Contribution ID: **28** Type: **Talk**

Centrality dependence of transverse momentum correlations in Pb-Pb sqrt(sNN) = at 2.76 TeV in ALICE at the LHC

Saturday 8 March 2014 17:35 (25 minutes)

Two-particle correlations provide information about particle production mechanisms in heavy-ion collisions. We report on results of transverse momentum dierential two particle correlations in Pb-Pb collisions at p
sNN = 2.76 TeV measured with the ALICE detector at the LHC. Correlation functions for unidentied ++, + and charged particle pairs as a function of pair azimuthal and pseudo-rapidity dierences are measured. We study their evolution with collision centrality. We nd that pTpT correlation shapes exhibit a strong centrality dependence in Pb-Pb collisions. The momentum correlation values are everywhere positive, indicating that both particles from one pair are more likely to have a momentum above or below the average transverse momentum in an event ensemble. We further study the Fourier decomposition of the correlation function dependence on as a function of for dierent collision centralities.

Author: Dr PUJAHARI, prabhat (Wayne State University)

Presenter: Dr PUJAHARI, prabhat (Wayne State University)

Track Classification: Experiment