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Jet study in doubly triggered 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 formation of a 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 azimuthal correlation functions in Au+Au collisions to those in p+p collisions. However, a surface bias occurs in events triggered on a single hadron due to the larger probability of a high- p_T parton emerging with little or no energy loss from production points near the surface of the medium. This effect can be minimized, and in fact controlled, by studying events in which the production of two high- p_T hadrons at large azimuthal separation is required. We present preliminary results of such an analysis performed in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV.

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