
Subject: Covariance Matrix for CbmHit

Posted by [Tobias Stockmanns](#) on Wed, 12 Mar 2008 09:18:06 GMT

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Dear pandaRooters,

for the correct calculation of the covariance matrix of the riemann fit I need the covariances of the CbmHits. Therefore I would like to ask Mohammad to add a TMatrixD(3,3) to the CbmHit class and the tracking sub-detector experts to fill this matrix with the correct data.

Thanks,

Tobias

Subject: Re: Covariance Matrix for CbmHit

Posted by [Mohammad Al-Turany](#) on Wed, 12 Mar 2008 09:28:49 GMT

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Hallo Tobias,

I think that the CbmHit should be kept as small as possible, otherwise the data volume in CBM will explode! So what about introducing a PndTrkHit analog to the cbmroot/cmbase/CbmTrkHit class which can have this matrix and maybe other information like station number or what ever!

regards

Mohammad

Subject: Re: Covariance Matrix for CbmHit

Posted by [Tobias Stockmanns](#) on Wed, 12 Mar 2008 09:59:13 GMT

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Hi Mohammad,

for me a new class is fine. Then we just have to change the dependency of PndMvdHit from CbmHit to the new class.

Regards,

Tobias

Subject: Re: Covariance Matrix for CbmHit

Posted by [Tobias Stockmanns](#) on Wed, 12 Mar 2008 10:37:22 GMT

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We can save some space if we replace the TMatrixD with TMatrixTSym<double>

Cheers,

Tobias

Subject: Re: Covariance Matrix for CbmHit
Posted by [Mohammad Al-Turany](#) on Wed, 12 Mar 2008 10:45:04 GMT
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Hi,

What about creating a pandabase subdirectory and move the mcstack contents to it, also this new class (PndHit?? as a subclass of CbmHit).

Mohammad

Subject: Re: Covariance Matrix for CbmHit
Posted by [Tobias Stockmanns](#) on Wed, 12 Mar 2008 10:50:10 GMT
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For me this seems to be a clean solution.

Are there other opinions?

Cheers,

Tobias

Subject: Re: Covariance Matrix for CbmHit
Posted by [Sebastian Neubert](#) on Wed, 12 Mar 2008 13:34:41 GMT
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Seems good!
