

Iranian Journal of Physics Research, Vol. 19, No. 4, 2020

Holographic complexity for R^2 and R^3 gravities

A Naseh, Q Jafari, and H Zolfi

Department of Physics, Faculty of Science, Urmia University, Urmia. Iran

E-mail: hamed.Zolfi@physics.sharif.edu

(Received 24 January 2019; in final form 19 March 2019)

Abstract

In this paper, the second and third order corrections of the curvature tensor to the holographic complexity of a temperature state in the coherent field theory are studied. Dual geometry of this temperate state is Schwarzschild's anti deSitter black hole geometry. The calculations made in this paper show that considering these new sentences will only appear as a constant coefficient in the final result, that is the rate of complexity growth over long periods of time.

Keywords: AdS / CFT duality, quantum complexity, black hole

For full article, refer to the Persian section