

**MIT DEPARTMENT
OF MATHEMATICS**

Yuval Peres

Microsoft Research

April 24 • 25 • 26

4:30–5:30pm

Lectures: Rm. 2-190

Reception: 4pm, Rm. 2-290

**Surprises in
Discrete Probability**

Lecture 1

A fair partition of the
sphere and overhanging blocks

Lecture 2

Strange geometry of
high-dimensional spanning forests

Lecture 3

Mixing time in Ramanujan graphs
and random graphs

**SIMONS LECTURES
IN MATHEMATICS 2017**

Martin Hairer

University of Warwick

May 1 • 2 • 3

4:30–5:30pm

Lectures: Rm. 2-190

Reception: 4pm, Rm. 2-290

Singular Stochastic PDEs

Lecture 1

Bridging scales: from microscopic
dynamics to macroscopic laws

Lecture 2

An analyst's incursion into
quantum field theory

Lecture 3

Renormalization: a BPHZ theorem
for stochastic PDEs



Massachusetts
Institute of
Technology