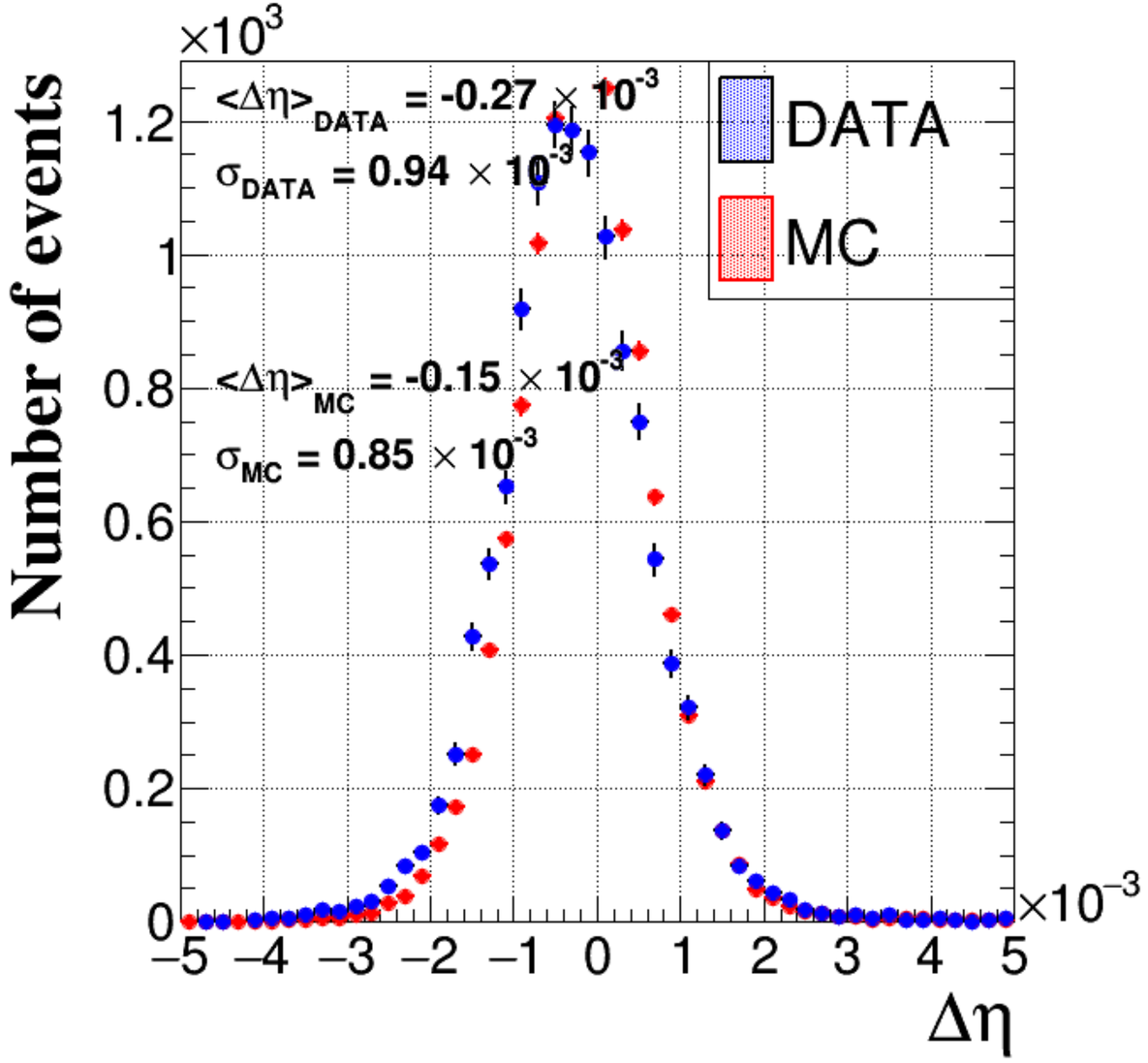
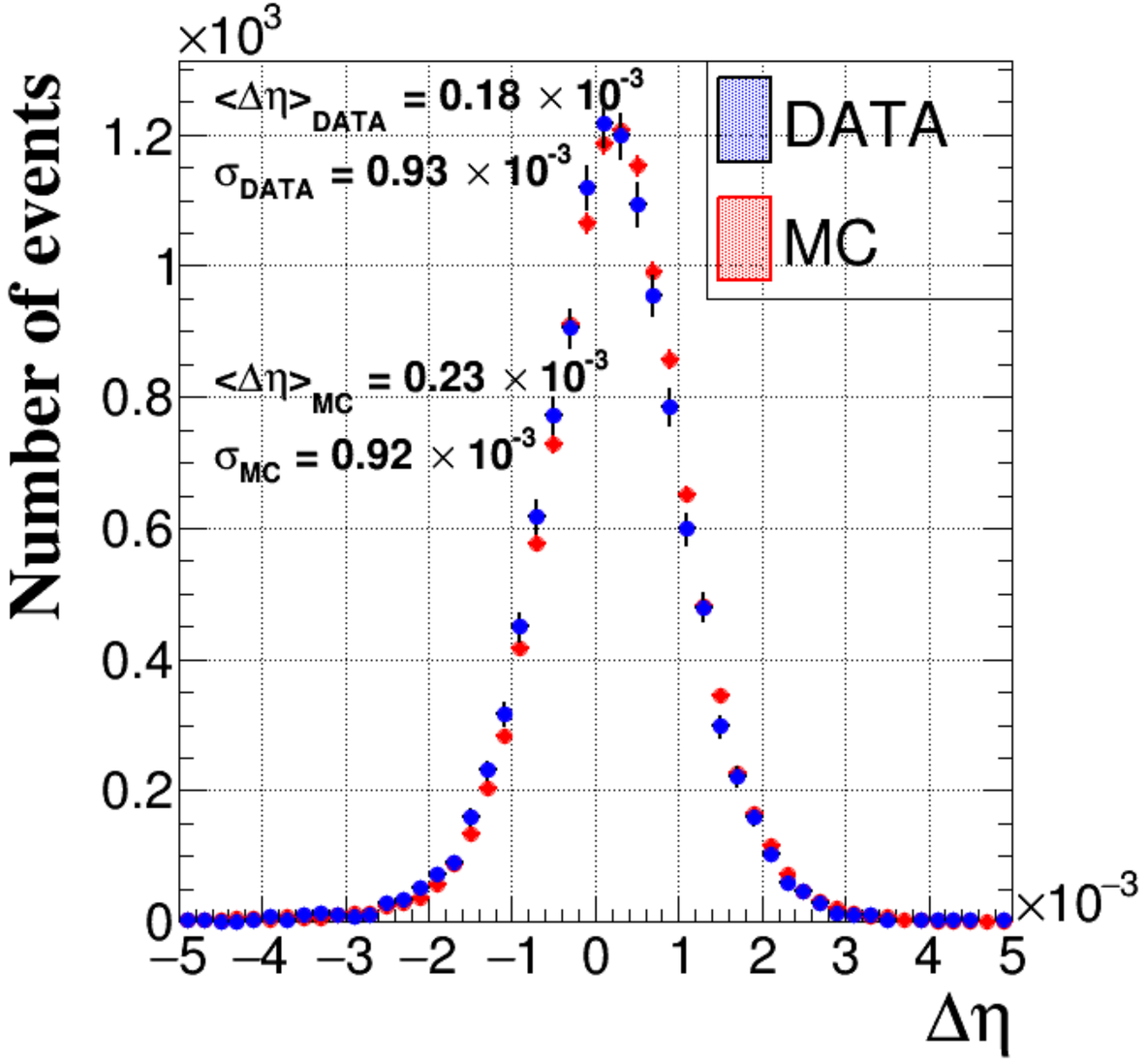
First look at 2018 ECAL Alignment

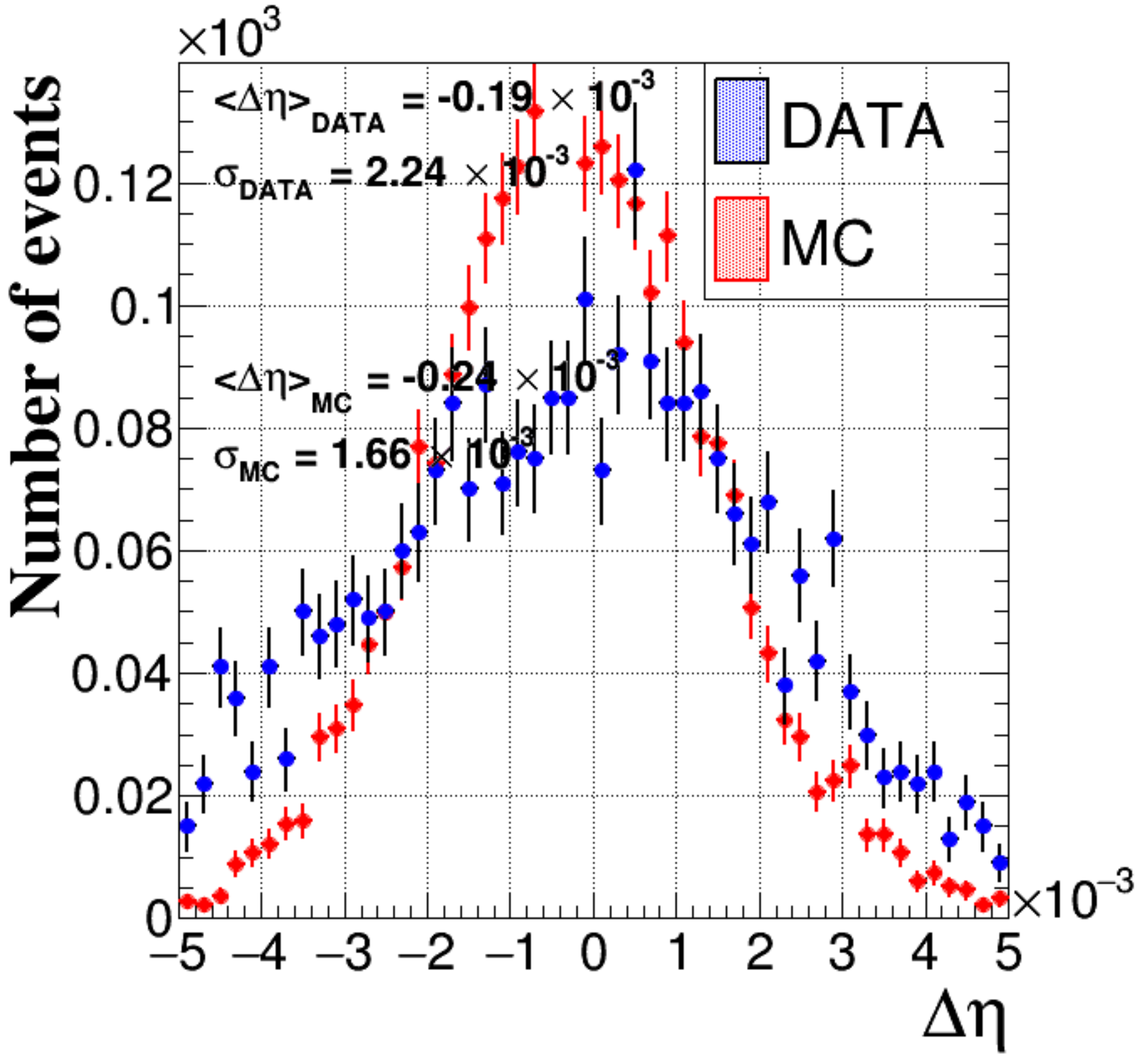
- MC : /DYJetsToLL_M-50_TuneCP5_13TeV-madgraphMLM-pythia8/RunIISpring18MiniAOD-NZSPU40to70_100X_upgrade2018_realistic_v10-v2/MINIAODSIM
- Data : /EGamma/Run2018A-PromptReco-v1/MINIAOD
- GT used for Data : 101X_dataRun2_Prompt_v9
- Selections applied while making plots :
  - PT (Supercluster) > 30 GeV
  - For |η| < 1.5 : (eleTrkIso+eleEcalIso+eleHcalIsoD1+eleHcalIsoD2)/pT<0.07 && abs(SigmaIEtaIEta)<0.01
  - For |η| > 1.5 : (eleTrkIso+eleEcalIso+eleHcalIsoD1+eleHcalIsoD2)/pT<0.06 && abs(SigmaIEtaIEta)<0.03
  - 85 < Di-lepton mass < 95 GeV
- Full set of plots here : http://twamorka.web.cern.ch/twamorka/ECALAlignment/2018_prealignment_test1/images/


×10^3
Number of events
<Δη>_DATA = -0.27 × 10^-3
σ_DATA = 0.94 × 10^-3
<Δη>_MC = -0.15 × 10^-3
σ_MC = 0.85 × 10^-3
DATA
MC
×10^-3
Δη

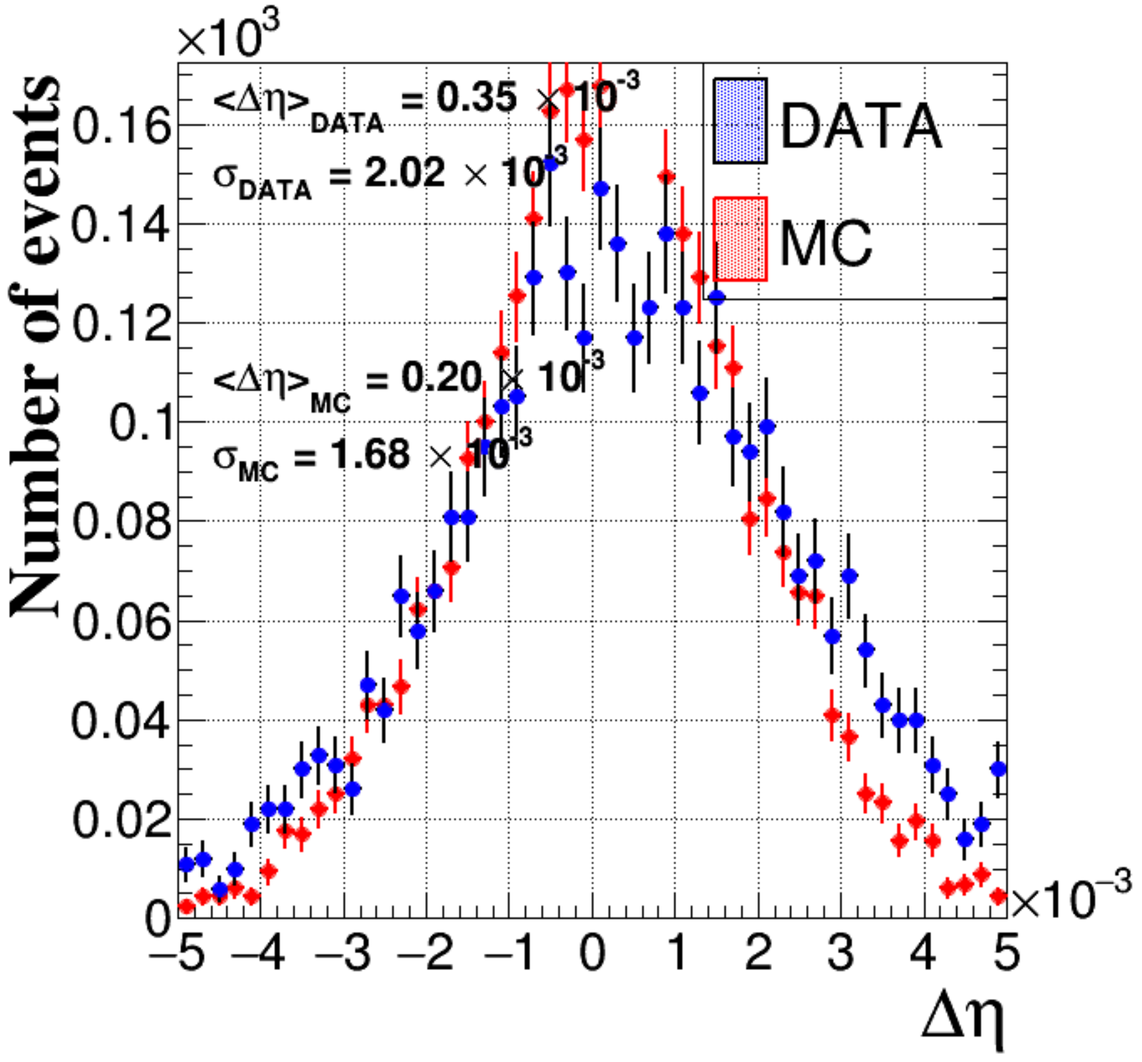
EB +


×10^3
Number of events
<Δη>_DATA = 0.18 × 10^-3
σ_DATA = 0.93 × 10^-3
<Δη>_MC = 0.23 × 10^-3
σ_MC = 0.92 × 10^-3
DATA
MC
×10^-3
Δη

EB -

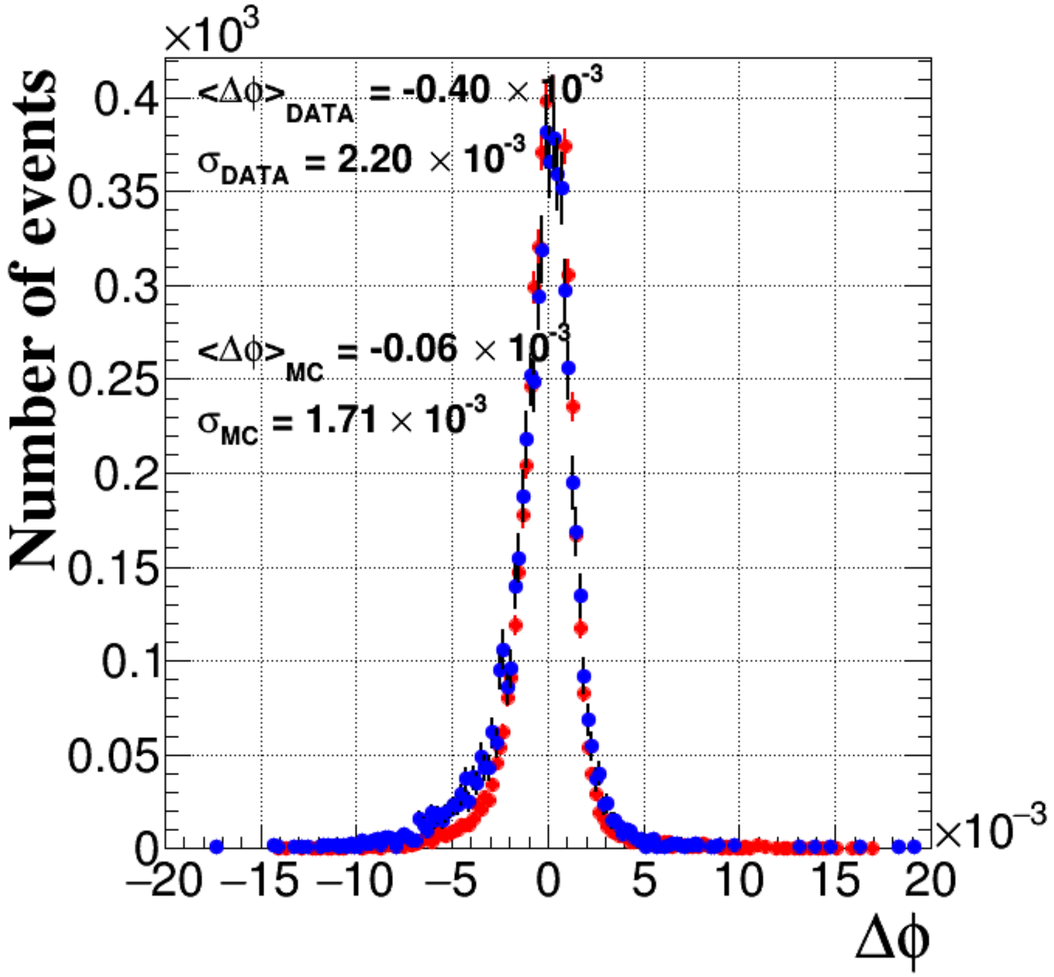

×10^3
Number of events
<Δη>_DATA = -0.19 × 10^-3
σ_DATA = 2.24 × 10^-3
<Δη>_MC = -0.24 × 10^-3
σ_MC = 1.66 × 10^-3
DATA
MC
0.12
0.1
0.08
0.06
0.04
0.02
0
−5 −4 −3 −2 −1 0 1 2 3 4 5
×10^-3
Δη

EE +

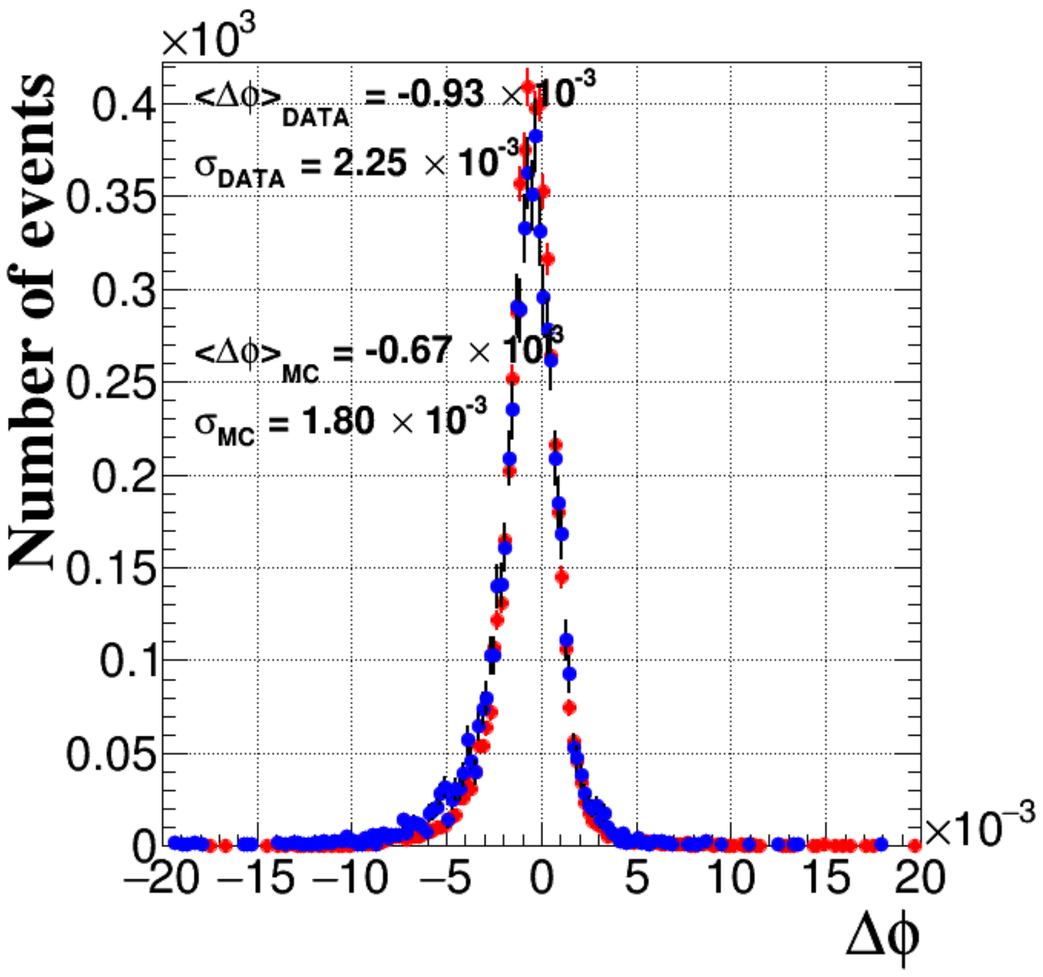

×10^3
Number of events
<Δη>_DATA = 0.35 × 10^-3
σ_DATA = 2.02 × 10^-3
<Δη>_MC = 0.20 × 10^-3
σ_MC = 1.68 × 10^-3
DATA
MC
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
−5 −4 −3 −2 −1 0 1 2 3 4 5
×10^-3
Δη

EE -

ELECTRON

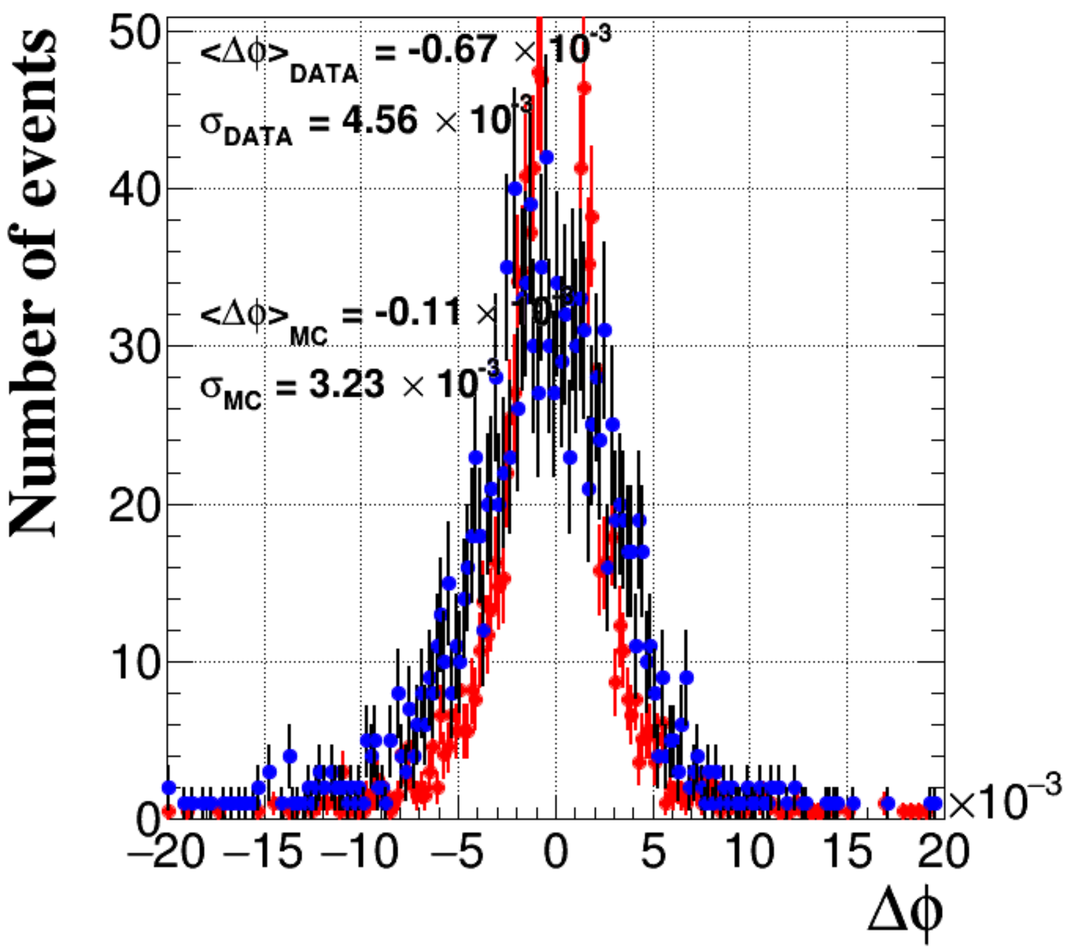


EB +

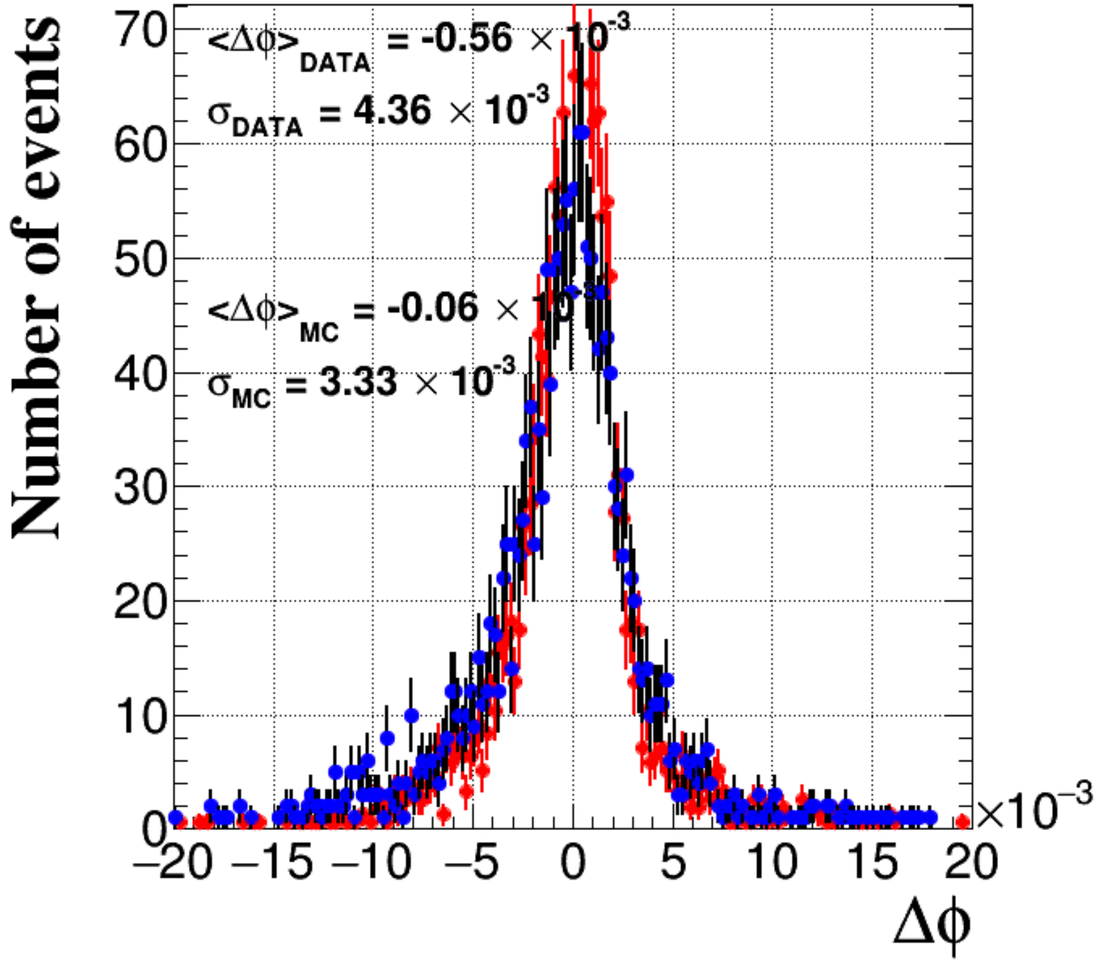


EB -

ELECTRON

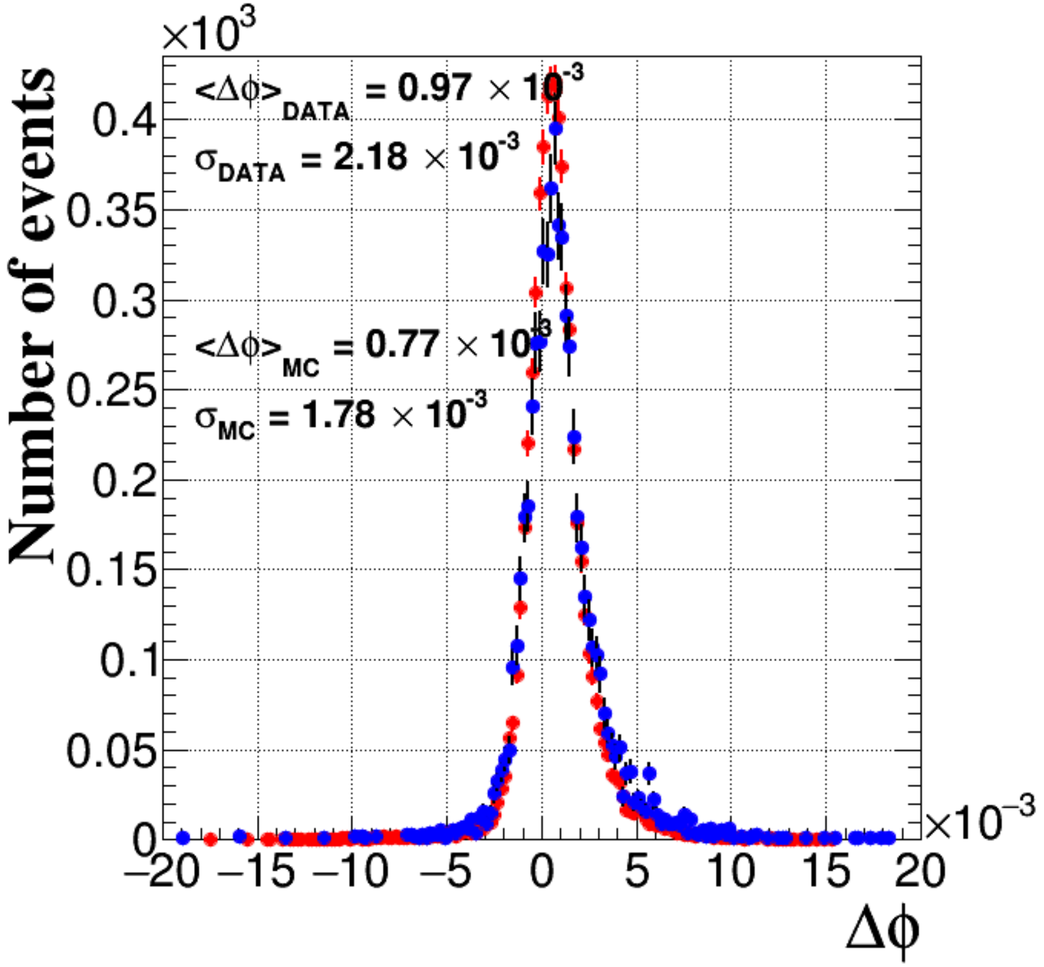


EE +

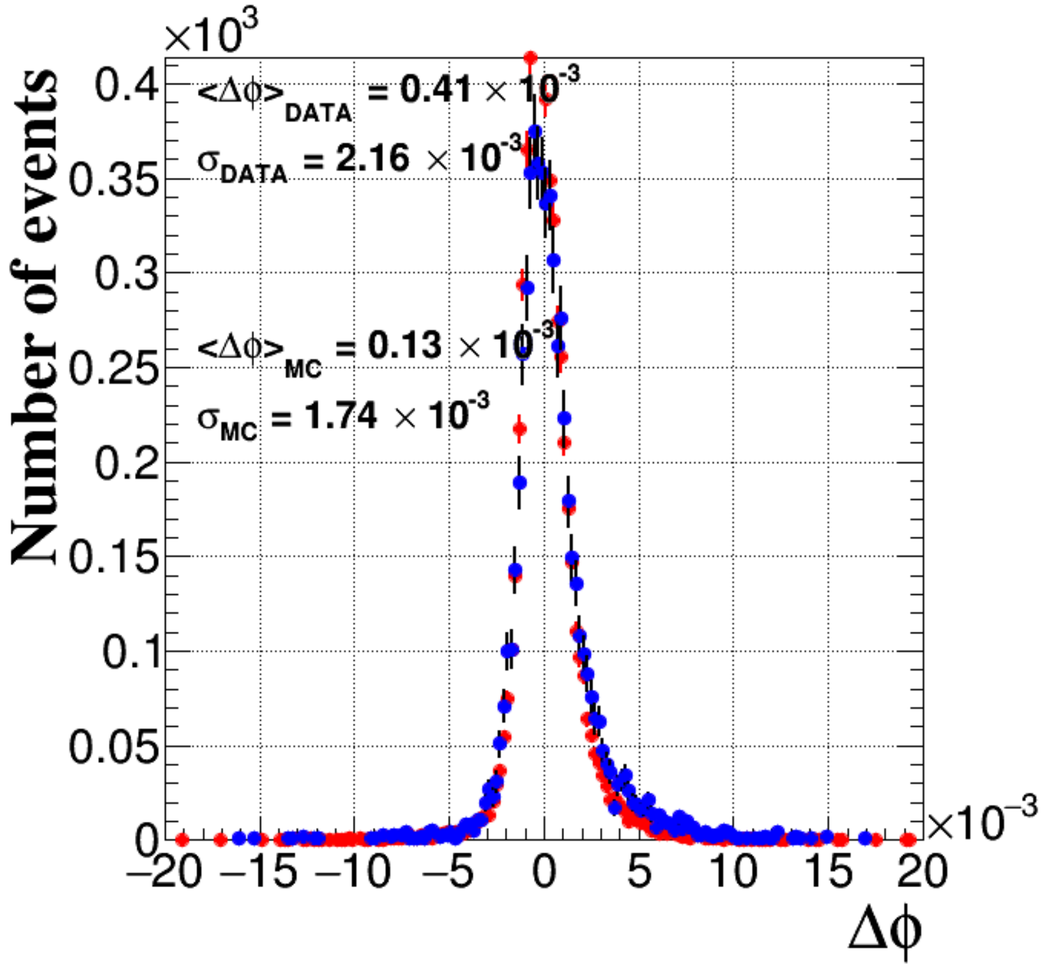


EE -

POSITRON

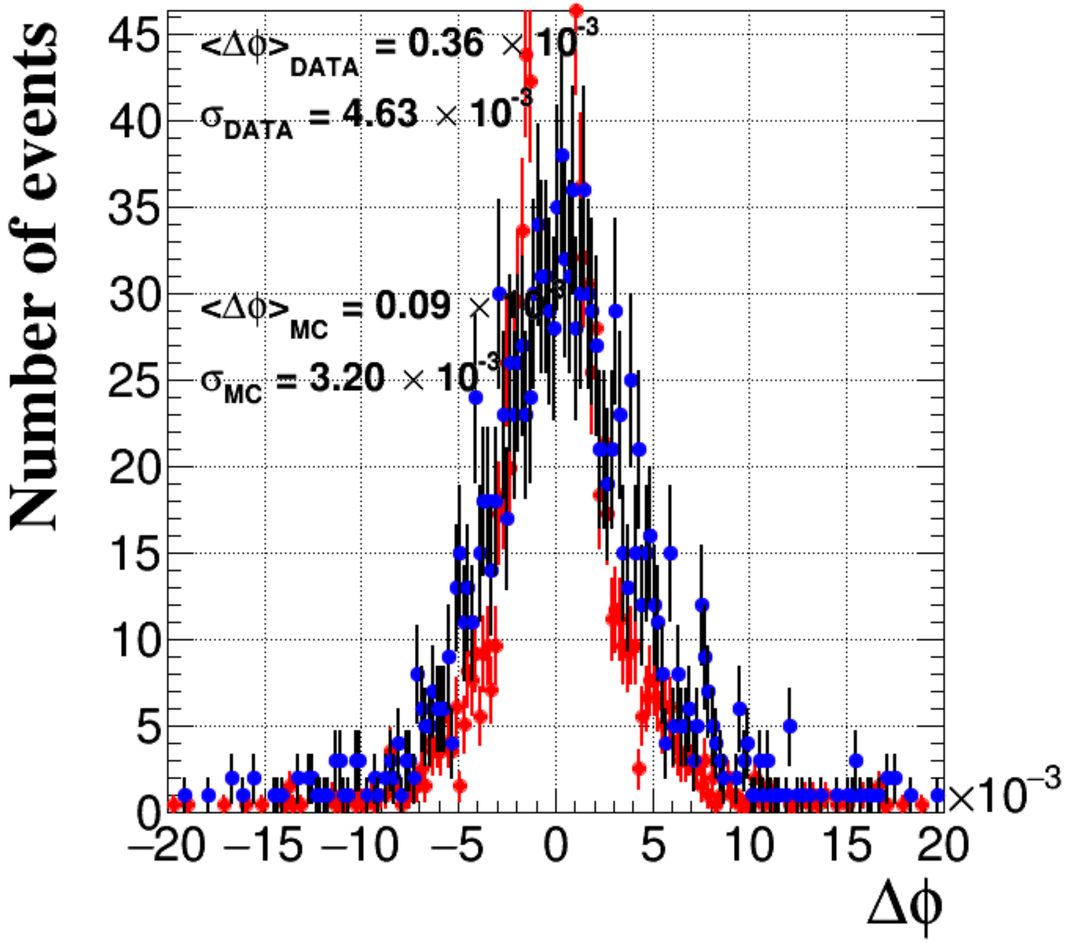


EB +

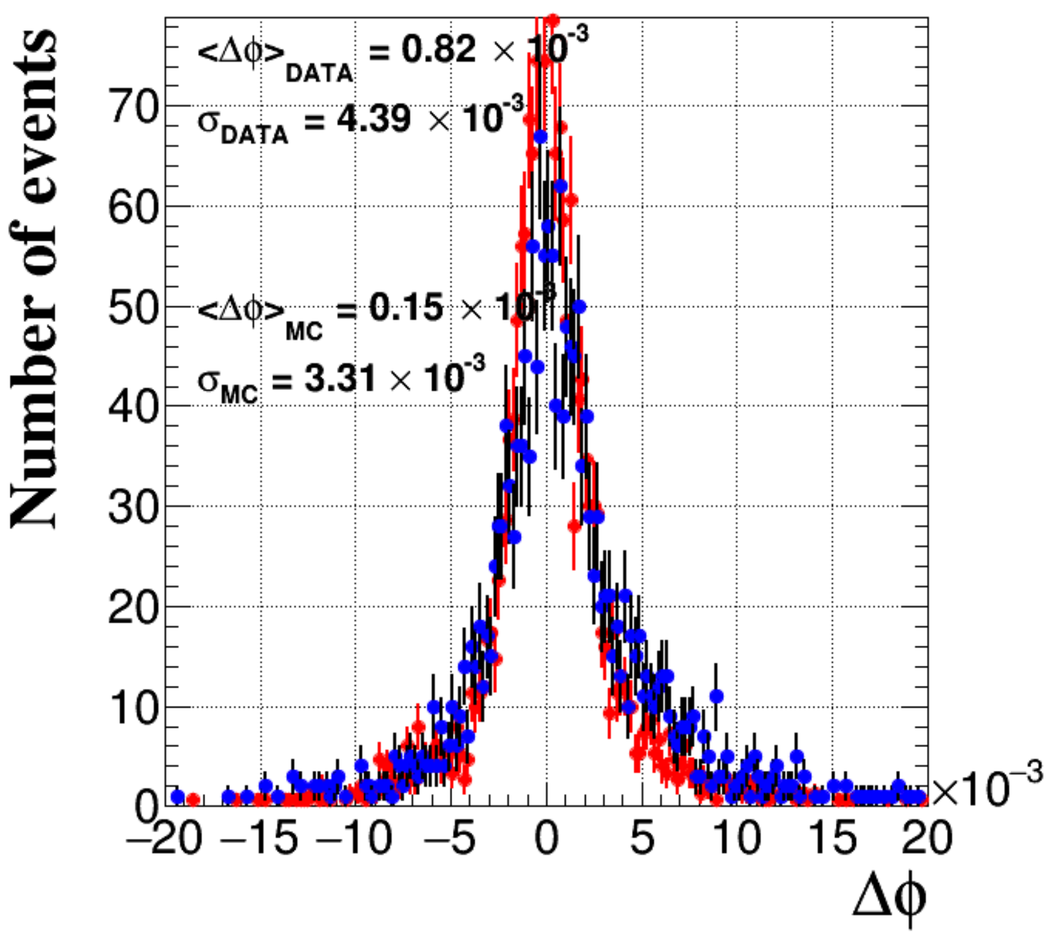


EB -

POSITRON



EE +



EE -