

Abstract Submitted
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Untriggered di-hadron correlations using 2.76 TeV Pb-Pb collisions in ALICE DANTHASINGHE PIYARATHNA, University of Houston, ALICE COLLABORATION — We present measurements of untriggered di-hadron correlations as a function of mean p_T in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV at ALICE. The momentum evolution of untriggered data has been studied by increasing the lower p_T acceptance of both charged particles and within momentum windows. A smooth evolution of the correlation structures is observed. We further quantify the evolution of the contributing components by fitting a model function. The model function emphasizes possible initial state fluctuation contributions via the use of higher harmonics, v_n ($n = 2, 3, 4, 5$). A remainder is modeled via an asymmetric 2D Gaussian to extract parameters of the long range $\Delta\eta$ correlations, referred to as the “soft ridge.” In order to model nonflow contributions (via a 2D Gaussian) Fourier harmonics [1] are shown with and without such a 2D Gaussian. Extracted harmonics parameters are compared with published ALICE flow results [2] and IP Glasma model predictions [3].

[1] A.M Adare et al.(ALICE Collaboration), Phys. Lett. B 708 (2012)

[2] K. Aamodt et al.(ALICE Collaboration), Phys. Rev. Lett. 107, 032301(2011)

[3] Prithwish Tribedy (private comm.)

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