

Fig. 1: Error on position vs tracking parameters: (full) `deltaOneStep` (dashed) `missDistance` (dotted) `deltaIntersection`

Three tracking parameters: `deltaOneStep` controls numerical integration accuracy at midpoint of plane. `missDistance` controls distance between integrated track and chord at step mid-point. `deltaIntersection` controls numerical integration accuracy at boundary.

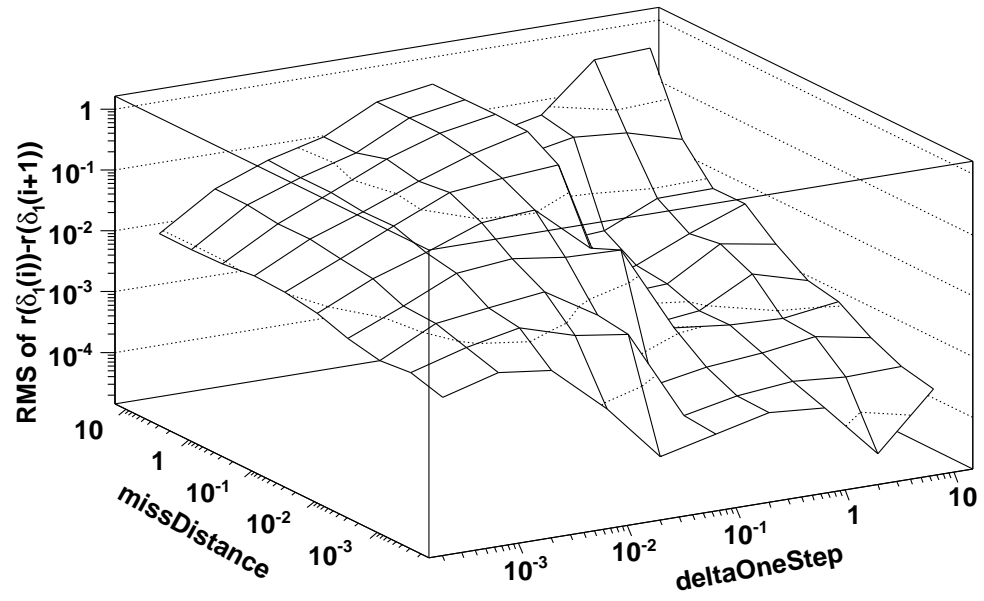


Fig. 2: Error on position vs tracking parameters miss distance and deltaOneStep.

DeltaOneStep does not converge!

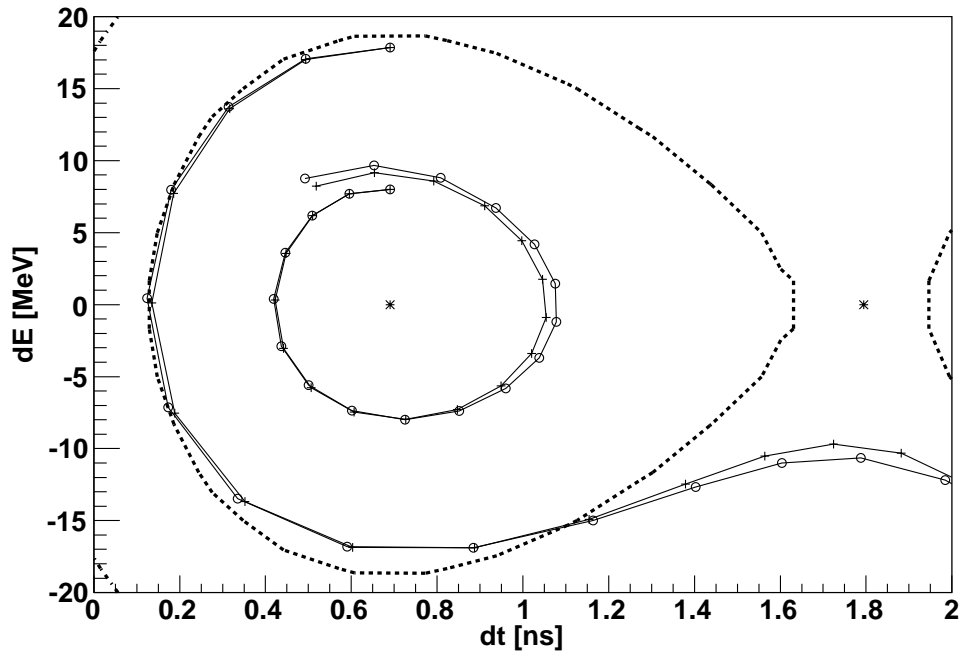


Fig. 3: Muons traversing the RF bucket (o) using RF field maps (+) using pill-box cavities. The emittance increase is due to the gradient of the Bethe Bloch curve.