

# Status of the FPCCD software

Physics and Software meeting

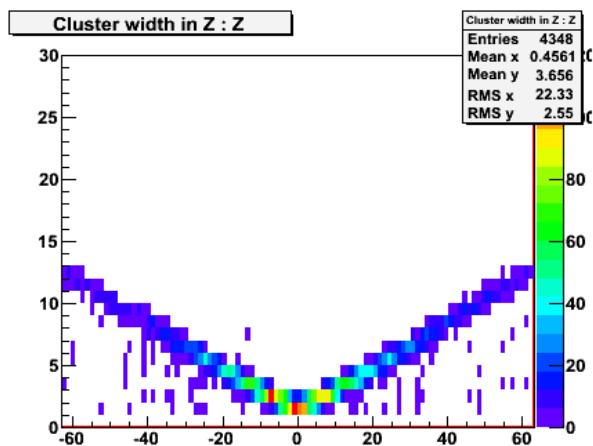
2011/12/02

D.Kamai (Tohoku University)

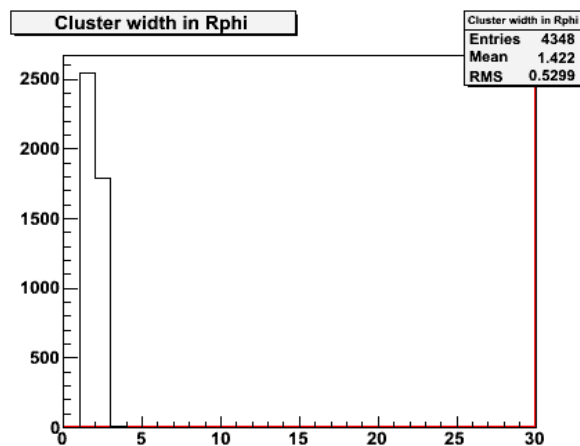
# Current states

- FPCCD software
  - enable to handle the Cluster shape information.
  - adjusted for new system.

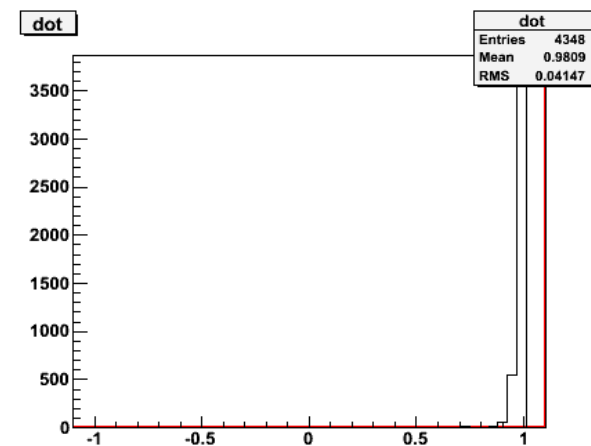
# Cluster shape mu- 100GeV



Cluster width in Z  
vs Z postion

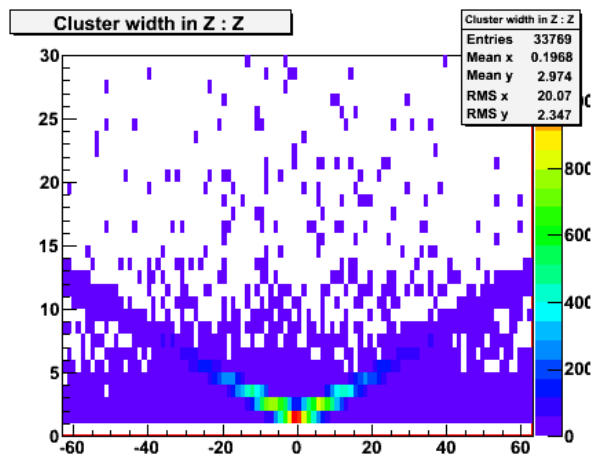


Cluster width in Rphi

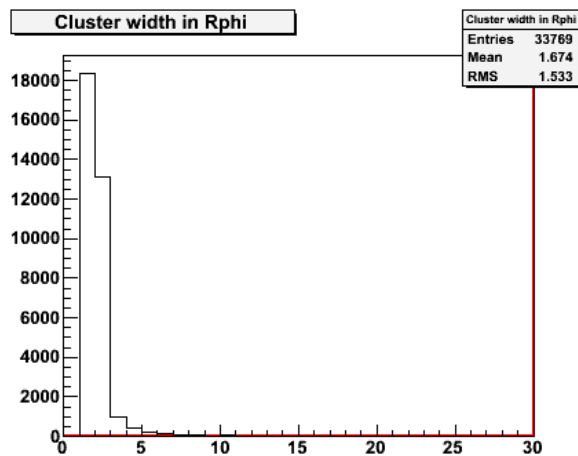


Dot product

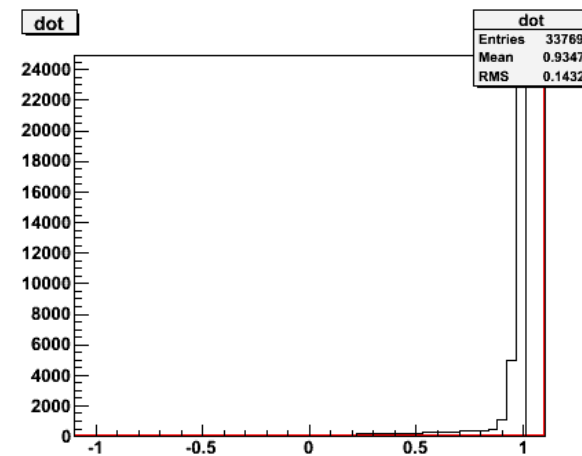
# Cluster shape $t\bar{t} \rightarrow b\bar{b}q\bar{q}q\bar{q}$



Cluster width in Z  
vs Z position

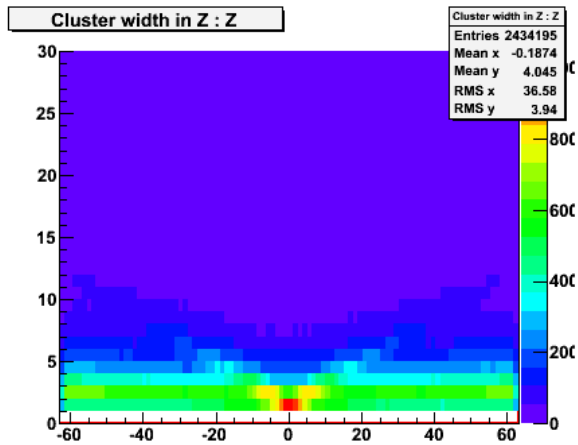


Cluster width in Rphi

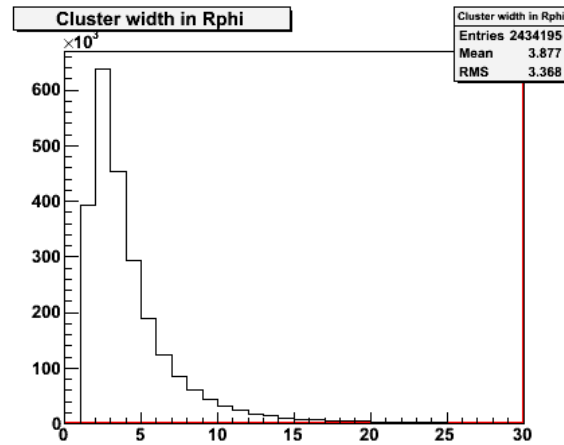


Dot product

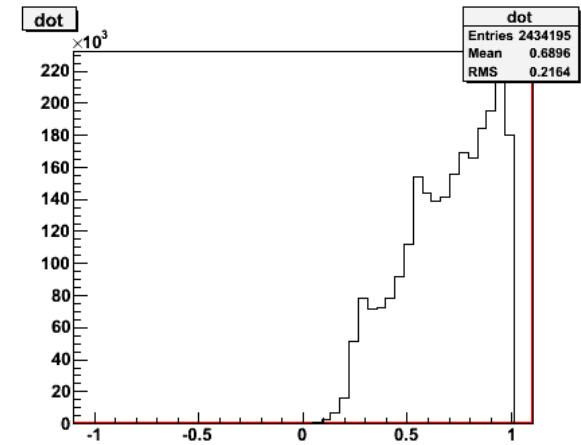
# Cluster shape pair background



Cluster width in Z  
vs Z position



Cluster width in Rphi



Dot product

- Dot product seems to can be used as cut criteria.

# New Tracking System

- New Tracking code is being developed by Steve.
- FPCCD software was adjusted for new system.

# Plan

- Check the tracking performance with FPCCD software.

- Dot product of the direction of cluster and the position vector from IP.
  - cluster direction is 3D vector (becomes vertical vector when cluster is only 1 pixel)
  - Can reject the particle from non IP.

