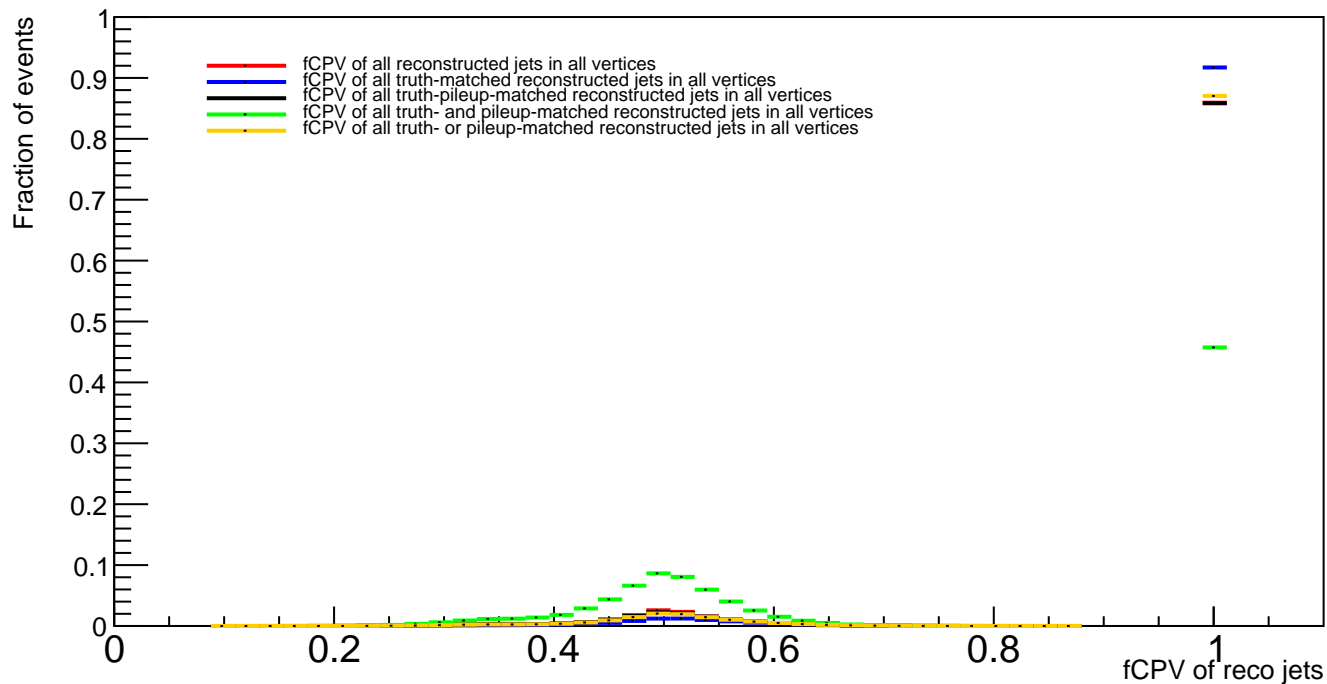
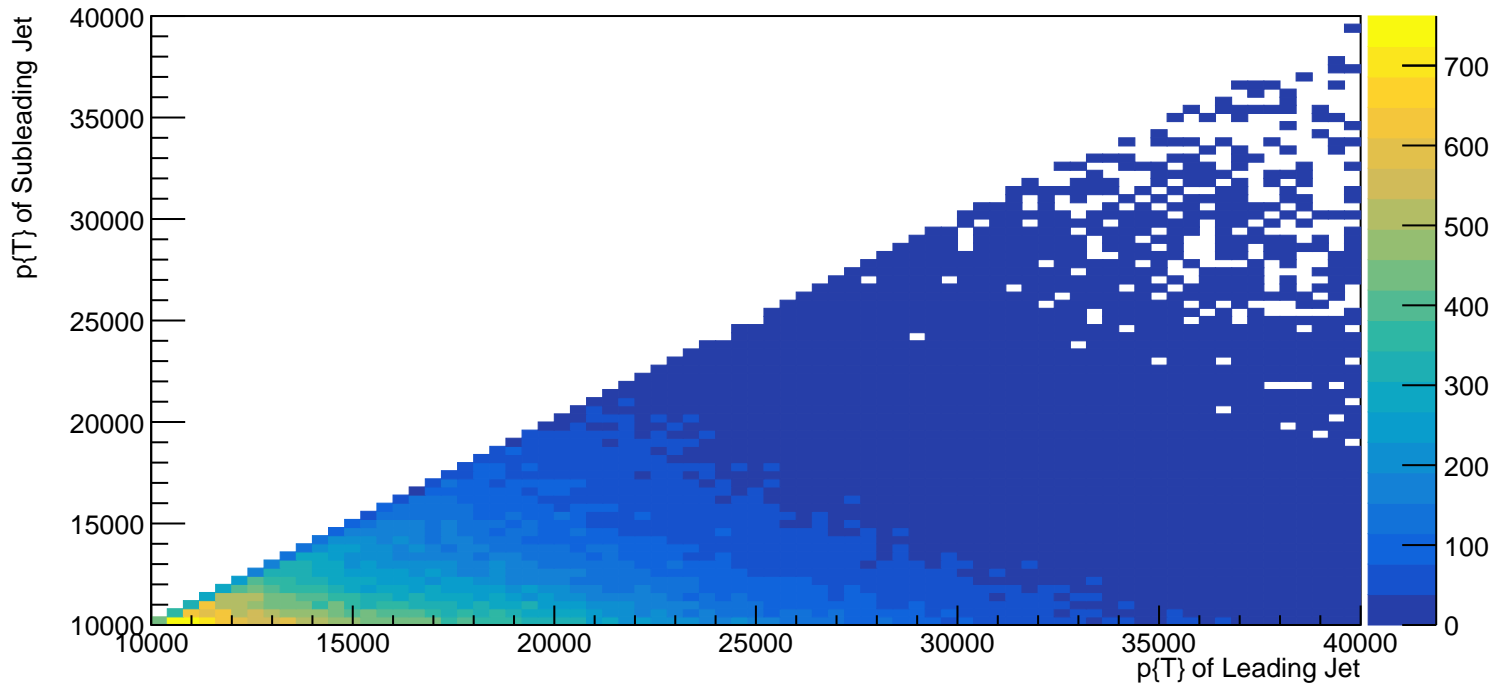


fCPV of all reconstructed jets in all vertices



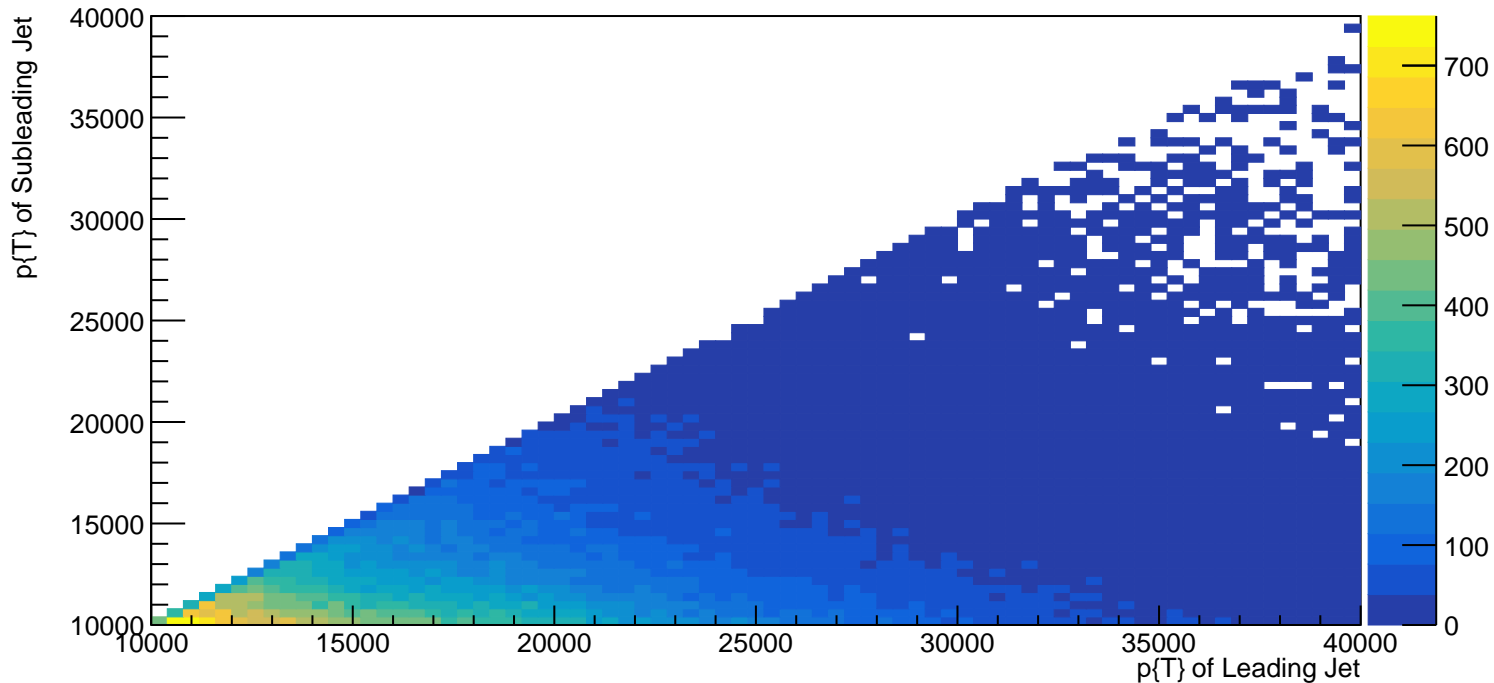
Filled with fCPV of reco jets, categorised by to what extent they are matched

Correlation between Leading Jet p_T and Subleading Jet p_T for any fCPV



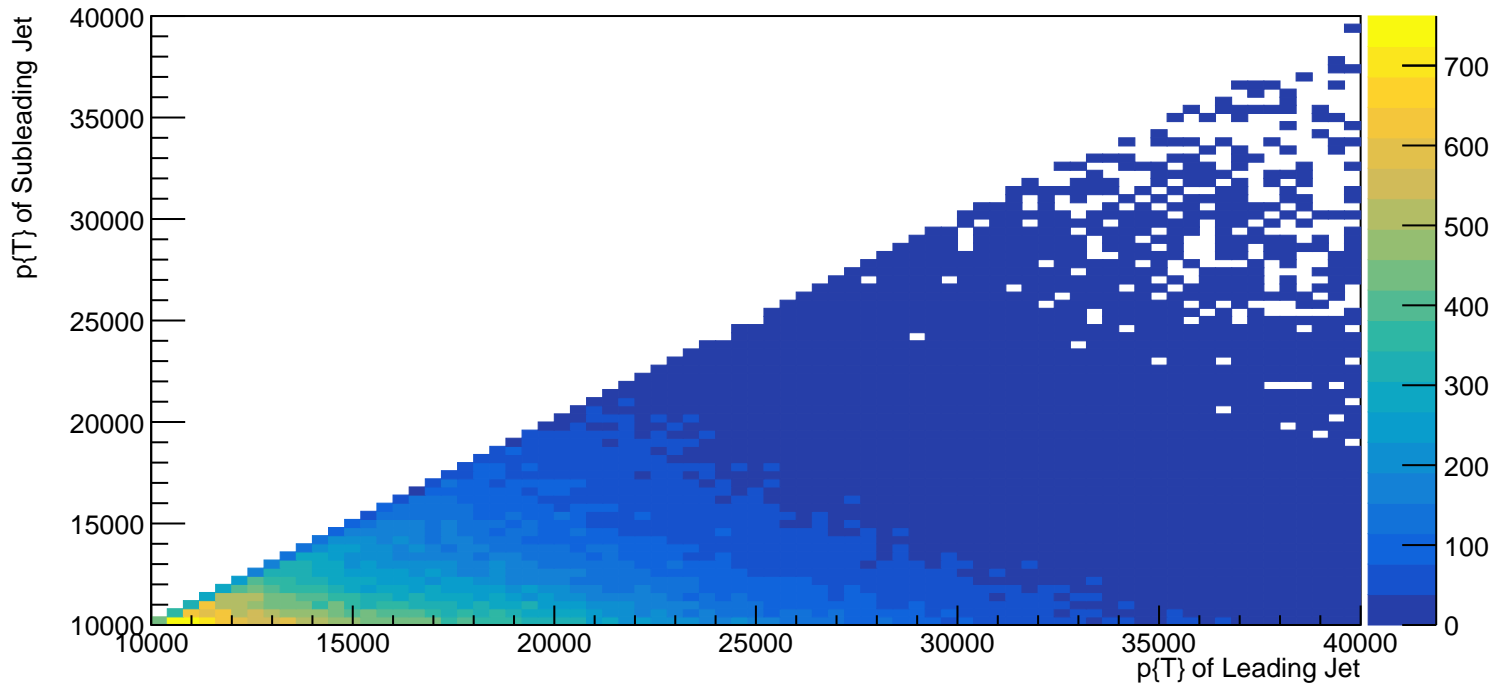
For double matched (GPV / Pileup) reco jets of any fCPV: Filled with the leading vs subleading matched jet p_T

Correlation between Leading Jet p_T and Subleading Jet p_T for $f_{CPV} = 1$



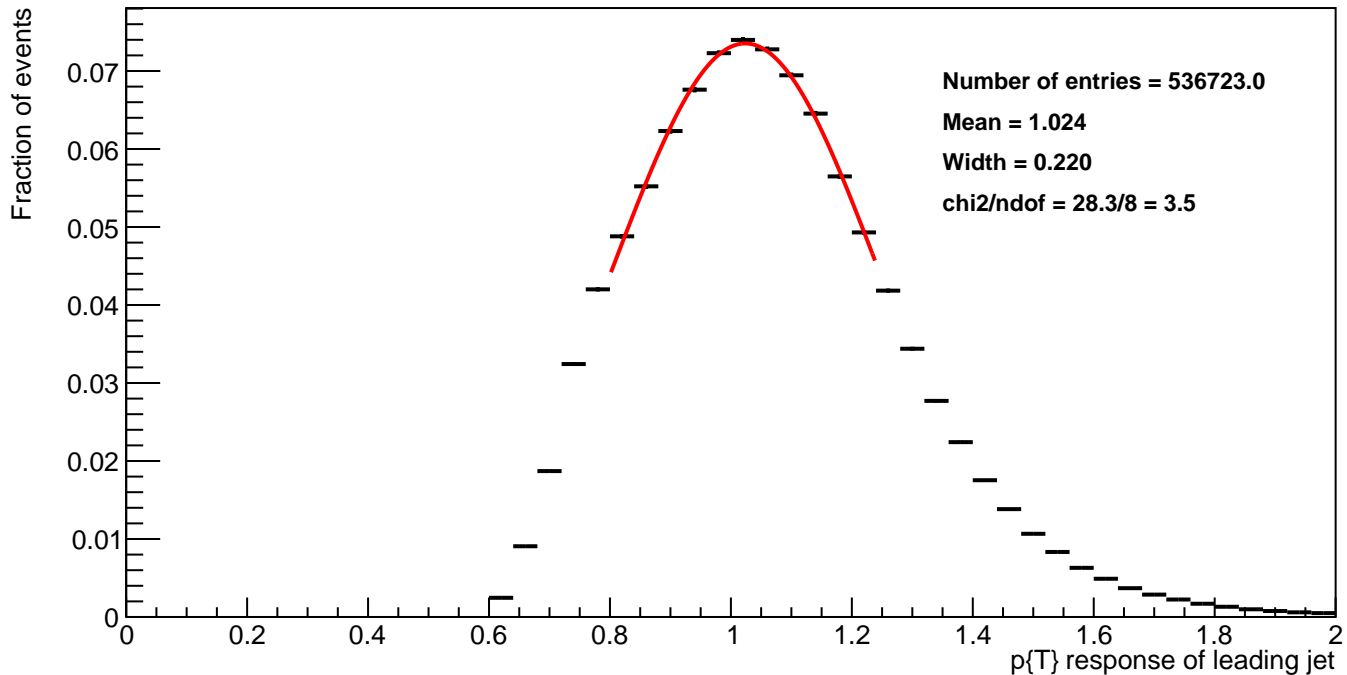
For double matched (GPV / Pileup) reco jets of $f_{CPV} = 1$: Filled with the leading vs subleading matched jet p_T

Correlation between Leading Jet p_T and Subleading Jet p_T for $f_{CPV} < 1$



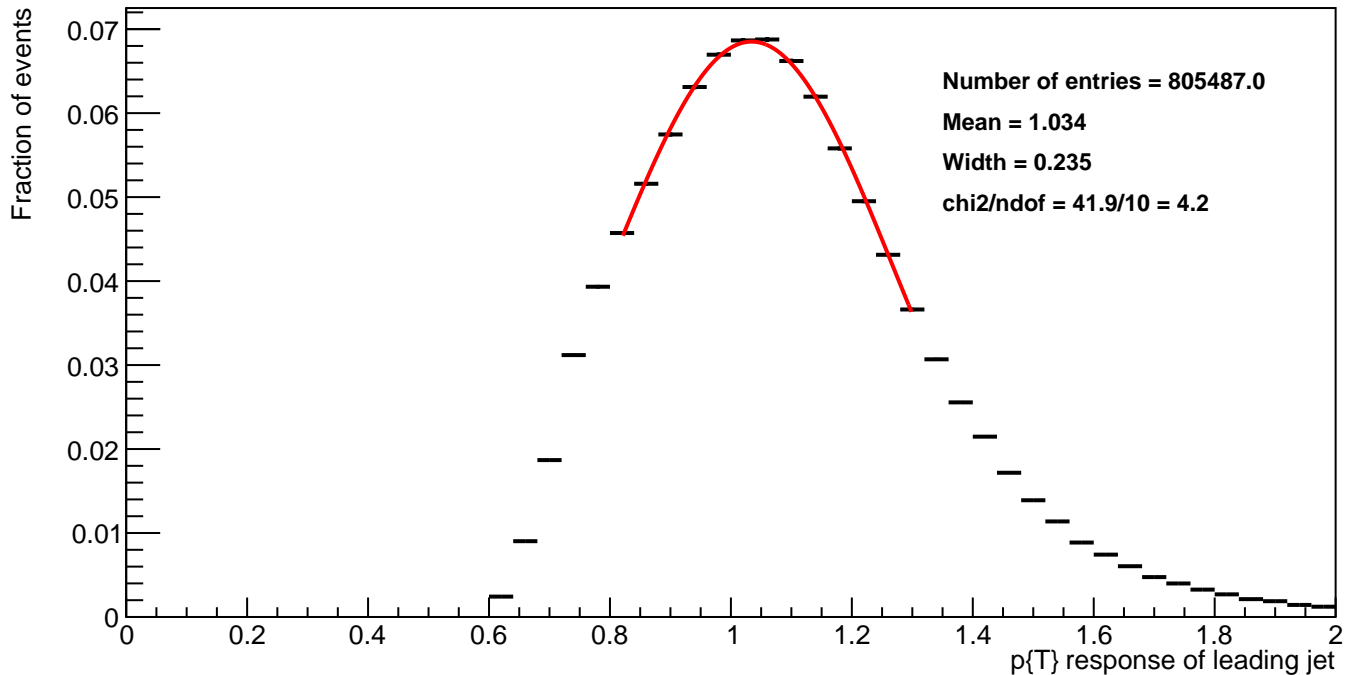
For double matched (GPV / Pileup) reco jets of $f_{CPV} < 1$: Filled with the leading vs subleading matched jet p_T

pT response: p{T} of reco jets of any fCPV / p{T} of matching truth jet - Range: 20000.0-25000.0 MeV



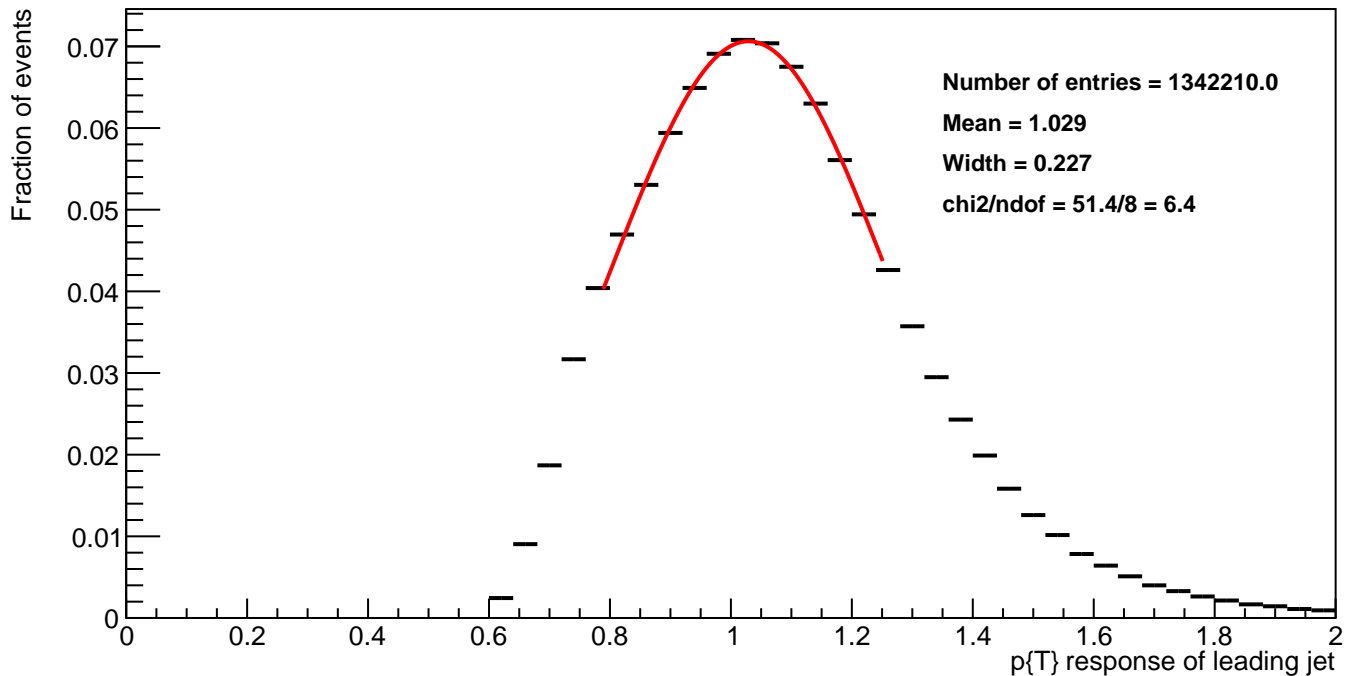
Filled with the pT response of only GPV-matched reco jets of any fCPV - Range: 20000.0-25000.0 MeV

pT response: p{T} of reco jets of any fCPV / p{T} of matching inTimeTruthJet - Range: 20000.0-25000.0 MeV



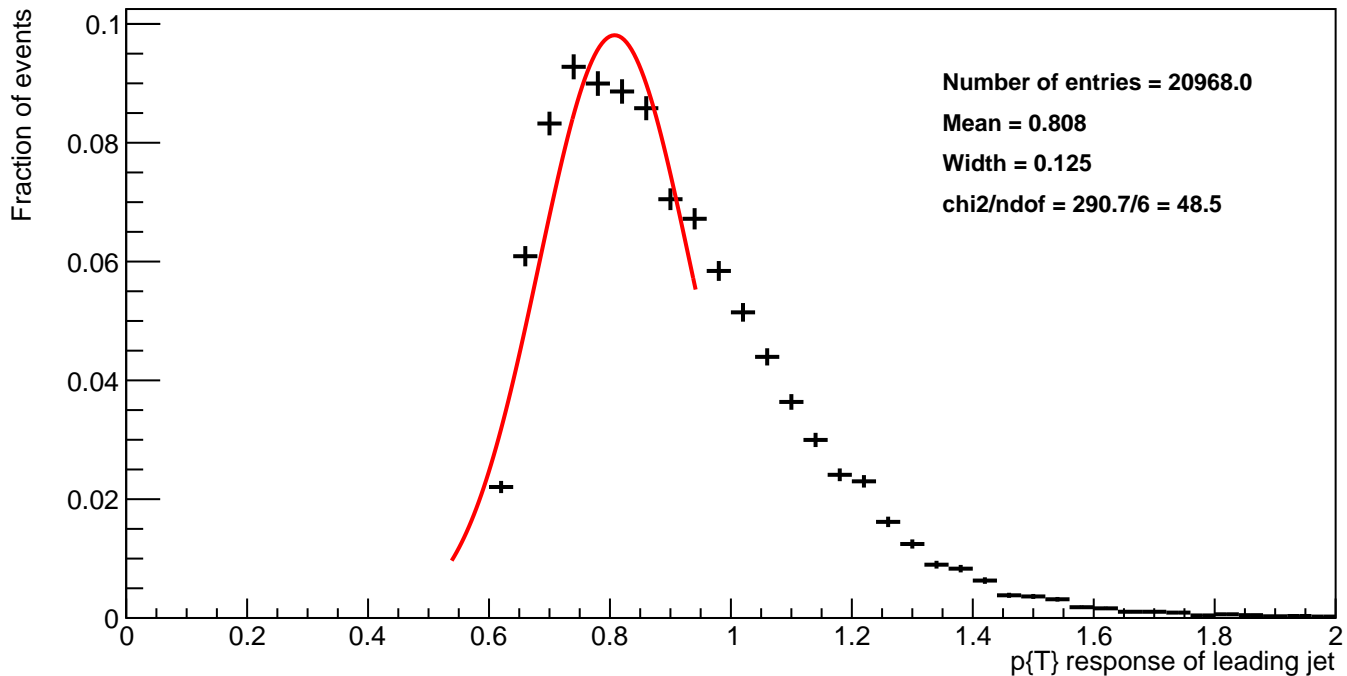
Filled with the pT response of only pileup-matched reco jets of any fCPV - Range: 20000.0-25000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of any fCPV / $p_{\{T\}}$ of matching truth jet OR inTimeTruthJet - Range: 20000.0-25000.0 MeV



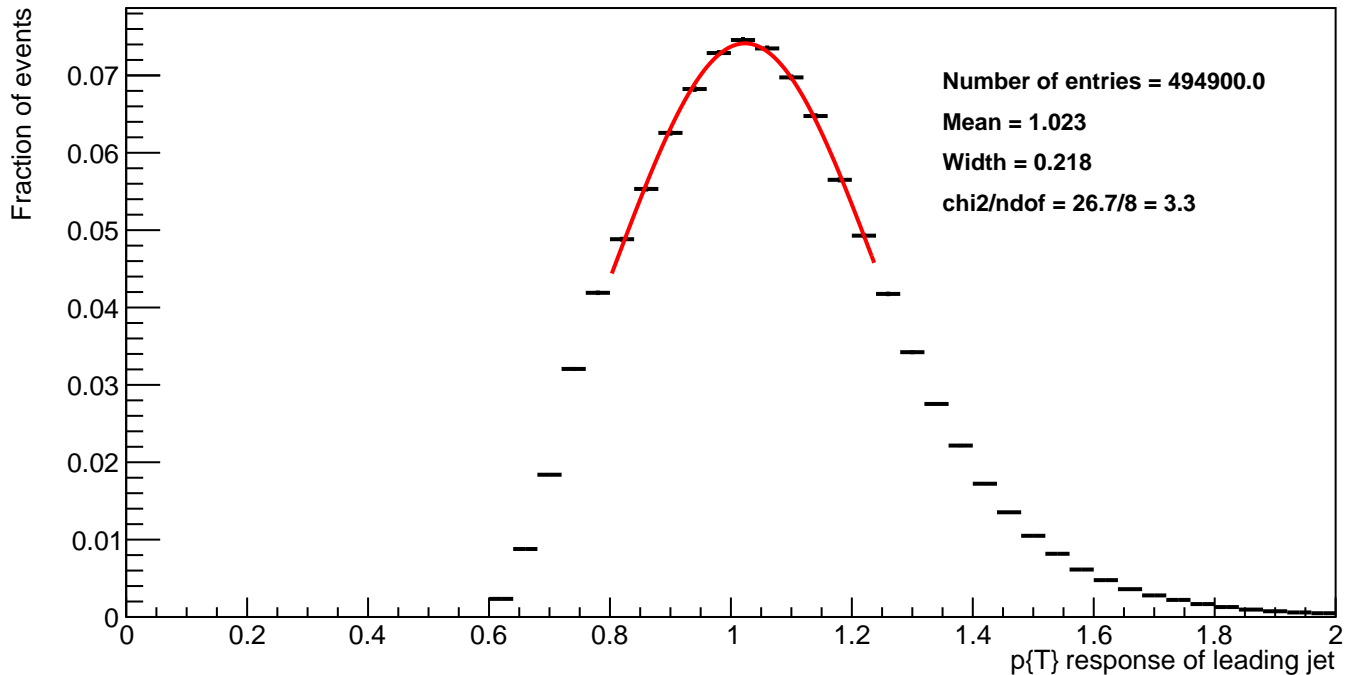
Filled with the pT response of single-matched (either GPV or pileup) reco jets of any fCPV - Range: 20000.0-25000.0 MeV

pT response: p{T} of reco jets of any fCPV / p{T} of BOTH matching truth jets - Range: 20000.0-25000.0 MeV



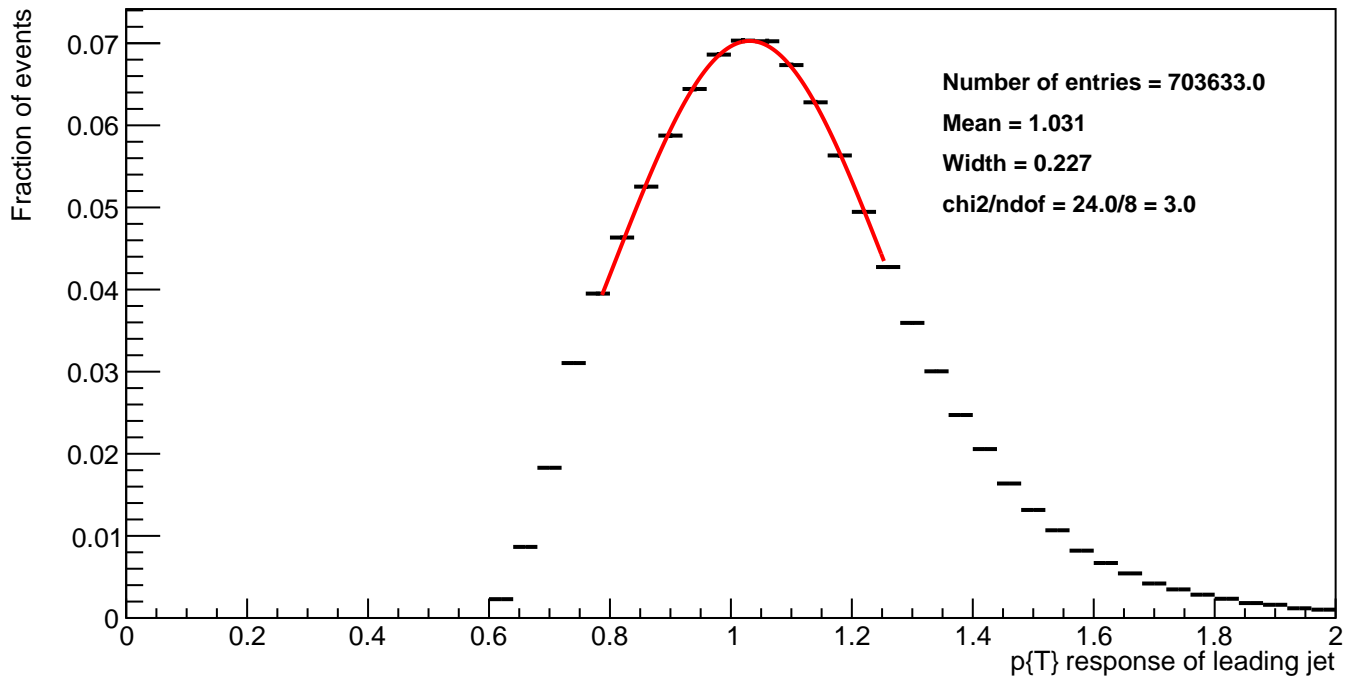
Filled with the pT response of double-matched reco jets of any fCPV - Range: 20000.0-25000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of matching truth jet - Range: 20000.0-25000.0 MeV



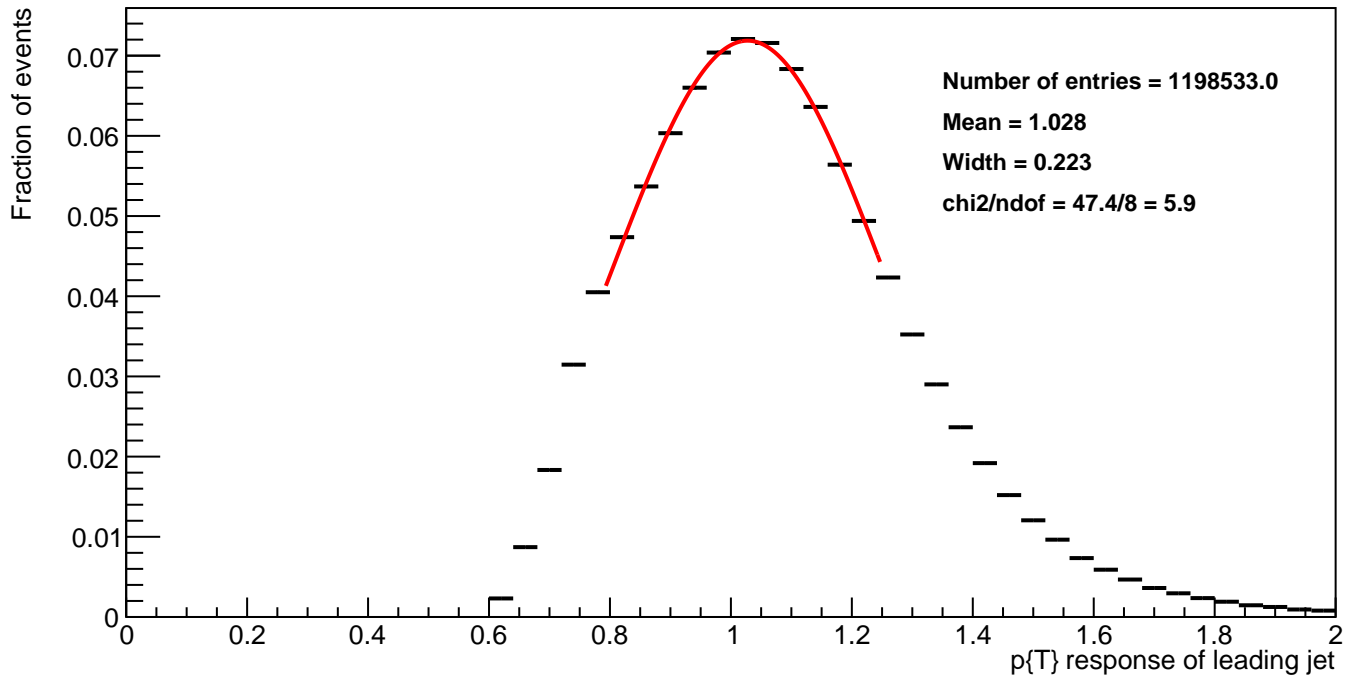
Filled with the pT response of only GPV-matched reco jets of fCPV = 1 - Range: 20000.0-25000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of matching inTimeTruthJet - Range: 20000.0-25000.0 MeV



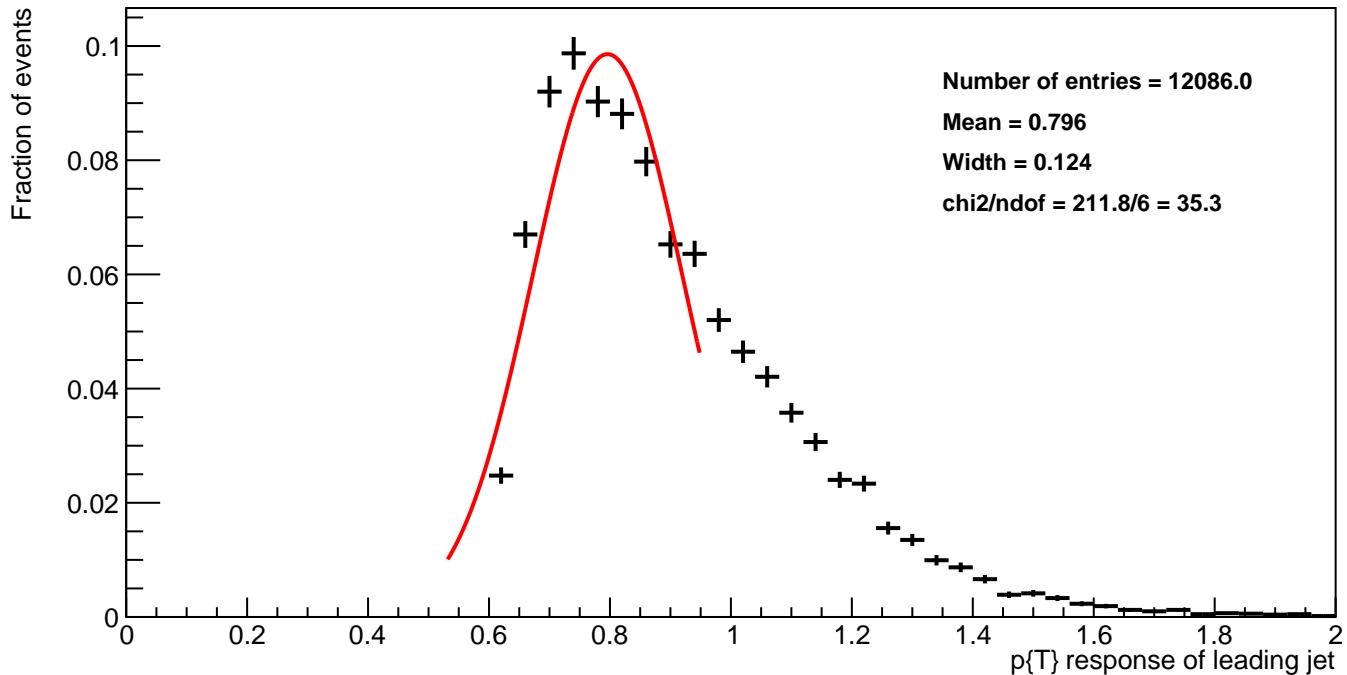
Filled with the pT response of only pileup-matched reco jets of fCPV = 1 - Range: 20000.0-25000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of matching truth jet OR inTimeTruthJet - Range: 20000.0-25000.0 MeV



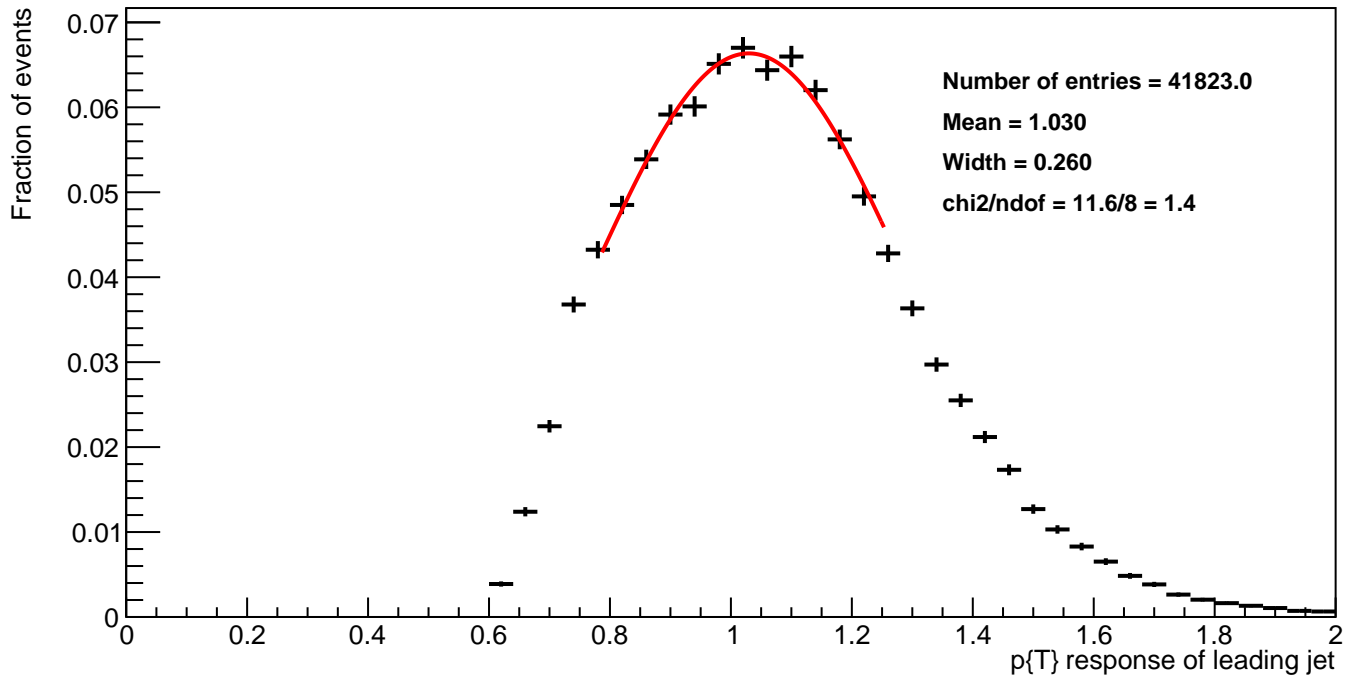
Filled with the pT response of single-matched (either GPV or pileup) reco jets of fCPV = 1 - Range: 20000.0-25000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of BOTH matching truth jets - Range: 20000.0-25000.0 MeV



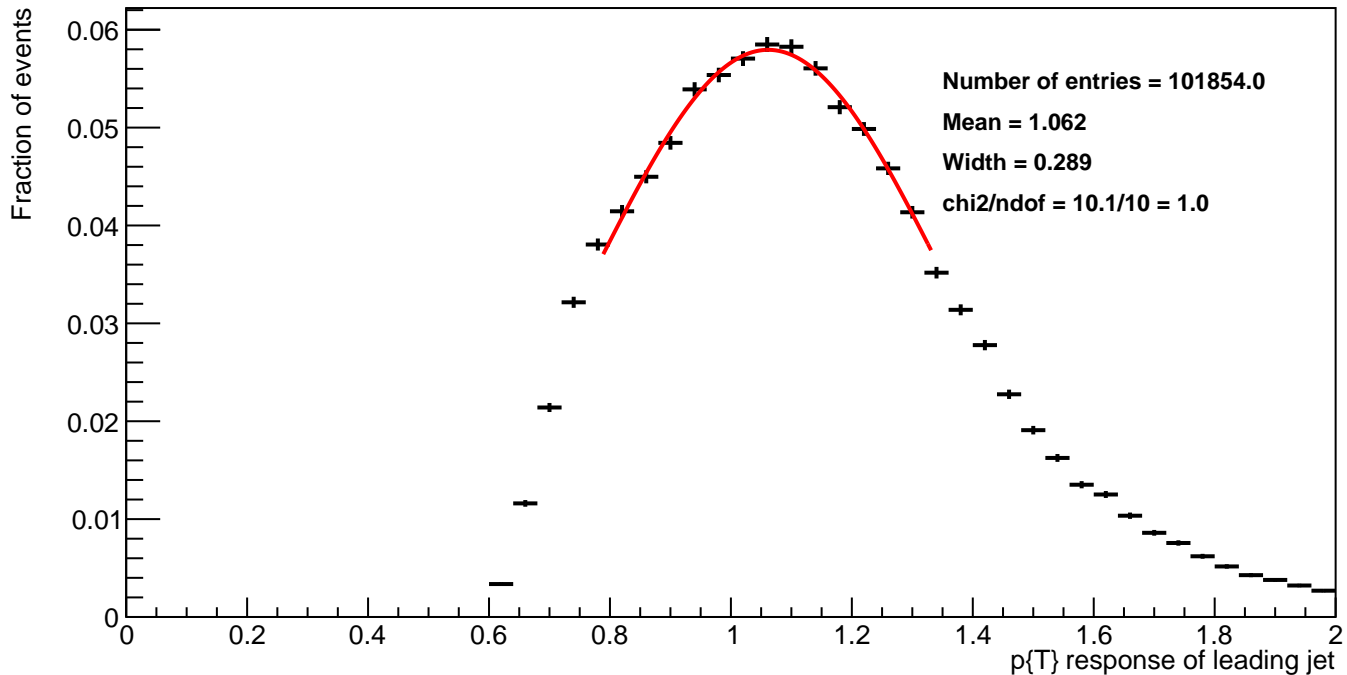
Filled with the pT response of double-matched reco jets of fCPV = 1 - Range: 20000.0-25000.0 MeV

pT response: p_{T} of reco jets of $f_{\text{CPV}} < 1$ / p_{T} of matching truth jet - Range: 20000.0-25000.0 MeV



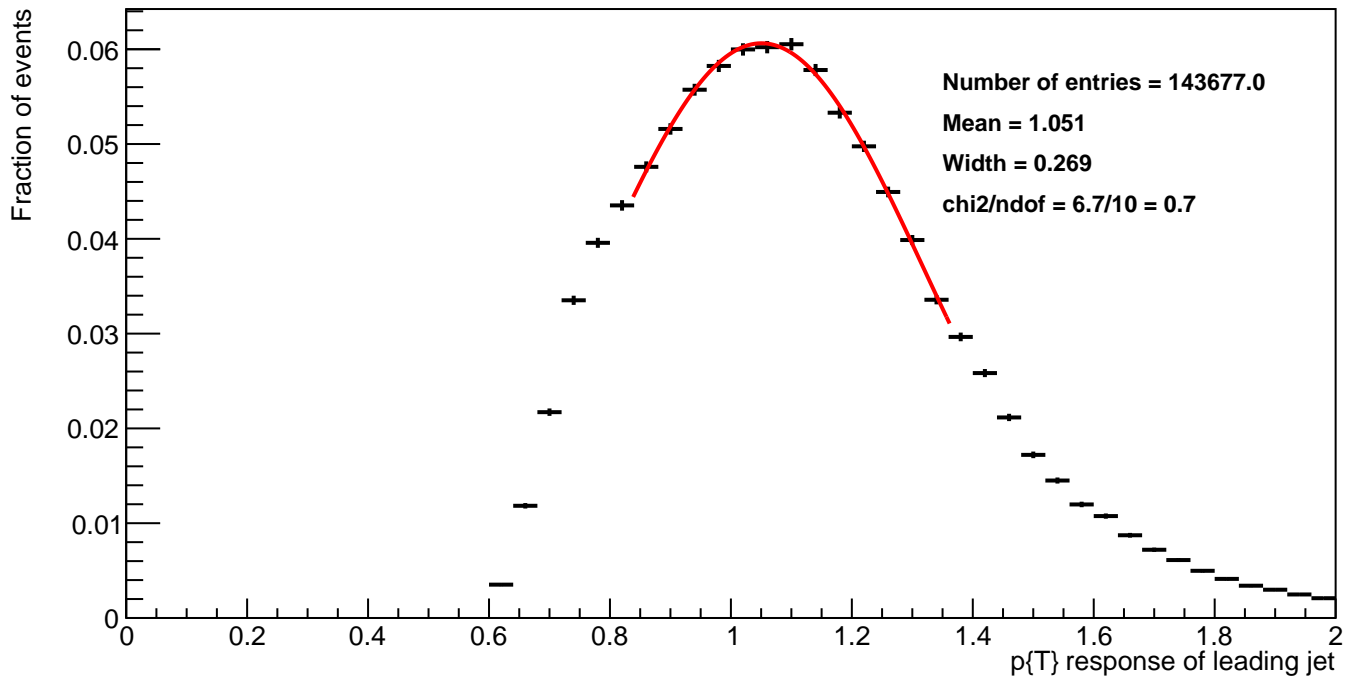
Filled with the pT response of only GPV-matched reco jets of $f_{\text{CPV}} < 1$ - Range: 20000.0-25000.0 MeV

pT response: p_{T} of reco jets of $f_{\text{CPV}} < 1$ / p_{T} of matching inTimeTruthJet - Range: 20000.0-25000.0 MeV



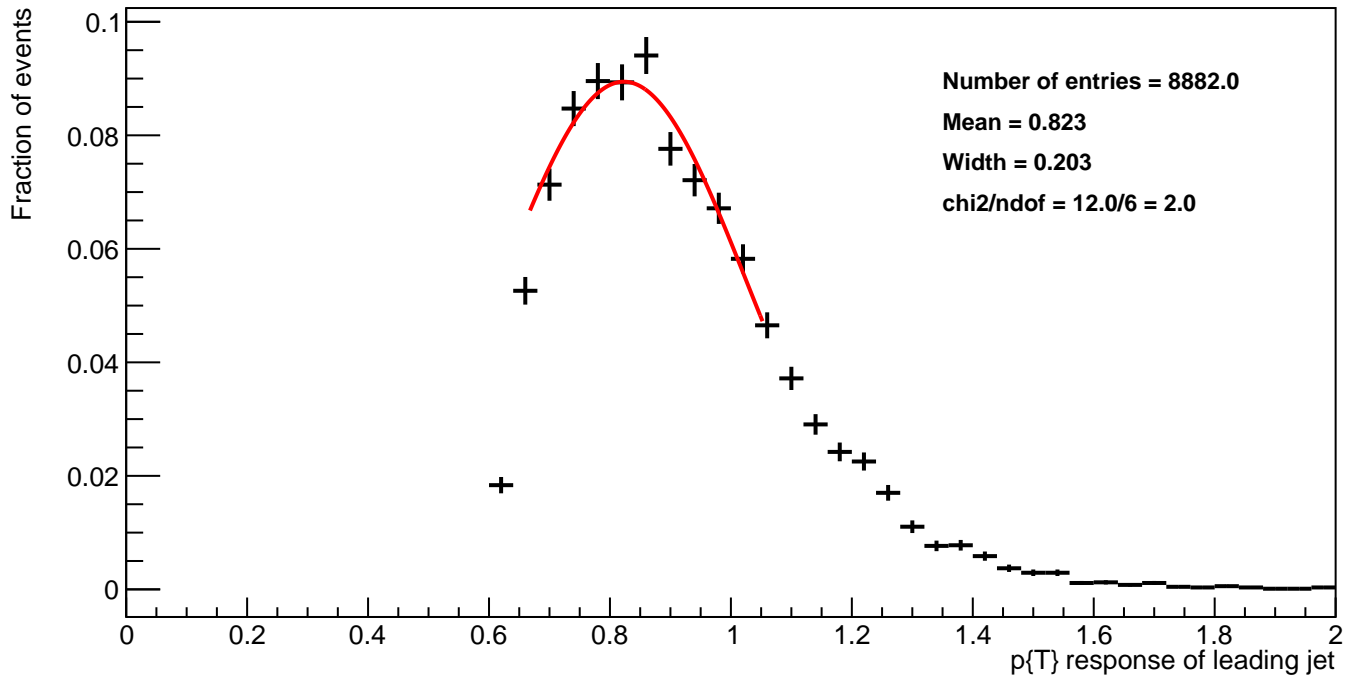
Filled with the pT response of only pileup-matched reco jets of $f_{\text{CPV}} < 1$ - Range: 20000.0-25000.0 MeV

pT response: p{T} of reco jets of fCPV < 1 / p{T} of matching truth jet OR inTimeTruthJet - Range: 20000.0-25000.0 MeV



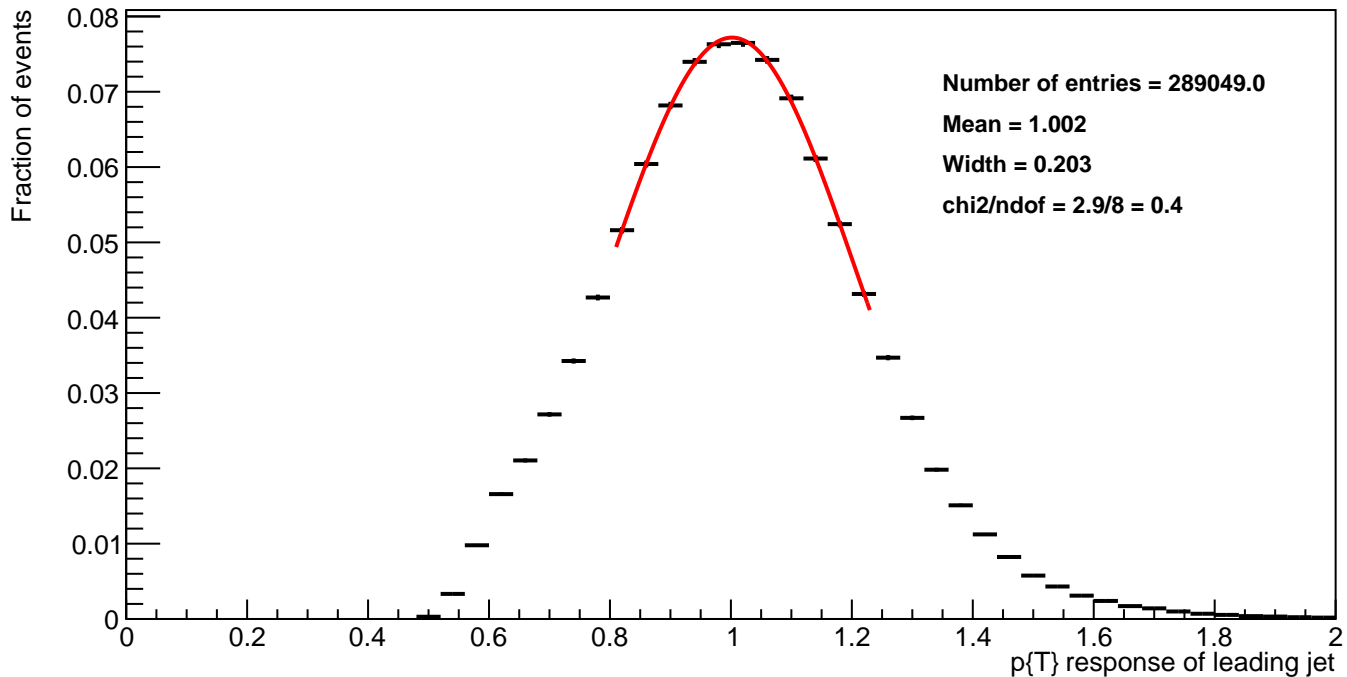
Filled with the pT response of single-matched (either GPV or pileup) reco jets of fCPV < 1 - Range: 20000.0-25000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV < 1 / $p_{\{T\}}$ of BOTH matching truth jets - Range: 20000.0-25000.0 MeV



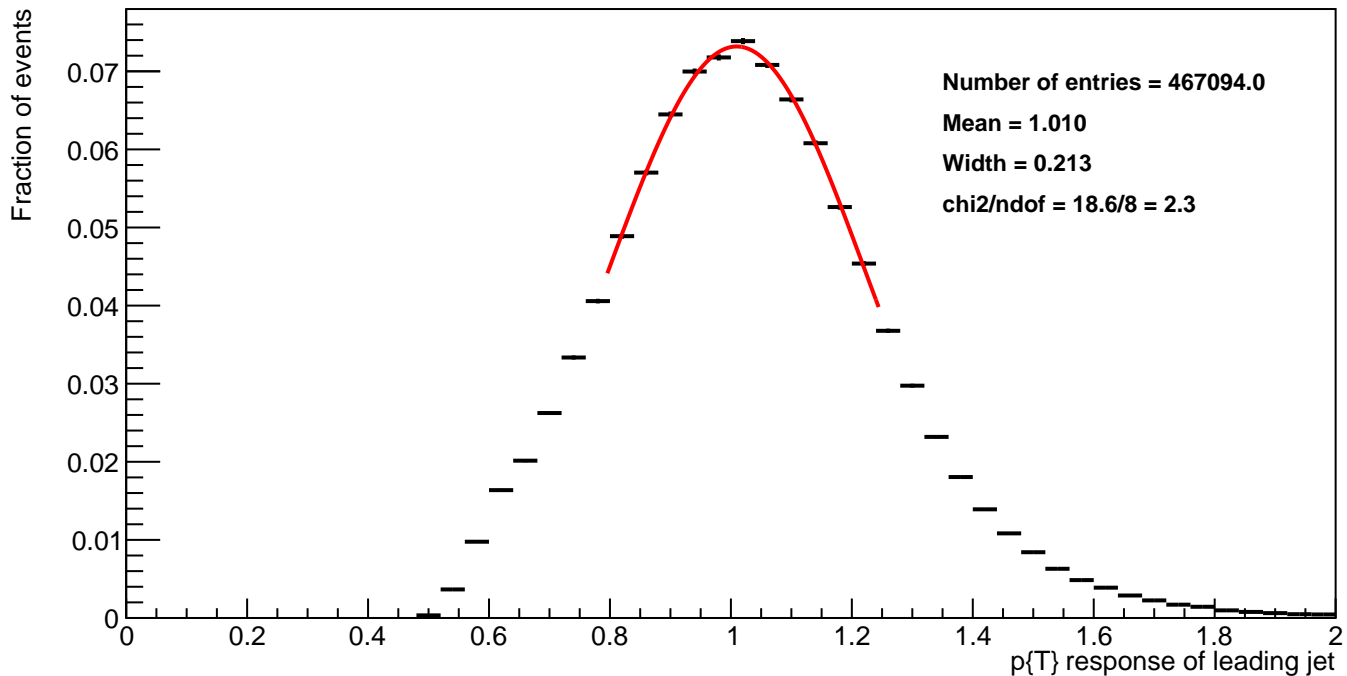
Filled with the pT response of double-matched reco jets of fCPV < 1 - Range: 20000.0-25000.0 MeV

pT response: p{T} of reco jets of any fCPV / p{T} of matching truth jet - Range: 25000.0-30000.0 MeV



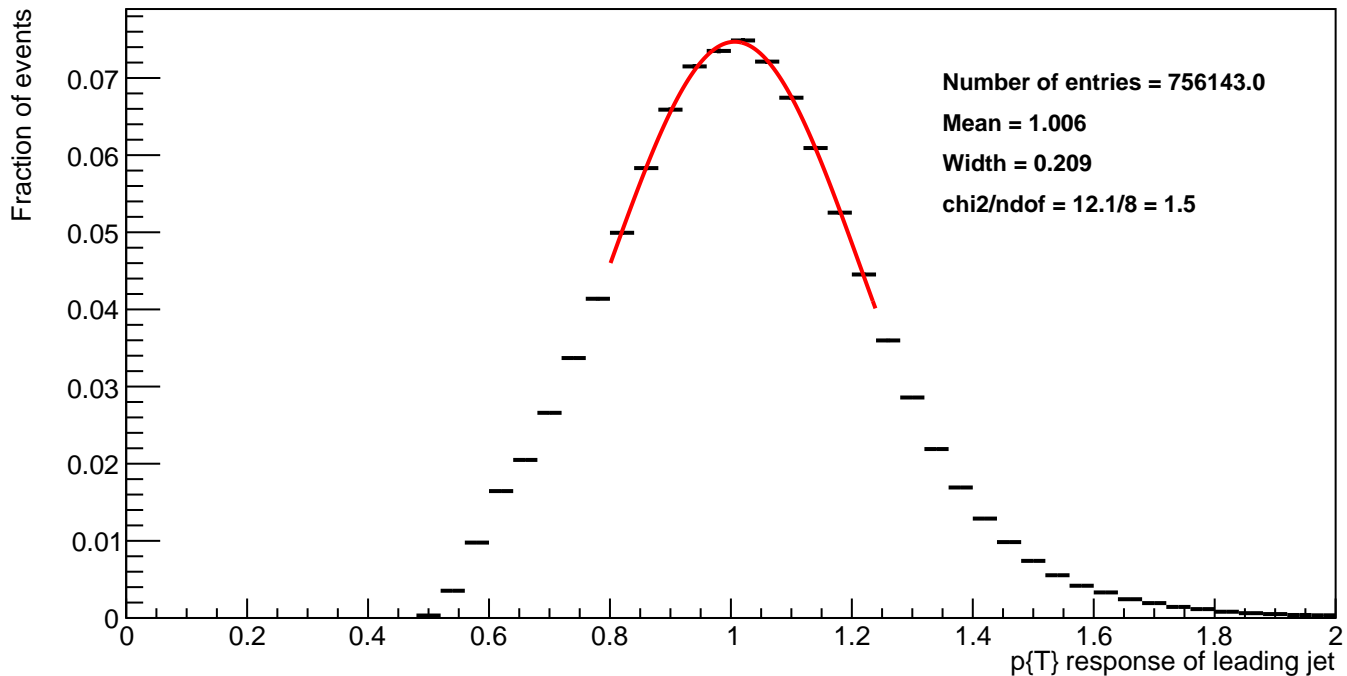
Filled with the pT response of only GPV-matched reco jets of any fCPV - Range: 25000.0-30000.0 MeV

pT response: p_{T} of reco jets of any fCPV / p_{T} of matching inTimeTruthJet - Range: 25000.0-30000.0 MeV



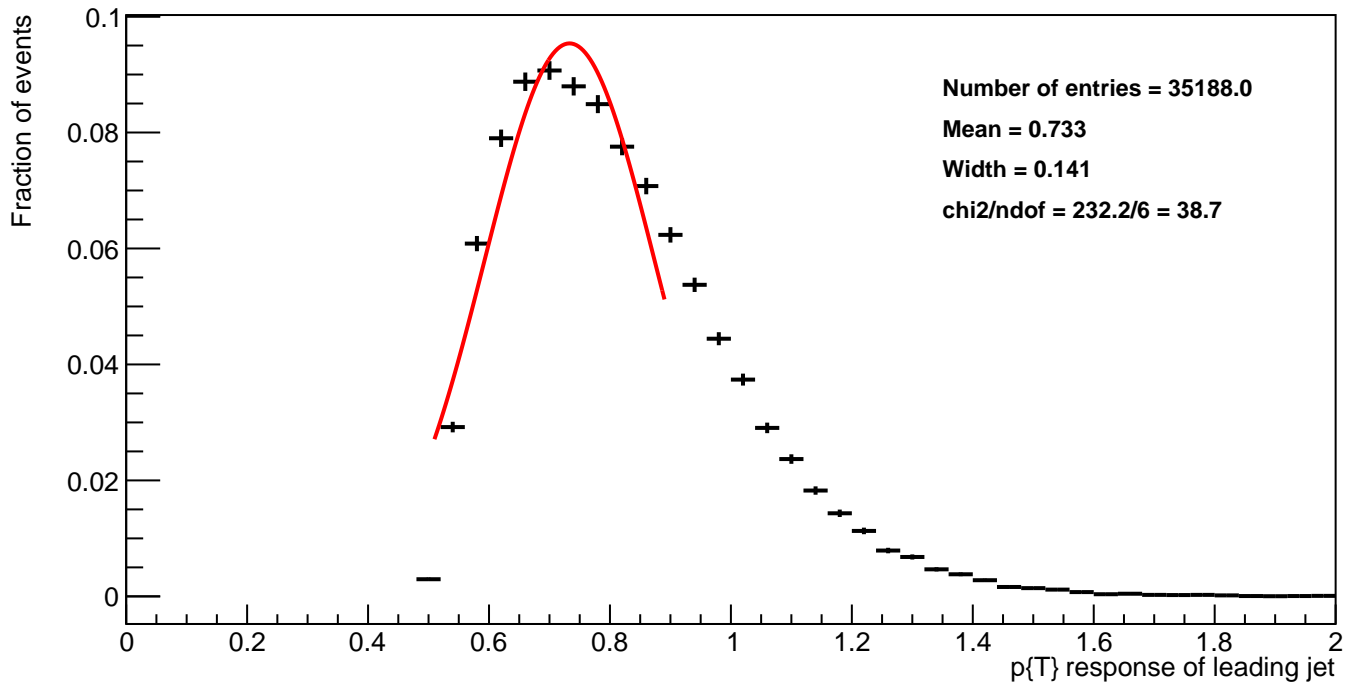
Filled with the pT response of only pileup-matched reco jets of any fCPV - Range: 25000.0-30000.0 MeV

pT response: p{T} of reco jets of any fCPV / p{T} of matching truth jet OR inTimeTruthJet - Range: 25000.0-30000.0 MeV



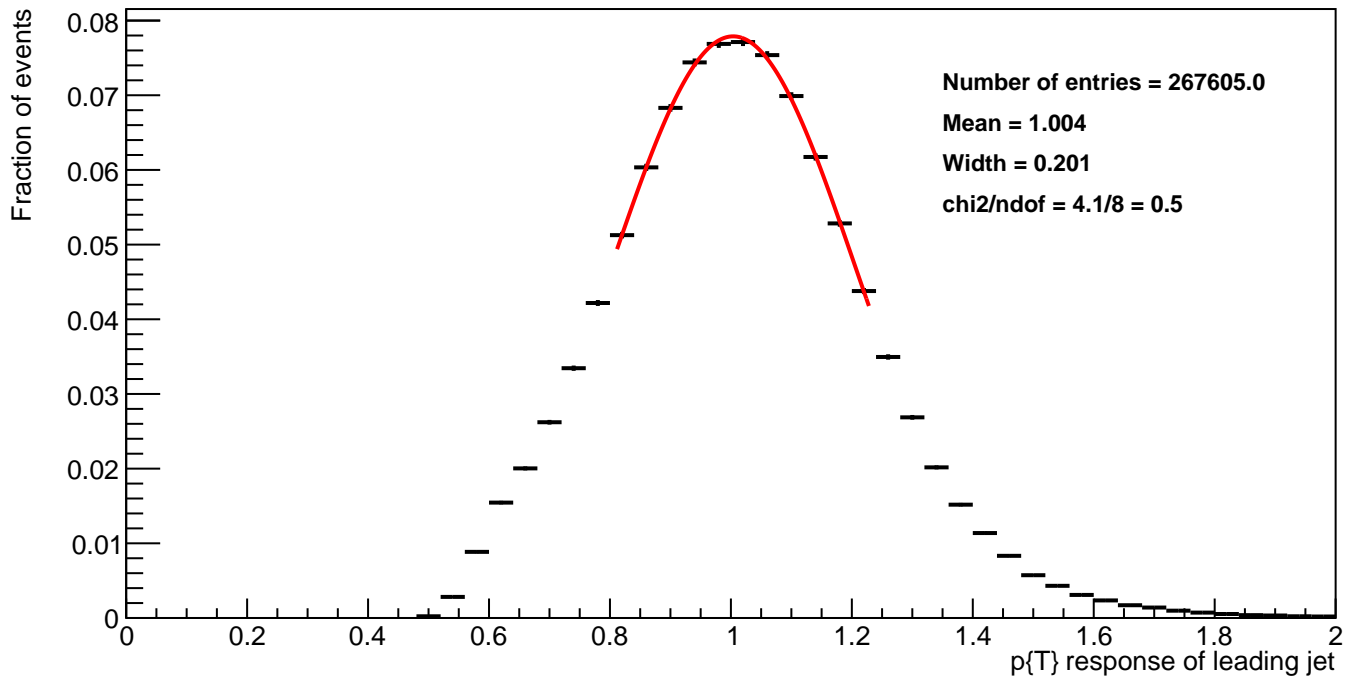
Filled with the pT response of single-matched (either GPV or pileup) reco jets of any fCPV - Range: 25000.0-30000.0 MeV

pT response: p{T} of reco jets of any fCPV / p{T} of BOTH matching truth jets - Range: 25000.0-30000.0 MeV



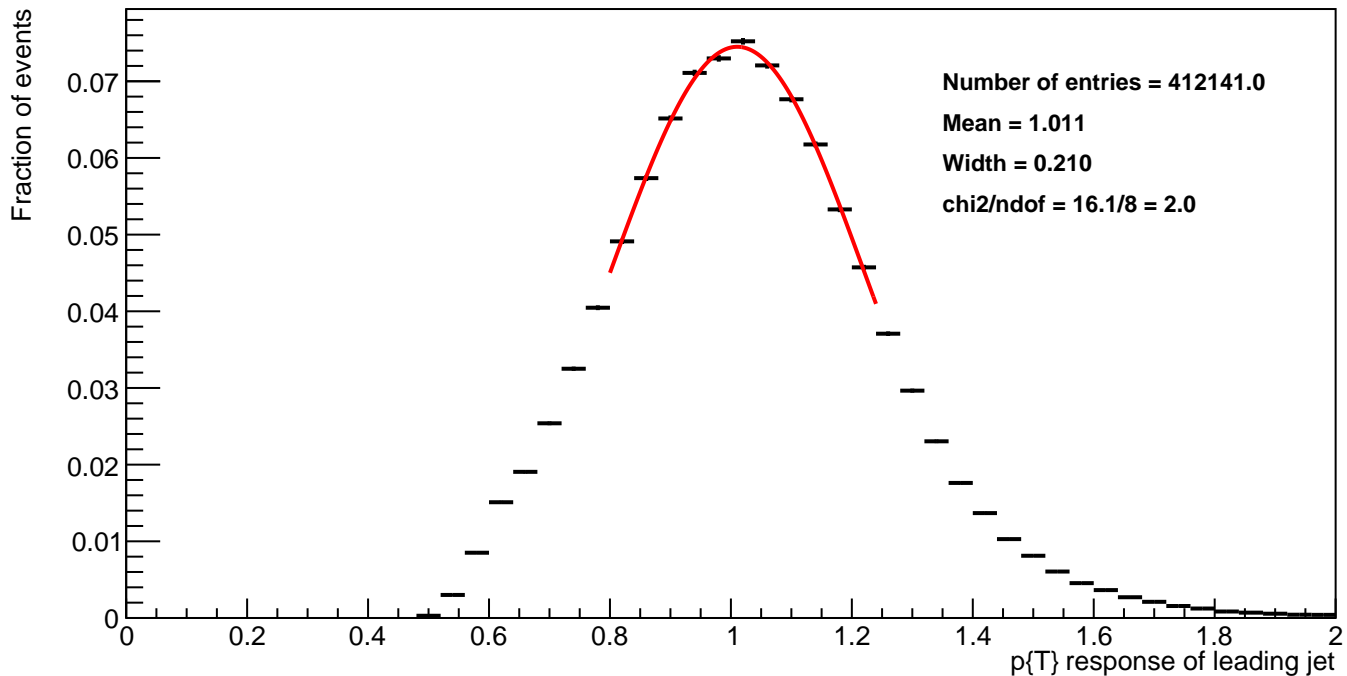
Filled with the pT response of double-matched reco jets of any fCPV - Range: 25000.0-30000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of matching truth jet - Range: 25000.0-30000.0 MeV



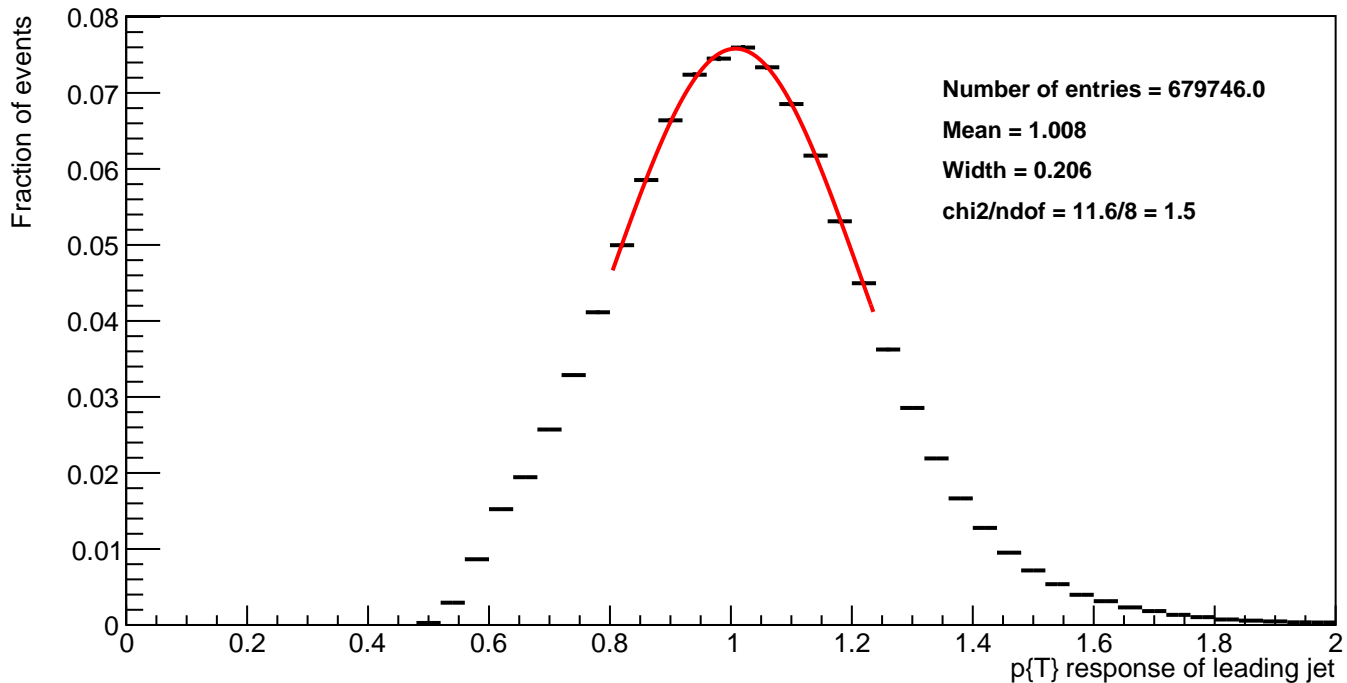
Filled with the pT response of only GPV-matched reco jets of fCPV = 1 - Range: 25000.0-30000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of matching inTimeTruthJet - Range: 25000.0-30000.0 MeV



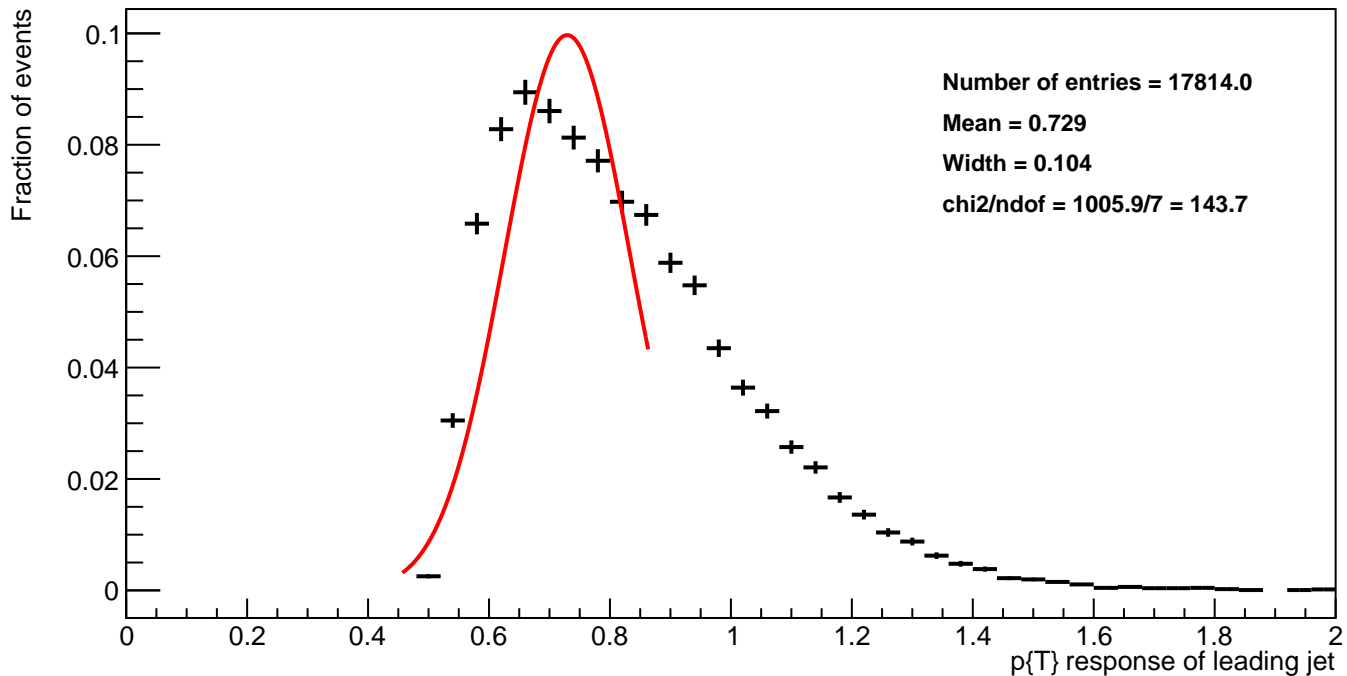
Filled with the pT response of only pileup-matched reco jets of fCPV = 1 - Range: 25000.0-30000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of matching truth jet OR inTimeTruthJet - Range: 25000.0-30000.0 MeV



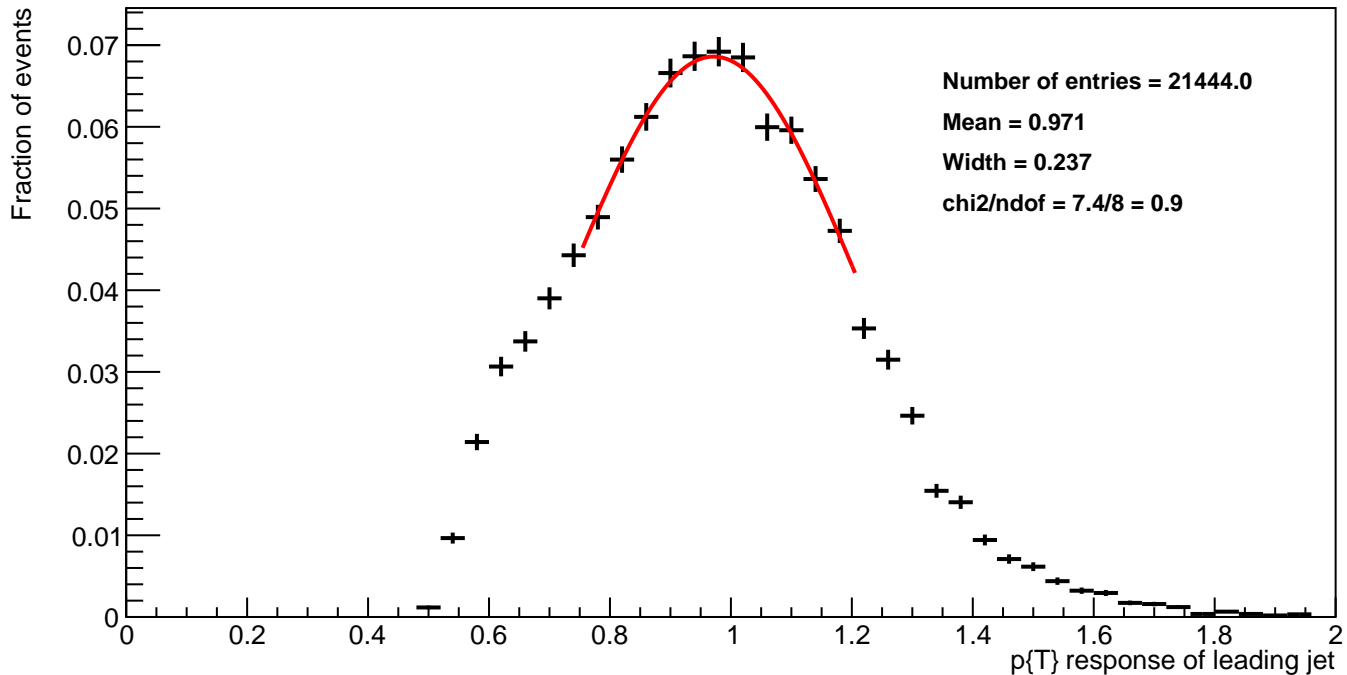
Filled with the pT response of single-matched (either GPV or pileup) reco jets of fCPV = 1 - Range: 25000.0-30000.0 MeV

pT response: $p\{T\}$ of reco jets of fCPV = 1 / $p\{T\}$ of BOTH matching truth jets - Range: 25000.0-30000.0 MeV



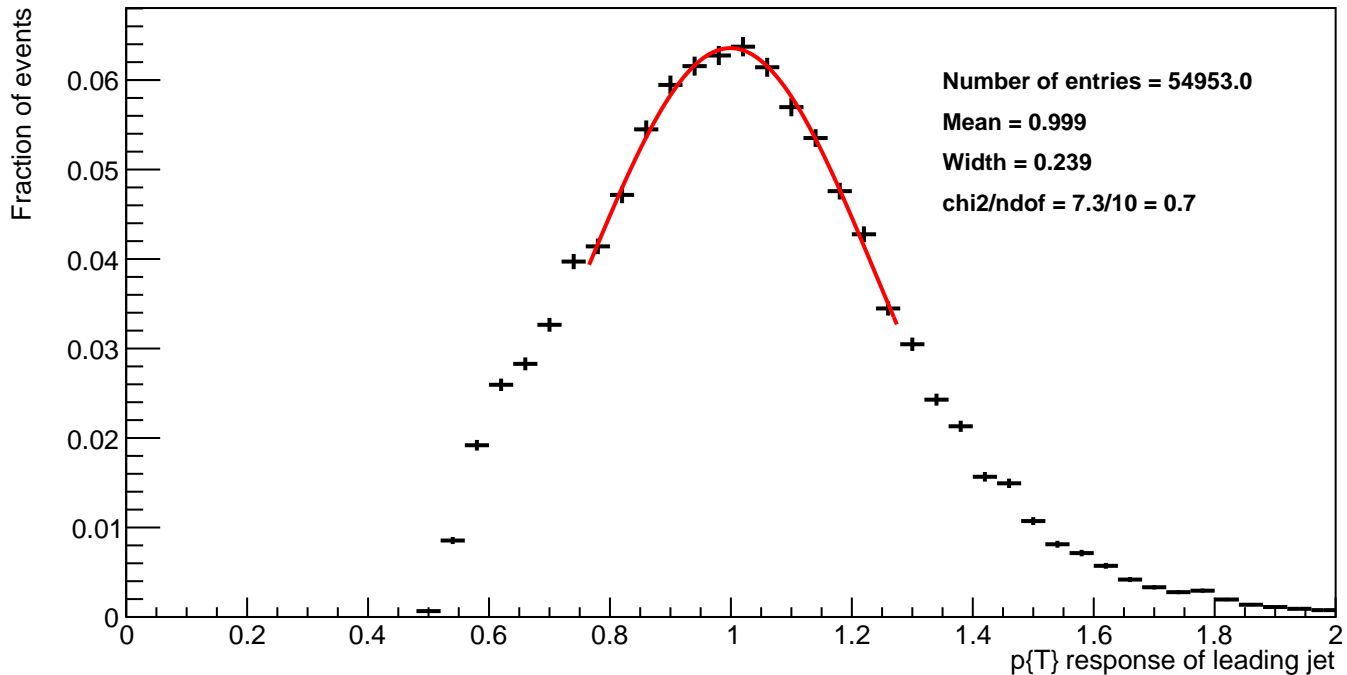
Filled with the pT response of double-matched reco jets of fCPV = 1 - Range: 25000.0-30000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of $f_{\text{CPV}} < 1$ / $p_{\{T\}}$ of matching truth jet - Range: 25000.0-30000.0 MeV



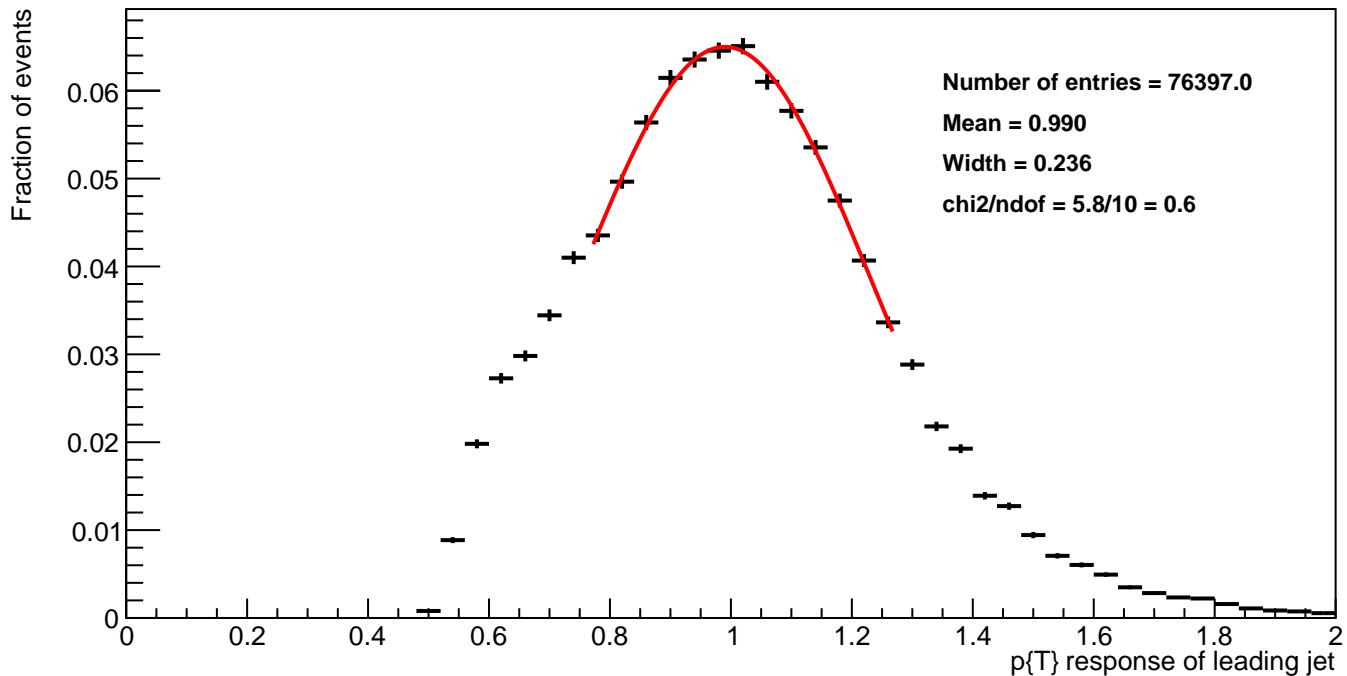
Filled with the pT response of only GPV-matched reco jets of $f_{\text{CPV}} < 1$ - Range: 25000.0-30000.0 MeV

pT response: p_{T} of reco jets of $f_{\text{CPV}} < 1$ / p_{T} of matching inTimeTruthJet - Range: 25000.0-30000.0 MeV



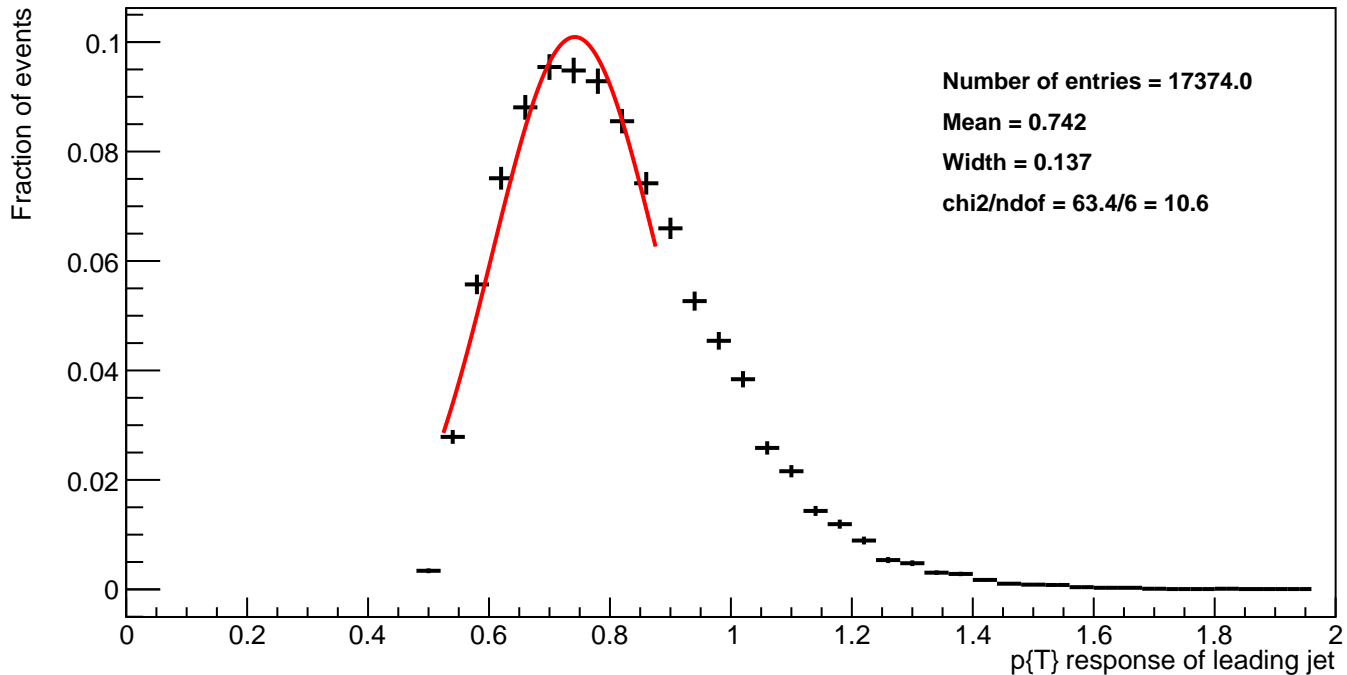
Filled with the pT response of only pileup-matched reco jets of $f_{\text{CPV}} < 1$ - Range: 25000.0-30000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV < 1 / $p_{\{T\}}$ of matching truth jet OR inTimeTruthJet - Range: 25000.0-30000.0 MeV



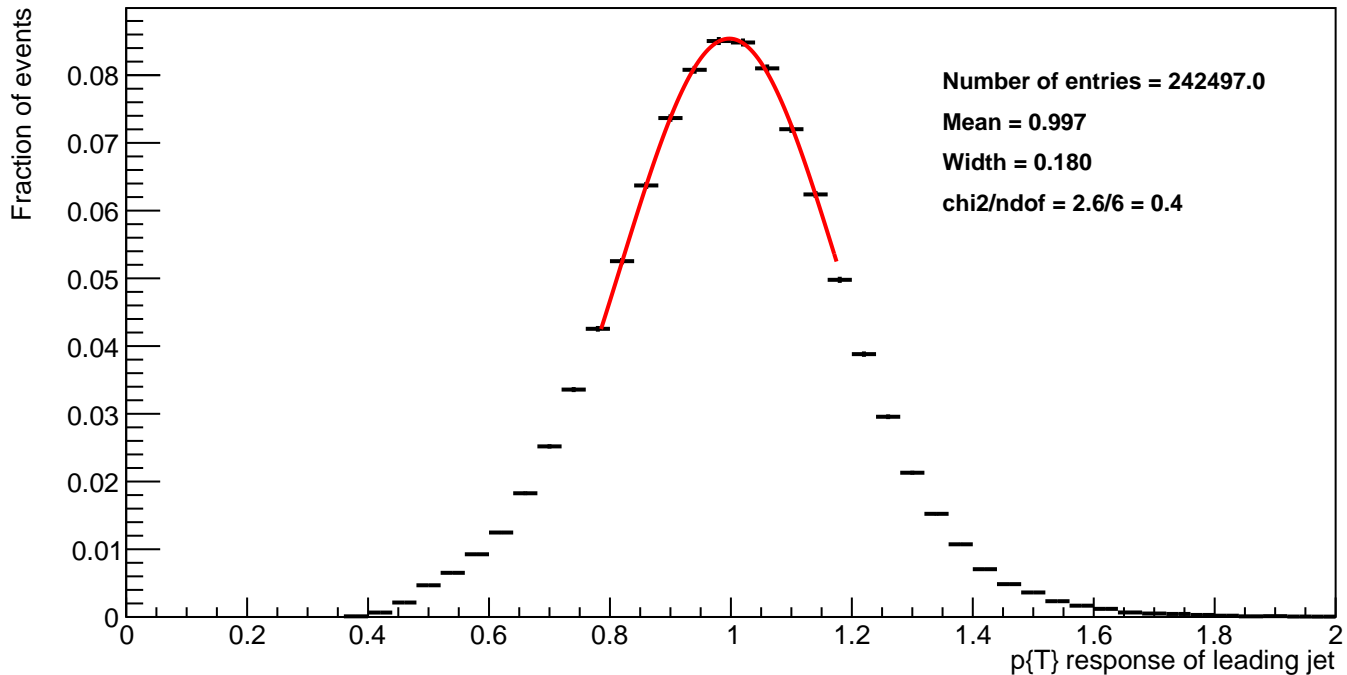
Filled with the pT response of single-matched (either GPV or pileup) reco jets of fCPV < 1 - Range: 25000.0-30000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV < 1 / $p_{\{T\}}$ of BOTH matching truth jets - Range: 25000.0-30000.0 MeV



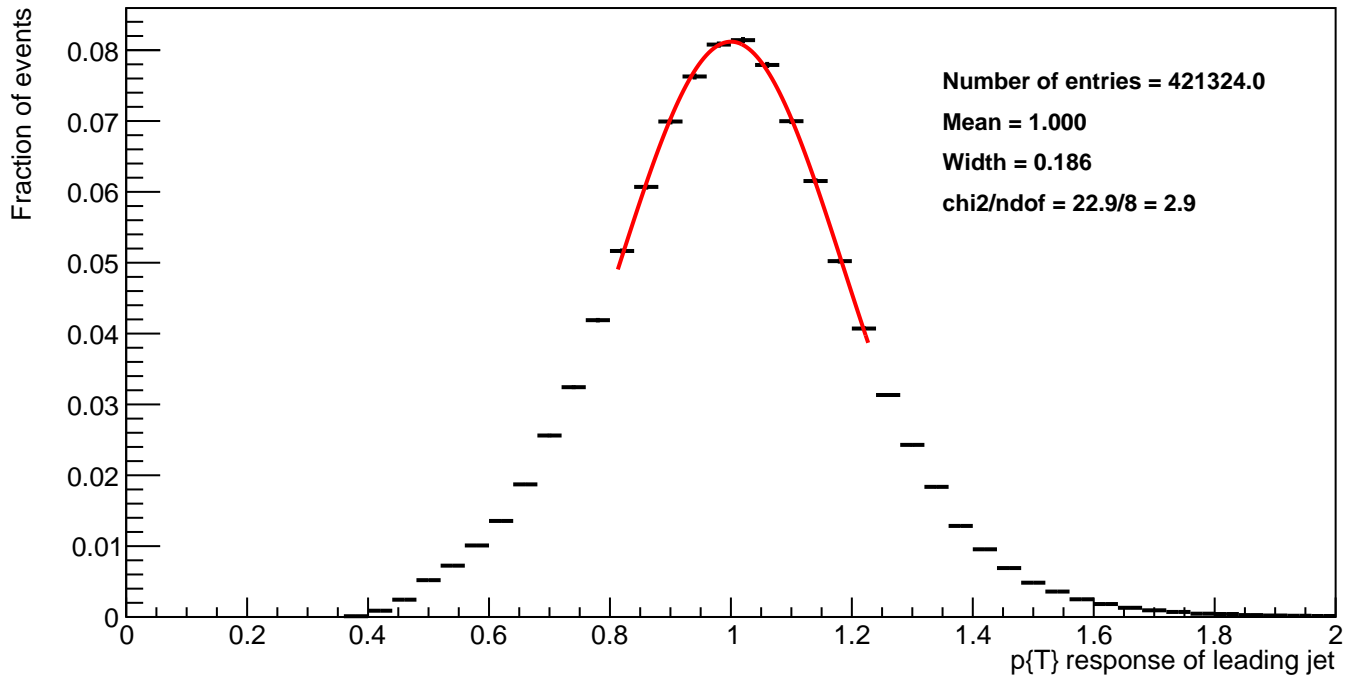
Filled with the pT response of double-matched reco jets of fCPV < 1 - Range: 25000.0-30000.0 MeV

pT response: p{T} of reco jets of any fCPV / p{T} of matching truth jet - Range: 30000.0-40000.0 MeV



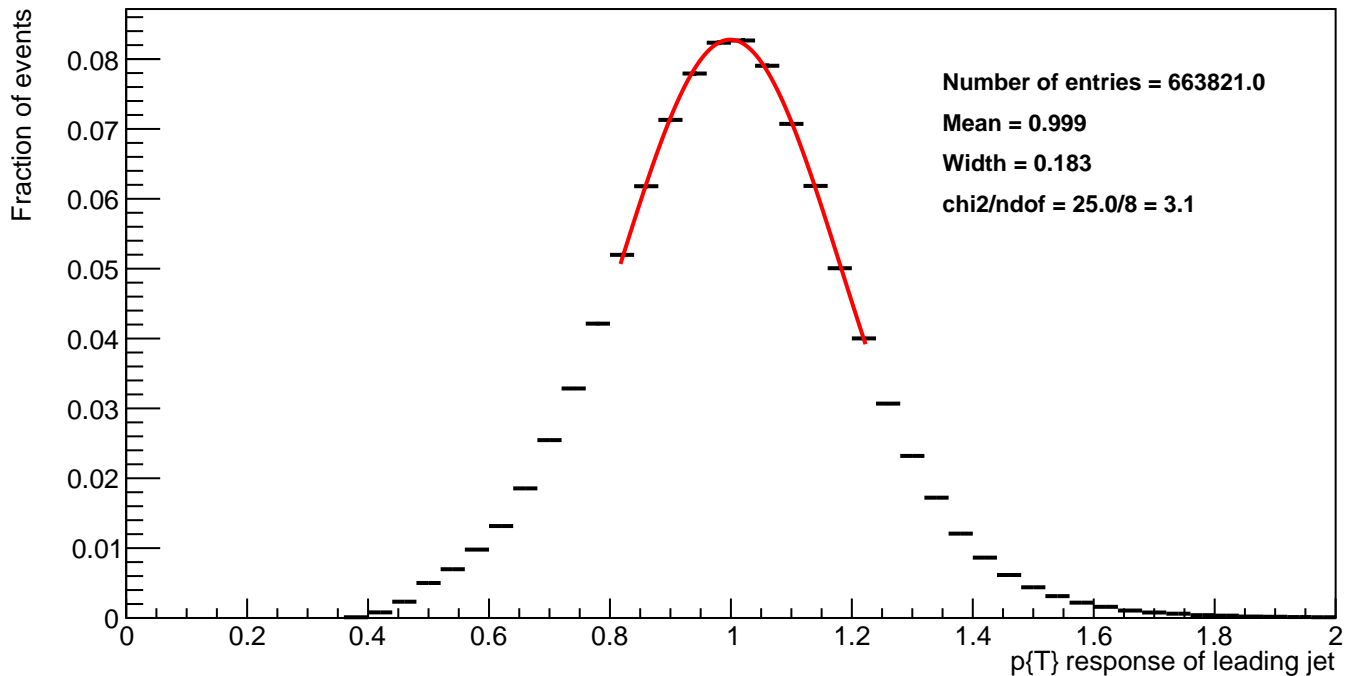
Filled with the pT response of only GPV-matched reco jets of any fCPV - Range: 30000.0-40000.0 MeV

pT response: p{T} of reco jets of any fCPV / p{T} of matching inTimeTruthJet - Range: 30000.0-40000.0 MeV



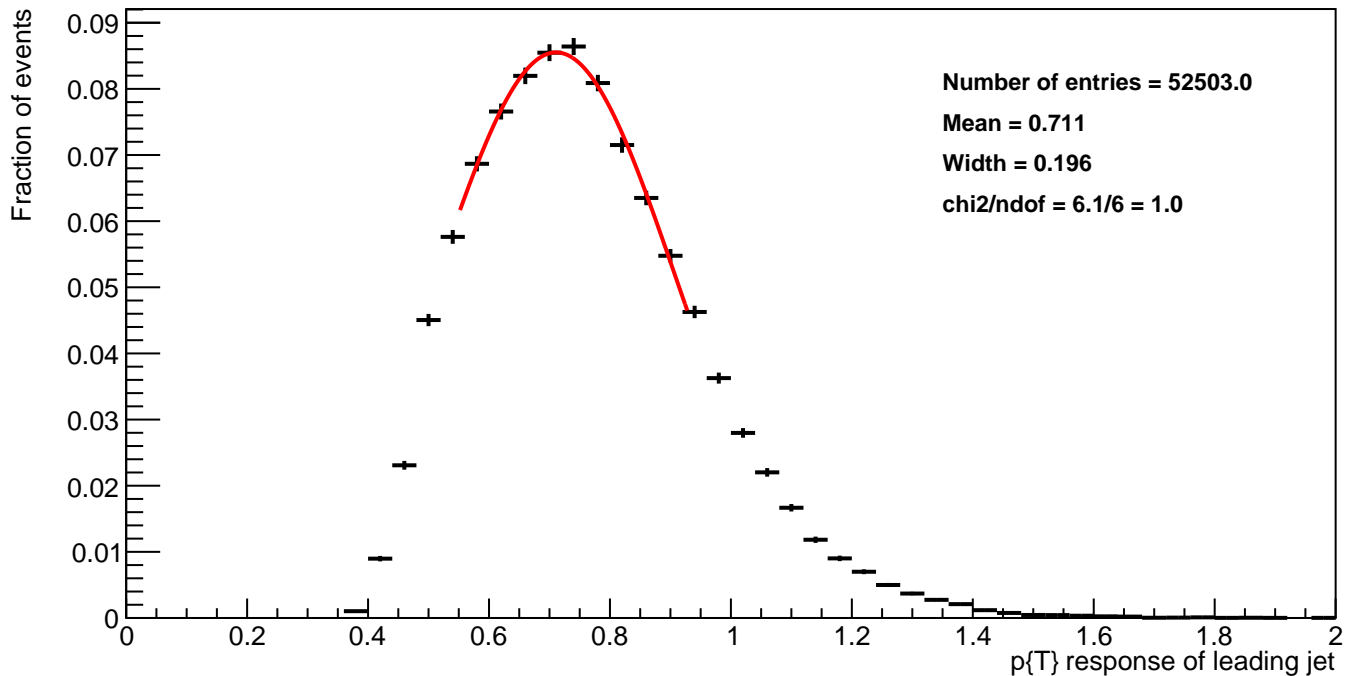
Filled with the pT response of only pileup-matched reco jets of any fCPV - Range: 30000.0-40000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of any fCPV / $p_{\{T\}}$ of matching truth jet OR inTimeTruthJet - Range: 30000.0-40000.0 MeV



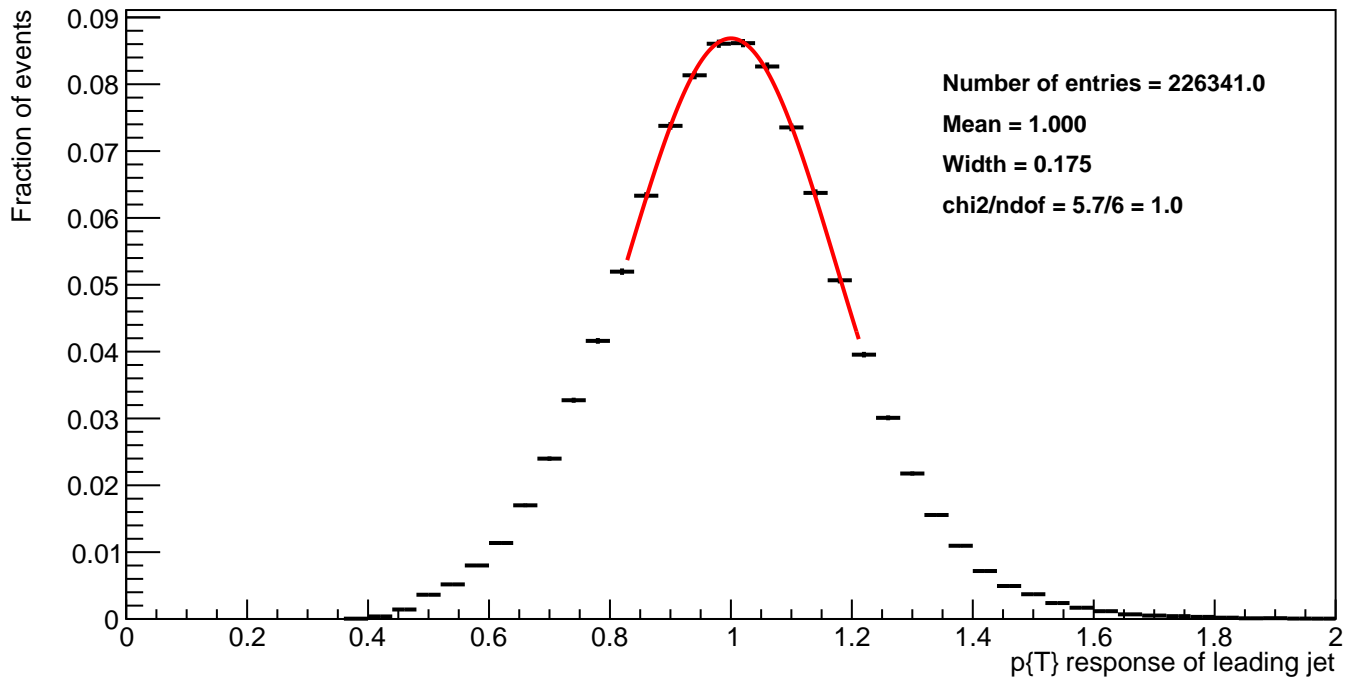
Filled with the pT response of single-matched (either GPV or pileup) reco jets of any fCPV - Range: 30000.0-40000.0 MeV

pT response: p{T} of reco jets of any fCPV / p{T} of BOTH matching truth jets - Range: 30000.0-40000.0 MeV



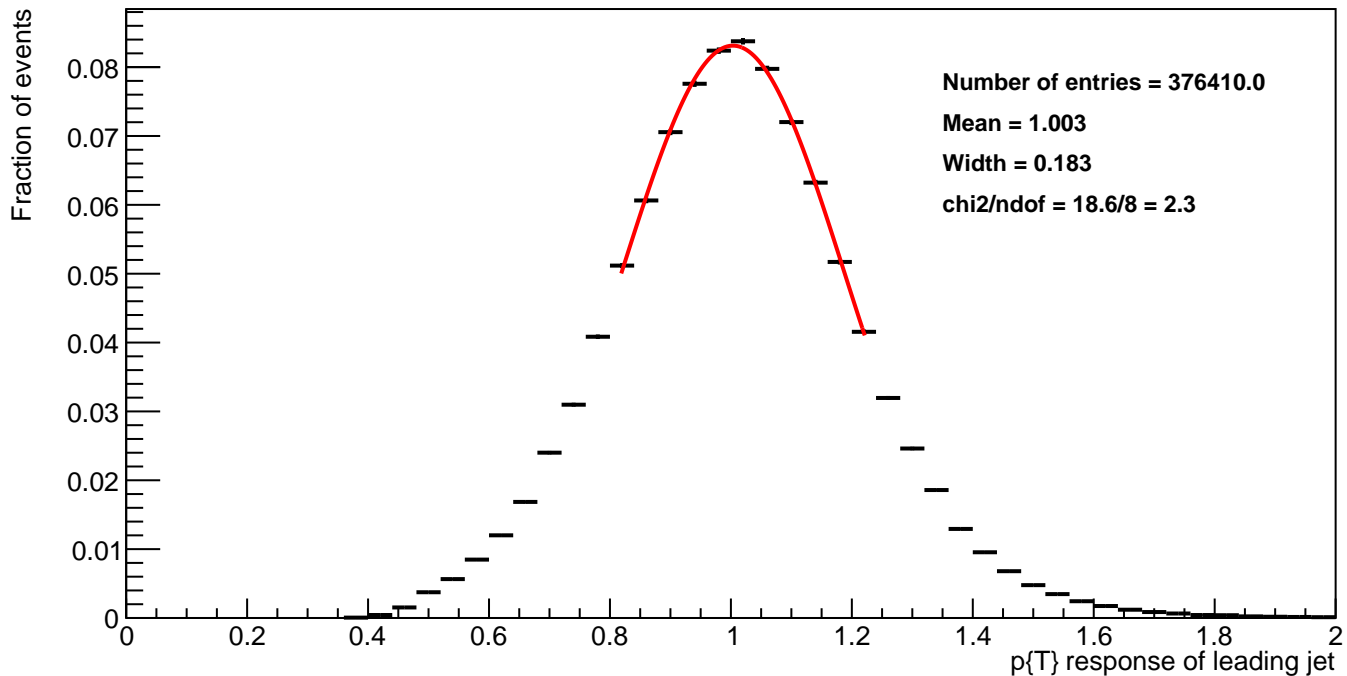
Filled with the pT response of double-matched reco jets of any fCPV - Range: 30000.0-40000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of matching truth jet - Range: 30000.0-40000.0 MeV



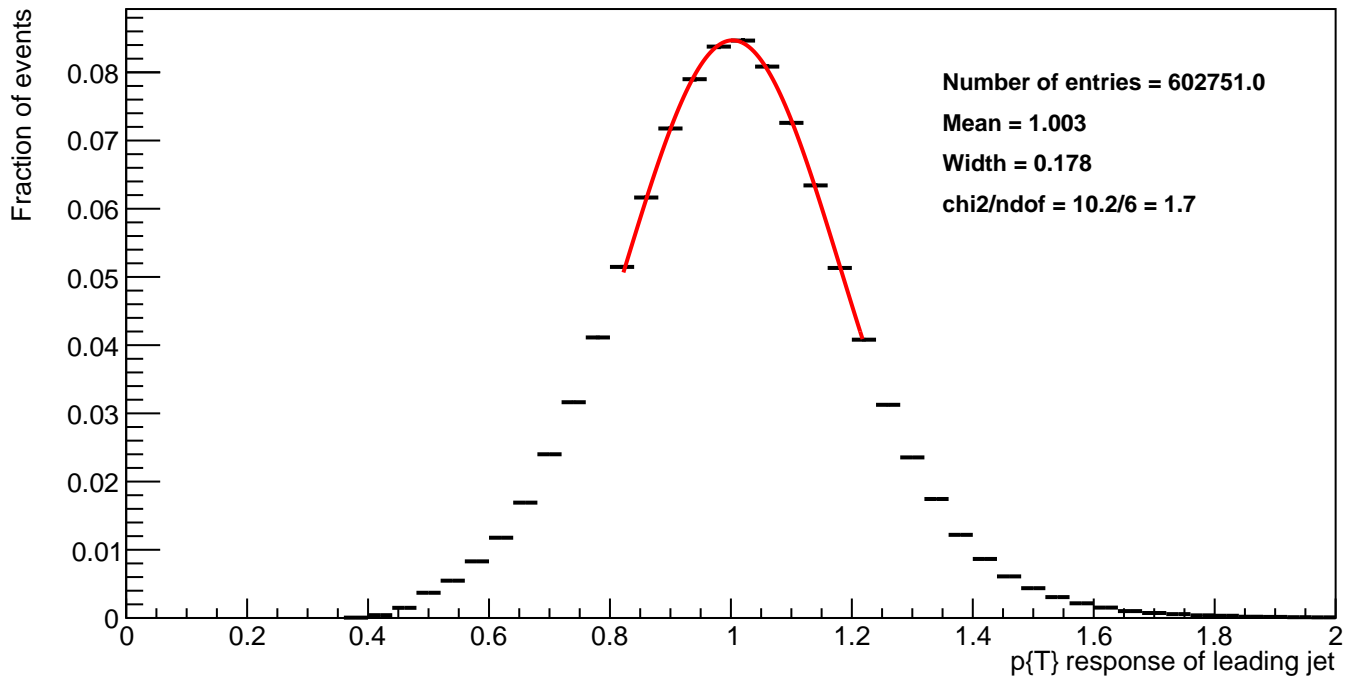
Filled with the pT response of only GPV-matched reco jets of fCPV = 1 - Range: 30000.0-40000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of matching inTimeTruthJet - Range: 30000.0-40000.0 MeV



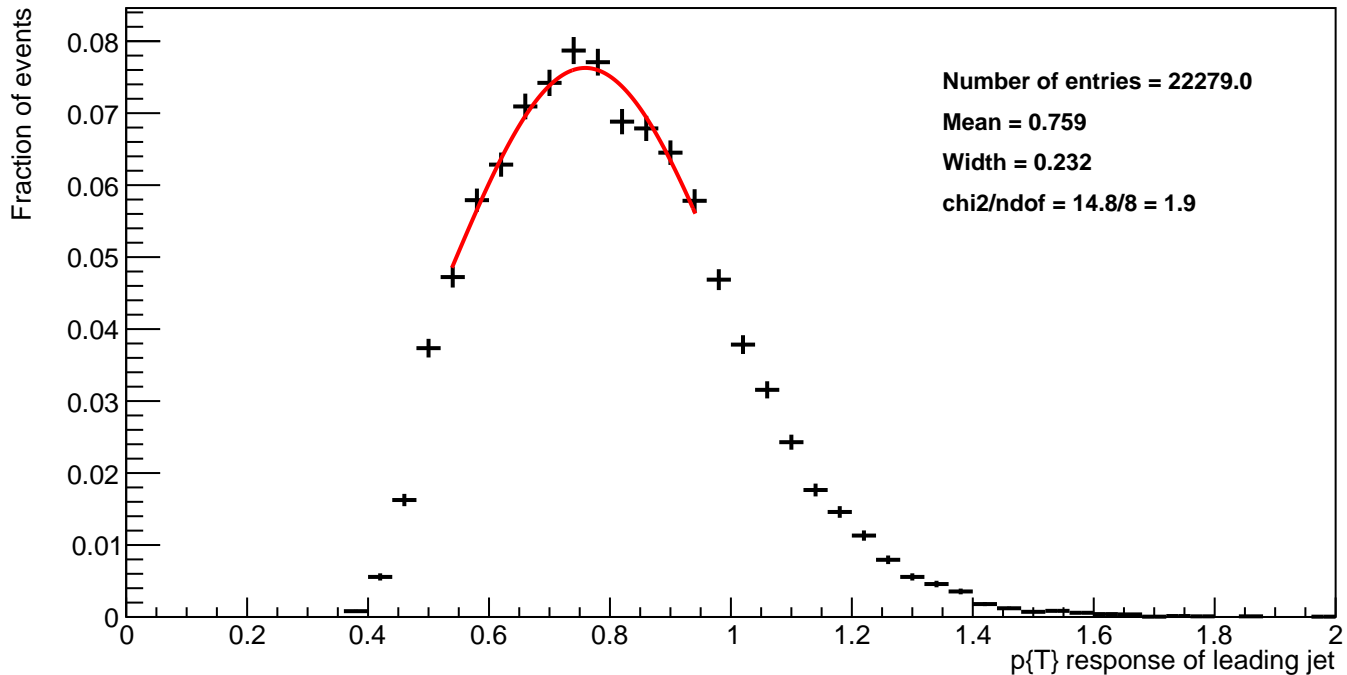
Filled with the pT response of only pileup-matched reco jets of fCPV = 1 - Range: 30000.0-40000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of matching truth jet OR inTimeTruthJet - Range: 30000.0-40000.0 MeV



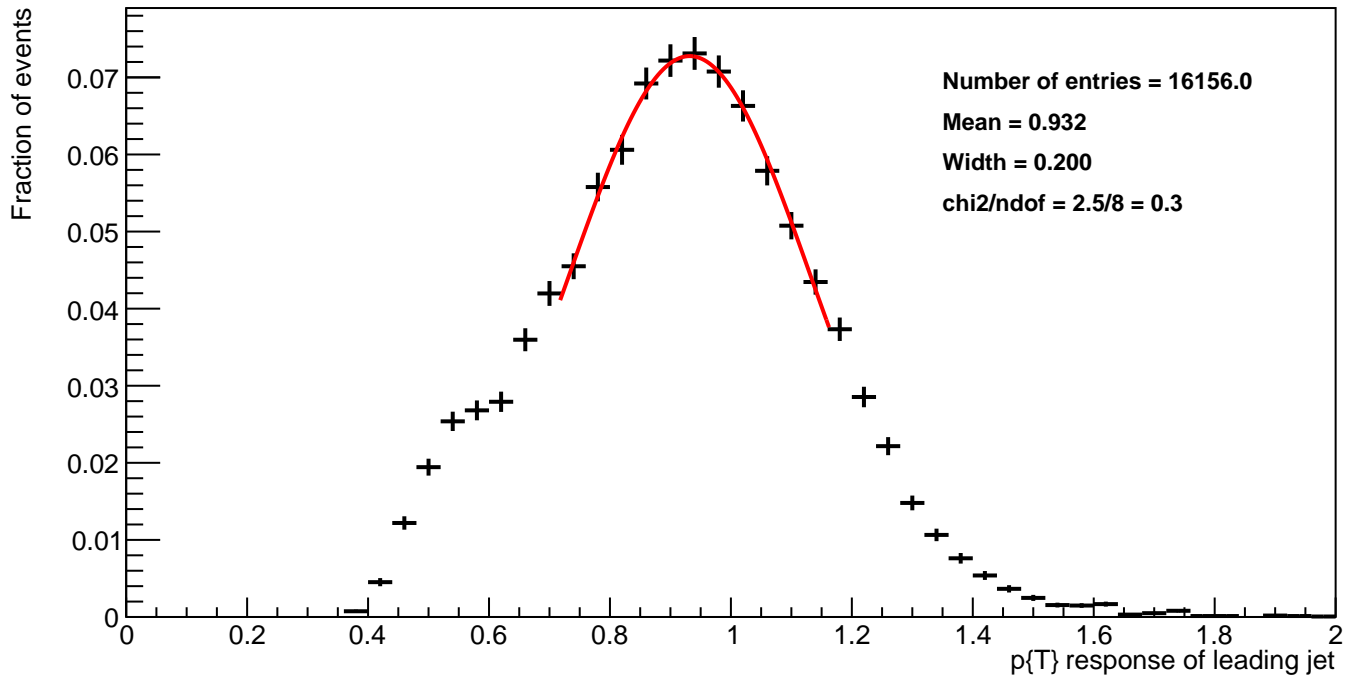
Filled with the pT response of single-matched (either GPV or pileup) reco jets of fCPV = 1 - Range: 30000.0-40000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV = 1 / $p_{\{T\}}$ of BOTH matching truth jets - Range: 30000.0-40000.0 MeV



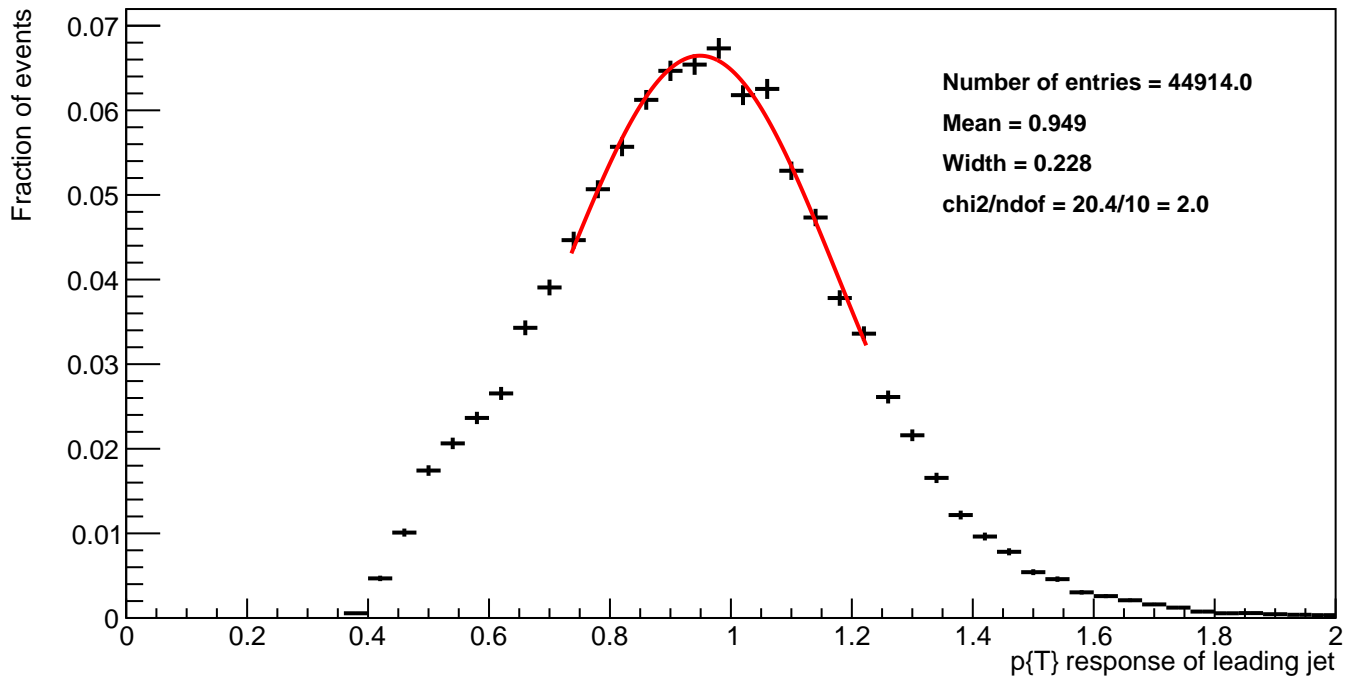
Filled with the pT response of double-matched reco jets of fCPV = 1 - Range: 30000.0-40000.0 MeV

pT response: $p\{T\}$ of reco jets of $fCPV < 1$ / $p\{T\}$ of matching truth jet - Range: 30000.0-40000.0 MeV



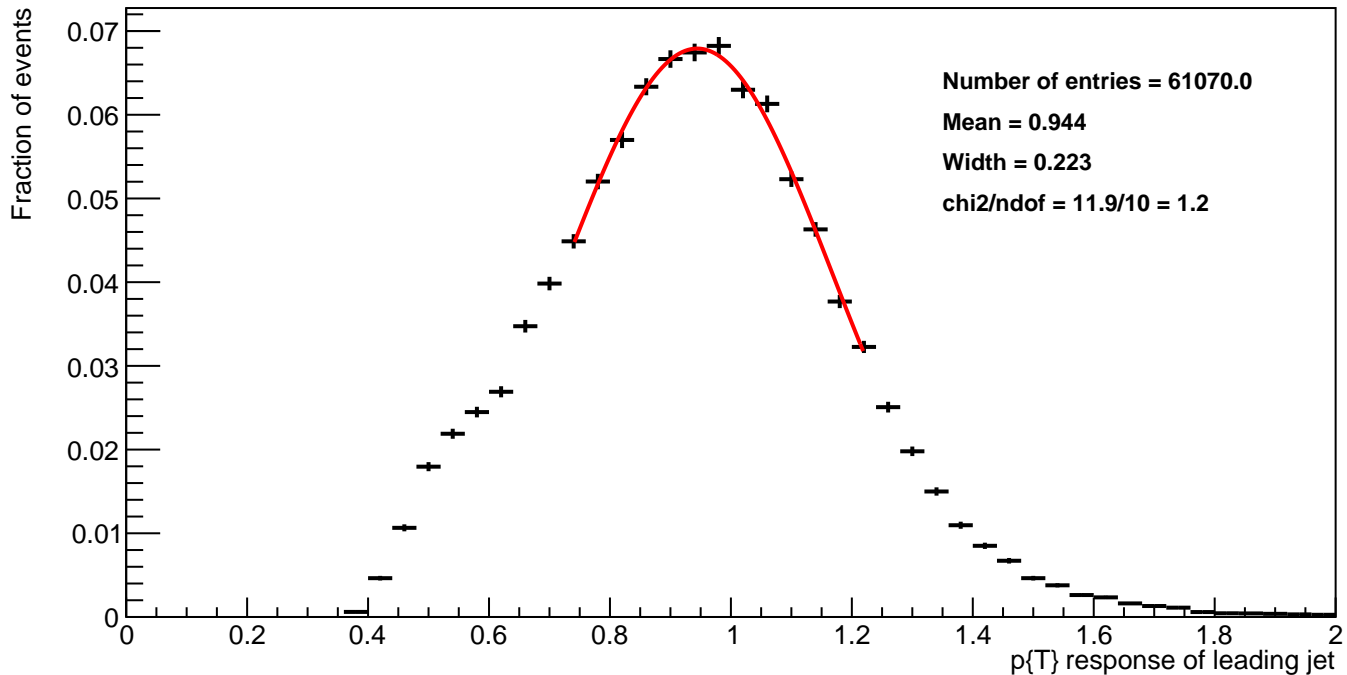
Filled with the pT response of only GPV-matched reco jets of $fCPV < 1$ - Range: 30000.0-40000.0 MeV

pT response: p_{T} of reco jets of $f_{\text{CPV}} < 1$ / p_{T} of matching inTimeTruthJet - Range: 30000.0-40000.0 MeV



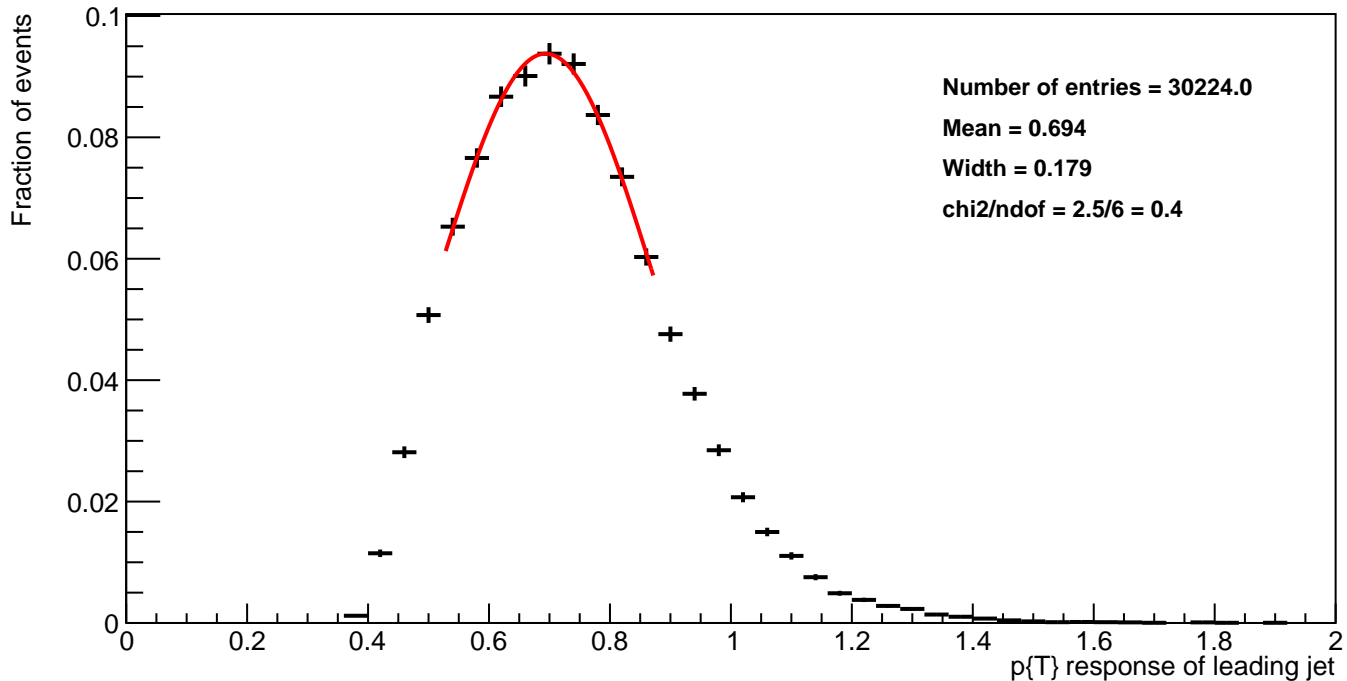
Filled with the pT response of only pileup-matched reco jets of $f_{\text{CPV}} < 1$ - Range: 30000.0-40000.0 MeV

pT response: $p_{\{T\}}$ of reco jets of fCPV < 1 / $p_{\{T\}}$ of matching truth jet OR inTimeTruthJet - Range: 30000.0-40000.0 MeV



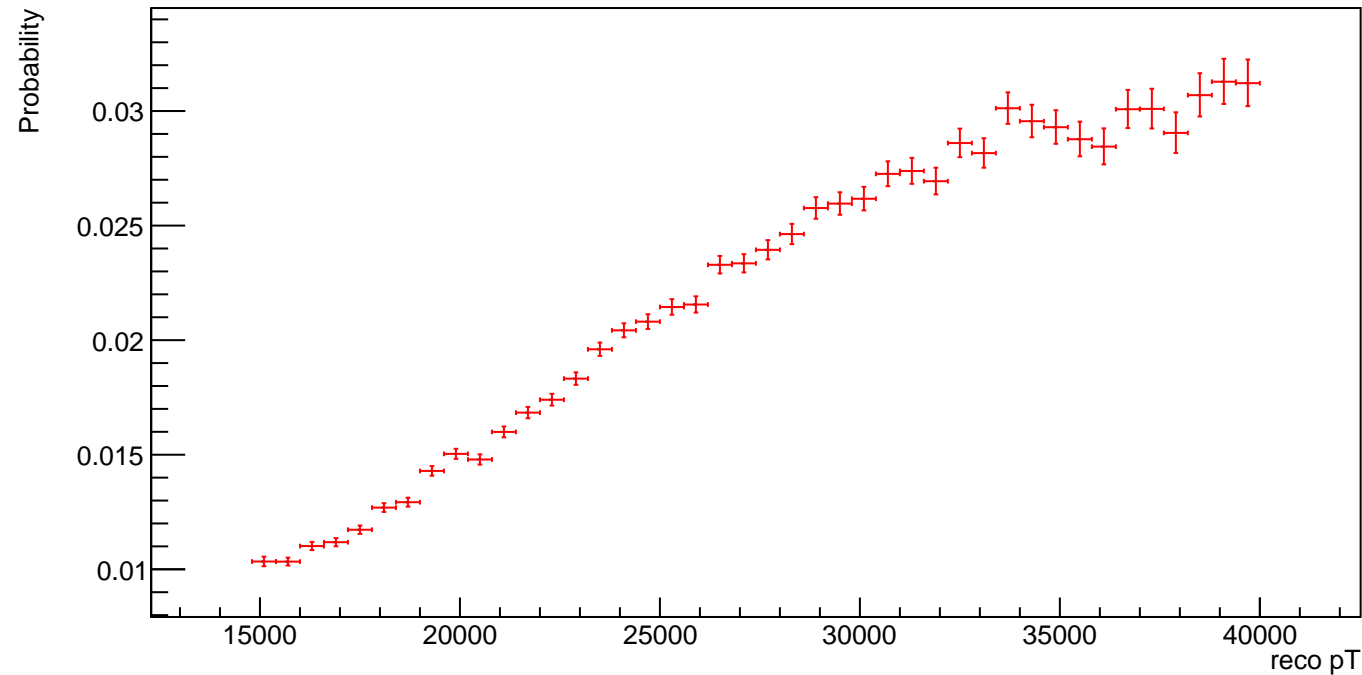
Filled with the pT response of single-matched (either GPV or pileup) reco jets of fCPV < 1 - Range: 30000.0-40000.0 MeV

pT response: p_{T} of reco jets of fCPV < 1 / p_{T} of BOTH matching truth jets - Range: 30000.0-40000.0 MeV



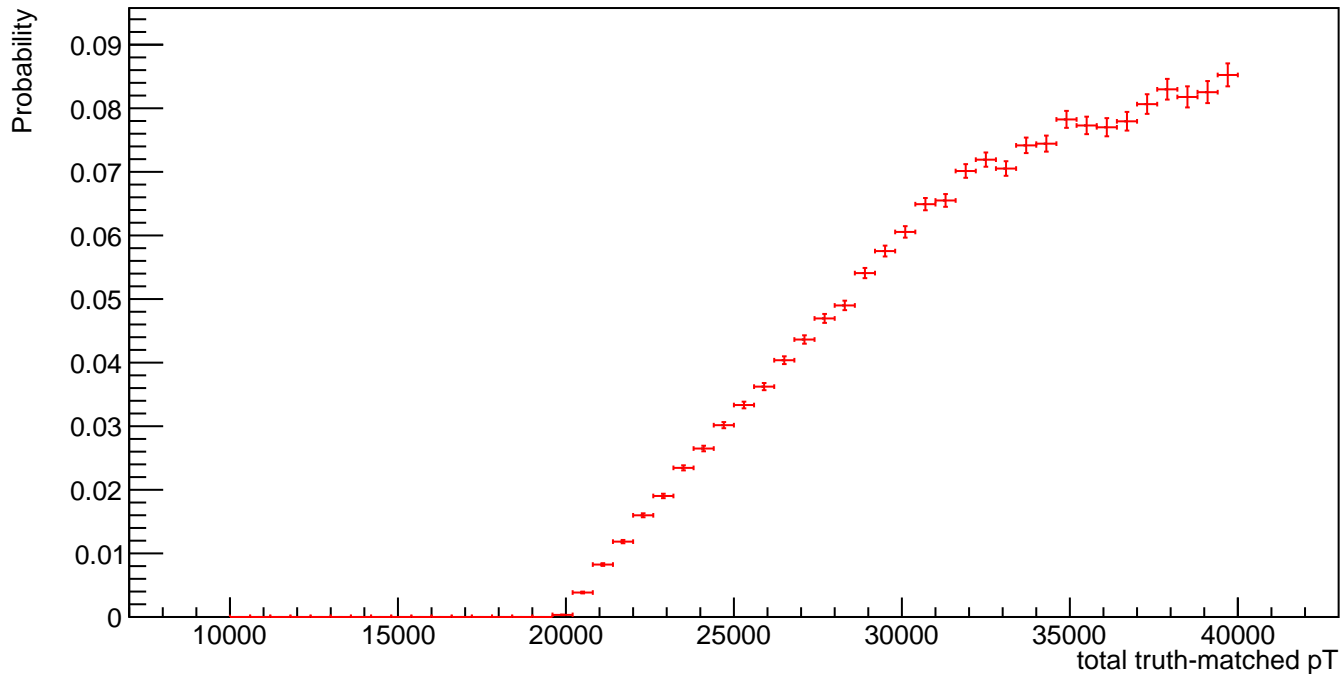
Filled with the pT response of double-matched reco jets of fCPV < 1 - Range: 30000.0-40000.0 MeV

Probability of a matched jet being double matched for any fCPV



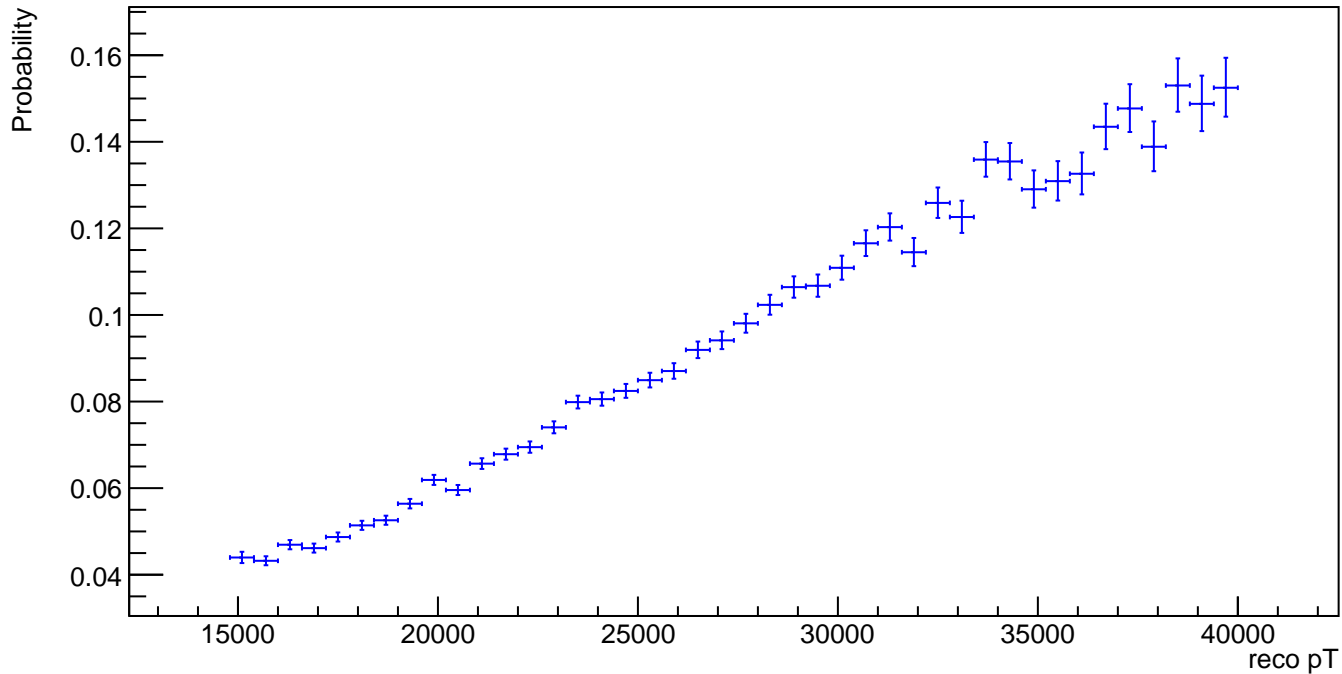
Filled with fraction of: no. of double matched jets / total no. of matched jets of any fCPV; for each reco pT bin

Probability of a matched jet being double matched for any fCPV



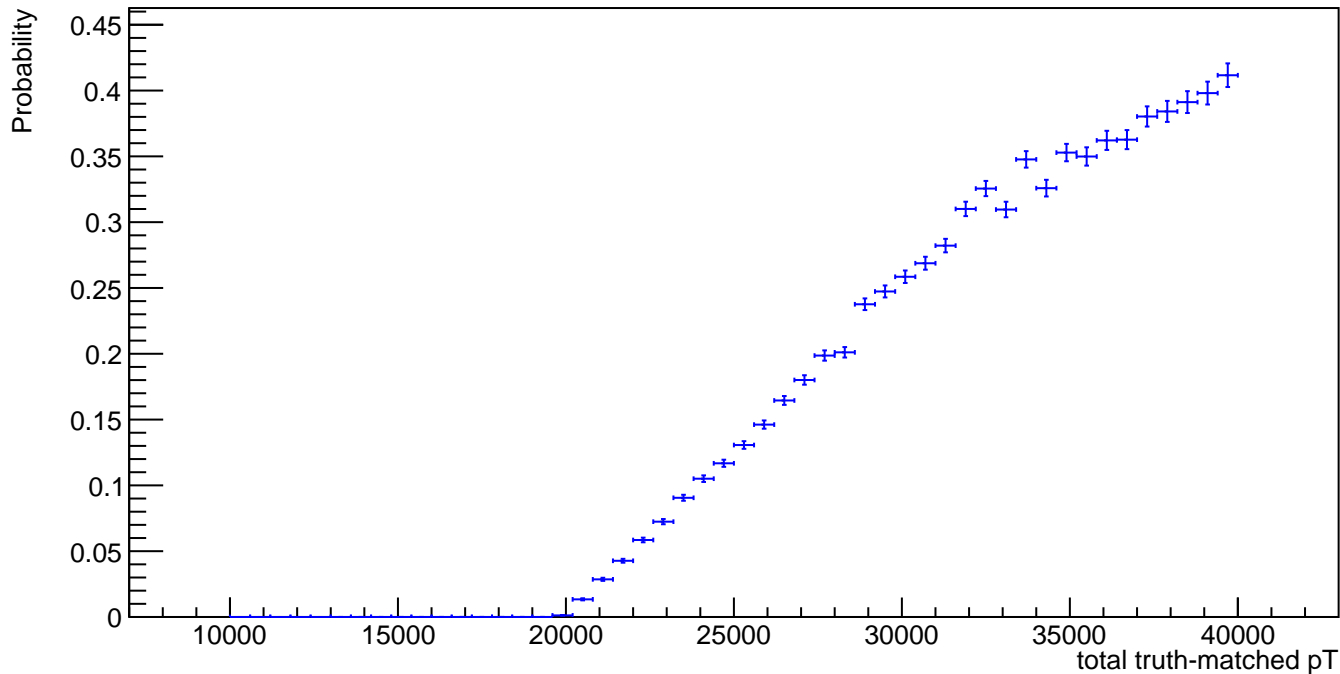
Filled with fraction of: no. of double matched jets / total no. of matched jets of any fCPV; for each total truth-matched pT bin

Probability of a matched jet being double matched for $f_{CPV} < 1$



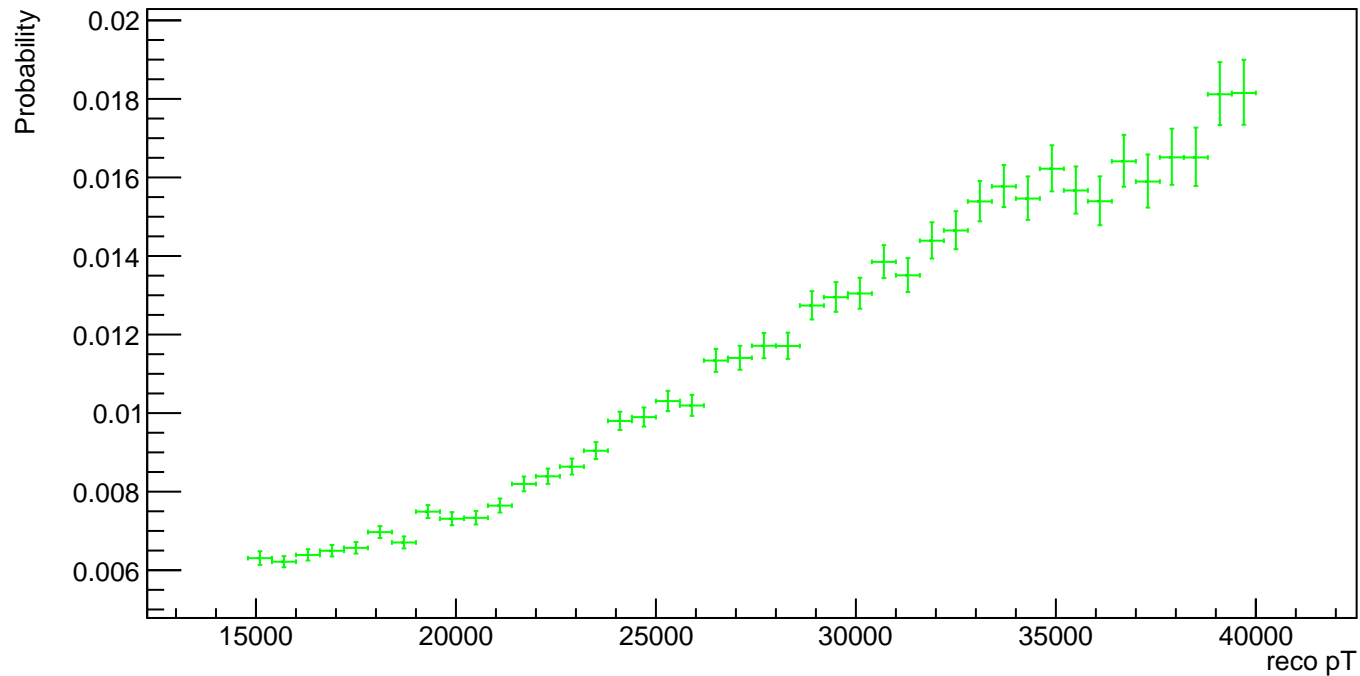
Filled with fraction of: no. of double matched jets / total no. of matched jets of $f_{CPV} < 1$; for each reco pT bin

Probability of a matched jet being double matched for $f_{CPV} < 1$



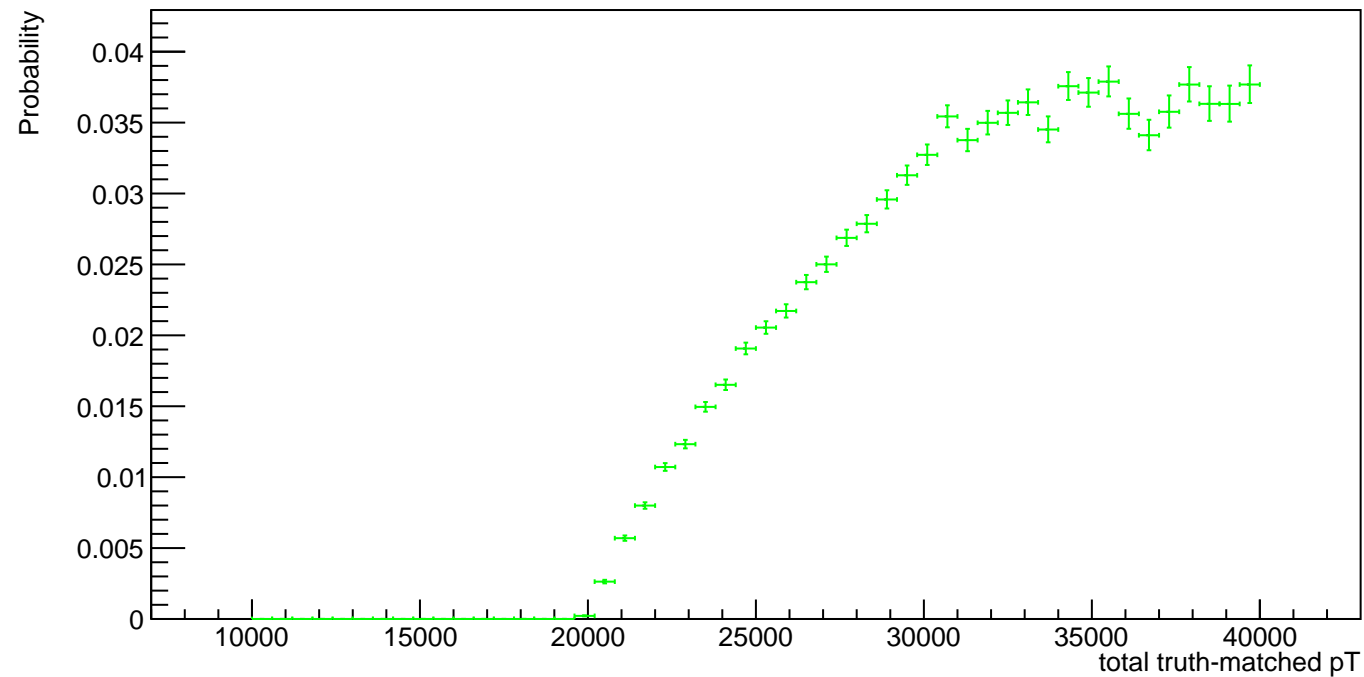
Filled with fraction of: no. of double matched jets / total no. of matched jets of $f_{CPV} < 1$; for each total truth-matched pT bin

Probability of a matched jet being double matched for $f_{CPV} = 1$



Filled with fraction of: no. of double matched jets / total no. of matched jets of $f_{CPV} = 1$; for each reco pT bin

Probability of a matched jet being double matched for $f_{\text{CPV}} = 1$



Filled with fraction of: no. of double matched jets / total no. of matched jets of $f_{\text{CPV}} = 1$; for each total truth-matched p_T bin