

[gamma-jet analysis] Jet Energy Correction study

16 Jan. 2015
Yeonju Go

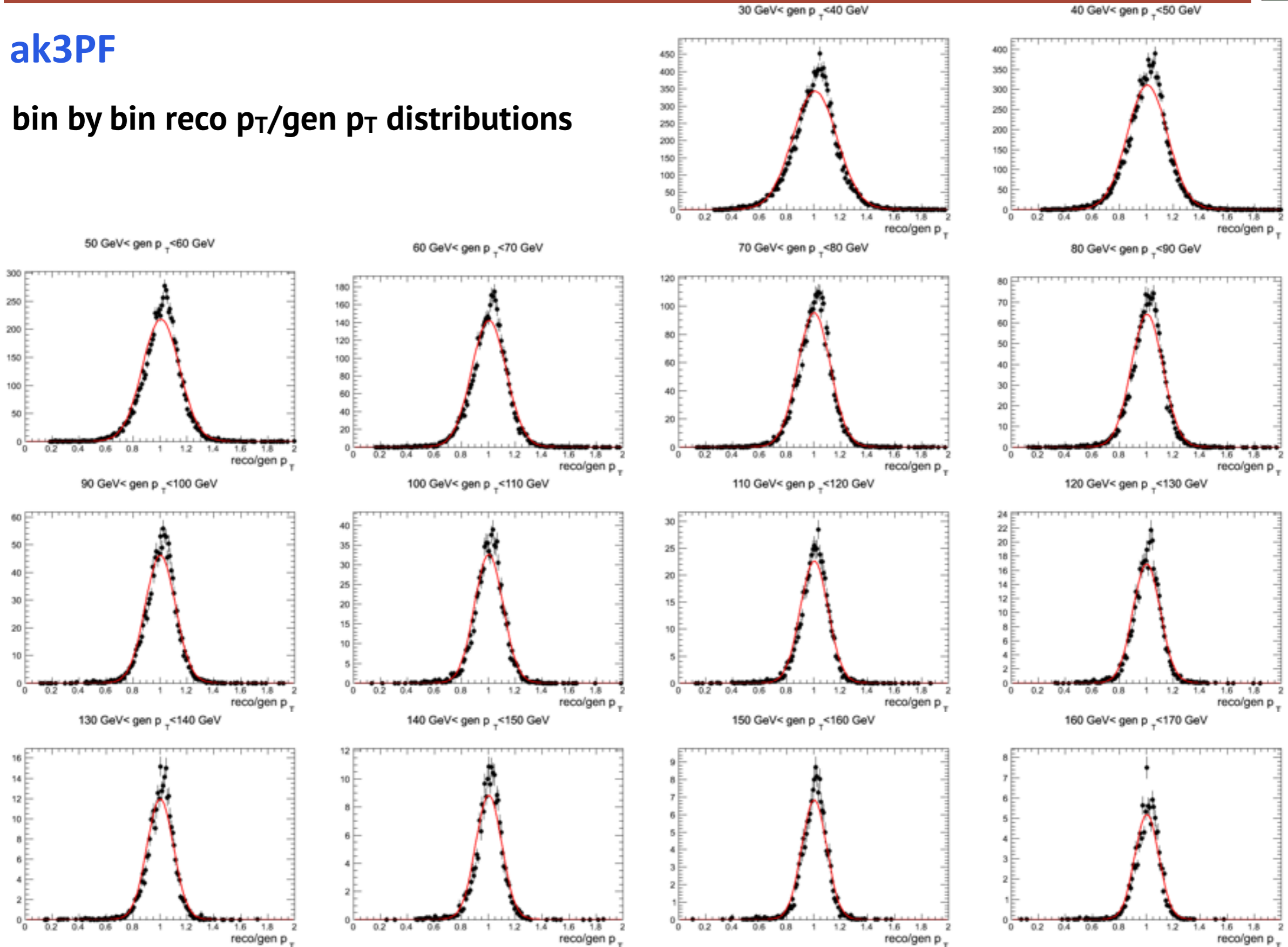


- **Previous analysis samples are produced using inclusive di-jet JEC(Jet Energy Correction)**
- **I derived local JEC optimized for our gamma-jet analysis.**

- **Steps that I took**
 - I produced private samples to be used for deriving JEC.
 - JEC factors are derived and tested with the same private sample.
 - Official samples are produced with the derived JEC applied.
 - Closure test with the official sample confirmed that the JEC work well.

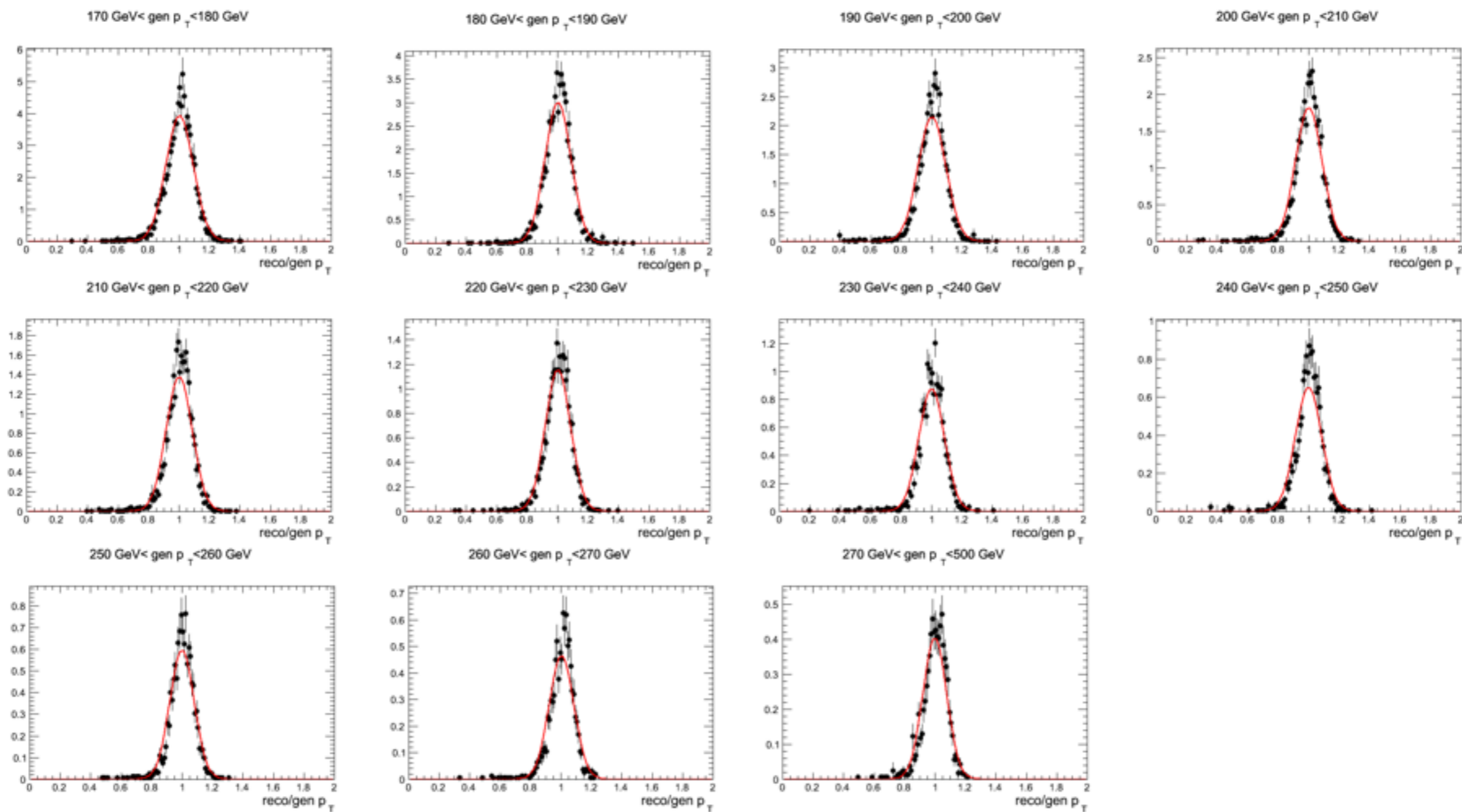
ak3PF

- bin by bin reco p_T /gen p_T distributions

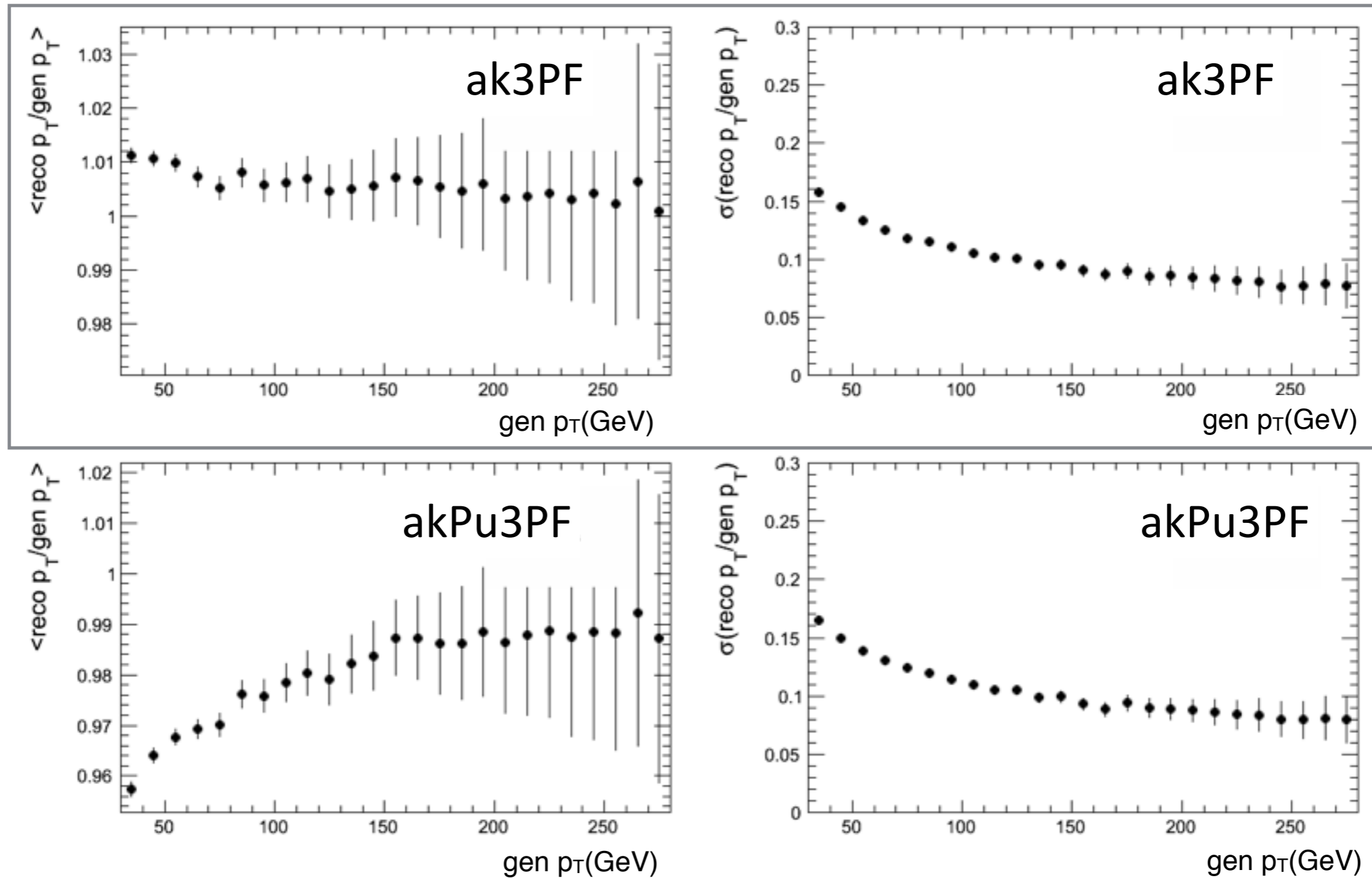


ak3PF

- bin by bin reco p_T /gen p_T distributions



Closure test



- JEC are good within ~1%

● **Centrality service work**

Centrality

- Software development and maintenance (4 month OffSoft->Reco->HI)
- Calibrations for new datasets (1 month OffSoft->Reco->HI)
- Documentation and user support (1 month OffSoft->Reco->HI)
- Run preparations and training (8 month OffSoft->Reco->HI)
- Centrality tables and Glauber calculations for 5 TeV (2 month OffSoft->Reco->HI)
- Event selection monitoring during the run (2 month OffSoft->Reco->HI)
- Validation (2 month PPD->PdmV->HI)