

Abstract Submitted
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Incident Energy Dependence of p_t Correlations at RHIC JOHN NOVAK, Michigan State University, STAR COLLABORATION — We present results for two-particle transverse momentum correlations $\langle \Delta p_{t,i} \Delta p_{t,j} \rangle$ as a function of event centrality for Au+Au collisions at $\sqrt{s_{NN}} = 7.7, 11.5, 39, \text{ and } 200$ GeV at RHIC. Correlations were observed to decrease with centrality. The correlations multiplied by the multiplicity density increase with incident energy, and the centrality dependence may be indicative of physics. The square root of the correlations divided by the event-wise average transverse momentum per event shows little beam energy dependence for beam energies from 39 GeV up to LHC energies, but decreases at lower beam energies. This result differs with previous results from CERES [1], but is replicated by UrQMD.

[1] D. Adamova et al. [CERES Collaboration], Nucl. Phys. **A727**, 97 (2003).

Gary Westfall
Michigan State University

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