

Relative Systematic Effect (MultiFold)

ATLAS

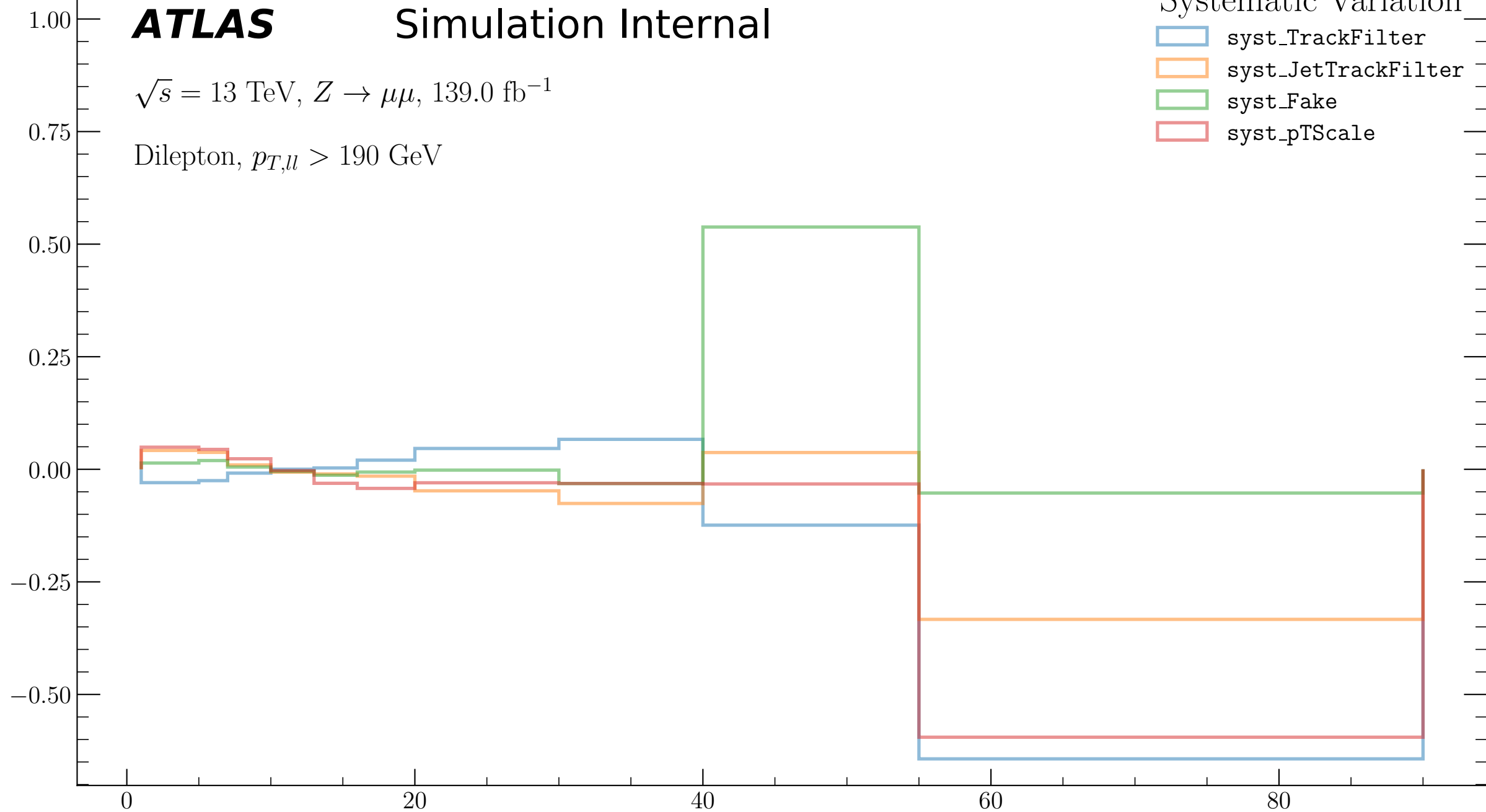
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}$, $Z \rightarrow \mu\mu$, 139.0 fb^{-1}

Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
- syst_JetTrackFilter
- syst_Fake
- syst_pTScale



Leading track jet n_{ch}

Relative Systematic Effect (MultiFold)

ATLAS

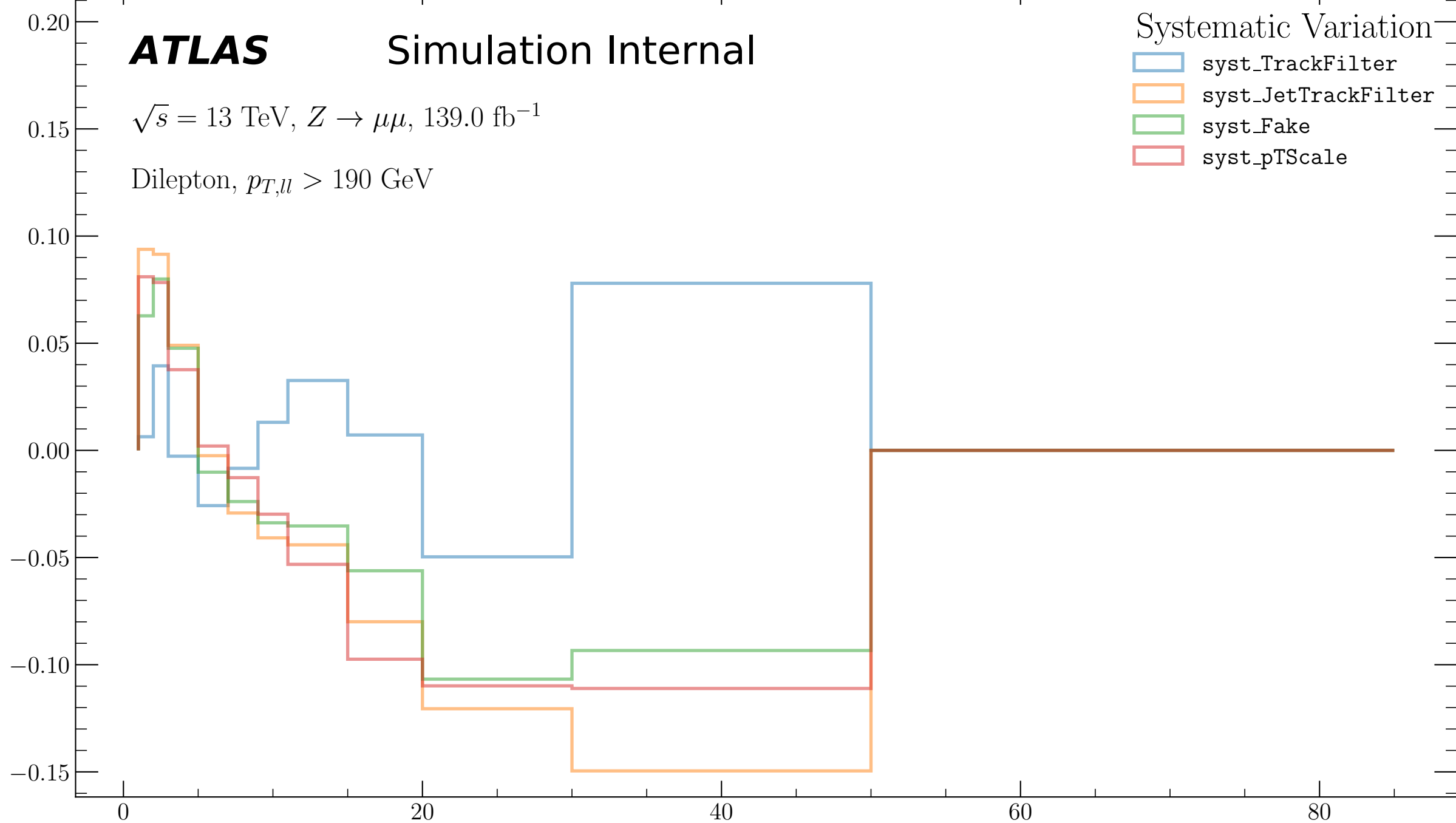
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$

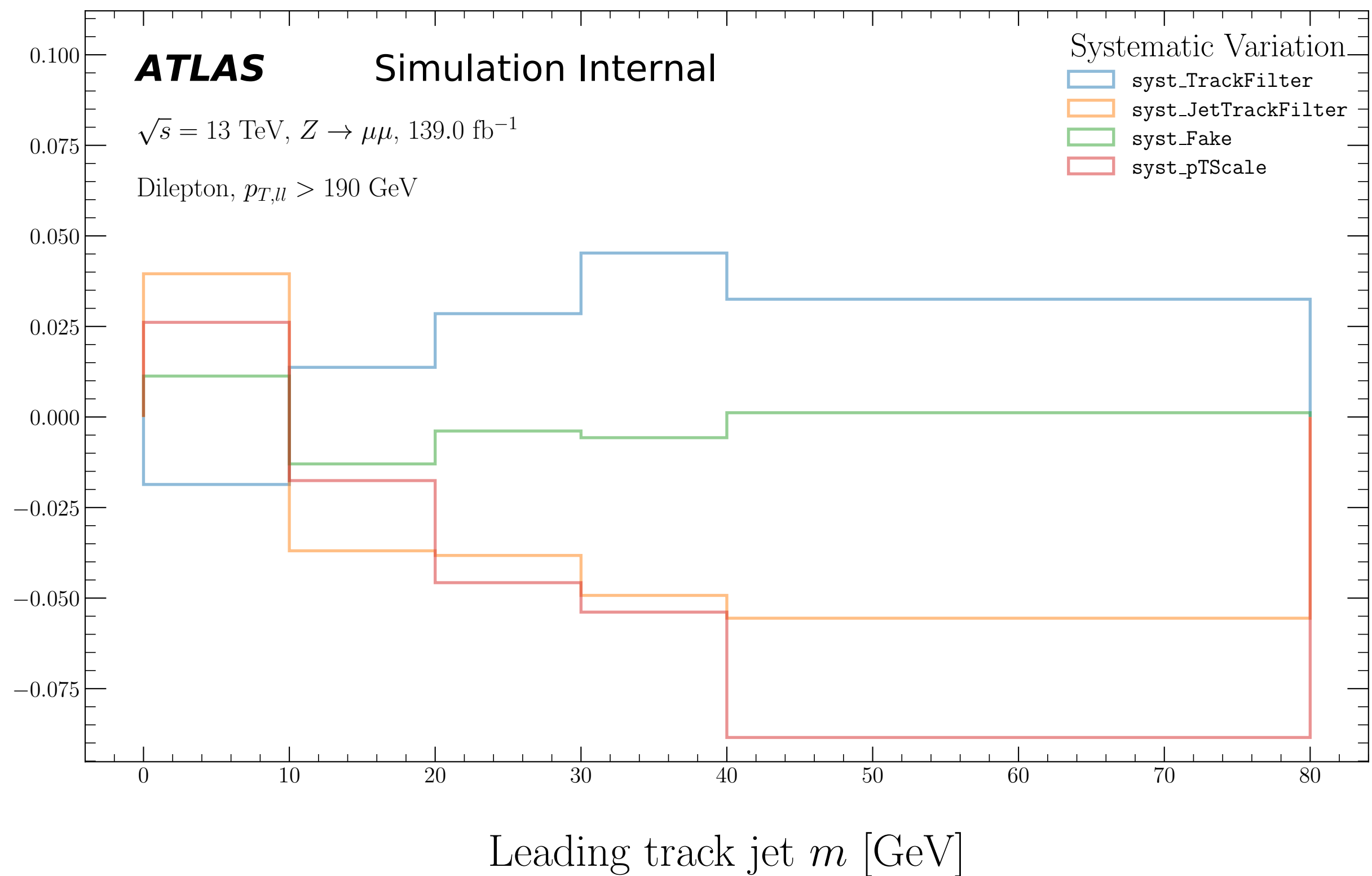
Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

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- syst_pTScale



Subleading track jet n_{ch}



Relative Systematic Effect (MultiFold)

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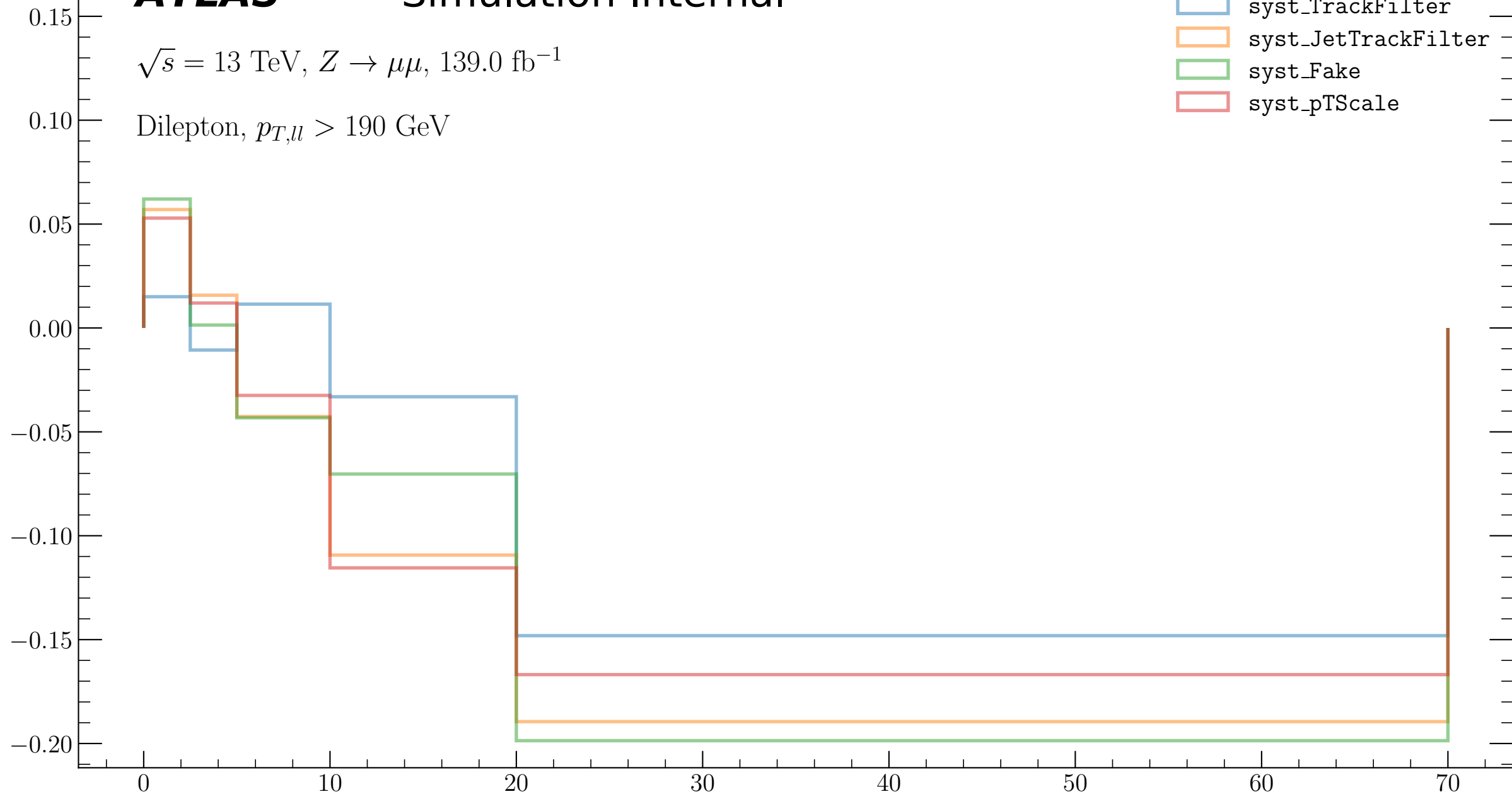
Simulation Internal

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Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

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Subleading track jet m [GeV]

Relative Systematic Effect (MultiFold)

ATLAS

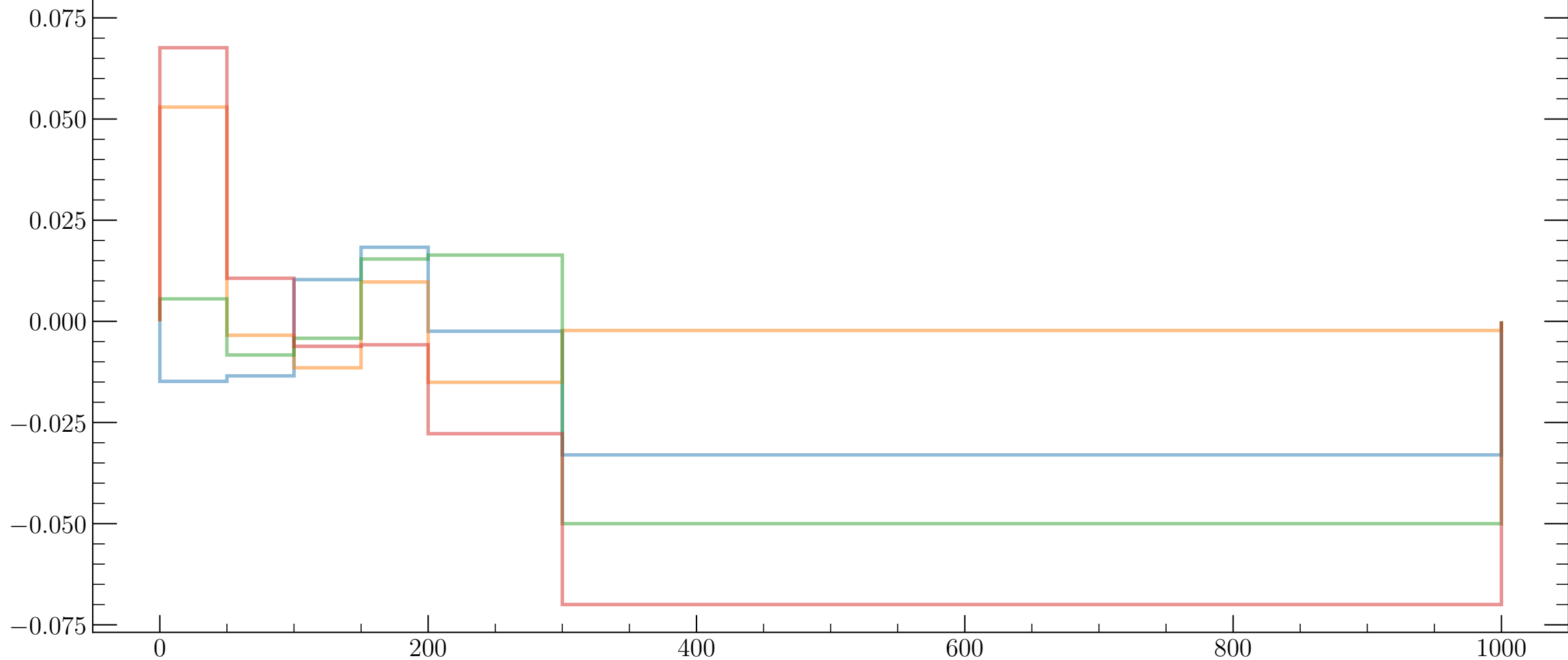
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$

Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

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- syst_Fake
- syst_pTScale



Leading track jet p_T [GeV]

Relative Systematic Effect (MultiFold)

ATLAS

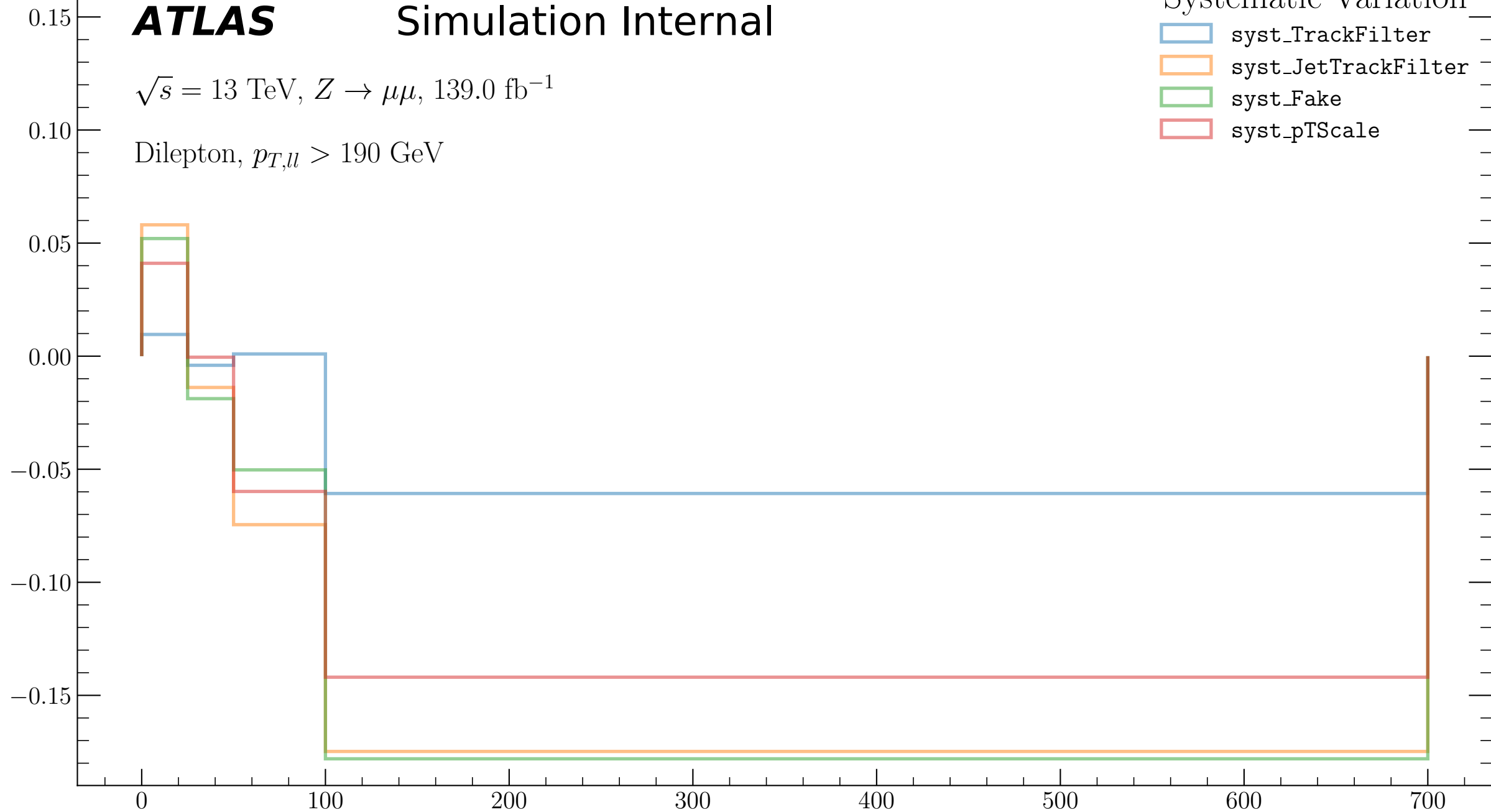
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}$, $Z \rightarrow \mu\mu$, 139.0 fb^{-1}

Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

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- syst_pTScale



Subleading track jet p_T [GeV]

Relative Systematic Effect (MultiFold)

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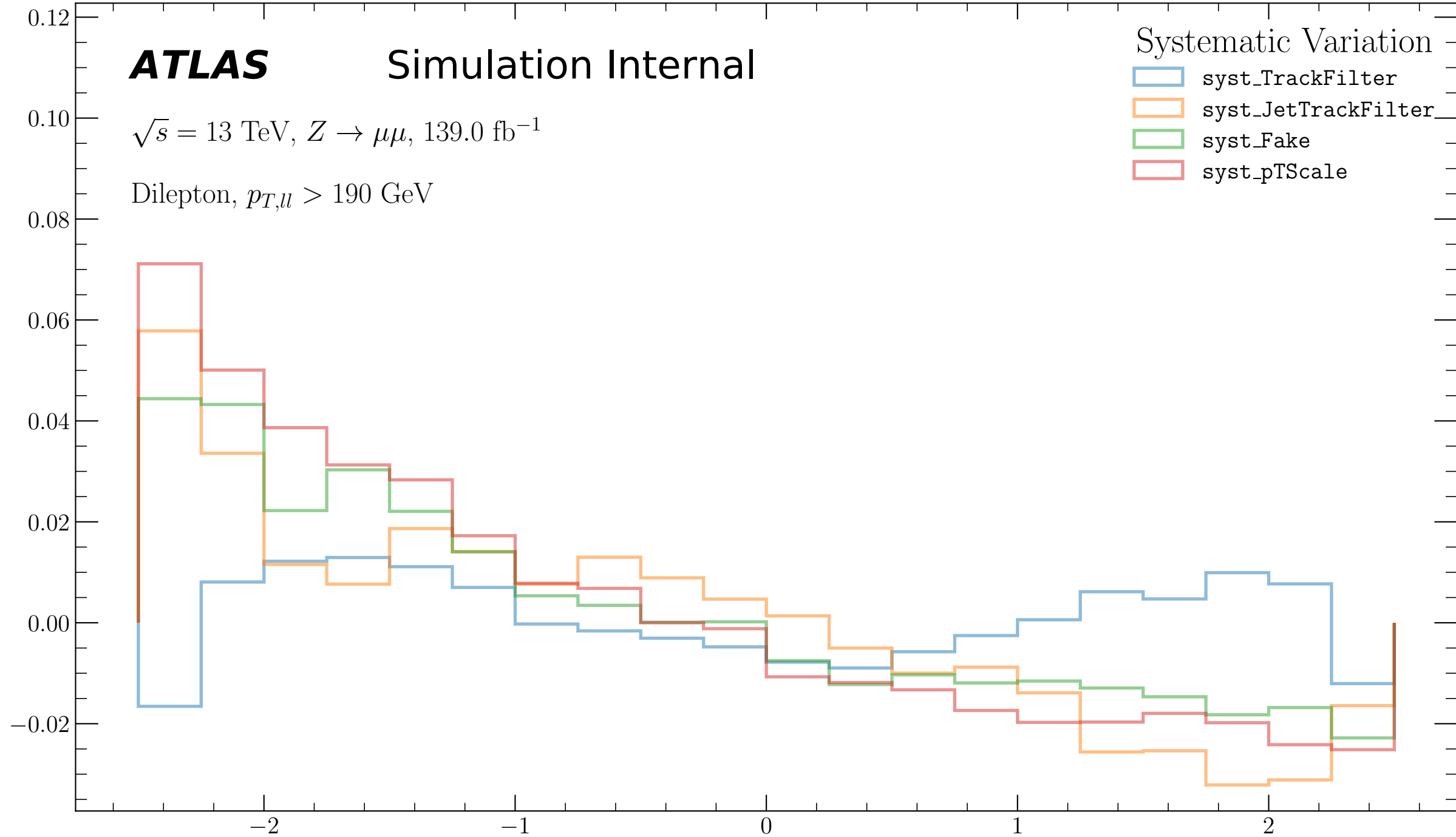
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$

Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

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Leading track jet y

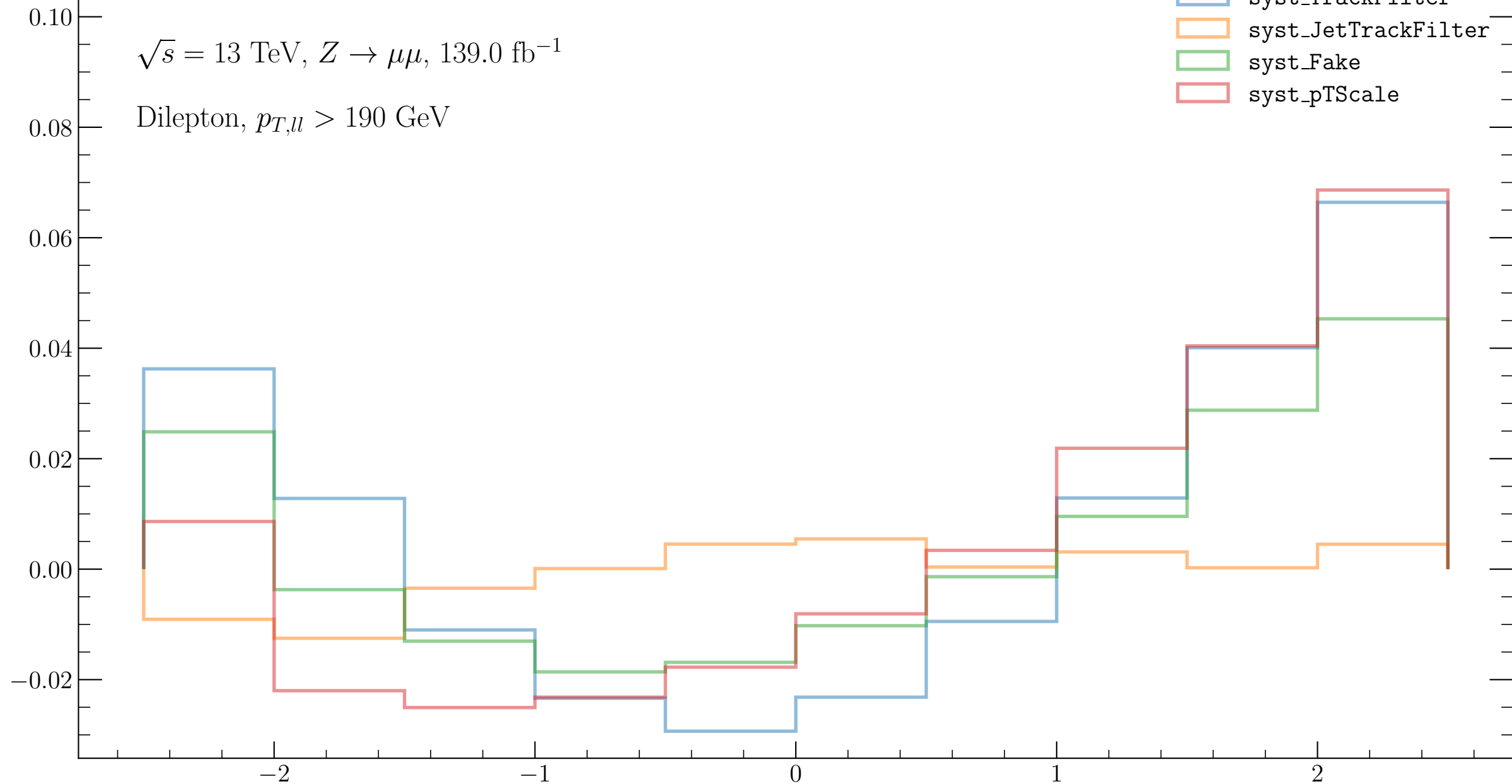
ATLAS

Simulation Internal

 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$ Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
- syst_JetTrackFilter
- syst_Fake
- syst_pTScale

Subleading track jet y

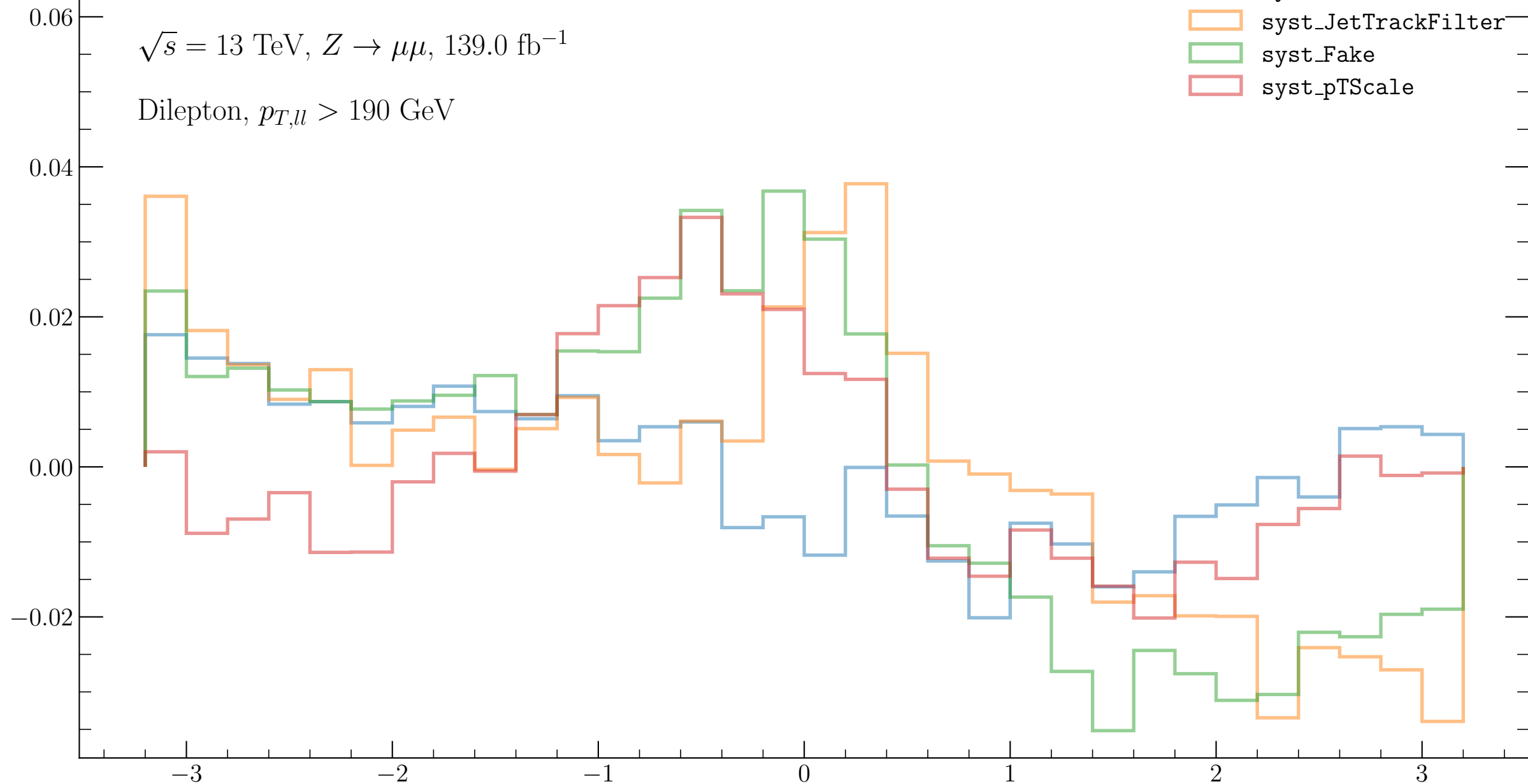
ATLAS

Simulation Internal

 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$ Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
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- syst_Fake
- syst_pTScale

Leading track jet ϕ

Relative Systematic Effect (MultiFold)

ATLAS

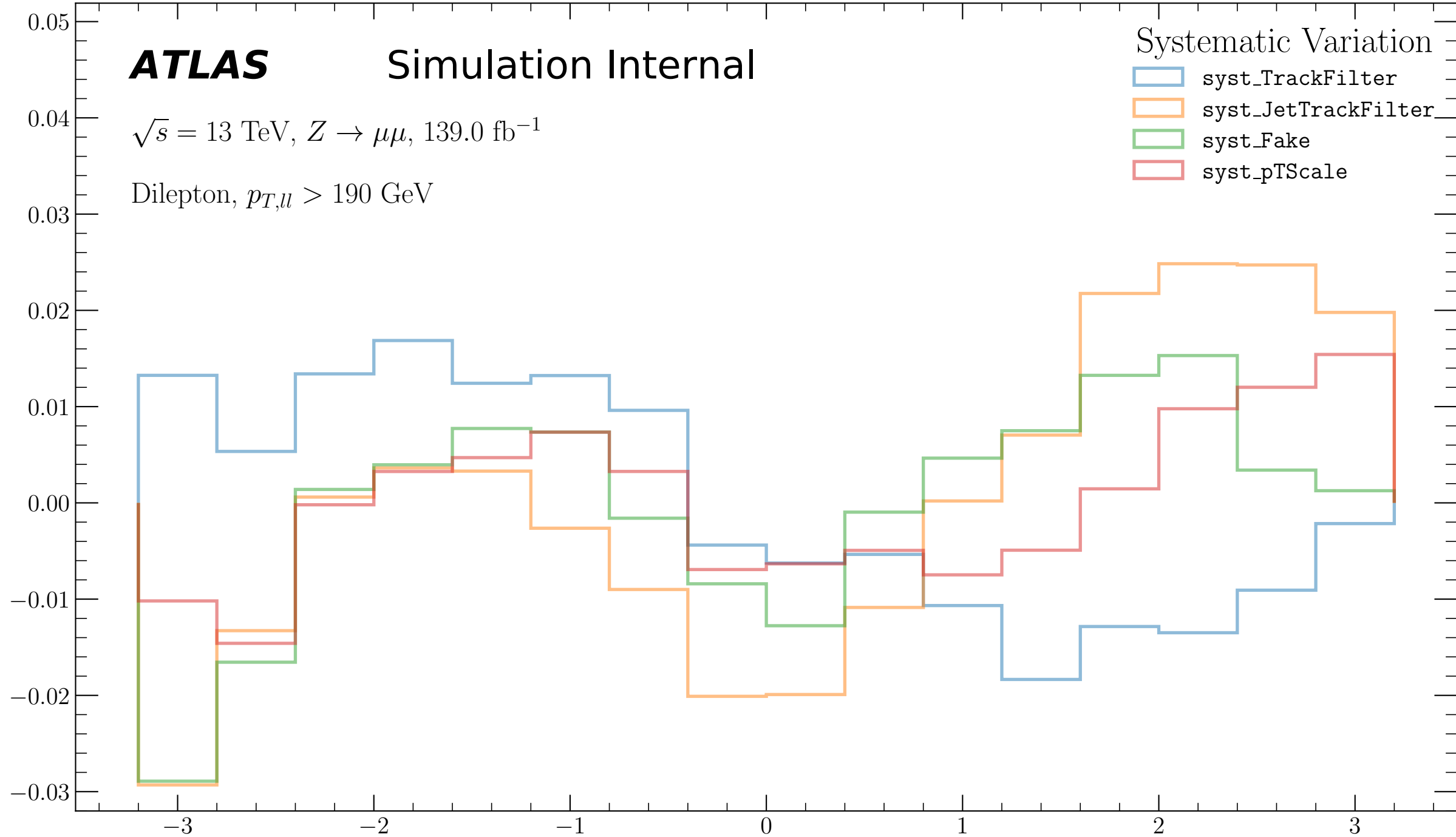
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$

Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
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- syst_Fake
- syst_pTScale



Subleading track jet ϕ

Relative Systematic Effect (MultiFold)

ATLAS

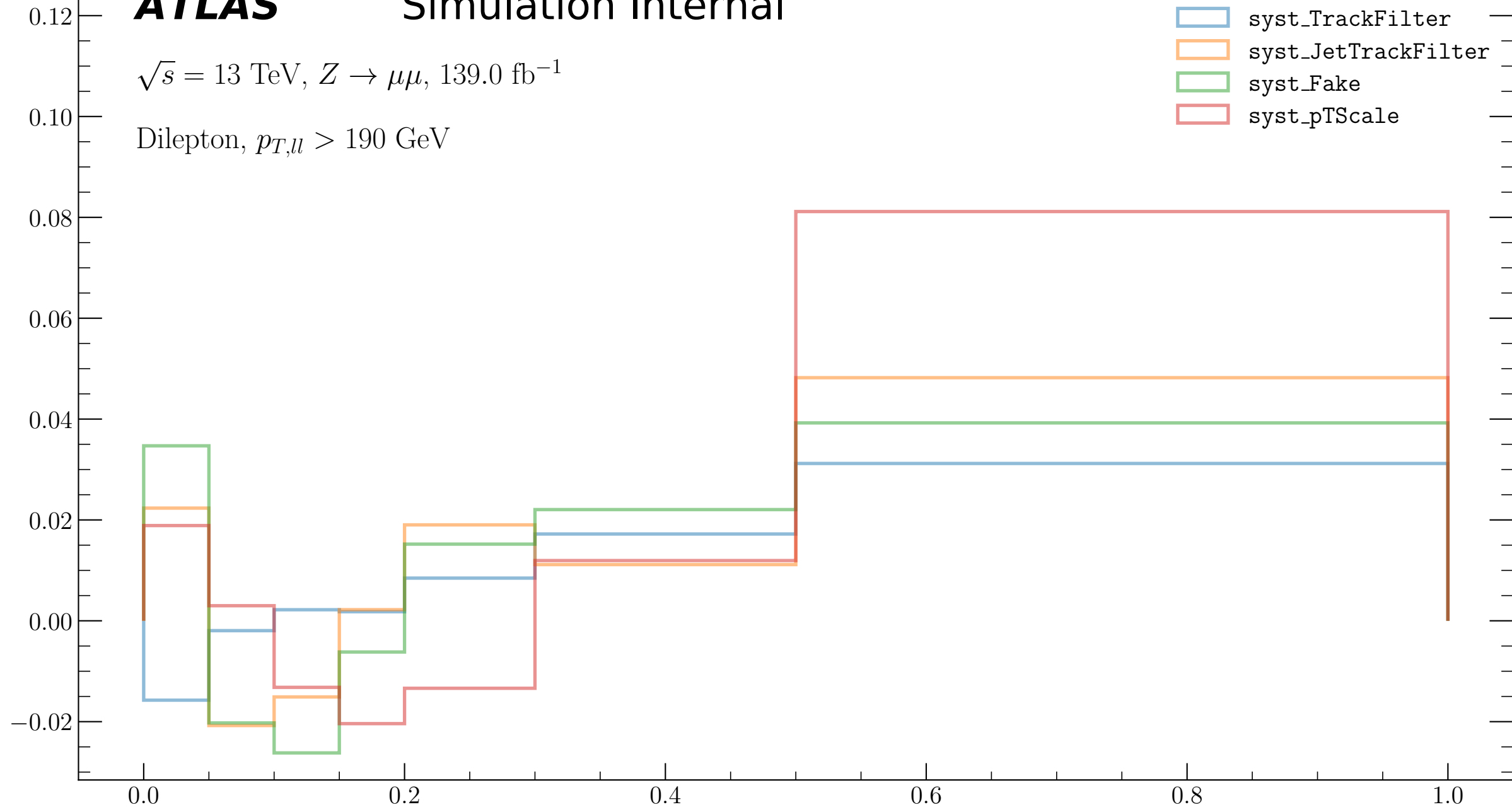
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$

Dilepton, $p_{T,l} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
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Leading track jet τ_1

Relative Systematic Effect (MultiFold)

ATLAS

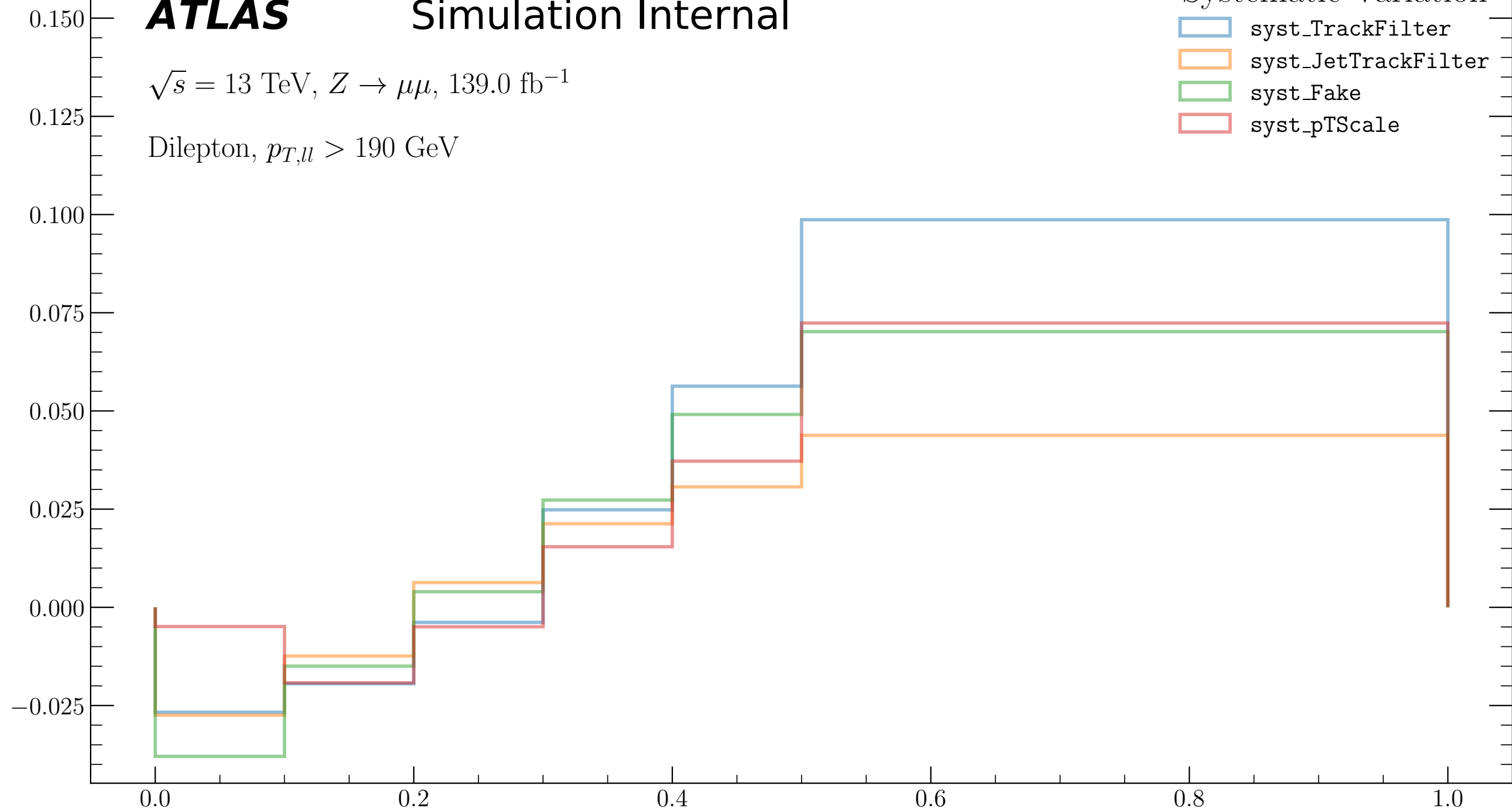
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}$, $Z \rightarrow \mu\mu$, 139.0 fb^{-1}

Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
- syst_JetTrackFilter
- syst_Fake
- syst_pTScale



Subleading track jet τ_1

Relative Systematic Effect (MultiFold)

ATLAS

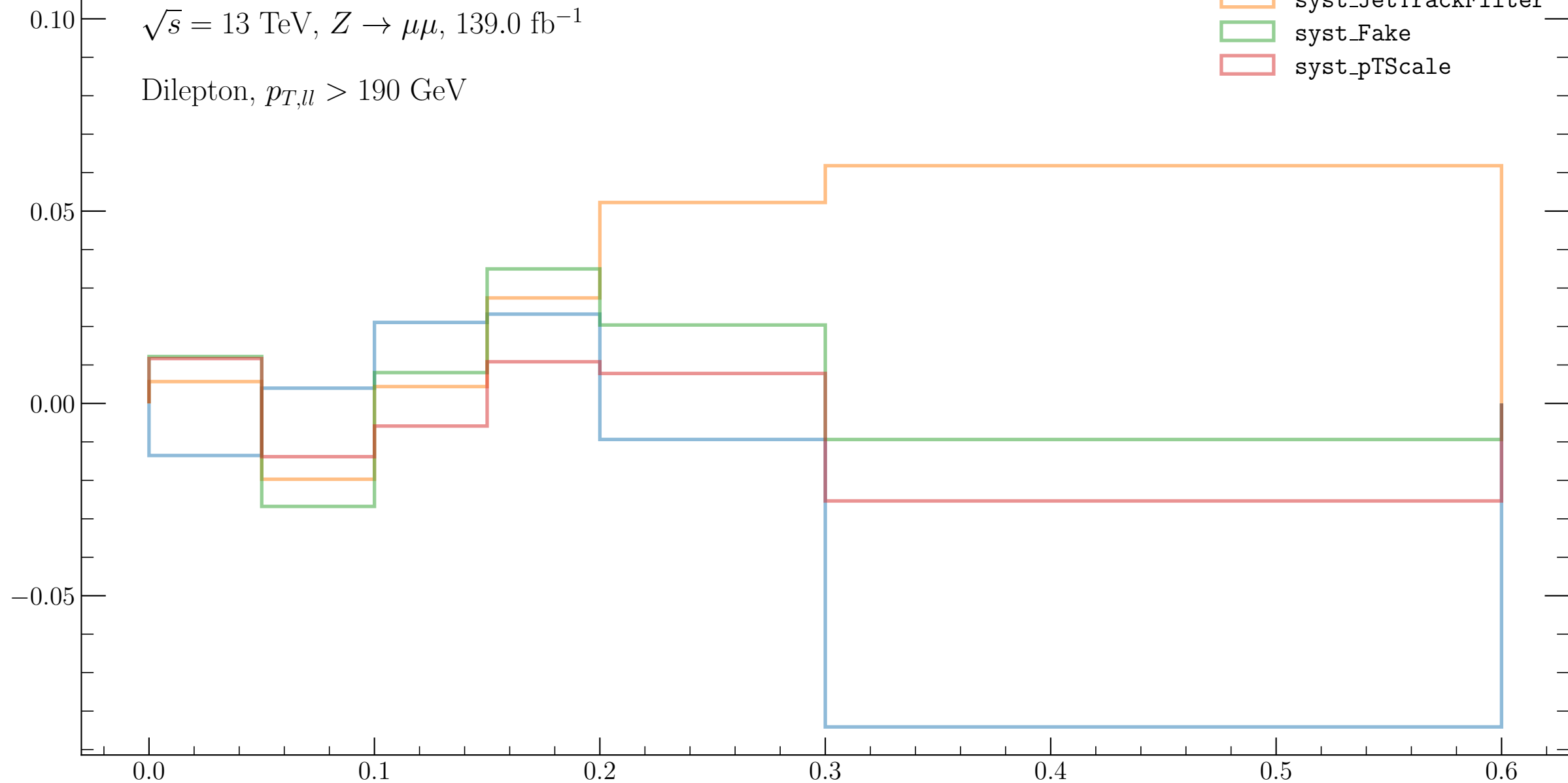
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$

Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
- syst_JetTrackFilter
- syst_Fake
- syst_pTScale



Leading track jet τ_2

Relative Systematic Effect (MultiFold)

ATLAS

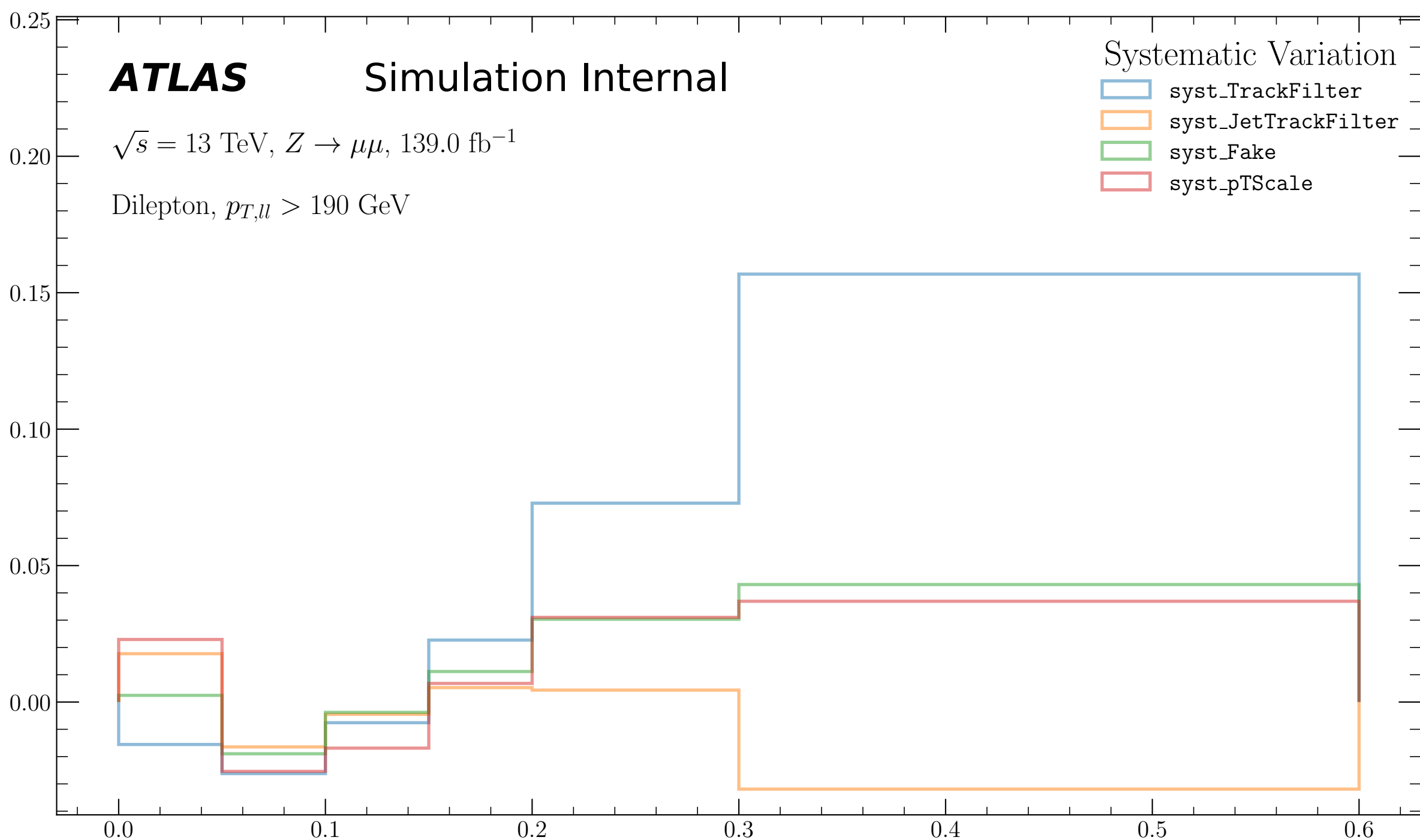
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}$, $Z \rightarrow \mu\mu$, 139.0 fb^{-1}

Dilepton, $p_{T,l} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
- syst_JetTrackFilter
- syst_Fake
- syst_pTScale



Subleading track jet τ_2

Relative Systematic Effect (MultiFold)

ATLAS

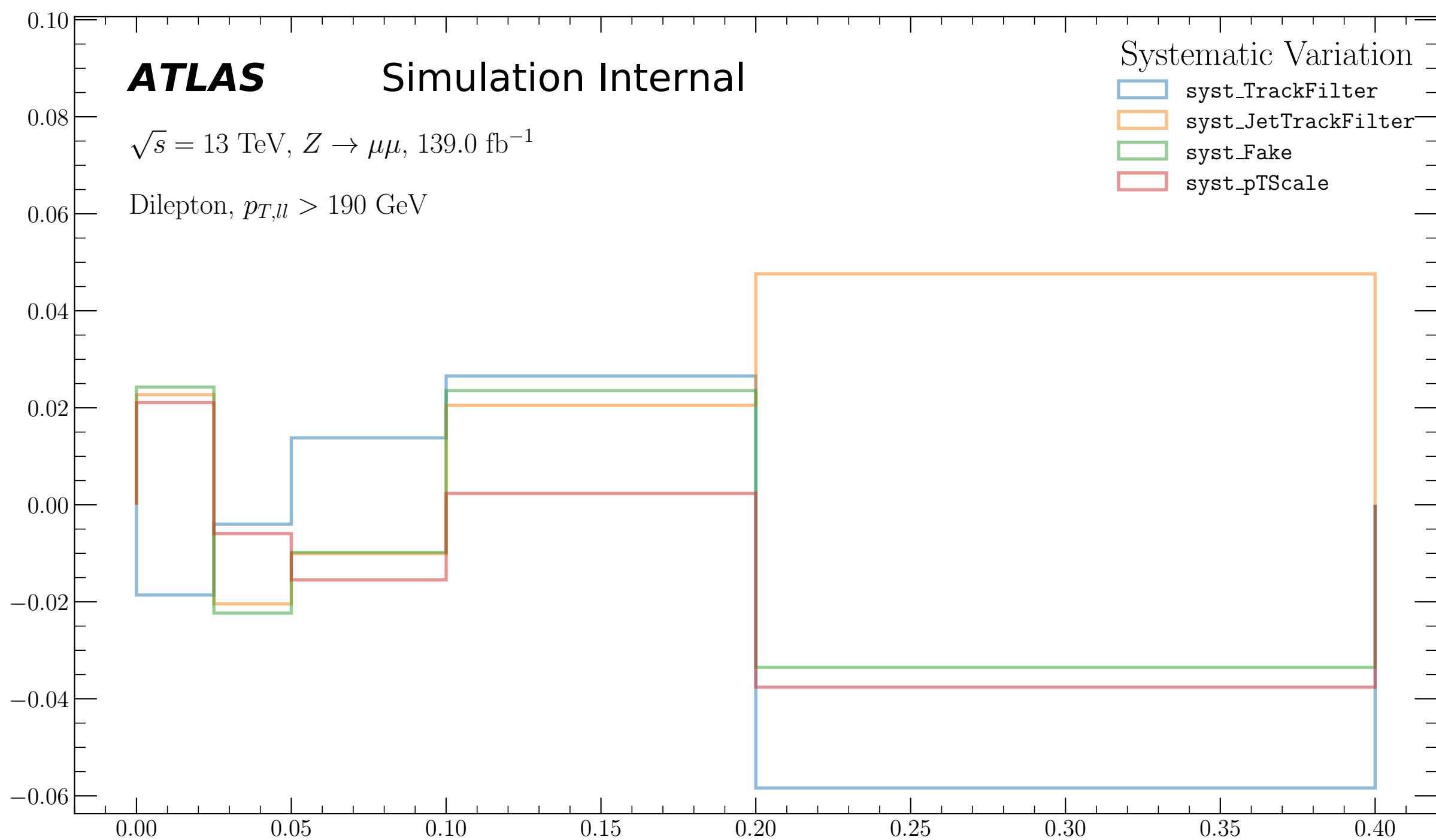
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$

Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
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- syst_Fake
- syst_pTScale



Leading track jet τ_3

Relative Systematic Effect (MultiFold)

ATLAS

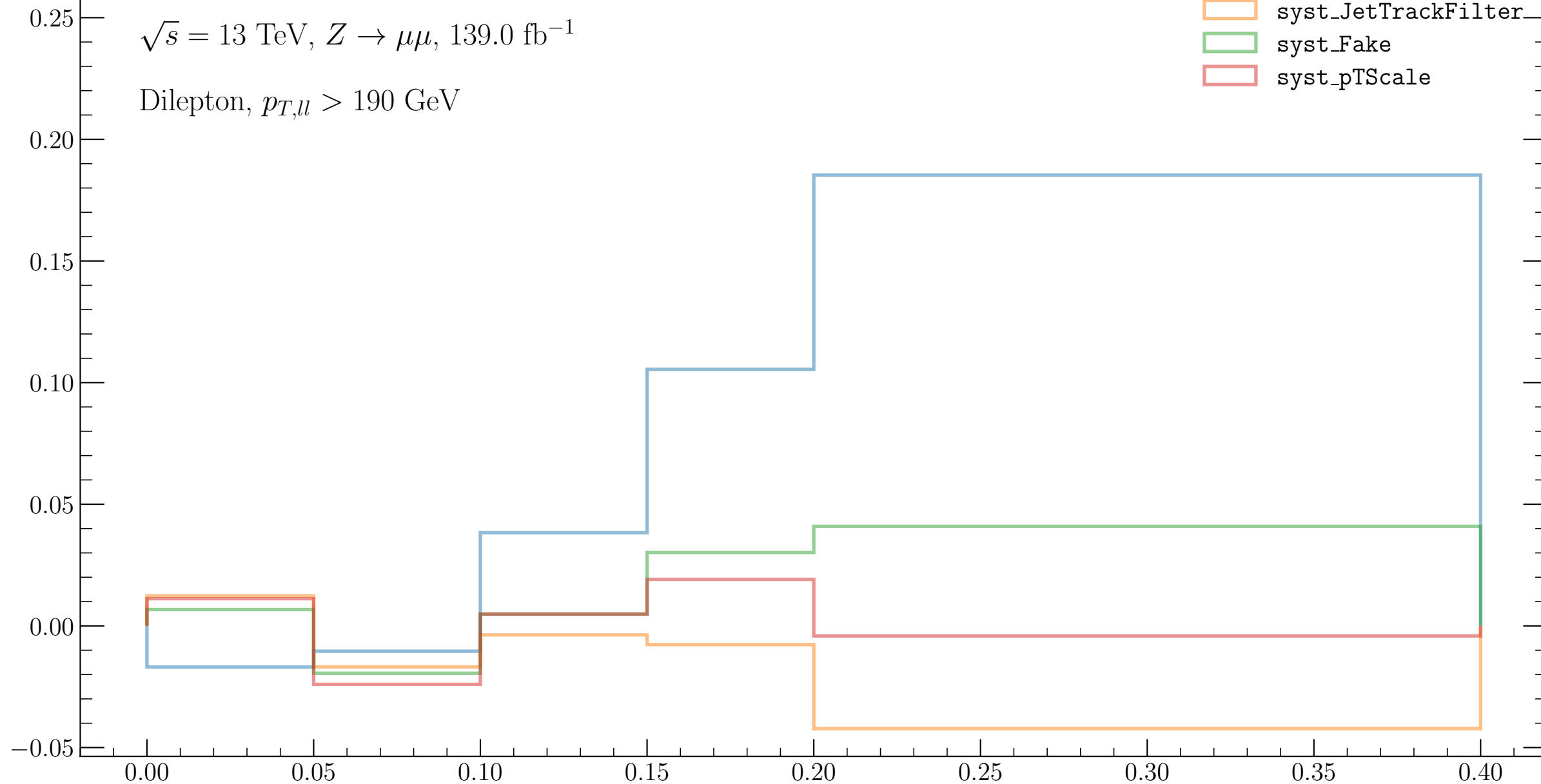
Simulation Internal

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$

Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
- syst_JetTrackFilter
- syst_Fake
- syst_pTScale



Subleading track jet τ_3

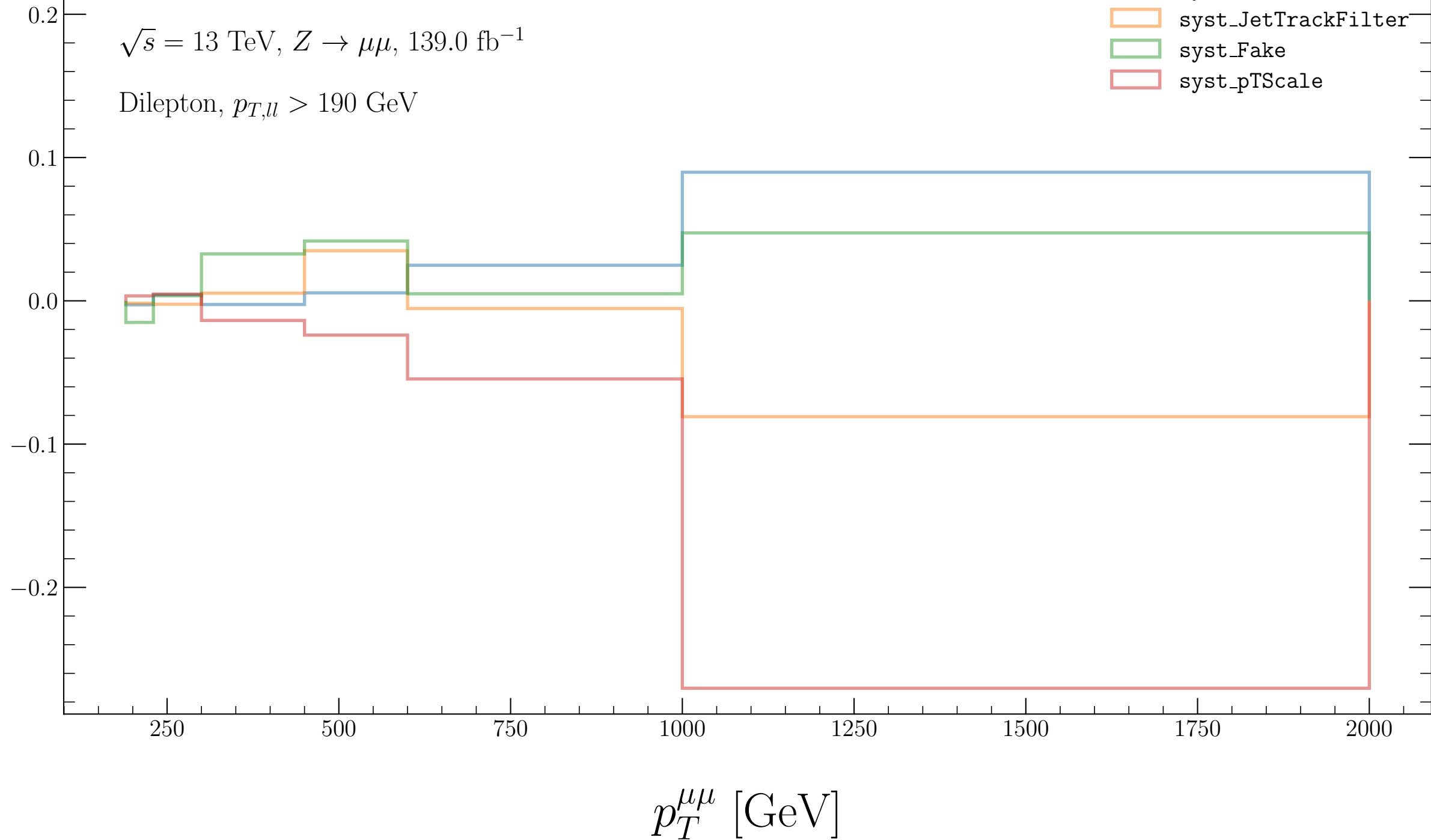
ATLAS

Simulation Internal

 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$ Dilepton, $p_{T,l} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
- syst_JetTrackFilter
- syst_Fake
- syst_pTScale



Relative Systematic Effect (MultiFold)

ATLAS

Simulation Internal

$\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$

Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

Systematic Variation

- syst_TrackFilter
- syst_JetTrackFilter
- syst_Fake
- syst_pTScale

0.10
0.08
0.06
0.04
0.02
0.00

-2

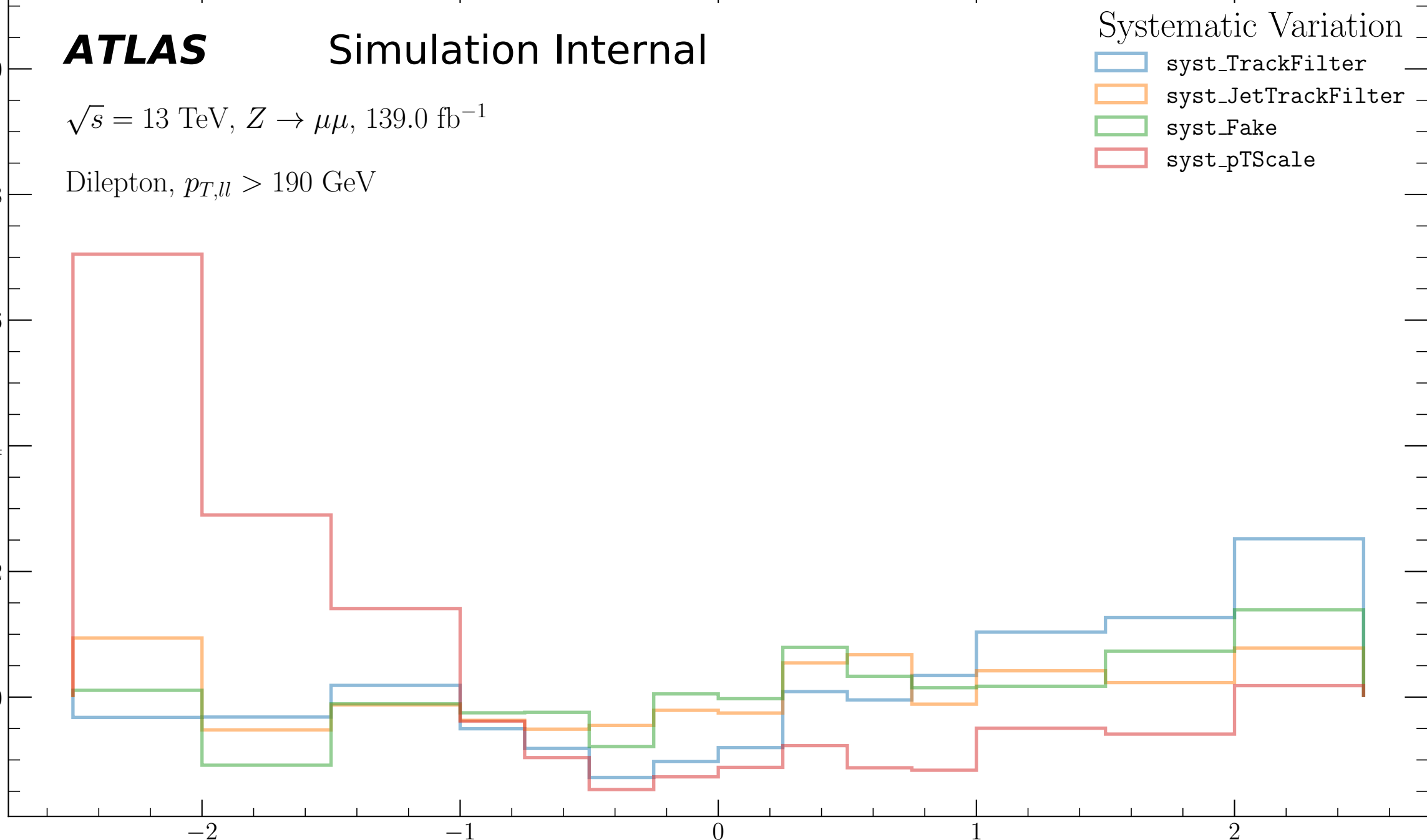
-1

0

1

2

$y_{\mu\mu}$



Relative Systematic Effect (MultiFold)

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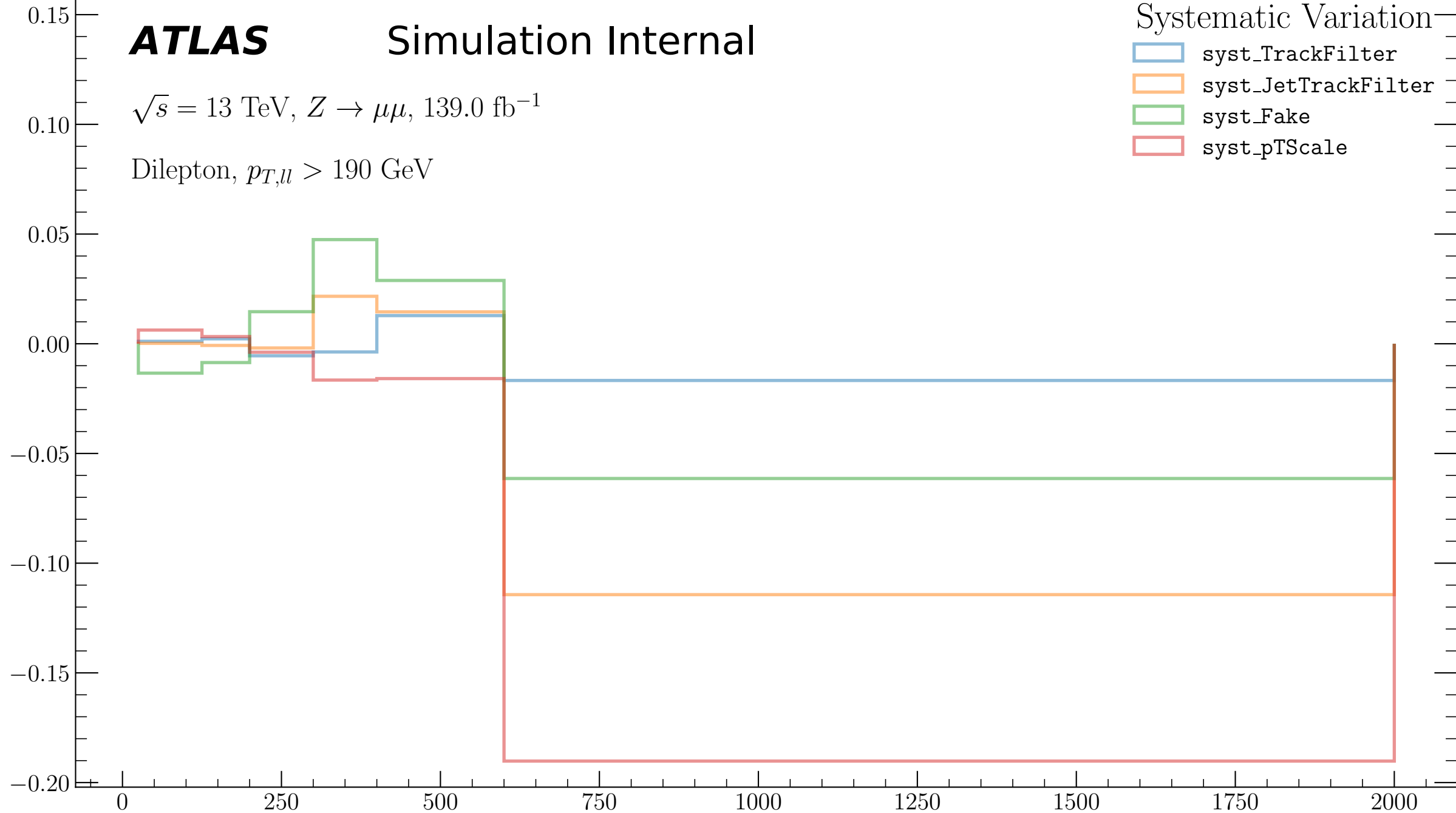
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Dilepton, $p_{T,\ell} > 190 \text{ GeV}$

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$p_T^{\mu 1}$ [GeV]

ATLAS

Simulation Internal

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Systematic Variation

- syst_TrackFilter
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- syst_Fake
- syst_pTScale

0.8
0.6
0.4
0.2
0.0

0

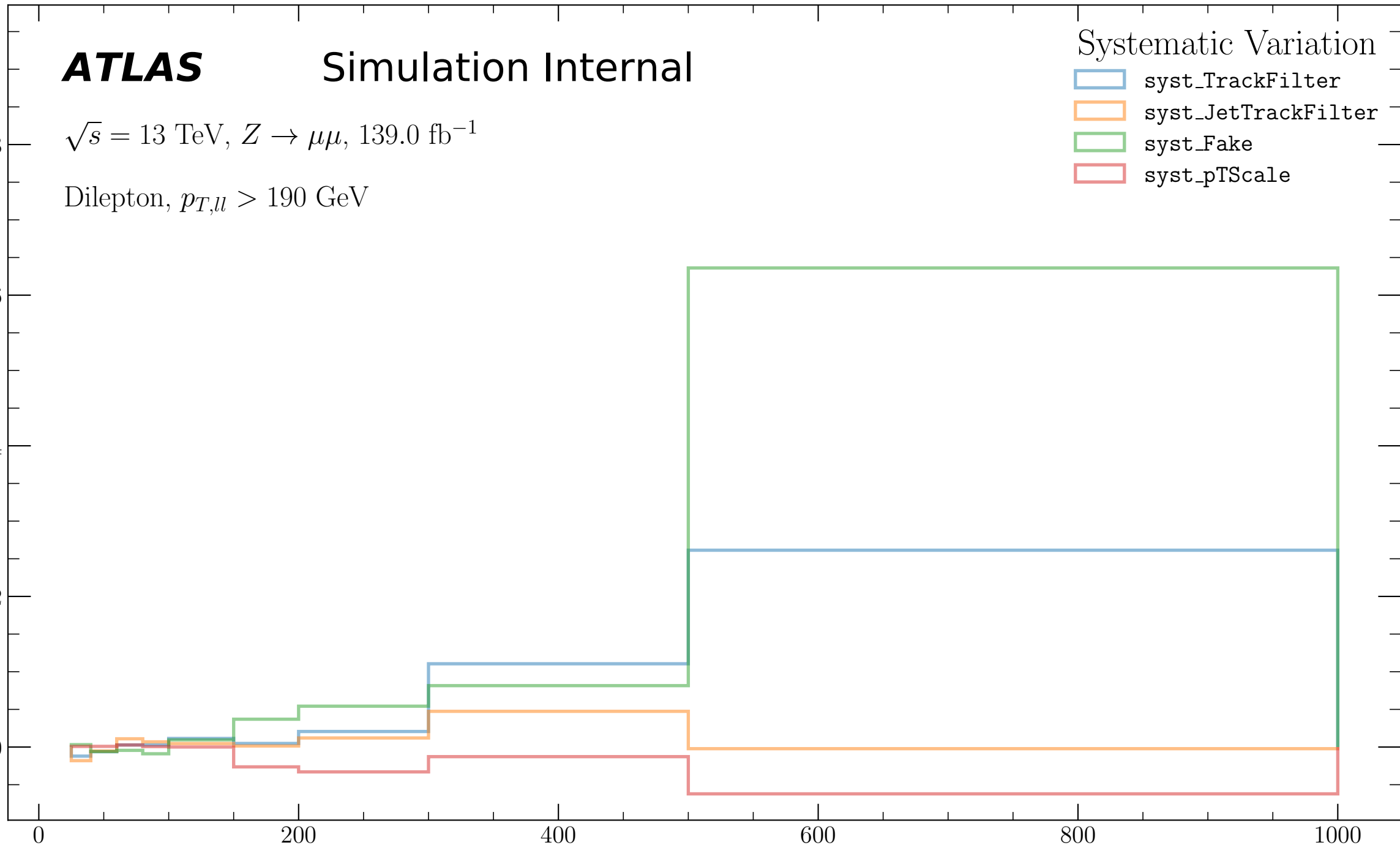
200

400

600

800

1000

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

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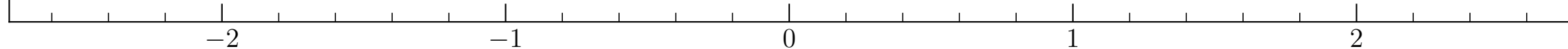
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0.10
0.08
0.06
0.04
0.02
0.00



$\eta_{\mu 1}$

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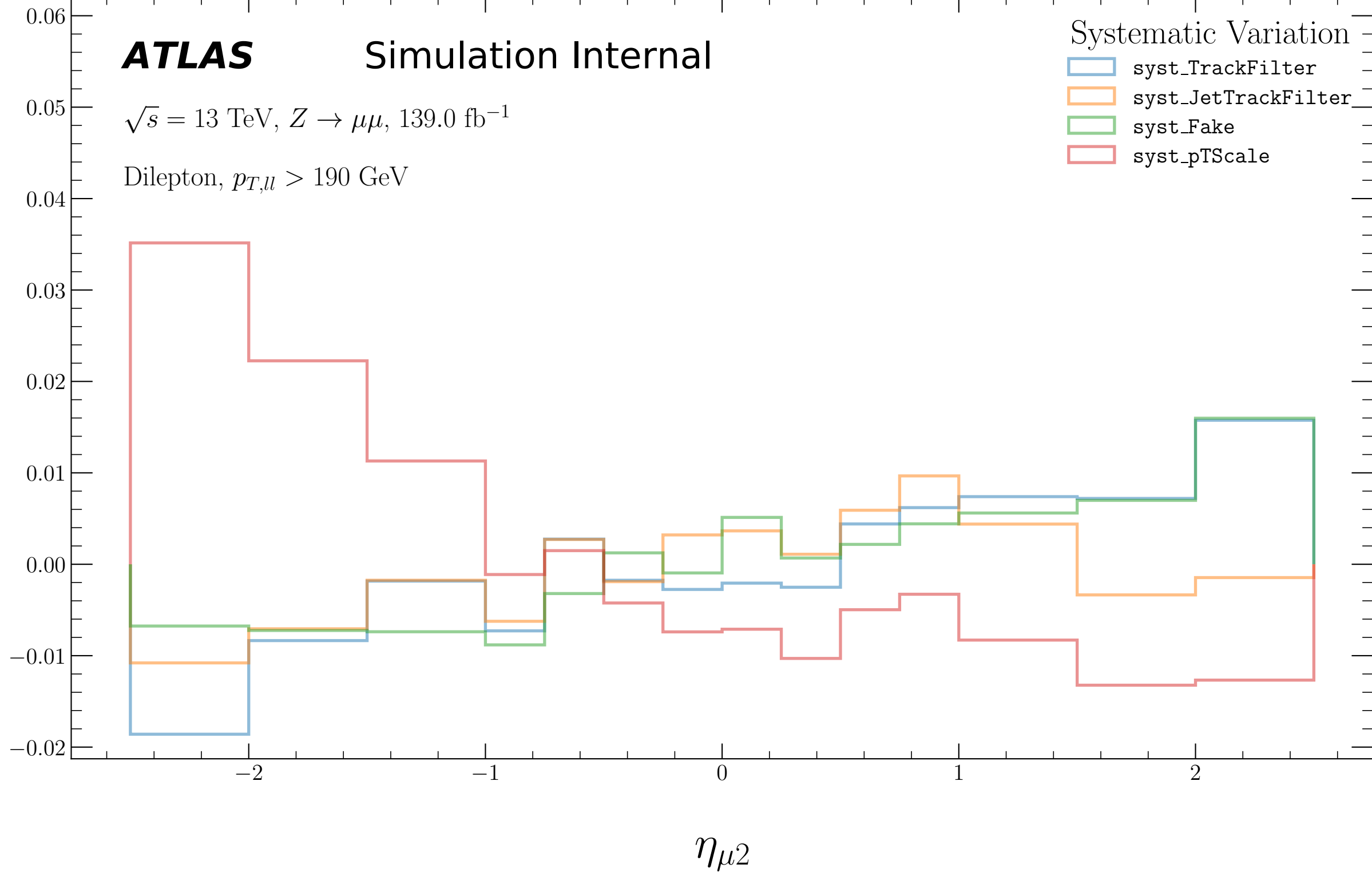
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