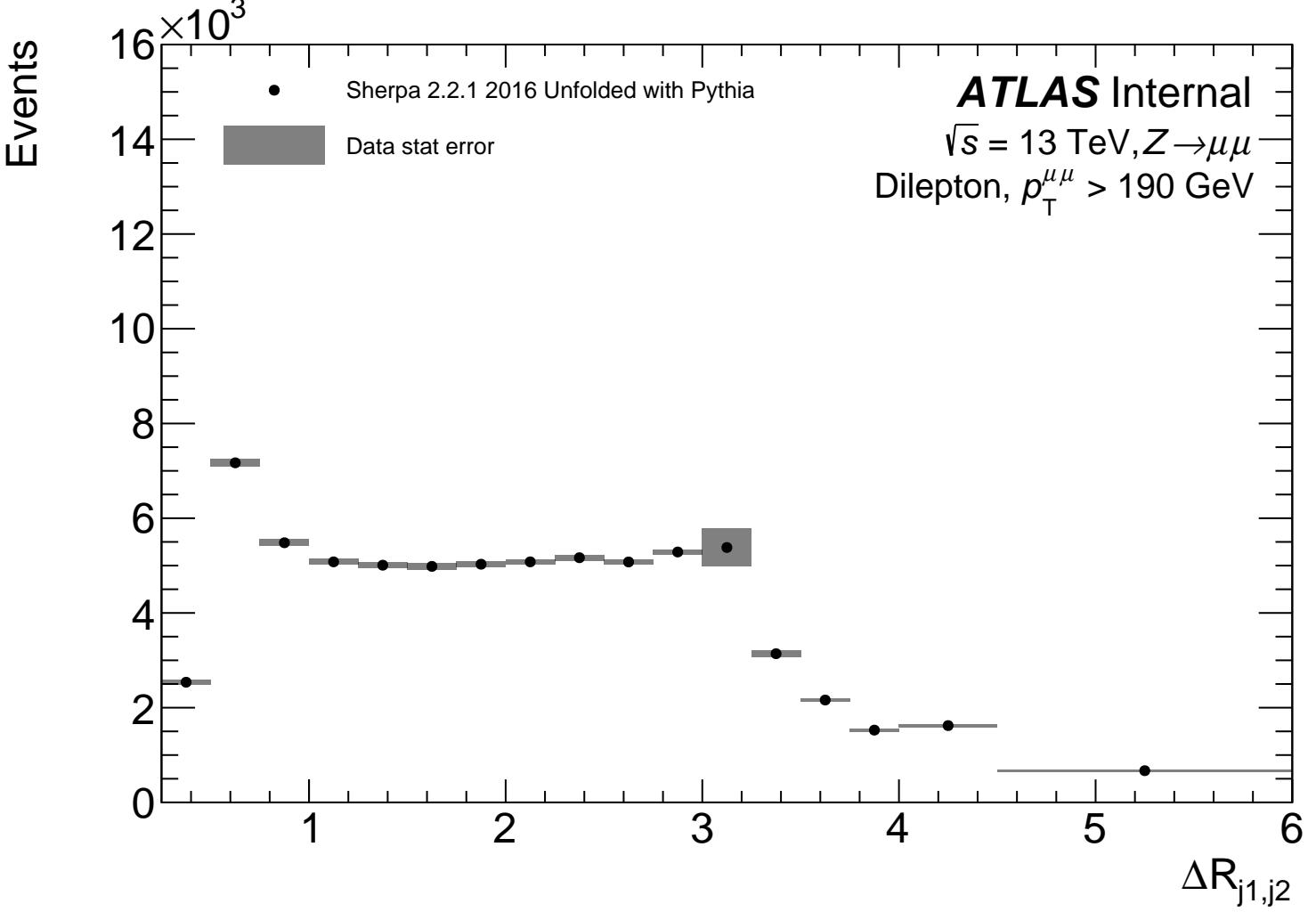


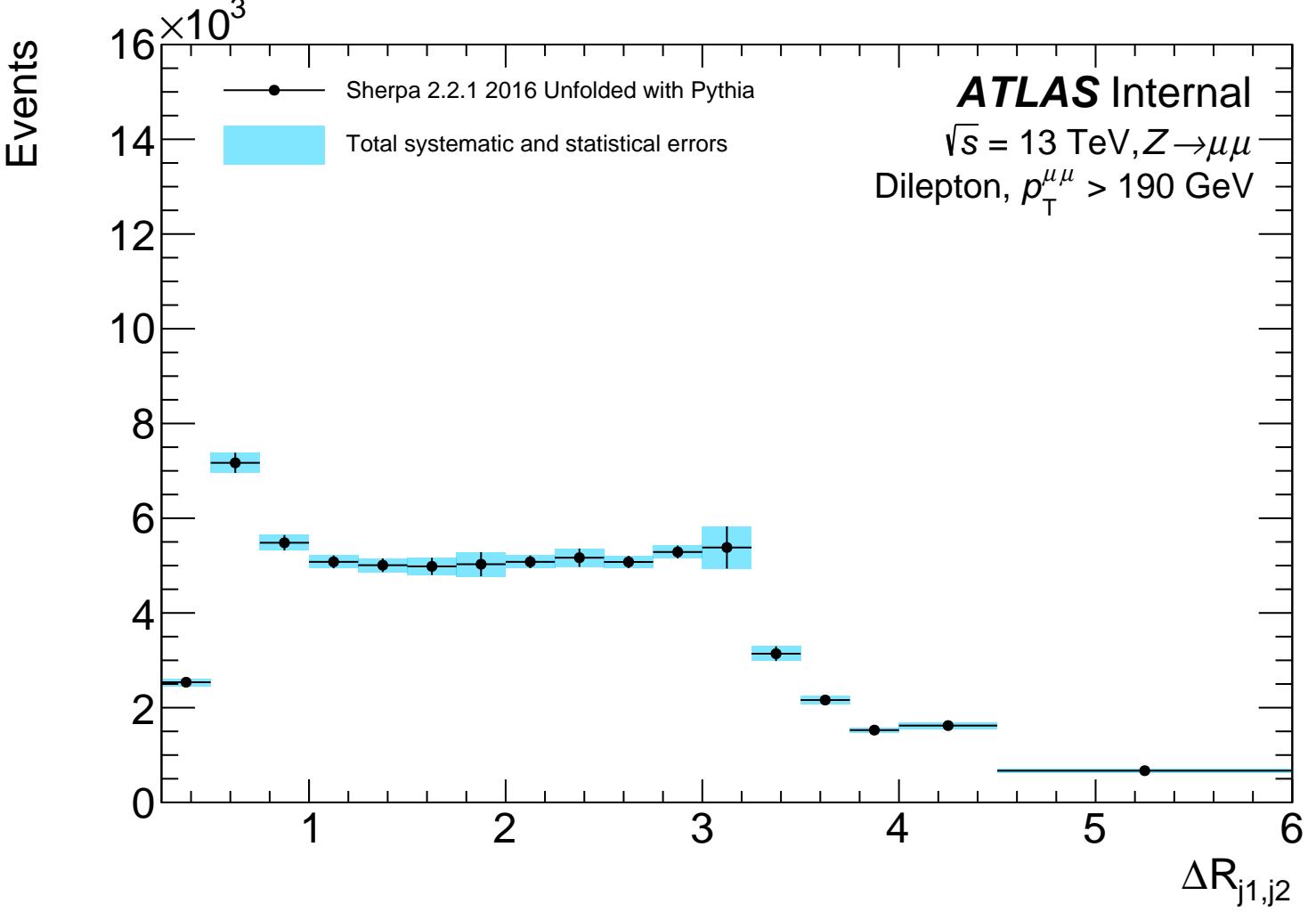


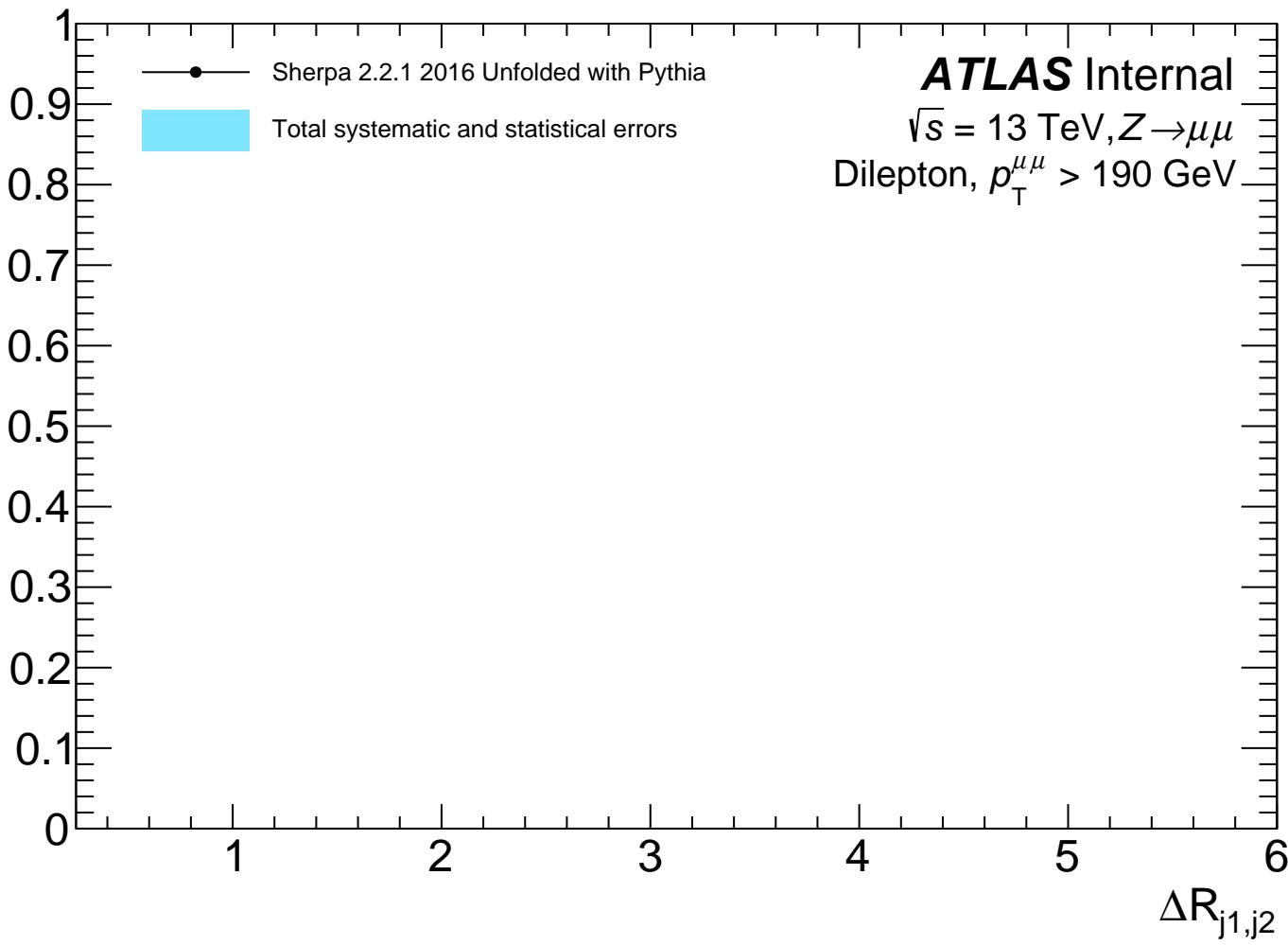


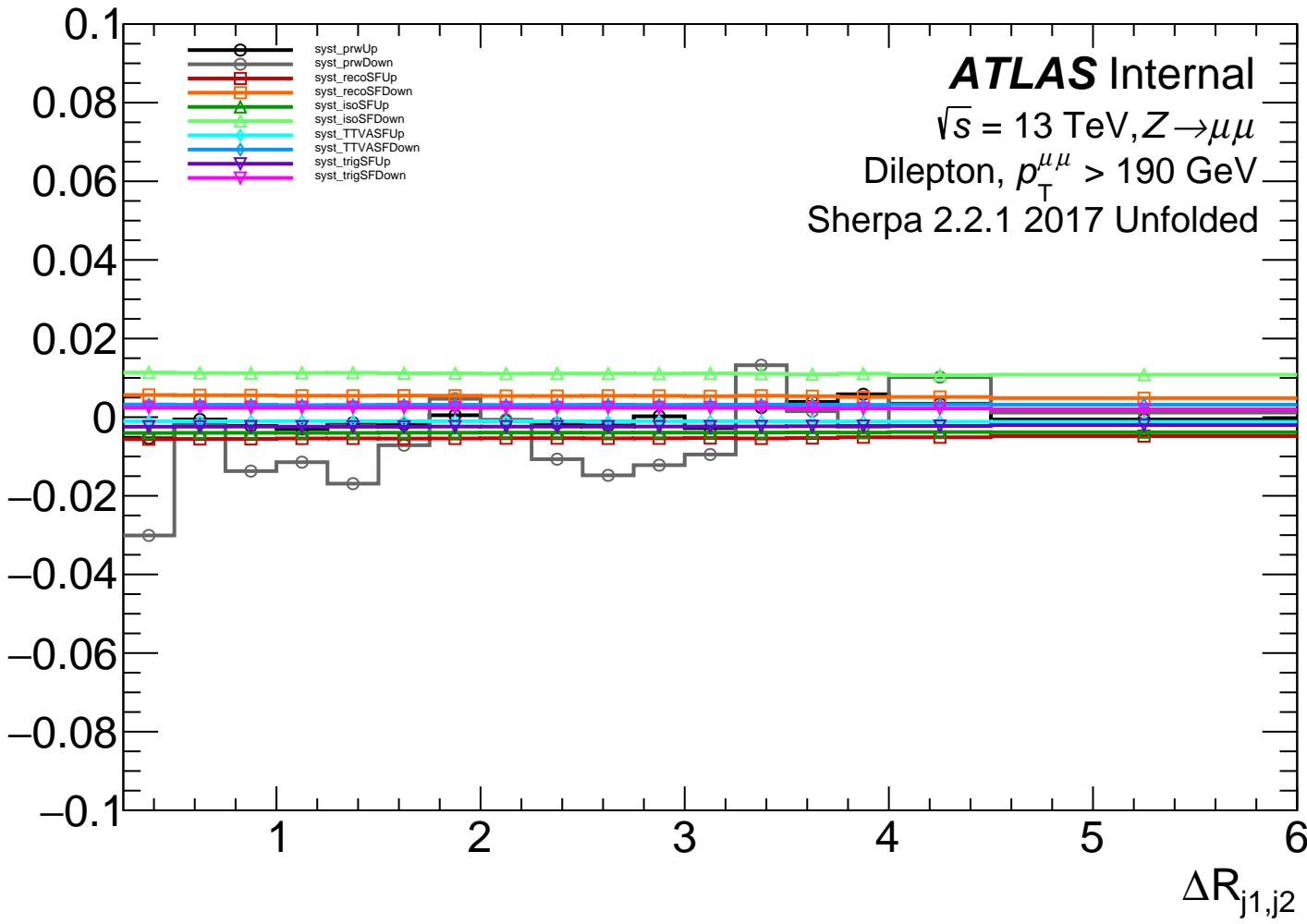


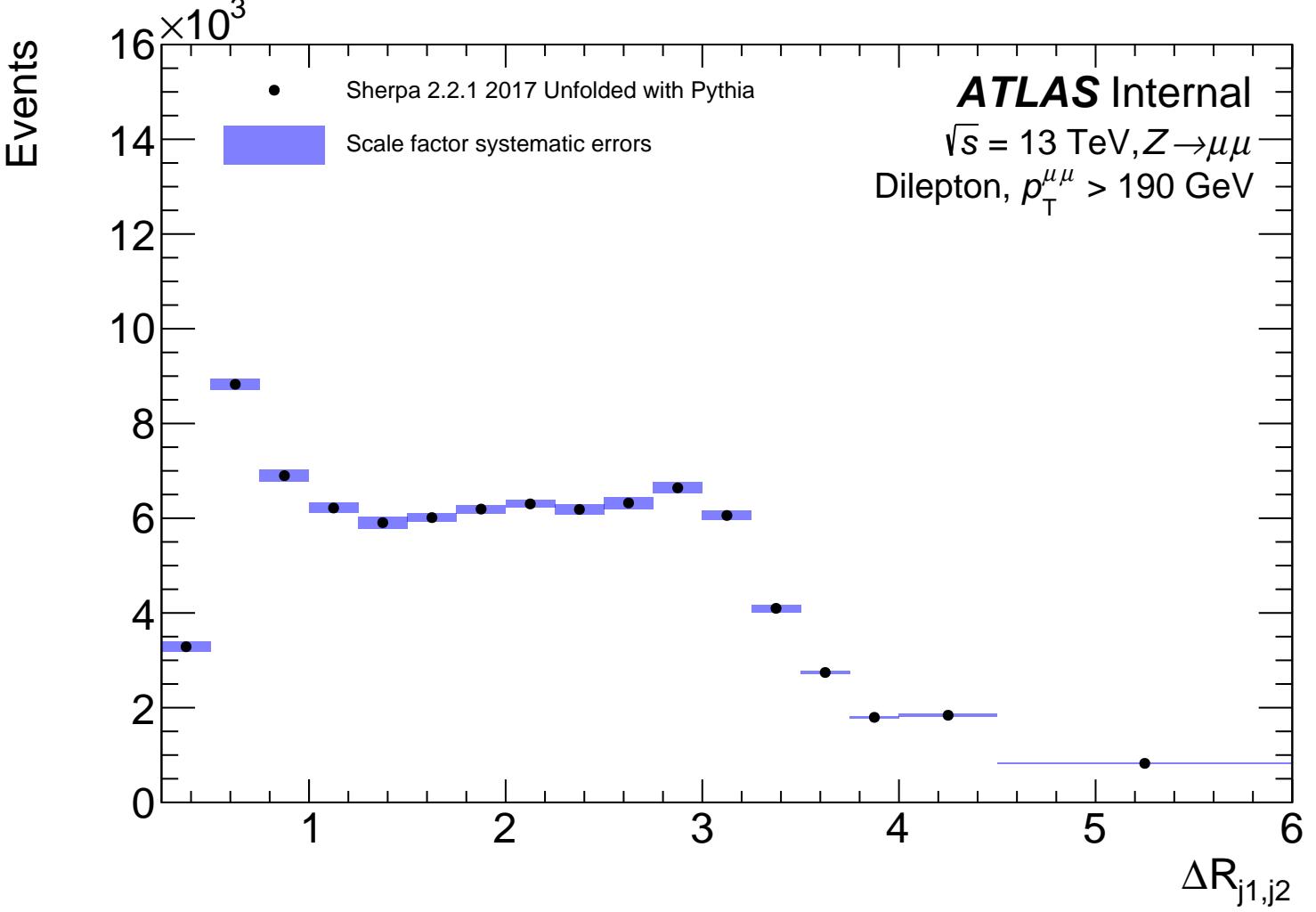


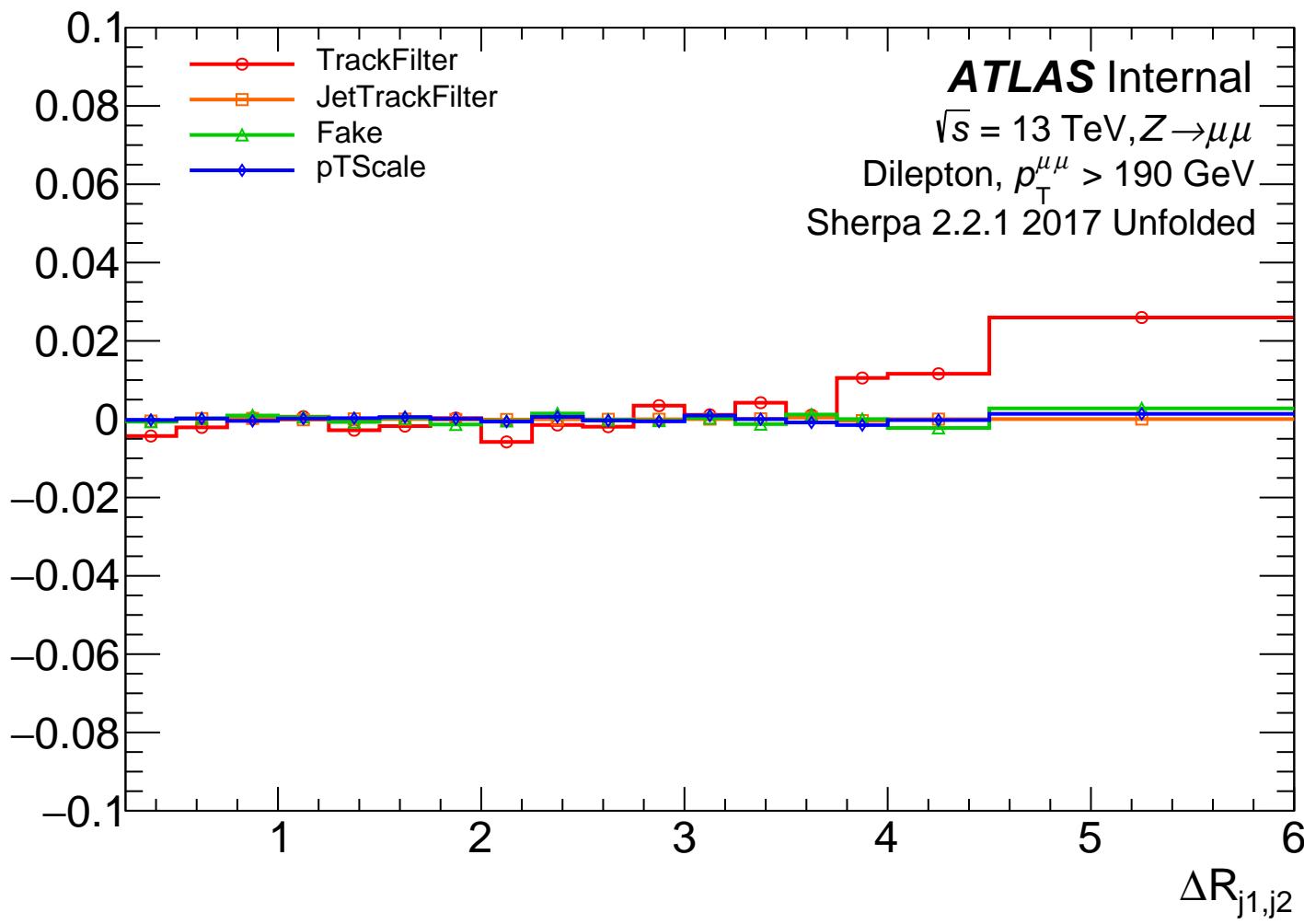


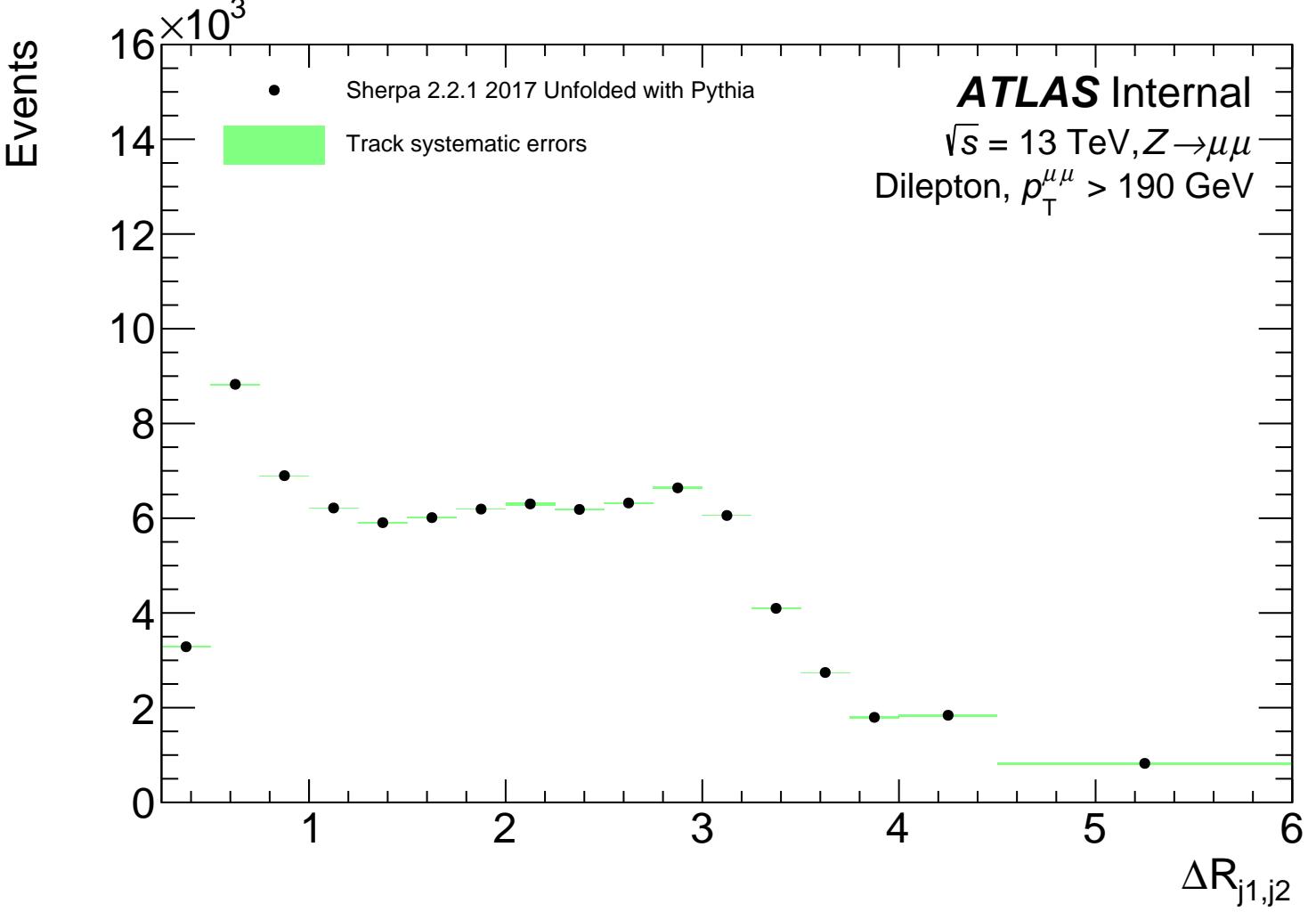


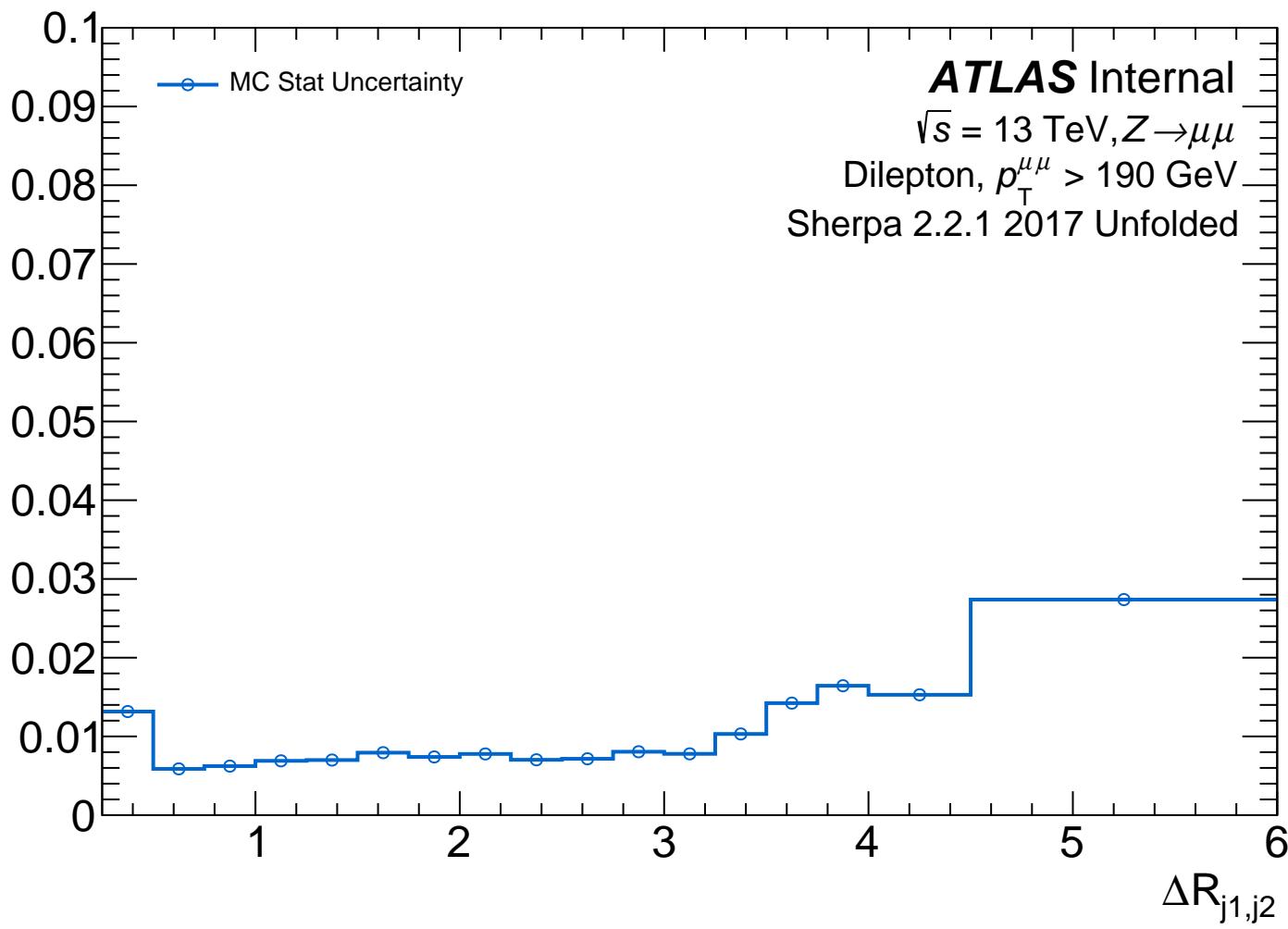


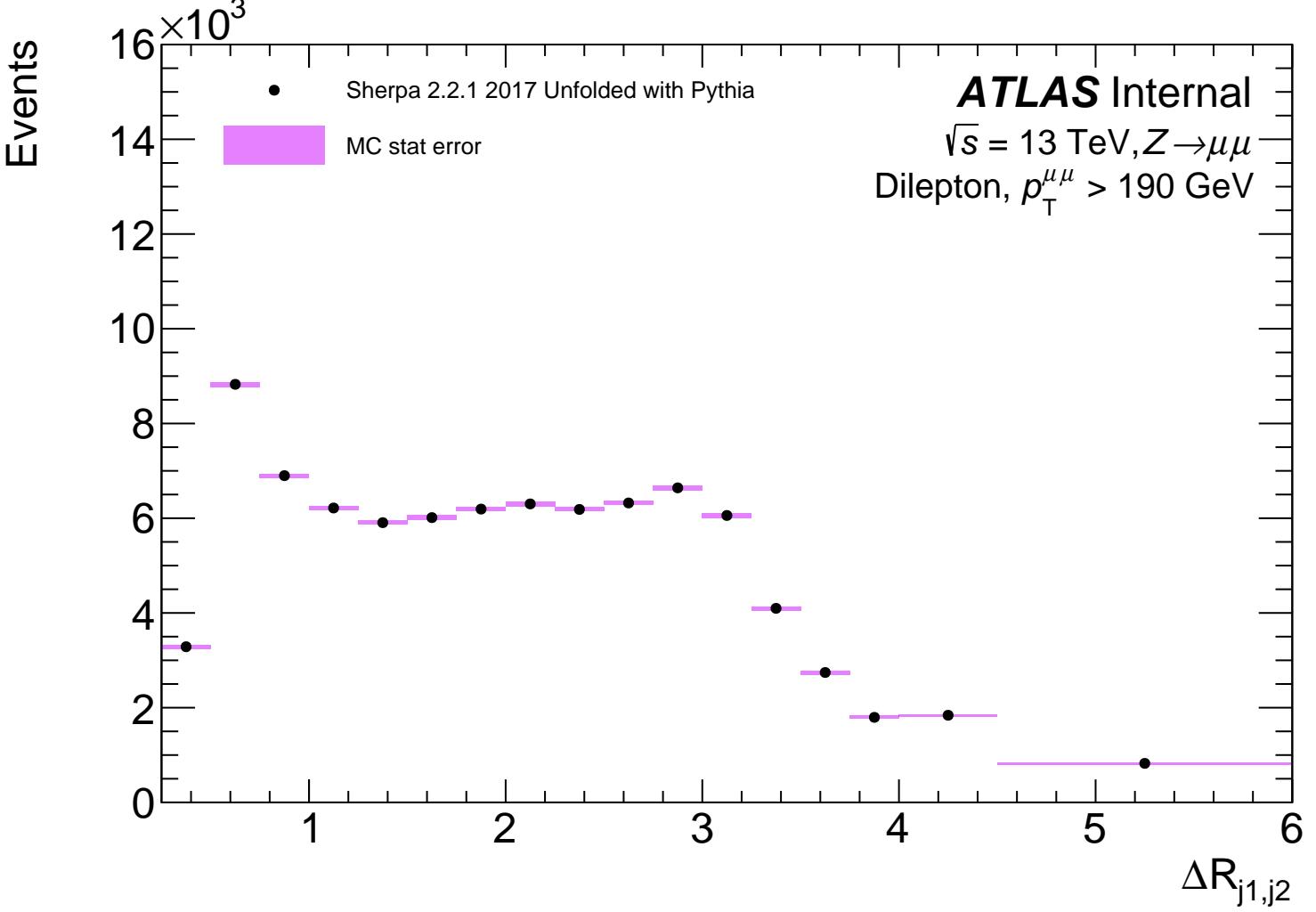


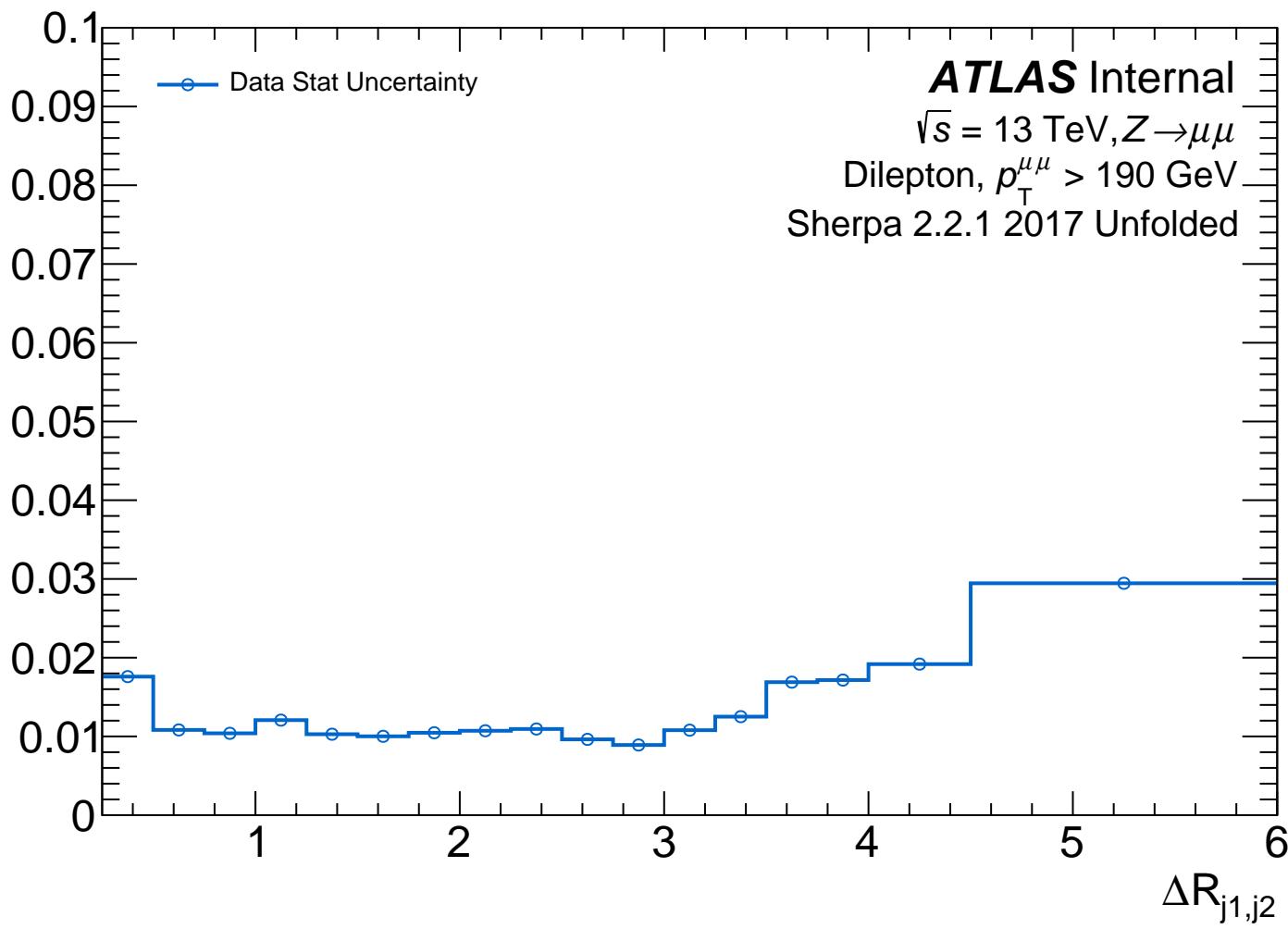


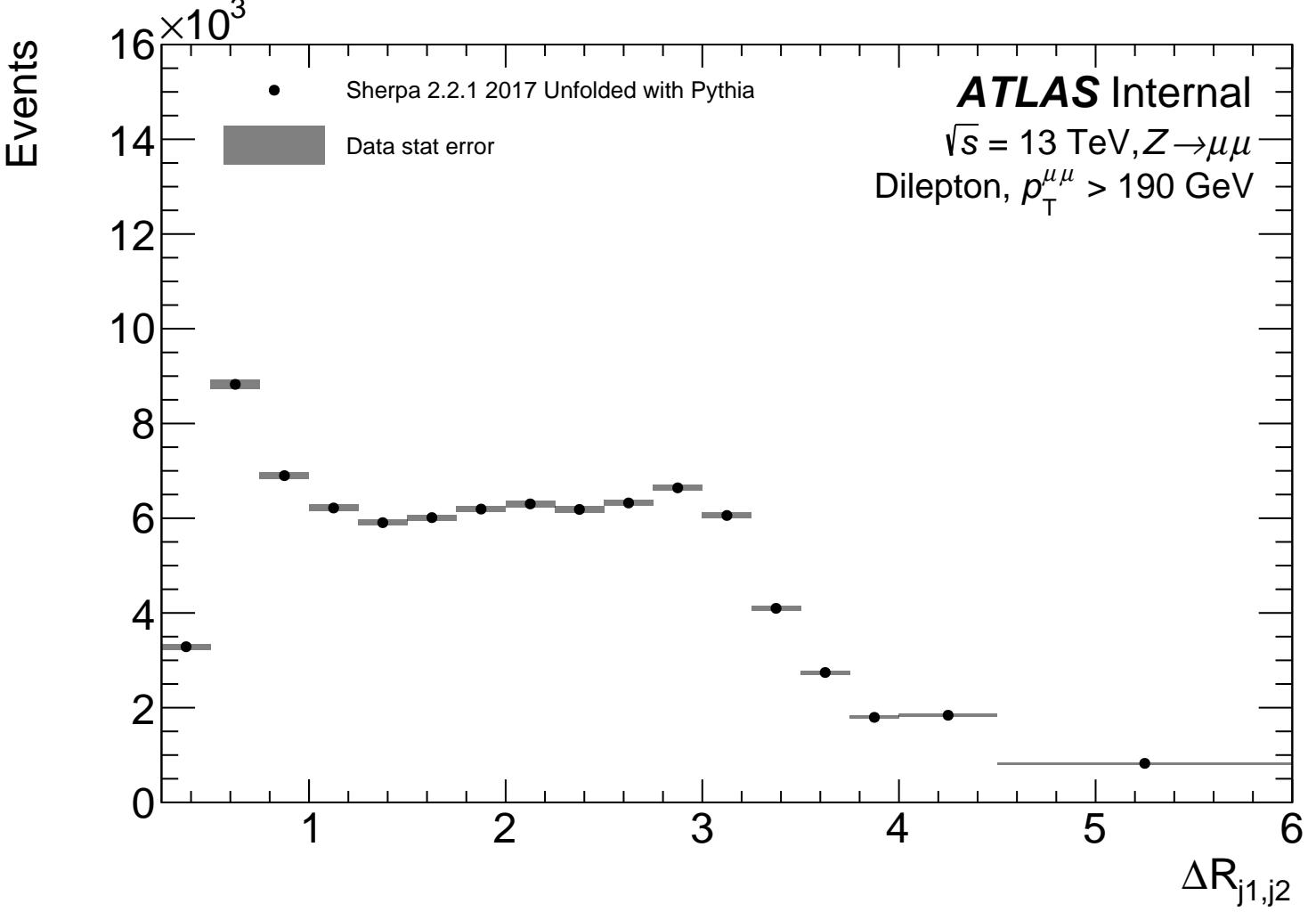


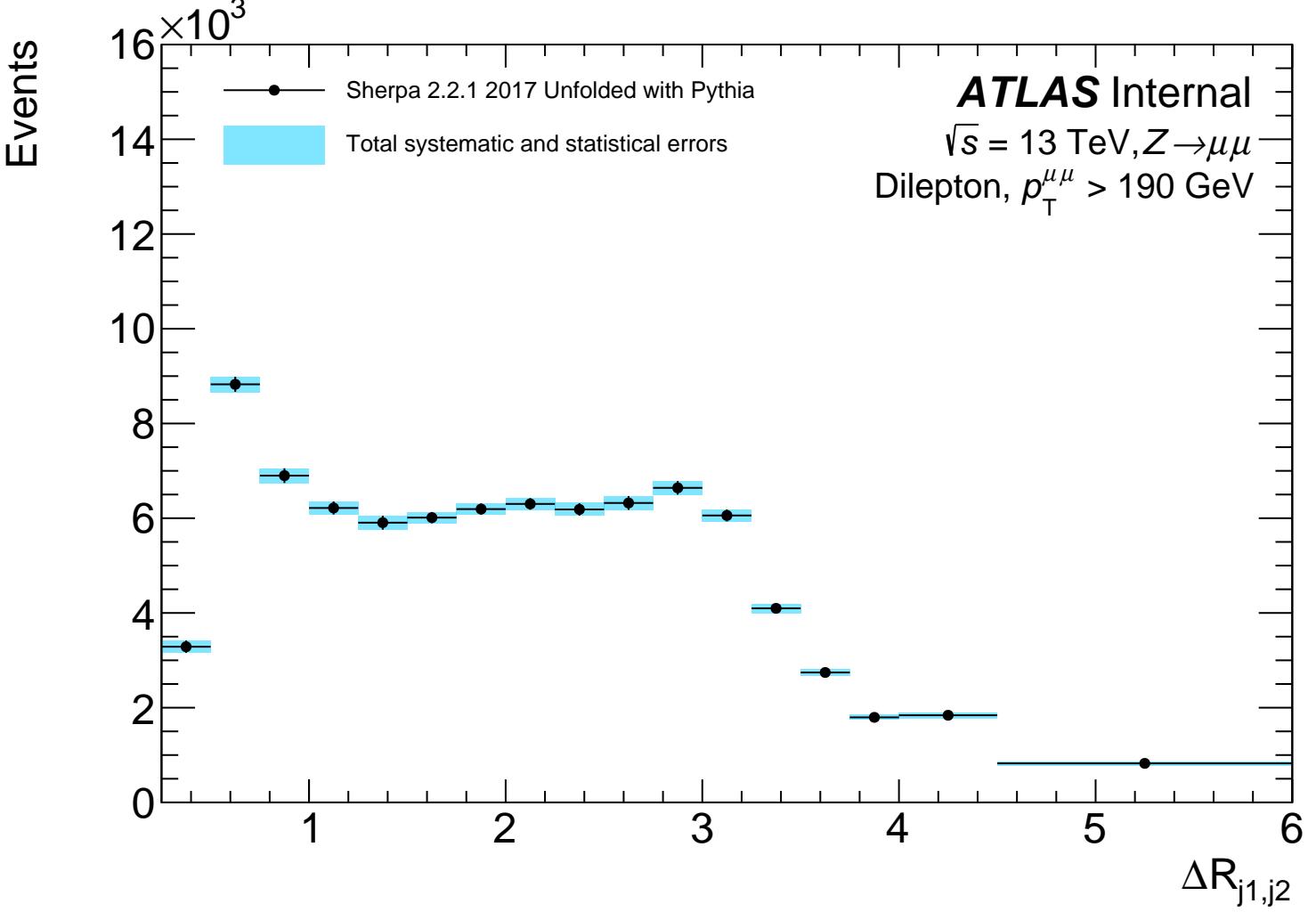


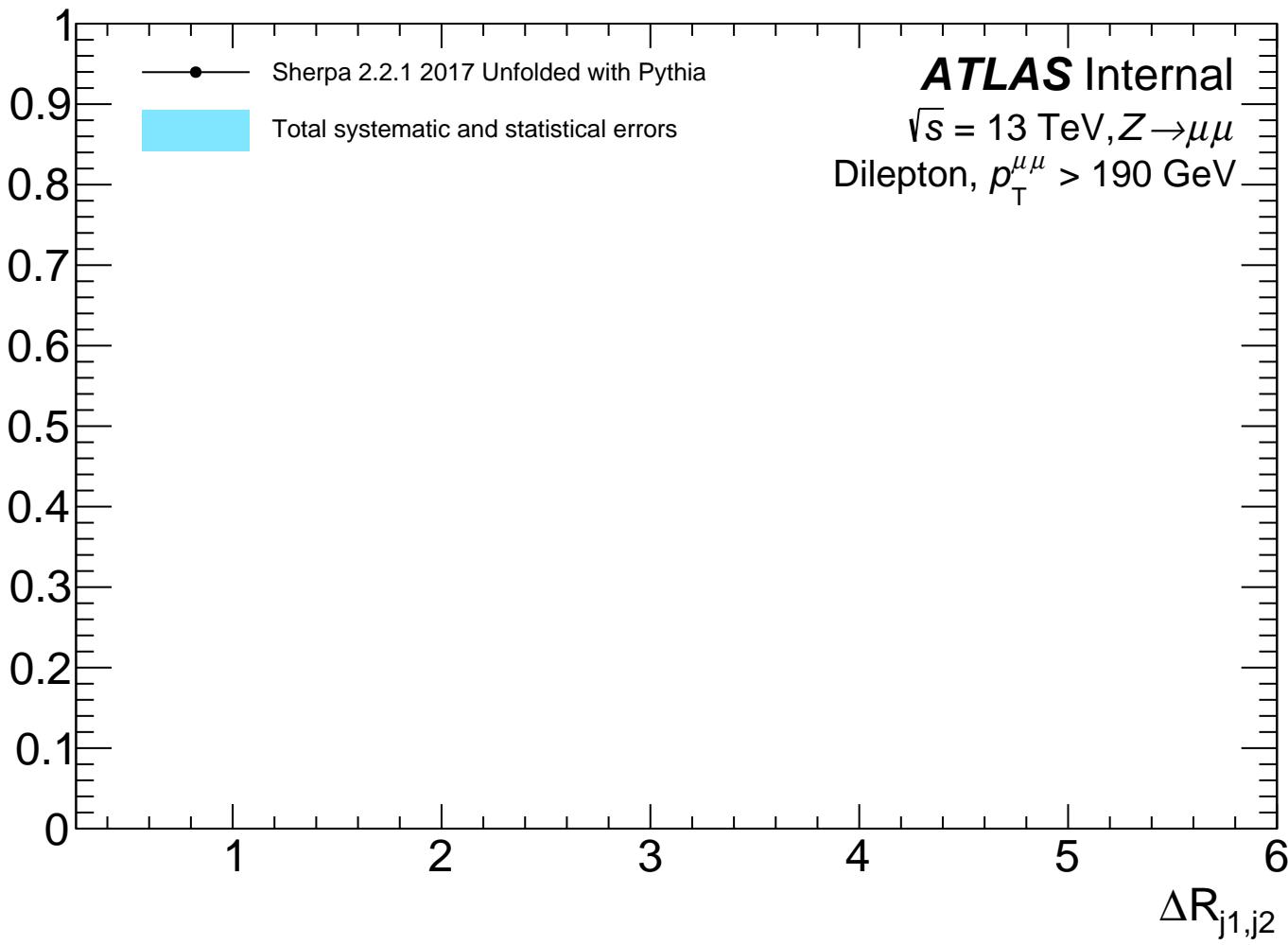


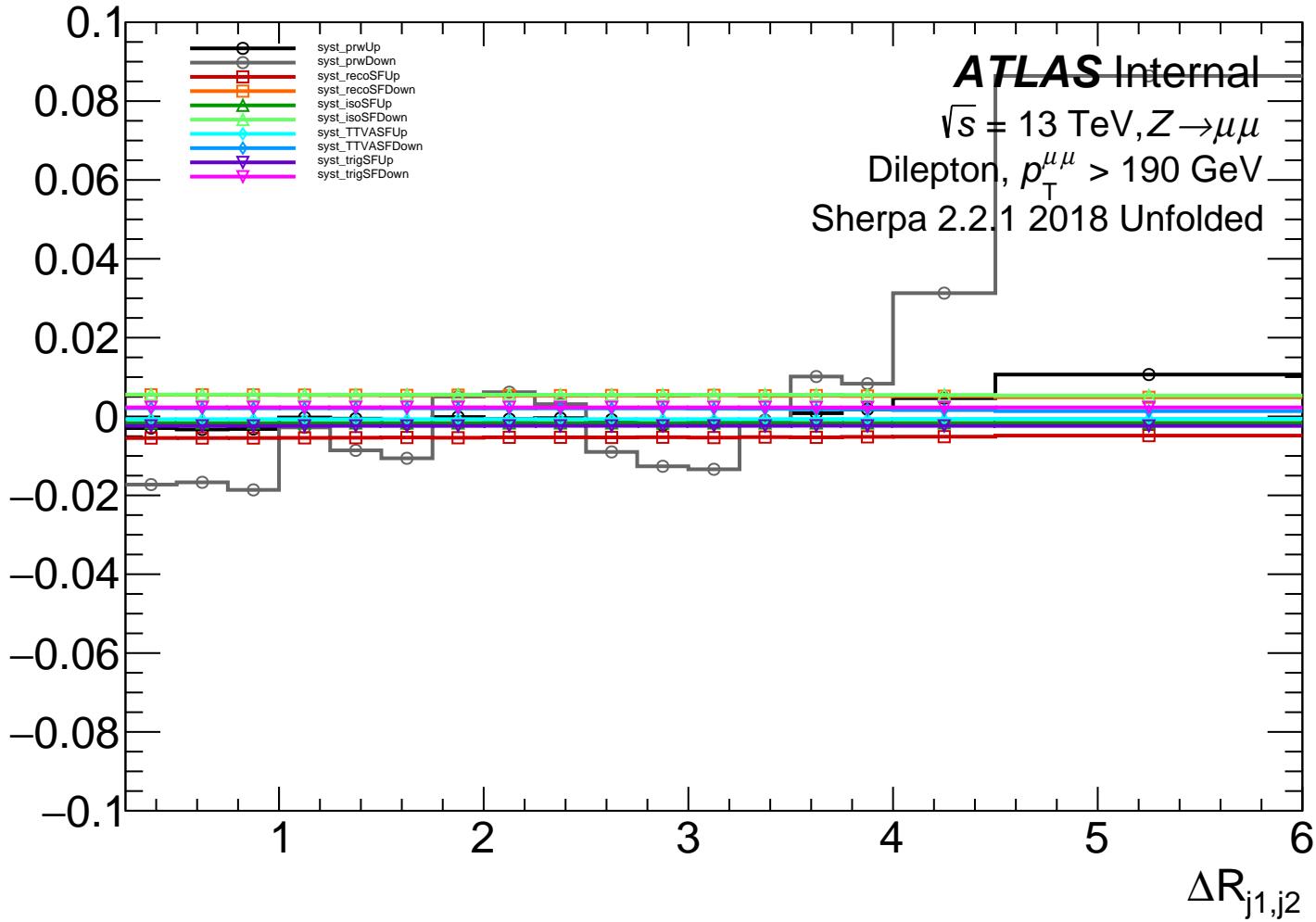


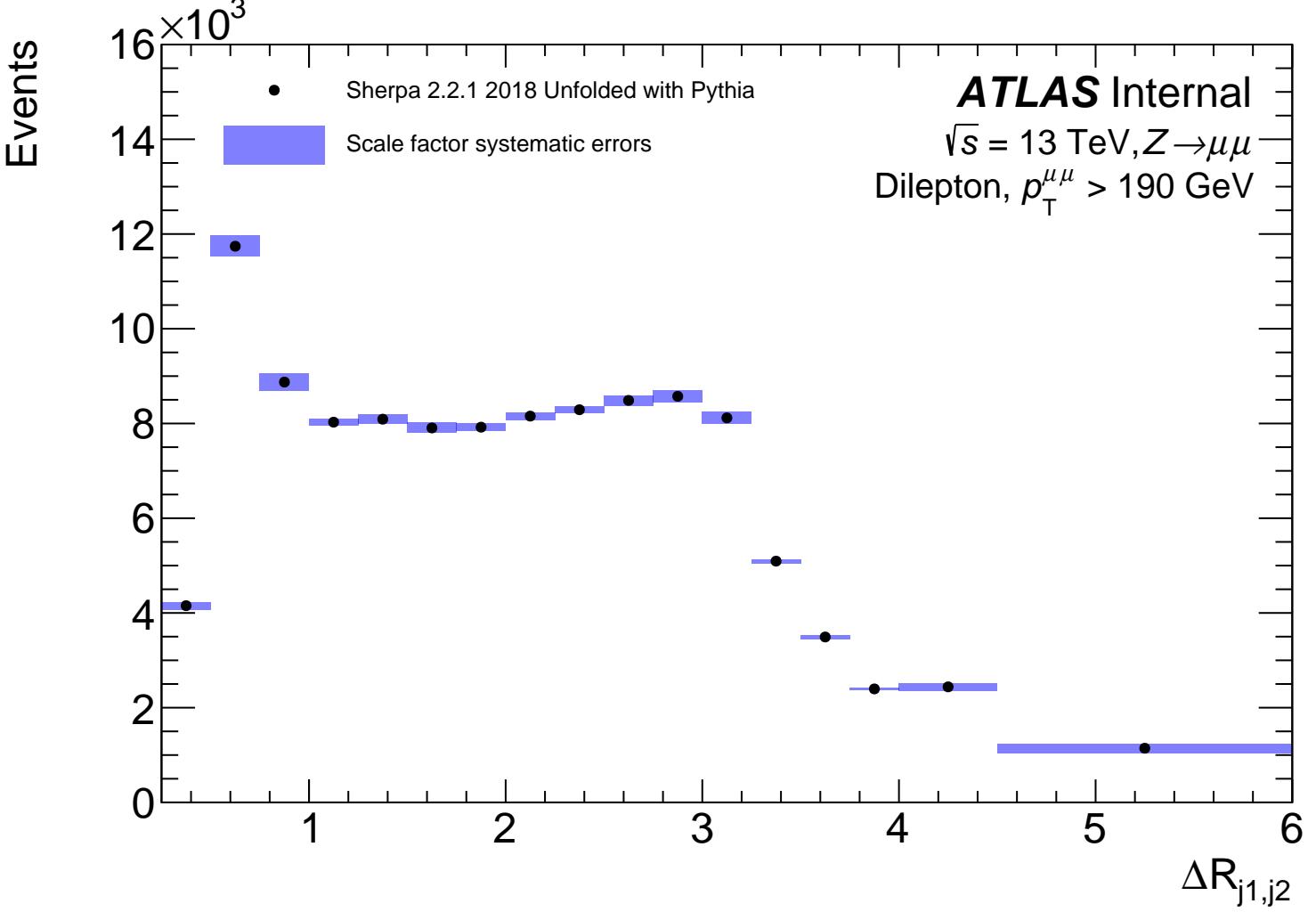


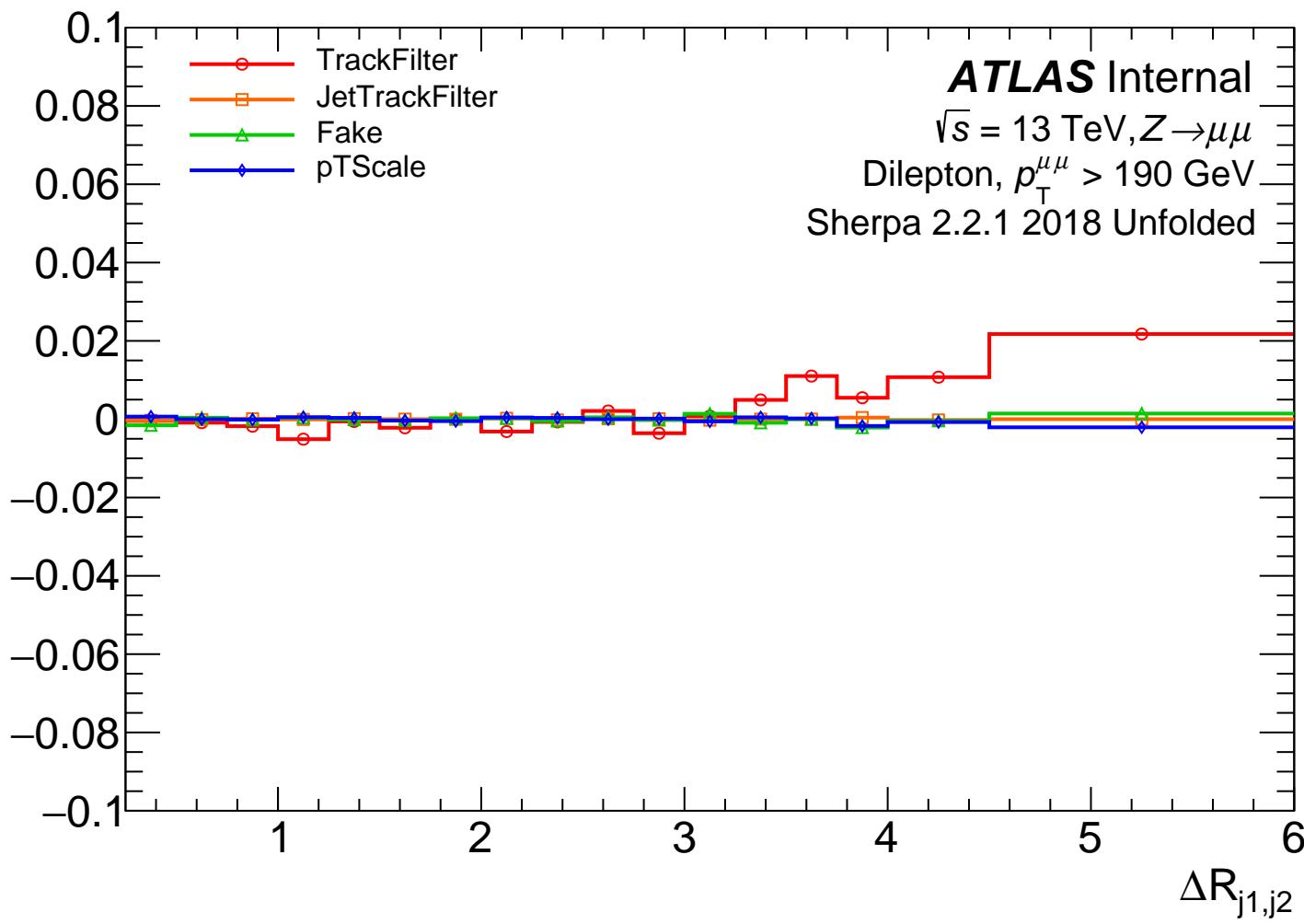


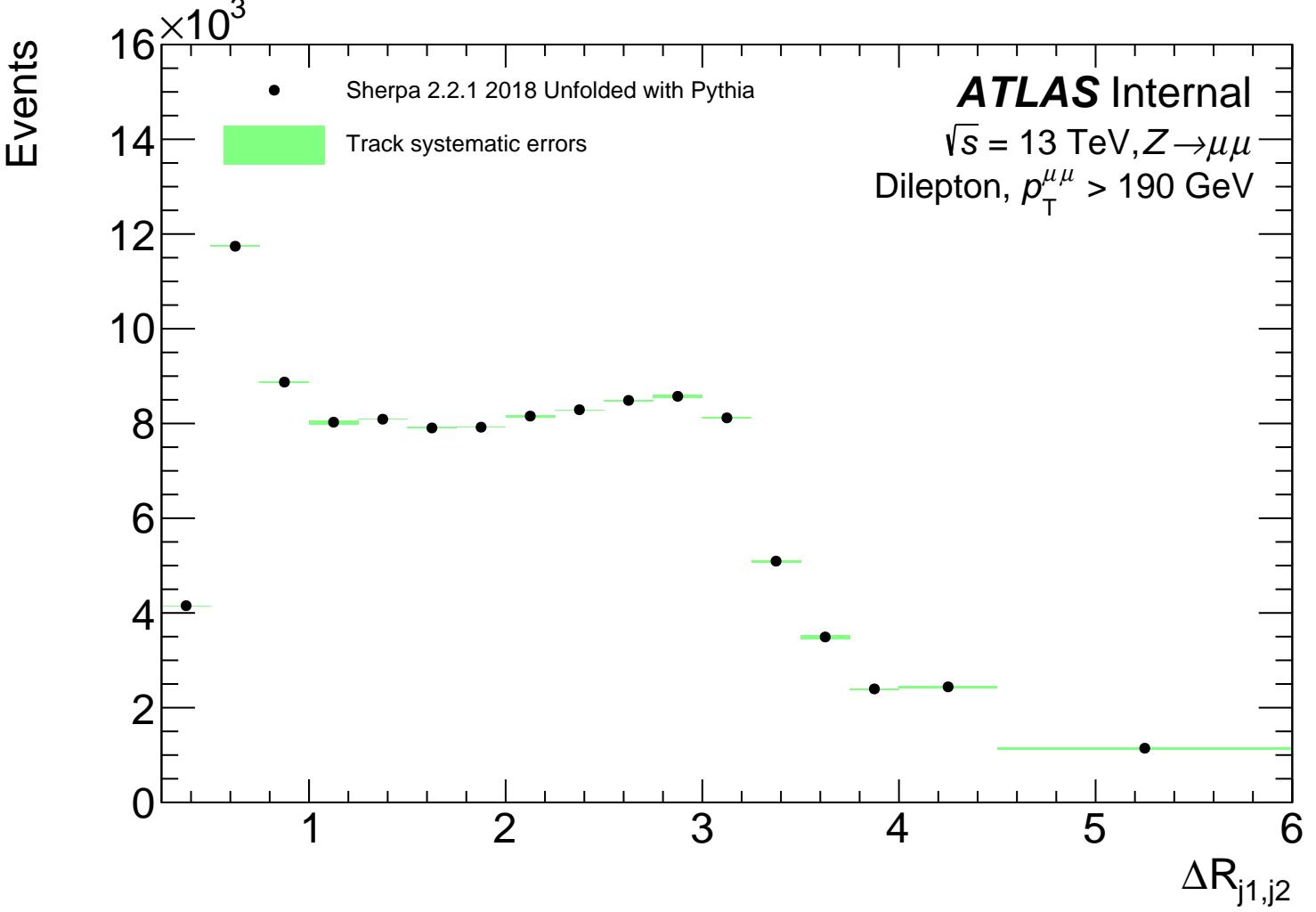


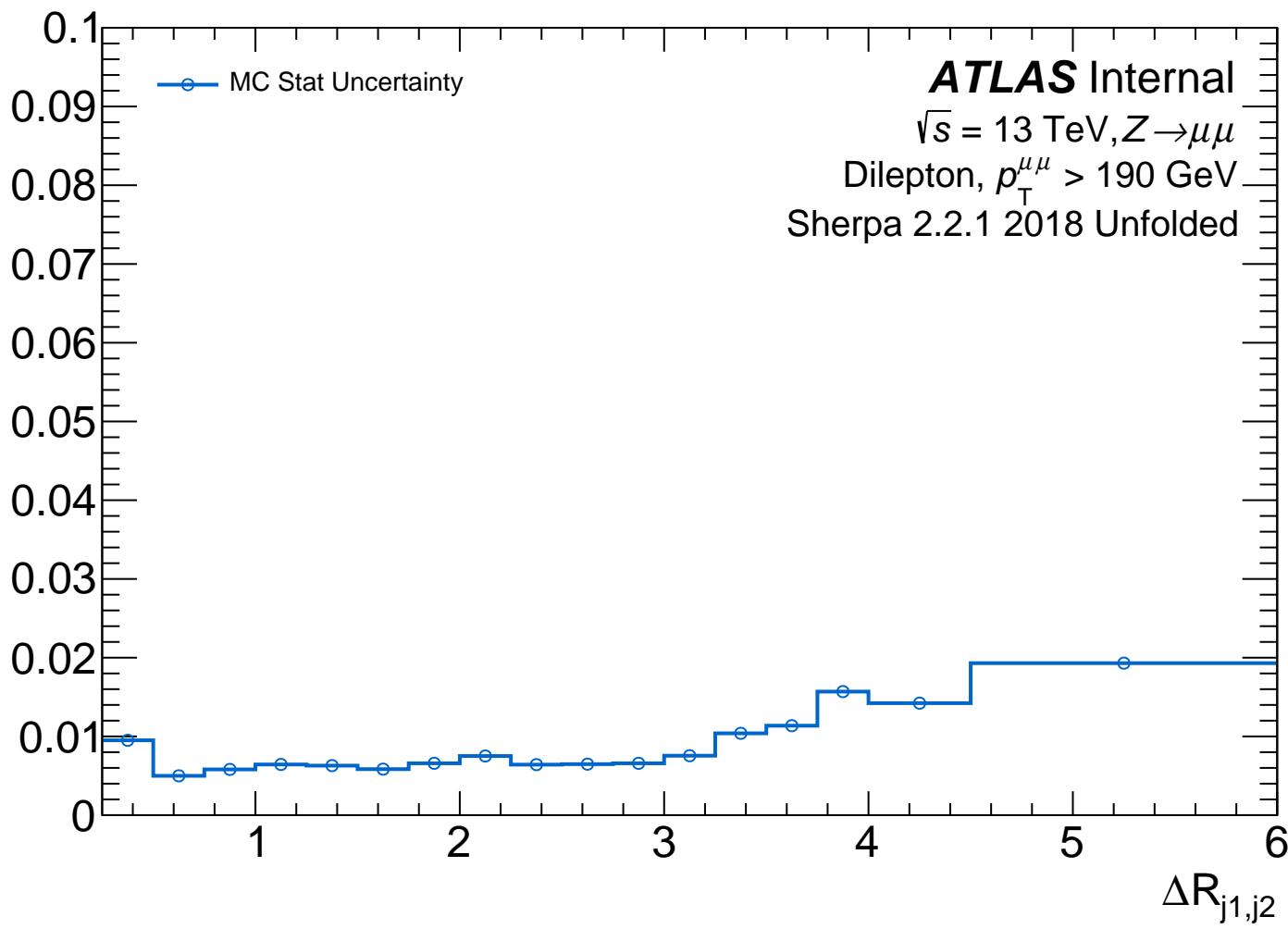


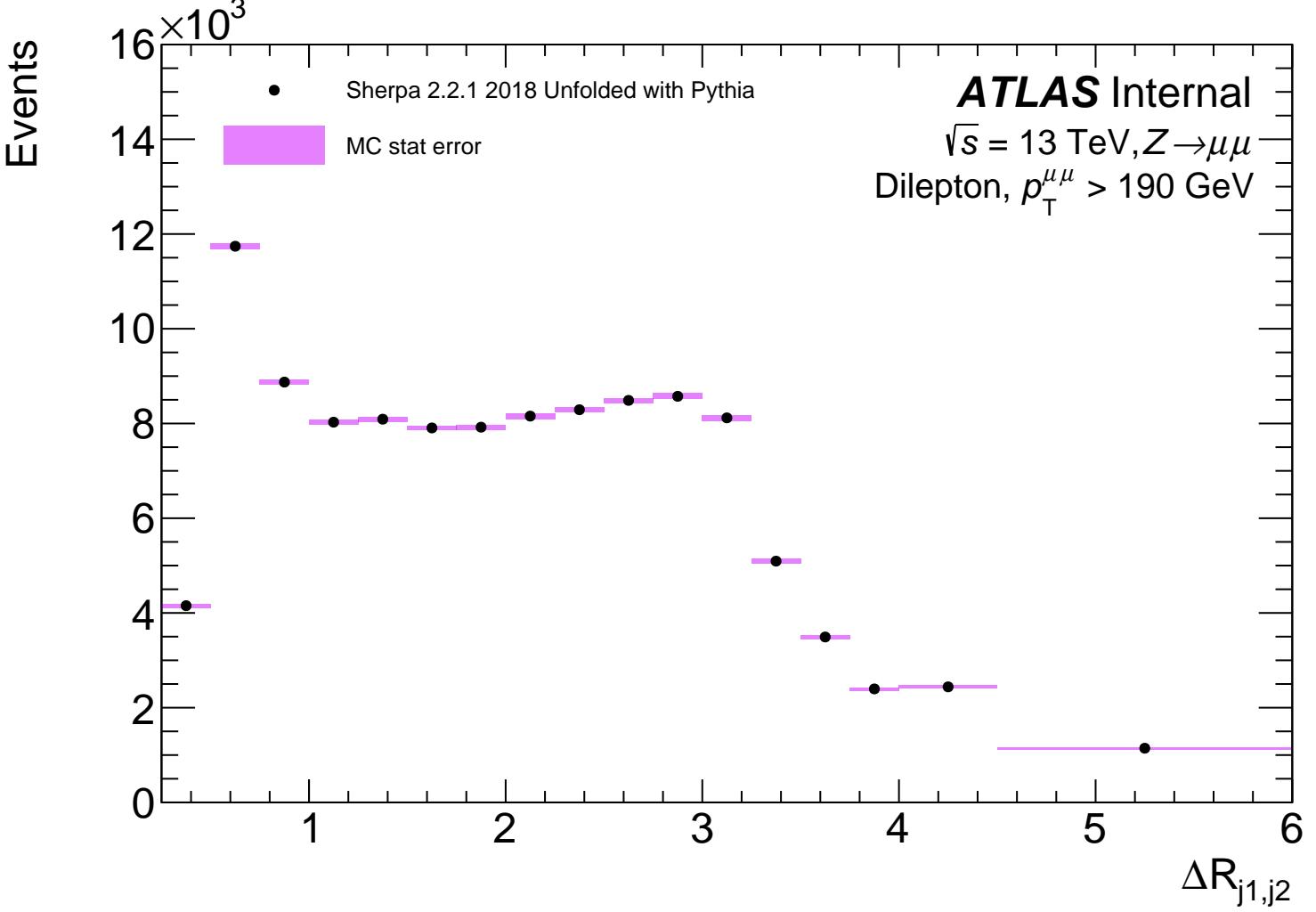


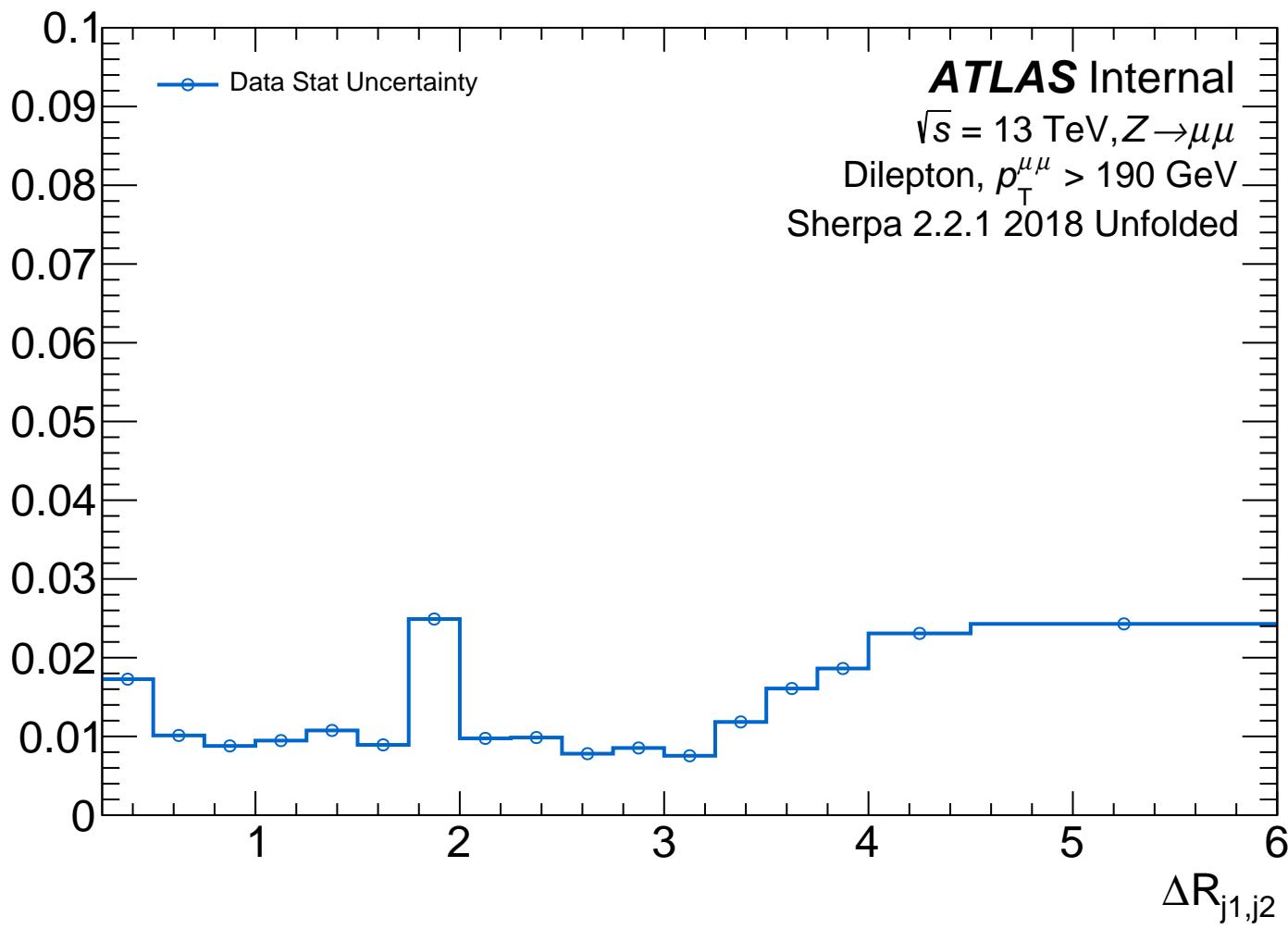


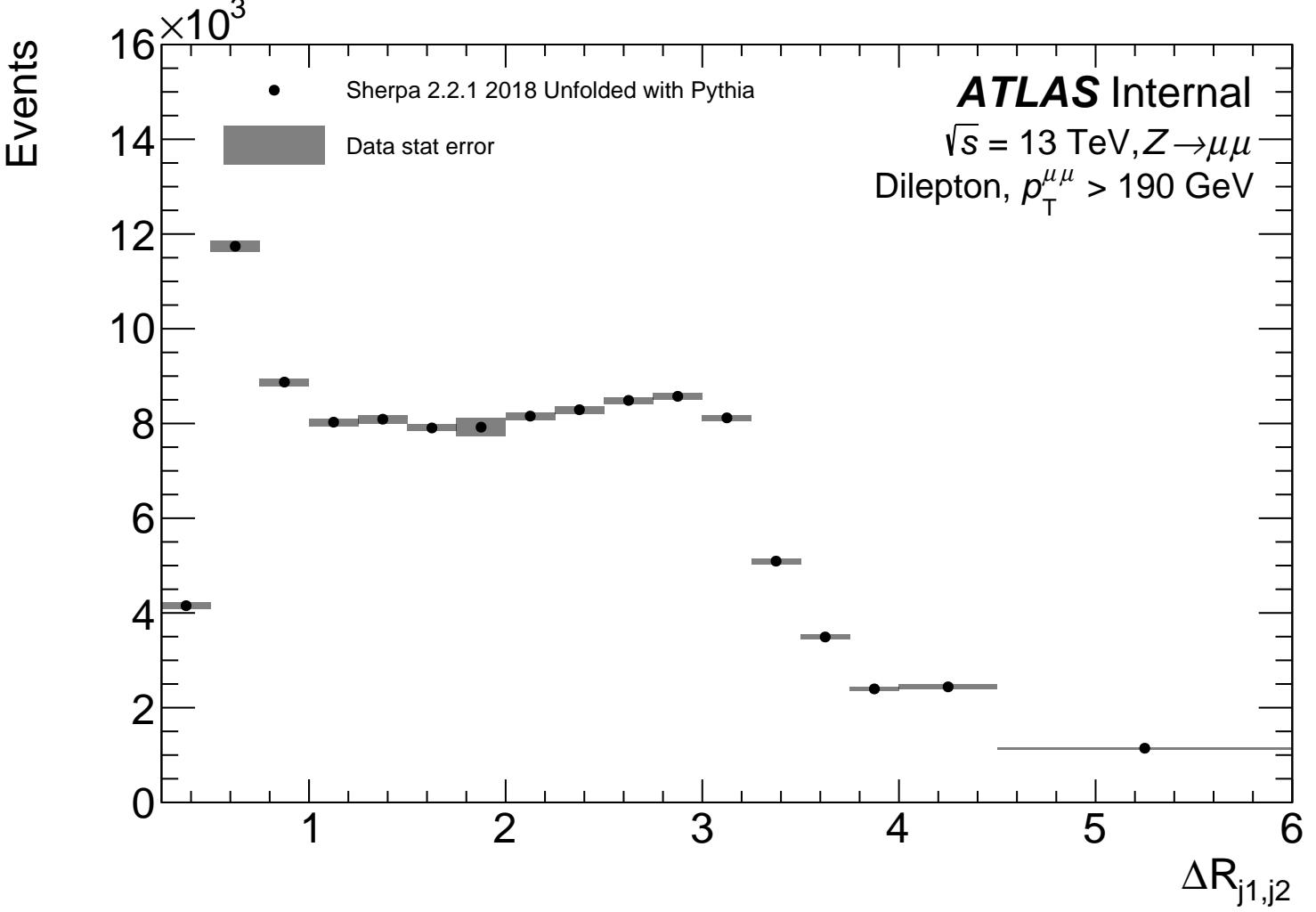


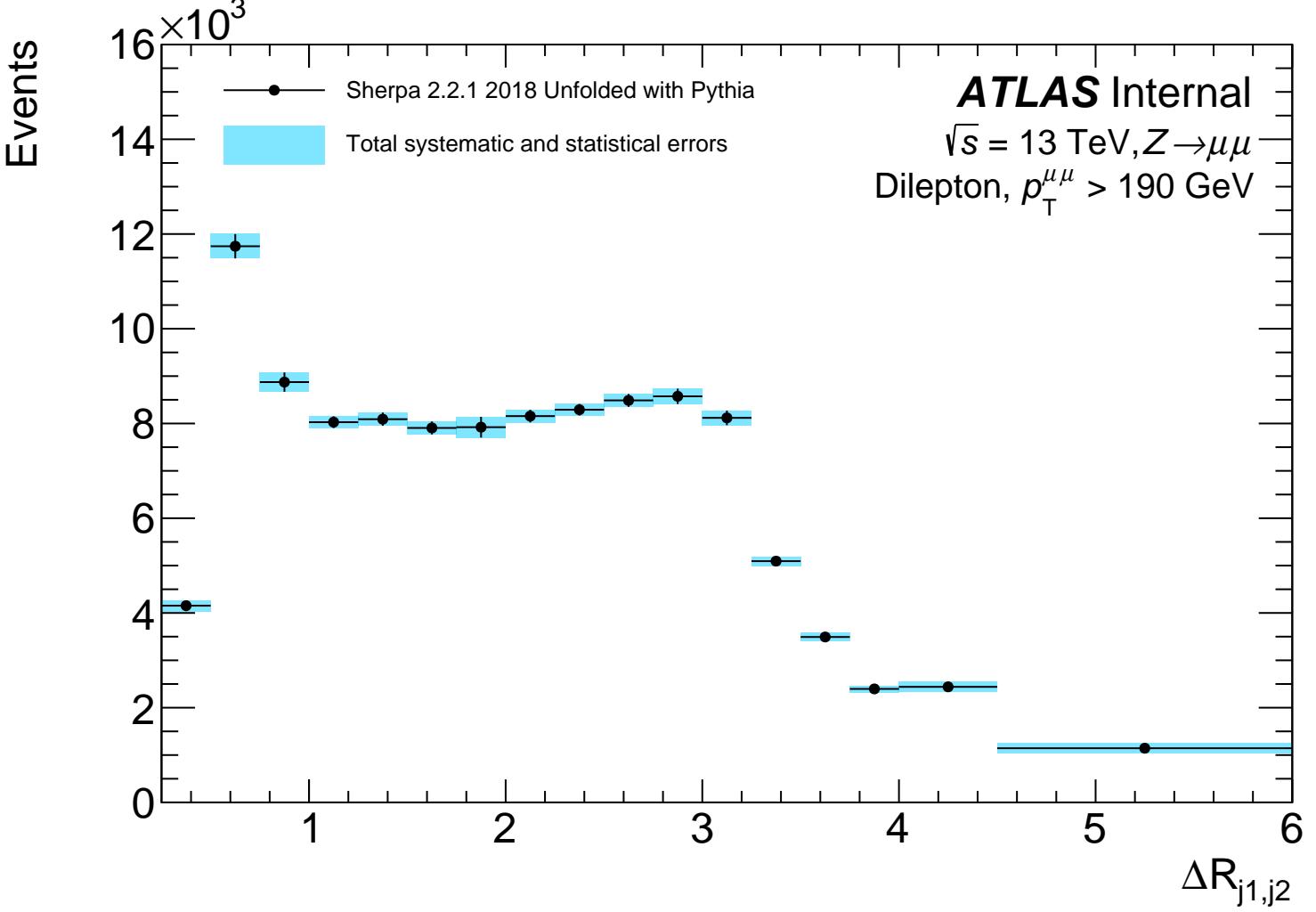


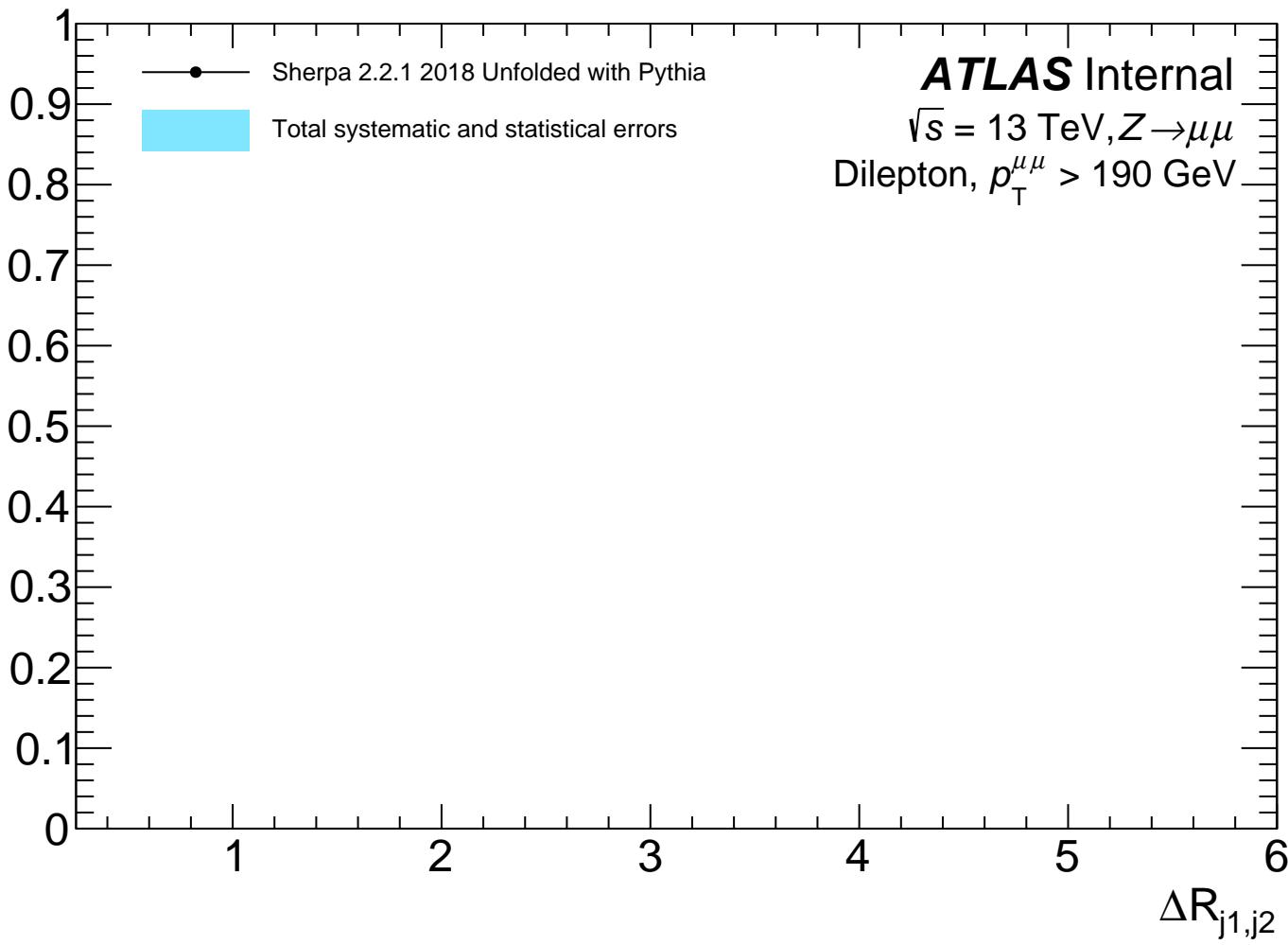












**ATLAS Internal**

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$

Dilepton,  $p_T^{\mu\mu} > 190 \text{ GeV}$

Sherpa 2.2.1 Run2 Unfolded

