

## International Federation of Classification Societies Newsletter

Number 31

May 2006

President: David Hand

**The International Federation of Classification Societies**, founded in 1985, is composed of:

Associação Portuguesa de Classificação e Análise de Dados, British Classification Society, Central American and Carribean Society of Classification and Data Analysis, Classification Society of North America, Gesellschaft für Klassifikation, Irish Pattern Recognition and Classification Society, Japanese Classification Society, Korean Classification Society, Société Francophone de Classification, Società Italiana di Statistica, Vereniging voor Ordinatie en Classificatie and Section of Classification and Data Analysis of the Polish Statistical Society. The IFCS is a non-profit, non-political scientific organization, the aims of which are to further classification research. Among other activities, the IFCS organises a biennial conference, and supports the Journal of Classification.

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## **IFCS Homepage:**

http://www.classification-society.org/ Designed and maintained by David Dubin. The website contains among others: the IFCS Constitution and By-Laws, the IFCS newsletters, and pointers to the websites of the member societies.

#### For IFCS Newsletter, May 2006 A Word from the President

This is my first contribution to the Newsletter since stepping into the Presidential shoes, so perhaps I can begin by saying how aware I am of eminence of my predecessors - they have left large shoes to fill. The history of the IFCS written by Hans Bock, and available on the IFCS website at http://www.stochastik.rwthaachen.de/bock/ifcshistory.pdf describes how the Federation has developed, and some of the activities it has taken part in. I would also like to express my appreciation to Past-President Henk Kiers and to the retiring Publications Officer Krzysztof Jajuga, and to Carlo Lauro, for leaving the IFCS in such good shape - and for their assistance in bringing me up to speed in my role as President. F.R. (Buck) McMorris has been elected the new President-Elect, to take over from me at the end of 2007, and André Hardy has been elected Publication Officer. Vincenzo Esposito Vinzi and Iven Van Mechelen continue Scientific Secretary and as Treasurer respectively, and I am already aware of the tremendous jobs they are doing. Much of the work of the Federation goes on behind the scenes, and its success is a reflection of the commitment and selflessness of the officers of the Federation: I am proud to be working with such a dedicated group.

I look forward to seeing you at the IFCS conference in Ljubljana this July - the details are

Editor : André Hardy

the website http://vlado.fmf.uniat on lj.si/info/ifcs06/, or elsewhere in this Newsletter. The program looks rich and varied, with a wealth of invited speakers, and I am sure it will be an especially rewarding meeting. The IFCS conference deserves to be well-attended, not least because classification is one of the core data analytic activities, and underlies a vast amount of work in related areas such as data mining and machine learning. I intend to make this one of the cornerstones of my period as President - raising the awareness of the existence of the Classification Societies amongst researchers who clearly have a close interest in the sort of work carried out by their members, but who do not yet belong to a society. I also intend to encourage other societies concerned with research in classification theory, methods, and applications to join the IFCS.

David J. Hand IFCS President

## News from the IFCS Scientific Secretary

Dear Colleagues and Friends of the Classification,

In the past months, the IFCS Executive Committee and Council have been working mainly on the following projects: the Chikio Hayashi Awards Program, the development of contacts with potentially new member societies, the preparation of the IFCS 2006 Meeting in Ljubljana, the election of IFCS officers, the IFCS Finances, the 11<sup>th</sup> IFCS Conference in 2008.

#### Chikio Hayashi Awards Program (CHA)

The IFCS provides awards to single persons in the framework of its Chikio Hayashi Awards Program (CHA). Awards are given to promising researchers who started contributing to the domains of classification, data analysis and related areas, and who are in the early stages of their professional careers, as a support for attending an IFCS conference. The award is a cash payment to a candidate who attends the IFCS conference and may be used for travel, accommodation, and conference costs. After evaluating the submitted applications, the CHA committee for IFCS 2006 (chaired by Gunter Ritter, GfKl) has delivered the following list of winners (in alphabetical order) also approved by David Hand (IFCS President):

Abdoulaye Banire Diallo (Canada) Alessio Farcomeni (Italy) Gentian Gusho (Albany) Daniel Kosiorowski (Poland) Mariëlle Linting (The Netherlands) Michelangelo Misuraca (Italy) Georgi I. Nalbantov (The Netherlands) Mario A. Villalobos Arias (Costa Rica)

I congratulate all the winners and look forward to meeting them in Ljubljana during the IFCS 2006 Conference.

#### New Member Societies

A very important project which IFCS is currently engaged with is represented by the inclusion of new member societies in the Federation. Since a few months, there have been ongoing contacts with the Greek Society of Data Analysis and the Chinese Association for Applied Statistics in order to formalise their official candidature as IFCS member societies. Other potential candidates have also been contacted.

#### Election of IFCS officers

Between December 2005 and March 2006, the IFCS Election Committee, chaired by Hans-Hermann Bock (GfKl) and made also by Keiji Jajima (JCS), F. James Rohlf (CSNA) and Helena Bacelar-Nicolau (CLAD), has been running the election of new IFCS officers. The results are as follows:

- *Fred (Buck) R. McMorris* (IIT, Chicago, USA, CSNA) has been elected President-Elect for the period 1/4/2006 to 31/12/2007, then President from 1/1/2008 to 31/12/2009, then Past-President from 1/1/2010 to 31/12/2011.
- André Hardy (FUNDP, Namur, Belgium, SFC) has been elected IFCS Publication Officer for the period 1/4/2006 to 31/12/2008 (three years).
- *Patrick Goenen* (EUR, Rotterdam, NL, VOC) has been elected as a member of the IFCS

Finance Committee for the period 1/4/2006 to 31/12/2009 (four years).

I congratulate all the newly elected officers for their election and look forward to co-operating with them for the benefit of IFCS.

#### **IFCS Finances**

In January 2006, Iven Van Mechelen (IFCS Treasurer) sent the financial reports over 2004 and 2005, and the budget proposal for 2006 to the IFCS Finance Committee for inspection and approval. At the end of March 2006, Yoshiharu Sato, chairman of the Finance Committee, informed the IFCS Executive Committee about the positive results of the IFCS financial documents audit. Finally, the IFCS Council has approved the financial documents by formal voting.

#### IFCS 2008 organised by GfKl

Claus Weihs (President of the GfK1) officially informed David Hand (President of IFCS) about the will of GfK1 to host the IFCS conference in 2008 and provided a few details on the organisation. IFCS Council has accepted by formal voting the bid of the German Classification Society (GfK1) related to the organisation of IFCS 2008. IFCS 2008 shall then be organised by colleagues from the Economics Faculty of the TU Dresden (Germany) and will take place in July 2008. I congratulate GfK1 and our German colleagues for winning their bid and I wish them all the best for a smooth organisation and a successful Conference.

#### Schedule of the IFCS Executive Committee and Council Meetings at IFCS 2006

Here is the schedule of the Executive Committee and Council meetings during IFCS 2006 in Ljubljana:

- Executive Committee meeting on July 25th at 6:00 p.m.;
- Council Meeting on July 26th during lunch time and beginning of afternoon.

I look forward to meeting all of you in Ljubljana for an exciting IFCS 2006 Conference!

Vincenzo Esposito Vinzi IFCS Scientific Secretary

## IFCS Elections in 2005/2006: Report of the Election Committee

In the end of 2005, the terms of office ended for various members of the IFCS Executive Committee and other IFCS Committees and new members had to be elected by the IFCS Council. According to the IFCS Election Rules the organization and evaluation of these elections were conducted by the IFCS Election Committee in cooperation with the IFCS Secretary and took place from December 2005 to March 2006. The list of results has been officially sent to the IFCS Council members (thus also to the IFCS Executive Committee and the IFCS Election Committee) on March 24, 2006. The candidates and the presidents of IFCS Member Societies have been informed by the IFCS President. -Here is an official report on this election round:

- The members of the Election Committee for the election period were: Helena Bacelar-Nicolau (CLAD, Lisboa), Hans H. Bock (Aachen, GfKl, Chair), James Rohlf (Stony Brook, CSNA), and Keiji Yajima (Tokyo, JCS).
- 2. The open positions to be filled were: a) President-Elect b) IFCS Publication Officer (three years), and c) a member of the IFCS Finance Committee (four years).
- 3. A call for candidatures for the open positions has been sent to the presidents of the IFCS Members on December 20, 2005 with a deadline by January 20, 2006. Various proposals have been made. Some proposed candidates rejected a nomination. Finally, we had two candidates for President-Elect, one candidate for the IFCS Publication Officer, and one candidate for the IFCS Finance Committee.
- 4. Election sheets were sent out to the IFCS Council members on February 21, 2006 (with a minor correction on February 22, 2006), with a deadline by March 14, 2006. 20 Council members (from 27) sent their votes by time (two after the deadline). The votes arriving by time were counted and evaluated by the Chair of the Election Committee and the IFCS Secretary.
- 5. The results are the following ones:

- a) President-Elect: *Fred* (*Buck*) *R*. *McMorris* (IIT, Chicago, USA, CSNA).
- b) IFCS Publication Officer: *André Hardy* (FUNDP, Namur, Belgium, SFC)
- c) Member of the IFCS Finance Committee: *Patrick Goenen* (EUR, Rotterdam, The Netherlands, VOC)

The Election Committee thanks all candidates for their willingness to serve. And, naturally, congratulations to all elected candidates!

Hans-Hermann Bock

## A new journal in the context of IFCS:

## -- Advances in Data Analysis and Classification --

'Classification' is a primary keyword for all those that are involved in IFCS Member Societies or IFCS conferences. Nevertheless, over the years, the topics of active research in IFCS have somewhat shifted also to other scientific domains as can be seen, e.g., from the session titles of IFCS conferences and the proceedings volumes: there we find general data analysis methods, visualization tools, machine learning and pattern recognition, PLS, etc. New application fields emerged at the same time, in particular related to the web and internet, ecommerce, telecommunications, microarray data, and symbolic data.

In order to accommodate with these new developments and the need for an appropriate publication tool, a group of researchers (stemming from the Italian CLADAG, the German GfK1, and the Japanese JCS) took an initiative and created a new scientific journal with the name "Advances in Data Analysis and Classification" that will be published by Springer Verlag (Heidelberg), beginning in 2007. It is designed as a forum for high standard publications on research and applications concerning the extraction of structural information and knowable aspects from whatever types of data.

Insofar, its scientific spectrum will certainly comprise the classical topics of classification and clustering, but will have a broader scope and incorporate also more general and actual problems of data analysis, present a fine selection of new and innovative (exploratory, statistical, or algorithmic) solution methods, including the analysis of complex structures (such as text and web files), mining strategies, etc. Theoretical investigations and practical contributions will alternate. Note that the journal encourages strongly the publication of applications that illustrate how new domainspecific knowledge can be made available from data by skilful use of data analytic methods.

So the editors hope that the journal will be interesting for all researchers and practitioners that are related to IFCS and IFCS Member Societies, and encourage them to submit a manuscript of their most recent investigations for publication in the journal. Any details about the journal and the submission procedure can be found on the journal's website http://www.springer.com/journal/11634. In particular, Springer will provide low and special rates for all members of IFCS Member Societies (to be specified in the end of 2006).

The editors: Hans-Hermann Bock, Wolfgang Gaul, Akinori Okada, Maurizio Vichi

Hans Hermann Bock

## IFCS Executive Committee and IFCS Member Societies (Presidents and Representatives in the IFCS Council)

The lists of the IFCS Executive Committee members and IFCS Member Societies (Presidents and Representatives in the IFCS Council) are available on the IFCS website (http://www.classification-society.org/).

André HARDY Publication Officer of the IFCS

## UPDATE ON IFCS-2006, JULY 25-29 IN LJUBLJANA

The organization of the 10th jubilee conference of the International Federation of the Classification Societies is going very well. The conference website (<u>www.ifcs06.org</u>) has a copy of the conference program, registration form, hotel reservation form and many other information. The proceedings of the conference are in print with a very nice selection of the refereed conference papers.

We are very happy with the program, with the great plenary speakers Adrian E. Raftery and David J. Hand and the prominent invited speakers Hamparsum Bozdogan, Paula Brito, Patrick Doreian, Christian Hennig, Carlo Lauro, Jacqueline Meulman, Boris Mirkin and John Shawe-Taylor. And there are many other distinguished researchers participating at the IFCS-2006 conference in Ljubljana. There will be also two full day tutorials: `Knowledge mining by symbolic data analysis and the SODAS software` (Paula Brito and Edwin Diday) and 'Blockmodeling with Pajek clustering of relation data` (Patrick Doreian, Vladimir Batagelj and Anuška Ferligoj).

Beside the scientific program we organized a half day trip to the lake Bled, a great conference dinner and several receptions. Also the city of Ljubljana offers a lot of fun, the Summer Festival in Ljubljana should be especially mentioned. Participants can find a lot of tourist information on the conference website if they wish to prolonge their staying in Slovenia.

We invite all IFCS members to have a look on the conference website and to come to the 10th jubilee IFCS conference. It will be a great meeting, and we look forward to seeing as many of the IFCS members as possible in July 2006 in Ljubljana.

Anuška Ferligoj anuska.ferligoj@fdv.uni-lj.si

#### News from the VOC

The VOC had two interesting meetings. At the autumn meeting 2005, we welcomed over 50 attendants. John Gower and Garmt Dijksterhuis discussed theoretical and practical aspects of Procrustes Analysis. In a shoot-out, a number of classification methods battled to distinguish Gaucher patients from healthy persons on the basis of serum spectra data. Michael Greenacre lively discussed some controverses in correspondence analysis, like the role of outliers in CA maps, en scaling of CA maps.

Our spring meeting 2006 had the theme of measurement theory. Wim van der Linden discussed issues in Adaptive testing. Paul Krabbe presented scaling models to quantify health states. Models for economic forecasting using many predictors were compared by Christiaan Heij. A scale for measurement of development of children was presented by Gert Jacobusse. David Hand offered much food for thought, by profoundly discussing conceptual aspects of quantification. The up-to-date information on the activities of the VOC is available via <u>www.voc.ac</u>.

Marieke Timmerman

## News from the SFC

### SFC'2006

From September 6<sup>th</sup> to 8<sup>th</sup>, 2006, the French Speaking Classification Society will hold its 13<sup>th</sup> conference in Metz (France). SFC'06 meeting (<u>http://lita.sciences.univ-metz.fr/~sfc06/</u>) will put together researchers and application developers from a wide range of classification related areas such as machine learning, pattern recognition, and data visualization. By promoting high quality and novel research findings, and innovative solutions to challenging classification problems, the conference seeks to continuously advance the state of the art in this field.

The conference will also focus on new research challenges and initiatives, and the program will include communications on the latest developments in micro array data, text mining, pattern recognition, visualization, data mining and optimization. The invited speakers are

Andrea Cerioli (University of Parma) Joachim Buhmann (Institute of Computational Science, Zurich) Patrick Gallinari (Université Pierre et Marie Curie) Mark Girolami (University of Glasgow) Iven Van Mechelen (University of Leuven) Jean-Michel Poggi (Université Paris-Sud) Adrian Raftery (University of Washington) Accepted papers will be published in the conference proceedings. A selected number of accepted papers will be invited for possible inclusion, in an expanded and revised form, in the French journal RNTI

(<u>http://www.antsearch.univ-tours.fr/rnti/</u>) published by <u>Cépaduès Editions</u>.

Mohamed Nadif mohamed.nadif@univ-metz.fr

#### SFC 2007

SFC'07 Conference will be held in Paris (France) on September 5-7, 2007.

It will be organized by Telecom Paris (Ecole Nationale Supérieure des Télécommunications de Paris) which is situated in the heart of Paris.

Among the standard topics of this conference, the focus in 2007 will be on

- Graphs and classification
- Bioinformatics
- Data stream clustering
- Social networks, web
- Textual analysis
- Symbolic data analysis.

Olivier Hudry will chair the program committee.

I. Charon, G. Hébrail and O. Hudry will be in charge of the organization of the conference. Conference web site: <u>http://www.enst.fr/SFC2007</u>

**Georges Hébrail** 

## EGC'2007

# Knowledge extraction and management

# (Extraction et Gestion des Connaissances 2007)

January 2007, 23-26, Namur, Belgium

http://www.info.fundp.ac.be/egc2007

We are pleased to announce you that the 7th French Conference "Extraction et Gestion des

Connaissances" (EGC'2007) will take place in d'Informatique. the Institut Facultés Universitaires Notre-Dame de la Paix, Namur, Belgium, January 2007, 23-26. This conference is devoted to theories, methods and applications of Data Mining, Machine Learning, Knowledge Data Bases, Knowledge Discovery in Management and engineering. Its aim is to gather all researchers and company managers in this area in order to present work of high quality and exchange new ideas.

EGC'2007 invites you to propose your contribution in several ways: tutorials, workshops, oral presentations, posters, and software demonstrations. Two special scientific prices of 1500 euros each will be respectively awarded to the best accademic and industrial papers. Papers should be submitted in French or in English. Two formats of submission exist: short papers (up to 6 pages) and long papers (up to 12 pages), please refer to our web site for additional information

(http://www.info.fundp.ac.be/egc2007).

The main submission deadlines are: Paper abstract : September 22, 2006 Full paper: September 9, 2006 Tutorials and workshops: October 2, 2006 Software demonstrations: October 20, 2006.

The proceedings of EGC'2007 will appear in a special issue of the French journal RNTI (Cépaduès publisher). Each paper is read by three reviewers (see the program committee on our web site).

Monique Noirhomme and Gilles Venturini, (Local chair and program chair).

## News from CLAD

#### CLAD - ASSOCIACAO PORTUGUESA DE CLASSIFICAÇAO E ANALISE DE DADOS

The CLAD Portuguese Association had its XIII annual conference JOCLAD 2006 on April 6-8 in the Lusíada University in Lisbon, with the presence of about 90 participants, preceded by two days of satellite short courses. JOCLAD 2006 was organized by the in co-Marketing and Business Intelligence group of the Economics and Management Research Centre of the Lusíada University in cooperation with the Laboratory of Statistics and Data Analysis (LEAD) of the Faculty of Psychology and Education of the University of Lisbon.

The program included 3 round tables on statistics and data analysis in Health, in Marketing and Business Intelligence and in Training and Education, 7 invited papers, 36 contributed papers, 9 posters and 2 specialized sessions on "Analytical Techniques in Organizations" and on "ISI 2007 in Portugal". The annual general assembly of CLAD was held during the meeting.

The book of JOCLAD 2006 Extended Abstracts covers a broad and interdisciplinary area of research and application of methods in statistics and data analysis, certainly representative of the main goals of the CLAD. The volume includes the extended abstracts regarding the satellite courses, the invited conferences and 36 contributed papers. The book of JOCLAD 2006 Extended Abstracts was edited by L. Bacelar-Nicolau and H. Bacelar-Nicolau. Copies may be asked to the LEAD.

Titles and teachers of the satellite short courses on April 4-5 were:

"Principles of Model Selection" by Peter Bryant (University of Colorado at Denver and Health Sciences Centre-USA)

"Differential Stochastic Equations and Applications" by Carlos Braumann (University of Évora - Portugal, and President of the SPE -Sociedade Portuguesa de Estatística)

"Real Experiments, Real Mistakes, Real Learning" by Bovas Abraham (University of Waterloo-Canada; President of the ISI Section ISBIS-International Society for Business and Industrial Statistics)

"Conjoint Analysis: Principles, Applications and New Developments" by Gilbert Saporta (CNAM – France, President of the ISI Section IACS-International Association for Statistical Computing)

The 3 round tables discussed "Statistics in Health and Health in Statistics", "The Challenges of Marketing Analytics: Integration, Complementarity or Multidisciplinarity" and "Innovation in Teaching and Training Statistics: Future Challenges".

#### **Invited speakers and talks were:**

Peter Bryant (University of Colorado at Denver and Health Sciences Centre): "An Extended Minimum Description Length (MDL) penalty function for binomial proportions"

Pedro Pita Barros (Universidade Nova de Lisboa – Portugal): "Stochastic Production Function and Physician's choices"

Gilbert Saporta (CNAM University – France, President of the ISI Section IACS-International Association for Statistical Computing): "Statistical Methods and Credit Scoring"

Bovas Abraham (University of Waterloo-Canada; President of the ISI Section ISBIS-International Society for Business and Industrial Statistics): "Gamma Stochastic Volatility Models"

Carmen Batanero (University of Granada-Spain, Past President of the ISI Section IASE-International Association for Statistical Education): "The Challenges of Teaching Statistical Inference"

Carlos Braumann (University of Évora -Portugal, and President of the SPE - Sociedade Portuguesa de Estatística): "Population Growth Models in Random Environment"

Norbert Victor (Director of the Institut für Medizinische Biometrie und Informatik of the Universidade de Heidelberg – Germany): "Design Changes during a Clinical Trial: A Methodological Challenge"

Contributed Papers Sessions focused on: Measuring Quality and Satisfaction in Health and Education Services Modeling in Data Analysis and Sampling Statistics in Psychology and Health Applications in Data Analysis and Sampling Multivariate Data Analysis in Tourism and Characterization of Populations Data Mining and Applications Statistics, Teaching and Training Marketing in Banking and Health Economics

The main sponsors supporting JOCLAD 2006 were:

Universidade Lusíada de Lisboa CEAUL - Centro de Estatística e Aplicações APODEMO - Associação Portuguesa de Empresas de Estudos de Mercado e Opinião PSE / SPSS SAS Portugal DataScience Consultores Caixa Geral de Depósitos João Pires Lda.

#### Helena Bacelar-Nicolau

CLAD E-mail: <u>clad.lead@fpce.ul.pt</u>

## News from GfKl

## Report on the 30<sup>th</sup> Annual Conference of the German Classification Society, March 8 – 10, 2006

The 30<sup>th</sup> Annual Conference of the German Classification Society GfKl (Gesellschaft für Klassifikation) was titled "Advances in Data Analysis" and focused on data analysis, learning of latent structures in datasets, and unscrambling of knowledge. This vear's conference was hosted by the Free University of Berlin (Germany) and was managed by the local organizer Professor Dr. Hans-J. Lenz. The 325 participants came from 24 countries in Europe and overseas.

The scientific program featured seven parallel sessions with altogether more than 200 talks. Additionally, thanks to the support of the DFG (German Research Foundation), 18 plenary or semi-plenary speakers from Europe, Japan and Canada could be invited to Berlin. As usual the scientific program included a broad range of topics from data analysis and classification. Interdisciplinary research and the interaction between theory and practice were particularly emphasized. Papers were presented in the following sections (with section/session chairs in alphabetic order):

#### **Theory and Methods:**

Clustering and Classification (Bock, Godehardt, Walesiak); Exploratory Imaizumi, Data Analysis and Data Mining (Meyer, Schwaiger); Pattern Recognition and Discrimination (Ritter, Gatnar); Visualization and Scaling Methods (Groenen, Okada); Bayesian, Neural, and Fuzzy (Ultsch); Graphs, Clustering Trees, and Hierarchies Evaluation (Hansohm); of Clustering Algorithms and Data Structures (Hennig, Mucha); Data Analysis and Time Series Analysis (Kneib, Lang); Classification

and Dimensionality (Vichi); Classification with Complex Data Structures (Cerioli); Text Mining (Nürnberger, Spiliopoulou); Web Mining on Usage Data (Spiliopoulou); Personalization and Intelligent Agents (Geyer-Schulz); Tools for Intelligent Data Analysis (Hahsler, Hornik); Machine Learning (Zighed); Analysis of Causal Effects in Experiments (Steyer); Special Topics in Data Analysis (Harms, Lenz).

#### **Applications:**

Marketing, Management Science, and OR (Baier, Boztug, Opitz, Steiner); E-commerce, Recommender Systems. and **Business** Intelligence (Schmidt-Thieme); Banking and Finance (Jajuga, Locarek-Junge); Economics (Kauermann, **Biostatistics** Polasek); and Bioinformatics (Lausen): Genome and DNA (Schliep); Analysis Medical and Health Sciences (Wernecke); Archaeology (Posluschny); Statistical Musicology (Mörchen, Image Weihs); and Signal Processing (Buhmann); Linguistics (Goebl, Grzybek); Text Mining and Linguistics (Grzybek); Psychology (Krolak-Schwerdt); Technology and Production (Feldmann).

The scientific program was completed by a doctoral workshop for PhD students working on the conference topics on Tuesday 7th of March. At the same time the second "German Japanese Symposium on Classification" started. The symposium was organized together with the Japanese Classification Society (JCS) and included 26 talks in seven sections. With 46 participants (about half of them came from Japan) this event aroused great interest, too.

The post-conference proceedings with refereed papers will be published in the Springer Series "Studies in Classification, Data Analysis, and Knowledge Organization".

Reinhold Decker

## 31st GfKl Annual Conference

The German Classification Society GfKl (Gesellschaft für Klassifikation) will hold its **31**<sup>st</sup> **Annual Conference at the University of Freiburg (Germany), March 7 – 9, 2007.** The conference is titled "Data Analysis, Machine Learning, and Applications".

The scientific program will include sessions with invited and contributed talks from a broad range of topics. The conference addresses current research on theory and methods of data analysis and classification as well as their application to a wide range of areas with special emphasis on interdisciplinary research and the interaction between theory and practice. The program will be complemented by a doctoral workshop for PhD students working on the conference topics. Scholars and practitioners are invited to contribute papers to one of the following intended sections as well as on related topics:

#### **Theory and Methods**

Supervised Classification and Regression **Cluster Analysis** Frequent Pattern Mining **Time Series Analysis** Data Visualization and Scaling Methods **Exploratory Data Analysis** Mixture Analysis Bayesian Networks and Bayesian Analysis Neural Networks and Fuzzy Systems **Relational Logical Learning** Data Streams and Online Algorithms Data Preprocessing and Information Extraction Typology and Classification Tools for Intelligent Data Analysis

#### Applications

Marketing and Management Science Business Intelligence and Personalization Banking and Finance Economics and OR Data Analysis in Retailing Image and Signal Processing Biostatistics and Bioinformatics Medical and Health Sciences Text Mining, Web Mining, and Ontology Learning Linguistics, Statistical Musicology, Archaeology, Psychology Subject Indexing and Library Science Participants intending to present a talk are invited to submit an abstract via the conference website. All abstracts will be reviewed and the accepted ones will be distributed to the conference participants. A post-conference proceedings will be published in the Springer Series "Studies in Classification, Data Analysis, and Knowledge Organization".

Conference languages are English and German.

### Important dates:

November 10, 2006: Deadline for abstract submission

January 12, 2007: Notification of acceptance for talks

March 6, 2007: GfKl Doctoral Workshop March 7-9, 2007: 31<sup>st</sup> GfKl Conference March 23, 2007: Deadline for full paper submission (for the post-conference proceedings)

May 31, 2007: Notification of acceptance for papers

June 22, 2007: Deadline for camera-ready papers

Detailed information about the conference can be found on the conference website

http://www.informatik.uni-freiburg.de/gfkl/

If you have any further questions concerning the conference, please do not hesitate to contact the local organizing team:

gfkl@informatik.uni-freiburg.de

Lars Schmidt-Thieme, Hans Burkhardt, Reinhold Decker

## 2nd German-Japanese Symposium on Classification (2GJSC), Berlin, March 6-7, 2006

In close (as well under geographic as thematic points of view) connection to GfKl 2006 – the annual GfKl conference – a second meeting of Japanese and German researchers interested in data analysis, classification, and applications took place in the Japanisch-Deutsches Zentrum Berlin (jdzb) in March 6-7, 2006.

2. GJSC was held under the title ADVANCES IN DATA ANALYSIS AND RELATED NEW TECHNIQUES & APPLICATIONS with about 50 participants and attracted – besides researchers from Japan and Germany – even persons from Italy, Russia, and the US. 26 presentations (13 by Japanese and 13 by German authors) were scheduled in 7 sessions on "Analysis of Asymmetric Data", "Bayes Approaches and Latent "Classes", "Information Mining", "Structures in Data I", "Structures in Data II", and "Applications in Psychology and Sociology".

Together with the first Symposium of this kind, held in Tokyo, September 1-3, 2005, these meetings can be seen as excellent opportunities for deepening personal relationships and fostering cooperation in research directions of mutual interest.

A proceedings volume containing contributions from both symposia is under preparation.

Wolfgang Gaul

## 38th Meeting on Statistical Computing 25.-28. June 2006, Schloss Reisensburg (Günzburg, Germany)

The meeting on Statistical Computing is coorganized by the working groups AG-BT (GfKl), Statistical Computing (gmds, DR-IBG) Computale and Statistik der Österreichischen Statistischen Gesellschaft. Presentations the meeting at developments cover cutting edge in bioinformatics, genomics, classification, machine learning, algorithms and software for data analysis and classification.

More information under <u>http://www.dkfz-</u> heidelberg.de/biostatistics/Reisensburg2006/

Berthold Lausen (2nd vice president GfK1 - responsible for international relations)

## 28th Fall Meeting of the Working Group for Data Analysis and Numerical Classification (AG-DANK) of the GfKl.

The forthcoming meeting will be held at the Department of Statistics of the University of Dortmund, invited by Professor Claus Weihs. As the focal topic this year, the study of "ensemble methods" was chosen.

Gunter Ritter

## News from CNSA

## **CSNA ELECTION RESULTS**

The annual CSNA election was conducted in December, 2005. The results are as follows.

President Elect: Fionn Murtagh, Computer Science, Royal Holloway, University of London

Secretary / Treasurer:

Stanley L. Sclove, Information & Decision Sciences, University of Illinois at Chicago

Board of Directors (2006-2008):

Carolyn J. Anderson, Psychology & Educational Psychology, University of Illinois at Urbana-Champaign

F. James Rohlf Ecology and Evolution, State University of New York - Stony Brook

Mel Janowitz continues as President in 2006 and 2007; Murtagh will assume the Presidency for 2008 and 2009.

## ADDITIONAL BENEFITS OF MEMBERSHIP IN CSNA

Springer, the publisher of the Journal of Classification, offers their books to CSNA members at a 20% discount, and through June of this year, the discount is 33%. Upon paying CSNA dues, persons will receive the requisite pass codes from the CSNA Secretary.

CSNA members can access back issues of Journal of Classification on line via Springer's Website.

For the year 2006, members of IFCS societies can join CSNA at the rate of \$50 US. bibliographic CSNA's "Service" CD (Classification Literature Automated Search Service) will be included this year with all memberships. This CD includes clustering and classification bibliographies with over ten thousand references from 1994 to 2005, and out-of-print classic books several on classification / clustering in their entirety.

ANNUAL MEETING HELD AT DIMACS The CSNA Annual Meeting was held at DIMACS (Center for Discrete Mathematics and Computer Science), Rutgers University, Busch Campus, Piscataway, New Jersey. A report of the meeting appears elsewhere in this Newsletter.

Stanley L. Sclove Secretary of CSNA slsclove@uic.edu

## **CNSA Meeting**

On May 10-13, the Classification Society of North America met at DIMACS, the Center for Discrete Mathematics and Theoretical Computer Science at Rutgers University. The meeting was co-sponsored by the Institute for Mathematical Statistics, and had a shared day with the DIMACS workshop on Clustering Problems in Biological Networks.

As is customary at the annual CSNA meetings, the topics and applications were broad, but the common thread was cluster analysis and classification. This theme appeared in invited social networks, authorship sessions on computational biology, data identification, mining, protein interactions, and weighted clustering. It also appeared in the keynote talks; Panos Pardalos (University of Florida) spoke on mining massive datasets, Christina Leslie (Columbia University) spoke on protein classification, Sal Stolfo (Columbia University) spoke on anomaly detection in computer networks, David Madigan (Rutgers University) spoke on use of domain knowledge for prediction, Sanjoy Dasgupta (University of California--San Diego) spoke on active learning of linear separators, Pierre Hansen (GERAD, Montreal) spoke on automated theorem proving in the context of graph invariants, Casimir Kulikowski (and collaborators) spoke on cluster analysis in graph-structured genomic databases, and Fionn Murtagh (University of London) spoke on ultrametricity.

In terms of take-home messages, the crosscutting conclusion is that dynamic network models will play a central role in many kinds of applications. One key issue is that the appropriate kind of dynamics depends sensitively upon the scientific context; another is that assessing the fit and predictive accuracy of such models will be difficult. A second main message is that there are two broad strategies for modern classification---tree-based methods and support vector machines. In applications and testbeds, neither dominates the other, and it is an open question to determine the circumstances under which method is likely to be superior. A third main message is that biological growing fast. but face applications are challenges both in terms of data quantity and data quality. And a fourth main message is that the classical tools of statistics are both the foundation for a new generation of inferential tools and the benchmark against which success is measured.

This year's meeting was hosted by Mel Janowitz, CSNA president and associate director of DIMACS. The 2007 meeting will be at the University of Illinois at Urbana-Champaign.

David Banks

## International Workshop on Knowledge Extraction and Modeling (KNEMO'06)

September 4th-6th, 2006 Island of Capri (Italy) (www.knemo.unina.it)

organised by

Department of Mathematics and Statistics of the University of Naples "Federico II" Italy and jointly sponsored by:

IASC (International Association for Statistical Computing)

INTERFACE (Interface between Statistics and Computing)

IFCS (International Federation of Classification Societies)

The objective of the Workshop is to give an of "Knowledge overview on the theme & Modelling" with up-to-date Extraction lectures showing the state-of-art but also the most recent advances and future challenges. The Workshop is aimed at focusing on a theme that is not yet firmly established in literature or research. Namely, the Workshop is meant to address the analysis of "complex systems" where the difficulty of analysis is not only the availability of huge masses of data but also the complex structure of relationships. It is somehow the problem of extracting information from models, not just data. The challenge consists in considering the interaction between Knowledge Extraction and Modelling hv possible investigating two directions: Knowledge Extraction from models, Knowledge Extraction by modelling.

The structure of the Workshop foresees key-note speakers that can provide lectures on the theme of interest from different points of view (data analysis, machine learning, statistical modelling, data mining etc.), discuss among them and with the other attendees during the days of the Workshop and then conclude the Workshop with a round table where the results of the discussion hold and the thinking done during the Workshop are expressed.

Among the scientists invited to the Workshop discussion and tentative invited speakers:

Tomas Aluja-Banet (Spain), Stan Azen (USA), Helena Bacelar Nicolau (Portugal), Hans Bock (Germany), Amy Braverman (USA), Hamparsum Bozdogan (USA), Edwin Diday (France), Vincenzo Esposito Vinzi (Italy), Wolfgang Härdle (Germany), David Hand (UK), Kiers (The Netherlands), Henk Erricos Kontoghiorghes (Cyprus), Carlo Lauro (Italy), Yves Lechevallier (France), Alain Morineau (France), Alfredo Rizzi (Italy), Gilbert Saporta (France), Michael Schimek (Austria), Roberta Siciliano (Italy), Michel Tenenhaus (France),

Rosanna Verde (Italy), Maurizio Vichi (Italy), Giorgio Vittadini (Italy), Ed Wegman (USA), Djamel Zighed (France)

Deadline for early bird registration: May 31st, 2006.

For more information: Prof. Vincenzo Esposito Vinzi Dipartimento di Matematica e Statistica Facoltà di Economia Università degli Studi di Napoli "Federico II" Via Cintia, 26 - Complesso Monte Sant'Angelo 80126 Napoli – Italy e-mail: <u>vincenzo.espositovinzi@unina.it</u> Web: <u>www.knemo.unina.it</u>

## Contributions for the coming issue of the IFCS newsletter can be sent to:

andre.hardy@fundp.ac.be

Text files are by preference in ascii or word, with pc format. For graphical materials, by preference GIF is used.

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