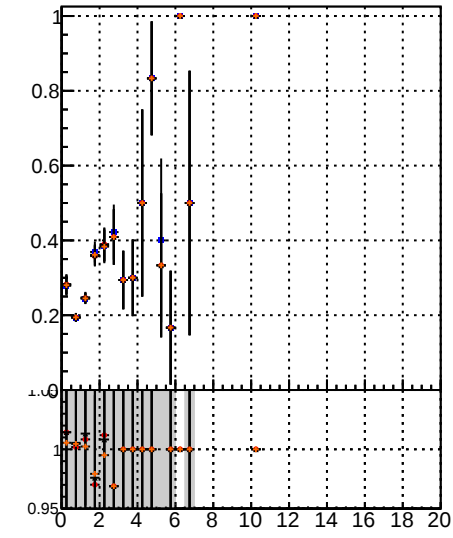


Fake rate vs normalized χ^2



Duplicates Rate vs normalized χ^2



Pileup rate vs normalized χ^2



Fake rate vs. χ^2 for BSM, MS, and data. The plot shows the fake rate as a function of normalized χ^2 for BSM (blue stars), MS (orange stars), and data (black stars) with error bars. A shaded region is present at the bottom of the plot, indicating a specific range of χ^2 values.

