

On holographic RG flow at zero and finite temperatures

The AdS/CFT correspondence allows to calculate RG flows of quantum field theories through its gravity duals. We will discuss a 5-dimensional holographic model, including a dilaton with a potential representing a sum of two exponential functions. Under the holographic duality solutions with Poincaré invariance to this model can be interpreted as RG flows. We will discuss their features and generalization to the case of finite temperature. We also consider reproducing the dependence of the QCD running coupling on the energy scale for both cases.

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