Anatoliy Swishchuk's Short Curriculum Vitae

Degrees: Ph.D., D.Sc.

Position: Professor (U of Calgary, Calgary, AB)

Research Interests: mathematical finance, stochastic processes, probability, statistics, insurance, energy finance and markets

Contributions in Research (last 6 years):

5 books; 4 book chapters; 30 research papers and 4 conference contributions; 1 paper was accepted a nd 3 are under review. My i10 index is 30, h-index is 17, and I am ranked in the top 10% of authors on S SRN by all-time downloads. In 2018 I have got **the Peak Scholar Award** from the University of Calgary for my research work.

Contributions to Training of HQP (last 6 years):

For the past 6 years, I supervised **1 post-doctoral fellow, 7 PhD and 12 MSc graduate students, and 3 undergraduate students.** My all MSc students have been in thesis-based MSc program.Some of my MSc students (3) were from Technical University of Munich (TUM, Munich, Germany), and I was the sole sup ervisor during their stay in Calgary, and co-supervisor once they return to Germany

Selected Peer-reviewed Publications (last 6 years):

1.1.Most significant contributions in Mathematical Finance:

-**Swishchuk, A. and Islam, S. (2013)**: Random Dynamical Systems in Finance. CRC Press, NY.

-**Swishchuk, A. (2013)**: Modelling and Pricing of Swaps for Financial and Energy Markets with Stochastic Volatilities. World Scientific Publishers, Singapore.

-**Swishchuk, A. (2016)**: Change of Time Methods in Quantitative Finance. Springer, NY.

-**Swishchuk, A. and Vadori, N. (2017)**: A semi-Markov modelling of limit order markets. SIAM J. Finan. Math., 8(1), 240-273.

-**Swishchuk, A., Cera, K., Hofmeister, T. and Schmidt, J. (2017):** General semi-Markov model for limit order books. J. Theor. Appl. Finance, 20, 1-21.

-**Vadori, N. and Swishchuk, A. (2019):** Inhomogeneous random evolutions: limit theorems and financial applications. Mathematics, 7(447), 1-62.

-**Swishchuk, A. and Wang, Z. (2019):** Variance and volatility swaps and futures pricing for stochastic volatility models. Financial Markets, Volatility and Covariance Models. Taylor & Francis.

1.2. Most significant contributions in Insurance and Risk Theory:

-**Badaoui, M., Swishchuk, A. and Fernandez, B. (2018)**: An optimal investment strategy for insurer in incomplete markets. Risks, 6(2): 1-23.

-**Swishchuk, A. (2018):** Risk model based on general compound Hawkes process. Wilmott Magazine, 2018, 94, 50-57.

1.3. Most significant contributions in Energy Markets:

-**Swishchuk, A. (2013):** Variance and volatility swaps in energy markets. J. Energy Markets. 6(1), 33-49.

-**Swishchuk, A. and Cui, K. (2014):** Applications of weather derivatives in energy markets. J. of Energy Markets, 16.

-**Shahmoradi, A. and Swishchuk, A. (2016**): Pricing crude oil options using Levy processes. J. of Energy Markets, 9(1), 47-65.

-**Swishchuk, A. (2019):** Stochastic modelling and pricing of energy markets contracts with local stochastic delayed and jumped volatility. Handbook in Energy Finance: Theory, Practice and Simulaions. 1(1), 32. Eds.: Guotte, S. et al.