

# TMG Meeting NTUA Report 24/2/2020

K. Kousouris, G. Tsiopolitis, G.Bakas, I. Papakrivopoulos

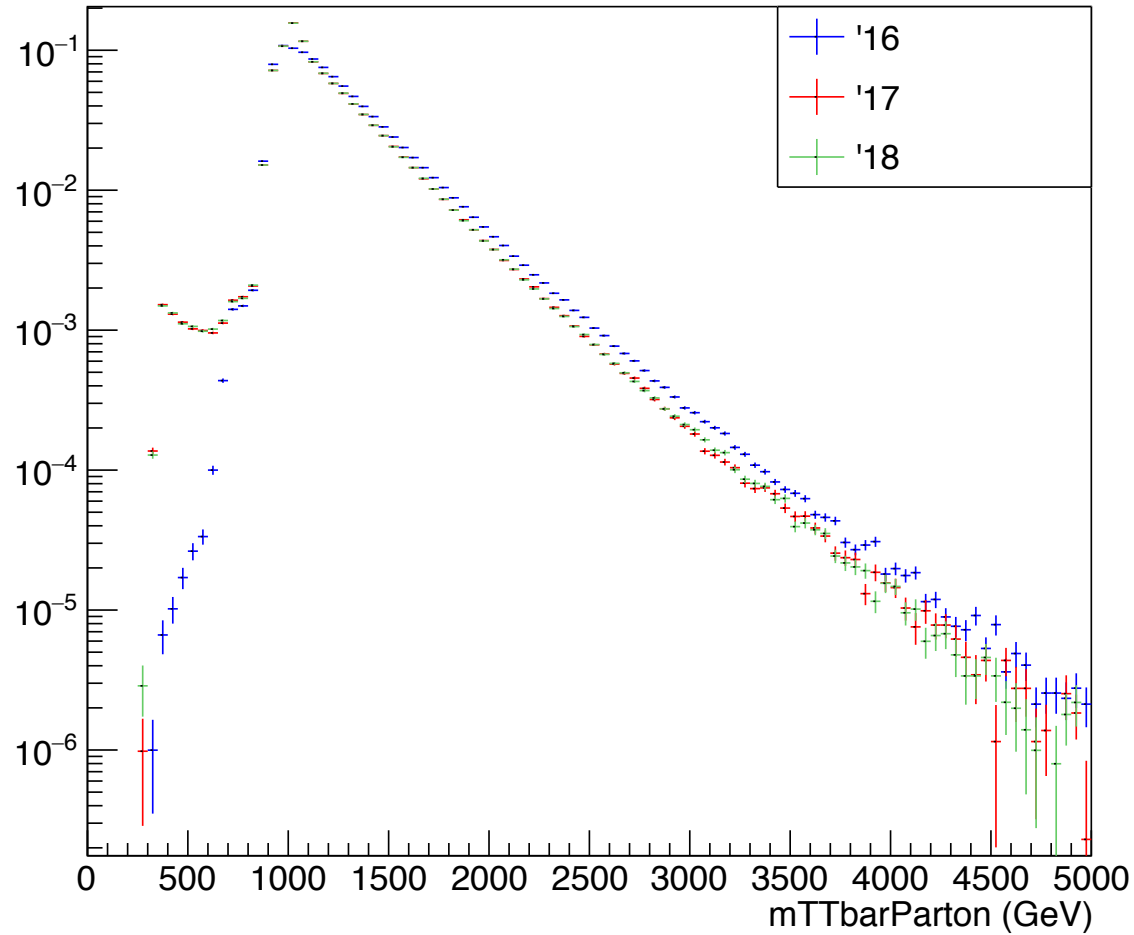


- Purpose:
  - Show the inconsistencies between the different Nominal and Mtt files
  - 2016, 2017, 2018
  - Parton Level quantities

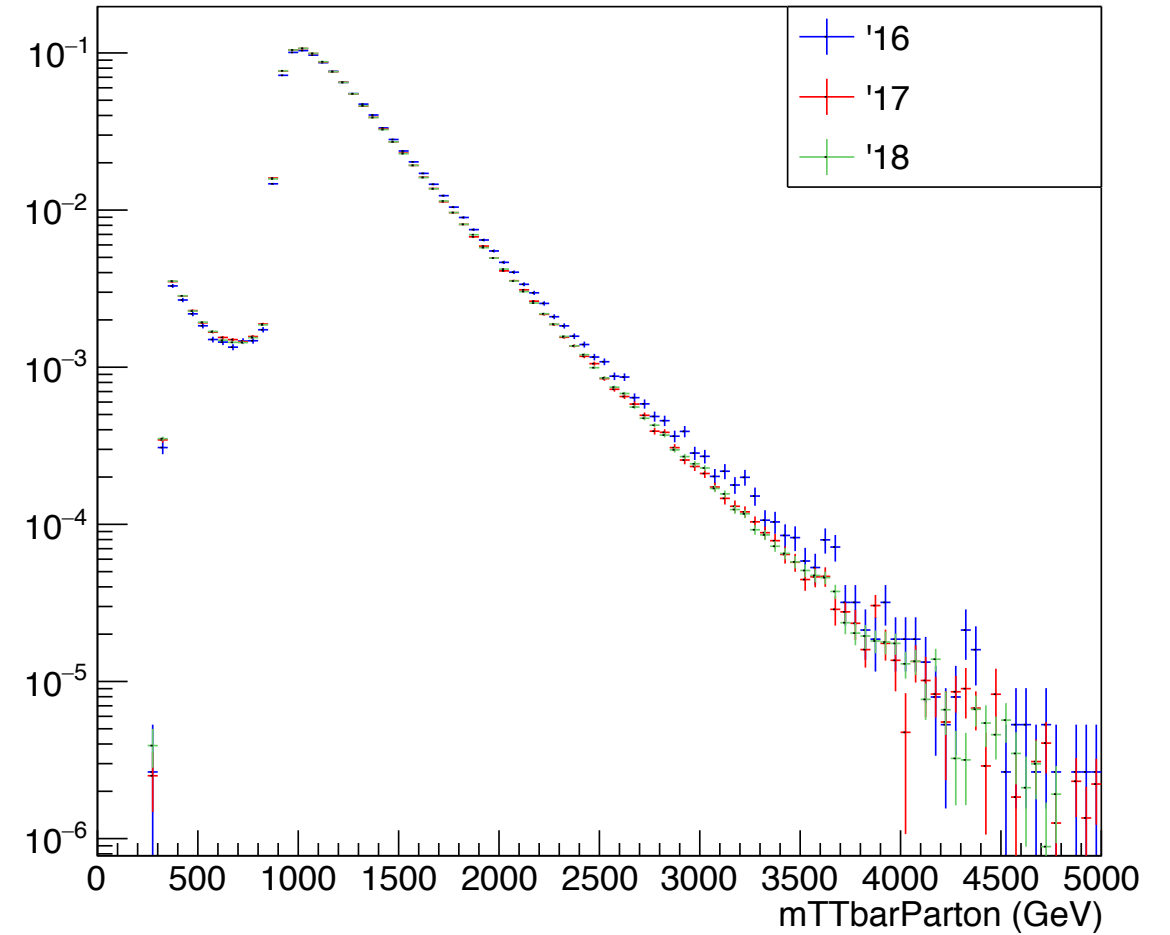
Year	Type of File	DAS
2016	TT Mtt 700-1000	<a href="#">/TT_Mtt-700to1000_TuneCUETP8M2T4_13TeV-powheg-pythia8/RunIISummer16MiniAODv3-PUMoriond17_94X_mcRun2_asymptotic_v3-v2/MINIAODSIM</a>
	TT Mtt 1000-Inf	<a href="#">/TT_Mtt-1000toInf_TuneCUETP8M2T4_13TeV-powheg-pythia8/RunIISummer16MiniAODv3-PUMoriond17_94X_mcRun2_asymptotic_v3-v2/MINIAODSIM</a>
	TT Nominal	<a href="#">/TT_TuneCUETP8M2T4_13TeV-powheg-pythia8/RunIISummer16MiniAODv3-PUMoriond17_94X_mcRun2_asymptotic_v3-v1/MINIAODSIM</a>
2017	TT Mtt 700-1000	<a href="#">/TT_Mtt-700to1000_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1/MINIAODSIM</a>
	TT Mtt 1000-Inf	<a href="#">/TT_Mtt-1000toInf_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1/MINIAODSIM</a>
	TT Nominal Hadronic	<a href="#">/TTToHadronic_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v1/MINIAODSIM</a>
	TT Nominal Semilepton	<a href="#">/TTToSemiLeptonic_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2/MINIAODSIM</a>
	TT Nominal Dilepton	<a href="#">/TTTo2L2Nu_TuneCP5_13TeV-powheg-pythia8/RunIIFall17MiniAODv2-PU2017_12Apr2018_94X_mc2017_realistic_v14-v2/MINIAODSIM</a>
2018	TT Mtt 700-1000	<a href="#">/TT_Mtt-700to1000_TuneCP5_PSweights_13TeV-powheg-pythia8/RunIIAutumn18MiniAOD-102X_upgrade2018_realistic_v15-v1/MINIAODSIM</a>
	TT Mtt 1000-Inf	<a href="#">/TT_Mtt-1000toInf_TuneCP5_13TeV-powheg-pythia8/RunIIAutumn18MiniAOD-102X_upgrade2018_realistic_v15-v1/MINIAODSIM</a>
	TT Nominal Hadronic	<a href="#">/TTToHadronic_TuneCP5_13TeV-powheg-pythia8/RunIIAutumn18MiniAOD-102X_upgrade2018_realistic_v15-v1/MINIAODSIM</a>
	TT Nominal Semilepton	<a href="#">/TTToSemiLeptonic_TuneCP5_13TeV-powheg-pythia8/RunIIAutumn18MiniAOD-102X_upgrade2018_realistic_v15-v1/MINIAODSIM</a>
	TT Nominal Dilepton	<a href="#">/TTTo2L2Nu_TuneCP5_13TeV-powheg-pythia8/RunIIAutumn18MiniAOD-102X_upgrade2018_realistic_v15-v1/MINIAODSIM</a>

# MC Closure tests '16, '17 and '18 (shape) for mtt and nominal files

TT Parton Mtt MC

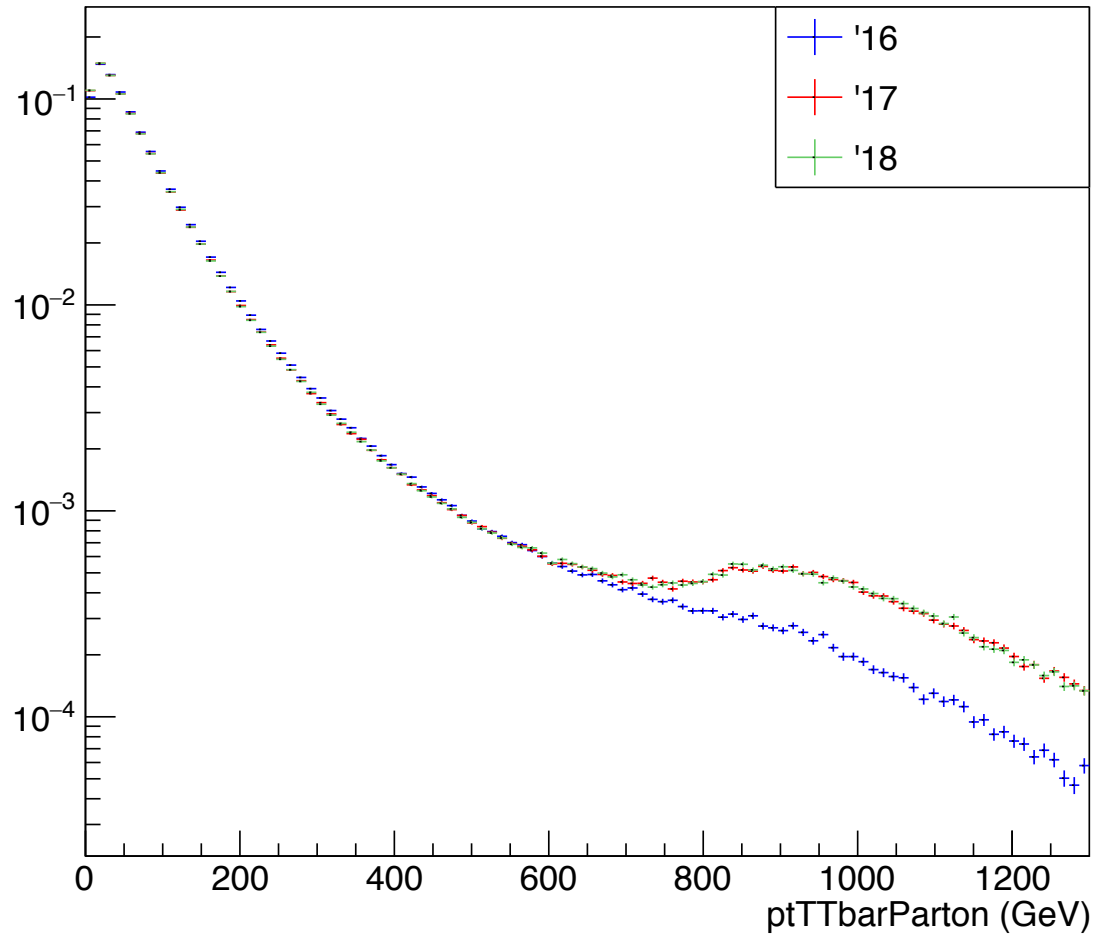


TT Parton Nominal MC

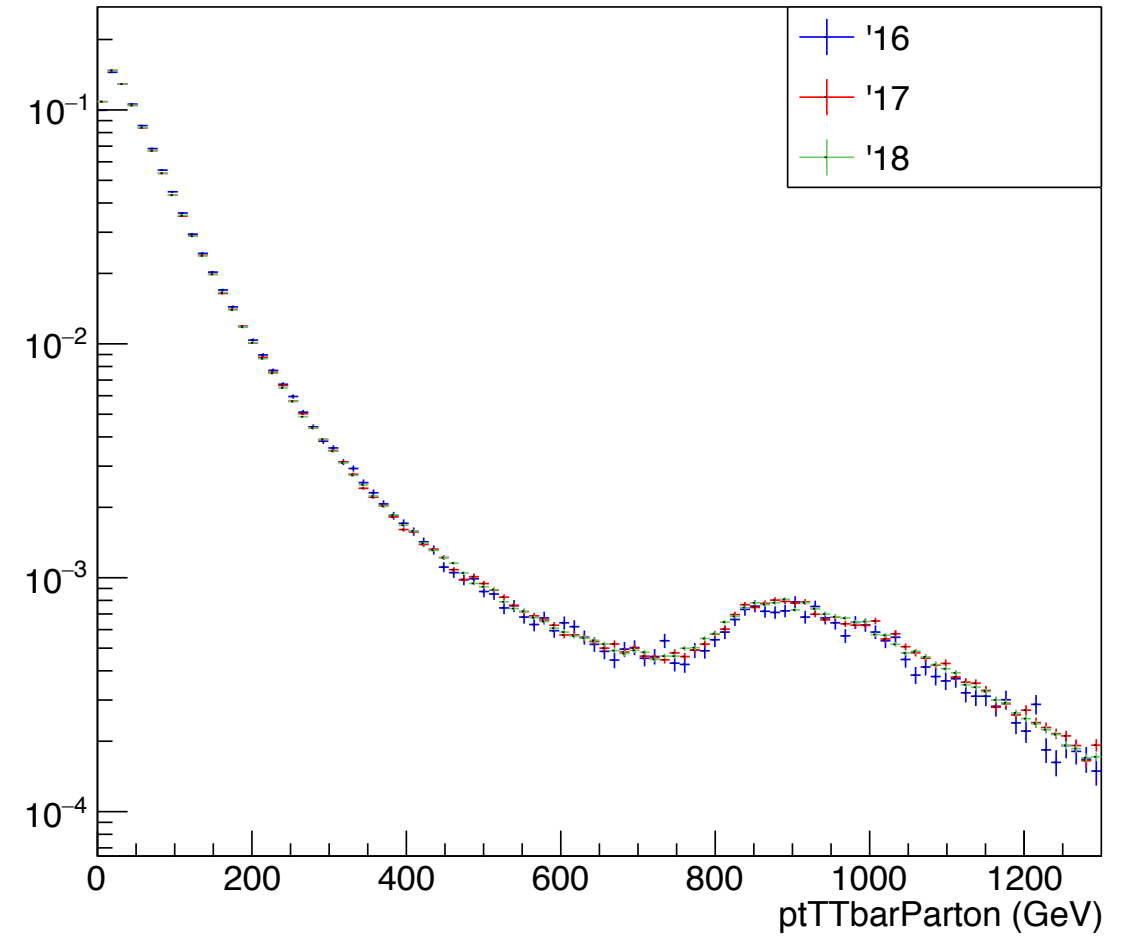


# MC Closure tests '16, '17 and '18 (shape) for mtt and nominal files

TT Parton Mtt MC

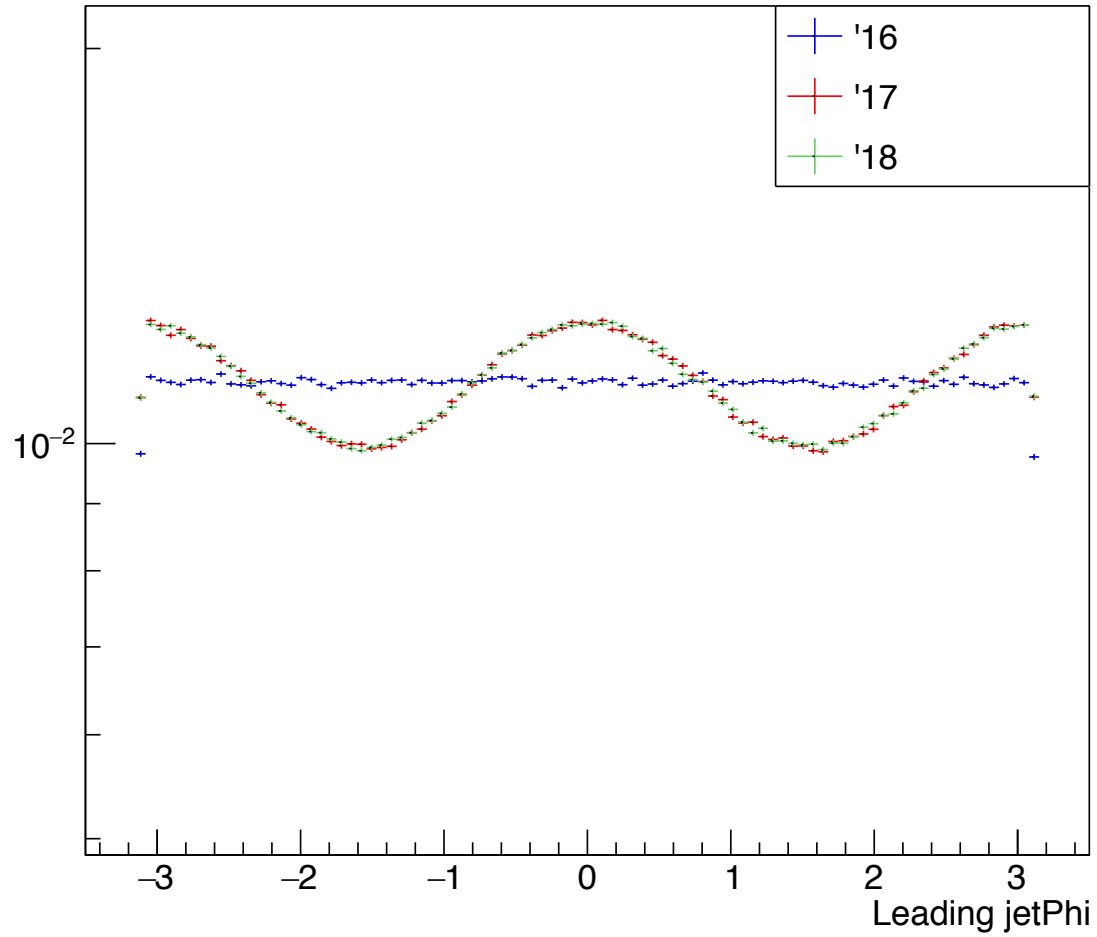


TT Parton Nominal MC

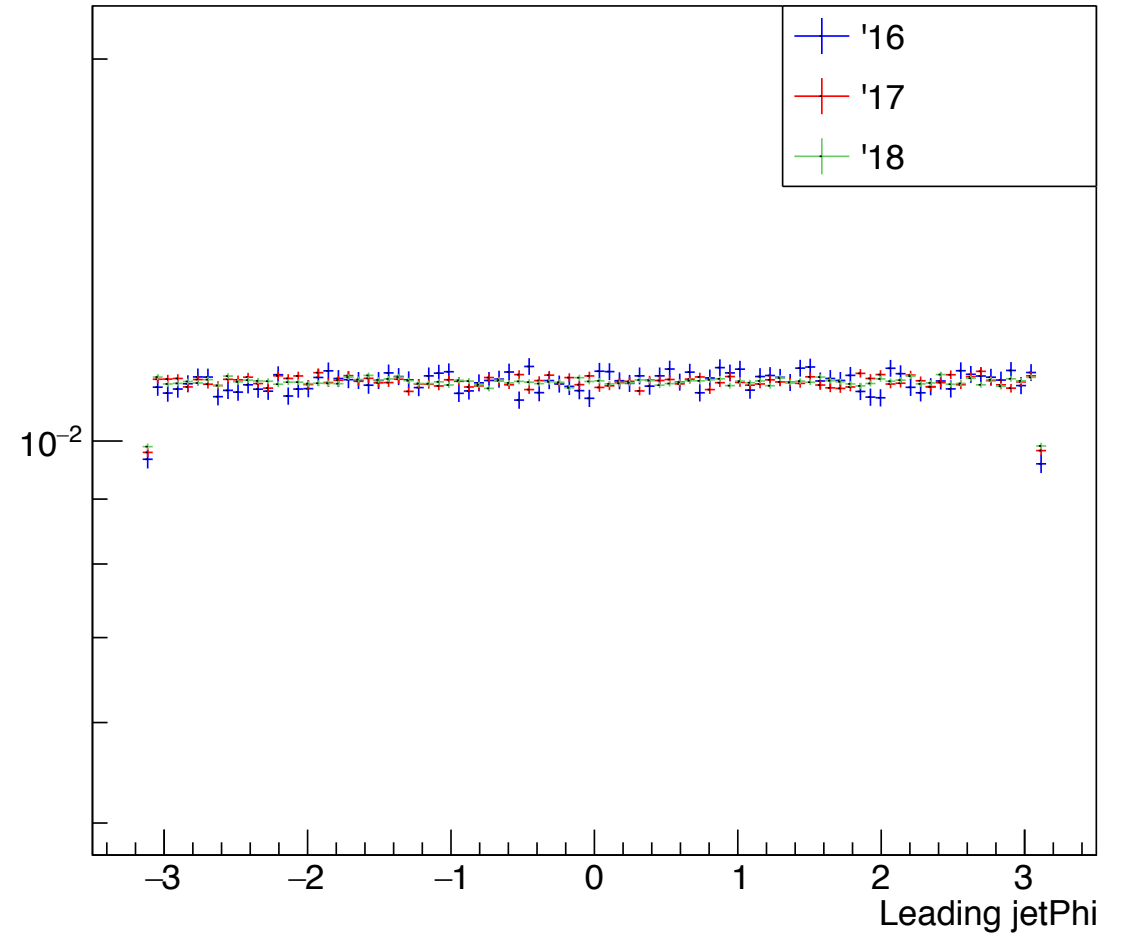


# MC Closure tests '16, '17 and '18 (shape) for mtt and nominal files

TT Parton Mtt MC

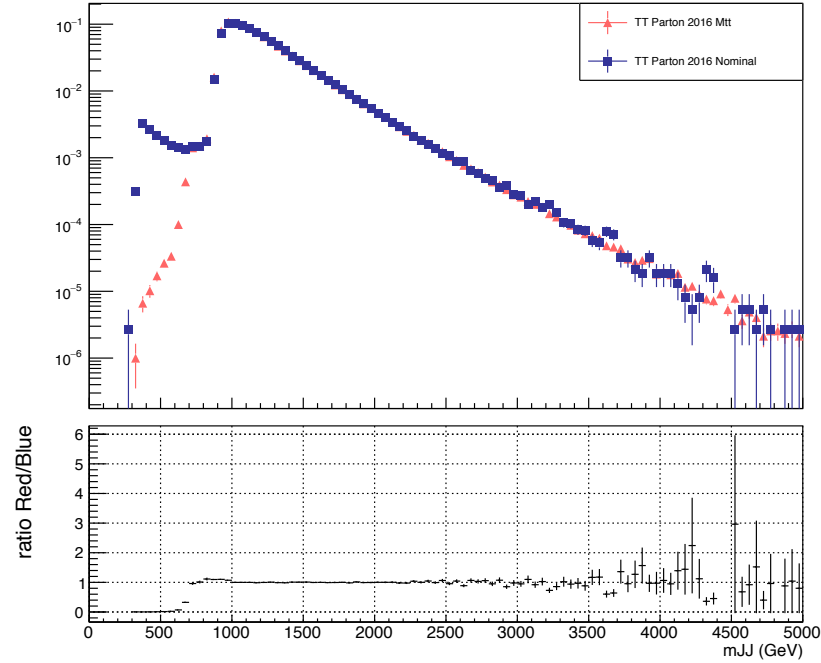


TT Parton Nominal MC

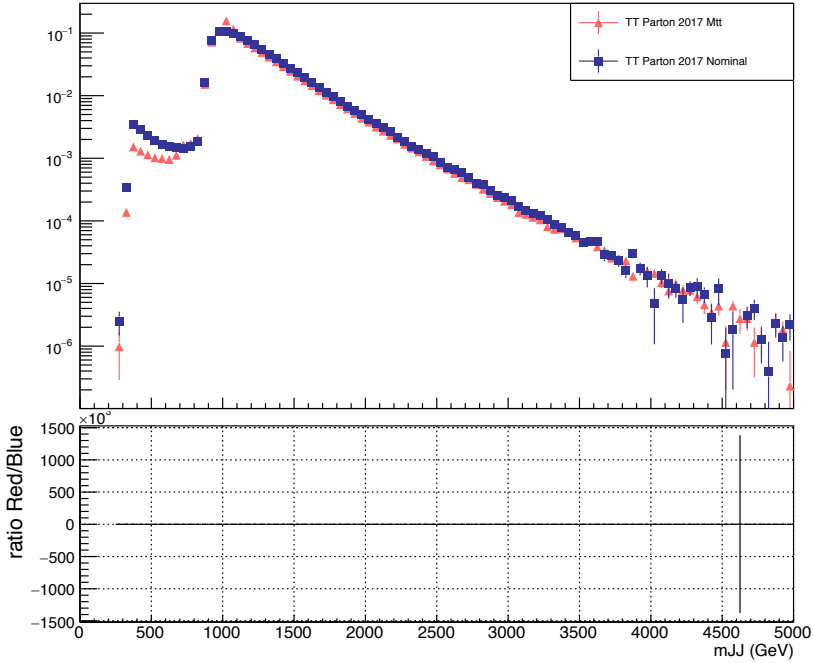


# MC Closure Tests Mtt vs Nominal Parton

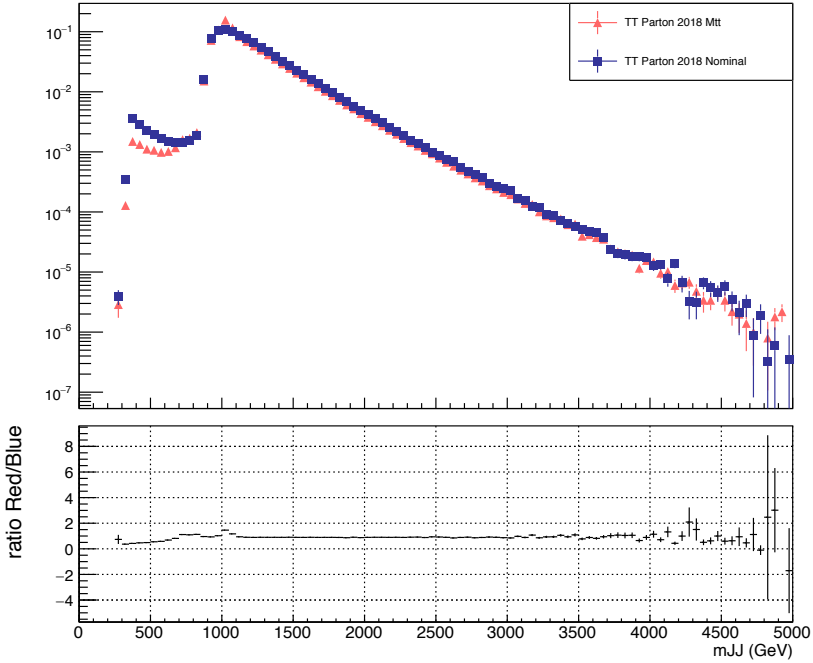
TT Parton 2016 Mtt



TT Parton 2017 Mtt

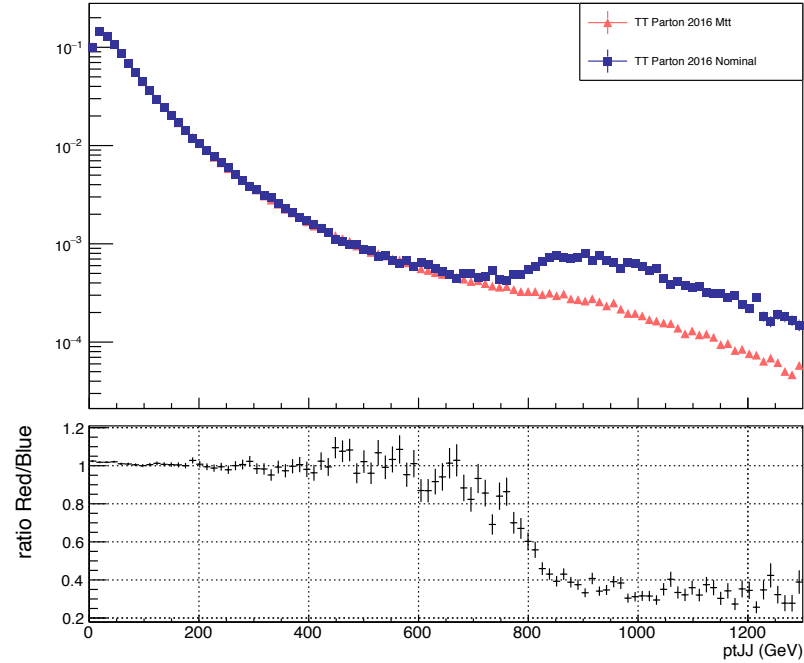


TT Parton 2018 Mtt

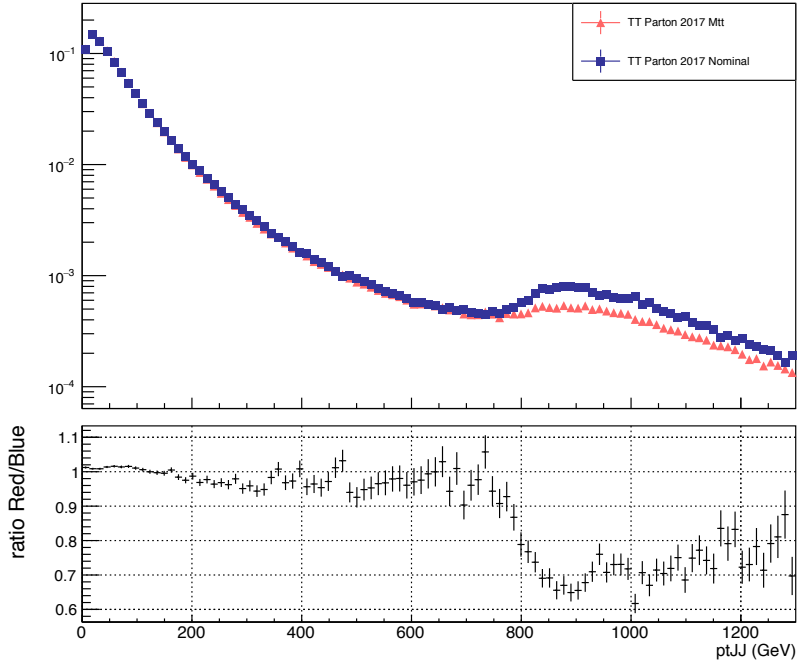


# MC Closure Tests Mtt vs Nominal Parton

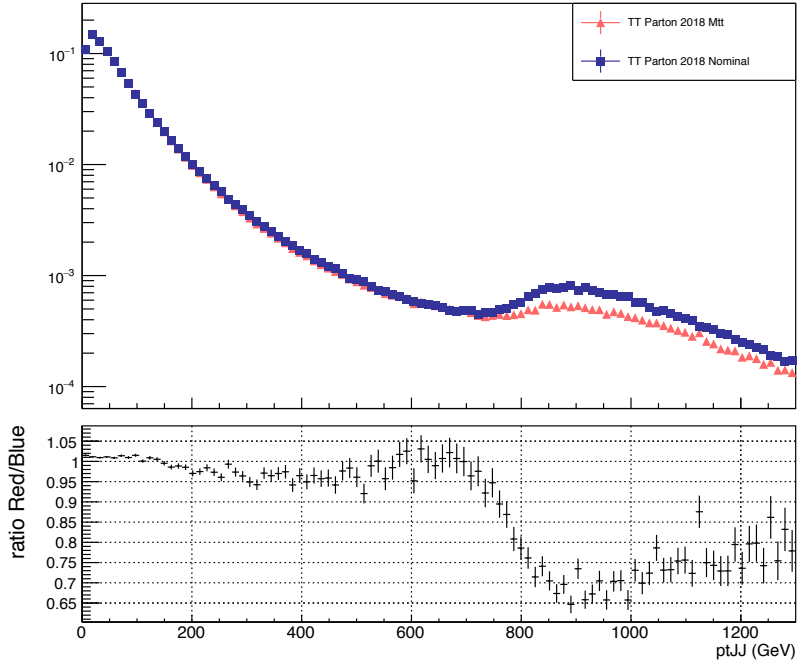
TT Parton 2016 Mtt



TT Parton 2017 Mtt

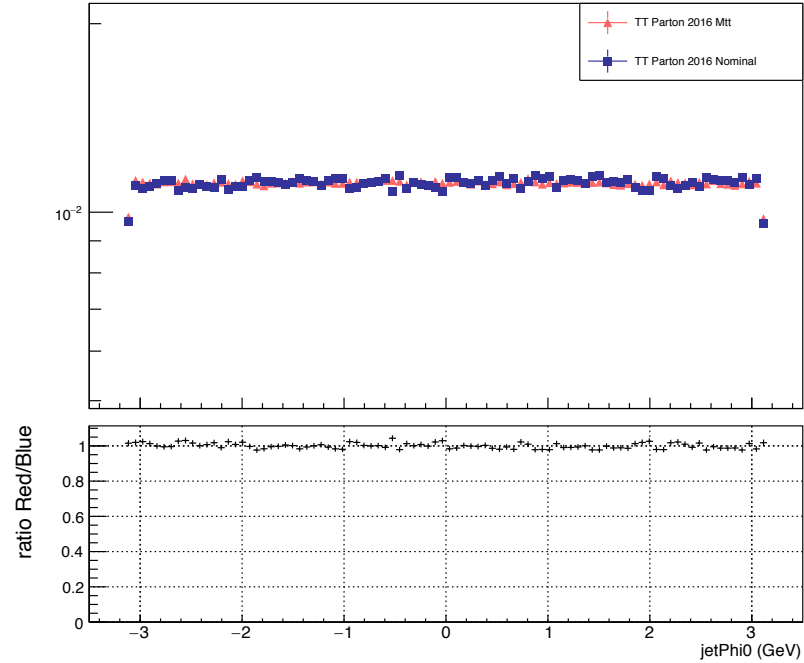


TT Parton 2018 Mtt

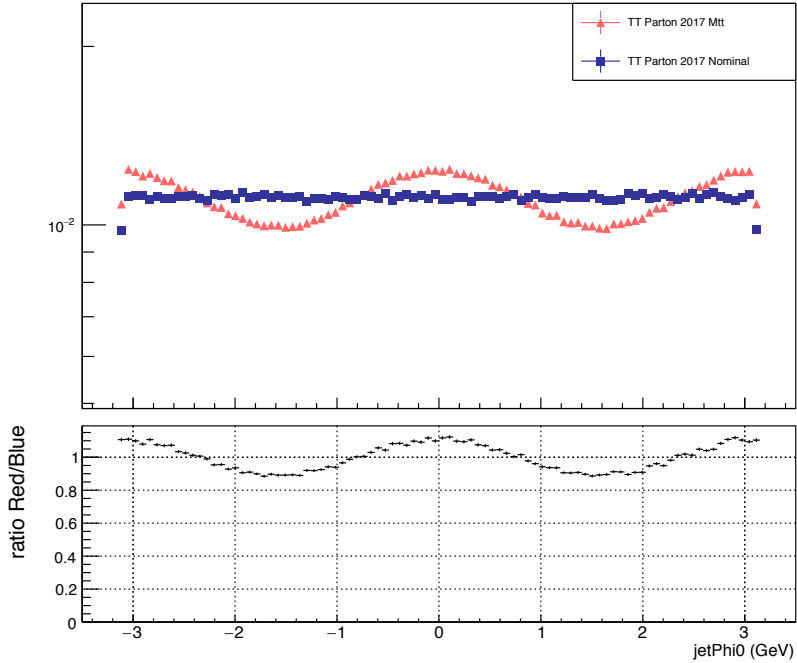


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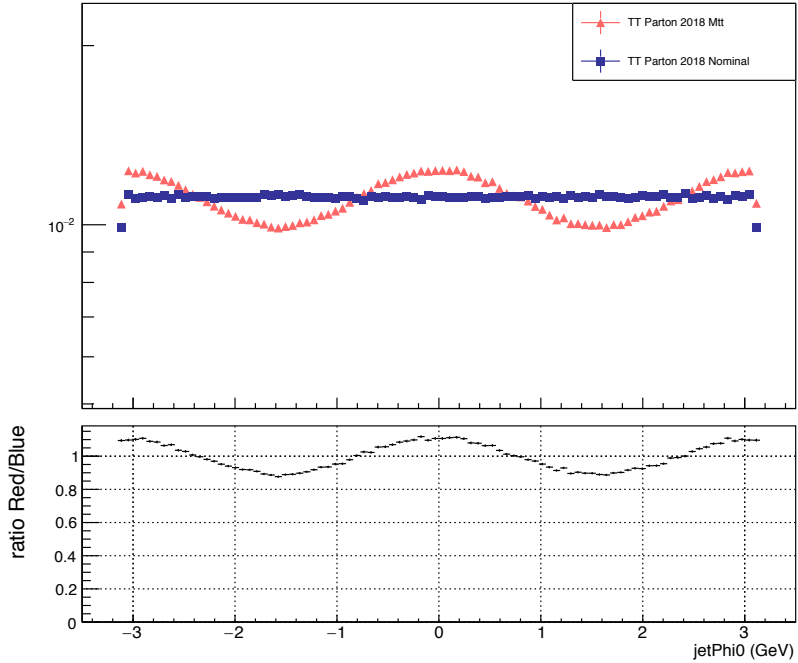
TT Parton 2016 Mtt



TT Parton 2017 Mtt



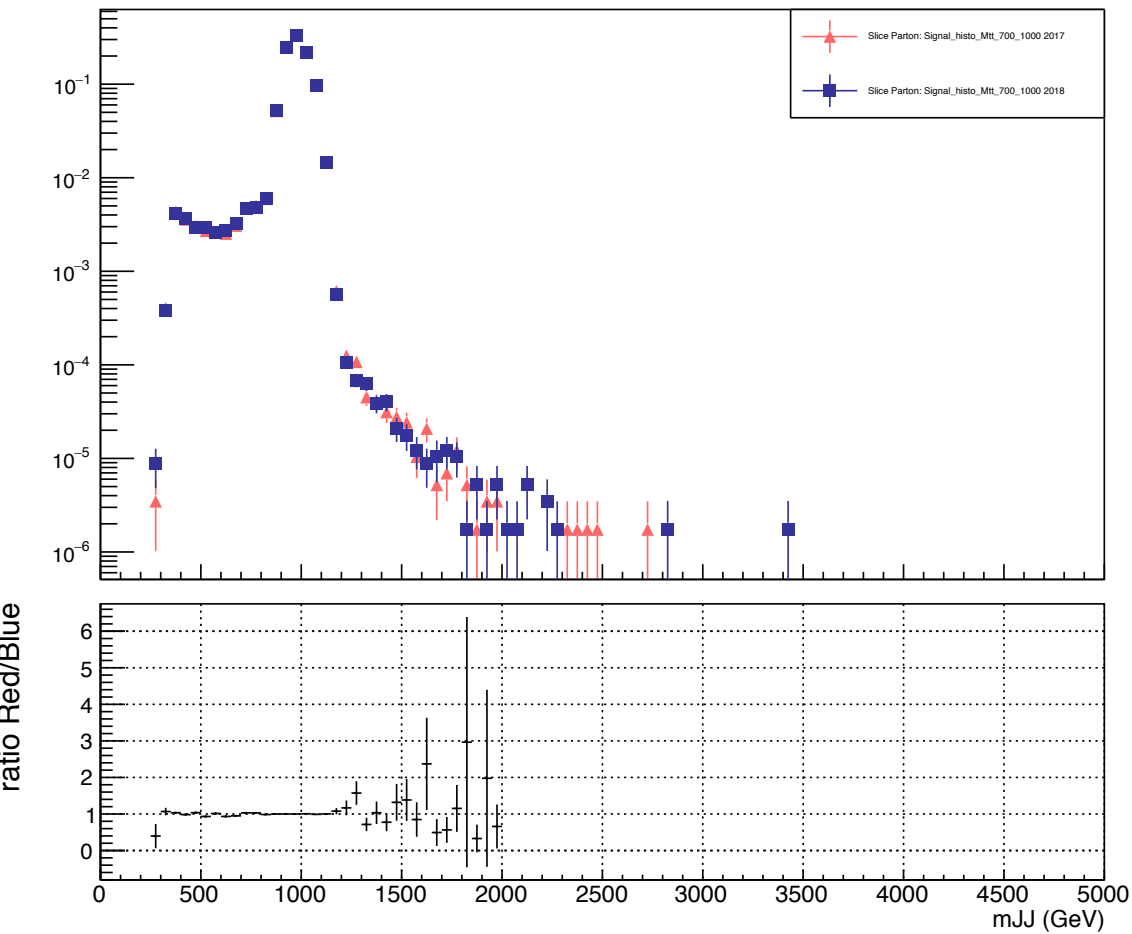
TT Parton 2018 Mtt



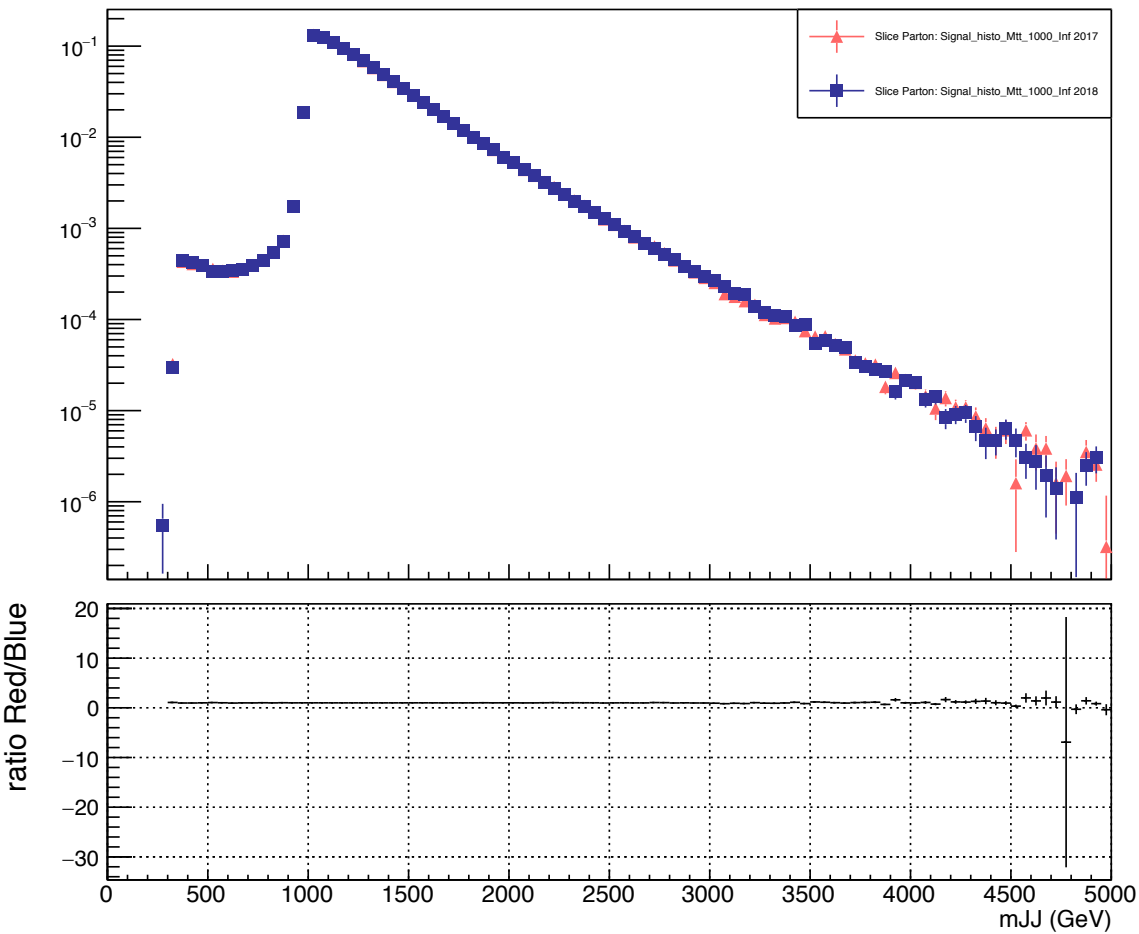


# MC Closure Tests Mtt 2017 vs 2018 (shape) per slice

Slice Parton: Signal\_histo\_Mtt\_700\_1000 2017

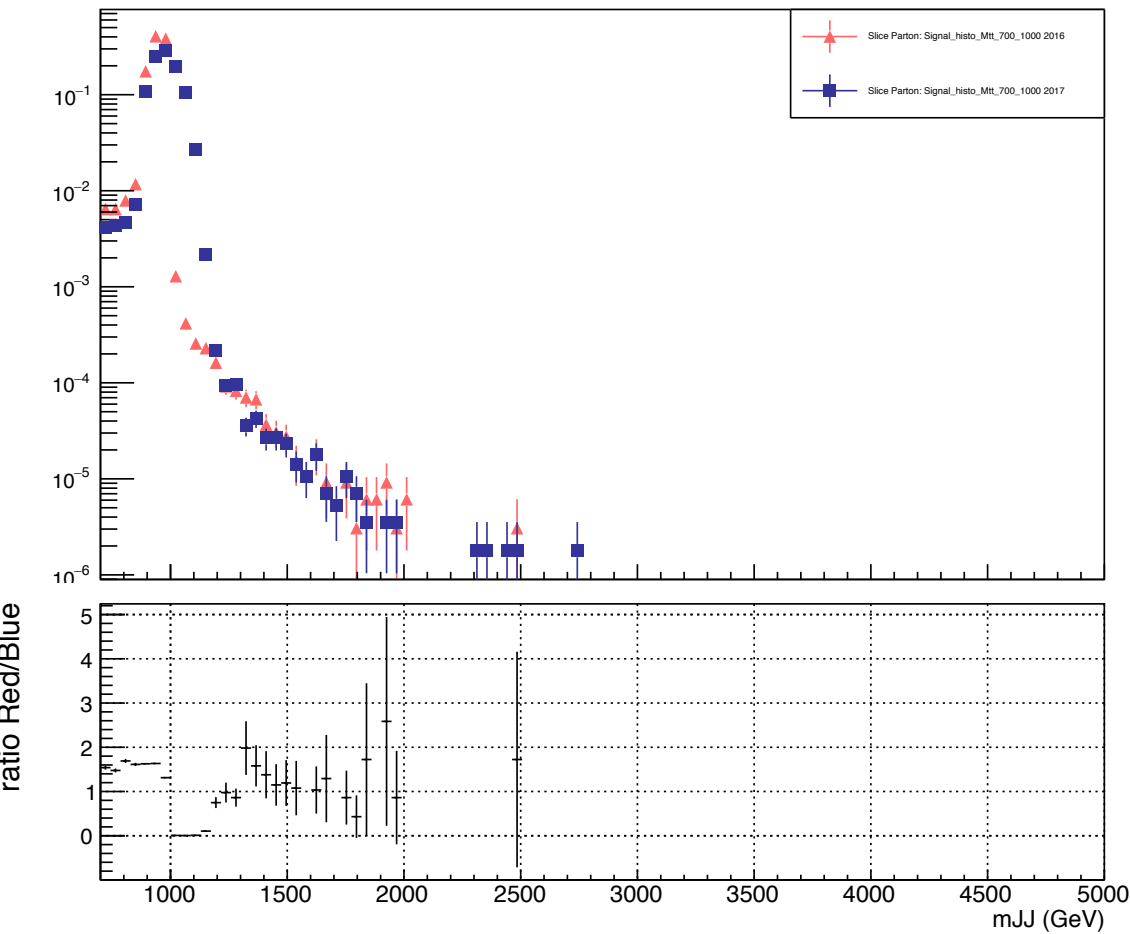


Slice Parton: Signal\_histo\_Mtt\_1000\_Inf 2017

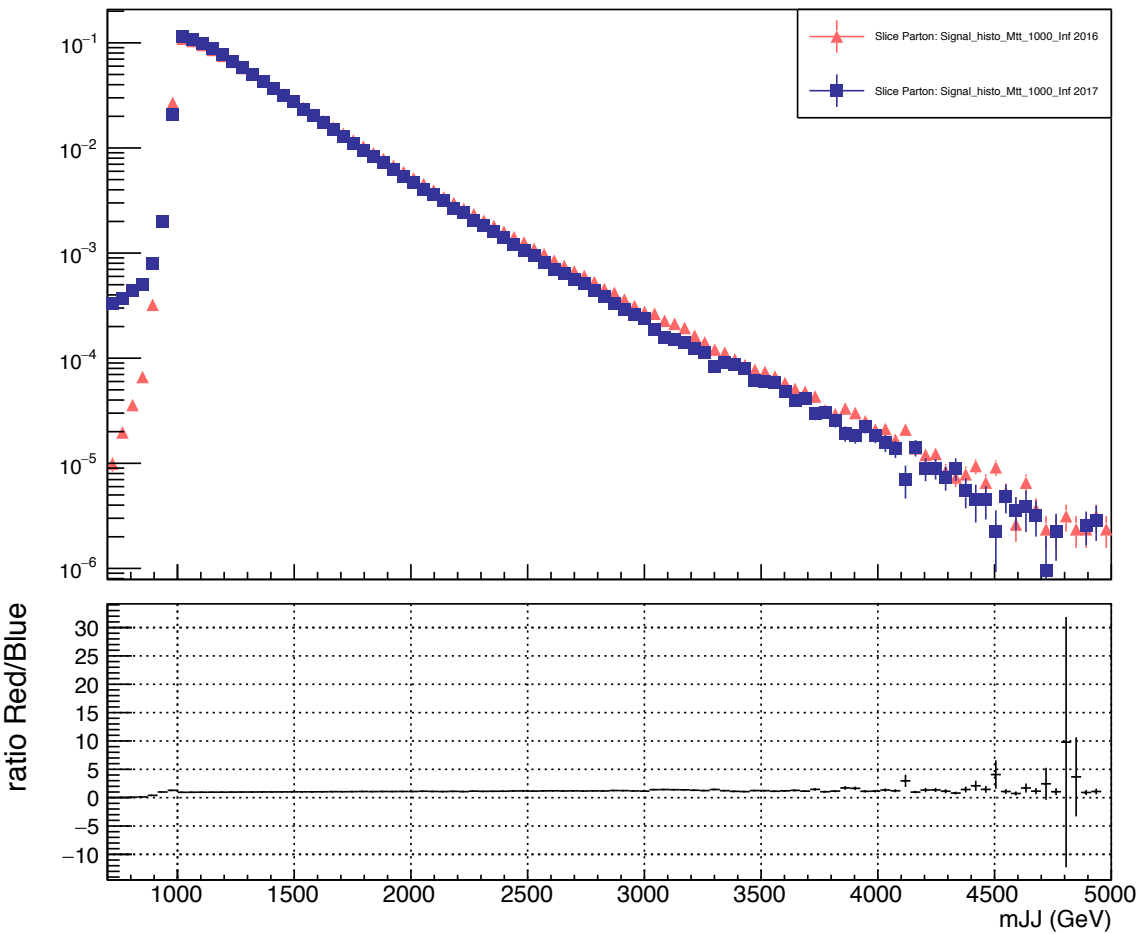


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Slice Parton: Signal\_histo\_Mtt\_700\_1000 2016

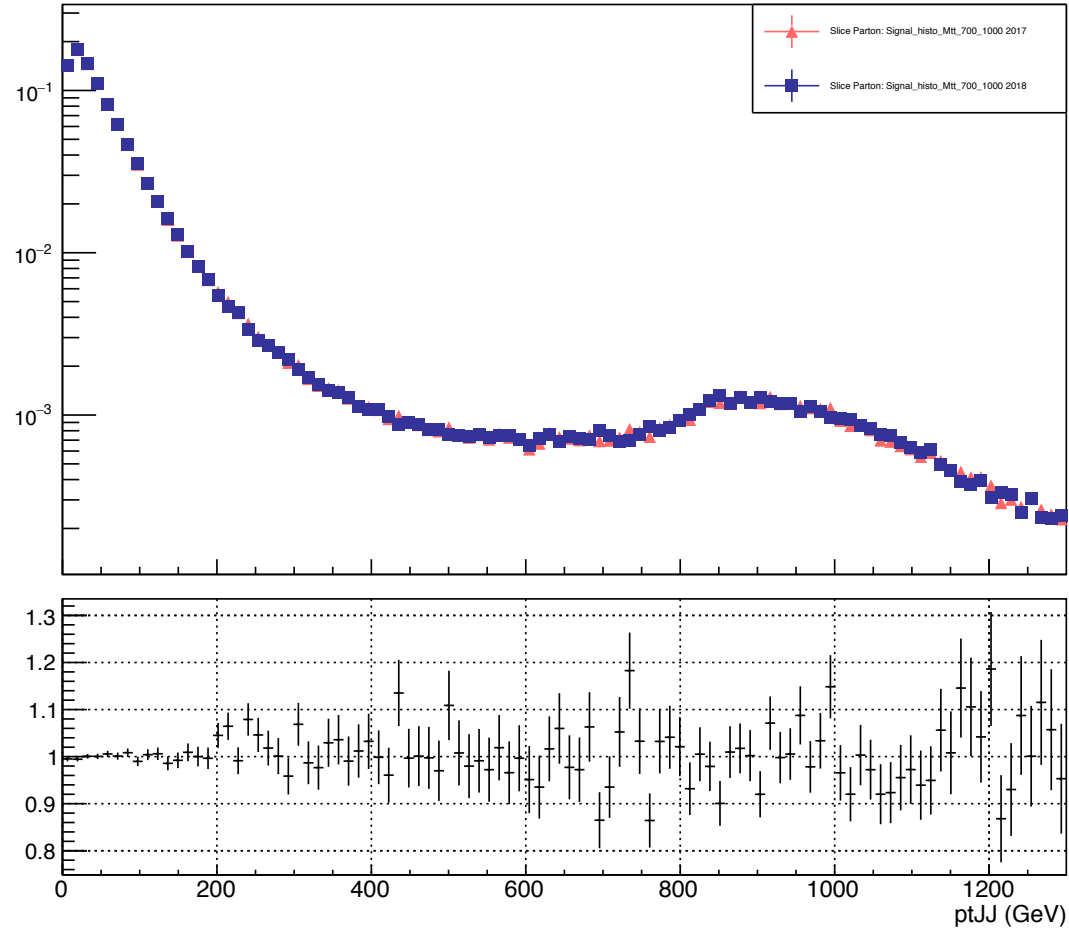


Slice Parton: Signal\_histo\_Mtt\_1000\_Inf 2016

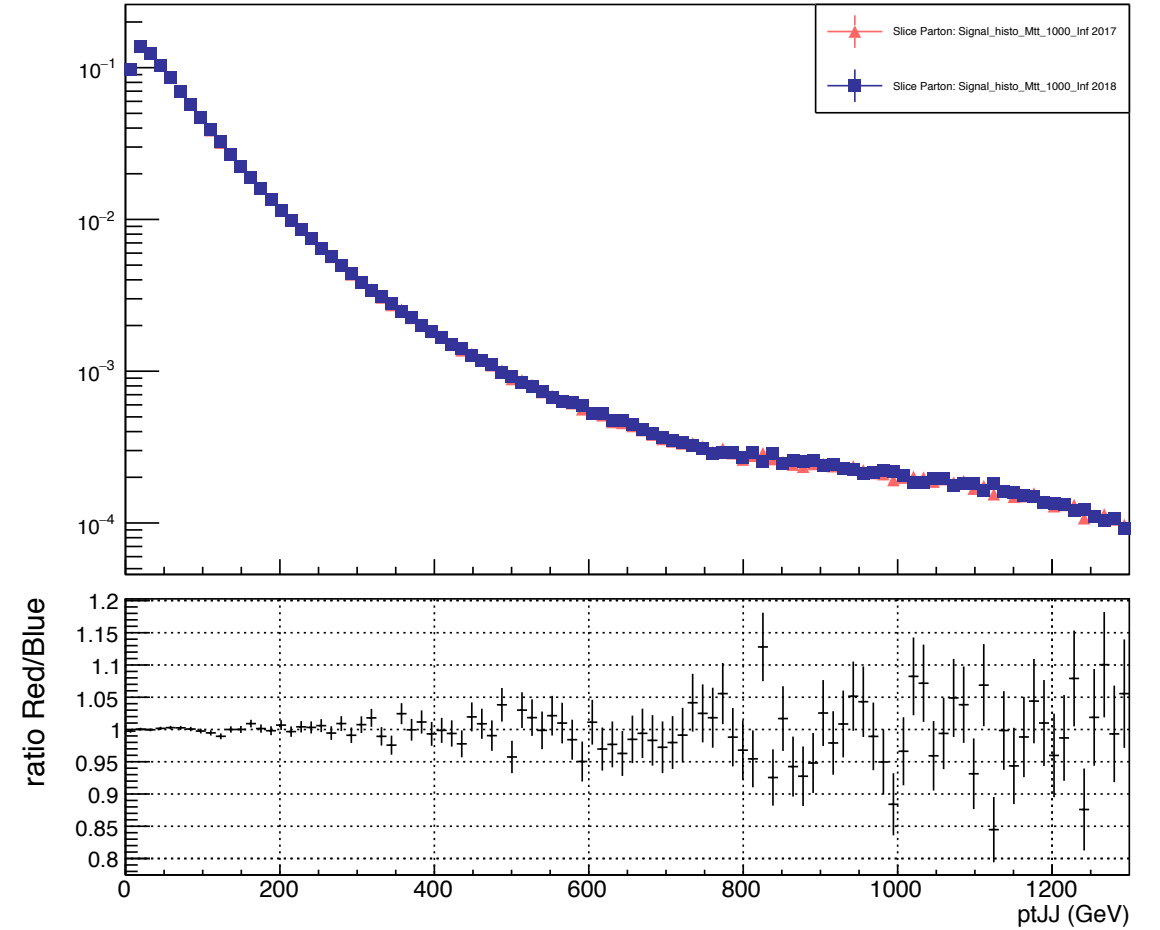


# MC Closure Tests Mtt 2017 vs 2018 (shape) per slice

Slice Parton: Signal\_histo\_Mtt\_700\_1000 2017

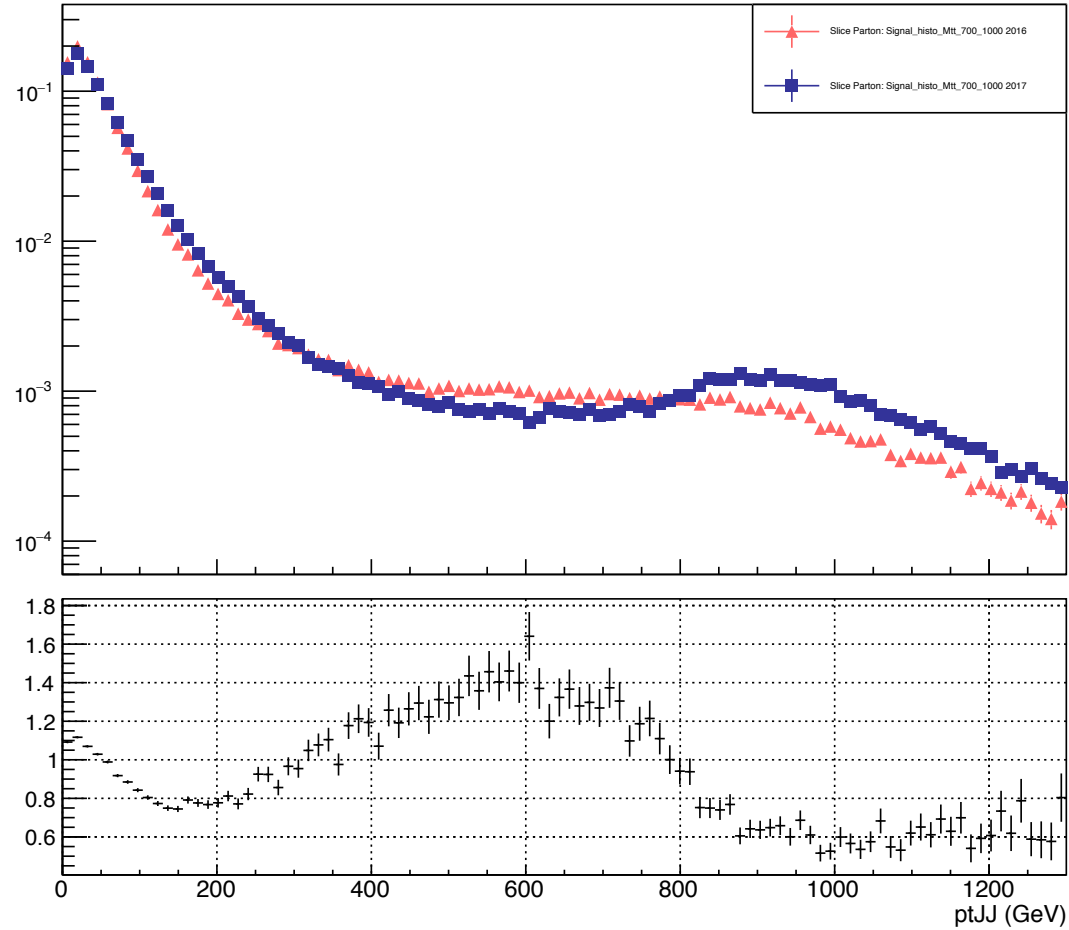


Slice Parton: Signal\_histo\_Mtt\_1000\_Inf 2017

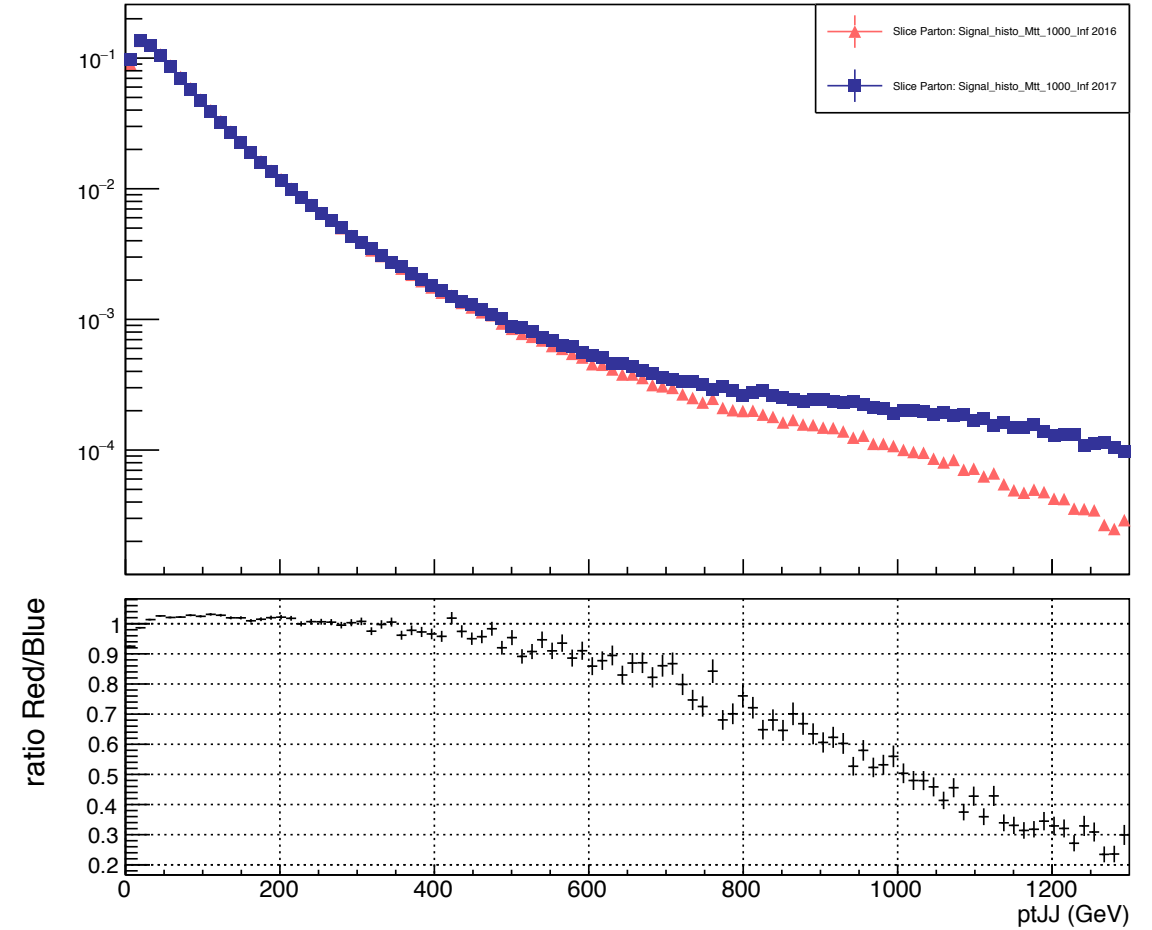


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Slice Parton: Signal\_histo\_Mtt\_700\_1000 2016

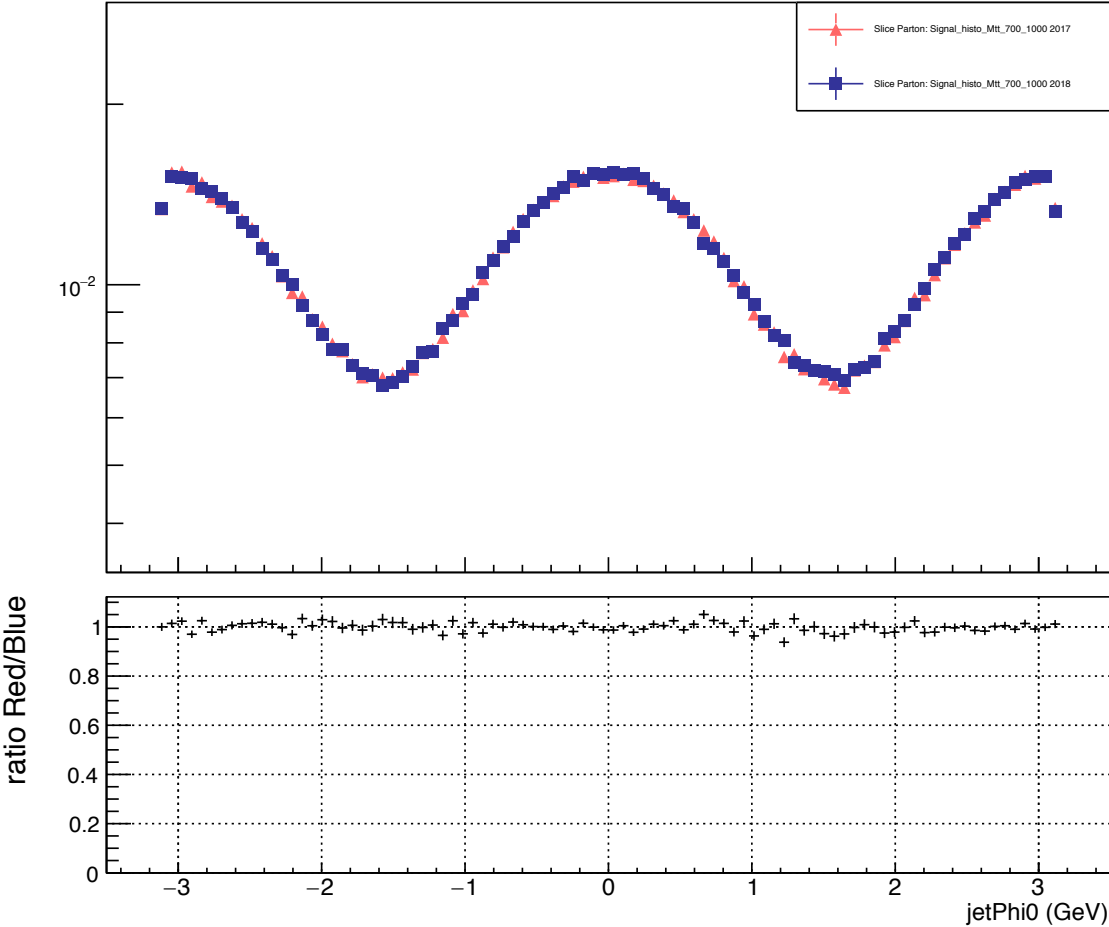


Slice Parton: Signal\_histo\_Mtt\_1000\_Inf 2016

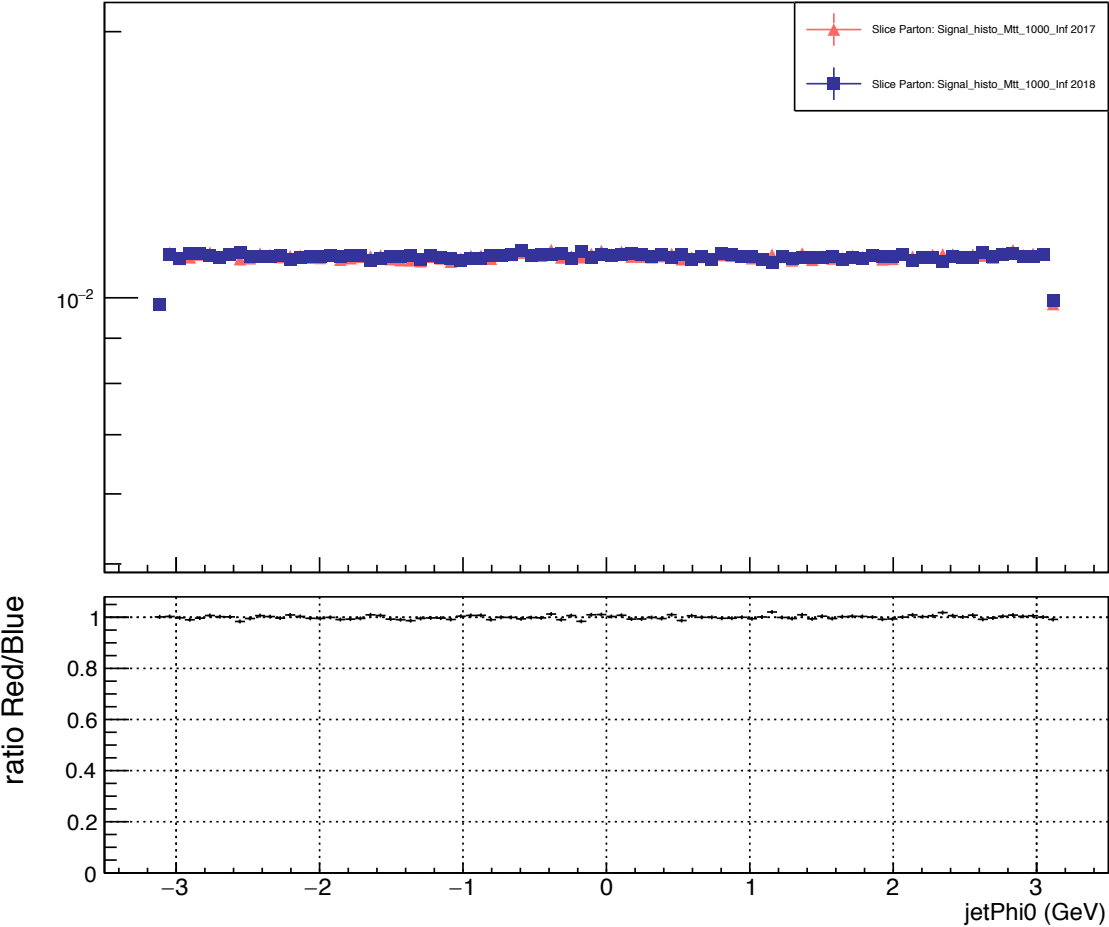


MC Closure Tests Mtt 2017 vs 2018 (shape) per slice

Slice Parton: Signal\_histo\_Mtt\_700\_1000 2017

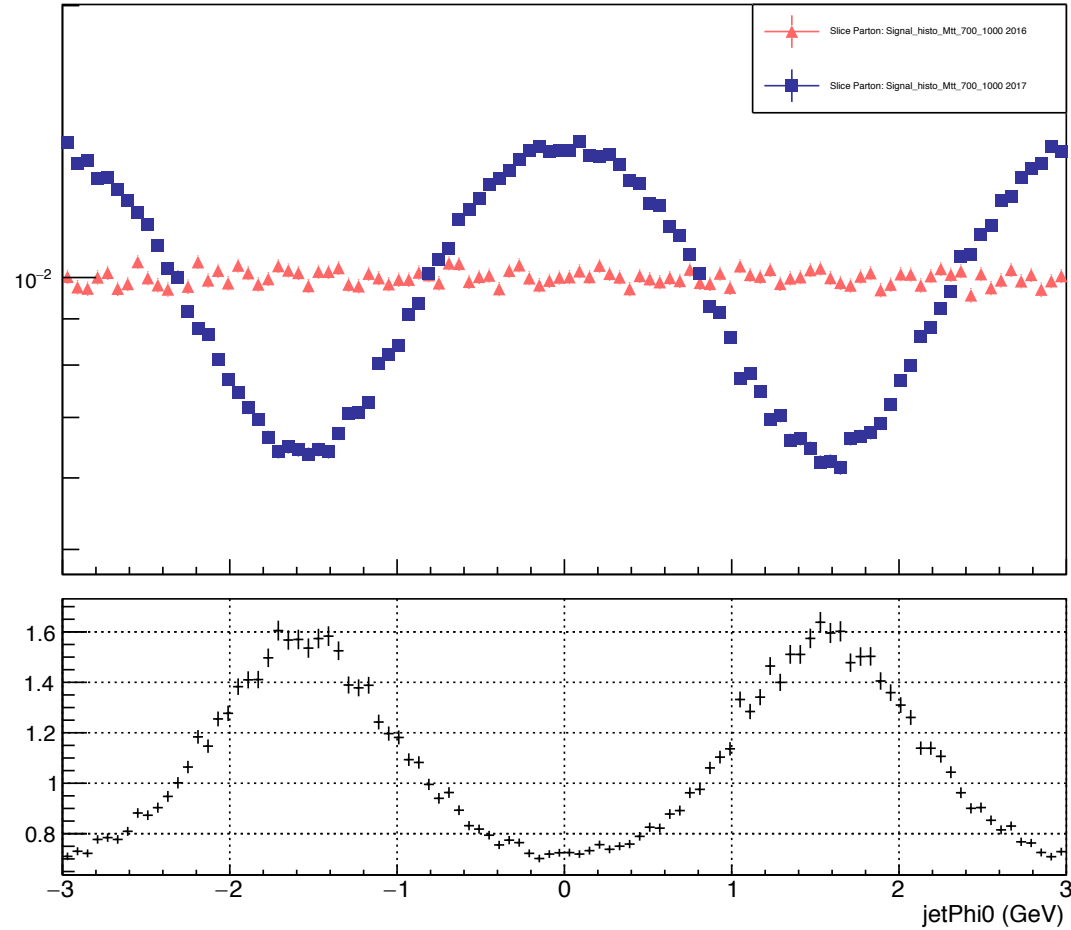


Slice Parton: Signal\_histo\_Mtt\_1000\_Inf 2017

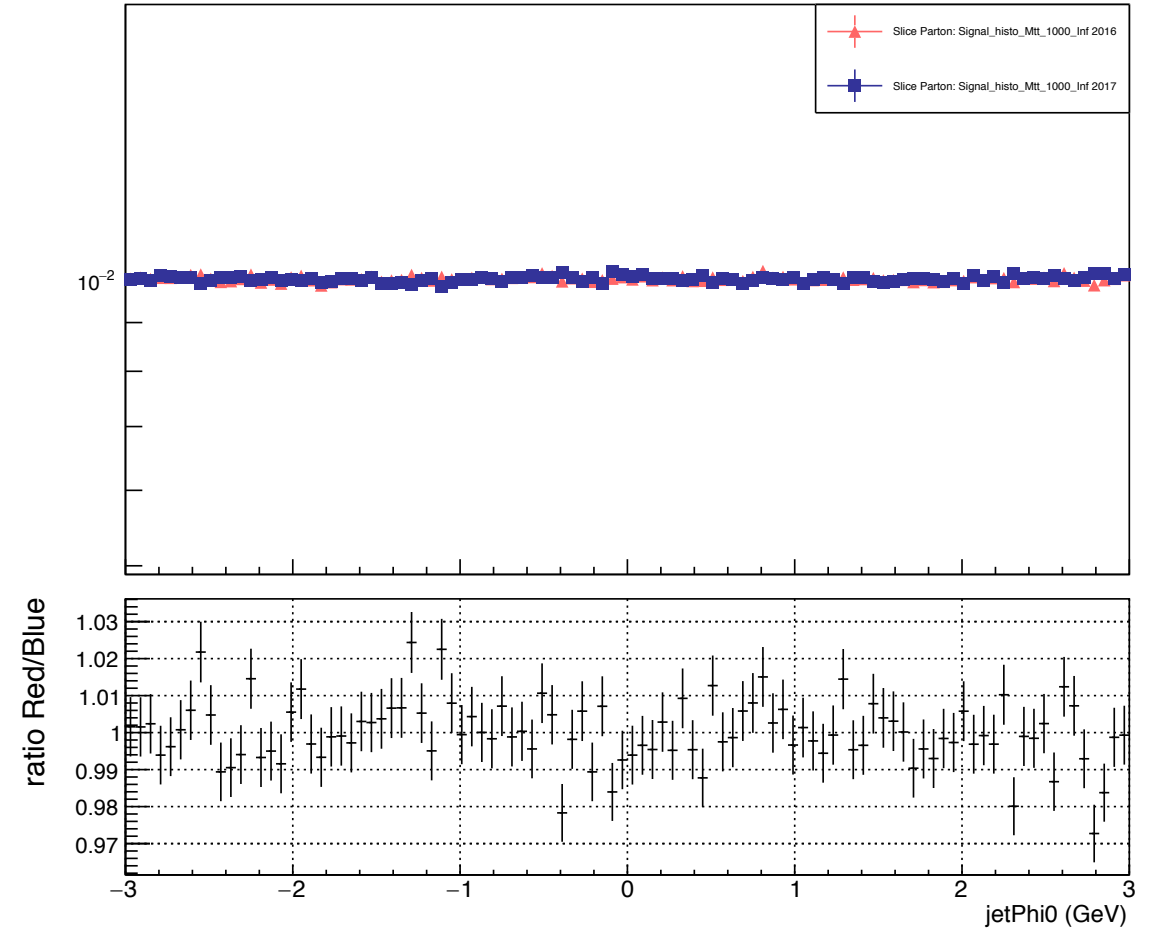


# MC Closure Tests Mtt 2016 vs 2017 (shape) per slice

Slice Parton: Signal\_histo\_Mtt\_700\_1000 2016

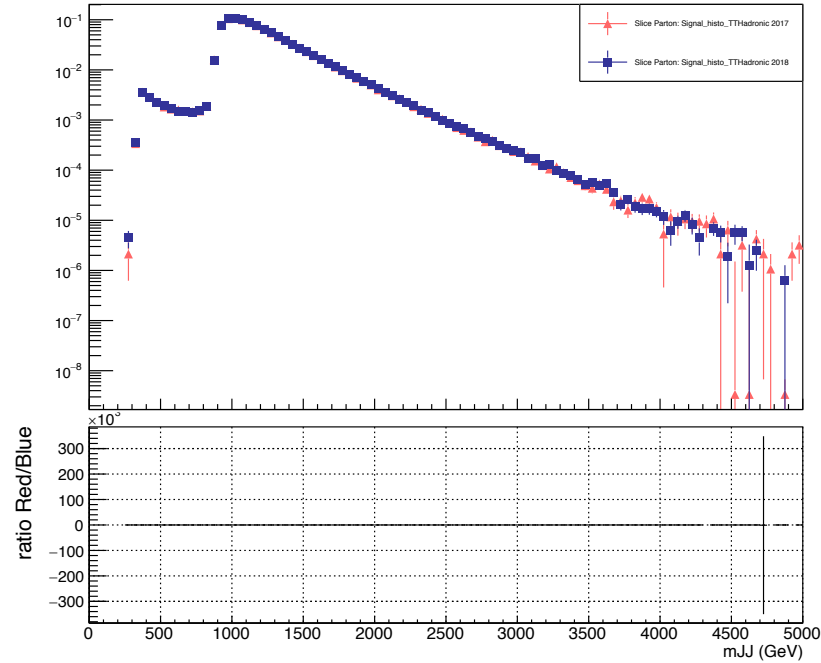


Slice Parton: Signal\_histo\_Mtt\_1000\_Inf 2016

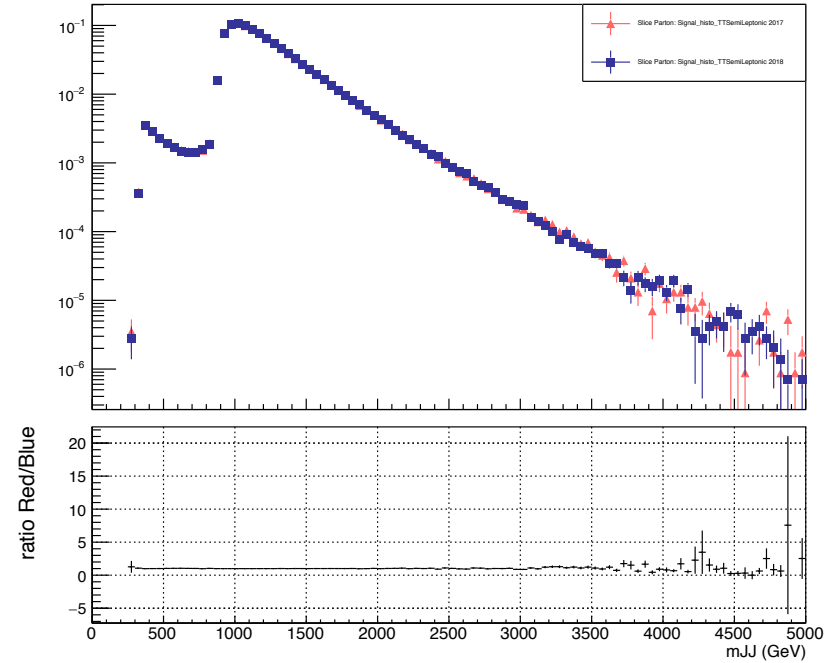


# MC Closure Tests Nominal 2017 vs 2018 (shape) per slice Nominal

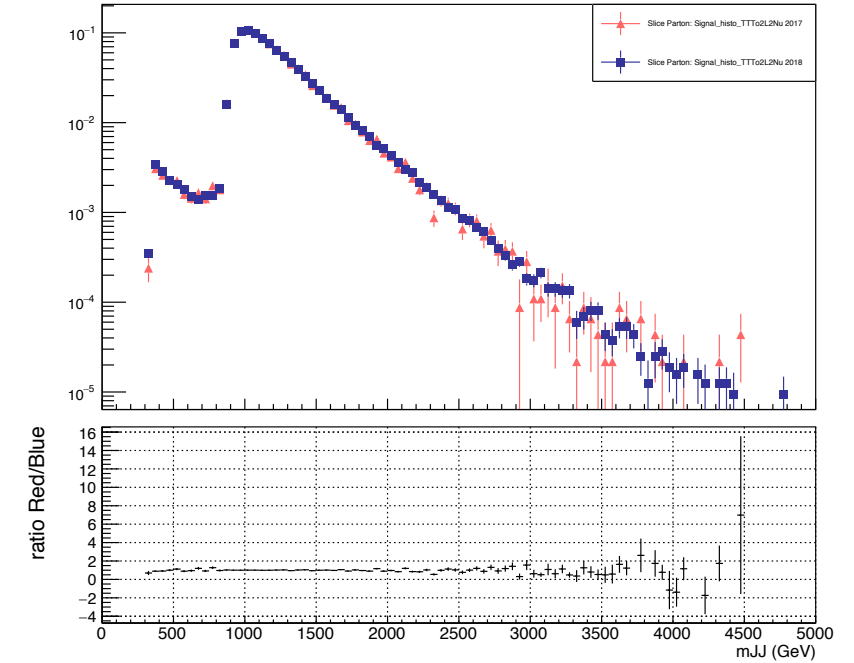
Slice Parton: Signal\_histo\_TTHadronic 2017



Slice Parton: Signal\_histo\_TTSemiLeptonic 2017

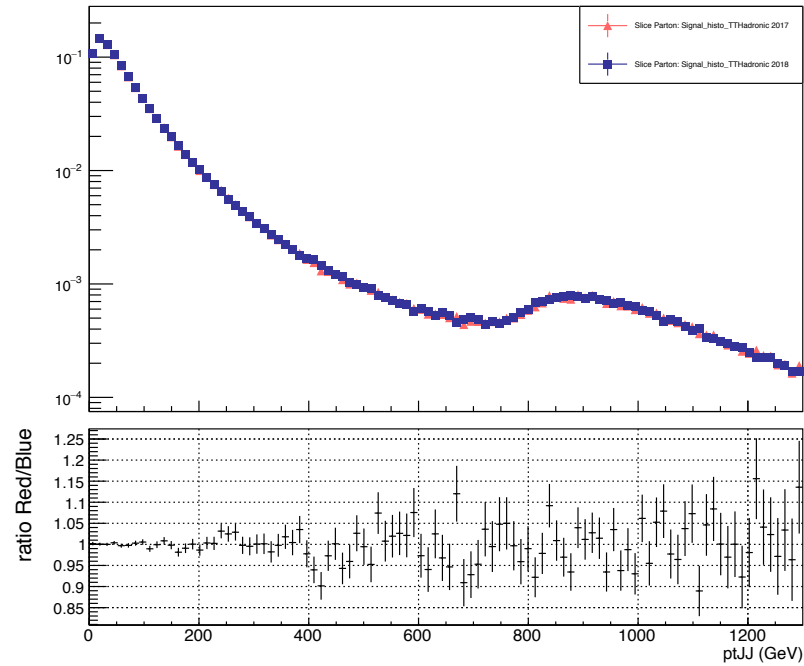


Slice Parton: Signal\_histo\_TTto2L2Nu 2017

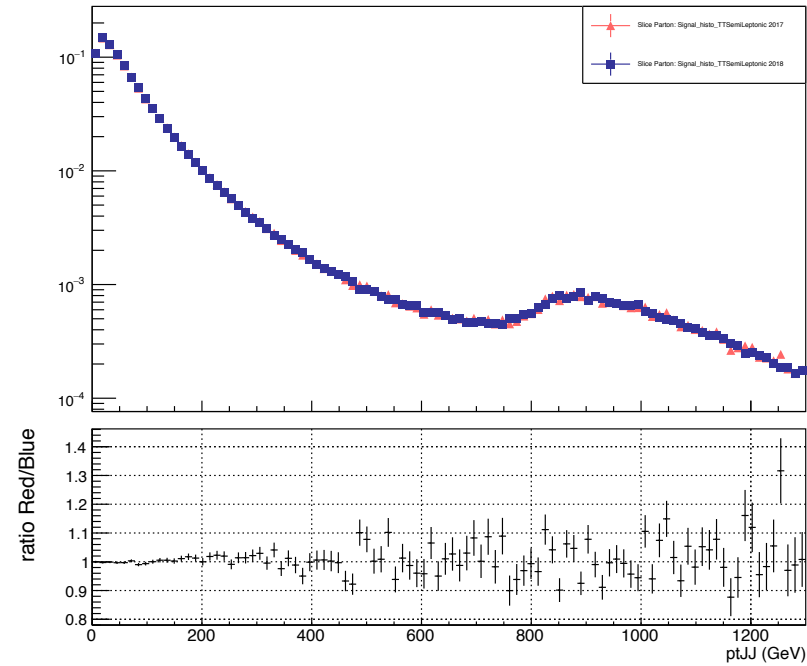


# MC Closure Tests Nominal 2017 vs 2018 (shape) per slice Nominal

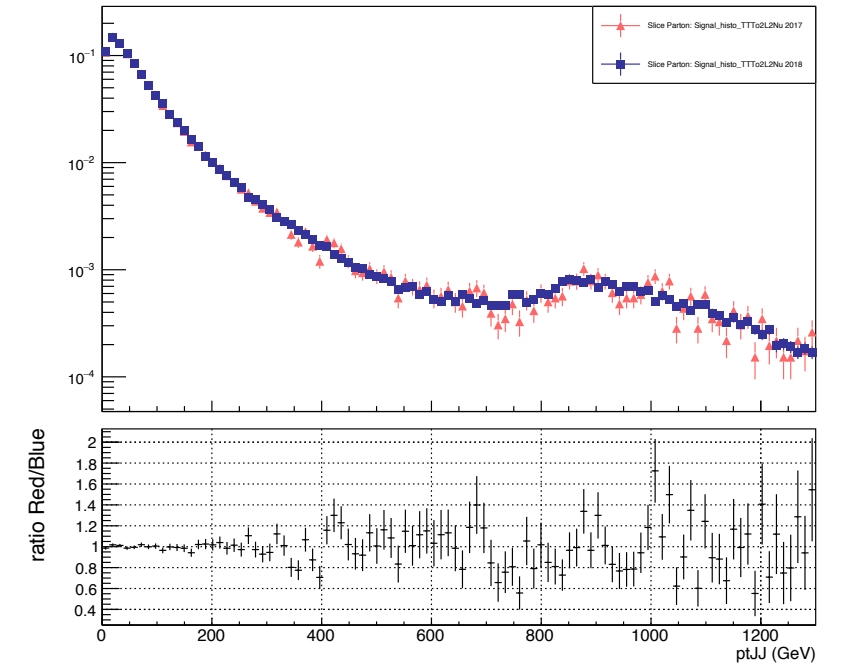
Slice Parton: Signal\_histo\_TTHadronic 2017



Slice Parton: Signal\_histo\_TTSemiLeptonic 2017



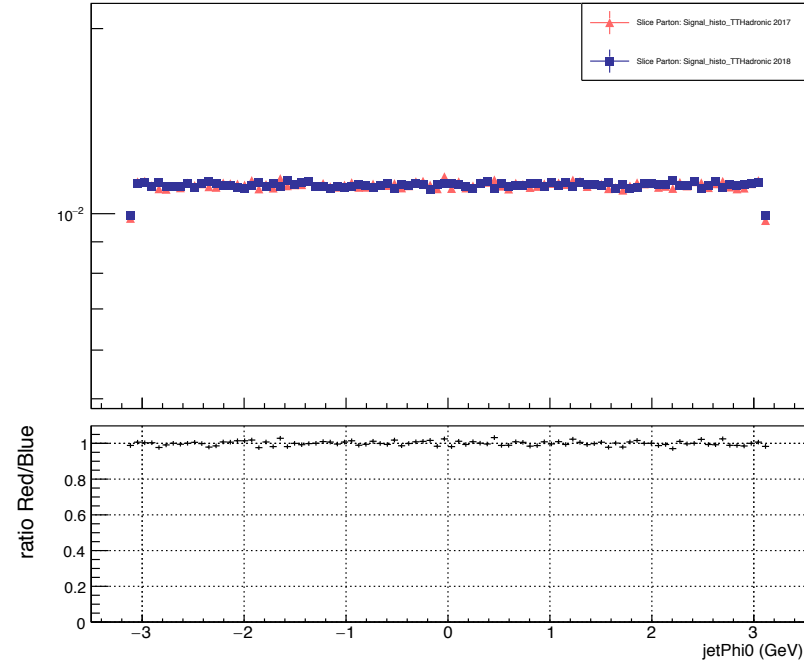
Slice Parton: Signal\_histo\_TTto2L2Nu 2017



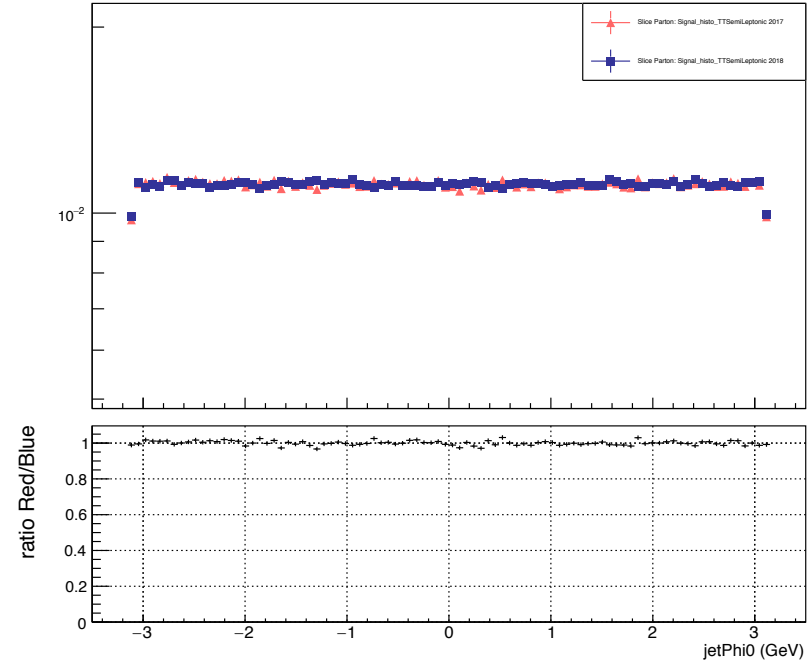


# MC Closure Tests Nominal 2017 vs 2018 (shape) per slice Nominal

Slice Parton: Signal\_histo\_TTHadronic 2017



Slice Parton: Signal\_histo\_TTSemiLeptonic 2017



Slice Parton: Signal\_histo\_TTTo2L2Nu 2017

