



Elena Silyakova

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Languages: English (fluent), German (fluent), Russian (mother tongue)
Website: <http://lvb.wiwi.hu-berlin.de/members/personalpages/es>

Education

- 02/2009 - present **PhD**
Ladislaus von Bortkiewicz Chair of Statistics and Econometrics
Humboldt-Universität zu Berlin (Berlin, Germany)
- Research interests: Volatility and correlation derivatives, dispersion trading, basket options
- 10/2006 - 01/2009 **Master program in Economics and Management Science (M. Sc.)**
Humboldt-Universität zu Berlin (Berlin, Germany)
- Majors: Finance, Statistics, Econometrics
Master thesis: "Variance swaps"
Degree: Master of Economics and Management Science, Grade: very good
- 09/2000 - 02/2006 **Diploma in business administration**
"MATI"-Russian State Technological University (Moscow, Russia)
- Majors: Economics and Business Administration
Final Thesis: "Development and introduction of business risk management system in hardware and software production for power engineering objects"
Degree: Economist and Manager, Grade: very good

Work experience

- 02/2009 - present **Research assistant**
Collaborative Research Center 649 "Economic Risk" (CRC 649) (Berlin, Germany)
- 08/2008 - 11/2008 **Intern**
Dresdner Bank AG, Dresdner Kleinwort,
Market Risk/ Equity Products (Frankfurt/Main, Germany)
- Valuation, analysis and validation of daily Clean PL
Monitoring of spreadsheets changes of exotic equity derivatives
Improvement of limits' monitoring procedure
Improvement of front-to-back-reconciliation breaks monitoring procedure
- 11/2004 - 08/2006 **Quality engineer**
Federal State Unitary Enterprise "All-Russian Research Institute of Automatics"
(FSUE VNIIA) (Moscow)

Teaching experience

- WS 2011 **Statistics of Financial Markets I**, lecture (Master-Level), Berliner bank
Stochastic processes and SDEs, Option pricing theory (European, American and exotic options), numerical methods for option pricing, exotic derivatives, interest rate theory
- SS 2010 **Applied multivariate statistics**, seminar (Master-Level)
Practical aspects of multivariate statistical modeling using SAS
- WS 2010 **Multivariate Statistical Analysis**, lecture (Master-Level)
visiting lecture at Charles University in Prague, Czech Republic (October, 2009)
- Numerical Introductory Course**, seminar (Master-Level)
Numerical methods and their applications in statistics and finance
- Statistics II**, tutorial (Bachelor-Level)
- SS 2009 **Statistics of Financial Markets II**, lecture (Master-Level)
VaR estimation methodologies (parametric und nonparametric), Statistics of extreme risk
- Statistics I**, tutorial (Bachelor-Level)
Introduction to Statistics

Presentations

- August 2010 **Genetics of basket options**
COMPSTAT2010 - International Conference on Computational Statistics, Paris, France
- August 2010 **Genetics of basket options**
EMS2010, 28th European Meeting of Statisticians, Athens, Greece
- April 2010 **Volatility investing with variance swaps**
DAGStat 2010 Conference, Dortmund, Germany
- June 2009 **Variance Swaps**
15. DStatG-Nachwuchsworkshop, Merseburg, Germany

Publications

- Härdle, W. and Silyakova, E.** (Forthcoming 2010). Volatility investing with variance swaps.
In Jin-Chuan Duan, J. E. G. and Härdle, W. (ed.), *Handbook of Computational Finance*. Springer
- Härdle, W. and Silyakova, E.** (Forthcoming 2010). Variance swaps.
In Cizek, W. H. and Weron, R. (ed.), *Statistical Tools for Finance and Insurance*. Springer

Research Skills

MS Office tools - Word, Excel, Access, Project, Visio, Power Point, Outlook
Databases - Bloomberg, Datastream, MS Access, MySQL
Quantitative Analysis - MATLAB, SAS, EViews, R, Mathematica
Programming - PHP, Javascript, Visual Basic
Languages - HTML, CSS, LaTeX

Interests

Singing, snowboard, capoeira, photography