

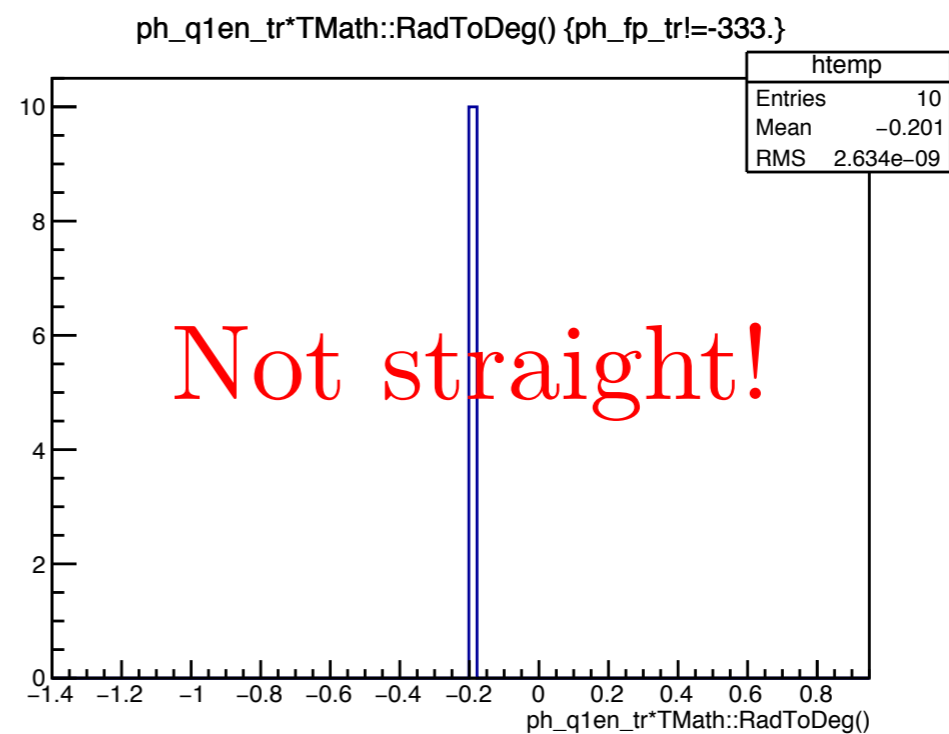
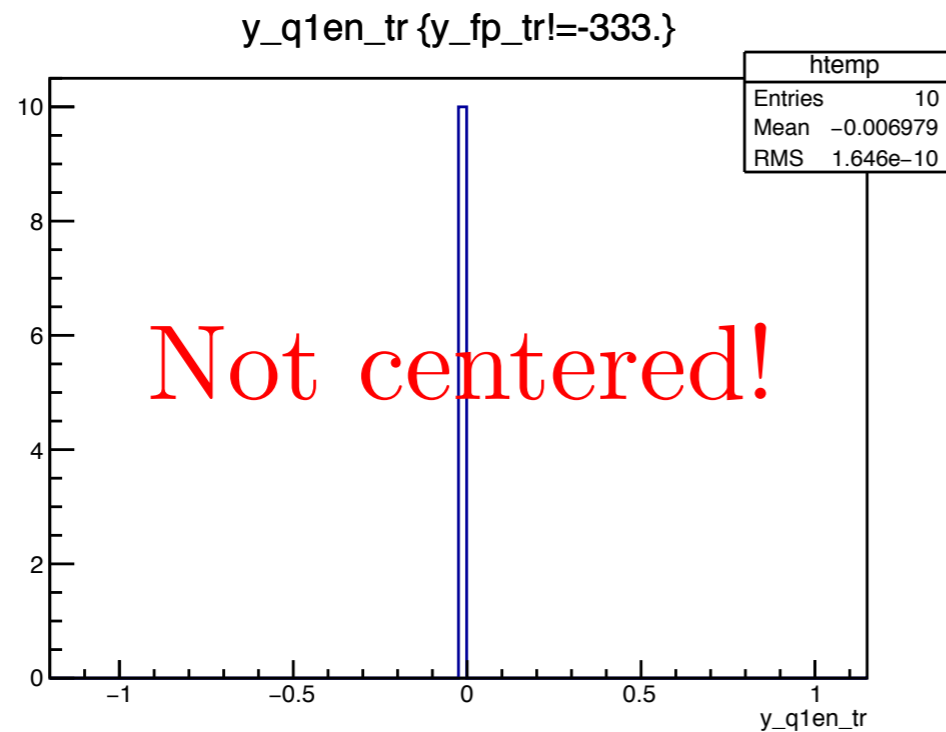
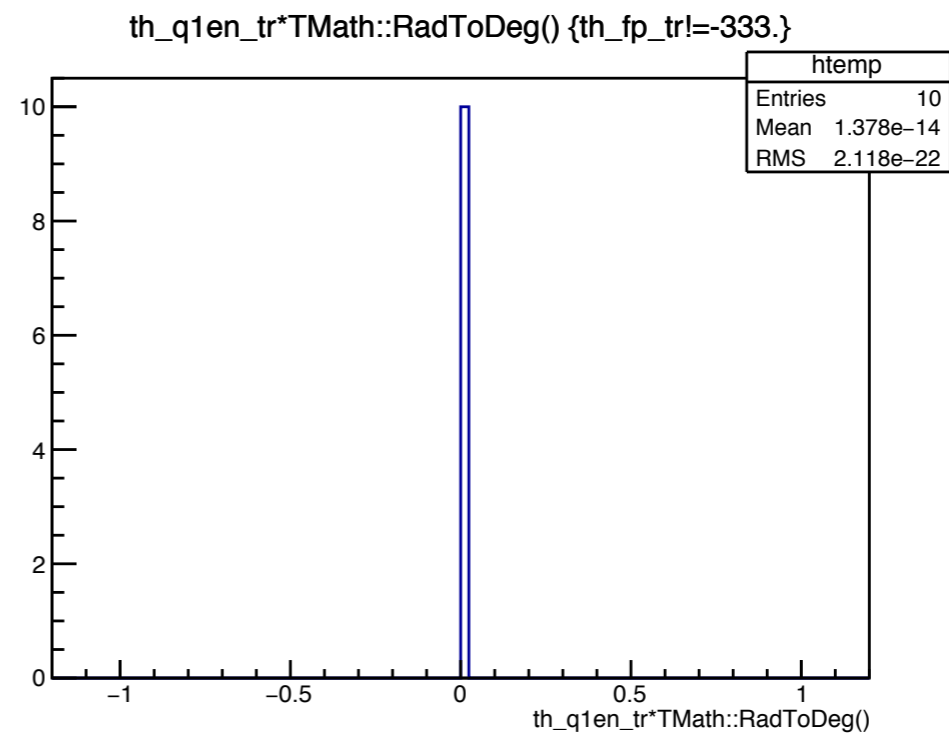
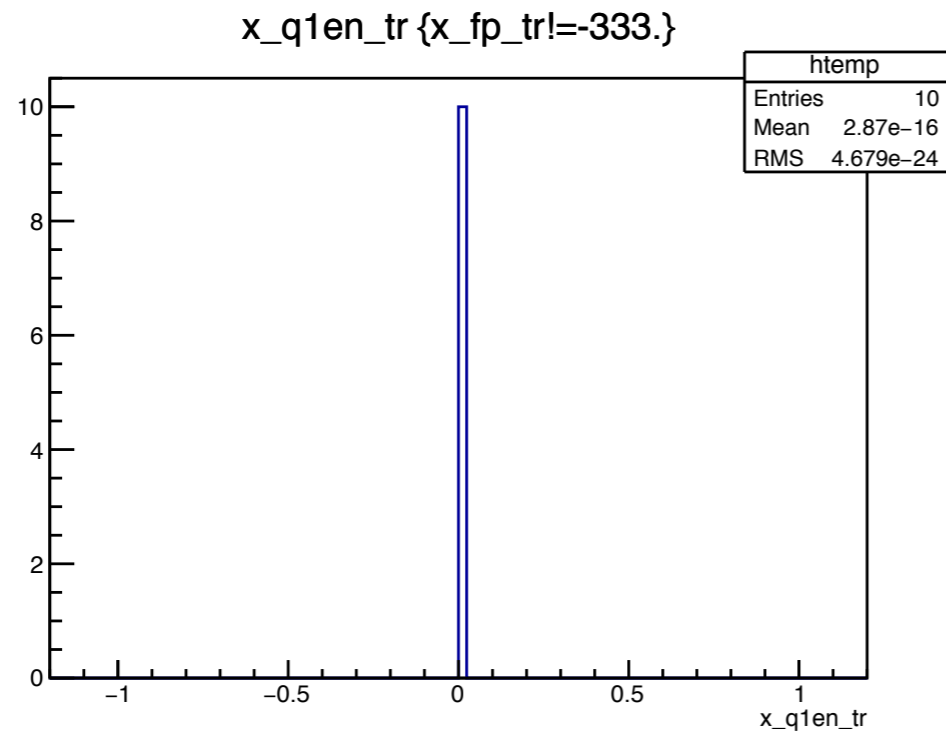
Update on g4hrs

Friday, March 9, 2018

Last week we saw g4hrs quad tune that...

- Minimized $\langle x \mid \theta_{\text{tg}} \rangle$ and $\langle y \mid \phi_{\text{tg}} \rangle$
- Destroyed focus and shrunk $\langle x \mid \delta_{\text{tg}} \rangle$ to less than 1
(incorrect central trajectory?)

Position/angle of “central ray” at Q1 entrance (from February 16 update)

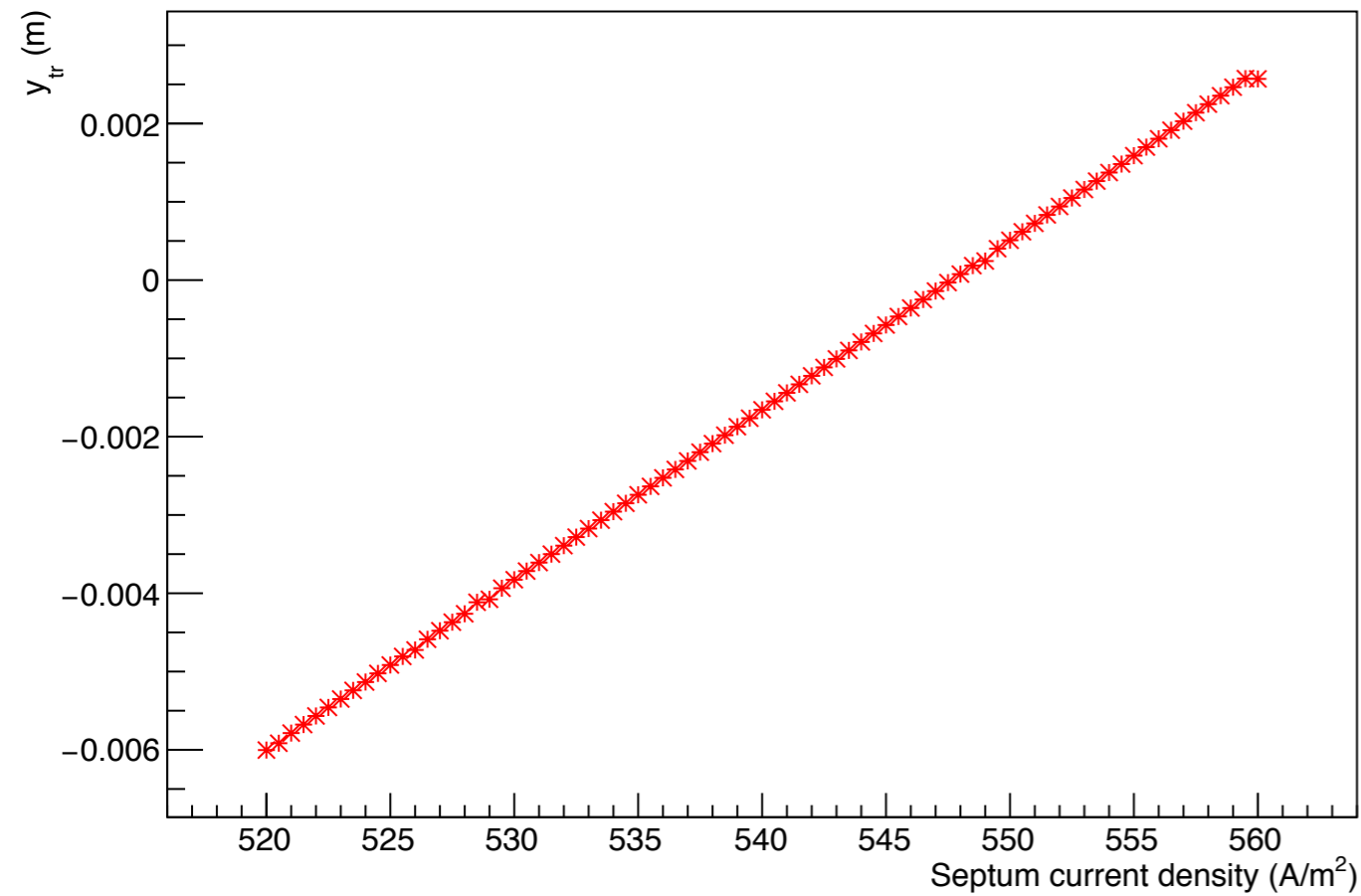


Two approaches:

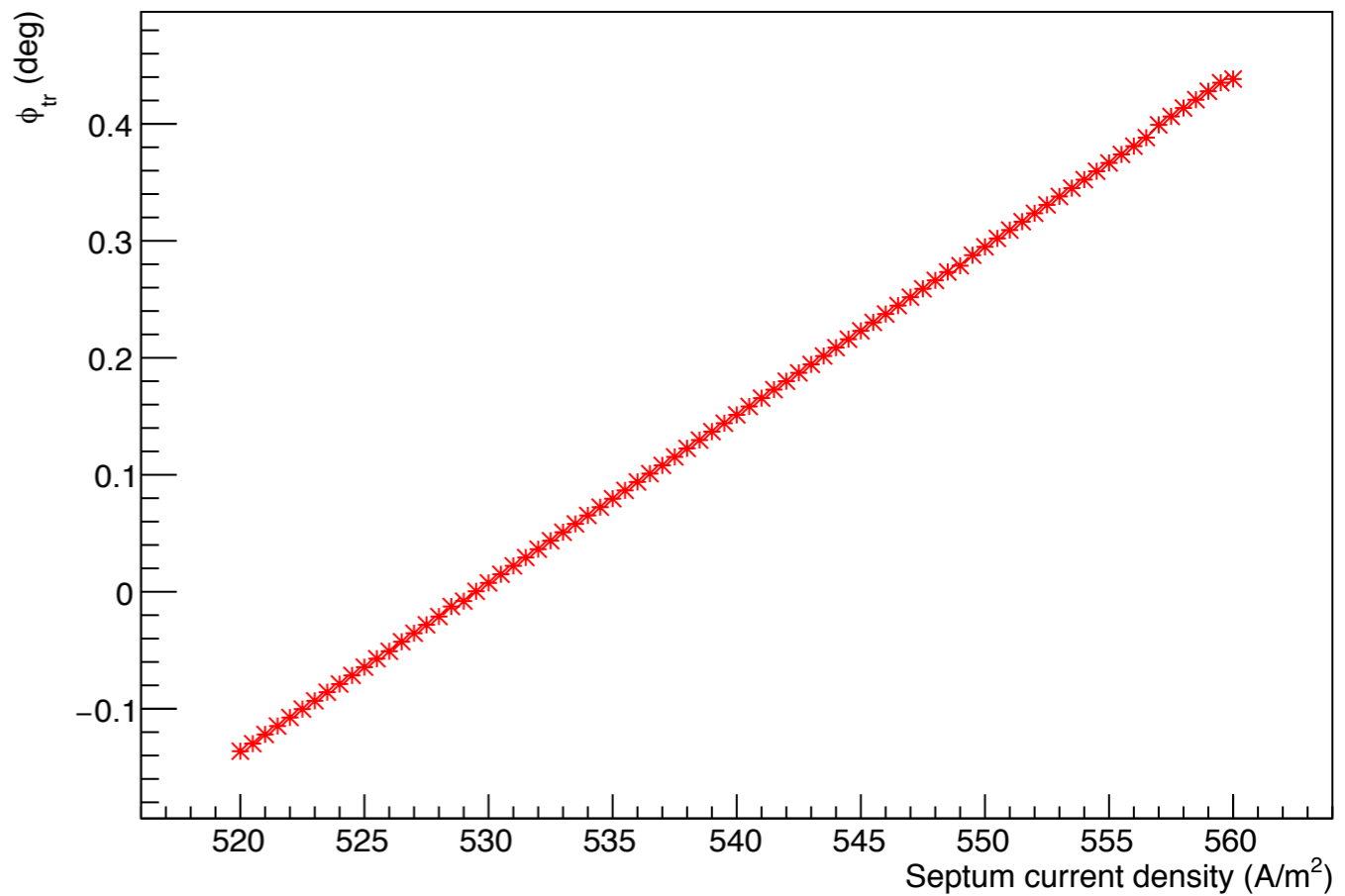
- Tune septum to minimize (y, ϕ) at Q1 entrance for a 5 degree track
- Tune septum *and* track angle to minimize (y, ϕ)

5 degree track

Position at Q1 entrance



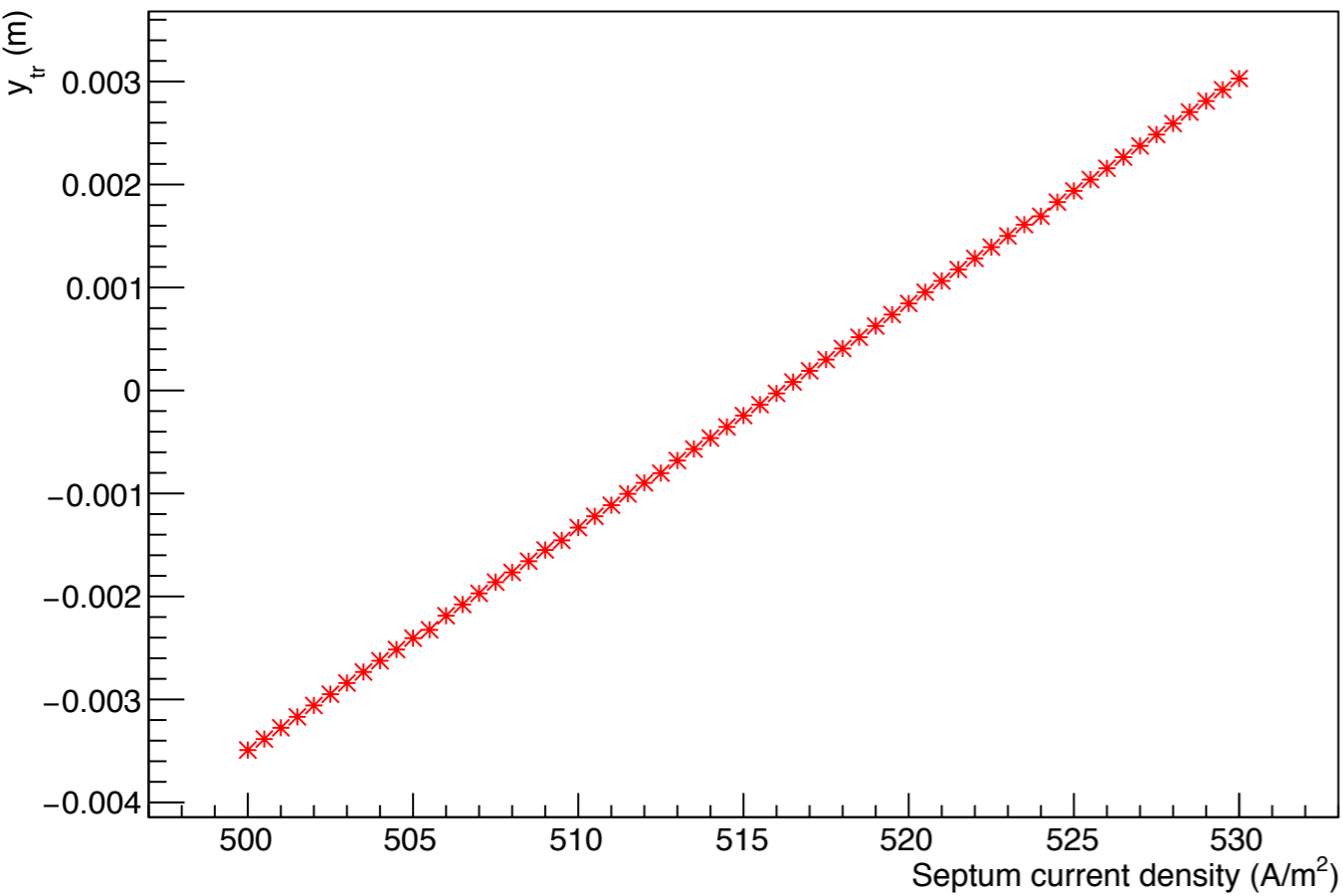
Angle at Q1 entrance



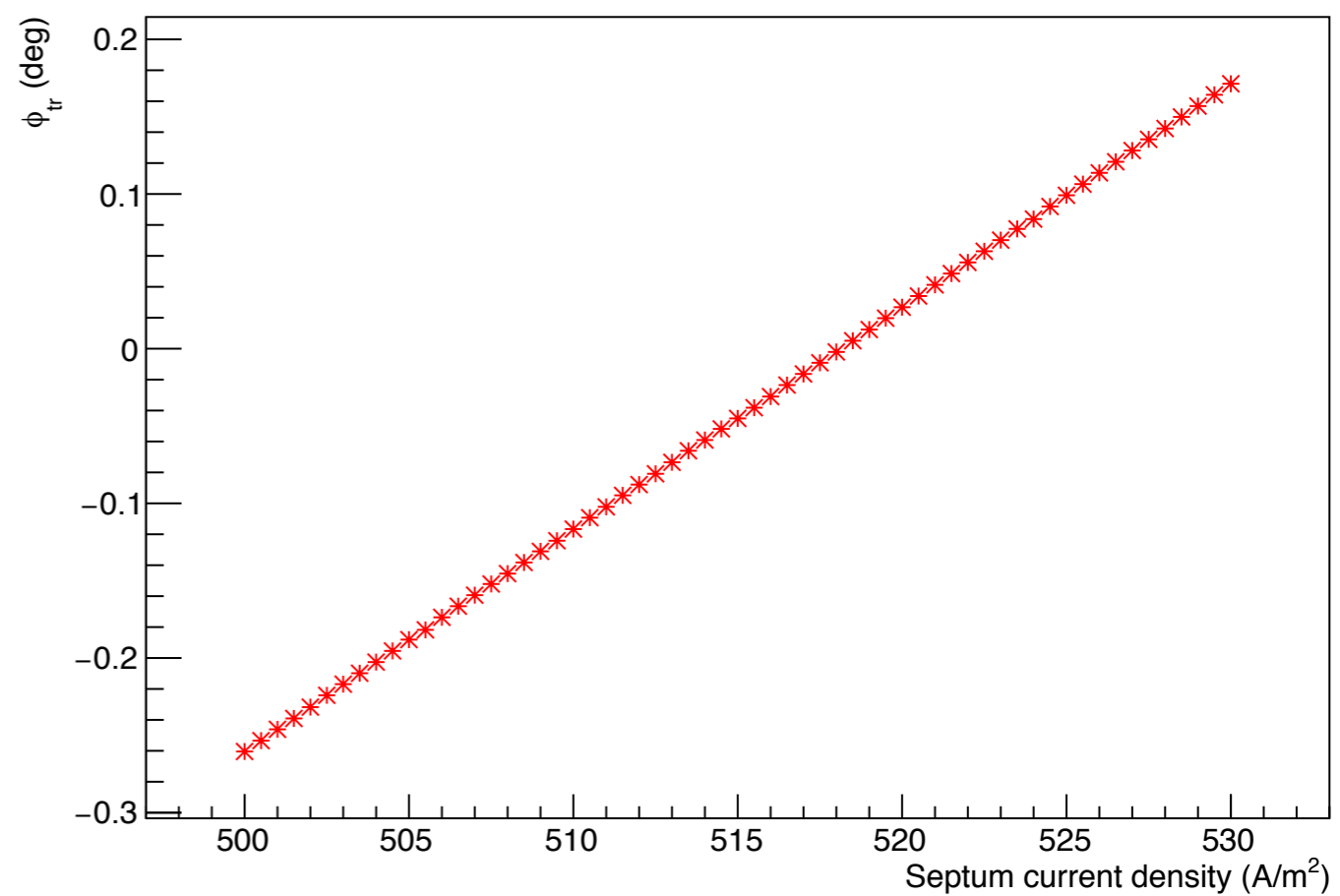
Cross zero at different septum currents

5.13 degree track

Position at Q1 entrance



Angle at Q1 entrance



Cross zero at the same septum current