
Subject: Condition for tracks to hit FWD EMC
Posted by [pandachris](#) on Thu, 06 Oct 2016 13:58:20 GMT
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Dear all,

in the file PndPidEmcInfo.cxx, there is a condition saying

```
if ((emcModule == 3) && (helix->GetZ() < 165.))
```

```
continue; // consider tracks only from last gem plane for FWD
```

This basically ensures that tracks without a hit in the last GEM plane are not considered to constitute pidChargedCandidates.

However, even if tracks have only STT/MVD hits, they can still pass between the gap of GEM and EMC barrel and produce a cluster in the EMC forward detector. Therefore I would consider this condition redundant.

Is there any reason for this that I do not see or can it be removed?

Thanks and all best,
Chris

Subject: Re: Condition for tracks to hit FWD EMC
Posted by [StefanoSpataro](#) on Thu, 06 Oct 2016 14:03:36 GMT
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Quote: This basically ensures that tracks without a hit in the last GEM plane are not considered to constitute pidChargedCandidates.

This ensures that tracks without a hit in the last GEM plane are not correlated to the FWD EMC, saving a lot of CPU time. But the pidChargedCandidate is created.

Can you please evaluate (DPM?) how many tracks w/o hits in the last GEM plane are really hitting the FWD EMC?
