

Abstract Submitted
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3-D Glasma initial state: Breaking boost-invariance by collisions of extended shock waves in classical Yang-Mills theory PRAGYA SINGH, SOEREN SCHLICHTING, University of Bielefeld, Bielefeld, 33615 Germany — We perform classical Yang-Mills simulations of the 3+1D structure of the initial state, based on the Color-Glass Condensate framework beyond the boost-invariant approximation. We demonstrate how the boost invariant case is recovered in the high-energy limit and study violations of boost invariance at smaller center of lower energies. By including (semi-) realistic color charge distributions, based on a simple parameterization of small-x TMDs, we further investigate the longitudinal fluctuations which emerge naturally within our framework.

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