

Dear colleagues,

I want to summarize briefly the status of GFTTrack to PndTrack conversion.  
My last attempt was to perform conversion from GFTTrack to PndTrack using  
PndGFTTrackToPndTrackConvertorTask in separate macro. And as I have written in my  
previous post it ended with error:

```
#5 0x00007f3c8379730f in FairGeanePro::PropagateFromPlane (  
    this=0x1000000000000000, v1=  
    0x7fff8ab90990, v2=  
    0x7fff8ab90960)  
    at /d/panda02/dmelnich/pandaroot/pandaroot/geane/FairGeanePro.cxx:384
```

Origin of this error was that GeaneTrackRep contained non persistent data member  
FairGeanePro \*\_geane and reading GFTTrack from root file it was undefined, but in turns was  
used during conversion in PndGenfitAdapters.cxx .  
So the conclusion is that conversion should be performed in the same macro as  
reconstruction.

But here another problem arise. My initial idea was that it's in some way memory problem, but  
it looks it's not the case. I observed that crash happend in the moment when the memory still  
not full.

So it looks like:

```
GFEException thrown with excString:  
GEANE propagation failed  
in line: 204 in file:  
/d/panda02/dmelnich/pandaroot/pandaroot/GenfitTools/trackrep/GeaneTrackRep/GeaneTrack  
Rep.cxx  
with fatal flag 0  
GFEException thrown with excString:  
GeaneTrackRep: PROTECT AGAINST LOW MOMENTA  
in line: 178 in file:  
/d/panda02/dmelnich/pandaroot/pandaroot/GenfitTools/trackrep/GeaneTrackRep/GeaneTrack  
Rep.cxx  
with fatal flag 0  
RKTrackRep::RKutta ==> Too long extrapolation requested : 14096.1 cm !  
X = 39.098 Y = 9.89889 Z = 117.621 COSx = -0.958658 COSy = -0.284551 COSz =  
0.00246591  
Destination X = -0.000  
GFEException thrown with excString:  
RKTrackRep::Extrap ==> Runge Kutta propagation failed  
in line: 997 in file:  
/d/panda02/dmelnich/pandaroot/pandaroot/GenfitTools/trackrep/RKTrackRep/RKTrackRep.cx
```

x  
with fatal flag 0  
Fitting done  
Error: Symbol #include is not defined in current scope run\_reco\_tpc\_evt.C:145:  
Error: Symbol exception is not defined in current scope run\_reco\_tpc\_evt.C:145:  
Syntax Error: #include <exception> run\_reco\_tpc\_evt.C:145:  
Error: Symbol G\_\_exception is not defined in current scope run\_reco\_tpc\_evt.C:145:  
Error: type G\_\_exception not defined  
FILE:/d/panda02/dmelnych/pandaroot/pandaroot/macro/run/tdrct/eta\_c/./run\_reco\_tpc\_evt.C  
LINE:145  
\*\*\* Interpreter error recovered \*\*\*

My observation is that in the cases I observed, the crash is after the message:

RKTrackRep::RKutta ==> Too long extrapolation requested

This crash happen not every event but sufficiently often (after 3-5 events) that conversion cannot be reasonably performed.

Dima

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