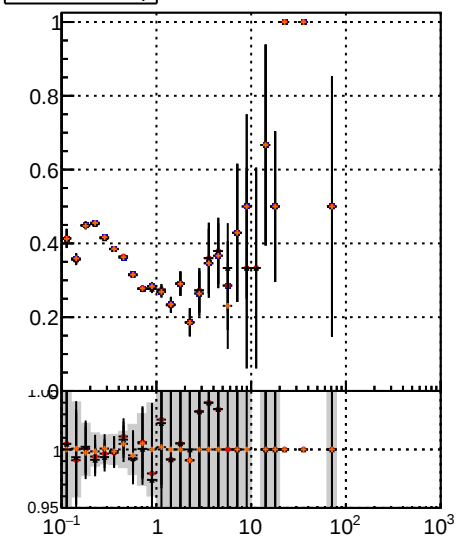
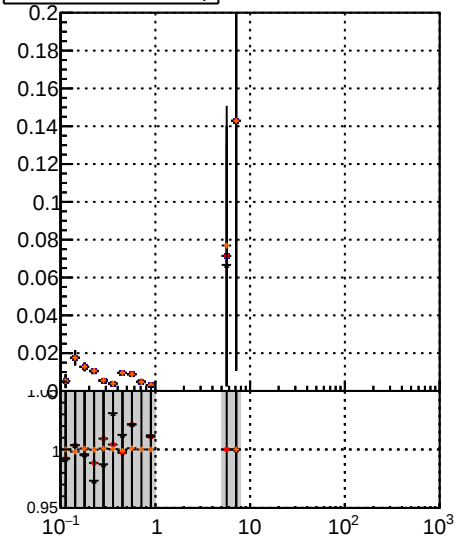
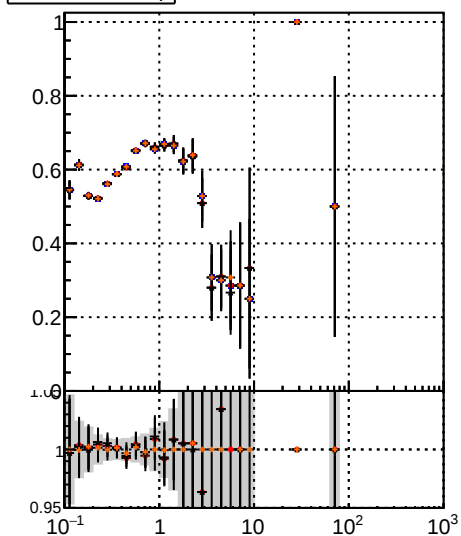
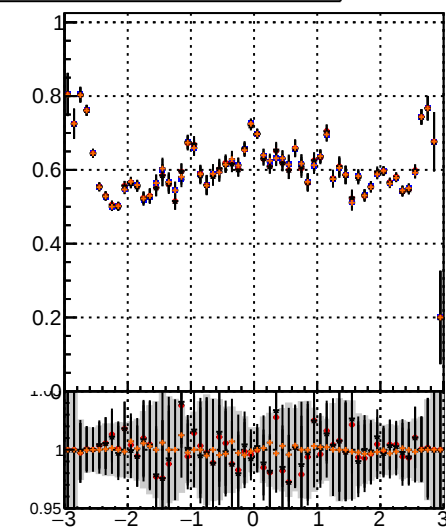
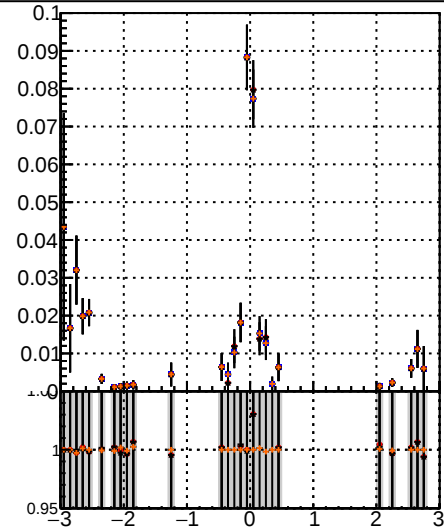
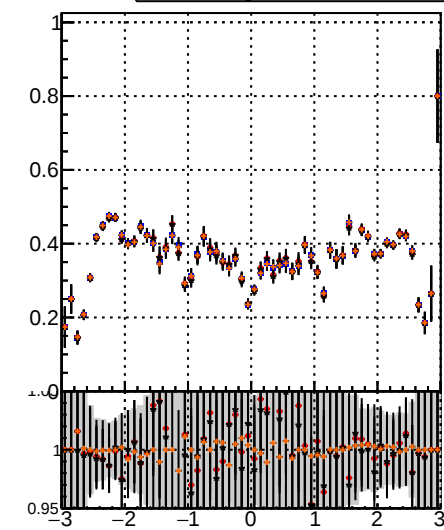
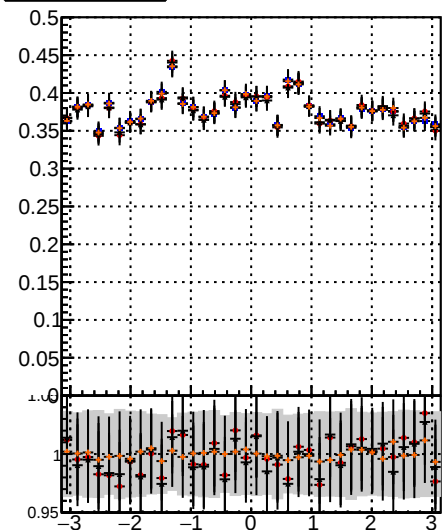
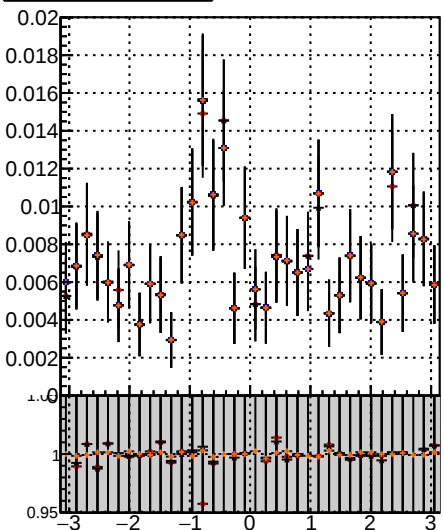


Fake rate vs p_T Duplicates Rate vs p_T Pileup rate vs p_T 

$\text{BQM} \rightarrow \text{TT}$ (blue)
 $\text{BQM} \rightarrow \text{TT} + \text{MS}$ (red)
 $\text{BQM} \rightarrow \text{TT} + \text{MS} + \text{detT}$ (black)
 $\text{BQM} \rightarrow \text{TT} + \text{MS} + \text{detT} + \text{dpdg}$ (orange)

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