



J/ψ in Small Systems with PHENIX

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Final-state effects on J/ψ nuclear modification in A+A collisions have long been observed in heavy-ion physics at RHIC and LHC energies. Suppression of the J/ψ nuclear modification factor has been considered a signature of quarkonia dissociation in large systems, where energy densities reach levels high enough to break bound $c\bar{c}$ states. However, suppression of the J/ψ nuclear modification factor has also been observed in small collision systems, prompting questions about whether the modification could be due to final-state effects. Here we present J/ψ measurements as a function of rapidity and transverse momentum by the PHENIX Collaboration for three different systems: p+Al, p+Au, and 3He+Au collisions at center of mass energy $\sqrt{s_{NN}} = 200\text{GeV}$, to investigate the origin of this suppression. Results are compared between collision systems, as well as to gluon shadowing and Transport Model predictions.

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