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Initial condition from the shadowed Glauber model

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We study the effects of nucleon shadowing in the two component Glauber model. The conventional Glauber model predicts a knee-like structure in the centrality dependence of v_2 which has not been observed in experiments. This discrepancy is removed by the inclusion of nucleon shadowing. The model also explains the suppression in fluctuations of initial ε_2 for a given centrality. This result agrees with the dynamical models of initial condition based on gluon saturation physics.

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