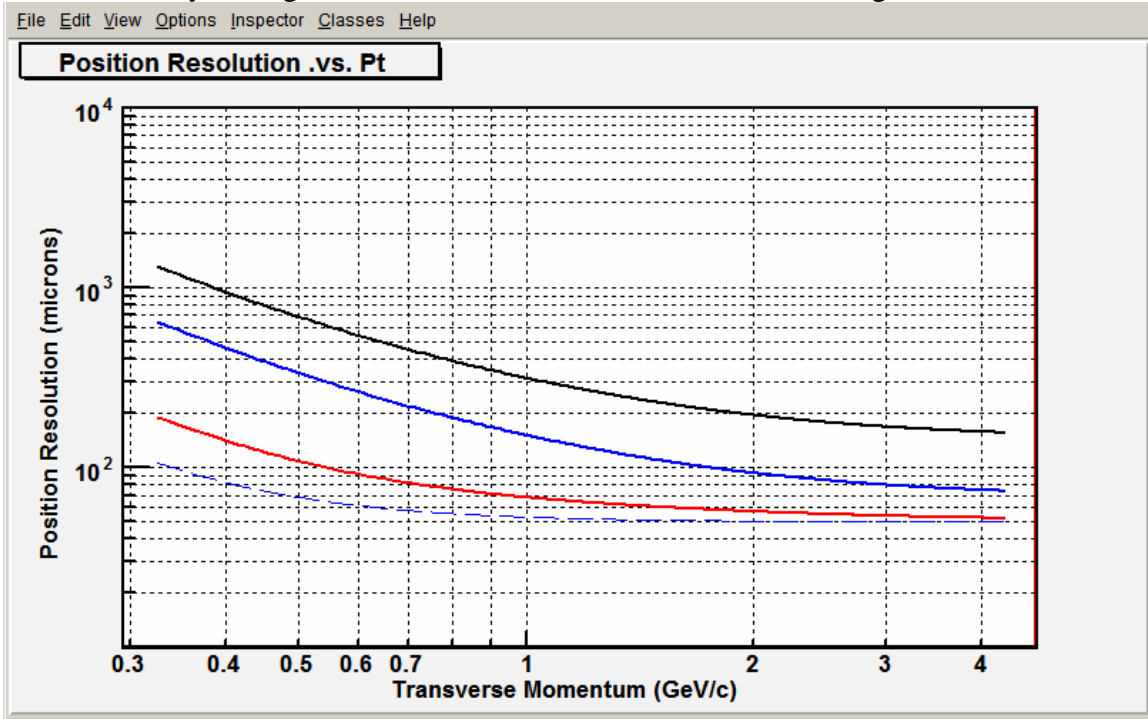
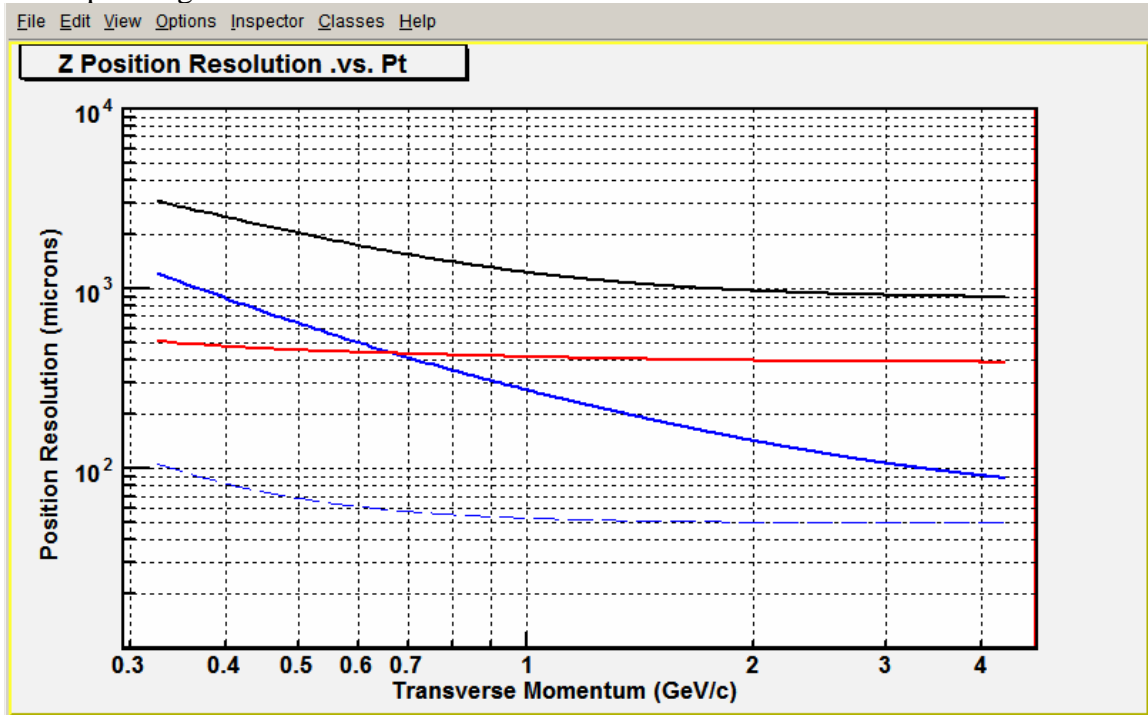


A Curious Situation:

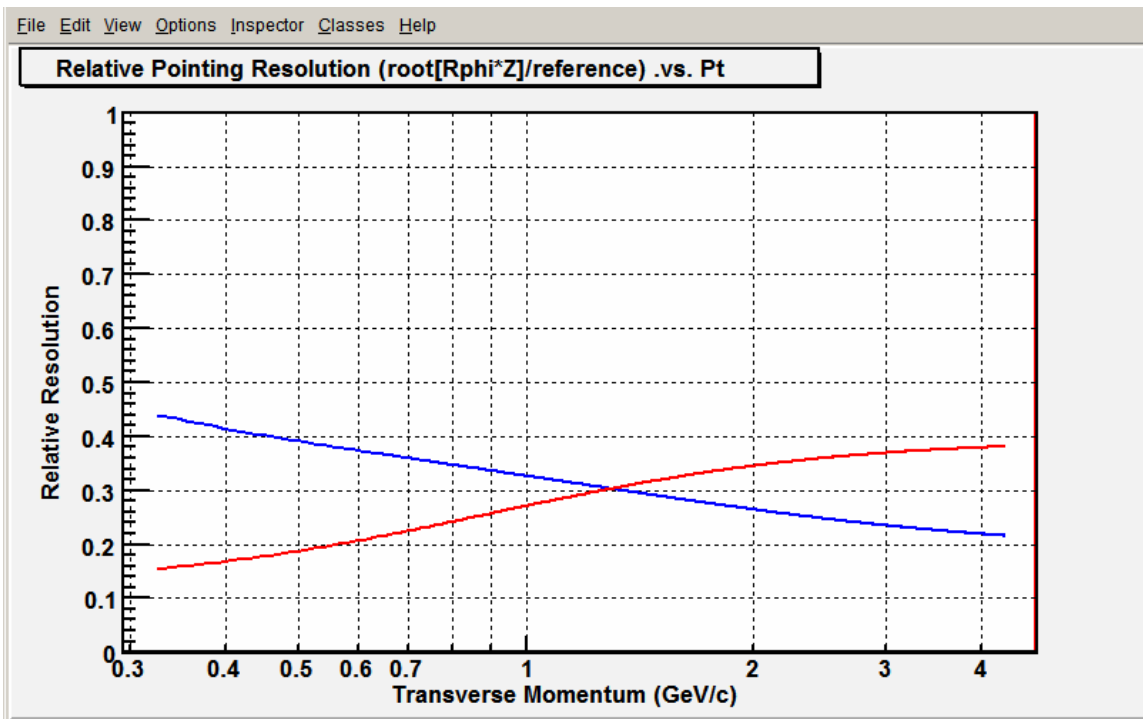
The calculations shown show a comparison between the HFT+HPD+SSD (in red) and the HFT+IST1+IST2 (in blue). The only change from the canonical settings is that I have rotated IST2 by 90 degrees. The radii of the detectors has not changed.



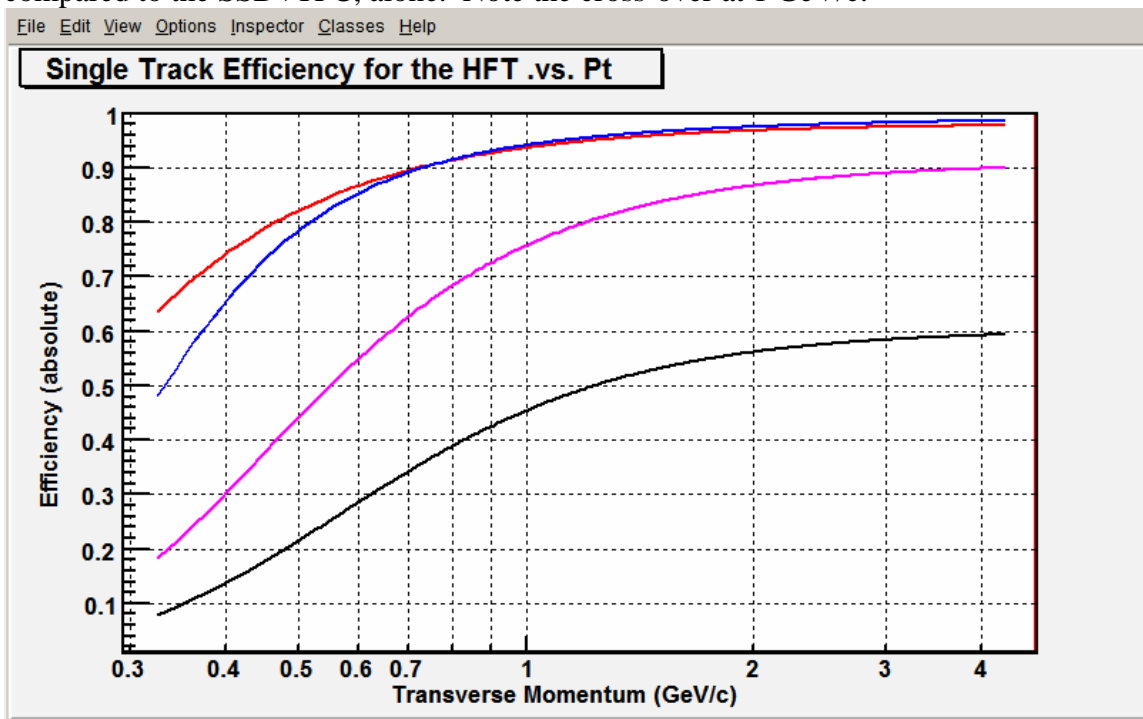
R-Phi pointing resolution at the surface of the HFT. Black line is TPC+SSD.



Z pointing resolution at the surface of the HFT. Color scheme is same as above. Note that the HPD+SSD has poor resolution in the Z direction at high pt.



The relative resolution of the HPD+SSD+TPC (red) and the IST1+IST2+TPC (blue) compared to the SSD+TPC, alone. Note the cross-over at 1 GeV/c.



Predicted efficiency for the HFT (not including efficiency of matching tracks in the other detectors). The black line shows the TPC acting alone. The magenta line shows the TPC+SSD acting together. The red and blue lines show the HPD+SSD and IST1+IST2 combinations working together. For all practical purposes, they are the same.