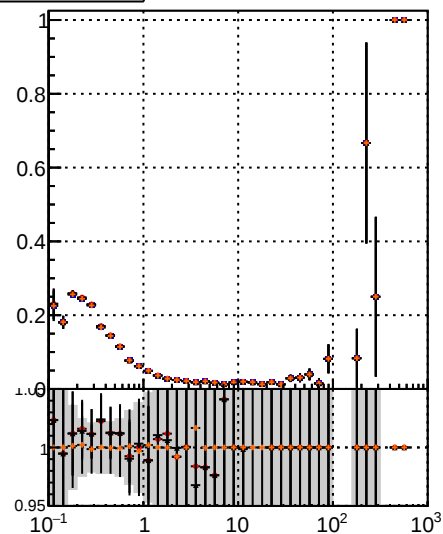
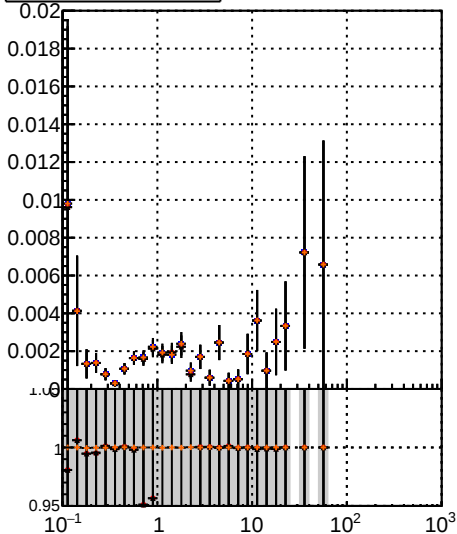
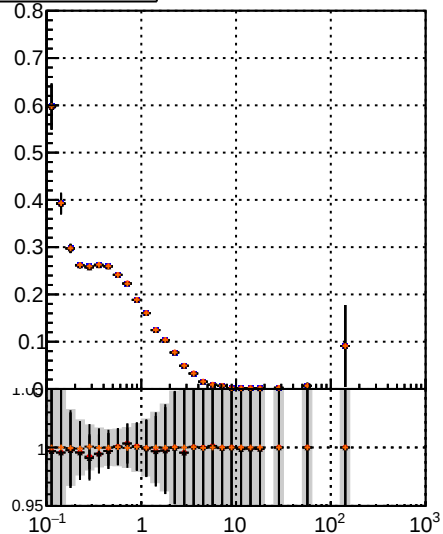
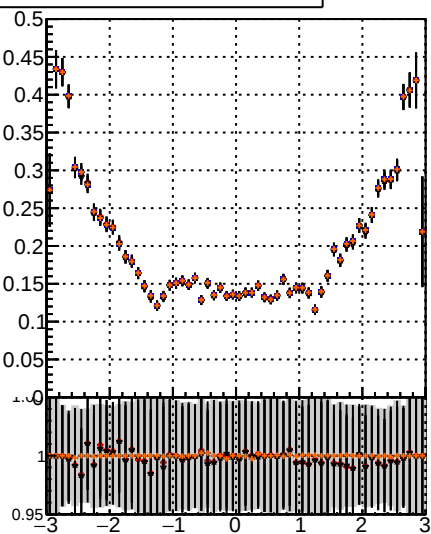
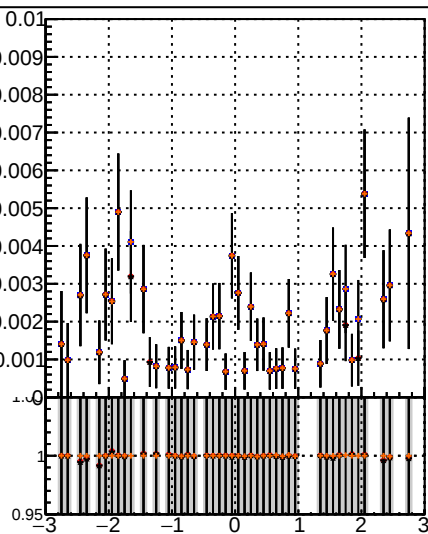
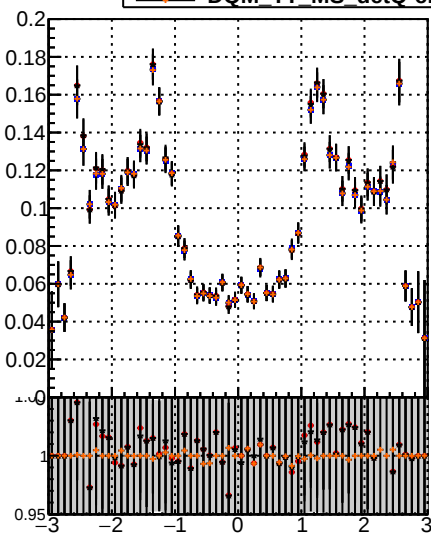
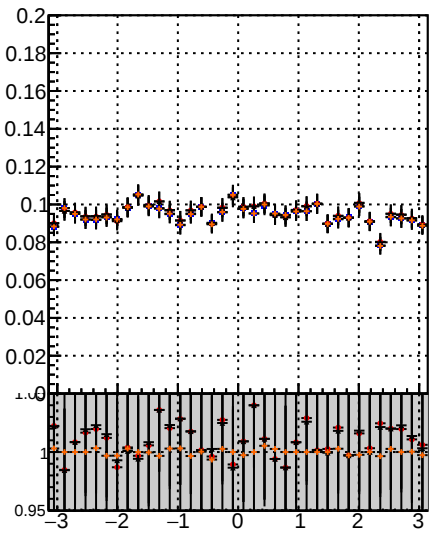
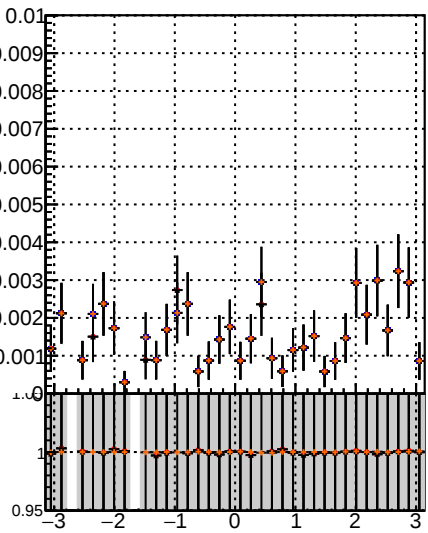


Fake rate vs p_T Duplicates Rate vs p_T Pileup rate vs p_T 

Legend for Fake rate vs p_T , Duplicates Rate vs p_T , and Pileup rate vs p_T :

- Blue line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Red line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Black line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Orange line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Green line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Grey line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light blue line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light red line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light black line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light orange line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light green line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light grey line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light blue line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light red line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light black line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light orange line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light green line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light grey line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light light blue line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light light red line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light light black line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light light orange line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light light green line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$
- Light light light grey line: $pp \rightarrow tt \rightarrow b\bar{b} + \text{lepton}$

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