

Reconstruction Status

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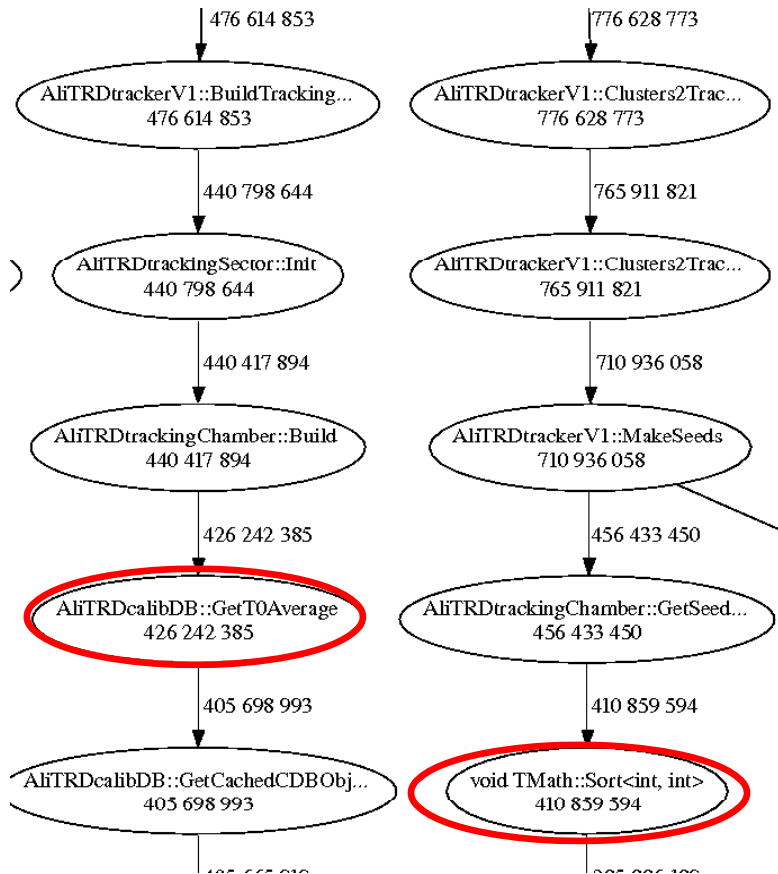
01.Oct.2008

GSI

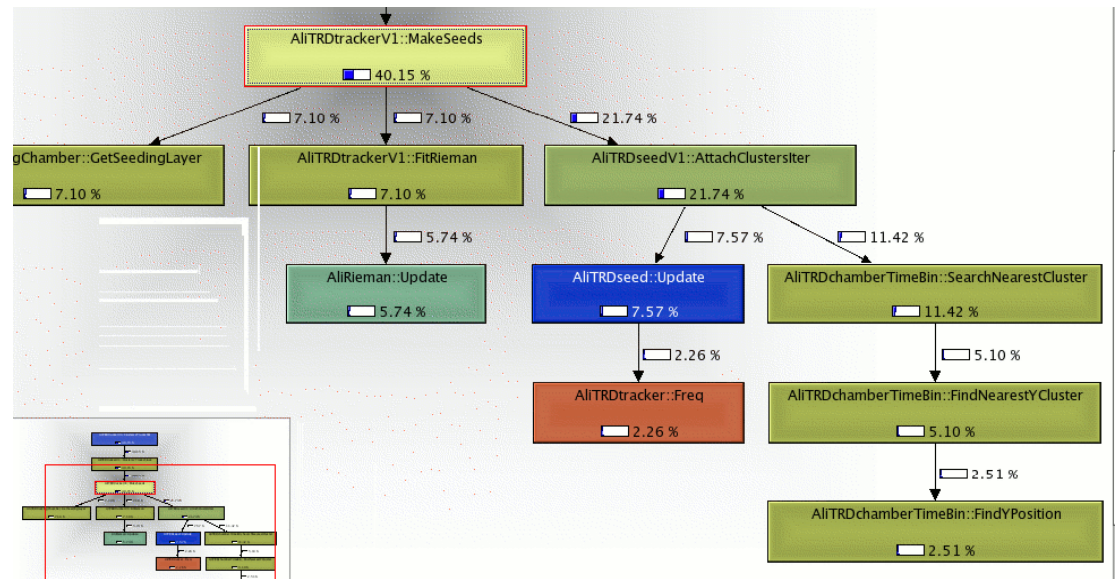
Reconstruction Overview

- Code performance (time/storage)
- Visualization - the reconstruction triangle
- Production & QA issues
- Algorithm – error parameterization

Code performance



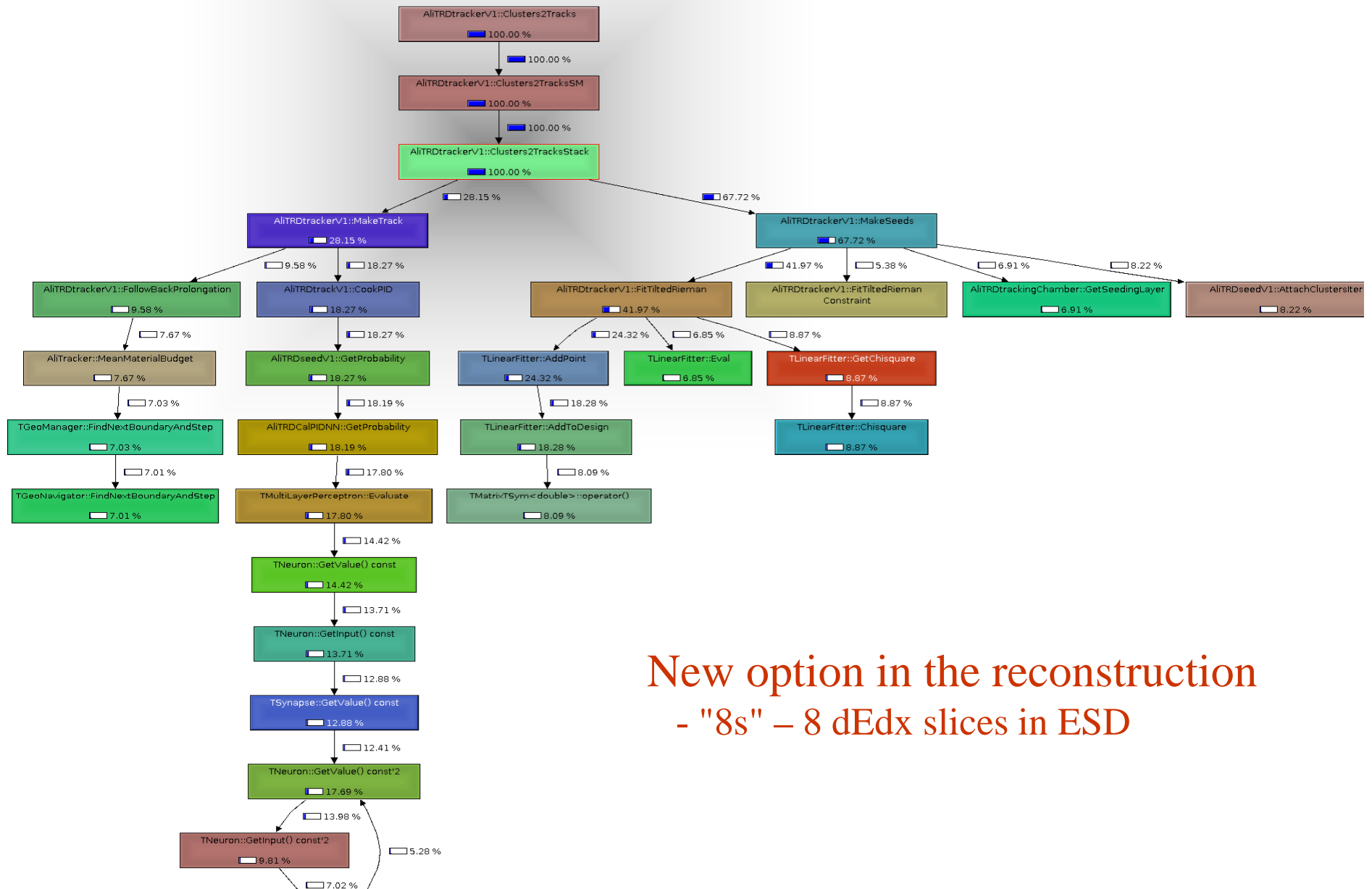
1-Oct-08



Reconstruction Status

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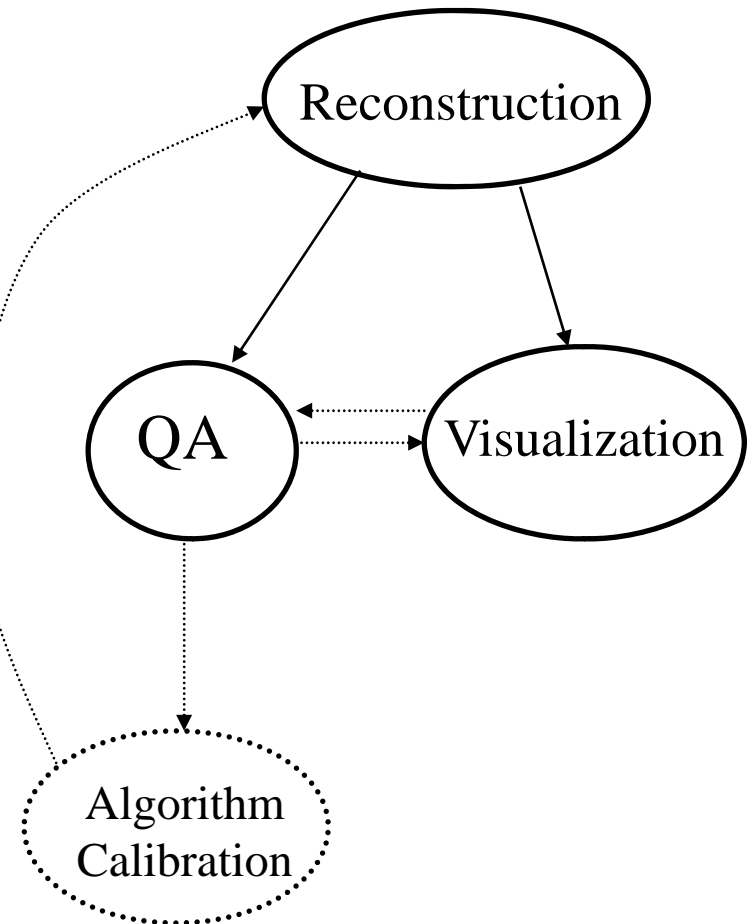
Code performance

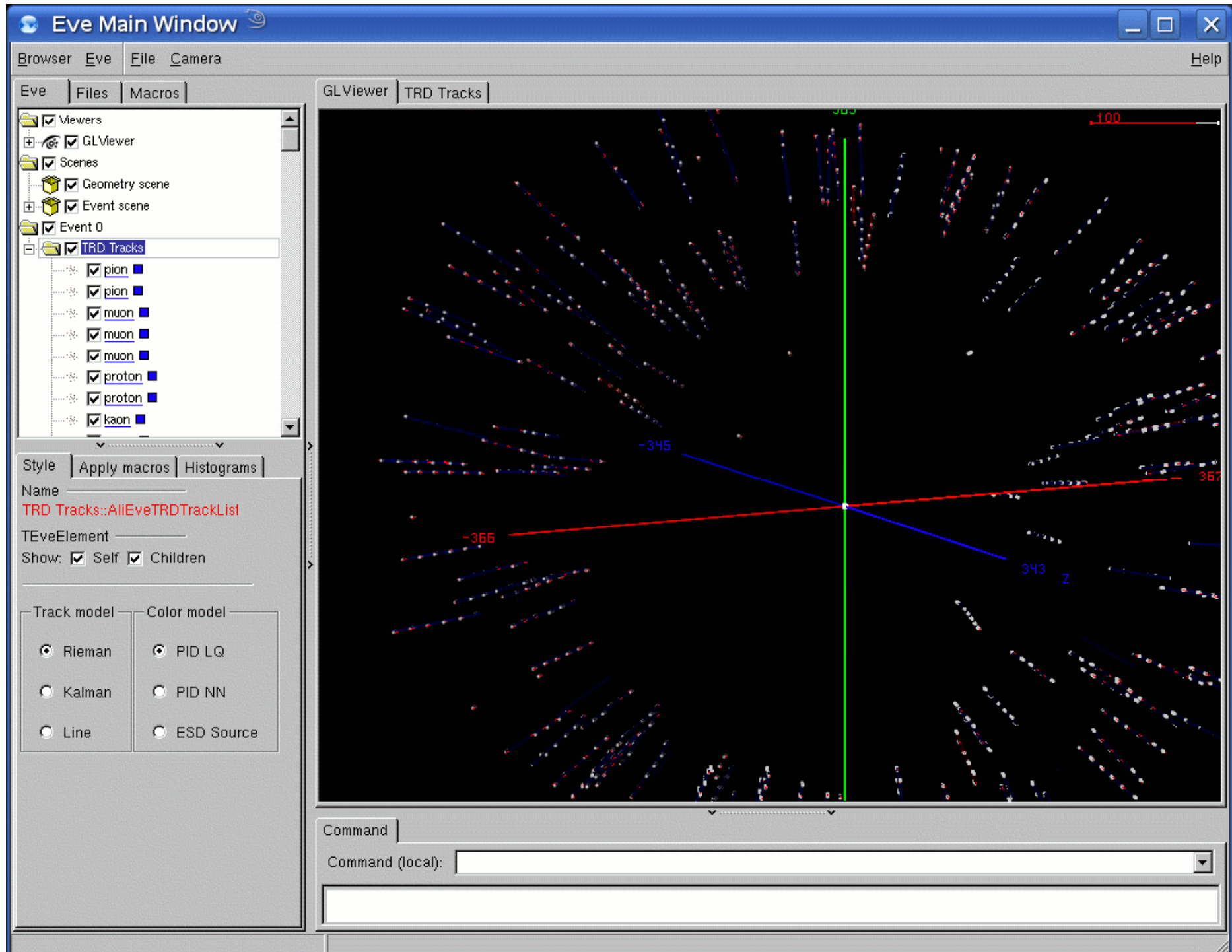


New option in the reconstruction
- "8s" – 8 dEdx slices in ESD

Visualization

- Implemented by Ben Hess (summer student !!)
- Started up with trd_friend_tracks.C
- Example macro in
\$ALICE_ROOT/TRD/qaRec/macros
- Single track analysis
 - selection : Bool_t macro(AliTRDtrackV1*)
 - analysis :
 - void macro(AliTRDtrackV1*, Double_t*, Int_t)
 - void macro(AliTRDtrackV1*, TH1*)
- Track correlation analysis





Eve Main Window

Browser | Eve | File | Edit | View | Options | Inspect | Classes | Help

Eve | Files | Macros | GLViewer | TRD Tracks

Viewers

- GLViewer

Scenes

- Geometry scene
- Event scene
- Event 0
- TRD Tracks
 - pion
 - pion
 - muon
 - muon
 - proton
 - proton
 - kaon

Style | Apply macros | Histograms

Name: TRD Tracks::AllEveTRDTrackList

Add macro(s):

Selection macros:

clusterSelection

Process macros:

PH
chargeDistr
clusterResiduals

Average PH

Entries	18256
Mean	12.01
Mean y	78.9
RMS	6.412
RMS y	122.1
Underflow	0
Overflow	0
Integral	1800
Skewness	-0.2012
Kurtosis	-1.08

Tue Sep 30 18:58:32 2008

Command:

Command (local):

Production & QA

- AliRoot

/d/alice12/abercuci/AliRoot/alroot.login HEAD

/d/alice12/mfasel/Software/alilogin HEAD1

- Simulation

/lustre_alpha/alice/TRDdata/HEAD

- Measurements

[/lustre_alpha/alice/local/alice/data/2008/](#)

[LHC08d/000060283/ESDs/trd/pass1](#)

- QA files : TRD.Task*.root

- QA pics : *_figN.gif

- WEB :

- Main time consumer in the last month

- Tasks

- AliTRDcheckDetector

- AliTRDtracking* (3)

- AliTRDpid* (2)

- AliTRDcalibration

- One code which runs ESD (MC), (Friends)

- Starting point for algorithm calibration (TODO)

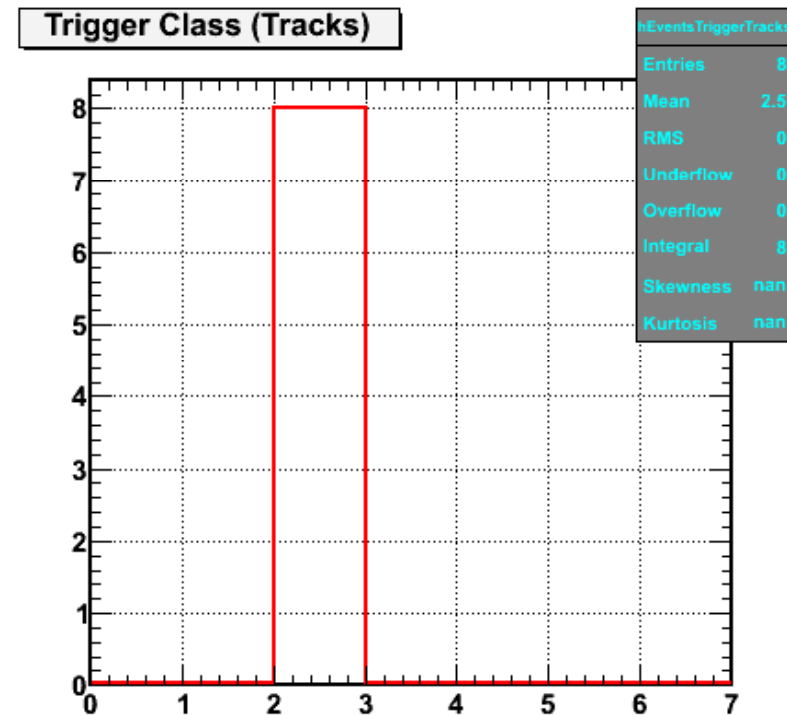
<http://www-linux.gsi.de/~abercuci/MyWork/ALICE-TRD/qaRec/>

Trigger issues

we have just switched to a new ZS configuration for taking cosemics. The first **run is 60517**. TRD gets TRD- as well as **SPD-triggers** (setup by mistake, and now we don't dare to change it), take this into account when judging the purity. (Tom Dietel)

RUN 60517

- Trigger cluster: 0,
 - Name "D0SCO"
- Trigger cluster: 1,
 - Name "trdbytof"
- Trigger cluster: 2,
 - Name ""

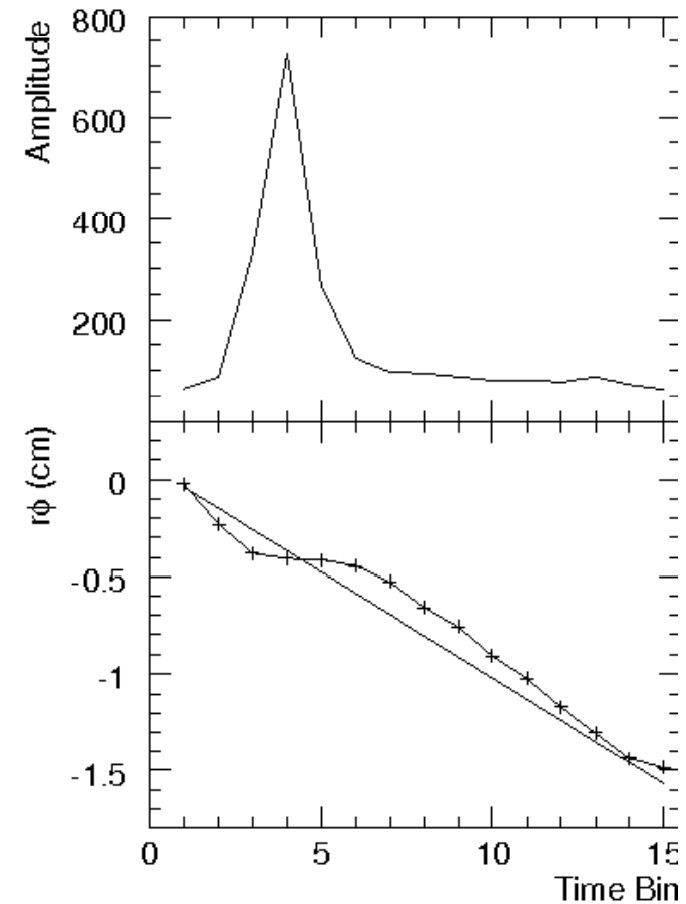
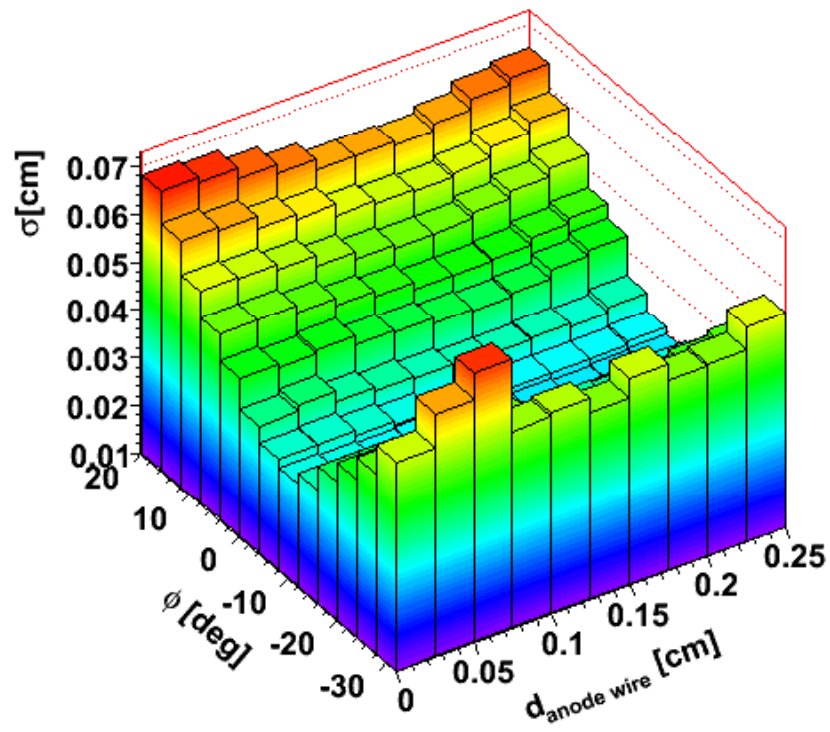


Cluster Error Parameterization

$$\sigma_y^2 = \sigma_{PRF}^2 + \sigma_Q^2 + tg^2(\phi - \alpha_L) \cdot \sigma_x^2$$

$$\sigma_x^2 = \sigma_{TRF}^2 + d(z) \cdot \sigma_{isochron}^2$$

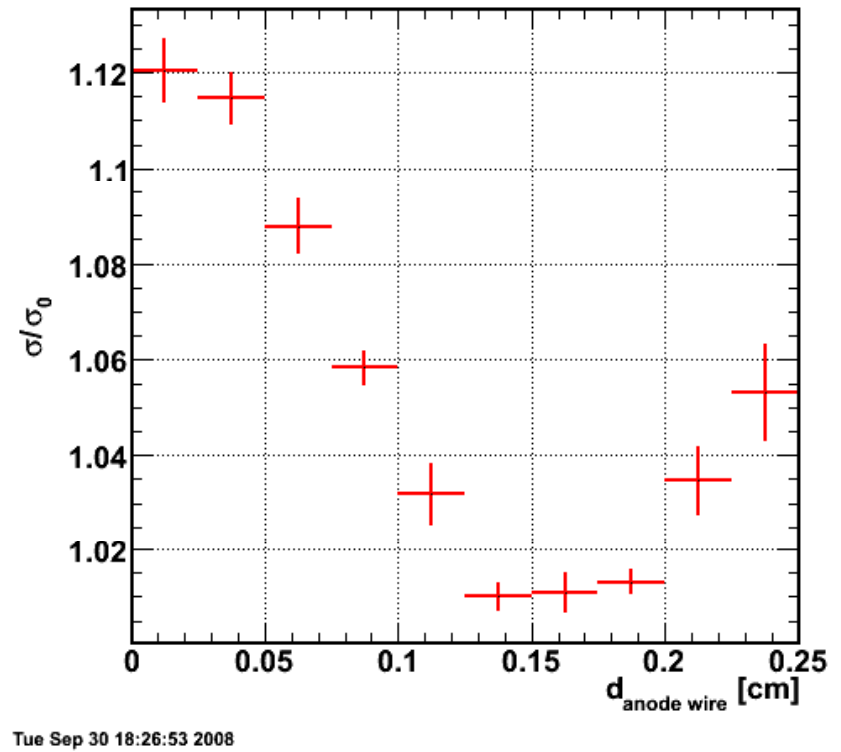
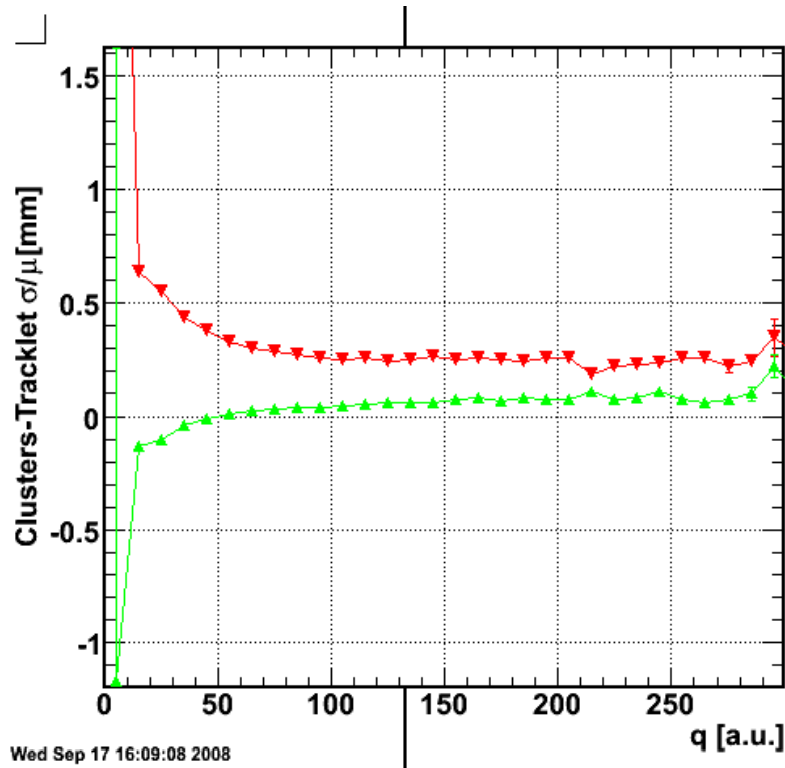
$$\sigma_z^2 = L^2 / 12$$



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Cluster Error Parameterization



```
void AliTRDseedV1::Fit(Bool_t tilt_correction)
```