CCNU-HUST Joint Seminar

Introduction to Holographic Superconductors

Date 10:00 - 11:00, 2021/12/3 (Friday)

Place 1130, Building 9, CCNU (Zoom ID: 861 3152 0915)

Speaker

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Abstract

In the past decade, the anti-de Sitter/conformal field theory (AdS/CFT) correspondence has been becoming a powerful tool to study the strongly correlated condensed matter physics. Especially, it has been shown that some properties of strongly coupled superconductors can be potentially described by classical general relativity living in one higher dimension, which is known as holographic superconductors. In this talk, we will give a quick and introductory overview of some holographic superconductor models in the literature, including the s-wave, p-wave, d-wave models in the backgrounds of AdS black hole and AdS soliton, and summarize some basic properties of these holographic models in the probe limit and away from the probe limit.

Biography

2008年于湖南师范大学物理系获博士学位，先后在复旦大学和巴西圣保罗大学从事博士后研究，2008年7月开始在湖南师范大学物理系工作，现任教授、博士生导师；主要的研究兴趣为引力的全息理论、黑洞物理学和量子信息理论，在《J. High Energy Phys.》、《Phys. Rev. A/D》、《Phys. Lett. B》和《Eur. Phys. J. C》等国际权威物理学期刊发表SCI论文50余篇；主持和参与包括国家自然科学基金面上项目、重点项目、科技部国家重点研发计划子课题等多个课题的研究。