返回首页

AdS Phase Transitions at finite \kappa

We investigate the effect of adding a Chern-Simons term coupled to an axion field to SU(2) Einstein-Yang-Mills in a fixed 4D AdS/Schwarzschild background. We show that, as per the vanishing Chern-Simons case, there is a second order phase transition between a Reissner-Nordstrom black-hole and one with a non-abelian condensate. Furthermore, by giving the axion field a mass, one can shift the critical temperature at which this occurs and observe interesting features of the order parameter scaling form.

存档文本