

Shape Dependence of Renormalized Holographic Entanglement Entropy

Thursday 16 January 2020 18:00 (15 minutes)

We show some results concerning the holographic entanglement entropy of deformed entangling regions in three-dimensional CFTs dual to Einstein-AdS gravity, using the extrinsic counterterms renormalization scheme. In this prescription, valid for arbitrary dimension, entanglement entropy is given by the sum of a topological term and a geometrical part that explicitly describes the deformation of the entangling surface. Then, we will discuss the relation of the geometrical part to the Willmore energy, stressing on the link between the strong subadditivity property and the AdS curvature.

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Session Classification: short talk