

RTG 2131-Conference, Program

**RTG 2131, High dimensional phenomena in probability
- Fluctuations and discontinuity**



24 – 28 September 2018

Location: Ruhr-University Bochum, HZO 80

The UA Ruhr is an alliance between Ruhr University Bochum, TU Dortmund and the University of Duisburg-Essen, the three strongest universities in Germany's thriving Ruhr area.



Monday, 24 September

09:00

Registration and Refreshments

09:30

Opening

09:45

Aernout van Enter, Groningen

One-sided versus two-sided points of view

10:30

Coffee Break

11:00

Masha Gordina, Connecticut

Gradient bounds for hypoelliptic diffusions

11:45

Sebastian Mentemeier, Kassel

Limit theorems for recursive cell-splitting schemes

12:30

Lunch (self catered)

14:00

Florence Merlevede, Marne-la-Vallée

Rates in almost sure invariance principle for slowly mixing dynamical systems

14:45

Julian Grote, Bochum

Threshold phenomena and limit theorems for random polytopes in high dimensions

15:30

Coffee Break

16:00

Maite Wilke-Berenguer, Bochum

The Wright-Fisher model with selection in a random environment

17:00

Discussions

Tuesday, 25 September

09:45

Friedrich Götze, Bielefeld

Limit Theorems and Expansions in Information Distances

10:30

Coffee Break

11:00

Richard Kraaij, Delft

Fluctuations for a dynamic Curie-Weiss model of self-organized criticality

11:45

Fabrice Gamboa, Toulouse

Around large deviations and sum rules

12:30

Lunch (self catered)

14:00

Sara Mazzonetto, Duisburg-Essen

A new perturbation theory and its applications to numerical approximation of $S(P)DEs$

14:45

Joscha Prochno, Graz

The asymptotic volume ratio of Schatten p -classes

15:30

Coffee Break

16:00

Dominik Tomecki, Bochum

Random Moment Problems Under Constraints

17:00

Discussions

Wednesday, 26 September

09:45

Giovanni Peccati, Luxembourg

Nodal sets of random waves: second order results and phase transitions

10:30

Coffee Break

11:00

Alexander Drewitz, Cologne

The maximum particle of branching random walk in spatially random branching environment

11:45

Frank den Hollander, Leiden

Spectra of Adjacency and Laplacian Matrices of inhomogeneous Erdős-Rényi Graphs

12:30

Lunch (self catered)

13:30

Excursion by Bus to Zeche Zollverein / Mine Zollverein in Essen

UNESCO world cultural heritage site

18:30

Conference Dinner, Ruhr-University Bochum, Beckmanns Hof

Thursday, 27 September

09:45

Adrian Röllin, Singapore

Stein's method, universality and high-dimensional approximation

10:30

Coffee Break

11:00

Rafał Łatała, Warsaw

Hanson-Wright inequality in Banach Spaces

11:45

Joseph Lehec, Paris-Dauphine

On the stability of the logarithmic Sobolev inequality

12:30

Lunch (self catered)

14:00

Martin Venker, Bochum

Time to universality for Dyson's Brownian motion started at a point of low density

14:45

Andre Pessik, Dortmund

Limit Theorems for Bipower / Multipower Variations of Lévy Driven Processes

15:30

Coffee Break

16:00

Yacine Barhoumi-Andréani, Zurich, Bochum

The characteristic polynomial of a random unitary matrix, 20 years of study

17:00

Discussions

Friday, 28 September

09:00

Wolfgang König, Berlin

A large-deviations approach to the multiplicative coalescent

9:45

Mattias Reitzner, Osnabrück

Limit Results for the Gilbert Hyper-Graph

10:30

Coffee Break

11:00

David Dereudre, Lille

Canonical DLR equations and number-rigidity for the Sine-beta process

11:45

Michel Ledoux, Toulouse

Stein's method for normal approximation of linear statistics of beta-ensembles

12:30

Lunch (self catered)
