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Elliptic Flow from Non-equilibrium Initial Conditions with a Saturation Scale

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A current goal of relativistic heavy ion collisions experiments
is the search for a Color Glass Condensate (CGC) as the limiting state of QCD matter at very high density.
In viscous hydrodynamics simulations, a standard Glauber initial condition leads to estimate $4\pi\eta/s \sim 1$, while employing the Kharzeev-Levin-Nardi (KLN) modeling of the glasma leads to at least a factor of 2 larger η/s.
Within a kinetic theory approach based on a relativistic Boltzmann-like transport simulation, our main result is that the out-of-equilibrium initial distribution reduces the efficiency in building-up the elliptic flow.
At RHIC energy we find the available data on v_2 are in agreement with a $4\pi\eta/s \sim 1$ also for KLN initial conditions.
More generally, our study shows that the initial non-equilibrium in p-space can have a significant impact on the build-up of anisotropic flow.

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