

**A N N U A L
R E P O R T**

2014

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1 Foreword

I am pleased to present the Annual Report of the Department of Statistics and Operations Research, which documents some of the many achievements in 2014. The Department of Statistics and Operations Research is part of the Faculty of Business, Economics and Statistics of the University of Vienna. Faculty members are active in research in various fields of Statistics, Econometrics, Operations Research, Applied Mathematics, and Computer Science. The department offers degree programs in Statistics at the Bachelor, Master, and PhD-level. During the academic year 2013/14 the department taught also many undergraduate and graduate courses for programs run by other departments, including the Department of Business Administration and the Department of Economics.

In 2014, our department has been strengthened by the arrival of Christina Büsing, Gökhan Cebiroglu, Marek Chudy, Akos Horvath, Martin Luipersbeck, Mathias Pohl, Patrick Streif, Christine Wallisch and Christopher Walsh as assistants, Dominique Sundt as administrative assistant and Andreas Loibl as system administrator.

Regrettably, there were also several departures. Johanna Bertl, Peter Dickinson and Andreas Futschik left the department to pursue new professional opportunities. We wish them well in their new position.

I would like to express special thanks to Vera Lehmwald for editing the Annual Report 2014.

Hannes Leeb (HoD)

Vienna, September 2016

2 Faculty and Staff

2.1 Regular Faculty

François Bachoc (PhD)	Gaussian Process Modeling, Covariance Function Estimation, Metamodeling and Validation of Computer Models, Small-Probability Estimation, Model Selection
Immanuel Bomze (Prof.)	Operations Research and Quantitative Decision Support, Game Theory and Modelling of Behaviour, Optimization Theory and Application, Asymptotic Statistics, Stochastic Modelling, Dynamical Systems
Christina Büsing (Dr.)	Combinatorial Optimization, Optimization under Uncertainty, Recoverable Robustness, Mixed Integer Programming
Gökhan Cebiroglu (Dr.)	Financial Econometrics, Market Microstructure, Structural Modelling, Mechanism and Market Design, Financial Markets, Quantitative Finance, Game Theory, Asset Pricing, Efficient Programming, Optimization, Genetic Algorithms, High-Frequency Trading
Marek Chudy (Mgr.)	Macroeconomic Forecasting, Financial Econometrics, Model Selection Methods
Peter Dickinson (PhD)	Copositive Optimisation, Conic Optimisation, Polynomial Optimisation
Andreas Futschik (Assoc. Prof.)	Asymptotic Statistics, Applied Statistics, Bioinformatics
Walter Gutjahr (Prof.)	Optimization Theory, Discrete Optimization, Stochastic Modeling, Multicriteria Decision Analysis
Nikolaus Hautsch (Prof.)	Financial Econometrics, Econometric Modelling of Financial High-Frequency Data, Time Series Econometrics, Time-Varying Volatility and Correlation, Market Liquidity, Market Microstructure Analysis, Systemic Risk, Information Processing on Financial Markets, Risk Management
Irene Klein (Assoc. Prof.)	Stochastic Finance
Raimund Kovacevic (Dr.)	Stochastic Optimization, Quantitative Risk Management, Stochastic Processes in Finance and Insurance
Hannes Leeb (Prof.)	Model Selection, Regularization, and Shrinkage, Statistical Analysis of High-Dimensional Data, Spectral Analysis of Large Random Matrices
Martin Luipersbeck (Dipl.-Ing.)	(Mixed) Integer Programming, Network Design, Algorithm Engineering
Ivana Ljubic (Ass. Prof.)	Algorithmic Operations Research, Algorithm Engineering
Ivana Milovic (MAS)	Model Selection in High-Dimensional Linear Models

Georg Pflug (Prof.)	Mathematical Statistics, Stochastic Optimization, Risk Management
Benedikt Pötscher (Prof.)	Econometrics, Statistics, Time Series Analysis
David Preinerstorfer (MMag.)	Mathematical Statistics, Econometrics, Time Series Analysis, Psychometrics
Erhard Reschenhofer (Assoc. Prof.)	Time Series Analysis, Financial Econometrics, Automatic Model Selection, Chronobiology
Werner Schachinger (Assoc. Prof.)	Optimization, Probabilistic Analysis of Algorithms
Nina Senitschnig (Dr.)	Mathematical Statistics, Predictive Inference, Shrinkage Estimation in High Dimensions, Nonparametric Regression
Lukas Steinberger (Mag.)	Mathematical Statistics, Statistical Analysis of High-Dimensional Data
Patrick Streif (MSc)	
Reinhard Ullrich (MMag.)	Evolutionary Game Theory and Dynamical Systems
Christopher Walsh (Dr.)	Non- and Semiparametric Statistics and Econometrics, Time Series and Financial Econometrics

2.2 Externally Funded Faculty

Johanna Bertl (Mag.)	Biostatistics, Approximate Inference
Markus Leitner (Dr.)	Operations Research, Combinatorial Optimization, (Mixed) Integer Linear Programming, Multi-objective Optimization
Mathias Pohl (MSc)	Dependence Modeling and Copulas, High Frequency Trading, Model Ambiguity and Robust Optimization, Portfolio Optimization
Anna Timonina (MSc)	Stochastic Optimization, Robust Optimization, System Analysis, Information Control and Processing, Data Mining
Christine Wallisch (MSc)	

2.3 External Lecturers (Academic Year 2013/14)

Andreas Baierl (Dr.), Johanna Bertl (PhD), Johann Brandstetter (Dr.), Andreas Chwatal (Dr.), Marek Chudy (Mgr.), Manfred Deistler (Prof., University of Technology Vienna), Sarah Dippenaar (Mag.), Marlies Dolezal (Dr.), Evelina Erlacher (Dr.), Florian Frommlet (Privatdoz.), Angelika Geroldinger (Dr.), Alexandra Graf (Ass.-Prof.), Wilfried Grossmann (Prof., Educational Technologies, Faculty of Computer Science), Marcus Hudec (Assoc. Prof., Data Analytics and Computing, Faculty of Computer Science), Johannes Klotz (Mag.), Simon Konzett (Mag.), Carolin Kosiol (Dr.), Christoph Krall (Dr.), Eric-John Laas-Nesbitt (MSc), Markus Leitner (Dr.), Nysret Musliu (Privatdoz.), Herbert Nagel (Dr.), David Preinerstorfer (MMag.), Stefan Rath (Dr.), Peter Reiter (Dr.), Robin Ristl (Dr.), Harald Schwab (Dr.), Christian Spreitzer (Mag.), Nina Senitschnig (PhD), Lukas Steinberger (Mag.), Markus Sinnl (Dipl.-Ing.), Gabriel Strasser (Mag.), Alexander Tichy (Dr.), Anna Timonina (PhD), Gabriele Uchida

(Assoc. Prof., Data Analytics and Computing, Faculty of Computer Science), Claus Vogl (Dr., University of Veterinary Medicine Vienna), Johannes Wessely (Mag.)

2.4 Teaching Assistants (Academic Year 2013/14)

Bernhard Kober, Christine Wallisch

2.5 Tutors (Academic Year 2013/14)

Stefan Bock, Tinatini Buturishvili, Sarah Dippenaar, Bernhard Hrobath, Daniel Obszelka, Alexander Ruth, Marina Stiliyanova Ivanova, Daniel Povolny, Michael Themessl-Huber, Carolina Torossian, Zachary Valtschanoff, Christine Wallisch, Klaus Winhofer, Haimiao Zhang

2.6 Administrative Assistants

Birgit Ewald, Gerald Kamhuber, Vera Lehmwald, Manuela Nicham-Zorn, Madlen Stottmeyer, Dominique Sundt

2.7 System Administrators

Jürgen Berlakovich, Georg Fochler, Stefan Geißler, Rolf Karner, Svetlana Mihajlovic, Andreas Loibl

3 Visitors

Reinhard Furrer (University of Zurich, Switzerland), Bernard Fortz (Université libre de Bruxelles, Belgium), Luis Gouveia (University of Lisbon, Portugal), Marwan Lisser (Intern, France), Francesca Maggioni (University of Bergamo, Italy), Peter Malec (University of Cambridge, UK), Axel Werner (Zuse Institute Berlin, Germany)

4 Teaching

4.1 Theses Supervised

4.1.1 PhD Theses in Progress

Supervisor	Author	Title
Immanuel Bomze, Werner Schachinger	Reinhard Ullrich	Selecting equilibria from an ample choice
Immanuel Bomze, Ivana Ljubic	Markus Sinnl	Bi-objective optimization for telecommunication networks
Hannes Leeb	Ivana Milovic	Conditional means of low-dimensional projections from high-dimensional data. Explicit error bounds
Hannes Leeb	Lukas Steinberger	Statistical inference in high dimensional linear regression based on simple working models
Georg Pflug	Eric-John Laas-Nesbitt	Trust-Region Methods for Endogenous Stochastic Optimization
Benedikt M. Pötscher	David Preinerstorfer	Autocorrelation robust testing in time series regression models
Erhard Reschenhofer	Marek Chudy	Analysis and Prediction of Economic Time Series

4.1.2 PhD Theses Finished

Supervisor	Author	Title
Andreas Futschik	Johanna Bertl	An approximate maximum likelihood algorithm with case studies
Walter J. Gutjahr *	Eeva Vilkkumaa, Aalto University, Helsinki, Finland	Model-based decision processes for agenda building and funding
Walter J. Gutjahr *	Stefanie Kritzinger	A unified variable neighborhood search metaheuristic for solving problems in vehicle routing
Walter J. Gutjahr *	Attila Kovacs	Vehicle routing problems with service consistency considerations

* Reviewer

Supervisor	Author	Title
Georg Pflug, Walter J. Gutjahr*	Anna Timonina	Approximation of continuous-state scenario processes in multi-stage stochastic optimization and its applications
Georg Pflug	Peter Gross	Behavioral pricing of energy swing options: A tailored solution algorithm for a multi-stage stochastic bilevel program with applications in energy markets
Georg Pflug, Ivana Ljubic*	Bitva Analui	Multistage stochastic optimization of energy portfolios under model ambiguity

4.1.3 Master Theses in Progress

Supervisor	Author	Title
Georg Pflug	Theodoros Kouimtsidis	Systemic risk for the Austrian banking system
Erhard Reschenhofer	Stefan Mück	Applications of the dynamic conditional correlation model

4.1.4 Master Theses Finished

Supervisor	Author	Title
Walter J. Gutjahr	Nada Zubur	Optimization of warehouse locations based on Wardrop equilibria
Walter J. Gutjahr	Christian Burkart	Competitive location models for transportation in disaster relief logistics
Walter J. Gutjahr	Daniel Obszelka	Projektportfoliooptimierung unter einem Kompetenzentwicklungsmodell
Walter J. Gutjahr	Johann Aigner	Cooling Center Standortwahlproblem am Beispiel der Stadt Wien
Erhard Reschenhofer	Christian Pfeiffer	Statistische Analyse des Ausfallrisikos von Firmenkunden im Leasinggeschäft
Erhard Reschenhofer	Martin Ruzek	Comparison of regular FX trading and FX option trading

4.1.5 Bachelor Theses

Johanna Bertl (1), Immanuel Bomze (10), Georg Pflug (1), Erhard Reschenhofer (13)

* Reviewer

5 Publications

5.1 Monographs

Pichler, Alois, **Pflug, Georg C.** (Eds.): Multistage Stochastic Programming. Springer Series in Operations Research and Financial Engineering. Springer, Switzerland, 2014.

5.2 Journal Articles

Alvarez-Miranda, Eduardo, **Ljubic, Ivana**, Raghavan, S., Toth, P.: The Recoverable Robust Two-Level Network Design Problem. *INFORMS Journal on Computing* **27** (1), 1–19, 2014 (preprint).

Amaral, Paula, **Bomze, Immanuel**, Judice, Joaquim: Copositivity and constrained fractional quadratic problems. *Mathematical Programming* **146**, 325–350, 2014.

Analui, Bitu, **Kovacevic, Raimund M.**: Medium Term Hydroelectric Production Planning – a Multistage Stochastic Optimization Model. *Civil Engineering Infrastructures Journal (CEIJ)* **47** (1), 139–152, 2014.

Bachoc, François, Bois, G., Garnier, J. Martinez, J. M.: Calibration and improved prediction of computer models by universal Kriging. *Nuclear Science and Engineering* **176** (1), 81–97, 2014.

Bachoc, François: Asymptotic analysis of the role of spatial sampling for covariance parameter estimation of Gaussian processes. *Journal of Multivariate Analysis* **125**, 1–35, 2014.

Bibinger, Markus, **Hautsch, Nikolaus**, Malec, Peter, Reiß, Markus: Estimating the quadratic covariation matrix from noisy observations: local method of moments and efficiency. *Annals of Statistics* **42** (4), 1312–1346, 2014.

Bomze, Immanuel M., Schachinger, Werner, Ullrich, Reinhard: From seven to eleven: completely positive matrices with high cp-rank. *Linear Algebra and its Applications* **459**, 208–221, 2014.

Bomze, Immanuel, Gollowitzer, Stefan, Yildirim, E. Alper: Rounding on the standard simplex: regular grids for global optimization. *Journal of Global Optimization* **59** (2–3), 243–258, 2014.

Cordero, Fernando, **Klein, Irene**, Perez-Ostafe, Lavinia: Binary markets under transaction costs. *International Journal of Theoretical and Applied Finance* **17** (5), 1450030, 2014.

Gouveia, Luis, **Leitner, Markus, Ljubic, Ivana**: Hop Constrained Steiner Trees with multiple Root Nodes. *European Journal of Operational Research* **236** (1), 100–112, 2014.

Hautsch, Nikolaus, Malec, Peter, Schienle, Melanie: Capturing the Zero: A New Class of Zero-Augmented Distributions and Multiplicative Error Processes. *Journal of Financial Econometrics* **12** (1), 89–121, 2014.

Hautsch, Nikolaus, Schaumburg, Julia, Schienle, Melanie: Forecasting Systemic Impact in Financial Networks. *International Journal of Forecasting* **30** (3), 781–794, 2014.

Jongmann, Brenden, Ward, Philip, Mechler, Reinhard, Aerts, Jeroen, Bouwer, Laurens, Hochrainer, Stefan, Botzen, Wouter, Rojas, Rodrigo, **Pflug, Georg**: Increasing Stress on Disaster Risk Finance due to Large Floods. *Nature: Climate Change* **4**, 264–268, 2014.

Klein, Irene, Lepinette, Emmanuel, Perez-Ostafe, Lavinia: Asymptotic arbitrage with small transaction costs. *Finance and Stochastics* **18** (4), 917–939, 2014.

- Kovacevic, Raimund M., Paraschiv, F.:** Medium-Term Planning for Thermal Electricity Production. *OR Spectrum* **36** (3), 723–759, 2014 (paper awarded with the DK Gupta Memorial Best Energy Paper Prize at the Energy Finance Conference 2013 in Essen, Germany).
- Kovacevic, Raimund M., Pflug, Georg Ch.:** Are time consistent valuations information monotone? *International Journal of Theoretical and Applied Finance* **17** (1), 1450003-1-1450003-33, 2014.
- Kovacevic, Raimund M., Pflug, Georg Ch.:** Electricity swing option pricing by stochastic bilevel optimization: a survey and new approaches. *European Journal of Operational Research* **237** (2), 389–403, 2014.
- Kovacevic, Raimund M., Wozabal, David:** A semiparametric model for EEX spot prices. *IIE Transactions* **46** (4), 344–356, 2014 (paper selected as the IIE Transactions best applications paper in Operations Engineering & Analytics).
- Leitner, Markus, Ljubic, Ivana, Sinnl, Markus:** A computational study of exact approaches for the bi-objective prize-collecting Steiner tree problem. *INFORMS Journal on Computing* **27** (1), 118–134, 2014 (preprint).
- Ljubic, Ivana, Putz, Peter, Salazar-Gonzalez, J. J.:** A MIP-based Heuristic Approach to solve a Prize-Collecting Local Access Network Design Problem. *European Journal of Operational Research* **235** (3), 727–739, 2014 (preprint).
- Rath, Stefan, **Gutjahr, Walter J.:** A math-heuristic for the warehouse location routing problem in disaster relief. *Computers and Operations Research* **42**, 25–39, 2014.
- Reschenhofer, Erhard, Ploberger, W., Lehecka, G. V.:** Detecting fuzzy periodic patterns in futures spreads. *Statistical Papers* **55** (2), 487–496, 2014.
- Shad, Muhammed Yousaf, **Pflug, Georg Ch.:** Stochastic vs Deterministic Programming in Water Management: The value of flexibility. *Annals of Operations Research* **223** (1), 309–328, 2014 (available online since 14 Oct. 2014, DOI 10.1007/s10479-013-1455-8).

5.3 Contributions to Proceedings and Edited Books

- Gutjahr, Walter J.:** A three-objective optimization approach to cost-effectiveness analysis under uncertainty. In: Helber, Stefan et al. (Eds.): *Operations Research Proceedings 2012: Selected Papers of the International Annual Conference of the German Operations Research Society (GOR), Leibniz University of Hannover, Germany, September 5-7, 2012*. Springer Verlag, 239–246, 2014.
- Kovacevic, Raimund, Pflug, Georg, Pichler, Alois:** Measuring and Managing Risk. Chapter 2. In: Baker, K.H., Filbeck, G. (Eds.): *Investment Risk Management*. Oxford University Press, 2014.
- Leitner, Markus, Ljubic, Ivana, Luipersbeck, Martin, Resch, Max:** A partition-based heuristic for the Steiner tree problem in large graphs. In: Blesa, M. J. et al. (Eds.): *Hybrid Metaheuristics*. Lecture Notes in Computer Science **8457**, 56–70, 2014.
- Leitner, Markus, Ljubic, Ivana, Salazar-Gonzalez, J. J., Sinnl, Markus:** On the Asymmetric Connected Facility Location Polytope. In: Fouilhoux, Pierre, Gouveia, Luis Eduardo Neves, Mahjoub, A. Ridha, Paschos, Vangelis T. (Eds.) *Combinatorial Optimization: Third International Symposium, ISCO 2014, Lisbon, Portugal, March 5–7, 2014, Revised Selected Papers*. Lecture Notes in Computer Science **8596**, 371–383, 2014 (preprint).

Leitner, Markus, Ljubic, Ivana, Salazar-Gonzalez, Juan-José, **Sinnl, Markus**: On the asymmetric connected facility location polytope. In: Foilhoux, P. et al. (Eds.): *International Symposium on Combinatorial Optimization 2014*. Lecture Notes in Computer Science **8596**, 371–383, 2014.

5.4 Working Papers

Bachoc, François, Leeb, Hannes, Pötscher, Benedikt: Valid confidence intervals for post-model-selection predictors (in revision).

Bachoc, François: Asymptotic analysis of covariance parameter estimation for Gaussian processes in the misspecified case (submitted).

Bibinger, Markus, **Hautsch, Nikolaus**, Malec, Peter, Reiss, Markus: Estimating the Spot Covariation of Asset Prices – Statistical Theory and Empirical Evidence. *CFS Working Paper 477*, 2014.

Bomze, Immanuel M., Schachinger, Werner, Ullrich, Reinhard: New lower bounds and asymptotics for the cp-rank. To appear in: *SIAM Journal on Matrix Analysis and Applications*, 2015.

Bomze, Immanuel, Overton, Michael: Narrowing the difficulty gap for the Celis-Dennis-Tapia problem. To appear in: *Mathematical Programming*, 2015.

Branke, Juergen, Corrente, Salvatore, Greco, Salvatore, **Gutjahr, Walter J.**: Using indifference information in robust ordinal regression.

Cebiroglu, Gökhan, Hautsch, Nikolaus, Horst, Ulrich: Order Exposure and Liquidity Coordination: Does Hidden Liquidity Harm Price Efficiency? *CFS Working Paper 468*, 2014.

Cebiroglu, Gökhan, Horst, Ulrich: Drivers and Impact of Hidden Liquidity: Empirical Evidence from the US.

Cebiroglu, Gökhan, Grith, Maria: The Role of Delegated Trading Mechanisms in Explaining the Empirical Pricing Kernel Puzzle.

Cebiroglu, Gökhan, Hautsch, Nikolaus, Walsh, Christopher: Revisiting the Stealth Trading Hypothesis. Does Time-Varying Liquidity Explain the Size-Effect?

Fischetti, Matteo, **Leitner, Markus, Ljubic, Ivana, Luipersbeck, Martin**, Monaci, Michele, Resch, Max, Salvagnin, Domenico, Sinnl, Markus: Thinning out Steiner trees: A node-based model for uniform edge costs (Workshop of 11th DIMACS challenge).

Furini, Fabio, **Ljubić, Ivana, Sinnl, Markus**: ILP and CP Formulations for the Lazy Bureaucrat Problem. To appear in: *Integration of AI and OR Techniques in Constraint Programming*. Springer International Publishing, 255–270, 2015.

Gouveia, Luis, **Leitner, Markus, Ljubic, Ivana**: A polyhedral study of the diameter constrained minimum spanning tree problem. Submitted to: *Networks*, 2014.

Gouveia, Luis, **Leitner, Markus, Ljubic, Ivana**: The two-level diameter constrained spanning tree problem. To appear in: *Mathematical Programming* (available online since 12th January 2014, DOI: 10.1007/s10107-013-0743-z).

Hautsch, Nikolaus, Okhrin, Ostap, Ristig, Alexander: Efficient Iterative Maximum Likelihood Estimation of High-Parameterized Time Series Models. *Discussion Paper 2014-010, CRC 649*, Humboldt-Universität zu Berlin, 2014.

Leeb, Hannes, Kabaila, Paul: Admissibility of the usual confidence set for the mean of a univariate or bivariate normal population: The unknown variance case (in preparation).

- Leeb, Hannes, Pötscher, Benedikt**, Ewald, Karl: On Various Confidence Intervals Post-Model-Selection. To appear in: *Statistical Science* **30** (2), 216–227, 2015.
- Leeb, Hannes, Senitschnig, Nina S.**: Prediction out-of-sample using block shrinkage estimators: model selection and predictive inference.
- Leitner, Markus, Ljubic, Ivana, Luipersbeck, Martin**, Prosegger, Markus, Resch, Max: New real-world instances for the Steiner tree problem in graphs. *Technical report*, ISOR, University of Vienna, 2014.
- Pötscher, Benedikt M., Leeb, Hannes**: Testing in the Presence of Nuisance Parameters: Some Comments on Tests Post-Model-Selection and Random Critical Values (revision 2014).
- Pötscher, Benedikt M., Preinerstorfer, David**: On the Power of Invariant Tests for Hypotheses on a Covariance Matrix.
- Preinerstorfer, David, Pötscher, Benedikt M.**: On Size and Power of Heteroscedasticity and Autocorrelation Robust Tests. To appear in: *Econometric Theory*, 2015.
- Reschenhofer, Erhard, Chudy, Marek**: Adjusting band-regression estimators for prediction: shrinkage and downweighting.
- Reschenhofer, Erhard, Chudy, Marek**: Imposing frequency-domain restrictions on time-domain forecasts.
- Shaked-Monderer, Naomi, Berman, Abraham, **Bomze, Immanuel**, Jarre, Florian, **Schachinger, Werner**: New results on the cp rank and related properties of co(mpletely)positive matrices. To appear in: *Linear and Multilinear Algebra* **63** (2), 384–396, 2015.
- Sinnl, Markus, Ljubic, Ivana**: A Node-Based Layered Graph Approach for the Steiner Tree Problem with Revenues, Budget and Hop-Constraints (Workshop of 11th DIMACS challenge).
- Zehetner, Michaela, **Gutjahr, Walter J.**: Sampling-based genetic algorithms for the bi-objective stochastic covering tour problem.

6 Dissemination of Research

6.1 Workshops and Conferences

	Conference	Title of Presentation
Immanuel M. Bomze	EURO mini-conference on Optimization in the Natural Sciences, Aveiro, Portugal	Copositive relaxation beats Lagrangian dual bounds in quadrically and linearly constrained QPs
Immanuel M. Bomze	EUROPT 2014 (12 th EUROPT Workshop on Advances in Continuous Optimization), Perpignan, France (invited plenary talk)	The role of copositivity in optimality conditions and relaxation bounds
Immanuel M. Bomze	IFORS 2014 (20 th Conference of the International Federation of Operational Research Societies), Barcelona, Spain (invited stream organizer)	New bounds for the cp-rank in copositive optimization
Immanuel M. Bomze	Optimization 2014 Conference, Guimarães, Portugal (invited session organizer)	Copositive relaxation beats Lagrangian dual bounds in quadrically and linearly constrained QPs
Immanuel M. Bomze	COMPSTAT 2014 (21 st International Conference on Computational Statistics), Geneva, Switzerland (invited session)	Robust spherical separation
Immanuel M. Bomze	MAGO 2014 (XII Global Optimization Workshop), Malaga, Spain	Narrowing the difficulty gap for the Celis-Dennis-Tapia problem
Immanuel M. Bomze	AIRO 2014 (44 th Annual Conference of the Italian Operational Research Society), Como, Italy (invited plenary)	The role of copositivity in optimality conditions and relaxation bounds
François Bachoc	New Researcher Conference 2014, Harvard University, Cambridge, Massachusetts, USA	Kriging models with Gaussian processes - covariance function estimation and impact of spatial sampling
François Bachoc	Uncertainty in Computer Models Conference 2014, Sheffield, UK	Asymptotic analysis of the role of spatial sampling for covariance parameter estimation of Gaussian processes
François Bachoc	11 th Colloquium of Young Probabilists and Statisticians, Forge-les-Eaux, France	Kriging models with Gaussian processes - covariance function estimation and impact of spatial sampling

	Conference	Title of Presentation
Gökhan Cebiroglu	8 th World Congress of the Bachelier Finance Society, Brussels, Belgium, (invited)	Order Exposure and Liquidity Coordination: Does Hidden Liquidity Harm Price Efficiency?
Gökhan Cebiroglu	Workshop on New Directions in Financial Mathematics and Mathematical Economics, Banff, Canada (invited)	Order Exposure and Liquidity Coordination: Does Hidden Liquidity Harm Price Efficiency?
Walter J. Gutjahr	APMOD 2014 (International Conference on Applied Mathematical Optimization and Modelling), University of Warwick, Coventry, UK	A Wardrop equilibrium model for the bi-objective location of distribution centers in disaster relief
Nikolaus Hautsch	Workshop Measuring and Modeling Financial Risk with High Frequency Data, European University Institute, Florence, Italy (invited)	The Hidden Side of the Market
Nikolaus Hautsch	Financial Statistics Conference, Stevanovich Center, University of Chicago, USA (invited)	Estimating the Spot Covariation of Asset Prices – Statistical Theory and Empirical Evidence
Nikolaus Hautsch	Empirical Market Microstructure Conference, University of Cambridge, UK (invited)	Order Exposure and Liquidity Coordination: Does Hidden Liquidity Harm Price Efficiency?
Nikolaus Hautsch	Conference Market Microstructure: Confronting Many Viewpoints, Paris, France (invited)	Order Exposure and Liquidity Coordination: Does Hidden Liquidity Harm Price Efficiency?
Irene Klein	8 th World Congress of the Bachelier Finance Society, Brussels, Belgium	Asymptotic arbitrage with small transaction costs
Raimund M. Kovacevic	IFORS 2014 (20 th Conference of the International Federation of Operational Research Societies), Barcelona, Spain (invited)	Swing option pricing by bilevel optimization
Raimund M. Kovacevic	CMS 2014 (11 th International Conference on Computational Management Science), Lisbon, Portugal (invited)	Swing option pricing by bilevel optimization
Raimund M. Kovacevic	EFC14 (4 th Energy Finance Christmas Workshop), St. Gallen, Switzerland (invited)	Valuation and pricing of electricity delivery contracts – the producer's view
Hannes Leeb	ASC & IMS Annual Meeting, Sydney, Australia (invited)	On various confidence intervals post-model-selection

	Conference	Title of Presentation
Markus Leitner	CIRRELT & COMEX Workshop on Network Design, Montréal, Canada (invited)	Models and Exact Approaches for the Two-Level Diameter Constrained Spanning Tree Problem
Markus Leitner	OR2014 (International Conference of the German Operations Research Society), Aachen, Germany	A Polyhedral Study of the Diameter Constrained Spanning Tree Problem
Markus Leitner	IFORS 2014 (20 th Conference of the International Federation of Operational Research Societies), Barcelona, Spain	A Polyhedral Study of the Diameter Constrained Spanning Tree Problem
Markus Leitner	ISCO 2014 (3 rd International Symposium on Combinatorial Optimization), Lisbon, Portugal	A Polyhedral Study of the Diameter Constrained Spanning Tree Problem
Ivana Ljubic	SIAM Conference on Optimization, San Diego, CA, USA	The Recoverable Robust Two-Level Network Design Problem
Ivana Ljubic	ISCO 2014 (3 rd International Symposium in Combinatorial Optimization), Lisbon, Portugal	The Recoverable Robust Facility Location Problem
Ivana Milovic	PhD Meeting Halle, Halle, Germany	Conditional means of low-dimensional projection from high dimensional data. Explicit error bounds
Ivana Milovic	Heidelberg Laureate Forum, Heidelberg, Germany	Conditional means of low-dimensional projection from high dimensional data. Explicit error bounds (poster)
Georg Pflug	Workshop Stochastic Optimization, Bad Hofgastein, Austria	Scenario tree generation from simulations
Georg Pflug	CMS 2014 (11 th International Conference on Computational Management Science), Lisbon, Portugal	Multistage stochastic optimization
Georg Pflug	London Optimization Workshop, King's College, London, UK (invited)	Approximation and ambiguity in multistage stochastic optimization
Georg Pflug	Workshop Statistic & Risk Modeling, Ulm, Germany (invited)	Time consistency in dynamic stochastic optimization
Georg Pflug	IFORS 2014 (20 th Conference of the International Federation of Operational Research Societies), Barcelona, Spain	Stochastic optimization with decision-dependent probabilities

	Conference	Title of Presentation
Georg Pflug	OR2014 (International Conference of the German Operations Research Society), Aachen, Germany	Multistage stochastic programs: metrics, approximations, ambiguity
Georg Pflug	ECSP2014 (Euro Mini Conference Stochastic Programming and Energy Application), Paris, France (invited)	On stochastic bilevel programs
Georg Pflug	EFC14(4 th Energy Finance Christmas Workshop), St. Gallen, Switzerland (invited)	Behavioral Pricing of Swing Options
Georg Pflug	VOCAL2014 (6 th Veszprém Optimization Conference: Advanced Algorithms), Veszprém, Hungary	On scenario tree generation
Nina Senitschnig	JSM 2014 (Joint Statistical Meetings), Boston, Massachusetts, USA	Shrinkage methods for prediction out-of-sample: Selection of estimators and predictive inference
Markus Sinnl	Workshop of the 11 th DIMACS (Center for Discrete Mathematics and Theoretical Computer Science), Implementation challenge, Providence, Rhode Island, USA	Thinning out Steiner trees
Markus Sinnl	Workshop of the 11 th DIMACS (Center for Discrete Mathematics and Theoretical Computer Science), Implementation challenge, Providence, Rhode Island, USA	A new layered graph approach to hop- and diameter-constrained spanning/Steiner tree problems in graphs
Markus Sinnl	IFORS 2014 (20 th Conference of the International Federation of Operational Research Societies), Barcelona, Spain	On the node-quadratic prize collecting Steiner tree problem
Markus Sinnl	ISCO 2014 (3 rd International Symposium in Combinatorial Optimization), Lisbon, Portugal	On the asymmetric connected facility location polytope
Christopher Walsh	ERCIM 2014 (7 th International Conference of the ERCIM WG on Computational and Methodological Statistics), Pisa, Italy	Local stationary multiplicative modelling

6.2 Outside Seminars

	Institution	Title
Immanuel M. Bomze	PGMO Seminar (Le Programme Gaspard Monge pour l'Optimisation), Fondation Hadamard, École polytechnique, Paris, France	Copositive relaxation beats Lagrangian dual bounds in quadrically and linearly constrained QPs
Immanuel M. Bomze	University of Calabria (UNICAL), Rende, Cosenza, Italy	Narrowing the difficulty gap for the Celis-Dennis-Tapia problem
Immanuel M. Bomze	Laboratory of Intelligent Decision Support Systems, Institute of Computing Science, Poznań University of Technology, Poznań, Poland (invited)	A nasty cone with nice properties – new issues in copositive optimization
Immanuel M. Bomze	Continuous Optimization Seminar, Budapest University of Technology and Economics, Institute of Mathematics (BME), Budapest, Hungary	Copositive relaxation beats Lagrangian dual bounds in quadrically and linearly constrained QPs
Immanuel M. Bomze	Bocconi University, Milan, Italy	A conic view of uncertainty
François Bachoc	Applied Statistics Group Colloquium, University of Zurich, Switzerland	Maximum Likelihood and Cross Validation for covariance function estimation in Gaussian process regression
François Bachoc	Kriging and Statistical Learning Workshop of the Manon Research Laboratory, Saclay, France	Introduction to Gaussian-process based Kriging models for metamodeling and validation of computer codes
Walter J. Gutjahr	University of Warwick, Coventry, UK	Multi-objective resource-constrained project scheduling under risk aversion
Nikolaus Hautsch	Institute for Advanced Studies, Vienna, Austria	Local Method of Moments Estimation of Integrated and Spot Covariation
Nikolaus Hautsch	University of St. Gallen, Switzerland	Local Method of Moments Estimation of Integrated and Spot Covariation
Nikolaus Hautsch	IESEG School of Management, Paris, France	Systemic Risk and Network Dependencies in the European Financial System
Nikolaus Hautsch	Leibniz University of Hannover, Germany	Local Method of Moments Estimation of Integrated and Spot Covariation
Nikolaus Hautsch	HEC Lausanne, Switzerland	On the Hidden Side of the Market
Nikolaus Hautsch	Vienna University of Economics and Business, Vienna, Austria	Estimating the Spot Covariation of Asset Prices – Statistical Theory and Empirical Evidence

	Institution	Title
Hannes Leeb	University of Cambridge, Cambridge, UK	On conditional moments of high-dimensional random vectors given lower-dimensional projections
Hannes Leeb	ETH Zurich, Zurich, Switzerland	On conditional moments of high-dimensional random vectors given lower-dimensional projections
Hannes Leeb	University of Bremen, Bremen, Germany	On conditional moments of high-dimensional random vectors given lower-dimensional projections
Ivana Ljubic	Graz Discrete Mathematics and Optimization Seminar, TU Graz, Austria	The Recoverable Robust Facility Location Problem
Georg Pflug	University of Bergamo, Italy (invited)	PhD course on Selected Topics in Stochastic Optimization
Georg Pflug	Université Paris Sud, Orsay, France (invited)	Cours sur l'optimization stochastique
Georg Pflug	PGMO Seminar (Le Programme Gaspard Monge pour l'Optimisation), Fondation Hadamard, École polytechnique, Paris, France (invited)	Multistage stochastic optimization
Georg Pflug	FGV University, Rio de Janeiro, Brazil (invited)	Tutorial on scenario generation
Benedikt M. Pötscher	Department of Economics, National University of Singapore, Singapore	Valid Confidence Intervals for Post-Model-Selection Predictors

6.3 Departmental Seminar = ISOR Colloquium

January 13	Abdel Lisser (University of Paris-Sud, France)	Linear programs with Joint Probabilistic constraints
January 20	Alexander Aue (University of California, Davis, USA)	On the prediction of functional time series
January 27	Melanie Schienle (University of Hannover, Germany)	Semiparametric Estimation with Generated Covariates
March 03	Viktor Todorov (Northwestern University, USA)	Inference Theory for Volatility Functional Dependencies
March 10	Donald Richards (Penn State University, USA)	The Affinely Invariant Distance Correlation

March 17	Robert Stelzer (University of Ulm, Germany)	Stochastic Volatility and Possible Long Memory: The supOU Model
March 31	Helmut Gfrerer (University Linz, Austria)	On computation of generalized derivatives of solution maps to a class of generalized equations
April 07	Daniel Kuhn (EPFL Lausanne) Switzerland)	Interdiction Games on Markovian PERT networks
April 28	Michael Wolf (University of Zurich, Switzerland)	Spectrum Estimation: A Unified Framework for Covariance Matrix Estimation and PCA in Large Dimensions
May 05	Markus Reiß (Humboldt University of Berlin, Germany)	Optimal estimation of linear functionals in irregular nonparametric models
May 12	Anders Rahbek (University of Copenhagen, Denmark)	Bootstrapping Nonstationary Heteroscedastic Vector Autoregressive Models
May 19	Anna Timonina (IIASA, Austria)	Approximation of Continuous-State Scenario Processes in Multi-Stage Stochastic Optimization and its Applications
May 26	Christina Büsing (RWTH Aachen University, Germany & University of Vienna, Austria)	Multiband Uncertainties in Robust Optimization
June 02	Nikolaus Hautsch (University of Vienna, Austria)	Inaugural lecture: Hochfrequenz auf Finanzmärkten - Fluch oder Segen?
June 16	Gökhan Cebiroglu (University of Vienna, Austria)	Does Hidden Liquidity Harm Price Efficiency? Equilibrium Exposure under Latent Demand
June 30	Frauke Liers (University of Erlangen, Germany)	Exact Solution Approaches for Constrained Binary Quadratic Optimization
October 06	François Bachoc (University of Vienna, Austria)	Maximum Likelihood and Cross Validation for covariance function estimation in Gaussian process regression
October 13	Dennis Kristensen (University College London, UK)	ABC of SV: Limited Information Likelihood Inference in Stochastic Volatility Jump-Diffusion Models
October 20	Francis Bach (INRIA Paris, France)	Beyond stochastic gradient descent for large-scale machine learning
October 27	Wolfgang Karl Härdle (Humboldt University of Berlin, Germany)	TEDRIS - Tail Event Driven Risk Structures

November 03	Nina Senitschnig (University of Vienna, Austria)	Shrinkage estimators for prediction out-of-sample: selection of estimators and predictive inference
November 10	Immanuel Bomze (University of Vienna, Austria)	New bounds for the cp-rank in copositive optimization
November 17	Roland Hildebrand (Weierstrass Institute Berlin, Germany)	Minimal zeros of copositive matrices
November 24	Teemu Pennanen (King's College London, UK)	Optimal investment and contingent claim valuation in illiquid markets
December 01	Frédéric Roupin (University of Paris 13, France)	Semidefinite Optimization for solving the Quadratic Assignment Problem
December 15	Mathias Staudigl (Bielefeld University, Germany)	On Dynamic games with incomplete information: Relations between discrete and continuous-time

7 Grants and Externally Funded Research Projects

Maarten Jansen (Project-Coordinator) Hannes Leeb (Co-Investigator) Research Associate: Benedikt Pötscher	Title: Vienna Graduate School of Economics Funding: FWF Runtime: 2010-2014
Nikolaus Hautsch (Project-Coordinator) Research Associate: Michael Noé	Title: Impact and Risks of High-Frequency Trading on Global Equity Markets Funding: Fritz Thyssen Stiftung Runtime: 2012-2014
Nikolaus Hautsch (Project-Coordinator) Research Associate: Gökhan Cebiroglu	Title: Econometric Modelling of Liquidity Risks, Transaction Risks and Trading Costs Funding: Deutsche Forschungsgemeinschaft Runtime: 2007-2014
Nikolaus Hautsch (Project-Coordinator) Research Associate: Alexander Ristig	Title: Portfolio Risk and Asset Allocation: Utilizing High-Frequency Information in High Dimensions Funding: WWTF Runtime: 2014-2017
Immanuel M. Bomze (Project-Coordinator/Principal Investigator) Research Associates: Peter Dickinson, Ivana Ljubic, Markus Sinnl	Title: Stochastic Copositive Optimization Funding: OeAD – WTZ (Austria – France “Amadée”) Runtime: 2014-2015
Markus Leitner (Project-Coordinator) Research Associate: Georg Brandstätter	Title: e4-share: Models for Ecological, Economical, Efficient, Electric Car-Sharing Funding: JPI (Joint Programming Initiative Urban Europe) / FFG Runtime: 2014-2017 Web: http://www.univie.ac.at/e4-share

<p>Ivana Ljubic (Project-Coordinator) Research Associate: Markus Leitner</p>	<p>Title: Multi-Criteria Optimization of FTTx Networks Funding: FWF Runtime: 2012-2015</p>
<p>Ivana Ljubic (Project-Coordinator) Research Associates: Markus Leitner, Markus Sinnl</p>	<p>Title: Network Optimization in Bioinformatics and Systems Biology Funding: FWF Runtime: 2014-2018</p>
<p>Christian Schlötterer (Project-Coordinator) Research Associate: Andreas Futschik</p>	<p>Title: Doktoratskolleg Populationsgenetik Funding: FWF Runtime: 2010-2014</p>
<p>Hannes Leeb (Project-Coordinator) Research Associate: Nina Senitschnig</p>	<p>Title: Shrinkage estimators for prediction out-of-sample Funding: FWF Runtime: 2014-2016</p>
<p>Georg Pflug (Principal Investigator) Research Associate: Christine Wallisch</p>	<p>Title: Risk Capital Requirements for Floods in Europe Funding: OeNB Runtime: 2014-2016</p>
<p>Georg Pflug, Walter Schachermayer, Nikolaus Hautsch) (Sub-Project-Coordinator) Research Associate: Mathias Pohl</p>	<p>Title: Portfolio Risk and Asset Allocation: Utilizing High-Frequency Data in High Dimensions Funding: WWTF Runtime: 2014-2017</p>

8 Research Stays at Other Institutions

	Institution	Research Topic	Weeks
Immanuel M. Bomze	University of Paris Sud, Orsay, France	Stochastic copositive optimization	2
Immanuel M. Bomze	University of Calabria (UNICAL), Rende, Cosenza, Italy	Copositive approaches to Machine Learning	1,5
Immanuel M. Bomze	Continuous Optimization Seminar, Budapest University of Technology and Economics, Institute of Mathematics (BME), Budapest, Hungary	Copositive Optimization and LCP	1
Immanuel M. Bomze	University Ca' Foscari, Venice, Italy	Preparations for Proposal of FET Open Project-H2020: Topic: HOLGA - Towards a Holistic Theory of Pattern Analysis and Recognition: A Game-Theoretic Perspective	1
Immanuel M. Bomze	University La Sapienza, Rome, Italy	Quadratic and polynomial optimization	0,5
François Bachoc	University of Zurich, Switzerland	Covariance tapering	3
Nikolaus Hautsch	University of Cambridge, UK	High-Frequency Econometrics	1
Markus Leitner	University of Lisbon, Portugal	Diameter Constrained Spanning Trees	1
Markus Leitner	Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation (CIRRELT), Montréal, Canada	Fixed-Charge Network Design	9
Georg Pflug	University of Bergamo, Italy	Stochastic Optimization	1
Georg Pflug	FGV University, Rio de Janeiro, Brazil	Scenario generation	2
Markus Sinnl	University Paris-Dauphine, Paris, France	The lazy bureaucrat problem	1
Markus Sinnl	DEI, University of Padua, Italy	Steiner Trees in Graphs	2

9 Other Faculty Activities

9.1 Editorial Work

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|----------------------|---|
| Immanuel M. Bomze | <ul style="list-style-type: none">• Advances in Data Analysis and Classification (Member of Editorial Board)• Central European Journal of Operations Research (Member of Editorial Board)• European Journal of Operational Research (Editor)• Journal of Global Optimization (Member of Editorial Board)• Optimization Letters (Member of Editorial Board)• Operations Research Perspectives (Member of Editorial Board) |
| Walter J. Gutjahr | <ul style="list-style-type: none">• Advances in Operations Research (Member of Editorial Board)• Central European Journal of Operations Research (Associate Editor)• EURO Journal on Decision Processes (Member of Editorial Board)• OR Spectrum (Associate Editor)• Swarm Intelligence (Member of Editorial Board) |
| Nikolaus Hautsch | <ul style="list-style-type: none">• Journal of Financial Econometrics (Associate Editor)• Empirical Economics (Associate Editor)• Econometrics (Member of Editorial Board)• Market Microstructure and Liquidity (Associate Editor) |
| Hannes Leeb | <ul style="list-style-type: none">• Sankhya (Associate Editor) |
| Georg Pflug | <ul style="list-style-type: none">• Statistics and Risk Modeling (Past Editor-in-Chief)• Computational Optimization and Applications (Associate Editor)• Computational Management Science (Associate Editor)• Central European Journal of Operations Research (Associate Editor)• Austrian Journal of Statistics (Associate Editor)• Energy Systems: Optimization (Associate Editor)• Modeling, Simulation and Economic Aspects (Associate Editor)• Operations Research (Associate Editor)• Journal of Stochastic Analysis (Associate Editor)• Financial Mathematics and Applications (Associate Editor) |
| Benedikt M. Pötscher | <ul style="list-style-type: none">• Econometric Theory (Co-Editor)• Journal of Statistical Planning and Inference (Associate Editor) |

9.2 Refereeing¹

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|-------------------|---|
| Johanna Bertl | <ul style="list-style-type: none">• Molecular Ecology (1) |
| Immanuel M. Bomze | <ul style="list-style-type: none">• Journal of Global Optimization (1)• Optimization Letters (2)• Linear Algebra and its Applications (1) |
| Gökhan Cebiroglu | <ul style="list-style-type: none">• Quantitative Finance (1) |

¹ incomplete list

- Walter J. Gutjahr
- Central European Journal of Operations Research (4)
 - European Journal of Operational Research (3)
 - Evolutionary Computation (1)
 - International Journal of Parallel, Emergent and Distributed Systems (1)
 - International Journal of Production Research (1)
 - Journal of Cleaner Production (1)
 - Omega (1)
 - Swarm Intelligence (1)
 - Theoretical Computer Science (1)
 - Transactions on Evolutionary Computation (1)
 - Transportation Research Part E (2)
- Nikolaus Hautsch
- Allgemeines Statistisches Archiv
 - Journal of Applied Econometrics
 - Journal of Econometrics
 - Journal of Economic Dynamics and Control
 - Journal of Finance
 - Deutsche Forschungsgemeinschaft (3)
- Irene Klein
- Electronic Journal of Probability (1)
 - Mathematical Finance (1)
- Hannes Leeb
- Journal of Econometrics (1)
 - Journal of the American Statistical Association (1)
 - Annals of Statistics (1)
 - IEEE Transactions on Information Theory (1)
 - Mathematics of Computation (1)
 - Netherlands Organisation for Scientific Research (NWO) (1)
- Markus Leitner
- Central European Journal of Operations Research
 - Computational Optimization and Applications
 - INFORMS Journal on Computing
 - Journal of Heuristics
 - Networks
- Benedikt M. Pötscher
- Journal of the Royal Statistical Society - Series B
- Werner Schachinger
- Journal of Optimization Theory and Applications
 - Electronic Journal of Linear Algebra
- Markus Sinnl
- European Journal of Operational Research
 - Journal of Combinatorial Optimization
 - Naval Research Logistics
 - Systems Science and Control Engineering
 - Proceedings of ISCO2014
- Nina Senitschnig
- Computational Statistics and Data Analysis (1)
 - European Journal of Operational Research (1)

9.3 Public Relations Activities

- Nikolaus Hautsch Public Lecture, Finance Fusion Finanzmesse, Vienna University of Economics and Business, Vienna, Austria, October 2014
- Nikolaus Hautsch Public Lecture, Katholischer Akademikerverband, Vienna, Austria, November 2014

9.4 Other Professional Activities

- Immanuel M. Bomze • Deputy Director of studies Ph.D. program, University of Vienna, Austria
• Management Committee Meeting COST TD1207, University of Klagenfurt, Austria
• EJOR Editorial Meeting, Institute of Computing Science, Poznań University of Technology, Poland
• EJOR Editorial Meeting, University of Bocconi, Milano, Italy
- Walter J. Gutjahr • Member of Program Committee, ANTS 2014
• Member of Program Committee, EvoCOP 2014
• Member of Program Committee, EvoCOP 2015
• Member of Program Committee, EMO 2015
• Member of Program Committee, FOGA 2015
• Member of Program Committee, GECCO 2014
• Member of Program Committee, LION 2014
• Member of Program Committee, PPSN 2014
- Nikolaus Hautsch • Co-Organizer (jointly with Markus Bibinger and Markus Reiß) of the Workshop on Recent Advances in High-Frequency Statistics, Berlin, Germany
• Member of Program Committee, 21st Annual Meeting of the German Finance Association and 13th Symposium on Finance, Banking, and Insurance, Karlsruhe, Germany, December 2014
• Member of Program Committee, BdF-ACPR-SoFiE Conference “Systemic Risk and Financial Regulation”, Paris, France, July 2014
• Member of Program Committee, Annual Conference of the “Verein für Socialpolitik”, Hamburg, Germany, September 2014
• Member of Program Committee, Annual Conference of the Society for Financial Econometrics (SoFiE), University of Toronto, Canada
• Member of Ph.D. Committee of Sebastian Trojan, “Essays on Multivariate Stochastic Volatility”, University of St. Gallen, Switzerland
- Irene Klein • Deputy Head of Department (since October)
• Member of Curriculum Working Group for Bachelor Studies
- Raimund M. Kovacevic • Organizer of stream “Technical and Financial Aspects of Energy Problems” (together with M.T. Vespucci), INFORMS 2014, Barcelona, Spain
• Organizer of session “Pricing of Energy Derivatives”, CMS 2014, Lisbon, Portugal

- Markus Leitner
- Co-Organizer of the workshop “Combinatorial Optimization for Personalized Medicine”, University of Vienna, Austria, 2014
 - Co-Organizer of the workshop “Routing and Networks”, University of Vienna, Austria, 2014
 - Co-Leader of the Austrian Network Optimization Group (working group of the Austrian Society of Operations Research)
- Hannes Leeb
- Head of Department (since January)
 - Bernoulli Society European Regional Committee
 - Bernoulli Society ERC Conference Committee
- Georg Pflug
- Organizer of the EURO Winter School on Stochastic Programming, Bad Hofgastein, Austria, March 23-28
 - Council Member for Applied Mathematics at the Austrian Science Fund (FWF)
- Benedikt M. Pötscher
- Deputy Director of Studies Programme Business, Economics and Statistics, University of Vienna, Austria (until September)
 - Faculty member of Vienna Graduate School of Economics
 - Member of ASA and IMS
- Werner Schachinger
- Deputy Director of Studies Programme Business, Economics and Statistics, University of Vienna, Austria (since October)