

PROGRAM

13th German Probability and Statistics Days



FEBRUARY 27 – MARCH 2, 2018

UNI
FREIBURG

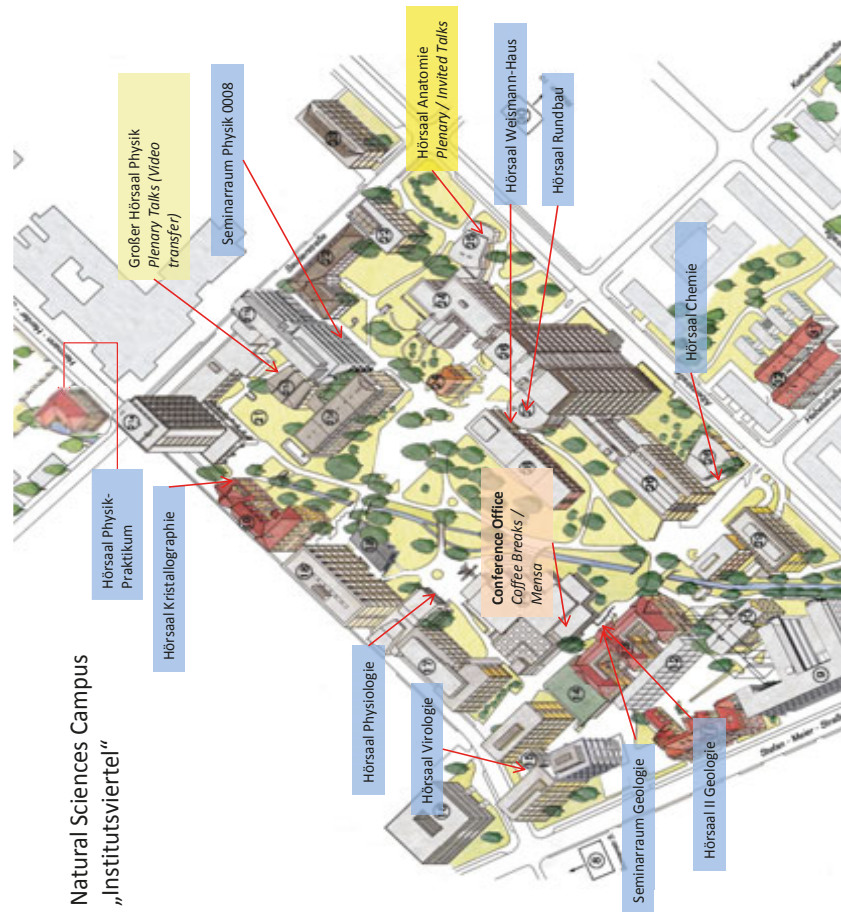
SECTIONS:

- Stochastic analysis
- Spatial statistics and random structures
- Limit theorems, large deviations and extremes
- Finance insurance and risk: modelling & statistics
- Stochastic modelling in Physics and Biology
- Stochastic optimization and operations research
- Stochastic processes
- Time series
- Computational statistics and data analysis
- Nonparametric and asymptotic statistics
- Statistics of stochastic processes
- Statistical methodology

www.gpsd-2018.de



Plenary/Invited Talks	HS Anatomie
Stochastic Analysis	HS Kristall
Spatial statistics and random structures	HS Virologie
Limits, large deviations, extremes	HS Physiologie
Finance, insurance & risk: modelling	HS Chemie
Finance, insurance & risk: statistics	HS Rundbau
Stochastic modelling in Physics	HS II Geolog.
Stochastic modelling in Biology	HS II Geolog.
Stochastic optimization and operations research	SR Geologie
Stochastic processes	HS Weismann
Time series	SR Physik 0008
Computational statistics, data analysis	SR Geologie
Nonparametric and asymptotic statistics	HS Phys.-Prakt.
Statistics of stochastic processes	SR Physik 0008
Statistical methodology	SR Geologie



Natural Sciences Campus „Institutsviertel“

Welcome

In the tradition of the previous conferences, the *13th German Probability and Statistics Days 2018* – or *Freiburger Stochastik-Tage* – provide a leading international forum for presentation and discussion of latest developments in the area of probability and statistics including the highly interesting fields financial and insurance mathematics, machine learning, and data analysis.

Highlights of the conference are plenary lectures by five outstanding researchers. Contributed talks will be given in 12 sections devoted to specific topics; each section will have one invited main talk.

Over the last years, the *Stochastik-Tage* have been attracting an increasing number of participants from abroad. This year there is an impressive number of almost 500 attendees and about 350 contributions to the scientific program. We are happy to welcome you here and are looking forward to an inspiring meeting in Freiburg!

The Local Organizing Committee



Philipp Harms, Peter Pfaffelhuber, Eva Lütkebohmert-Holtz, Thorsten Schmidt, Angelika Rohde



Organizer

Program Committee

Peter Eichelsbacher (Bochum, Chair)
Hajo Holzmann (Marburg)
Peter Pfaffelhuber (Freiburg)
Angelika Rohde (Freiburg)
Thorsten Schmidt (Freiburg)
Anja Sturm (Göttingen)
Anita Winter (Duisburg-Essen)



Local Organizing Committee

Ernst August Freiherr von Hammerstein
Monika Hattenbach (Secretary)
Phillip Harms
Eva Lütkebohmert-Holtz
Peter Pfaffelhuber
Angelika Rohde
Thorsten Schmidt (Chair)



Conference Office

Home:
SAW Tagungsmanagement
Ahornweg 12b
78269 Volkertshausen
www.saw-tagungsmanagement.com

On site: Mensa 1st floor
Phone: +49 171 8355059
Mon: 16:00 – 19:00
Tue–Thu: 8:00 – 17:00
email: karsch@saw-tagungsmanagement.com



General Information

For more information, consult the conference webpage <http://www.gpsd-2018.de>.

Abstracts

The complete book of abstracts is available online at the conference webpage

Conference Office

The registration desk and conference office is located in the *Casino* of the *Mensa*. It is the same place as for coffee breaks.

Lecture Halls

All **plenary lectures** and the **talks by the invited section speakers** take place in the *Hörsaal Anatomie*. In addition, there is a video transfer of plenary talks to the *Großer Hörsaal Physik*.

All other lectures take place in a total of 12 lecture halls in the *Institutsviertel*.

All lecture halls are equipped with laptop/data projectors and with black-boards. The files (preferably on a flash drive in PDF format) should be handed over to the technical support in your lecture hall not later than 20 minutes before the session starts.

Lunch Options and Coffee Breaks

If you did not book tickets for the *Mensa*, please refer to the interactive map on the conference webpage for lunch options.

Coffee Breaks take place in the *Mensa*.

Poster Session

The poster session takes place during the *Get Together* Tuesday evening at the *Historisches Kaufhaus*; see next page.

Social Events

On Tuesday evening, starting 18:30, we will have a *Get Together* including the *poster session*; see next page.

On Wednesday evening, starting 18:45, we invite you to join the *General Assembly* of the *Fachgruppe Stochastik* in the *Hörsaal Anatomie*.

On Thursday evening, starting 19:30, the *conference dinner* takes place at the *Bürgerhaus Seepark*; see next page.



Get Together and Poster Session

Historisches Kaufhaus, Tuesday, 18:30

The *Historische Kaufhaus* at the historic city center of Freiburg was built from 1520 until 1522 and is located directly at the *Freiburger Münster* at the Münsterplatz. Just a 15 minutes walk from the conference site, the *Get Together* takes place in the *Kaisersaal*, together with the *poster session*. Finger food and beverages will be provided.



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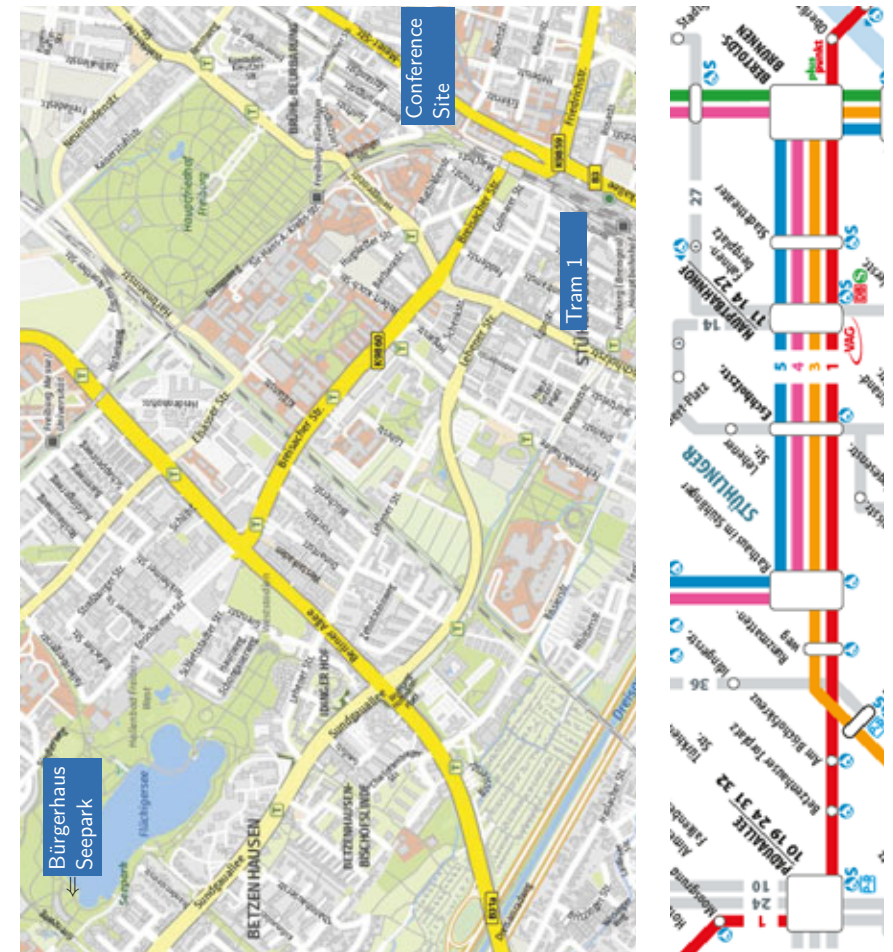


Conference Dinner

Bürgerhaus Seepark, Thursday, 19:30

The *Bürgerhaus Seepark* is located in the West of Freiburg in the district *Betzenhausen*, within a recreation park. In order to get there, you have two options:

- Walk about 45 minutes from the conference site, following the *Breisacher Straße* straight ahead, which takes you to the *Seepark*.
- Take the Tram 1 (direction *Landwasser*) from the *Central Station* or the *Bertoldsbrunnen*, get out at *Betzenhausener Torplatz*. Then, walk 300 meters until the *Bürgerhaus Seepark*.





Program Overview

Tuesday	Wednesday	Thursday	Friday
9:00 – 10:30 Opening, Plenary	9:00 – 10:00 Plenary	9:00 – 10:00 Plenary	9:00 – 9:50 Parallel Sessions
Coffee Break			
11:15 – 12:30 Parallel Sessions	10:45 – 12:25 Parallel Sessions	10:45 – 12:25 Parallel Sessions	10:30 – 11:20 Parallel Sessions 11:30 – 12:30 Plenary
Lunch Break			
14:00 – 15:40 Parallel Sessions	14:00 – 15:40 Parallel Sessions	14:00 – 15:40 Parallel Sessions	
Coffee Break			
16:30 – 17:30 Plenary	16:30 – 18:35 Parallel Sessions	16:30 – 18:35 Parallel Sessions	
17:30 – 18:20 Parallel Sessions			
18:30 – 21:00 Get Together	18:45 – 20:00 General Assembly	19:30 Conference Dinner	

Plenary Talks

The plenary talks all take place in the main lecture hall, *Hörsaal Anatomie*. There is also a video transfer of all plenary lectures to the *Großer Hörsaal Physik*.

Tue, 9:30	Wendelin Werner	ETH Zurich
Tue, 16:30	Christina Goldschmidt	University of Oxford
Wed, 9:00	Kavita Ramanan	Brown University, Providence
Thu, 9:00	Bin Yu	University of California, Berkeley
Fri, 11:30	Marcel Nutz	Columbia University, New York



	Section	Chairs	Invited Speaker	Lecture Hall (Sessions)
1	Stochastic Analysis	Nicolas Perkowski Benjamin Gees	<i>Franco Flandoli (Pisa)</i> ; Thu, 10:45	HS Kristall Tue – Fri
2	Spatial Statistics and random structures	Claudia Redenbach Christoph Thäle	<i>David Dereudre (Lille)</i> ; Fri, 9:00	HS Virologie Tue, Wed
3	Limit theorems, large deviations and extremes	Nicola Kistler Alexander Drewitz	<i>Louis-Pierre Arguin, (New York)</i> ; Fri, 10:30	HS Physiologie Tue – Thu
4a	Finance insurance & risk: modelling	Anita Behme Francesca Biagini	<i>Paul Embrechts, (Zurich)</i> ; Thu, 14:00	HS Chemie Tue – Thu
4b	Finance insurance & risk: statistics	Denis Belomestny Gernot Müller	<i>Valentine Genon-Catalot, (Paris)</i> ; Wed, 16:30	HS Rundbau Tue – Fri
5a	Stochastic modelling in Physics	Simone Warzel	<i>Margherita Disertori, (Bonn)</i> ; Thu, 17:20	HS II Geolog. Tue, Wed
5b	Stochastic modelling in Biology	Noemi Kurt	<i>Alison Etheridge, (Oxford)</i> ; Thu, 16:30	HS II Geolog. Wed – Fri
6	Stochastic optimization and operations research	Sören Christensen Alois Pichler	<i>A. Ruszczyński, (Rutgers)</i> ; Tue, 17:30	SR Geologie Wed, Fri
7	Stochastic processes	Vitali Wachtel Leif Döring	<i>Leonid Mytnik, (Haifa)</i> ; Wed, 10:45	HS Weismann Tue – Fri
8	Time series	Claudia Kirch Jens-Peter Kreiss	<i>Suhasini Subba Rao, (Texas)</i> ; Thu, 11:35	SR Physik 0008 Tue, Wed
9	Computational statistics and data analysis	Sonja Greven Thomas Kneib	<i>Thordis L. Thorarinsdottir, (Oslo)</i> ; Wed, 11:35	SR Geologie Thu
10	Nonparametric and asymptotic statistics	Jan Johannes Melanie Schienle	<i>Fabienne Comte, (Paris)</i> ; Tue, 11:15	HS Phys.-Prakt. Wed – Fri
11	Statistics of stochastic processes	Markus Bibinger Cl. Klüppelberg	<i>Victor Panaretos, (Lausanne)</i> ; Wed, 17:20	SR Physik 0008 Thu, Fri
12	Statistical methodology	Moritz Jirak Axel Bücher	<i>Aad van der Vaart, (Leiden)</i> ; Tue, 14:00	SR Geologie Tue, Wed



Program | Tuesday February 27

9:00 – 9:30

Opening HS Anatomie

9:00 *Hans-Jochen Schiewer (Rektor of the University of Freiburg)*
Wolfgang Soergel (Director of the Mathematical Institute)
Claudia Klüppelberg (President-Elect of the Bernoulli Society)
Michael Röckner (President of the DMV)

9:30 – 10:30

Plenary Talk 1 HS Anatomie

9:30 The (quantum) disk as patchwork of (quantum) disks
Wendelin Werner (ETH Zürich)

11:15 – 12:30

Section 1 – Stochastic analysis HS Kristall

11:15 Characterization of pointwise conditional nonlinear expectations
Daniel Bartl (Uni Konstanz)

11:40 A maximum principle for a stochastic optimal control problem in L^q spaces
Mahdi Azimi (University Halle-Wittenberg)

12:05 Doubly Reflected BSDEs and non-linear \mathcal{E}^f -Dynkin games: beyond right-continuity
Miryana Grigorova (Centre for Risk and Insurance, Hannover)

Section 2 – Spatial statistics and random structures HS Virologie

11:15 Local averages tests for random fields
Evgenii Sovetkin (RWTH Aachen)

11:40 Extreme Value Asymptotics for Moving Local Means in Random Fields
Ansgar Matthias Steland (RWTH Aachen)

12:05 Convergence rates for geostatistical thinning of point processes based on Gaussian random fields
Dominic Schuhmacher (Universität Göttingen)



Section 3 – Limit theorems, large deviations and extremes HS Physiologie

11:15 On the sample autocovariance of a Lévy driven continuous time moving average process sampled at a renewal sequence
Dirk-Philip Brandes (University Ulm)

11:40 Limit Theorems for Bipower / Multipower Variations of stationary increments Lévy Driven Moving Averages
Andre Pessik (TU Dortmund)

12:05 A Limit theorems for a class of moving average processes under multiple degeneracies
Mathias Mørck Ljungdahl (Aarhus University)

Section 4a – Finance, insurance & risk: modelling HS Chemie

11:15 Risk measures based on benchmark loss distributions
Matteo Burzoni (ETH Zurich)

11:40 Systemic Risk Measures, an axiomatic approach
Ludger Overbeck (Justus-Liebig-Universität Gießen)

12:05 Design of insurance contract under ambiguity. Applications in climate-change events
Corina Birghila (University of Vienna)

Section 4b – Finance, insurance & risk: statistics HS Rundbau

11:15 Utility indifference pricing of insurance catastrophe derivatives
Gunther Leobacher (University of Graz)

11:40 The Seasonality in the Implied Volatility of Electricity Options
Maren Diane Schmeck (Bielefeld University)

12:05 Continuous-time threshold autoregressions with jumps
Daniel Lingohr (University of Augsburg)

Section 5a – Stochastic modelling in Physics HS II Geolog.

11:15 On the projection of the two-dimensional Ising model onto a line
Diana-Camelia Conache (TU München)

11:40 Second Class Particles at Shocks in TASEP
Peter Nejjar (IST Austria)

12:05 Geometric Functionals of Fractal Percolation
Steffen Winter (Karlsruhe Institute of Technology)



13th German Probability and Statistics Days
 Freiburger Stochastik-Tage, February 27–March 2, 2018
 Program Tuesday

Section 7 – Stochastic processes		HS Weismann
11:15	The set of sub- σ -algebras is a compact metric space <i>Jonas M. Tölle (Universität Augsburg)</i>	
11:40	An extension of Markov kernels and disintegration <i>Asgar Jammeshan (University of Konstanz)</i>	
12:05	Symmetric Equilibria in Stochastic Timing Games <i>Jan-Henrik Steg (Bielefeld University)</i>	
Section 8 – Time series		SR Physik 0008
11:15	Bootstrapping characteristic functions under local stationarity <i>Carina Beering (Technische Universität Braunschweig)</i>	
11:40	Change-point tests for LMSV time series <i>Annika Betken (Ruhr-Universität Bochum)</i>	
12:05	Bootstrap methods for vector autoregression estimators in generalized dynamic factor models <i>Alexander Braumann (TU Braunschweig)</i>	
Section 10 – Nonparametric and asymptotic statistics		(Invited speaker) HS Anatomie
11:15	Nonparametric regression function estimation with non compactly supported bases <i>Fabienne Comte (Université Paris Descartes)</i>	
Section 12 – Statistical methodology		SR Geologie
11:15	The Distance Standard Deviation <i>Dominic Edelmann (German Cancer Research Center)</i>	
11:40	D -optimal saturated designs for the Bradley-Terry paired comparison model <i>Frank Röttger (OVGU Magdeburg)</i>	
12:05	Generalized functional linear models with points of impact <i>Dominik Poß (University of Bonn)</i>	



13th German Probability and Statistics Days
 Freiburger Stochastik-Tage, February 27–March 2, 2018
 Program Tuesday

14:00 – 15:40		
Section 1 – Stochastic analysis		HS Kristall
14:00	Stability for gains from large investors' strategies in M1/J1 topologies <i>Peter Frentrup (Humboldt-Universität zu Berlin)</i>	
14:25	Decorrelation and Persistence of the Rosenblatt process <i>Christian Mönch (Universität Mannheim)</i>	
14:50	Parameter estimate for a linear parabolic fractional SPDE <i>Wilfried Grecksch (Martin-Luther-University Halle-Wittenberg)</i>	
15:15	Periodic ergodicity for degenerate diffusions with time-dependent drift <i>Simon Holbach (Johannes-Gutenberg-Universität Mainz)</i>	
Section 2 – Spatial statistics and random structures		HS Virologie
14:00	Binary trees and their limits <i>Rudolf Grübel (Leibniz Universität Hannover)</i>	
14:25	Diffusion limit of the Aldous chain on cladograms in a new state space of algebraic measure trees <i>Wolfgang Löhr (TU Chemnitz, University of Duisburg-Essen)</i>	
14:50	Branching processes with disasters and applications for duplication-based random graphs <i>Felix Hermann (Albert-Ludwigs-Universität Freiburg)</i>	
15:15	Graph-based Pólya urns on countable networks <i>Christian Hirsch (LMU Munich)</i>	
Section 3 – Limit theorems, large deviations and extremes		HS Physiologie
14:00	Average Extreme Regression Quantile and its One-Step Version <i>Jana Jureckova (Charles University, Prague)</i>	
14:25	On a generalized Darling-Erdős theorem <i>Gauthier Dierickx (University of Luxembourg)</i>	
14:50	Extremes of observations with heavy-tailed inter-arrival times <i>Katharina Hees (Universität Dortmund)</i>	
15:15	A deviation inequality for martingales and some applications <i>Davide Giraudo (Ruhr Universität Bochum)</i>	



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 Freiburger Stochastik-Tage, February 27–March 2, 2018
 Program Tuesday

Section 4a – Finance, insurance & risk: modelling		HS Chemie
14:00	Model-independent finance with a focus on applications <i>Daniel Schmithals (Karlsruhe Institute of Technology)</i>	
14:25	Good Deal Hedging and Valuation under Combined Uncertainty about Drift and Volatility: A 2nd order BSDE approach <i>Dirk Becherer (Humboldt Universität zu Berlin)</i>	
14:50	Non-Smooth Verification for Impulse Control Problems <i>Sören Christensen (University of Trier)</i>	
15:15	Testing if the market microstructure noise is a function of the limit order book <i>Simon Clinet (Keio University)</i>	
Section 5a – Stochastic modelling in Physics		HS II Geolog.
14:25	Stochastic optimal control theory for quantum systems <i>Jeanette Köppe (Martin-Luther-Universität Halle-Wittenberg)</i>	
14:50	Empiristic probability theory: A new view of von Mises collectives <i>Lutz Mattner (Universität Trier)</i>	
15:15	Adaptive Calculation of Global Sensitivity Indices <i>Diana Ackermann (Fraunhofer Institute ITWM, Kaiserslautern)</i>	
Section 7 – Stochastic processes		HS Weismann
14:00	On entrance boundaries and quasi-processes <i>Martin Maiwald (University Münster)</i>	
14:25	Infinite rate symbiotic branching on the real line: The tired frogs model <i>Achim Klenke (Universität Mainz)</i>	
14:50	Wasserstein-eigenmetrics of Markov chains <i>Florian Völlering (University of Bath)</i>	
15:15	Wasserstein and total variation distance between marginals of Lévy processes <i>Ester Mariucci (Humboldt University)</i>	



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 Freiburger Stochastik-Tage, February 27–March 2, 2018
 Program Tuesday

Section 8 – Time series		SR Physik 0008
14:00	Modeling and Prediction of Dynamic Networks using binary autoregressive time series processes <i>Shaikh Tanvir Hossain (University of Mannheim)</i>	
14:25	Bootstrapping functional autoregressions <i>Jürgen Franke (University of Kaiserslautern)</i>	
14:50	Functional data analysis in the Banach space of continuous functions <i>Kevin Kokot (Ruhr-Universität Bochum)</i>	
15:15	Periodogram of Functional Time Series and Related Quantities <i>Daniel Constantin Rademacher (Technische Universität Braunschweig)</i>	
Section 12 – Statistical methodology		
14:00	On Bayesian uncertainty quantification <i>Aad van der Vaart (Leiden University)</i>	HS Anatomie
14:50	Multiscale change point detection based on moving sums <i>Claudia Kirch (Otto-von-Guericke University Magdeburg)</i>	SR Geologie
15:15	Multiple Change Point Detection: A MOSUM Approach Based on Estimating Functions <i>Kerstin Reckrühm (Otto-von-Guericke-Universität Magdeburg)</i>	



16:30 – 17:30

Plenary Talk 2 HS Anatomie

16:30 Voronoi cells in the Brownian continuum random tree
Christina Goldschmidt (Oxford)

17:30 – 18:20

Section 1 – Stochastic analysis HS Kristall

17:30 Monotone stopping problems revisited
Sören Christensen (University of Hamburg)

17:55 Martingale Benamou-Brenier: a probabilistic perspective
Julio Backhoff Veraguas (TU Wien)

Section 2 – Spatial statistics and random structures HS Virologie

17:30 Bayesian networks based on max-linear structural equations
Claudia Klüppelberg (Technical University of Munich)

17:55 Backward nested subspace inference and applications to stem cell differentiation
Stephan F. Huckemann (Universität Göttingen)

Section 3 – Limit theorems, large deviations and extremes HS Physiologie

17:30 A Liouville property for the random conductance model
Tuan Anh Nguyen (Universität Duisburg-Essen)

17:55 A random walk between long and short range dependence
Martin Wendler (University Greifswald)

Section 6 – Stochastic optimization and operations research HS Anatomie

17:30 Risk-Averse Control of Partially Observable Markov Systems
Andrzej Ruszczyński (Rutgers University New Brunswick)

Section 7 – Stochastic processes HS Weismann

17:30 On Euler-type schemes for SDEs with discontinuous drift
Michaela Szölgényi (ETH Zürich)

17:55 Geometry of Distribution-Constrained Optimal Stopping Problems
Uwe Schmock (TU Wien)



Section 8 – Time series SR Physik 0008

17:30 Inference on the mean of high-dimensional random vectors in a multiple sample setting
Nils Mause (RWTH Aachen)

17:55 On a pseudo-maximum likelihood estimator for the extremal index
Axel Bücher (Ruhr-Universität Bochum)

Section 12 – Statistical methodology SR Geologie

17:30 Asymptotics of a non-Markov state transition probability estimator with applications to the expected length of stay
Dennis Dobler (Vrije Universiteit Amsterdam)



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18:30 – 21:00

Get Together and Poster Session

Historisches Kaufhaus

Intuitionistic Fuzzy Regression Functions Approach for Forecasting
Eren Bas (Giresun University, Turkey)

Volatility estimation for stochastic PDEs using high-frequency observations
Markus Bibinger (Philipps-Universität Marburg)

Comparing performance of tests for ANOVA under heterocedasticity
Mustafa Çavuş (Anadolu University, Turkey)

Solution methods for equations with random parameters
Ganna Chekhanova (TU Bergakademie Freiberg,)

Weak convergence of the solution to the stochastic heat equation driven by a pure jump Lévy white noise
Thomas Delerue (Technical University of Munich)

Tests on Asymmetry for Ordered Categorical Variables
Monika Doll (University of Erlangen-Nürnberg)

Bootstrapped linear and nonlinear artificial neural network for time series forecasting
Erol Egrioglu (Giresun University, Turkey)

Testing the Equality in Distribution of Two Random Graphs
Maurilio Gutzeit (OVGU Magdeburg)

High-frequency expert opinions and power utility maximization in a market with Gaussian drift
Kondakji Hakam (BTU Cottbus-Senftenberg)

Semi-Static and Sparse Variance-Optimal Hedging
Martin Haubold (TU Dresden)

Polynomial Semimartingales
Wahid Khosrawi-Sardroudi (University of Freiburg)

Stochastic reconstruction for inhomogeneous point processes
Kateřina Kořasová (Charles University, Prag)

Confidence Intervals for Markov Transition and Generator Matrices, with Application to Credit Rating Migrations
Linda Möstel (University of Erlangen-Nuremberg)

Symbols and Time Inhomogenous Processes
Kevin Musielak (Universität Siegen)

The strong Law of large Numbers and the central limit Theorem for abstract Cauchy Problems driven by random Measures
Alexander Nerlich (Ulm University)

Quantification of spatial collocation patterns of shops and facilities using the two-dimensional Kolmogorov-Smirnov statistic
Takaaki Ohnishi (The University of Tokyo)

Uniform integrability of a single jump local martingale with state-dependent characteristics
Michael Schatz (ETH Zurich)



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Identifying differential distributions for single-cell RNA sequencing data comprising biological replicates

Roman Schefzik (German Cancer Research Center)

Randomized weight function in change-point tests and estimators
Stefanie Schwaar (Technische Universität Kaiserslautern)

Improving the performance of polling models using forced idle times
Sebastian Schwinn (Technische Universität Darmstadt)

Pesin's formula for isotropic Brownian flows
Vitalii Senin (TU Berlin)

Variational analysis for the solution of random differential equations
Hans-Jörg Starkloff (TU Bergakademie Freiberg)

L^p -solutions of BSDEs with Jumps – Existence and Comparison
Alexander Steinicke (Universität Graz)

Semi Markovian Queuing System with Bifurcation of Arrivals
Nino Svanidze (Shota Rustaveli Batumi State University, Georgia)

Self-organized criticality faithfully describes systemic risk in the interbank loan market
Wayne Tarrant (Rose-Hulman Institute of Technology)

Expert Opinions and their Approximation for Multivariate Stock Returns with Gaussian Drift
Dorothee Westphal (University of Kaiserslautern)

Winsorized Mean-Pi Artificial Neural Network based on Robust Learning for Time Series Forecasting
Ufuk Yolcu (Giresun University, Turkey)

Regularity structures for the primitive equations
Sebastian Zaigler (TU Darmstadt)



Program | Wednesday February 28

9:00 – 10:00

Plenary Talk 3 HS Anatomie

9:00 Beyond Mean-Field Limits: Local Dynamics of Interacting Stochastic Processes on Sparse Graphs
Kavita Ramanan (Brown University)

10:45 – 12:25

Section 1 – Stochastic analysis HS Kristall

10:45 Strong existence and uniqueness for stable SDEs with distributional drift
Oleg Butkovsky (Technische Universität Berlin; Technion, Haifa)

11:10 Parabolic SPDE with multiplicative Lévy noise
Lena-Susanne Hartmann (Friedrich-Schiller-Universität)

11:35 Large linear systems of coupled diffusions
Nils Detering (University of California Santa Barbara)

12:00 Generalized Itô formulas for Itô semimartingales
Randolf Altmeyer (Humboldt-Universität Berlin)

Section 2 – Spatial statistics and random structures HS Virologie

10:45 Convex Cones Spanned by Regular Polytopes, and Probabilistic Applications
Hauke Seidel (Universitaet Münster)

11:10 Absorption probabilities for Gaussian polytopes and angles of regular simplices
Zakhar Kabluchko (WWU Münster)

11:35 Isotropic random polytopes
Julian Grote (Ruhr University Bochum)

12:00 Limit theorems for random polytopes with vertices on convex surfaces
Nicola Turchi (Ruhr-Universität Bochum)



Section 3 – Limit theorems, large deviations and extremes HS Physiologie

10:45 Bounds on the rates of convergence in Pólya urns
Ralph Neininger (Goethe University Frankfurt)

11:10 Central limit theorem analogues for multicolor urn models
Noela Müller (Goethe University Frankfurt)

11:35 The cycle structure of random permutations without macroscopic cycles
Helge Schäfer (Technische Universität Darmstadt)

12:00 On Bobkov's approximate de Finetti representation via new permanent approximation inequalities
Bero Roos (University of Trier)

Section 4a – Finance, insurance & risk: modelling HS Chemie

11:10 Hidden Markov Model for the Contagion between Eurozone Spreads
Camilla Damian (WU Vienna)

11:35 Information Jumps produced by Meyer- σ -fields vs. The Urge of Investment
David Beßlich (Technische Universität Berlin)

12:00 Semi-Static Variance-Optimal Hedging in Stochastic Volatility Models with Fourier Representation
Paolo Di Tella (TU Dresden)

Section 4b – Finance, insurance & risk: statistics HS Rundbau

10:45 Central Bank Interest Rate Policy - Bayesian Analysis Using a Cross Nested AOP Model
Armin Seibert (University of Augsburg)

11:10 Empirical Analysis and Forecasting of Multiple Yield Curves
Christoph Gerhart (University of Freiburg)

11:35 The utility of Basel III rules on excessive violations of internal risk models
Wayne Tarrant (Rose-Hulman Institute of Technology)

12:00 Attention to Bitcoin
Amirhossein Sadoghi (University of Hohenheim)



Section 5a – Stochastic modelling in Physics HS II Geolog.

- 10:45 Convergence of vertex-reinforced jump processes to an extension of the supersymmetric hyperbolic nonlinear sigma model
Silke Rolles (TU München)
- 11:10 A fresh look at R-positivity
Jan M. Swart (Czech Acad. Sci)
- 11:35 Fluctuations and the phase diagram of the complex BBM energy model
Anton Klimovsky (Universität Duisburg-Essen)
- 12:00 The Elliptic Fixed Trace Ensemble: Universality at Strong and Weak non-Hermiticity
Martin Venker (Ruhr-Universität Bochum)

Section 6 – Stochastic optimization and operations research SR Geologie

- 10:45 On Finding Equilibrium Stopping Times for Time-Inconsistent Markovian Problems
Kristoffer Lindensjö (Stockholm University)
- 11:10 Optimal Liquidation under Stochastic Liquidity
Todor Bilarev (Humboldt-Universität zu Berlin)
- 11:35 On a Dividend Problem with Capital Injection over a Finite Horizon
Giorgio Ferrari (Bielefeld University)
- 12:00 Optimal Stopping at Random Intervention Times
Mick Schaefer (University of Hamburg)

Section 7 – Stochastic processes

- 10:45 Dimension of the boundary of the super-Brownian motion HS Anatomie
Leonid Mytnik (Technion Haifa)
- 11:35 Entrance laws for annihilating Brownian motions HS Weismann
Matthias Hammer (TU Berlin)



Section 8 – Time series SR Physik 0008

- 10:45 Generalized binary time series models
Lena Reichmann (Universität Mannheim)
- 11:10 Identification of independent structural shocks in the presence of multiple Gaussian components
Simone Maxand (University of Goettingen)
- 11:35 Regularly varying time series and max-stable processes
Anja Janssen (KTH Royal Institute of Technology Sweden)
- 12:00 On Eigenvalues of the Transition Matrix of some Count-Data Markov Chains
Christian H. Weiß (Helmut-Schmidt University)

Section 9 – Computational statistics and data analysis HS Anatomie

- 11:35 On developing general and efficient inference algorithms for complicated hierarchical models
Thordis L. Thorarinsdottir (Norwegian Computing Center)

Section 10 – Nonparametric and asymptotic statistics HS Phys.-Prak.

- 10:45 Nonparametric estimation of locally stationary Hawkes processes
Enno Mammen (Heidelberg University)
- 11:10 Minimax rate optimal estimation of linear functionals under differential privacy
Lukas Steinberger (University of Freiburg)
- 11:35 The power of big data sparse signal detection tests on nonparametric detection boundaries
Marc Ditzhaus (Heinrich-Heine University Düsseldorf)
- 12:00 Nonparametric inference for continuous-time event counting and link-based dynamic network models
Alexander Kreiß (Heidelberg University)



13th German Probability and Statistics Days
 Freiburger Stochastik-Tage, February 27–March 2, 2018
 Program Wednesday

14:00 – 15:40

Section 2 – Spatial statistics and random structures HS Virologie

14:00 Concentration inequalities for measures of a Boolean model
Günter Last (Karlsruher Institut für Technologie)

14:25 Multivariate normal approximation of Poisson functionals
Matthias Schulte (University of Bern)

Section 3 – Limit theorems, large deviations and extremes HS Physiologie

14:00 Universality in Random Moment Spaces
Dominik Tomecki (Ruhr Universität Bochum)

14:25 Higher Order Concentration of Measure
Holger Sambale (Bielefeld University)

14:50 Exit time asymptotics for small noise stochastic delay differential equations
David Lipshutz (Technion Haifa)

15:15 Expected number of real zeroes of random Taylor series
Hendrik Flasche (WWU Münster)

Section 4a – Finance, insurance & risk: modelling HS Chemie

14:00 Optimal Liquidation under Partial Information with Price Impact
Rüdiger Frey (Vienna University of Economics and Business)

14:25 How local in time is the no-arbitrage property under capital gains taxes?
Christoph Kühn (Goethe University)

14:50 Dynamic trading under integer constraints
Stefan Gerhold (TU Wien)

15:15 Dividends with Tax and Capital Injection in a Spectrally Negative Lévy Risk Model
Hanspeter Schmidli (University of Cologne)



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Section 4b – Finance, insurance & risk: statistics HS Rundbau

14:00 A multifactor approach to modelling the impact of wind energy on electricity spot prices
Paulina Agata Rowińska (Imperial College London)

14:25 Modelling and inference for electricity prices by oscillating Ornstein-Uhlenbeck processes
Jeannette Woerner (TU Dortmund)

14:50 Modelling electricity prices using nearly alpha-stable processes
Genot Müller (Augsburg University)

15:15 Stochastic models for hourly photovoltaic yields
Matthias Reuber (Universität Siegen)

Section 5b – Stochastic modelling in Biology HS II Geolog.

14:00 On classifying genealogies for general diploid exchangeable population models
Anja Sturm (Universität Göttingen)

14:25 The collision spectrum of Λ -coalescents
Martin Möhle (University of Tübingen)

14:50 Coalescent trees – do subsamples reach the root?
Fabian Freund (University of Hohenheim)

15:15 Modeling gene genealogies in highly fecund populations
Bjarki Eldon (Museum fuer Naturkunde)

Section 7 – Stochastic processes HS Weismann

14:00 Fastest and entropy-maximising random walks on groups
Lorenz Alexander Gilch (Universität Passau, Technische Universität Graz)

14:25 Lifting preferential attachment trees yields beta coalescents
Helmut Pitters (TU Dresden)

14:50 The speed of biased random walk among random conductances
Jan Nagel (TU Eindhoven)

15:15 Lyapunov exponents on trees
Gundelinde Wiegel (Graz University of Technology)



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Section 8 – Time series SR Physik 0008

14:00 A comparison of high-dimensional sample covariance and correlation matrices of a heavy-tailed time series
Johannes Heiny (Aarhus University)

14:25 Inference for High-Dimensional Time Series Based on Bilinear Forms of Covariance Matrices with Applications to Shrinkage
Ansgar Matthias Steland (RWTH Aachen)

14:50 Long-Run Precision Matrix Estimation for High-Dimensional Linear Processes
Mario Philipp Rothfelder (Tilburg University)

15:15 Determination of Vector Error Correction Models in High Dimensions
Chong Liang (Karlsruhe Institute of Technology)

Section 10 – Nonparametric and asymptotic statistics HS Phys.-Prak.

14:00 Inference For High-Dimensional Split-Plot-Designs:
 A Unified Approach for Small to Large Numbers of Factor Levels
Paavo Sattler (Ulm University)

14:25 Nonparametric Procedures for Factorial Designs: Treatment Effects and Testing Hypotheses
Markus Pauly (Ulm University)

14:50 A Test of exogeneity in the functional linear regression model
Manuela Dorn (Universität Bayreuth)

Section 12 – Statistical methodology SR Geologie

14:00 Asymptotic distribution of the stopping time in sequential change-point procedures based on U -Statistics
Christina Stöhr (Otto-von-Guericke Universität Magdeburg)

14:25 First-order autoregressive processes with irregular innovations
Hanna Gruber (TU Braunschweig)

14:50 Bayesian Combining of Probability and Non-Probability Samples for Survey Error Reduction and Cost Savings
Joseph Sakshaug (University of Manchester, Institute for Employment Research)

15:15 Order-Sensitivity and Equivariance of Scoring Functions
Tobias Fissler (Imperial College London)



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16:30 – 18:35

Section 1 – Stochastic analysis HS Kristall

16:30 The principal eigenvalue of the Anderson Hamiltonian in continuous space
Willem van Zuijlen (WIAS & HU Berlin)

16:55 Multi-level Picard approximations for high-dimensional nonlinear parabolic partial differential equations
Thomas Kruse (Universität Duisburg-Essen)

17:20 Weak convergence rates for noise discretizations of stochastic evolution equations
Marvin S. Mueller (ETH Zurich)

17:45 About existence, uniqueness and numerical approximation for some stochastic partial differential equations
Sara Mazzonetto (Universität Duisburg-Essen)

18:10 Malliavin Calculus for enlarged σ -fields and Applications to the Approximation of SDEs and SPDEs
Anselm Hudde (Universität Duisburg-Essen)

Section 2 – Spatial statistics and random structures HS Virologie

16:30 Monotonicity of facet numbers of random convex hulls
Gilles Bonnet (Ruhr University Bochum)

16:55 Convex Hulls of Poisson Point Processes, Random Cones and Random Points on Half-Spheres
Daniel Temesvari (Ruhr-Universität Bochum)

17:20 Continuum percolation for Cox point processes
Benedikt Jahnel (WIAS Berlin)

17:45 An algorithm for computing Fréchet means on the sphere
Johannes Wieditz (Georg-August-Universität Göttingen)

18:10 Variances of estimators based on pixel configuration counts
Jürgen Kampf (Ulm University)



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Section 3 – Limit theorems, large deviations and extremes	HS Physiologie
16:30 A new proof of Pinelis and Sakhanenko's Bennett-type inequality for vectors <i>Matthias Glock (TU Ilmenau)</i>	
16:55 Limit theorems for multivariate long-range dependent processes <i>Marie-Christine Düker (Ruhr-Universität Bochum)</i>	
17:20 Limit theorems for volumes of excursion sets of anisotropic Gaussian random fields <i>Vitalii Makogin (Universität Ulm)</i>	
17:45 Limit theorems for random walks on noncompact Grassmannians with growing dimensions <i>Merdan Artykov (TU Dortmund)</i>	
Section 4a – Finance, insurance & risk: modelling	HS Chemie
16:30 The Optimal Martingale Transport Problem with additional Information about Variance of the Returns <i>Julian Sester (Albert-Ludwigs-Universität Freiburg)</i>	
16:55 Model reduction for filtering and portfolio optimization in Markov switching models <i>Jörn Sass (University of Kaiserslautern)</i>	
17:20 Equilibrium Asset Pricing with Transaction Costs <i>Martin Herdegen (University of Warwick)</i>	
17:45 Extensions of mean-variance portfolio selection <i>Frank Bosserhoff (Ulm University)</i>	
18:10 Financial risk measures for portfolios of light-tailed claims <i>Miriam Isabel Seifert (Ruhr-Universität Bochum)</i>	
Section 4b – Finance, insurance & risk: statistics	HS Anatomie
16:30 Inference for stochastic differential equations with random effects <i>Valentine Genon-Catalot (Université Paris Descartes)</i>	
Section 5b – Stochastic modelling in Biology	HS II Geolog.
16:30 A stochastic individual-based model for cancer immunotherapy <i>Anna Katharina Kraut (University of Bonn)</i>	
16:55 On the Averaging of Gram Matrices in Random Tomography <i>Christian Rau</i>	
17:20 Relaxed Network Deconvolution <i>Stephanie Nargang (TU Dresden)</i>	



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Section 6 – Stochastic optimization and operations research	SR Geologie
16:30 On the pointwise superhedging duality in continuous time <i>Michael Kupper (University of Konstanz)</i>	
16:55 Stochastic vector optimization and parameter-dependent stochastic optimal control <i>Asgar Jamneshan (University of Konstanz)</i>	
17:20 On almost sure rates of convergence for sample average approximations <i>Ralf Werner (Universität Augsburg)</i>	
17:45 Worst-Case Optimal Investment in Incomplete Markets <i>Sascha Desmettre (University of Kaiserslautern)</i>	
Section 7 – Stochastic processes	HS Weismann
16:30 Lévy processes conditioned to avoid an interval <i>Philip Weißmann (University of Mannheim)</i>	
16:55 A Solution Technique for Long Term Average Impulse Control Problems for Levy Processes <i>Tobias Sohr (Universität Hamburg)</i>	
17:20 Optimal stopping of one-dimensional diffusions with generalised drift <i>Neofytos Rodosthenous (Queen Mary University of London)</i>	
17:45 Causal CARMA processes on the plane <i>Viet Son Pham (Technical University of Munich)</i>	
18:10 Inherent Numerical Instability in Computing Invariant Measures of Markov Chains <i>Hendrik Baumann (Clausthal University of Technology)</i>	



Section 8 – Time series SR Physik 0008

16:30 Towards a general theory for non-linear locally stationary processes
Stefan Richter (Heidelberg University)

16:55 Testing for long memory in panel random-coefficient AR(1) data
Vytaute Pilipauskaite (Aarhus University)

17:20 Large-sample approximations for high-dimensional variance-covariance matrices of factor models
Monika Bours (RWTH Aachen)

17:45 Frequency domain hybrid bootstrap for spectral means
Marco Meyer (Helmut Schmidt University Hamburg)

18:10 Time Series Modeling on Dynamic Networks
Jonas Krampe (TU Braunschweig)

Section 10 – Nonparametric and asymptotic statistics HS Phys.-Prak.

16:30 Adaptive estimation in sup-norm for semiparametric conditional location-scale mixtures
Heiko Werner (Philipps-Universität Marburg)

16:55 Construction of asymptotic confidence bands for the jump curve in bivariate regression problems
Viktor Bengs (Philipps University Marburg)

17:20 Asymptotic linear expansion of regularized M-estimators
Tino Werner (Carl von Ossietzky Universität)

17:45 Testing for Independence of Large Dimensional Vectors
Nestor Parolya (Leibniz University Hannover)

Section 11 – Statistics of stochastic processes HS Anatomie

17:20 Nearly Blind Deconvolution of Gaussian Processes
Victor Panaretos (EPFL Lausanne)

18:45 – 19:45

General Assembly Fachgruppe Stochastik HS Anatomie
 including the best dissertation award and a historic reflection of 25 years *Fachgruppe Stochastik*.





Program | Thursday March 1

9:00 – 10:00	
Plenary Talk 4	HS Anatomie
9:00	Three principles of data science: predictability, stability, and computability <i>Bin Yu (UC Berkeley)</i>
10:45 – 12:25	
Section 1 – Stochastic analysis	HS Anatomie
10:45	Randomness in 2D Euler equations <i>Franco Flandoli (Scuola Normale Superiore of Pisa)</i>
Section 4a – Finance, insurance & risk: modelling	HS Chemie
10:45	A mathematical framework for inefficient market bubbles <i>Michael Schatz (ETH Zurich)</i>
11:10	Brownian trading excursions <i>Thorsten Rheinländer (TU Wien)</i>
11:35	Functional central limit theorems for rough volatility models <i>Aitor Muguruza Gonzalez (Imperial College London)</i>
12:00	The order barrier for strong approximation of rough volatility models <i>Taras Shalaiko (Uni Mannheim)</i>
Section 4b – Finance, insurance & risk: statistics	HS Rundbau
10:45	Multivariate subordination of stable processes <i>Vladimir Panov (Higher School of Economics, Russian Federation)</i>
11:10	Efficient Rare Event Simulation for Multiple Jump Events in Regularly Varying Random Walks and Compound Poisson Processes <i>Bohan Chen (CWI, Netherlands)</i>
11:35	Entropic Risk Measures <i>Alois Pichler (TU Chemnitz)</i>
12:00	Regularised empirical sieve approach for pricing kernel estimation <i>Ekaterina Krymova (Universität Duisburg-Essen)</i>



Section 5b – Stochastic modelling in Biology	HS II Geolog.
10:45	Freidlin-Wentzell type large deviations for population dynamics <i>Richard Kraaij (Ruhr University of Bochum)</i>
11:10	On interacting particle systems and Darwinian evolution <i>Gabriel Hernan Berzunza Ojeda (Georg-August-Universität Göttingen)</i>
11:35	Uniformity of hitting times of the contact process <i>Markus Heydenreich (LMU München)</i>
12:00	Ergodicity of a system of interacting random walks with asymmetric interaction <i>Luisa Andreis (WIAS Berlin)</i>
Section 7 – Stochastic processes	HS Weismann
10:45	Thin-decomposition of random times and applications <i>Monique Jeanblanc (LaMME, Évry Cedex)</i>
11:10	Hybrid marked point processes: characterisation, existence and uniqueness <i>Maxime Morariu-Patrichi (Imperial College London)</i>
11:35	Weak dependence and GMM estimation for supOU and mixed moving average processes <i>Imma Valentina Curato (Ulm University)</i>
12:00	Exponential functionals of Markov additive processes <i>Apostolos Sideris (TU Dresden)</i>
Section 8 – Time series	HS Anatomie
11:35	Linear Regression with Time Series Regressors <i>Suhasini Subba Rao (Texas A&M University)</i>
Section 9 – Computational statistics and data analysis	SR Geologie
10:45	Distance Multivariance – a new dependence measure for multiple random vectors <i>Martin Keller-Ressel (TU Dresden)</i>
11:10	Parametric classes of star-shaped distributions <i>Eckhard Liebscher (University of Applied Sciences Merseburg)</i>
11:35	Learning Mixtures of Gaussians via Method of Moments <i>Carlos Améndola (Technische Universität Berlin, Technische Universität München)</i>
12:00	Statistical postprocessing of sea surface temperature forecasts <i>Claudio Heinrich (Norwegian Computing Center)</i>



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Section 10 – Nonparametric and asymptotic statistics HS Phys.-Prak.

10:45 A family of adaptive Bayesian methods for statistical ill-posed inverse problems
Xavier Loizeau (Universität Heidelberg)

11:10 Adaptive procedure for Fourier density estimation
Céline Duval (Université Paris Descartes)

11:35 Empirical Risk Minimization as Parameter Choice Rule for General Linear Regularization Methods
Frank Werner (Max Planck Institute for biophysical Chemistry, Göttingen)

12:00 Data-driven Estimation by Aggregation based on a penalised contrast criterion
Jan Johannes (Ruprecht-Karls-Universität Heidelberg)

Section 11 – Statistics of stochastic processes SR Physik 0008

10:45 A universal approach to estimate the conditional variance in semimartingale limit theorems
Mathias Vetter (Christian-Albrechts-Universität zu Kiel)

11:10 The realized empirical distribution function of stochastic variance with application to goodness-of-fit testing
Bezirgen Veliyev (Aarhus University)

11:35 Central Limit Theorems for the Autocovariance of a Moving Average Random Field
David Berger (Ulm University)

12:00 Volatility estimation for stochastic PDEs
Carsten Chong (École Polytechnique Fédérale de Lausanne)



13th German Probability and Statistics Days
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 Program Thursday

14:00 – 15:40

Section 1 – Stochastic analysis HS Kristall

14:00 The Fourth Characteristic of a Semimartingale
Alexander Schnurr (Siegen University)

14:25 Error bounds on the normal approximation in non-diffusive situations
Christian Döbler (University of Luxembourg)

14:50 Random dynamical systems and rough paths
Sebastian Riedel (TU Berlin)

15:15 Rough convolution equations and related SDEs
David Johannes Prömel (University of Oxford)

Section 3 – Limit theorems, large deviations and extremes HS Physiologie

14:25 Asymptotic routing properties in a Gibbsian model for highly dense multihop networks
András József Tóbiás (Technische Universität Berlin)

14:50 Efficient simulation of Brown-Resnick processes based on variance reduction of Gaussian processes
Marco Oesting (Universität Siegen)

15:15 On Bernstein's blocking method for strongly mixing spatial processes
Lothar Heinrich (Augsburg University)

Section 4a – Finance, insurance & risk: modelling

14:00 Quantile-based Risk Sharing
Paul Embrechts (ETH Zurich) HS Anatomie

14:50 Parametric Monte Carlo by Chebyshev Interpolation and Applications
Kathrin Glau (Queen Mary University of London) HS Chemie

15:15 Robust strategies for financing risky investments
Mikhail Urusov (University of Duisburg-Essen)



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Section 5b – Stochastic modelling in Biology HS II Geolog.

14:00 Lines of descent in a deterministic model with mutation, selection and pairwise interaction
Sebastian Hummel (Bielefeld University)

14:25 Tree lengths under additive selection
Elisabeth Huss (Albert-Ludwigs-Universität Freiburg)

14:50 Ancestral lines under selection and recombination
Carolin Herrmann (Bielefeld University)

15:15 Maintenance of diversity in a parasite population capable of persistence and reinfection
Cornelia Pokalyuk (Universität Frankfurt)

Section 7 – Stochastic processes HS Weismann

14:00 Persistence probabilities of fractional Gaussian sequences
Micha Buck (Technische Universität Darmstadt)

14:25 Robust LDP for Markov chains through an extended Laplace principle
Stephan Eckstein (University of Konstanz)

14:50 Generators of measure-valued jump-diffusions
Martin Larsson (ETH Zurich)

15:15 Discretizing Malliavin calculus
Peter Parczewski (Mannheim University)

Section 9 – Computational statistics and data analysis SR Geologie

14:00 Focusing on regions of interest in forecast evaluation
Bernhard Klar (Karlsruher Institut für Technologie)

14:25 Spatially adaptive Bayesian estimation for Probabilistic Temperature Forecasts
Annette Möller (Clausthal University of Technology)

14:50 Similarity-based semilocal estimation of post-processing models
Sebastian Lerch (Karlsruhe Institute of Technology)

15:15 Combining predictive distributions for calibration of ensemble forecasts for precipitation accumulation
Sándor Baran (University of Debrecen.)



13th German Probability and Statistics Days
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 Program Thursday

Section 10 – Nonparametric and asymptotic statistics HS Phys.-Prak.

14:00 On minimax optimal and adaptive estimation of linear functionals in inverse Gaussian sequence space models
Martin Kroll (ENSAE-ParisTech CREST)

14:25 On the Optimal Reconstruction of Partially Observed Functional Data
Dominik Liebl (Universität Bonn)

14:50 Nonparametric Estimation in Poisson Autoregression
Maximilian Wechsung (Friedrich Schiller University Jena)

15:15 Multiscale scanning in inverse problems
Katharina Proksch (University of Göttingen)

Section 11 – Statistics of stochastic processes SR Physik 0008

14:00 Ornstein-Uhlenbeck Equivalents of Polynomial Processes
Jan Kallsen (Christian-Albrechts-Universität zu Kiel)

14:25 Inference on the Trend of a High-Frequency Observed Lévy Jump Process
Christian Palmes (TU Dortmund)

14:50 Estimation of the Jump Activity Index in the Presence of Random Observation Times
Adrian Theopold (CAU Kiel)

15:15 Estimation of stopping times for some stopped Lévy processes on hypergroups
Viktor Schulmann (TU Dortmund)



13th German Probability and Statistics Days
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 Program Thursday

16:30 – 18:35

Section 1 – Stochastic analysis HS Kristall

16:30 Recent results on grey Brownian motion
Wolfgang Bock (TU Kaiserslautern)

16:55 Solving linear parabolic rough partial differential equations
Martin Redmann (Weierstrass Institute Berlin)

17:20 On the Simulation of Iterated Stochastic Integrals in Infinite Dimensions
Claudine Leonhard (Christian-Albrechts-Universität zu Kiel)

17:45 The primitive equations driven by space-time white noise
Martin Saal (TU Darmstadt)

18:10 An analysis of variance reduction methods in stochastic homogenization
Julian Fischer (IST Austria)

Section 4a – Finance, insurance & risk: modelling HS Chemie

16:30 On order statistics and their copulas
Markus Dietz (Bergakademie Freiberg)

16:55 Expectiles, Omega ratios and stochastic dominance
Alfred Müller (Universität Siegen)

17:20 Characterizations of Copulas for which the Bounds of Kendall's Tau are Attained
Sebastian Fuchs (Free University of Bozen-Bolzano)

17:45 Improved Fréchet–Hoeffding bounds, optimal transport and applications in finance
Antonios Papantoleon (NTUA)

18:10 Ordering properties of risk bounds in risk factor models
Jonathan Ansari (University of Freiburg)

Section 5a – Stochastic modelling in Physics HS Anatomie

17:20 Random operators in quantum diffusion and history dependent stochastic processes
Margherita Disertori (Bonn University)

Section 5b – Stochastic modelling in Biology HS Anatomie

16:30 Modelling populations under fluctuating selection
Alison Etheridge (University of Oxford)



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Section 7 – Stochastic processes HS Weismann

16:30 Stochastic domination in space-time for the supercritical contact process
Stein Andreas Bethuelen (Technische Universität München)

16:55 Affine Processes with Stochastic Discontinuities
Robert Wardenga (TU Dresden, Germany)

17:20 A semigroup approach to nonlinear Lévy processes
Max Nendel (University of Konstanz)

17:45 Affine Volterra processes
Eduardo Abi Jaber (Université Paris Dauphine)

Section 7 – Stochastic processes HS II Geolog.

16:30 General Erased-Word Processes: Ergodic laws and product type filtrations
Julian Gerstenberg (Leibniz Universität Hannover)

16:55 Convergence, Fluctuations and Large Deviations for finite state Mean Field Games via the Master Equation
Guglielmo Pelino (University of Padova)

17:20 Analysing Markov chains using random measures
Thomas Hotz (TU Ilmenau)

17:45 Small deviations of fractional Gaussian sums
Frank Aurzada (Technische Universität Darmstadt)

Section 9 – Computational statistics and data analysis SR Geologie

16:30 Consistency and Robustness Properties of Predictors Based on Locally Learned SVMs
Florian Dumpert (University of Bayreuth)

16:55 Implementing Monte Carlo Tests with P-value Buckets
Axel Gandy (Imperial College London)

17:20 Non-parametrically Interpolating Utility Points to Establish Smoothed Differentiable Utility Functions With an Application to Risk Preferences in Bogota
Sebastian Olivier Schneider (Goettingen University)

17:45 Testing for conditional dependence between domestic indexes using nonparametric copulas
Jone Ascorbebeitia Bilbatua (University of the Basque Country)

18:10 Change-point detection using the conditional entropy of ordinal patterns
Karsten Keller (University of Luebeck)



Section 10 – Nonparametric and asymptotic statistics HS Phys.-Prak.

16:30 Bayesian nonparametric analysis of multivariate time series
Alexander Meier (OvGU Magdeburg)

16:55 Nonparametric Gaussian Inference for Stable Processes
Fabian Mies (RWTH Aachen)

17:20 On high-frequency limits of U-statistics in Besov spaces over compact manifolds
Claudio Durastanti (Ruhr-Universität Bochum)

17:45 Tail empirical processes in nonparametric boundary regression
Holger Drees (University of Hamburg)

Section 11 – Statistics of stochastic processes SR Physik 0008

16:55 LAMN in a class of parametric models for null recurrent diffusions
Reinhard Hoefner (Universitaet Mainz)

17:20 Drift Estimation for Fractional Ornstein Uhlenbeck Processes With Periodic Structure
Radomyra Shevchenko (Technische Universität Dortmund)

17:45 Concentration inequalities for diffusion processes and their application to adaptive drift estimation in sup-norm loss, Part I
Cathrine Aeckerle (Universität Heidelberg)

18:10 Concentration inequalities for diffusion processes and their application to adaptive drift estimation in sup-norm loss, Part II
Claudia Strauch (Universität Mannheim)

19:30

Conference Dinner

Bürgerhaus Seepark





Program | Friday March 2

9:00 – 9:50	
Section 1 – Stochastic analysis	HS Kristall
9:00	Mild solutions to path-dependent PDEs <i>Alexander Kalinin (Imperial College London)</i>
9:25	Intermittency for the stochastic heat equation with Lévy noise <i>Carsten Chong (École Polytechnique Fédérale de Lausanne)</i>
Section 2 – Spatial statistics and random structures	HS Anatomie
9:00	Percolation for Poisson outdegree-one graphs <i>David Dereudre (University Lille)</i>
Section 3 – Limit theorems, large deviations and extremes	HS II Geolog.
9:00	Fluctuations in the preferential attachment model <i>Carina Betken (Universität Osnabrück)</i>
9:25	A limit theorem for the q -length of random functional graphs with fixed degree sequences <i>Kevin Leckey (Technische Universität Dortmund)</i>
Section 4b – Finance, insurance & risk: statistics	HS Rundbau
9:00	Elicitability and Identifiability of Measures of Systemic Risk <i>Tobias Fissler (Imperial College London)</i>
9:25	Robust forecast evaluation of expected shortfall <i>Johanna F. Ziegel (University of Bern)</i>
Section 6 – Stochastic optimization and operations research	SR Geologie
9:00	The min MSE Approach to Treatment Assignment for One and Multiple Treatment Groups <i>Sebastian Olivier Schneider (Goettingen University)</i>
9:25	Subsolutions for convex optimal control problems <i>Markus Fischer (University of Padua)</i>



Section 7 – Stochastic processes	HS Weismann
9:00	Mean-field dual of the cooperative branching process <i>Tibor Mach (Institute of Information Theory and Automation, Prague)</i>
9:25	The parabolic Anderson model with renormalized inverse-square Poisson potential <i>Renato Soares dos Santos (Weierstrass Institute Berlin)</i>
Section 8 – Time series	SR Physik 0008
9:00	A Justification of Conditional Confidence Intervals <i>Alexander Heinemann (Maastricht University)</i>
9:25	Parameter estimation and diagnostic tests for INMA(1) processes <i>Boris Aleksandrov (Helmut Schmidt University)</i>
Section 10 – Nonparametric and asymptotic statistics	HS Phys.-Prak.
9:00	On the consistency of false rejection proportion of adaptive multiple tests <i>Arnold Janssen (Heinrich-Heine University Düsseldorf)</i>
9:25	Weak convergence of quantile and expectile processes under general assumptions <i>Tobias Zwingmann (Philipps-Universität Marburg)</i>



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 Program Friday

10:30 – 11:20

Section 1 – Stochastic analysis HS Kristall

10:30 Invariant manifolds in the space of tempered distributions
Stefan Tappe (Albert-Ludwigs-University of Freiburg)

10:55 Projective simulation and regression methods for McKean-Vlasov SDEs
Denis Belomestny (Duisburg-Essen University)

Section 3 – Limit theorems, large deviations and extremes HS Anatomie

10:30 The maxima of the Riemann zeta function in a short interval of the critical line
Louis-Pierre Arguin (City University of New York)

Section 4b – Finance, insurance & risk: statistics HS Rundbau

10:30 Robust Dynamic Regression Modelling for Extreme Value Distributions with Applications to Finance
Peter Ruckdeschel (Oldenburg University)

10:55 Is more data always better? Optimal data usage in non-stationary systems
Jakob Krause (MLU Halle-Wittenberg)

Section 5b – Stochastic modelling in Biology HS II Geolog.

10:30 Scaling limits in a stochastic model for Lenski's long term evolution experiment
Anton Wakolbinger (Goethe-Universität Frankfurt)

10:55 How large is infinity? Simulations and heuristics for a stochastic model of Lenski's long-term evolution experiment
Sebastian Probst (Bielefeld University)

Section 6 – Stochastic optimization and operations research SR Geologie

10:30 A Regime-Switching Model for Energy Storage Valuation and Optimal Operation
Anton A. Shardin (BTU Cottbus-Senftenberg)

10:55 Efficient Computation of the Prokhorov Metric for Discrete Distributions
Christian Drescher (University of Augsburg)



13th German Probability and Statistics Days
 Freiburger Stochastik-Tage, February 27–March 2, 2018
 Program Friday

Section 7 – Stochastic processes HS Weismann

10:30 On the convergence problem in Mean Field Games: a two state model without uniqueness
Alekos Cecchin (University of Padova)

10:55 Approximation of geometrically ergodic Metropolis-Hastings algorithms
Nikolaus Schweizer (Tilburg University)

Section 10 – Nonparametric and asymptotic statistics HS Phys.-Prak.

10:30 Nonparametric Testing on Discontinuities of Probability Densities Using Truncated Asymmetric Kernels
Benedikt Funke (FH Aachen)

10:55 Applications of a minimum distance estimator for specific self-exciting point processes
Mirko Alexander Jakubzik (Technische Universität Dortmund)

Section 11 – Statistics of stochastic processes SR Physik 0008

10:30 Change point inference on volatility in noisy Itô semimartingales
Mehmet Madensoy (Mannheim University)

10:55 Asymptotics for functionals based on asynchronously observed semimartingales
Ole Martin (Christian-Albrechts-Universität zu Kiel)

11:30 – 12:40

Plenary Talk 5 HS Anatomie

11:30 Supply and Shorting in Speculative Markets
Marcel Nutz (Columbia University)

12:30 Closing



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