

Status BigBite Reconstruction

Ole Hansen — 17 March 2008

Done:

- Find & fit hits within roads
- Reject ghosts
- Combine u, v, x in 3D

In progress:

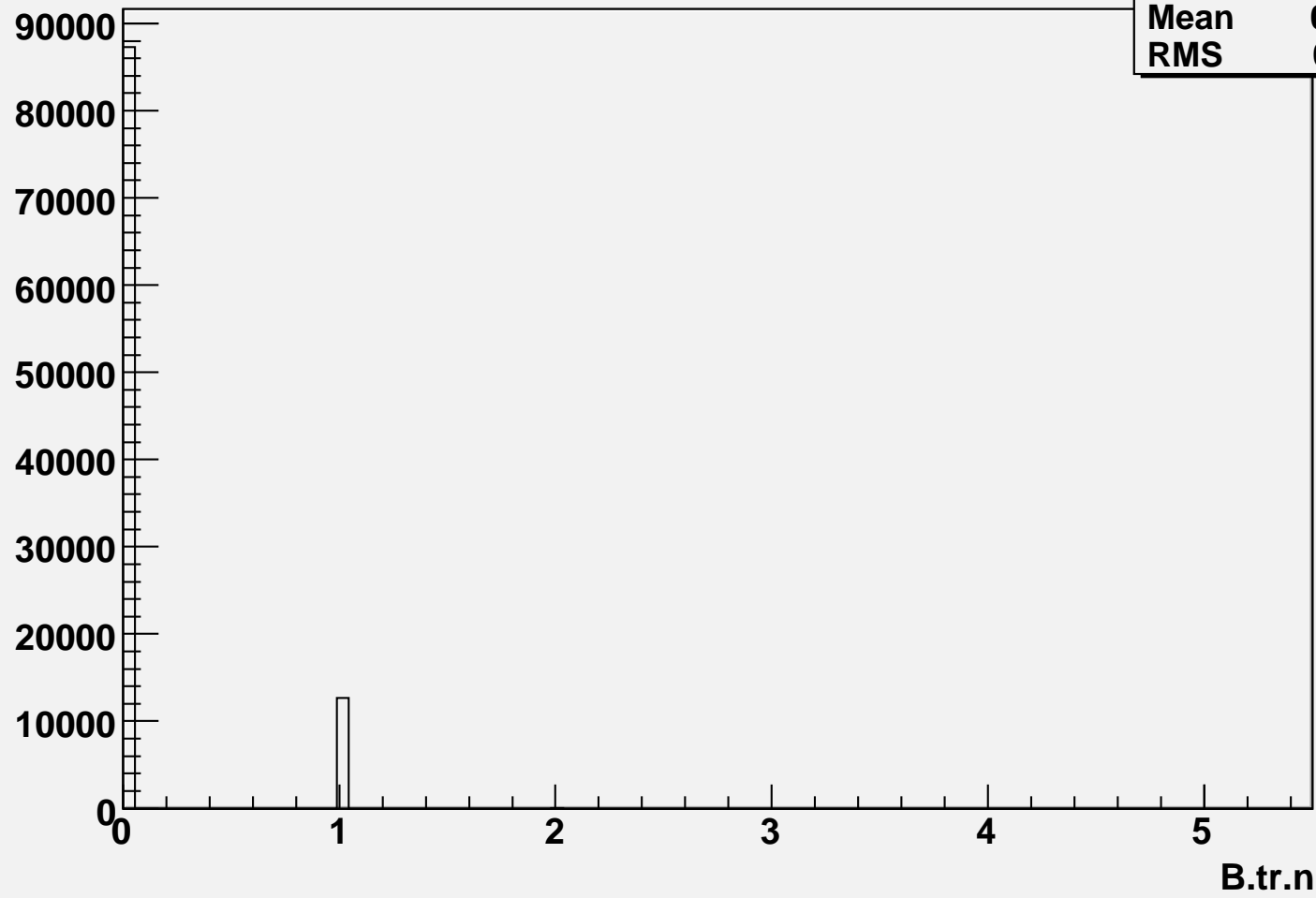
- Test/compare with MC input and with G_E^n data (with Xin Qian)
- Test VME decoder with Test Lab data (Xin)
- Event display (Miha Mihovilovic)
- Optics/momentum reconstruction (Jin Huang)

To do:

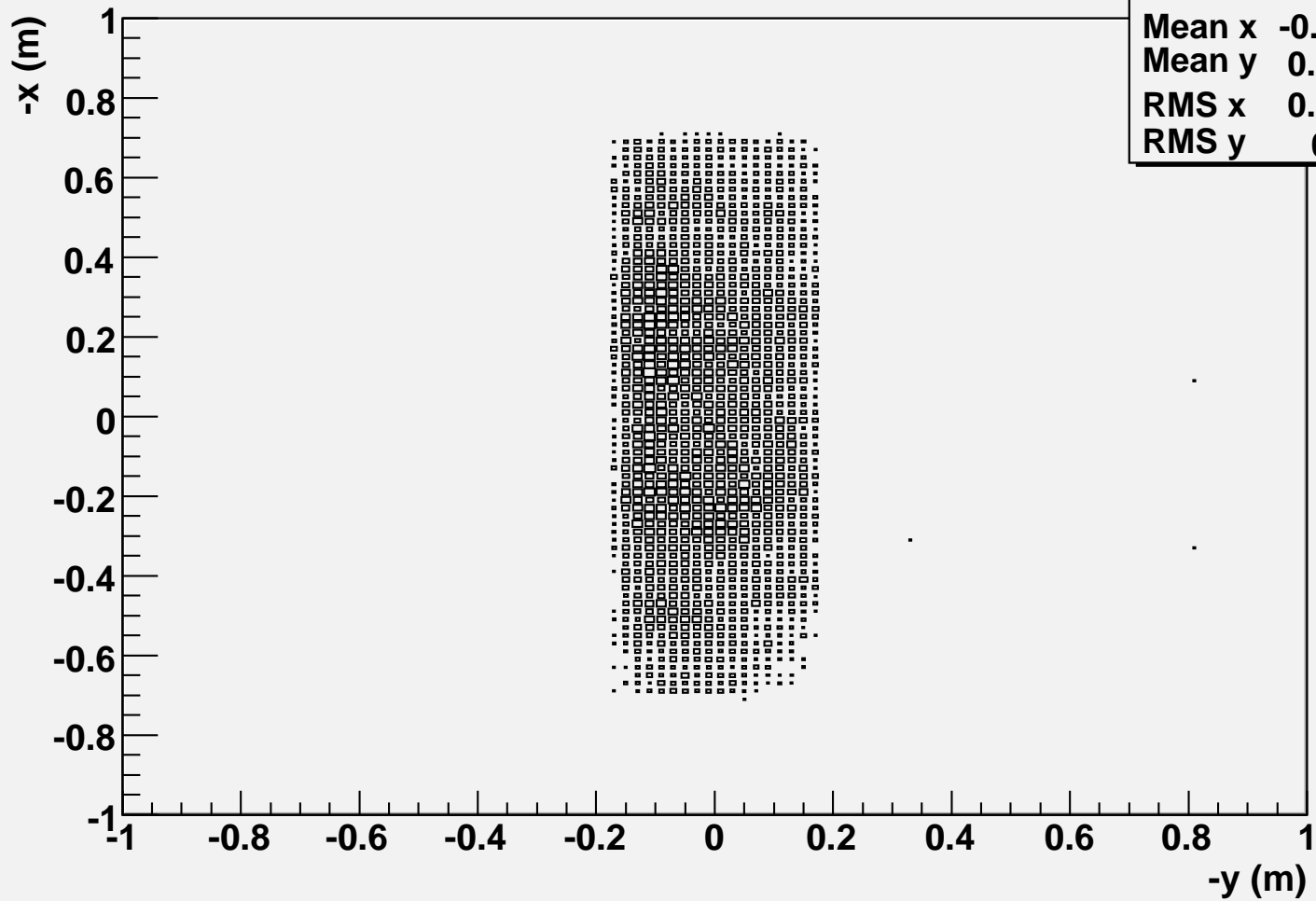
- Calibrate (for π^0)
- FineTrack corrections, e.g. $1/\cos\theta$, t_0 , alignment, magnet fringe field
- Parallelize (for maximum speed)

B.tr.n

htemp	
Entries	100000
Mean	0.1274
RMS	0.3349

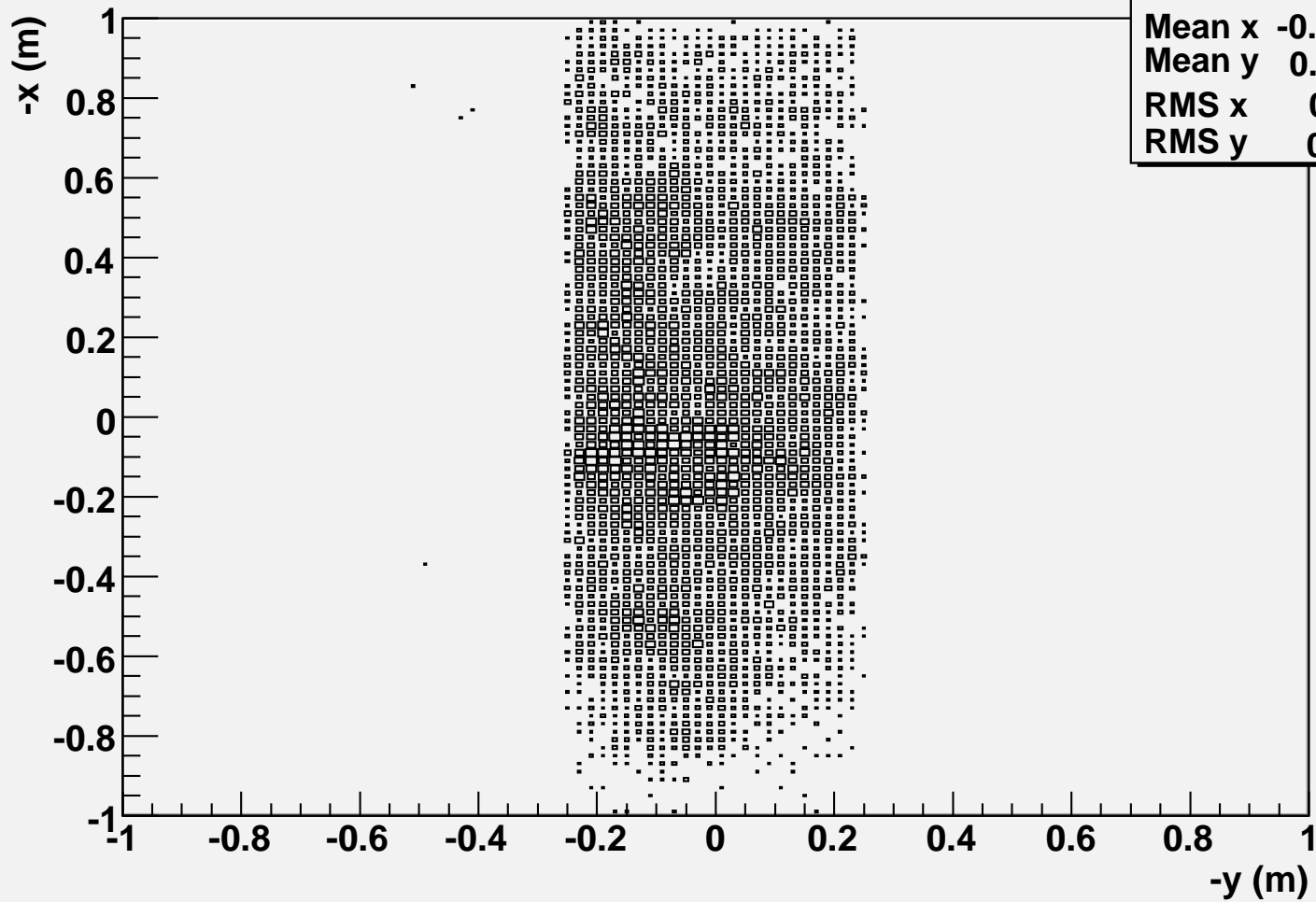


GEN 4427: Track -x vs -y



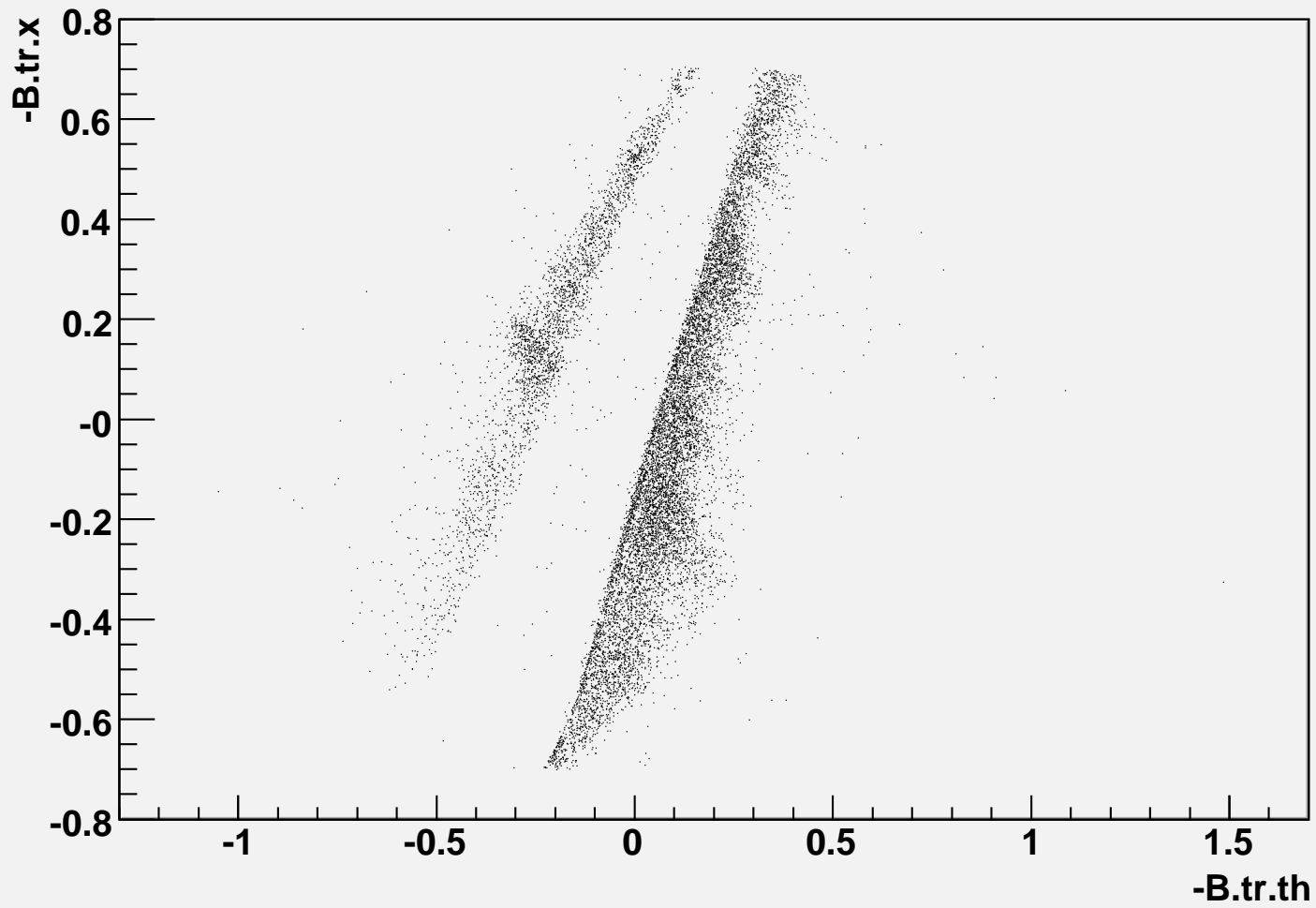
h2	
Entries	12737
Mean x	-0.01691
Mean y	0.01359
RMS x	0.08995
RMS y	0.3361

GEN 4427: Track -x vs -y at u3p (z=0.73845 m)

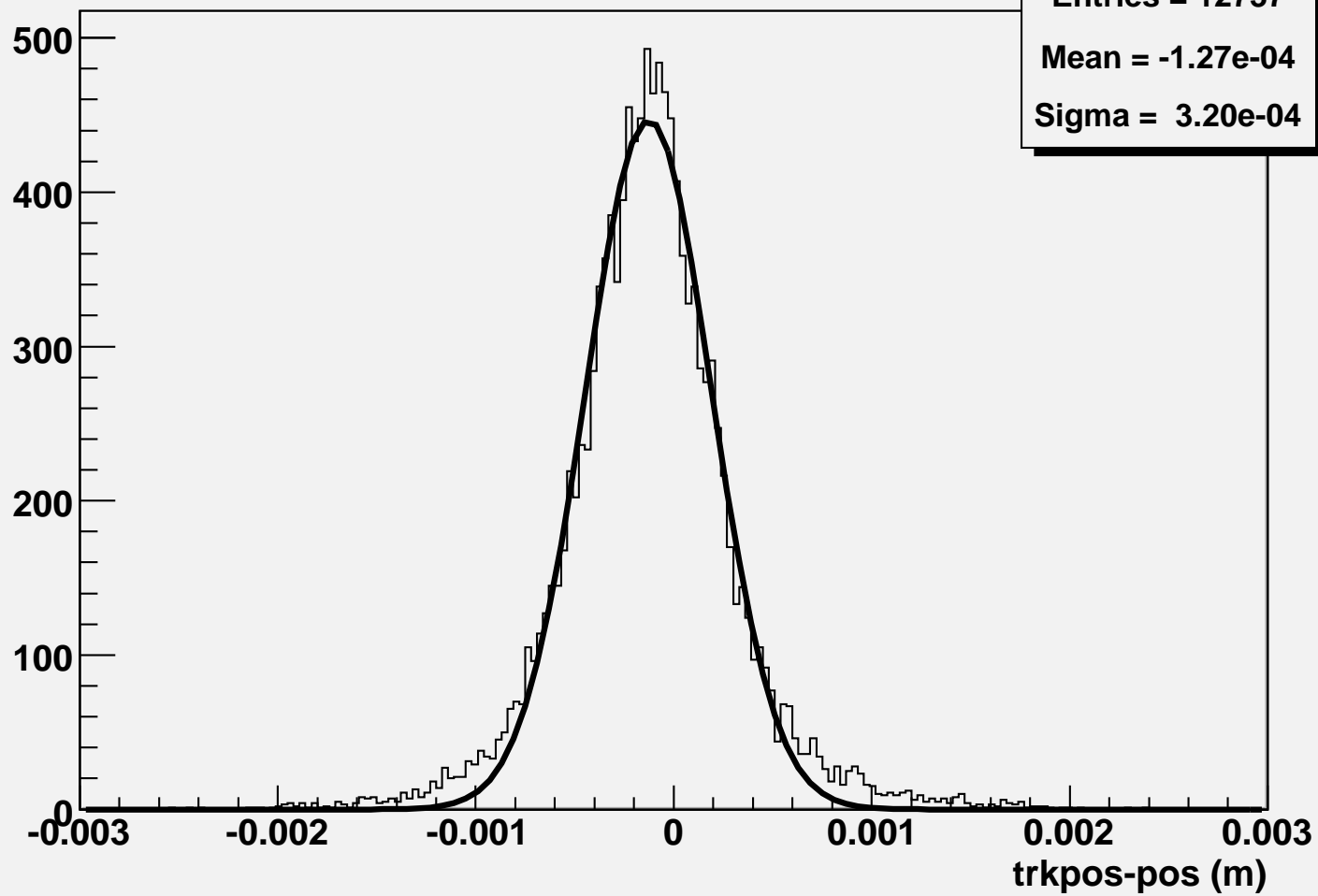


h2	
Entries	12737
Mean x	-0.03455
Mean y	0.04358
RMS x	0.1293
RMS y	0.4184

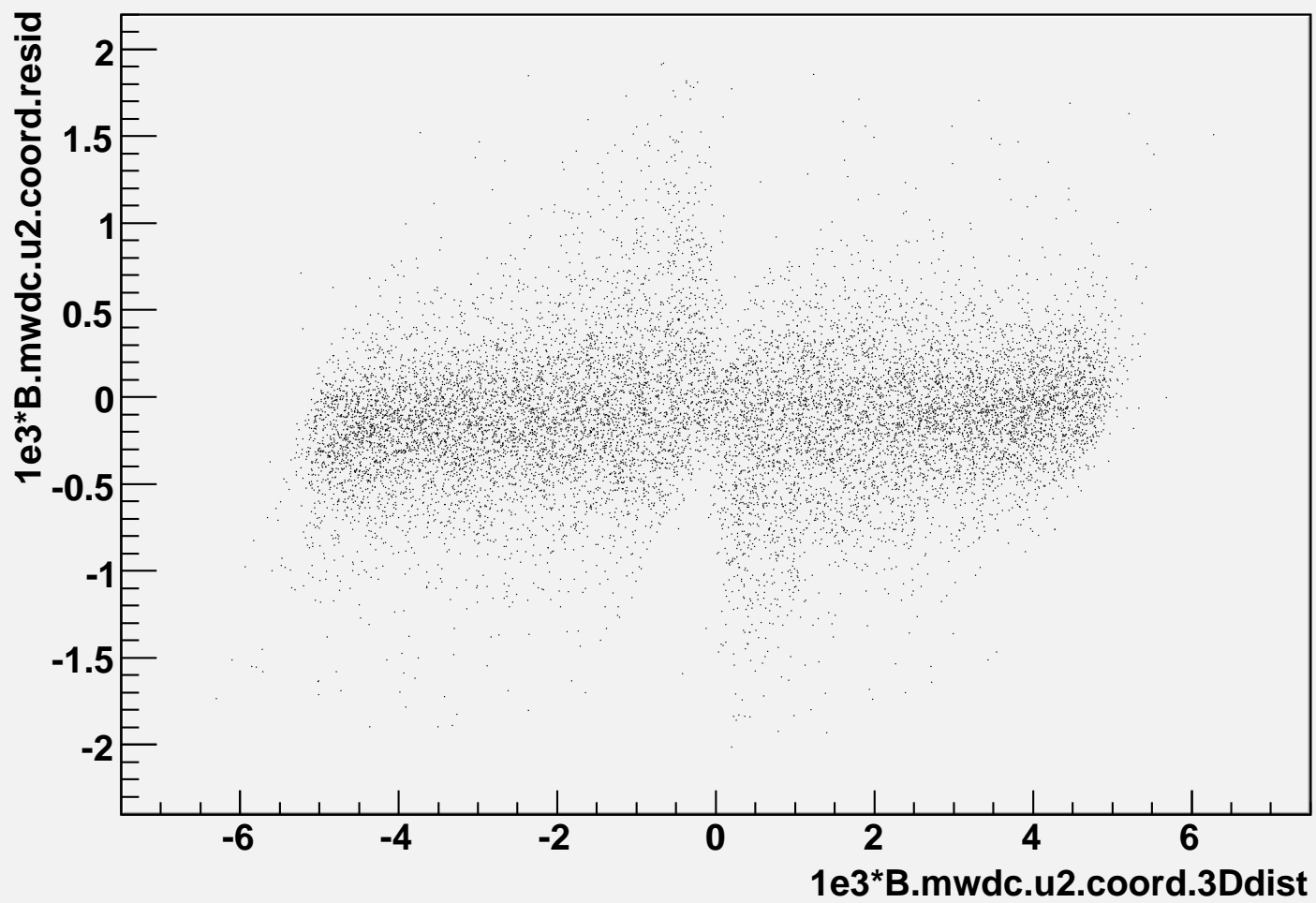
-B.tr.x:-B.tr.th



GEN 4427 CoarseTrack: u2 residuals

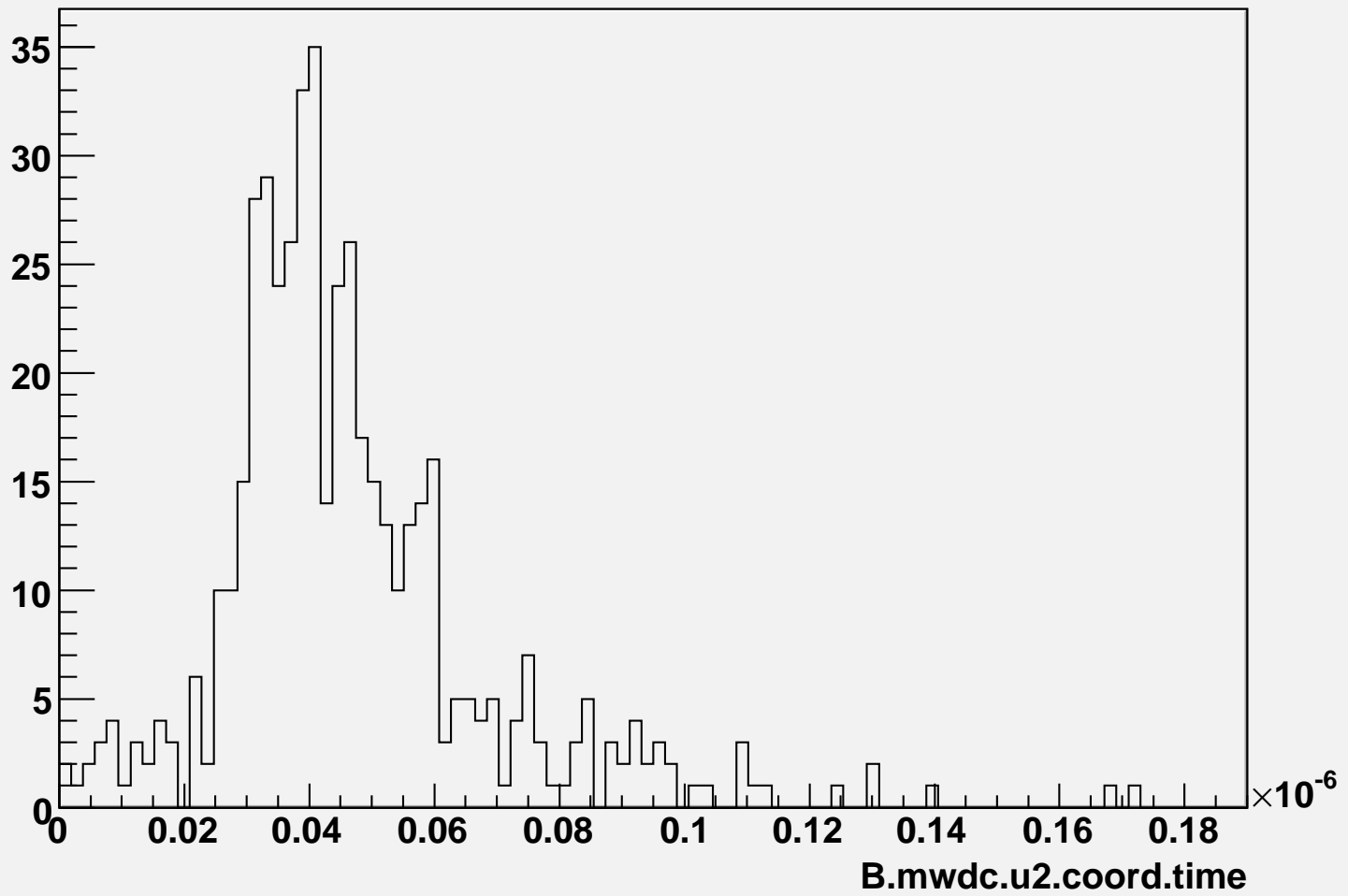


1e3*B.mwdc.u2.coord.resid:1e3*B.mwdc.u2.coord.3Ddist



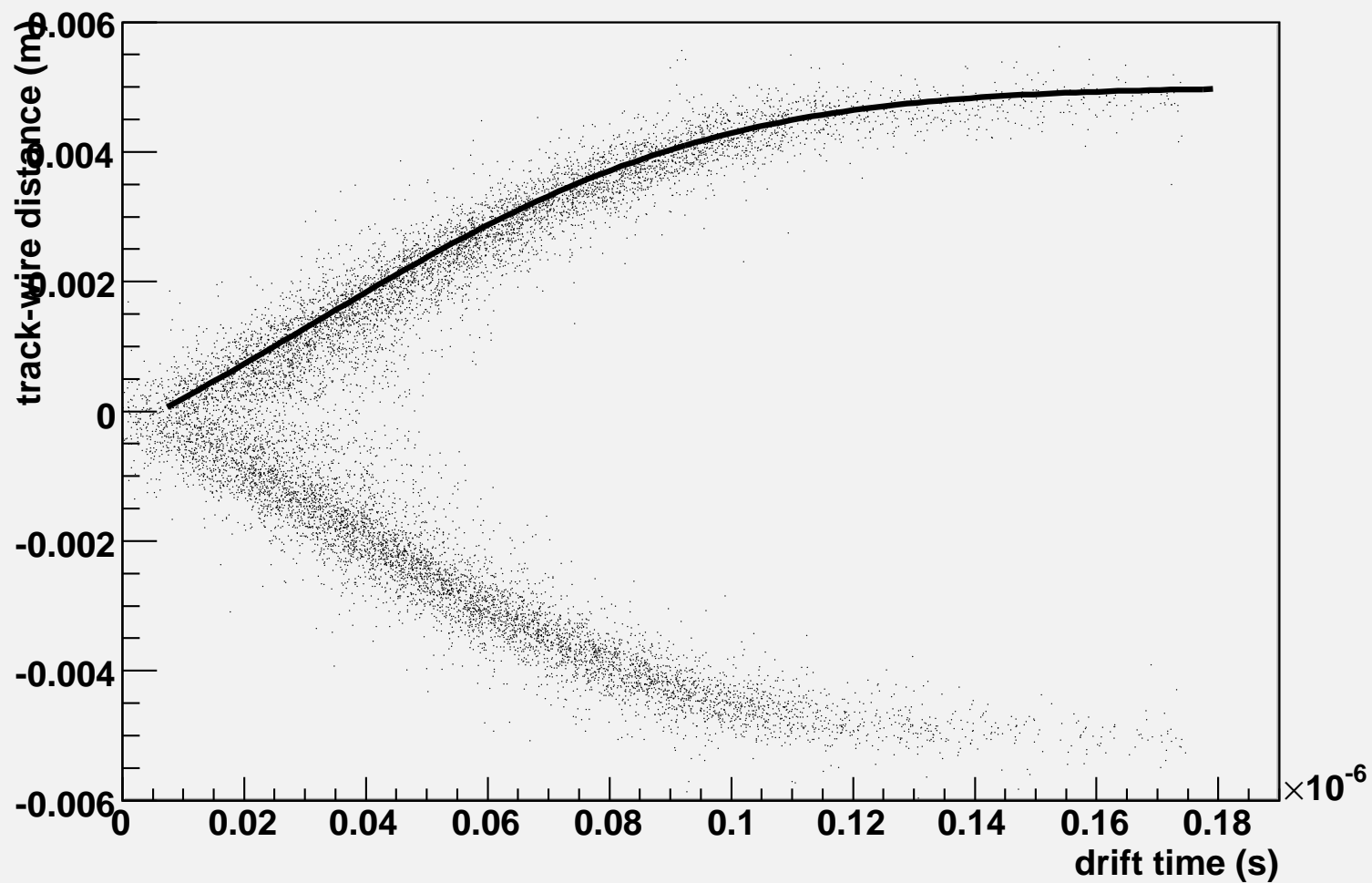
B.mwdc.u2.coord.time {abs(B.mwdc.u2.coord.3Dresid+1.27e-4)>1e-3}

Entries 481



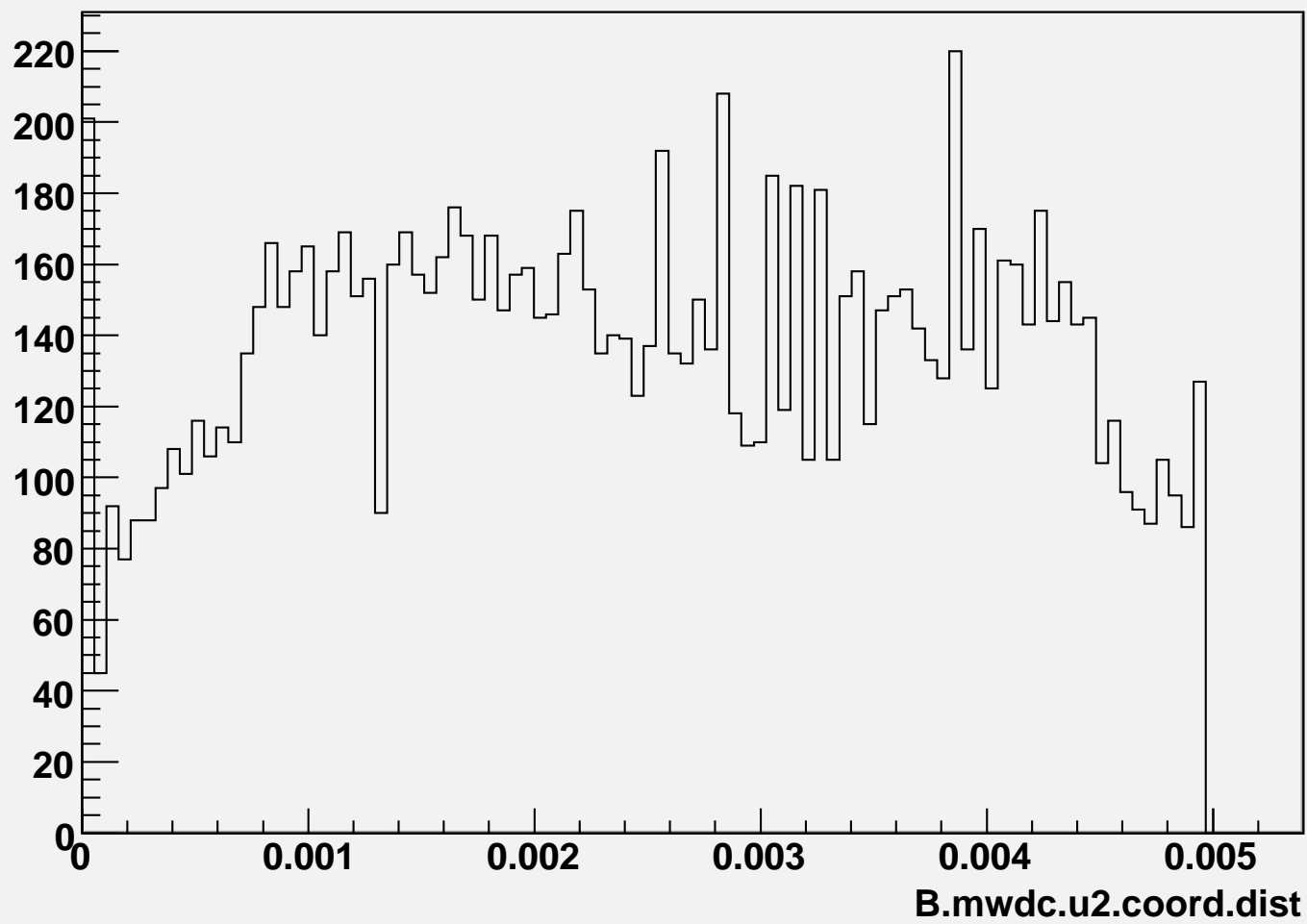
GEn 4427: u2 dist vs time

Entries 12737



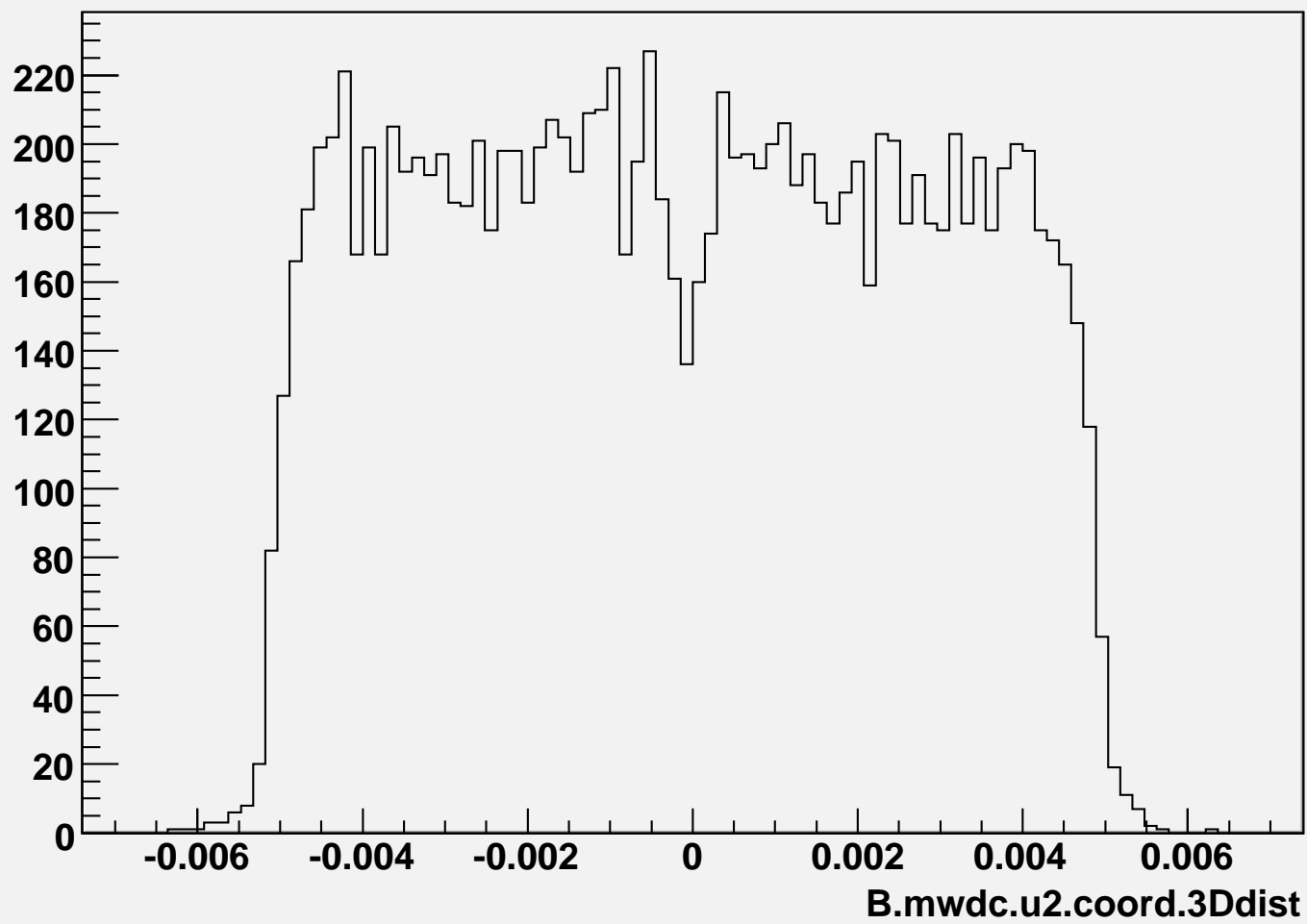
B.mwdc.u2.coord.dist

Entries 12737



B.mwdc.u2.coord.3Ddist

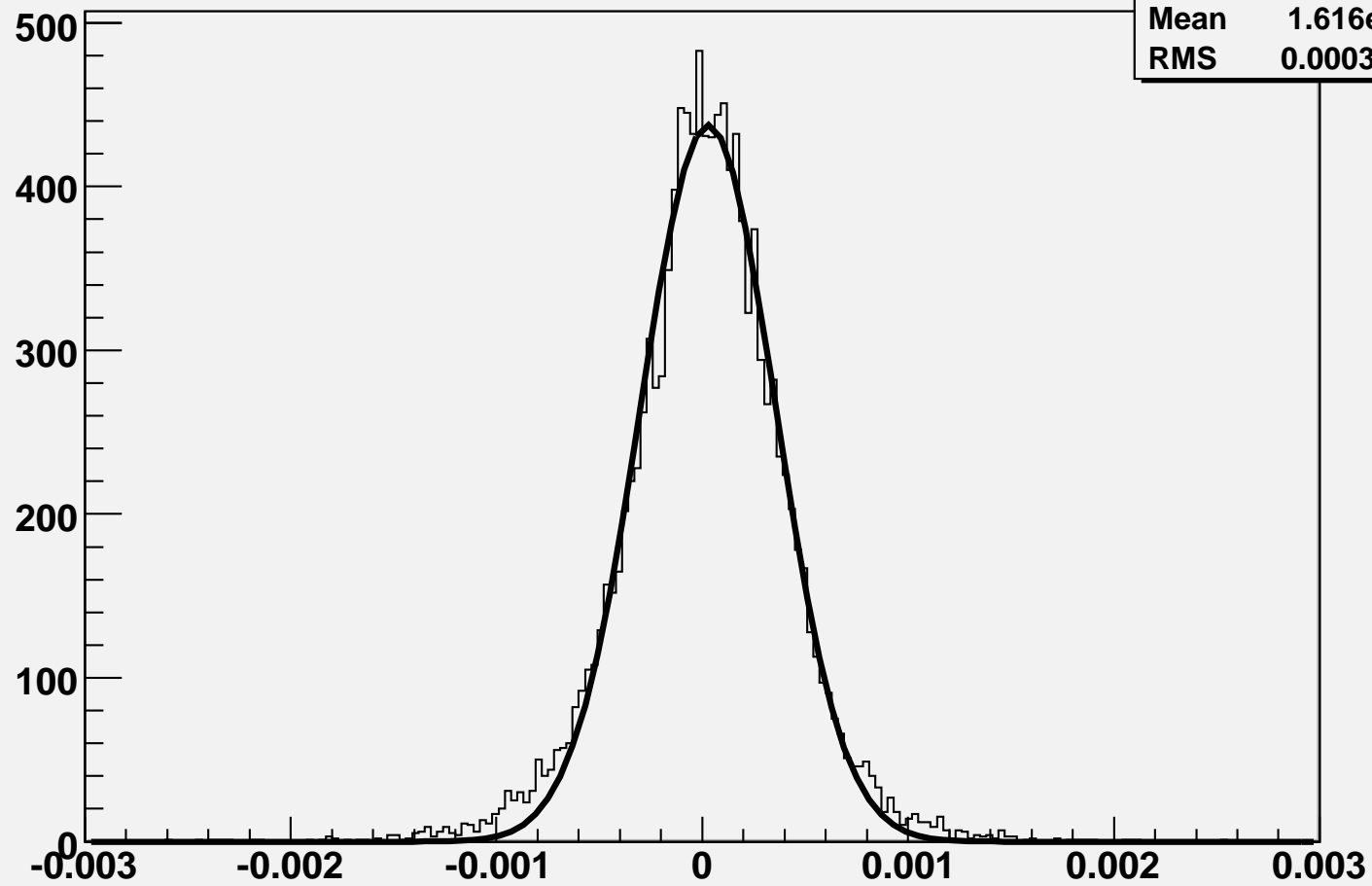
Entries 12737



GEN 4427 CoarseTrack: u1 residuals

h1

Entries	12514
Mean	1.616e-05
RMS	0.0003963



GEN 4427: track χ^2 for ndof = 11

Entries = 9849

ndof = 12.2

