## Subject: Re: TPC digitization blocks everything for too many cluster events
Posted by StefanoSpataro on Tue, 22 Jun 2010 17:08:08 GMT

View Forum Message <> Reply to Message

Dear all,
I think I have found the guilty guy. Which is not tpc digitization, not exactly.
Putting some thousands of cout in PndTpcElectronicTask::Exec, I have found that the code stucks at the following line:

dig->SetLinks(FairMultiLinkedData(kTpcSignal, sigIdMap[padIt->first]));

Now we have understood why the problem was not appearing before: becuase it is related to the new fairlink propagation! If I comment out this line, the code is slow for the "heavy" events, but it is processed in a "reasonable" amount if time...
I have taken my wonderful 5533 event, it took 24 hours with FairLink line, 1 minute without....

I suppose there is something bad in the linking procedure for tpc, for large events, maybe because the too many objects to handle.

Another slow line, but two orders of magnitude faster than the link line, is the following:

 PndTpcDigitizationPolicy().Digitize(sv,&samplelist,ffrontend,fpulseshape);

The code is stucked there for the guilty event, but just for 10 seconds per iteration of the padmap. I am not sure if this is a "feature" or if this could be optimized somehow, I leave the word to digitization experts.

About the SetLinks, I would suggest for the moment to comment out the line, in order to make the digit faster. If somebody wants to check the guilty event, just send me a mail and I could give him the path at GSI where to get a root file with... many problems.
Regards