

Weekly Seminar

Itinerant Quantum Critical Points and Self-learning Monte Carlo Method

Zi Yang Meng

Institute of Physics, Chinese Academy of Sciences

Time: 4:00pm, Sep. 13, 2017 (Wednesday)

时间: 2017年9月13日 (周三)下午4:00

Venue: Room W563, Physics building, Peking University

地点:北京大学物理楼,西563会议室

Abstract

In this talk, I will present our recent attempts in understanding itinerant quantum critical points (both ferrormagnetic and antiferromagnetic) via large-scale quantum Monte Carlo simulations, focusing on the scaling behavior in the quantum critical region. If time permit, I will also discuss the self-learning quantum Monte Carlo method, as well as possible directions that our setup of fermion coupled to critical bosonic fluctuations could further explore.

About the speaker

Zi Yang is an associate Professor at Institute of Physics, Chinese Academy of Sciences, his research is focused on numerical investigations of strongly correlated electrons systems. For more information, please see his group webpage at http://ziyangmeng.iphy.ac.cn.