
Subject: Mc Truth Match

Posted by [Elisa Fioravanti](#) on Tue, 20 May 2014 11:57:26 GMT

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Dear all,

I'm simulating the channel

J/psi pi0 pi0 at the energy in the center of mass of the X(3872).

I select j/psi->e+e- in this way:

```
TString pidalg = "PidChargedProbability";
theAnalysis->FillList(eminus, "ElectronLooseMinus", pidalg);
theAnalysis->FillList(eplus, "ElectronTightPlus", pidalg);
SelectTruePid(theAnalysis, eplus);
SelectTruePid(theAnalysis, eminus);
jpsiee.Combine(eminus,eplus);
for(Int_t j=0;j<jpsiee.GetLength();++j){
    if (theAnalysis->McTruthMatch(jpsiee[j])){
        ntp1->Column("jpsi_before_fit", (Float_t) jpsiee[j]->M());
        ntp1->DumpData();
    }
}
```

in this way only 20% of J/psi are reconstructed.

If I did not (theAnalysis->McTruthMatch(jpsiee[j]))

I have 66% of J/psi reconstructed.

Maybe something is going wrong with the McTruthMatch?

Do you have an idea?

Thanks a lot

Elisa

Subject: Re: Mc Truth Match

Posted by [Klaus Götzen](#) on Tue, 20 May 2014 14:21:02 GMT

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Hi Elisa,

if you have enabled 'Photos' in EvtGen, the truth match fails if you don't add the bremsstrahlung gamma to the J/psi reco candidate. I.e. use 'noPhotos' in the decay file and try again, whether the number of truth matches increases.

Best,

Klaus

Subject: Re: Mc Truth Match

Posted by [StefanoSpataro](#) on Fri, 12 Sep 2014 08:31:16 GMT

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Did it help?
