

Abstract Submitted  
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**Searching for factorization-breaking effects via two-particle correlation measurements in hadronic collisions** CHRISTINE AIDALA, University of Michigan — Over the last decade and a half, studies initially focused on spin-momentum correlations in the proton have brought to the fore several deep, fundamental issues within QCD that come to light when nonperturbative transverse momenta are treated in hard scattering processes. Two-particle correlation measurements in proton-proton collisions provide sensitivity to nonperturbative transverse momentum effects and offer a means of searching for predicted factorization breaking in such processes. This factorization breaking leads to quantum correlations of partons across QCD bound states. Recent experimental measurements and their implications will be discussed.

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