

International Federation of Classification Societies Newsletter

President: Maurizio Vichi Number 48 March. 2014

Editor: Paul McNicholas

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, The Classification Society, Gesellschaft für Klassifikation, Greek Society of Data Analysis, Irish Pattern Recognition and Classification Society, Japanese Classification Society, Korean Classification Society, Moroccan Classification Society, Société Francophone de Classification, Società Italiana di Statistica, Statistical Society of Slovenia, 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 further classification research. are to Among other activities, the IFCS organises a biennial conference, and supports two journals: Advances in Data Analysis and Classification and the Journal of Classification.

IFCS Homepage:

http://www.ifcs.info

The website contains, among other things: the IFCS Constitution and By-Laws, IFCS newsletters, and links to the websites of member societies.

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Upcoming Conferences and Meetings

Words from the IFCS President

This is my first contribution to IFCS Newsletter since my election as President, so I may start by expressing my great pleasure to work for the Federation after having already gained so much by participating in its scientific activities. It is a privilege and a great honour for me to serve as President. The relevance of the history of IFCS and the eminence of my predecessors, clearly teach me that I will have to be an active President to continue to increase the appreciation of the Federation within the scientific community.

Before describing some activities of the Federation, let me first congratulate and thank the executive officers stepping in and down! Congratulations and welcome to Akinori Okada, the President-Elect. I am already aware that Akinori is an eminent scientist, and it is my great pleasure to work with him on the Executive Committee. Welcome to Christian Hennig, the Secretary. He is a brilliant researcher, and I look forward to an effective and pleasant collaboration with him. Thanks to Nema Dean for having accepted a second term as Treasurer of the Federation and for the excellent work done in her

first term. I would like to express my sincere appreciation to the Past-President, Iven Van Mechelen, who has invested much time in IFCS activities, leaving the IFCS in good shape. I wish to warmly thank the retiring Past-President, Geoff McLachlan, and the Secretary, Patrice Bertrand, for the work and time they have generously dedicated to the Federation. On future occasions, I will certainly ask Geoff and Patrice to be in IFCS events. giving consideration to their experience in the IFCS. I also wish to thank Paul McNicholas for doing a good job as Publication Officer. I am aware of the great patience he demonstrates in retrieving information for the Newsletter. communication channel is one of the most important activities for a successful association in the Information Society; so I really count on his great skills and competence to increase the scientific impact of IFCS.

In the first three months of my presidency, I have organized two executive committee meetings. The first one was focused on revisiting the major activities of IFCS and to discuss refinements and new proposals with the other executive officers. I consider it fundamental for my Presidency to spend some time to understand how the Federation can better converge towards its mission, considering the great changes within Society and the way research is being conducted in recent years.

A first tangible change will be in the Newsletter. In collaboration with Paul, who I thank, starting with the next newsletter, number 49, in addition to the usual information, the Newsletter will publish interviews with the Presidents of national societies of IFCS. These newsletters will help us understand new trends in research and appreciate new strategic activities of member societies. We also plan to publish non-technical articles, written by eminent researchers, outlining current trends in scientific developments in classification, data analysis, and related methods. I have also prepared a flyer to promote the Federation activities. This will be useful to contact new possible Societies candidates to collaborate with the Federation. The flyer can be downloaded from the **IFCS** website (www.ifcs.info).

In the second meeting of the Executive Committee, we discussed the reorganization of

the awards program of IFCS, which is strictly connected with: the participation level in award competitions and the low probability to win for very young candidates, such as Ph.D. students. Moreover, the program should involve all of the **IFCS** participants conferences. independently of their age, by considering different categories of awards. To increase participation in the IFCS and especially to include new activities dedicated to young participants, we decided to propose awards for two categories: Students/Postdoctoral Fellows and Researchers. Finally, for researchers with more experience, we propose an IFCS Research Medal for Outstanding Research Achievements. We will finalize the award program soon in order to experiment with it for IFCS-2015. I would like to thank the organizers of IFCS-2015 for their support in this experiment!

For the biannual conference of the Federation, IFCS-2015, readers will remember that the Department of Statistics of Bologna University, in cooperation with the Classification and Data Analysis Section of the Italian Statistical Society, will organize the meeting. I have already had several interactions with the local organizers, Angela Montanari and Francesco Palumbo. Starting from IFCS-2015 we will use the Open Conference System (OCS) of the Stanford University to organize the website of the meeting. The advantage will be two-fold: all IFCS conferences will be located at the IFCS website, and all participants of IFCS conferences will have the same user-id and password from now on.

I am delighted to have the opportunity, in my first Words from the IFCS President, to welcome a new member society to the IFCS family. As you will read in the News from the IFCS Secretary, the IFCS Council has approved membership of the Moroccan Classification Society (MCS). Congratulations to the MCS, and their president Prof. Sbihi Abderrahmane, on becoming part of the IFCS!

I wish to conclude these words from the President remembering two eminent scientists: Peter Ihm and Alfredo Rizzi, who passed away in the last days of March 2014. Peter and Alfredo have very much positively influenced the life of IFCS. Peter was one of the representatives of GfKl who signed the document of foundation of IFCS, at Cambridge, in 1985, and Alfredo was organizer

of the successful IFCS1998 in Rome. Hans Bock has kindly written the obituary in this number. We will certainly honour their memory in the future.

Maurizio Vichi IFCS President

News from the IFCS Secretary

The first "News from the IFCS Secretary" is actually that I am the new Secretary. It is a big honour for me to serve the IFCS in this role and I thank the Council for having elected me. I hope that there is some good collaboration between us ahead. My first task was to conduct the ballot regarding the approval of the application of the Moroccan Classification Society to join the IFCS. The IFCS Council voted in favour of the application. I am delighted therefore that the Moroccan Classification Society now becomes the 15th member society of the IFCS. Congratulations go to the MCS and their president Prof. Sbihi Abderrahmane.

The members of the new IFCS Executive Committee (EC) are Maurizio Vichi (President), Iven van Mechelen (Past-President), Akinori Okada (President-Elect), Nema Dean (Treasurer), Paul McNicholas (Publication Officer) and myself. There were already two Skype meetings of the new EC. We have decided to precede every meeting by a two-week long email discussion phase so that decisions can be made more smoothly at the actual meetings. Discussion topics in the EC were, among others, overhauls of the IFCS flyer, web page and newsletter, a proposal for a revision of IFCS's awards system, initiatives to fund potential new member societies, potential collaborations with other societies and the state of preparations for the IFCS 2015 conference in Bologna, 6-8 July 2015. We were also informed that the Japanese Classification Society prepares a bid for hosting the IFCS conference 2017.

One of my tasks is to update information on IFCS representatives and key roles of the member societies. One member society informed me of a change: The new president of the Classification Society is Doug Steinley. His term runs from 1 January 2014 to 31 Decmber 2015. Please make sure that I get all such information. This is of

vital importance for keeping up the contact between IFCS and the member societies.

With this, I wish you a nice spring and summer.

Christian Hennig IFCS Secretary

News from the IFCS Publication Officer

I would like to begin by thanking all of the member societies who have contributed to this newsletter. I also want to welcome Akinori and Christian to the IFCS Executive Committee, and to welcome Nema back to the IFCS Executive Committee!

As Maurizio mentioned in his Words from the IFCS President, we will have interviews with presidents of member societies in the next few newsletters. We hope that this will be a very interesting exercise for all involved!

Paul McNicholas IFCS Publication Officer

News from JCS

(I) The 32nd Annual Meeting of the Japanese Classification Society

The 32nd Annual Meeting of the Japanese Classification Society was held at Tokyo Metropolitan University, Akihabara Satellite Campus in Tokyo on March 1-2, 2014. The speakers and the titles of their talks were as follows:

- Analysis of cross-classified tables by Bertin's reorderable matrix, Tatsuo OTSU (National Center for University Entrance Examinations).
- Difference of Ability Estimates of Item Response Theory at the Same Raw Score, Taka-Mitsu Hashimoto (The National Center for University Entrance Examinations)
- Item selection based on principal components of mixed measurement level data, Yuichi Mori (Okayama University of Science), Masahiro Kuroda (Okayama University of Science), Masaya Iizuka (Okayama University), and Michio Sakakihara (Okayama University of Science).

- Spatial Partitioning based on Ecological Process, Makiko Oda (National Defense medical College), Saija Koljonen (Finnish Institute), Environment Fumio Ishioka (Okavama University). Petteri Alho (University of Turku), Hiroshi Suito (Okayama University), Timo Huttula (Finnish Environment Institute), and Koji Kurihara (Okayama University).
- Latent class binomial logit model using F-measure, Jun Tsuchida (Graduate School of Culture and Information Science, Doshisha University), and Hiroshi Yadohisa (Faculty of Culture and Information Science, Doshisha University).
- Adaptive Step Function Regression for Right Censored Survival Data, Toshio Shimokawa (University of Yamanashi).
- Thinking of the world and influence of news media, Takaharu Tsuda (Graduate School of Management and Information Science, Tama University).
- Analysis of Sentence Structure based on State Space Representation Model, Yasumasa Baba (The Institute of Statistical Mathematics), and Osamu Komori (The Institute of Statistical Mathematics).
- Classification by the characteristic of the professional baseball batter, Keita Yagi (Graduate School of Science, Tokai University), and Yoshiro Yamamoto (School of Science, Tokai University).
- Product Map considering Changing condition of Brand Manegement, Toshinori Saito (Bunkyo Gakuin University., MACROMILL.Inc).
- A proposal for analytical method to support; "Designing of products for Oral & Dental Care", Nobuyuki Otake (Marketing Service Co., Ltd.).
- "Ghost Survey"---Deep Structure of Religious Minds ----, Ryozo Yoshino (The Institute of Statistical Mathematics), and Yoosung Park (The Institute of Statistical Mathematics).

A workshop about Bijinesu no tame no Deta Mappingu [Data Mapping for Business] was held on March 1st at the meeting. The organizer was Yuki Toyoda (Tama University), and the lecturers were Yuki Toyoda (Tama University), Satoru Yokoyama (Teikyo University), and Hiroyuki Tsurumi (Yokohama National University).

(II) Notice of the 33rd Annual Meeting of JCS The annual meeting will be held in March, 2015 at Teikyo University, Tokyo. For additional information, please visit our website at http://www.bunrui.jp.

Satoru Yokoyama

News from CLAD

JOCLAD 2014

The XXI Annual Meeting of the Associação Portuguesa de CLassificação e Análise de Dados (CLAD), JOCLAD 2014, will be held next week, on April 10-12 2014 at the INE-Instituto Nacional de Estatística, Lisboa. The scientific program includes four plenary sessions, three thematic sessions, contributed papers and posters. JOCLAD 2014 plenary lectures are the following:

- "Measurement of quality in cluster analysis" (Christian Hennig, University College London, London, UK).
- "Sparsity and Structured Sparsity for Feature Selection in Machine Learning and Statistics" (Mario A. T. Figueiredo, Instituto de Telecomunicações and Instituto Superior Técnico, Universidade de Lisboa, Portugal).
- "The value-added of international comparisons" (Georges Lemaître formerly OECD, Paris France).
- "Recent results in model based clustering via the Cluster-Weighted approach" (Salvatore Ingrassia, Department of Economics and Business, University of Catania, Italy).

JOCLAD2014 thematic sessions are:

- Sessão "20 Anos CLAD" "O Movimento da CLassificação e Análise de Dados /CLAD em Portugal", in celebration of the 20th CLAD anniversary.
- Sessão INE "Desafios nas Estatísticas Oficiais III"
- Sessão Banco de Portugal.

A short course entitled "Clustering with the Gaussian mixture model", by Christian Hennig (University College London, UK) will take place on April 10. More information may be found at: sites.google.com/site/joclad2014/.

News from the VOC

The VOC is proud to announce the third VOC conference, which will take place the 9th of May 2014 in Leiden, The Netherlands. A keynote speech will be given by Arthur Tenenhaus (Supélec, France). We would like to invite you to attend the conference. Contributed papers can be submitted on topics such as classification, clustering, scaling, data analysis, machine learning, pattern recognition, statistical modeling, and applications of classification and data analysis. To encourage PhD students participate, the conference fee is kept very low. Furthermore, in light of the VOC jubilee meeting, which will take place November 2014 in Kerkrade, The Netherlands, the VOC provides an award for the best student presentation. The award consists of a presentation slot at the Jubilee Meeting, a waiver for the registration, and an accomodation fee. Please consult the conference website for information: more www.voc.ac/index.php?type=5.

Katrijn Van Deun

News from the Irish Pattern Recognition and Classification Society

1) Irish Machine Vision and Image Processing (IMVIP) Conference 2014

IMVIP 2014 is the main conference of the Irish Pattern Recognition and Classification Society (www.iprcs.org), a member body of the International Association for Pattern Recognition (IAPR) and Internal Federation of Classification Societies (IFCS). The 2014 Irish Machine Vision and Image Processing (IMVIP) Conference will be hosted by the Intelligent Systems Research Centre, School of Computing and Intelligent Systems, University of Ulster, bringing together theoreticians and practitioners, industrialists and academics, from the numerous related disciplines involved in the processing and analysis of imageinformation based information. More sites.google.com/site/imvip2014/.

2) Conference on Applied Statistics in Ireland (CASI) 2014

The Centre for Statistical Science and Operational Research (CenSSOR) within the School of Mathematics and Physics at Queen's University Belfast is pleased to host the 34th Conference on Applied Statistics in Ireland from Wednesday 14th to Friday 16th May 2014. The conference is the Irish Statistical Association's forum for discussion of statistical and related issues for Irish and International statisticians with an emphasis on both theoretical research and practical applications in all areas of statistics. More information at www.casi.ie/CASI 2014/.

Rozenn Dahyot

The Classification Society Distinguished Dissertation Award 2014

The Classification Society each year offers an award for an outstanding PhD dissertation on the theme of clustering, classification, related areas of data analysis, encompassing both associated theory and/or applications (defended in the last 5 years and completed by December 2013). The 2014 Award totals US\$500 in book vouchers from Chapman and Hall/CRC and the winner will be invited to make a presentation in a special plenary session at the CS Annual Meeting. CS will cover travel expenses to the next Annual Meeting of at most US\$1000 for a North American based Award winner or most US\$1500 for an Award winner based elsewhere.

Nominations may be made by the dissertation author, advisor/supervisor or related person by emailing the chair of the Dissertation award evaluation committee, Nema Dean at nema.dean 'at' glasgow.ac.uk. After the nomination has been received, the evaluation committee chair will request that the nominator obtain two external referee reports. It is suggested that these reports be completed by knowledgeable persons other than the author, their advisor/supervisor or similarly related person. The deadline for full submission of these reports is April 30th, 2014. Full details are available on the website: www.classification-society.org/news/article/12

Nema Dean

MBC²: Call for Papers

The Second International Workshop on Model-Based Clustering and Classification will be

organized by the Department of Economics and Business of the University of Catania (Italy) and will take place in Catania on September 3-5, 2014. The workshop aims to providing a focus on state-of-the-art research in the field of modelbased clustering and classification as well as a forum of scientific discussions and comparisons among young and senior researchers. Topics methodological, concern applied computational issues in model-based clustering and classification. The workshop will take place with the support of the Italian Statistical Society and the Classification and Data Analysis Group (CLADAG). Interested people are invited to submit an abstract and some background literature by May 5, 2014. For more information, visit the website mbc2.unict.it or contact mbc2@unict.it

Salvatore Ingrassia

Obtuaries

When proceeding in time IFCS not only acquires new adherents and scientific facets, but also has to say goodbye to personalities that shaped the Federation in its early times. After having lost two co-founders and former IFCS presidents, Doug Carroll (1939-2011), Bob Sokal (1926-2012) and IFCS President Jean-Paul Rasson (1949-2013) in the recent past, we have to announce two more losses: Alfredo Rizzi (CLADAG) and Peter Ihm (GfKl). Both were involved in several activities of IFCS.

Alfredo Rizzi suddenly passed away on March 27, 2014 in the age of 80 from a still active scientific life. For many years he held a chair of statistics at the Università degli Studi 'La Sapienza' di Roma and shaped the development and evolution of the Italian statistical community, also during his office as the president of the Società Italiana di Statistica. He was a leading person in the group of Italian scientists who introduced 'classification and data analysis' as a discipline in Italy and organized it formally in the 'Classification and Data Analysis Group' which then became a founding member of the IFCS. Alfredo Rizzi organized the IFCS Conference 1998 in Rome, and served as a member of the IFCS Council in 1997-2000. He was a marvelous person and a most influential Italian academician. Whoever met him appreciated his engaging

manner, his tolerance and his calm, but persuading personality. We will honour his memory in the future.

Peter Ihm was a German mathematician, biologist and biometrician who died on March 24, 2014 at the age of 87 years. After various early employments, e.g., at EURATOM in Ispra/Italy, he founded the first 'Institute of Medical Informatics' in Germany, at the university of Marburg in 1966 where he worked until his retirement in 1991. Apart from statistical activities in the domains of medicine, biology and archeology, he proposed new seriation and clustering methods as early as 1960-1965 and so joined the GfKl from its beginnings in 1977. For many years he served in the GfKl Board and it was also on his initiatives that various special working groups were installed such as 'Data analysis and numerical classification', 'Data archeology', analysis in and 'Biological taxonomy' where he was a leading person. In the years 1983-1985 Peter Ihm was involved in the discussions that finally led to the foundation of IFCS, and signed the IFCS founding document on behalf of the GfKl in 1985. We will remember him as a broadly interested, very cultivated personality with a fine sense of humour.

Hans-Hermann Bock

Upcoming Conferences and Meetings

April 2014

JOCLAD 2014: 20th CLAD annual meeting, April 10-12, Lisbon, Portugal: www.clad.pt

May 2014

VOC Conference, May 9, Leiden, The Netherlands: www.voc.ac/index.php?type=5

34th Conference on Applied Statistics in Ireland (CASI), May 14-16, Templepatrick, Co. Antrim, Northern Ireland: www.casi.ie/CASI 2014/

PLS '14: 8th International Conference on PLS and Related Methods, May 26-28, Paris, France: www.pls14.org

July 2014

Second European Conference on Data Analysis (ECDA 2014), July 2-4, Bremen, Germany: www.gfkl2014.de

August 2014

Irish Machine Vision and Image Processing (IMVIP) Conference, August 27-29, Derry-Londonderry, Northern Ireland: sites.google.com/site/imvip2014/

September 2014

Second International Workshop on Model-Based Clustering and Classification (MBC²), September 3-5, Catania, Italy: www.dei.unict.it/mbc2

July 2015

IFCS-2015, July 6-8, Bologna, Italy.

Looking Ahead to IFCS Newsletter Number 49

Contributions for the forthcoming issue of the IFCS newsletter should be sent to

paul.mcnicholas@uoguelph.ca

before July 25, 2014.

Plain text or Word files are preferred.

Thanks!

Paul McNicholas

IFCS Publication Officer