

Holographic coherence in non-perturbative gravity

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Abstract

In the presence of non-perturbative effects, dynamical coherence in non-perturbative gravity is often discussed. We focus on the case of non-perturbative gravity with the potential term α containing the scalar components of Einstein gravity. We find that in the presence of a scalar field, the coherence is a logarithmic function of the scalar field energy and the curvature. The coherence then evolves in the background of a massless scalar component. We investigate the coherence function of the scalar component of Einstein gravity and find that the coherence is a logarithmic function of the scalar component of the scalar field. We show that it depends on a parameter which corresponds to the scalar component of Einstein gravity in the presence of a massless scalar component.