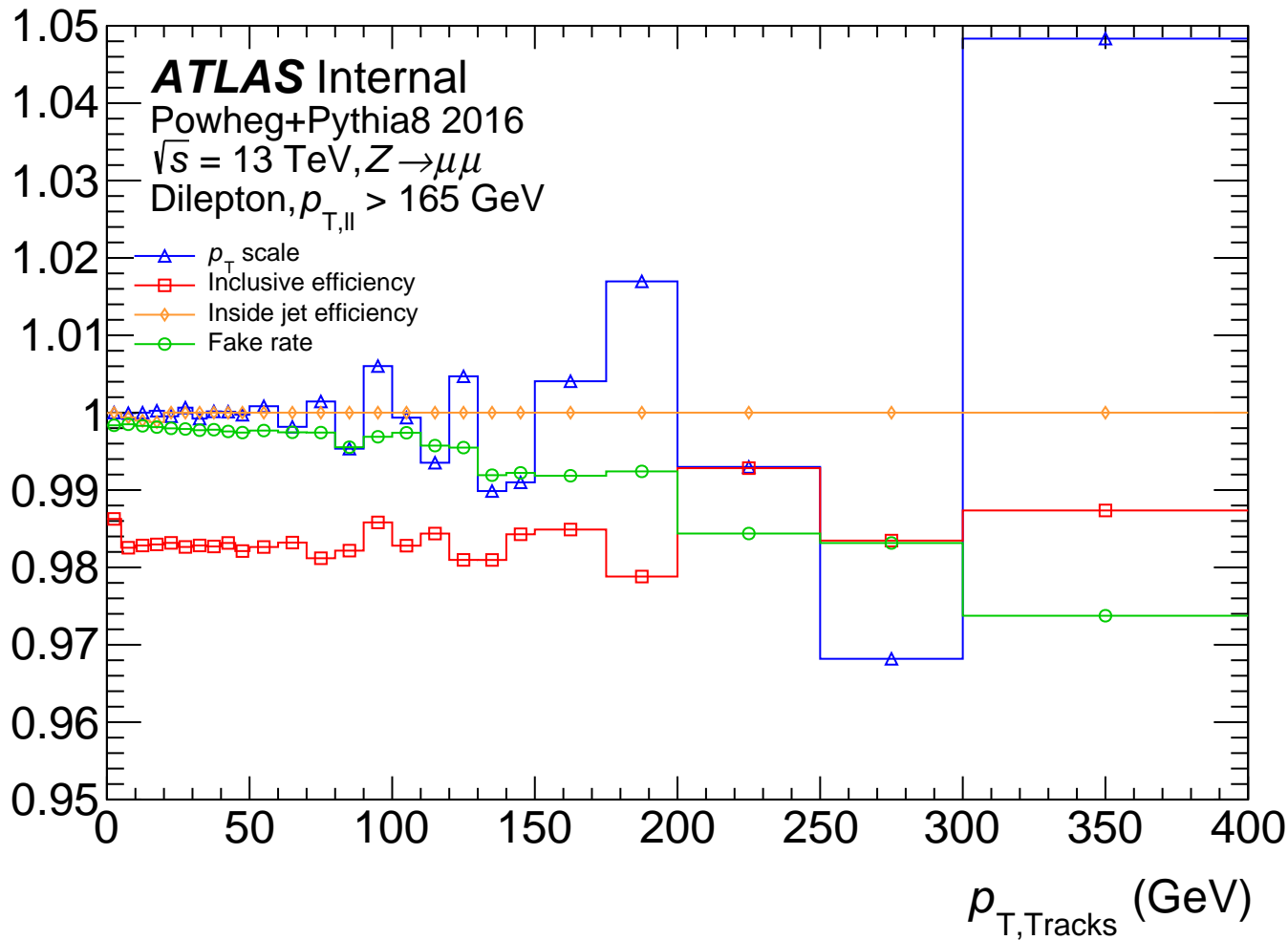
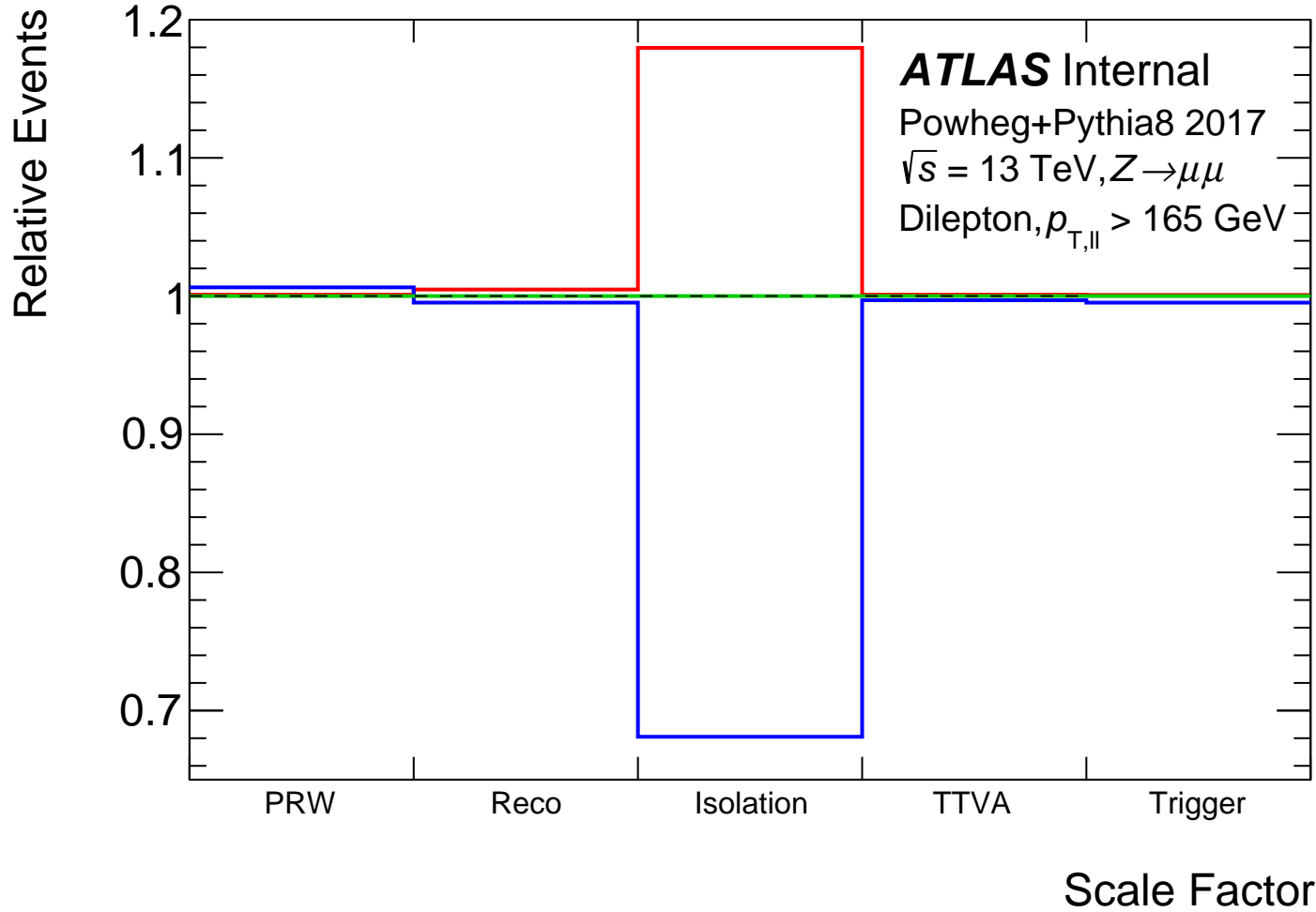


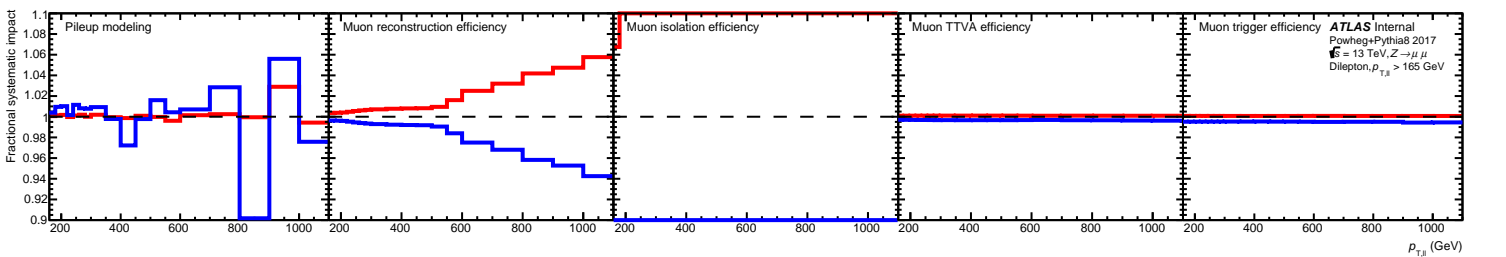
Fractional systematic impact

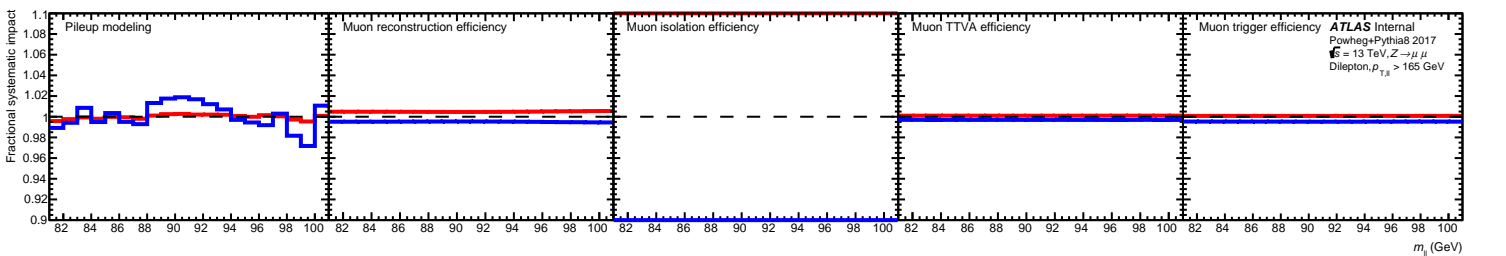
ATLAS Internal
Powheg+Pythia8 2016
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$
Dilepton, $p_{T,\text{ll}} > 165 \text{ GeV}$

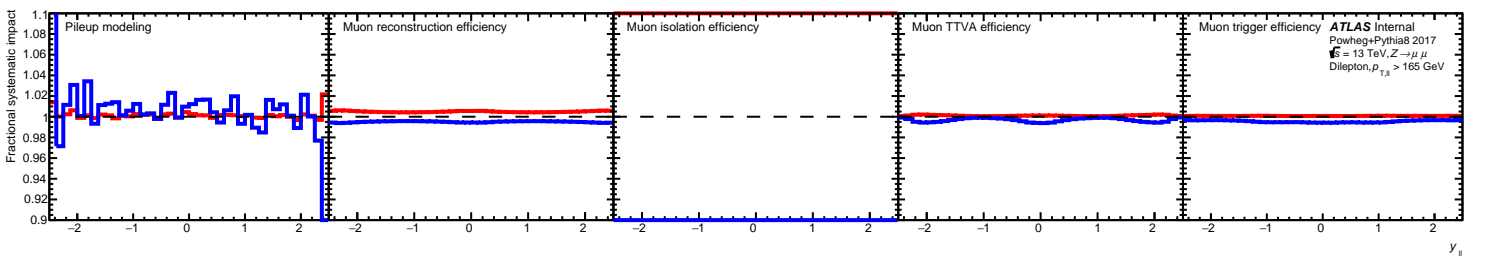
- $p_{T,\text{scale}}$
- Inclusive efficiency
- Inside jet efficiency
- Fake rate

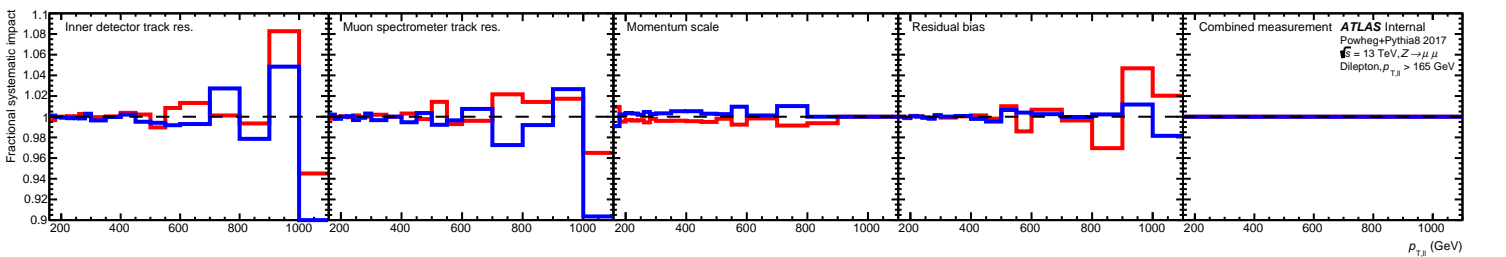


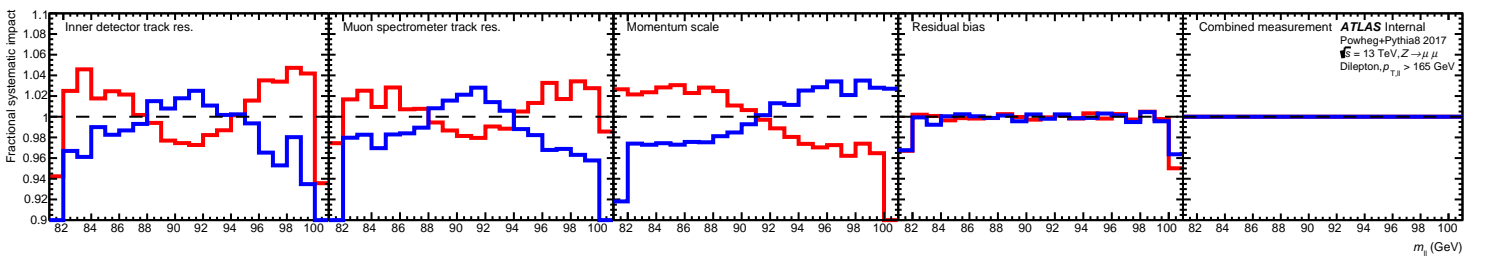








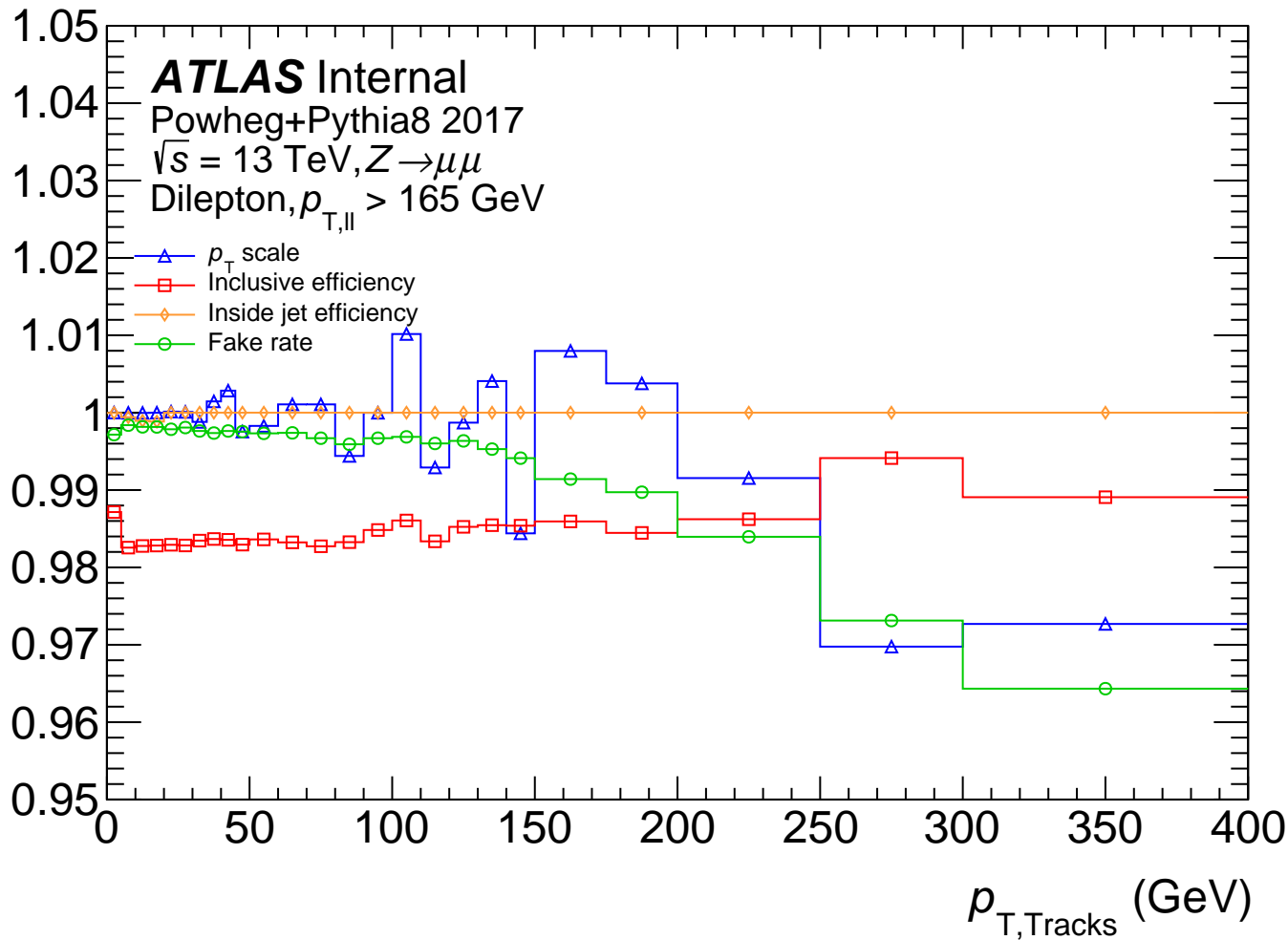


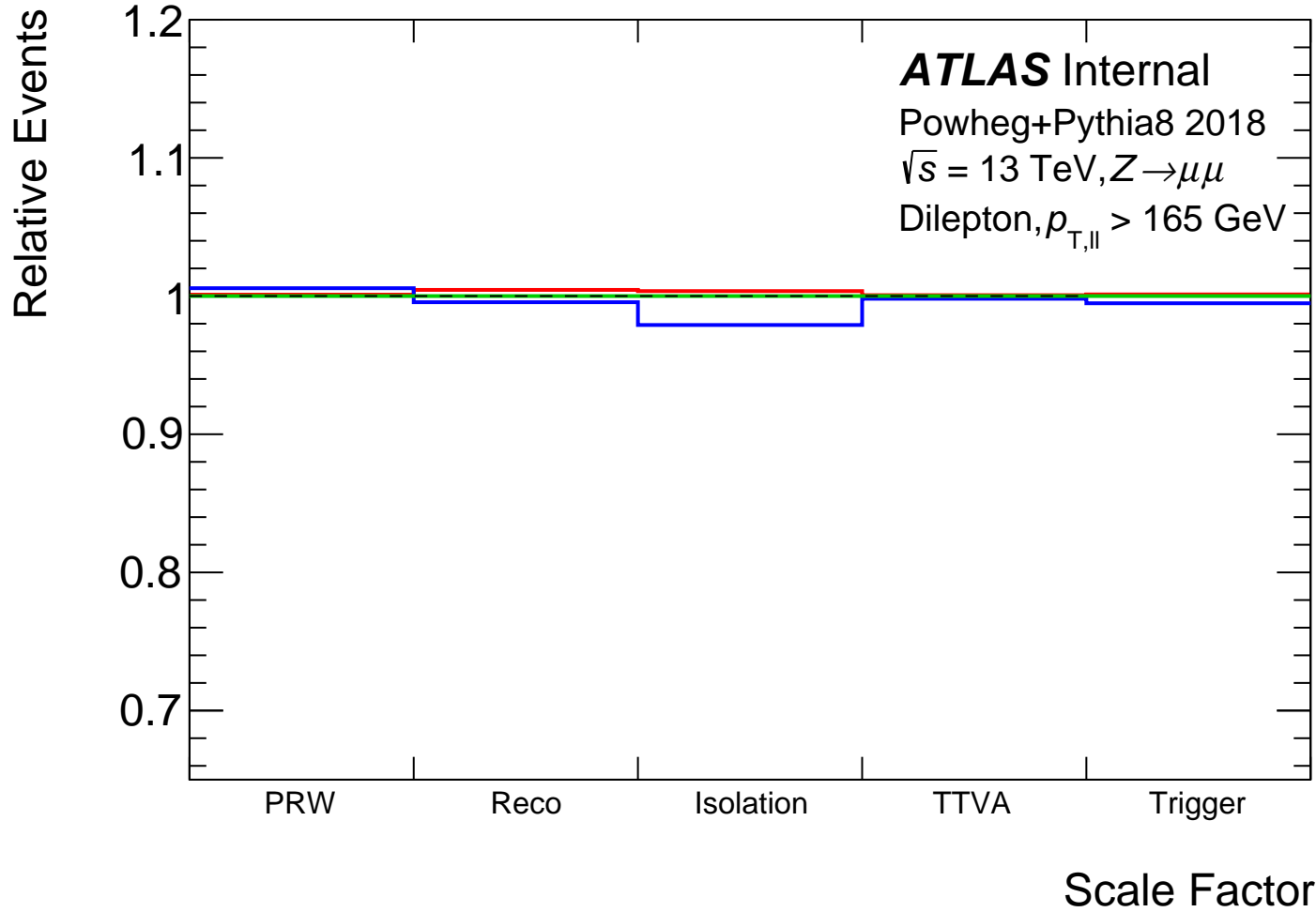


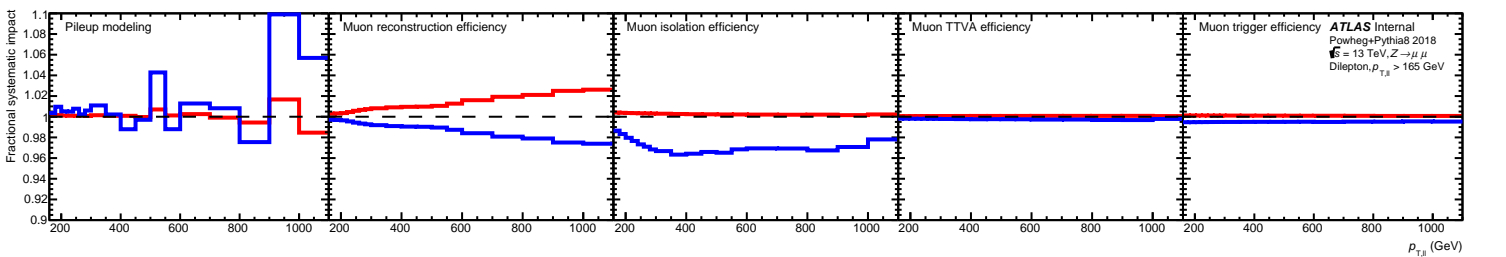
Fractional systematic impact

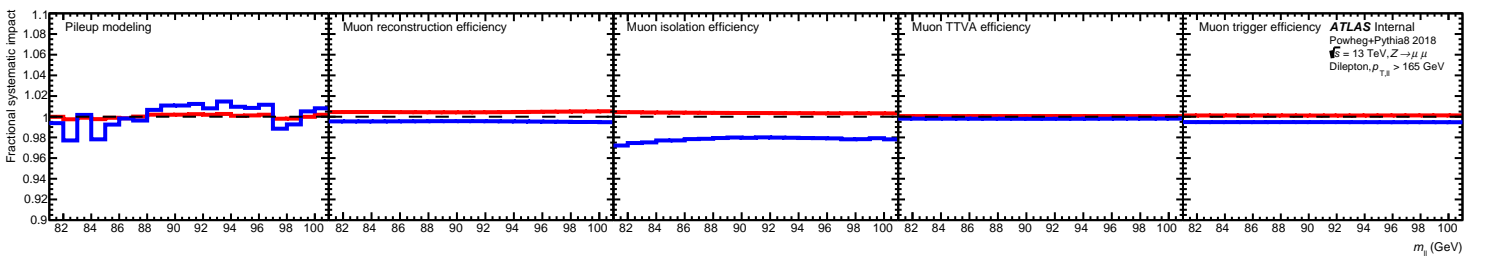
ATLAS Internal
Powheg+Pythia8 2017
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$
Dilepton, $p_{T,\text{ll}} > 165 \text{ GeV}$

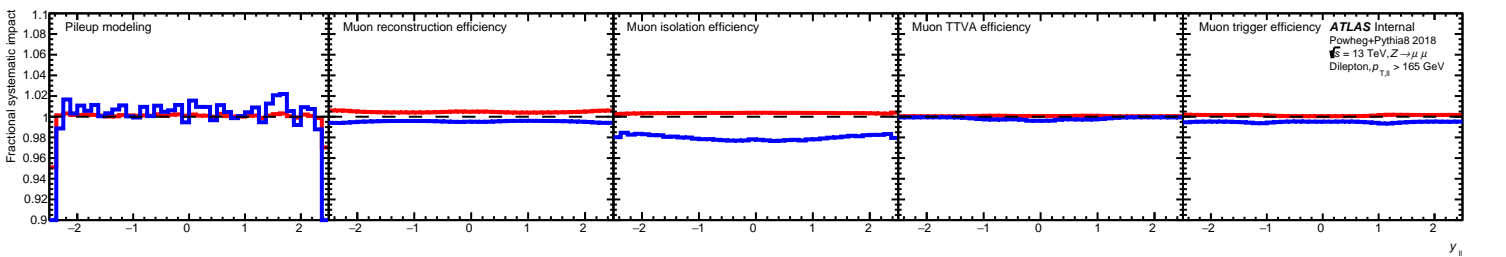
- $p_{T,\text{scale}}$
- Inclusive efficiency
- Inside jet efficiency
- Fake rate

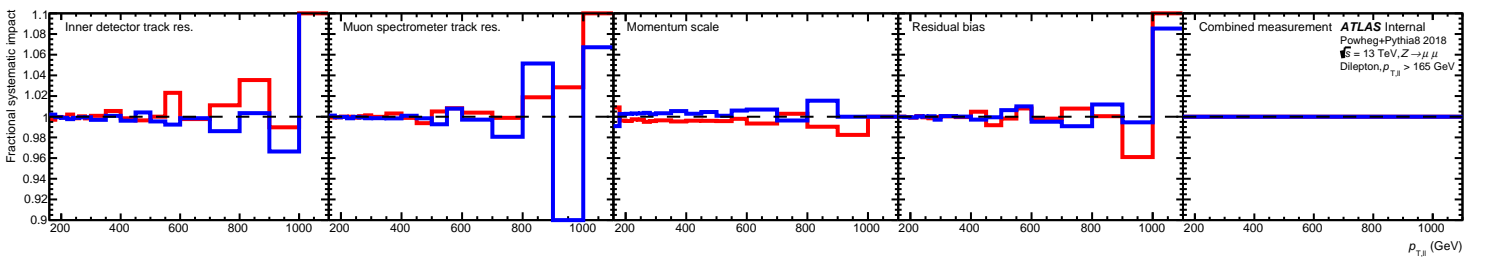


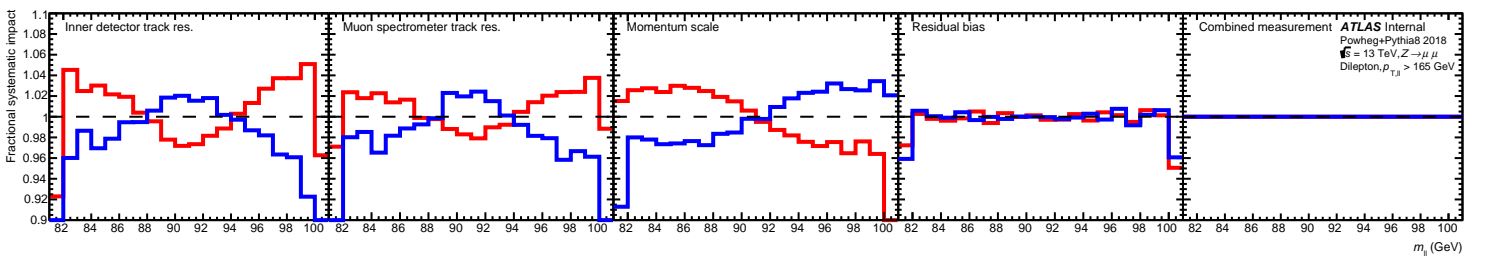








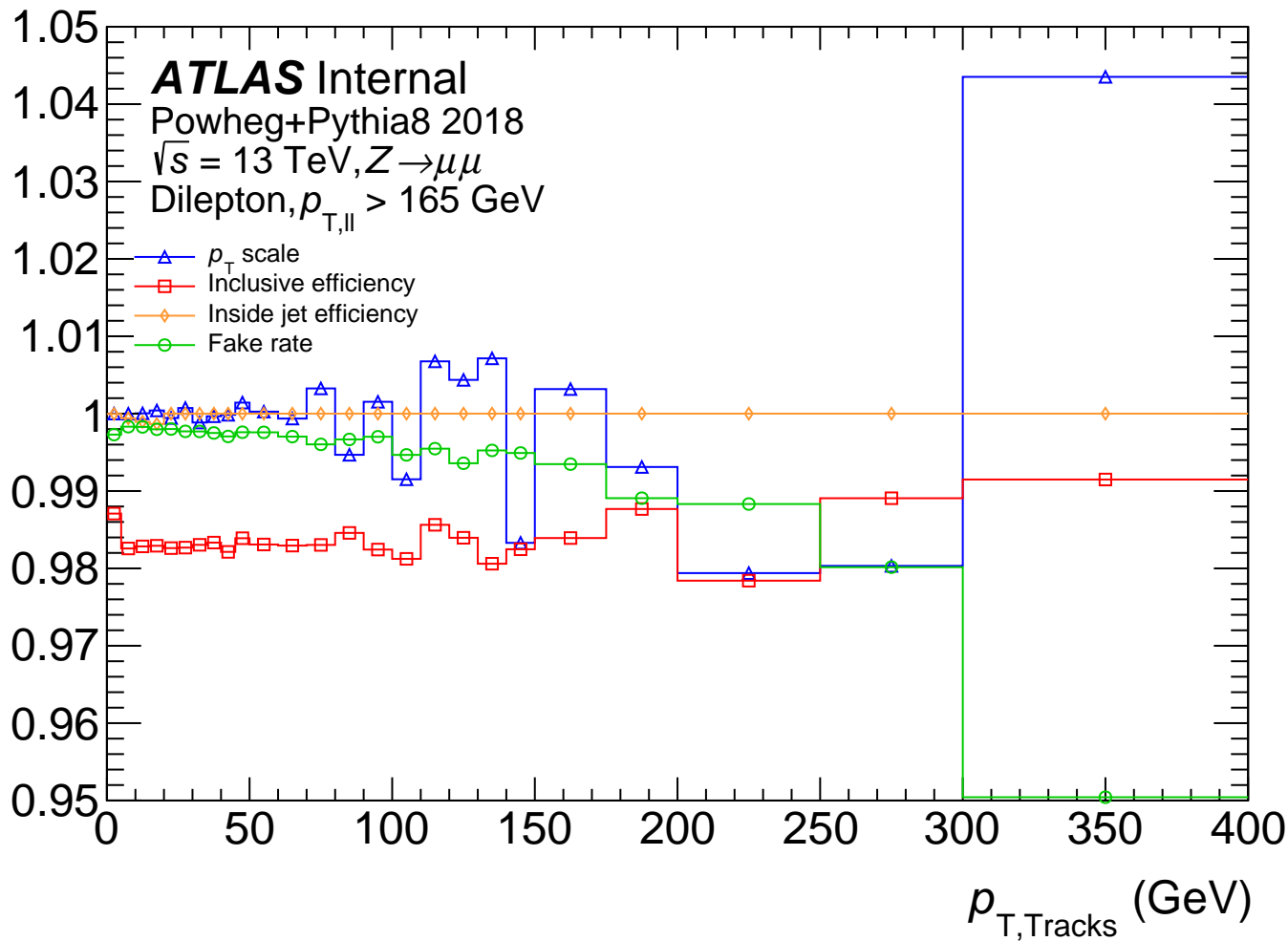


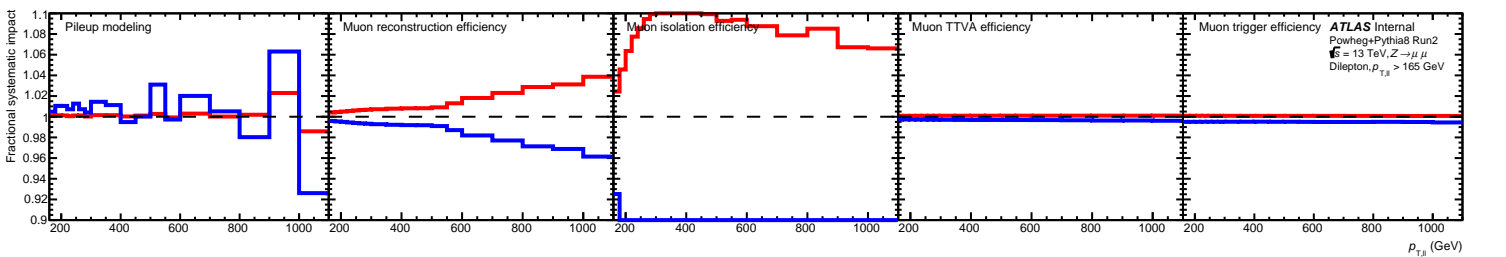


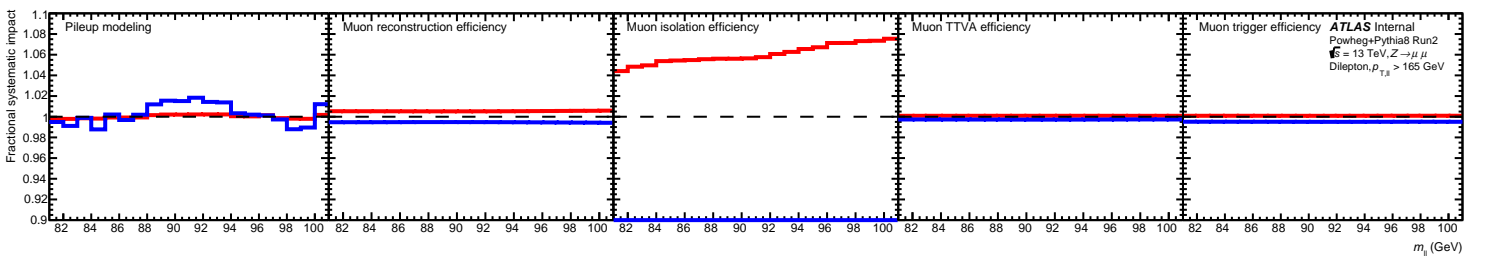
Fractional systematic impact

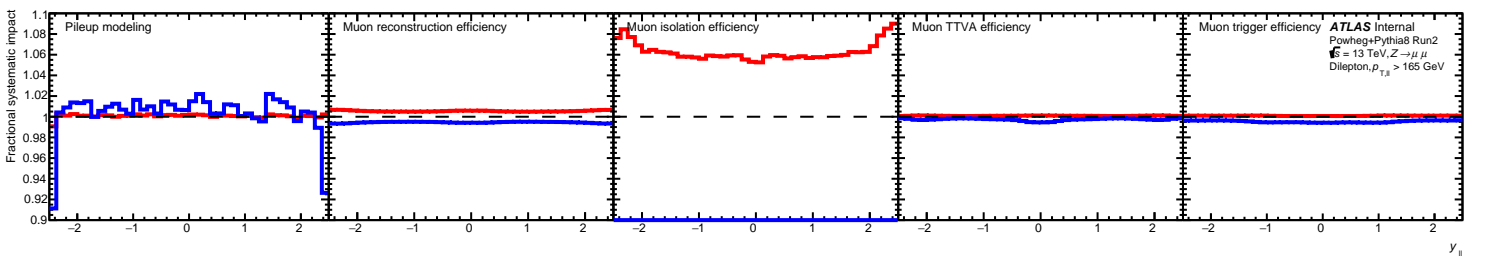
ATLAS Internal
Powheg+Pythia8 2018
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$
Dilepton, $p_{T,\text{ll}} > 165 \text{ GeV}$

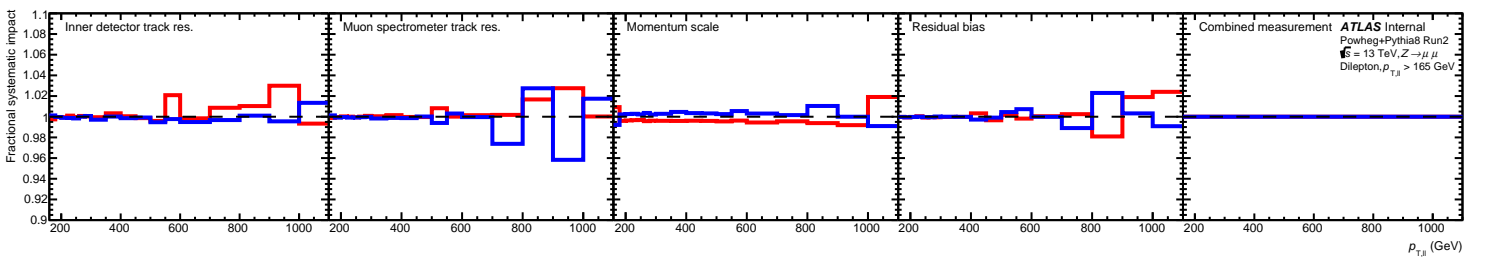
- $p_{T,\text{scale}}$
- Inclusive efficiency
- Inside jet efficiency
- Fake rate

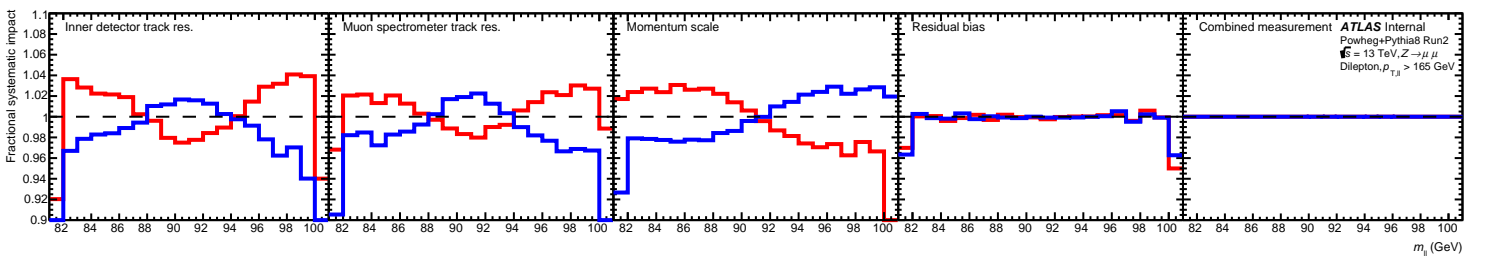








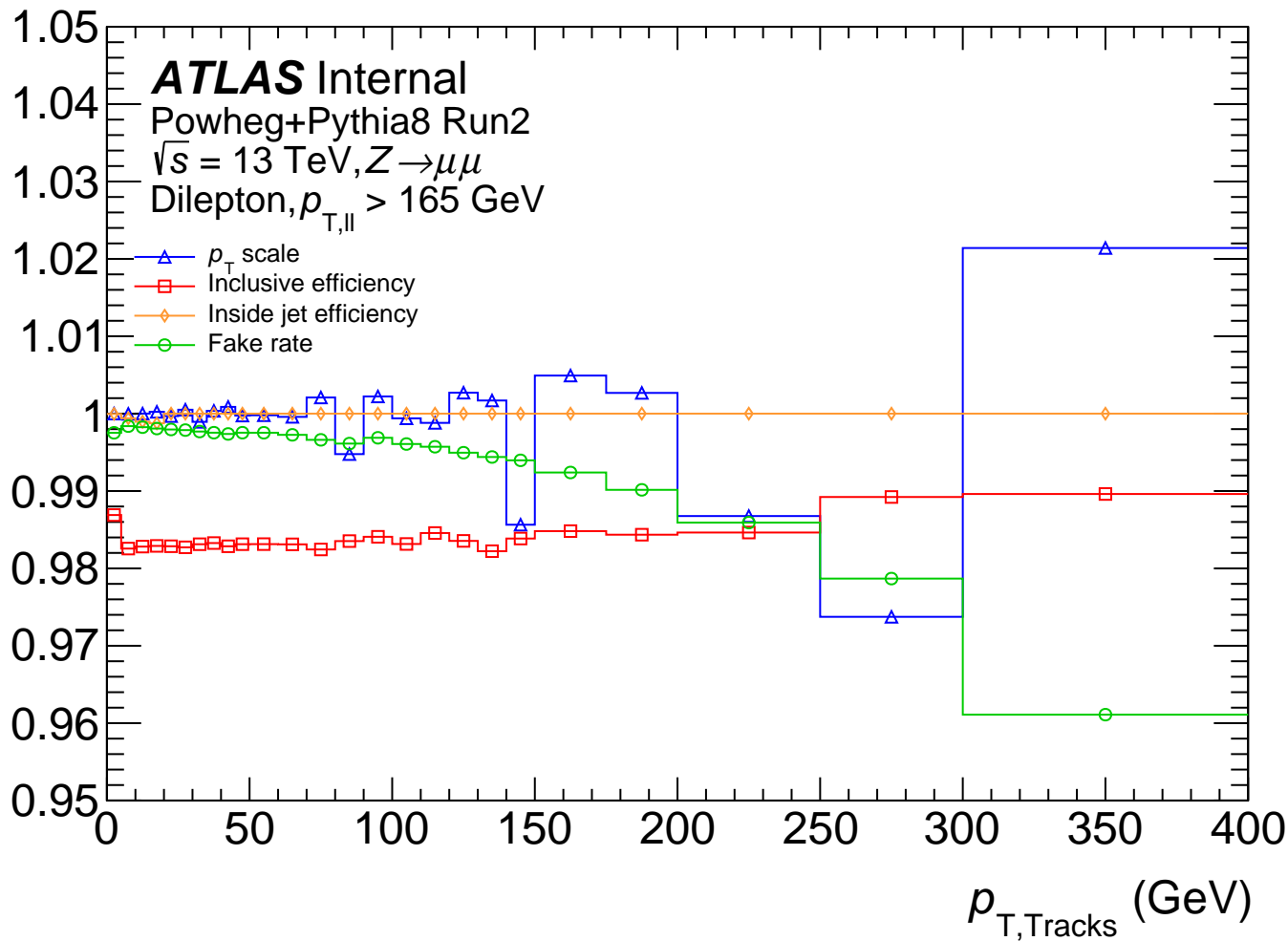


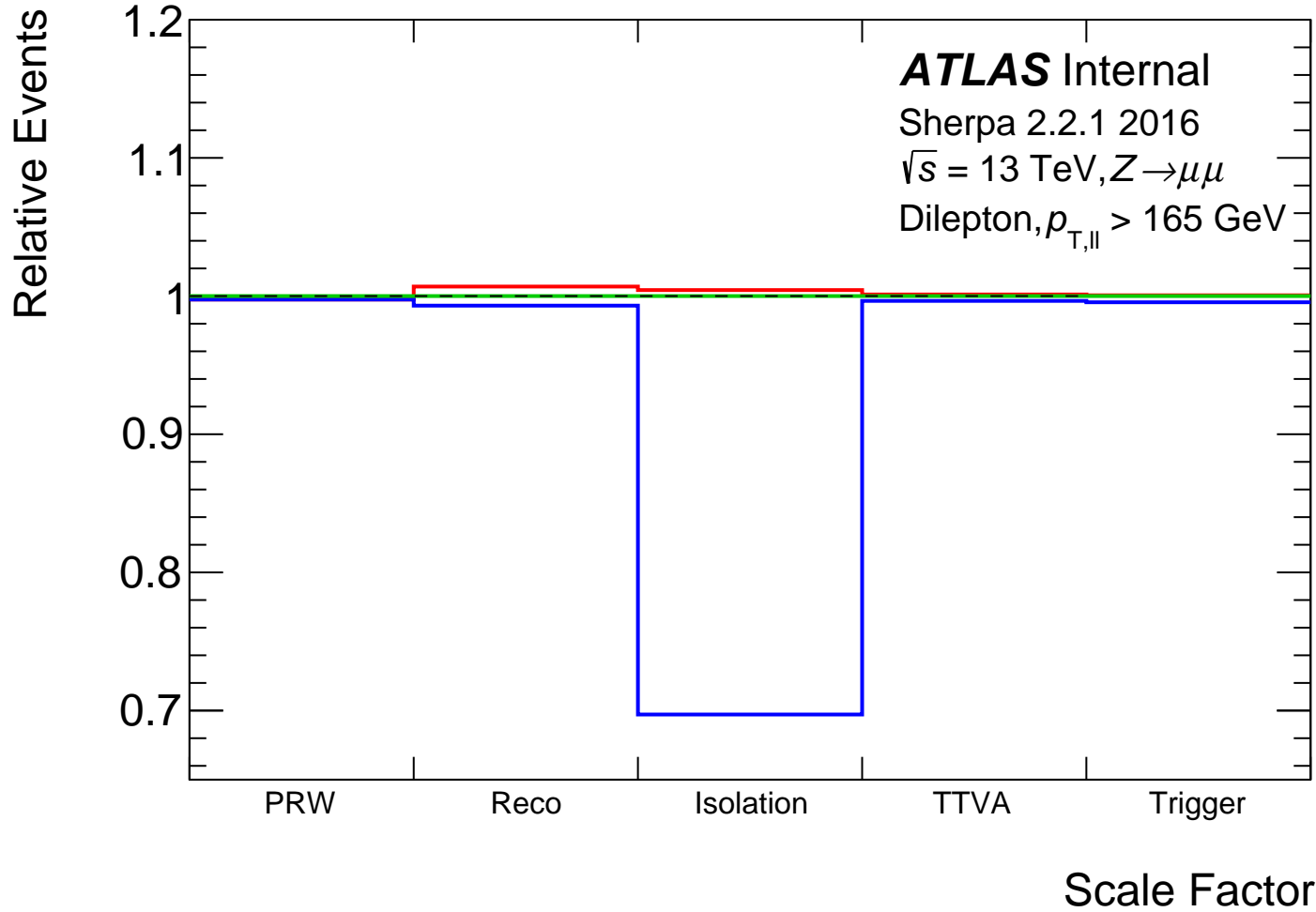


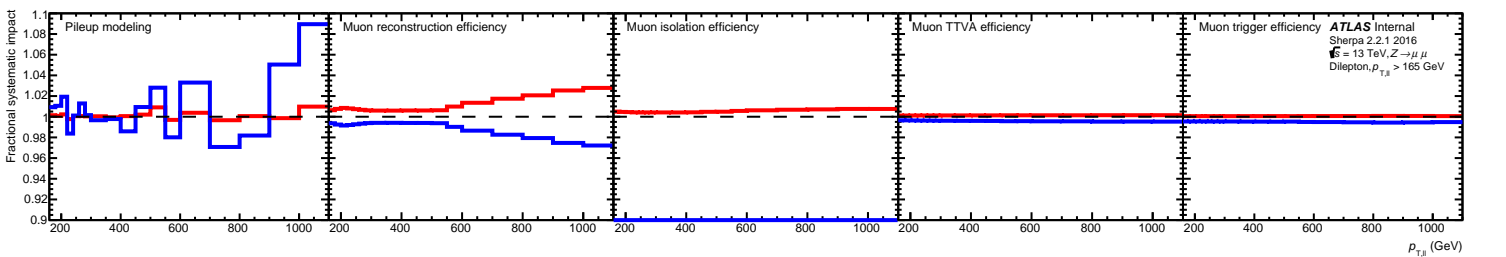
Fractional systematic impact

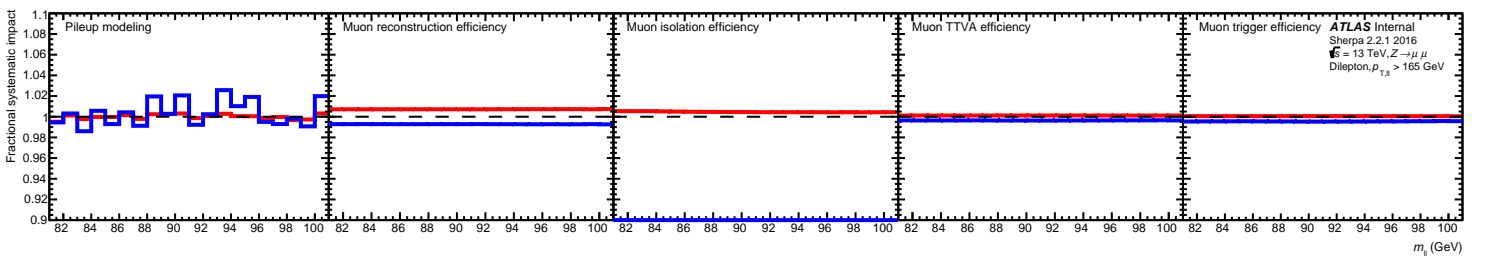
ATLAS Internal
Powheg+Pythia8 Run2
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$
Dilepton, $p_{T,\text{ll}} > 165 \text{ GeV}$

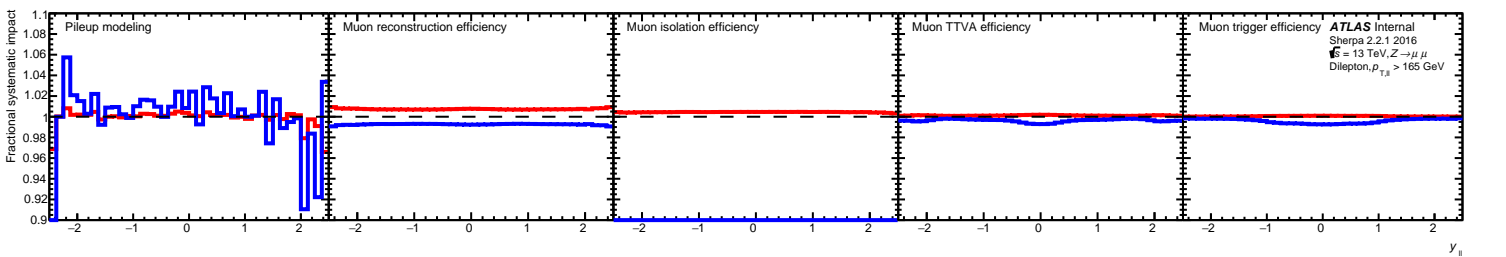
- $p_{T,\text{scale}}$
- Inclusive efficiency
- Inside jet efficiency
- Fake rate

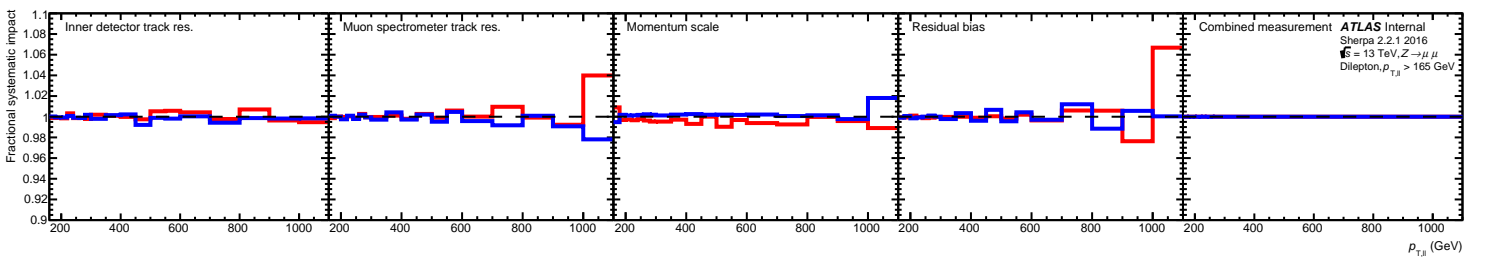


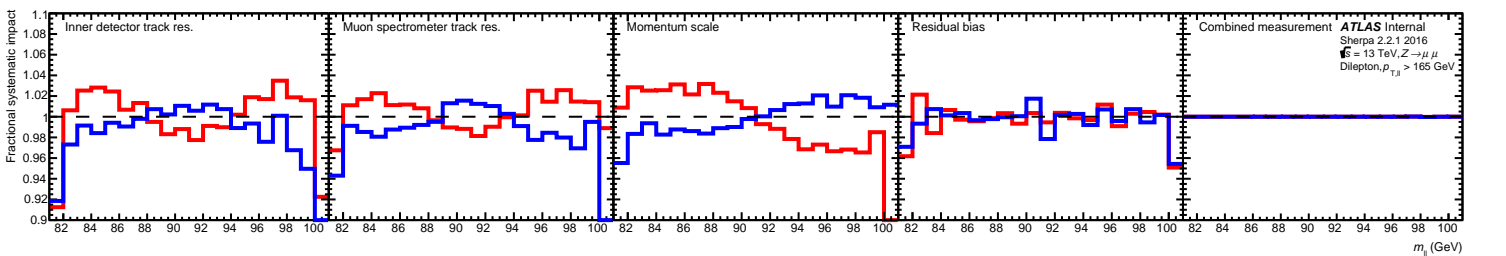




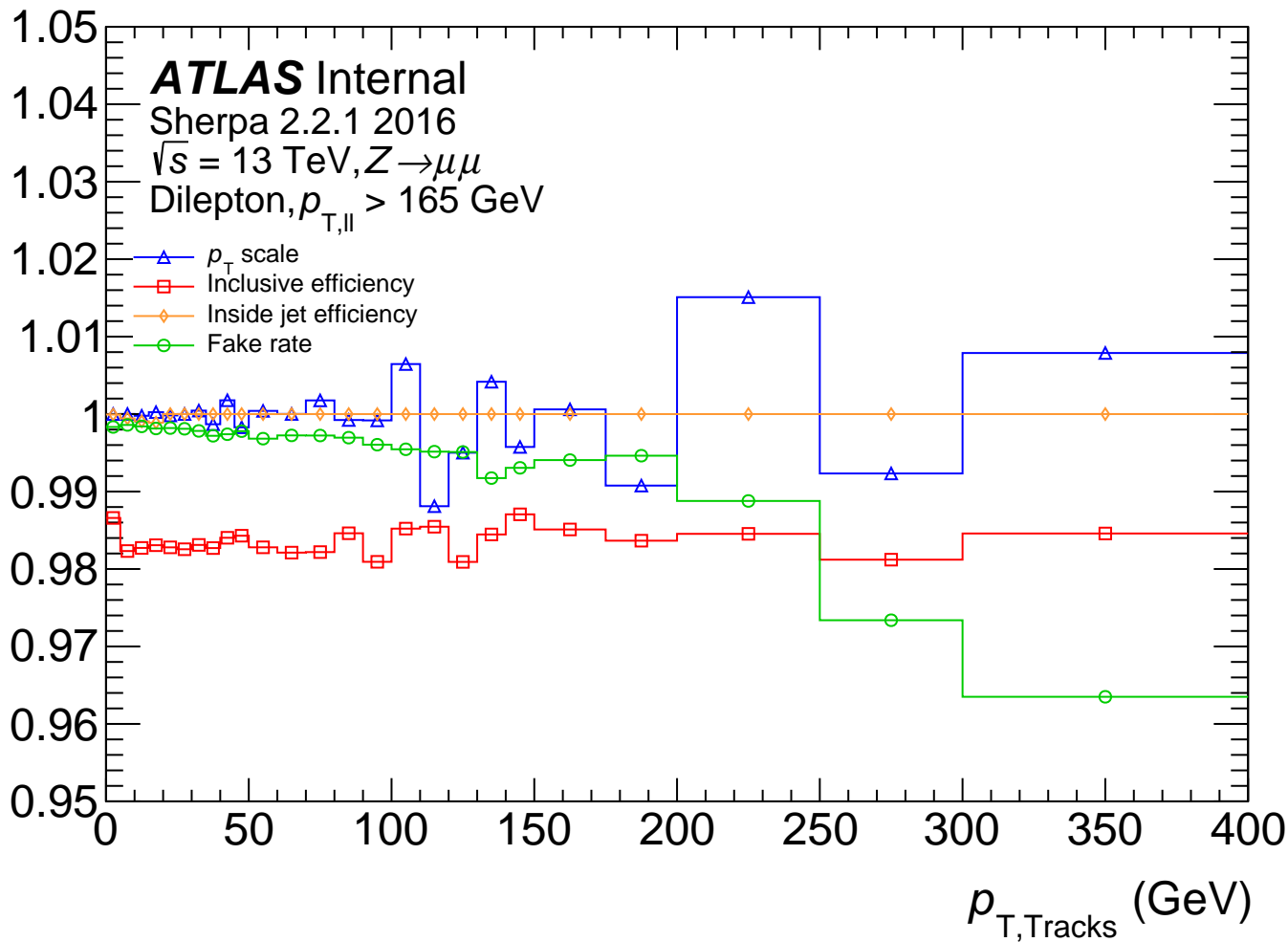


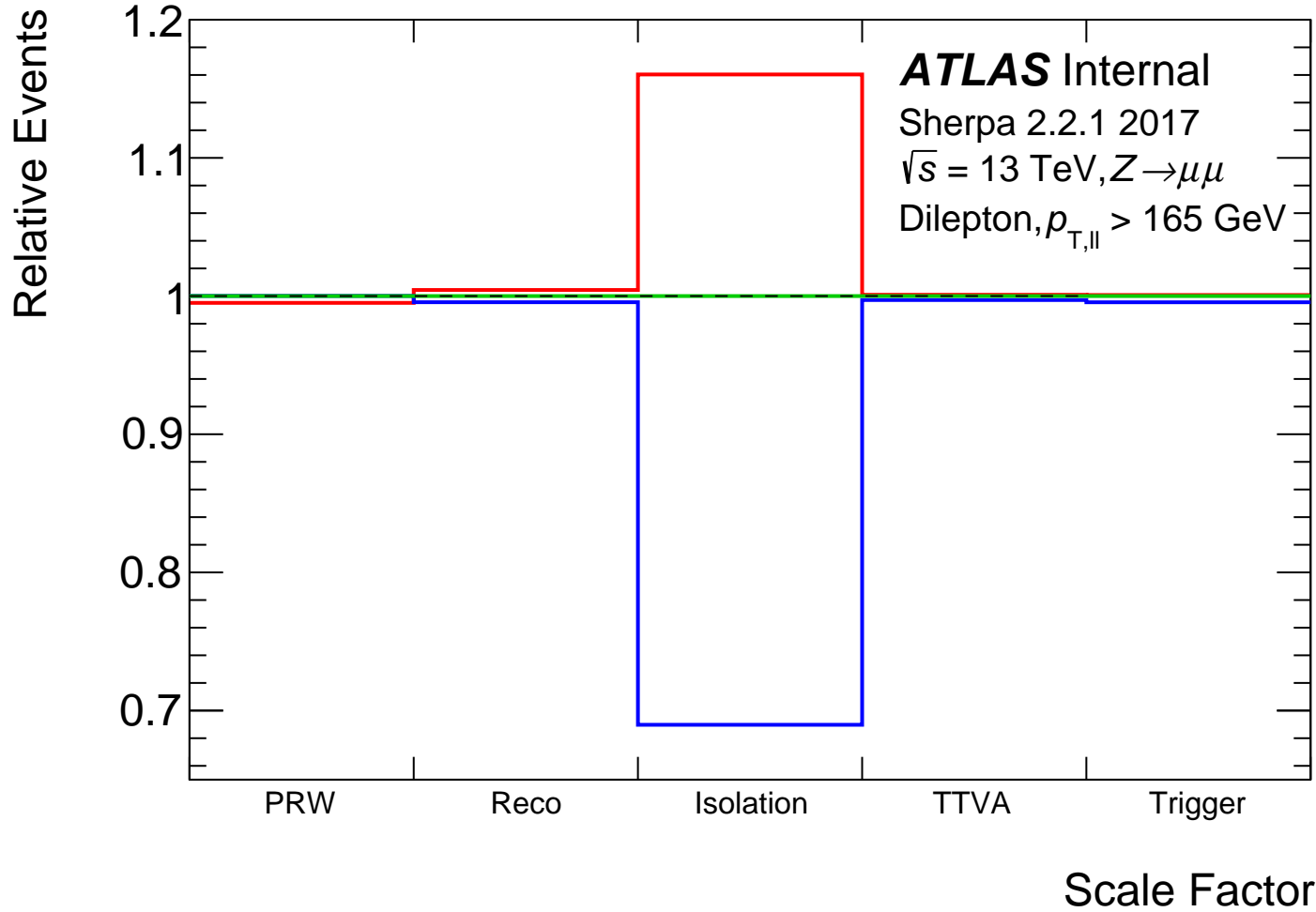


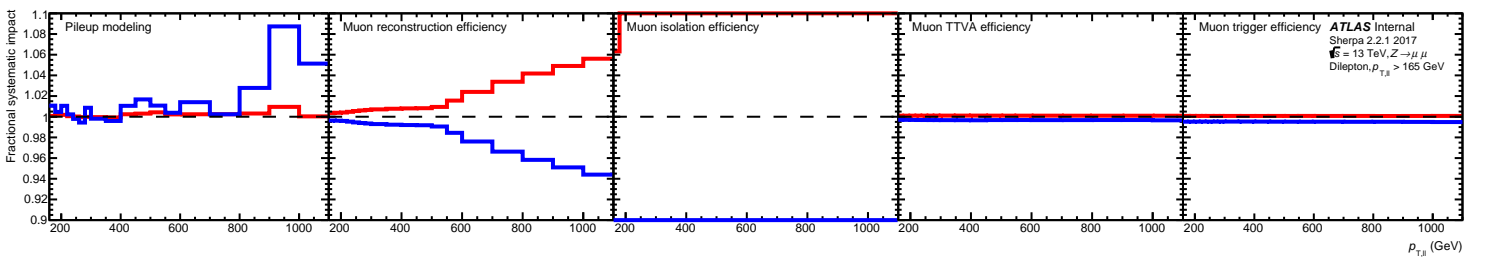


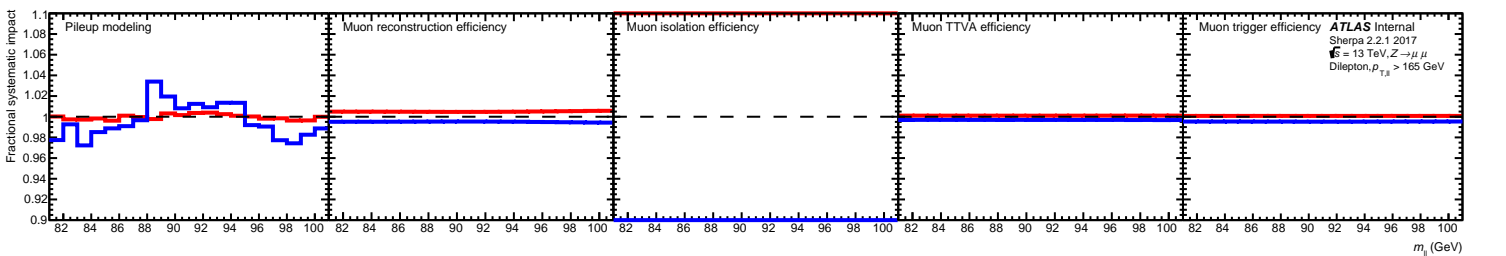


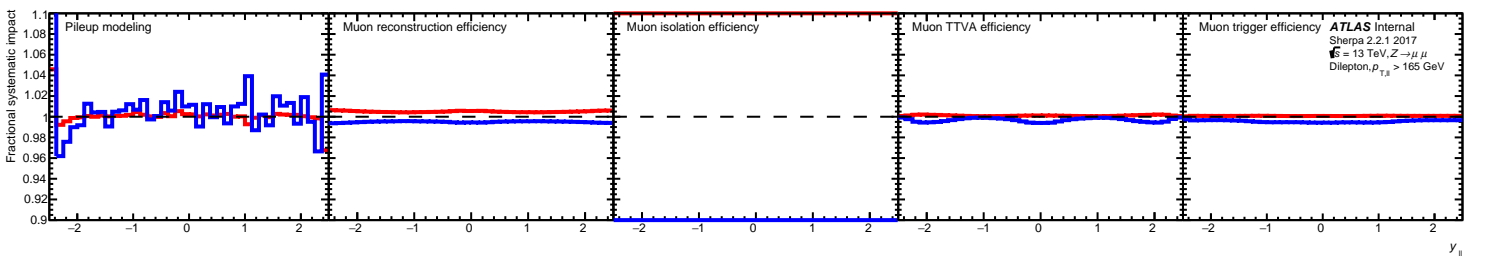
Fractional systematic impact

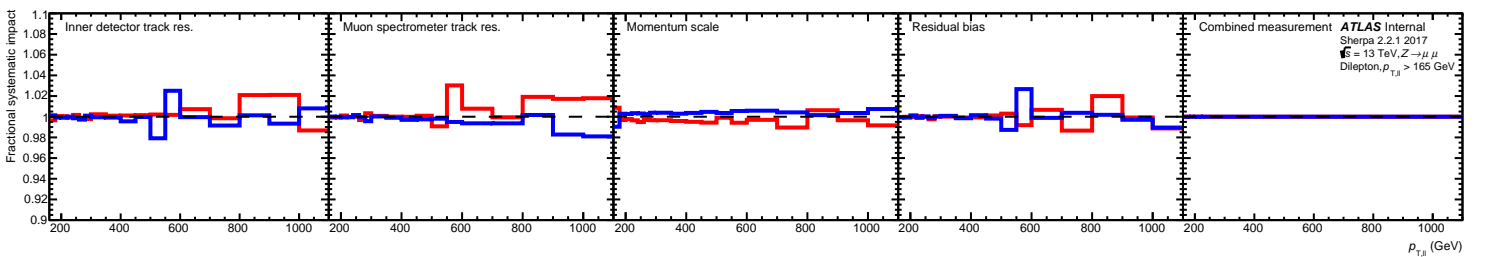


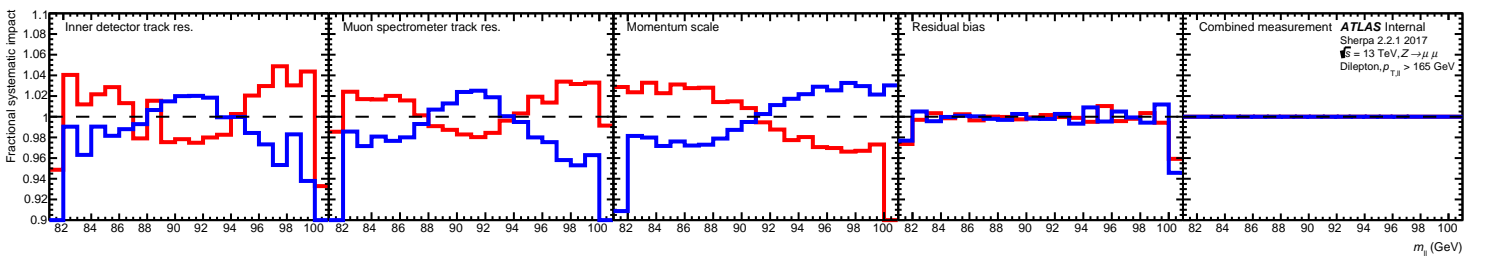








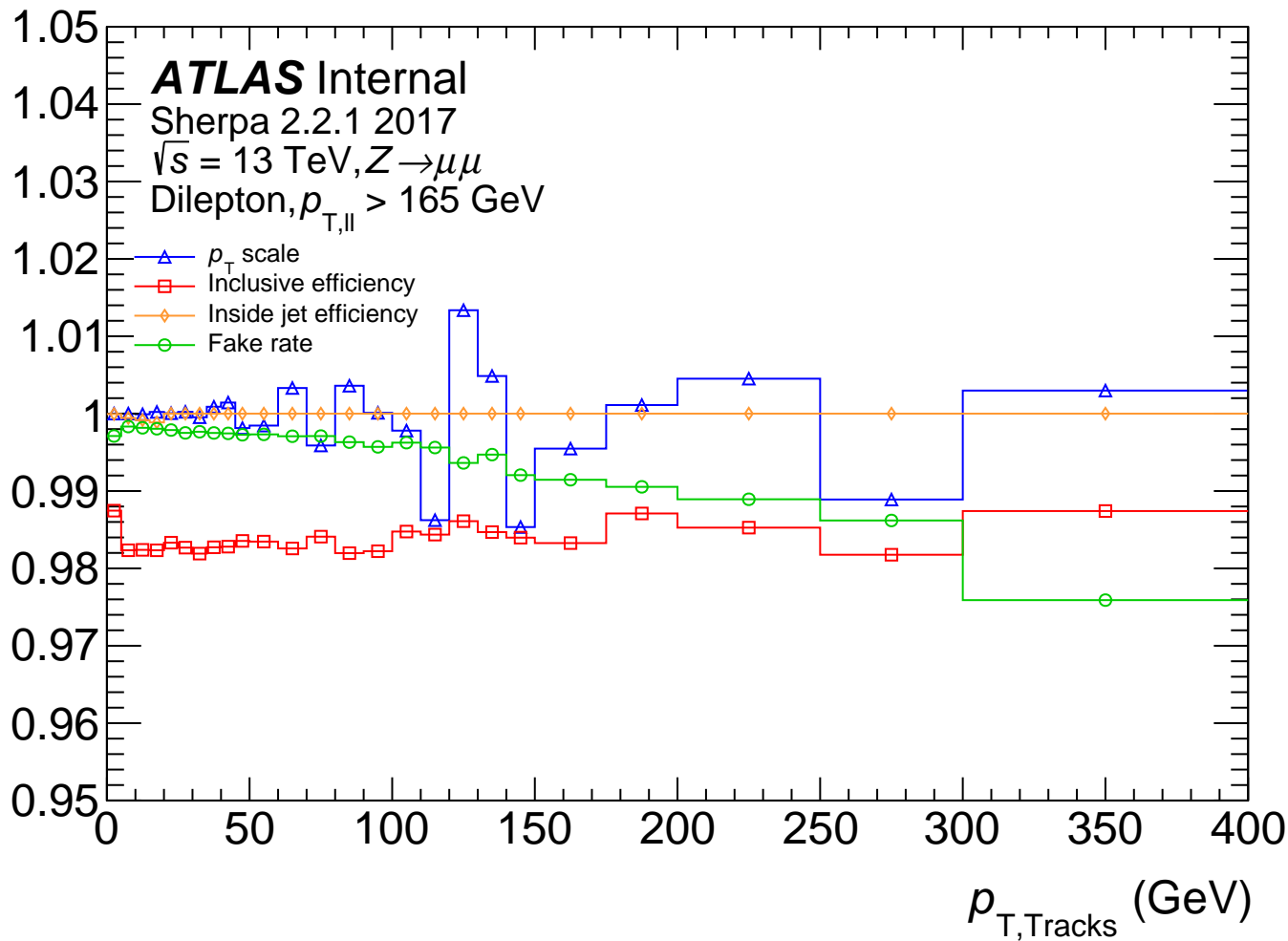


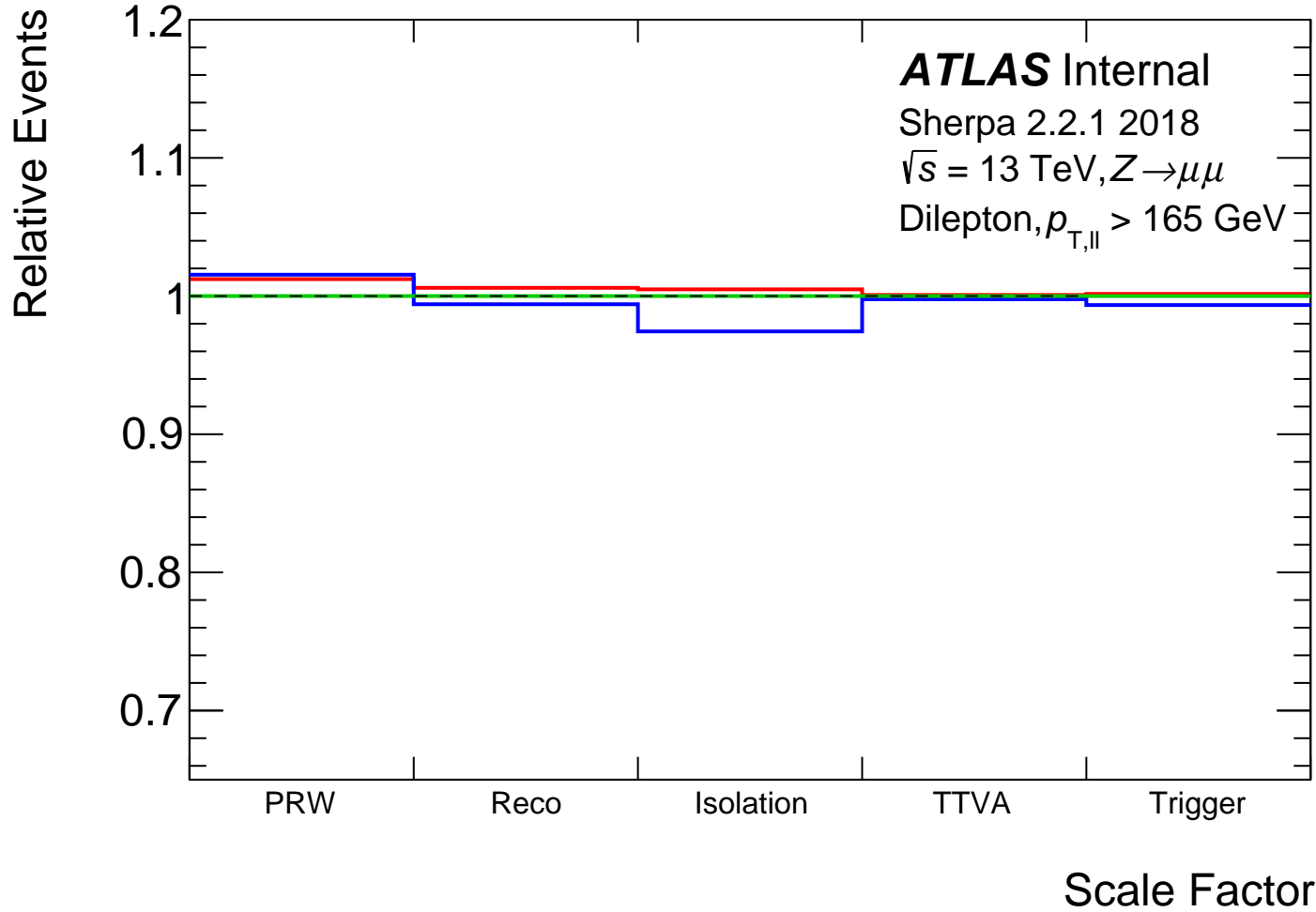


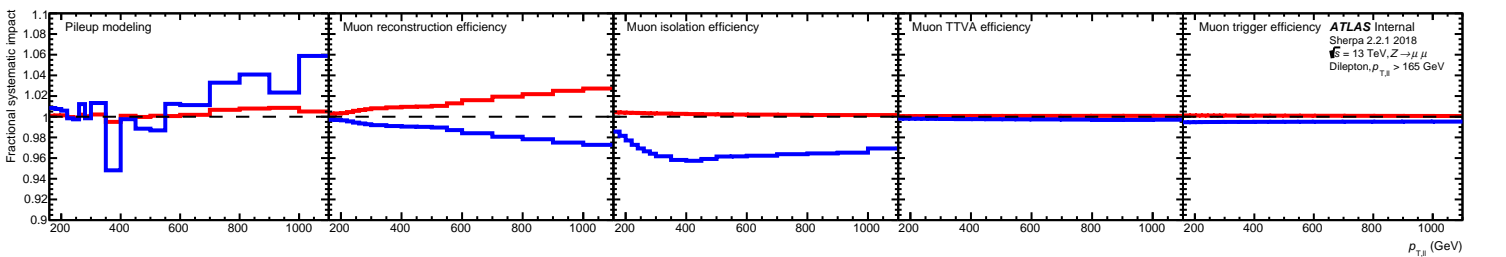
Fractional systematic impact

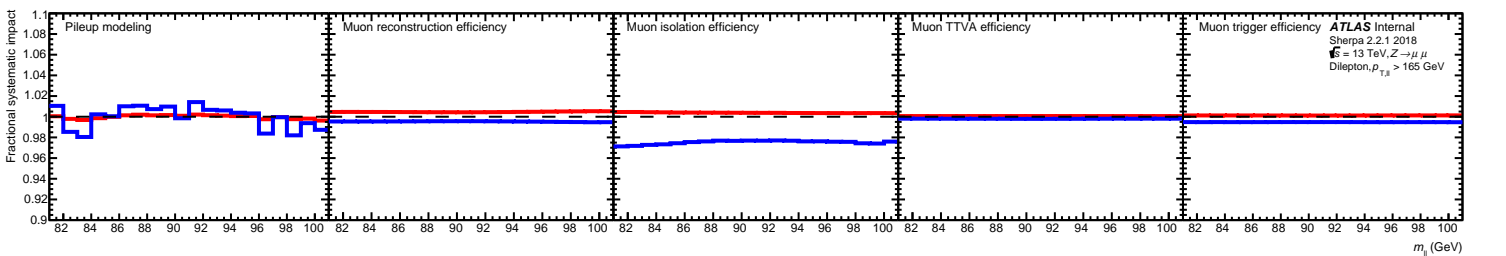
ATLAS Internal
Sherpa 2.2.1 2017
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$
Dilepton, $p_{T,\text{ll}} > 165 \text{ GeV}$

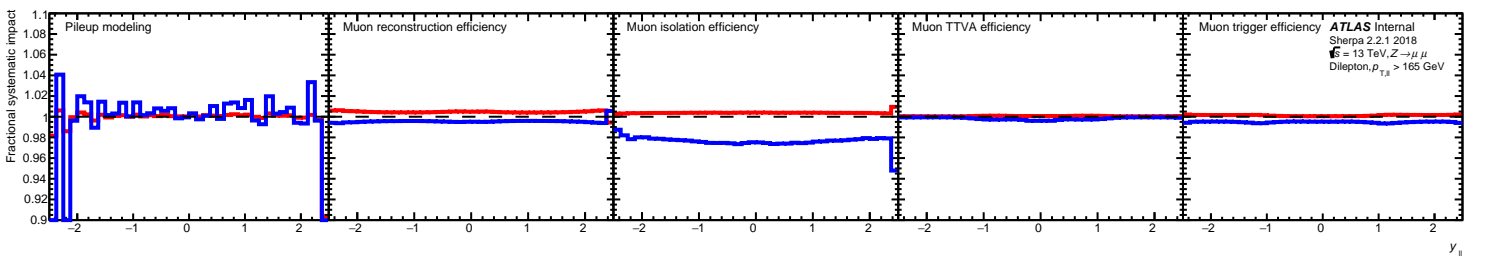
- $p_{T,\text{scale}}$
- Inclusive efficiency
- Inside jet efficiency
- Fake rate

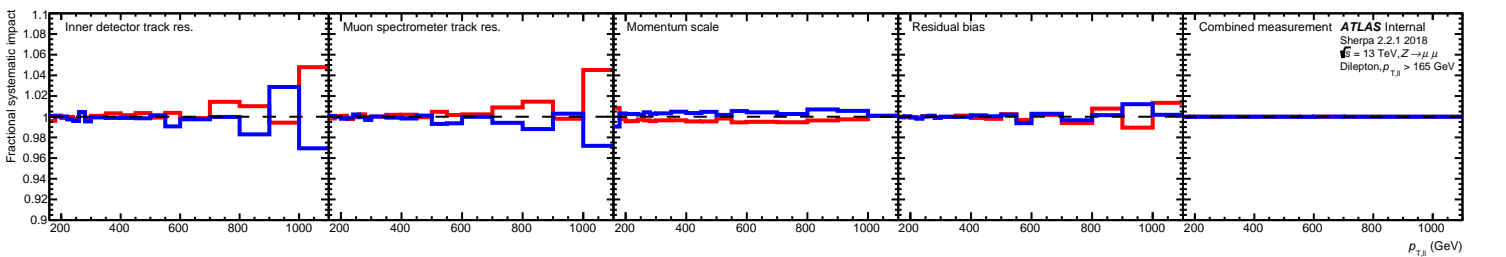


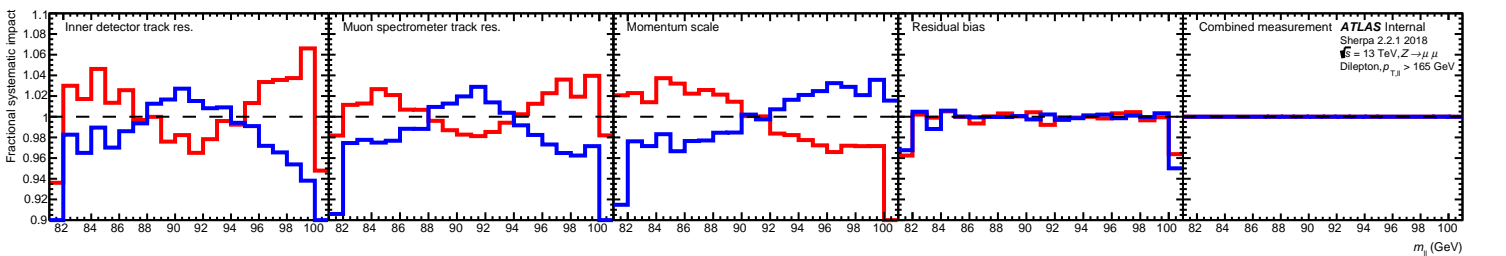








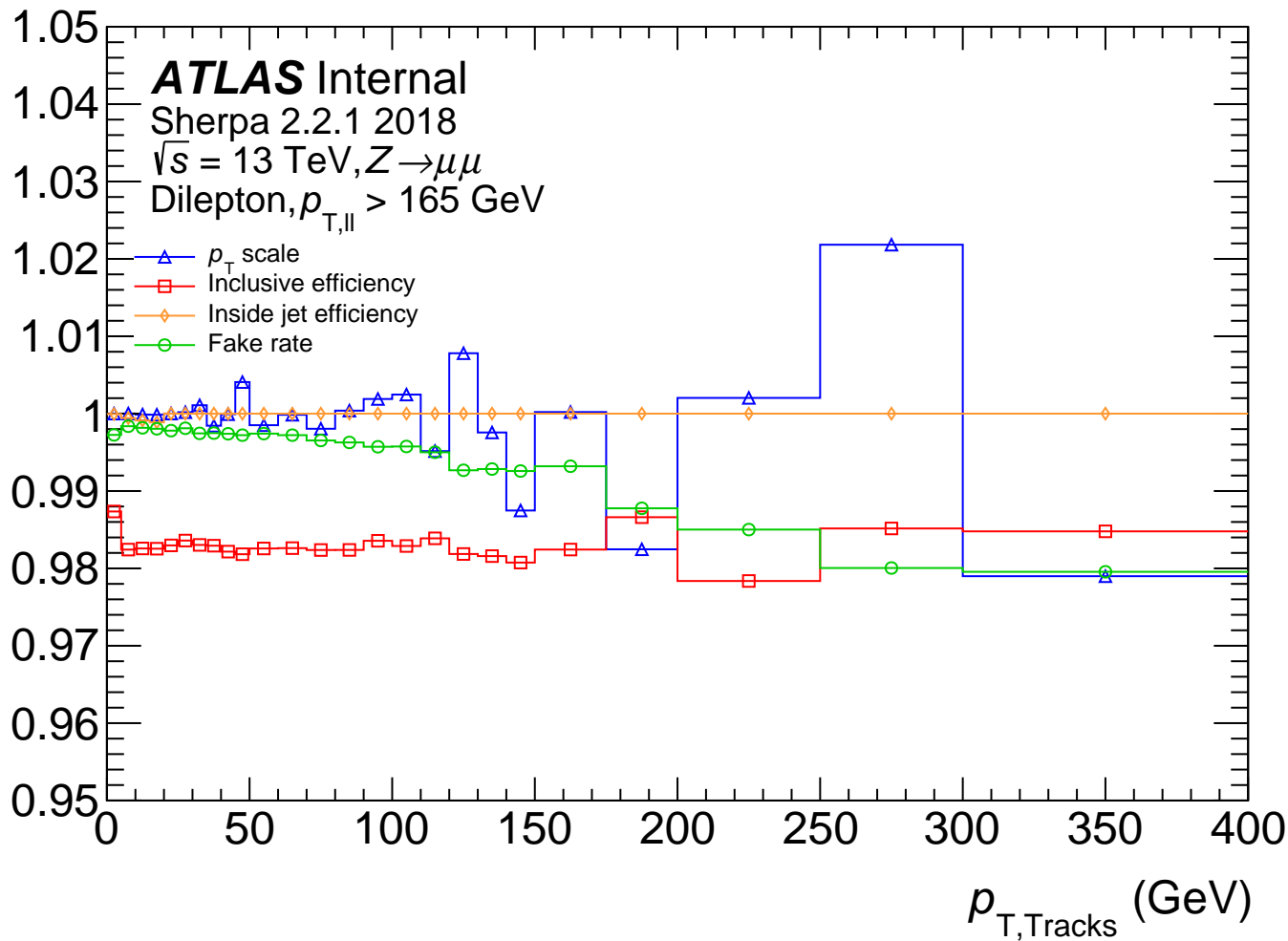


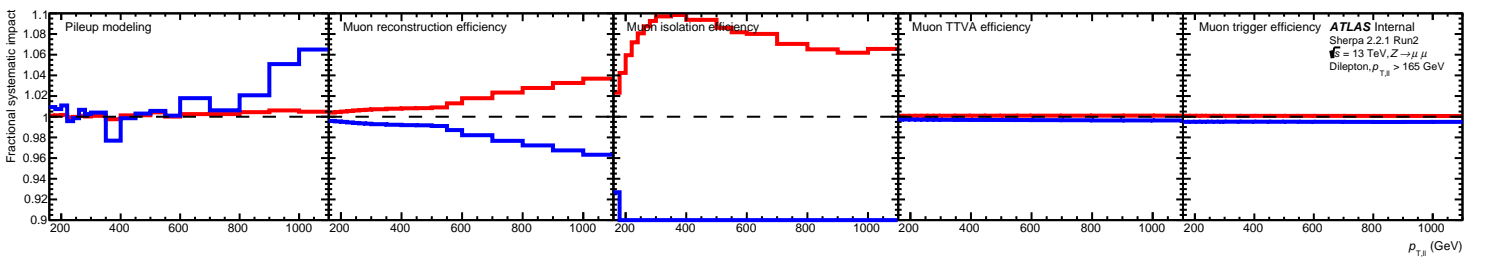


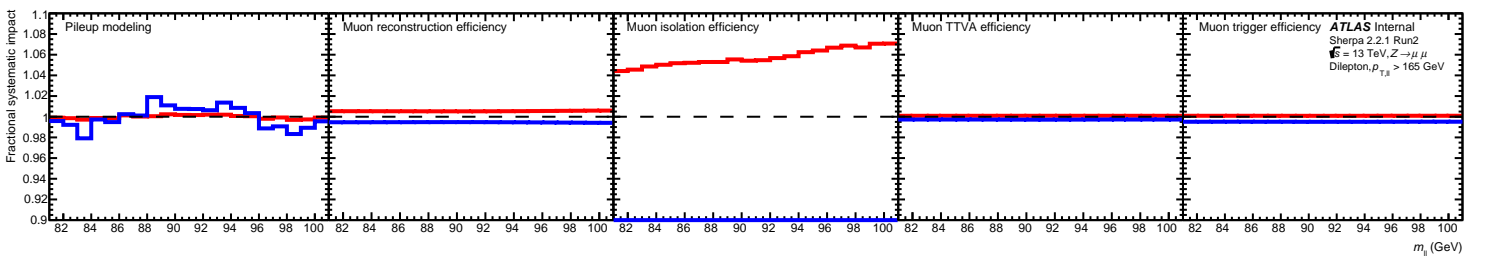
Fractional systematic impact

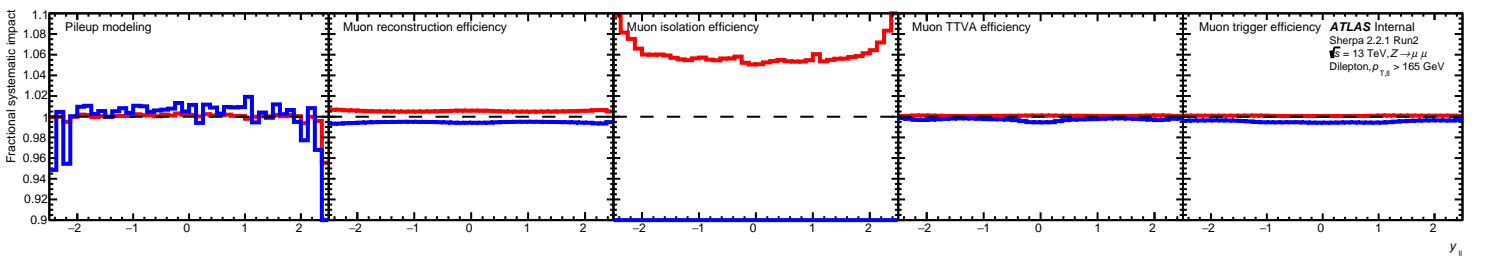
ATLAS Internal
Sherpa 2.2.1 2018
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu$
Dilepton, $p_{T,\text{ll}} > 165 \text{ GeV}$

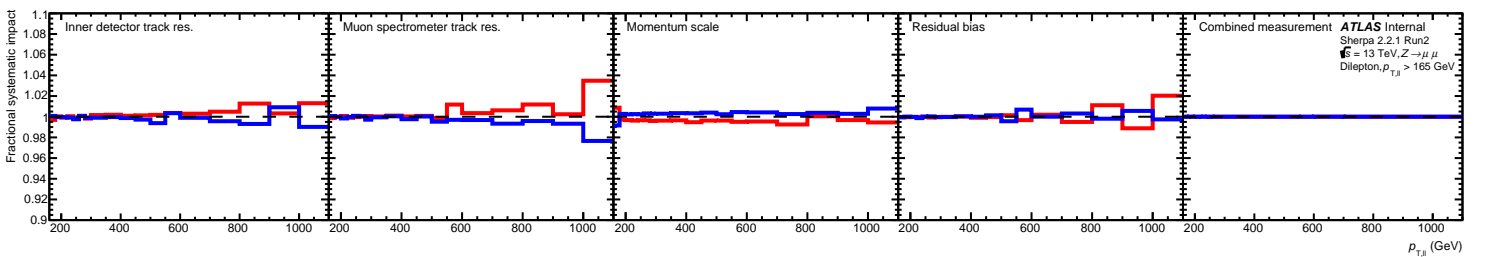
- $p_{T,\text{scale}}$
- Inclusive efficiency
- Inside jet efficiency
- Fake rate

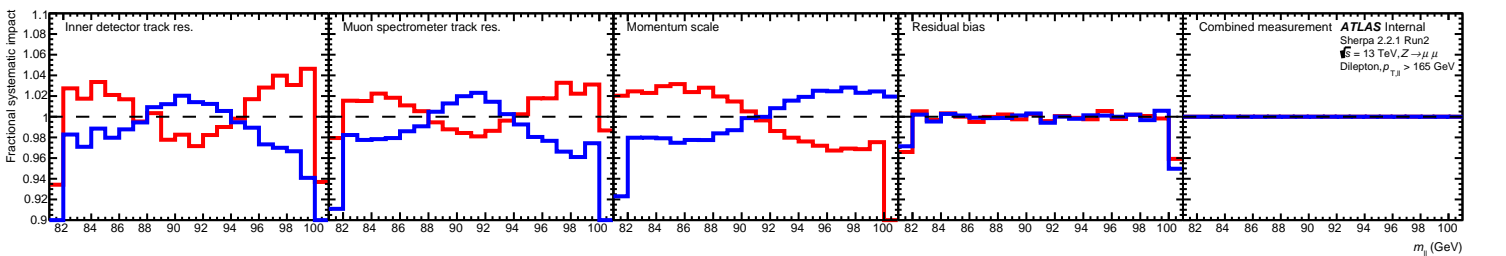












Fractional systematic impact

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

- $p_{T,\text{scale}}$
- Inclusive efficiency
- Inside jet efficiency
- Fake rate

