

Abstract Submitted
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Investigating the near-side ridge structure in two particle number correlations at RHIC CHANAKA DE SILVA, Wayne State University, STAR COLLABORATION — Two particle number correlation measurements at RHIC have shown an extended near side δ_η correlation in heavy ion collisions relative to p+p for both momentum triggered and untriggered analyses. This phenomenon is also known as the “ridge.” A quantitative investigation of the near-side structure as a function of momentum of the correlated particles will be shown for Cu+Cu and Au+Au 200 GeV collisions. A smooth evolution of the ridge properties from the untriggered to the triggered correlations is observed. We try to estimate the jet like correlation contribution to the ridge by comparing the integrals of several of the fit components to the complete two-particle correlation structure as a function of centrality and low cut-off in transverse momentum. Several model calculations that attempts to distinguish between bulk and jet contributions are compared to the data [1], [2].

[1] S. Gavin et.al., Phys. Rev. C79, 051902 (2009)

[2] E. Shuryak, Phys. Rev. C76, 047901 (2007)

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