

Entanglement measure on one and two dimensional spin systems

Feng-Li Lin

Department of Physics, National Taiwan Normal University

We studied the properties of the entanglement measure on one and two dimensional spin systems by using the matrix/tensor product states. In this talk we will review the basics of the matrix/tensor product states, and using it to study the global entanglement measure, especially to characterize the quantum phase transition. We will report our progress on the problem of capturing the scaling behavior of entanglement measure and also its application to quantum state transfer.