Directed flow of charged pions

meeting 18.09.26

Отбор данных:

RunId < 8312

VtxNTracks >= 2

Vtx_z < 1 cm

Vtx_R < 1 cm

no PileUp

Отбор трека:

Nhits > 5

Chi2/Ndf < 5

DCA_R < 5

$\sigma_\pi < 3$

-30 < trFhcalX < 160

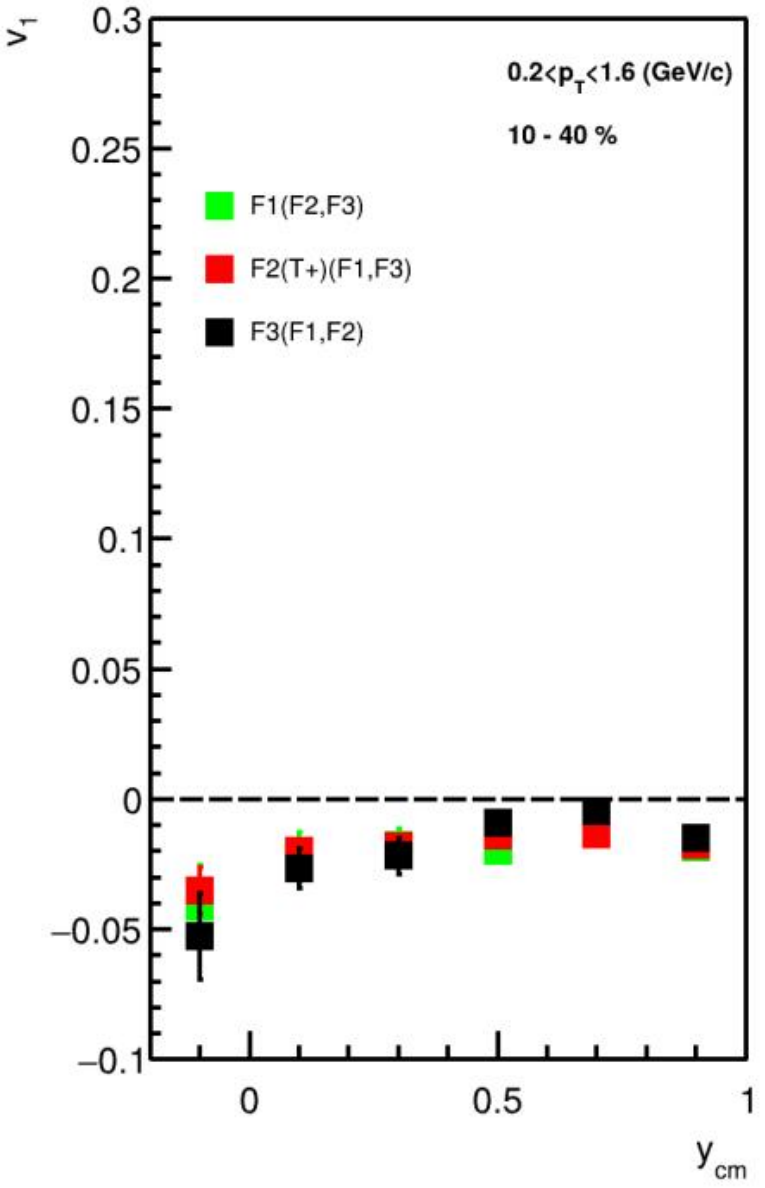
-60 < trFhcalY < 60

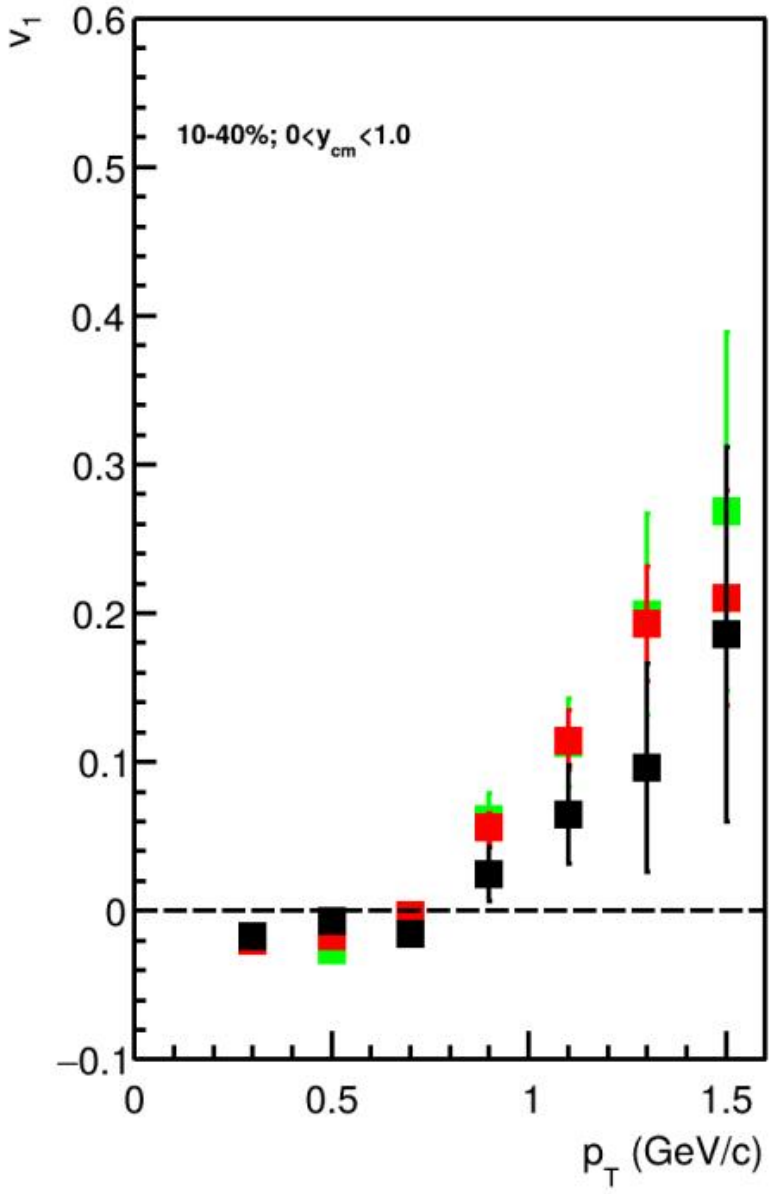
Также на π+ дополнительный кат:

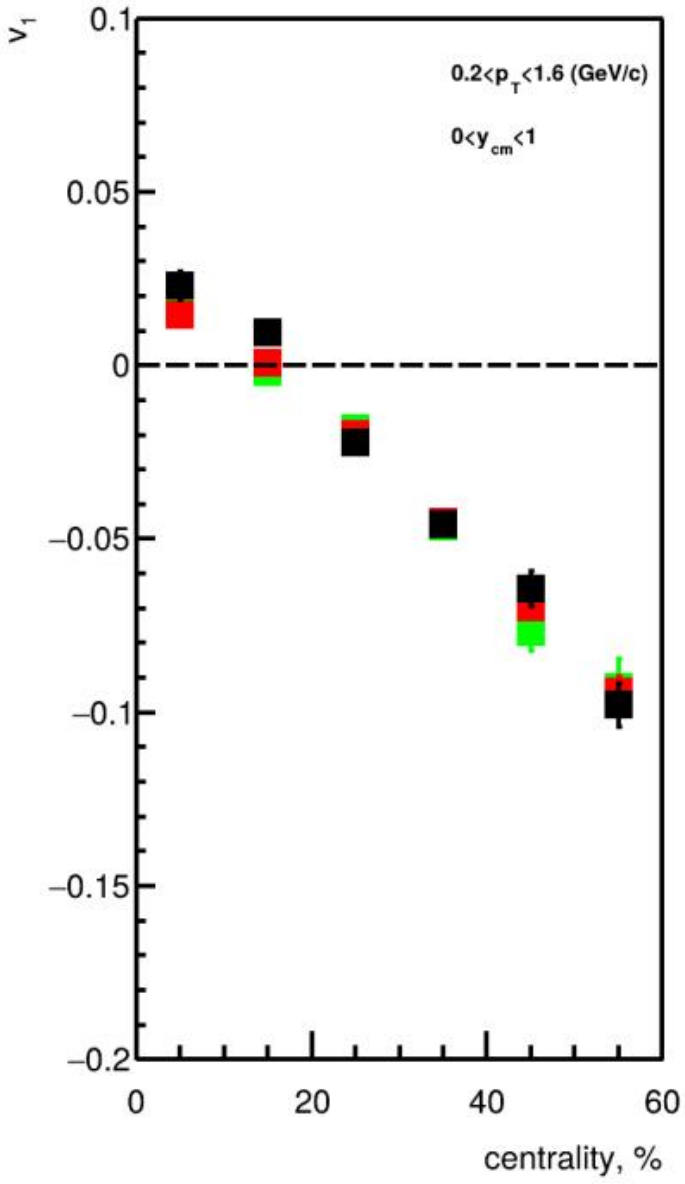
0.8 < P < 2.6 GeV/c

Так как при P > 2.6 GeV/c пионы плохо разделяются от каонов и протонов

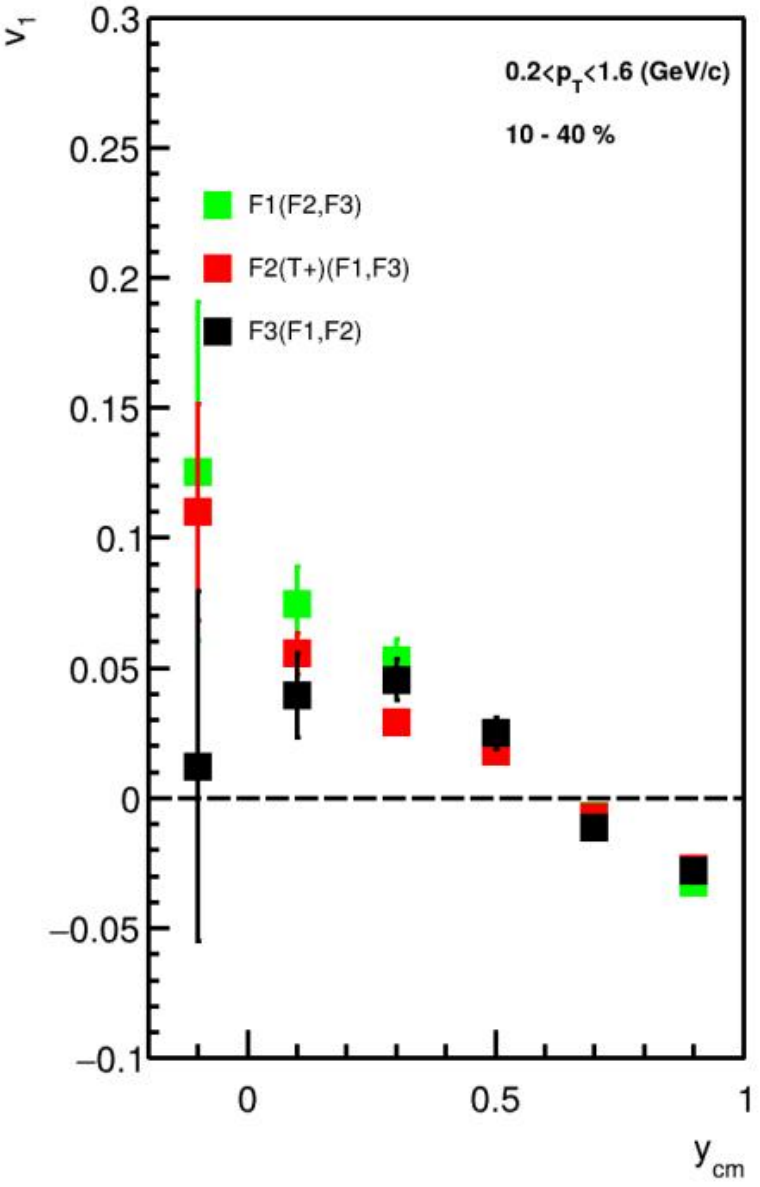
v_1 (π-) vs y_{cm}, pT, centrality

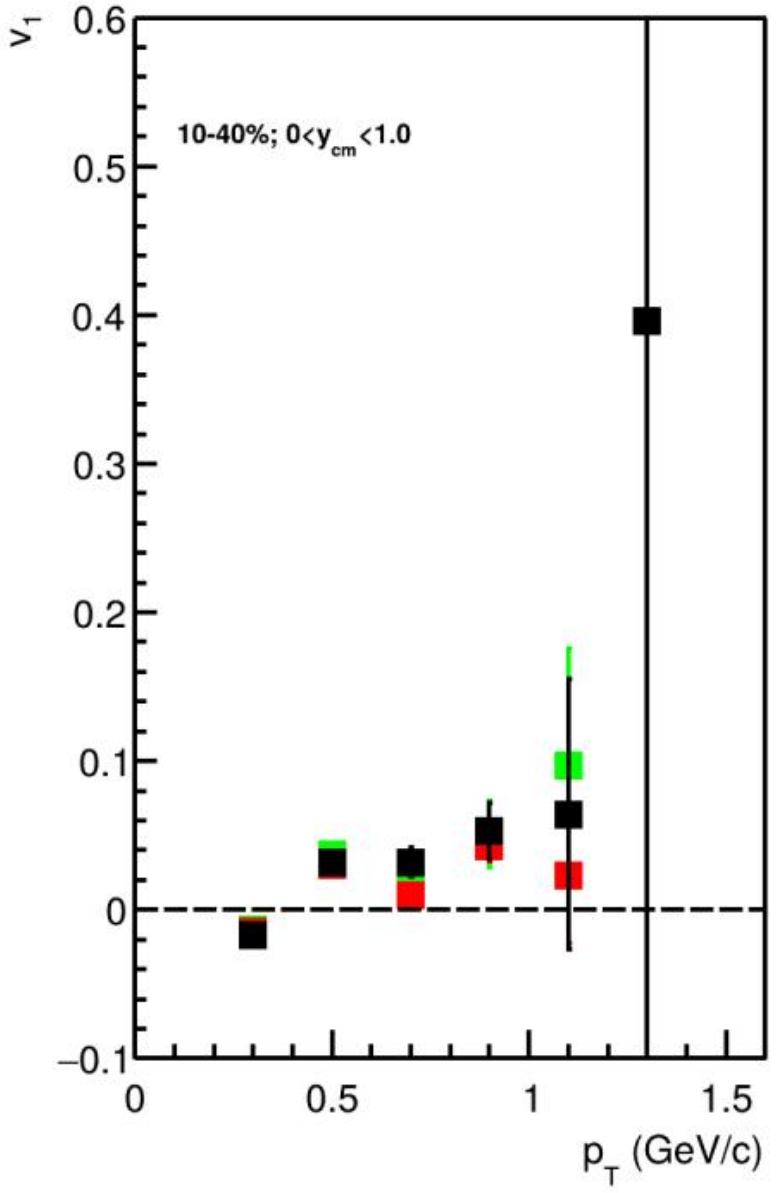


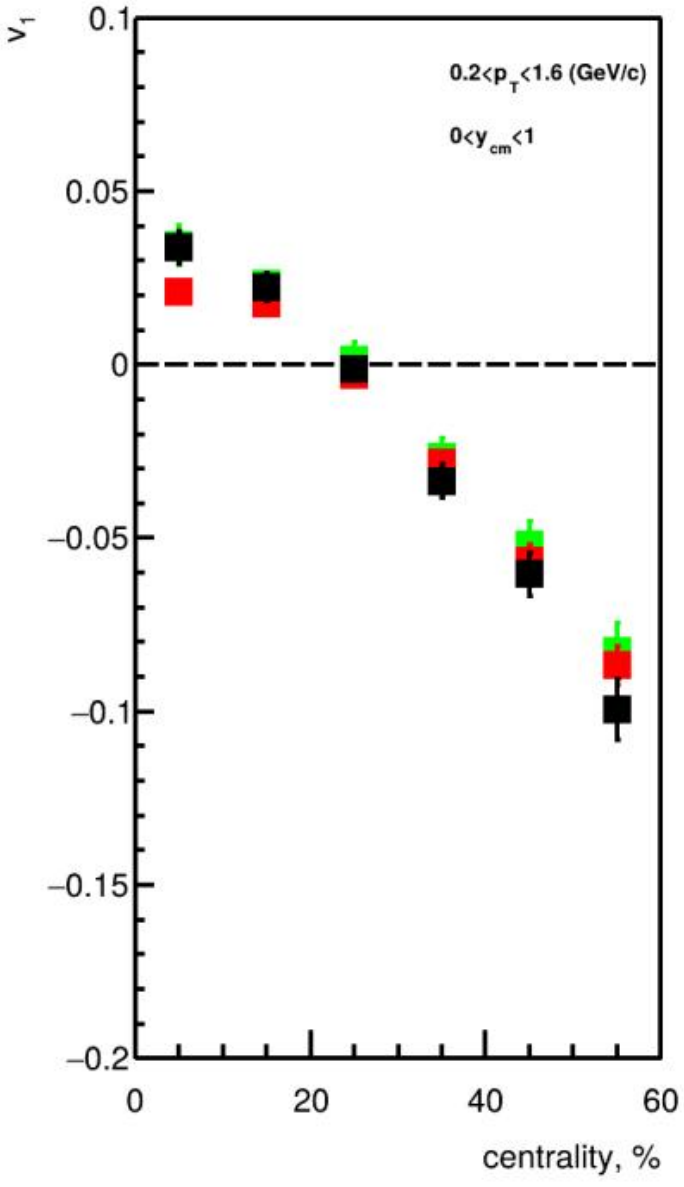




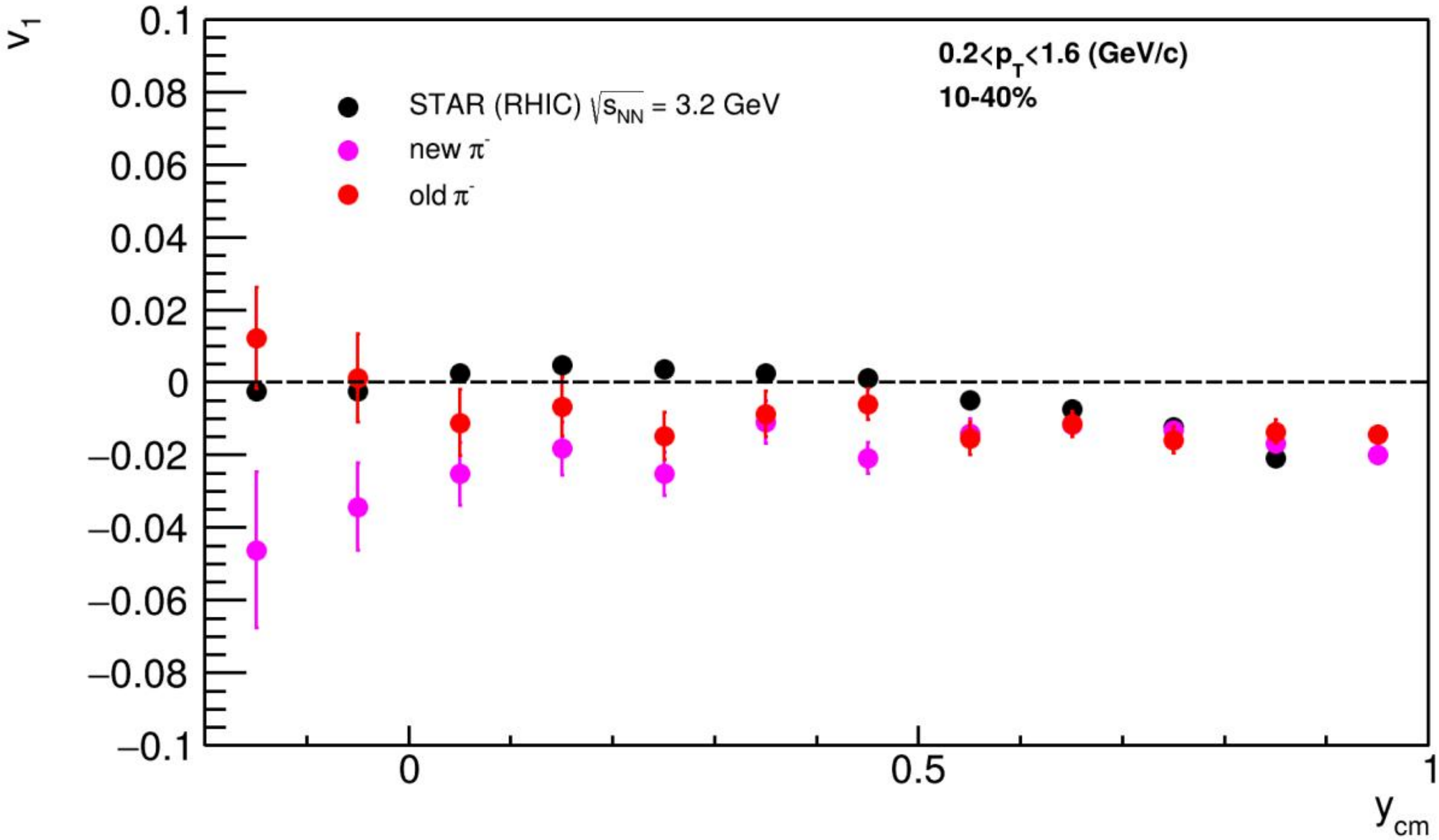
v_1 (π+) vs y_{cm}, pT, centrality







v_1 (π^-) vs y_{cm}


v_1
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1
0
0.5
1
y_{cm}
STAR (RHIC) $\sqrt{s_{NN}}$ = 3.2 GeV
new π^-
old π^-
0.2<p_T<1.6 (GeV/c)
10-40%