

"Klebanov-Witten flows in M-theory"

Sangmin Lee (Seoul National University)

Abstract

We study renormalization group flows among three dimensional superconformal gauge theories which closely resemble the renowned Klebanov-Witten flow in four dimensions. In the large  $N$  limit, each theory appearing in the flow is holographically dual to M-theory on AdS<sub>4</sub> times a toric Sasaki-Einstein seven-manifold. The square of the free energy, inversely proportional to the volume of the seven-manifold, decreases by a universal ratio  $16/27$  for all flows considered in this paper.