

**CURRICULUM VITAE**  
**Anatoliy SWISHCHUK**

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**Education:**

- *Doctor of Phys. & Math. Sci.* (1992, Doctorate, Institute of Mathematics, National Academy of Sciences of Ukraine (NASU), Kiev, Ukraine)
- *Ph.D.* (1984, Institute of Mathematics, NASU, Kiev, Ukraine)
- *M.Sc., B.Sc.* (1974-1979, Kiev State University, Faculty of Mathematics & Mechanics, Probability Theory & Mathematical Statistics Department, Kiev, Ukraine)

**Work Experience:**

- *Full Professor*, Department of Mathematics and Statistics, University of Calgary, Calgary, Canada (April 2012-present)
- *Co-Director*, Mathematical and Computational Finance Laboratory, Department of Mathematics and Statistics, University of Calgary, Calgary, Canada (October 2004-present)
- *Associate Professor*, Department of Mathematics and Statistics, University of Calgary, Calgary, Canada (July 2006-March 2012)
- *Assistant Professor*, Department of Mathematics and Statistics, University of Calgary, Calgary, Canada (August 2004-June 2006)
- *Course Director*, Department of Mathematics & Statistics, York University, Toronto, ON, Canada (January 2003-June 2004)
- *Research Associate*, Laboratory for Industrial & Applied Mathematics, Department of Mathematics & Statistics, York University, Toronto, ON, Canada (November 1, 2001-July 2004)
- *Professor*, Probability Theory & Mathematical Statistics Department, Faculty of Mathematics & Mechanics, Kiev National Taras Shevchenko University, Kiev, Ukraine (1998-2001)
- *Head of Mathematical Projects & Programs Department, Deputy Scientific Manager*, International Mathematical Center, NASU, Kiev, Ukraine (1992-2001)
- *Leading Scientific Collaborator, Senior Scientific Collaborator, Scientific Collaborator, Junior Scientific Collaborator*, Institute of Mathematics, NASU, Kiev, Ukraine (1984-2000)

**Courses Taught:**

- *Introduction to Lévy Processes with Applications (AMAT601.20)* (Fall 2010, 2008, Department of Math. & Stat., University of Calgary (U of C), Calgary)
- *Introduction to Mathematical Finance (AMAT481)* (Fall 2010, 2006, Department of Math. & Stat., U of C, Calgary)
- *Multivariable Calculus for Engineers (AMAT219)* (Winter 2011, 2010, Department of Math. & Stat., U of C, Calgary)
- *Multivariable Calculus (MATH331)* (Winter 2010, 2006, 2005, Department of Math. & Stat., U of C, Calgary)
- *Differential Equations for Engineers (AMAT 307)* (Fall 2009, 2005, Department of Math. & Stat., U of C, Calgary)
- *Stochastic Processes (STAT 761)* (Winter 2011, 2009, Department of Math. & Stat., U of C, Calgary)
- *Theoretical Probability (STAT 408)*(Winter 2009, Department of Math. & Stat., U of C, Calgary)
- *Introduction to Optimization (AMAT 425)* (Fall 2007, Department of Math. & Stat., U of C, Calgary)
- *Mathematical Probability (MATH 321)* (Fall 2007, 2006, Department of Math. & Stat., U of C, Calgary)
- *Operations Research (STAT 509)* (Winter 2007, Department of Math. & Stat., U of C, Calgary)
- *Advanced Futures and Options (AMAT 581)* (Winter 2006, Department of Math. & Stat., U of C, Calgary)
- *Computing for Mathematicians (AMAT 371)* (2004-2008, Department of Math. & Stat., U of C, Calgary)
- *Symbolic Computation Laboratory II (AS/SC/MATH 2042)* (Winter 2004, 2003, Department of Math. & Stat., York U, Toronto)
- *Symbolic Computation Laboratory I (AS/SC/MATH 2041)* (Fall 2003, Department of Math. & Stat., York U, Toronto)
- *Elementary Statistics I (CF MATH 2560)* (Fall 2003, Department of Math. & Stat., York U, Toronto)
- *Individual Project 'Mathematical Models and Computational Methods in Finance' (AS/SCMATH 4000)* (Summer 2003, Department of Math. & Stat., York U, Toronto)

**New Courses' Development:**

- *Developed Two New Courses:*
  - 1) 'Advanced Futures and Options' AMAT 581 (2005, taught in Winter 2006, U of C, Calgary) and
  - 2) 'Introduction to Lévy Processes with Applications' AMAT 601.20 (2008, taught in Fall 2010, 2008, U of C, Calgary)

**Research Interests:**

- *financial mathematics, stochastic calculus, stochastic processes, random evolutions and their applications, probability, statistics, biomathematics*

### Editorial Boards

- *Stochastic Analysis and Applications*
- *Journal of Modeling in Management*
- *Journal of Mathematics*
- *Biometrics & Biostatistics International Journal*

### Professional Services:

- *Session organizer: 'Limit Order Books', IWAP (Toronto, ON, Canada) (June 20-23, 2016)*
- *Session organizer: 'Stochastic models in energy finance' (CAIMS, Edmonton, AB, Canada) (June 26-30, 2016)*
- *Director of Calgary site of the Postdoctoral Training Center in Stochastics (PTCS) (PIMS, Vancouver, BC, Canada) (August 2014-present)*
- *Chair of 'Utility and Frictions' Session, Bachelier Finance Society Congress (June 19-23, 2012, Sydney, Australia)*
- *Organizer and Chair of 'Martingale, Stochastic Calculus and Finance' Session, 14th International ASMDA 2011 Conference (June 7-10, 2011, Rome, Italy)*
- *Creator and one of the signators of the 'Memorandum of Understanding'-agreement between the Department of Mathematics and Statistics, U of C (Canada), and Elite Graduate Program in Finance, U of Augsburg and TUM, Munich (Germany) (August 2010-present)*
- *Member of the PRMIA (Professional Risk Managers' International Association) Calgary Chapter Steering Committee (July 2006-present, Calgary, AB, Canada)*
- *Coordinator and Organizer of the 'Lunch at the Lab' Finance Seminar (Fall 2004-present, weekly finance seminar at the Mathematical and Computational Finance Laboratory, Department of Math. & Stat., U of C, Calgary)*
- *Departmental Liaison to the MAA (Mathematical Association of America) (December 2005-present, Department of Math.& Stat., U of C, Calgary)*
- *3 Reviews of NSERC application (December 2010-January 2011, NSERC, Canada)*
- *MSc Thesis Defence Examiner (May 19, 2011, U of C, Calgary)*
- *PhD Thesis Defence Examiner (April 27, 2011, U of C, Calgary)*
- *Two Reviews of Full Professor's Application (2009, 2010)*
- *PhD Thesis External Examiner (May 10, 2010, Technical University of Munich, Munich, Germany)*
- *Judge of Undergraduate Students Posters (PNW-MAA Annual Meeting, May 9-10, 2010, Seattle University, WA, USA)*
- *Member of the Oral PhD Candidacy Examination (September 28, 2010, U of C, AB, Canada)*

- *Examiner of the Candidacy Oral Examination* (September 28, 2010, Department of Math. & Stat., U of C, Calgary)
- *PhD Thesis Defense External Examiner* (April 30, 2010, University of Alberta, AB, Canada)
- *PhD Thesis Examiner* (December 2009, University of Adelaide, Adelaide, Australia)
- *Neutral Chair of the PhD Thesis Defense Committee* (August 18, 2009, Department of Math. & Stat., University of Calgary (U of C), Calgary)
- *External Examiner of the Candidacy Oral Examination Committee* (August 4, 2009, Haskayne School of Business, U of C, Calgary)
- *Organizer of the Financial Mathematics Session* (May 2, 2008, North/South Dialogue Meeting, U of C, Calgary)
- *Chair of the Academic Selection Committee (hired two faculties, in topology and mathematical finance)* (January 2008-May 2008, Department of Math. & Stat., U of C, Calgary)
- *Member of the PhD thesis defense committee* (April 11, 2008, Haskayne School of Business, U of C, Calgary)
- *Member of the PhD thesis defense committee* (March 6, 2008, Haskayne School of Business, U of C, Calgary, AB, Canada)
- *Neutral Chair of the MSc thesis defense committee* (August 3, 2007, Department of Math. & Stat., U of C, Calgary)
- *Member of the Candidacy Oral Examination Committee* (December 7, 2006, Department of Math. & Stat., U of C, Calgary)
- *Co-organizer of the Mathematical Finance Session at the CMS Summer Meeting* (June 3-5, 2006, U of C, Calgary, AB, Canada)
- *Preparation of Questions for APRM Certification Exam* (PRMIA, Winter 2008)
- *Organizer of TMAC (Treasury Management Association of Canada) /PRMIA Student Event* (September 20, 2006)
- *Organizer of the University of Calgary/PRMIA Graduate Students Presentation Event* (April 10th, 2007, Calgary, Bankers Hall, West Tower, EnCana Corp.)
- *Organizer of Grad Students Research Presentations Opportunity: Grad Students Presentations to Calgary Business Community* (October 11, 2007, Bankers Hall, Calgary)
- *Participation in Preparation of The Professional Risk Manager (PRM) Certification Program* (2007)
- *External Examiner of the PhD Defense Committee* (October 11, 2005, Department of Math. & Stat. Sci., University of Alberta, Edmonton)
- *Judge of graduate students and PDFs posters* (MITACS 6th Annual Conference, May 11-14, 2005, U of C, Calgary, AB, Canada)
- *Reviewer for the RISK Magazine*, London, UK
- *Reviewer for the Journal of Applied Probability*, Sheffield, UK
- *Reviewer for the Mathematical Review* (AMS), Providence, RI, USA
- *Reviewer for the Zentralblatt fur Mathematik*, Karlsruhe, Germany
- *Reviewer for the Canadian Mathematical Bulletin*, Ottawa, ON, Canada

- Reviewer for the *Journal of Applied Mathematics & Stochastic Analysis*, NY, USA
- Reviewer for the *SIAM J. of Financial Mathematics*, NY, USA
- Reviewer for the *Applied Mathematical Finance J.*, NY, USA
- Reviewer for the *Intern. Review of Applied Financial Issues and Economics*

### Students' Supervision:

- Novak, Joshua, MSc (University of Calgary, September 2015-present))
- Cera, Katharina, MSc (U of Calgary & TUM (Munich), May-October 2016)
- Schmidt, Julia, MSc (U of Calgary & TUM (Munich), May-October 2016)
- Wang, Zijia, MSc (University of Calgary, September 2015-present)
- Zhang, Yi, PhD (University of Calgary, September 2014-present)
- Vadori, Nelson, PhD (University of Calgary, September 2011-June 2015)
- Moyer, Zachary, MSc (University of Calgary, September 2013-January 2015)
- Tertychnyi, Maksym, MSc (University of Calgary, September 2013-May 2014)
- Salvi, Giovanni, PhD (University of Rome 'La Sapienza', Rome, Italy, Jan-Aug 2012)
- Hiller, Martin, MSc (TUM, Munich, Germany, April 2012-September 2012)
- Steinruecke, Lea, MSc (TUM, Munich, Germany, September 2011-February 2012)
- Cui, Kaijie, PhD (University of Calgary (U of C), Calgary, September 2010-present)
- Sahmoradi, Akbar, PhD (U of C, Calgary, September 2010-present)
- Zhao, Ke, PhD (U of C, Calgary, January 2009-present)
- Devault, Wesley, MSc (U of C, Calgary, September 2010-present)
- Zhang, LiFeng, MSc (U of C, Calgary, September 2010-present)
- Malenfant, Kevin, MSc (U of C, Calgary, September 2008-present)
- Couch, Matthew, MSc (U of C, Calgary, September 2008-August 2010)
- Nedunthally, Thomas, MSc (U of C, Calgary, September 2007-November 2009)
- Li, Xu, MSc (interim supervising, U of C, Calgary, August 2006-August 2007)
- Orosi, Greg, PhD (interim supervising, U of C, Calgary, July 2007-December 2007)
- Pratt, Aaron, MSc (interim supervising, U of C, Calgary, July 2007-December 2007)
- Zhao, Lu (Matthew), MSc-August 2007 (U of C, Calgary, September 2005-August 2007)
- Qyuan, Yuyuan (Lance), MSc-July 2007 (U of C, Calgary, September 2005-August 2007)
- Lyle, Matthew, MSc-June 2007 (U of C, Calgary, September 2006-June 2007)
- Quan, Guanghui, MSc-November 23, 2006 (U of C, Calgary, July 2006-December 2006)
- Kazmerchuk, Yuriy, PhD-May 2005 (York U, Toronto, 2001-2004) (co-supervised)

### Post-Doctoral Fellow's Supervision:

- Chavez-Casillas, Jonathan (University of Calgary, Calgary, Canada, August 2015-present)
- Coayla-Teran, Edson Alberto (University of Calgary, Calgary, Canada, March-December 2009)

### Visitors:

- *Limnios, Nikolaos (UTC, Compiègne, France)*, May 2013
- *Zagst, Rudi (TUM, Munich, Germany)*, August 2010, 2013
- *Silvestrov, Dmitrii (University of Stockholm, Sweden)*, May 2008
- *Malyarenko, Anatoliy (Malardalen University, Vasteros, Sweden)*, June 2008
- *Mishura, Yulia (Kiev University, Ukraine)*, July 2009
- *Islam, Shafiqul (PEIU, Charlottetown, PEI, Canada)*, February, 20010, December 2010

#### USRA NSERC Students' Supervision:

- *Hofmeister, Tyler (University of Calgary, Calgary, AB, Canada, May-August 2016)*
- *Moyer, Zachary (University of Calgary, Calgary, AB, Canada, May-August 2013)*
- *Soos, Boglarka (University of Calgary, Calgary, AB, Canada, May-August 2010)*
- *Hargreven, Brock (University of Calgary, Calgary (U of C), Canada, May-August 2009)*
- *Malenfant, Kevin (May-August 2008, U of C, Calgary, AB, Canada)*
- *Daekwan, Kim (May-August 2008, U of C, Calgary, AB, Canada)*
- *Lyle, Matthew (May-August 2006, U of C, Calgary, AB, Canada)*

#### Conferences' Talks (Invited Speaker/Lecturer/Plenary Talks):

- *Invited Speaker, Bachelor Finance Society Congress, New York, July 15-19, 2016)*
- *Invited Speaker, IWAP (June 20-23, 2016, Toronto, AB, Canada)*
- *Invited Speaker, CAIMS meeting (June 26-30, 2016, Edmonton, AB, Canada)*
- *Invited Lecture, University of Adelaide, Adelaide, Australia, December 11, 2016)*
- *Invited Lecture, La Trobe University, Melbourne, Australia, December 9, 2016)*
- *Invited Speaker, QMF Conference, Sydney, Australia, December 17-20, 2016)*
- *Invited Speaker, AMMCS/CAIMS Congress (June 8-12, 2015, Waterloo, WLU, ON, Canada)*
- *Invited Speaker, CMS Summer meeting (June 5-8, 2015, Charlottetown, PEI, UPEI, Canada)*
- *Poster Presentation, IPAM Workshop (March 23-27, 2015, UCLA, Los Angeles, CA, USA)*
- *Invited Speaker, CAIMS meeting (June 22-24, 2014, Saskatoon, SK, Canada)*
- *Invited Speaker, AMS Western Spring Sessional Meeting (April 4-6, 2014, Albuquerque, NM, USA)*
- *Invited Lecturer, North Dakota State University (November 20, 2014, Fargo, ND, USA)*
- *Invited Speaker, CMS Winter meeting (December 5-8, 2014, Hamilton, ON, Canada)*
- *Invited Speaker, SMTDA Conference (June 11-14, 2014, Lisbon, Portugal)*
- *Invited Speaker, 8th Conference in Actuarial Science & Finance on Samos (May 29-June 1, 2014, Samos, Greece)*
- *Invited Speaker, SSC Conference (May 25-27, 2014, Toronto, ON, Canada)*
- *Invited Speaker, AMMCS Congress (August 27-30, 2013, Waterloo, ON, Canada)*
- *Invited Speaker, IME Congress (July 1-3, 2013, Copenhagen, Denmark)*

- *Plenary Speaker, Quantitative Methods in Finance (QMF) 2012 Conference* (June 26-30, 2012, Cairns, Australia)
- *Invited Speaker, Bachelier Finance Society Congress* (June 19-23, 2012, Sydney, Australia)
- *Invited Speaker, ICIAM 2011* (July 18-22, 2011, Vancouver, BC, Canada)
- *Invited Lecture, HVB-Institute for Mathematical Finance, Technical University Munich (TUM)* (June 22, 2011, Munich, Germany)
- *Invited Speaker, 15th International Congress on Insurance: Mathematics & Economics, IME 2011* (June 14-17, 2011, Trieste, Italy)
- *Invited Speaker, 14th International Conference of ASMDA Society (ASMDA 2011)* (June 7-10, 2011, Rome, Italy)
- *Invited Speaker, Canadian Mathematical Society Summer Meeting, Mathematical Finance Session* (June 3-4, 2011, Edmonton, Canada)
- *Invited Speaker, North/South Dialogue Meeting in Mathematics* (May 5-6, 2011, Calgary, Canada)
- *Invited Speaker, 6th World Congress of Bachelier Finance Society* (June 17-19, 2010, Toronto, Canada)
- *Invited Lecture, HVB-Institute for Mathematical Finance, Technical University Munich (TUM)* (May 12, 2010, Munich, Germany)
- *Invited Speaker, 38th SSC Annual Meeting* (May 23-26, 2010, Quebec City, Canada)
- *Invited Speaker, PEIU* (June 28, 2010, Charlottetown, PEIU, PEI, Canada)
- *Invited Speaker, International Conference 'Modern Stochastics: Theory and Applications II'* (September 7-11, 2010, Kiev, Ukraine)
- *Invited Speaker, Alberta Statisticians Meeting* (October 16, 2010, Edmonton, Canada)
- *Invited Speaker, Quantitative Methods in Finance (QMF) 2009 Conference* (December 16-19, 2009, Sydney, Australia)
- *Invited Speaker, Alberta Statisticians' Meeting* (October 24, 2009, University of Calgary, Calgary, AB, Canada)
- *Invited Speaker, III International Conference on Semi-Markov Models: Theory and Applications* (June 17-20, 2009, Cagliari, Italy)
- *Invited Lecturer, University of Rome I 'La Sapienza'* (delivered two lectures, June 15-16, 2009, Rome, Italy)
- *Invited Speaker, CAIMS Meeting* (June 10-14, 2009, University of Western Ontario, London, ON)
- *Invited Speaker, North/South Dialogue Meeting (Financial Mathematics Session)* (May 1-2, 2009, Red Deer College, Red Deer, AB, Canada)
- *Invited Speaker, Quantitative Methods in Finance (QMF) 2008 Conference* (December 17-20, 2008, Sydney, Australia)
- *2008 Stochastic Modeling Symposium and Investment Seminar* (December 1-2, 2008, Montreal, Quebec, Canada)
- *North/South Dialogue Meeting (Financial Mathematics Session)* (May 2, 2008, U of C, Calgary, AB, Canada)

- *Quantitative Methods in Finance (QMF) 2007 Conference* (December 12-15, 2007, Sydney, Australia)
- *Canadian Mathematical Society (CMS) 2007 Winter Meeting (Mathematical Finance Session)* (December 8-10, 2007, London, ON, Canada)
- *Computational Methods in Finance Conference* (July 26-27, 2007, Waterloo, ON, Canada)
- *Statistical Society of Canada (SSC) 2007 Meeting* (June 10-13, 2007, St. John's, Newfoundland, Canada)
- *Canadian Applied and Industrial Mathematical Society (CAIMS\*SCMAI) 2007 Annual Meeting* (20-24 May, 2007, Banff, Alberta, Canada)
- *Canadian Mathematical Society (CMS) 2006 Summer Meeting (Mathematical Finance Session)* (June 3-5, 2006, Calgary, AB, Canada)
- *2006 Stochastic Modeling Symposium* (April 3-4, 2006, Toronto, ON, Canada)
- *MITACS Project Meeting: Modelling Trading and Risk in the Market* (November 11-12, 2005, McMaster U, Hamilton, ON, Canada)
- *RJE2005 Conference* (July 24-27, 2005, Haskayne School of Business, U of C, Calgary, Canada)
- *SCMOCS05 Conference* (July 10-16, 2005, Daydream Island Resort, Australia) (contributed paper)
- *5th North-South Dialog* (April 30-May 1, 2005, University of Alberta, Edmonton, Canada)
- *MITACS 6th Annual Conference* (May 11-14, 2005, U of C, Calgary, AB, Canada)
- *MITACS Project Workshop: Modelling Trading and Risk in the Market* (November 11-13, 2004, BIRS, Banff, Alberta, Canada)
- *6th Annual Financial Econometrics Conference "Estimation of Diffusion Processes in Finance"* (March 19, 2004, Centre for Advanced Studies in Finance, University of Waterloo, Waterloo, Canada: <http://arts.uwaterloo.ca/ACCT/finance/fec6.htm>)
- *6th Annual PIMS Industrial Problems Solving Workshop* (May'27-31, 2002, University of British Columbia, Vancouver, Canada, (supervisor of Royal Bank of Canada Financial Group's students' team. Project: Pricing of pseudo-variance, pseudo-covariance, pseudo-volatility and pseudo-correlation swaps-in analytical close form; <http://www.pims.math.ca/publications/proceedings/ipsw6.pdf>)

#### Talks on Seminars:

- *PRMIA (Professional Risk Managers' International Association) Calgary Chapter Luncheon Talk: 'The Volatility Surface'* (May 17, 2011, Bankers Hall, Calgary, Canada)
- *PRMIA Calgary Chapter Luncheon Talk: 'Stochastic Modelling of Electricity and related Markets'* (May 4, 2010, Bankers Hall, Calgary: Organizer: S. Dalton (EnCana))
- *More than 60 talks at the Mathematical and Computational Finance Laboratory Seminars, Department of Math. & Stat., U of C, Calgary* (Fall 2004-present)
- *Colloquium: What is Financial Mathematics: History, Basic Ideas, Methods and Some Prospectives* (April 2, 2009, Department of Math. & Stat., U of C, Calgary: Organizer: A. Brudniy)



- *PRMIA Calgary Chapter Luncheon Talk: Lévy Processes: History, Basic Ideas, Methods and Applications* (February 10, 2009, Bankers Hall, Calgary: Organizer: S. Dalton (En-Cana))
- *Colloquium: Lévy Processes-From Probability to Finance* (January 23, 2008, Department of Mathematics & Statistics, U of C, Calgary: Organizer: A. Brudniy)
- *Colloquium: Mean-Reverting Models in Financial and Energy Markets* (April 14, 2005, Department of Math. & Stat., U of C, Calgary Organizer: P. Binding))
- *Department's Seminar* (April 15, 2004, Department of Statistics, University of Toronto, Toronto, Canada Organizers: R. Almgren & S. Jaimungal))
- *Industrial & Applied Mathematics Seminar* (November, 2002, Department of Math. & Stat., York U, Toronto, Canada; Organizers: J. Wu & D. Liang)
- *Probability & Finance Seminar* (April, 2002, Department of Math. & Stat., York U, Toronto, Canada; Organizers: T. Salisbury & N. Madras)
- *Finance Seminar* (January, 2002, Algorithmics Inc., Toronto, Canada; Organizer: A. Kreinin)

**Grants:**

- *NSERC Discovery Grant* (2015-2020, \$85,000)
- *NSERC Discovery Grant* (2010-2015, \$60,000)
- *NSERC Discovery Grant* (2005-2010, \$65,000)
- *NCE Grant* (February 2007-March 2008, \$ 30,000)
- *Start-Up Grant* (2004-2006, Faculty of Science, University of Calgary, \$10,000)

**Books' Review on the Finance Seminar:**

- *J. Gatheral "The Voatility Surface. A Practitioner's Guide."*, Wiley, 2006 (Finance Seminar, Fall2010-Winter 2011, Department of Math. & Stat., U of C)
- *F. Benth, J. Benth and S. Koekebakker "Stochastic Modeling for Electricity and Related markets"*, World Sci., 2008 (Finance Seminar, Department of Math. & Stat., U of C)
- *H. Geman "Commodity and Commodity Derivatives"*, World Sci., 2005 (Finance Seminar, Department of Math. & Stat., U of C)
- *W. Shoutens "Lévy Processes in Finance"*, Wiley, 2003 (Finance Seminar, Department of Math. & Stat., U of C)
- *L. Clelow and C. Strickland "Energy Derivatives: Pricing and Risk Management"*, Lacima Publ., 2000 (Finance Seminar, Department of Math. & Stat., U of C)
- *O. Kallenberg "Foundation of Modern Probability"*, Springer, 2002 (Finance Seminar, Department of Math. & Stat., U of C)

**Books' Review:**

- *F. Menezes and P. Monterio "An Introduction to Auction Theory"*, Oxford University Press, 2008
- *V. Borkar "Stochastic Approximation. A Dynamic Systems Viewpoint"*, Cambridge University Press, 2008
- *A. Barrat, M. Barthelemy and A. Vespignani "Dynamical Processes on Complex Networks"*, Cambridge University Press, 2008
- *R. Bhattacharya and M. Majumdar "Random Dynamical Systems"*, Cambridge University Press, 2007
- *A. Gulisashvili and J. A. van Casteren "Non-Autonomous Kato Classes and Feynman-Kac Propagators"*, World Scientific, 2006
- *S. L. Kalpazidou "Cycle Representations of Markov Processes"*, Springer, 2006
- *K. L. Seip and F. Wenstop "A Primer on Environmental Decision-Making. An Integrative Quantitative Approach"*, Springer, 2006
- *S. N. Ethier and T. G. Kurtz "Markov Processes: Characterization and Convergence"*, Wiley Series in Probability and Statistics, 2005
- *D. G. Cacuci, M. Ionescu-Bujor and I. M. Navon "Sensitivity and Uncertainty Analysis. Applications to Large-Scale Systems"*, Chapman& Hall/CRC, 2005
- *Mu-Fa Chen "Eigenvalues, Inequalities, and Ergodic Theory"*, Springer, Probability and Its Application Series, 2005.
- *A. J. Kurdia and M. Zabaranin "Convex Functional Analysis"*, Birkhauser, 2005.
- *D. G. Cacuci "Sensitivity and Uncertainty Analysis"*, Chapman & Hall/CRC, Boca Raton, 2003, 285p.
- *R. Buff "Uncertain Volatility Models-Theory and Applications"*, Springer, Berlin, 2002, 243p.
- *C. Gourieroux and J. Jasiak "Financial Econometrics"*, Princeton University Press, Princeton and Oxford, Princeton Series in Finance, 2001, 513p.
- *H. Hennion and L. Herve "Limit Theorems for Markov Chains and Stochastic Properties of Dynamical Systems by Quasi-Compactness"*, Springer, Berlin, 2001, 145p.
- *V. Girko "Theory of Stochastic Canonical Equations"*, Kluwer Academic Publishers, Dordrecht, 2001, Volume I, 497p. and Volume II, 463p.
- *W. Szczepinski and Z. Kotulski "Error Analysis with Applications in Engineering"*, Lastran, Rochester, 2000, 235p.
- *W. Klonecki "Statystyka dla Inzynierow"*, Wydawnictwo Naukowe PWN, Warszawa, 1999, 283p.
- *J. K. Sengupta and P. Fanchon "Control Theory Methods in Economics"*, Kluwer Academic Publishers, Dordrecht, 1997, 258p.
- *V. Kalashnikov "Topics on Regenerative Processes"*, CRC Press, Boca Raton, 1994, 212p.

#### Computer Skills:

- *Maple, LaTeX, Excel, Matlab, UNIX, HTML, Microsoft PowerPoint, Microsoft Word*

## Personal:

- *Date of Birth: April 26, 1957*
- *Married, two children*

## Citizenship:

- *Canadian*

## Publications

- *More than 170 publications and conference contributions, including 12 published monographs (see my Publication List below)*

## Books Published:

12. **Swishchuk A.V. (2015)** *Change of Time Methods in Quantitative Finance*. Springer. Series: SpringerBriefs in Mathematics.
11. **Swishchuk A.V. (2014)** *Stochastic Calculus in Banach Spaces*. Scholars' Press, Saarbrücken, Germany.
10. **Swishchuk A.V. (2013)** *Modeling and Pricing of Swaps for Financial and Energy Markets with Stochastic Volatilities*. World Sci. Publ. Co., Singapore.
9. **Swishchuk A.V. & Islam S. (2013)** *Random Dynamical Systems in Finance*. Chapman & Hall/CRC Press, Boca Raton, FL, USA.
8. **Swishchuk A. V. and Wu J. (2003)** *Evolutions of Biological Systems in Random Media. Limit Theorems and Stability* Kluwer AP, Dordrecht, The Netherlands, 218p. ISBN 1-4020-1554-2. Serie: Mathematical Modelling: Theory and Applications, v. 18.
7. **Swishchuk A.V. (2000)** *Random Evolutions and Their Applications. New Trends*. Kluwer Academic Publ., Dordrecht, The Netherlands, v.504, 315p. ISBN 0-7923-6264-0.
6. **Korolyuk V.S. and Swishchuk A.V. (2000)** *Evolutionary Stochastic Systems. Algorithms of Averaging and Diffusion Approximation*. Mathematics and its Applications: Theory Probability and Mathematical Statistics, v. 33, Institute of Mathematics, National Academy of Sciences of Ukraine, Kyiv, Ukraine. 344p. (In Russian). ISBN 5-12-004265-1.
5. **Swishchuk A.V. (1997)** *Random Evolutions and their Applications*. Kluwer Academic Publishers, Dordrecht, The Netherlands, v.408, 215 p. ISBN 0-7923-4533-9.
4. **Korolyuk V.S. and Swishchuk A.V. (1995)** *Evolution of Systems in Random Media*. CRC Press, Boca Raton, USA. 356 p. ISBN 0-8493-9405-8.
3. **Korolyuk V.S. and Swishchuk A.V. (1995)** *Semi-Markov Random Evolutions*. Kluwer Academic Publishers, Dordrecht, The Netherlands. 310 p. ISBN 0-7923-3150-8.

2. **Korolyuk V.S. and Swishchuk A.V. (1992)** *Semi-Markov Random Evolutions*. Naukova Dumka Publishing, Kiev. 256 p. (In Russian). ISBN 5-12-003165-X.

1. **Korolyuk V.S. and Swishchuk A.V. (1990)** *Applied Problems of the Theory of Random Evolutions*. Znannya, Kiev, Ukraine. 30 p. (In Russian)

## Peer-Reviewed Publications:

94. **Elliott, R., Swishchuk, A. and Zhang, Y.** A semi-martingale representation for a semi-Markov chain with application to finance. *TPMS*, 2017 (accepted).

93. **Chavez-Casillas, J., Elliott, R., Remillard, B. and Swishchuk, A.** A level-1 limit order book with time dependent arrival rates. *Proceed. IWAP, Toronto, June-20-25, 2017*.

92. **Swishchuk, A., Cera, K., Hofmeister, T. and Schmidt, J.** General semi-Markov model for limit order books, *Intern. J. Theoret. Applied Finance*, 2017 (accepted).

91. **Swishchuk, A. and Vadori, N.** A semi-Markovian modeling of limit order markets, *SIAM J. Finan. Math.*, 2017, v. 8, 240-273..

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