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Initial conditions for hydrodynamics from weakly coupled pre-equilibrium evolution

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We use effective kinetic theory, accurate at weak coupling, to simulate
the pre-equilibrium evolution of transverse energy and flow perturbations in heavy-ion collisions. We provide a Green function which propagates the initial perturbations to the energy-momentum tensor at a time when hydrodynamics becomes applicable. With this map,
the complete pre-thermal evolution from saturated nuclei to hydrodynamics can be modelled in a perturbatively controlled way.

Collaboration

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