

Tracking performances for ALICE3 Tracker using fast Simulation tool

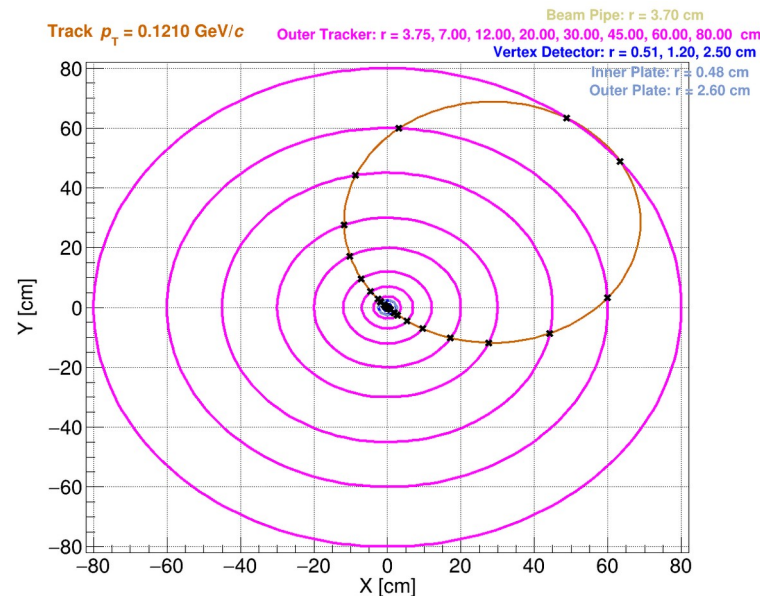
Shyam Kumar
INFN Bari, Italy



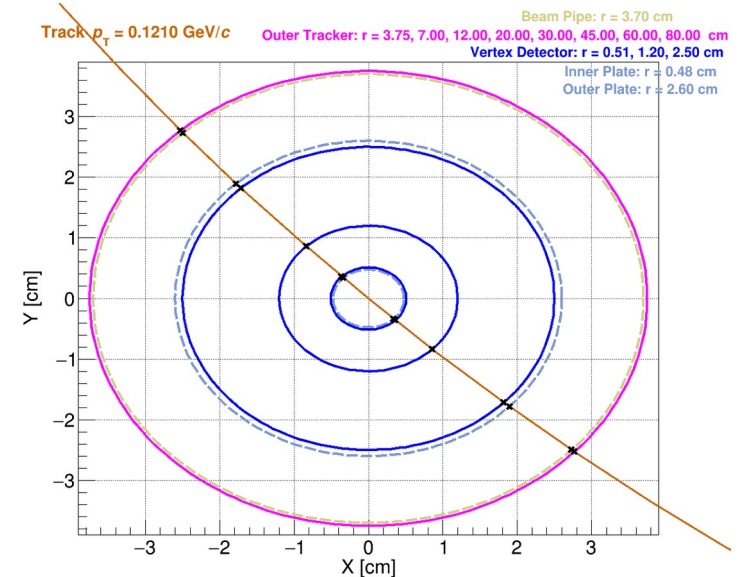
Istituto Nazionale di Fisica Nucleare

Layout of ALICE3 Tracker

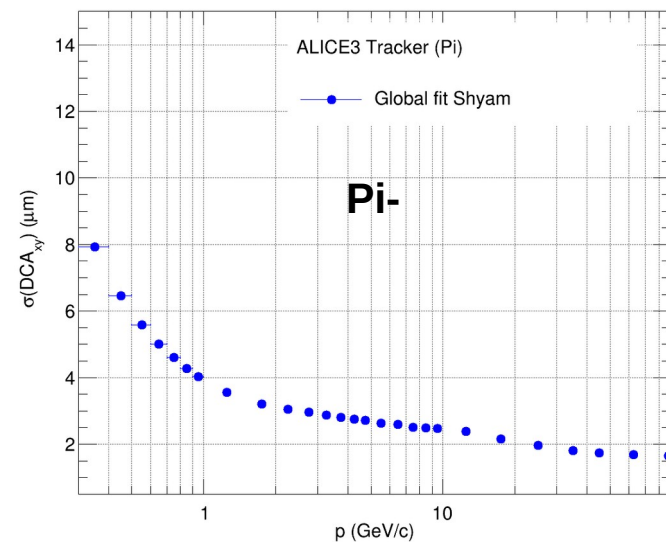
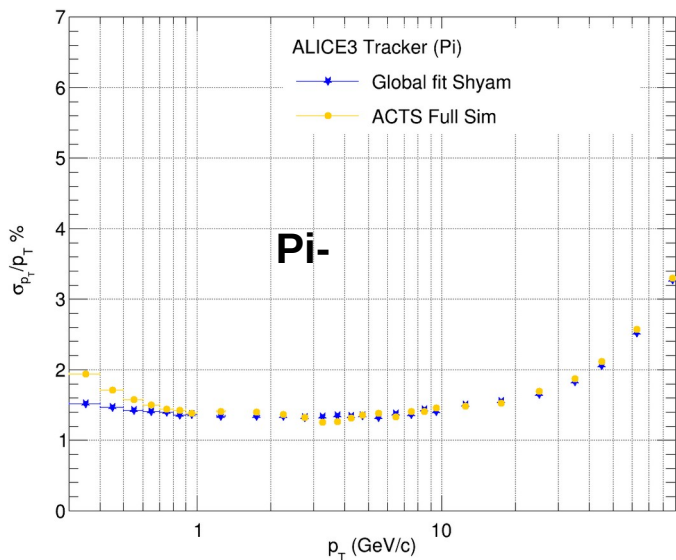
```
Double_t radius[] = { 0.48, 0.51, 1.2, 2.5,2.6, 3.7, 3.75, 7., 12., 20., 30, 45, 60, 80}; // cm
Double_t x0IT    = 0.00107; // ~0.1%
Double_t x0OT    = 0.0107; // ~1%
Double_t x0_InnerPlate = 0.0007;
Double_t x0_OuterPlate = 0.021;
Double_t x0_beampipe = 0.00205;
Double_t efracd_vtx[] = {x0_InnerPlate, x0IT, x0IT, x0IT,x0_OuterPlate, x0_beampipe, x0OT, x0OT, x0OT, x0OT, x0OT, x0OT, x0OT, x0OT};
Double_t magentic_field = 1.0;
Double_t resRPhiIT  = 0.00025; // 2.5 mum
Double_t resZIT     = 0.00025; // 2.5 mum
Double_t resRPhiOT  = 0.0010; // 10 mum
Double_t resZOT     = 0.0010; // 10 mum
Double_t res_dead = 0.;
Double_t sigma[] = {res_dead, resRPhiIT,resRPhiIT,resRPhiIT,res_dead, res_dead, resRPhiOT,resRPhiOT,resRPhiOT,resRPhiOT,resRPhiOT,resRPhiOT,resRPhiOT,resRPhiOT};
Double_t Radius = (pT/(0.3*magentic_field))*100; // cm
```



zoom



Tracking Performances



Fast simulation tool based on global fit

Further implementing the energy loss effect

