Beyond Bjorken: Longitudinal Effects in Viscous Hydrodynamics

JOSHUA VREDEVOOGD, SCOTT PRATT, Michigan State University — Boost invariant viscous hydrodynamics and ideal hydrodynamics have both proven to be useful approximations to the predictions of complete viscous hydrodynamics in relativistic hydrodynamics. However, since both shear viscosity and longitudinal extent contribute to the predictions, it is necessary to complete the task and evaluate viscous hydrodynamics without the Bjorken symmetry. We will make a preliminary comparison of the predictions of (3+1)-dimensional Israel-Stewart viscous hydrodynamics to soft observables.

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