Market Risk and Financial Markets Modeling
**Contents**

**Introduction**

Financial Market and Systemic Risks ............................................. 3
*Didier Sornette, Susanne von der Becke*

On the Development of Master in Finance & IT Program
in a Perm State National Research University ............................... 7
*Dmitry Andrianov, Natalya Frolova, Sergey Ivliev*

Questions of Top Management to Risk Management ...................... 11
*Sergey Chernov*

**Market Risk and Financial Markets Modeling**

Estimation of Market Resiliency from
High-Frequency Micex Shares Trading Data .................................. 15
*Nikolay Andreev*

Market Liquidity Measurement and Econometric Modeling ............ 25
*Viacheslav Arbuzov, Maria Frolova*

Modeling of Russian Equity Market Microstructure
(MICEX:HYDR Case) ................................................................. 37
*Tatyana Efremova, Sergey Ivliev*

Asset Pricing in a Fractional Market Under Transaction Costs .... 47
*Vladimir Gisin, Andrey Markov*

Influence of Behavioral Finance on the Share Market ................ 57
*Vadim Gribnikov, Dmitry Shevchenko*

Hedging with Futures: Multivariate Dynamic Conditional Correlation
GARCH ................................................................. 63
*Aleksey Kolokolov*

A Note on the Dynamics of Hedge-Fund-Alpha Determinants ........ 73
*Olga Kolokolova*
Equilibrium on the Interest Rate Market Analysis ........................................... 99
Eva Kvasničková

Term Structure Models ..................................................................................... 115
Victor Lapshin

Current Trends in Prudential Regulation of Market Risk:
From Basel I to Basel III .................................................................................. 129
Alexey Lobanov

Belarusian Banking System: Market Risk Factors ........................................... 141
Svetlana Malykhina

The Psychological Aspects of Human Interactions Through Trading
and Risk Management Process ........................................................................ 151
Polina Mikhailova

Options: Risk Reducing or Creating? ............................................................... 171
Marianna Morozova

Hierarchical and Ultrametric Models of Financial Crashes ......................... 191
Anna Pivovarova

Catastrophe Theory in Forecasting Financial Crises ...................................... 201
Anastassia Pleten

A Mathematical Model for Market Manipulations ......................................... 209
Bismark Singh

Adaption of World Experience in Insider Dealing Regulation
to the Specificity of the Russian Market ....................................................... 219
Alexander Starikov

Agent-Based Model of the Stock Market ......................................................... 229
Alexander Steryakov

How can Information on CDS Contracts
be Used to Estimate Liquidity Premium in the Bond Market .................... 247
Polina Tarasova

Adelic Theory of the Stock Market ................................................................. 255
Victor Zharkov