

Gennady Shaikhet – Curriculum Vitae

Work: 613-520-2600 (ext.7094) • gennady@math.carleton.ca • www.math.carleton.ca/~gennady

Employment

Assistant Professor School of Mathematics and Statistics
starting July 2010 Carleton University

Postdoctoral Associate Department of Mathematical Sciences
Sept 2007 - June 2010 Carnegie Mellon University

Research Interests

Probability Theory, Stochastic Processes and Applications: Approximations and Control of Large Scale Service Systems, Queueing Networks, Financial Engineering.

Personal

Birth date June 25, 1978
Place of birth Donetsk, Ukraine (former Ukrainian Republic of USSR)
Citizenship Israeli (immigrated from Ukraine in 1999)
Marital status Married to Alina (31)
Children Michael (6), Margarita (3)
Languages Russian, Ukrainian, Hebrew, English, Spanish (Elementary)

Education

Ph.D. Statistics TECHNION, Faculty of Industrial Engineering and Management, Israel, 2007.
Advisors: Rami Atar and Avishai Mandelbaum
MSc. Statistics TECHNION, Faculty of Industrial Engineering and Management, Israel, 2003.
Advisor: Gady Zohar
B.A. Mathematics DONETSK STATE UNIVERSITY, Ukraine, 1999

Teaching Experience

- Elements of Probability Theory (Math, Carleton) 2010 (Fall)
- Algebra and Geometry (Math, Carleton) 2010 (Fall)
- Monte Carlo Simulation (Math, Carnegie Mellon) 2007-2009 (Fall)
- Continuous Time Finance (Math, Carnegie Mellon) 2008-2010 (Spring)
- CNA institute – project director (Math, Carnegie Mellon) 2008-2009 (Summer)
- Teaching Assistant (IE&M, Technion) 2001-2007

Publications

- **Optimal Execution in a General One-Sided Limit-Order Book** (2010). (with Steven Shreve and Silviu Predoiu). Submitted.
- **A Fluid Control Problem in Overloaded Queueing Networks with General Service Times** (2010). Submitted.
- **Simplified control problems for multi-class many-server queueing systems** (with Rami Atar and Avishai Mandelbaum). *Math. Oper. Res. Vol. 34, No. 4, November 2009, pp. 795-812.*
- **Critically loaded queueing models that are throughput sub-optimal** (with Rami Atar). *Ann. Appl. Prob., 2009, Vol. 19, No. 2, 521–555.*
- **Queueing Systems with Many Servers: Null Controllability in Heavy Traffic** (with Rami Atar and Avishai Mandelbaum). *Ann. Appl. Prob., 2007, Vol. 16, No. 4, 1764–1804.*
- **Optimal Investment Strategies Under Transaction Costs** (2003). MSc. Thesis, Technion. (with Gady Zohar)
- **About Credit Risk Estimation.** Proceedings of the Second International School on Actuarial and Financial Mathematics. 8-12 June 1999 in Kyiv, Ukraine. Theory of Stochastic Processes. Vol.5(21), no.1-2, 1999, pp. 166-174 and Vol.6(22), no.3-4, 2000, pp. 252-254.
- **Stability of stochastic linear difference equations with varying delay.** In Advances in Systems, Signals, Control and Computers (V. Bajic Ed.), ISBN 0-620-23136-X, IAAMSAD and SA branch of the Academy of Nonlinear Sciences, Durban, South Africa, 1998, pp. 101-104.

Prizes and Scholarships

- Excellent Teaching Assistant 2003
- Wolf Prize 2003
- Otto Schwartz Prize 2002
- Technion Excellence Scholarship 2001