國 立 清 華 大 學 數 學 系 學 術 演 講
NTHU MATH Colloquium

講題　　From nonlocality transitivity to resource marginal problems and back

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時間　　2023.05.29 (Mon.) 16:00 – 17:00

地點　　https://meet.google.com/nzb-jnjn-iym

茶會　　**因遠距暫停茶會**

Abstract

In this colloquium, I shall recall the nonlocality transitivity problem --- a problem that concerns the possibility of inferring the nonlocality in a multipartite scenario based on partial information. Then, I explain how considering this problem has led to a more general class of problems known as resource marginal problems (RMPs). More precisely, RMPs concern the possibility of having a resource-free target subsystem compatible with a given collection of marginal density matrices. We show that a resource theory for marginal density matrices naturally arises from any given RMP and present some general features of such a theory. After that, we focus on a special case of RMPs known as the entanglement transitivity problems and explain how our progress on this problem has led to progress in the original nonlocality transitivity problem.