

Subject: Re: PndBoxGenerator -> distributions uniform in cos(theta)

Posted by [Stefano Spataro](#) on Tue, 22 May 2007 17:11:57 GMT

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To show that the PndBoxGenerator works...

Comparison plots with the two methods:

RED - uniform theta

BLUE - uniform cos(theta)

Theta distributions

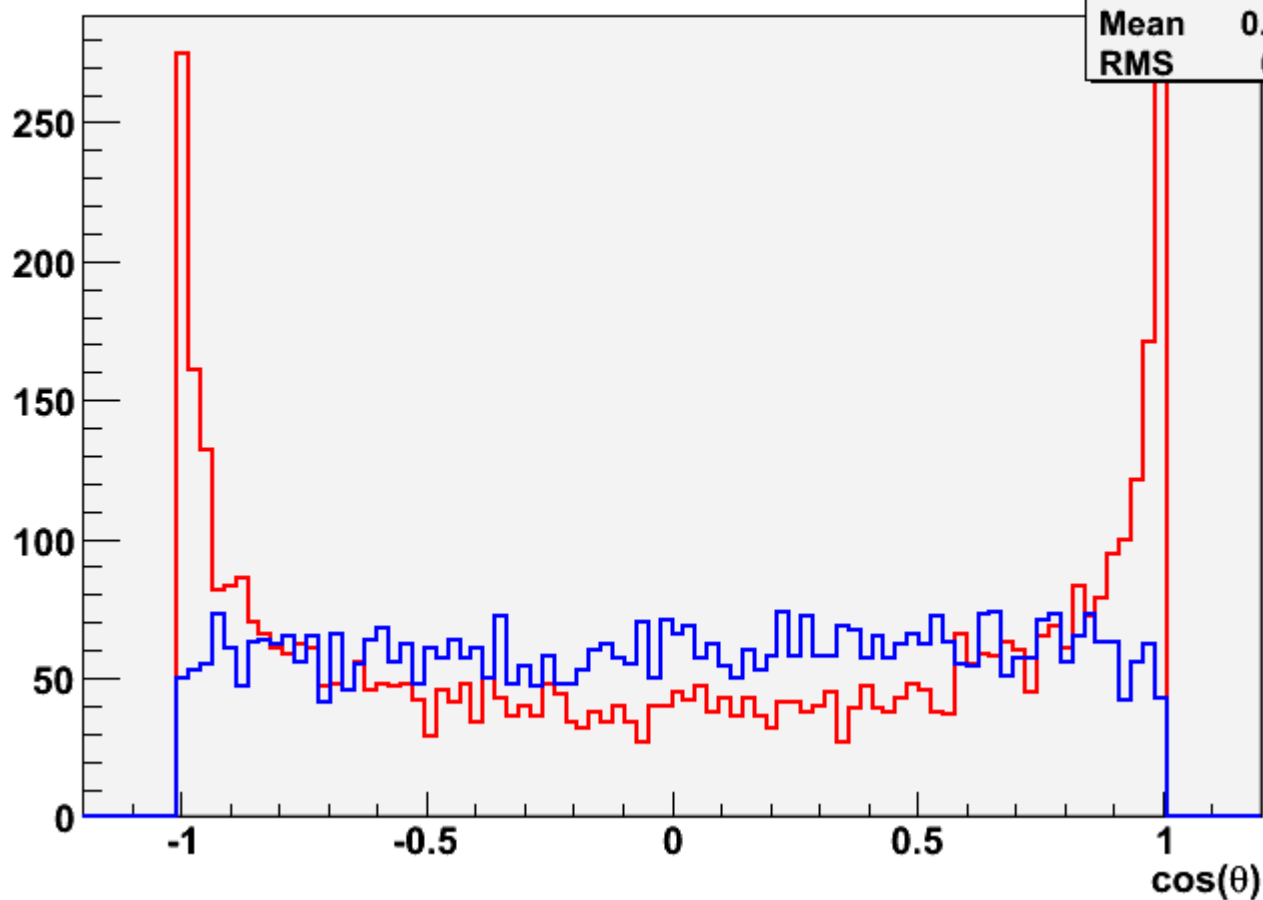
Cos(Thata) distributions

Yes, it works!

File Attachments

1) [pndbox_costheta.gif](#), downloaded 770 times

`cos(TMeth::ATan2(sqrt(MCTrack.fPx*MCTrack.fPx+MCTrack.fPy*MCTrack.fPy),MCTrack.fPz)) (MCTrack.fMotherID==1)`



2) [pndbox_theta.gif](#), downloaded 835 times

(TMath::ATan2(sqrt(MCTrack.fPx*MCTrack.fPx+MCTrack.fPy*MCTrack.fPy),MCTrack.fPz)/TMath::RadToDeg) (MCTrack.fMotherID==1)

htemp

Entries	5000
Mean	89.2
RMS	39.41

