

Contribution ID : 72

Reconstruction of Ds mesons in the ALICE Experiment at LHC

Content :

Open Charm production is among the most direct probes of the early time evolution of the quark gluon plasma produced in ultra-relativistic nuclear reactions. The possibility of reconstructing the Ds mesons through their hadronic decay channel ($D_s \rightarrow K + K - \pi^+$) in the central barrel of ALICE detector is studied. Ds mesons act as an useful probe to study hadronization mechanism in heavy-ion collisions. The barrel tracking detectors provide the momentum information and the particle identification of the charged particles. They also provide an accurate measurement of the primary and secondary vertex positions and of track impact parameters. The study of the selection cuts to optimize the combinatorial background rejection will be described. The Ds signal in the KKpi invariant mass distribution from p + p collisions at 7 TeV will be presented.

Primary authors : Dr. DASH, Sadhana (I.N.F.N., Torino) ; Dr. PRINO, Francesco (I.N.F.N , Torino) ; Dr. SENYUKOV, Serhiy (University of Torino & I.N.F.N)

Co-authors :

Presenter : Dr. DASH, Sadhana (I.N.F.N., Torino)

Session classification : --not yet classified--

Track classification : --not yet classified--

Type : --not specified--