

Abstract Submitted  
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**Fully Reconstructed Jets in p+p and p+Au Collisions at PHENIX**

JONATHAN RUNCHEY, Iowa State University, PHENIX COLLABORATION — Fully Reconstructed Jets in p+p and p+Au Collisions at PHENIX Jets are an excellent observable for the study of quantum chromodynamics in high energy collisions as they are the products of the initial hard, partonic scattering. Comparisons of fully reconstructed jet measurements made in p+p and p+Au collisions are powerful tools that can be used to probe cold nuclear matter effects. These measurements will also provide information about the initial state in A+A collisions and therefore, help disentangle which effects on jet production are due to the presence of the quark gluon plasma. Using the PHENIX Central Arm detectors, jet production is measured at mid-rapidity using the anti- $k_T$  algorithm with  $R=0.3$  in both p+Au and p+p collisions at  $\sqrt{s}=200$  GeV from datasets recorded in 2015 to determine the jet nuclear modification factor,  $R_{pAu}$ . The latest results from this analysis will be presented.

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