

Clusters in Analysis Ecce

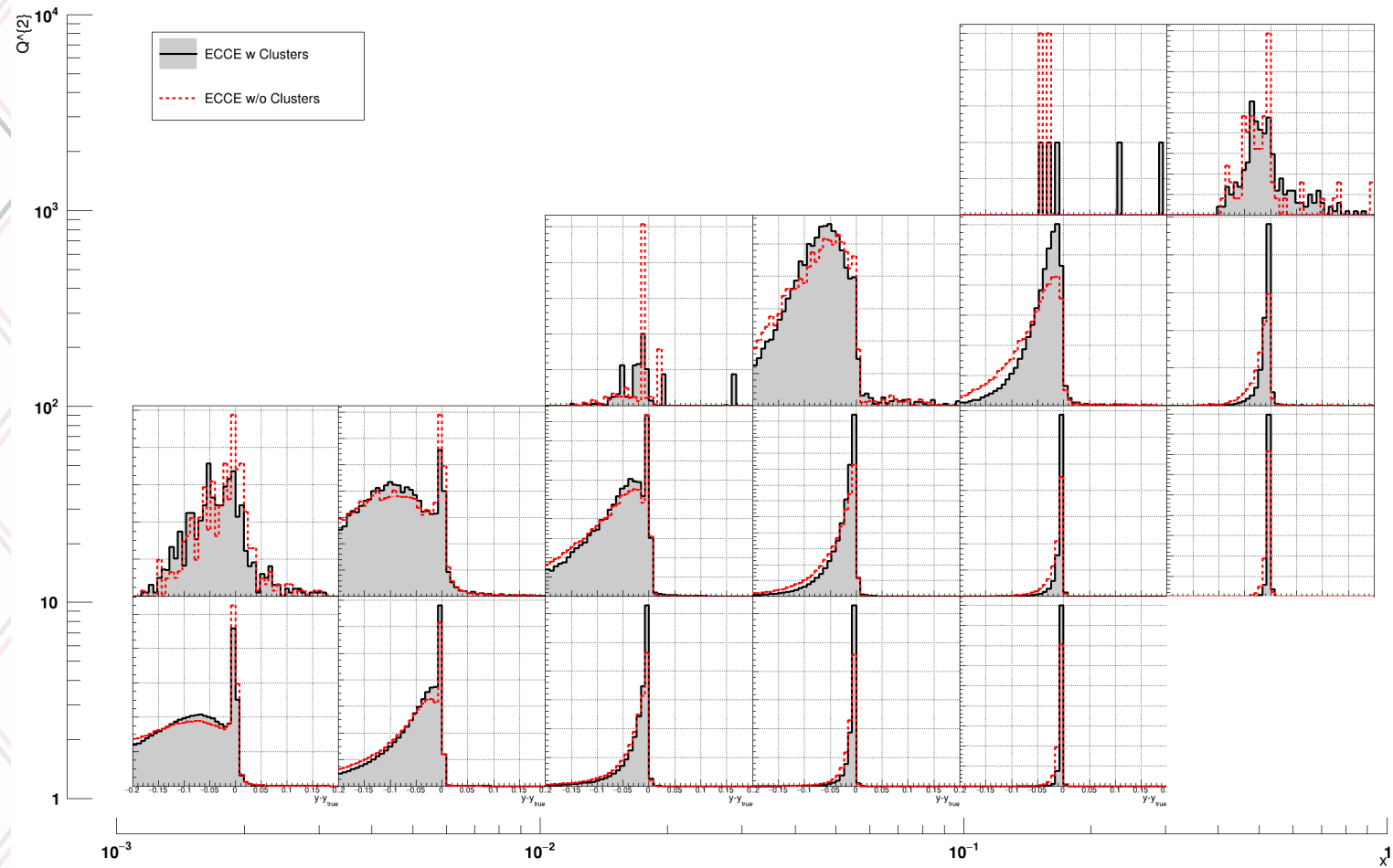
SIDIS PWG meeting
December 20, 2022,
Ralf Seidl (RIKEN)

Fixing AnalysisEcce for clusters

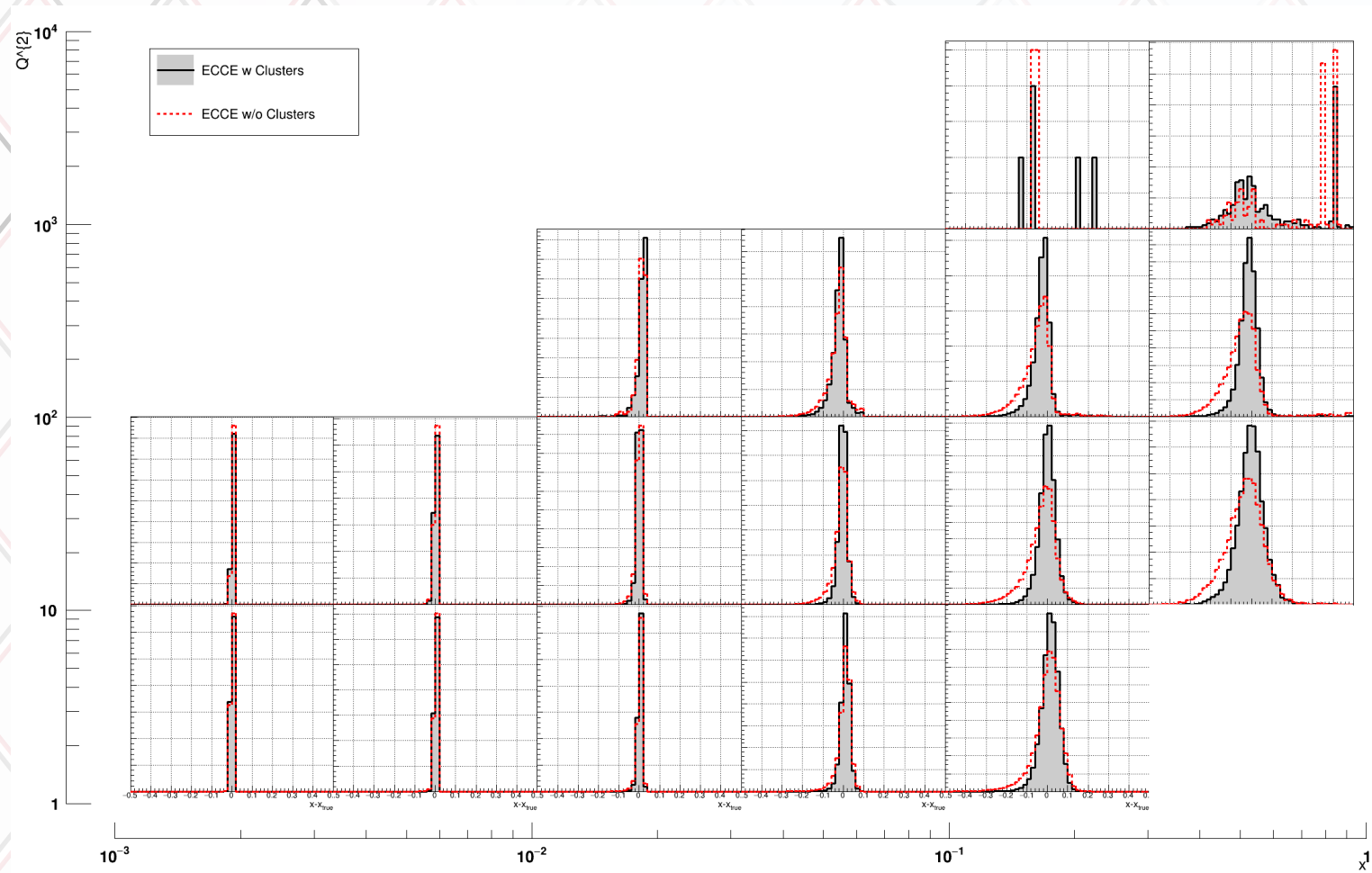
- Problem: hadronic methods seemed to be off for AnalysisEcce (Issue #187 in sidis-eic)
- Reason: In initial commit only the track information was used, clusters were not looked at (relevant for neutral particles in hadronic final state)
- Clusters now added for the hadronic final state, using true particle association (non-charged particles, e.g. Photons, K_L , neutrons), in the future use alternatively track projections to reject charged particles
- Clusters or neutral particles not added to final-state particle list (i.e. no π^0 final state available)

JB γ resolution

Note: This uses privately produced EventEvaluator
Output of previous fun4all simulation DSTs as
default Output (also) misses clusters



JB x resolution



Summary

- Cluster are addressed now in AnalysisECCE

TODO:

- might be useful to create relative resolution plots instead of absolute (especially for smaller x values, etc)
- Next try to look at cluster inclusion in AnalysisEpic (if not addressed already)