



Weekly Seminar

Mottness and high-Tc superconductivity

翁征宇

清华大学高等研究院



Time: 3:00 pm, April. 3, 2024 (Wednesday)

时间: 2024年4月3日 (周三) 下午3:00

Venue: Room w563, Physics building, Peking University

地点: 北京大学物理楼, 西563会议室

直播链接: <https://www.koushare.com/live/details/33289>

摘要

In this talk, I will discuss the Mott physics of strongly correlated electrons, in which the new organizing principle arises due to the presence of a Mott gap. Here, in contrast to the Landau quasiparticle in a Fermi liquid, new elementary quanta with topological gauge structure will emerge, which can be accurately studied by the state-of-the-art numerical methods. I will then show that the essential experimental phenomenology of the cuprate, including the high-Tc superconductivity, may be systematically understood by such a mathematical framework of the doped Mott insulator.

报告人简介

翁征宇, 清华大学高等研究院教授。1978年考入中国科大少年班, 1987年在中国科大物理系获博士学位。在休斯顿大学和德州超导中心做博士后和任研究职位多年。2001年加入清华大学高等研究院(中心), 2004年任杨振宁讲席教授。目前主要研究方向与兴趣: 凝聚态物理理论尤其是量子多体强关联系统的研究, 包括各种emergent现象特别是非常规高温超导机理的探索。

