
Subject: Re: How to distinguish between STT hits in barrel part and forward tracker?

Posted by [Stefano Spataro](#) on Thu, 23 Jun 2016 00:30:37 GMT

[View Forum Message](#) <> [Reply to Message](#)

As I told you during the meeting, we have two separate PndTrack TClonesArrays for MVD+STT+GEM and MVD+FTS+GEM. This means you cannot have both STT and FTS in the same track.

The function PndPidCandidate::GetSttHits() returns the number of STT hits if you have the PndSttMvdGemTrackingIdeal and the number of FTS hits if you have the PndFtsTrackerIdeal. The two track branches are separate by the function PndPidCandidate::GetTrackBranch().

This means that if you want to select tracks with at least 3 STT hits, you should use the condition GetTrackBranch()==XX && GetSttHits()>=3, where XX is the index of the central tracking TClonesArray number (if you plot the GetTrackBranch() you will have only two numbers, the central track is the first). And if you want to have at least 3 FTS hits then GetTrackBranch()==YY and GetSttHits()=3.

You can check macro/run/plot_pid.C, and see how the histograms hSttHits and hFtsHits are filled.

In any case, if you hit particles between 6 and 9 degrees you won't have any STT hit.
