Subject: Re: Upcoming DC

Posted by Jens Sören Lange on Sun, 06 Apr 2008 13:28:19 GMT

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Hi all,

Stefano and I thought a bit again about the question, which macros to use.

And the key question is:

which are our most time-consuming steps in the simu or reco?

And, actually, here the fast sim is the smallest problem, because - obviously - it is fast by definition. So I changed my opinion a bit.

Therefore I would like to propose three different macro groups (in other words, our "bottlenecks")

- 1.) dpm
- 2.) UrQMD
- 3.) tpc reco and stt reco

(maybe - if we keep the DC data somewhere - we could actually use it for the long-planned tpc/stt comparison?)

So, concerning 1.)

macro/run/run_sim1.C
with all detectors switched on
and then change the generator to DPM, see
http://panda-wiki.gsi.de/cgi-bin/view/Computing/Dpm
-> "Simulation inside PandaRoot"
and then generate billions of events

Note: unfortunately I don't know anymore how to set the beam energy in DPM. I have to ask Stefano tomorrow.

So, concerning 2.)

macro/run/run_sim1.C with all detectors switched on and then change the generator to UrQMD, see http://panda-wiki.gsi.de/cgi-bin/view/Computing/UrqmdSmm here the heavy targets (Au, Pb) are most useful, because most time-consuming. anti-proton beam momenta 3.00 and 4.05 GeV (these are needed for the J/Psi-in-nucleus measurement).

Actually, the GRID would be very useful here to generate as many events as possible!

So, concerning 3.)

macro/tpc/tutorial runMC.C runDigi.C runReco.C the svn version of these macros have some difficulties right now (I just tried again and I have e.g. undefined symbol GeaneTrackRep), see also http://forum.gsi.de/index.php?t=msg&th=1802&rid=0&S=dfa54395 2d09c2dca876d4fb1bde7c98#msg_6124 e.g. one has to comment out "UseGeane()". I hope that we can fix it until the DC

macro/stt run.C rundigi.C runreco.C they work fine.

(I know that Dipak has a version which works).

Here I would propose just to use the box generator for muons with pT=30,40,50,...100 MeV/c pT=100,200,300,...,1000 MeV/c pT=1,2,3,...,7.5 GeV/c and uniform polar angle. (the highest point at 7.5 GeV/c is for the Drell-Yan measurement).

What do you think?

cheers, Soeren