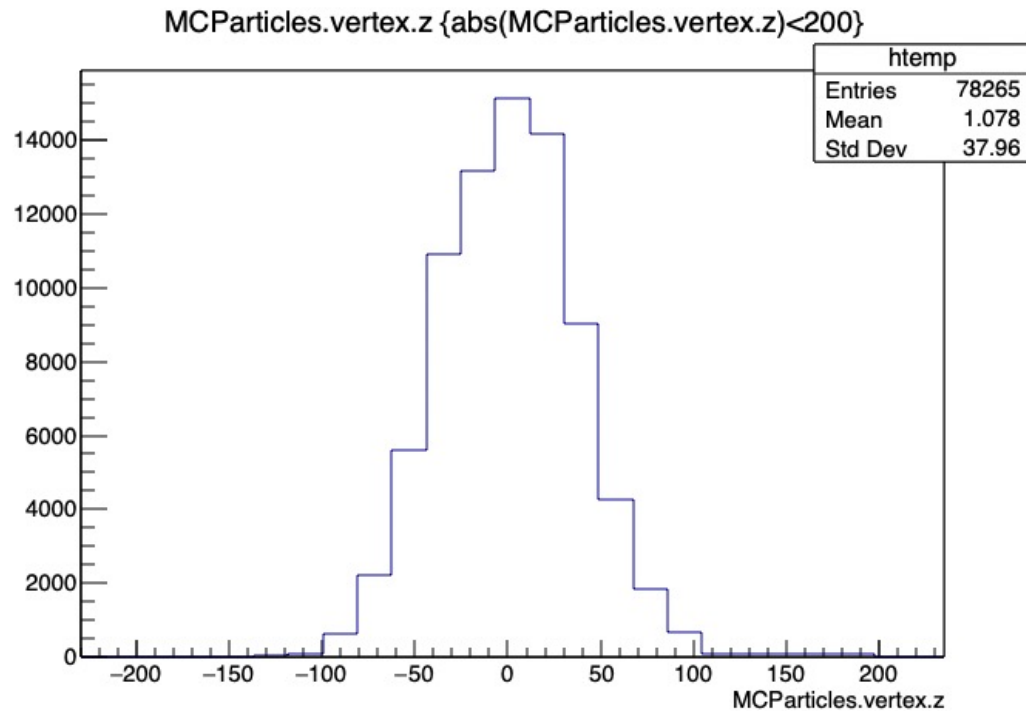


Momentum resolution from simulations of π^+ in different vertex bin

02Feb2023

Niveditha Ram , Francesco Bossú

Choice of vertex bins for this study



Typical sigma of the vertex distribution is 3cm. So plotted for resolution for $\pm 3\sigma$ values.

[-100 , -50, -25, 0, 25, 50, 100]

Z vertex position of DIS events in S3 folder with 10x100

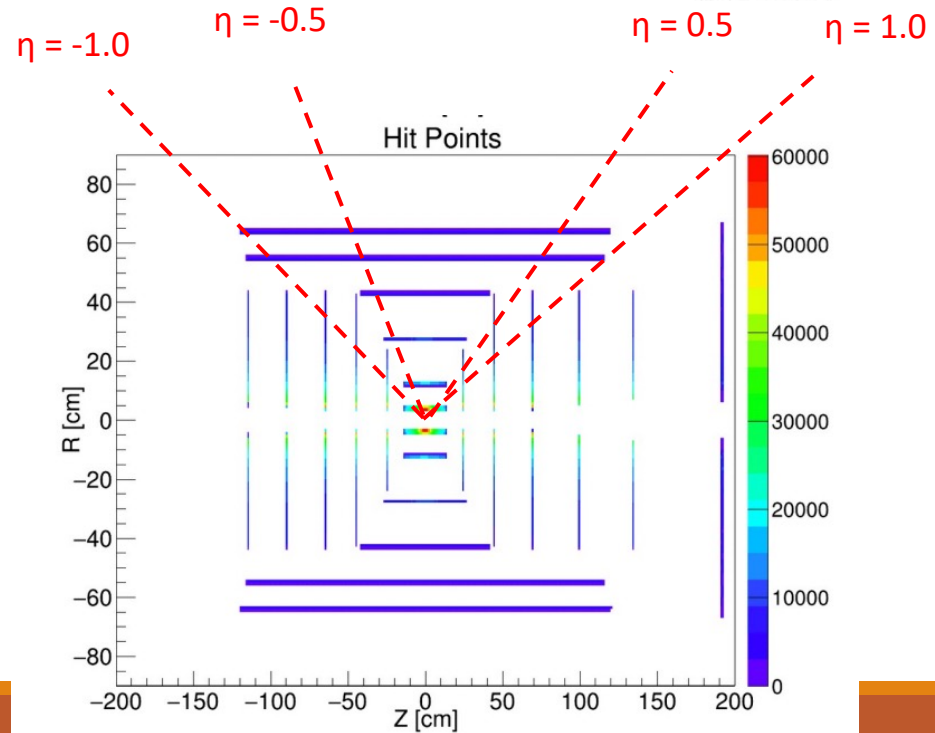
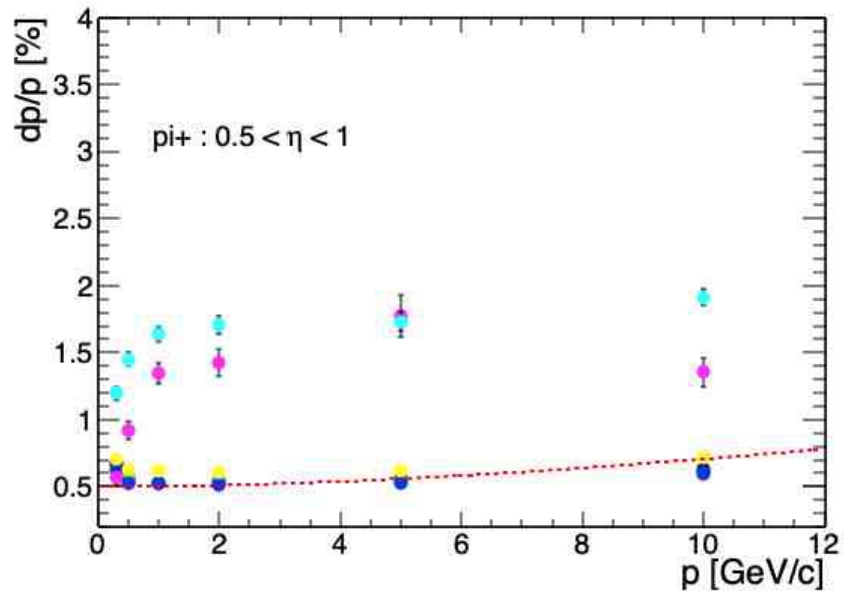
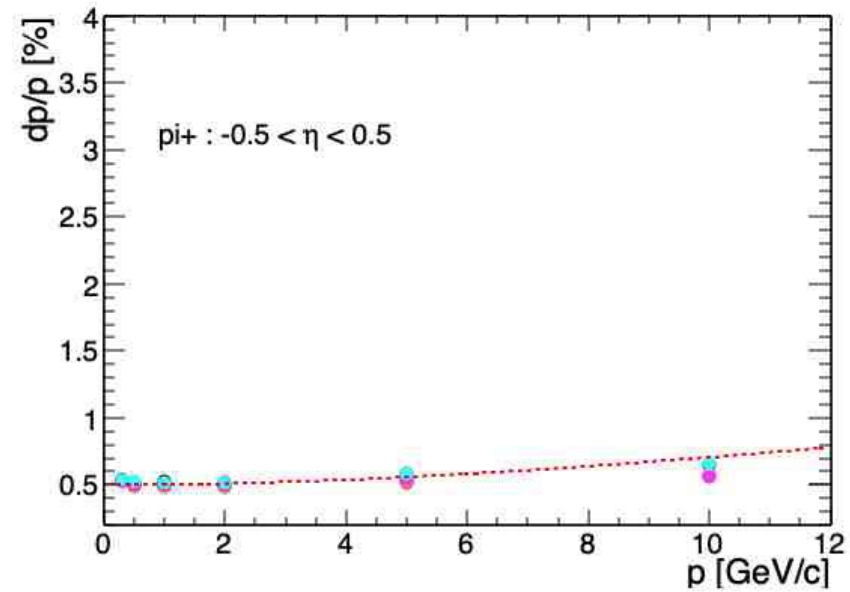
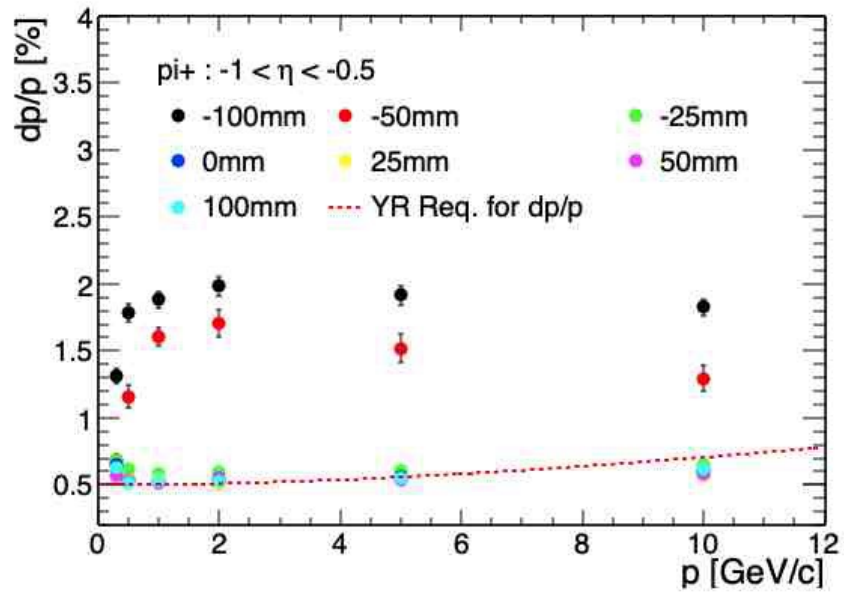
Global information regd this simualtion

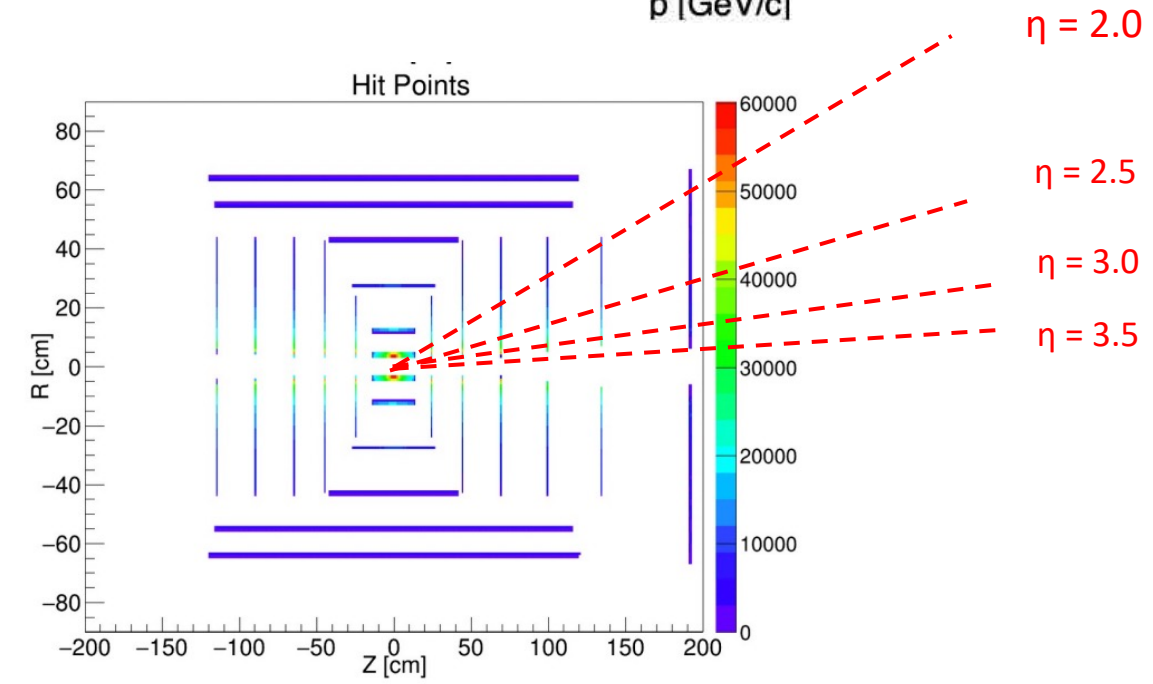
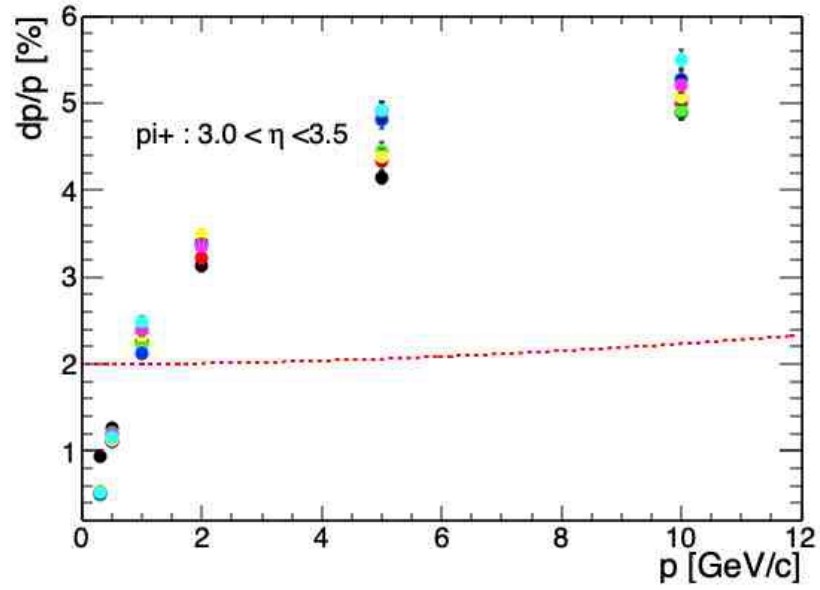
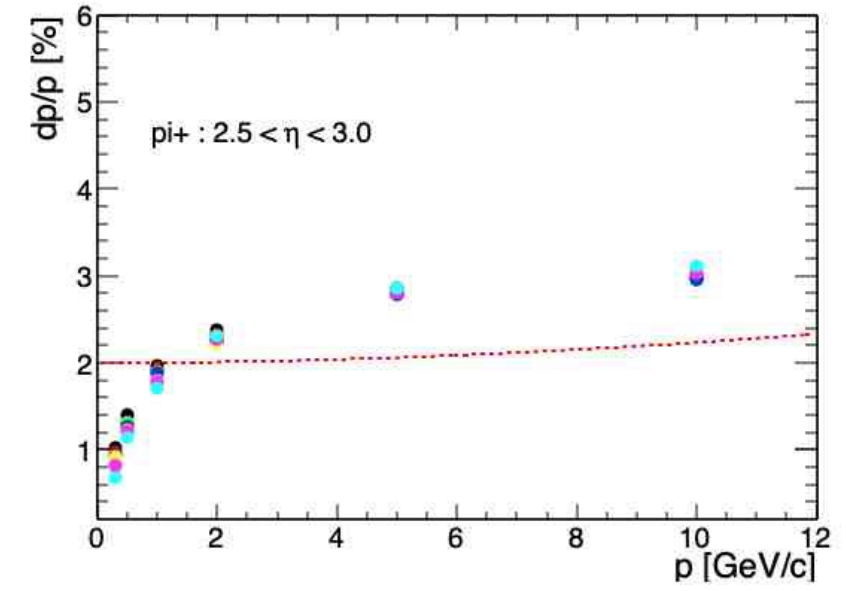
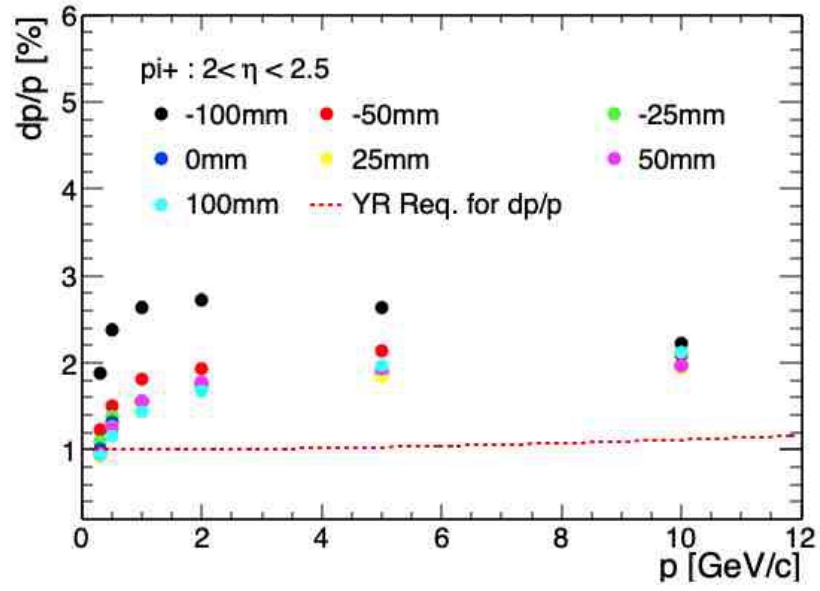
Particle : single pi+ simulation

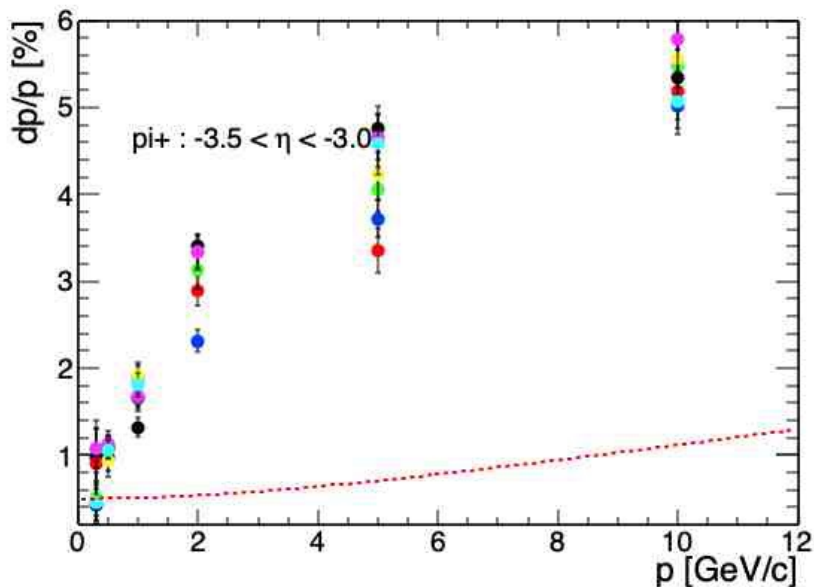
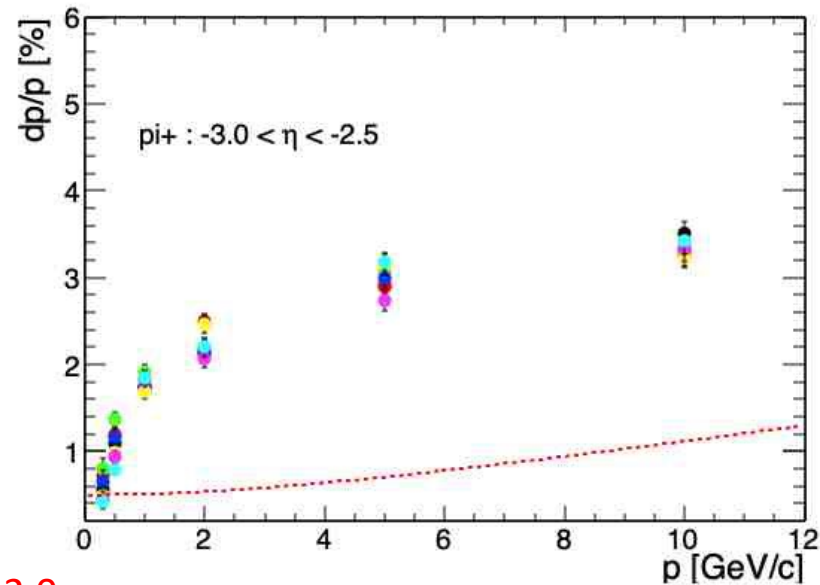
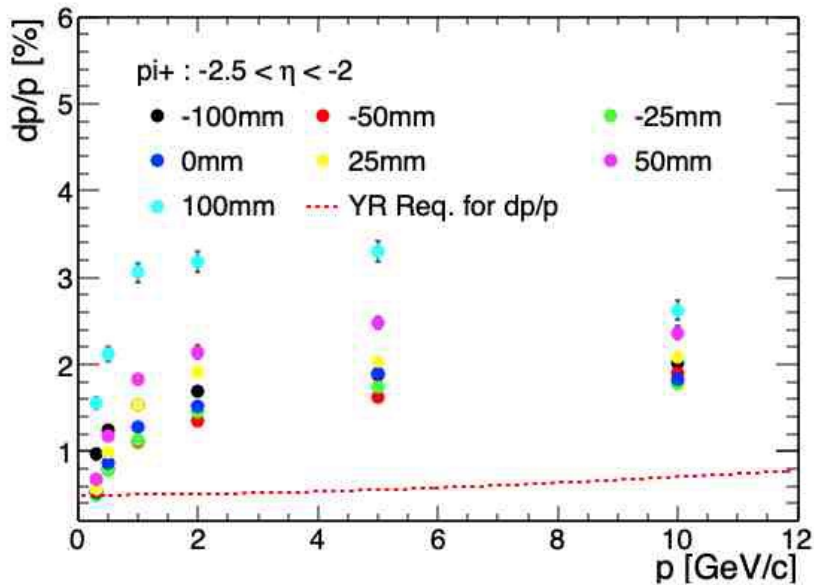
Momentum range: 0.3 to 10 GeV

Detector Configuration : Arches

Tools : simualtion with edm4hep and reconstruction using eicrecon







$\eta = -2.0$

$\eta = -2.5$

$\eta = -3.0$

$\eta = -3.5$

