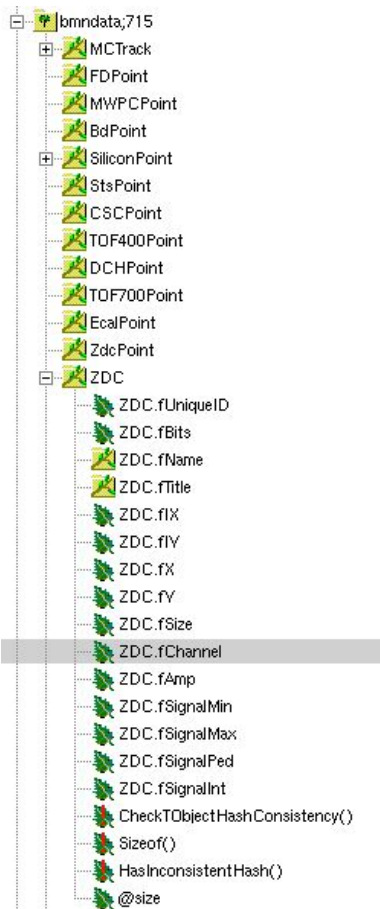


ZDC data analysis

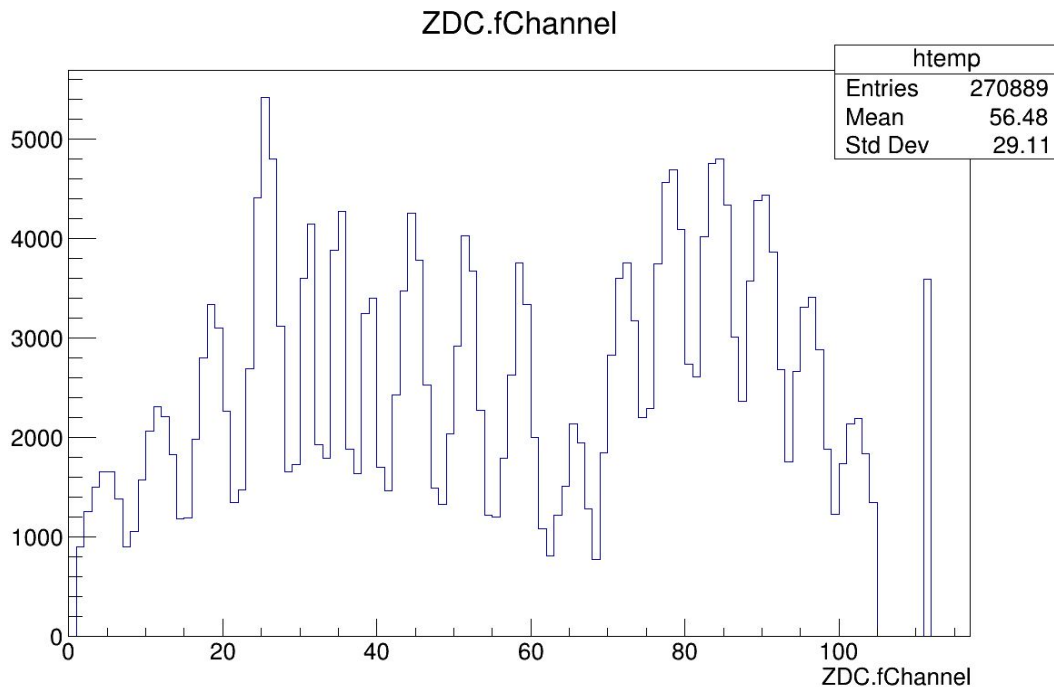
29.06.2020

ZDC digitizer



```
// ZDC-Digitizer  
BmnZdcDigitizer * zdcDigit = new BmnZdcDigitizer ();  
zdcDigit->SetScale(39e3);  
zdcDigit->SetThreshold(500.);  
fRun->AddTask(zdcDigit);
```

```
fRun->Init();  
magField->Print();
```

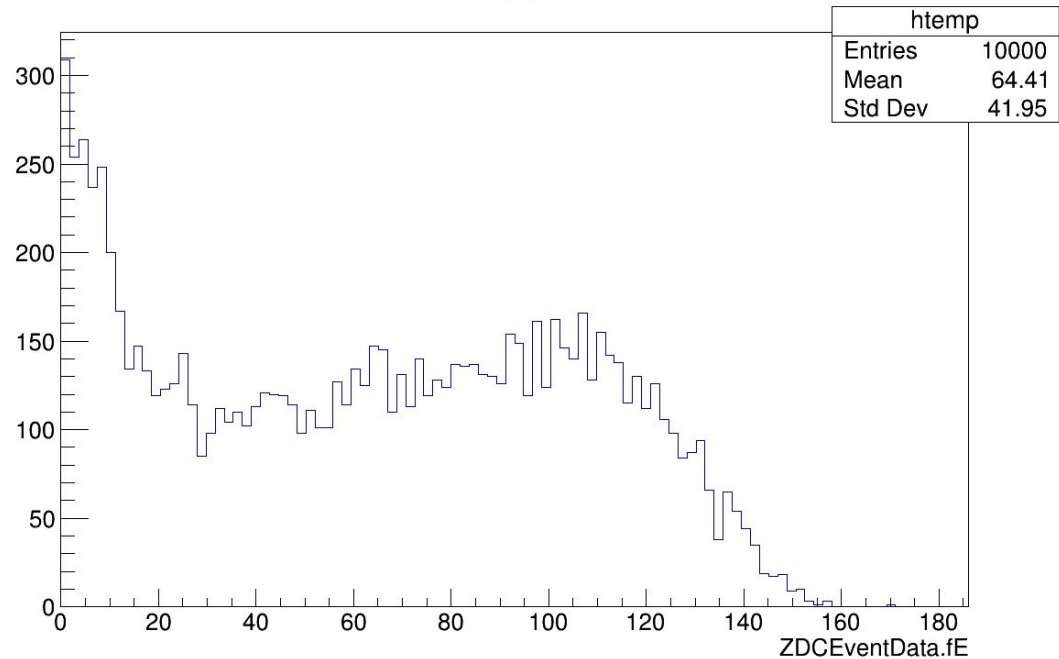


ZDC analyzer

- bmndata,27
 - DstEventHeader.
 - BmnSiliconHit
 - BmnSiliconHitMatch
 - BmnSiliconTrack
 - BmnGemStripHit
 - BmnGemStripHitMatch
 - BmnGemTrack
 - BmnVertex
 - BmnGlobalTrack
 - BmnInnerHits
 - BmnDchHit_1
 - BmnDchHit_2
 - BmnUpstreamHit
 - ZDCEventData.
 - ZDCEventData.TNamed
 - ZDCEventData.fE
 - ZDCEventData.fEc
 - ZDCEventData.fEp
 - ZDCEventData.fEn
 - ZDCEventData.fH
 - ZDCEventData.fHc
 - ZDCEventData.fHp
 - ZDCEventData.fHn
 - ZDCEventData.fX
 - ZDCEventData.fY
 - ZDCEventData.fAsymmetry
 - ZDCEventData.fMoment
 - sizeof()
 - HasInconsistentHash()

```
// =====  
// ==              ZDC              ==  
// =====  
BmnZdcAnalyzer * zdcAna = new BmnZdcAnalyzer();  
//zdcAna->SetModuleScale(GetScaleArray(isExp));  
//zdcAna->SetModuleThreshold(GetThresholdArray(isExp));  
fRunAna->AddTask(zdcAna);
```

ZDCEventData.fE

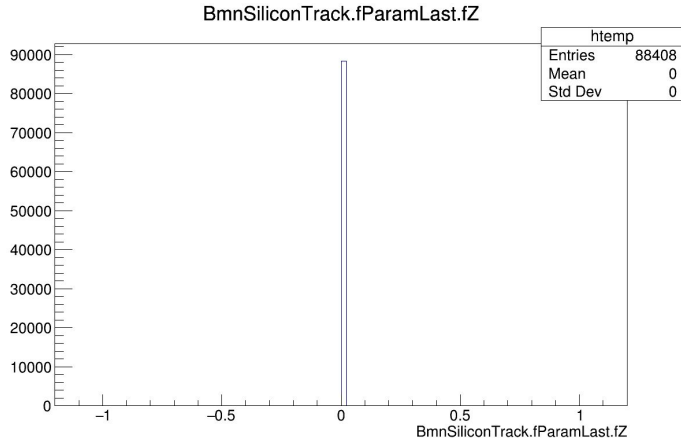
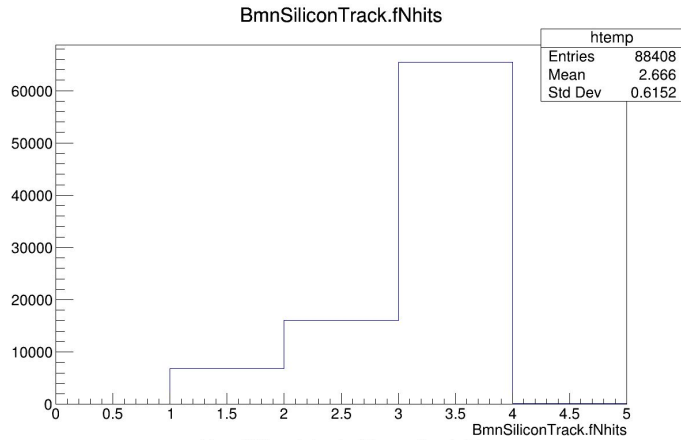


No BmnSiliconTracks neither in sim. nor in exp. reconstruction

- ArSn_3.2AGeV_mb_10_reco.root
 - bmnrroot;1
 - BranchList;1
 - TimeBasedBranchList;1
 - FileHeader;1
 - bmndata;27
 - DstEventHeader.
 - BmnSiliconHit
 - BmnSiliconHitMatch
 - BmnSiliconTrack
 - @size
 - BmnSiliconTrack.fB
 - BmnSiliconTrack.fBits
 - BmnSiliconTrack.fChi2
 - BmnSiliconTrack.fFlag
 - BmnSiliconTrack.fHits
 - BmnSiliconTrack.fLength
 - BmnSiliconTrack.fNDF
 - BmnSiliconTrack.fNhits
 - BmnSiliconTrack.fParamFirst.fBits
 - BmnSiliconTrack.fParamFirst.fCovMatrix[15]
 - BmnSiliconTrack.fParamFirst.fQp
 - BmnSiliconTrack.fParamFirst.fTx
 - BmnSiliconTrack.fParamFirst.fTy
 - BmnSiliconTrack.fParamFirst.fUniqueID
 - BmnSiliconTrack.fParamFirst.fX
 - BmnSiliconTrack.fParamFirst.fY
 - BmnSiliconTrack.fParamFirst.fZ
 - BmnSiliconTrack.fParamLast.fBits
 - BmnSiliconTrack.fParamLast.fCovMatrix[15]
 - BmnSiliconTrack.fParamLast.fQp
 - BmnSiliconTrack.fParamLast.fTx
 - BmnSiliconTrack.fParamLast.fTy
 - BmnSiliconTrack.fParamLast.fUniqueID
 - BmnSiliconTrack.fParamLast.fX
 - BmnSiliconTrack.fParamLast.fY
 - BmnSiliconTrack.fParamLast.fZ
 - BmnSiliconTrack.fUniqueID
 - BmnSiliconTrack.fUsing

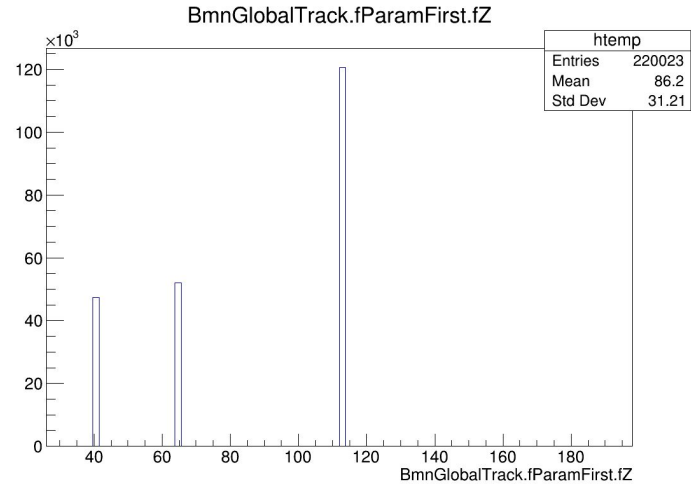
Simulation

Exp. data



/eos/nica/bmn/exp/digi/run7/19.05.0

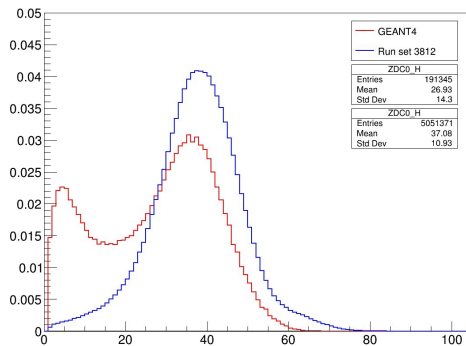
BmnSiliconHit - all EMPTY!



ZDC data (w/o threshold and amplitude correction)

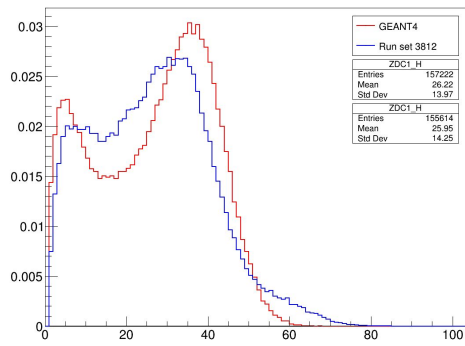
All events,
no matter vertex found or not

ZDC Multiplicity



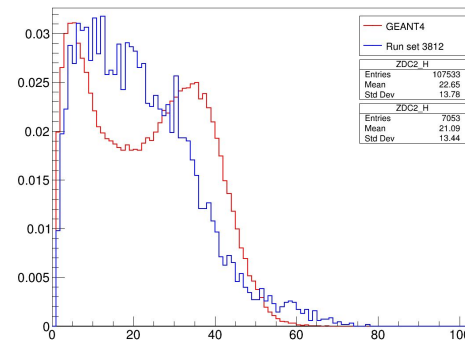
Vertex found in the range by Z
 $-8 < Z < 8$

ZDC Multiplicity

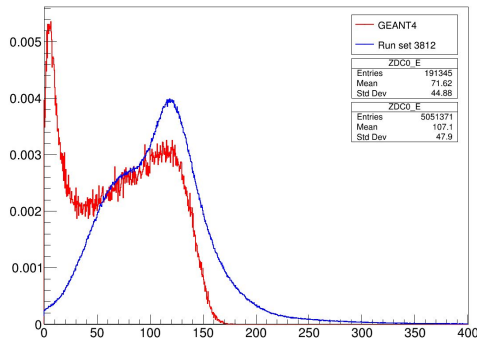


Event have tracks of opposite
signs near the vertex

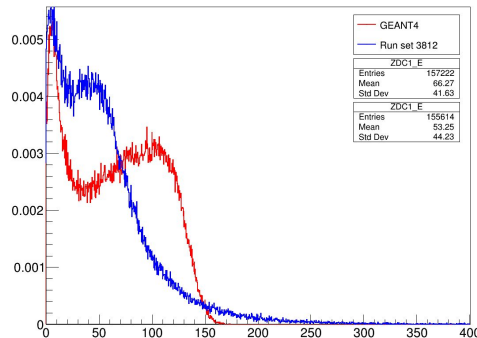
ZDC Multiplicity



ZDC Energy, GeV



ZDC Energy, GeV



ZDC Energy, GeV

