
Subject: Event Mixing with TPC

Posted by [Stefano Spataro](#) on Wed, 24 Aug 2011 15:01:00 GMT

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Dear TPC tracking experts,
which should be the TPC macro chain to launch sim+digi+reco mixing with background dpm files? Is the correction in the number of bg events for elastic channel cross section already applied?

And another question: in the TrackCandidate, is there a way to separate which PndTpcCluster is coming from the signal and which from the background file?

Thanks in advance.

Subject: Re: Event Mixing with TPC

Posted by [Felix Boehmer](#) on Wed, 24 Aug 2011 15:13:07 GMT

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Hi Stefano,

Concerning the mixing macros: as I said before, this is all quite a lot manual labor at the moment.

I will send you a bunch of macros and cluster scripts along with a short discription in a couple of minutes. It will be quite some work to streamline those files for grid usage I suppose
The mixing is based on rate assumptions, just taking 1000 or 2000 DPM events, respectively, and mix them with one physics event (eta_c). On top of that the scale of the distortions can be chosen.

To the second question: The clusters in the candidate contain a McIdCollection of McIds they contain from digi level. There is also an EventID which is 0 for the physics tracks and >0 for background tracks.

Cheers

Felix