

Disordered holographic superconductors

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We consider a direct implementation of disorder in the context of the AdS/CFT correspondence. In particular we discuss its implementation in the context of holographic superconductors. We study the behavior of the superfluid density and of the conductivity as a function of the strength of disorder. We observe that the behavior of the order parameter close to the transition is not mean-field type as in the clean case, rather we find robust agreement with BKT for this disorder-driven smeared transition.

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