
Scientific programme

The numbers in brackets denote the page numbers of the abstracts.
 If several authors are present then the one presenting is marked by an asterisk.

Invited speakers

 Invited speakers

 Silbersaal

Monday, September 24, 2007

9:30 – 10:20 Susan Lewis (77)
Cost effective screening experiments

10:20 – 10:50 Bradley Jones (68)
Split-plot screening designs with minimal numbers of whole plots

13:50 – 14:40 Stefan Steiner (108)
Use of the Statistical Method in variation reduction projects

Tuesday, September 25, 2007

9:45 – 10:10 Nadine Henkenjohann (66)
Scoring – predicting customer behaviour

10:15 – 10:40 Anja Schleppe (100)
Six Sigma implementation in Kraft Foods Europe

15:20 – 16:05 Petra Perner (88)
Case-based reasoning and the statistical challenges

Wednesday, September 26, 2007

8:30 – 9:20 Karsten Röpke (96)
DoE in engine development

Detailed programme
Sunday, September 23, 2007

18:00 Preregistration and get-together

Monday, September 24, 2007

8:30 Registration **Saal 9**

9:00 – 10:50 Plenary session I

Opening session **Silbersaal**

Chair: P. Goos

9:00 – 9:30 R. Kenett, J. Kunert
Welcome

9:30 – 10:20 Invited speaker: S. Lewis (77)
Cost effective screening experiments

10:20 – 10:50 Invited speaker: B. Jones (68)
Split-plot screening designs with minimal numbers of whole plots

10:50 – 11:10 Coffee break

11:10 – 12:10 Parallel sessions I

A. Computer experiments I **Silbersaal**

Chair: D. Woods

11:10 – 11:30 J. J. M. Rijpkema (95)
Metamodels from computer experiments

11:30 – 11:50 D. Ginsbourger*, C. Helbert and L. Carraro (55)
Mixing krigings for global optimization

11:50 – 12:10 M. Ratto* and A. Pagano (92)
Some thoughts about the use of kriging and smoothing techniques for metamodelling purposes

B. Statistics and pharmaceutics**Saal 8***Chair: D. Romano*

11:10 – 11:30 T. Greenfield* and R. Kenett (60)

Validating clinical trials protocols with simulations

11:30 – 11:50 B. Govaerts*, M. Maumy, W. Dewé and B. Boulanger (59)

Analytical method validation based on the total error concept. Comparison of alternative statistical approaches

11:50 – 12:10 S. Barone*, A. Caranna and V. Fonti (35)

Phase I statistical control of key indicators in health care

C. Methodology and measurement**Saal 10***Chair: J. Engel*

11:10 – 11:30 L. Bordes*, S. Dossou-Gbété and J.-P. Valois (39)

A note on Smart Alarming Methods

11:30 – 11:50 M. Bogdan (38)

Selecting explanatory variables with the modified version of Bayesian Information Criterion

11:50 – 12:10 F. Pavese (86)

*Accounting for systematic effects in metrology and testing, namely in comparisons***12:10 – 13:50 Lunch****13:50 – 15:00 Plenary session II**

Plenary session**Silbersaal***Chair: A. Ahlemeyer-Stubbe*

13:50 – 14:40 Invited speaker: S. Steiner (108)

Use of the Statistical Method in variation reduction projects

14:40 – 15:00 Box Medal Award Ceremony

15:00 – 15:20 Coffee break

15:20 – 16:40 Parallel sessions II

A. Statistical process control I

Silbersaal

Chair: R. Göb

15:20 – 15:40 S. Bersimis*, M. V. Koutras and P. E. Maravelakis (37)

A control chart for high quality processes with a FIR property based on the run length of conforming products

15:40 – 16:00 C. H. Weiß (119)

Controlling correlated processes with binomial marginals

16:00 – 16:20 A. Hamrol* and A. Kujawńska (64)

Analysis of the efficiency of the new pattern recognition's methods for the control charts

16:20 – 16:40 G. Maggio (78)

Time Series analysis and GARCH modelling in S+ Finmetrics

B. Statistical applications in engineering I

Saal 8

Chair: J. Kunert

15:20 – 15:40 A. Messaoud*, N. Raabe, O. Webber, D. Enk and C. Weihs (82)

Prediction of spiralling in BTA deep-hole-drilling

15:40 – 16:00 J. M. Myszewski* and L. Kozminski (84)

Standards in control of variability

16:00 – 16:20 N. Haselgruber (65)

A corrected likelihood-based confidence area for Weibull distribution parameters and large-scale life time data

16:20 – 16:40 M. S. Reis*, P. M. Saraiva and F. P. Bernardo (93)

Integrating data and model uncertainties in paint formulations

C. Design of experiments in marketing
Saal 10*Chair: M. Vandebroek*

15:20 – 15:40 H. Grossmann*, R. Schwabe and S. G. Gilmour (61)

Designs for first-order interactions in choice experiments with binary attributes

15:40 – 16:00 P. Goos*, R. Kessels, B. Jones and M. Vandebroek (58)

Bayesian versus non-Bayesian design of choice experiments in marketing

16:00 – 16:20 R. Schwabe (101)

Efficient Design in Conjoint Analysis and alike

16:20 – 16:40 R. Kessels*, B. Jones, M. Langford and T. Clapp (71)

*A practical guide to design conjoint experiments***16:50 – 17:40 General assembly**

General assembly
Silbersaal

16:50 – 17:10 C. McCollin (81)

The ENBIS papers database

17:10 – 17:40 General assembly

19:00 Italian buffet at INCONTRO

Tuesday, September 25, 2007

8:30 – 9:30 Parallel sessions III

A. Design of experiments in industry I

Silbersaal

Chair: D. Steinberg

8:30 – 8:50 M. Tanco*, E. Viles, M. J. Alvarez and L. Ilzarbe (110)
Why DoE is not widely used among engineers in Europe?

8:50 – 9:10 P. Whitcomb* and G. W. Oehlert (120)
Sizing mixture designs

9:10 – 9:30 W. Theis* and H. van der Knaap (113)
Planning dose response curve experiments with insufficient observations per individual

B. Methodology

Saal 8

Chair: F. Ruggeri

8:30 – 8:50 I. Ben-Gal*, N. Shkolnik and E. Kagan (36)
Greedy learning algorithms and their applications to decision trees

8:50 – 9:10 N. H. Spencer (106)
Testing randomness for the gaming industry: tackling the multiple testing issue

9:10 – 9:30 F. Sobieczky*, B. Sponer and G. Rappitsch (105)
Robust elimination of atypical data points in small samples and high dimensions

C. Public services and healthcare

Saal 10

Chair: S. Coleman

8:30 – 8:50 A. Guillet*, B. Govaerts and A. Benoit (62)
Implementation of a quality plan for the monitoring of blood treatment process for the Belgian Red Cross

8:50 – 9:10 W. Sieben (102)
Improving alarm systems by classification

9:10 – 9:30 A. O. Brochado* and R. C. Marques (42)
Measuring service quality in higher education sector

9:40 – 10:40 Plenary session III

Young Statistician and Best Manager Awards**Silbersaal***Chair: A. Ahlemeyer-Stubbe*9:45 – 10:10 Invited speaker: N. Henkenjohann (66)
*Scoring – predicting customer behaviour*10:15 – 10:40 Invited speaker: A. Schleppe (100)
*Six Sigma implementation in Kraft Foods Europe***10:40 – 11:00 Coffee break****11:00 – 12:20 Parallel sessions IV**

A. Statistical process control II**Silbersaal***Chair: C. Weihs*11:00 – 11:20 P. Cozzucoli (45)
*A two-sided multivariate p control chart*11:20 – 11:40 E. Mønness* and M. Linsley (83)
*A practical experience with Corrugation height production process improvement using an SPC*11:40 – 12:00 S. Yasui* and Y. Ojima (121)
*New adaptive EWMA control charts*12:00 – 12:20 M. C. Testik (111)
Analysis of CUSUM and EWMA control charts for Poisson data under parameter estimation

B. Design of experiments in industry II**Saal 8***Chair: B. Jones*11:00 – 11:20 J. Kunert, A. E. Tekkaya, L. Kwiatkowski, O. Melsheimer and
S. Straatmann* (76)
*Use of experimental design to analyse a Necking-in process*11:20 – 11:40 E. Polwart (89)
*Investigating the impact on product quality of raw material variability for a chemical process: a DoE approach*11:40 – 12:00 H. Arnouts* and P. Goos (34)
*Efficient experimental designs in the presence of more than one hard-to-change variable*12:00 – 12:20 L. Ilzarbe*, M. Tanco, M. J. Alvarez and E. Viles (67)
An automotive experience in applying DoE to improve a process

C. Statistical consultancy
Saal 10
Chair: A. de Frenne

- 11:00 – 11:20 R. Caulcutt (44)
Statistical consultancy. What's in it for me?
- 11:20 – 11:40 J. Smyth-Renshaw (104)
Six Sigma, the good, the bad and the very bad
- 11:40 – 12:00 M. Tkáč (114)
Economical aspects of training Six Sigma
- 12:00 – 12:20 R. Kenett*, A. De Frenne, X. Tort-Martorell and C. McCollin (70)
The Statistical Efficiency Conjecture

12:20 – 13:50 Lunch
13:50 – 15:10 Parallel sessions V

A. Data mining
Silbersaal
Chair: W. Theis

- 13:50 – 14:10 S. Ahrens (30)
Automating model selection for predictive modeling using SAS Enterprise Miner
- 14:10 – 14:30 M. Anger (33)
Industrial data mining: a real life example of simulation and optimizing an entire semiconductor fab with heavy duty 6 sigma data mining tools
- 14:30 – 14:50 G. Szepannek*, J. Schiffner and C. Weihs (109)
Local models in data mining
- 14:50 – 15:10 C. Hajas*, Z. Robotka, C. Seres and A. Zempléni (63)
Genetic algorithms and grid technologies in clustering

B. Design and analysis of experiments
Saal 8
Chair: S. Lewis

- 13:50 – 14:10 J. Engel* and R. Rajae-Joordens (49)
Paired comparisons in visual perception studies using small sample sizes
- 14:10 – 14:30 U. Kappel and J. Kunert* (69)
Variability of electromagnetic emissions
- 14:30 – 14:50 D. Zappa* and M. Pesaturo (123)
Calibration of instruments using LogVariance models
- 14:50 – 15:10 P. Pedone*, D. Romano and G. Vicario (87)
Kriging-based sequential inspection plans for Coordinate Measuring Machines

C. Applications in business and finance
Saal 10*Chair: T. Greenfield*

- 13:50 – 14:10 D. M. Steinberg*, A. Matas and Y. Schamroth (107)
Statistical issues in Search Engine Marketing
- 14:10 – 14:30 F. Kramer* and R. Weissbach (74)
Implementation of a Kolmogorov-Smirnov-type test for the partial homogeneity of Markov processes with application to credit ratings
- 14:30 – 14:50 S. Salini* and R. Kenett (99)
Bayesian Network in Customer Satisfaction Survey
- 14:50 – 15:10 G. Albeanu, H. Madsen, M. Ghica*, P. Thyregod and F. Popentiu-Vladicescu (32)
On using bootstrap methods for understanding empirical loss data and dynamic financial analysis

15:20 – 16:25 Plenary session IV

Plenary session
Silbersaal*Chair: R. Kenett*

- 15:20 – 16:05 Invited speaker: P. Perner (88)
Case-based reasoning and the statistical challenges
- 16:05 – 16:25 Introduction to the poster presentation

16:25 – 17:10 Poster session with coffee

Poster session

Saal 9

1. S. Aktas* and M. Kaya (31)
Analysis of repeated measures data that are autocorrelated at lag(k)
2. A. O. Brochado*, A. C. Castro and F. V. Martins (41)
Supermarkets sales and retail area: a mixture regression model for segmentation
3. A. O. Brochado*, F. V. Martins and P. C. Rodrigues (43)
Brand loyalty and mixture regression models: segmenting customers in jeans market
4. P. Cozzucoli (46)
Notes on experimental design for statistical calibration
5. M. Emmett*, P. Goos and E. Stillman (48)
Design of experiments for mean and variance
6. F. Franceschini*, M. Galetto, D. Maisano and L. Mastrogiacomo (52)
On-line diagnostics tools in the Mobile Spatial coordinate Measuring System (MScMS)
7. Y. Goegebeur, P. Goos and M. Vandebroek* (57)
A hierarchical Bayesian approach to robust parameter design
8. S. Kuhnt* and C. Schürmann (75)
Taut string as an alternative to empirical distribution estimators for system loads in logistics
9. E. Polwart (90)
Virtual statistics: exploiting new web-based tools on the company intranet to improve internal discussion and learning within the user community
10. J. J. M. Rijpkema (94)
How engineers learn statistics from motor cycle tires!
11. K. Smith* and S. Coleman (103)
Data mining of a mail order customer database for Kansei Engineering
12. M. C. Testik (112)
Fault detection in feedback (closed-loop) controlled systems
13. J. Yu, P. Goos and M. Vandebroek* (122)
Efficient conjoint choice designs in the presence of respondent heterogeneity

18:30 – 19:30 Guided tour at the German Occupational Safety and Health Exhibition**19:30 Conference dinner**

Wednesday, September 26, 2007

8:30 – 9:20 Plenary session V

Plenary session

Silbersaal

Chair: J. Kunert

8:30 – 9:20 Invited speaker: K. Röpke (96)
DoE in engine development

9:30 – 10:30 Parallel sessions VI

A. Statistical process control III

Silbersaal

Chair: A. di Bucchianico

9:30 – 9:50 H. Trautmann and C. Weihs* (117)
A control chart for the Desirability Index

9:50 – 10:10 P. Tsiamyrtzis* and D. M. Hawkins (118)
A Bayesian EWMA method to detect jumps at the start-up phase of a process

10:10 – 10:30 M. Pacella* and Q. Semeraro (85)
A comparison of neural network and control charting for monitoring profiles in manufacturing processes

B. Methods in design of experiments

Saal 8

Chair: E. Isaia

9:30 – 9:50 T. Dalon (47)
The use of intelligent experimental designs for optimal automotive engine calibration online at engine test bench

9:50 – 10:10 B. Gauthier*, L. Carraro and O. Roustant (53)
Model-robust designs for assessing the uncertainty of simulator outputs with linear metamodels

10:10 – 10:30 J. Godolphin (56)
Residual analysis in experimental design

C. Public services

Saal 10

Chair: C. McCollin

9:30 – 9:50 A. Fassò*, G. Martini and M. Pezzoni (51)

The effect of liberalization in the Italian gasoline sector: higher chance of collusion or incomplete liberalization?

9:50 – 10:10 L. Marco-Almagro, L. Rodero, X. Tort-Martorell*, L. Jordan, J. Molina and R. Ariño (79)

Fitting a model for predicting leaks in pipes for a water supplying company

10:10 – 10:30 R. Faranda*, A. Pievatolo and E. Tironi (50)

*Load shedding: a new proposal***10:30 – 10:50 Coffee break****10:50 – 11:50 Parallel sessions VII**

A. Statistical applications in engineering II

Silbersaal

Chair: N. Henkenjohann

10:50 – 11:10 N. Raabe*, D. Enk, O. Webber, C. Weihs and D. Biermann (91)

Spiralling in BTA deep-hole-drilling: combining statistical and physical models

11:10 – 11:30 E. Brandt*, I. C. Ramos, A. Di Bucchianico and R. Henzen (40)

Software reliability growth models: systematic descriptions and implementations

11:30 – 11:50 K.-R. Knuth (72)

Accuracy of the end-to-end performance estimation in logistic service environments

B. Decision making and statistics

Saal 8

Chair: A. Schleppe

10:50 – 11:10 Y. Adler*, E. Hunuzidi and V. Shper (29)

The estimation of the role of system and statistical thinking in decision making

11:10 – 11:30 M. Tkáč and Š. Lyócsa* (116)

Managing Six Sigma projects – actively

11:30 – 11:50 M. Tkáč and M. Andrejkovič* (115)

Safety improvement using DMAIC algorithm

C. Computer experiments II**Saal 10***Chair: R. Kenett*

10:50 – 11:10 H. Kracker* and M. Gössling (73)

Statistical modelling of springback simulation

11:10 – 11:30 O. Roustant*, D. Dupuy and C. Helbert (97)

Robust estimation of the variogram in computer experiments

11:30 – 11:50 S. Masala*, P. Pedone, M. Sandigliano and D. Romano (80)

*Improvement of a manufacturing process by integrated physical and numerical experiments: a case-study in the textile industry***12:00 – 12:30 Closing session****Silbersaal****12:30 – 14:00 Council meeting****14:00 – 18:00 Workshop: Teaching process improvement (S. Steiner)****Saal 10**