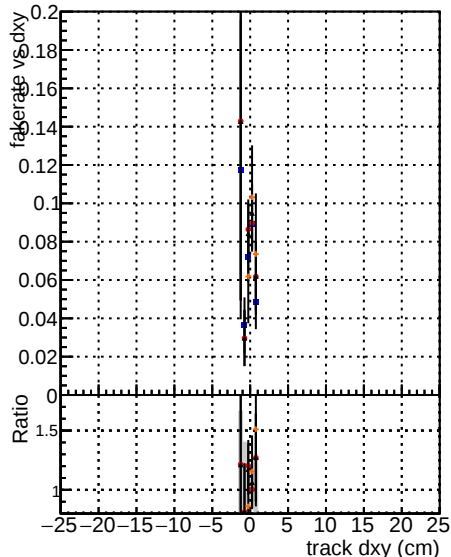
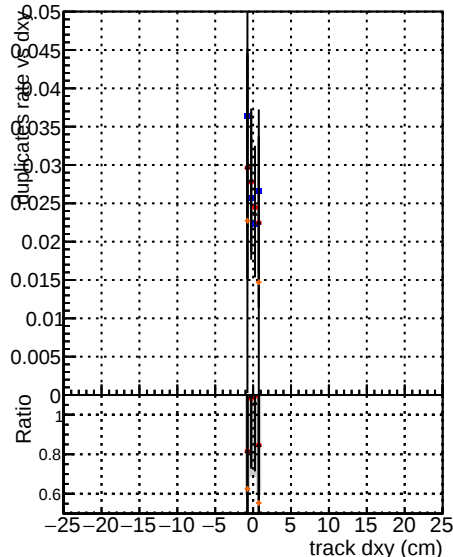


Fake rate vs dxy



Duplicates Rate vs Dxy



Pileup rate vs dxy

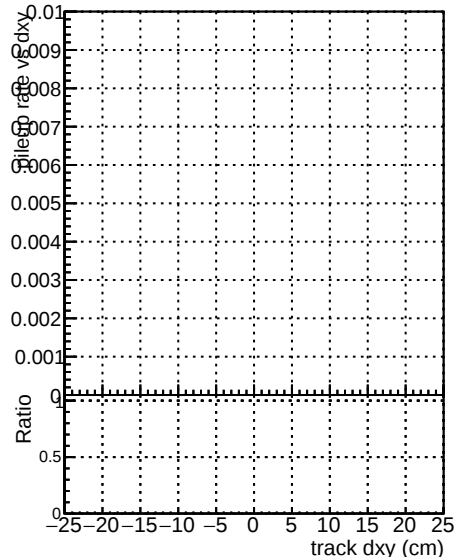


Figure 1: Fake rate vs d. The plot shows the fake rate (y-axis, 0 to 1) versus the distance d (x-axis, 0 to 1). The baseline (blue line) shows a high fake rate, while the proposed method (red line) shows a significantly lower fake rate across the entire range of d.

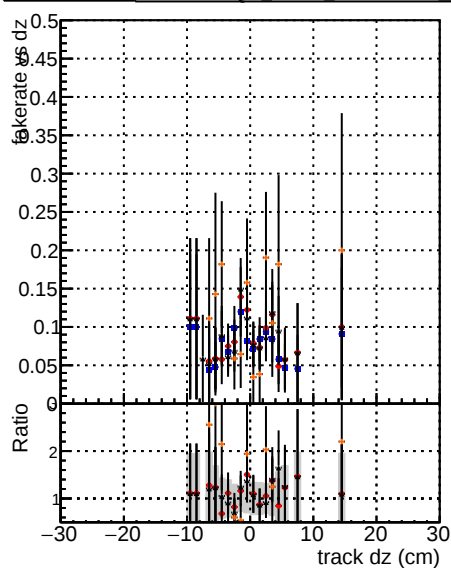


Figure 1 is a scatter plot showing the ratio of duplicate rates versus track distance (dz) for the ATLAS experiment. The x-axis is labeled "track dz (cm)" and ranges from -30 to 30. The y-axis is labeled "Ratio" and ranges from 1.0 to 0.8. The plot displays data points for different track multiplicities: 1 (black), 2 (blue), 3 (orange), 4 (red), and 5 (green). Error bars are included for each point. The ratio decreases as track dz increases, with a sharp drop around 0 cm.

