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Towards fully 3-D simulations of heavy-ion collisions in the IP-Glasma Initial State

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In this talk, we report on phenomenological studies using the recently developed 3-D IP-Glasma initial state. Our 3-D formulation generalizes the boost invariant formulation by including both the rapidity evolution (JIMWLK) and the temporal evolution (Classical Yang-Mills) in the longitudinal direction. Special attention is paid to the local realization of Gauss law in a 3D+1 environment. Hydrodynamic evolution was carried out using MUSIC and the hadronic interaction was carried out using UrQMD to simulate full heavy ion collisions. Comparisons with the $\sqrt{s} = 2.76$ TeV LHC data including spectra, flow harmonics and correlations will be discussed.

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