

Jointly organized by the Department of Physics and HK Quantum Institute of Science & Technology

CTCP SEMINAR

Impurity screening by defect in a spin-1 chain

Prof. Hong-hao Tu

Ludwig Maximilian University of Munich

Friday, December 19, 2025, 4:00pm

Room 522, 5/F, Chong Yuet Ming Physics Building,

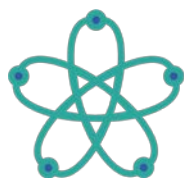
The University of Hong Kong

Abstract:

In this talk, I will present a new mechanism of impurity screening in quantum critical chains, where topological defect lines of the underlying conformal field theory provide the screening channels. This leads to exotic boundary states that go beyond Cardy's types. As an example, we demonstrate impurity screening by defect in a spin-1 chain described by the $SU(3)_1$ WZW model, with numerical results for the spectrum and Affleck-Ludwig entropy matching the theoretical predictions.

ANYONE INTERESTED IS WELCOME TO ATTEND!

HK Institute of Quantum Science & Technology,
Room525, Chong Yuet Ming Physics Building, The University of Hong Kong
Phone: 3917 1108



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Department of Physics
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