

ATRAPP Meeting

Planning progression

Jeremy Couthures

Moving to Athena

1) Move the Hashing code to core:

- 1) Move the code to core (local) ✓
- 2) Make the code compile ✓
- 3) Ensure same results than before ✓
- 4) Pull requests: Hashing **WIP**, Container Policy, Event Timing (—), Root seed writer ✓, Root comparison ✓

2) Link ACTS+Hashing version in Athena (**TWiki**) ✓

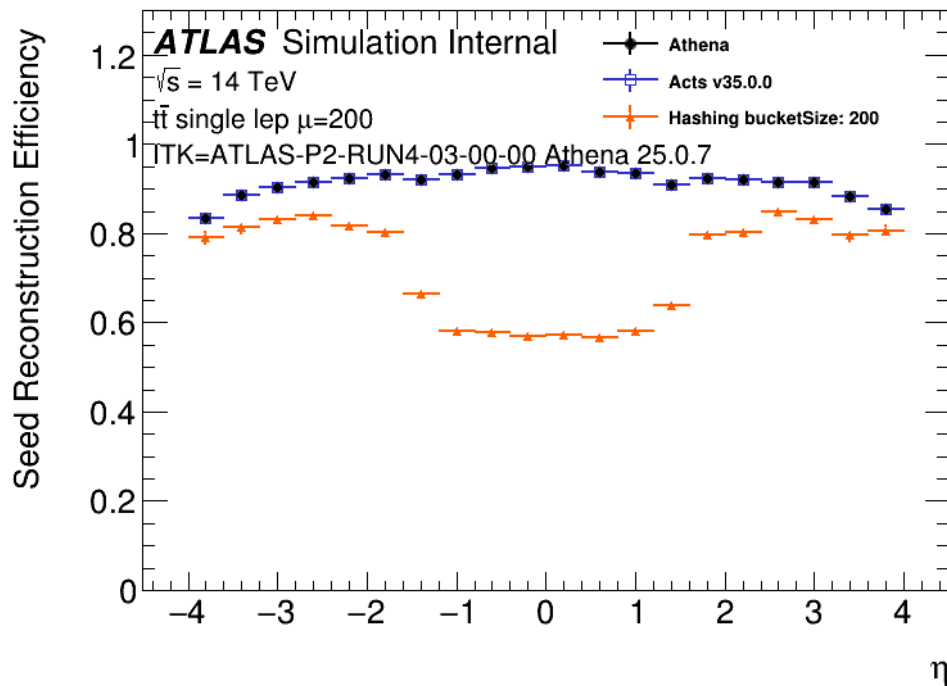
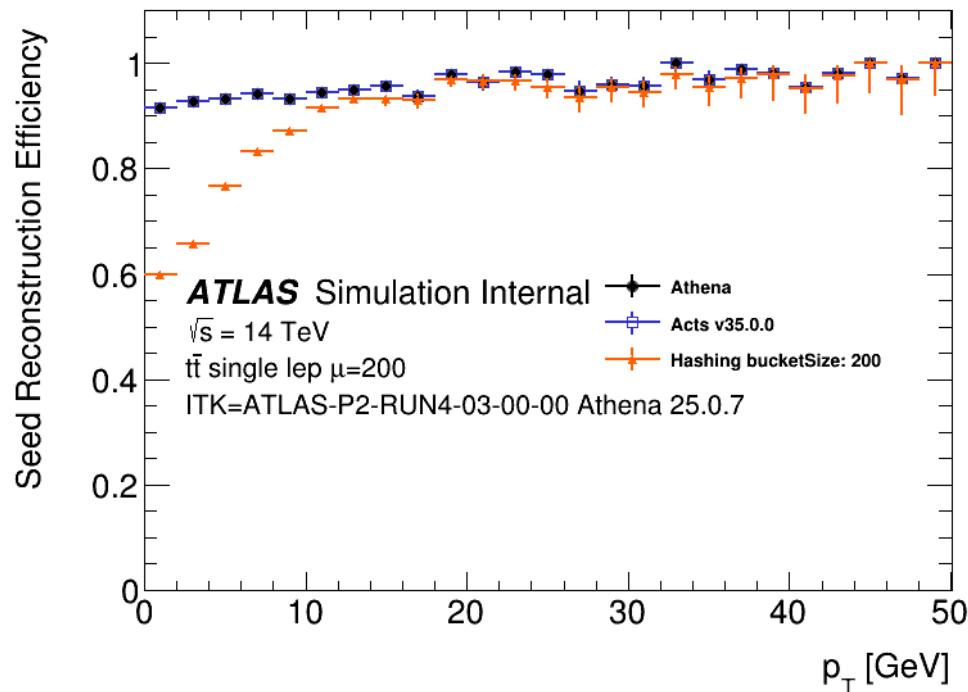
3) Reproduce **official plots** (slide 17) (with Florencia):

- 1) Athena + Default: $\mu = 0$ ✓; $\mu = 200$ ✓
- 2) Athena + ACTS $\mu = 0$ ✓; $\mu = 200$ ✓
- 3) Athena + ACTS (Container Policy) $\mu = 0$; $\mu = 200$

4) Edit seeding tool (in Athena) with Hashing **WIP**

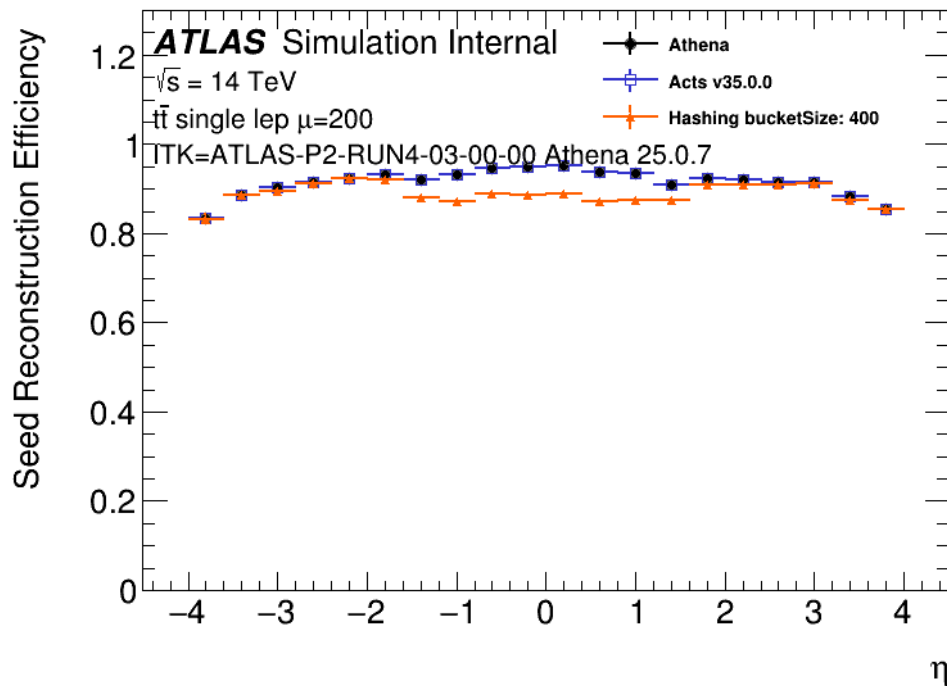
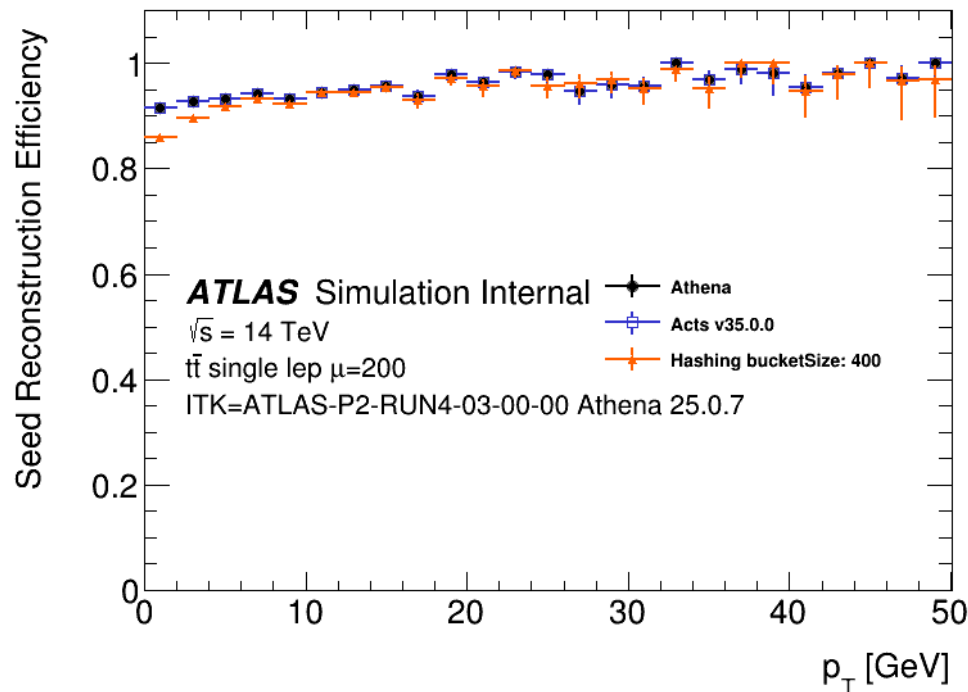
5) Reproduce the plots with Hashing (Eff + CPU) **WIP**

Hashing $\mu = 200$



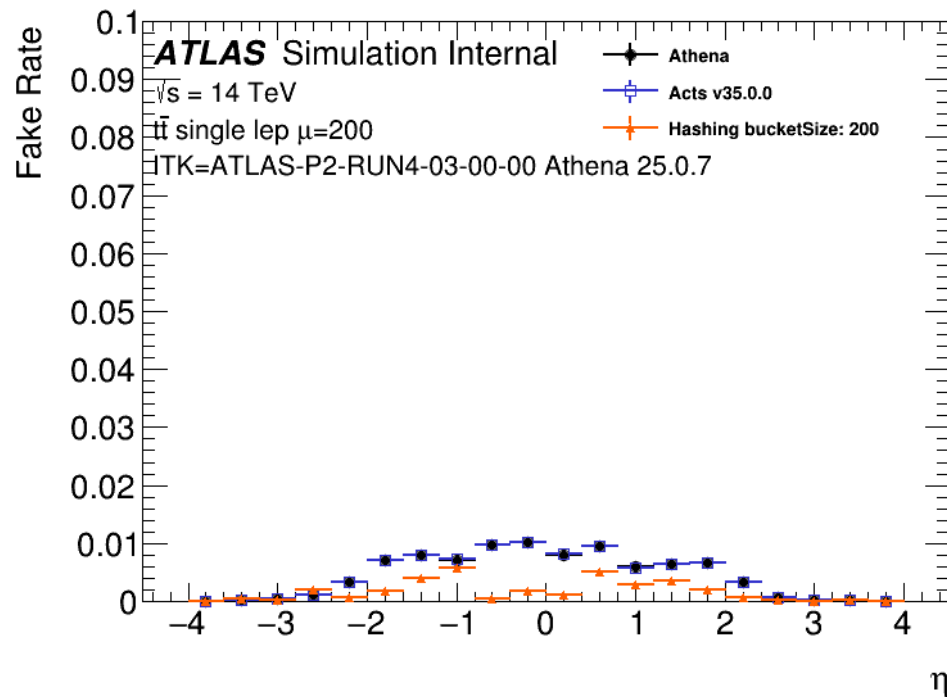
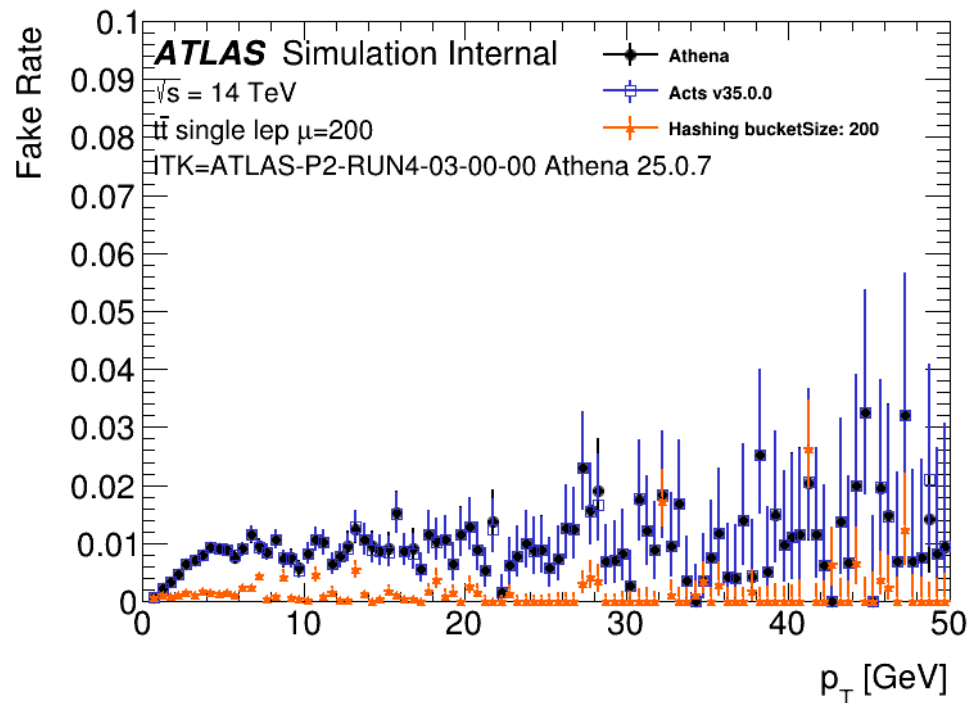
1000 events

Hashing $\mu = 200$



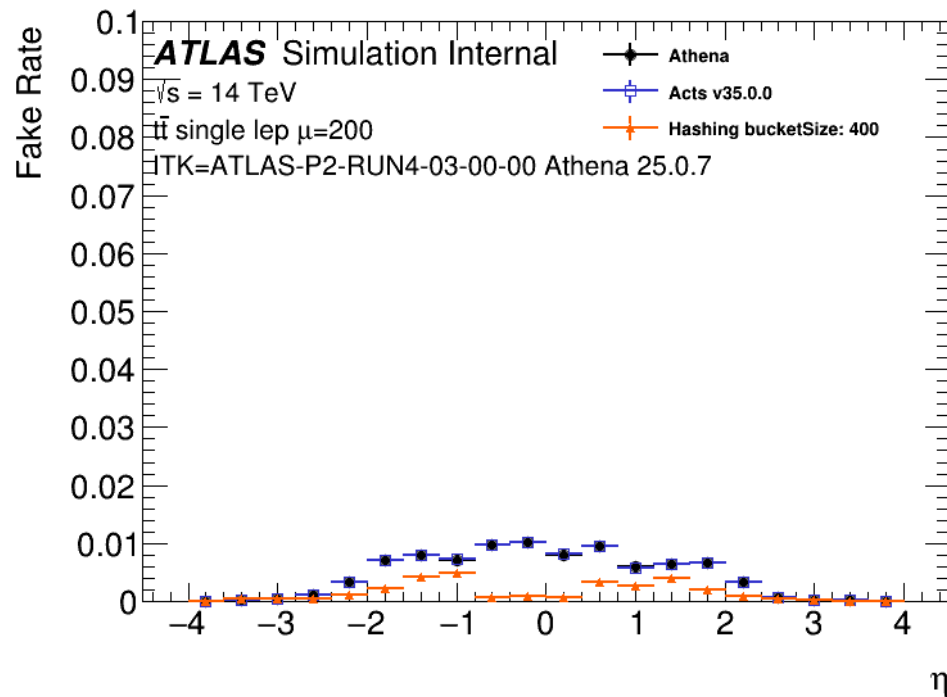
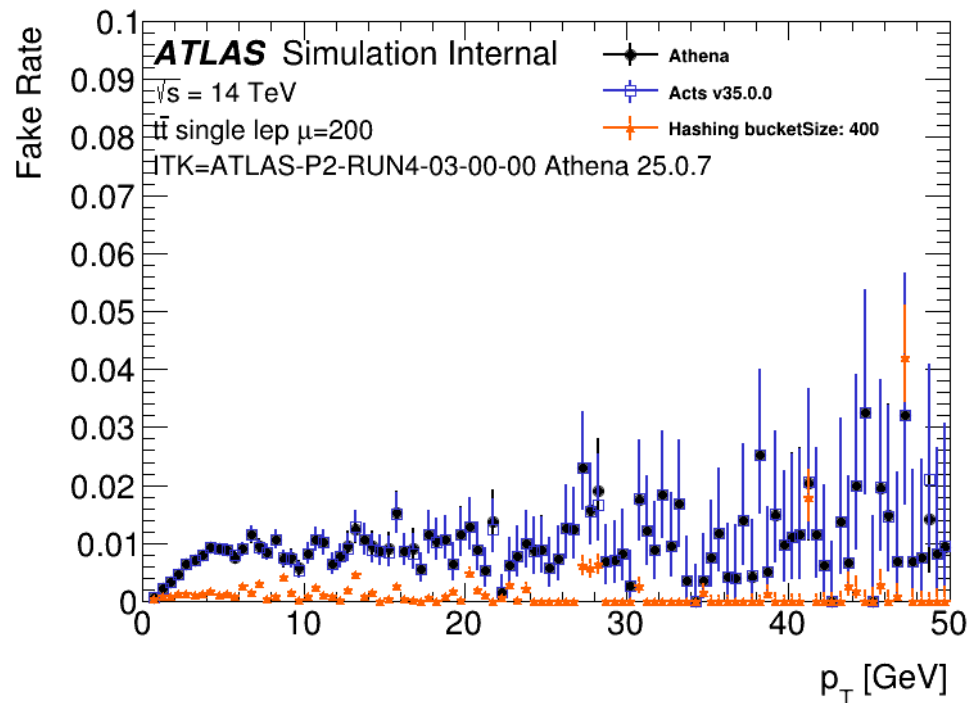
1000 events

Hashing $\mu = 200$



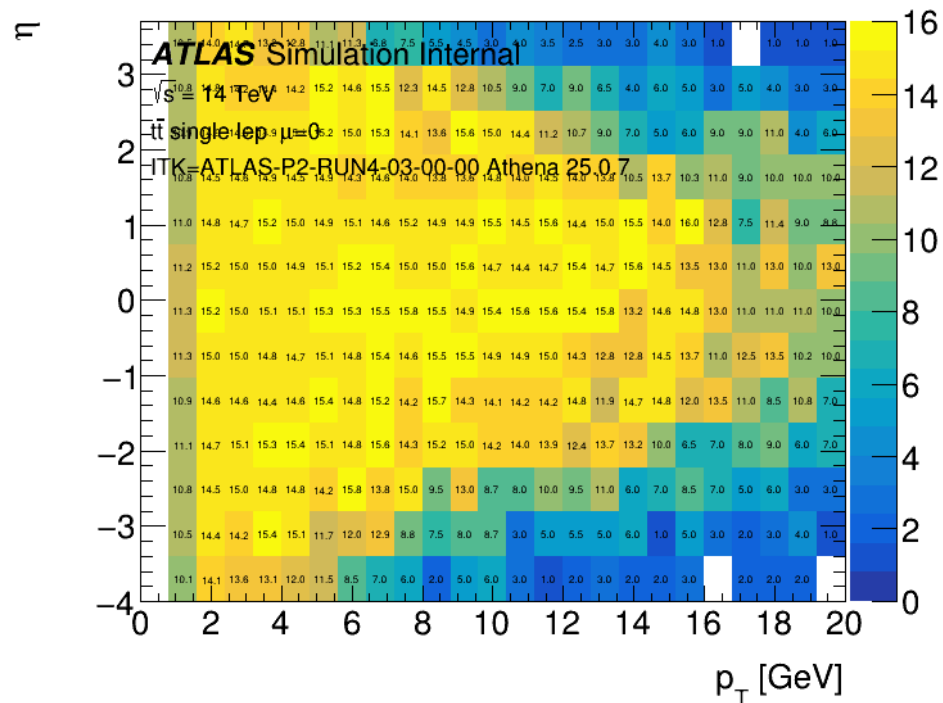
1000 events

Hashing $\mu = 200$

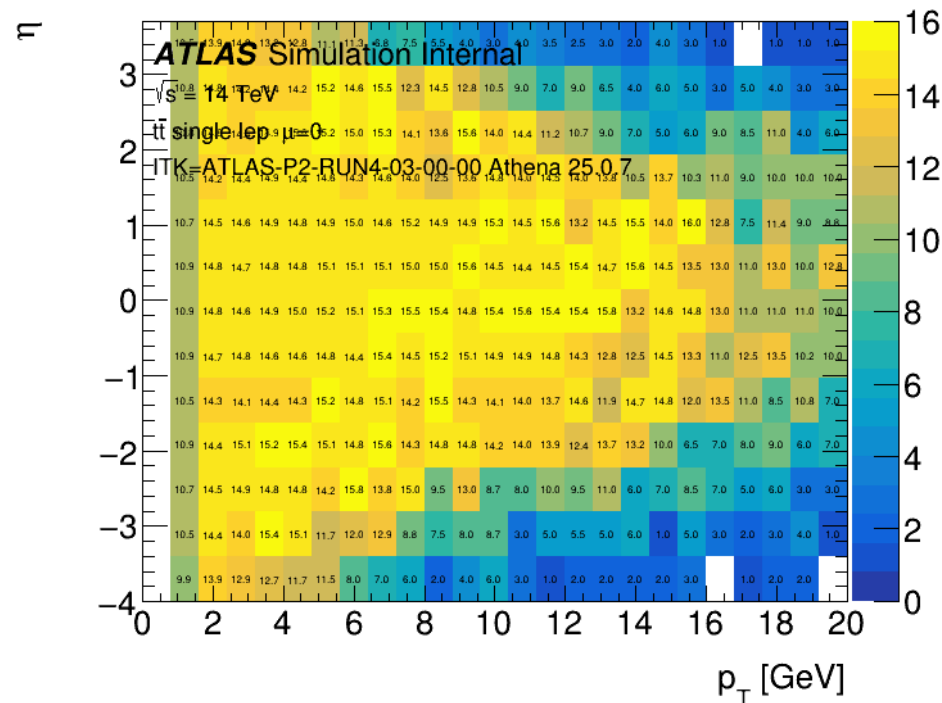


1000 events

Hashing $\mu = 0$

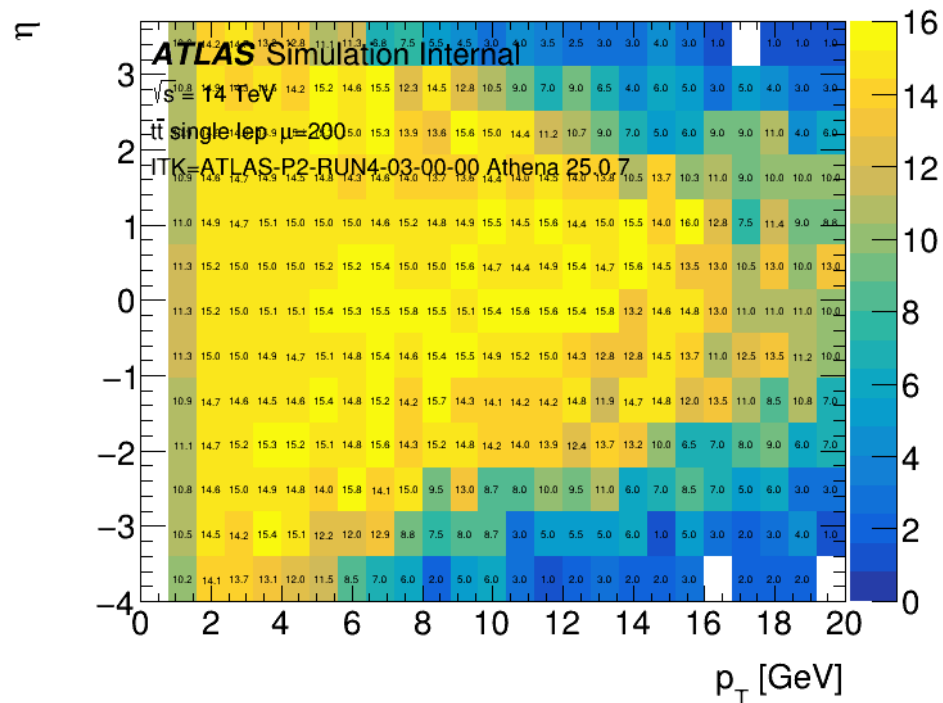


Acts

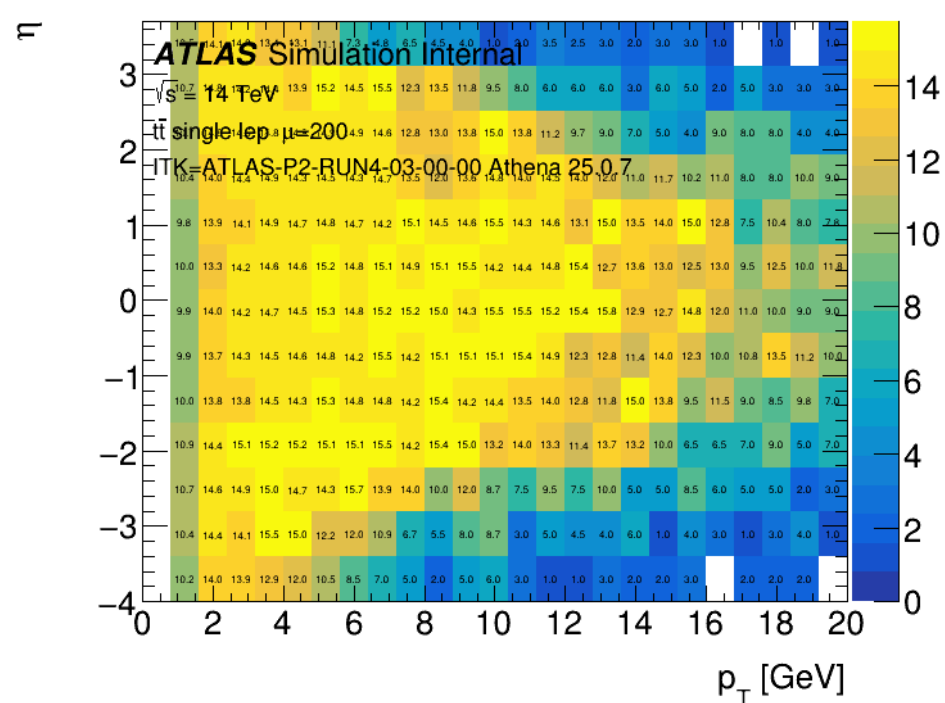


Hashing

Hashing $\mu = 200$

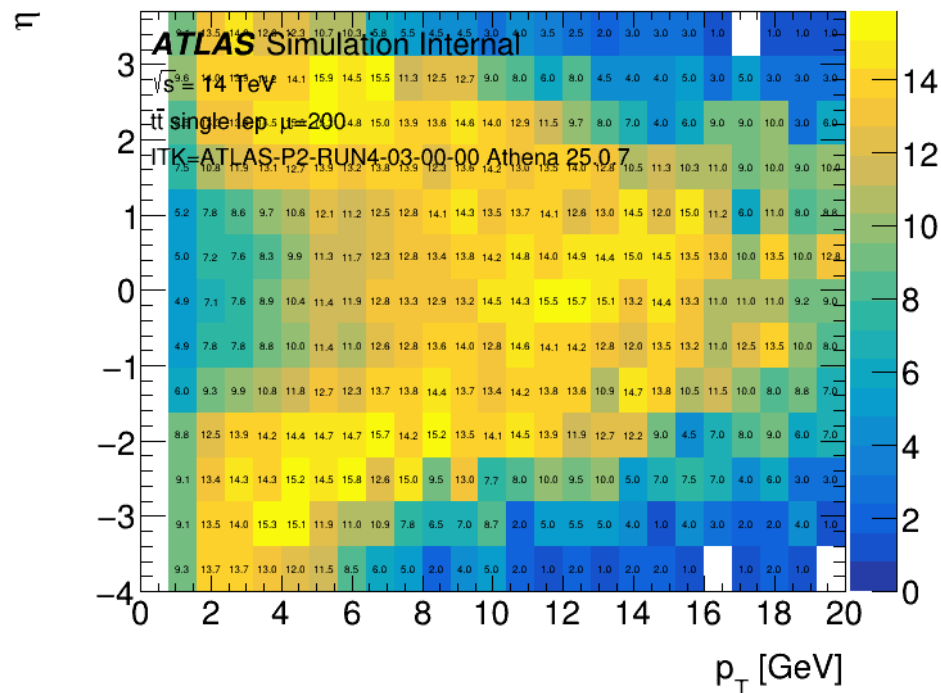


Acts

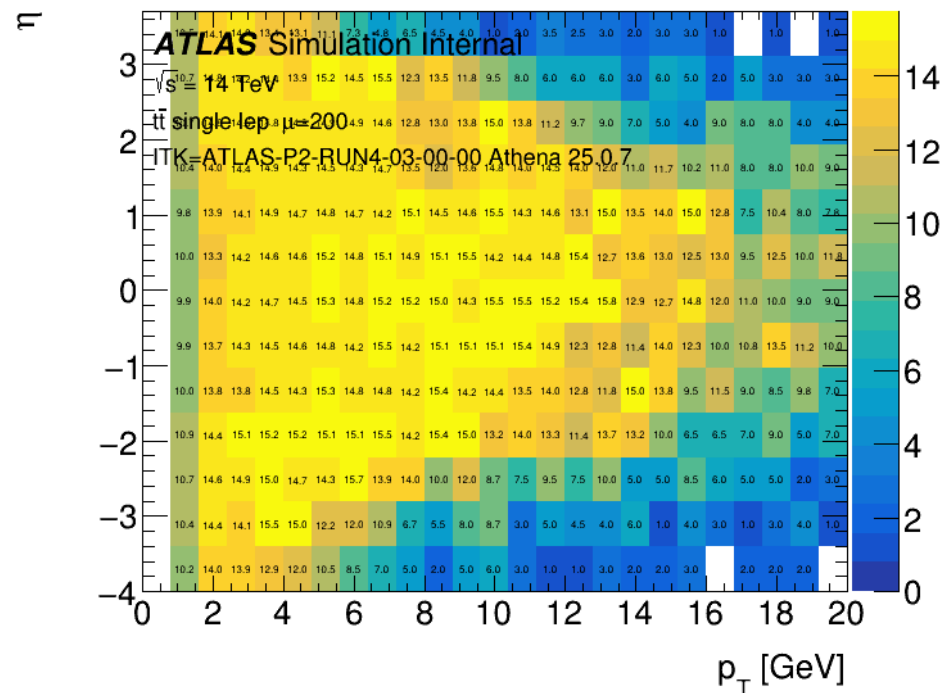


Hashing

Hashing $\mu = 200$

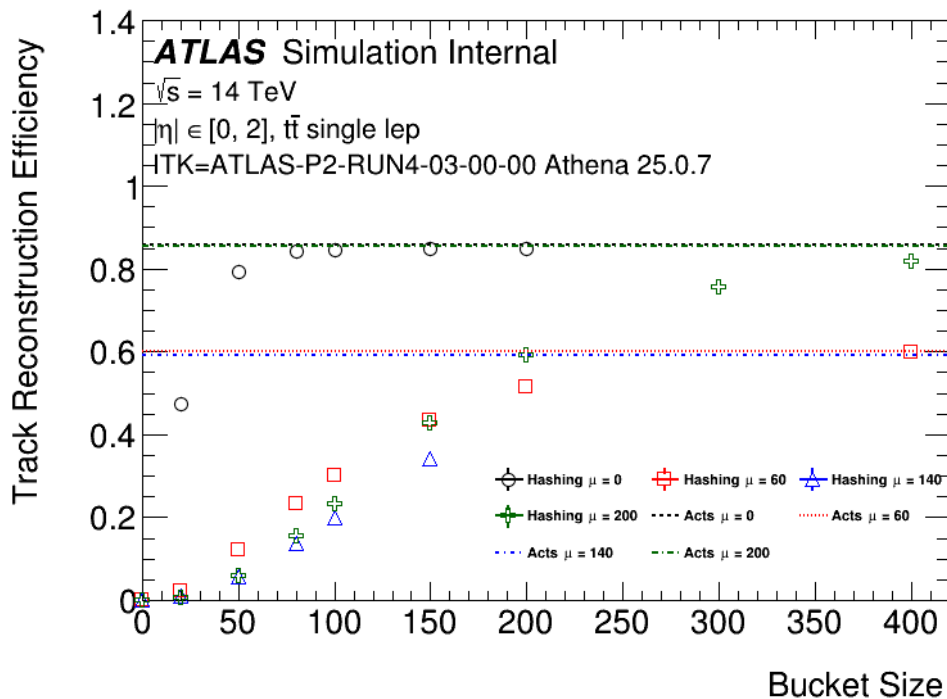
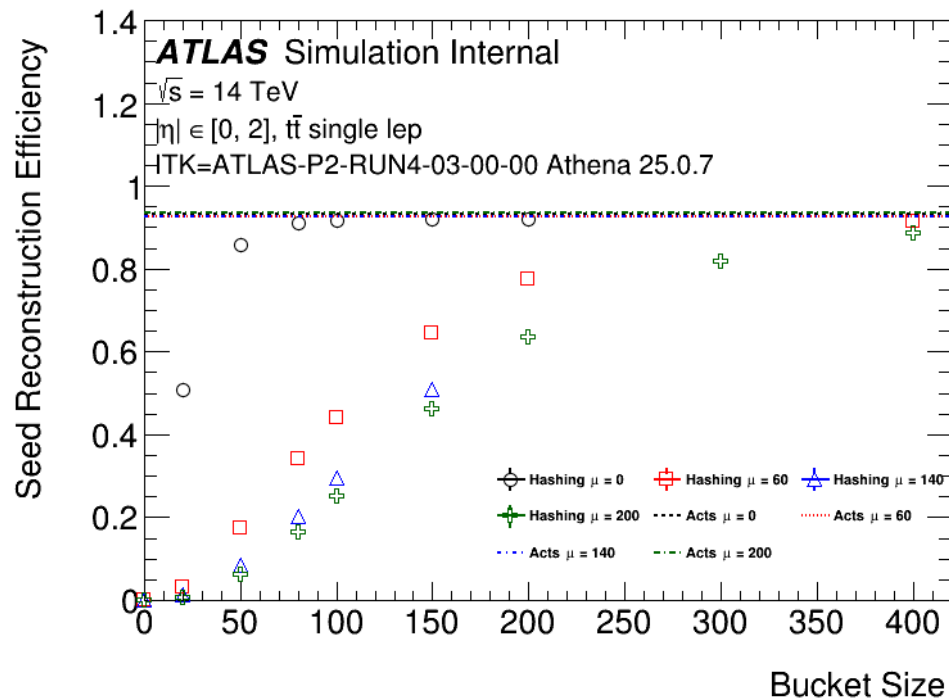


Bucket size 200

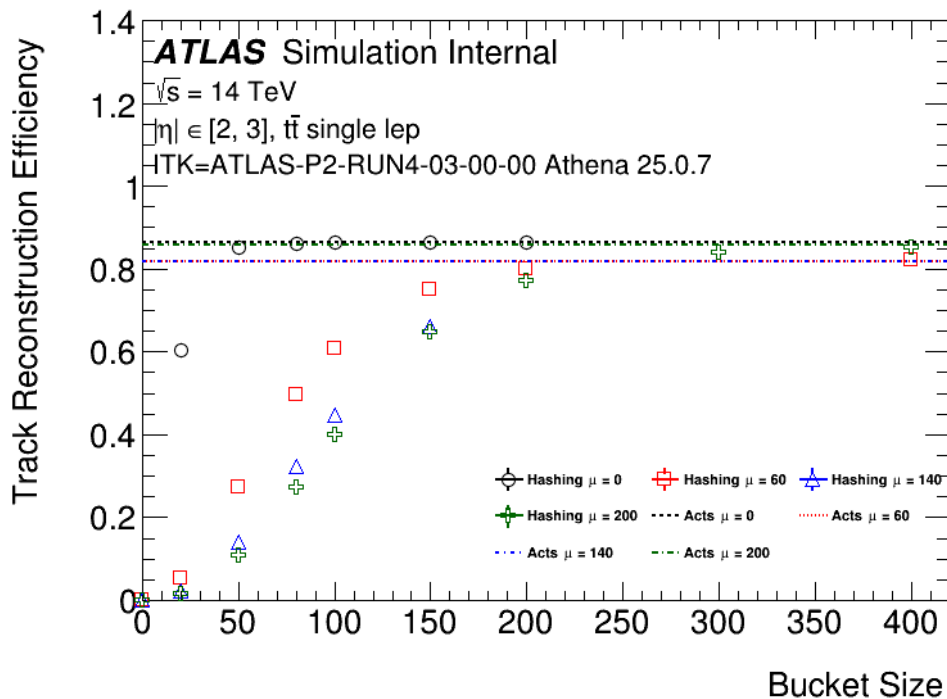
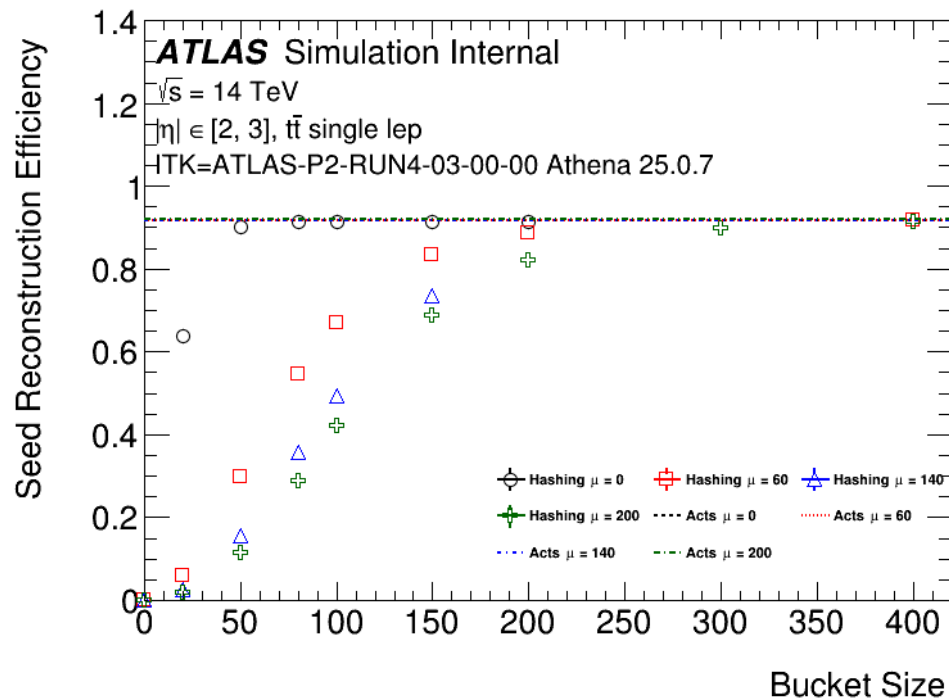


Bucket size 400

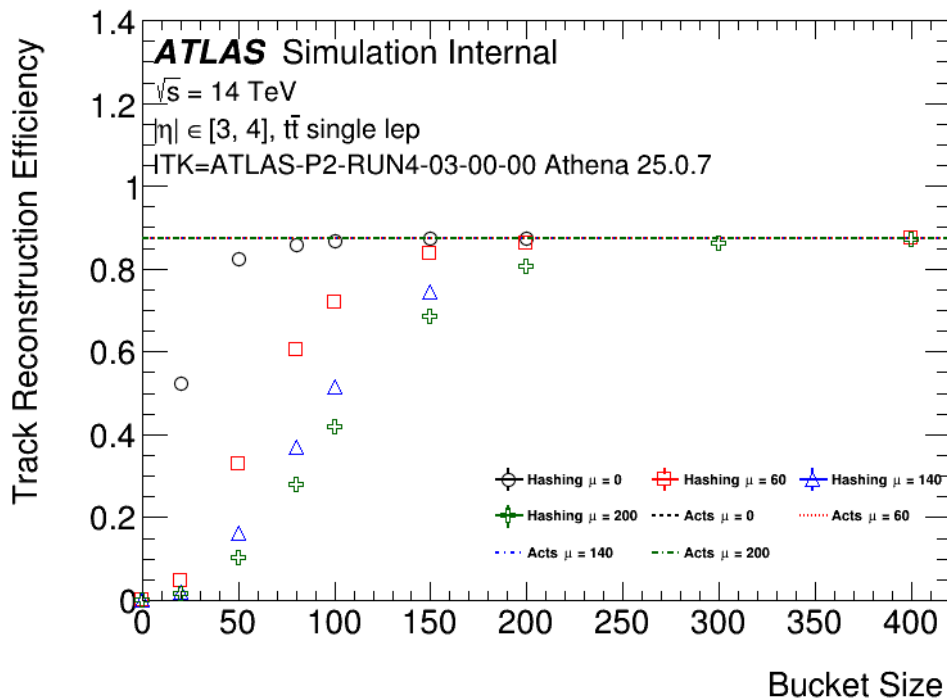
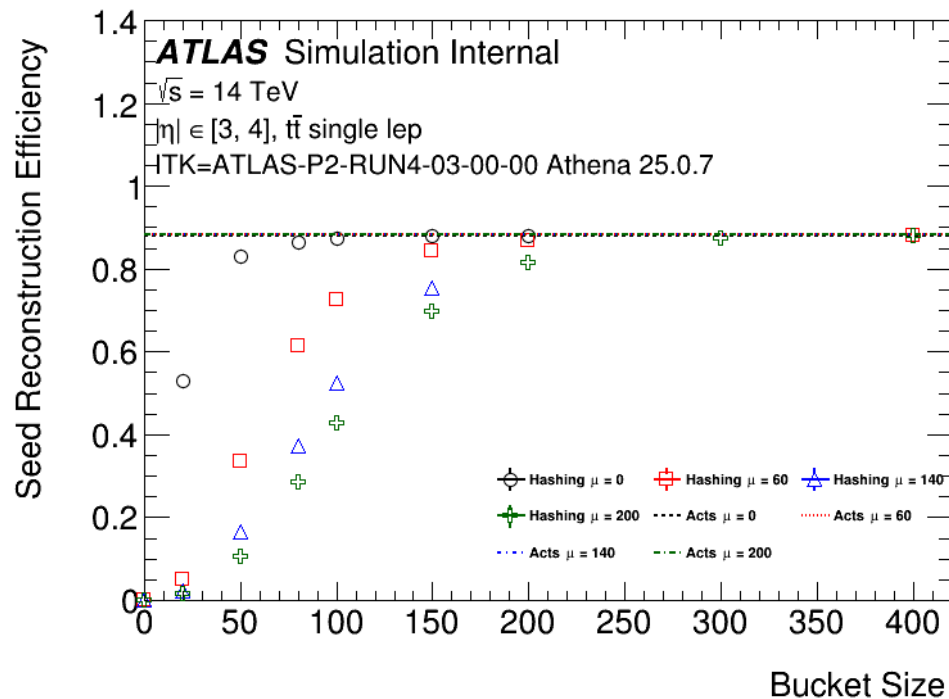
Bucket Size



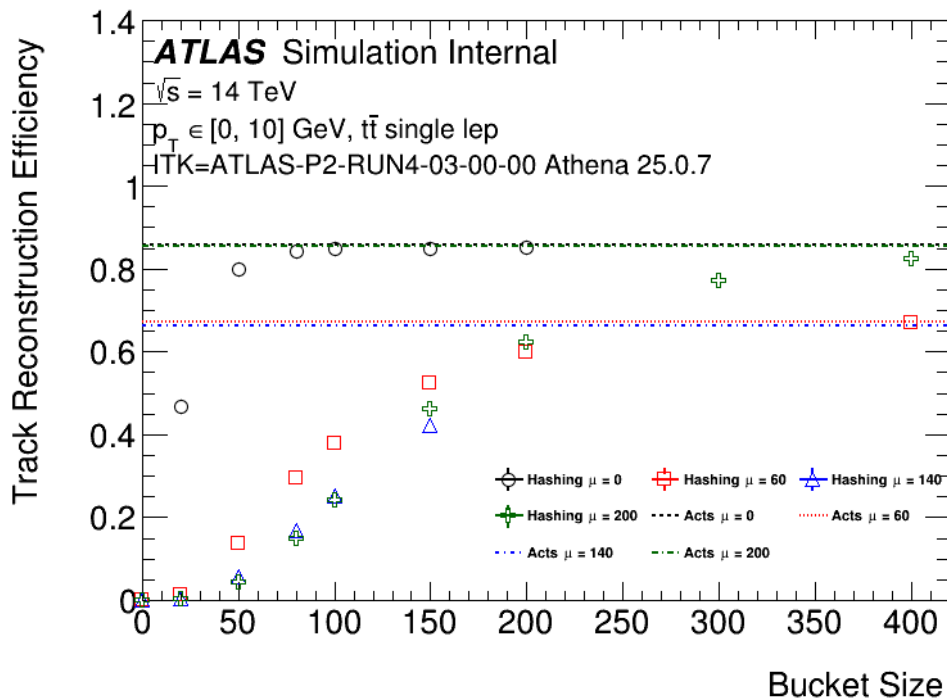
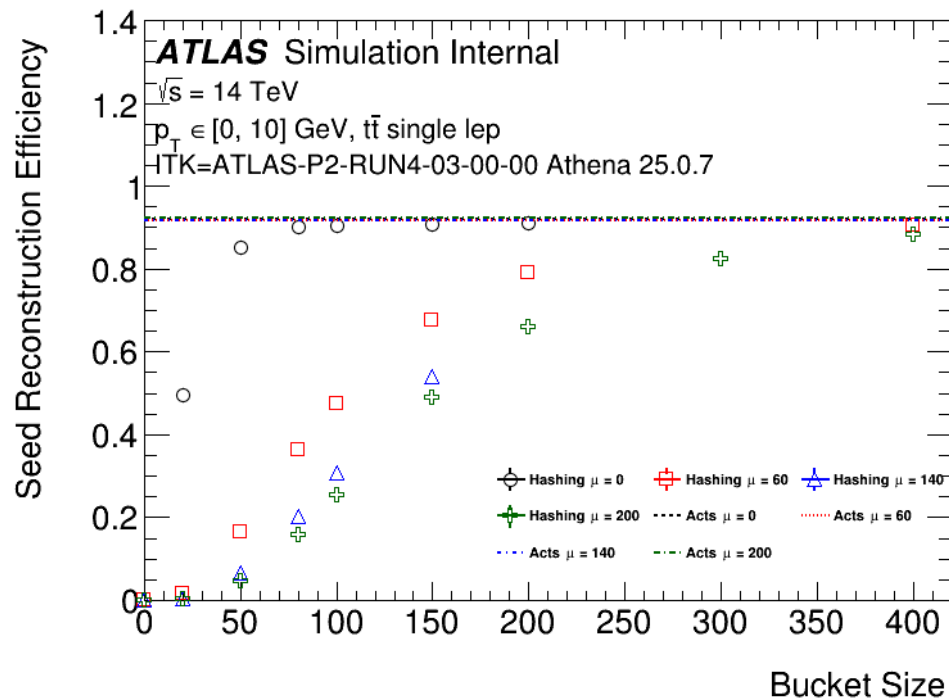
Bucket Size



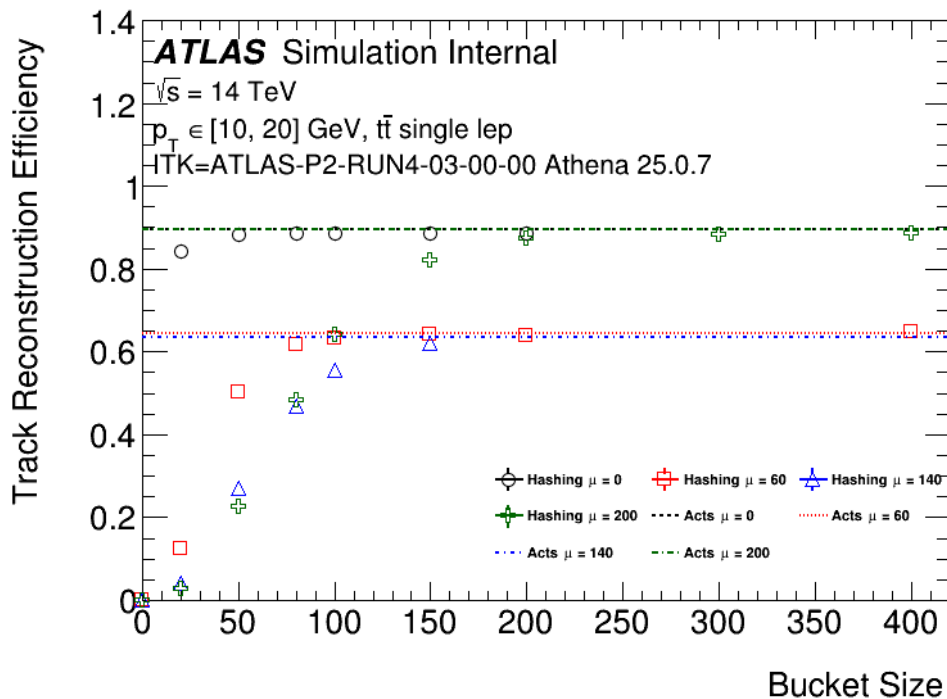
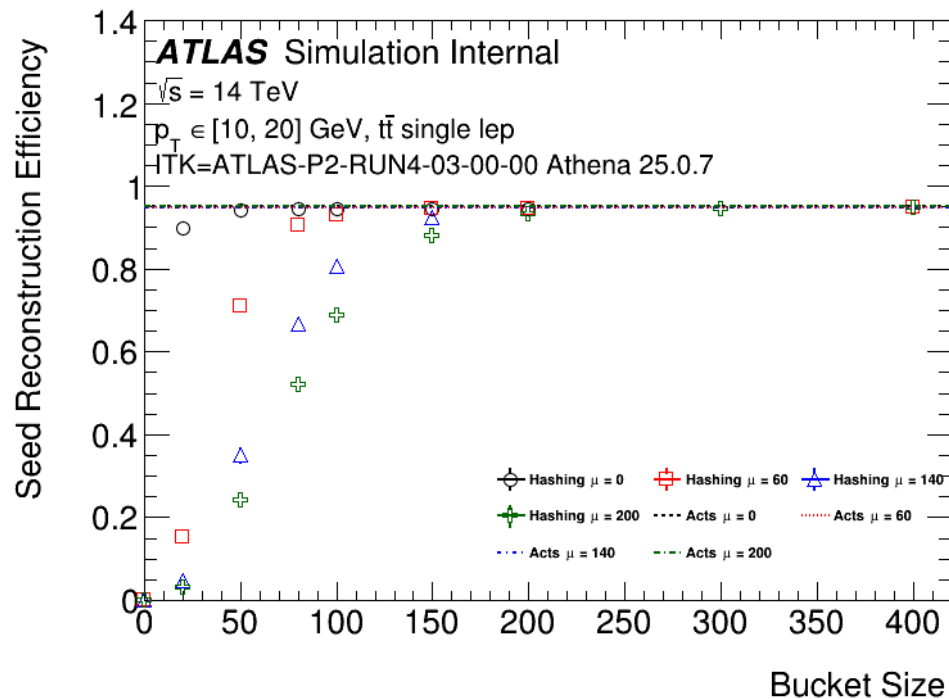
Bucket Size



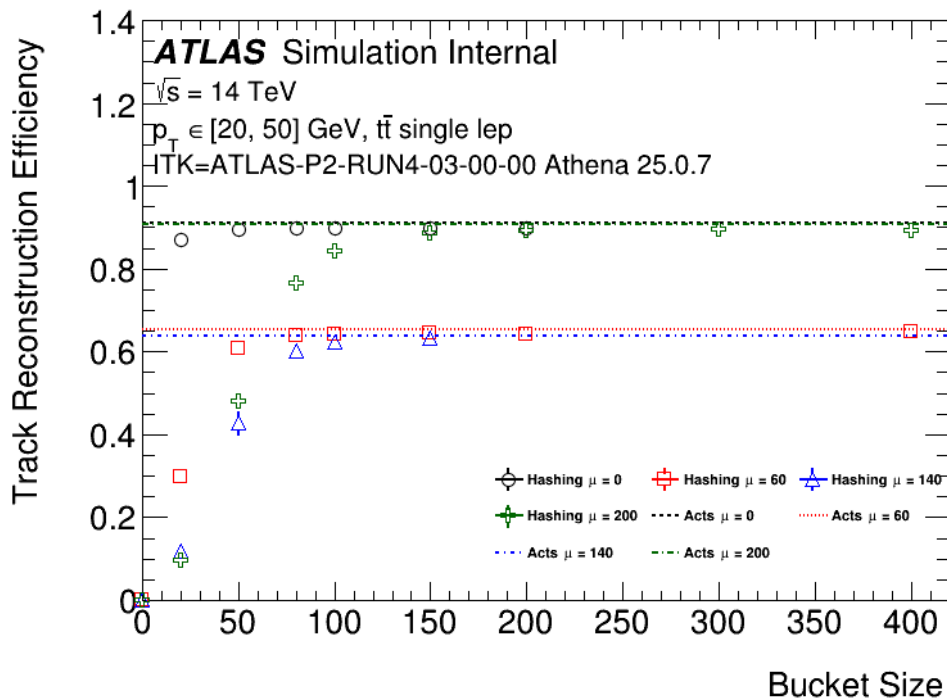
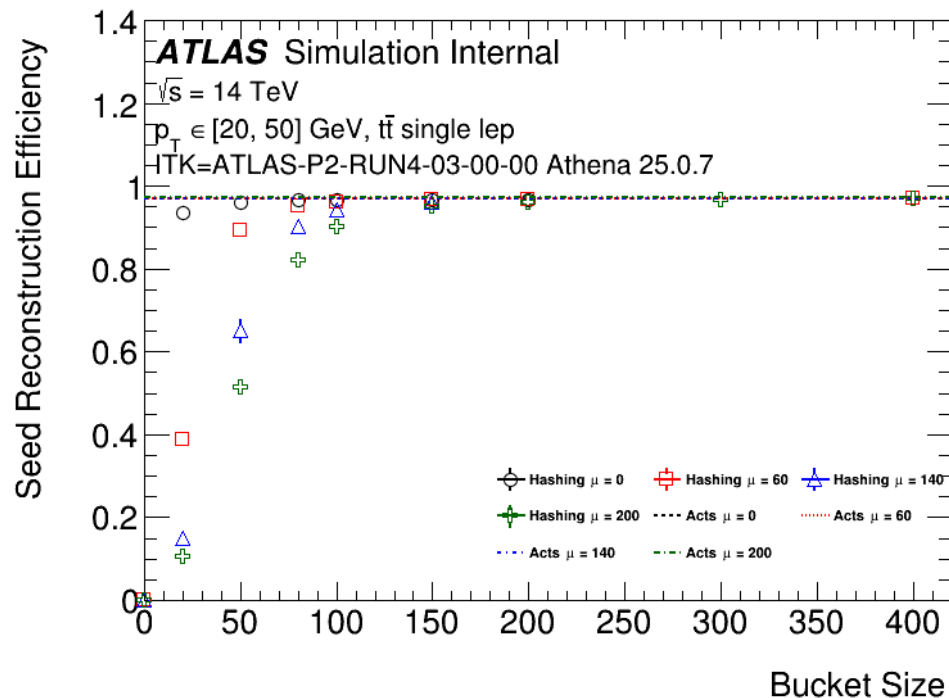
Bucket Size



Bucket Size



Bucket Size

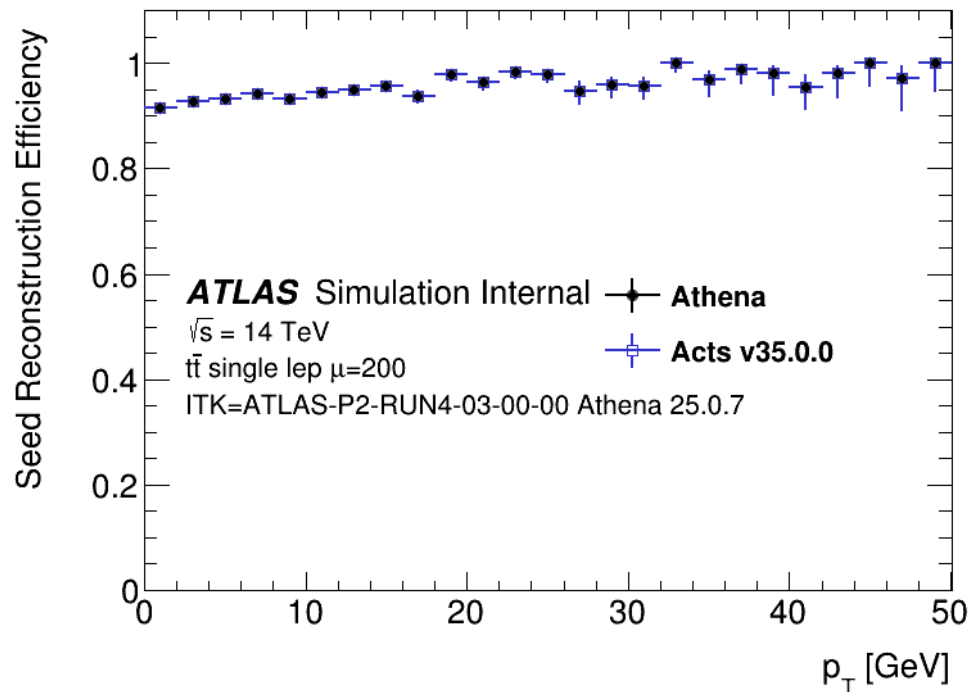


Next

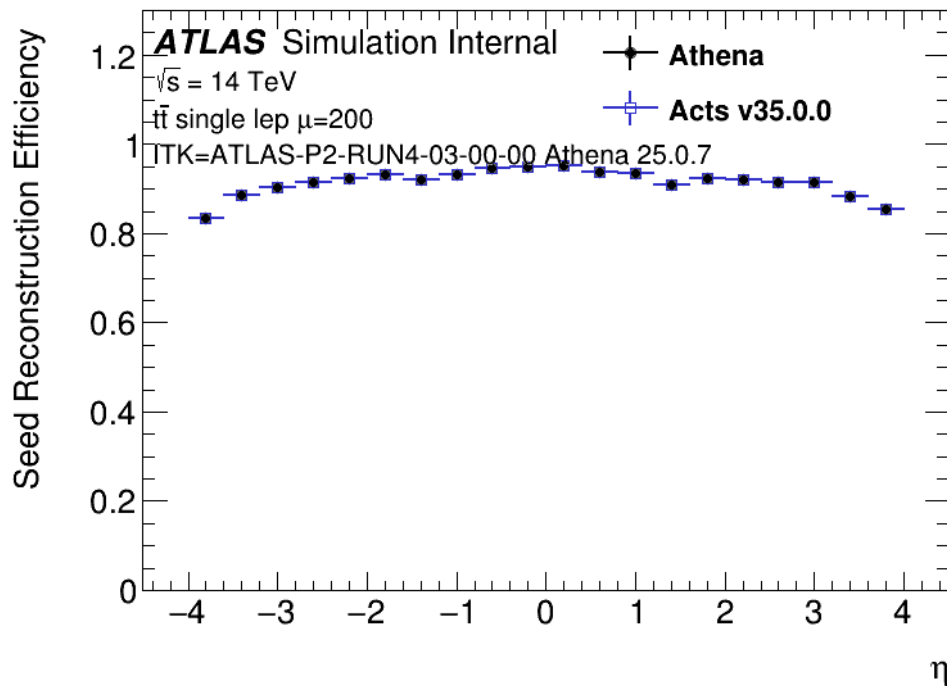
- 1) Get the data from GNN people (SP and truth) (Alexis) (**Dumped files**) (**Dumping code**)
- 2) Train NN (using **acorn**? It can already read the dumped files)

Backup

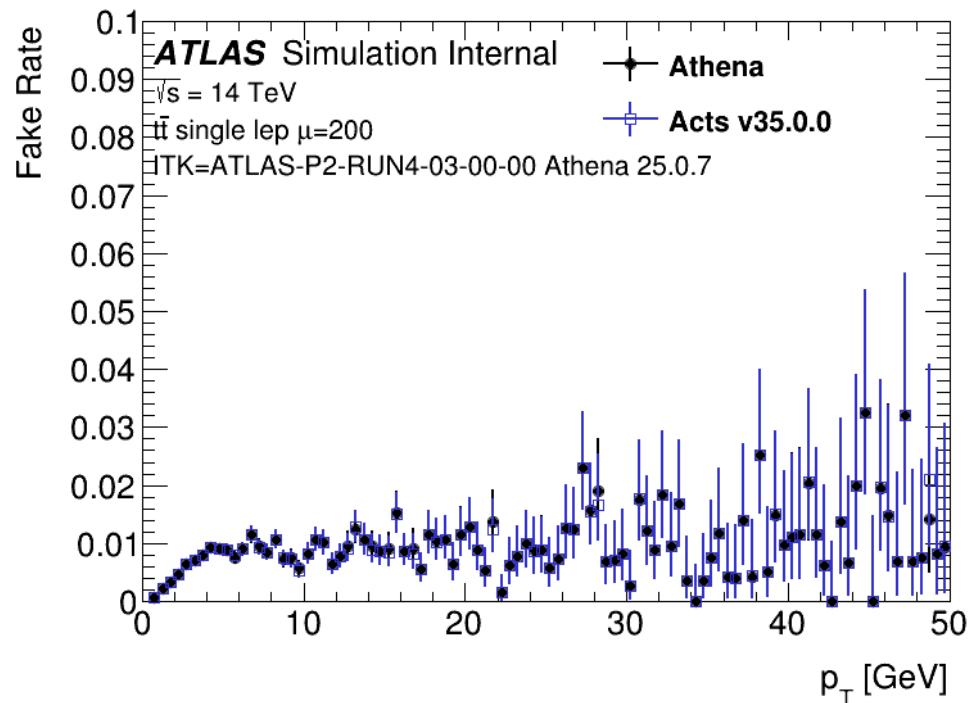
Setup validation: Efficiency $\mu=200$



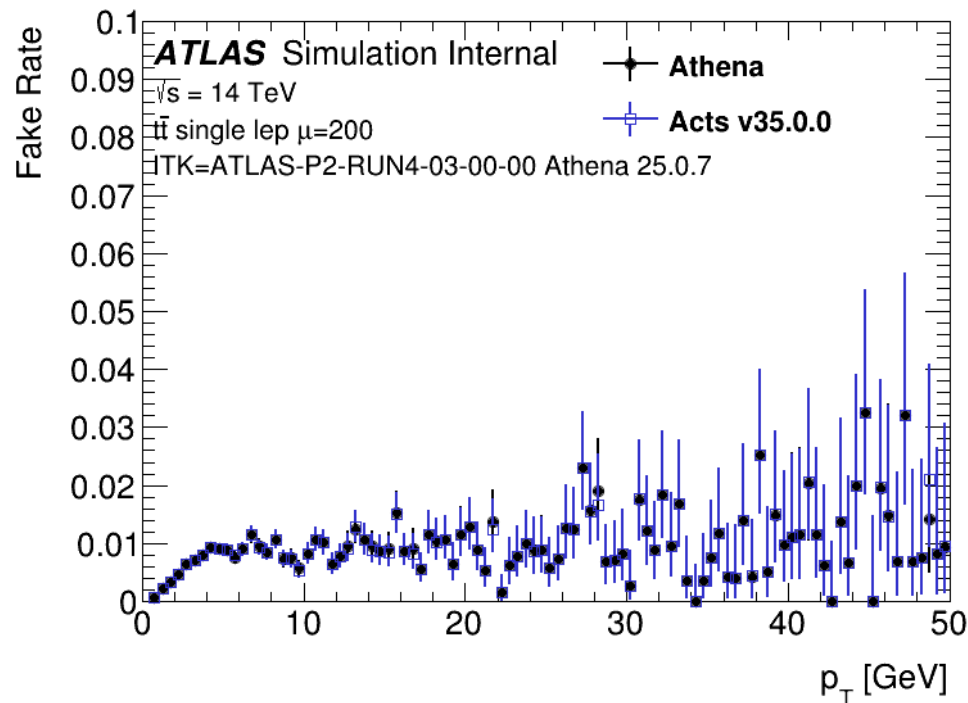
1000 events



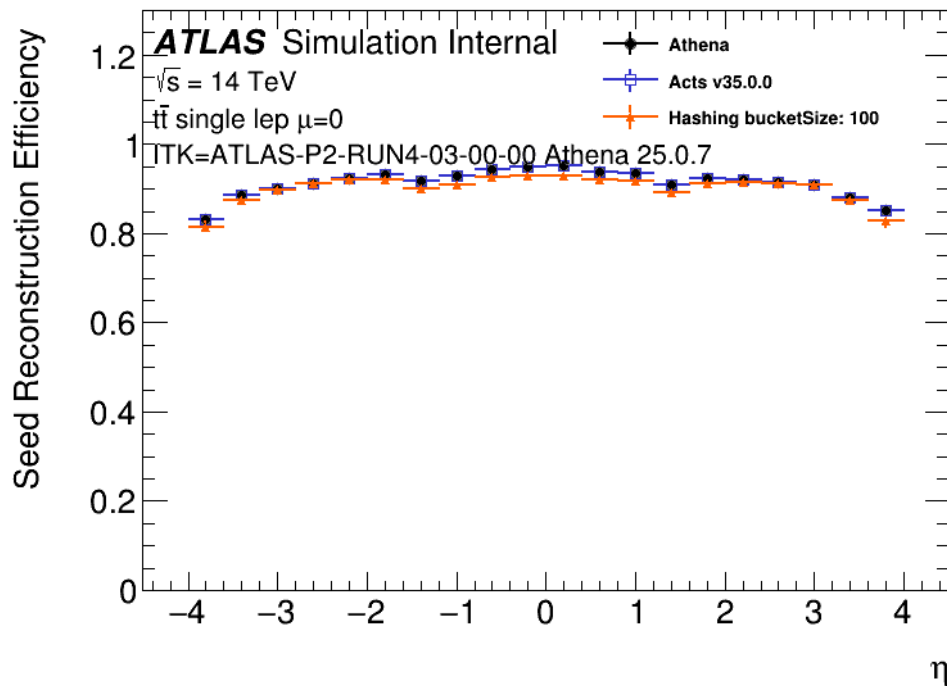
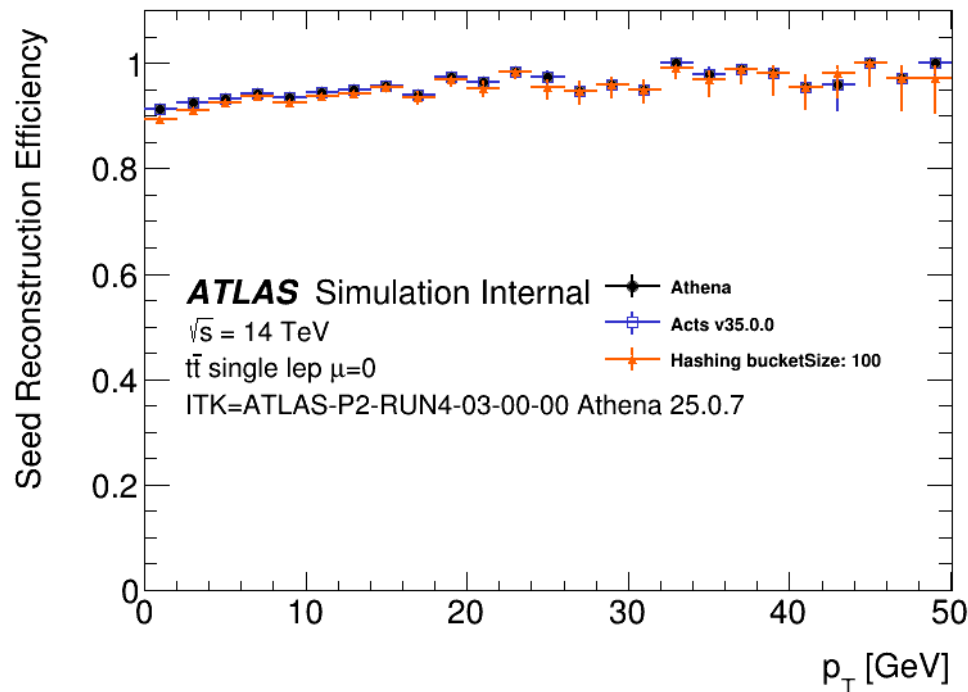
Setup validation: Fake Rate $\mu=200$



1000 events

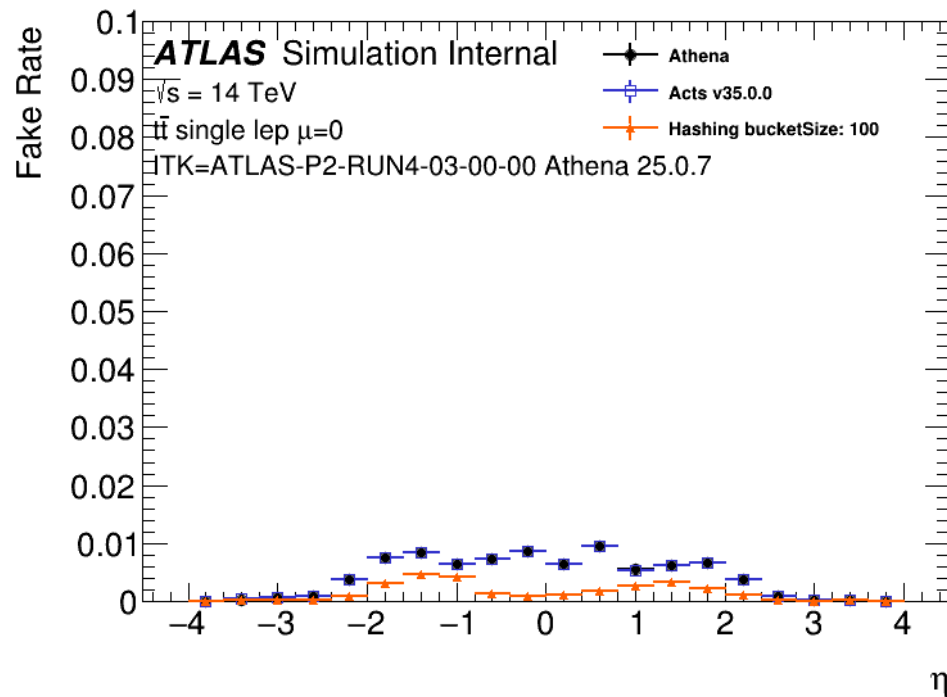
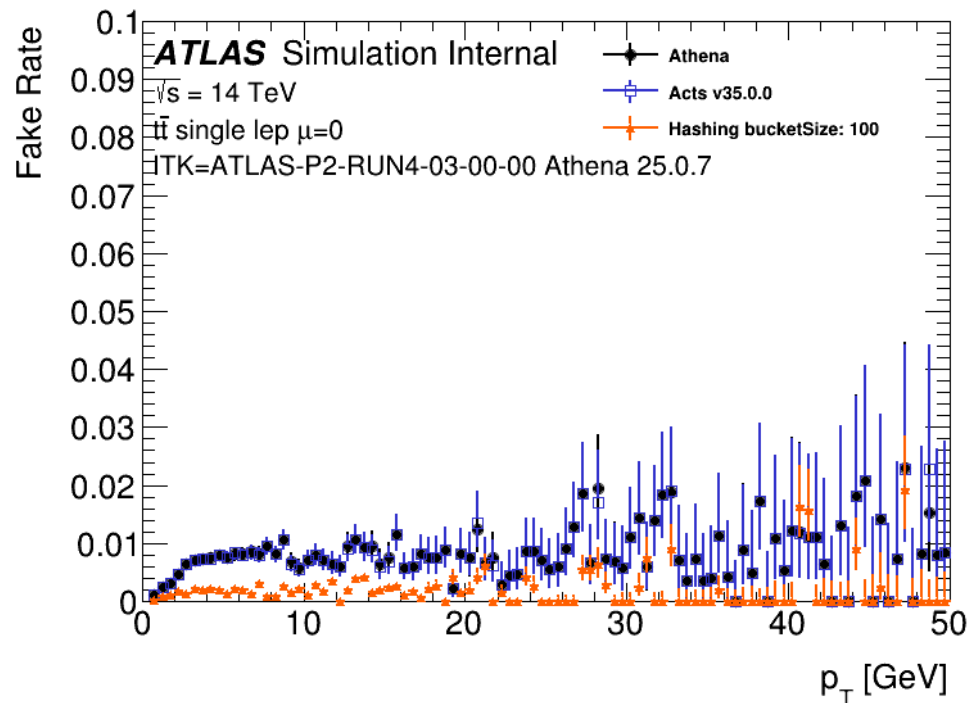


Hashing $\mu = 0$



1000 events

Hashing $\mu = 0$



1000 events

Acorn metric learning

