Subject: [FIXED] Geane for luminosity monitor: TGeant3 not initialized
Posted by Mathias Michel on Wed, 24 Feb 2010 13:49:39 GMT

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Hi all.

I'd like to use Geane for backtracking of reconstructed tracks in the luminosity monitor through the dipole.
Therefore i had a look at the wiki page about Geane, the tutorials and the pid package, still i have problems getting FairGeanePro initialized:
FairGeanePro::TGeant3 has not been initialized! ABORTING!

So could someone give me a hint where i can get more information about Geane in Pandaroot or give me a point to start?
Thinks like the usage of the PndEmcMapper are mysterious to me

Thanks
Mathias

Subject: Re: Geane for luminosity monitor
Posted by Lia Lavezzi on Wed, 24 Feb 2010 14:16:25 GMT

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Hi Mathias,
   having a look to the tutorial ex1 macro runGEANE1.C I see that GEANE is still called in the old way.
Now it has to be called as a task. You can look into macro/stt/rungenfit.C to see how it is done:
 FairGeane *Geane = new FairGeane();
 fRun->AddTask(Geane);
This should solve your problem.

Cheers,
   Lia.

Subject: Re: Geane for luminosity monitor
Posted by Mathias Michel on Wed, 24 Feb 2010 14:29:01 GMT

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I tried to find the newest macros, like in the pid package, so this is how my macro looks like:

FairRunAna *fRun= new FairRunAna();
 fRun->SetInputFile(MCFile);
 fRun->AddFriend(DigiFile);

 ...
 fRun->SetOutputFile(outFile);

 FairRuntimeDb* rtdb = fRun->GetRuntimeDb();
 FairParRootFileIo* parInput1 = new FairParRootFileIo(kTRUE);

```
parInput1->open(parFile.Data(),"UPDATE");
rtdb->setFirstInput(parInput1);

FairGeane *Geane = new FairGeane();
fRun->AddTask(Geane)

PndLmdGeaneTask* lmdgeane = new PndLmdGeaneTask();
fRun->AddTask(lmdgeane);

rtdb->setOutput(parInput1);
rtdb->print();

fRun->Init();
PndEmcMapper *emcMap = PndEmcMapper::Instance(6);
//Geane->SetField(fRun->GetField());
fRun->Run(0,nEvents);
```

Subject: Re: Geane for luminosity monitor
Posted by Lia Lavezzi on Wed, 24 Feb 2010 16:04:56 GMT
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Hi Mathias,
  it looks correct from the GEANE point of view. Do you still have the error with this macro? If so can you please post it?
Lia.

Subject: Re: Geane for luminosity monitor
Posted by Mathias Michel on Thu, 25 Feb 2010 09:58:04 GMT
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Hi,

mh ok, yes it's still crashing:

...
-I- PndFieldMap: Reading field map from ROOT file
/local/data/michel/fairroot/fairsoft10/pandaroot/trunk/input/SolenoidMap 3.root
-I- PndFieldMap: Reading field map from ROOT file
/local/data/michel/fairroot/fairsoft10/pandaroot/trunk/input/SolenoidMap 4.root
FairGeanePro::TGeant3 has not been initialized! ABORTING!
terminate called without an active exception

I attached the Task class, which is a modified PndMvdMSAnaTask.

Most probably i just miss to call something or such, but i didn't find more documentation to understand the way Geane is used so i could just try to imitate the classes using FairGeanePro i found.

Cheers

Mathias

Subject: Re: Geane for luminosity monitor
Posted by StefanoSpataro on Thu, 25 Feb 2010 10:02:16 GMT
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Could you please post the macro you are using to launch your lmdgeane task?

Subject: Re: Geane for luminosity monitor
Posted by Mathias Michel on Thu, 25 Feb 2010 10:31:20 GMT
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Hi,

i attached it. Btw i use the newest external package and rev 7877 of pandaroot trunk. Thank you for checking, but the Lmd Software is not yet implemented correct so it would be circuitous to get the hole sim running just to check the GeaneTask.
I would prefer to get more information about Geane and the interface so that i could find and understand my failure by myself maybe.

Cheers
Mathias

Subject: Re: Geane for luminosity monitor
Posted by StefanoSpataro on Thu, 25 Feb 2010 10:47:52 GMT
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Hi,
at a first glance, everything seems fine.
But considering that it is crashing, i would suggest few changes:

* in the .h file, remove TGeant3 *gMC3;
* in the macro, move FairGeane part before Parameter database (and after fRun->SetOutputFile)
* in the macro, again, parInput1->open(parFile.Data()) (no "UPDATE")

After, if it continues to crash, please send the full log from your macro. Maybe there are other hidden problems that cause the crash.

Subject: Re: Geane for luminosity monitor
Posted by Lia Lavezzi on Thu, 25 Feb 2010 11:12:23 GMT
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Hi Mathias,
    I think in the macro you need to add the following red line to load all the libraries:
 gROOT->Macro("$VMCWORKDIR/gconfig/rootlogon.C");
rootlogon();
gSystem->Load("libSds");
gSystem->Load("libSdsReco");
gSystem->Load("libLmd");
gSystem->Load("libLmdReco");
gSystem->Load("libLmdTrk");
I hope this helps.
            Lia.

Subject: Re: Geane for luminosity monitor
Posted by Mathias Michel on Thu, 25 Feb 2010 11:15:17 GMT
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wow, moving the Geane part before the parameter-stuff did the trick somehow!

It's still crashing in the exec but that much i expected because the stuff there is copied without sense yet. I think i am now able to play with Geane.

Thank you very much!!

Subject: Re: Geane for luminosity monitor
Posted by StefanoSpataro on Thu, 25 Feb 2010 11:32:25 GMT
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Ok,
nice to know.
If you are able to run properly GEANE, could you please modify the title of your first message, such as:

[FIXED] Geane for luminosity monitor

In this case we know that the thread is almost closed, and that we can focus on other problems
 Of course, if you find new problems, you could rename it again and remove the "fixed".

Subject: Re: Geane for luminosity monitor
Posted by Mathias Michel on Thu, 25 Feb 2010 11:37:20 GMT

Yes i'll rename it as soon as i checked a few things. Maybe i even find a more fitting name in case someone has a similar problem.