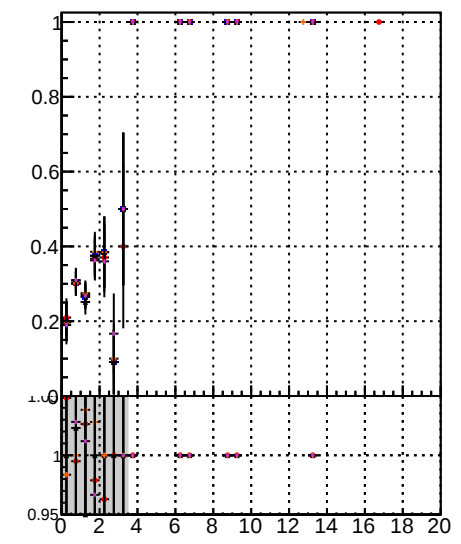


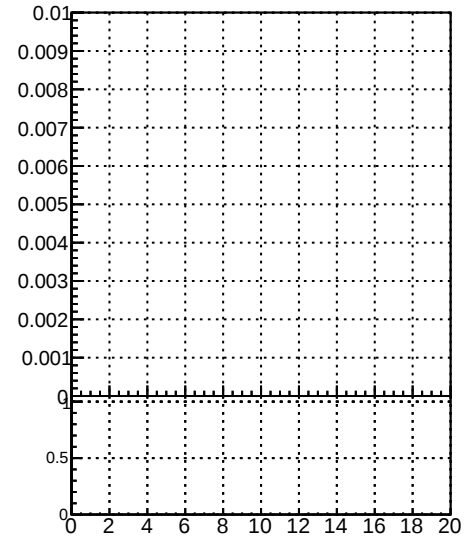
Fake rate vs normalized χ^2



Duplicates Rate vs normalized χ^2



Pileup rate vs normalized χ^2



Fake rate vs. χ^2 for different categories: Original (blue), Detached (red), and Pileup (purple). The plot shows the fake rate as a function of normalized χ^2 for three categories: Original (blue), Detached (red), and Pileup (purple). The y-axis ranges from 0.95 to 0.8, and the x-axis ranges from 0 to 20. Data points are shown for three categories: Original (blue), Detached (red), and Pileup (purple). The plot shows a sharp increase in fake rate as normalized χ^2 increases, with a plateau around 0.75 for $\chi^2 > 4$. Shaded regions indicate uncertainty bands.

