

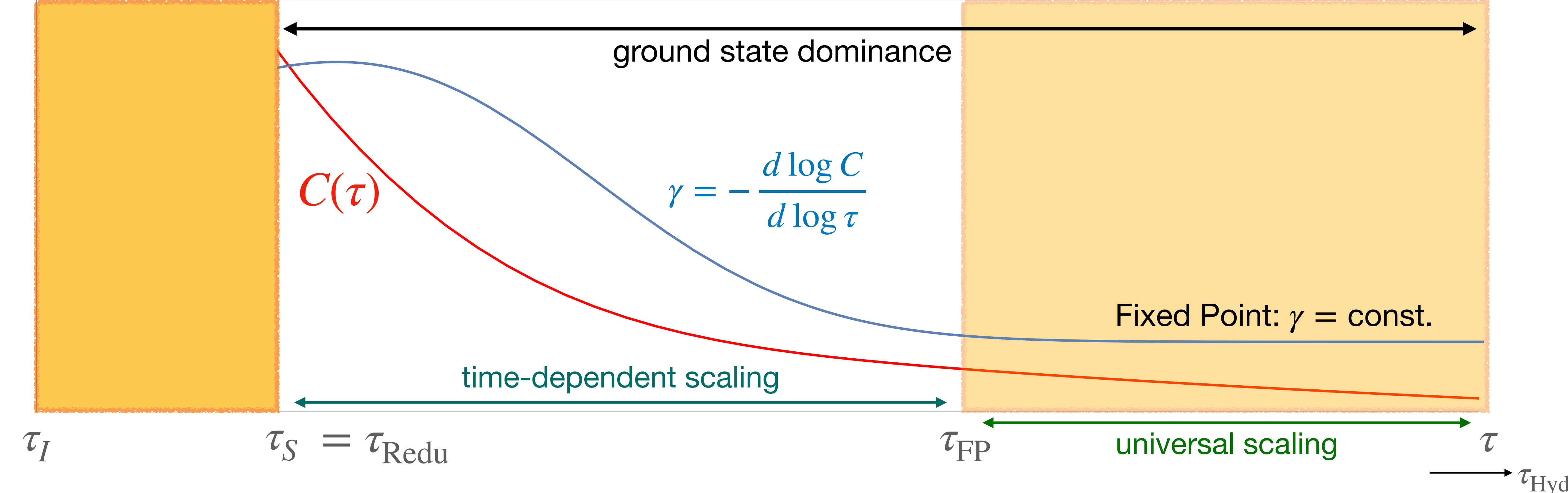
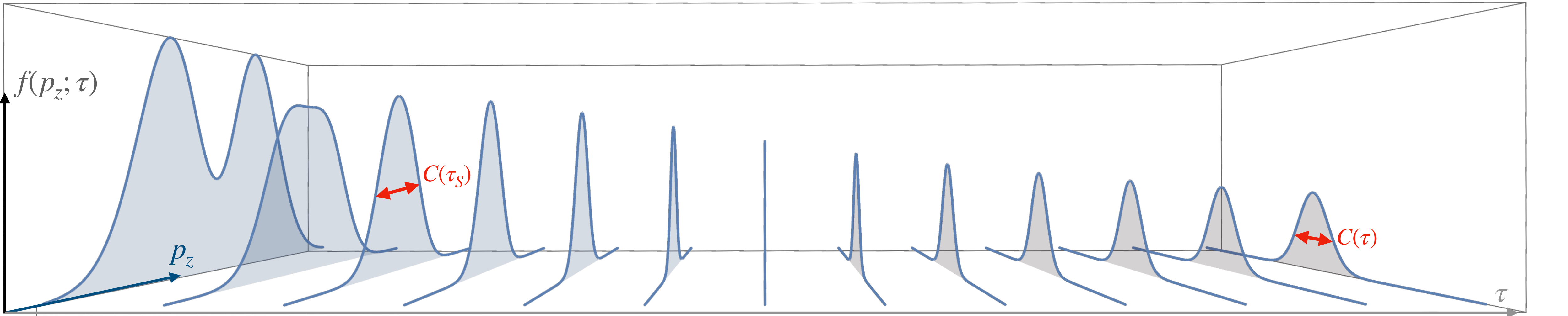
# Adiabatic hydrodynamization in the 'bottom-up' thermalization scenario

**XQCD Flash Talks**  
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based on *JHEP 05 (2022) 145* [arXiv:2203.02427 [hep-ph]]



Typical time evolution of the gluon occupation number in a weakly-coupled Bjorken-expanding plasma



# Summary

We conclude that the first stage of the ‘bottom-up’ thermalization scenario is an example of adiabatic hydrodynamization. Our results explain:

1. How an out-of-equilibrium weakly-coupled gluon plasma rapidly approaches a pre-hydrodynamic stage whose subsequent evolution has little memory of its initial conditions, all long before hydrodynamization.
2. The emergence of time-dependent scaling as a feature of QCD kinetic theory.
3. The fixed points of the (non-linear) dynamical evolution as instantaneous ground states of an effective Hamiltonian.