Curriculum Vitae
Dr. Mladen Savov

Personal

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Education

2005-2008	Ph.D. in Probability, University of Manchester, UK Thesis: "Small time behaviour of Lévy processes" Supervisor: Prof. R. Doney
2000-2004	First class Bachelor of Mathematics, University of Sofia, Bulgaria

Research Interests

Probability Theory and Stochastic Processes

Lévy and Markov Process; Fluctuation Theory of Lévy Processes

Spectral Theory for Markov Processes

Employment

2012-present	Lecturer in Probability and Statistics, University of Reading, UK
2009-2012	Esmee Fairbairn Junior Research Fellow in Mathematics, New College, Oxford
2008-2009	Postdoc with Prof. J. Bertoin, University Pierre and Marie Curie, Paris, France

Awards

2011	UK Scopus Young Researcher Award 2011 - Mathematics
2007	Faculty of Engineering and Physical Sciences' Postgraduate Student of the year, University of Manchester, UK
2004	"Sv. Sv. Kiril i Methodii" Student Award for Excellence in Mathematical Studies,University of Sofia, Bulgaria

Grants

2012 Grant from *FNRS subsidy pour Mission Scientifique*

2011 Grant from *"Fondation Phillipe Wiener-Maurice Aanspach"* for a visit to ULB, Brussels

2005-2008 Overseas Research Scholarship for my PhD studies, UK

Published and accepted papers

[17] Patie, P. and Savov, M. (2013) "*Exponential functional of Lévy processes: Generalized Weierstrass products and WienerHopf factorization*", *Comptes Rendus Mathematique* **351**, No.9-10, 393–396,

[16] Aurzada, F., Doering, L. and Savov, M. (2013) "*Chung LIL for Lévy processes at small times*", *Bernoulli* **19**, No.1, 115–136,

[15] Kolb, M., Savov, M. and Wübcker, A. (2013) "*Geometric ergodicity of a hypoelliptic diffusion modelling the melt-spinning process of nonwoven materials*", *SIAM J. Math. Anal.* **45** No.1, 1–13

[14] Patie, P. and Savov, M. (2012) "*Extended factorizations of exponential functionals of Lévy processes*", *Electron. J. of Probab.* **17**, No.38, 1–22

[13] Pardo, J.C., Patie, P. and Savov, M. (2012) "*A Wiener-Hopf type of factorization for the exponential functional of Lévy processes*", *J. of London Math. Soc.* **96** (2), 930–956

[12] Kuznetsov A., Pardo J.C. and Savov, M. (2012) "*Distributional properties of exponential functionals of Lévy processes*", *Electron. J. of Probab.* **17**, No.8, 1–35

[11] Doering, L. and Savov, M. (2011) "*(Non) Differentiability and asymptotics for renewal densities of subordinators*", *Electron. J. of Probab.* **16**, No.17, 470–503

[10] Chan, T., Kyprianou A. and Savov, M. (2011) "*Smoothness of scale functions for spectrally negative Lévy processes*", *Probab. Theory and Related Fields* **150**, 691–708

[9] Savov, M. and Winkel, M. (2010) "*Right inverses of Levy processes: the excursion measure in the general case*", *Electron. Comm. in Probab.* **38**, No. 15, 572–584

[8] Savov, M. (2010) "*Small time one-sided LIL behaviour for Lévy processes at zero*", *J. of Theoret. Probab.* **23**, No.1, 209–236

[7] Bertoin, J. and Savov, M. (2010) "*Some applications of duality for Lévy processes in a half-line*", *Bull. of London Math. Soc.* **43**, 97–111

[6] Doering, L. and Savov, M. (2010) "*Application of renewal theorems to exponential moments of local times*", *Electron. Comm. in Probab.* **38**, No.15, 263–269

[5] Doney, R. and Savov, M. (2010) "*Right inverses of Lévy processes*", *Ann. of Probab.* **38**, No.4, 1390–1400

[4] Doney, R. and Savov, M. (2010) "*The asymptotic behavior of densities related to the supremum of a stable process*", *Ann. of Probab.* **38**, No.1, 316–326

[3] Doney, R., Maller, R. and Savov, M. (2009) "*Renewal theorems and stability for the reflected process*", *Stochastic Process. Appl.* **119**, No.4 , 1270–1297

[2] Savov, M. (2009) "*Small time two-sided LIL behavior for Levy processes at zero*", *Probab. Theory and Related Fields* **144**, No.1-2, 79–98

[1] Savov, M. (2008) "*Curve crossing for the reflected Lévy process at zero and infinity*", *Electron. J. of Probab.* **13**, No.7, 157–172

Submitted papers

[5] Kolb, M and Savov, M. (2014) "*Conditional survival distributions of Brownian trajectories in a one dimensional Poissonian environment in the critical case*"

[4] Aurzada, F., Kramm, T. and Savov, M. (2013) "*First passage times of Lévy processes over a one-sided moving boundary*"

[3] Kolb, M. and Savov, M. (2013) "*Exponential ergodicity of killed completely asymmetric Lévy processes in a finite interval*"

[2] Savov, M. and Wang, S-D. (2013) "*Fluctuation limits of a locally regulated population and generalized Langevin equations*"

[1] Kolb, M. and Savov, M. (2013) "*Transience and recurrence of a Brownian path with limited local time and its repulsion envelope*"

Recent Conferences | Talks

2013	"Some spectral properties for a class of non-self-adjoint operators related to Markov processes", From Spectral Gaps to Particle Filters, Reading, UK
2013	"Some spectral problems associated to non-self-adjoint selfsimilar semigroups", invited speaker, 7th International Conference on Lévy Processes, Wroclaw, Poland
2012	"Eigenvalue expansions of invariant Feller-Lamperti semigroups generated by non-local, non-selfadjoint operators via intertwining approach ", invited speaker, Workshop on Lévy processes and Their Applications, University of Zurich, Switzerland
2012	"Lévy perpetuities", invited speaker, Workshop IPAS, Brussels, Belgium
2011	"Exponential functionals of Lvy processes", invited speaker, Conference on Self-Similarity and Related Fields, Le Touquet, France
2011	"Exponential functionals of Lvy processes", invited speaker to a contributed session, "ttl", 35th Conference on Stochastic Processes and their applications, Oaxaca, Mexico.
2010	"Exponential functionals of Lvy processes", invited speaker, Workshop on Lévy processes and Their Applications, University of Zurich, Switzerland
2010	"Lamperti representation of self-similar Markov processes", invited speaker, 6th International Conference on Lévy Processes, Dresen, Germany
2009	"Right Inverses of Lévy processes", invited speaker to a special session, 34th Conference on Stochastic Processes and their applications, Berlin, Germany
2008	"Laws of Iterated Logarithms for Lévy processes at small times", invited speaker, Workshop on Risk Modeling and High Frequency Data, Munich, Germany

Recent Seminars | Talks

2013	"Spectral Expansions and Intertwining of Semigroups", London Mathematical Analysis Seminar, Imperial College, London, UK
2011	"Factorization of Exponential Functionals", Probability Seminar of Paris 6, Paris, France
2011	"Factorizations of Exponential Functionals", Probability Seminar of Fields Institute, Toronto, Canada
2010	"Some Results on Box Dimensions of Subordinators", CIMAT Probability Seminar, Guanajuato, Mexico
2010	"Some Results on Box Dimensions of Subordinators", UNAM Probability Seminar, Mexico city, Mexico
2010	"Some Applications of Duality for Lévy Processes in a Half-line", Stochastic Analysis Seminar, Oxford, UK

2010	“Some Applications of Duality for Lévy Processes in a Half-line”, ULB Seminar Meeting, Brussels, Belgium
2010	“Right Inverses of Lévy Processes”, Seminar meeting, Oxford, UK
2010	“Right Inverses of Lévy Processes”, Seminar meeting, Braunschweig, Germany
2009	“Right Inverses of Lévy Processes”, Seminar meeting, Bath, UK
2008	“Laws of Iterated Logarithms for Lévy processes at small times”, Probability Seminar of Paris 6, Paris, France
2008	“Laws of Iterated Logarithms for Lévy processes at small times”, Seminar Meeting, Vienna, Austria
2008	“Laws of Iterated Logarithms for Lévy processes at small times”, EURANDOM, Eindhoven, Holland

Teaching

Autumn 2013	“Statistical Methods-Distribution Theory”, University of Reading, UK
Spring 2013	“Probability Theory”, University of Reading, UK
2012-2013	Projects on “Renewal Theory”, University of Reading, UK
Spring 2012	Prepared two MSc projects in statistics, University of Reading, UK
Autumn 2012	“Probability Theory and Distributions”, University of Reading, UK
Spring 2012	Given some lectures on “Lévy processes”, ULB, Brussels, Belgium
Hilary 2012	Tutorials for visiting students at New College, Oxford, UK
Michaelmas 2011	Tutorials for visiting students, New College, Oxford, UK
Hilary 2010	Tutorials for “Lévy processes and Finance” at undergraduate and graduate level, University of Oxford, UK
2005-2008	Tutorials at the University of Manchester, UK on topics such as: probability theory, statistics, real and functional analysis, calculus, PDE, complex analysis.
2005-2008	Service teaching of mathematics for engineers and other sciences at University of Manchester

Oxford, UK, May 23, 2014