



# 北京理工大学

## 数学与统计学院学术报告

# Capacity, Intersection Events and Fractal Percolation

**报告人:** 白天衣 (中国科学院数学与应用数学研究院)

**时间:** 2025.4.15 上午9:30--11:30

2025.4.16 上午9:30--11:30

**地点:** 文萃楼E409

### 摘要:

Beginning by an elementary introduction to potential theory and electric network theory of random walks, we focus on the concept of capacity, and explore its relation to intersection events of random walks.

Then we present an interesting observation found in [Peres 1996], that links these quantities to fractal percolation, which is a fractal object carrying tree-like structures also known as Mandelbrot percolation.

Finally, we shall introduce our recent work [B., Chen and Peres 2024] that extends this story to Minkowski sums of random sets.

**报告人简介:** 白天衣, 中国科学院数学与应用数学研究院助理研究员, 主要研究方向为分枝随机游走. 2017 年本科毕业于北京大学, 2018 年硕士毕业于巴黎第六大学, 2021 年博士毕业于巴黎第十三大学, 2021-2023 年于上海纽约大学任博士后研究员, 2023 年 9 月起于中国科学院任助理研究员。