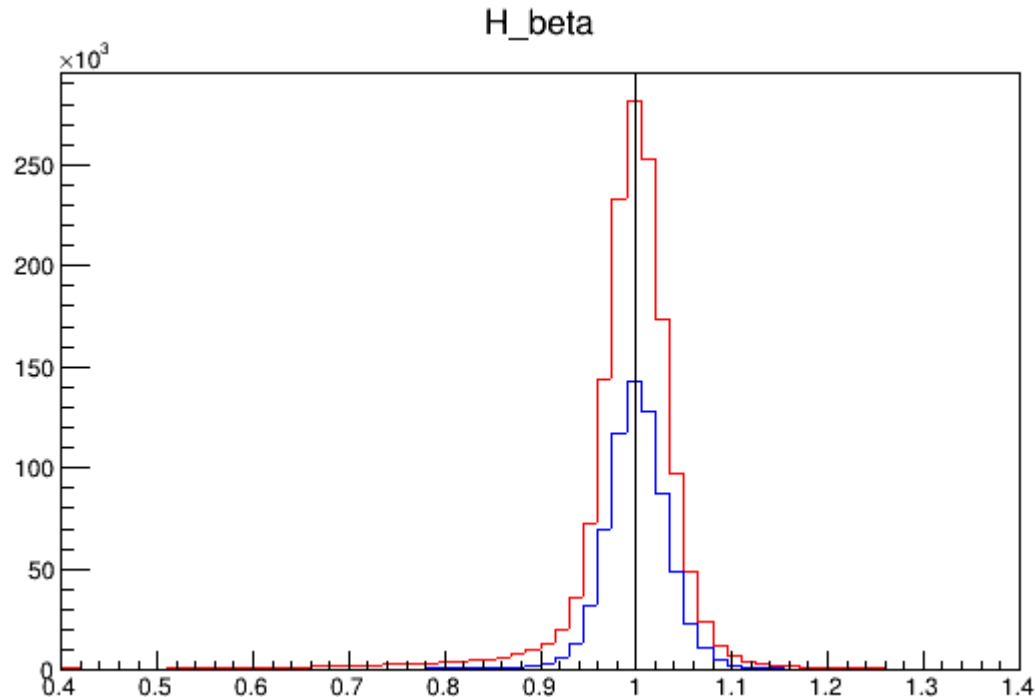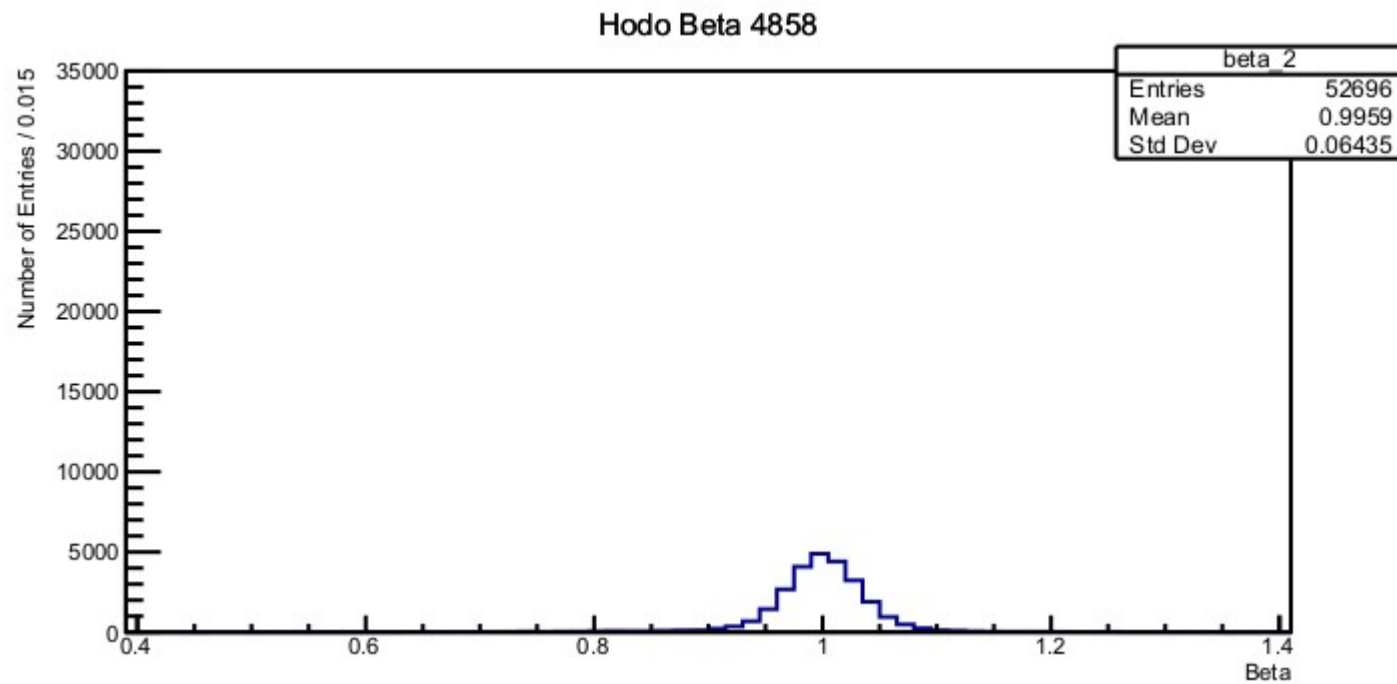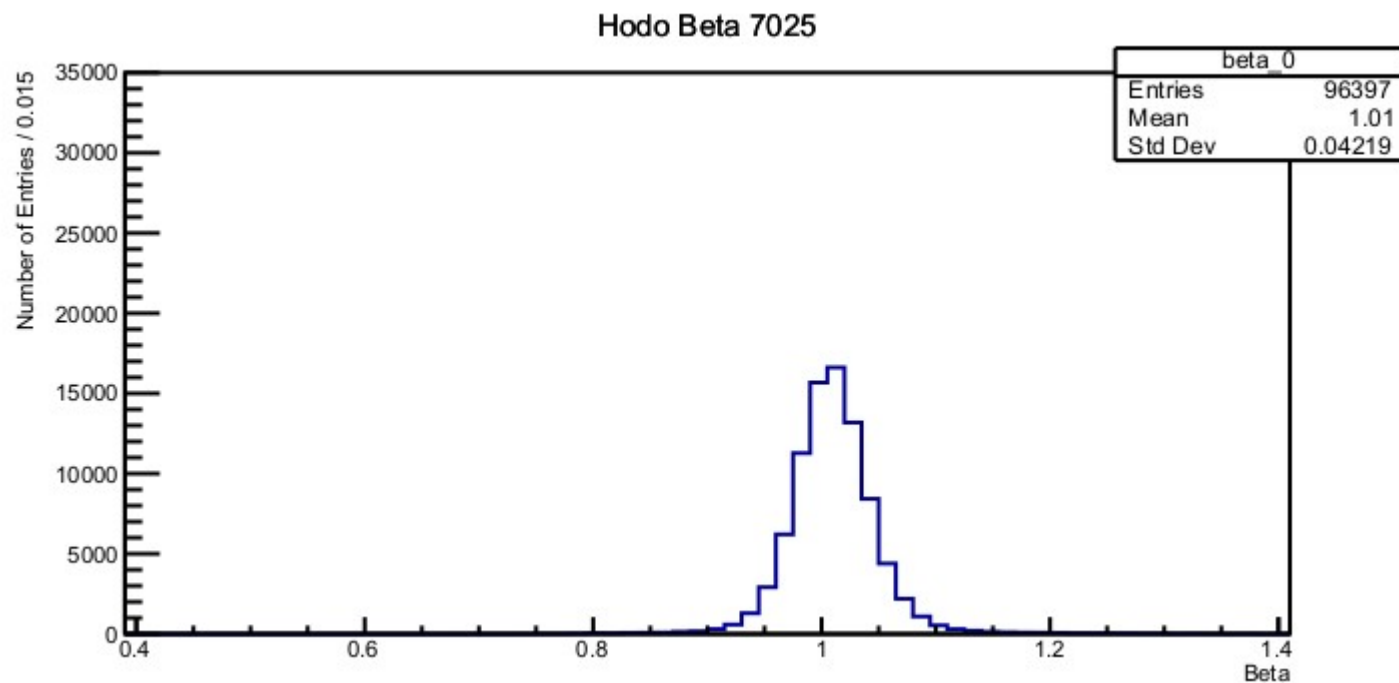# HMS Hodoscope Calibration

- Calibrated HMS hodoscope using run 4889, type K+3.0 ,Ebeam 10.59

- Used this calibration to replay the runs on the next slides for a 100 000 events
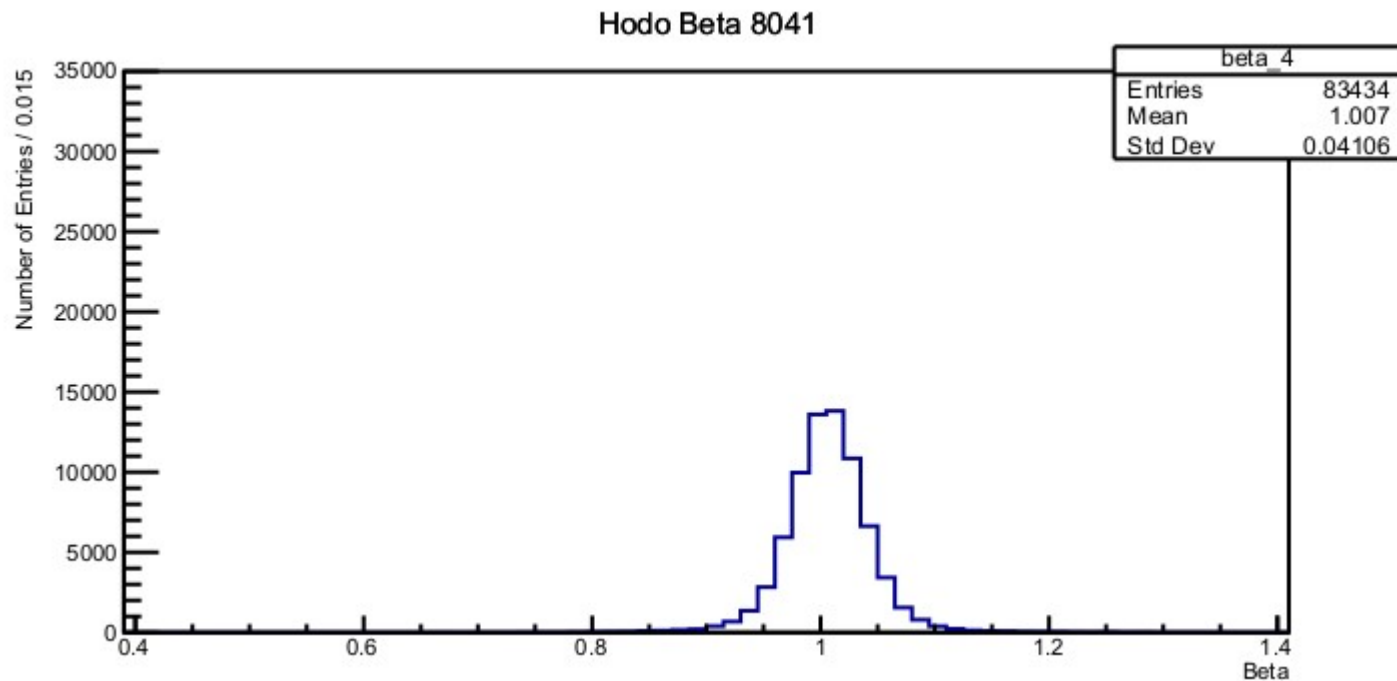
H_beta

Run 4858, type HeepC, Ebeam 10.59

Hodo Beta 4858

beta_2	
Entries	52696
Mean	0.9959
Std Dev	0.06435

Run 7025, type Prod, Ebeam 4.933

Hodo Beta 7025

beta_0	
Entries	96397
Mean	1.01
Std Dev	0.04219

Run 8041, type HeepC, Ebeam 8.2

Run 6639, type Prod, Ebeam 3.835

Hodo Beta 6639

beta_1	
Entries	92375
Mean	1.007
Std Dev	0.04116

Number of Entries / 0.015
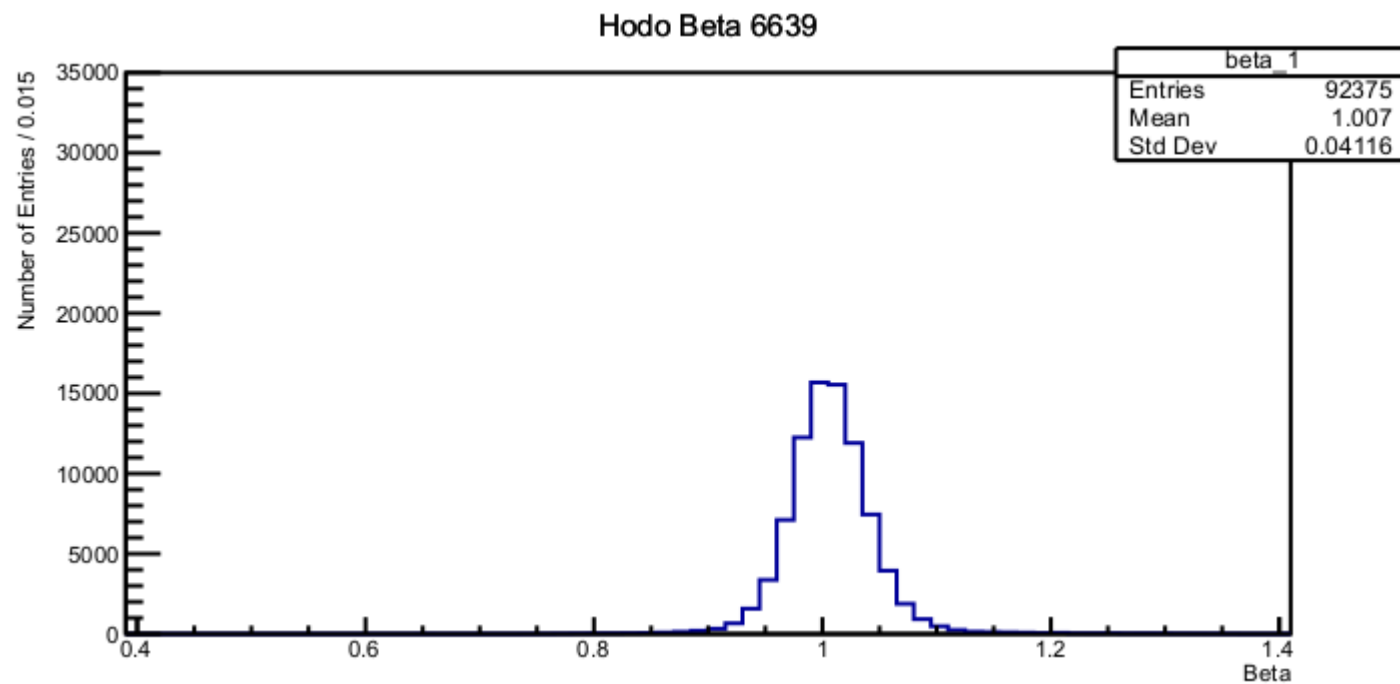
Beta

Run 4904, type Prod, Ebeam 10.2

Hodo Beta 4904

beta_5	
Entries	98003
Mean	0.9956
Std Dev	0.06216
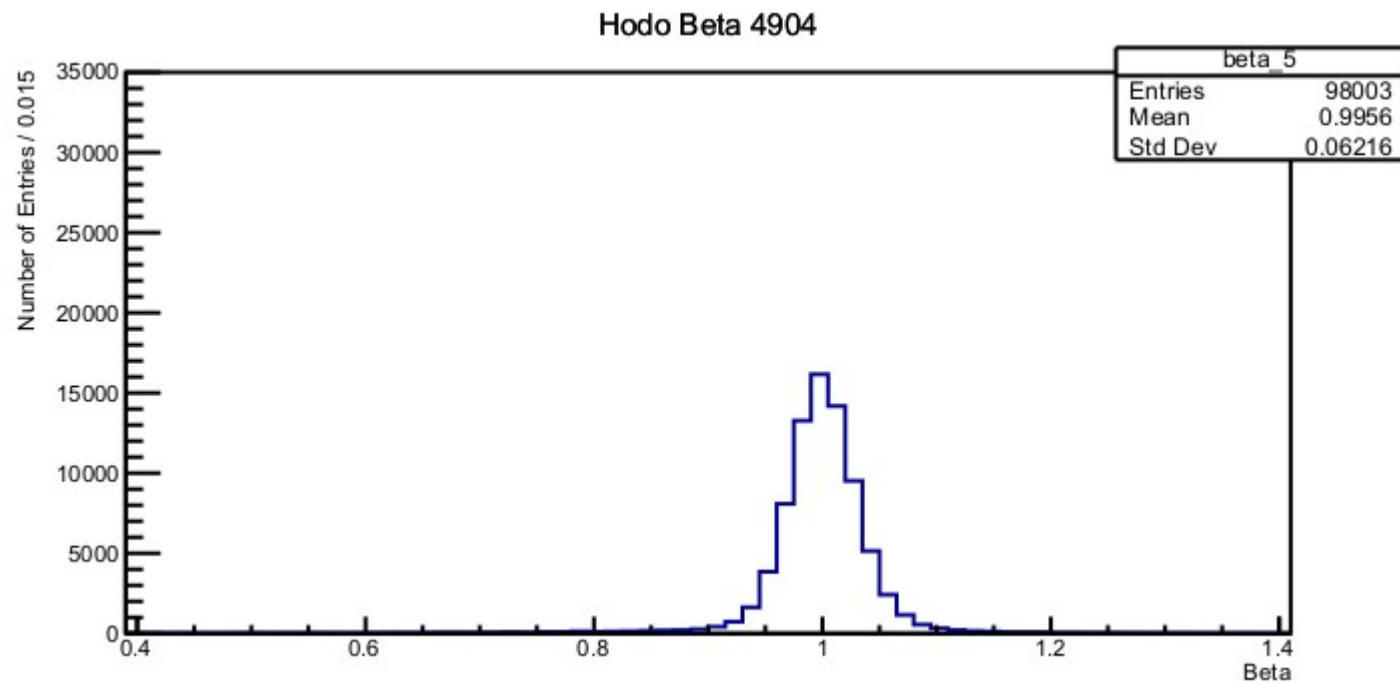
Run 7883, type Prod, Ebeam 6.2

Hodo Beta 7883

beta_3	
Entries	60056
Mean	1.011
Std Dev	0.0411
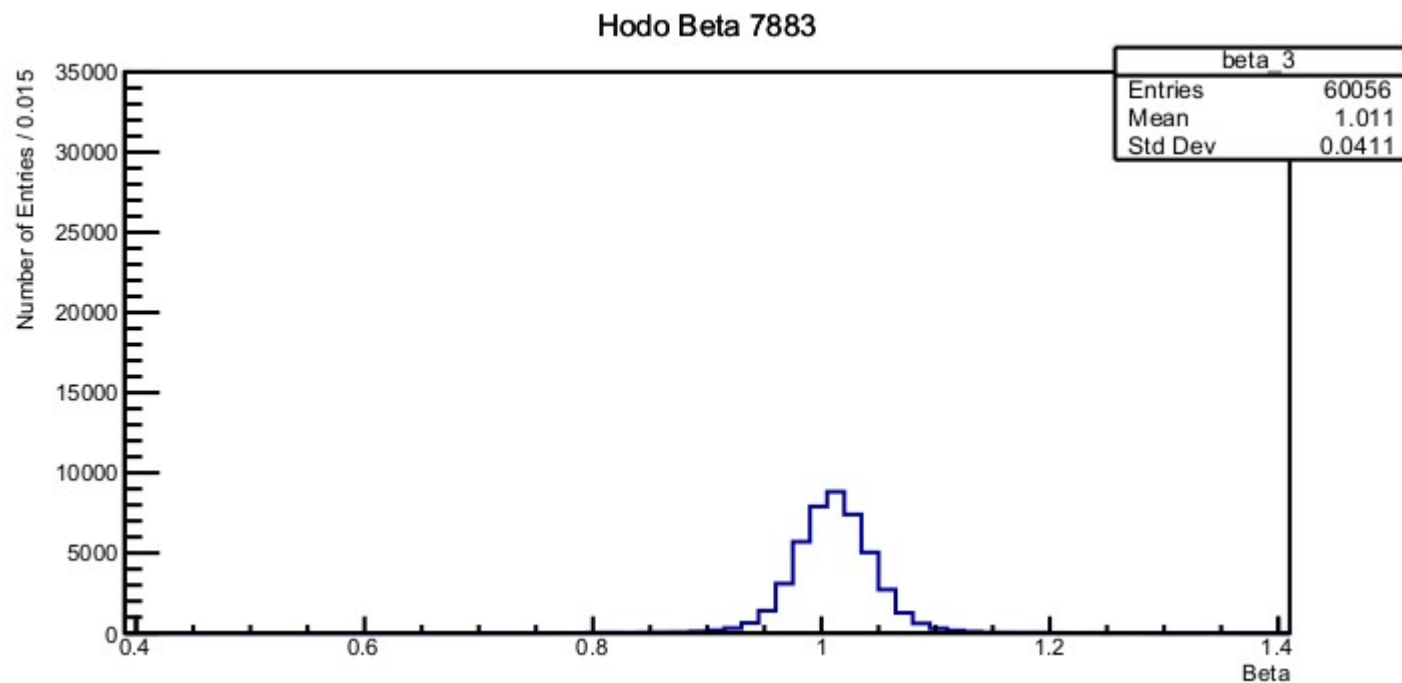
Plot of mean for all runs against run number
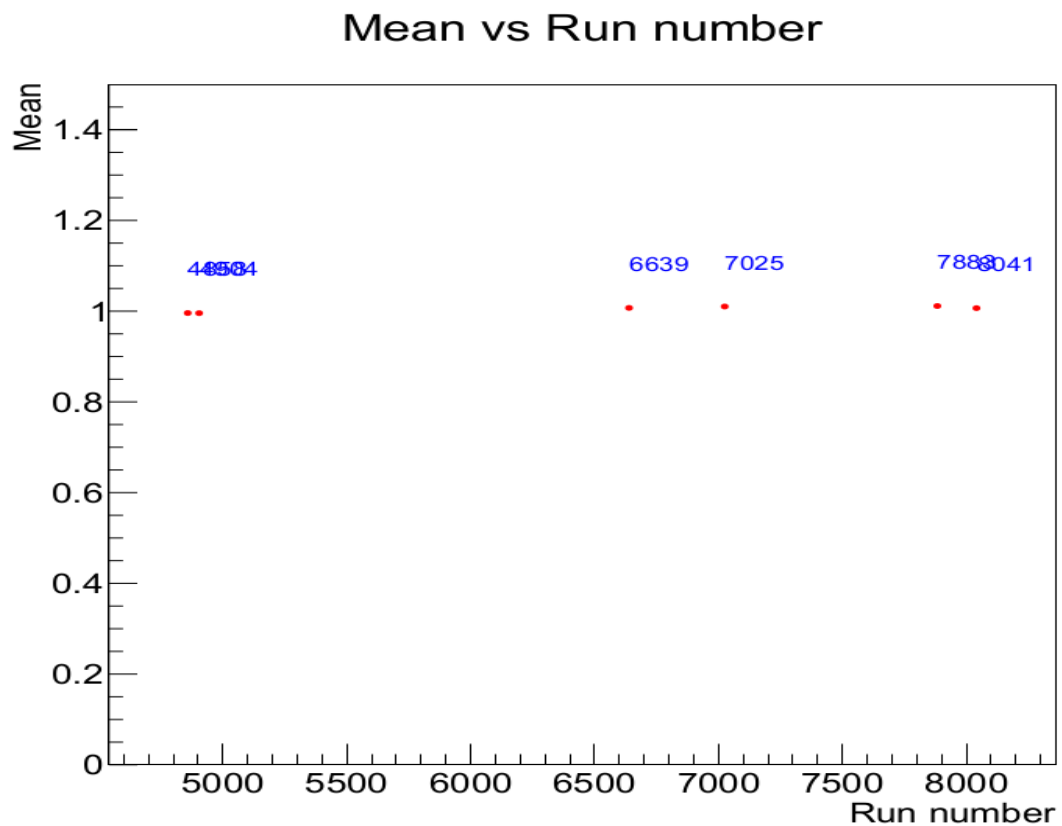
Observation & Questions

- Mean of beta for runs with different kinematics is centered close to one
- Is the standard deviation error acceptable?
- If so is the calibration good for the entire run?
- Do further texting, recalibrate for one of the runs and see how the results change across the board