Subject: PndBoxGenerator
Posted by StefanoSpataro on Tue, 22 May 2007 16:59:16 GMT
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After some discussions I wrote a new box generator inside pgenerators directory: PndBoxGenerator.

PndBoxGenerator is like CbmBoxGenerator, but I put one function in order to set uniform distributions in cos(theta), and not in theta as it is done by default.

Example:

If you want to have a unifor distribution i theta, you have to type in your simulation macro:

```
PndBoxGenerator* boxGen = new PndBoxGenerator(13, 1);
boxGen->SetPRange(1.,1.); // GeV/c
boxGen->SetPhiRange(0., 360.); // Azimuth angle range [degree]
boxGen->SetThetaRange(0., 180.); // Polar angle in lab system range [degree]
boxGen->SetXYZ(0., 0., 0.); // vertex coordinates [cm]
primGen->AddGenerator(boxGen);
```

IF you want to have a unifor distribution in cos(theta):

```
PndBoxGenerator* boxGen = new PndBoxGenerator(13, 1);
boxGen->SetPRange(1.,1.); // GeV/c
boxGen->SetPhiRange(0., 360.); // Azimuth angle range [degree]
boxGen->SetThetaRange(0., 180.); // Polar angle in lab system range [degree]
boxGen->SetCosTheta(); // Set uniform ditribution in cos(theta)
boxGen->SetXYZ(0., 0., 0.); // vertex coordinates [cm]
primGen->AddGenerator(boxGen);
```

And that's all.
Enjoy...

Ste