Institut für
Mathematische Stochastik

Georg–August–Universität

Einladung

Im Stochastik-Kolloquium spricht:

Dr. Rahul Roy
(Indian Statistical Institute, New Delhi)

über das Thema:

On confetti percolation

Der Vortrag findet statt am:

Donnerstag, 17.5.2018 um 13:00 Uhr

im: Seminarraum der Stochastik, SR 5.101, Goldschmidtstr. 7

Es laden ein: Die Dozenten des Instituts für Mathematische Stochastik

Abstract

Using the randomized algorithm method developed by Duminil-Copin, Raoufi, Tassion (2016, 2017) we exhibit sharp phase transition for the confetti percolation model. This provides an alternate proof that the critical parameter for percolation in this model is ½ when the underlying shapes for the distinct colours arise from the same distribution. This extends the work of Hirsch (2015) and Müller (2016). In addition, we study the covered area fraction for this model, which is akin to the covered volume fraction in continuum percolation. This study allows us to calculate exact critical parameter for percolation when the underlying shapes for different colours may be of different sizes subject to a certain `transitivity condition'.
Joint work with Partha Pratim Ghosh.