

Tuesday July 1, 2008

15:00 – 20:00 ISBIS-2008 Registration

15:30 – 19:00 Guided Walking Tour of Prague

Wednesday July 2, 2008

08:00 – 09:00 ISBIS-2008 Registration

Opening Session & Keynote Session 1

Hall A+B+C+D

09:00 - 09:15 Welcome from Conference Director
Nicholas Fisher, University of Sydney

Chair: *George Michailidis, University of Michigan, USA*

09:15 - 10:30 Keynote Address: Process Monitoring, Anomaly Detection, and Beyond: New Directions and Applications
Vijay Nair, University of Michigan, USA

10:30 - 11:00 Coffee Break

11:00 - 12:30 Parallel Sessions

Invited Session 1a: Biostatistics Applications

Organiser: *Moulinath Banerjee, University of Michigan*
Chair: *Stilian Stoev, University of Michigan*

Room A

11:00 - 12:30 Quantile Inference for Competing Risks Data
Jason Fine, University of North Carolina

Variable Importance Based on Intervention Calculus
Marloes Maathuis, M Kalisch & P Buehlmann, ETH Zurich

Adaptive Design Procedures for Threshold Estimation Problems
Yan Lan, Runlong Tang, Moulinath Banerjee & George Michailidis, Abbot Laboratories and University of Michigan

Invited Session 1b: Statistical Process Control

Organiser: *Eugenio Epprecht, Catholic University of Rio de Janeiro*
Chair: *Eugenio Epprecht, Catholic University of Rio de Janeiro*

Room B

11:00 - 12:30 Robust Economic Design of Adaptive Shewhart Control Charts Constrained by Limited Human Resource
Giovanni Celano, University of Catania, Italy

Economic-Statistical Model for the Design of a Non-central Chi-square Chart
Maysa S De Magalhães, Bruno F T Simes & Antonio F B Costa, National School of Statistical Sciences/Brazilian Institute of Geography and Statistics (ENCE/IBGE), Catholic University of Rio de Janeiro (PUC-Rio), São Paulo State University (UNESP)

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| | Control Charts for the Number of Nonconforming Items <i>Aurélia A de A Rodrigues, Eugenio K Epprecht & Maysa S De Magalhães, Federal University of Uberlândia, Brazil, Catholic University of Rio de Janeiro, Brazil, National School of Statistical Sciences, Brazil</i> |
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| Invited Session 1c: Bayesian Reliability | |
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| Organiser: <i>Fabrizio Ruggeri, CNR-IMATI</i> Chair: <i>William Meeker, Iowa State University</i> | Room C |
| 11:00 - 12:30 | Analysis of Breaks in Non-Equally Load Sharing System <i>Petr Volf, Aleš Linka & Maros Tunak, UTIA of Czech Academy of Sciences CR, Prague, Technical University Liberec, Czech Republic</i> |
| | Bayesian Reliability Models and Mortgage Default Risk <i>Refik Soyer & Feng Xu, The George Washington University</i> |
| | Stochastic Modelling of Cylinder Liners Wear In A Marine Diesel Engine <i>Fernanda D'Ippoliti & Fabrizio Ruggeri, CNR-IMATI</i> |

| Contributed Session 1a: Financial Modelling I | |
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| Chair: <i>Tara Keshar Nanda Baldya, Pontificia Universidade Catolica do Rio de Janeiro</i> | Room D |
| 11:00 - 12:30 | Building Default Models for Subprime Mortgages: Assessing Risk When Historical Data Is Not Too Much Help <i>Vladimir Ladyzhets & David Canuel, Babson Capital Group</i> |
| | A New Stochastic Volatility Model to Manage Convexity of Implied Volatility <i>Adamo Uboldi, Joint Research Centre of the European Commission</i> |
| | Segmentation of Financial Data by Using Hidden Markov Chain With Non Gaussian Long Memory Noise <i>Jérôme Lapuyade-Lahorgue & Wojciech Pieczynski, Telecom Sud Paris Evry France</i> |
| | Generation Capacity Investment in Oligopolistic Electricity Markets Under Uncertainty <i>Robert Ferstl, University of Regensburg</i> |
| | Stochastic Model for Describing Future Prices on Oil Contracts <i>Tara K N Baldya, Fernando Alube & Edison Tito, PUC-RIO and PETROBRAS</i> |

| Contributed Session 1b: Hot Topics | |
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| Chair: <i>Sheng-Tsaing Tseng, National Tsing-Hua University</i> | Room E |
| 11:00 - 12:30 | Behavioral Segmentation of Credit Card Customers <i>Seohoon Jin, Su-Cheol Han, Sang-Hwa Jung & Seung Hwan Jeong, Korea University</i> |
| | Using Cause Selecting Control Charts to Monitor Dependent Process Stages with Attribute Data <i>Jin-Tyan Yeh & Su-Fen Yang, National Chengchi University</i> |

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| | Optimal Initial Recipe Setting for dMEWMA Controller <i>Sheng-Tsalng Tseng, National Tsing-Hua University</i> |
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12:30 – 14:00 **Lunch Break**

14:00 – 15:30 **Parallel Sessions**

| Invited Session 1d: Statistics in Marketing | |
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| Organiser: <i>Rajkumar Venkatesan, University of Virginia</i> Chair: <i>Nalini Ravishanker, University of Virginia</i> | Room A |
| 14:00 – 15:30 | Negative Incidents and the Impact of Satisfaction on Customer Share; An Application of Spline Models in Marketing <i>Jenny van Doorn & Peter C Verhoef, University of Groningen, The Netherlands</i> |
| | Attitudes Towards Firm and Competition: How Do They Matter for CRM Activities? <i>Rajkumar Venkatesan, Werner Reinartz & Nalini Ravishanker, University of Virginia</i> |

| Invited Session 1e: Quality Issues in Social and Environmental Problems | |
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| Organiser: <i>Daniela Cocchi, University of Bologna</i> Chair: <i>Werner Mueller, University of Linz</i> | Room B |
| 14:00 – 15:30 | A Geostatistical Approach for Dynamic Life Tables <i>Ana Debón, F Martínez-Ruiz & Francisco Montes, University of Valencia</i> |
| | A Hierarchical Spatio-Temporal Model for Mapping Air Quality Data <i>Alessandro Fassò, University of Bergamo</i> |
| | A Robust Approach for Measurement Systems Capability Analysis Under the Two-Component Error Model <i>Daniela Cocchi & Michele Scagliarini, University of Bologna</i> |

| Invited Session 1f: Statistics and E-Learning | |
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| Organiser: <i>Uwe Ziegenhagen, Humboldt University Berlin</i> Chair: <i>Graham Wills, SPSS</i> | Room C |
| 14:00 – 15:30 | A System Providing Statistical Contents for e-learning <i>Yoshiro Yamamoto, Yuichi Mori, Hiroshi Yadohisa & Tomokazu Fujino, Tokai University, Okayama University of Science, Doshisya University & Fukuoka Women's University</i> |
| | Modern e-Learning Techniques for Statistics <i>Uwe Ziegenhagen, Sigbert Klinke & Wolfgang Härdle, Humboldt University Berlin</i> |
| | Dynamic, Interactive Reproducible Documents for Data Analysis and Education <i>Duncan Temple Lang, University of California at Davis</i> |
| | An e-learning Website for the Design and Analysis of Experiments with Application to Chemical Processes <i>David Woods, D M Grove, I Liccardi, S M Lewis & J G Frey, University of Southampton</i> |

Contributed Session 1c: Design**Chair:** *Roelof J Coetzer, Sasol Technology Ltd.***Room D**

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| 14:00 – 15:30 | Factor Screening by Supersaturated Designs – A Review <i>Stelios Georgiou, University of the Aegean</i> |
| | Predictability and Profitability of Stock Return by Nonlinear Neural Network <i>Porntip Dechpichai & Pamela Davy, University of Wollongong</i> |
| | Determining the Best Order Run for Factorial Experiments of Two Level Using Techniques of Operational Research: Method Branch-and-Bound <i>Pedro Carlos Oprime & Vitória M M Pureza, Universidade Federal de Sao Carlos</i> |
| | A Defining Contrast Structure for Two-Level Nonregular Designs <i>Shao-Wei Cheng & Chien-Yu Peng, National Tsinghua University</i> |
| | Mixture Design and Analysis of Computer Experiments for Refinery Reactor Optimization <i>Roelof Coetzer, R F Rossouw & D K J Lin, Sasol Technology Ltd.</i> |

Contributed Session 1d: Banking, Risk Measures and Financial Modeling**Chair:** *Tony Bellotti, University of Edinburgh***Room E**

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| 14:00 – 15:30 | Do Financial Systems Converge? New Evidence from Household Financial Assets in the Main OECD Countries <i>Giuseppe Bruno & Riccardo De Bonis, Bank of Italy</i> |
| | Putting your Eggs in More Than One Basket: Mitigating Model Risk for Interest-Rate Forecasts in Canada <i>David Bolder & Yuliya Romanyuk, Bank of Canada</i> |
| | The Boom and Crash of the Cyprus Stock Exchange, in Relation to the Real Estate Market <i>Haritini Tsangari & Yiannis Roussos, University of Nicosia</i> |
| | Basket Trading under Cointegration with Logistic Mixture AR Noise <i>Xixin Cheng, Philip L H Yu & W K Li, The University of Hong Kong</i> |
| | Confidence Intervals and Hypotheses Testing on Sharpe Ratio <i>Lucio de Capitani, University of Milano Bicocca</i> |
| | Prediction of Loss Given Default for Consumer Loans <i>J Crook & Tony Bellotti, University of Edinburgh</i> |

15:30 – 16:00 **Coffee Break****16:00 – 17:30** **Parallel Sessions****Invited Session 1g: Statistical Methods and Applications I****Organiser:** *Graciela González-Farías, CIMAT, Mexico***Chair:** *Graciela González-Farías, CIMAT, Mexico***Room A**

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| 16:00 – 17:30 | Trend Estimation of Financial Time Series <i>Víctor M Guerrero & Adriana Galicia, Instituto Tecnológico Autónomo de México</i> |
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| | IRT and Medicine <i>Antonio Costilla & Graciela Gonzalez-Farias, Centro de Investigación en Matemáticas, Mexico</i> |
| | Optimum Designs for Discrimination in Nonlinear Models <i>Rogelio Ramos-Quiroga & Víctor I López-Ríos, CIMAT, México</i> |

Invited Session 1h: Six Sigma and Other Quality Management Paradigms

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| Organiser: <i>Yves-Laurent Grize, Baloise Insurance Group</i> Chair: <i>Yves-Laurent Grize, Baloise Insurance Group</i> | | Room B |
| 16:00 – 17:30 | The Concept of Quality, Six Sigma and its Future <i>Karl Baur & Elart von Collani, University of Wurtzburg, Germany</i> | |
| | Quality in Official Statistics; Challenges of Introducing a New Quality Management System at the FSO Switzerland <i>Andrea Eichholzer, Swiss Federal Office of Statistics, Switzerland</i> | |

Invited Session 1i: Challenging Consulting Problems

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| Organiser: <i>George Michailidis, University of Michigan</i> Chair: <i>George Michailidis, University of Michigan</i> | | Room C |
| 16:00 – 17:30 | Guidelines for Cluster Analysis <i>Jon Kettenring, Drew University</i> | |
| | Portfolio Analysis in Finance Management <i>D S Hooda, Jaypee Institute of Engineering and Technology</i> | |
| | Modified Capability Indices for Evaluating the Performance of Multivariate Manufacturing Processes <i>Jeh-Nan Pan & Chun-Yi Lee, National Cheng Kung University</i> | |

Invited Session 1j: Statistical Methods and Applications II

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| Organiser: <i>Graciela González-Farías, CIMAT, Mexico</i> Chair: <i>Sigfrido Iglesias-Gonzalez, CIMAT, Mexico</i> | | Room D |
| 16:00 – 17:30 | Outlier Detection in Statistical Process Control <i>Eddy Angel Castillo Suriano & Graciela González Farías, Centro de Investigación en Matemáticas, Mexico</i> | |
| | Identifying Active Effects in Screening Experiments with Non-normal Response <i>Victor Aguirre & Roman de la Vara, ITAM and CIMA, Mexico</i> | |
| | Data Quality In Environmental Monitoring And Its Implications For Environmental Management <i>Anders Grimvall & Karl Wahli, Linköping University</i> | |

Contributed Session 1e: Statistical Methodology

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| Chair: <i>Hao Cheng, Delft University of Technology</i> | | Room E |
| 16:00 – 17:30 | The Use of Factor Analysis to Determine Key Factor of Finance and Administration Improvement in Academic Hospitals <i>Altair de Almeida Campos, Luiz Bueno da Silva & Maria de Lourdes Silva, Universidade Federal da Paraíba/ UFPB, Brazil</i> | |

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| | Adapting the Classic CUSUM Change-Point Detection Algorithm for Non-Stationary Sequences <i>Veronica Montes de Oca & Daniel R Jeske, University of California, Riverside</i> |
| | Acceptance Sampling for Gamma Distributions <i>Elisabete Carolino & Isabel Barão, ESTESL, IPL</i> |
| | Monitoring Dependent Process Means Using Adaptive Ewma Control Charts <i>Su-Fen Yang & Yi-Ning Yu, National Chengchi University</i> |
| | A Monte Carlo Comparison of Variance Estimators for the Sampling of Industrial Mixtures of Particles <i>Hao Cheng, Bas Geelhoed & Peter Bode, Delft University of Technology</i> |

19:00 Meeting Point by Hotel Reception

19:30 Welcoming Reception at the Residence of the Mayor of the City of Prague
(Mariánské náměstí, Prague 1, Old Town)



Thursday July 3, 2008

09:00 – 10:30 Parallel Sessions

| Invited Session 2a: Mortality Risk | | |
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| Organiser: <i>Daniel Bauer, Georgia State University</i> Chair: <i>Henrik Hult, KTH</i> | | Room A |
| 09:00 – 10:30 | Relative Hedging of Systematic Mortality Risk <i>Michael Ludkovski, University of Michigan</i> | |
| | Survivor Bonds and Generalized Thiele's Differential Equation <i>Shaohui Wang & Rüdiger Kiesel, University of Ulm</i> | |
| | Modeling the Forward Surface of Mortality <i>Daniel Bauer, Georgia State University</i> | |

| Invited Session 2b: Design of Experiments | | |
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| Organiser: <i>David Steinberg, Tel Aviv University</i> Chair: <i>Stellos Georgiou, University of the Aegean</i> | | Room B |
| 09:00 – 10:30 | Quantifying the Uncertainty in Statistical Models, With Applications to Finance and AIDS Modeling <i>Roger Hoerl & Huaiyu Ma, GE Global Research</i> | |
| | Recursive Algorithms for Financial Time Series <i>Andrea Pagano & Marco Ratto, Joint Research Centre of the EC</i> | |

| Invited Session 2c: Information and Data Visualization | |
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| Organiser: <i>Jussi Klemelä, University of Oulu</i> Chair: <i>Graham Wills, SPSS</i> | Room C |
| 09:00 – 10:30 | Visual Analytics Tools for Analysis of Financial Data <i>Tatiana Tekusova & Tobias Schreck, Technische Universität Darmstadt</i> |
| | Finding and Visualizing the Hierarchical Cluster Structure in Data <i>Rebecca Nugent, Carnegie Mellon University</i> |
| | Visualization of Dependence with Nonparametric Density Estimation <i>Jussi Klemelä, University of Oulu</i> |

| Contributed Session 2a: Credit Analysis and Risk | |
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| Chair: <i>Jin Seohoon, Korea University</i> | Room D |
| 09:00 – 10:30 | Dynamic Models for Assessing Credit Risk of Portfolios of Consumer Loans <i>Madhur Malik & L C Thomas, University of Southampton</i> |
| | An Agent-based Model for Crisis Simulation in Payment Systems <i>Luca Arciero, Claudia Biancotti, Leandro D'Aurizio & Claudio Impenna, Bank of Italy</i> |
| | Insurance Risk Calculations Based Non-fixed Interest Rates <i>M H Omar, King Fahd Univ of Petroleum & Minerals Dhahran</i> |
| | Non Ruin Probability under Time-Varying Risk Process, Premium and Interest Rates <i>José Carlos Simon de Miranda, University of Sao Paulo</i> |
| | A study on Data Mining Application for Finance Industry <i>Seohoon Jin, Sang-Hwa Jung, Su-Cheol Han & Seongkeun Park, Korea University</i> |
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10:30 – 11:00 **Coffee Break & [Posters](#)**

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| POSTERS | QATRIS Imanager, a Bayesian Image Search Engine <i>Jose Pablo Arias-Nicolás, F Calle-Alonso, I Horrillo-Sierra & J Martín, University of Extremadura</i> |
| | Quality Control Applied to Telecommunication Inbound and Outbound Customer's Service <i>Vera Guerreiro & Paulo Infante, University of Évora</i> |
| | Forecast Demands Model and Vaccine Supplies Management <i>Mario Lucio De Oliveira Novaes, Antonio Augusto Gonçalves & Vera Maria Medina Simonetti, Univesidade Estácio De Sá</i> |
| | Prediction of Technical State of Petrol Equipments (Thermic Motor Case) <i>Hocine Megloul, E Bouali, F Ait Hocine, University of Boumerdes Algeria</i> |
| | Statistical Surveillance of Complex Monitoring Systems <i>Alessandro Fassò, University of Bergamo</i> |

11:00 – 12:30 **Parallel Sessions**

Invited Session 2d: Stochastic Modelling of Electricity Markets

Organiser: *Fred Espen Benth, University of Oslo*

Chair: *Fred Espen Benth, University of Oslo*

Room A

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| 11:00 – 12:30 | The Information Premium in Electricity Markets <i>Thilo Meyer-Brandis & Fred Espen Benth, CMA</i> |
| | A Jump Diffusion Stochastic Volatility Model for the Electricity Spot Price <i>Rikard Green & Marcus Nossman, Lund University and E-ON</i> |
| | Market Price of Risk in the Nordic Electricity Market <i>Rafal Weron, Wroclaw University of Technology</i> |

Invited Session 2e: Reliability

Organiser: *William Meeker, Iowa State University*

Chair: *Fabrizio Ruggeri, CNR-IMATI*

Room B

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| 11:00 – 12:30 | Prediction of Remaining Life of Power Transformers Based on Left Truncated and Right Censored Lifetime Data <i>William Meeker, Iowa State University</i> |
| | Aspects of Network Survivability <i>Nozer Singpurwalla, The George Washington University</i> |
| | On Competing Risks and Degradation Processes <i>Nozer Singpurwalla, The George Washington University</i> |

Invited Session 2f: Data Mining

Organiser: *George Michailidis, University of Michigan*

Chair: *George Michailidis, University of Michigan*

Room C

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| 11:00 – 12:30 | Visualization Databases for Lossless Analysis of Complex Data Sets <i>William Cleveland, Purdue University</i> |
| | Mining Massive Text Data: Classification and Tracking Statistics <i>Daniel R Jeske & Regina Liu, UC Riverside & Rutgers University, USA</i> |
| | Spectrum Based Mining Techniques for Clustering Financial Time Series <i>Nalini Ravishanker, University of Connecticut</i> |

Contributed Session 2b: Statistical Theory

Chair: *Silvia Osmetti, University Cattolica de Sacro Cuore Milano*

Room D

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| 11:00 – 12:30 | The Construction and Test of Variance Estimators for Particulate Sampling <i>Bastiaan Geelhoed, Delft University</i> |
| | Choosing a Robust Estimator: A Data Based Procedure <i>Alessandra Durio & Ennio Davide Isaia, University of Torino</i> |
| | Discriminant Analysis and Decision Theory <i>Sandra Ferreira, Dário Ferreira, Célia Nunes & João Tiago Mexia, UBI & FCT-UNL</i> |
| | Bayesian Dynamic Density Estimation <i>Abel Rodríguez & Enrique ter Horst, IESA</i> |

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| | Approximate Normality and Additional Information <i>Dário Ferreira, Sandra Ferreira & João Tiago Mexia, UBI & FCT-UNL</i> |
| | A Comparison Between Maximum Likelihood And Method Of Moment For The Estimation Of The Marshall-Olkin Copula Parameters: Complete And Censored Data <i>Silvia Angela Osmetti, University Cattolica de Sacro Cuore Milano</i> |

12:30 – 14:00 **Lunch Break**

14:00 – 15:30 **Parallel Sessions**

| Invited Session 2g: Ruin Events in Insurance | |
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| Organiser: <i>Vicky Fasen, Munich University of Technology</i> Chair: <i>Vicky Fasen, Munich University of Technology</i> | Room A |
| 14:00 – 15:30 | Ruin Probabilities in the Presence of General Semi-martingale Investments and Heavy-tailed Claims <i>Henrik Hult, KTH</i> |
| | Ruin in a Markov-dependent Stochastic Economic Environment <i>Jeffrey Collamore, University of Copenhagen</i> |
| | The Effect of Tax Payments in Ruin Theory <i>Hansjörg Albrecher, Radon Institute for Computational and Applied Mathematics, Linz</i> |

| Invited Session 2h: Time Series with Business Applications | |
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| Organiser: <i>Nalini Ravishanker, University of Connecticut</i> Chair: <i>Nalini Ravishanker, University of Connecticut</i> | Room B |
| 14:00 – 15:30 | A Continuous-time Stochastic Model for Temperature with Seasonal Volatility <i>Fred Espen Benth, Jurate Saltyte Benth & Steen Koekebakker, University of Oslo</i> |
| | Modeling Long Memory Processes, with Application to Weather Derivatives <i>Nalini Ravishanker, Jeffrey Pai & Yulia R Gel, University of Connecticut, University of Manitoba & University of Waterloo</i> |
| | On the Estimation of The Heavy-Tail Exponent in Time Series Using the Max-Spectrum <i>Stillian Stoev & George Michailidis, University of Michigan</i> |

| Invited Session 2i: Handling Monstrous Data Sets – Responding to the Plight of the Analyst | |
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| Organiser: <i>Nicholas Fisher, University of Sydney</i> Chair: <i>Nicholas Fisher, University of Sydney</i> | Room C |
| 14:00 – 15:30 | <i>William Cleveland, Purdue University</i> |
| | Discussant: <i>Leland Wilkinson, SYSTAT Software</i> |
| | Discussant: <i>Graham Wills, SPSS</i> |
| | Discussant: <i>Duncan Temple Lang, University of California, Davis</i> |

Contributed Session 2c: Industrial Applications and Process Control

Chair: *Vincenzo Esposito Vinzi,*
ESSEC Business School of Paris-Singapore

Room D

14:00 - 15:30

Cost and Risk Based Weighted DPMO (W-DPMO) and Weighted Overall Sigma Level

Eralp Dogu & Zeynep Filiz Eren, Dokuz Eylul University

Comparison of Control Charts

Florbela Correia & P Oliveira, Escola Superior Ciências Empresariais - Instituto Politécnico de Viana do Castel

Formative Indicators in Structural Equation Models and Highly Correlated Latent Variable Scores: a Full PLS-based Approach

Laura Trinchera & Vincenzo Esposito Vinzi, Università degli Studi di Napoli Federico II & ESSEC Business School of Paris-Singapore

15:30 - 16:00

Coffee Break

16:00 - 17:30

Parallel Sessions

Invited Session 2j: Quantitative Finance in High Frequency and Low Temperature

Organiser: *Wolfgang Härdle, Humboldt University Berlin*

Chair: *Wolfgang Härdle, Humboldt University Berlin*

Room A

16:00 - 17:30

Nonparametrics and Default Risk

Michal Benko, Deutsche Bank

Yield Curve Factors, Factor Volatilities, and the Predictability of Bond Excess Returns

Nikolaus Hautsch, Humboldt University Berlin

Heavy-tails and Regime-switching in Electricity Prices

Rafal Weron, TU Wroclaw

Invited Session 2k: Multivariate Statistical Process Control

Organiser: *Eugenio Epprecht, Catholic University of Rio de Janeiro*

Chair: *Giovanni Celano, University of Catania, Italy*

Room B

16:00 - 17:30

A New Control Chart for Monitoring the Covariance Matrix

Antonio F B Costa, M A Machado & M Rahim, UNESP & UNB

Control Charts for Individual Observations of Bivariate Poisson Data

Linda Lee Ho & Antonio Fernando Branco Costa, EPUSP & FEG-UNESP

Joint Charts for Monitoring the Mean Vector and the Covariance Matrix

Marcela A G Machado & Antonio F B Costa, São Paulo State University (UNESP)

Invited Session 2l: Statistics and Software

Organiser: *Alan Karr, NISS*

Chair: *Jon Kettenring, Drew University*

Room C

16:00 - 17:30

Analytical Computing Platforms for the Future

Leland Wilkinson, SYSTAT Software

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| | Experimental Analysis of Algorithms: Opportunities for Statistics <i>Alan Karr, NISS</i> |
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| Contributed Session 2d: Statistical Modeling | | |
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| Chair: <i>Peiming Wang, Auckland University</i> | | Room D |
| 16:00 - 17:30 | Modelling Operational Risk using Bayesian Approach <i>Pavel Shevchenko, CSIRO</i> | |
| | A Bayesian Approach to Replacement Policy Based on Cost and Downtime Following the Expiration of Non-Renewing Warranty <i>Ki Mun Jung, Sung Sil Han & Dong Ho Park, Kyungsung University, Pukyung National University & Hallym University</i> | |
| | A Fuzzy TOPSIS Approach for Supplier Evaluation of an Automotive Company <i>Zeynep Filiz Eren & Eralp Dogu, Dokuz Eylul University</i> | |
| | Quantitative Measures for the 'Size' of Stochastic Dependences with Applications to 'Life Time' Analysis <i>Jerzy K Filus & Lidia Z Filus, Oakton Community College & Northeastern Illinois University</i> | |
| | A Markov Bivariate Zero-inflated Negative Binomial Model for the Analysis of M&A and non-M&A FDI <i>Peiming Wang & Joseph D Alba, Auckland University of Technology & Nanyang Technological University, Singapore</i> | |

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| 17:45 - 18:30 | Open Meeting of ASMBI (the ISBIS Official Journal) | Room C |
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OPTIONAL

19:00 Meeting Point by Hotel Reception

19:30 Gala Dinner at the Gothic Pillar Hall of New Town Hall
(Vodičkova 23, Prague 2, New Town)



Friday July 4, 2008

09:00 – 10:30 Parallel Sessions

| Invited Session 3a: Risk and Dynamics - I | | |
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| Organiser: <i>Jitka Dupačová & Zuzana Prášková, Charles University</i> Chair: <i>Miloš Kopa, Charles University</i> | | Room A |
| 09:00 - 10:30 | Nonparametric Financial Time Series with Sudden Changes in Structure <i>Juergen Franke, Technical University of Kaiserslautern</i> | |
| | Computing High-Frequency Value at Risk <i>Wei Sun, Svetlozar Rachev & Frank Fabozz, University Karlsruhe, University of California at Santa Barbara, & Yale University</i> | |

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| | Random Coefficient Volatility Models <i>Zuzana Prášková & Pavel Vaněček, Charles University</i> |
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Invited Session 3b: Process Control II

Organiser: *Gejza Dohnal, Czech Technical University in Prague*

Chair: *Gejza Dohnal, Czech Technical University in Prague*

Room B

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| 09:00 - 10:30 | Advances in Operational Risk Management: Results from the MUSING Project on Combining Semantic and Quantitative Data in Risk Assessment <i>Ron S Kenett, KPA Ltd., Raanana, Israel and University of Torino & Yossi Raanan, College of Management, Business School, Rishon LeZion, Israel</i> |
| | Problems with Capability and Performance Indices in Practice <i>Jiří Michálek, Institute of Information Theory and Automation, Czech Academy of Sciences</i> |
| | Cost-effective Design of Control Charts: Optimal Design of the Zone Control Chart <i>Gejza Dohnal, Centre for Quality and Reliability of Production, Czech Technical University in Prague</i> |

Invited Session 3c: Statistical Issues in Information Technology

Organiser: *Earl Lawrence, Los Alamos National Laboratory*

Chair: *Simon Wilson, Trinity College, Dublin*

Room C

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| 09:00 - 10:30 | Approximate and Generalized Pivotal Quantities for Deriving Confidence Intervals for the Offset Between Two Clocks <i>Jun Li & Daniel R Jeske, University of California, Riverside</i> |
| | Statistical Analysis for Data Center Management <i>Yasuo Amemiya, IBM Research</i> |
| | Statistical Issues in Soft Error Rate Estimation <i>Sarah Michalak, Michael Hamada & Nicolas Hengartner, Los Alamos National Laboratory</i> |

Contributed Session 3a: Time Series

Chair: *Demetrios Papanastassiou, University of Macedonia*

Room D

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| 09:00 - 10:30 | High Level Dependence in Time Series Models <i>Vicky Fasen, C Klüppelberg & M Schlather, Technical University of Munich</i> |
| | Control Graphs and Bai & Perron Test Comparisons for the Identification of Structural Changes in Time Series <i>André Luis Korzenowski, L Werner & I A C Moraes, UFRGS</i> |
| | Discrimination and Clustering of GARCH Models <i>Demetrios Papanastassiou, University of Macedonia</i> |

10:30 - 11:00 **Coffee Break**

11:00 - 12:30 **Parallel Sessions**

| Invited Session 3d: Credit Risk | | |
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| Organiser: <i>Matthias Scherer, TU Munich</i> Chair: <i>Matthias Scherer, TU Munich</i> | | Room A |
| 11:00 - 12:30 | A Tractable Multivariate Default Model Based on a Stochastic Time-change <i>Jan-Frederik Mai & Matthias Scherer, TU Munich</i> | |
| | Pricing Credit Derivatives under Stochastic Recovery <i>Stephan Höcht & Rudi Zagst, TU Munich</i> | |
| | CDO Pricing with Nested Archimedean Copulas <i>Matthias Scherer & Marius Hofert, TU Munich</i> | |

| Invited Session 3e: Particular Situations in Quality Control | | |
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| Organiser: <i>Eugenio Epprecht, Catholic University of Rio de Janeiro</i> Chair: <i>Marcela A G Machado, UNESP</i> | | Room B |
| 11:00 - 12:30 | Robust Estimation and its Application in Statistical Quality Control <i>Fernanda Otília Figueiredo & M Ivette Gomes, DEIO and CEAUL</i> | |
| | Proposal of an alternative to Control Charts based on Residuals <i>Danilo Cuzzuol Pedrini, Carla Schwengber ten Caten & Fernando de Jesus Moreira Junior, PPGE/UFRGS</i> | |
| | Statistical Control of Multiple-stream Processes: A Group Chart for Enhanced Detection of Shifts in One Individual Stream <i>Eugenio K Epprecht & Laura F M Barbosa, Pontifica Universidade Catolica do Rio de Janeiro</i> | |

| Invited Session 3f: Spatial Dependence | | |
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| Organiser: <i>Werner Müller, University of Linz</i> Chair: <i>Sarah Michalak, Los Alamos National Laboratory</i> | | Room C |
| 11:00 - 12:30 | Optimal Design Points for Detecting Spatial Dependence <i>Daniela Gumprecht, Werner G Muller & Juan M Rodriguez-Diaz, University of Salamanca & University of Linz</i> | |
| | Market Access, Regional Price Levels and Wage Differentials: The German Case <i>Reinhold Kosfeld & Hans-Friedrich Eckey, University of Kassel</i> | |
| | Power Calculations for Global and Local Moran's I <i>Roger Bivand, Werner G Mueller & Markus Reder, Norwegian School of Economics and Business Administration and University of Linz</i> | |

| Contributed Session 3b: Volatility Models, Risk Measures, Options and Hedging | | |
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| Chair: <i>Josef Hayden, University of Regensburg</i> | | Room D |
| 11:00 - 12:30 | On Value at Risk and Diversification of Long Positions - the Copula Approach <i>Piotr Jaworski, University of Warsaw</i> | |
| | Investigating the Efficiency of EU Deposit Protection Schemes <i>Adamo Uboldi & Jessica Cariboni Joint Research Centre of the European Commission</i> | |

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| | A New Functional Limit Theorem for L-Statistics Applied to Risk Measures <i>Nancy Wozabal, University of Vienna</i> |
| | Pricing of Basket Options using Univariate Normal Inverse Gaussian Approximations <i>Fred Espen Benth & Pål Nicolai Henriksen, University of Oslo</i> |
| | Profit Forecasting -a Project Report <i>Mohammed Z Farooqui, M DCollege</i> |
| | Hedging with Electricity Futures: Evidence from the European Energy Exchange <i>Gregor Dorfleitner, Josef Hayden & Radovan Krajcik, University of Regensburg</i> |

12:30 - 14:00 **Lunch Break**

14:00 - 15:30 **Parallel Sessions**

| Invited Session 3g: Risk and Dynamics - II | | |
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| Organiser: <i>Jitka Dupačová & Zuzana Prášková, Charles University</i> Chair: <i>Juergen Franke, Technical University of Kaiserslautern</i> | | Room A |
| 14:00 - 15:30 | Matching Algorithms of International Exchanges <i>Karel Janeček & M Kabrhel, RSJ Invest, Prague</i> | |
| | Portfolio Inefficiency Measures for Stochastic Dominance Criteria <i>Miloš Kopa, Charles University</i> | |
| | New Methods for Value-at-Risk Constrained Optimization using Difference of Convex (D.C.) Programming <i>David Wozabal, Georg Pflug & Ronald Hochreiter, University of Vienna</i> | |

| Invited Session 3h: Econometric Problems | | |
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| Organiser: <i>Graciela González-Farías, CIMAT, Mexico</i> Chair: <i>Graciela González-Farías, CIMAT, Mexico</i> | | Room B |
| 14:00 - 15:30 | Clusters for Nonstationary Time Series <i>J Ramon Domínguez-Molina, Graciela Gonzalez-Farias & Sigfrido Iglesias-Gonzalez, Centro de Investigación en Matemáticas, Mexico</i> | |
| | Risk Analysis and Mortality Tables: The Mexican Case <i>Manuel Mendoza Ramírez, ITAM, Mexico</i> | |
| | Estimation of The Censored Regression Model. A Review on Some Econometrical Models <i>Karla Muñoz Gajardo, Reinaldo Arellano-Valle & Graciela González-Farías, Pontificia Universidad Católica de Chile; Research Center in Mathematics Probability & Statistics Guanajuato, México</i> | |

| Invited Session 3i: Networks and Reliability | | |
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| Organiser: <i>Simon Wilson, Trinity College Dublin</i> Chair: <i>Daniel R Jeske, University of California, Riverside</i> | | Room C |
| 14:00 - 15:30 | Bayesian Reliability Analysis for Hardware/Software Systems <i>Javier Cano & David Rios Insua, Rey Juan Carlos University, Madrid</i> | |

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| | Reliability Modelling Using Hybrid Bayesian Networks <i>David Marquez, Martin Neil & Norman Fenton, Queen Mary, University of London</i> |
| | Optimising Testing of Telecommunications Network Systems <i>Simon Wilson & Suresh Goyal, Trinity College Dublin & Bell Labs Ireland</i> |

Contributed Session 3c: Statistical Modelling

Chair: *Ismael Sanchez, University Carlos III Madrid*

Room D

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| 14:00 - 15:30 | A Hedonic Pricing Model of Building Costs: an Application of the Hybrid Approach to Neural Networks and Linear Regression <i>Miyoko Asano, Pijush Bhattacharyya, Marco K W Yu & Hiroe Tsubaki, Daito Bunka University, University of Westminster, University College London & University of Tsukuba</i> |
| | A Bayesian Approach to Utilizing Prior Data in New Drug Development <i>Larry Z Shen, Todd Coffey & Wei Deng, Amylin Pharmaceuticals</i> |
| | Regression Techniques for Estimating Rice Yield Using Remote Sensing Data <i>Kunio Takezawa, Yasuko Yoshida, Seishi Ninomiya, Chiharu Hongo, Kazuhisa Tokui, Akihiko Ito & Toshiaki Takeshima, University of Tsukuba, Chiba University, National Agricultural Insurance Association, Space Engineering Development Co., Ltd., Japan Aerospace Exploration Agency</i> |
| | Smoothing Spatially Variable Functions using Nonlinear Smoothers <i>Mardi Jankowitz, W J Conradie & T de Wet, University of South Africa, University of Stellenbosch & University of Stellenbosch</i> |
| | Influence Angle Cluster Approach in Financial Analysis <i>Dong Q Wang & Nazrina Aziz, Victoria University of Wellington, New Zealand</i> |
| | Capability Indices and Nonconforming Proportion in Univariate and Multivariate Processes <i>Ismael Sanchez & Isabel Gonzalez, University Carlos III Madrid</i> |

15:30 - 16:00

Coffee Break

Keynote Session II & Closing Remarks

Chair: *Rüdiger Kiesel, University of Ulm*

Hall A+B+C+D

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| 16:00 - 17:15 | Dynamic Pricing of Synthetic Collateralized Debt Obligations <i>William Perraudin, Imperial College London</i> |
| 17:15 - 17:30 | Closing Remarks <i>Nicholas Fisher, Conference Director</i> |