中国科学院数学与系统科学研究院

量子论与信息论

学术报告

报告题目: Recent Progress on Multipartite Entanglement Detection and Faithful Coherence

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时　　间: **2023 年 6 月 6 日 (星期二) 下午 13:30--14:30**

地　　点: 腾讯会议 **763-481-231**

摘　　要: The talk consists of two parts. First we propose entanglement criteria for multipartite systems via symmetric informationally complete measurement and general symmetric informationally complete measurement. We apply these criteria to detect entanglement of multipartite states, such as the convex of Bell states, entangled states mixed with white noise. Second, we propose the notion of faithful coherent states based on the fidelity-based coherence witness. The criterion for detecting faithful coherent states can be restricted to a subclass of fidelity-based criterion under unitary transformations for single and bipartite systems. We can realize these unitary transformations by using quantum gates and circuits.