

Abstract Submitted
for the APR21 Meeting of
The American Physical Society

Energy dependence of forward-backward transverse momentum correlation from STAR¹ TONGZHOU GUO, Stony Brook University, STAR COLLABORATION — Transverse momentum correlations could serve as a powerful probe of the early dynamics of hadronic interactions in heavy ion collisions. The related correlation coefficient is constructed from event-by-event average transverse momentum in two separated pseudorapidity regions. We present measurements of the average transverse momentum correlation coefficient ρ in Au+Au collisions from 27 to 200 GeV at STAR. Results of forward-backward correlations are compared with correlations between adjacent pseudorapidity regions. The centrality and pseudorapidity separation dependence of transverse momentum correlations has been discussed.

¹I really appreciate the help of STAR Collaboration. Thanks for your suggestions to my work and abstract.

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Date submitted: 12 Apr 2021

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