Subject: Muon tracking in forward spectrometer
Posted by StefanoSpataro on Mon, 08 Apr 2013 23:15:53 GMT
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Dear all,
I have implemented a fast tracking algorithm for the muon detector in the forward spectrometer.
I have tested it with muons (red) and pions (blue) at 5 GeV/c, just to be sure that it is working.

In the following plots you can see the distribution of number of mdt layers:

the amount of iron crossed by the particle:

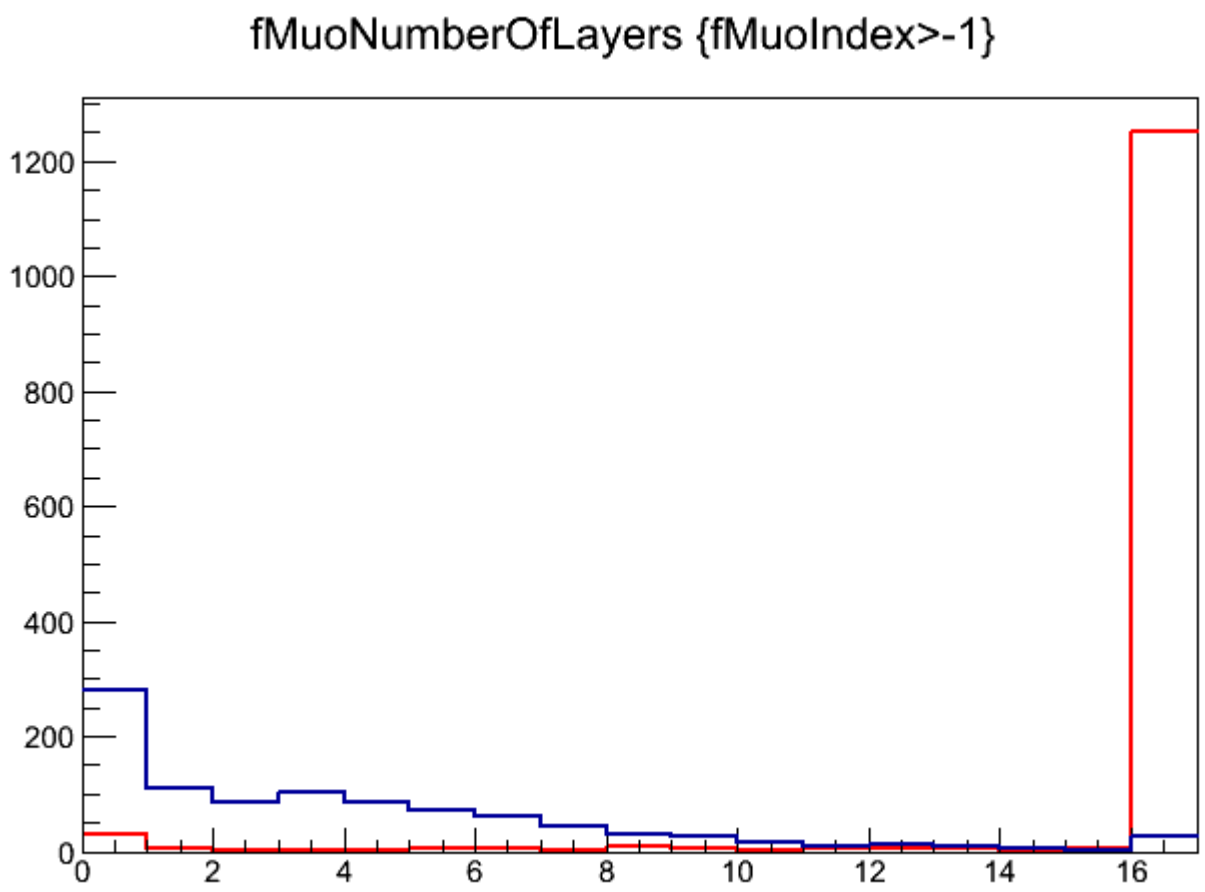
and the number of mdt hits inside a broad correlation window:

It seems to work, now we can do muon identification for the whole spectrometer.

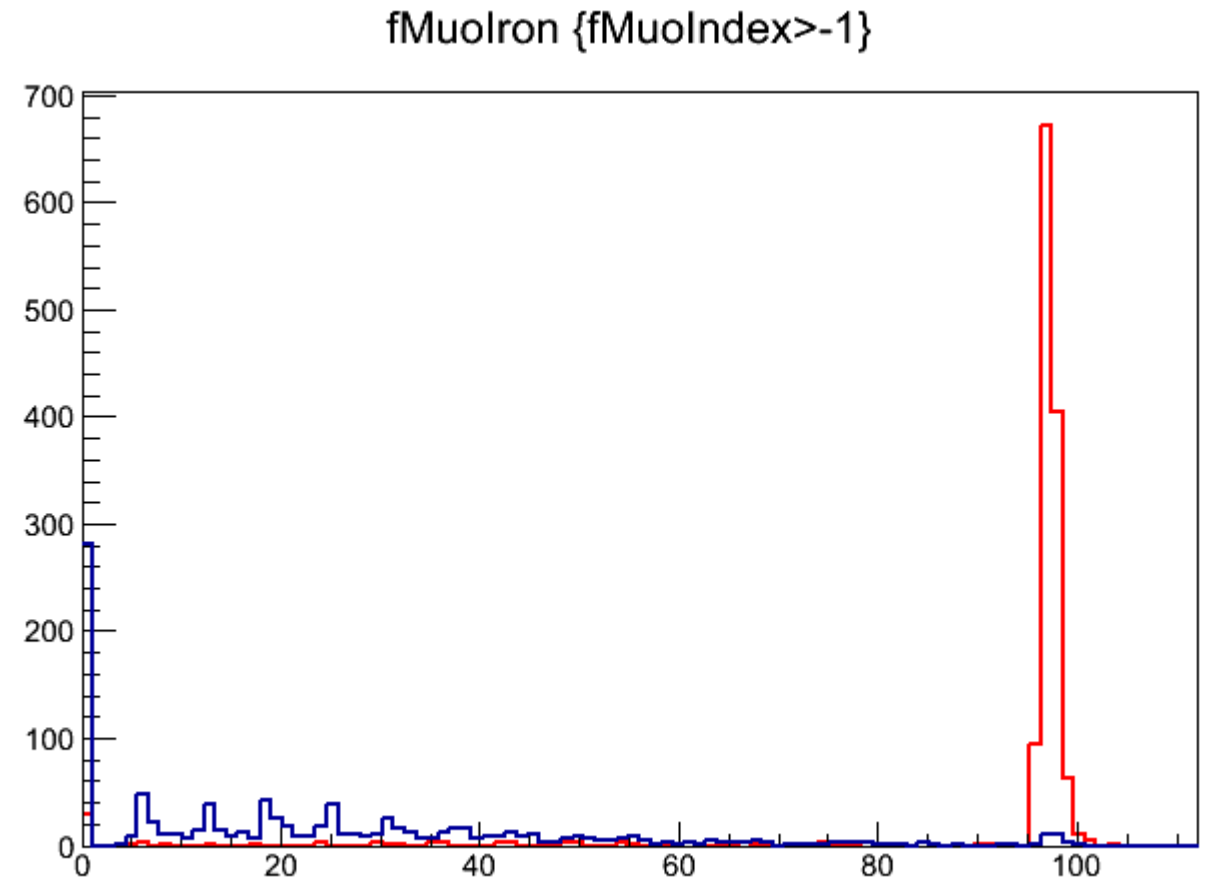
However improvements in the correlation window and checks at other momenta should be performed. Guinea's pigs are welcome

File Attachments

1) fMuoNumberOfLayers.gif, downloaded 1036 times



2) fMuoIron.gif, downloaded 996 times



3) fMuoHits.gif, downloaded 968 times