



## 复旦大学数学科学学院 数学综合报告会

报告题目: Random trees, Chinese restaurant processes, and interval-partition evolutions

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时间: 2021-06-01 星期二 16:50-17:35

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报告摘要:

A composition of a positive integer  $n$  is a sequence of positive integers that sum to  $n$ . In this talk, I will introduce a family of interval-partition-valued diffusions that arise as limits of random walks on integer compositions. These infinite-dimensional diffusions have Poisson-Dirichlet (pseudo-)stationary distributions. Our model is closely related to Pitman-Dubins Chinese restaurant processes and random walks on integer partitions studied by Borodin-Olshanski and Petrov. I will also talk about some applications of our model in population genetics and continuum-tree-valued dynamics.

This talk is based on joint work with Noah Forman, Douglas Rizzolo, and Matthias Winkel.

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