# L3 Muon Progress Report

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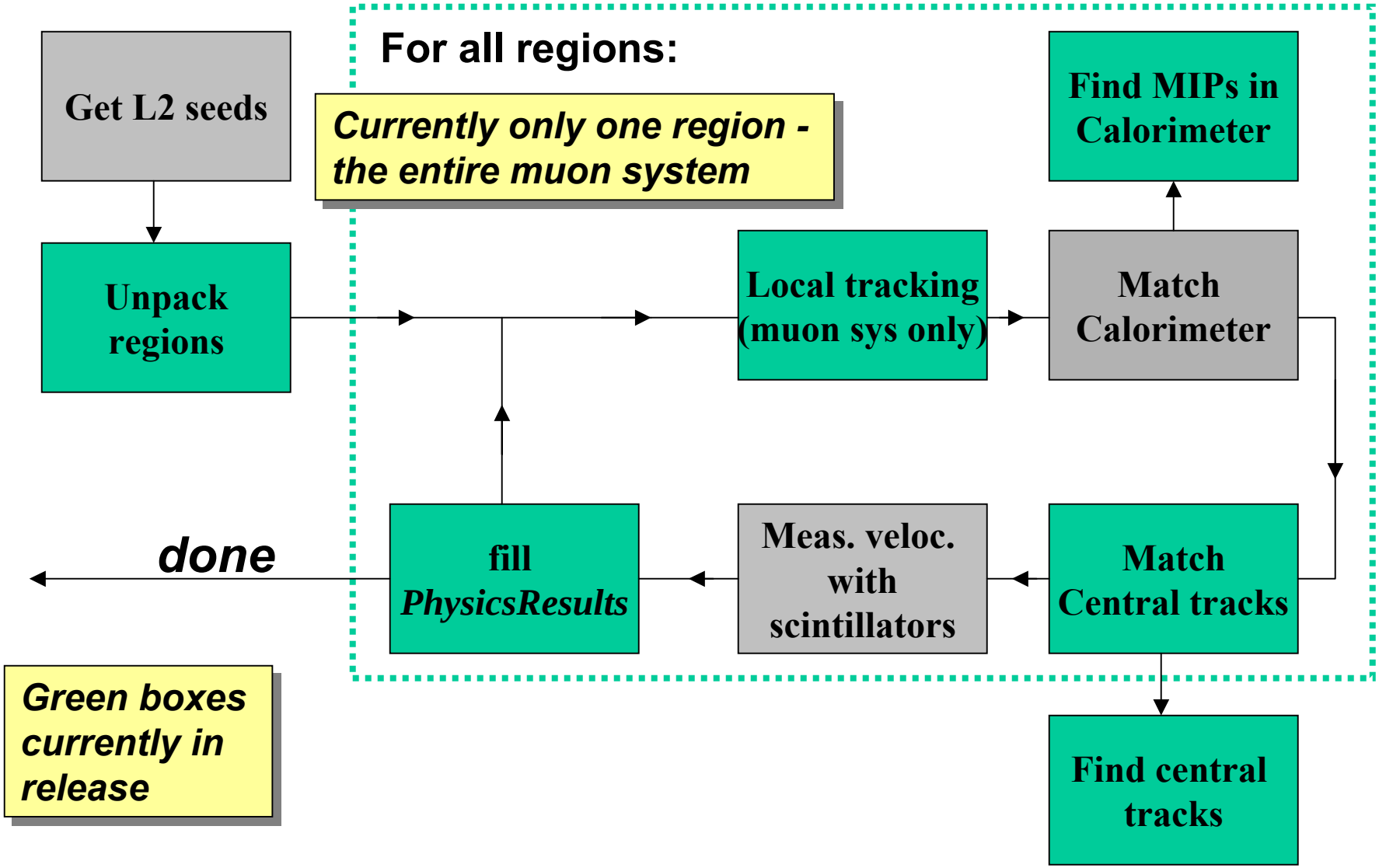
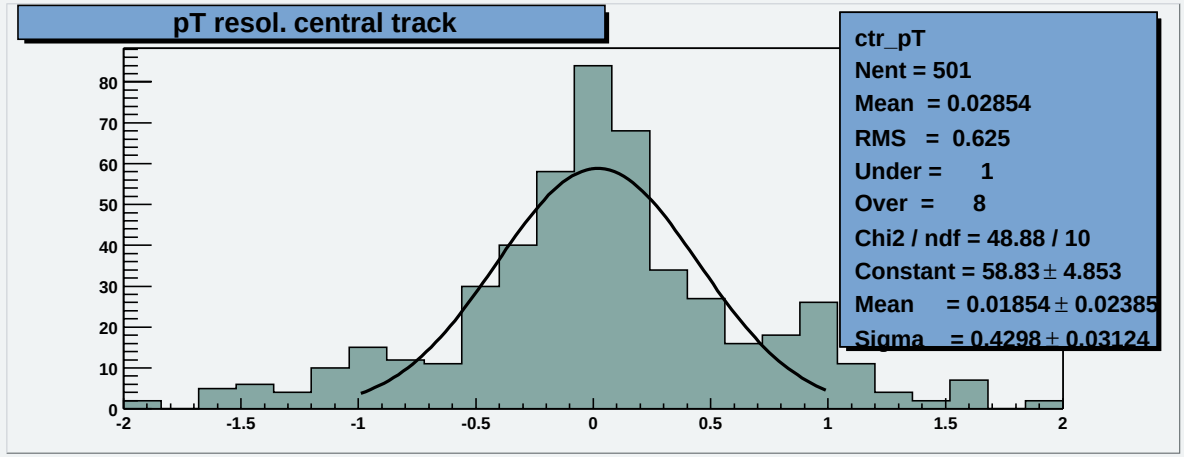
# L3 Muon Flowchart

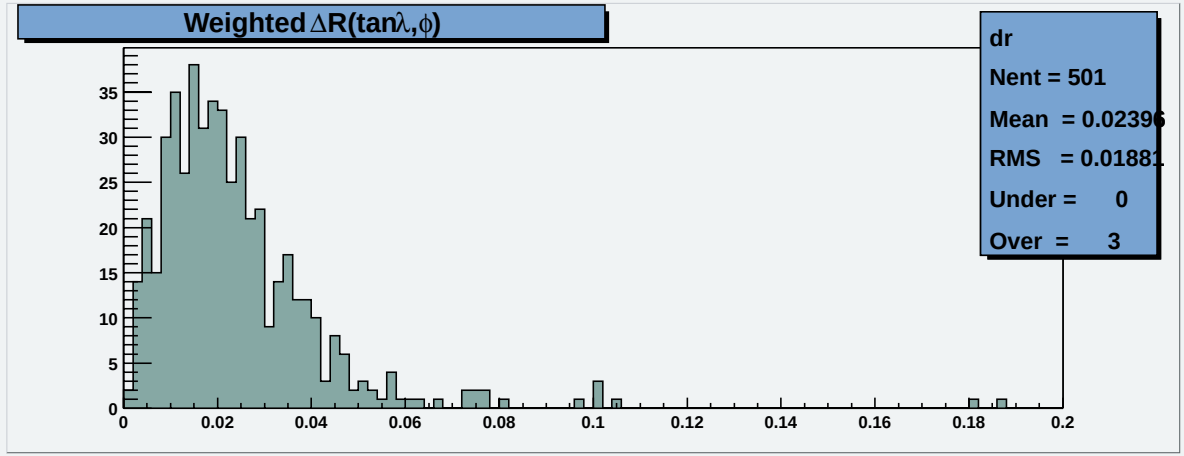


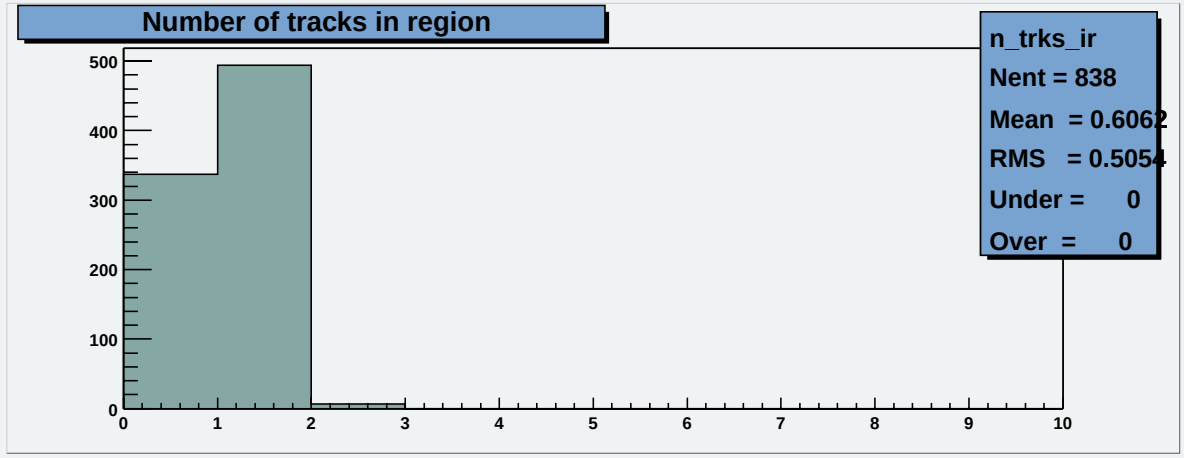

*Green boxes currently in release*

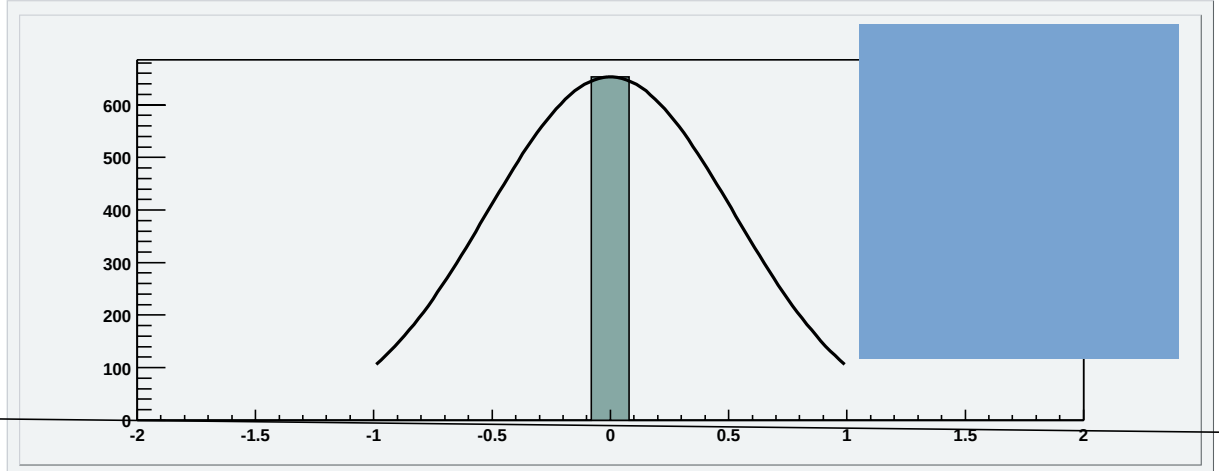
# Tool status (2)

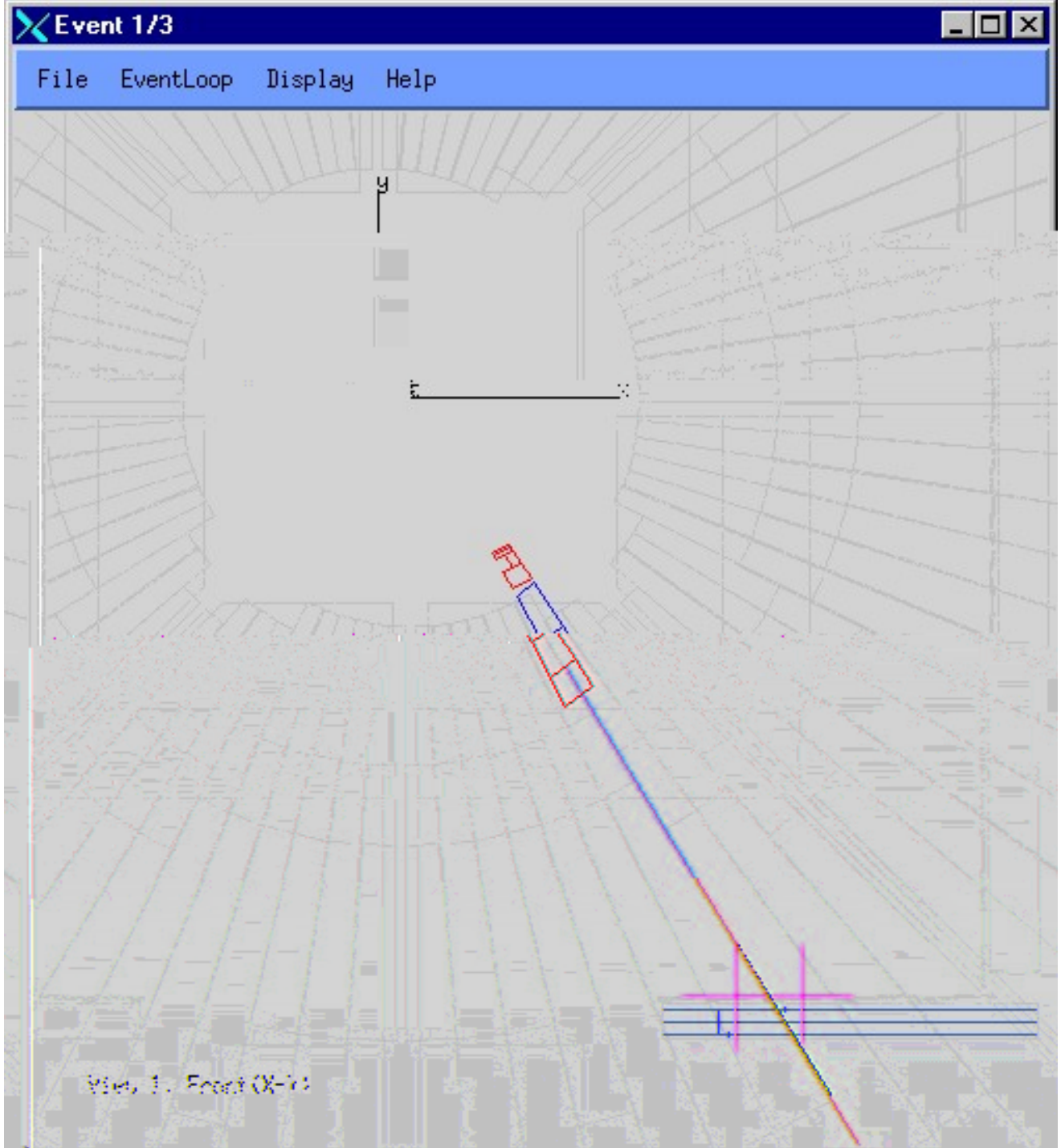
- **Central track matching (L3TMuoCentralMatch):**
  - **Timing ~4 ms/evt**
  - **Released, being verified…**

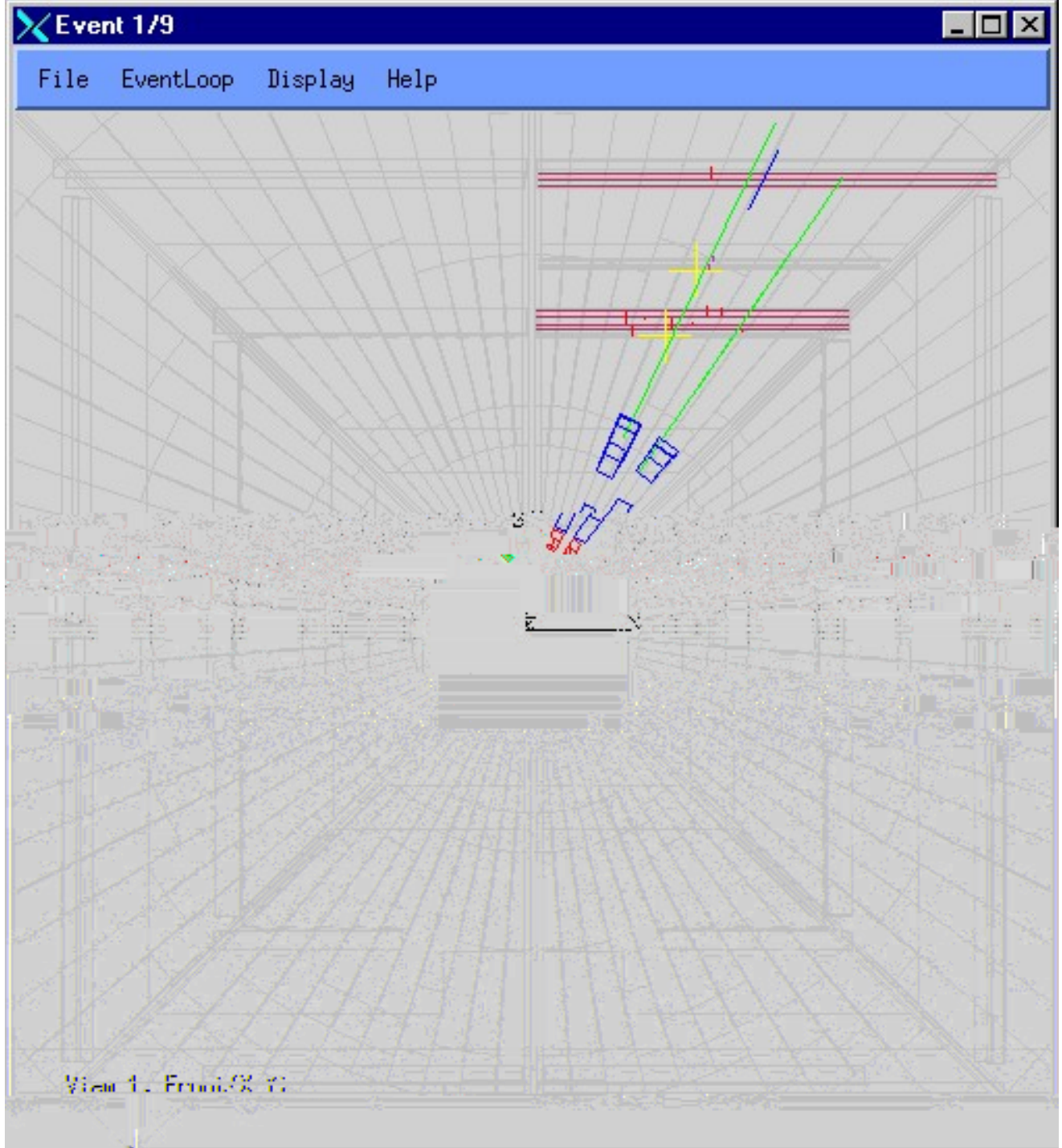

pT resol. central track
ctr_pT
Nent = 501
Mean = 0.02854
RMS = 0.625
Under = 1
Over = 8
Chi2 / ndf = 48.88 / 10
Constant = 58.83 ± 4.853
Mean = 0.01854 ± 0.02385
Sigma = 0.4298 ± 0.03124


Weighted ΔR(tanλ,φ)
dr
Nent = 501
Mean = 0.02396
RMS = 0.01881
Under = 0
Over = 3


Number of tracks in region
n_trks_ir
Nent = 838
Mean = 0.6062
RMS = 0.5054
Under = 0
Over = 0


600
500
400
300
200
100
0
-2
-1.5
-1
-0.5
0
0.5
1
1.5
2


Event 1/3
File
EventLoop
Display
Help
y


Event 1/9
File
EventLoop
Display
Help

# Filter status

- **Available filters**
  - **unpacking (pass on given # hits)**
  - **hit coincidence**
  - **local (pass on given # local tracks)**
  - **muon filter…**
- **Muon upgrade group has requested some more functionality for the muon filter**
  - **pass on #segments on tracks found, pT of tracks found… will implement that this week**

# Conclusions

- I've got a lot more help than I used to
  - Chunhui for L3 examiners
  - V. Koreshev for Local tracking tuning
  - M. Gruenewald for calorimeter matching
  - S. Dugad for "MTC" tuning
  - and of course muon ID group for tracking algorithm development, unpacking work…
- Scintillator tool (velocity measurement) is still open
  - possibly summer student from Pushpa