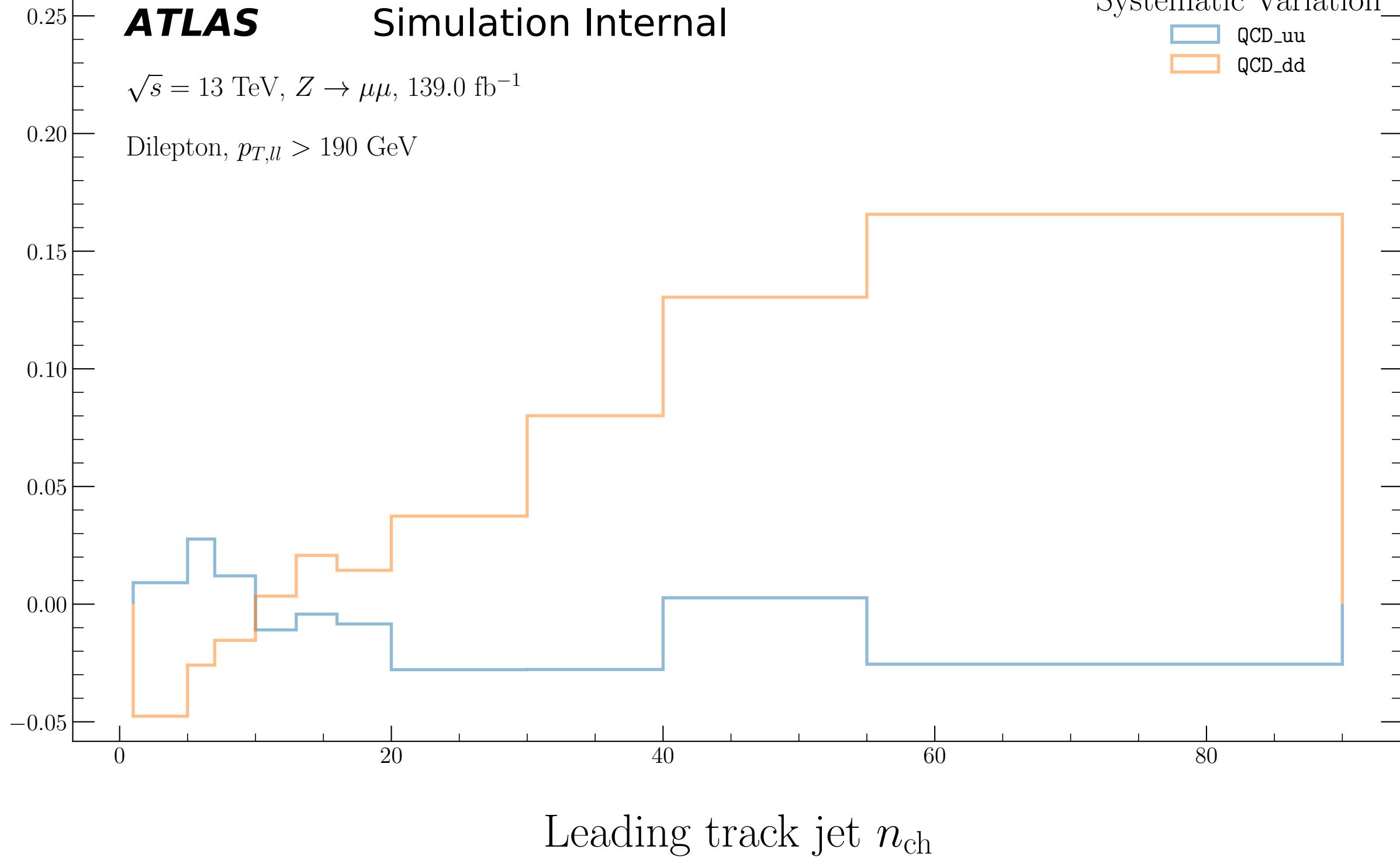


ATLAS

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

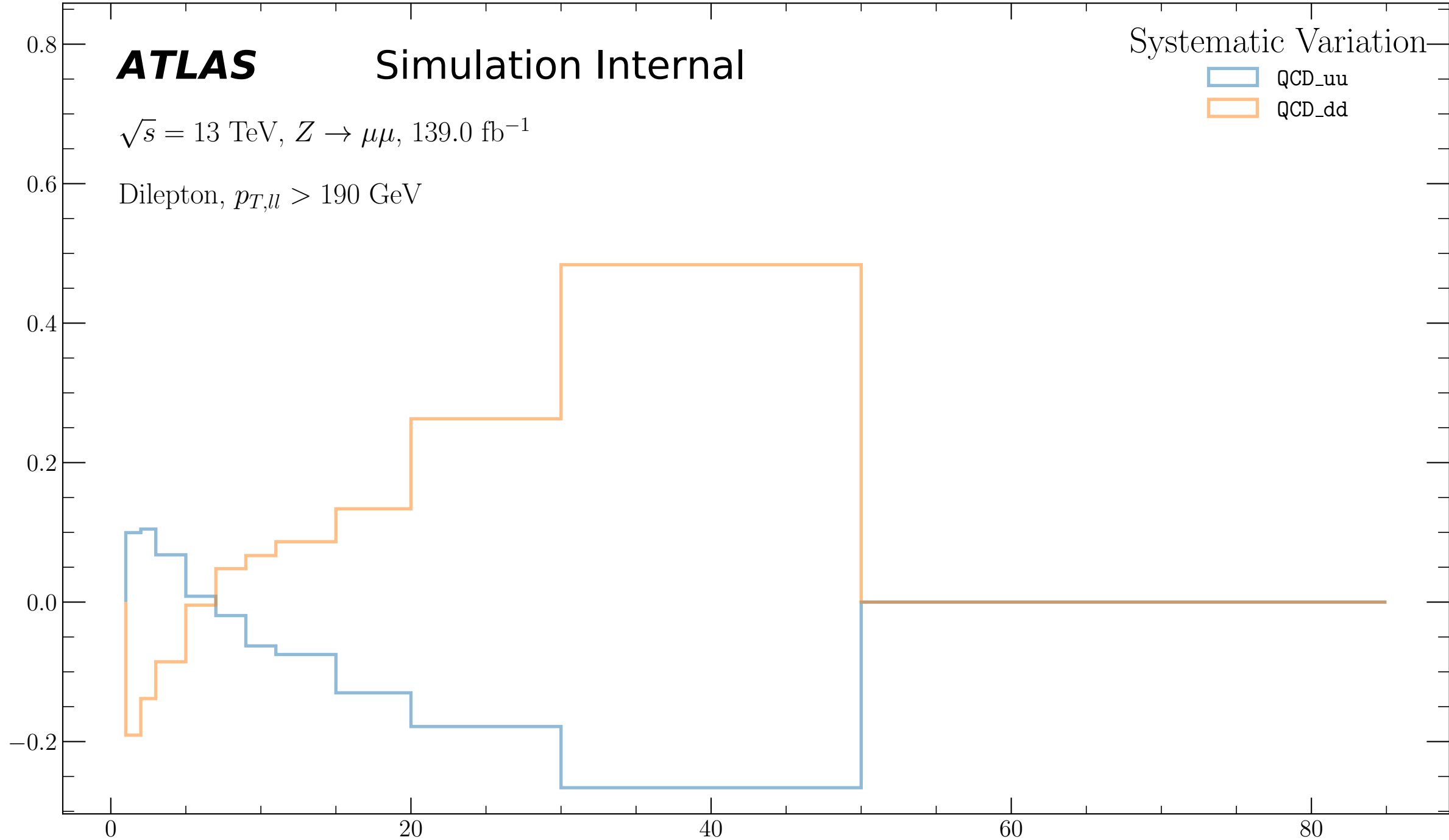
QCD_uu
QCD_dd

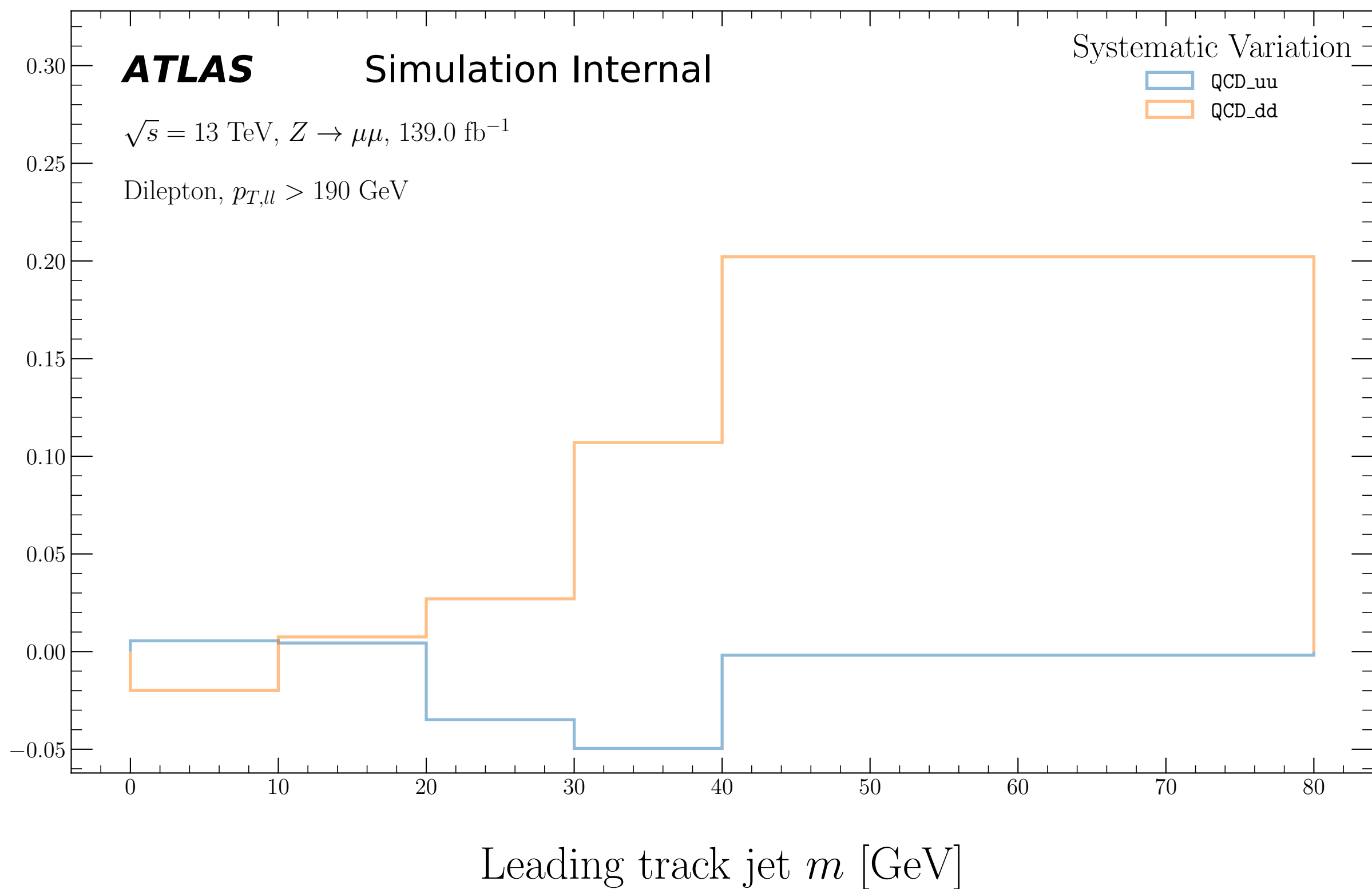
ATLAS

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

QCD_uu
QCD_ddSubleading track jet n_{ch}

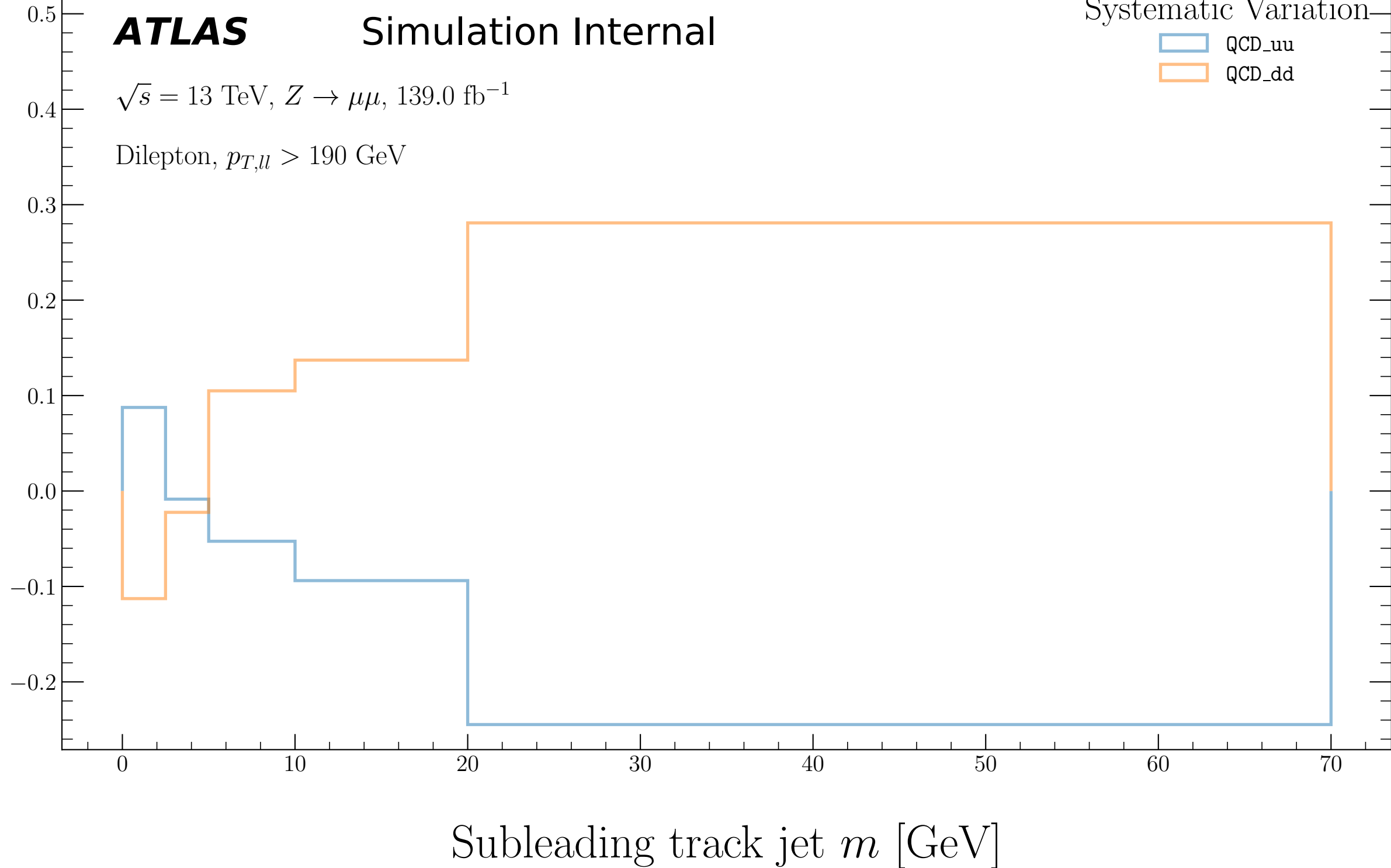


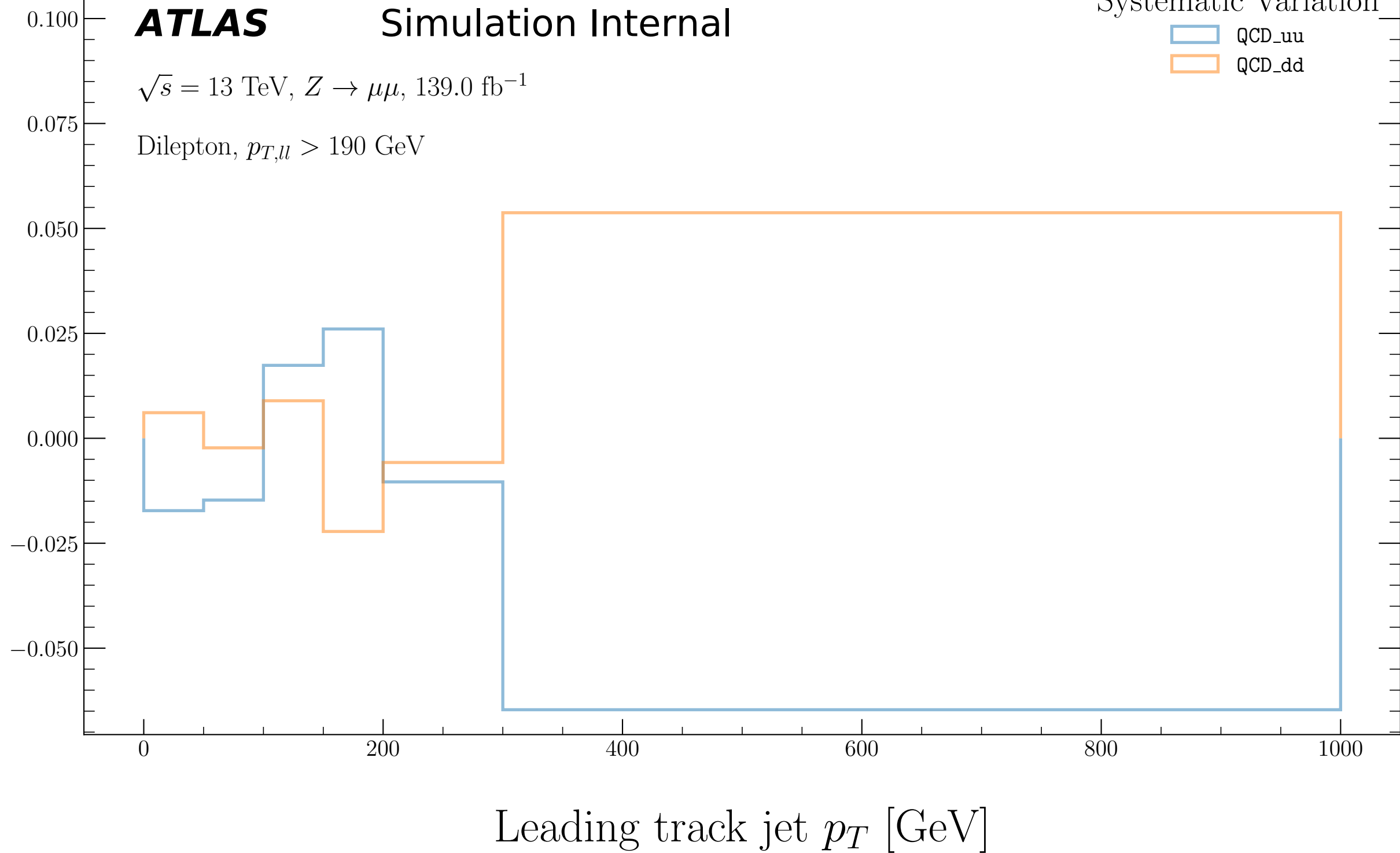
ATLAS

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

QCD_uu
QCD_dd

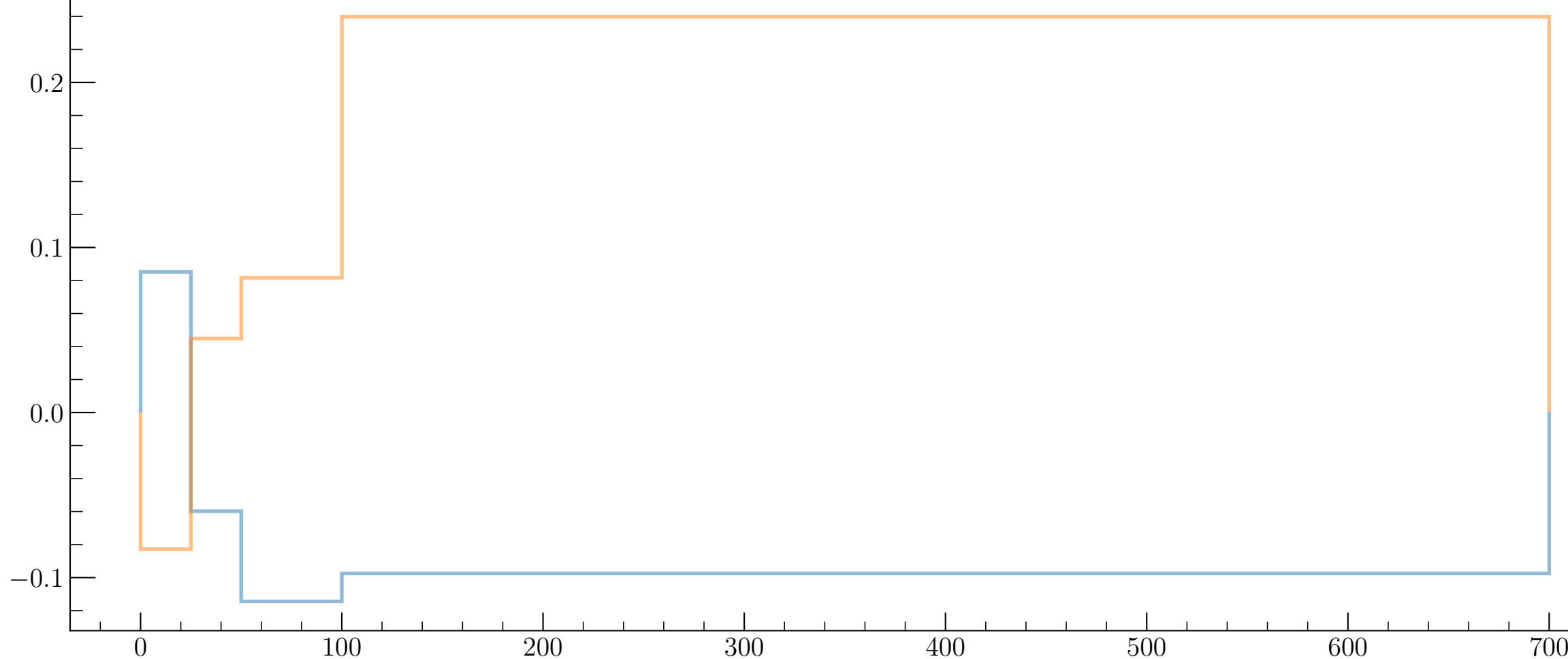


ATLAS

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

QCD_uu
QCD_ddSubleading track jet p_T [GeV]

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

QCD_uu
QCD_dd0.08
0.06
0.04
0.02
0.00
-0.02

-2

-1

0

1

2

Leading track jet y

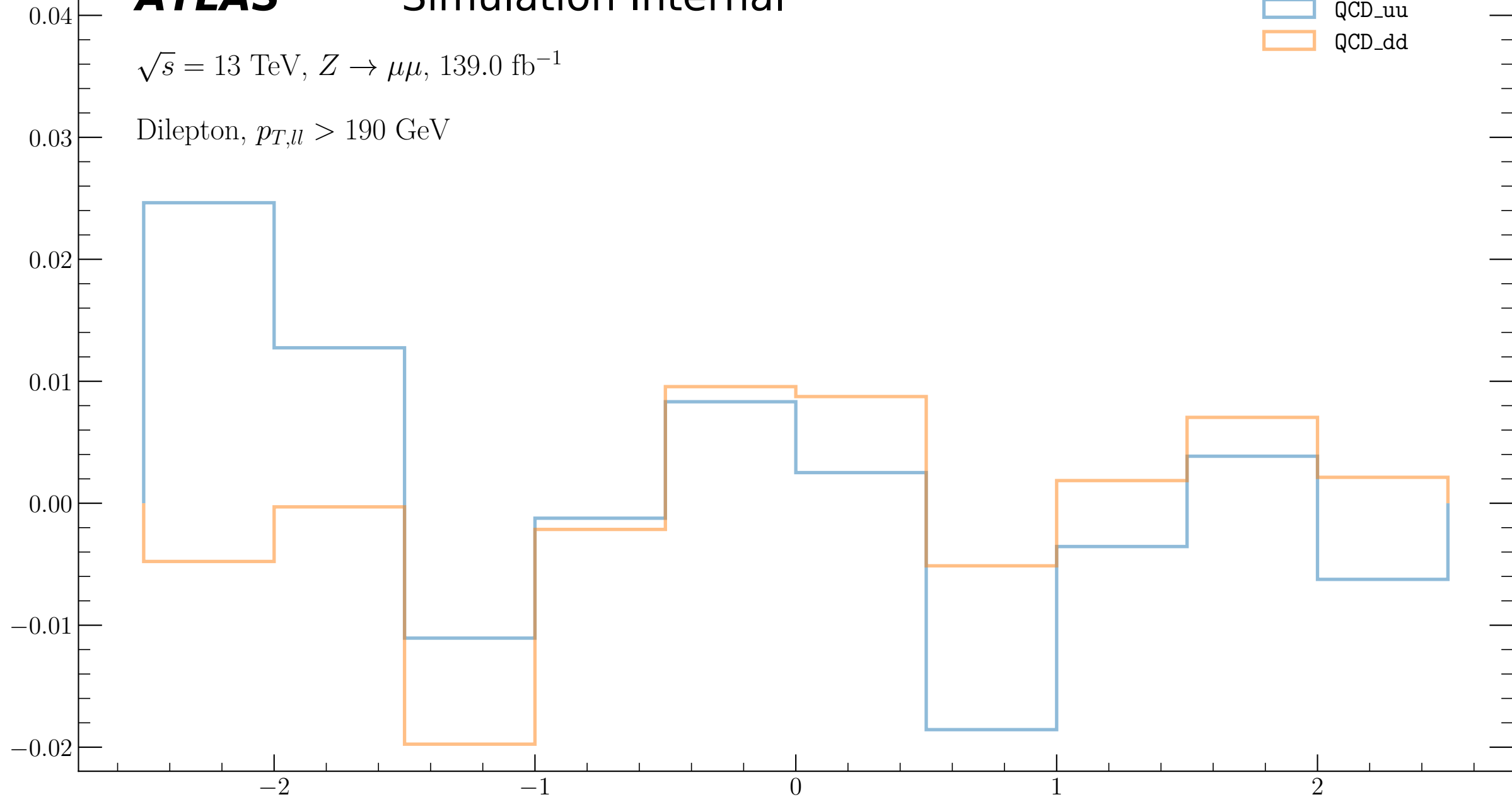
-0.02

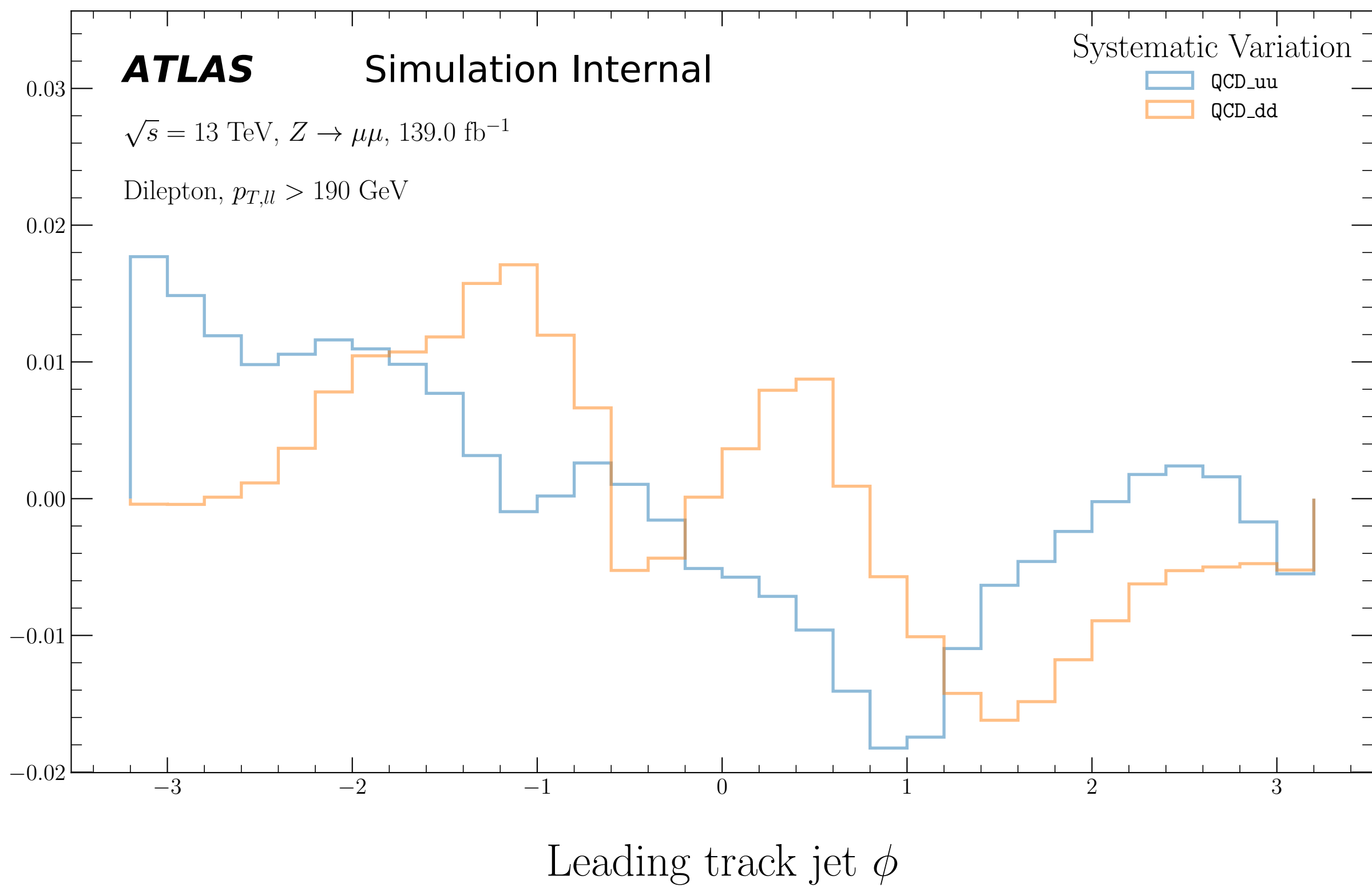
ATLAS

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

QCD_uu
QCD_ddSubleading track jet y

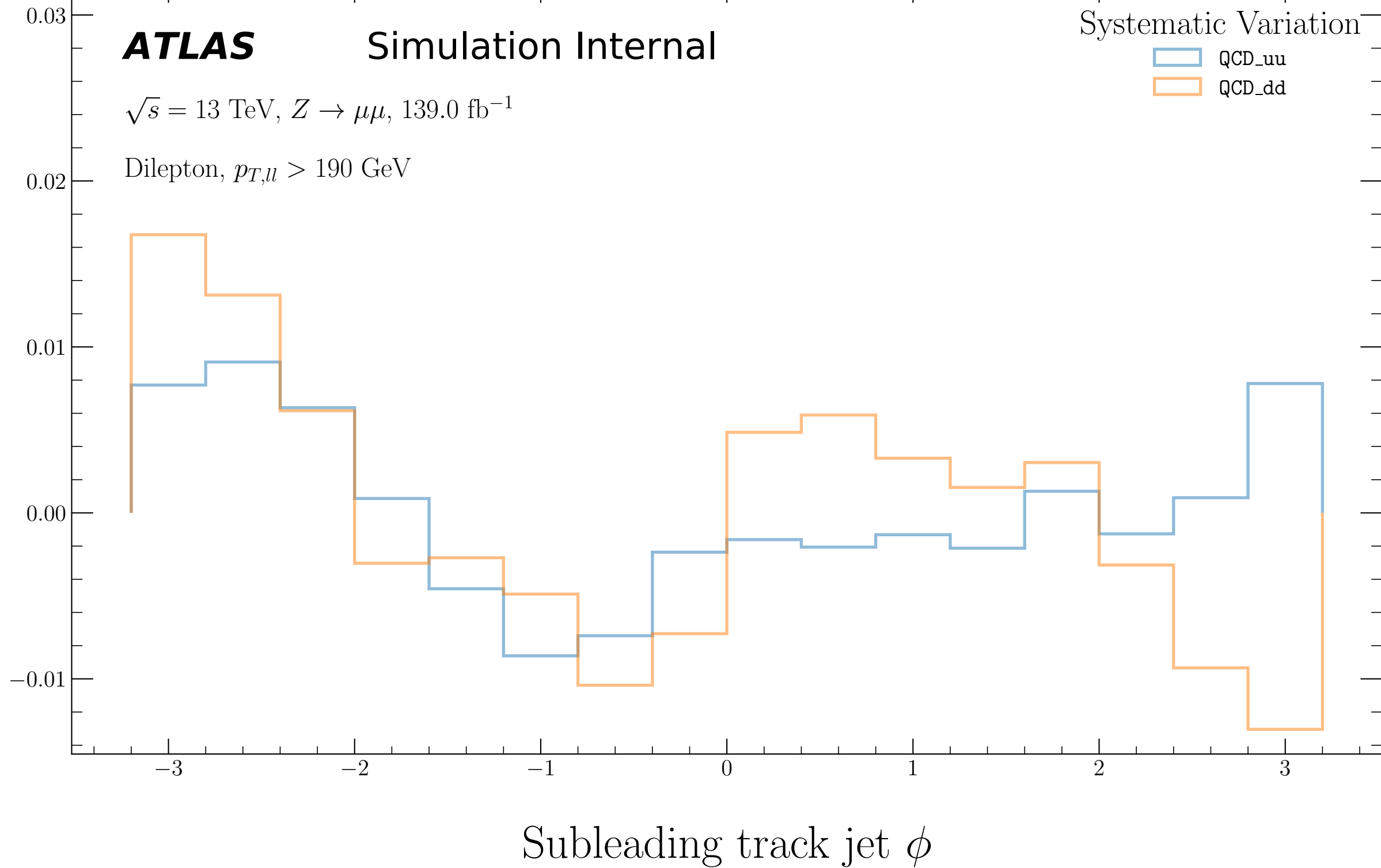


ATLAS

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

QCD_uu
QCD_dd

Relative Systematic Effect (UniFold)

ATLAS

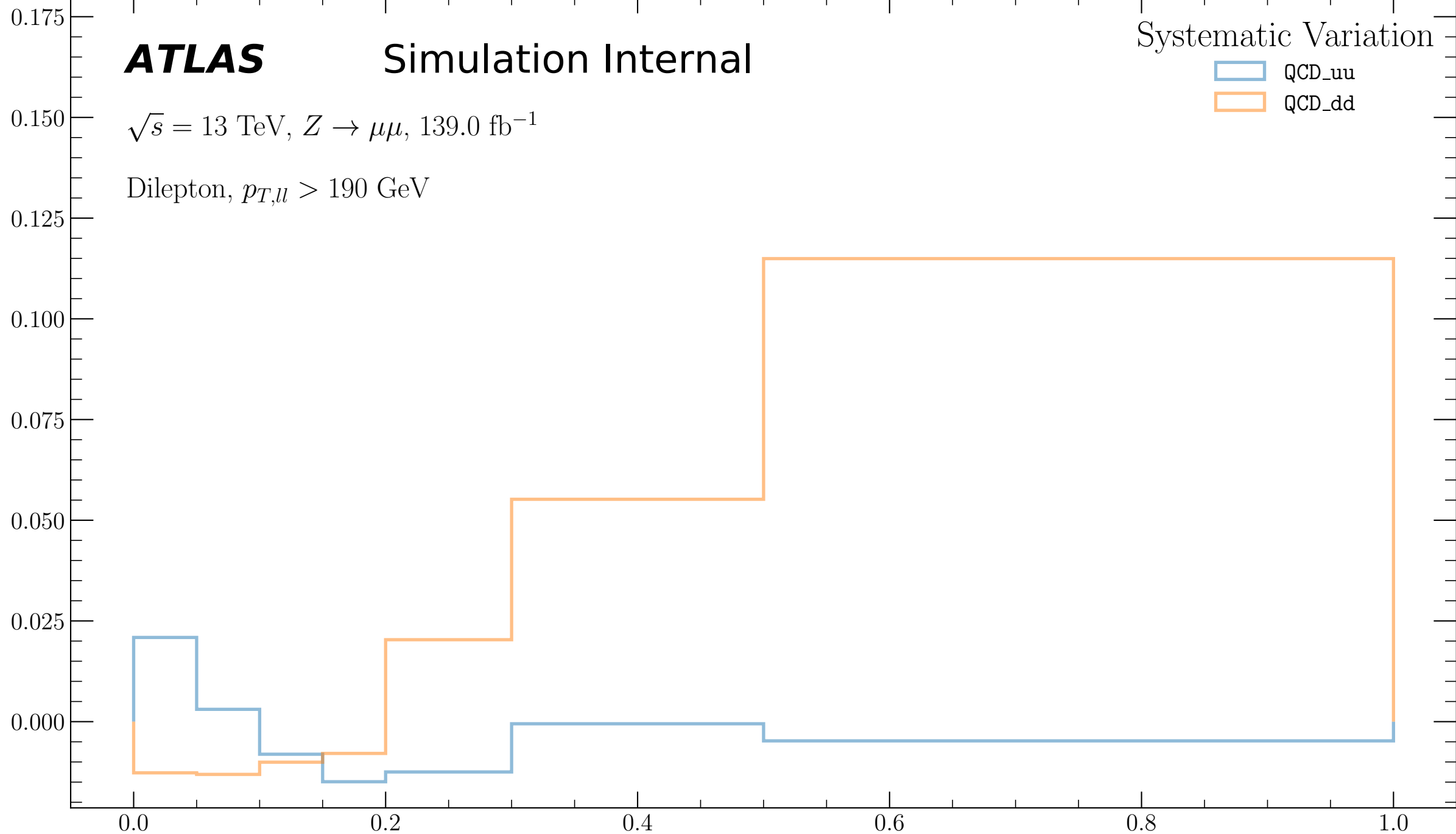
Simulation Internal

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

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

Systematic Variation

QCD_uu
QCD_dd

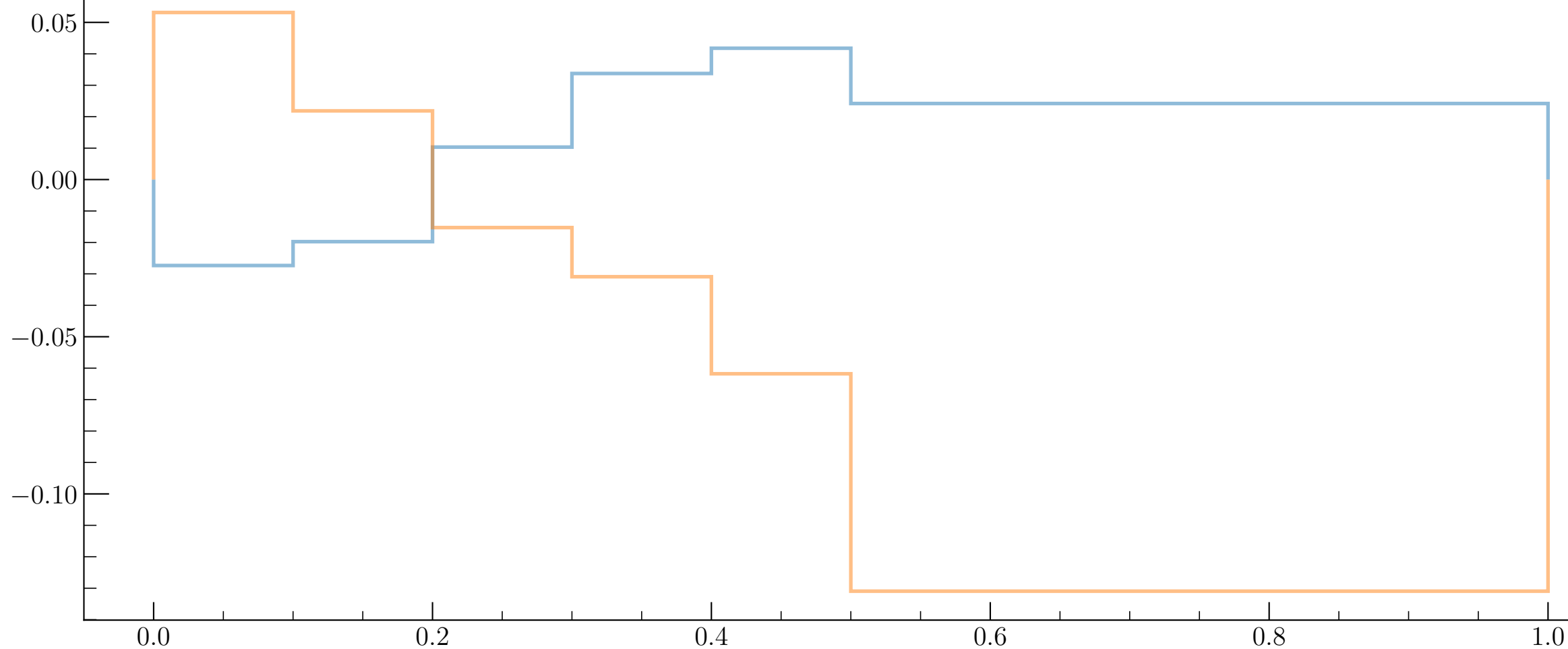


Leading track jet τ_1

ATLAS

Simulation Internal

Systematic Variation

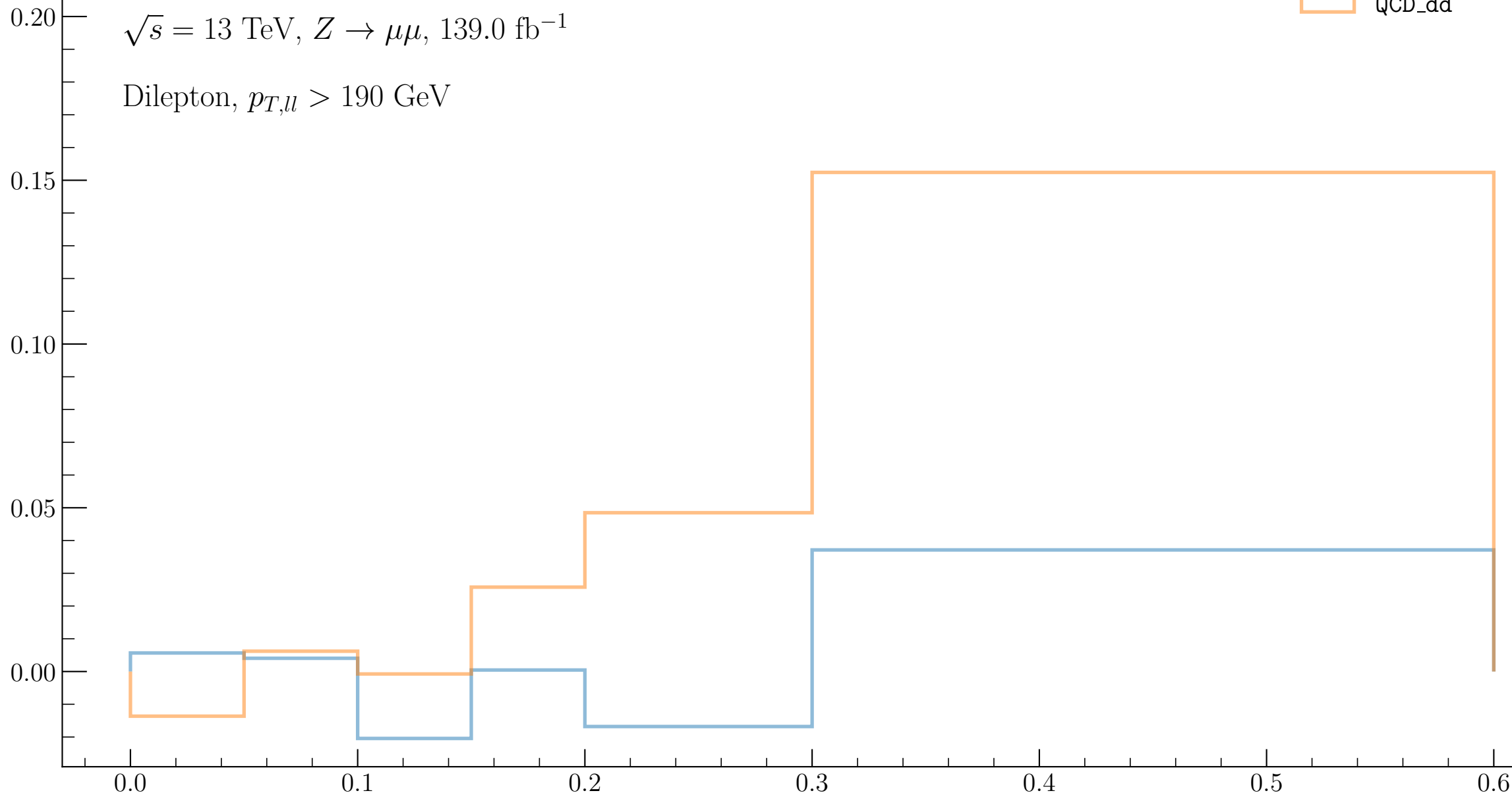
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$ Dilepton, $p_{T,\ell} > 190 \text{ GeV}$ QCD_uu
QCD_ddSubleading track jet τ_1

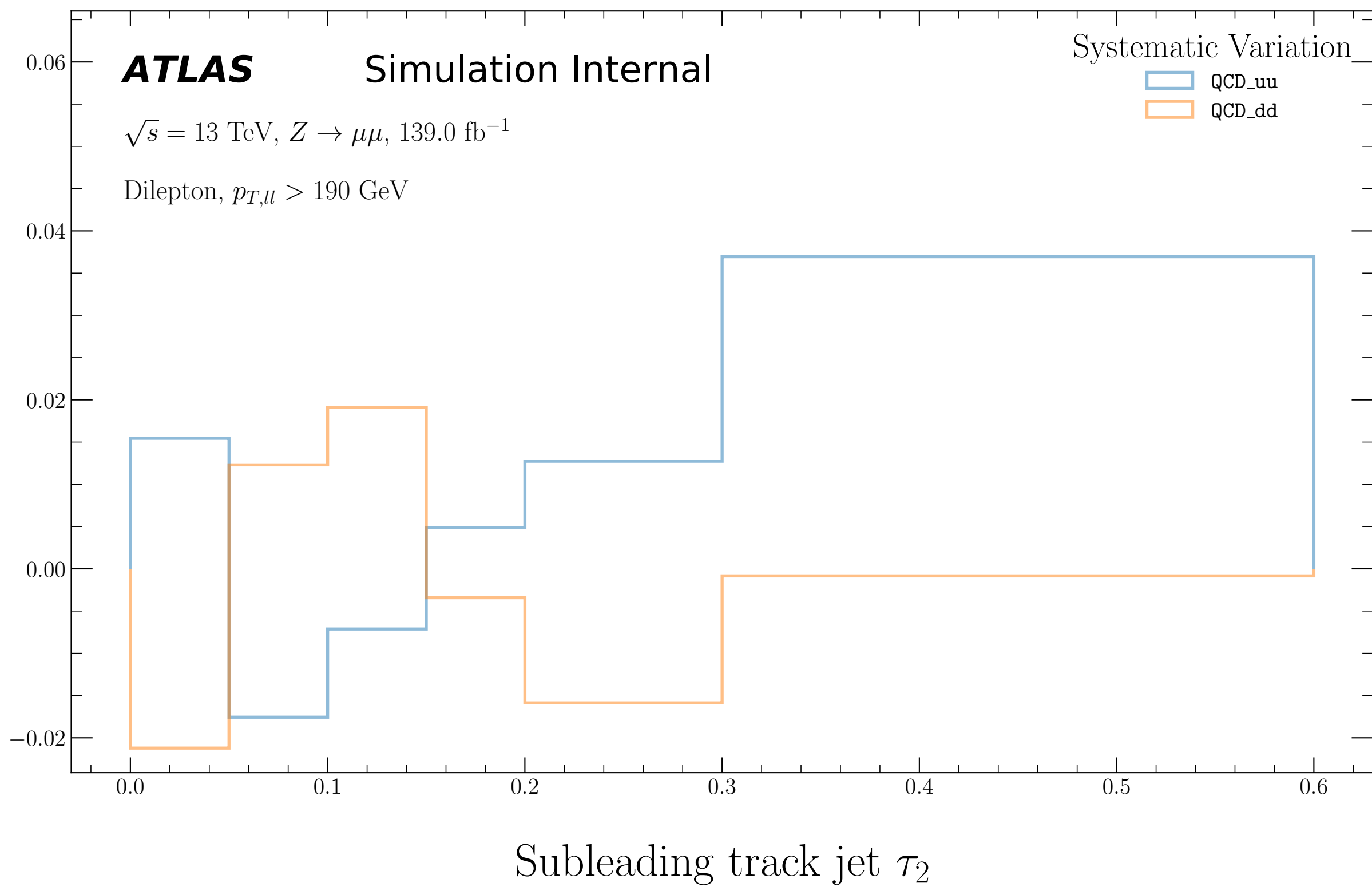
ATLAS

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

QCD_uu
QCD_ddLeading track jet τ_2



Relative Systematic Effect (UniFold)

ATLAS

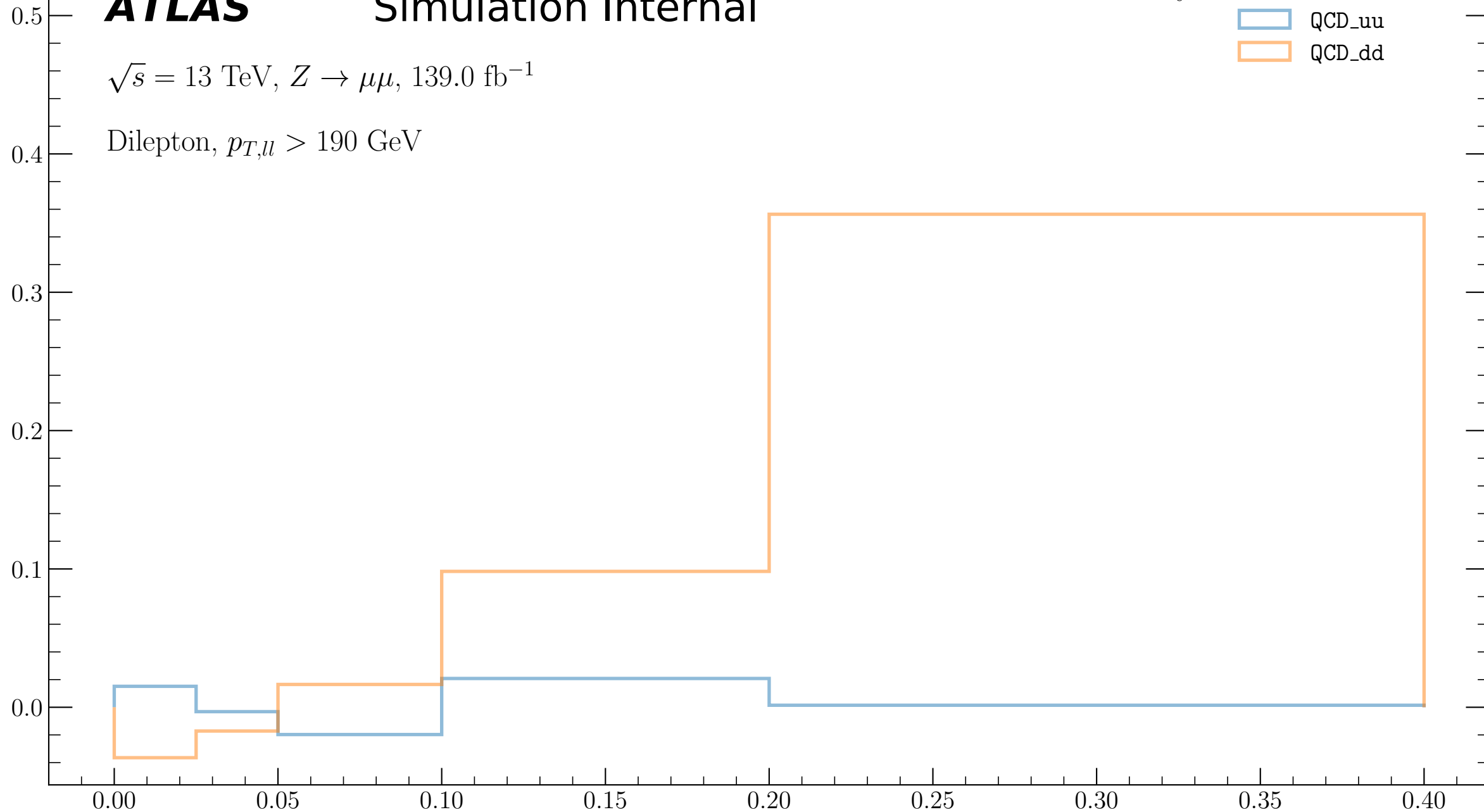
Simulation Internal

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

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

Systematic Variation

QCD_uu
QCD_dd



Leading track jet τ_3

Relative Systematic Effect (UniFold)

ATLAS

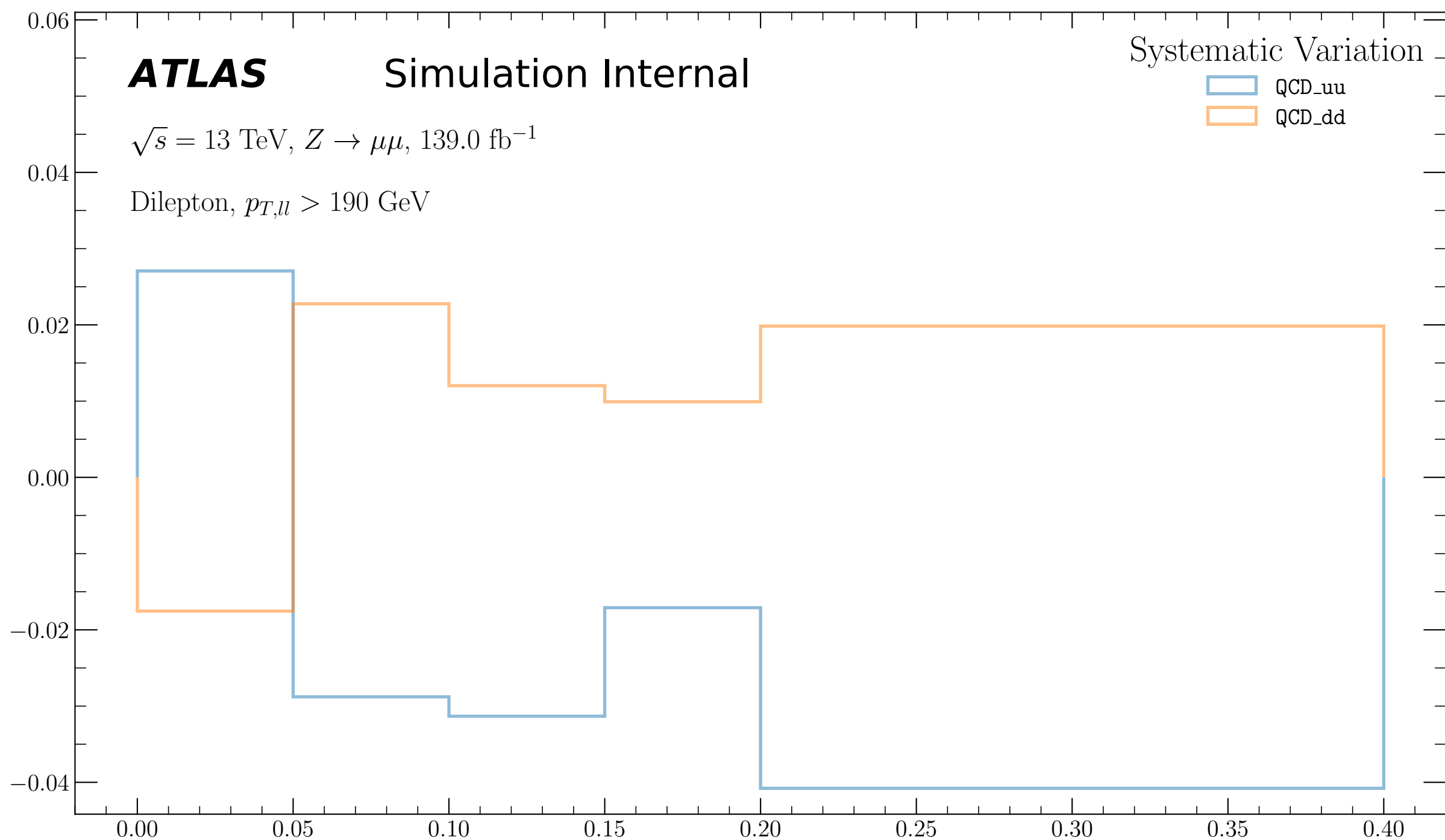
Simulation Internal

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

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

Systematic Variation

QCD_uu
QCD_dd

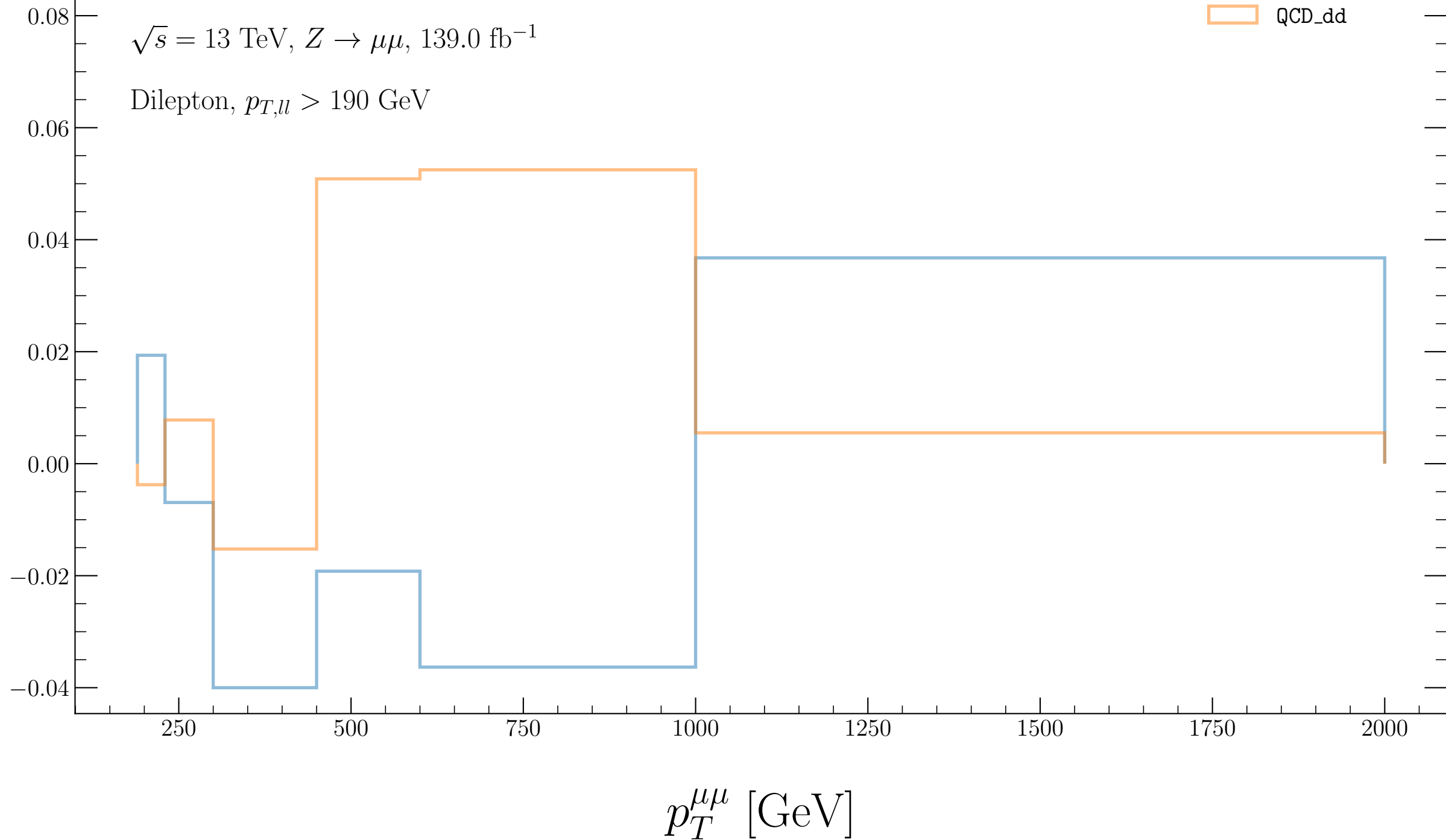


Subleading track jet τ_3

ATLAS

Simulation Internal

Systematic Variation

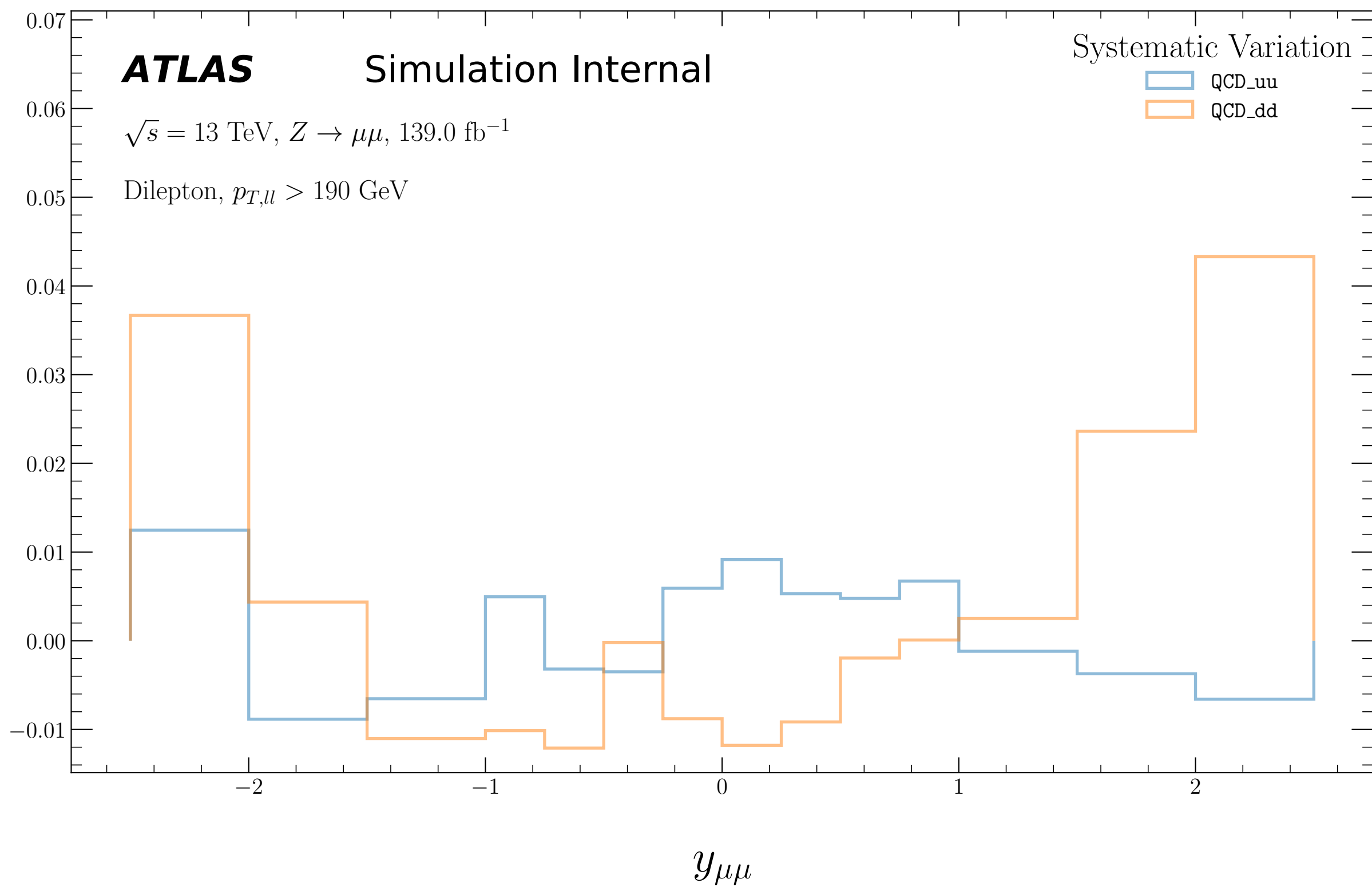
 $\sqrt{s} = 13 \text{ TeV}, Z \rightarrow \mu\mu, 139.0 \text{ fb}^{-1}$ Dilepton, $p_{T,\ell} > 190 \text{ GeV}$ QCD_uu
QCD_dd

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

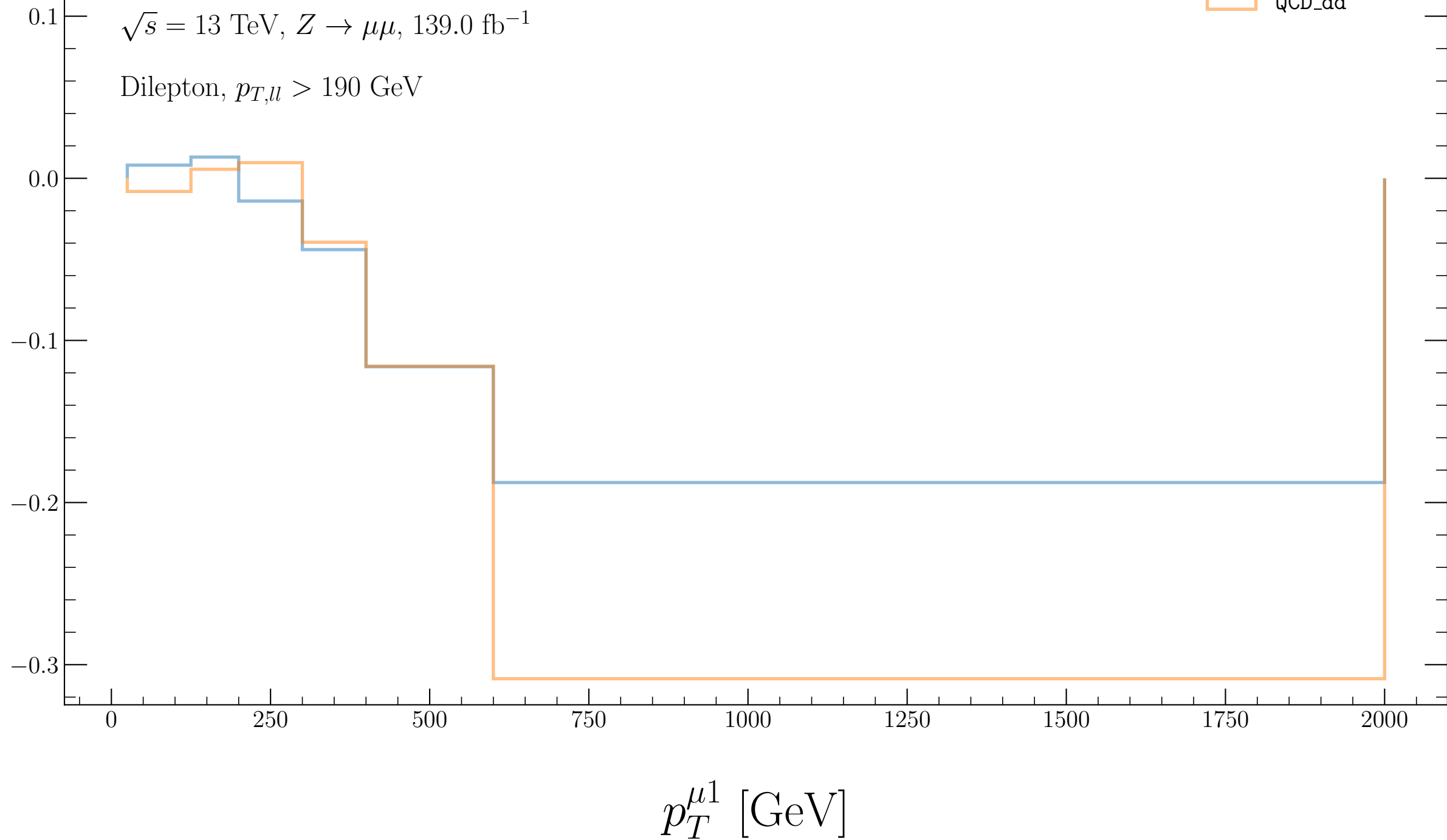
QCD_uu
QCD_dd

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

QCD_uu
QCD_dd

Relative Systematic Effect (UniFold)

ATLAS

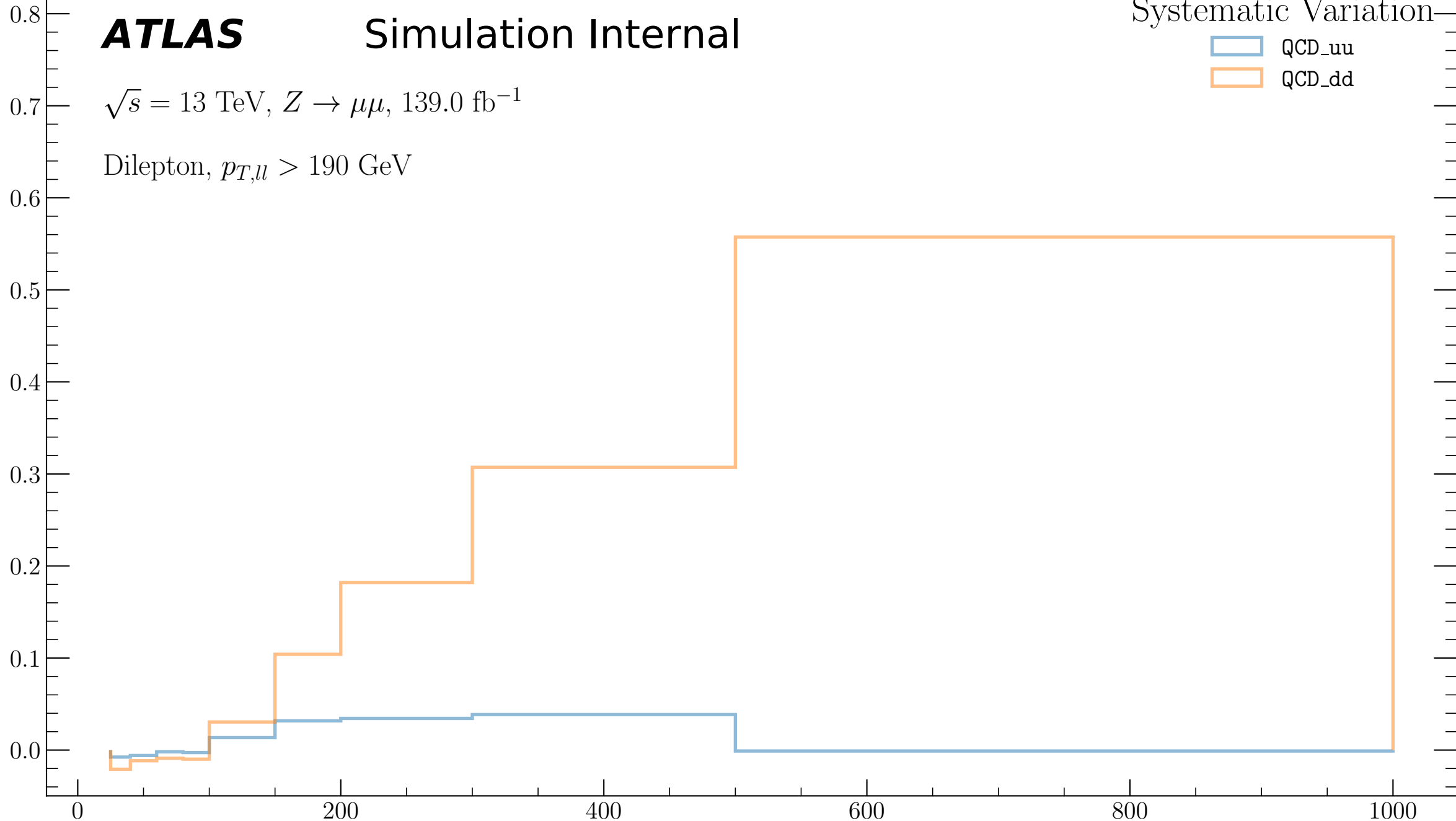
Simulation Internal

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

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

Systematic Variation

QCD_uu
QCD_dd



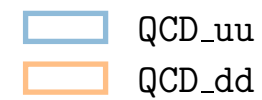
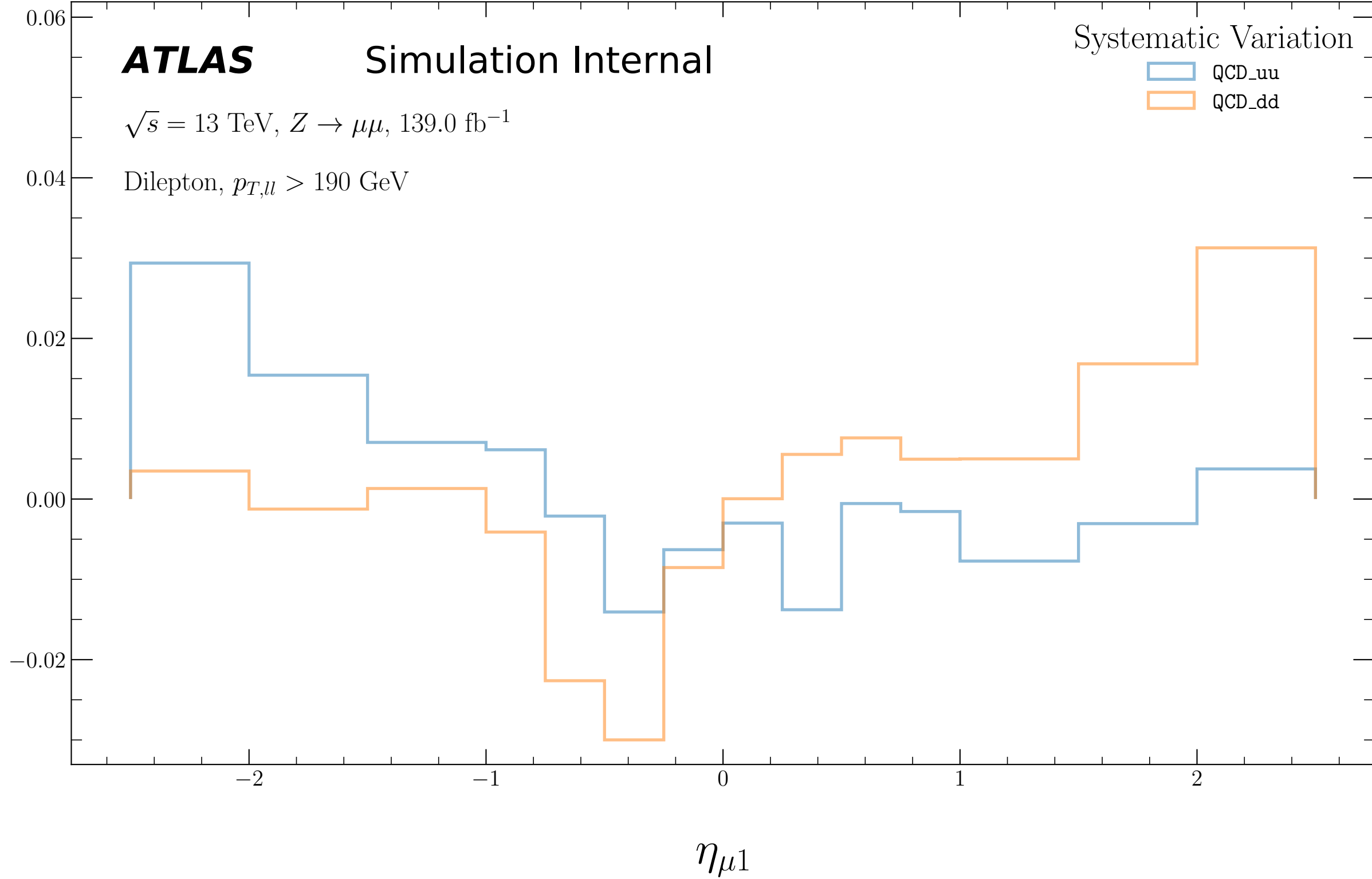
$p_T^{\mu 2}$ [GeV]

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

QCD_uu
QCD_dd

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

QCD_uu
QCD_dd0.03
0.02
0.01
0.00
-0.01

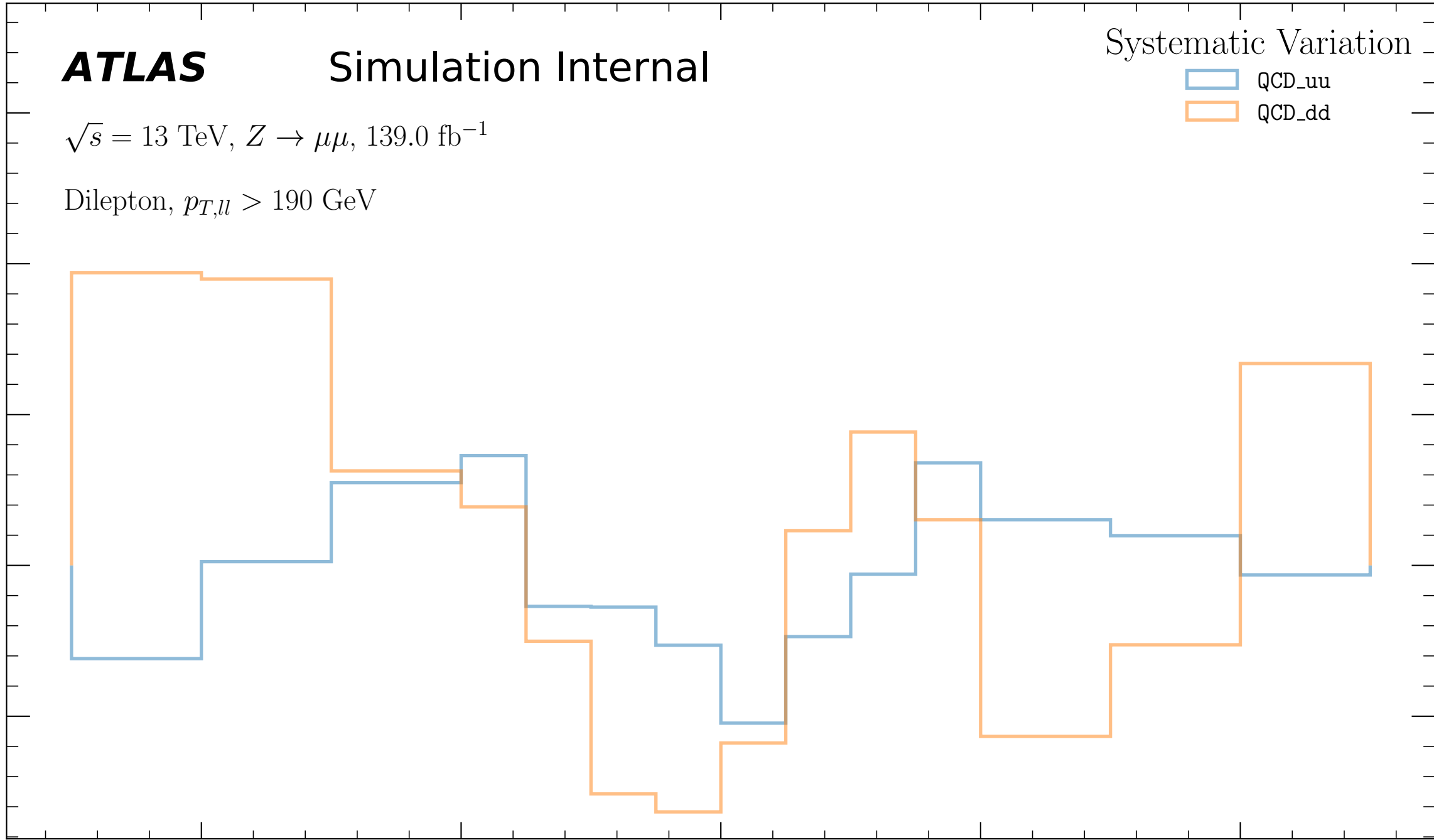
-2

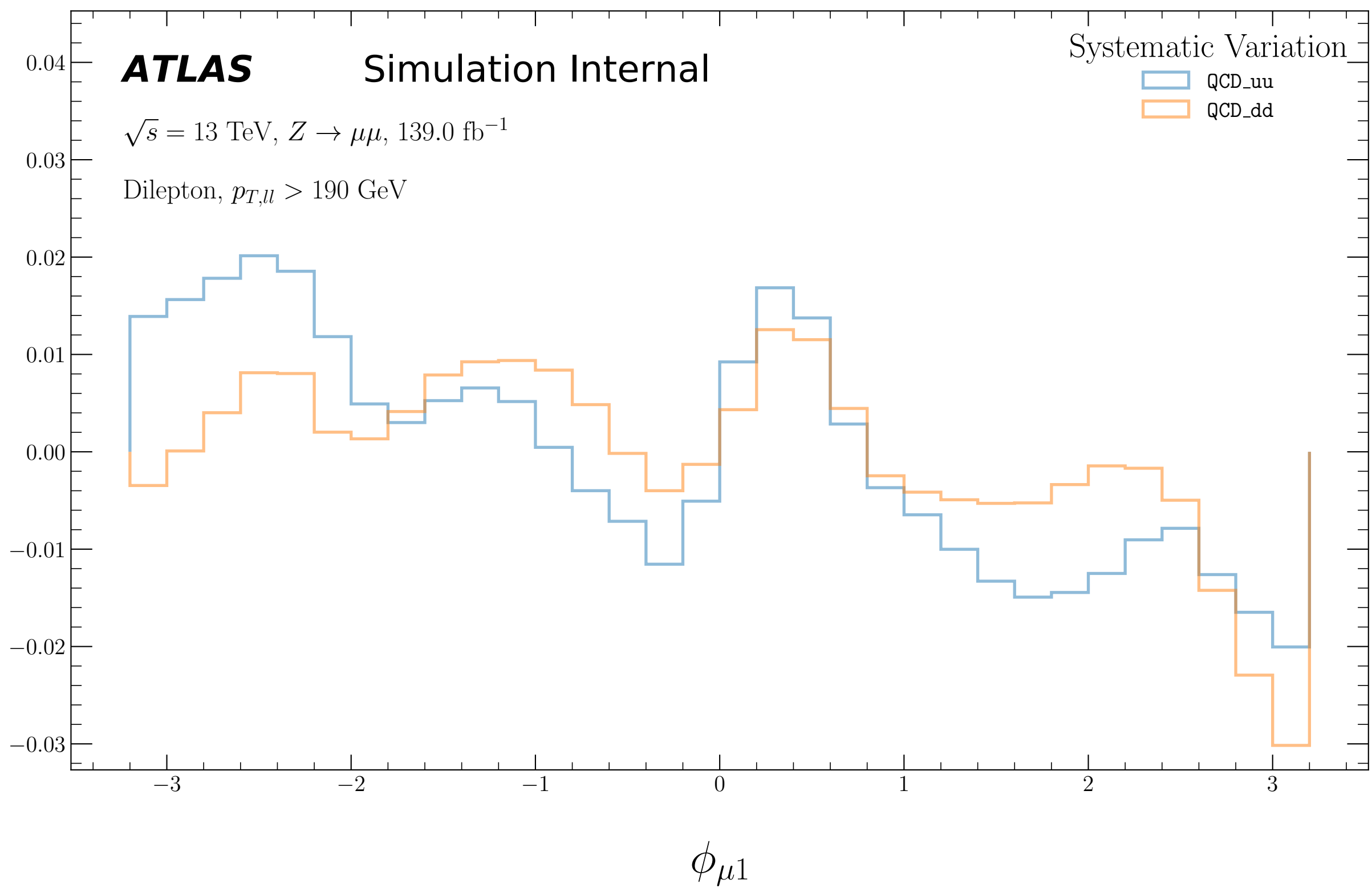
-1

0

1

2

 $\eta_{\mu 2}$ 

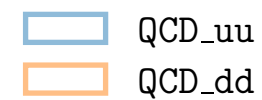


ATLAS

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

QCD_uu
QCD_dd