

**German-Polish Joint Conference on Probability  
and Mathematical Statistics  
Toruń, Poland, 6–9 June 2013  
– Schedule of Talks –**

**Wednesday, 5 June 2013**

18:00–21:00 Welcome Guests and registration

**Thursday, 6 June 2013**

08:45–09:00 Opening of the conference

09:00–10:00 Plenary Lecture I

Sara VAN DE GEER (Zürich): *Estimation and testing in high dimensions:  
a panorama*

10:00–10:30 Coffee break

10:30–13:00 Session Talks I

12:30–14:30 Lunch break

14:30–16:30 Session Talks II

16:30–17:00 Coffee break

17:00–19:00 Session Talks III

19:00–21:00 Reception: posters, cheese and wine

**Friday, 7 June 2013**

09:00–10:00 Plenary Lecture II

Rama CONT (London, Paris): *Functional Itô calculus and functional Kol-  
mogorov equations*

10:00–10:30 Coffee break

10:30–13:00 Session Talks IV

12:30–14:30 Lunch break

14:30–16:30 Session Talks V

16:30–17:00 Coffee break

17:00–19:00 Session Talks VI

19:30 Conference Dinner

**Saturday, 8 June 2013**

09:00–10:00 Plenary Lecture III

Dominique PICARD & Gérard KERKYACHARIAN (Paris): *Thomas Bayes’  
walk on manifolds: Part 1: Bayesian functional estimates on compact  
manifolds, Part 2: Frames and regularity spaces in geometric framework*

10:00–10:30 Coffee break

10:30–13:00 Session Talks VII

12:30–14:30 Lunch break

14:30–16:30 Session Talks VIII

16:30–17:00 Coffee break

17:00–19:00 Session Talks IX

20:00–21:00 Concert

## Sunday, 9 June 2013

- 09:00–11:00 Session Talks X  
11:00–11:15 Coffee break  
11:15–12:15 Plenary Lecture IV  
Frank DEN HOLLANDER (Leiden): *Extremal geometry for a Brownian porous medium*  
12:15–12:30 Closing of the conference  
12:30–13:30 Lunch  
16:00–17:00 VIIth Aleksander Nagajew Lecture on Limit Theorems of Probability Theory  
Herold DEHLING (Bochum): *Limit theorems for some robust change point tests in the presence of dependent data*  
17:00 P&S (Probability & Statistics) Picnic

## Monday, 10 June 2013

### Tomasz Schreiber's Memorial Session

- 09:00–09:30 Opening  
09:30–10:20 Lecture I  
Eva B. VEDEL-JENSEN (Aarhus): *A spatio-temporal model for fMRI data – with a view to resting state networks*  
10:20–10:40 Coffee break  
10:40–11:30 Lecture II  
Pierre CALKA (Rouen): *Limit theorems for random polytopes*  
11:30–12:20 Lecture III  
Roberto FERNÁNDEZ (Utrecht): *Models with exclusions: Discretization and perfect simulation*  
12:20–13:30 Lunch break  
13:30–14:20 Lecture IV  
Günter LAST (Karlsruhe): *Clark-Okone type martingale representations for Poisson martingales*  
14:20–15:10 Lecture V  
Matthew PENROSE (Bath): *Random parking and rubber elasticity*  
15:10–15:30 Coffee break  
15:30–16:20 Lecture VI  
Marie-Colette VAN LIESHOUT (Amsterdam): *Discrete multi-colour random mosaics with an application to network extraction*  
16:20–17:10 Lecture VII  
Hans-Otto GEORGII (München): *Branching random tessellations with interaction – a last project of Tomasz Schreiber*  
19:30 Concert

## Session Talks I (Thursday, 6 June, 10:30-12:30 [13:00])

### IPS 5: Applied Mathematical Finance

AULA

Session's organizers: Jacek JAKUBOWSKI, Thorsten SCHMIDT

- 10:30–11:00 Mariusz NIEWĘGŁOWSKI: *Local risk minimization for dividend streams, BSDE approach*
- 11:00–11:30 Michał BARSKI: *Monotone CDO term structure models*
- 11:30–12:00 Rüdiger KIESEL: *Model risk for energy markets*

### IPS 20: Spatial Stochastic Modeling

S9

Session's organizers: Rafał KULIK, Volker SCHMIDT

- 10:30–11:00 Henryk ADRIAN, Kurt WIENCEK: *Stochastic model for austenite grain chords in structural steels*
- 11:00–11:30 Stephan HUCKEMANN: *Stochastic spatio-temporal deconvolution for sparse image sequences under drift*
- 11:30–12:00 Gerd GAISELMANN: *Stochastic 3D modeling of fiber-based materials by means of multivariate time series*
- 12:00–12:30 Michael SCHEUERER: *Stochastic models for spatial dependence structures of precipitation fields*
- 12:30–13:00 Donata PUBLINSKAITE: *Aggregation of autoregressive random fields and anisotropic long memory* [Contributed talk]

### CPS 1: Convergence Rates for Markov Processes

S5

Session's organizers: Błażej MIASOJEDOW, Daniel RUDOLF

- 10:30–11:00 Andreas EBERLE: *Couplings and Wasserstein contractivity of diffusion processes revisited*
- 11:00–11:30 Robert PATTERSON: *Convergence of stochastic numerical methods for coagulation and advection*
- 11:30–12:00 Mario ULLRICH: *Comparison of Markov chains for sampling in convex sets*
- 12:00–12:30 Krzysztof ŁATUSZYŃSKI: *Variance bounding and geometric ergodicity of Markov chain Monte Carlo kernels for approximate Bayesian computation*

### CPS 2: Stochastic Analysis I

S3

Session's organizers: Leszek SŁOMIŃSKI, Jeannette WOERNER

- 10:30–11:00 Stefan GEISS: *On first exit times of continuous Itô-processes*
- 11:00–11:30 Peter PARCZEWSKI: *On the connection between discrete and continuous Wick calculus with application to fractional Brownian motion*
- 11:30–12:00 Rafał ŁOCHOWSKI: *Pathwise stochastic integration with finite variation processes uniformly approximating càdlàg processes*
- 12:00–12:30 Christel GEISS: *Variance-optimal hedging for Lévy processes and pay-offs with Malliavin fractional smoothness*

### CPS 3: Change-Point Tests I

S2

Session's organizers: Teresa LEDWINA, Roland FRIED

- 10:30–11:00 Stefanie SCHWAAR: *Asymptotic distribution of change-point estimators in nonlinear AR-processes*
- 11:00–11:30 Jurgita MARKEVICIUTE: *Testing the epidemic change in nearly nonstationary processes*
- 11:30–12:00 Joseph TADJUIDJE KAMGAIN: *Shrinkage estimation for multivariate hidden Markov mixture models*
- 12:00–12:30 Krzysztof SZAJOWSKI: *Detection of distributed disorders*

## Session Talks II (Thursday, 6 June, 14:30-16:30)

### IPS 11: Change-Point Tests

AULA

Session's organizers: Teresa LEDWINA, Roland FRIED

- 14:30–15:00 Claudia KIRCH: *Monitoring nonlinear autoregressive time series based on estimating functions*
- 15:00–15:30 Piotr KOKOSZKA: *Detection of change in the annual pattern of global environmental data*
- 15:30–16:00 Ewaryst RAFAJŁOWICZ: *Splitting detection of changes in scale and location using indicators based on estimating a characteristic function*
- 16:00–16:30 Josef STEINEBACH: *Functional change-point analysis with increasing number of projections*

### IPS 2: Random Recursive Structures

S9

Session's organizers: Ewa DAMEK, Gerold ALSMEYER

- 14:30–15:00 Dariusz BURACZEWSKI: *On fixed points of generalized multidimensional affine recursions*
- 15:00–15:30 Rudolf GRÜBEL: *Search trees: Metric aspects and strong limit theorems*
- 15:30–16:00 Alexander IKSANOV: *Asymptotics of the number of empty boxes in the Bernoulli sieve*
- 16:00–16:30 Ralph NEININGER & Henning SULZBACH: *A recursive approach to Pólya urns*

### CPS 4: Models for Ordered Data I

S5

Session's organizers: Tomasz RYCHLIK, Udo KAMPS

- 14:30–15:00 Krzysztof JASIŃSKI: *Maximum variance of order statistics from symmetric populations*
- 15:00–15:30 Jens LENNARTZ: *Confidence regions in models of ordered data*
- 15:30–16:00 Alexander KATZUR: *Homogeneity-testing in multiparameter exponential families*
- 16:00–16:30 Kamil DYBA: *Multidimensional quantile functions and multidimensional stochastic orders*

### CPS 5: Lévy and Related Jump Processes I

S3

Session's organizers: Krzysztof BOGDAN, Réne SCHILLING

- 14:30–15:00 Christian PALMES: *Statistical inference for certain jump dependencies in multidimensional Lévy processes*
- 15:00–15:30 Irmina CZARNA: *Parisian ruin probabilities with a lower ultimate bankrupt barrier*
- 15:30–16:00 Michał RYZNAR: *Dirichlet heat kernels of unimodal Lévy processes*
- 16:00–16:30 Tomasz BYCZKOWSKI: *Hitting half-spaces of spheres by Ornstein-Uhlenbeck type diffusions*

### CPS 6a: Statistics of Financial Data

S2

Session's organizers: Rafał WERON, Wolfgang HÄRDLE

- 14:30–15:00 Eric BEUTNER: *A note on moment conditions for quasi-maximum likelihood estimation of multivariate GARCH models*
- 15:00–15:30 Grzegorz PERCZAK: *A new look at variance estimation based on values of minimum, maximum, finish and the drift*
- 15:30–16:00 Jeannette WOERNER: *The Gumbel test for jumps in stochastic volatility models*

### CPS 6b: Functional Data Analysis

S2

Session's organizers: Adam JAKUBOWSKI, Herold DEHLING

- 16:00–16:30 Łukasz KIDZIŃSKI: *Dynamic functional principal components*

## Session Talks III (Thursday, 6 June, 17:00-19:00)

### IPS 15: Statistics and Econometrics

AULA

Session's organizers: Jan MIELNICZUK, Wolfgang SCHMID

- 17:00–17:30 Tadeusz BEDNARSKI: *On testing a non-response mechanism in unemployment surveys*
- 17:30–18:00 Karl MOSLER: *Depth statistics for robust classification*
- 18:00–18:30 Rafał KULIK: *Heavy tails and long memory: Modeling and estimation*
- 18:30–19:00 Philip SIBBERTSEN: *Hypothesis testing under unknown degree of fractional integration*

### IPS 4: Free Probability

S9

Session's organizers: Jacek WESOŁOWSKI, Roland SPEICHER

- 17:00–17:30 Włodzimierz BRYC: *Cauchy-Stieltjes kernel families*
- 17:30–18:00 Marek BOŹEJKO: *Infinitely divisible measures in classical and free probability*
- 18:00–18:30 Matthias LÖWE: *Limit theorems for random matrices with stochastically dependent entries*
- 18:30–19:00 Roland SPEICHER: *Random matrices and operator-valued free probability theory*

### CPS 7: Models for Ordered Data II

S5

Session's organizers: Tomasz RYCHLIK, Udo KAMPS

- 17:00–17:30 Tomasz RYCHLIK: *Bounds on expectations of small order statistics from DDA and DFRA populations*
- 17:30–18:00 Patryk MIZIUŁA: *Precise evaluations for lifetime variances of reliability systems with exchangeable components*
- 18:00–18:30 Ekaterina BEZGINA: *Dependence properties of sequential order statistics*
- 18:30–19:00 Maria KAMIŃSKA-ZABIEROWSKA: *Preservation of the generalized TTT transform order*

### CPS 8: Lévy and Related Jump Processes II

S3

Session's organizers: Krzysztof BOGDAN, Réne SCHILLING

- 17:00–17:30 Martin WENDLER: *Stable limit theorem for  $U$ -statistics processes indexed by a random walk*
- 17:30–18:00 Paweł SZABŁOWSKI: *On Markov processes with polynomial conditional moments*
- 18:00–18:30 Zbigniew MICHNA: *Formulas for the supremum distribution of spectrally asymmetric Lévy processes*
- 18:30–19:00 Alexander SCHNURR: *Path properties of stochastic processes with underlying Lévy dynamics*

### CPS 9: Random Recursive Structures

S2

Session's organizers: Ewa DAMEK, Gerold ALSMEYER

- 17:00–17:30 Konrad KOLESKO: *Linear stochastic equations in the critical case*
- 17:30–18:00 Matthias MEINERS: *Power and exponential moments of the number of visits and related quantities for perturbed random walks*
- 18:00–18:30 Sebastian MENTEMEIER: *Generalized multivariate stable distributions*
- 18:30–19:00 Jeffrey COLLAMORE: *Large deviation estimates for the exceedance times of perpetuity sequences*

## Poster Session (Thursday, 6 June, 19:00-21:00)

### List of Posters

- James ALLISON: *The probability weighted empirical characteristic function and goodness-of-fit testing*
- Katarzyna BRZOZOWSKA-RUP: *A new modification of particle filter algorithm*
- Todor DINEV: *The asymptotic Berry-Esseen constant for intervals*
- Adam DOSKOCZ: *Use of nonparametric statistics for estimation of accuracy of digital map data*
- Wiktor EJSMONT: *Noncommutative characterization of free Meixner processes*
- Jolanta GRALA-MICHALAK: *The application of polar coordinates in discriminant and cluster analysis*
- Wiesław GRYGIERZEC: *Maximum principle for optimal control of stochastic infinite dimensional diffusion equation*
- Dorota KOWALSKA: *Lowest eigenvalue bounds for Markov processes with obstacles*
- Lucian MATICIUC: *Stochastic delay variational inequalities and associated stochastic control problems*
- Wojciech MATYSIAK: *Racah polynomials and stitched Markov processes*
- Marcin PITERA: *Dynamic limit growth indices*
- Roman RÓŻAŃSKI, Adam ZAGDAŃSKI: *Sieve bootstrap based prediction intervals for time series*
- Agata SAKOWICZ: *A characterization of Dirichlet distribution through neutralities*
- Leonard SANTANA: *Diagnostic tests for the distribution of random effects in multivariate mixed effects models*
- Katarzyna STELIGA: *On  $\alpha(j)$ -modified distributions and their properties*
- Leonid TORGOVITSKI: *Darling-Erdős-type CUSUM-procedures for dependent high-dimensional data*
- Maria ZIEMLAŃSKA: *Method of lines for parabolic stochastic functional partial differential equations*

## Session Talks IV (Friday, 7 June, 10:30-12:30 [13:00])

### IPS 17: Signal Analysis

AULA

Session's organizers: Mirosław PAWLAK, Ulrich STADTMÜLLER

- 10:30–11:00 Anna DUDEK: *Resampling methods in autocovariance analysis of cyclostationary signals*
- 11:00–11:30 Hajo HOLZMANN: *Statistical inference for inverse problems*
- 11:30–12:00 Maciej NIEDŹWIECKI: *Generalized adaptive notch filters and smoothers*
- 12:00–12:30 Ansgar STELAND: *Nonparametric sequential signal change detection under dependent noise*

### IPS 14: Stochastic Inequalities

S9

Session's organizers: Krzysztof OLESZKIEWICZ, Lutz MATTNER

- 10:30–11:00 Friedrich GÖTZE: *Limit theorems in Fisher- and entropic distance*
- 11:00–11:30 Rafał LATAŁA:  *$L_1$ -norm estimates of linear combinations of products of independent nonnegative random variables*
- 11:30–12:00 Bero ROOS: *On approximations for sampling without replacement*
- 12:00–12:30 Witold BEDNORZ: *Sample boundedness of Bernoulli processes*

### CPS 10: Stochastic Analysis II

S3

Session's organizers: Leszek SŁOMIŃSKI, Jeannette WOERNER

- 10:30–11:00 Marek MALINOWSKI: *Set-valued and fuzzy stochastic differential equations*
- 11:00–11:30 Joachim SYGA: *Properties of set-valued stochastic integrals and stochastic inclusions and their applications*
- 11:30–12:00 Michael SCHEUTZOW: *Forward Brownian motion*
- 12:00–12:30 Florian BAUMGARTNER: *Measure preserving maps and their invariant Lévy random variables*

### CPS 11: Extremes and Heavy-Tail Phenomena

S5

Session's organizers: Adam JAKUBOWSKI, Claudia KLÜPPELBERG

- 10:30–11:00 Miriam Isabel SEIFERT: *On the extreme behavior of polar random vectors*
- 11:00–11:30 Enrico BIBBONA: *Higher moments and prediction-based estimation for the COGARCH(1,1) model*
- 11:30–12:00 Dirk ERHARD: *Random interlacements in high dimensions: Transience of the vacant set near criticality*
- 12:00–12:30 Natalia SOJA-KUKIEŁA: *Managing local dependencies in limit theorems for maxima of weakly dependent random fields*
- 12:30–13:00 Vygantas PAULAUSKAS: *On  $\alpha$ -covariance for random vectors without finite second moment*

### CPS 12: (Applied) Mathematical Finance

S2

Session's organizers: Jacek JAKUBOWSKI, Thorsten SCHMIDT,

Łukasz STETTNER, Peter IMKELLER

- 10:30–11:00 Tina ENGLER: *On investment consumption modeling with jump process extensions for productive sectors*
- 11:00–11:30 Paul KRÜHNER: *On infinite dimensional modeling in electricity finance*
- 11:30–12:00 Stefan GERHOLD: *Small time central limit theorems for semimartingales with applications*
- 12:00–12:30 Ludovic TANGPI: *Dual representation of minimal supersolutions of convex BSDE's*
- 12:30–13:00 Dirk BECHERER: *Regularized sparse optimal portfolios in continuous time [Invited talk]*

## Session Talks V (Friday, 7 June, 14:30-16:30)

### IPS 3: Mathematical Finance

AULA

Session's organizers: Łukasz STETTNER, Peter IMKELLER

- 14:30–15:00 Stefan ANKIRCHNER: *Hedging forward positions: Basis risk versus liquidity costs*
- 15:00–15:30 Michael KUPPER: *Superhedging under model uncertainty*
- 15:30–16:00 Jacek JAKUBOWSKI: *Linear stochastic volatility models*
- 16:00–16:30 Martin KARLICZEK: *Dynamic Assessment Indices*

### IPS 13: Markov Chains and Monte-Carlo Methods

S9

Session's organizers: Krzysztof ŁATUSZYŃSKI, Andreas EBERLE

- 14:30–15:00 Wojciech NIEMIRO: *Asymptotics and adaptation of Maximum Likelihood Monte Carlo algorithms*
- 15:00–15:30 Klaus RITTER: *Multi-level Monte Carlo for approximation of distribution functions and an application to AF<sup>4</sup>*
- 15:30–16:00 Benjamin JOURDAIN: *Optimal scaling of the transient phase of Metropolis Hastings algorithms*
- 16:00–16:30 Nikolaus SCHWEIZER: *Error bounds for sequential MCMC*

### CPS 13: Free Probability/Mathematical Physics

S3

Session's organizers: Jacek WESOŁOWSKI, Roland SPEICHER

- 14:30–15:00 Carlos VARGAS OBIETA: *Application of operator-valued free multiplicative convolution to random matrix models*
- 15:00–15:30 Kamil SZPOJANKOWSKI: *Dual Lukacs regressions in free probability*
- 15:30–16:00 Jacek WESOŁOWSKI: *Generators of quadratic harnesses: The case of  $q$ -Lévy-Meixner processes*
- 16:00–16:30 Christof KÜLSKE: *A class of nonergodic interacting particle systems with unique invariant measure*

### CPS 14: Applied Probability

S2

Session's organizers: Ryszard SZEKLI, Günter LAST

- 14:30–15:00 Sebastian SCHWEER: *Queueing systems of INAR(1) processes with compound Poisson arrival distribution*
- 15:00–15:30 Paweł LOREK: *Speed of convergence to stationarity for Möbius monotone Markov chains*
- 15:30–16:00 Derya ERSEL: *Fuzzy Bayesian networks with Buckley's approach*
- 16:00–16:30 Saeid REZAKHAH: *Certain periodically correlated multicomponent locally stationary processes*

### CPS 15: Statistical Inference I

S5

Session's organizers: Adam JAKUBOWSKI, Herold DEHLING

- 14:30–15:00 Teresa LEDWINA: *Detection of non-Gaussianity*
- 15:00–15:30 Tadeusz INGLOT: *Data driven tests for univariate symmetry*
- 15:30–16:00 Carsten JENTSCH: *Penalized approach for estimating party positions with time-varying word weights from political texts*
- 16:00–16:30 Markus REISS: *Efficiency for covolatility matrix estimation under noise*



## Session Talks VI (Friday, 7 June, 17:00-19:00)

### IPS 18: Stochastic Analysis

AULA

Session's organizers: Leszek SŁOMIŃSKI, Jeannette WOERNER

- 17:00–17:30 Tomasz KLIMSIK: *Dirichlet forms, BSDEs and nonlocal semilinear elliptic equations with measure data*
- 17:30–18:00 Tomasz KOMOROWSKI: *Principal eigenvalue of the fractional Laplacian with a large incompressible drift*
- 18:00–18:30 Francesco RUSSO: *Probabilistic aspects of a porous media type equation with irregular coefficient*
- 18:30–19:00 Hendrik WEBER: *Invariant measure of the stochastic Allen-Cahn equation: The regime of small noise and large system size*

### IPS 8: Applied Probability

S9

Session's organizers: Ryszard SZEKLI, Günter LAST

- 17:00–17:30 Cornelia WICHELHAUS: *Sojourn time estimation in stochastic networks*
- 17:30–18:00 Bartłomiej BŁASZCZYSZYN: *Clustering comparison of point processes with applications to percolation*
- 18:00–18:30 Hans DADUNA: *Stochastic networks*
- 18:30–19:00 Lukasz KRUK: *Asymptotics for some models of the order book dynamics*

### CPS 16: Stochastic Inequalities I

S3

Session's organizers: Krzysztof OLESZKIEWICZ, Lutz MATTNER

- 17:00–17:30 Stanisław KWAPIEŃ: *Estimates moments of order statistics*
- 17:30–18:00 Adam OSEKOWSKI: *Martingale study of Fourier multipliers*
- 18:00–18:30 Irina SHEVTSOVA: *Moment inequalities for characteristic functions*
- 18:30–19:00 Zbigniew ŁAGODOWSKI: *An asymmetric Baum-Katz type theorem for dependent random fields*

### CPS 17a: Algorithms in Statistics

S5

Session's organizers: Adam JAKUBOWSKI, Herold DEHLING

- 17:00–18:00 Fabian REFFEL, Christoph GIETL: *Accumulation points of the iterative proportional fitting procedure (joint talk, 60 min.)*

### CPS 17b: Models for Ordered Data III

S5

Session's organizers: Tomasz RYCHLIK, Udo KAMPS

- 18:00–18:30 Andrzej OKOLEWSKI: *Stability of L-statistics against dependence of observations*
- 18:30–19:00 Tahani ABUSHAL: *Estimation for a mixture of Pareto distribution and constant-partially accelerated life tests with progressive type-II censoring*

### CPS 18: Change-Point Tests II

S2

Session's organizers: Teresa LEDWINA, Roland FRIED

- 17:00–17:30 Karol DZIEDZIUL: *Procedure of sample enrichment*
- 17:30–18:00 Michael MESSER: *A multiple filter test for change point detection in renewal processes with varying variance*
- 18:00–18:30 Daniel VOGEL: *Change-point tests based on U-statistics and U-quantiles*
- 18:30–19:00 Roland FRIED: *Robust shift detection in time series*

## Session Talks VII (Saturday, 8 June, 10:30-12:30 [13:00])

### IPS 16: Stochastic Models in Insurance

AULA

Session's organizers: Zbigniew PALMOWSKI, Hanspeter SCHMIDLI

- 10:30–11:00 Claudia KLÜPPELBERG: *Statistical modelling and estimation of extreme observations in space and time*
- 11:00–11:30 Łukasz DELONG: *Instantaneous mean-variance hedging and instantaneous Sharpe ratio pricing in a regime-switching financial model, with applications to insurance*
- 11:30–12:00 Holger DREES: *How strongly do extreme losses cluster?*
- 12:00–12:30 Tomasz ROLSKI: *A stochastic model for reserves: Problems and conjectures*
- 12:30–13:00 Zbigniew PALMOWSKI: *Exact and asymptotic results for insurance risk models with surplus-dependent premiums [Contributed Talk]*

### IPS 10: Stochastic PDEs

S9

Session's organizers: Szymon PESZAT, Michael RÖCKNER

- 10:30–11:00 Sergio ALBEVERIO: *Stochastic PDEs in neurobiology and quantum field theory: Some recent developments*
- 11:00–11:30 Benjamin GOLDYS: *On some systems of stochastic partial differential equations arising in micromagnetics*
- 11:30–12:00 Peter IMKELLER: *A Fourier analytic approach to rough paths*
- 12:00–12:30 Jerzy ZABCZYK: *Large deviation principle for SPDEs with Lévy noise*

### CPS 19: Ergodic Theory, Dynamical Systems

S3

Session's organizers: Mariusz LEMAŃCZYK, Manfred DENKER

- 10:30–11:00 Adam PASZKIEWICZ: *On main conjectures on products of projections in Hilbert space*
- 11:00–11:30 Andrzej BIŚ: *A theorem of Sacksteder for  $n$ -dimensional manifolds*
- 11:30–12:00 Martin SCHMOLL: *Renormalization and renormalizable directions on flat surfaces*
- 12:00–12:30 Christian WOLF: *On rotation entropy*

### CPS 20: Markov Chains and Monte Carlo Methods

S5

Session's organizers: Krzysztof ŁATUSZYŃSKI, Andreas EBERLE

- 10:30–11:00 Daniel RUDOLF: *A generalized slice sampler*
- 11:00–11:30 Błażej MIASOJEDOW: *Optimal scaling for the transient phase of the random walk Metropolis algorithm: Implications of main result*
- 11:30–12:00 Jochen VOSS: *Efficiency of Approximate Bayesian Computation*
- 12:00–12:30 Anna GAMBIN: *Modelling proteolysis*

### CPS 21a: Statistics and Econometrics

S2

Session's organizers: Jan MIELNICZUK, Wolfgang SCHMID

- 10:30–11:00 Daniel KOSIOROWSKI: *Local data depth procedures in robust prediction of the economic data stream characteristics*
- 11:00–11:30 Łukasz LENART: *Detecting almost periodicity in mean function with application to business cycle comovement*

### CPS 21b: Signal Analysis

S2

Session's organizers: Mirosław PAWLAK, Ulrich STADTMÜLLER

- 11:30–12:00 Daniel HOHMANN: *Weighted angle Radon transform*
- 12:00–12:30 Vladimir ZAIATS: *Statistical inference in partially observed linear systems*

## Session Talks VIII (Saturday, 8 June, 14:30-16:30)

### IPS 1: Lévy and Related Jump Processes

AULA

Session's organizers: Krzysztof BOGDAN, Réne SCHILLING

- 14:30–15:00 Katarzyna PIETRUSKA-PAŁUBA: *Lifschitz singularity for stable processes on fractals*
- 15:00–15:30 Frank AURZADA: *First passage times of Lévy processes over a one-sided moving boundary*
- 15:30–16:00 Björn BÖTTCHER: *Approximation and construction of Feller processes with unbounded coefficients*
- 16:00–16:30 Paweł SZTONYK: *Estimates of transition densities for jump Feller processes*

### IPS 12: Models for Ordered Data

S9

Session's organizers: Tomasz RYCHLIK, Udo KAMPS

- 14:30–15:00 Anna DEMBIŃSKA: *Almost sure limiting properties of central order statistics from linear processes*
- 15:00–15:30 Agnieszka GORONCY: *Evaluation of expected order statistics from restricted families*
- 15:30–16:00 Stefan BEDBUR: *Statistical inference and model selection for ordered data*
- 16:00–16:30 Marco BURKSCHAT: *Type-I censored sequential order statistics*

### CPS 22: Stochastic Inequalities II

S3

Session's organizers: Krzysztof OLESZKIEWICZ, Lutz MATTNER

- 14:30–15:00 Zbigniew SZEWCZAK: *Correlation inequalities for lattice stationary sequences*
- 15:00–15:30 Paweł WOLFF: *Concentration inequalities for non-Lipschitz functions*
- 15:30–16:00 Jona SCHULZ: *On normal approximations to symmetric hypergeometric laws*
- 16:00–16:30 Przemysław MATUŁA: *Covariance and comparison inequalities under quadrant dependence*

### CPS 23: Stochastic Processes in the Life Sciences I

S5

Session's organizers: Ryszard RUDNICKI, Anton WAKOLBINGER

- 14:30–15:00 Peter JAGERS: *The long run age structure of branching populations in bounded habitats [invited talk]*
- 15:00–15:30 Marcin MAGDZIARZ: *Detecting ergodicity and mixing in experimental data*
- 15:30–16:00 Götz KERSTING: *Beta-coalescent trees and their lengths*
- 16:00–16:30 Thomas KURTZ: *A stochastic derivation of the Michaelis-Menten equation*

### CPS 24: Statistical Inference II

S2

Session's organizers: Adam JAKUBOWSKI, Herold DEHLING

- 14:30–15:00 Jan MIELNICZUK: *Linear model selection via combined  $l_1$  and  $l_0$ -penalized least squares*
- 15:00–15:30 Piotr POKAROWSKI: *Delete or merge regressors for linear model selection*
- 15:30–16:00 Jakob SÖHL: *A uniform central limit theorem and efficiency for deconvolution estimators*
- 16:00–16:30 Wojciech REJCHEL: *Lasso and adaptive Lasso with convex loss functions*

## Session Talks IX (Saturday, 8 June, 17:00-19:00)

### IPS 19: Extremes and Heavy-Tail Phenomena

AULA

Session's organizers: Adam JAKUBOWSKI, Claudia KLÜPPELBERG

- 17:00–17:30 Krzysztof DEBICKI: *Extremes of multidimensional Gaussian processes*
- 17:30–18:00 Robert STELZER: *Regular variation of càdlàg mixed moving average processes*
- 18:00–18:30 Mateusz KWAŚNICKI: *Recent progress in the study of suprema of Lévy processes*
- 18:30–19:00 Alexander LINDNER: *Multivariate generalized Ornstein-Uhlenbeck processes*

### IPS 7: Ergodic Theory, Dynamical Systems

S9

Session's organizers: Mariusz LEMAŃCZYK, Manfred DENKER

- 17:00–17:30 Omri SARIG: *A random walk driven by an irrational rotation*
- 17:30–18:00 Mark KESSEBÖHMER: *A Fréchet law and an Erdős-Philipp law for maximal cuspidal windings*
- 18:00–18:30 Krzysztof FRĄCZEK: *Ergodic properties of translation flows on infinite periodic translation surfaces*
- 18:30–19:00 Manfred DENKER: *Von Mises statistics for stationary processes*

### CPS 25: Stochastic Processes in the Life Sciences II

S5

Session's organizers: Ryszard RUDNICKI, Anton WAKOLBINGER

- 17:00–17:30 Paweł ZWOLEŃSKI: *Phenotypic evolution of hermaphrodites*
- 17:30–18:00 Przemysław PAŹDZIOREK: *Mathematical model of stem cell differentiation and tissue regeneration with stochastic noise*
- 18:00–18:30 Paweł BŁAŻEJ: *Optimization of nucleotide substitution process in protein coding sequences*
- 18:30–19:00 Bence MÉLYKÚTI: *Equilibrium distributions of simple biochemical reaction systems for time-scale separation in stochastic reaction networks*

### CPS 26: Stochastic PDEs

S3

Session's organizers: Szymon PESZAT, Michael RÖCKNER

- 17:00–17:30 Monika WRZOSEK: *Newton's method for parabolic stochastic functional partial differential equations*
- 17:30–18:00 Diana KELLER: *Solvability of a stochastic Schrödinger problem with Kerr-nonlinearity*
- 18:00–18:30 Benjamin GESS: *Finite speed of propagation for stochastic porous media equations*
- 18:30–19:00 Frank WUSTERHAUSEN: *Stochastic delay equation with Lévy noise*

### CPS 27: Statistical Inference III

S2

Session's organizers: Adam JAKUBOWSKI, Herold DEHLING

- 17:00–17:30 Lutz MATTNER: *Partial complete sufficiency implies completeness*
- 17:30–18:00 Aleksander ZAIGRAJEW: *Likelihood vs integrated likelihood in statistical inference*
- 18:00–18:30 Robert SCHLICHT: *Dual representation of convex sets of probability measures*

## Session Talks X (Sunday, 9 June, 9:00-11:00)

### IPS 6: Statistics of Financial Data

AULA

Session's organizers: Rafał WERON, Wolfgang HÄRDLE

- 09:00–09:30 Ying CHEN: *Adaptive dynamic Nelson-Siegel term structure model with applications*
- 09:30–10:00 Katarzyna MACIEJOWSKA: *What can we learn about financial indexes from disaggregated data?*
- 10:00–10:30 Piotr MAJER: *Risk patterns and correlated brain activities*

### IPS 9: Stochastic Processes in the Life Sciences

S9

Session's organizers: Ryszard RUDNICKI, Anton WAKOLBINGER

- 09:00–09:30 Adam BOBROWSKI: *Convergence of semigroups of operators in models of mathematical biology*
- 09:30–10:00 Steve EVANS: *Optimal transport and metagenomics*
- 10:00–10:30 Peter PFAFFELHUBER: *Horizontal gene transfer in bacteria: The ancestral gene transfer graph*
- 10:30–11:00 Radosław WIECZOREK: *Individual based approach to fragmentation with shattering [contributed talk]*

### CPS 28: Backward Stochastic Differential Equations

S3

Session's organizers: Andrzej ROZKOSZ, Stefan GEISS

- 09:00–09:30 Alexander STEINICKE: *Malliavin differentiation of Lévy-driven BSDEs*
- 09:30–10:00 Martin BÜTTNER: *On backward SDEs with jumps of infinite activity*
- 10:00–10:30 Juha YLINEN: *BMO-estimates for BSDEs*
- 10:30–11:00 Andrzej ROZKOSZ: *Obstacle problem for semilinear parabolic equations with measure data: A BSDEs approach*

### CPS 29: Probability Theory and Limit Theorems

S5

Session's organizers: Adam JAKUBOWSKI, Herold DEHLING

- 09:00–09:30 Jolanta MISIEWICZ: *Symmetric weakly stable random vector is pseudo-isotropic*
- 09:30–10:00 Barbara JASIULIS-GOŁDYN: *The Poisson processes and the lack of memory property under generalized convolutions*
- 10:00–10:30 Bartosz KOŁODZIEJEK: *Lukacs-Olkin-Rubin theorem without invariance in the "quotient"*
- 10:30–11:00 Adam JAKUBOWSKI: *Functional convergence of linear processes with heavy-tail innovations*