

Status of SIDIS

**SIDIS working group meeting
September 7**

Ralf Seidl (RIKEN)

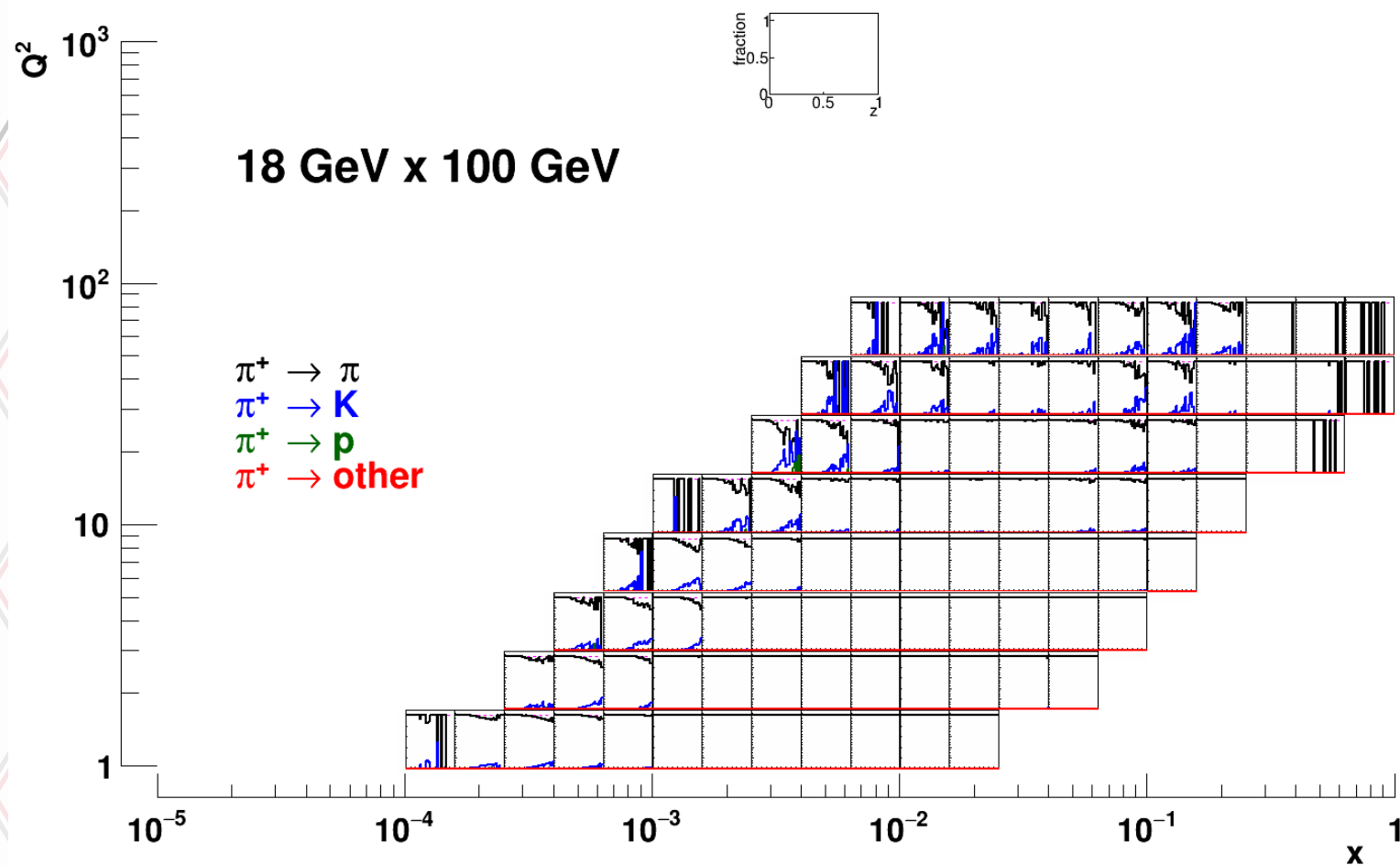
Prop4 production

- First files of the prop4 production become available. Output at usual directory prop2→prop4
So far:
 - ep18x100_lowq2 (not complete yet)
 - ep18x275 (not complete yet)
- Sidispico module adjusted following EventEvaluator changes (and detector changes):
 - CEMC → BEMC (still called CEMC in pico output)
 - FHCAL → LFHCAL (still called LFHCAL in pico output)
 - EEMC → EEMC (hybrid, but transparent, it seems)
 - Pion, kaon and proton loglikelihood sums over DIRC, mRHIC, and both dRHICes, TOF not yet available

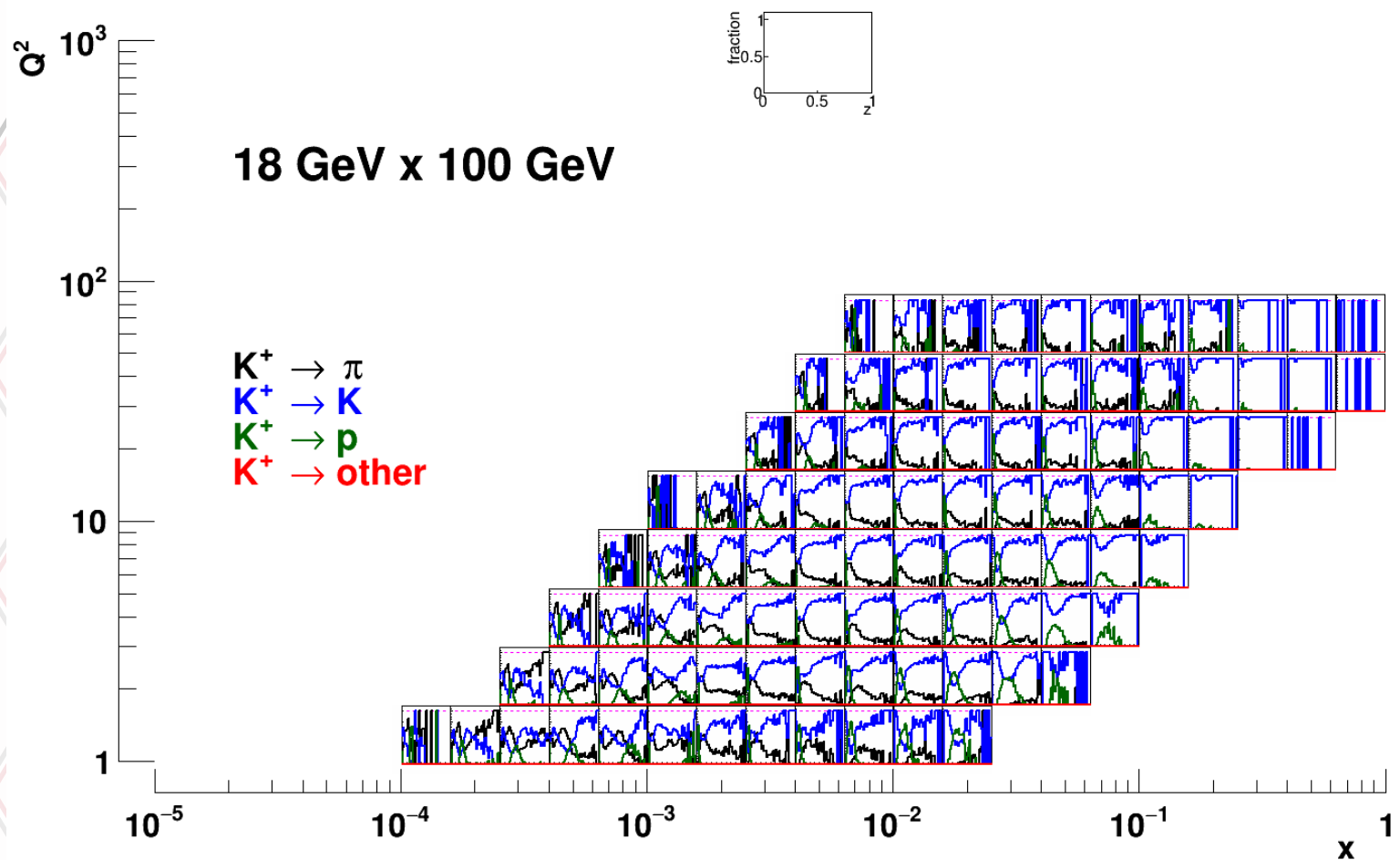
PID tests

- Currently:
- Pions: $p_{ll} - k_{ll} > 0.1$ && $p_{ll} - p_{rl} > 0.1$
- Kaons: $p_{ll} - k_{ll} < 0.1$ && $k_{ll} - p_{rl} > 0.1$
- Protons: $p_{rl} - p_{ll} > 0.1$ && $k_{ll} - p_{rl} < 0.1$
- Option to not misid particles with momenta < 2 GeV to see impact of TOF info

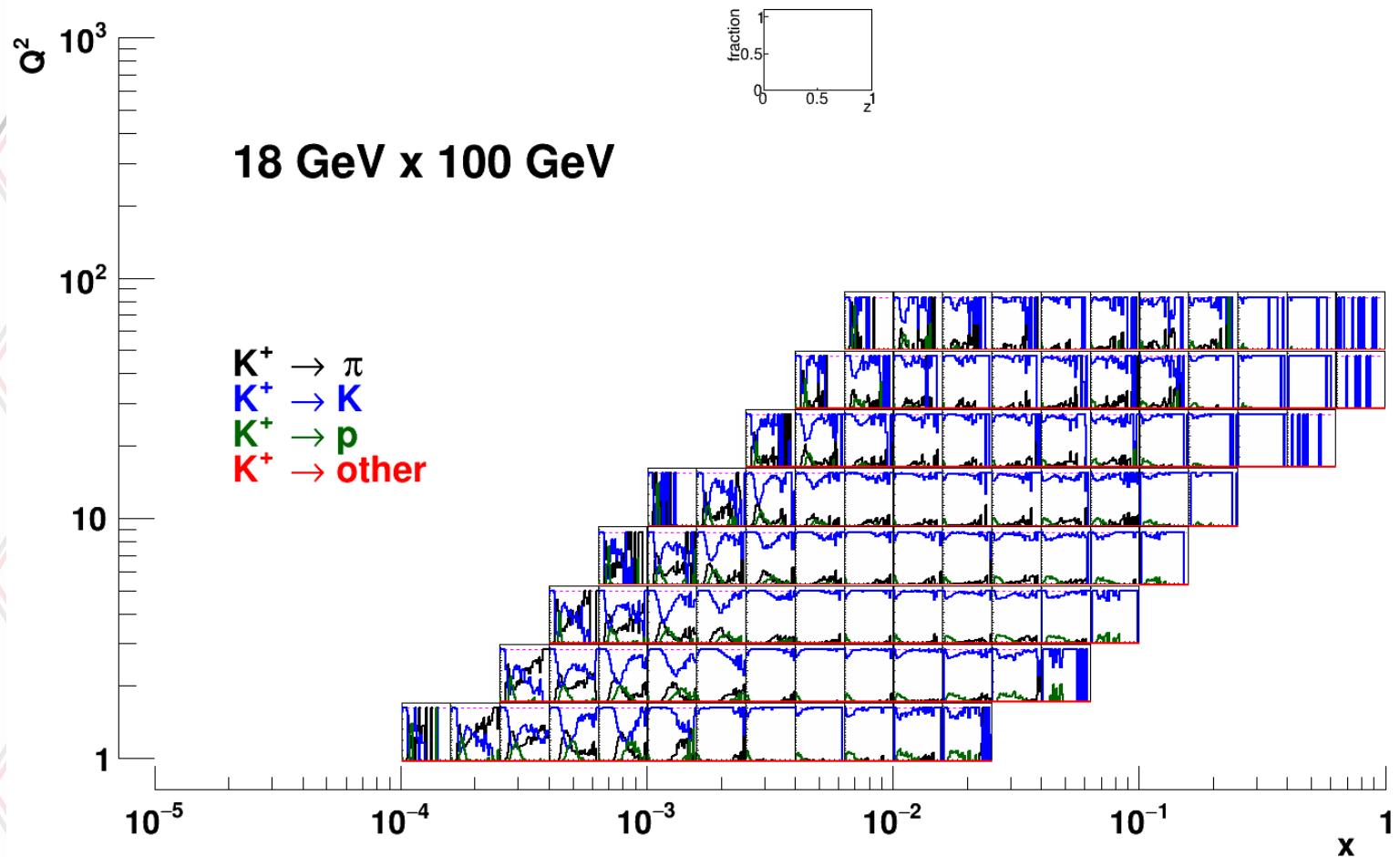
Pion efficiencies



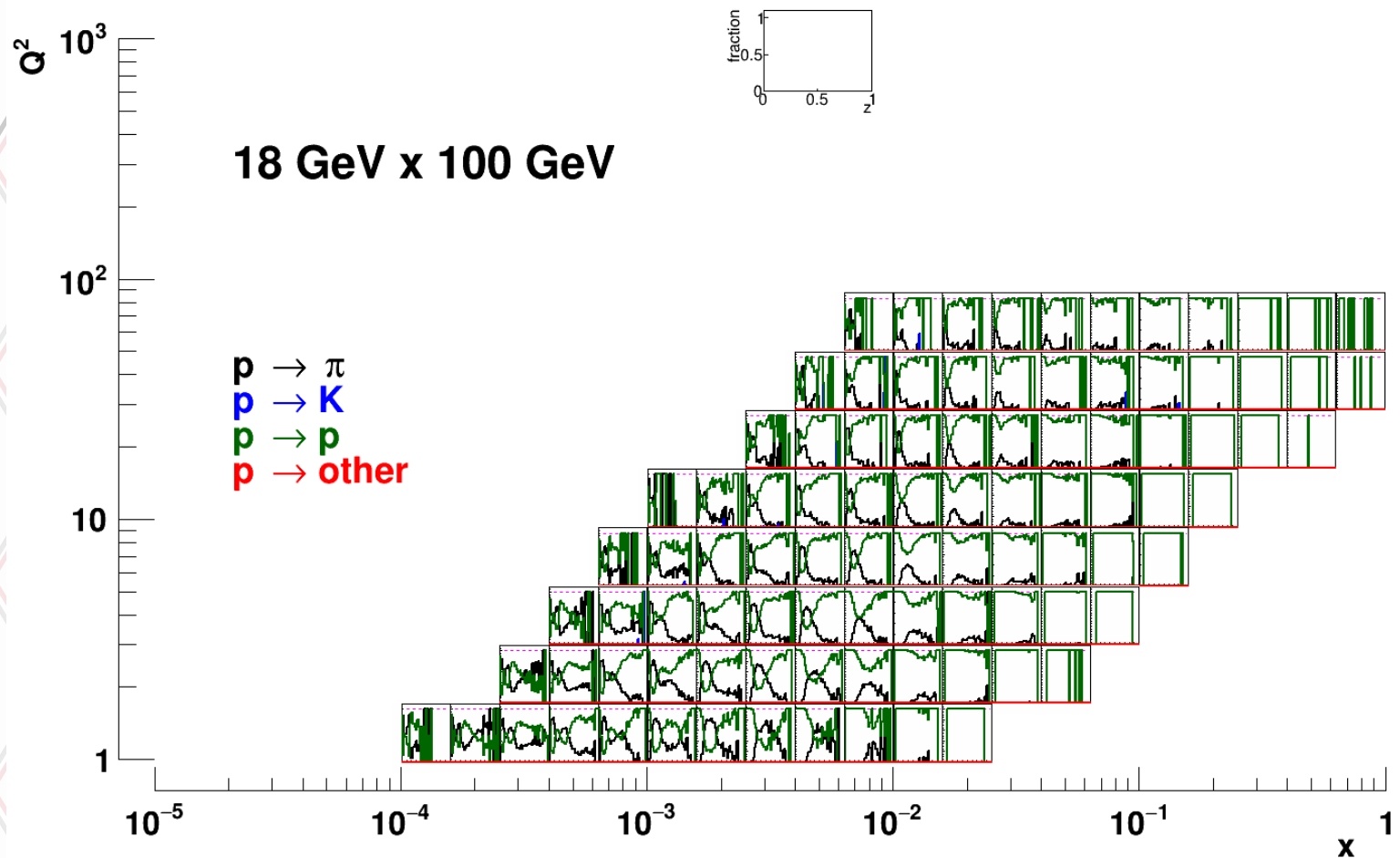
Kaon Efficiencies



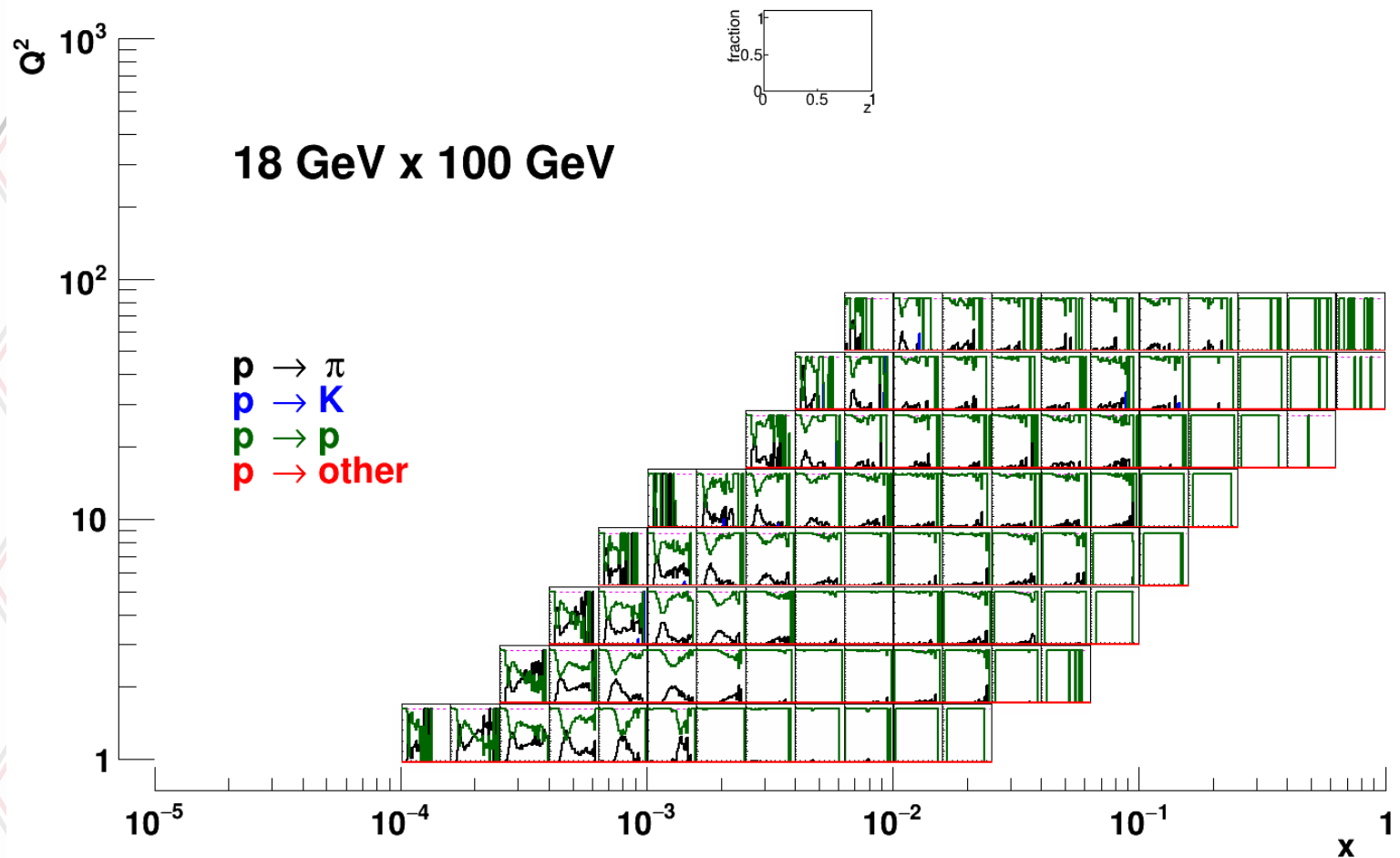
Kaon efficiencies, $p < 2$ correctly assigned



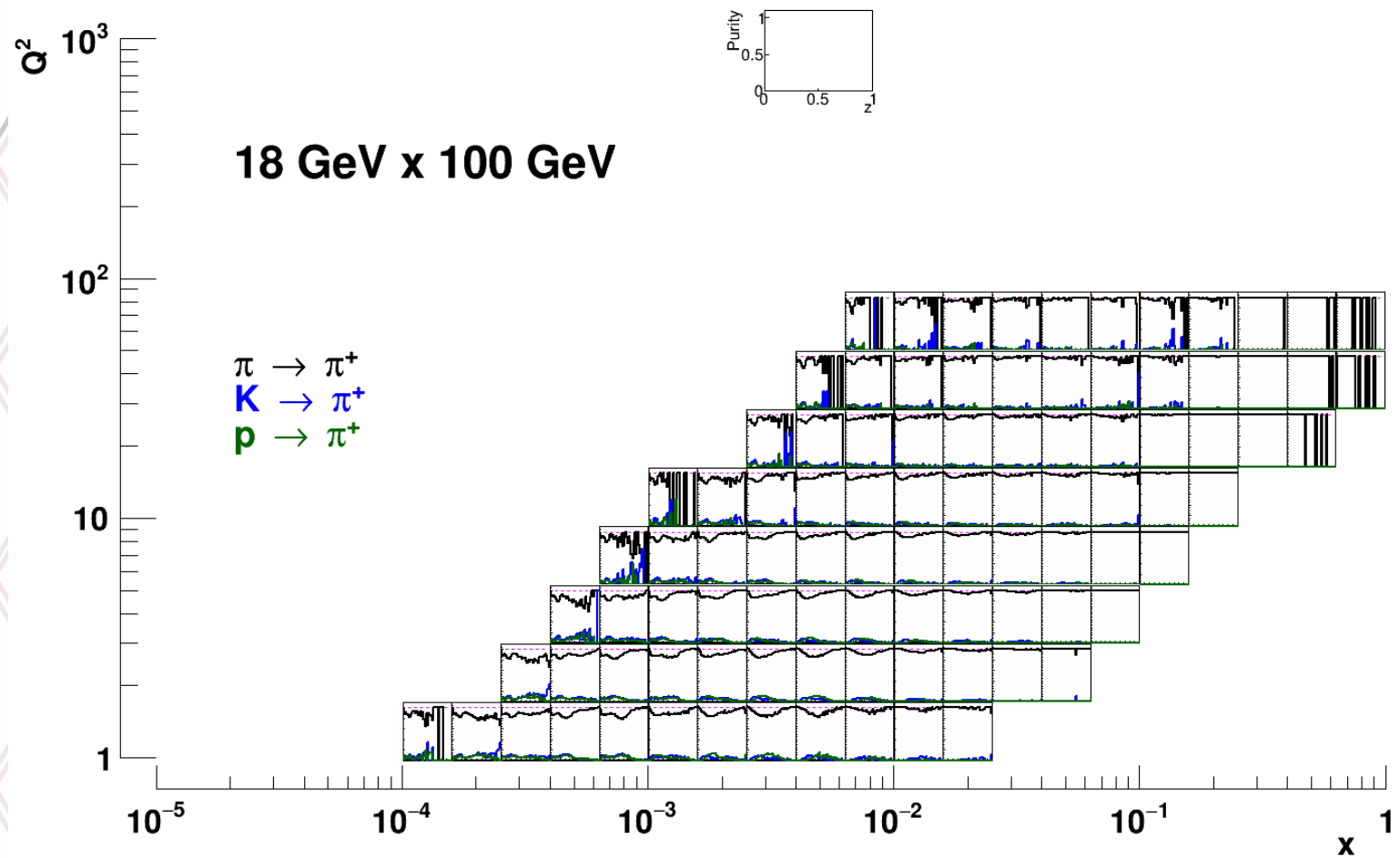
Proton efficiencies



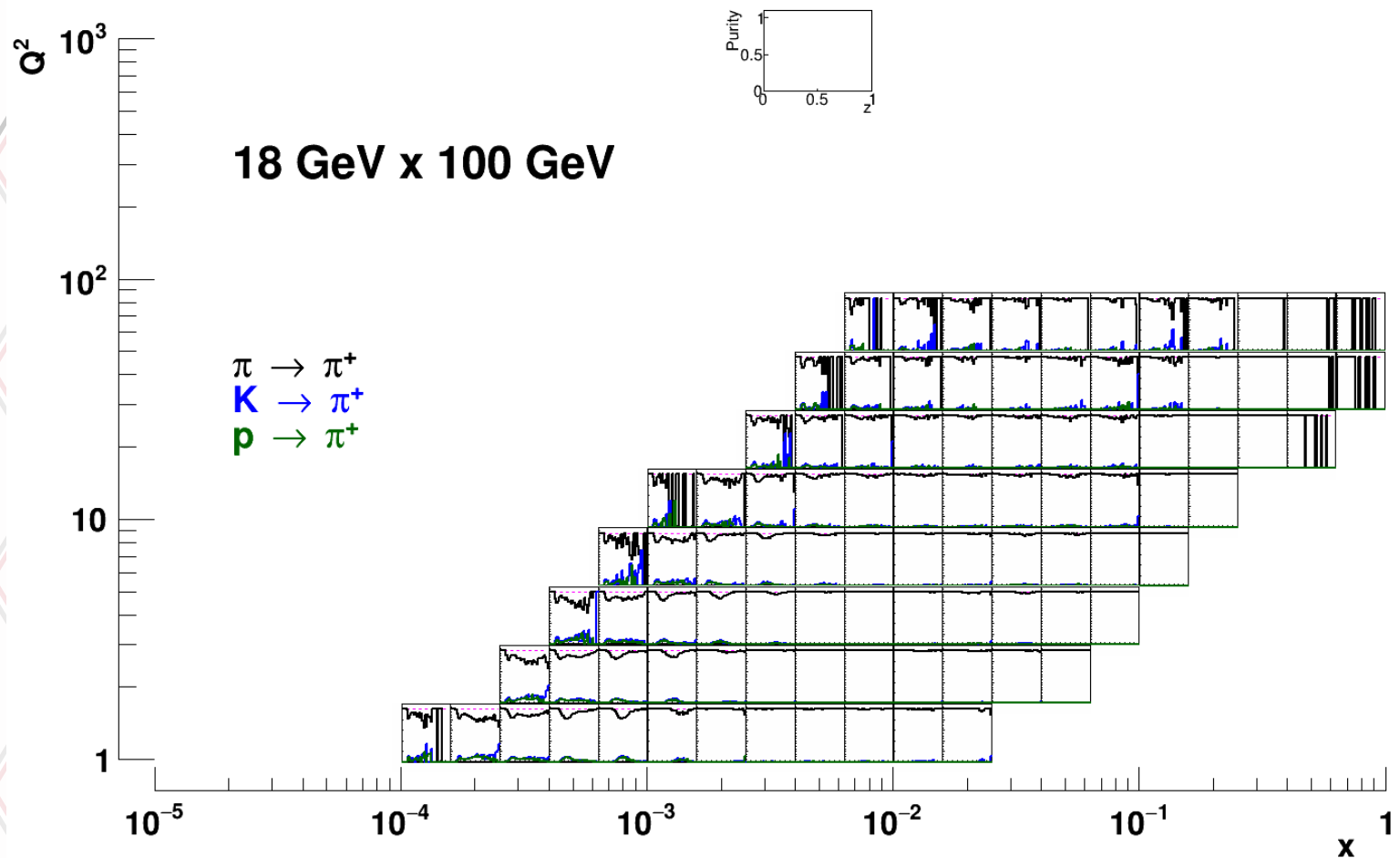
Proton efficiencies, $p < 2$ correctly assigned



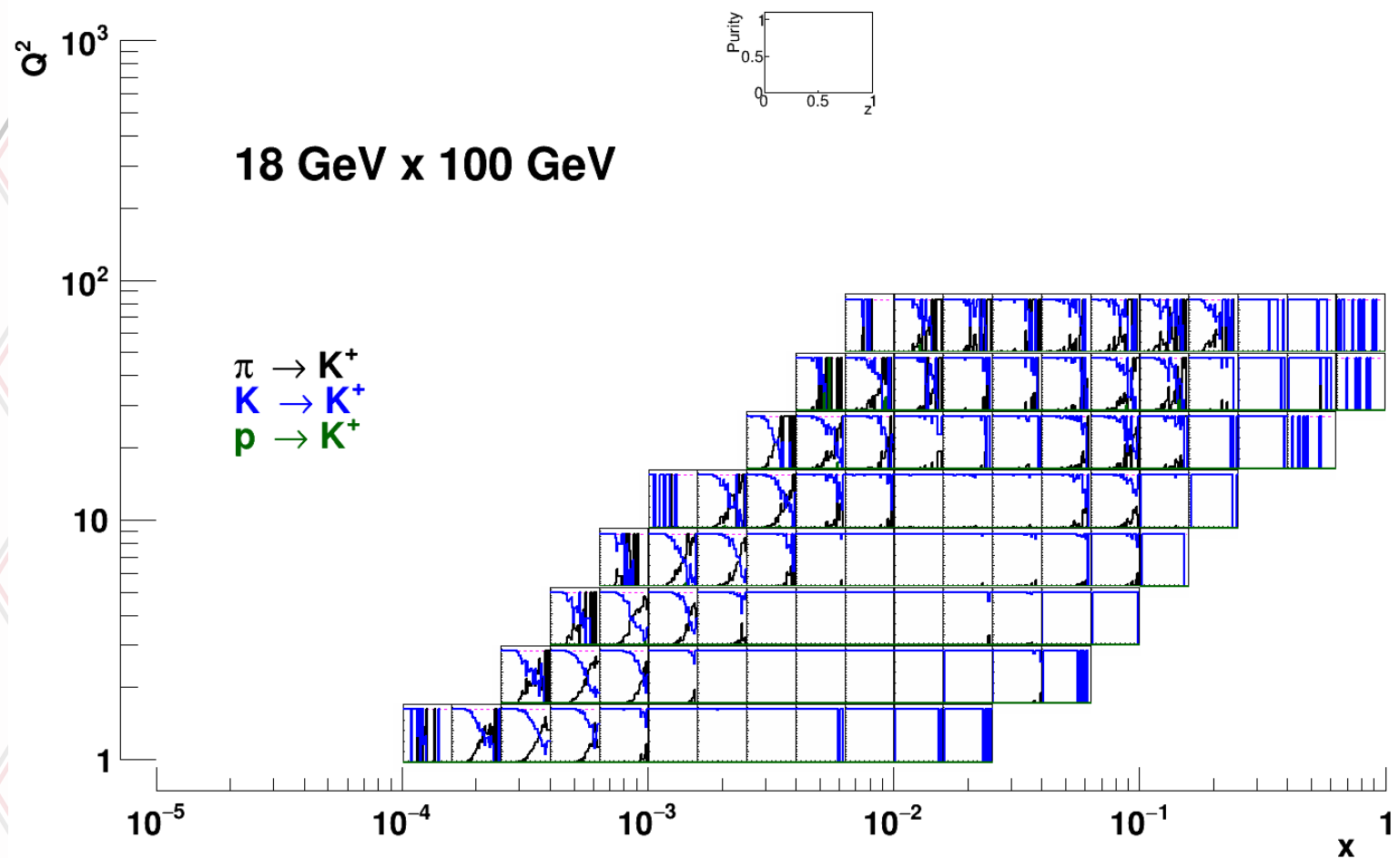
Pion Purities



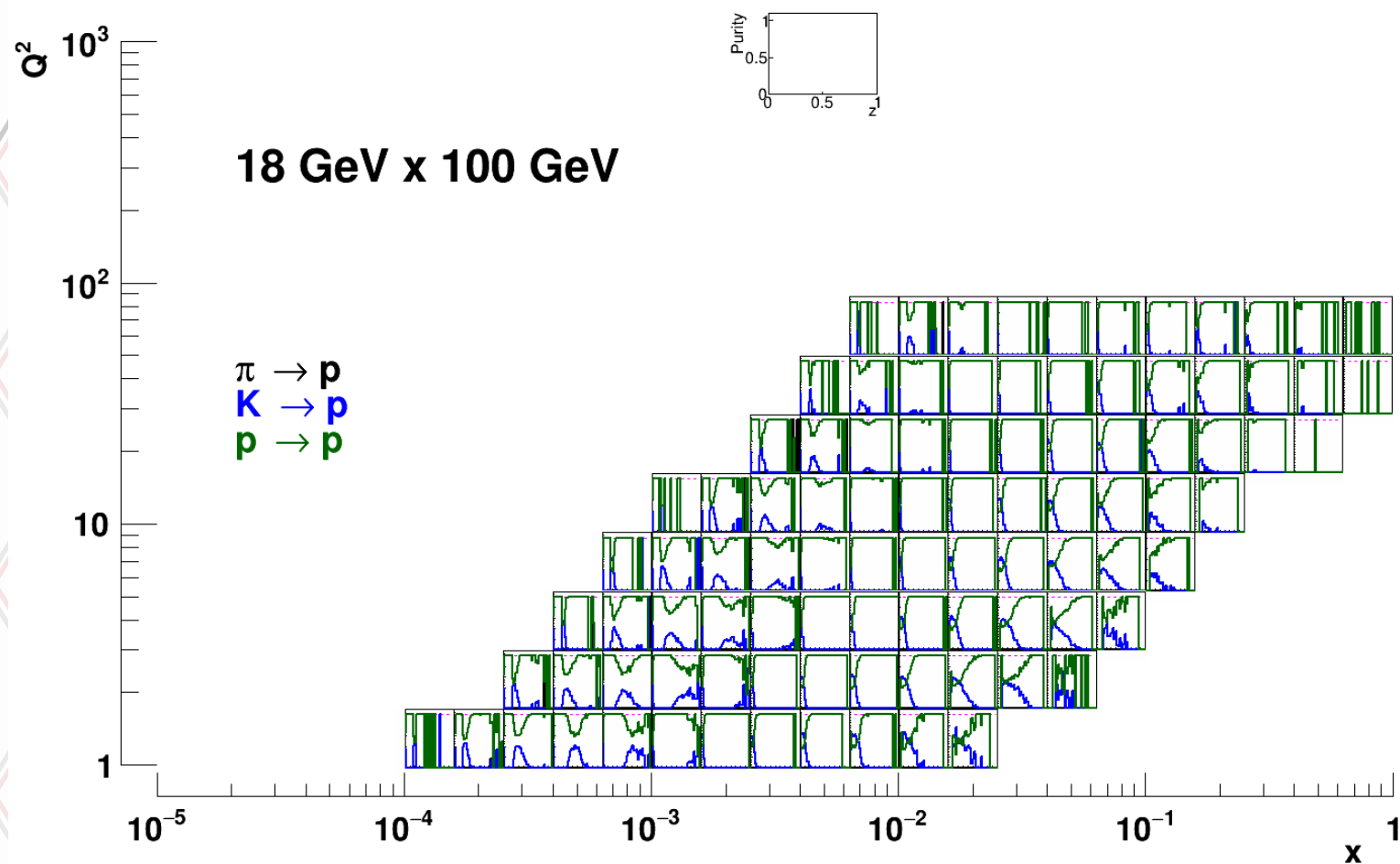
Pion purities, $p > 2$ correctly assigned



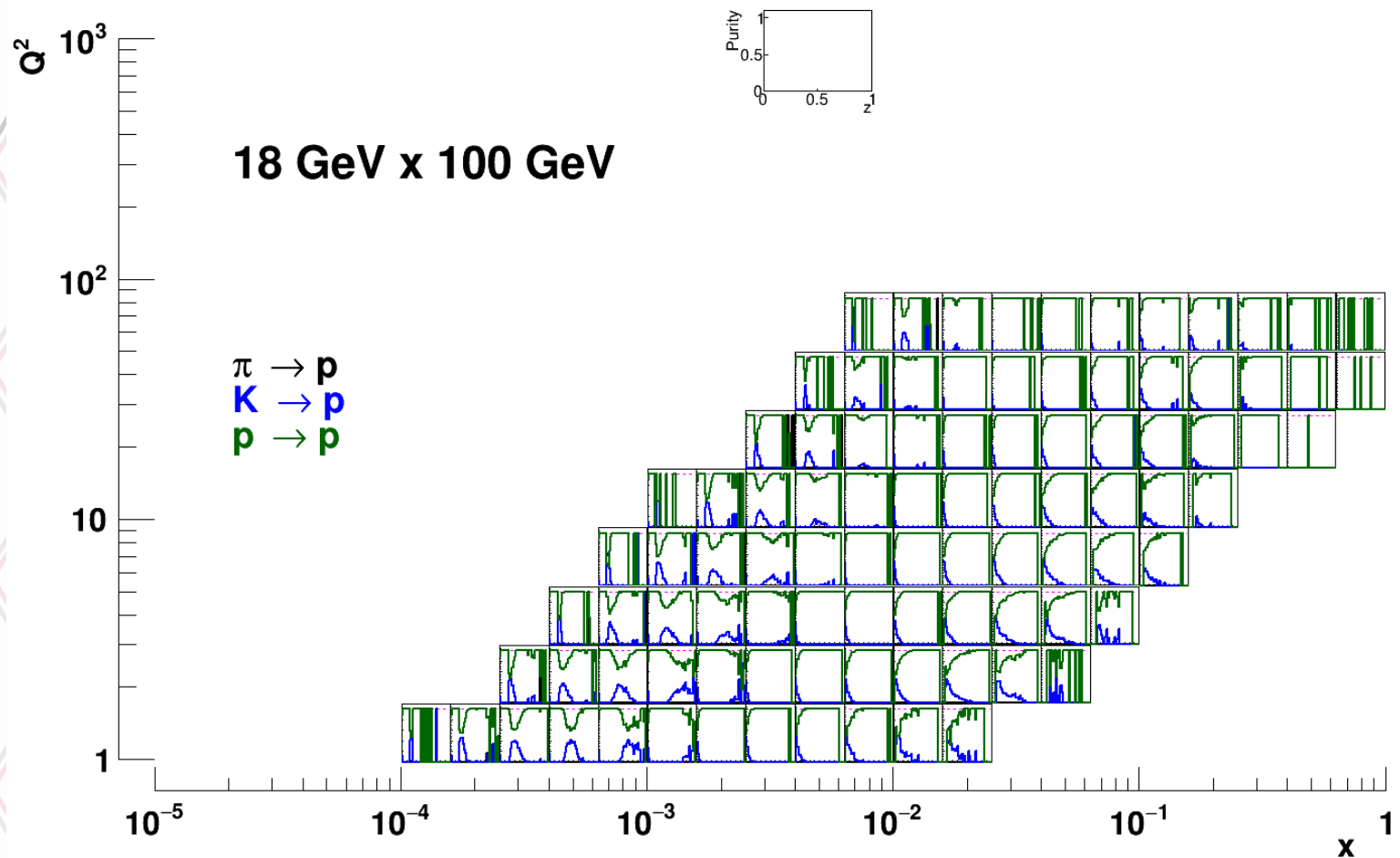
Kaon purities



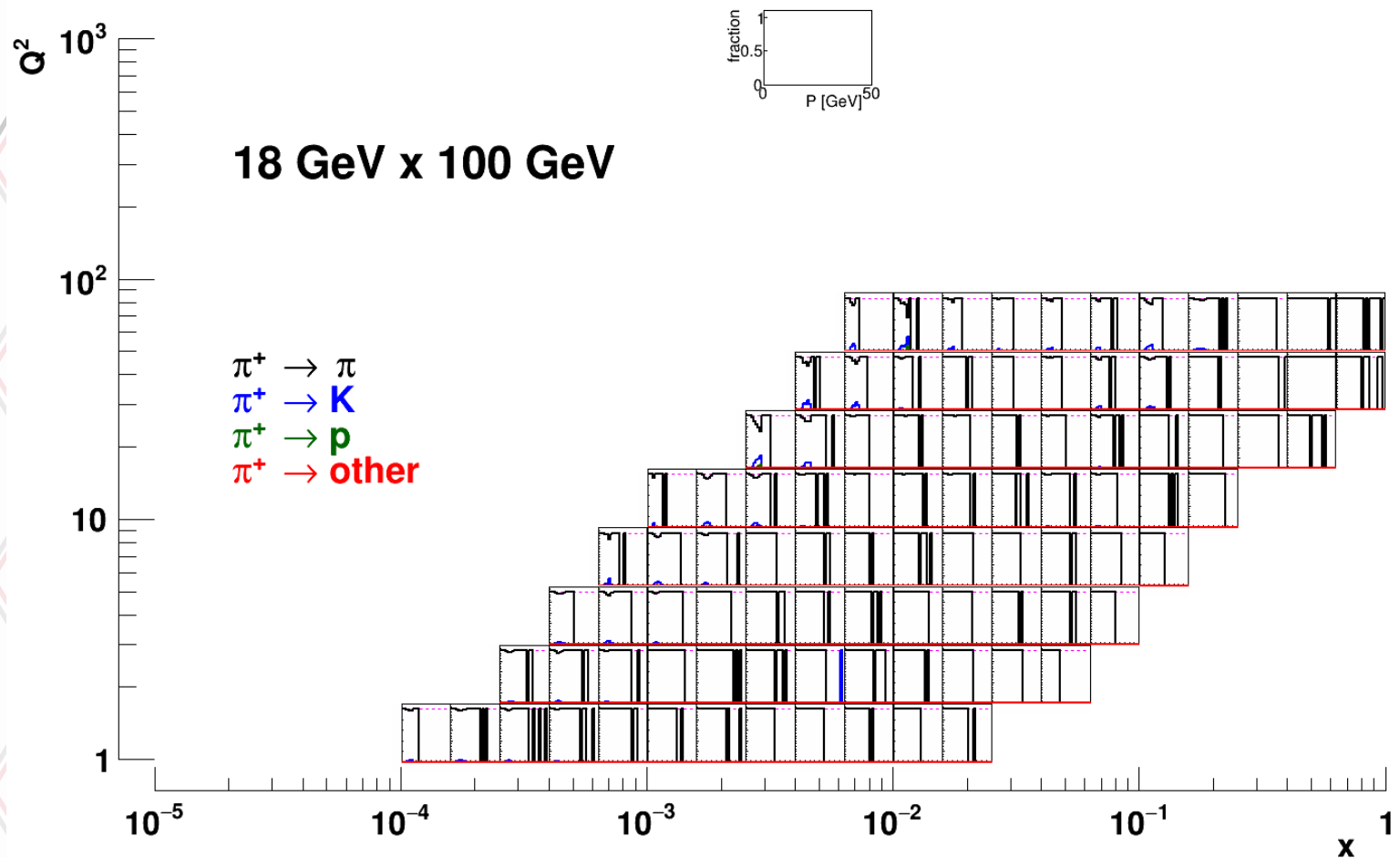
Proton purities



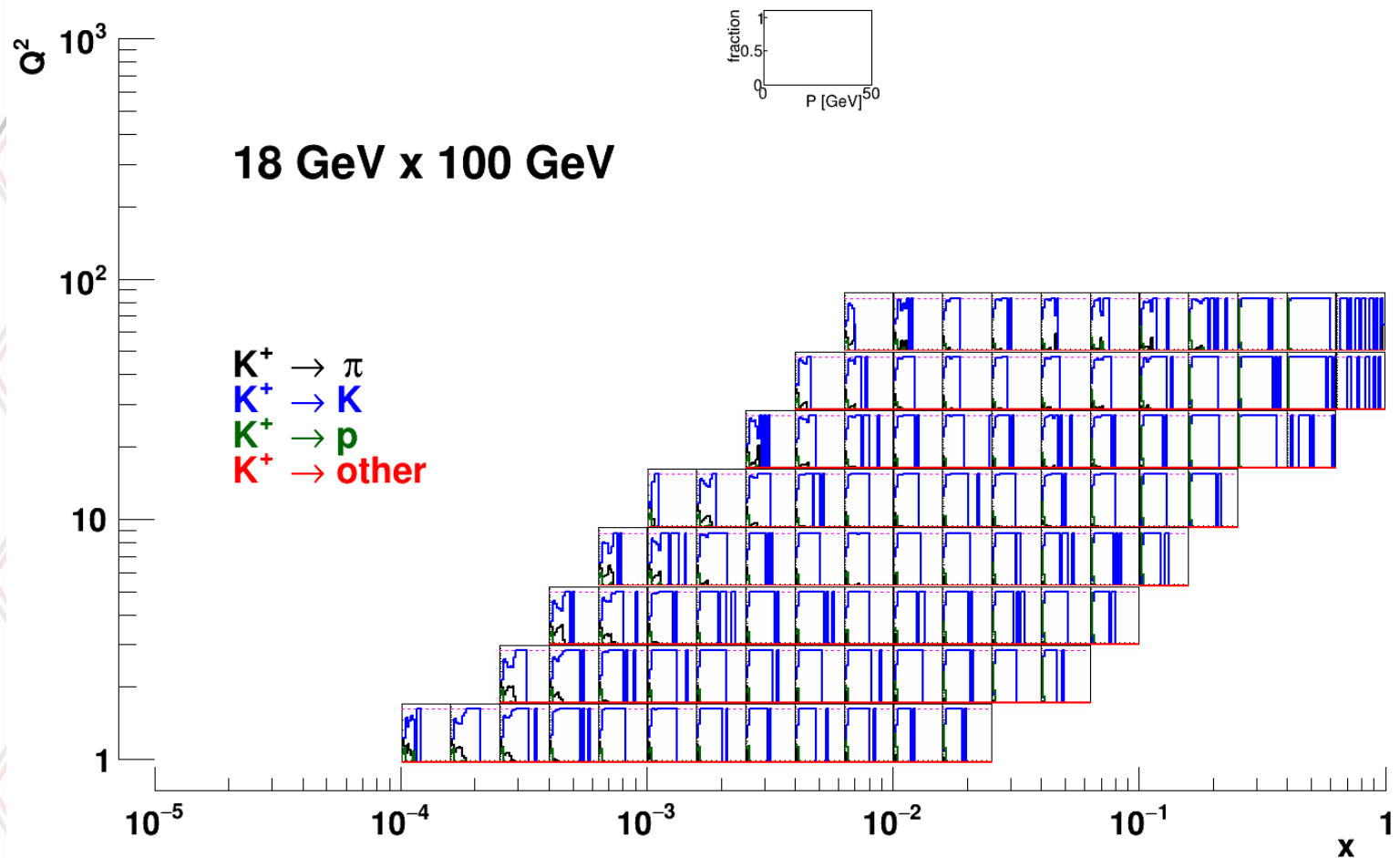
Proton purities, $p > 2$ correctly assigned



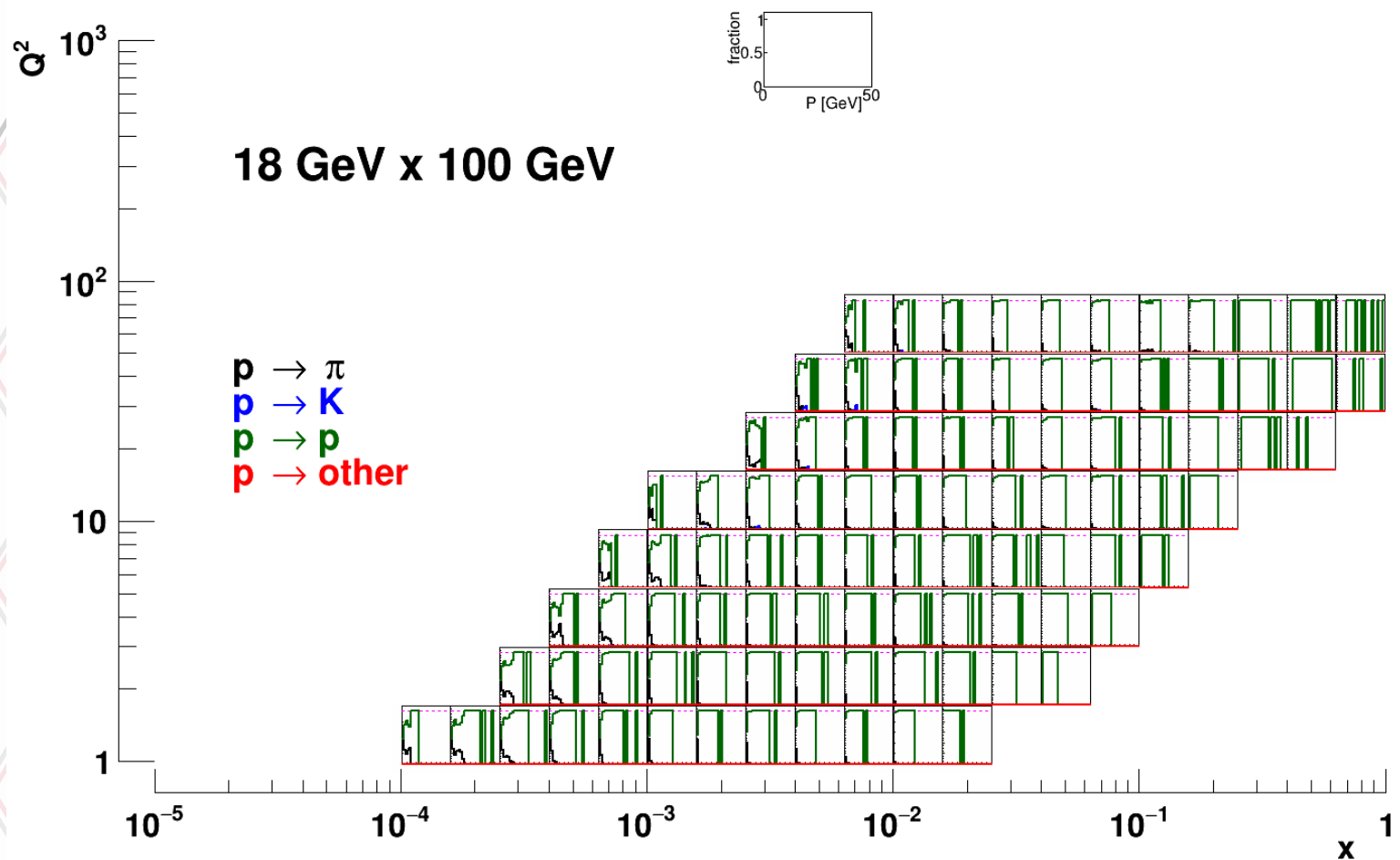
Pion Efficiencies vs Momentum



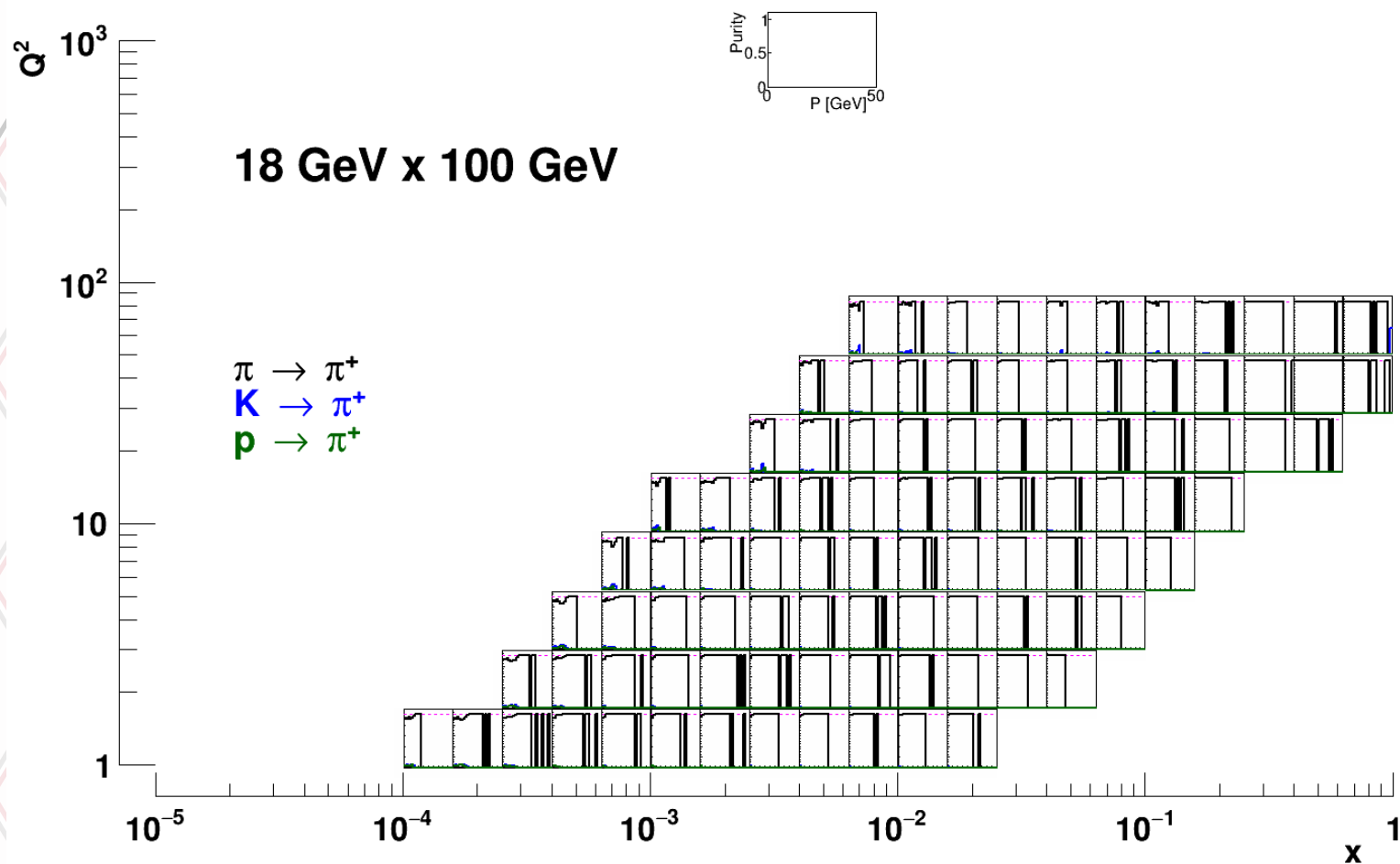
Kaon Efficiencies vs Momentum



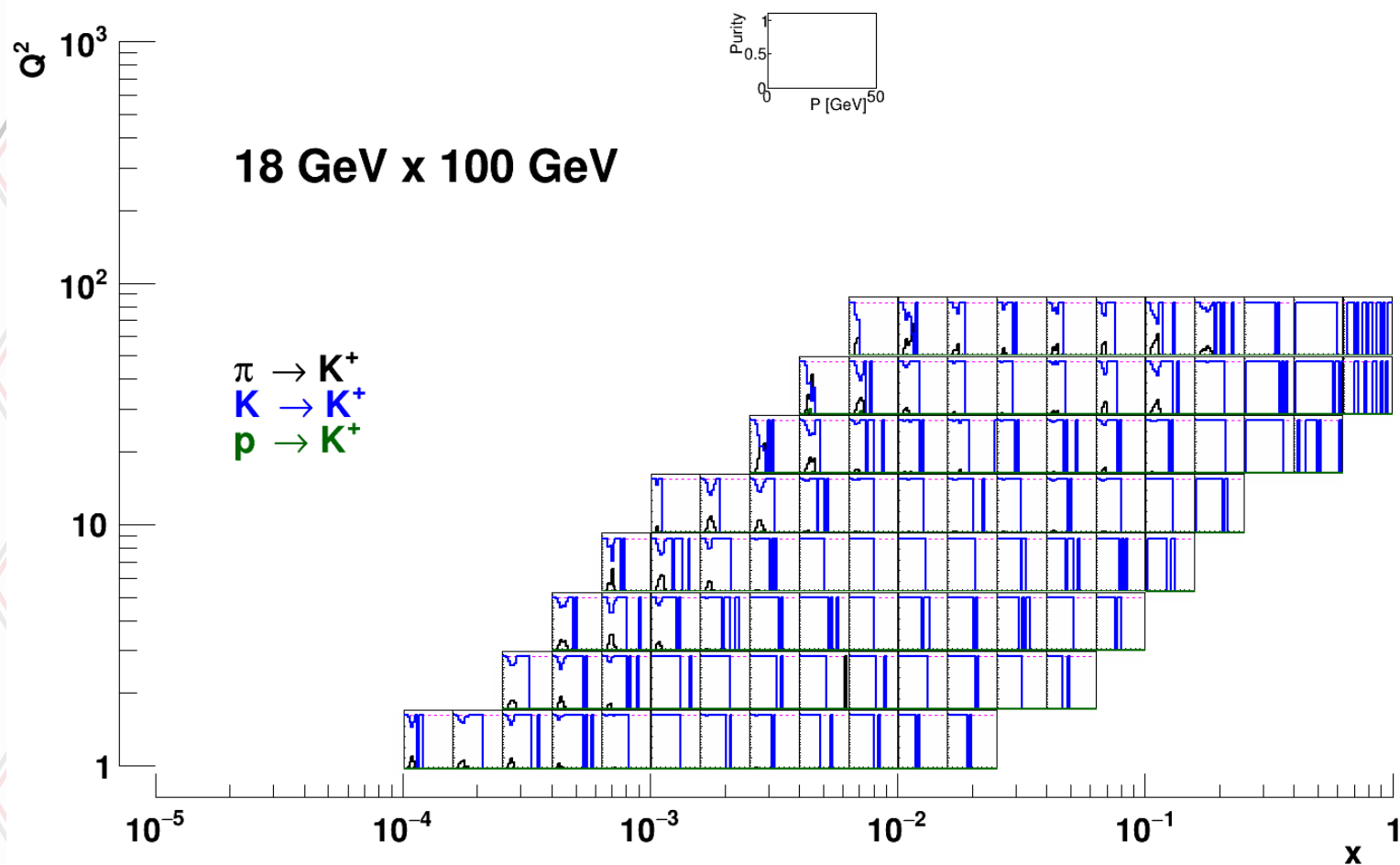
Proton Efficiencies vs Momentum



Pion Purities vs Momentum



Kaon Purities vs Momentum



Proton Purities vs Momentum

