



PHYSICS AND ASTRONOMY SEMINAR

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“Holographic Entanglement Entropy, Probe Branes and Non-Fermi Liquids”

Abstract

Entanglement correlations are a crucial microscopic characteristic distinguishing different states. Their quantification in terms of the entanglement entropy has wide applications, e.g. as order parameter. Computing entanglement entropy directly in QFT, however, is challenging. I will discuss methods to efficiently compute it in AdS/CFT when the holographic description involves probe branes or otherwise small deformations.

This makes phenomenologically interesting setups accessible, and I will focus on flavored N=4 SYM at finite charge density as an intriguing holographic quantum liquid.

Friday, October 31, 2014
2:30 p.m.
Elliott Building
Room 160