
Subject: Ideal Pattern Recognition

Posted by [NazilaDivani](#) on Mon, 22 May 2017 14:15:07 GMT

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Dear all

As I understood "PndBarrelTrackFinder" is one of the Realistic pattern recognition for track finding class in the PandaRoot which is useful for the GEM. Is there any possibility to use it as the Idealistic pattern recognition too?

I mean like "PndSttMvdGemTracking" class for the realistic pattern recognition and "PndSttMvdGemTrackingIdeal" class for Idealistic pattern recognition. May somebody guide me?

Thanks in advance,

Nazila

Subject: Re: Ideal Pattern Recognition

Posted by [Radoslaw Karabowicz](#) on Mon, 22 May 2017 14:25:56 GMT

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The ideal pattern recognition is ideal. In the sense that PndSttMvdGemTracking and PndSttMvdGemTrackingIdeal share no code to find tracks.

The PndSttMvdGemTrackingIdeal task is creating ideal tracks from the Stt,Mvd,Gem hits taking into account MC information.

Since PndBarrelTrackFinder finds tracks in same set of detectors, the "PndBarrelTrackFinderIdeal" would virutally be exactly the same as PndSttMvdGemTrackingIdeal, hence there's no need to implement it.

Subject: Re: Ideal Pattern Recognition

Posted by [NazilaDivani](#) on Mon, 22 May 2017 14:28:49 GMT

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OK, I got it, Thank you so much

Subject: Re: Ideal Pattern Recognition

Posted by [Tobias Stockmanns](#) on Mon, 22 May 2017 14:29:09 GMT

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In the mean time we have an official ideal track finder called PndIdealTrackFinder which should be used. It is able to find tracks in all different sub-detectors.

Cheers,

Tobias

Subject: Re: Ideal Pattern Recognition
Posted by [NazilaDivani](#) on Mon, 22 May 2017 14:30:38 GMT
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OK, Thank you so much,

Subject: Re: Ideal Pattern Recognition
Posted by [StefanoSpataro](#) on Mon, 22 May 2017 14:45:40 GMT
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The PndBarrelTrackFinder seems to have better performances in the GEM region, but it was never tested with large simulations such as in the case of the PndSttMvdGemTracking. In this sense, if you would like to do a complete characterization, it would be good I suppose.

Subject: Re: Ideal Pattern Recognition
Posted by [NazilaDivani](#) on Mon, 22 May 2017 14:53:15 GMT
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Dear Stefano,
Thanks for your comment. As you know, I have shown the good influence of the GEM when I have used PndBarrelTrackFinder. By using PndSttMvdGemTracking the contribution of the GEM is small. Now, I want to check it as the Idealistic pattern recognition in Lambda-Lambda-bar channel too.
Best Regards.
Nazila
