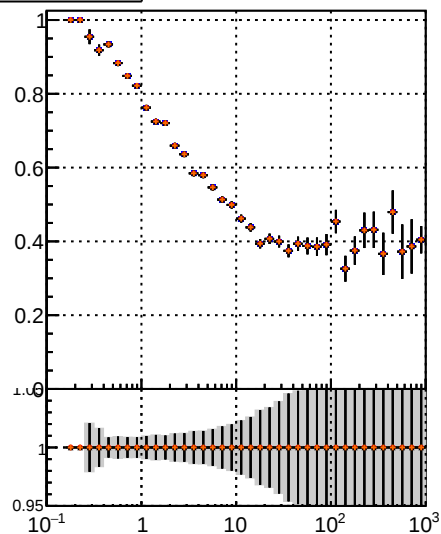
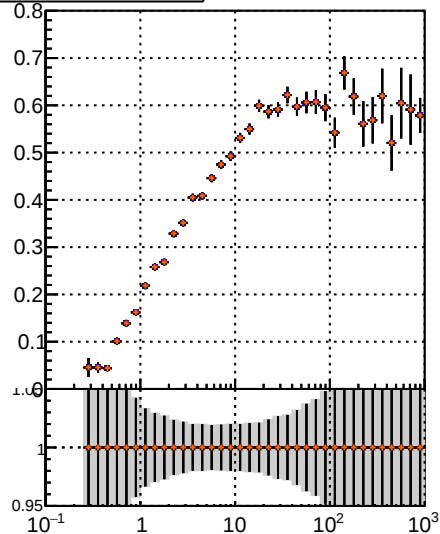
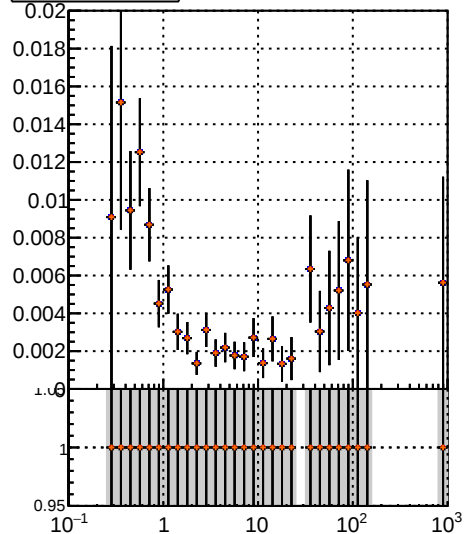
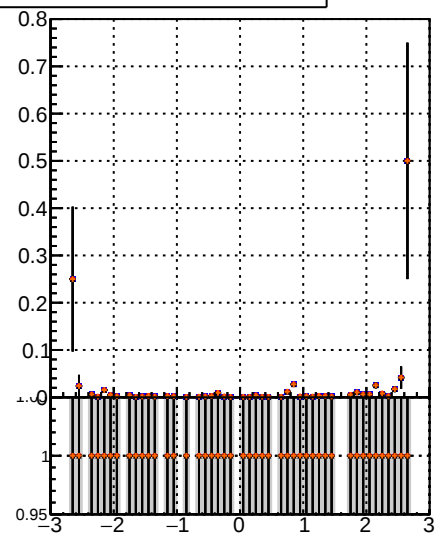
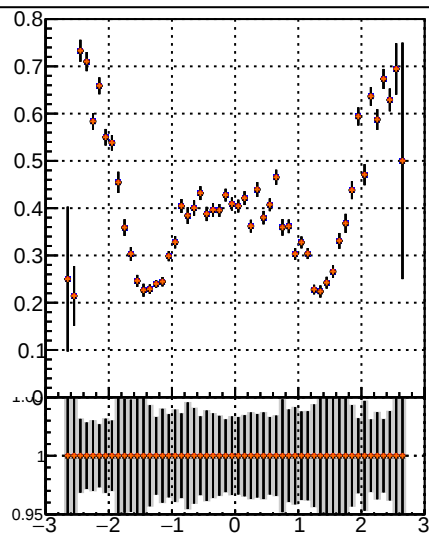
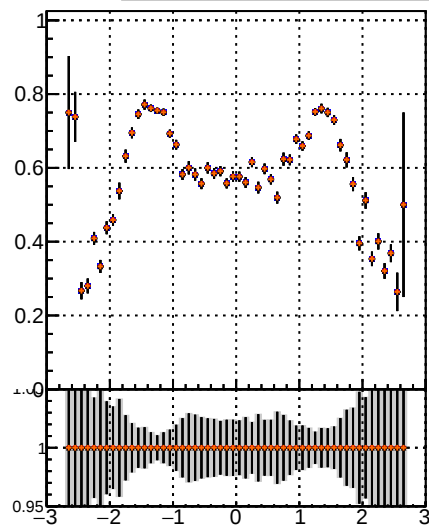
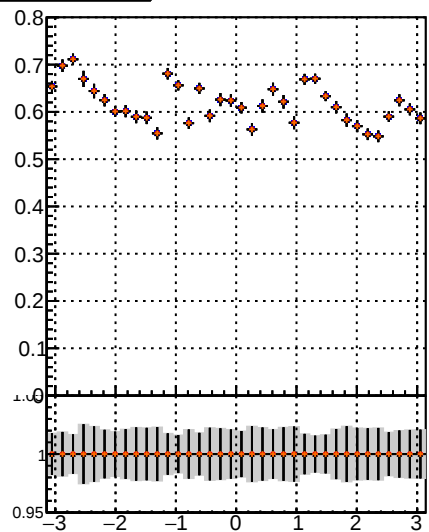
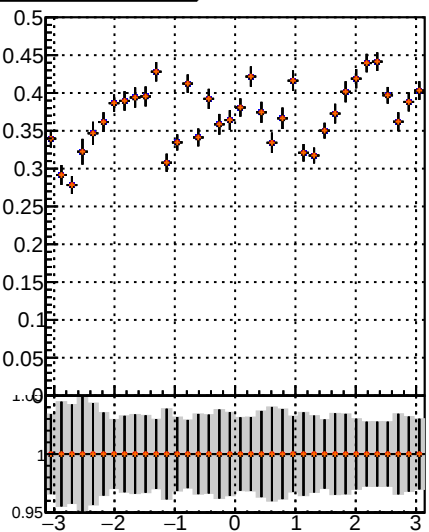


Fake rate vs p_T Duplicates Rate vs p_T Pileup rate vs p_T 

Legend for the top row of plots:

- $\text{BQM} \rightarrow \text{TT} \rightarrow \text{MS}$ (blue line)
- $\text{BQM} \rightarrow \text{TT} \rightarrow \text{MS} \rightarrow \text{detT}$ (red line)
- $\text{BQM} \rightarrow \text{TT} \rightarrow \text{MS} \rightarrow \text{detT} \rightarrow \text{dpdg}$ (green line)
- $\text{BQM} \rightarrow \text{TT} \rightarrow \text{MS} \rightarrow \text{detT} \rightarrow \text{chiz}$ (orange line)

Fake rate vs ϕ Duplicates Rate vs ϕ Pileup rate vs ϕ 