Subject: Doing collisions and input information. Posted by Raghav Kunnawalkam on Fri, 20 Apr 2012 13:46:46 GMT View Forum Message <> Reply to Message

Hi Guys

So now i have my detector (EIC) up and running and i started doing some collisions. Ideally i would like to input a pythia file which has all the necessary primary information regarding particles and stuff. Is there a way for it to read a pythia file as a input for collisions?

Right now i am doing collisions like this:

FairBoxGenerator* boxGen1 = new FairBoxGenerator(11, 1); // 13 = muon; 1 = multipl. boxGen1->SetXYZ(0., 0., 1200.); // mm o cm ?? boxGen1->SetPRange(-5.0,-5.0005); // GeV/c boxGen1->SetPhiRange(0.,0.); // Azimuth angle range [degree] boxGen1->SetThetaRange(0.,0.); // Polar angle in lab system range [degree] boxGen1->SetCosTheta(); primGen->AddGenerator(boxGen1);

FairBoxGenerator* boxGen2 = new FairBoxGenerator(2212, 1); // 13 = muon; 1 = multipl. boxGen2->SetXYZ(0., 0., -1200.); // mm o cm ?? boxGen2->SetPRange(5.0,5.0005); // GeV/c boxGen2->SetPhiRange(0.,0.); // Azimuth angle range [degree] boxGen2->SetThetaRange(0.,0.); // Polar angle in lab system range [degree] boxGen2->SetCosTheta(); primGen->AddGenerator(boxGen2);

Is there a better way of doing it?

Thanks a lot Cheers Raghav

Subject: Re: Doing collisions and input information. Posted by StefanoSpataro on Fri, 20 Apr 2012 13:57:50 GMT View Forum Message <> Reply to Message

Pythia6 or Pythia8? In Panda we can use both, but you need pandaroot classes.

Subject: Re: Doing collisions and input information. Posted by Raghav Kunnawalkam on Fri, 20 Apr 2012 14:07:47 GMT View Forum Message <> Reply to Message

I would assume pythia6, but it would not hurt to get both to work.

So when you say there are pandaroot classes, is there a way to implement those classes in

fairroot. like maybe just creating those classes. I am also trying to create the magnetic field class in fairroot but without any success.

Also is there an example in pandaroot which does this (use pythia)?

Subject: Re: Doing collisions and input information. Posted by StefanoSpataro on Fri, 20 Apr 2012 14:40:48 GMT View Forum Message <> Reply to Message

In panda there is a presentation for Pythia8, and a wiki page for pythia6, which could help.

