

SPA 2019 Scientific Program

Monday, July 8th

8:15 - 9:15 Registration, 2nd Floor Norris Center
9:15 - 9:30 Opening Remarks, McCormick Auditorium
9:30 - 10:30 Doob Lecture, McCormick Auditorium
Jeremy Quastel (University of Toronto, Canada)
Title: The KPZ fixed point
10:30 - 11:00 Coffee Break
11:00 - 12:00 Plenary Talk, McCormick Auditorium
Caroline Uhler (MIT, USA)
Title: Your dreams may come true with MTP2

2:45 - 3:45 Schramm Lecture, McCormick Auditorium

Stanislav Smirnov (Université de Genève and Skoltech, Switzerland, Russia)

Title: Percolation revisited

3:45 - 4:15 Coffee break

4:15 - 6:00 Invited Sessions and Contributed Talks

Invited Session: Biomedical applications, McCormick Auditorium Organized by Sebastien Roch (University of Wisconsin, USA)

4:15 - 4:45 Julia Palacios (Stanford University, USA) Title: Tajima Coalescent

4:50 - 5:20 Lea Popovic (Concordia University, Canada) Title: Spatial effects in stochastic dynamics of gene regulation

5:25 - 5:55 Rebecca Willett (University of Chicago, USA) Title: Estimating network structure from incomplete event data

Invited Session: Nodal structures of random and deterministic functions, Northwestern Room

Organized by Igor Wigman (King's College London, UK) and Dmitry Belyaev (University of Oxford).

4:15 - 4:45 Steve Zelditch (Northwestern University, USA) Title: Equivariant random spherical harmonics on S³ have just one nodal component and it is of near-maximal genus

4:50 - 5:20 Marie Kratz (ESSEC Business School, CREAR, France) Title: On the regularity of functionals for stationary Gaussian processes

5:25 - 5:55 Igor Wigman (King's College London, UK) Title: Mean conservation of nodal volume and connectivity measures for Gaussian ensembles

Invited Session: Fluctuations of interacting particle systems, Wildcat Room Organized by Patrícia Gonçalves (IST-Lisbon, Portugal)

4:15 - 4:45 Otávio Menezes (IST-Lisbon, Portugal) Title: Non-equilibrium fluctuations of interacting particle systems

4:50 - 5:20 Nicolas Perkowksi (Humbold Univ. Berlin, Germany) Title: Energy solutions to the stochastic Burgers equation with Dirichlet boundary

5:25 - 5:55 Joe Chen (Colgate University, USA) Title: Nonequilibrium fluctuations in the boundary-driven exclusion process on a resistance space

Contributed Session: SPDE, Lake Room

Organized by Raluca Balan (University of Ottawa, Canada)

4:15 - 4:30 Le Chen (University of Nevada, USA) Title: Nonlinear stochastic partial differential equations with fractional operators 4:30 - 4:45 Fei Pu (University of Utah, USA) Title: Optimal lower bounds on hitting probabilities for stochastic heat equations in spatial dimension $k \ge 1$

4:50 - 5:05 Luis Quer-Saranyons (Universitat Autonoma de Barcelona, Spain) Title: SPDEs with fractional noise in space: continuity in law with respect to the Hurst index

5:05 - 5:20 Guangqu Zheng (University of Kansas, USA) Title: Gaussian fluctuation of spatial average of some SPDEs

Contributed Talks, Lake Room

5:25 - 5:40 Raluca Balan (University of Ottawa, Canada) Title: Stable Levy motion with values in the Skorohod space: construction and approximation

5:40 - 5:55 Michael Choi (City University of Hong Kong, Hong Kong) Title: Accelerated simulated annealing with fast cooling

Contributed Talks, Arch Room

4:15 - 4:30 Watthanan Jatuviriyapornchai (Mahidol University, Thailand) Title: Coarsening dynamics in inclusion processes and duality

4:30 - 4:45 Vladimir Vinogradov (Ohio University, USA) Title: On the law of the total progeny for some Galton-Watson processes

4:50 – 5:05 Francys Andrews de Souza (Unicamp, Brazil) Title: Stochastic near-optimal controls for path dependent systems and some applications

5:05 - 5:20 Chris Scullard (Lawrence Livermore National Laboratory, USA) Title: The method of critical polynomials on supercomputers

5:25 - 5:40 Jie Yen Fan (Monash University, Australia) Title: Age-and-type structured population model

5:40 - 5:55 Alexander Roitershtein (Texas A&M, USA) Title: On ballistic deposition process on a strip

6:00 - 8:30 Reception, Deering Meadow

Tuesday, July 9th

8:30 - 10:10 Invited Sessions and Contributed Talks

Invited Session: Random Trees, Wildcat Room

Organized by Christina Goldschimdt (University of Oxford, UK)

8:30 - 9:00 David Croydon (RIMS, Japan) Title: Quenched and averaged tails of the heat kernel of the two-dimensional uniform spanning tree

9:05 - 9:35 Cécille Mailler (University of Bath, UK) Title: The monkey walk: a random walk with random reinforced relocations and fading memory

9:40 - 10:10 Delphin Sénizergues (Paris 13, France) Title: Asymptotic properties of weighted recursive trees

Invited Session: Spin Glasses, Northwestern Room

Organized by Louis-Pierre Arguin (CUNY, USA)

8:30 - 9:00 Qiang Zeng (CUNY, USA) Title: Properties of Parisi Measures

9:05 - 9:35 Michel Pain (ENS, France) Title: Fluctuations of branching Brownian motion at criticality

9:40 - 10:10 Nicholas Cook (Stanford University, USA) Title: Maximum of the characteristic polynomial for a random permutation matrix

Contributed Session: Biological and Statistical Applications of Branching Processes, Arch Room

Organized by Anand Vidyashankar (George Mason University, USA)

8:30 - 8:45 Maroussia Bojkova (Sofia University, Bulgaria) Title: Stochastic monotonicity and continuity of general epidemics with vaccination control

8:45 - 9:00 Cristina Gutierrez Pérez (Universidad de Extremadura, Spain) Title: A multitype branching process for modeling a Y-linked pedigree with non-syndromic hearing impairment

9:05 - 9:20 Olivier Hyrien (ENS, France) Title: A Stochastic Evolutionary Model of Affinity Maturation

9:20 - 9:35 Carmen Minuesa (Universidad de Extremadura, Spain) Title: Approximate Bayesian computation in controlled branching processes: the role of summary statistics

Contributed Talks, Arch Room

9:40 - 9:55 Matthew Griffiths (King's College London, UK) Title: Cylindrical Lévy processes and Lévy space-time white noises

9:55 - 10:10 Dan Daniel Erdmann-Pham (UC Berkeley, USA) Title: Generalized Greenwood Statistics and their Application to Two-Sample Testing

Contributed Talks, Lake Room

8:30 – 8:45 Nicholas Georgiou (Durham University, Georgia) Title: Markov chains with heavy-tailed increments and asymptotically zero drift

8:45 - 9:00 Dan Goreac (Université Paris-Est, France) Title: Order Avoidance for Controlled Systems; Impact on Gene Networks

9:05 - 9:20 Dimitar Atanasov (New Bulgarian University, Bulgaria) Title: A robust approach for estimating the discrete time branching process with bivariate power series offspring distribution

9:20 - 9:35 Stephen Connor (University of York, UK) Title: Cutoff for a One-sided Transposition Shuffle

9:40 - 9:55 Christian Döbler (University of Luxembourg, Luxembourg) Title: Quantitative CLTs and FCLTs for U-statistics with applications

9:55 - 10:10 Hyun-Jung Kim (Illinois Institute of Technology, USA) Title: Statistical Analysis of Evolution Equations Driven by Space-only Noise

Contributed Talks, Evans Room

8:30 - 8:45 Jure Vogrinic (University of Warwick, UK) Title: Anomalous scaling of the Metropolis Adjusted Langevin Algorithm

8:45 - 9:00 Hao Ge (Peking University, China) Title: Nonequilibrium thermodynamic functionals of diffusion processes under first-order and secondorder averaging

9:05 - 9:20 Huijie Qiao (Southeast University, China) Title: Effective Filtering for Multiscale Stochastic Dynamical Systems driven by Lévy processes

9:20 - 9:35 Matija Vidmar (University of Ljubljana, Slovenia) Title: Observing a Lévy process up to a stopping time

9:40 - 9:55 Ziteng Cheng (Illinois Institute of Technology, USA) Title: Wiener-Hopf Factorization for Time-Inhomogeneous Finite Markov Chains

9:55 - 10:10 Eunghyun Lee (Nazarbayev University, Kazakhstan) Title: Determinantal formulas in the multi-species integrable particle models

10:15 -10:45 Coffee Break

10:45 - 12:25 Invited Sessions and Contributed Talks

Invited Session: Stochastic Dynamics, Wildcat Room

Organized by Jinqiao Duan (IIT, USA)

10:45 - 11:15 Konstantinos Spiliopoulos (Boston University, USA) Title: Metastability and exit problems for systems of stochastic reaction-diffusion equations 11:20 - 11:50 Changho Kim (UC Merced, USA)

Title: Characterization of non-local and non-Markovian nature in the dynamics of a molecular fluid

11:55 - 12:25 Yong Chen (Zhejiang Sci-Tech University, China) Title: Wave-breaking and moderate deviations of the stochastic Camassa-Holm with pure jump noise

Invited Session: Gaussian Free Field, Northwestern Room

Organized by Marek Biskup (UCLA, USA)

10:45 - 11:15 Alexander Drewitz (Universität zu Köln, Germany) Title: Geometry of Gaussian free field sign clusters and random interlacements

11:20 - 11:50 Yoshihiro Abe (Chiba University, Japan) Title: Exceptional points of two-dimensional random walks at multiples of the cover time

11:55 - 12:25 Santiago Saglietti (Technion Haifa, Israel) Title: Weak convergence for the scaled cover time of the rooted binary tree

Invited Session: Branching Processes, Lake Room

Organized by Zenghu Li (Beijing Normal University, China)

10:45 - 11:15 Leif Döring (University of Mannheim, Germany) Title: Boundary behaviour of stable jump-diffusions

10:20 - 11:50 Hui He (Beijing Normal University, China) Title: TBA

11:55 - 12:25 Chunhua Ma (Nankai University, China) Title: Coalescences in Continuous-State Branching Processes

Contributed Talks, Arch Room

10:45 - 11:00: Omer Bobrowski (Technion, Israel) Title: Homological Connectivity in Random Čech Complexes

11:00 - 11:15: Stefan Koch (Manheim University, Germany) Title: Smooth dependence of fractional Brownian motion on its Hurst parameter and the limits of rough paths theory

11:20 - 11:35: Louis Fan (Indiana University, USA) Title: Joint distribution of Busemann functions in the corner growth model

11:35 - 11:50: Wai-Kit Lam (University of Minnesota, USA) Title: Universality for the time constant in 2D critical first-passage percolation

11:55 - 12:10: Alexander Schnurr (Universität Siegen, Germany) Title: On Markov Processes with Killing and Semimartingales with Four Characteristics

12:10 - 12:25: Jeff Kuan (Texas A&M, USA) Title: Markov duality and the KPZ equation

Contributed Talks, Evans Room

10:45 - 11:00: May-Ru Chen (National Sun Yat-sen University, Taiwan) Title: On the cover times of the reflected-walk and the reflected Brownian motion

11:00 - 11:15: Waisur Khuda Bukhsh (The Ohio State University, USA) Title: A Functional Central Limit Theorem for Susceptible-Infected (SI) Process on Configuration Model Graphs

11:20 - 11:35: Martina Favero (KTH Royal Institute of Technology, Sweden) Title: A dual process for the coupled Wright-Fisher diffusion

11:35 - 11:50: Christian Tsai (National Taiwan University, Taiwan) Title: On memory effect of sediment particle movement in turbulent flows by a random time interval Brownian motion model

11:55 - 12:10: Dong Yao (Duke University, USA) Title: The symbiotic contact process

12:10 - 12:25: Julia Gaudio (MIT, USA) Title: Attracting Random Walks

2:00 - 3:45 Invited Sessions and Contributed Talks

Invited Session: Potential Theory, Wildcat Room

Organized by Panki Kim (Seoul National University, South Korea)

2:00 - 2:30 Moritz Kassmann (Bielefeld University, Germany) Title: Heat kernel bounds for symmetric Markov processes with singular jump measures

2:35 - 3:05 Tadeusz Kulczycki (Wroclaw University of Science and Technology, Poland) Title: Strong Feller property for SDEs driven by multiplicative cylindrical Lévy noise

3:10 - 3:40 Renming Song (University of Illinois at Urbana-Champaign, USA) Title: Factorizations and estimates of Dirichlet heat kernels for non-local operators with critical killings

Invited Session: Percolation, Northwestern Room

Organized by Vincent Tassion (ETHZ, Switzerland)

2:00 - 2:30 Michael Damron (Georgia Tech, USA) Title: Absence of backward infinite paths in first-passage percolation in arbitrary dimension

2:35 - 3:05 Sébastien Martineau (ENS - Lyon, France) Title: Strict monotonicity of percolation thresholds under covering maps

3:10 - 3:40 Subhajit Goswami (Institut des Hautes Études Scientifiques, France) Title: Equality of critical parameters for GFF level-set percolation

Invited Session: Stochastic Homogenization, Lake Room

Organized by Felix Otto (Max-Planck, Germany)

2:00 - 2:30 Charles Smart (University of Chicago, USA)

Title: Unique continuation and localization on the planar lattice

2:35 - 3:05 Pierre-Francois Rodriguez (ENS - Lyon, France) Title: Random walk on dynamical percolation clusters

3:10 - 3:40 Martin Slowik (Technische Universität Berlin, Germany) Title: Green kernel asymptotics for two-dimensional random walks among random conductances

Contributed Session: Stochastic Population Models, Arch Room

Organized by Jason Schweinsberg (UC San Diego, USA)

2:00 - 2:15 Maite Wilke Berenguer (Ruhr-Universität Bochum, Germany) Title: Simultaneous migration in the seed bank coalescent

2:15 - 2:30 Sebastien Roch (University of Wisconsin, USA) Title: Inferring the multispecies coalescent from average internode distances: some rigorous results

2:35 - 2:50 Verónica Miró Pina (UNAM, Mexico) Title: The symmetric coalescent and Wright-Fisher models with bottlenecks

2:50 - 3:05 Dang Nguyen (University of Alabama, USA) Title: Persistence and Extinction in Random Environments

Contributed Talks, Arch Room

3:10 - 3:25 Jason Schweinsberg (UC San Diego, USA) Title: The nested Kingman coalescent: speed of coming down from infinity

3:25 - 3:40 Laurence Field (Australian National University, Australia) Title: Length-biasing, pinning and unpinning for SLE

Contributed Talks, Evans Room

2:00 - 2:15 Sangjoon Lee (University of Connecticut, USA) Title: Quasi-Limiting Behavior of a Drifted Brownian Process

2:15 - 2:30 Adrian Falkowski (Nicolaus Copernicus University, Poland) Title: BSDEs with two barriers and generalized reflection

2:35 - 2:50 Jacek Malecki (Politechnika Wrocławska, Poland) Title: Universality classes for general random matrix flows

2:50 - 3:05 Ma Elena Hernández-Hernández (University of Warwick, UK) Title: Stochastic Optimal Control in Continuous time for general jump processes

3:10 - 3:25 Shota Osada (Kyushu University, Japan) Title: Isomorphisms between determinantal point processes and Poisson point processes

3:25 - 3:40 Airam Blancas (Stanford University, USA) Title: A general mulitispecies coalescent model of neutral evolution

3:45 - 4:15 Coffee Break

4:15 - 6:10 Invited Sessions and Contributed Talks

Invited Session Rough Paths, Wildcat Room

Organized by Mathieu Rosenbaum (Ecole Polytechnique, France)

4:15 - 4:45 Christa Cuchiero (Vienna University, Austria) Title: Existence and stability for stochastic Volterra equations with jumps

4:50 - 5:20 Rama Cont (University of Oxford) Title: Pathwise calculus for processes with irregular trajectories

5:25 - 5:50 Mathieu Rosenbaum (Ecole Polytechnique, France) Title: From quadratic Hawkes processes to rough volatility and Zumbach effect

Invited Session: SLE, Northwestern Room

Organized by Fredrik Viklund (KTH, Sweden)

4:15 - 4:45 Eveliina Peltola (Université de Genève, Switzerland) Title: Crossing probabilities of multiple Ising interfaces

4:50 - 5:20 Xin Sun (Columbia University, USA) Title: Conformal embedding and percolation on the uniform triangulation

5:25 - 5:50 Dapeng Zhan (Michigan State, USA) Title: Time-reversal of Multiple-force-point SLE_\kappa(\underline\rho) with All Force Points Lying on the Same Side

Contributed Session: Inference for stochastic processes, Lake Room

Organized by Soukaina Doussi (University Cadi Ayyad, Morocco)

4:15 - 4:30 Igor Cialenco (Illinois Institute of Technology, USA) Title: Statistical inference problems for discretely sampled SPDEs

4:30 - 4:45 Konstantinos Spillopoulos (Boston University, USA) Title: Statistical Inference for Continuously- And Discretely-Observed Multiscale Diffusion Processes

4:50 - 5:05 Soukaina Douissi (University Cadi Ayyad, Morocco) Title: Berry Esséen bound for mean-reversion estimator of an AR(1) process driven by a second chaos white noise

5:05 - 5:20 Fatimah Alshahrani (Michigan State University) Title: Modeling Atlantic sea level rise as an AR(1) process with Gumbel innovations

Contributed Talks, Lake Room

5:25 - 5:40 Nathaniel Eldredge (University of Northern Colorado, USA) Title: Uniform heat kernel estimates for left-invariant Brownian motion on Lie groups via uniform doubling

5:40 - 5:55 Jorg-Uwe Lobus (Martin-Luther-University Halle-Wittenberg, Germany, and University of Linkoping, Sweden)

Title: Infinite dimensional Ornstein-Uhlenbeck processes with unbounded diffusion – quadratic variation, Itô formula, and generalizations

5:40 - 5:55 Guodong Pang (Penn State University)

Title: Generalized fractional Brownian motion as scaling limits of non-stationary shot noise processes

Contributed Session: Interacting systems in statistical mechanics, Arch Room

Organized by Benedikt Jahnel (WIAS, Germany) and Christof Külske (Ruhr Universität, Germany)

4:15 - 4:30 Pierre Houdebert (Universität Potsdam, Germany) Title: Sharp phase transition for the Area-interaction and Widom-Rowlinson model

4:30 - 4:45 Arnaud Le Ny (Université Paris-Est, France) Title: Random b.c. for long-range Dyson-Ising models

4:50 - 5:05 Christof Külske (Ruhr Universität, Germany) Title: Time-evolved Widom-Rowlinson models in discrete geometries: hardcore vs softcore

5:05 - 5:20 Benedikt Jahnel (WIAS, Germany) Title: Dynamical Gibbs-non-Gibbs transitions for the continuum Widom-Rowlinson model

Contributed Talks, Arch Room

5:25 - 5:40 Nobuaki Naganuma (Osaka University, Japan) Title: Asymptotic expansion of the density for hypoelliptic rough differential equation

5:40 - 5:55 Praveen Kolli (Carnegie Mellon, USA) Title: Large rank-based models with common noise

5:55 - 6:10 Christophe Biscio (Aalborg University, Denmark) Title: A general central limit theorem and subsampling variance estimator for α-mixing multivariate point processes

Contributed Talks, Evans Room

4:15 - 4:30 Matthieu Simon (The University of Melbourne, Australia) Title: SIR epidemics with stochastic infectious periods

4:30 - 4:45 Mateusz Topolewski (Nicolaus Copernicus University, Poland) Title: Systems of BSDEs with oblique reflection and related optimal switching problems

4:50 - 5:05 David Stenlund (Åbo Akademi University, Finland) Title: Moments of Occupation Times for One-dimensional Diffusions

5:05 - 5:20 David Barrera (École Polytechnique, France) Title: Generalization bounds for least-squares regression over independent samples

5:25 - 5:40 Zhang Na (University of Cincinnati, USA) Title: Quenched Central Limit Theorem (CLT) for Random Fields

5:40 - 5:55 Lucas Reding (Université de Rouen Normandie, France) Title: On kernel regression estimation for random fields

5:55 - 6:10 James Thompson (University of Luxembourg, Luxembourg) Title: Functional inequalities for Feynman-Kac semigroups

Wednesday, July 10th

8:30 - 9:30 Plenary Lecture, McCormick Auditorium
Béatrice de Tilière (Université Dauphine, France)
Title: The Z-invariant Ising model via dimers & outlook
9:30 - 10:30 Plenary Lecture, McCormick Auditorium
Dmitry Panchenko (University of Toronto, Canada)
Title: Synchronization mechanism in spin glasses
10:30 - 11:00 Coffee Break
11:00 - 12:00 Medallion Lecture, McCormick Auditorium
Krzysztof Burdzy (University of Washington)
Title: On Archimedes' principle and Fermi acceleration

Free afternoon

Thursday, July 11th

8:30 - 9:30 Plenary Lecture, McCormick Auditorium
James R. Lee (University of Washington)
Title: Unimodular uniformization and random walks
9:30 - 10:30 Plenary Lecture, McCormick Auditorium
Allan Sly (Princeton University)
Title: The slow bond model with small pertubations
10:30 - 11:00 Coffee Break
11:00 - 12:00 Medallion Lecture, McCormick Auditorium
Etienne Pardoux (Aix-Marseille Université, France)
Title: Fluctuations around a law of large numbers and extinction of an endemic disease
2:45 - 3:45 Doeblin Prize Lecture, McCormick Auditorium
Jason Miller (University of Cambridge)
Title: Existence and uniqueness of the Liouville quantum gravity metric for \gamma \in (0,2)

3:45 - 4:15 Coffee break

4:15 - 6:00 Invited Sessions and Contributed Talks

Invited Session: Random Walks, Location: McCormick Auditorium Organized by Assaf Nachmias (Tel Aviv University, Israel)

4:15 - 4:45 Ewain Gwynne (University of Cambridge, UK) Title: Random walk on random planar maps via Liouville quantum gravity

4:50 - 5:20 Jonathan Hermon (University of Cambridge, UK) Title: Anchored expansion in supercritical percolation on nonamenable graphs

5:25 – 5:55 Shirshendu Ganguly (University of Chicago, USA) Title: Diffusive estimates for random walk under annealed polynomial growth

Invited Session: Random Topology, Northwestern Room Organized by Omer Bobrowski

4:15 - 4:45 Shmuel Weinberger (University of Chicago) Title: Random embeddings of manifolds 4:50 - 5:20 Takashi Owada (Purdue University, USA) Title: Limit theorems for topological invariants of dynamic multi-parameter simplicial complex

5:25 - 5:55 Jean-Yves Welschinger (Université Lyon, France) Title: TBA

Invited Session: Long Term Memory and applications, Arch Room

Organized by Gennady Samorodnitsky (Cornell University, USA)

4:15 - 4:45 Gennady Samorodnitsky (Cornell University, USA) Title: Extreme Value Theory for Long Range Dependent Stable Random Field

4:50 – 5:20 Liudas Giraitis (Queen Mary, UK) Title: Estimation pitfalls when the noise is not i.i.d.

5:25 – 5:55 Joseph Rynkiewicz (Universite Paris 1, France) Title: Spectral estimation for long range dependent discrete time travel processes

Contributed Session: Random Matrices, Northwestern Room

Organized by Sean O'Rourke (UC Boulder, USA)

4:15 - 4:30 Indrajit Jana (Temple University, USA) Title: CLT for non-Hermitian random band matrices with variance profiles

4:30 - 4:45 Tom Trogdon (University of California, Irvine) Title: The conjugate gradient algorithm on random matrices

4:50 - 5:05 Hoi Nguyen (Ohio State University, USA) Title: On random matrices over finite fields

Contributed Talks, Northwestern Room

5:05 - 5:20 Gursharn Kaur (National University of Singapore, Singapore) Title: Interacting reinforcement on finite graphs

5:25 - 5:40 Gleda Kutrolli (University of Tirana, Albania) Title: Dynamic probabilistic forecasting with uncertainty

5:40 - 5:55 Chunxi Jiao (University of Sydney, Australia) Title: Computable primal and dual bounds for stochastic control

5:55 – 6:10 Malkhaz Shashiashvili (Tbilisi State University, Georgia) Title: Area Estimation between the Early Exercise Boundaries for the American Put Option with Different Local Volatilities

Contributed Session: Dynamics of SPDE, Lake Room

Organized by Jinqiao Duan (Illinois Institute of Technology, USA)

4:15 - 4:30 Jinqiao Duan (Illinois Institute of Technology, USA) Title: Homogenization for Nonlocal Stochastic Partial Differential Equations 4:30 - 4:45 Jing Wang (Purdue University, USA) Title: Graded large deviation principle for nilpotent hypoelliptic diffusion processes

Contributed Talks, Lake Room

4:50 - 5:05 Robert Baumgarth (University of Luxembourg, Luxembourg) Title: Scattering theory for the Hodge-Laplacian without assumption on the injectivity radius

5:05 - 5:20 Cristina Tone (University of Louisville, USA) Title: A central limit theorem for non-stationary strongly mixing random fields

5:25 - 5:40 Hyoeun Lee (University of Illinois at Urbana-Champaign, USA) Title: Optimal placement of a small order in a diffusive limit order book

5:40 - 5:55 Pavel Chigansky (The Hebrew University of Jerusalem, Israel) Title: Accuracy in linear filtering with fractional noises

5:55 - 6:10 Vytaute Pilipauskaite (Aarhus University, Denmark) Title: Aggregation of random-coefficient AR(1) processes with infinite variance

6:30 - 10:00 Dinner at Tapas Barcelona (ticket needed \$40).

Friday, July 12th

8:30 - 9:30 Plenary Lecture, McCormick Auditorium

Yan-Xia Ren (Peking University, China)

Title: Spine decompositions and limit results for models with branching structure

9:30 - 10:30 Lévy Lecture, McCormick Auditorium

Massimiliano Gubinelli (University of Bonn, Germany)

Title: Stochastic analysis and quantum fields

10:30 - 11:00 Coffee Break

11:00 - 12:00 Itô Lecture, McCormick Auditorium

Zhen-Qing Chen (University of Washington), McCormick Auditorium

Title: Brownian motion with darning and stochastic Komatsu-Loewner equations