Subject: UrQMD - SMM

Posted by Olaf Hartmann on Fri, 22 Jan 2010 12:37:26 GMT

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Salut,

I've seen that for the grid there's an executable UrQMDSmmGen with the appropriate .so file. I suppose this program produces the root files which later are read by

PndUrqmdSmmGenerator. But it's not part of svn, or I just didn't find it. Where is the source of the source?

Cheers Olaf.

Subject: Re: UrQMD - SMM

Posted by asanchez on Fri, 22 Jan 2010 13:19:06 GMT

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Dear Olaf.

PndUrqmdSmmGenerator can be found at trunk/pgenerators directory.

For input files you should contact Aida Galoyan and let her know your request.

cheers Alicia

Subject: Re: UrQMD - SMM

Posted by Olaf Hartmann on Fri, 22 Jan 2010 13:28:51 GMT

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Alicia Sanchez wrote on Fri, 22 January 2010 14:19Dear Olaf, PndUrqmdSmmGenerator can be found at trunk/pgenerators directory.

For input files you should contact Aida Galoyan and let her know your request.

cheers Alicia

Hola Alicia.

yes, I know about PndUrgmdSmmGenerator and some medium-aged root files on /d/panda02

Actually I'm really interested in UrqmdSmmGen, because with the ROOT files I've no influence on the input parameters for UrQMD itself (like freeze-out time, time step size ...)

Salu2 Olaf.

Subject: Re: UrQMD - SMM

Posted by asanchez on Fri, 22 Jan 2010 13:44:18 GMT

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Hi again, i know that in the case of dpm generator there is for instance for the user the possibility to create the inputs files by running at build/bin the executable dpmgen.

As you already wrote, i don't know either wether the same is possible for urqmdsmm(grid). Maybe Aida or Mohamad could give you more information to this respect.

regards alicia

Subject: Re: UrQMD - SMM

Posted by Johan Messchendorp on Fri, 22 Jan 2010 23:34:26 GMT

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Hi Olaf,

Concerning the UrQMD_smm code on the GRID. Aida asked me not to distribute the source. Therefore, you will not find it in the repository. I have access to the code, but I prefer that you ask Aida directly for a copy. I am sure she will help you out here....

Kind wishes,

Johan.

Subject: Re: UrQMD - SMM

Posted by StefanoSpataro on Sat, 23 Jan 2010 07:50:06 GMT

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By the way,

is the Urqmd stuff compatible with the new ROOT in jan10 external packages? I heard it does not compile.

Subject: Re: UrQMD - SMM

Posted by Johan Messchendorp on Sat, 23 Jan 2010 11:18:01 GMT

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Hi,

I just tried to compile and build the code to the latest root release in fairsoft. Seems to work well and it also runs.... The problem which we have is that we cannot distribute the code on the all the Grid machines, which makes it hard to make it compatible with the large variety of machines and distributions available on the Grid. We basically have to do the installation manually on the machines, which is a nightmare. Hence, we didnt switch to the newer root release on the grid.

Johan.

Subject: UrQMD SmmGen

Posted by Olaf Hartmann on Wed, 10 Feb 2010 09:30:32 GMT

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Hi Aida,

using the UrqmdSmmGen I encountered twice a crash of the program. The error message is just "program stopped". Is there a verbosity level to get some more information about the crash?

One problem I could cure by using a different initial seed.

Bye, Olaf.

Subject: UrQMDSmm and FLUKA

Posted by Olaf Hartmann on Fri, 12 Feb 2010 10:56:44 GMT

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Hi all,

finally I started to look into the potential use of FLUKA as an event generator for PANDARoot (this is at the moment a "private study" because of the FLUKA license).

The first test case is the reaction of a 3.5 GeV/c pbar on carbon-12. I compare FLUKA (using an extended target) to UrQMDSmmGen. "Thin target" means a carbon wire of $100\mu m$ diameter.

Exemplarily I show the momentum distribution of the nucleons (p+n).

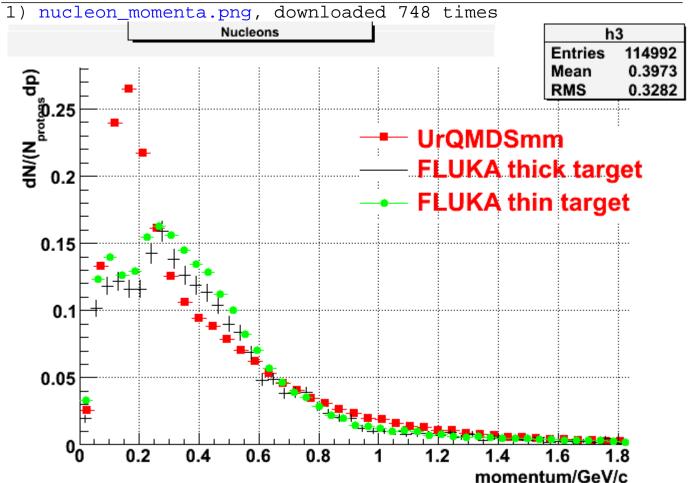
The normalization is done here using the total number of protons.

The figures show the lower and the high momentum range. I'll further iterate to see if the "dip" in FLUKA between 100 and 200 MeV/c is due absorption in the target (which UrQMD does not

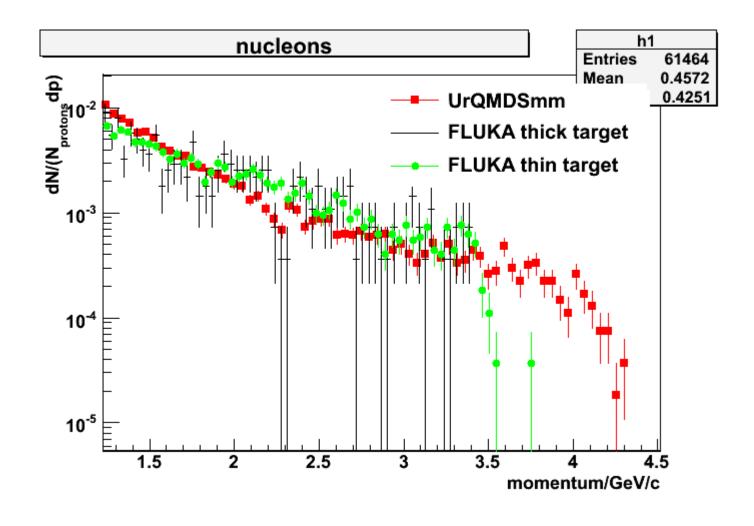
have). However the difference between thick and thin target does not look that prominent. In contrast to UrQMDSmm, FLUKA has also antiprotons in the final state which underwent scattering (n.b. those who don't interact at all are discarded). A more detailed report will follow latest at the coll.meeting.

Cheers Olaf.





2) nucleon_momenta_high.png, downloaded 834 times



Subject: Re: UrQMDSmm and FLUKA
Posted by Johan Messchendorp on Fri, 12 Feb 2010 12:36:20 GMT
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Hi Olaf,

very interesting! Looking forward for more results,

Johan.