
Subject: Event filter II

Posted by [donghee](#) on Mon, 10 Nov 2014 06:48:28 GMT

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Hi Martin,

I am not trying to sort events for $\pi^+\pi^-$ or $\pi^+\pi^-\pi^0$ at DPM

I tried with below to get $\pi^+\pi^-$

Quote:

```
FairEvtFilterOnSingleParticleCounts* fil= new FairEvtFilterOnSingleParticleCounts("fil");
fil->AndMinMaxPdgCodes(1,1,211,-211);
primGen->AndFilter(fil);
```

Bet in the MCinfo the initial particles are not only $\pi^+\pi^-$ as I expected.

$\pi^+\pi^-$ plus some extras are in the entry. That means that the concept is wrong for $\pi^+\pi^-$ selection.

Therefore I tried to do with one more constrain.

Quote:

```
FairEvtFilterOnSingleParticleCounts* fil= new FairEvtFilterOnSingleParticleCounts("fil");
fil->AndMinMaxPdgCodes(1,1,211,-211);
fil->AndMaxAllParticles(2);
primGen->AndFilter(fil);
```

I used maximum allowed particles as 2, but unfortunately happens the crash with following message

Quote:

```
=====
#5 0x00002b86e240184e in TDatabasePDG::GetParticle(int) const ()
    from /cvmfs/fairroot.gsi.de/fairsoft/apr13/lib/root/libEG.so
#6 0x00002b86ea00a624 in FairEvtFilter::GetCharge (this=0x1af0780,
    inPdgCode=211, pdgCodeCharge=0x7ffa99d6870)
    at /hera/panda/donghee/pandaroot/pandaroot_oct14/pgenerators/eventFilter/Fa
irEvtFilter.cxx:64
#7 0x00002b86ea00daf8 in FairEvtFilterOnSingleParticleCounts::CountCharge (
    this=0x1af0780, particle=0xce27f00)
    at /hera/panda/donghee/pandaroot/pandaroot_oct14/pgenerators/eventFilter/Fa
irEvtFilterOnSinglePa
rticleCounts.cxx:524
#8 0x00002b86ea00e002 in FairEvtFilterOnSingleParticleCounts::EventMatches (
    this=0x1af0780, evtNr=1)
    at /hera/panda/donghee/pandaroot/pandaroot_oct14/pgenerators/eventFilter/Fa
irEvtFilterOnSinglePa
rticleCounts.cxx:612
#9 0x00002b86ea00758c in FairFilteredPrimaryGenerator::GenerateEvent (
    this=0x1ae2d70, pStack=0x5804450)
    at /hera/panda/donghee/pandaroot/pandaroot_oct14/pgenerators/eventFilter/Fa
irFilteredPrimaryGene
rator.cxx:187
```

```
#10 0x00002b86e513d5a1 in FairMCApplication::GeneratePrimaries (this=0x1b3d010)
    at /hera/panda/donghee/pandaroot/pandaroot_oct14/base/sim/FairMCApplication.cxx:792
#11 0x00002b86ea7aabf3 in g3trig_ ()
    from /cvmfs/fairroot.gsi.de/fairsoft/apr13/lib/libgeant321.so
#12 0x00002b86eaaf7e4c in TGeant3::ProcessRun(int) ()
    from /cvmfs/fairroot.gsi.de/fairsoft/apr13/lib/libgeant321.so
#13 0x00002b86e513a8f0 in FairMCApplication::RunMC (this=0x1b3d010,
    nofEvents=1000)
    at /hera/panda/donghee/pandaroot/pandaroot_oct14/base/sim/FairMCApplication.cxx:246
#14 0x00002b86e512aed0 in FairRunSim::Run (this=0x17dbf10, NEvents=1000,
    NotUsed=0)
    at /hera/panda/donghee/pandaroot/pandaroot_oct14/base/steer/FairRunSim.cxx: 372
=====
```

Do you have an idea or simple solution to avoid this problem?
Best wishes,
Donghee
