Update

Transport functions RHRS target y calibration

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Transport Functions Package

- Goal: For simulation of optics situations of Rseptum=400016
- Setting in Snake: no target field, 400016 septum field map, 2.251 GeV e- trajectories
- Fitting functions
 - Forward
 - Reverse
- See talks by Chao/Jixie for simulation results

RHRS Target y Calibration

- Settings
 - Beam energy 2.253GeV
 - OT target field at 6 deg, Gep target magnet config
 - Good septum
- Optics runs
 - Beam position scan (-4,0) (0,0) (4,0)(mm) at dp= -3.5%
 - 22256, 22259, 22254

Matrix Target y Calibration

- Target y distribution mixed
- Identify carbon from other material: dp distribution of each hole
- Steps similar to previous calibrations
- Start from calibrated matrix of dp and angle, and lowest possible x order of each (theta, y, phi) term

Steps of cuts

Tg_y vs. fp_ph vetex cut for the whole run
Cut on each hole



This is from #22254 (4,0) dp=-3.5%

Steps of cut

3. Cut carbon elastic for each hole



DpCut 0 3 3

This plot is from #22254 (4,0) dp=-3.5%

Matrix Target_y Calibration

Initial pattern







After 1st iteration



Initial



Possible overlap?



Chao's talk

Select Cuts







DpCut_0_3_3





L.tr.r_th:L.tr.r_ph {L.cer.asum_p>250&&L.tr.n==1&&DL.evtypebits>>3&1&&tg_yvsph&&6_5}



L.tr.tg_th:L.tr.tg_ph {L.cer.asum_p>250&&L.tr.n==1&&DL.evtypebits>>3&1&&tg_yvsph}



L.tr.r_th:L.tr.r_y {L.cer.asum_p>250&&L.tr.n==1&&DL.evtypebits>>3&1&&tg_yvsph&&6_5}



Next

- Update with pengjia's latest beam info
- Look into the possible overlap?
- Understand the peak issue, acceptance?
- Any suggestions from this meeting
- LHRS vertex
- RHRS longitudinal?
- Pointing...