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Disentangling the Away-Side jet contributions of two-particle $h^{\pm}$-$h^{\pm}$ correlations in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV ERIC VAZQUEZ, Columbia University, PHENIX COLLABORATION — A hot dense medium exceeding the critical energy density for the partonic state of matter is created in Au+Au collisions at RHIC. This dense matter is extremely opaque to high energy partons and therefore leads to strong modifications of di-jets traversing the medium. These modifications are typically studied by comparing the di-hadron azimuth correlation functions in Au+Au collisions to those in p+p collisions. A cone-like structure is observed in the away side jet at low p_T, which has led to various interpretions attempting to explain such modifications. We present a method for distinguishing possible contributions to the away side jet for di-hadron azimuthal correlation in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV using unidentified charged hadrons at different p_T and centrality bins.

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