Iranian Journal of Physics Research, Vol. 18, No. 1, 2018

Holographic calculation of two-point correlation functions of CFT stress tensor in the BMS gauge and asymptotically flat space-times holography

R Fareghbal and P Karimi

Department of physics, Shahid Beheshti University, Tehran, Iran

E-mail: r_fareghbal@sbu.ac.ir

(Received 1 February 2017 ; in final form 13 August 2017)

Abstract

In this paper, we use the holographic renormalization method to calculate the two-point correlation functions of the CFT stress tensor. In the gravity side, we write the asymptotically AdS spacetimes in the BMS gauge and apply the standard holographic renormalization method for these space-times. The significance of using multi-point functions in this gauge is that its flat-space limit is well-defined. We discuss this point in the last section of the paper.

Keywords: gauge/gravity duality, flat-space holography

For full article, refer to the Persian section