Theory Seminar

Monday, October 20, 2008 2:10 PM 831 Pupin Hall

"Transport properties of holographic defects"

We study the charge transport properties of fields confined to a (2+1)-dimensional defect coupled to a (3+1) dimensional super-Yang-Mills theory at large-N_c and strong coupling, using AdS/CFT techniques applied to linear response theory.

Considering a wide range of parameters describing the defect and the field theory, we compare our results to general expectations from condensed matter physics. We also comment about the quasiparticle spectrum in relation to the structure of the defect and about taking N_c finite.

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