



## JOINT CCQC - CCTP SEMINAR

**Tuesday, 04 November 2014**

**14:00-15:00**

**2nd Floor Seminar Room**

### *Dirty Holographic Superconductors*

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#### Abstract

The study of disorder, and in particular the phenomenon of Anderson localization, in interacting many-body systems is a challenging problem in condensed matter physics. By introducing disorder in holographic realizations of superconductivity we can get predictions from the gauge/gravity duality on how strongly coupled superconductors behave in the presence of impurities. In the framework of holographic s- and p-wave superconductors we will study the effect of disorder on the critical temperature and the conductivity of the system. We will also characterize the spectral properties of both the condensate and the charge density, finding a fairly universal response consisting of linear functions of the input (disordered) power spectrum.

