



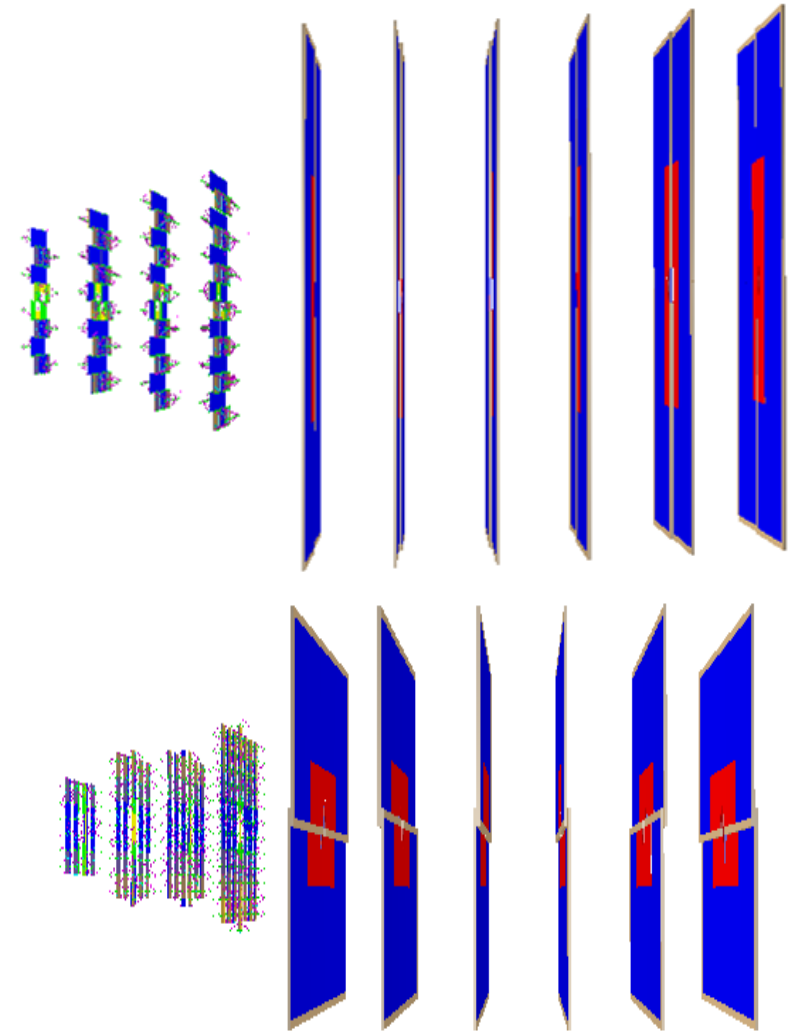
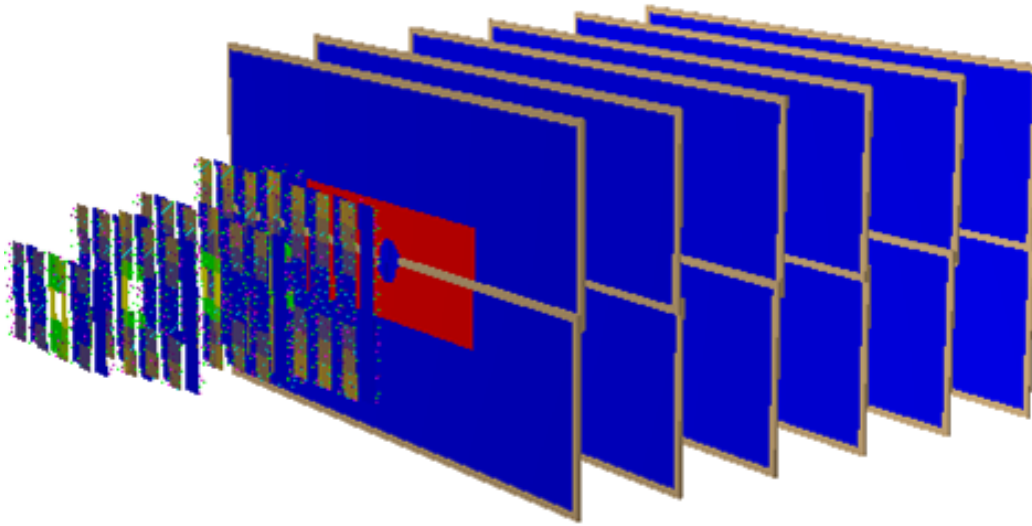
# First results from PHQMD on BM@N

**A.Zinchenko, V.Vasendina**

29 July 2020

# Geometry

A.Zinchenko



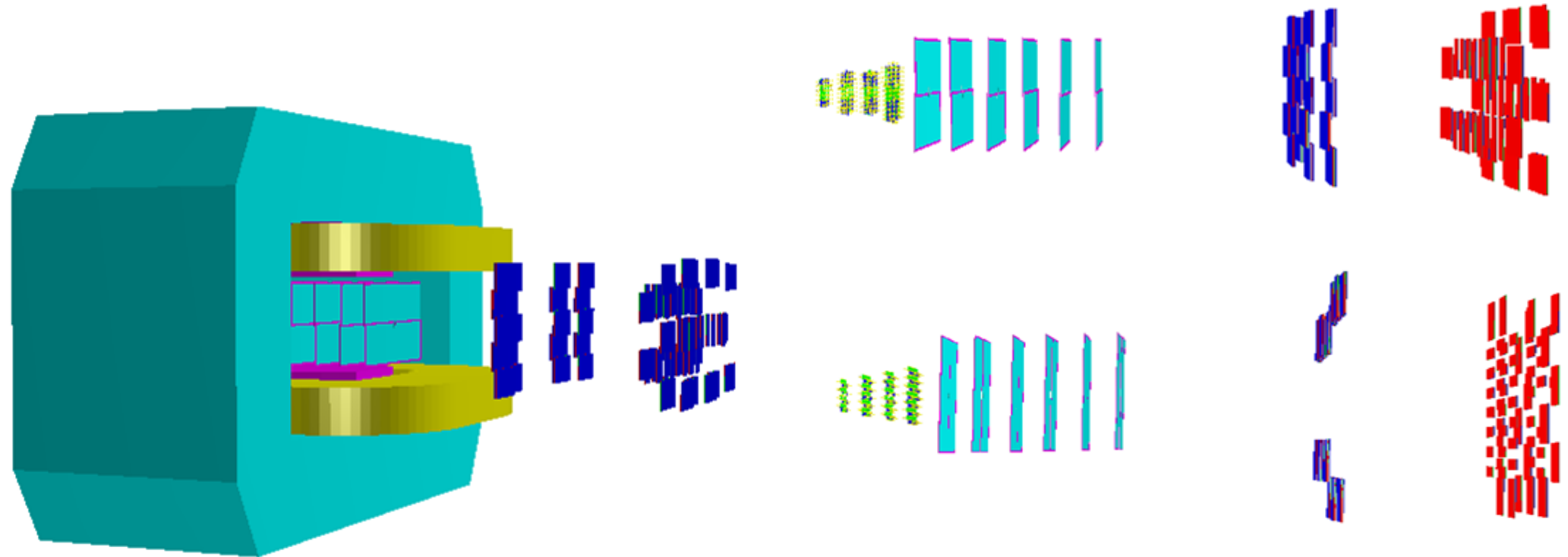
## Stations (target at 0):

Si	30 cm	50 cm	70 cm	90 cm	(version "f" from E.Lavrik)	Beam hole 6x8 cm	
GEMs	120 cm	150 cm	180 cm	210 cm	240 cm	270 cm	Beam hole R = 5.75 cm

**Field:** ~0.8 T

# Geometry with TOF

A.Zinchenko



## Stations (target at 0):

Si	30 cm	50 cm	70 cm	90 cm	(version "f" from E.Lavrik)
GEMs	120 cm	150 cm	180 cm	210 cm	240 cm 270 cm

**Field:** ~0.8 T

10k Au+Au at  $T_0 = 4$  GeV,  $b = 0-5$  fm  
(from V.Kireyeu)

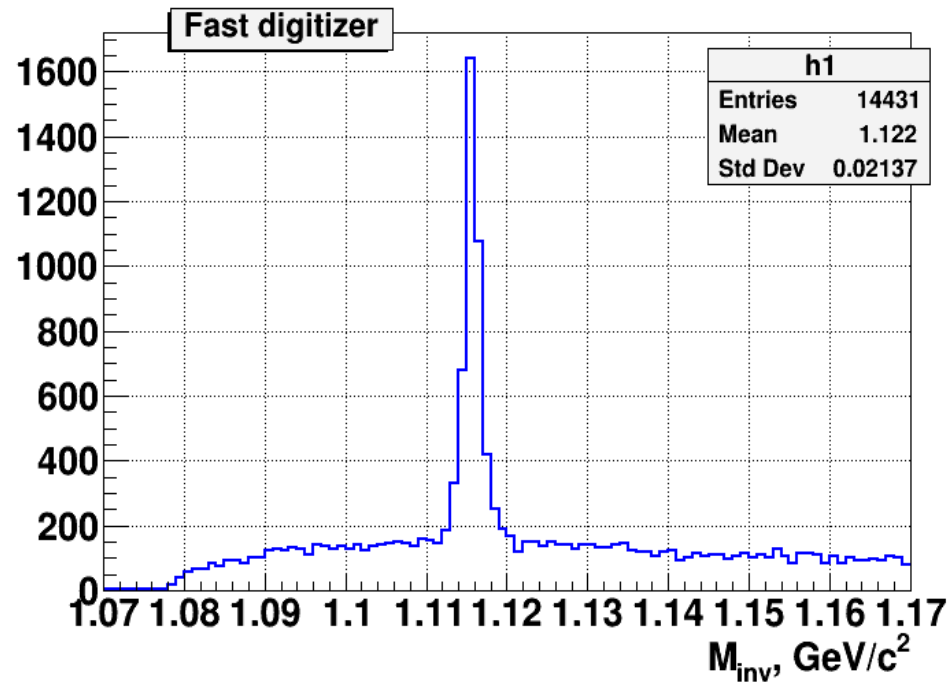
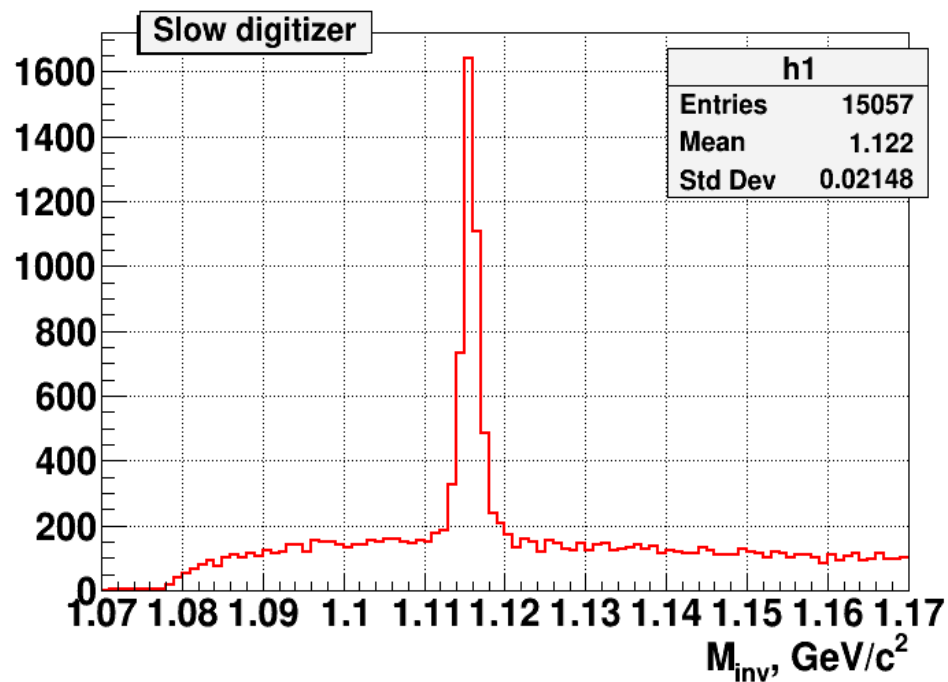
1) Lambda: 40859

2) Xi-: 529

3) H3L: 1689

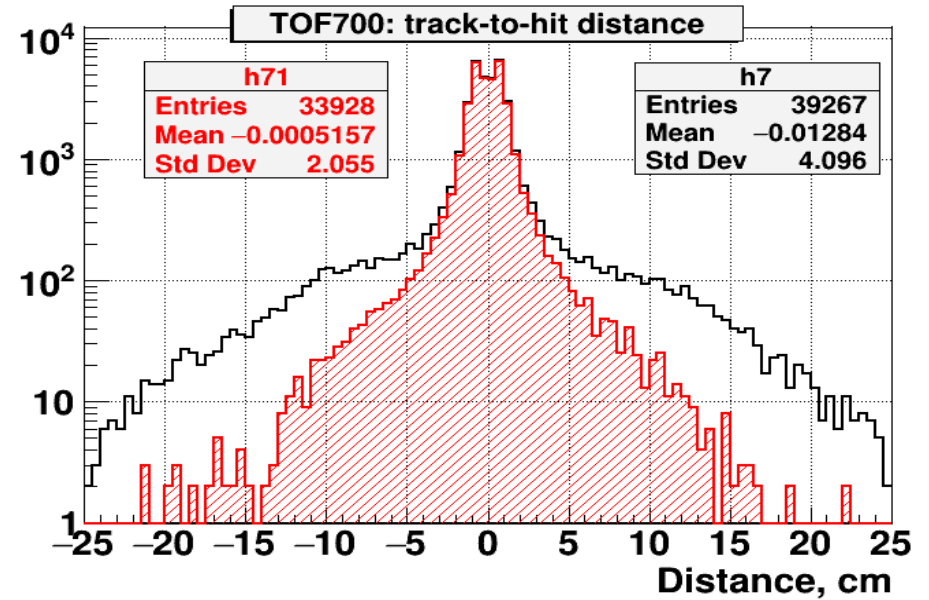
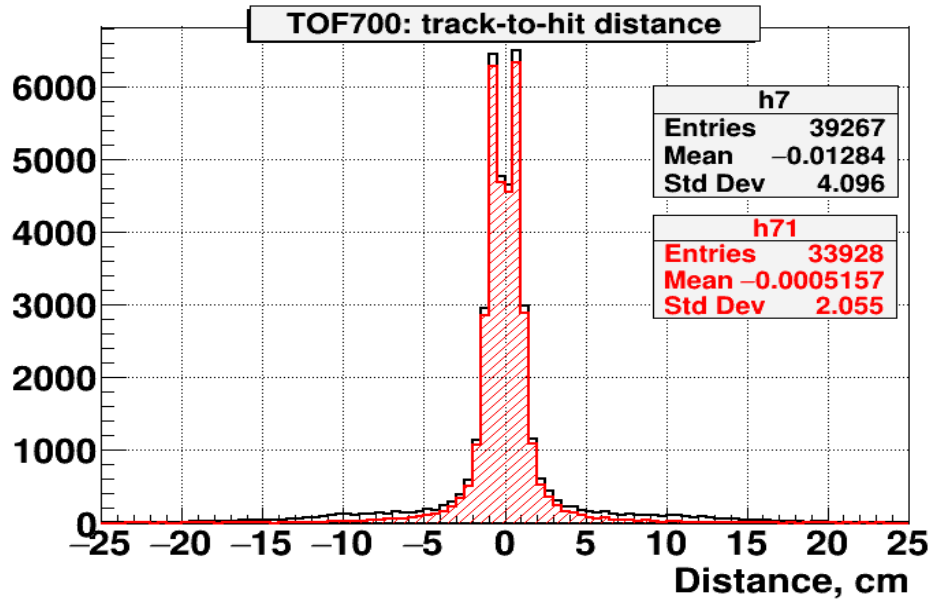
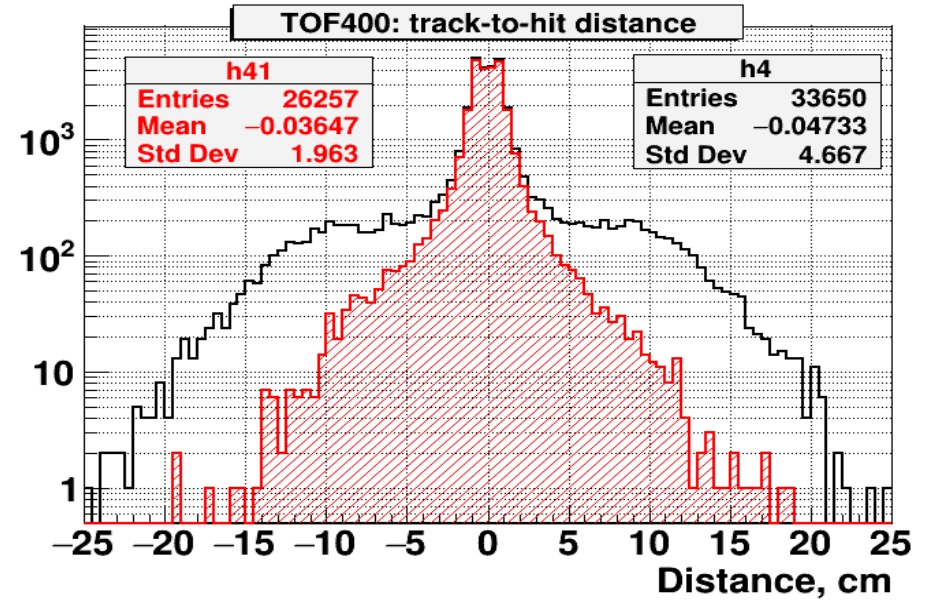
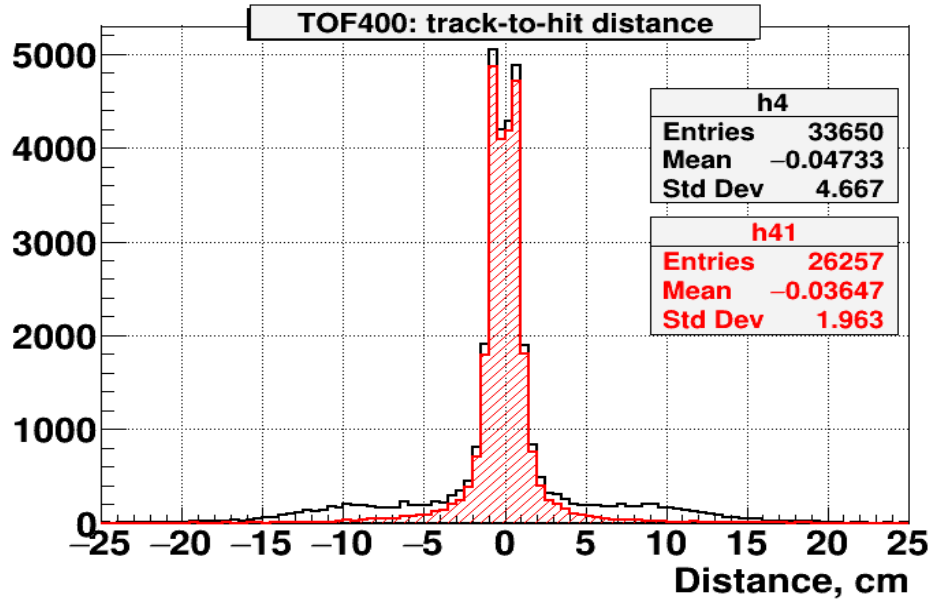
# Lambda peak with slow and fast digitizers in GEMs

Factor of 3.9 decrease in processing time

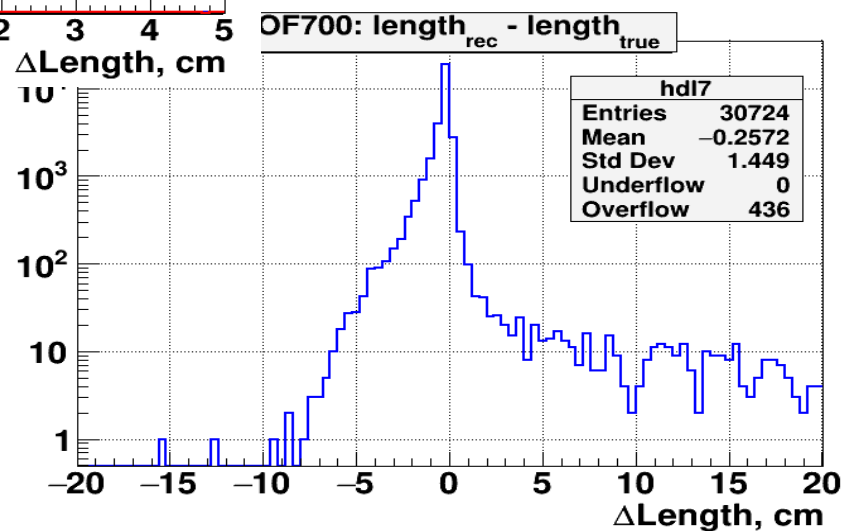
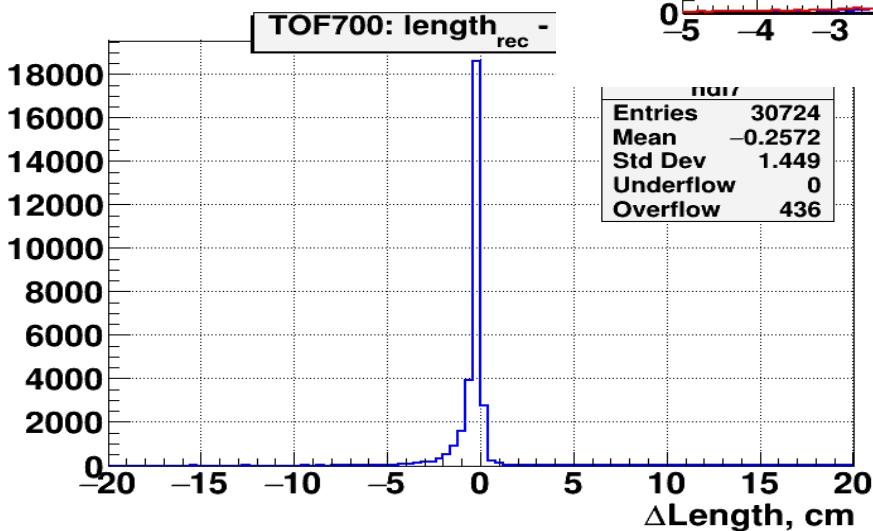
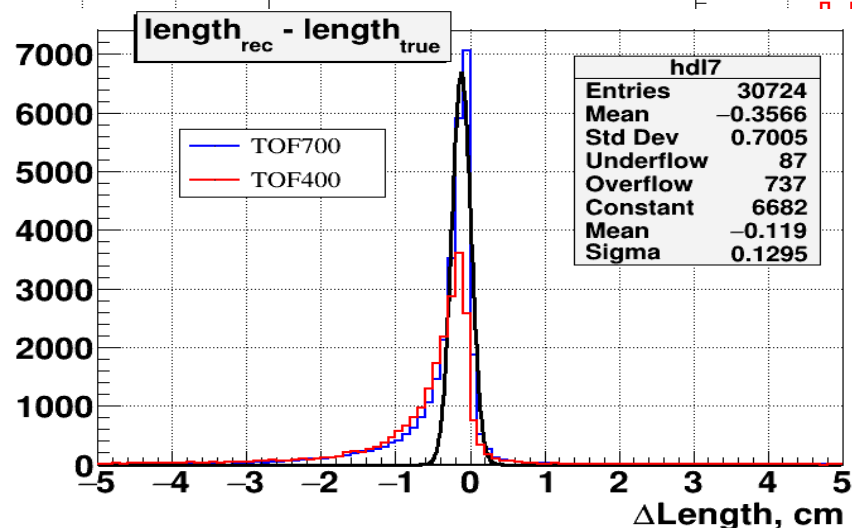
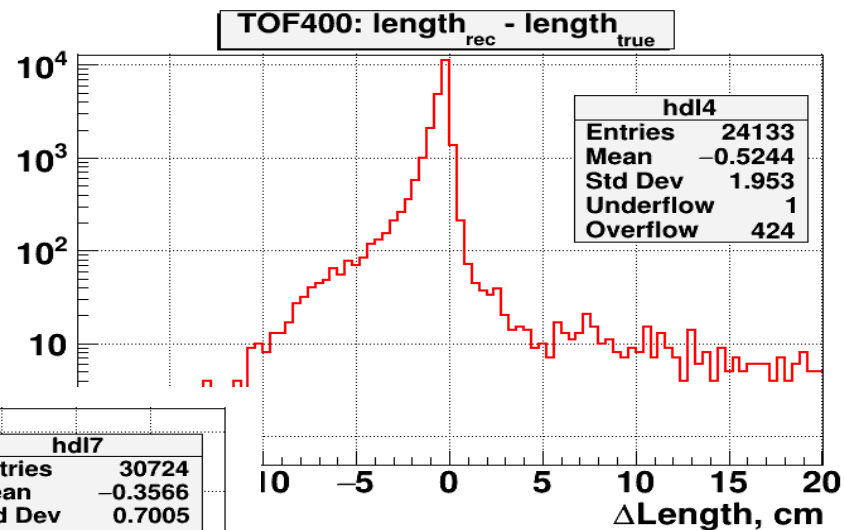
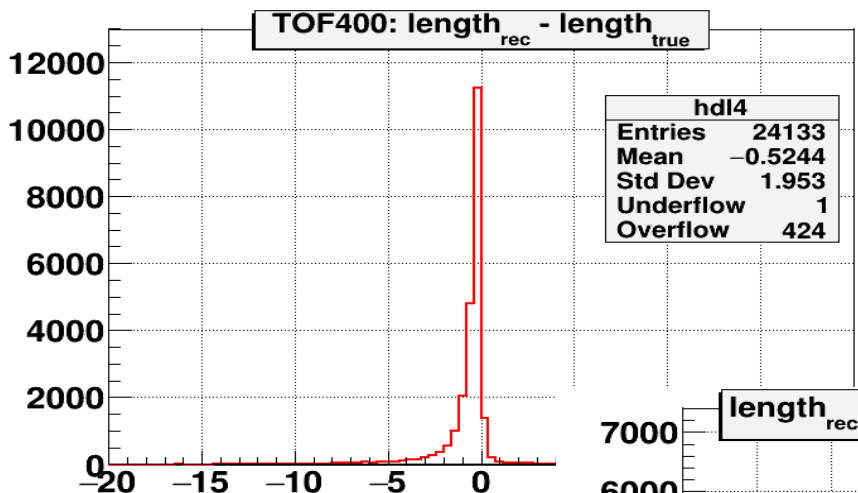


$$\chi^2_P > 5, \chi^2_\pi > 5, \lambda_\Lambda > 5 \text{ cm}, \chi^2_\Lambda < 20, \text{angle}_\Lambda < 0.1$$

# Matching with TOF



# Matching with TOF



# Matching with TOF

