

# ANNUAL REPORT 2002



Institut für Statistik  
und Decision Support Systems  
Systems Universität Wien

Department of Statistics,  
and Decisions Support  
University of Vienna



Universitätsstraße 5/9, A-1010 Wien  
Brünnerstraße 72, A-1210 Wien

Institutsvorstand: Prof. Dr. Georg Pflug  
Institutssekretariat: Manuela Nicham  
<http://univie.ac.at/statistics>

Wien, Juli 2003

## **TEACHING AND RESEARCH ACTIVITIES**

The main teaching duty of the Department of Statistics and Decision Support Systems comprises the education of students at the School of Economics, Business and Computer Science in the fields of Mathematics, Statistics, Operations Research, Econometrics, and several areas of Computer Science.

The Department offers undergraduate courses in Mathematics (Linear Algebra, Analysis, Discrete Mathematics) and Statistics for students of Management Science, Economics, Sociology, Applied Computer Science and Statistics. Graduate courses are offered in Mathematical Statistics, Applied Statistics, Operations Research (Optimization and Simulation), Foundations and Applications of Computer Science, Econometrics and Stochastic Financial Mathematics.

Research is conducted in the areas of Mathematical Statistics; Applied Statistics, Computational Statistics; Stochastic Methods of Financial Mathematics; Game Theory; Econometrics; Time Series Analysis; Global, Nonlinear, Combinatorial and Stochastic Optimization; Scheduling and Project Management; Modeling and Simulation of Complex Systems; Software Engineering; Information Systems; Statistical Methods in Theoretical Computer Science as well as Pattern Recognition.

# FACULTY

## Senior Faculty:

<b>Bomze</b> , Immanuel M.	Mathematical Statistics, Game Theory on leave as of 01. August 2002
<b>Fröschl</b> , Karl A.	Statistical Data Modelling, Production Scheduling, Human Factors in Computing on leave as of 01. July 2001
<b>Futschik</b> , Andreas	Asymptotic Statistics, Applied Statistics
<b>Grossmann</b> , Wilfried	Applied Statistics, Statistical Data Bases, Environmental Simulation
<b>Gutjahr</b> , Walter J.	Algorithms and Data Structures, Combinatorial Optimization, Reliability, Software Engineering
<b>Hudec</b> , Marcus	Applied Statistics, Statistical Computing
<b>Neuwirth</b> , Erich	Applied Statistics, Information Technology for Education, Mathematics & Musics Education, Combinatorics
<b>Pflug</b> , Georg	Mathematical Statistics, Stochastic Optimization and Financial Management
<b>Pötscher</b> , Benedikt	Econometrics, Statistics and Time Series Analysis
<b>Reschenhofer</b> , Erhard	Applied Statistics, Econometrics, Biometrics
<b>Uchida</b> , Gabriele	Non-linear Optimization

## **Junior Faculty:**

<b>Cenker</b> , Christian	Applied Mathematics, Statistics in Pattern Recognition, Mathematical and Statistical Computing
<b>Denk</b> , Michaela	Statistical Information Systems, until 01 May 2002
<b>Klein</b> , Irene	Stochastic Finance
<b>Krall</b> , Christoph	Biomathematics, until 01. March 2002
<b>Leisch</b> Friedrich	Statistical Computation, since 01. December 2002
<b>Novak</b> , Andreas J.	Time Series Analysis, Econometrics
<b>Schachinger</b> , Werner	Stochastic Finance, Analysis of Data Structures
<b>Schimanovich</b> , Werner	Mathematical Logic and Computer Science
<b>Schlifni</b> Manhard	Computer Science and Society, since 01. October 2002
<b>Schwab</b> , Harald	Numerical Harmonic Analysis, until 28. February 2002

# ANNUAL REPORT 2002

## Papers published in 2002

Author	Title	Bibliographic details
Bomze, Immanuel M.	Branch-and-Bound Approaches to Standard Quadratic Optimization Problems	Journal of Global Optimization, 22, 17-37, (2002)
Massaro, Alessio; Pelillo, Marcello; Bomze, Immanuel M.	A complementary pivoting approach to the maximum weight clique problem	SIAM Journal on Optimization, 12, 928-948, (2002)
Bomze, Immanuel M.; Budnich, Marco; Pelillo, Marcello; Rossi, Claudio	Annealed replication: A new heuristic for the maximum clique problem	Discrete Applied Mathematics, 121, 27-49, (2002)
Bomze, Immanuel M.; de Klerk, Etienne	Solving standard quadratic optimization problems via linear, semidefinite and copositive programming	Journal of Global Optimization, 24, 163-185, (2002)
Bomze, Immanuel M.	Regularity vs. degeneracy in dynamics, games, and optimization: a unified approach to different aspects	SIAM Review, 44, 394-414, (2002)
Futschik, Andreas	A Data Driven Smooth Test for Circular Uniformity	Ann. Inst. Statist. Math., 54(1), 29-44, (2002)
Futschik, Andreas	Ist der Euro fair? Ergebnis einer empirischen Untersuchung.	Austrian Journal of Statistics, 31(1), 35-40, (2002)
Danninger-Uchida, Gabriele	Szenarios für x-Commerce	Austrian Journal of Statistics, 31(1), 105-112, (2002)
Grossmann, Wilfried; Ofner, Petra	A Self Documenting Programming Environment for Weighting	Proceedings in Computational Statistics 2002, Berlin, (Härdle, W. ; Rönz, B. ed.), Physica-Verlag, Heidelberg, 129-134, (2001), ISBN 3-7908-1517-9
Grossmann, Wilfried; Froeschl, Karl, Anton; Denk, Michaela	Statistical Composites: A Transformation-Bound Representation of Statistical Datasets	Proceedings 14th International Conference on Scientific and Statistical Database Management, Edinburgh, (J. Kennedy ed.), 217-226, IEEE Press, Los Alamitos, California, (2002), ISBN 0-7695-1632-7

Grossmann, Wilfried	Bemerkungen zum Zusammenhang von amtlicher und methodischer Statistik	Austrian J. of Statistics, 31 (1), 41 – 54, (2002)
Gutjahr, Walter J. Dörner, Karl; Hartl, Richard; Strauß, Christine; Stummer, Christian	Investitionsentscheidungen bei mehrfachen Zielsetzungen und künstliche Ameisen	Operations Research Proceedings, (P. Chamoni et al. ed.) Springer Verlag, Berlin, 355-362, (2002)
Gutjahr, Walter J.; Uchida, Gabriele	A branch-and-bound approach to the optimization of redundant software under failure correlation	Computers and Operations Research 2002 (29), Elsevier, 1773-1791, (2002)
Gutjahr, Walter J.;	The move-to-partner rule for self-organizing task allocation on a linear array	Stochastic Models, 2002 (18), (Marcel Dekker ed.) 109-137, (2002),
Gutjahr, Walter J.;	ACO algorithms with guaranteed convergence to the optimal solution	Information Processing Letters, 2002 (82), 145 – 153, Elsevier, (2002)
Gutjahr, Walter J.; Biffl, Stefan	Using a reliability growth model to control software inspection	Empirical Software Engineering, 2002 (7), Kluwer, 257-284, (2002)
Hubalek, Friedrich; Klein, Irene; Teichmann, Josef	A general proof of the Dybvig-Ingersoll-Ross-Theorem: long forward rates can never fall	Mathematical Finance, 12, 447-451, Marcel Dekker, (2002)
Neuwirth, Erich	Minimalistic Tools for Mathematical Multimedia	Multimedia Tools for Communicating Mathematics, Springer Verlag, 231-240, (2002)
Neuwirth, Erich	The Mathematics of Tuning Musical Instruments - A simple toolkit for Experiments	Mathematics and Art, 79-88, (2002)
Neuwirth, Erich	The Mathematics of Tuning Musical Instruments - A simple toolkit for Experiments	Mathematics and Music, Springer Verlag, 232-241, (2002)
Neuwirth, Erich	Volksbegehren "Veto gegen Temelin"	Österreichische Zeitschrift für Statistik, 31(1), 65-72, (2002)
Neuwirth, Erich	Computing Tournament Sequence Numbers Efficiently With Matrix Techniques	Séminaire Lotharingien de Combinatoire, B47h, 12p, (2002)
Dawid, Herbert; Feichtinger, Gustav; Novak, Andreas J.	Extortion as an Obstacle to Economic Growth: A Dynamic Game Analysis	European Journal of Political Economy, 18(3), 499-516, (2002)

Novak, Andreas J.; Kort, Peter M.; Greiner, Alfred; Feichtinger, Gustav; Haunschmied, Josef L.; Hartl, Richard F.	Environmental effects of tourism industry investments: an intertemporal trade-off.	Optimal Control Applications and Methods, 23 (1), 1-19, (2002)
Novak, Andreas; J.Hartl, Richard F.; Kort, Peter M.	A Capital Accumulation Model with Debt Financing: The Steigm Model Revisited	Advances in Computational Management Science, (Georges Zaccour ed.), Kluwer Academic Publishers, 5, 23-38, (2002)
Pflug, Georg Ch.; Rubinstein, Reuven	Inventory processes: Quasi Regenerative Property and Sensitivity Estimation	Stochastic Models, Marcel Dekker Verlag, 18(3), 469-496, (2002)
Pflug, Georg Ch.	Coherent Risk Measures and Convex Combinations of the Conditional Value at Risk	Austrian J. of Statistic, 31(1), 73-75, (2002)
Pötscher, Benedikt	Lower Risk Bounds and Properties of Confidence Sets for Ill-posed Estimation Problems with Applications to Spectral Density and Persistence Estimation, Unit Roots, and Estimation of Long Memory Parameters	Econometrica, 70, No. 3, (Econometric Society ed.), Evanston, 1035-1065, (2002), ISSN 0012-9682

### **Papers finished in 2002**

<b>Person</b>	<b>Title</b>
Locatelli, Marco; Bomze, Immanuel M.; Pelillo, Marcello	Swaps, diversification, and the combinatorics of pivoting for the maximum weight clique
Bomze, Immanuel M.	Portfolio selection via replicator dynamics and projections of indefinite estimated covariances
Bomze, Immanuel M.	Undominated statistical experiments - structure, sufficiency, invariance, and optimality in unbiased estimation
Futschik, A.	Subsampling of Biased Statistics with Application to Nonparametric Density and Intensity Estimation
Futschik, Andreas; Clarke, B.R.	Improving bandwidth selection methods by adding qualitative constraints

Grossmann, Wilfried; Dür, Wolfgang; Bauer, Monika	The effect of national Tobacco policies on smoking prevalence among 15-year olds Controlling for school empowerment in 7 European countries, (British Medical Journal)
Grossmann, Wilfried	Metadata in General purpose statistical packages (MetaNet Work Package 1: Methodology and Tools; Deliverable 4)
Grossmann, Wilfried	Structures (MetaNet Work Package 1: Methodology and Tools; Deliverable 4)
Gutjahr, Walter J.; Dörner, Karl	Extracting test sequences from a Markov software usage model by ACO
Gutjahr, Walter J.	Interaction dynamics of two slowly learning agents
Klein, Irene; Rogers, L.C.G.	Duality in constrained optimal investment and consumption problems: a synopsis
Neuwirth, Erich	Statistische Wählerstromanalyse der Nationalratswahl 2002 (Österreichische Zeitschrift für Statistik)
Pflug, Georg Ch.; Moritsch H.	Polynomial pricing algorithms for path dependent contracts
Pflug, Georg Ch.; Hochreiter R.	Scenario generation as a facility location problem
Pflug, Georg Ch.	The score function method (Encyclopedia of Statistical Sciences)
Pflug, Georg Ch.; Heidergott, Bernd; Vasquez-Abad Felisa	The measure valued differentiation for stochastic systems (Encyclopedia of Financial Engineering)
Pflug, Georg Ch.	Measures of downside risk (Encyclopedia of Financial Engineering)
Pflug, Georg Ch.	Risk measures - an overview (Encyclopedia of Financial Engineering)
Pflug, Georg Ch.	Stochastic Optimization and statistical inference (Handbook of Stochastic Optimization, Elsevier)
Pflug, Georg Ch.	The value of perfect information as risk measure (Springer Lecture Notes)
Pötscher, Benedikt M.; Leeb, Hannes	Performance Limits for Estimators of the Risk or Distribution of Shrinkage-Type Estimators, and Some General Lower Risk-bound Results
Reschenhofer, Erhard	Unexpected Features of Financial Time Series: Higher-Order Anomalies and Predictability
Reschenhofer, Erhard; Benkherout, Lakdere	Automatic Continuous Smoothing (Advances and Applications in Statistics)
Reschenhofer, Erhard Schachinger, Werner	Robust Tests of the Martingale Hypothesis Concentration of size and path length of tries



Schachinger, Werner

Further distributional results for costs of partial match queries in K-d tries

### Research projects

<b>Person</b>	<b>Title</b>	<b>Sponsor</b>	<b>Total budget in EUR</b>	<b>Budget used in 2002 in EUR</b>	<b>Begin / End of the project</b>	<b>Women months / men months</b>
Grossmann, Wilfried; Froeschl, Karl A.	Metanet	EU EUROSTAT	47.000,00	12.320,00	01.12.2000 30.05.2003	0/3
Grossmann, Wilfried;	Inspector	EU EUROSTAT	100.613,00	37.552,00	01.06.2001 30.11.2003	0/6
Grossmann, Wilfried	EC 3 (Electronic Commerce Competence Centre)	Wirtschafts- ministerium	29.794,00	14.897,00	Okt.02 Sep.03	Work- contract
Grossmann, Wilfried; Hudec, Marcus	Redesign des Statsitikangebotes der OENB im Internet	Österreichi- sche Nationalbank	34.560,00	22.464,00	01.10.2002 31.01.2003	Work- contract
Neuwirth, Erich	Co-Didactics	Wissensch.- Technisches Abkommen Österreich- Ungarn	4.000,00	1.500,00	01.01.2001 31.12.2002	1/0
Pflug, Georg Ch.	AURORA	FWF	303.000,00	103.900,00	01.04.2000 31.03.2003	0/24
Pflug, Georg Ch.	Marktmodelle der Telekombranche	Telekom Austria	28.000,00	16.000,00	20.04.2002 19.04.2003	0/8
Pflug, Georg Ch.	Unit linked Life insurance	OENB	73.000,00	11.000,00	01.10.2002 31.05.2004	0/3
Pötscher, Benedikt M.	Model Selection and Statistical Inference	FWF	91.274,32		01.10.2000 30.09.2002	0/12

## Presentations at conferences

<b>Person</b>	<b>Conference</b>	<b>Title of presentation</b>
Bomze, Immanuel M.	HPOPT 2002, Tilburg, NL	Linear, semidefinite and copositive programming for standard quadratic optimization problems
Bomze, Immanuel M.	Probastat 2002, Smolenice, SK	Undominated statistical experiments
Bomze, Immanuel M.	4th APODS meeting, Università degli Studi, Siena, I	Cone programming for standard quadratic optimization problems
Futschik, A.	Vilnius, Lithuania	On Bootstrap and Subsampling of Biased Statistics
Grossmann, Wilfried	MetaNet-Meeting Statistics Stockholm, S	Structures for Metadata
Grossmann, Wilfried	AMRADS-Meeting, Edinburgh, UK	Towards a Unified Metadata Model for Statistical Offices
Grossmann, Wilfried	COMPSTAT Conference	A Self Documenting Programming Environment for Weighting
Grossmann, Wilfried	COMPSTAT Conference	On the Use of Metadata in Statistical Computing
Grossmann, Wilfried	MetaNet-Meeting Statistics, Oslo, N	The Unified Meta-Information Architecture of Statistics
Grossmann, Wilfried	Statistische Woche, Wien, A	Web-Mining im e-Commerce
Klein, Irene	Bachelier Finance Society Second World Congress, G	A general proof of the Dybvig-Ingersoll-Ross-Theorem: long forward rates can never fall
Klein, Irene	16. Workshop: Austrian Working Group on Banking and Finance, Wien	A general proof of the Dybvig-Ingersoll-Ross-Theorem: long forward rates can never fall
Neuwirth, Erich	ISMTF, Kopenhagen, DK	Spreadsheets as modeling instruments
Neuwirth, Erich	ISMTF, Kopenhagen, DK	Eine Kleine (Mathematische) Nachtmusik
Neuwirth, Erich	JSM, New York	Embedding R Graphics in Excel
Neuwirth, Erich	IuK, Landesinstitut für Schule, Bremen	Minimalistic Multimedia
Neuwirth, Erich	IuK, Landesinstitut für Schule, Bremen	Musikalische Stimmungen

Neuwirth, Erich	Lehrerakademie Bremen	Spreadsheets - nur Rechenhilfe oder auch Denkhilfe?
Neuwirth, Erich	Statistik-Tage	Statistische Bildung: die Rolle von Computerprogrammen bei der Vermittlung
Neuwirth, Erich	Viewdet	Robots: Designing and Implementing a Simple Software Interface (combining fischertechnik and MSWLogo)
Neuwirth, Erich	Viewdet	eLearning perspectives
Novak, Andreas J.	Yale University, New Haven, USA	Extortion as an Obstacle to Economic Growth
Novak, Andreas J.	OR 2002 Klagenfurt, A	Optimal Pricing of a Product which Diffuses in Rich and Poor Populations
Novak, Andreas J.	Tunis, Tunisia	Optimal Pricing of a Product which Diffuses in Rich and Poor Populations
Pflug, Georg Ch.	OR 2002, Klagenfurt, A	Risk measures for income streams
Pflug, Georg Ch.	APMOD, Varenna, I	Scenario tree generation methods
Pflug, Georg Ch.	INFORMS Tagung, Edinburgh	Risk measures and the risk processes
Pflug, Georg Ch.	MCQMC2002, Singapore	Scenario generation using Monte Carlo and Quasi Monte Carlo
Pötscher, Benedikt M.	NSF/NBER Time Series Conference, Philadelphia, USA	A Problem in Estimating the Risk or Distribution of Shrinkage-Type Estimators
Pötscher, Benedikt M.	Department of Statistics, Catholic University of Louvain, Belgien	Estimating the Accuracy of Shrinkage-Type Estimators
Pötscher, Benedikt M.	Econometric Society European Meeting, Venice, I	Nonlinear Functions and Convergence to Brownian Motion
Schachinger, Werner	Eighth Seminar on Analysis of Algorithms, Strobl, A	Concentration of Distribution Results for Trie-Based Sorting of

### Talks given at other institutions

Person	Institution	Title
Bomze, Immanuel M.	Universita Ca' Foscari, Venezia, I	Cone programming for standard quadratic optimization problems
Gutjahr, Walter J.	Montanuniversität Leoben, A	Risk-based software testing
Neuwirth, Erich	Combinatorics Seminar, Dept. of Mathematics, MIT, Cambridge	Recursively defined combinatorial functions: Extending Galton's board.

Neuwirth, Erich	Universite Paul Sabatier, Laboratoire de Statistique et Probabilités, Toulouse	Spreadsheets as Clients for Statistical Software
Neuwirth, Erich	Bulgarische Akademie der Wissenschaften, Statistisches Institut	Spreadsheets as tools for statistical computation and statistical education
Pflug, Georg Ch.	Universität Freiburg	Optimalität in der Statistik
Pflug, Georg Ch.	ETH Zürich	Risk measures and risk processes
Pötscher, Benedikt M.	Institut für empirische Wirtschaftsforschung, Universität Zürich	A Problem in Estimating the Distribution of Post-Model-Selection Estimators
Pötscher, Benedikt M.	Institute for Advanced Studies, Vienna	A Problem in Estimating the Distribution of Post-Model-Selection Estimators
Pötscher, Benedikt M.	Volkswirtschaftliches Institut, University of Bern	A Problem in Estimating the Distribution of Post-Model-Selection Estimators
Reschenhofer, Erhard	Universität Bielefeld	Grenzen der konventionellen Zeitreihenanalyse
Reschenhofer, Erhard	Universität Bielefeld	Nichtstationaritäten in ökonomischen Zeitreihen

### Research stays at other institutions

<b>Person</b>	<b>Institution</b>	<b>Research topic</b>	<b>Duration in weeks</b>
Futschik, Andreas	NUS, Singapore	Subsampling when Bias is Present	10

## **Time spent for teaching, research and administration (hours per week)**

The responsibility for these figures lies entirely with the reporting persons

<b>Person</b>	<b>Teaching</b>	<b>Research</b>	<b>Administration</b>
Bomze, Immanuel M.	20	10	10
Cenker, Christian	30	10	15
Futschik, Andreas	20	10	10
Grossmann, Wilfried	18	15	19
Gutjahr, Walter J.	20	15	10
Klein, Irene	10	22	8
Neuwirth, Erich	25	15	10
Novak, Andreas J.	18	12	10
Pflug, Georg Ch.	20	10	20
Pötscher, Benedikt M.	17	13	20
Reschenhofer, Erhard	20	25	5
Schachinger, Werner	10	20	10
Uchida, Gabriele	20	10	10

## **Averaging teaching load in hours per week**

<b>Person</b>	<b>Total</b>	<b>Lectures</b>	<b>Hours of teaching With less than 10 graded participants</b>
Bomze, Immanuel M.	9,5	7,5	1
Cenker, Christian	6,5	2,5	0

Futschik, Andreas	9	5	2
Grossmann, Wilfried	9,5	3	2,5
Gutjahr, Walter J.	7,5	3	0,5
Klein, Irene	4	0	0
Neuwirth, Erich	10	3,5	4,5
Novak, Andreas	6,5	0.5	0
Pflug, Georg Ch.	10,5	8	1
Pötscher, Benedikt M.			
Reschenhofer, Erhard			
Schachinger, Werner			
Uchida, Gabriele	7,5	2	2,5
Neuwirth, Erich			

### **Referee work for journals and organisations**

<b>Person</b>	<b>Journal or Organisation</b>
Bomze, Immanuel M.	Math. Programming, Advances in Complex Systems, J. Econometrics, Math. Reviews, Discrete Applied Mathematics, Tatra Mountains Mathematical Publications, J.Math.Biol., Neurocomputing J., Games and Economic Behaviour, European Journal of Operations Research, IEEE Transactions on Systems, Man, and Cybernetics
Caner, Christian	SCS, Monatshefte der Mathematik
Futschik, Andreas	Biometrical Journal, Mathematical Reviews, Statistics in Medicine, Mathematical Methods of Statistics
Grossmann, Wilfried	Gutachtertätigkeit für das Projekt AGORA des Federal Office for Scientific, Technical and Cultural Affairs, Belgien
Gutjahr, Walter J.	IEEE Transaction on Evolutionary Computation, Information Processing Letters, Statistics and Probability Letters, IEEE Transaction on Software Engineering, Computers and Operations Research, European J. of Operational Research, Man and Cybernetics, Proc. ANTS 2002, IEEE Trans. on Software Engineering, J. Evolutionary Computation, Central European J. of Operations Research
Klein, Irene	Mathematical Finance
Neuwirth, Erich	International Journal of Computers in Mathematical Learning
Novak, Andreas J.	Journal of Difference Equations and Applications, Operations Research, Optimal Control Applications and Methods, Mathematical Modelling of Systems,

Pflug, Georg Ch.	Mathematical Programming, Computational Optimization and Applications, National Science Foundation (USA), Journal of Applied Probability, Math. Reviews, SIAM J. of Optimization, Econometrica
Pötscher, Benedikt M.	Annals of Statistics, Journal of Econometrics
Reschenhofer, Erhard	Journal of Econometrics, Journal of Time Series Analysis Biometrical Journal, Journal of Scientific Research (Science and Technology)
Schachinger, Werner	Discrete Mathematics and Theoretical Computer Science

### **Editorial work**

<b>Person</b>	<b>Journal</b>
Bomze, Immanuel M.	Journal of Global Optimization, Central European Journal of Operations Research
Neuwirth, Erich	International Journal on Computers and Mathematical Learning
Pflug, Georg Ch.	Associate Editor of: Statistics and Probability Letters, Computational Optimization and Applications, Central European Journal of Operations Research, Austrian Journal of Statistics, Proceedings IFIP Workshop 2002
Pötscher, Benedikt M.	Co-Editor, Econometric Theory, Associate Editor, Journal of Econometrics, Guest-Editor (with I.R. Prucha) of a special issue of the Journal of Econometrics

### **Membership as scientific professional in scientific organisations**

<b>Person</b>	<b>Scientific Organisation</b>
Bomze, Immanuel M.	member of the executive board: Austrian Statistical Society; member of the advisory council: Austrian Society for Operations Research;

Grossmann, Wilfried	Österreichische Statistische Gesellschaft (Vicepresident)
Neuwirth, Erich	IFIP Working Group 3.1 (Computers in Secondary Education), IFIP Working Group 3.6 (Distance Education)
Pflug, Georg Ch.	member: Council of Scientists, INTAS; Committee on Stochastic Programming (Executive board of the Stochastic programming community)
Pötscher, Benedikt M.	American Mathematical Society, American Statistical Association, Econometric Society, Institute of Mathematical Statistics, Österreichische Statistische Gesellschaft, Verein für Socialpolitik, Ausschuss für Ökonometrie)

### **Public Relations Activities**

<b>Person</b>	<b>Activity</b>
Cenker, Christian	Statistik Werbefolder
Futschik, Andreas	Schülerwettbewerb und Preisrätsel 2002, Material für und Beratung bei Studien und Berufsinformationsmesse
Denk, Michaela	Member of the working group „public opinion“ of the ÖSG
Neuwirth, Erich	Arbeitskreis Statistische Bildung und Ausbildung der Österr. Statistischen Gesellschaft (Arbeitskreisleiter), Wahlhochrechnung zur Nationalratswahl 2002 am WWW.
Pflug, Georg Ch.	Schülerwettbewerb und Preisrätsel 2002, Aussteller bei der Science Week 2002

### **Supervision of Diploma Theses and Ph.D. Theses**

DA .....Diplomarbeit  
DISS 1 ...Dissertation – First referee  
DISS 2 ...Dissertation – Second referee



<b>supervisor</b>	<b>author</b>	<b>DA/ DISS</b>	<b>Title of work</b>
Futschik, Andreas	König, Franz	DA	Zweistufige Designs in der sequentiellen Statistik
Grossmann, Wilfried	Ledl, Thomas	DA	Kernel Density Estimation, Theory, Aspect of Dimension and Application in Discriminant Analysis
Grossmann, Wilfried	Auer, Michael Mario	DA	Rauchverhalten und subjektive Gesundheit bei Schülern in Österreich. Eine Anwendung der Multilevel-Analysis
Gutjahr, Walter J.	Aichberger, Hans	DA	Fehlerspezifikationen in Softwareentwicklungsmodellen
Gutjahr, Walter J.	Pörnbacher, Hubert	DA	Empirische Untersuchung des Verhaltens von ACO- Algorithmen bei zeitabhängiger Evaporisierung der Pheromonspuren
Gutjahr, Walter J.	Dinges, Gerlinde P.	DA	Mathematische Formulierung des semantischen Differentials zur Konzeption einer softwaregestützten Analyse des semantischen Raums
Gutjahr, Walter J.	Preuer, Sibylle	DA	Befragung im Internet -- ein Anwendungsbeispiel
Pflug, Georg Ch.	Niel, Paul	DA	Catastrophe-linked securities
Pflug, Georg Ch.	Hochrainer, Stefan	DA	Warteschlangen: Stochastische Modelle und Performance Maße
Pflug, Georg Ch.	Vrabec, Ingrid	DA	Constraint Logic Programming
Reschenhofer, Erhard	Hofreither, Andreas	DA	Anomalien in Finanzzeitreihen
Grossmann, Wilfried	Amirani Shoreh	DISS 1	Multiple Imputation
Grossmann, Wilfried	Ofner, Petra	DISS 1	Embedding of Weighting Algorithms into Metadata Structures
Grossmann, Wilfried	Denk, Michaela	DISS 2	Statistical Data Combination: A Metadata Framework for Record Linkage Procedures
Grossmann, Wilfried	Ploner, Meinhard	DISS 2	Bootstrap Confidence Intervals, an overview and comparisons by means of selected applications
Gutjahr, Walter J.	Reimann, Marc	DISS 2	Ant based optimization in goods transportation

### **Other professional activities**

**Person**                      **Activity**

Bomze, Immanuel M.	Organisator: HPOPT Workshop 2002
Cenker, Christian	IEEE, SCS, ULV, Juror EASA 2002
Grossmann, Wilfried	Österreichische Statistische Gesellschaft (Vizepräsident), m-business 2003, Member of Programm Committee
Gutjahr, Walter J.	Leiter des Arbeitskreises Operations Research in der Österreichischen Computergesellschaft; Vorstand des wissenschaftlichen Fachbeirats von Vienna Knowledge Net
Neuwirth, Erich	Juror des Jugendinformatikwettbewerbs der Österr. Computergesellschaft, Vorstandsmitglied Österr. Statistische Gesellschaft, Bereichskoordinator Mathematik des European Academic Software Award 2002, MAA Minicourse Mathematical algorithms, models, and graphic representations using spreadsheets, Scholar in Residence JCCC, Workshop eLearning im Rahmen des Zentrums fuer Lehrentwicklung der Universität Wien
Pflug, Georg Ch.	Organisator: IFIP Workshop 2002, Sektionsleiter: OR 2002, Jurymitglied: Preise der Österreichischen Statistischen Gesellschaft, Preise der OEGOR

### Talks given at the department in 2002

Date	Person Title
21.01.2002	Marco Gori (Univ. of Siena, Italy) Inside Google`s web page scoring system

- 11.03.2002 Keith Knight (University of Toronto, Canada)  
Model selection and shrinkage for nearly singular designs
- 18.03.2002 Andrzej Ruszczycki (Rulgers University)  
Decomposition Methods in Stochastic Programming
- 08.04.2002 Volkert Paulsen (Kiel)  
On optimal stopping and its applications in math finance
- 15.04.2002 Bernard Hanzon (EOS, TU Wien)  
State space calculations for discrete probability densities
- 22.04.2002 Mirjam Diu (WU Wien)  
Nonconvex Duality: Theory and Application
- 10.06.2002 Kabaila (La Trube Univ. Australien)  
Statistical Model Selection: Comparing AIC and BIC
- 10.10.2002 D. Ferger (TU Dresden)  
Über die Minimalstelle des inkorrekt zentrierten empirischen Prozesses und seiner Grenzverteilung in nichtregulären Experimenten
- 04.11.2002 Frank Kleibergen (Amsterdam)  
Testing parameters in GMM without assuming that they are identified
- 18.11.2002 Lindos Giraitis, York  
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