Subject: Re: new FTF generator in pandaroot
Posted by Aida Galoyan on Tue, 23 Sep 2014 08:58:16 GMT

Hi Donghee,

> In DPM, some generated particles are stable,which is Pi0,K_S0,
> Lambda, anti-Lambda, eta.
> I am now interested in the fundamental kinematics of both
> generators. At pure stand-alone generator study or fast
> simulation, they(stable particles) are normally turning
> to be unstable for DPM case.

Mainly, these particles are stable in DPM. It is a user
responsibility to point out what particles are unstable.
We set stable all long-lived particles -
Pi0, K0_s, K0_l, Lambda and others.

The same is true for FTF generator.

> If I want to do same study with FTFGen at fast simulation or
> stand-alone generator, Do I need to allow decay in order to compare
> with DPM generator. What about the situation for this at FTF
> generator?

The lists of "stable" particles in DPM and FTF coincide.

> At full simulation, all stable particles will be decayed at GEANT
> level afterwards, therefore we don't need to care about it. But
> generator level or fast simulation case, we have to know correctly how
> they are handled.

There is a problem in FTF how to point out that we are
going to consider rho-mesons (and others)
as stable particles. It is needed for various studies.
We implemented such possibility in DPM.
It is more complicated job in the case of FTF.

Best regards!
Aida