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Subject: some notes...

Posted by [Johan Messchendorp](#) on Tue, 10 May 2011 19:17:23 GMT

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Here some notes after our meeting this afternoon:

\*) new external packages: may11 release. Made available by Mohammad and includes the requested GLPK, root 5.29/02, updates Geant4, etc. The new external packages have been tested so far successfully on various linux flavors. Furthermore, it has been installed on most GRID sites (except for Glasgow: Dan is looking at that).

\*) DPM discussion was concluded during last tracking meeting: there is a momentum-dependent cut-off implemented that cuts recoil protons of 100 MeV/c and less. The request has been implemented in PndDpmDirect.

\*) Status of STT chain: 1) geometry+digi fixed! 2) GEM extension reconstruction completed. The efficiencies are larger than 80% for the hit finding; 3) Lia and Gianluigi presently working on secondary track finding code; 4) Gianluigi is furthermore working on a clean-up by studying the continuity in firing tubes.

\*) Status TPC chain: 1) new ROOT geometry committed: still has to be tested. This will be done by Felix within the upcoming two days. He will notify Johan/Stefano when ready, so that we can start with DPM events on Grid; 2) Johannes presented some of the reconstruction results from the data taking run at GSI (see attachment). Efficiencies are typically 80% and larger; 3) Sebastian looked into some optimization of the performance. He will post the benchmarks asap on the forum. It is expected that the performance can be improved by a factor of two than what originally was stated, e.g. 1 event ~ 15 minutes with a few thousand tracks/event.

\*) Event-mixing: since the time-based framework will not be ready for the TDR, we will continue with a mixing procedure "by hand", e.g. each of the two different tracking detectors will implement their own code that reads DPM events on the digi level. As well, Gianluigi as Sebastian have done this already for their own reconstruction.

\*) Parameter management: at present, the detector parameters are stored in one ASCII file (all.par). Note that on the long run, we will make use of an oracle database (once we find a person for this), and the ASCII file will become obsolete. There is a request from Felix to make the existing structure more flexible, such that each detector can maintain their own parameters and that all these parameter files are automatically combined into one. Florian/Stefano might already have looked into this. They will be contacted to see whether we can accommodate such automatic merging.

Johan.

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## File Attachments

1) [PR Performance on real Data.pdf](#), downloaded 221 times

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