Subject: Digitization or Tracking in STT class.
Posted by donghee on Tue, 14 Apr 2009 14:17:37 GMT
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Dear all,

Does anybody knows the meaning of segmentation fault with human word?
==========
DemoPatternRecoTask::Exec
0 tracks created
DemoKalmanTask::Exec Event 0
 DIGI EXECUTION **********
Hit array contains 107 hits
Event Number 0
caution: wrong drift time
caution: wrong drift time
caution: wrong drift time
caution: wrong drift time
 Nr of Points: 4

 *** Break *** segmentation violation
==========

At a rough guess, DemoPattern and DemoKalmanTask couldn't find events, or digitization of emc, mvd, or stt have been wrong.
I'm following a simple example runReco.C in pandaroot/macro/fsim/
Simply, suggested sentences are introduced to perform the pattern recognition and kalman fit in my reconstruction script.
There are some EMC modules and few Tracking devices, which are delivered from other scripts for example in pandaroot/macro/run/reco_complete.C
The full script for this reconstruction purpose is also attached
==========
```
  DemoPatternRecoTask* DemoPR = new DemoPatternRecoTask();
  DemoPR->AddHitBranch(2,"PndTpcPoint");
  //  DemoPR->AddHitBranch(3,"MVDPoint");
  DemoPR->SetPersistence();
  //  DemoPR->UseGeane();
  fRun->AddTask(DemoPR);

  DemoKalmanTask* DemoKalman = new DemoKalmanTask();
  DemoKalman->AddHitBranch(2,"PndTpcPoint");
  //  DemoKalman->AddHitBranch(3,"MVDPoint");
  DemoKalman->SetPersistence();
  //  DemoKalman->SetSmooth(true);
  fRun->AddTask(DemoKalman);

  ..........................................................

  DemoToolsTask* DemoTools = new DemoToolsTask();
  fRun->AddTask(DemoTools);
```
==========

Thank you for your coorporation!!!
Best wishes,
Donghee Kang in Mainz

File Attachments

1) My_dvcs_full_reco.C, downloaded 558 times

Subject: Re: Tracking
Posted by Ralf Kliemt on Tue, 14 Apr 2009 14:58:54 GMT
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Hello,

How does the whole output look like? I could imagine that a file was not loaded properly in the beginning or not written correctly in a step before.

For better bug reporting (esp. SegFaults) I suggest to use gdb. The trick is to take the root.exe executable which is called anyway when you run your macros. Just like that:
gdb --args root.exe My_dvcs_full_reco.C

You may want to use the spoiler tags for the tons of output.

Kind Regards, Ralf.

Subject: Re: Tracking
Posted by asanchez on Tue, 14 Apr 2009 15:04:27 GMT
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Hi
are you sure that your input file is
called like that

Panda_event_1.full.mc.root ?

regards
alicia.

Subject: Re: Tracking
Posted by donghee on Wed, 15 Apr 2009 12:18:03 GMT
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Hi Alicia,

The accessing of input data was definitely no problem!

What a beautiful day!
Donghee

Subject: Re: Tracking
Posted by StefanoSpataro on Thu, 16 Apr 2009 10:00:43 GMT
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Hi,
first of all I have a comment. The line:

Geane->SetField(fRun->GetField());

is repeated two times. Only the last one after fRun->Init(); should be kept, the other should be removed.

I have the feeling that the problems comes not from STT but from the Demo* stuff before, that maybe is deleting somehwere some object and then stt has problems.
Have you tried to move all the Demo part just at the end of the task list? Just to be sure.

Regards

Subject: Re: Tracking
Posted by asanchez on Thu, 16 Apr 2009 10:31:18 GMT
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Hi only to be sure
please substitute the geo file for the tof detector
by tofbarrel.geo and not

```
PndTof *Tof = new PndTof("TOF",kTRUE);
58    Tof->SetGeometryFileName("tofSciF.geo");
59    fRun->AddModule(Tof);
```

cheers ALicia.

Subject: Re: Tracking
Posted by donghee on Thu, 16 Apr 2009 11:21:53 GMT
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Dear Alicia,

I try to run the geometry file with tofbarrel.geo
topSciF.geo is fine but topbarrel.geo doesn't work!

Could you check for that!

Subject: Re: Tracking
Posted by asanchez on Thu, 16 Apr 2009 11:50:48 GMT
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Hi again,
the geo file is tofbarrel.geo

look into geometry directory,

for me it is working without problems.

Subject: Re: Tracking
Posted by donghee on Thu, 16 Apr 2009 12:09:54 GMT
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Dear Alicia

With tofbarrel.geo the run goes to the event number 9 without error.
At event number 9, run come to a death stop!

*** Break *** floating point exception

Is this related overlap of detector loading?
I have introduced following tracking devices in current runMC.

```
FairDetector *Mvd = new PndMvdDetector("MVD", kTRUE);
Mvd->SetGeometryFileName("MVD14.root");
fRun->AddModule(Mvd);

PndStt *Stt= new PndStt("STT",kTRUE);
//Stt->SetGeometryFileName("straws_skewed_blocks.geo");
Stt->SetGeometryFileName("straws_skewed_blocks_35cm_pipe.geo");
fRun->AddModule(Stt);

PndTof *Tof = new PndTof("TOF",kTRUE);
//Tof->SetGeometryFileName("tofSciF.geo");
Tof->SetGeometryFileName("tofbarrel.geo");
fRun->AddModule(Tof);

PndDrc *Drc = new PndDrc("DIRC",kTRUE);
Drc->SetGeometryFileName("dirc.geo");
//fRun->AddModule(Drc);

PndDchDetector *Dch = new PndDchDetector("DCH",kTRUE);
Dch->SetGeometryFileName("dch.root");
fRun->AddModule(Dch);

PndMdt *Mdt = new PndMdt("MDT",kTRUE);
```

```
Mdt->SetGeometryFileName("muopars.root");
Mdt->SetMdtVersion("torino");
fRun->AddModule(Mdt);
```