

of Quantitative Consumer Behavior Models

U. Lutz, W. Gaul, E. Aust: Der "Inländer-Goodwill" als Determinante der Kaufentscheidung - eine empirische Studie im Rahmen der "Country-of-Origin"-Forschung

U. Andelfinger, R. Wille: Decision support by methods of formal concept analysis

#### **Classification and Information in Medicine**

K.-D. Wernecke: Der Einsatz der Diskriminanzanalyse als Verfahren zur Statistischen Diagnose-Unterstützung

O. Gefeller, J. Windeler, H.J. Trampisch: Screeningevaluation in Fall-Kontroll-Studien: Eine Alternative zu randomisierten Studien?

R. Muche, O. Gefeller, D. Nagel, P. Cremer: Maßzahlen zur quantitativen Beschreibung des Screening Erfolgs am Beispiel der Evaluation des Cholesterinscreenings

A. Zaiss, W. Sauerbrei, R. Klar: CART-Verfahren in der Medizin

P. Schwarzenau, B. Lausen, P. Bröde, P. Mehnert, B. Griefahn: Estimating the Point of Acclimation of Physiological Variables

J. Dreesman, B. Hamm, S. Kinzel, A. Schilling: Expertensystem zur Erkennung fokaler Leberläsionen in MR-Tomogrammen

#### **Plenary lectures**

K.-P. Jantke: Nichtstandardisierte Konzepte für Ähnlichkeitsmerkmale beim fallbasierten Klassifizieren

R. Kree: Architekturen und Bewertungskriterien für neuronale Netzwerke

#### **Survey lectures**

P. Ruján: Neural Networks for Classification

J. Pilz: Kriging and the application in environmental monitoring

R. Köhler: Systemtheorie und Linguistik

S. Pöhlmann: Unsicheres Schließen in Diagnosesystemen

P. Ihm, B. Sasse-Kunst, C. Theune-Vogt: Merovingian glass beads: an essay of classification

A. Zimmermann: Rekonstruktion vorgeschichtlicher Lebensbilder mittels datenanalytischer Methoden

#### **Spatial Statistics and Classification**

W. Vach: Sind Tests auf räumliche Korrelation auch gute Tests zur Entdeckung räumlicher Cluster?

F.-U. Siewert, P.O. Degens: Automatische Zerlegung von Datenfeldern mit fehlenden Werten und Rändern

S. Bruns: Nichtparametrische Regression. Glattheit versus Isotonie

U. Halekoh, P.O. Degens: Bestimmung eines arbeitsplatzabhängigen Wochengangs von regelmäßig erhobenen Lungenfunktionsparametern mit Tagesgang

#### **Mathematical and Statistical Methods for Classification**

Yu. Kharin, E. Zhuk: Robustness in Cluster-Analysis for the Case of Tukey-Huber Distortions

V. Malyugin, Yu. Kharin: Discriminant and Cluster Analysis of Multivariate Regression Data

E. Zhuk: k-Means Algorithm Stability

#### **Classification and Discrimination**

B. Schulmeister, F. Wysotzki: Trennebenenverfahren zur Klassifikation von Datenmengen bei vorgegebener Klasseneinteilung

C. Wisotzki, F. Wysotzki: Merkmalsbildung und lernfähige Klassifikation bei Zeitreihen aus nicht modellierbaren Prozessen

#### **Data Analysis in Linguistics**

M. Metoui: Beitrag zur Koartikulation und Lautabgrenzung statistischer Merkmalsanalyse mit computergestützter radiokinematographischer Bildverarbeitung

E. Leopold: Zum Verhältnis von Bedeutungsinhalten und sprachlichen Ausdrücken

J. Zelger: Auswertung offener Befragungen durch GABEK

#### **Structuring of Scientific Disciplines**

B. Rosner: Conceptual Measurement

W. Lenski: Klassifikation und Dokumentation in der Mathematischen Logik

E. Wette: Inhaltliche Strukturierung und formale Repräsentation von Konzepten der mathematischen Logik

#### **Classification and Information in Medicine**

F. Diekmann, Ch. Kolodzig: Mehrachsige Klassifizierung und Codierung medizinischer Prozeduren in die ICPM-GE und SNOMED

R.J. Fischer: Methoden der Phonetisierung zur Berücksichtigung von Schreibvarianten medizinischer Begriffe bei der automatischen Indexierung

H. Fischbach, E. Godehardt, A. Horsch, B. Kahl: Klassifikation kieferorthopädischer Daten: Vergleichende Clusteranalysen skelettaler und dentoalveolärer Meßgrößen

#### **Data Analysis in Esthetics and Archeology**

C. Thiopoulus, C. Dallas: Semiotic classification of material culture

K. Alt, W. Vach: Familienrekonstruktion auf prähistorischen Bestattungsplätzen - Methoden und Ergebnisse

I. Herzog: Eine relative Chronologie aus Stratigraphie und Fundtypologie

Th. Weber, F. Siegmund, D. Stoyan, A. Zimmermann: Statistische Verfahren zur Beschreibung von prähistorischen Siedlungsmustern

**Next issue deadline: September 15, 1993**

**This Newsletter, and the two previous issues, are available by anonymous ftp from [ecf.hq.eso.org](ftp://ecf.hq.eso.org) (134.171.11.4), directory <pub/swlib/mathstat/multiv>. They are available as postscript files.**

**And what of the future? One of the most wide-ranging developments in the last year or so has been the fast-growing use of Internet resource discovery and access tools such as WAIS (wide-area information servers), Gopher and others. The copies of the Newsletter indicated above are WAIS-indexed (but not yet accessible remotely). Your opinion on future electronic availability of this Newsletter would be welcome.**

**Editor: F. Murtagh**

**Email: [fmurtagh@eso.org](mailto:fmurtagh@eso.org)**

**Fax: +49 89 32006-480 Tel: + 49 89 32006-298**

**Postal: ST-ECF, Karl-Schwarzschild-Str. 2**

**DW-8046 Garching/Munich (Germany)**

**Erklärungsbasiertes Lernen**

Ch. Globig, S. Wess: Symbolisches Lernen und Nearest-Neighbour Klassifikation

J. Selbig: Maschinelles Lernen für die Proteinstrukturvorhersage

**Knowledge-Based Methods for Classification 2**

K.-D. Althoff, F. Maurer, S. Wess: Induction and Case-based Reasoning for Classification Tasks

G. Rahmstorf: Wissensbasiertes Information Retrieval

K. Witulski: Viewing PROLOG Programs as Hypertext

**Multidimensional Scaling**

G. d'Aubigny: A probabilistic modeling of the MDS method and its relationship to shape analysis

M. Lukanowicz: Multidimensional scaling by solving a force equilibrium

R. Mathar: Multidimensional Scaling with lp-Distance Matrices

**Conceptual Bases**

M. Zickwolff, Th. Reinartz: Formal Concept Analysis vs. Conceptual Clustering within Knowledge Acquisition

R. Wille: Denken in Begriffen: Von der griechischen Philosophie bis zur Künstlichen Intelligenz heute

F. Vogt, R. Wille: Ideas of algebraic concept analysis

**Knowledge-Processing for Information Systems**

H. Czup: Klassifikatorische Aspekte einer Kommunikation in verteilten heterogenen Systemen

S. Marx, M. Rundshagen: Objektorientierte Systemanalyse am Beispiel der Methodenkomponente von WIMDAS

F. Murtagh: An Object-Oriented Framework for Multivariate Data Analysis

M. Staudt: Klassifikationsbasierte Anfrageauswertung in Wissensbanksystemen

A. Kaiser: Computerunterstützte Indexierung in Information Retrieval Systemen

E. Weihs: Datenbanken als Grundlage für Informationssysteme

**Classification in Biology 1**

B. Lausen: Classification and data analysis in genome projects: Some aspects of mapping, alignment and tree reconstruction

M. Schöniger, A. Janke, A. v. Haeseler: How to Deal with Third Codon Positions in Phylogenetic Analysis

P. Argos: Recognition of Distantly Related Protein Sequences using Conserved Motifs and Neural Networks

R. Fuchs: The EMBL Data Library - Databases and Tools

W. Ludwig: Notwendigkeit und Grenzen der automatischen Analyse von ribosomalen RNS-Sequenzdaten

W. Schmidt: Multiples Alignment und Konstruktion von Dendrogrammen für Proteinsequenzen mit Hilfe von Eigenschaftsmustern - ein algebraisches Modell

**Discipline-Based Reasoning, Classification and Information Systems in Libraries and Archives**

G. Greiner: Präkoordination, Präkombination, Postkoordination. Drei Möglichkeiten der Begriffsverknüpfung aus theoretischer und praktischer Sicht

Ch. Sander, R. Schmiede, R. Wille: Ein begriffliches Datensystem zur Literatur der interdisziplinären Technikforschung

W. Bies: Das Kriterium "Gebräuchlichkeit des Schlagworts" in der Geschichte und Theorie des Schlagwortkatalogs

**Plenary lecture**

P. Willett: The Use of Similarity and Clustering Methods for Databases of Two-Dimensional and Three-Dimensional Chemical Structures

A. Baddeley: Stochastic geometry models as priors for pattern recognition and clustering

**Survey lectures**

Ch. Beierle: Aspekte der Integration von PROLOG und Datenbanken

W. Gödert: Strukturierung von Klassifikationssystemen und Online Retrieval

E. Godehardt, A. Horsch: Testing of Data Structures with Graph-theoretical Models

D. Pfeifer: The analysis of spatial data in marine ecology

**Mathematical and Statistical Methods for Classification**

J. Lebbe: Classification of descriptors with explanation

D. Baier, W. Gaul: Simultaneous Classification and Representation of Paired Comparisons Data

N. Bitterlich: Zur Optimierung von Fuzzy-Klassifikatoren

**Methods for Classification and Data Analysis**

H. Feger: Absolute cliques, structurally equivalent positions, and contact structure

Th. Eckes, P. Orlik: Eine Methode zur trimodalen hierarchischen Clusteranalyse

S. Krolak-Schwerdt, P. Orlik, B. Ganter: TRIPAT - ein Verfahren zur Analyse dreimodaler binärer Daten

**Analysis and Representation of Data**

J. de Leeuw: Augmentation algorithms in data analysis

R. Meyer: Universal Optimality of Rank Constrained Matrix Approximation

M. Gettler-Summa: Interpretation aid for data analysis by symbolic objects

**Neural Networks and Pattern Recognition**

F. Bodendorf: Klassifikation von Systemanwendern mit Hilfe Neuronaler Netzwerke

M. Natter, Ch. Buchta: Neuronale Netzwerke zur Bestimmung der Kaufverbundenheit

R. Volmer: Klassifikation mit künstlichen neuronalen Netzen: Das Iris-Beispiel von R.A. Fisher

**Knowledge-Based Methods for Classification**

B. Ganter, R. Wille: Knowledge-based systems for mathematical theories

J. Ingenerf: Konzeptionelle Meta-Modellierung zur Steuerung einer kompositionellen, semantischen Sprachanalyse - am Beispiel lexikalischer Ambiguität

R. Mayer, K. Torabli: Methoden der Indexierung und des Retrieval am Beispiel juristischer Dokumente

**Software for Classification and Data Analysis**

H.-J. Mucha: Adaptive Clustering in the Computing Environment XploRe

S. Strahinger, R. Wille: CONCLASS-Conceptual Clustering Assistant

K.E. Wolff: Applications of correspondence analysis and formal concept analysis

**Knowledge-Processing for Information Systems**

P. Reiss, M. Skorsky, F. Vogt: TOSCANA - Management System for Conceptual Data

P. Mutschke: Knowledge-based Concept Covering in Information Retrieval on Bibliographic Databases

**Data Analysis and Processing in Economics**

R. Decker, W. Gaul: Knowledge-based Selection and Application

**1993 Summer Institute in the Cartographic Sciences  
at Salem State College**

A series of one week applied experience courses will be held from June 7 to July 16, 1993 in computer-assisted cartography, geographic information systems, interpretation of air photos and satellite imagery and digital imageprocessing. Participants are able to register for individual courses up to the maximum of six. The successful completion of any four of the courses leads to a Certificate in the Cartographic Sciences.

About the Institute: The Institute provides applied study in geographic techniques - including data collection and presentation, air photo interpretation, digital image processing, computer-assisted cartography and geographic information systems. The programs offered at the undergraduate and graduate levels are designed to provide students with technologic expertise requisite to proper geo-science analyses.

In addition to taking any of the Insititute courses on an individual basis, you may also earn a Certificate in the Cartographic Sciences by completing any four of the courses offered.

Each one week course is held daily, Monday-Friday, 8am - 5pm:

June 7-11	Interpretation of Remote Sensing Imagery
June 14-18	Advanced Air Photo Intrepretation
June 21-25	Dig. Image Proc. of Remotely Sensed Data
June 28-July 2	Advanced Computer-Assisted Cartography
July 5-9	Geographic Information Systems
July 12-16	Advanced Geographic Information Systems

Institute faculty:

Robert H. Arnold, PhD. Clark University  
William L. Hamilton, PhD. Oregon State University

For more detailed course information via email, or for a registration packet and course info via US Mail, please contact: Kym Pappathanasi, kpappa@rcnvms.rcn.mass.edu, tel: (508) 741-6235. For other queries, please contact: Dr William Hamilton, tel: (508) 741-6228

**Not to be missed...**

**IFCS Biennial Conference**

**Paris, 31 August - 4 September, 1993**

**Further details page 3**

**7th Annual Conference - Gesellschaft für  
Klassifikation e.V.**

**Universität Kaiserslautern, 3-5 March 1993**

**Information Systems and Data Analysis  
Prospects - Foundations - Applications**

**Local Organizers:** Prof. Dr. Michael M. Richter und Dr. Wolfgang Lenski.

**Scientific Program Committee:** Prof. Dr. Hans-Hermann Bock, Aachen; Dr. Paul O. Degens, Bochum; Dipl.-Soz. Matthias Herfurth, Bonn; Dr. Hans-Joachim Hermes, Münster; Prof. Dr. Rüdiger Klar, Freiburg; Prof. Dr. Rudolf Mathar, Aachen; Prof. Dr. Michael M. Richter, Kaiserslautern; Prof. Dr. Rudolf Wille, Darmstadt.

**Organizing Committee:** Prof. Dr. Michael M. Richter, Kaiserslautern; Dr. Wolfgang Lenski, Kaiserslautern; Dipl.-Volksw. Annette Klein, Kaiserslautern; Dipl.-Inf. Sabine Friedrich, Kaiserslautern; Dr. Elisabeth Wette, Kaiserslautern.  
**Meetings of the GfKl:** Managing Board, Statutes Committee, General Assembly.

**Meetings of Working Groups:** AG DA-NK Datenanalyse und Numerische Klassifikation; AG BT Biologische Taxonomie; AG DK Dezimalklassifikation; AG IS Informationssysteme; AG 'Medizin' Medicine; AG ARCH Archäologie.

**Workshop for Librarians - Subject Indexing:** U. Schulz, H.-J. Hermes, G. Schmitt

**Tutorials:**

**Neural Networks:** M.M. Richter, A. von Wangenheim, J. Rahmel

**Systems for Analysis of Economic Data:** W. Gaul

**Use of Machine Learning for Classification:** G. Nakhaeizadeh

**Object-Oriented Methods:** F. Maurer, R. Traphöner

**Plenary lecture**

Ch. Thiel: Der klassische und der moderne Begriff des Begriffs. Gedanken zur Geschichte der Begriffsbildung in den exakten Wissenschaften

**Survey lectures**

J.-P. Barthélémy: On the compatibility of binary characters

N. Blum: Some remarks on the accurate notion of local optimality in genetic sequences

F. Puppe: Nutzung von Fällen in Diagnostik-Expertensystemen

M. Herfurth: Entwicklungsperspektiven für die Wissensverarbeitung in den Sozialwissenschaften

**Mathematical and Statistical Methods for Classification I**

A. Ferligoj: Clustering approaches to structural and regular equivalences

H.-G. Bartel: Die Verwendung von Komplexitätsmaßen in der partitionierenden Cluster-Analyse

D. Krause, W.-D. Richter: Geometrischer Zugang zur Bestimmung von Wahrscheinlichkeiten korrekter Klassifikation in Gauß'schen und sphärischen Populationen

**Similarity and Correlation**

J. Krauth: Jackknife Estimates of Some Coefficients of Similarity

R. Ostermann, Th. Schulze-Pillot: Kendalls tau in einer Scatterplot-Matrix

K. Lengnink, R. Wille: An order-theoretic foundation for similarity measures

**Knowledge-Based Methods for Classification 1**

H. Schimpe: Integration ähnlicher und plausibler Erklärungen in

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Stanley S. Sclove	(96)
Finance Committee:	
Peter G. Bryant, Ch.	(94)
Nominating Committee:	
Pierre Legendre, Ch.	(94)
Membership Committee:	
Melvin F. Janowitz, Ch.	(94)
Member Representatives to IFCS Council:	
Joseph B. Kruskal	(94)
Richard C. Dubes	(96)

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\*\*\* Various Meetings \*\*\*

**Workshop on Statistical Methods in Pattern Recognition, Tromsø, Norway, May 25-28, 1993**

Statistical models are very important in many image analysis, signal analysis and pattern recognition tasks. Currently, it is an area of substantial research activity.

The International Association for Pattern Recognition (IAPR) Technical Committee 1 on Statistical Pattern Recognition will organize a one-day Workshop on statistical methods in pattern recognition May 25-28, 1993 in Tromsø, Norway. The meeting will take place during the 8th Scandinavian Conference on Image Analysis. The Workshop will commence with an invited talk followed by contributed papers of 20 minutes each. The Workshop will end with a panel discussion on the role of contextual models in pattern recognition. Original contributions for presentation at this Workshop are being solicited. The papers should include or at least discuss a statistical approach or related methods. Topics of particular interest are new methodologies, theoretical considerations and practical applications. Please submit a two page (A4) abstract in English written in 12 pitch and with normal margins. The review and selection of the submitted abstracts will be done by the Program Committee. The abstracts will be published in the Workshop Proceedings. Six (6) copies of previously unpublished, extended abstracts should reach the Program Chair by February 1, 1993. Authors will be notified of the acceptance of the abstracts for oral presentation by April 1, 1993. Accepted abstracts which cannot be presented due to shortage of time will be printed in the Proceedings.

Torfinn Taxt, Chairman TC1, Aarstadveien 19, University of Bergen, 5000 Bergen, Norway. Email : Torfinn.Taxt@cc.uib.no, phone +47-5-206334, fax +47-5-206410

*The IAPR Technical Committee 1 on Statistical Pattern Recognition aims to promote collaboration between researchers basing their work on statistical models and statistical decision theory. Thus, topics such as random field models for image restoration and segmentation; statistical time series models for signal analysis and statistical classification models are considered central. Applications of new and established models are also important.*

**4th ASIS Classification Research Workshop**

The American Society for Information Science Special Interest Group on Classification Research (ASIS SIG/CR) invites submissions for the 4th ASIS Classification Research Workshop, to be held at the 56th Annual Meeting of ASIS in Columbus, Ohio. The workshop will take place Sunday, October 24th, 1993, 8:30 a.m. -5:00 p.m. ASIS '93 continues through Thursday, October 28th.

The CR Workshop is designed to be an exchange of ideas among active researchers with interests in the creation, development, management, representation, display, comparison, compatibility, theory, and application of classification schemes. Emphasis will be on semantic classification, in contrast to statistically based schemes. Topics include, but are not limited to:

\* Warrant for concepts in classification schemes \* Concept acquisition \* Basis for semantic classes \* Automated techniques to assist in creating classification schemes \* Statistical techniques used for developing explicit semantic classes \* Relations and their properties \* Inheritance and subsumption \* Knowledge representation schemes \* Classification algorithms \* Procedural knowledge in classification schemes \* Reasoning with classification schemes \* Software for management of classification schemes \* Interfaces for displaying classification schemes \* Data structures and programming languages for classification schemes \* Image classification \* Comparison and compatibility between classification schemes \* Applications such as subject analysis, natural language understanding, information retrieval, expert systems \*

The CR Workshop welcomes submissions from various disciplines. Those interested in participating are invited to submit a short (1-2 page single-spaced) position paper summarizing substantive work that has been conducted in the above areas or other areas related to semantic classification schemes, and a statement briefly outlining the reason for wanting to participate in the workshop. Submissions may include background papers as attachments. Participation will be of two kinds: presenter and regular participant. Those selected as presenters will be invited to submit expanded versions of their position papers and to speak to those papers in brief presentations during the workshop. All position papers (both expanded and short papers) will be published in proceedings to be distributed prior to the workshop. The workshop registration fee is \$35.00.

Submissions should be made by email, or diskette accompanied by paper copy, or paper copy only (fax or postal), to arrive by May 15, 1993, to:

Phil Smith, 210 Baker Systems, 1971 Neil Avenue, Cognitive Systems, Engineering Laboratory, The Ohio State University, Columbus, Ohio 43210; Phone: 614-292-4120; Fax: 614-292-7852, Internet: Phil+@osu.edu



### Classification Society of North America

To all members of IFCS, on behalf of the Officers of CSNA I invite you to attend the Twenty Fifth anniversary celebrations of CSNA and the Numerical Taxonomy Group in Pittsburgh, Pennsylvania, June 24-28, 1993. Please see below for details. The new international airport will be in full operation. We look forward to seeing you in Pittsburgh in June and Paris in September.

Sincerely yours,  
Herman P. Friedman  
President, CSNA

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### CSNA 1993 Annual Meeting - Twenty-fifth Anniversary of the Society June 24-26, 1993, Pittsburgh, PA

The 1993 annual meeting of the CSNA will be held on the campus of the University of Pittsburgh, starting Thursday evening, June 24 and continuing through Saturday afternoon, June 26. The purpose of the annual meeting is to provide a forum for presentation and cross-disciplinary discussion of data-oriented approaches related to classification and understanding of complex data structures. This meeting marks the twenty-fifth anniversary of the CSNA.

This year's meeting in Pittsburgh will be followed by a meeting of the Numerical Taxonomy Group, to begin on Saturday afternoon, with a special joint session with CSNA meeting, and conclude on Sunday evening. In making your travel plans, you are encouraged to stay through Sunday evening, if possible, to attend the NT meeting.

Program highlights of the CSNA '93 will include:

- ☛ Anniversary Key Note: "Classification: Our First Twenty Five Years" - Robert R. Sokal, Distinguished Professor of Ecology and Evolution, SUNY-Stony Brook
- ☛ Joint Session with the Numerical Taxonomy Group on Morphometrics
- \* James F. Rohlf, Professor, Department of Biological Sciences, SUNY-Stony Brook
- \* Colin R. Goodall, Associate Professor, Department of Statistics, Penn State University
- \* Fred L. Bookstein, Distinguished Research Scientist, University of Michigan
- ☛ "Admissibility of Lance and Williams Clustering Algorithms" - John W. Van Ness, Professor, Department of Mathematica Sciences, University of Texas at Dallas
- ☛ "Probability Models for Random Graphs" - Session organized by David Banks, Department of Statistics, Carnegie Mellon University
- ☛ Invited Session on Neural Networks and Classification
- \* "Performance Bounds for Neural Network Estimation and Classification" - Andrew Barron, Professor of Statistics, Yale University
- \* "Clustering and Classification with Extensions of LVQ"

- James C. Bezdek, Professor, Division of Computer Science, University West Florida

\* "Binary Classification Using a Gaussian Mixture Approximation" - Arthur Nadas, Senior Research Scientist, IBM Research

☛ "Reticulate Models for Evolution" - John A. Hartigan, Eugene Higgins Professor of Statistics, Yale University

☛ "Perspectives of Consensus Sequences Based On Plurality Rule" - William H. Day, Professor of Computer Science, Memorial University of Newfoundland

☛ "Interactive Clustering and Classification" - Daryl Pregibon, Head Statistics and Data Analysis Research, AT&T Bell Laboratories

☛ "A Software Environment for Cluster Analysis" - Laszlo Engelman & Leland Wilkinson, Systat Inc.

The meeting will be preceded by an optional short course on Multivariate Density Estimation: Theory, Practice, and Visualization to be given David W. Scott, Professor and Chair of the Department of Statistics, Rice University on Thursday, June 24.

Information on registration will be sent to all CSNA members. Others who wish to request information about registration, should contact: Stephen C. Hirtle, Department of Information Science, University of Pittsburgh, Pittsburgh, PA 15260, U.S.A. Tel: (412) 624-9434, fax: (412) 624-5231, email: csna93@lis.pitt.edu

Herman P. Friedman, president of CSNA, will be the co-chair of the program committee along with Stephen C. Hirtle. Local support for the meeting will be provided by the School of Library and Information Science at the University of Pittsburgh.

University of Pittsburgh is on an urban campus, located near several museums, Carnegie Mellon University, and the 450 acre Schenley park with a botanical conservatory, trails, woods, tennis courts and other outdoor amenities. Pittsburgh is easily reachable by air through its new, state-of-the-art international airport, opening Fall of 1992.

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### Current Officers of the CSNA

Terms expire on 1 January of the year in parentheses, except as noted.

Herman P. Friedman, President	(94)
Michael P. Windham, President Elect	(94)
Richard C. Dubes, Past President	(94)
Stanley Wasserman, Business Manager	(96)

Directors:

Phipps Arabie, Editor Director, ex officio	
William H. E. Day, Editor Director, ex officio (until 1 June, 1993)	
Peter G. Bryant	(94)
Melvin F. Janowitz	(94)
Joseph B. Kruskal	(95)
Fionn Murtagh	(95)
Stephen C. Hirtle	(96)

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**JCS - Japanese Classification Society**

The annual research meeting of JCS was held on 25 December, 1992. There were 6 submitted papers. Presentations are as follows, where the reporter is responsible for translation.

- ☛ Shoichi Ueda, "Analysis of dependency between highschools and universities based on the contingency table of accepted numbers in entrance examination of universities".
- ☛ Atsuhiko Hayashi, "Development of statistical analysis consultation system with a support of multimedia function".
- ☛ Akinori Okada, Junko Marumo, "A problem of MDPREF(multi-dimensional scaling of preferences) when a number of sources is large".
- ☛ Masahiro Mizuno, "Algebraic curve fitting for multi-dimensional data with a use of least-squares distance".
- ☛ Toshihiko Shimakawa, Takashi Kaji, Noboru Ohsumi, "Analysis of tobacco market through point of sales data set."
- ☛ Kiyoshi Katayama, Makoto Kimura, "Multivariate analysis of contribution degree of enterprises to environmental problems".

Keiji Yajima  
Science University of Tokyo  
YAJIMA@JPNSUT20.bitnet

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**Some Software Information and Press Releases  
Received**

- \* **STATlab, an interactive data analysis package running under Windows.**

Zooming and scale changing - identification of points - brushing - trajectories of points - textual information tagged to points - contextual hypertext help, extensive color and font support. Correspondence analysis and various other methods. Planned for March 1993: clustering, partitioning, discriminant analysis, regression.

Single user educational and evaluation copies FF445 (plus tax). Contact: ADDAD, 22 rue Charcot, 75013 Paris (France). Tel: 45.85.41.59, 45.85.40.28. Fax: 45.85.40.23

- \* **SPSS for Windows**  
**Axum 2.0** - 2-d and 3-d visualization, running under DOS  
**"SPSS now speaks Japanese"** - SPSS/PC+ is now available in a Japanese version

Further information:  
SPSS GmbH Software, Steindorfstr. 19, 8000 München 22 (Germany). Tel: 089/228 30 08, fax: 089/ 228 54 13

**Société Francophone de Classification****IFCS-93**

The biennial IFCS conference will be held at Telecom-Paris from 31 August to 4 September 1993. There will be a Forum for commercial enterprises and for laboratories to present their software or other products. The 31 August will be reserved for Tutorials.

For information, contact: INRIA - Rocquencourt  
IFCS-93 / Bureau des Cours et des Colloques  
Domaine de Voluceau - BP 105  
78153 Le Chesnay Cedex (France)  
Tel: (+33) 1 39 63 56 00 Fax: (+33) 1 39 63 56 38  
Email: symposia@inria.fr

The **XIV Franco-Belgian Meeting of Statisticians** will take place in Namur from 17 November 1993 (midday) to 19 November 1993 (midday). The theme is: Theoretical Problems and Statistical Foundations of Classification Methods. Summaries of 2-3 pages, with title, name of author(s), address(es), keywords and references should be sent before 15 March 1993 to J.P. Rasson at the colloquium address.

For information, contact:  
J.P. Rasson, Département de Mathématique, Facultés Universitaires Notre Dame de la Paix, 8, Rempart de la Vierge, B-5000 Namur (Belgique) Tel: (32 81) 72 49 28, 72 49 29, 72 49 30. Fax: (32 81) 72 49 14. Email: jpr@math.fundp.ac.be

**The SFC and the GfKI have signed an Associate Membership memorandum.** This agreement becomes effective March 4. It aims at favoring exchanges of information, facilitating scientific cooperation and joint activities.

Patrice Bertrand, bertrand@icare.inria.fr

**Contents, Journal of Classification****Articles to appear in Volume 10, Number 1, 1993**

- ☛ Michael D. Hendy and David Penny - "Spectral Analysis of Phylogenetic Data"
- ☛ W.J. Krzanoski - "The Location Model for Mixtures of Categorical and Continuous Variables"
- ☛ Thomas Eckes and Peter Orlik - "An Error Variance Approach to Two-Mode Hierarchical Clustering"
- ☛ Geert De Soete, J. Douglas Carroll, and Anil D. Chaturvedi - "A Modified CANDECOP Method for Fitting the Extended INDSCAL Model"
- ☛ Abba M. Krieger and Paul E. Green - "Generalized Measures of Association for Ranked Data with an Application to Prediction Accuracy"
- ☛ Jos M.F. ten Berge, Henk A.L. Kiers, and Wim P. Krijnen - "Computational Solutions for the Problem of Negative Saliences and Nonsymmetry in INDSCAL"

## Results of IFCS 1992 Elections

### Report by the outgoing and incoming Secretaries

The Executive Committee nominated Jacqueline Meulman (from VOC) to the position of Secretary-Treasurer of the IFCS. Following the support from the Council members and consequently, Jacqueline Meulman has been elected by acclamation to the position of Secretary-Treasurer of the IFCS for a (first) four-year mandate.

January 11, 1993

Pierre Legendre, Secretary IFCS in 1992

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In the Federation's elections for the positions of Vice-President and Additional Members of the Council, held in January 1993, a total of 17 members of the Council, including 10 Member representatives, returned ballots.

Allan D. Gordon (from BCS) was elected Vice-President of the IFCS. Allan Gordon will serve one year (1993) as Vice-President, then two years (1994 and 1995) as President, and one further year (1996) as Vice-President.

Two Additional members of the Council were elected. Phipps Arabie (from CSNA; also the Editor of the Journal of Classification) and Hans H. Bock (from GfKl) will serve for a four-year term (1993 to 1996).

The IFCS is very thankful to all the candidates for their willingness to participate in these elections which are so important to the Federation. We are also grateful to the following Council members who have completed their terms of office: John Gower, President of the IFCS in 1990 and 1991 and Vice-President in 1989 and 1992; Edwin Diday who served as Additional Member of the Council from 1989 to 1992, and Allan Gordon who served in the same quality in 1991-1992.

In the December 1992 ballot, the "Guidelines on the Planning, Format, and Financial Aspects of IFCS Conferences" have received unanimous approval of the Council members. The Federation is indebted to the members of the "Advisory Committee on the Planning, Format, and Financial Aspects of IFCS Conferences" for their thorough work: H. H. Bock (chair), Ph. Arabie, D. Hand, K. Yajima, and G. Saporta.

Finally, the Federation expresses its greatest appreciation for everything that Pierre Legendre has done as Secretary-Treasurer of the IFCS from 1988-1992. He has truly done a magnificent job!

February 15, 1993

Jacqueline J. Meulman, Secretary-Treasurer IFCS  
c/o Department of Data Theory, University of Leiden,  
P.O. Box 9555, 2300 RB Leiden, The Netherlands

## British Classification Society

Joint meeting with Neural Computing Applications Forum, 3rd March 1993, School of Electronic and Electrical Engineering, University of Birmingham:

### Statistical and Neural Network Approaches to Classification

organised by Dr Andrew Webb (Tel: 0684 894490, email: webb@uk.mod.hermes. The programme included:

- Lionel Tarassenko, Stephen Roberts (Oxford University) "The use of multi-layer networks with spatial organisation for medical classification problems."
- Bob Henery (University of Strathclyde) "Empirical results in the application of modern statistical, neural network and machine learning algorithms to large-scale classification (supervised learning) problems."
- Richard Rohwer (University of Aston) "Neural networks for classification."
- David Lowe (DRA) "Clustering techniques for radial basis function networks."

The meeting was introduced by Andrew Webb and Brian Everitt made some closing remarks.

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### VOC - Dutch/Flemish Classification Society

The VOC 1992 Fall Meeting was held on November 3 at the Centre of Limnology of the Netherlands Institute of Ecology in Nieuwersluis. Susan Embretson, who was visiting the Quantitative Psychology Research Group at the University of Leuven for a six months period, was the keynote speaker. The remaining papers were organized around the theme "application of various data analysis techniques to ecological data". The sessions were followed by a business meeting in which Ineke Stoop (from the Social and Cultural Planning Bureau) was elected to the position of Secretary of the VOC. The following papers were presented:

- ☛ Onno van Tongeren (Netherlands Institute of Ecology, Nieuwersluis): Developments in phytoplankton and zooplankton in the Loosdrecht Lakes: an application of redundancy analysis.
- ☛ Carlo v.d. Rijt (University of Nijmegen): Analysis and modeling of the shore line vegetation in a semi-tidal area using detrended correspondence analysis and a geographic information system.
- ☛ Jack Middelburg (Netherlands Institute of Ecology, Yerseke): Applications of fuzzy clustering on chemical data.
- ☛ Jan de Leeuw (ITC, Enschede): The response of salt-march vegetation on tidal changes: an application of canonical correspondence analysis.
- ☛ Susan Embretson (University of Kansas, USA): Structured Rasch models for measuring change.



# International Federation of Classification Societies Newsletter

Number 6

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President: William H.E. Day

Editor: Fionn Murtagh

**The International Federation of Classification Societies**, founded in 1985, is composed of: British Classification Society, Classification Society of North America, Gesellschaft für Klassifikation, Japanese Classification Society, Société Francophone de Classification, Società Italiana di Statistica, Association des Sociétés Yougoslaves de Statistique, and Vereniging voor Ordinatie en Classificatie.

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.

## IFCS-93, 31 August - 4 September 1993

Plans for the Fourth IFCS Conference, like pieces of a complex puzzle, are slowly falling into place. Of them, several concern new IFCS activities or the planning of future activities. The first IFCS Prize for Outstanding Research will be awarded at IFCS-93. This prize is the result of questions posed by (then President) John Gower in 1991, discussed by the IFCS Council at the Third IFCS Conference, and developed since then by committees of the IFCS Council. Should IFCS initiate other such activities? Such issues may well be debated at IFCS-93 in a Plenary Discussion, by Hans H. Bock and other distinguished panelists, on "Perspectives in Classification and the Future of the IFCS." I hope you will attend this session, not just to listen to the panelists, but to discuss your own vision of the Federation's future.

William H.E. Day  
President, IFCS  
Email: whday@ac.dal.ca  
Fax: (902) 742-1295

### From The President

#### IFCS Election

Elsewhere in this issue is a formal announcement of the results of the recent IFCS election. I am pleased to welcome Jacqueline Meulman and Allan Gordon to the IFCS Executive Committee, the members of which now are:

- \* William H. E. Day, President, whday@ac.dal.ca,
- \* Allan D. Gordon, Vice President, a.d.gordon@st-andrews.ac.uk,
- \* Jacqueline J. Meulman, Secretary-Treasurer, meulman@rulfsw.leidenuniv.nl, and
- \* Fionn D. Murtagh, Publication Officer, fmurtagh@eso.org

We would be pleased to have you contact us if you wish to discuss the activities or mandate of the Federation, or any related matters.

### Contents

From the President	1
Results of IFCS 1992 Elections	2
BCS, British Classification Society	2
VOC, Dutch/Flemish Classification Society	2
JCS, Japanese Classification Society	3
Software Information and Press Releases	3
SFC, Soc. Francophone de Classification	3
Journal of Classification Contents	3
Classification Society of North America	4
Various Meetings	5,6
GfKI, Gesellschaft für Klassifikation	6,7,8
Next Issue Deadline - Editorial Address	8