

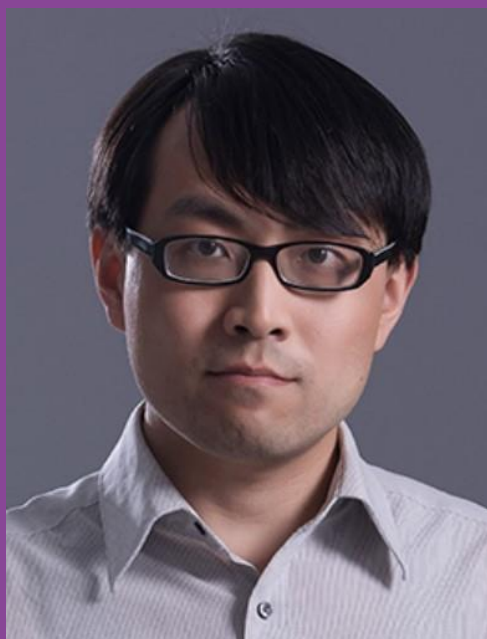
世纪物理情·系列讲座

Pseudo-criticality and its implication for the lost conformality

【摘要】

This talk will introduce the concept of “pseudo-criticality” and discuss its implication for phase transition theories. We will elucidate the pseudo-criticality is instrumental in unraveling the mysteries of complex conformal field theories and illuminating a variety of intriguing physical problems, including weakly first-order transitions in statistical mechanics and the conformal window of gauge theories. Moreover, we will discuss the deconfined criticality in $(2+1)d$ —the quantum phase transition between a Néel antiferromagnet and a valence-bond solid—may actually be pseudocritical, in the sense that it is a weakly first-order transition with a generically long correlation length.

【报告人简介】



Dr. Wei ZHU received his B.S. in applied physics (2007) and Ph.D. degree in physics (2012), both from University of Science and Technology of China. He performed post-doctoral research at California State University Northridge, Princeton University and Los Alamos National Lab. In 2018 he joined the Westlake University as an Assistant Professor. Dr. Zhu's research focuses on quantum mechanical aspects of condensed matter systems in the areas of strongly-correlated and mesoscopic physics.

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【报告人】

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西湖大学

【时间】

2024/ 06 / 12 (周三)

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清华大学高等研究院

科学馆104报告厅

