

Scaling properties of high p_T light hadrons from small to large systems by PHENIX

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PHENIX has performed measurements of light hadrons (π^0 , η , and other hadrons with masses up to $\sim 1\text{GeV}$) in a broad set of projectile-target combinations including p+Au, d+Au, ^3He +Au, Cu+Cu, Cu+Au, Au+Au, and U+U. This rich collection of data sets allows for detailed studies of parton energy loss in large systems, exploring various scaling behaviors from RHIC to LHC. We also explore the evolution of the hadron spectra with system size. In particular, the multiplicity dependence of hadron production in small systems is examined for signs of energy loss at high p_T , and collective effects at low p_T .

Summary

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