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Jet modifications in conditionally triggered di-hadron correlations at $\sqrt{s_{NN}} = 200$ GeV in Au+Au at RHIC-PHENIX 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, di-hadron correlations measured in events triggered on a single hadron are subject to a surface bias 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 reduced, 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 results of such an analysis performed in p+p and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV.

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