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Einladung
zum
Oberseminar Stochastik

Am Donnerstag, 6. Dezember 2018, um **17:45 Uhr** im Seminarraum 2 des Mathematischen Instituts, Weyertal 86−90, 50931 Köln. Es spricht:

Maximilian Nitzschner

(ETH Zürich)

zum Thema

Disconnection by level sets of the discrete Gaussian free field and entropic repulsion

Abstract: We consider level set percolation of the Gaussian free field on $\mathbb{Z}^d$, $d \geq 3$ in the strongly percolative regime. We derive upper and lower bounds on the probability that the level set below level α disconnects the discrete blow-up of a compact set A from the boundary of an enclosing box.

Additionally, we give an asymptotic upper bound on the probability of the intersection of the disconnection event with the event that local averages of the Gaussian free field deviate from a specific multiple of the harmonic potential of A. If certain critical levels coincide, these bounds underpin a push down of the Gaussian free field conditioned on disconnection, which can be understood as entropic repulsion. This talk is based on joint work with Alberto Chiarini.

Alle Interessenten sind herzlich eingeladen.

Die Dozenten der Stochastik