
Subject: [FIXED] Problem with UseEvtGenDirect
Posted by [Ronald Kunne](#) on Thu, 03 Jan 2013 15:34:31 GMT
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Hi there and best wishes for 2013!

I try to run macro/run/sim_complete.C using the UseEvtGenDirect.

My .dec file looks like this:

noPhotos

Decay pbarpSystem
1.0 J/psi pi+ pi- PHSP;
Enddecay

End

Running this results in the error message:

root.exe:
/vol0/panda/pandasep12/pandaroot/pgenerators/EvtGen/EvtGenBase/EvtIntervalFlatPdf.cc:19:

EvtIntervalFlatPdf::EvtIntervalFlatPdf(double, double): Assertion `max >= min' failed.

If I replace the "J/psi" by a "phi" everything works.

What is the problem here?

Subject: Re: Problem with UseEvtGenDirect
Posted by [Stefano Spataro](#) on Thu, 03 Jan 2013 15:38:30 GMT
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Which momentum value are you using?

Subject: Re: Problem with UseEvtGenDirect
Posted by [Ronald Kunne](#) on Thu, 03 Jan 2013 15:49:55 GMT
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I used BeamMomentum =10.0;

I tried 15.0 GeV as well. Then if I add a decay like

Decay J/psi
1.0 e+ e- VLL;
Enddecay

I get the same error message.

Without decay chain the error message is different:

EvtGen:End of decay chain.

EvtGen:Sorry, no luck finding a valid set of masses. This may be a pathological combo
root.exe:

/vol0/panda/pandasep12/pandaroot/pgenerators/EvtGen/EvtGenBase/EvtParticle.cc:466: void
EvtParticle::generateMassTree(): Assertion `0' failed.

Subject: Re: Problem with UseEvtGenDirect

Posted by [Stefano Spataro](#) on Thu, 03 Jan 2013 16:13:37 GMT

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I have just tried with the latest trunk w/o any problem.

Could you please check in the log that you have the following text:

```
<I> PndEvtGenDirect
<I> Particle: pbarpSystem
<I> decfile: /home/spataro/sep12/pandaroot/macro/run/ronald.dec
<I> pbar-Momentum: 10
<I> Rnd Seed: -1
<I> Rnd Seed changed to 3319
EvtGen:Initializing EvtGen
EvtGen:Storing known decay models
Will register EvtPythia
EvtGen:Main decay file name
:/home/spataro/sep12/pandaroot/pgenerators/EvtGen/DECAY.DEC
EvtGen:PDT table file name :/home/spataro/sep12/pandaroot/pgenerators/EvtGen/evt.pdl
EvtGen:Initializing RadCorr=PHOTOS
EvtGen:No RadCorr engine given in EvtGen::EvtGen constructor, will use default EvtPHOTOS.
EvtGen:In readDecayFile,
reading:/home/spataro/sep12/pandaroot/pgenerators/EvtGen/DECAY.DEC
EvtGen:As requested, PHOTOS will be turned on.
```

and

```
EvtGen:In readDecayFile, reading:/home/spataro/sep12/pandaroot/macro/run/ronald.dec
EvtGen:As requested, PHOTOS will be turned off.
EvtGen:Given allowed decays, resetting minMass pbarpSystem 1.48 to 3.37581
EvtGen:Reading /home/spataro/sep12/pandaroot/macro/run/ronald.dec to override decay
table.
```

Generating with following conditions:

incident 4-mom : (10.9822, 0, 0, 10), m = 4.53966

#####

and copy it here?

Subject: Re: Problem with UseEvtGenDirect
Posted by [Ronald Kunne](#) on Thu, 03 Jan 2013 16:22:46 GMT
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Good call, Stefano!

When I checked this, I saw that it uses "mom" and not "Beam momentum" to determine the incident beam.

So it's solved. Thanks very much.

Greetings,
Ronald

Subject: Re: Problem with UseEvtGenDirect
Posted by [Stefano Spataro](#) on Thu, 03 Jan 2013 16:24:57 GMT
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"mom" is the momentum for the generator, i.e. pbar momentum for evtgen, particle gun momentum for box, pbar momentum for dpm.
BeamMomentum is the momentum for the scaling of the dipole field.
