Subject: New pbarpSystem and pbardSystem implementations
Posted by StefanoSpataro on Tue, 13 Mar 2012 15:10:57 GMT
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Dear all,
few new implementations were done in EvtGen.

First all now, now you can set the spin of the initial pbar-p system, by using:
pbarpSystem0
pbarpSystem1
pbarpSystem2
The old pbarpSystem remains at the usual place, but please remember that it has spin 1 so you cannot use it with other models (i.e. the SVV used for eta_c).

Another note: if you use as initial state a particle, i.e. eta_c, in generation you will have an invariant mass resolution due to the particle width, and not to the beam momentum spread. For this reason we suggest to use pbarpSystem as initial state.

Morevoer, thanks to Albrecht we have a new model to simulate collisions antiproton-deuteron. In this case you have to use "pbardSystem" as initial state, and write a DEC file such as:

```
noPhotos
#
Decay pbardSystem
  1.0   p+  pbarnSystem  DeuteronSpectator 1.0 1.16;
Enddecay
#
Decay pbarnSystem
  1.0   pi- phi   PHSP;
Enddecay
#
Decay phi
  1.0   K+ K-   VSS;
Enddecay
#
End
```

Maybe Albrecht could comment about the parameters to provide to the DeuteronSpectator model.