
Subject: Re: Mc Truth Match

Posted by [Klaus Götzen](#) on Tue, 20 Aug 2013 12:40:35 GMT

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Hi Simone,

in the posting you have linked to I see some unusual PDG codes (say gammas, neutrons, even muons etc) only in the gamma/neutral list.

I think the explanation for this is, that the EMC cluster algorithm identifies clusters created by all kinds of particles, and when no track can be associated to this cluster unambiguously, it simply is taken as a gamma candidate, i.e. setting PDG code to 22, charge and mass to 0.

When you check the PDG codes from the reco candidates in the 'Neutral' list, you should only see particles with PDG code 22. The associated McTruth objects indeed might have completely different PDG codes and even charges.

The FillList routine (as well as PidSelectors) actually set the PDG code according to the requested list type, but it of course doesn't touch the types of the McTruth objects.

Best,
Klaus
