



International Federation of Classification Societies Newsletter

President: Maurizio Vichi

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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 Caribbean 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 Ordonatie 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 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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Words from the IFCS President

Activities of IFCS are continuing in several directions; I would like to underline the principal dimensions.

Regarding the IFCS 2015 conference, together with the Executive Committee, we have revamped the awards of IFCS by considering more specific categories. Our aim is to increase participation as well as the quality of presentations by attracting the best young and experienced scientists worldwide. We have maintained the Chikio Hayashi Award for Young Researchers (age 30-35), limiting the age of participants to between 30 and 35 years, because we observed that previous winners of these awards generally fell within this range. Accordingly, young scientists such as PhD students and postdoctoral fellows had a lower possibility to win. For younger scientists, we have created the Student/Postdoctoral Fellow Paper Competition and Travel Award (age 22-29). This IFCS will offer winners a grant towards their attendance expenses, conference fees, and the local/university hotel. Furthermore, the winners will be invited speakers at the special junior research session of the IFCS, and invited to submit their paper to ADAC or JoC for possible

publication. To complete the suite of awards dedicated to young researchers, we also created a Student Poster Session Competition Award for innovative research, including applications. This is a competition dedicated to applicants who are students in the fall of the year prior to the competition.

To recognize researchers with more experience, a new award has been created. To have a clear distinction, we have proposed the IFCS Research Medal for outstanding research achievements (age > 35). This is an award to recognize the exceptional achievements of an individual scientist who has made fundamental contributions to the advancement of classification, clustering and related topics over a number of years, with at least 10 years from the completion of their studies. The award is open to individuals whose research, teaching, service, and advocacy has had international impact and significantly benefited classification, clustering and other topics of interest to the IFCS. Individual members of IFCS member societies are invited to submit nominations. These awards and medal will be financed by IFCS together with the kind help of the publisher Springer and the local organization for the Bologna 2015 conference. I take this occasion to warmly thank them for their kind support.

Further information on the awards and other matter is available on the conference website: https://ifcs.boku.ac.at/_conference/index.php/ifcs2015/index/schedConfs/current. This complete conference website was created using the Open Conference Systems (OCS) of the Public Knowledge Project, which is a free web publishing tool created by several universities. It is now possible to compose and send a call for papers, electronically accept paper and abstract submissions, allow paper submitters to edit their work, and register participants.

One of the most important activities of the Federation is to promote participation and cooperation between international societies, and the affiliation of new Societies interested in the scientific activities of the IFCS. Together with the Executive Committee, I am working to increase the network of scientific contacts among the IFCS and other international associations. For this reason, I have proposed a Protocol Agreement with the International Association for

Statistical Computing (IASC). The IASC was founded during the 41st Session of the International Statistical Institute (ISI) in 1977, as a Section of the ISI. The Purpose of this Protocol Agreement is to enter into more formal arrangement with respect to the already good relationships between IFCS and IASC, establishing and maintaining a long-term cooperative collaboration. It emerges from the fact that both associations wish to improve the service they offer to their respective memberships and the international community as a whole, and the realization that together they should be able to go beyond what they can do as standalone societies. IASC and IFCS have agreed to meet regularly during the meetings of the two associations: to promote and encourage open and constructive dialogue, and to work cooperatively to increase the scientific impact of the two scientific communities.

Furthermore, IASC and IFCS have agreed to work together and explore the following key interests:

- *Communication*: include links in the website of the two societies; exchange information on conferences and other activities in the newsletters and/or websites;
- *Cooperation*: exchange invited sessions in our meetings (e.g., IFCS-COMPSTAT, IASC-ARS Meeting, IASC World Conference); propose a joint session on topics of common interest in the ISI World Statistics Conference; organize joint workshops, Summer Schools and short courses on topics of interest for both Societies; normally, a consultative member from one society is member of the scientific programme committee of meetings organized by the other society.

The Protocol Agreement has recently been signed by the president of IASC, Paula Brito, and myself, together with the director of permanent office of ISI, Ada van Krimpen. The ISI has guaranteed that we will have the opportunity to organize a joint session in future ISI World Statistics Conferences on topics of common interest between IASC and IFCS. You can find the signed protocol agreement in the IFCS website under the section “member societies and agreements”:

https://ifcs.boku.ac.at/site/doku.php?id=member_societies

As I mentioned, we are working to increase the size of the Federation, so after several contacts with different associations in the last Executive Committee, we have given a very positive opinion to the applications of two new groups:

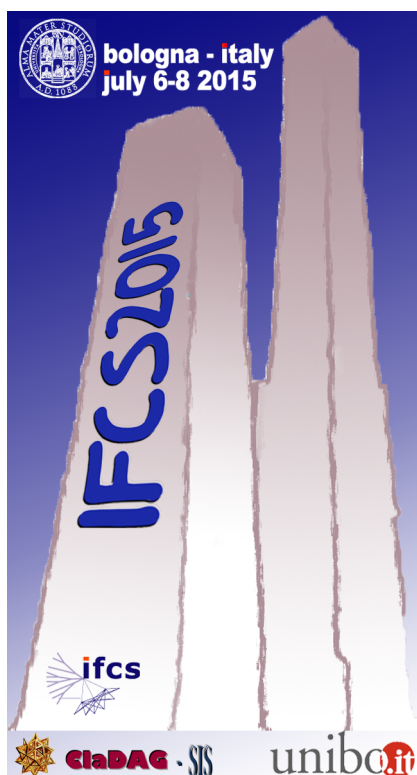
- Multivariate Statistics and Classification Group of the Spanish Society of Statistics and Operation Research SEIO-AMyC (<http://amyc.seio.es/>);
- Multivariate Data Analysis Group of the South African Statistical Association (SASA-MDAG) (<http://www.sastat.org.za/mdag-0>).

SEIO-AMyC was founded in 2008, while *SASA-MDAG* was constituted recently in 2014. Both are groups within well-known and large national statistical societies. I will now submit the proposal to the Council of IFCS requesting formal approval.

With the holiday season fast approaching, I would like to take this opportunity to wish you a very Merry Christmas and a prosperous New Year 2015 from all at IFCS. With best wishes and thanks,

Maurizio Vichi
IFCS President

IFCS 2015



Conference Setup

The 2015 conference of the International Federation of Classification Societies (IFCS) will be hosted by the University of Bologna 'Alma Mater Studiorum' (Italy) from July 6 to July 8, 2015. The conference will include a president's invited session and a presidential address, keynote presentations, invited presentations, invited and contributed symposia, and oral and poster presentations. The opening session will further feature the presentation of the awards.

Bologna

It is impossible to talk about Bologna without mentioning the Alma Mater Studiorum. Indeed, the University of Bologna, named Alma Mater Studiorum, was founded over nine hundred years ago by students who had come from all over Europe. Throughout the centuries, Bologna's identity has inextricably linked itself with that of the University. Because most of University buildings are still located in the old historical part of the city, the relationship between town and gown is kept strong and alive. Thanks to such strong relationship between city and University, Bologna has gotten the appellation of 'the erudite'. However, Bologna is not only culture; actually, it is also called 'the fat and the red'. The fat because it has a tasty gastronomy that might satisfy every palate, and the red because of the characteristic red roofs.

General organizational structure of the meeting and Conference Topics

The Conference will involve plenary invited lectures (with discussants) and one President's invited session, invited sessions proposed by Member Societies, contributed paper sessions in parallel, solicited sessions (self-organized sessions by individuals or Member Societies), and a poster session.

Contributed papers and sessions from scholars and practitioners are invited on any of the topics below as well as on related issues:

- Applications in Natural Sciences, Engineering, Medicine and Biology
- Banking and Finance
- Bioinformatics and Biostatistics
- Biomedical Data Analysis and Imaging
- Business and Industry
- Classification, Discriminant Analysis and Supervised Learning, Clustering and Unsupervised Learning

- Complex Event Processing
- Data Analysis in Archaeology
- Databionics
- Exploratory Data Mining
- Formal Concept Analysis
- Geospatial Planning
- Graphics and Vision
- Image Analysis and Computer Vision
- Information Retrieval and Library Science
- Knowledge Discovery
- Linguistics and Musicology
- Machine Learning and Pattern Recognition
- Marketing and Management
- Medical and Health Sciences
- Psychology and Educational Sciences
- Social Network Analysis
- Statistical Data Analysis and Models
- Swarm Systems
- Symbolic Data Analysis
- Text Mining, Web Mining, and Ontology
- Learning
- Visualization

Scientific Program Committee

- Francesco Palumbo (chair), University Federico II, Naples, Italy
- Angela Montanari (local organizer), Alma Mater Studiorum, Bologna, Italy
- Maurizio Vichi (IFCS President), Sapienza University of Rome, Italy
- Iven Van Mechelen (IFCS Past President), University of Leuven, Belgium
- Akinori Okada (IFCS President-Elect), Tama University, Japan
- Christian Hennig (IFCS Secretary), UCL, London, UK
- Paul McNicholas (IFCS Publication Officer), McMaster University, Canada
- Nema Dean (IFCS Treasurer), University of Glasgow, UK
- Andrea Cerioli (ClaDAG), University of Parma, Italy
- Daewoo Choi (KCS), Korean Classification Society
- Carlos Cuevas Covarrubias (SOLCAD), Universidad Anáhuac, Mexico
- Anuška Ferligoj (SSS), University of Ljubljana, Slovenia
- Paolo Giudici (ClaDAG), University of Pavia, Italy
- Tadashi Imaizumi (JCS), Tama University, Japan
- Berthold Lausen (GfKI), University of Essex, UK

- Mohamed Nadif (SFC), Université Paris Descartes, France
- Iannis Papadimitriou (GSDA), University of Thessaloniki, Greece
- Józef Pociecha (SKAD), Cracow University of Economics, Poland
- Abderrahmane Sbihi (MCA), Abdelmalek Essaadi University, Morocco
- Bryan Scotney (IPRS), University of Ulster, UK
- Fernanda Sousa (CLAD), Universidade do Porto, Portugal
- Doug Steinley (CS), University of Missouri, USA
- Jeroen Vermunt (VOC), Tilburg University, The Netherlands
- Vincenzo Esposito Vinzi (ISBIS delegate), ESSEC Business School, France
- Patrick Groenen (IASC delegate), Erasmus Univ. Rotterdam, The Netherlands

Local Organizers

Department of Statistical Sciences ‘Paolo Fortunati’, University of Bologna, via delle Belle Arti n. 41, 40126 Bologna, Italy. Under the auspices of the Classification and Data Analysis Group of the Italian Statistical Society (ClaDAG).

- Angela Montanari, *Conference Organizer*
- Laura Anderlucci
- Silvia Bianconcini
- Silvia Cagnone
- Luca De Angelis
- Giuliano Galimberti
- Alessandro Lubisco
- Monia Lupparelli
- Paola Monari
- Luisa Stracqualursi
- Cinzia Viroli

Email stat.ifcs2015@unibo.it

Website: <http://ifcs.boku.ac.at/ifcs2015>

Submission of Abstracts

Titles and abstracts should be submitted and uploaded via the conference website <http://ifcs.boku.ac.at/ifcs2015> before March 31, 2015. All abstracts will be subject to a peer review process. Notifications of acceptance will be sent on April 15, 2015.

Important Dates

March 31, 2015 Deadline abstract submission
 April 15, 2015 Notification of acceptance
 May 15, 2015 Deadline standard registration
 June 15, 2015 Deadline late registration

July 5, 2015 Preconference workshops

Fees (which include conference materials, an extended reception, coffee breaks)

| | Registration | |
|--------------|--------------|------|
| | Early | Late |
| IFCS Member* | €280 | €350 |
| Non-member | €350 | €420 |
| Student | €150 | €150 |

Note: here, 'member' means a member of an IFCS member society. IASC and ISBIS members are equally entitled to avail of the reduced fee.

Further information

Further information will be posted on the conference website <http://ifcs.boku.ac.at/ifcs2015>
We look forward to seeing you in Bologna in July 2015.

IFCS Awards Programs

Researchers who want to apply for an award on the occasion of the IFCS 2015 Conference (July 6th through July 8th 2015 in Bologna, Italy), are invited to submit their application to the Chair of the Awards Committee (see the conference web site).

Francesco Palumbo

News from the IFCS Secretary

The IFCS Executive Committee (EC) had a meeting on 18 September. On this meeting it was decided that a protocol agreement between the IFCS and the International Association of Statistical Computing (IASC) is ready for approval by the IFCS Council. The agreement was then approved by a ballot of the Council.

The core topic of the EC meeting was the IFCS Conference in Bologna, 6-8 July 2015. The EC received an update on the composition of the Scientific Programme Committee and the current state of organisation. A time line was agreed for Calls for Paper, submission deadlines, invitation of invited speakers, the conference's web page and submission software and the award committee.

Akinori Okada proposed to organise an IFCS session at the International Conference on

Psychology in 2016. After the meeting, the EC received the Financial Report 2013 and the Budget 2014. The next EC meeting will take place on Wednesday 3 December.

Please keep me posted about any current elections and nominations in the member societies so that I can keep the IFCS directory up to date. I wish all readers a pleasant time between the years!

Christian Hennig
IFCS Secretary

News from the IFCS Publication Officer

I would like to thank all of the member societies who have contributed to this newsletter. Thanks also to those who provided feedback on the interviews, with presidents of member societies, that appeared in the last newsletter. This was the first in a series of such interviews and more are planned for 2015. I want to take this opportunity to wish everyone a very Merry Christmas and a Happy New Year!

Paul McNicholas
IFCS Publication Officer

News from the VOC

25 Years VOC

The Dutch/Flemish classification society (VOC) celebrated its 25th anniversary with a Jubilee Meeting on November 6-7, 2014 in the beautiful Abbey Hotel Rolduc at Kerkrade (The Netherlands). We had an impressive program with excellent contributions covering both theory and applications of ordination and classification with a broad spectrum of applications: Daniel Oberski (Model fit evaluation by sensitivity analysis), Lianne Ippel (Estimating multi-level models in data-streams), Jeroen Jansen (Revealing the information within Flow Cytometry data using advanced and dedicated Chemometrics), Marieke Timmerman (Unraveling multivariate effects resulting from an experimental design), Paul Eilers (Generalized exponential tilting), Jelle Goeman (Two folklores: ridge regression versus the lasso), Willem Heiser (From Preference Mapping to Preference Learning, with an Example of a Prediction Tree for Rankings), Lieven de

Lathauwer (Tensor decompositions: golden tools for data mining), Christian Hennig (Flexible parametric bootstrap for testing homogeneity against clustering and assessing the number of clusters), Marco Riani (Robust Modern Multivariate Data Analysis and Classification), Patrick Groenen (Some Recent Biplots Approaches), and Denny Borsboom (All quiet on the psychometric front? Goals and challenges for 21st century psychometrics). These presentations were followed by animated discussions. After 25 years, the VOC is still very much alive and kicking!

Katrijn Van Deun

Farewell symposium and farewell lecture prof. P.M. Kroonenberg

On November 14, 2014 professor P.M. Kroonenberg, professor of multivariate analysis, in particular of three-way data, celebrated his retirement from the department of Child and Family Studies, part of the Institute of Education and Child Studies, Leiden University. Festivities started with a symposium titled “A Celebration of Multiway Analysis”, discussing multiway methods in different fields of research, including research on the methodology itself. Both speakers and participants originated from all over the world, including (in random order): Japan, Australia, USA, Spain, France, Belgium, the Netherlands, Norway, Czech Republic and Italy. Topics were related to chemistry, metabolomics, signal processing, psychology, agriculture, closed form and iterative solutions, contributions from Japan and how two-way problems could be approached (better) using thinking from multiway methods. Details about the program, speakers and the abstracts can still be retrieved from <http://www.leidenuniv.nl/fsw/three-mode/>.

Later that same afternoon prof. Kroonenberg gave his Dutch farewell lecture titled “De driewegwereld kent geen grenzen” (The Three-way world has no boundaries) in the traditional Large Auditorium at the Academy Building. With an audience of about 200, he spoke about history (referring back to the inaugural lecture in 2005), current state of affairs, referring to experts in the aforementioned fields of research and application, and future directions and ideas in multiway analysis. An example on musical data was supported by a live demonstration on the pipe

organ. After two personal speeches addressing prof. Kroonenberg, further celebrations took place throughout the evening. In prof. Kroonenberg's own words: "This was such a wonderful day: I would not mind retiring again."

Prof. Pieter M. Kroonenberg remains affiliated with the Institute as a guest researcher for at least the near future.

Ralph Rippe

News from SFC

Elections

Part of the SFC board renewed this year :

- Mohamed Nadif (Université Paris-Descartes) has been elected as President of SFC;
- Pascale Kuntz (Ecole Polytechnique de l'Université de Nantes, France) has been elected as Vice-President of the SFC;
- Marcel Remon (Université de Namur) has been elected as Vice-President of the SFC;
- Nicoleta Rogovschi (Université Paris-Descartes) has been elected as treasurer of the SFC.

SFC 2014

The (21st) meeting of the French speaking Classification Society was held in Rabat (Morocco) on 10-12 September, 2014 (<http://sfc2014.conferences-it.com>). It was co-organized by the Moroccan Society of Classification (SMC), the Ecole Nationale des Sciences Appliquées (ENSA, Tanger) and the Centre National de Recherche Scientifique et Technique (CNRST, Rabat). About 50 researchers participated to the meeting and 45 papers were presented in 13 sessions. One of the plenary sessions was devoted to Marc Csernel, who died last summer.

SFC 2015

The 22nd meeting of the French speaking Classification Society will be organized by the Laboratoire d'Informatique de Nantes Atlantique (LINA) of the University of Nantes at the beginning of September 2015. The Chair of the program committee is Pascale Kuntz (LINA - University of Nantes). Interdisciplinary papers of Humanities and Social Sciences will be encouraged.

SFC workshop in 2015

Recommendation Systems workshop will be organized by Nicoleta Rogovschi, Pascale Kuntz and Mohamed Nadif on 16 January 2015 in Paris-Descartes university.

Guillaume Cleuziou

News from SKAD

The 28th Annual Conference of Section of Classification and Data Analysis (SKAD) of Polish Statistical Society "Classification and Data Analysis: Theory and Applications" was held on 8th-10th September in 2014 in Międzyzdroje. There were about 90 participants and the overall number of papers presented was 84. The conference program included: 2 plenary sessions, 15 parallel sessions and a poster session.

The conference topics focused on theory (taxonomy, discriminant analysis, linear ordering, multivariate statistical analysis, continuous variables analysis, discrete variables analysis, symbolic data analysis, data visualization) and applications (data analysis in finance, marketing, economics, medicine, psychology, archaeology, etc.).

During the Section of Classification and Data Analysis members meeting, the following Council of the Section was elected for a two-year term (2015-2016):

- Józef Pociecha (Cracow University of Economics), President. E-mail: jozef.pociecha@uek.krakow.pl
- Marek Walesiak (Wrocław University of Economics), Vice-President. E-mail: marek.walesiak@ue.wroc.pl
- Barbara Pawełek (Cracow University of Economics), Secretary. E-mail: barbara.pawelek@uek.krakow.pl
- Krzysztof Jajuga (Wrocław University of Economics), Member. E-mail: krzysztof.jajuga@ue.wroc.pl
- Andrzej Sokołowski (Cracow University of Economics), Member. E-mail: andrzej.sokolowski@uek.krakow.pl
- Eugeniusz Gatnar (Katowice University of Economics), Member. E-mail: egatnar@ue.katowice.pl

- Krzysztof Najman (University of Gdańsk), Member. E-mail: knajman@wzr.ug.edu.pl

The 29th Annual Conference of Section of Classification and Data Analysis of Polish Statistical Society "Classification and Data Analysis: Theory and Applications" (local organizer: University of Gdańsk) will be held in Gdańsk in September in 2015.

Mateusz Baryła

News from JCS

(I) Information about the 33rd Annual Meeting of the Japanese Classification Society

The 33rd Annual Meeting will be held on March 2nd and 3rd, 2015 at Teikyo University, Kasumigaseki Campus in Tokyo. The chairperson of the organizing committee is Satoru Yokoyama (Teikyo University). For additional information, please visit our website at <http://www.bunrui.jp/>.

A workshop about Bijinesu no tame no Kurasutaringu [Clustering for Business] will be held on March 2nd in the meeting. The organizer is Yuki Toyoda (Tama University).

(II) The Japanese Classification Society Symposium on New Developments in Extended Principal Component Analysis

The symposium was held on September 2014 at the University of Tokyo, Hongo Campus in Tokyo under the 2014 Japanese Joint Statistical Meeting.

The organizer, discussant, speakers were as follows:

- Organizer: Kohei Adachi (Osaka University)
- Discussant: Yasumasa Baba (The Institute of Statistical Mathematics)

Speaker and co-speaker(s): Takashi Murakami (Chukyo University); Masahiro Kuroda and Yuichi Mori (Okayama University of Science), Masaya Iizuka (Okayama University), and Michio Sakakibara (Okayama University of Science); Kohei Adachi, Yuko Nakamura, and Hiroki Ikemoto (Osaka University); *Masahiro Mizuta* (Hokkaido University).

Satoru Yokoyama

News from CLAD

New elected CLAD Officers

The Executive Committee, General Assembly and Fiscal Council of CLAD for the years 2014-2017 are the following:

Executive Committee

President: José Gonçalves Dias (*ISCTE–Instituto Universitário de Lisboa*);

Vice-President: Carlos Marcelo (*INE–Instituto Nacional de Estatística*);

Secretary: Paula Vicente (*ISCTE–Instituto Universitário de Lisboa*);

Secretary: Luís Grilo (*ESTT–Instituto Politécnico de Tomar*);

Treasurer: Isabel Silva Magalhães (*FEUP–Universidade do Porto*).

General Assembly

President: Fernanda Sousa (*FEUP–Universidade do Porto*);

Secretary: Helena Bacelar-Nicolau (*FPUL–Universidade de Lisboa*);

Secretary: Ana Sousa Ferreira (*FPUL–Universidade de Lisboa*).

Fiscal Council

President: Adelaide Figueiredo (*FEUP–Universidade do Porto*);

Secretary: Fernando Costa Nicolau (*FCT–Universidade Nova de Lisboa*);

Reporter: Irene Oliveira (*DM.UTAD–Universidade de Trás-os-Montes e Alto Douro*)

JOCLAD 2015 – Call for Participation

The XXII Annual Meeting of the Associação Portuguesa de Classificação e Análise de Dados (CLAD), JOCLAD 2015, will be held April 10-11 2015 at the *Escola Superior de Tecnologia do Barreiro – Instituto Politécnico de Setúbal*.

JOCLAD 2015 scientific program includes plenary sessions, thematic sessions, panels, contributed papers and posters. A short course will take place April 10. The JOCLAD 2015 program and further information will soon be available at the CLAD web site, www.clad.pt

Helena Bacelar-Nicolau

News from The Classification Society

The Classification Society Meeting 2015

The Classification Society is pleased to announce the 2015 annual meeting will be held in Hamilton, Ontario on June 3-6. The organizing committee is:

- Brian Franczak, McMaster University.
- Paul McNicholas, McMaster University (chair).
- Doug Steinley, University of Missouri.

The meeting will include plenary lectures, invited sessions, contributed sessions, and a poster session. One of the invited sessions will be in celebration of 50 years of The Classification Society. The call for contributed abstracts is now open. The call is now available at <http://ms.mcmaster.ca/~paul/cs2015> and further information about the meeting will be posted as it becomes available.

Paul McNicholas

Upcoming Conferences and Meetings

January 2015

Recommendation Systems workshop (SFC), January 16, Paris-Descartes University.

March 2015

33rd Annual Meeting of the Japanese Classification Society, March 2-3, Teikyo University, Kasumigaseki Campus, Tokyo, Japan: <http://www.bunrui.jp/>

April 2015

JOCLAD 2015, April 10-11, Escola Superior de Tecnologia do Barreiro – Instituto Politécnico de Setúbal. <http://www.clad.pt>

June 2015

The Classification Society Annual Meeting, June 3-6, Hamilton, Ontario, Canada. <http://ms.mcmaster.ca/~paul/cs2015>

July 2015

IFCS-2015, July 6-8, Bologna, Italy. <http://ifcs.boku.ac.at/ifcs2015>

September 2015

European Conference on Data Analysis (ECDA2015), September 2-4, Colchester UK.

October 2015

CLADAG 2015, October 8-10, Flamingo Hotel,
Santa Margherita di Pula, Cagliari, Italy.

**Looking Ahead to IFCS Newsletter
Number 51**

Contributions for the forthcoming issue of the
IFCS newsletter should be sent to the IFCS
Publication Officer before March 21, 2015.

Plain text or Word files are preferred.

Thanks!

Paul McNicholas

IFCS Publication Officer