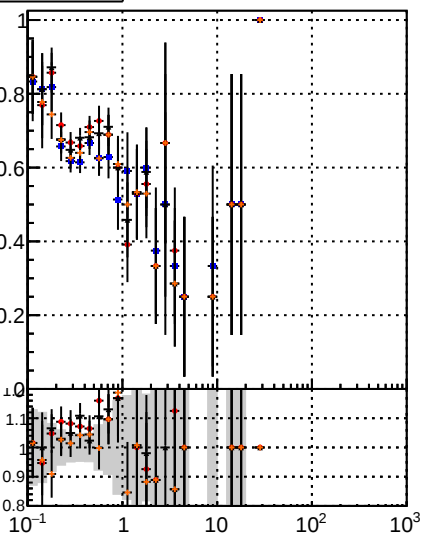
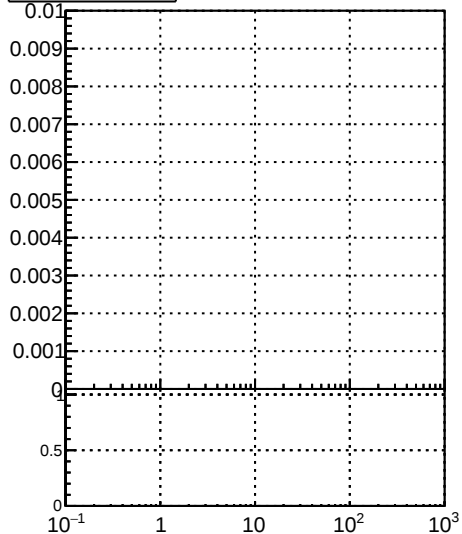
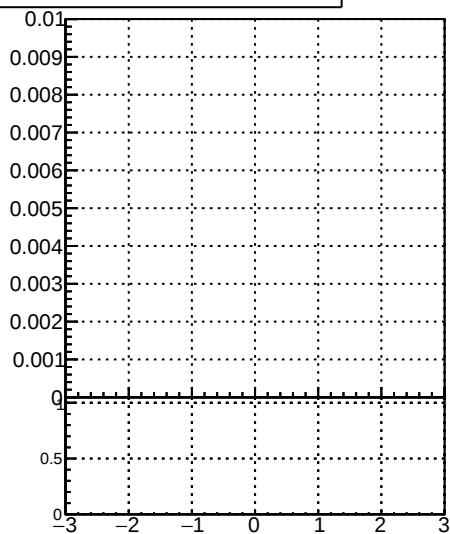
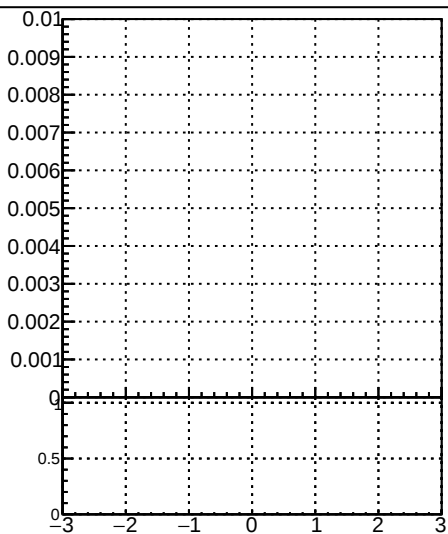
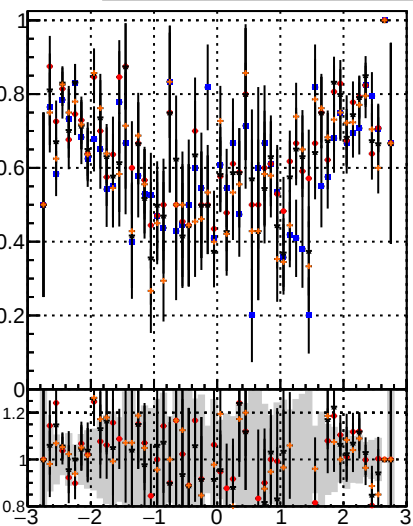
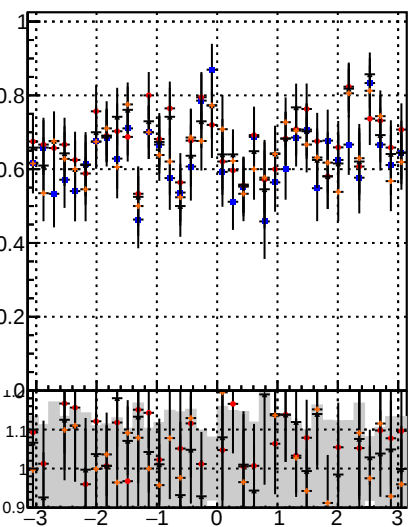
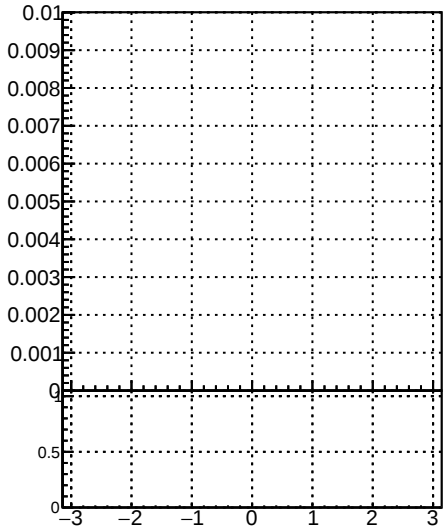


Fake rate vs p_T Duplicates Rate vs p_T Pileup rate vs p_T 

$Q0$ $Q1$ $Q9$ $Q99$
 MS MS MS MS
 $detQ0$ $detQ1$ $detQ9$ $detQ99$

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