Subject: Re: Mc Truth Match
Posted by Klaus Götzen on Mon, 19 Aug 2013 19:28:26 GMT
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Hi Martin,

actually it's not the case that FillList with option "XyzPlus" fills in as well negative particles. The results you shown confirm my observation I guess:

Your number piplus = 374 include all 359 pimatchplus particles, and in addition 15 negative pions, which were reconstructed wrongly as postive pions (perhaps the sign of the curvature or flight direction was fitted wrongly) and of course have as well a pion PID probability of 1.

So what you see is not negative charged particles selected by "PionLoosePlus", but reco tracks with positive charge, whose hits in reality were created by a particle with negative charge.

But how should the PID algorithm or data provider know that the true particle was negative, when tracking says, it's postive?

To clarify: The PidAlgoIdealCharged delivers perfect PID probabilities for all particle species, but it's not meant to be a McTruth match (as I just realized today...).

Best,
Klaus