Subject: Re: TPC digitization blocks everything for too many cluster events
Posted by Malgorzata Gumberidze on Wed, 16 Jun 2010 16:29:00 GMT
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Hi,

So what i have done is to run simulation (pgun) for positrons with the momentum
range 0.15- 5 GeV/c . For one of the event, e.g. 246, simulations takes 6 minutes.
This is not the worst case of event. Here is printout which i'm getting on the scream.
in addition i'm attaching plot which is showing amplitude of the sample: PndTpcSample.famp()

```
-------------------------------------------
-----  PndTpcDigiPar  -----
--  Context/Purpose:  PndTpcDefaultContext
-------------------------------------------
PndTpcGasFile: Int_t   0
EField: Double_t   400
AttachFlag: Int_t   0
LogitudinaldiffusionFlag: Int_t   1
TransversediffusionFlag: Int_t   1
DriftDistortionFlag: Int_t   0
zGem: Double_t   -40
zMax: Double_t   110
Gain: Double_t   4000
Supression: Double_t   0.001
Spread: Double_t   0.02
MinSignalAmp: Double_t   10
rMin: Double_t   15.5
rMax: Double_t   41.5
PadPlaneFile: Int_t   24
PadShapeFile: Int_t   14
PadShapeRange: Double_t   0.5
PadShapeStep: Double_t   0.02
PadShapeIntStep: Double_t   0.01
ADCThreshold: Int_t   10
ADCMax: Int_t   100000
ADCBits: Int_t   12
SamplingFreq: Double_t   40
T0_wallclock: Double_t   -60000
TimeBits: Int_t   28
PSAThreshold: Int_t   100
Shaper_tDiff: Double_t   50
Shaper_tInt: Double_t   50
Shaper_tSig: Double_t   2
TOTPSA: Int_t   1
GAUSSIANNOISE: Int_t   0
GAUSSIANNOISEAMP: Int_t   0
Rate: Double_t   0.02
-------------------------------------------
```

PndTpcClusterizer:: 18573 clusters created
39515 electrons arriving at readout

Aggregating drifted electrons into avalanches finished.
39515 Avalanches created
0 aggregations done.
73880 Signals created
PndTpcElectronicsTask::Exec
Building up padmap ...finished. 1094 pads hit
.....
1497 Digis created
PndTpcClusterFinderTask::Exec
387 cluster created containing 1497 digis from 1497
Hit array contains 3 hits
PndEmcMakeCluster, event: 1

Hope it will help you, i can also plot different distributions, but it would be nice
if you would be more exact what to plot.

best regards,
gosia

File Attachments

1) sample.gif, downloaded 1040 times

