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FB Mathematik

FB Physik, Mathematik und Informatik
Institut für Mathematik

FB Informatik und Mathematik
Institut für Mathematik
Schwerpunkt Stochastik

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Rhein-Main-Kolloquium Stochastik

TU Darmstadt, Goethe-Universität Frankfurt und Gutenberg-Universität Mainz

Friday, 17 July 2026

3:15 pm: [Nina Gantert \(TU München\)](#)

“Three questions about branching Markov chains”

We discuss some questions about branching Markov chains, in particular recurrence/transience, the growth of the maximal distance to the origin, and a localisation question for branching Markov chains with a catalyst.

The talk is based on joint work with Julien Berestycki, David Geldbach, Quan Shi, work in progress with Alice Callegaro and Carlo Scali, and work in progress with Xinxin Chen, Haojie Hou and Quan Shi.

4:15 pm: Coffee break

4:45 pm: [Alexis Prévost \(Universität Bonn\)](#)

“Hausdorff dimension of the critical clusters for the metric graph Gaussian free field”

I will review recent results concerning the phase transition for a strongly correlated percolation model called the metric graph Gaussian free field. In particular, I will focus on the Hausdorff dimension of the critical connected components, as well as on the critical exponents which describe the volume of these components on graphs of intermediate dimension.

<https://www.stochastik.mathematik.uni-mainz.de/rhein-main-kolloquium-stochastik/>

Venue:

TU Darmstadt
S2|15 Mathematikgebäude
Room 244
Schlossgartenstraße 7
64289 Darmstadt

Any interested parties are welcome.

Yours, Frank Aurzada and Volker Betz