
Subject: Fast Simulation- neutral particle
Posted by [Lu Cao](#) on Mon, 31 Mar 2014 14:24:37 GMT
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Hi all,

I try to do fast simulation with this decay chain: $p\bar{b}p \rightarrow D_s^+ D_s^-$; $D_s^- \rightarrow K^+ K^- \pi^-$; $D_s^+ \rightarrow e^+ \nu \eta$; $\eta \rightarrow \pi^+ \pi^- \pi^0$ (gamma gamma). From the examples in macro/scrut, I got some problems for simulating the neutral channel:

1) in simulation macro:

```
// generate electro-magnetic / hadronic split offs in the EMC? switch off when running w/o EMC
```

```
Bool_t enableSplitoff = kFALSE;
```

```
//enable the producing of parametrized neutral (hadronic) split offs  
if (enableSplitoff)
```

```
    fastSim->EnableSplitoffs(BaseDir+"/fsim/splitpars.dat");
```

From the comments there, if I understand correctly, the "enableSplitoff" seems should be switched on for $\eta \rightarrow \pi^+ \pi^- \pi^0$ (gamma gamma). I tried kTRUE, but it crashed.

2) in analysis:

```
// *** name of the only PidAlgo TClonesArray in fsim  
TString pidalg = "PidChargedProbability";
```

Does it mean no neutral algorithm in fast simulation? then, how to fill the neutral list?

Thanks in advance.

Lu
