

國立清華大學數學系學術演講

NTHU MATH Colloquium

講題 Critical Exponents of self-avoiding Walks on \mathbb{Z}^d lattices

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時間 2024.03.25 (Mon.) 16:00 – 17:00

地點 第三綜合大樓**2樓 Room 201**

茶會 15:30, Room 707

Abstract

Self-avoiding walk is a path on a lattice that does not visit the same site more than once. In spite of this simple definition, many of the most basic questions about this model are difficult to resolve in a mathematically rigorous proof. In particular, we do not know how much about how far an n -step self-avoiding walk from its starting point, or even how many such walks there are.

In this talk, we consider nearest-neighbor self-avoiding walk on \mathbb{Z}^d lattices. We present various critical exponents that are obeyed from the two-point function. Furthermore, we present the lower bound and upper bound of the number of n -step self-avoiding walk on \mathbb{Z}^d lattices as $n \rightarrow \infty$.

歡迎參加，敬請張貼 <http://www.math.nthu.edu.tw>