What ICIAM Does for Its Members — Barbara Lee Keyfitz 2
Mathematics of Planet Earth 2013 (MPE2013) — Christiane Rousseau 4
CIM International Conferences and Advanced Schools Planet Earth, Portugal 2013 5
News from the EMS — Franco Brezzi 5
ICIAM and ICSU — Roger Chau & Barbara Keyfitz 7
About the Code of Practice of the European Mathematical Society — Arne Jensen 8
Mathematical Congress of the Americas, 2013 — Susan Friedlander & Marcelo Viana 9
Two Items from SEMA 10
Start-up of the “Desk for Mathematics in Industry” in Italy — Roberto Natalini 11
IMA Bulletin — Iain Duff 11
ICIAM in the News 12
Inside the SMAI — Maria J. Esteban 13
ICIAM 2015: Call for Proposals of Thematic and Industrial Minisymposia 14
Call for nominations for ICIAM Prizes for 2015 14
About ICIAM 15

The ICIAM newsletter was created to express the interests of our membership and partner organizations and the views expressed in this Newsletter are those of the authors and do not necessarily represent those of ICIAM or the Editorial team. We welcome articles from members and associations, both announcing events, on-site reports from events and industry news.

homepage: www.iciam.org
©2013 International Council for Industrial and Applied Mathematics (ICIAM). For reprint permission, advertising requests, potential articles and event notices, please contact bkeyfitz@math.ohio-state.edu

The ICIAM newsletter was created to express the interests of our membership and partner organizations and the views expressed in this Newsletter are those of the authors and do not necessarily represent those of ICIAM or the Editorial team. We welcome articles from members and associations, both announcing events, on-site reports from events and industry news.

homepage: www.iciam.org
©2013 International Council for Industrial and Applied Mathematics (ICIAM). For reprint permission, advertising requests, potential articles and event notices, please contact bkeyfitz@math.ohio-state.edu
What ICIAM Does for Its Members

by Barbara Lee Keyfitz

As the first issue of ICIAM’s new newsletter goes to press, it is pertinent to recall why ICIAM exists in the first place, and why so many societies have joined ICIAM. How does an applied mathematics society, or a scientific society in a discipline that uses advanced mathematics, or a general mathematical society whose membership includes a significant number of applied mathematicians, benefit from membership in ICIAM? The following is my personal list of some of the ways.

Members support the discipline of applied and industrial mathematics.

The societies that came together to form ICIAM (GAMM, IMA, SMAI and SIAM) did so out of a realization that applied mathematics as a discipline was maturing, and that its future development would benefit from international communication and collaboration. As the world moved from pencil-and-paper calculations to the widespread use of computers, and as the formulation of increasingly complex models became a discipline in itself, the leaders of “applied mathematics” predicted that the importance of “mathematical sciences” would increase. Indeed, mathematics has become a part of biology and medicine in our generation, even as computation is now an essential part of engineering and finance. One can envisage mathematical tools being used in law, and they are increasingly used in management science, commerce and political science. The interaction among modeling, simulation and mathematical analysis has led to a new science that goes beyond what would have been recognized as “applied mathematics” a century, or even fifty years, ago. The creation of this new discipline has been a focus of many applied mathematics societies since their creation. ICIAM tries to speak for this field on the international stage.

In addition to highlighting new trends in applied mathematics, the societies that form ICIAM work to counter the isolation felt by mathematical scientists who work in non-academic settings. Researchers trained in mathematics who are employed in industry, government laboratories or, for another example, in hospitals, often do not carry the word “mathematician” in their job title. ICIAM’s activities, primary among them the Congresses, provide a place where like-minded people can meet, and can meet with students and potential employees.

I note that the term “applied mathematics” may strike some people as quaint. Properly, we should speak of industrial mathematics as well (which is part of ICIAM’s name), and computational science, which is the way many people in our profession now define what they do. In some communities we might want to make specific mention of Statistics, or Optimization, or Control Theory, or any one of a number of mathematical sciences disciplines that are the successors of “classical” applied mathematics. The term “applied mathematics” substitutes for repeating this entire list, or coining some neologism.

Members participate in the planning and organization of the International Congress on Industrial and Applied Mathematics.

The Congress takes place once every four years, but as the planning cycle for each Congress is six to seven years, the ICIAM Board is always working on at least one, and usually two future events. Participation is open to the entire world community — members and non-members of ICIAM alike — and with only a few exceptions (chairs of prize selection committees, for example) the Board chooses individuals to be leaders of the Congress, to serve on scientific committees, and to serve on selection committees without regard to whether they are members of societies that are members of ICIAM or not. But, through the Board and other ICIAM committees, member societies play an important role in determining the location and scientific leadership of the Congresses. In addition, the Board has a major say in the overall scientific direction of the Congresses, by validating the scientific program committee and the list of invited speakers, and hence in what becomes established as “current” applied mathematics.

The intent of the scientific organizers is to have the best and most important trends in applied mathematics represented at each Congress, irrespective of affiliation. And there is evidence that they succeed in this. But it is just in the nature of things that an individual applied mathematician who is known to a member society has a better chance of being invited to speak or to organize a mini-symposium than one who is not. A society that belongs to ICIAM brings its members to the attention of ICIAM, to their advantage.

Members support the advancement and prestige of applied mathematics in developing countries.

The recognition of applied mathematics as a discipline has not proceeded uniformly and smoothly throughout the world. Many of ICIAM’s member societies have worked...
hard to foster a culture of inclusiveness, recognizing that our own discipline emerged, sometimes painfully, in opposition to an elitist culture that at times was willing to broadcast statements like “Applied mathematics is bad mathematics”. And nowhere is encouragement of our discipline more needed than in the developing world, where two goals — establishing academic excellence for its own sake, and using advanced training to solve societal problems — sometimes appear to compete with each other. Through involvement with CIMPA and through its own small fellowship program, ICIAM works to encourage training in applied mathematics in developing countries.

**Members have the opportunity to focus mathematical and computational talent on international policy issues.**

Through its membership in ICSU (The International Council for Science), where ICIAM is now an associate member, ICIAM now has the opportunity to bring guidance to the activities of this international organization. A part of ICSU’s mission is to bring scientific expertise to bear on societal problems. Many issues — ecology, the environment, climate modeling, and economics among them — are likely to benefit from mathematical and computational support, and ICIAM is in a position to provide these to the committees that ICSU forms to study these topics and write policy reports on them. The contact with ICSU also provides an opportunity for applied mathematicians to contribute to research and policy analysis in these areas, alongside eminent scientists from other disciplines. ICIAM plans to develop the relationship with ICSU in ways that will benefit members of both organizations.

**ICIAM benefits from a member-oriented organizational principle.**

ICIAM and the IMU work together on a number of projects, and, after a certain period in the past when many applied mathematicians did not feel welcome in the IMU, both societies now share an inclusive vision of mathematics, although their core emphases will always be sufficiently different to justify the existence of both. But anyone who has worked with both organizations will notice that they differ in an important respect that has nothing to do with their scientific priorities. The IMU is constituted by and accountable to the principal scientific academies of its member countries; its members are known as “countries”, and the committees that channel national activity at the IMU — selection of delegates to its general assembly, payment of annual dues, candidates for election to its executive committee — are governed by these adhering organizations. It has been noted that these organizations, while comprised of excellent scientists, may not be representative of or sensitive to the full diversity of mathematical practice in their respective countries. As distinct from that, ICIAM was formed by and is responsible solely to its members, the applied and industrial mathematics societies of the world. Many of its member societies are themselves international; all of them are accountable to their members, and through this organizational principle ICIAM is mandated to act transparently. ICIAM’s officers serve the Board, which meets often enough to direct policy. Operating this way currently carries some administrative disadvantages for ICIAM: For example, ICIAM cannot be a full member of ICSU, which requires that its members be governed by national academies of science, and ICIAM does not qualify for the large government grants that enable the IMU to employ staff and to operate a permanent secretariat. But the closer connection to the community it serves enables ICIAM to benefit from the willing and enthusiastic volunteer service of the officers and representatives of its member societies. ICIAM’s member societies are the organization, in a very meaningful sense.

Barbara Lee Keyfitz (bkeyfitz@math.ohio-state.edu) is the Dr Charles Saltzer Professor of Mathematics at the Ohio State University. She has a PhD from New York University, and works in partial differential equations. She is the current President of ICIAM.

---

**Subscribing to the ICIAM Newsletter**

The ICIAM Newsletter will appear quarterly, in electronic form, in January, April, July and October. Issues will be posted on the ICIAM Web Page at www.iciam.org/News. If you would like to be notified by e-mail when a new issue is available, please subscribe to the Newsletter. There is no charge for subscriptions. To subscribe or unsubscribe, visit the webpage given above, or go directly to groups.google.com/group/iciam-news.
Mathematics of Planet Earth 2013 (MPE2013) is a special year of scientific and outreach activities in 2013: [www.mpe2013.org](http://www.mpe2013.org).

Initially launched by 13 North-American institutes in 2010, MPE2013 now has more than 100 partners from all around the world, and new partners join regularly. It is endorsed by ICSU, IMU and ICIAM, and it has the patronage of UNESCO. The mission is to increase the engagement of mathematicians — researchers, teachers, students — as well as the public, with the role of mathematics in issues affecting our Planet Earth and its future.

The success of MPE2013 and exceptional collaboration of MPE2013 comes from the fact that it is timely. The world mathematical community is aware of the urgency of planetary and sustainability issues. Progress can only come from a concerted, massive, large scale effort in collaboration with other scientific disciplines. And it is time to train a new generation of researchers to MPE problems. It is not too late to join MPE2013: the research and outreach efforts on planetary problems will not stop in 2013. And the exceptional world collaboration is there to last.

The activities take place everywhere on the planet. These include:

- Scientific programs in more than 40 research institutes around the world.
- Learned societies holding their annual meeting on the theme.
- Scientific meetings holding special sessions on the theme of MPE (including SIAM, MCA2013, IAMG2013, two symposia at AAAS meeting in 2013, and more to come). IAMG2013 will hold a poster competition on applications of Mathematics in Earth Sciences.

An international launch of MPE2013 took place on December 7 2012 (visit [mpe2013.org/newsroom](http://mpe2013.org/newsroom)). Several countries already held their MPE launches (South Africa, Canada, Malaysia, UK). The US launch will take place at the Joint Mathematics Meeting on January 9–12 2013 and the Australian launch will occur on January 29 2013 and other launches are still under planning.

The international unions, IMU (International Mathematical Union), IUGG (International Union of Geodesy and Geophysics) and IUTAM (International Union of Theoretical and Applied Mechanics) together with ICIAM, most likely under the leadership of ICSU (International Council of Science) are organizing a multi-disciplinary educational and capacity building workshop "Mathematics of Climate Change, Related Natural Hazards and Risks", as a satellite activity of the first Mathematical Congress of the Americas (MCA2013) on July 29 to August 2, 2013 in Guanajuato, Mexico: [cans.usc.edu/mathgeo](http://cans.usc.edu/mathgeo). The participants will be young researchers mostly from Latin America and the Caribbean.

MPE2013 includes an important outreach component:

- Numerous public lectures around the world, including a Simons MPE lecture series.
- In 2013, Ehrhard Behrends from EMS will write a weekly column in *die Welt* on MPE2013.
- Special issues of mathematical magazines on MPE distributed in the schools (Accromath, Pi in the Sky, etc.).
- In North America, the Math Awareness Month in 2013 will be on MPE.
- MPE brochures by EMS European Mathematical Society.

MPE2013 has organized an International Competition for an Open Source Exhibition of museum quality exhibits (modules). The modules will form the basis of a permanent Open Source Exhibition that will be hosted through the IMAGINARY project at Oberwolfach. The exhibition will be launched at the UNESCO Headquarters in Paris on March 5–8, 2013.

Christiane Rousseau ([rousseac@dms.umontreal.ca](mailto:rousseac@dms.umontreal.ca)) got her PhD from University of Montreal in 1977. She is a professor at the University of Montreal. She was Chair of her department for 1993–1997 and interim Director of the CRM in 2008–2009. She was President of the Canadian Mathematical Society in 2002–2004, and she is Vice-President of the International Mathematical Union for 2011–2014. She initiated "Mathematics of Planet Earth 2013" (MPE2013) in 2009. Her research is in dynamical systems. She is also very involved in the popularizing of mathematics and in the training of preservice high school teachers.
CIM International Conferences and Advanced Schools
Planet Earth, Portugal 2013

The International Center of Mathematics (CIM) is a partner institution of the International Program Mathematics of Planet Earth 2013 (MPE2013). CIM plans to organize and support several activities in the scope of International Program Mathematics of Planet Earth 2013 (MPE2013).
sqig.math.ist.utl.pt/cim/mpe2013

To this extent, CIM is organizing the following CIM International Conferences and CIM Advanced schools Planet Earth:

MECC 2013 - International Conference and Advanced School Planet Earth, Mathematics of Energy and Climate Change, 18–28 March 2013. Keynote speakers and school lecturers: Inês Azevedo, Carnegie Mellon University, USA; Richard James, University of Minnesota, USA; Christopher K.R.T. Jones, University of North Carolina, USA; Pedro Miranda, Universidade de Lisboa, Portugal; Keith Promislov, Michigan State University, USA; Richard L. Smith, University of North Carolina, USA; José Xavier, Universidade de Coimbra, Portugal; David Zilberman, University of California, Berkeley, USA.

DGS 2013 - International Conference and Advanced School Planet Earth, Dynamics, Games and Science, 26 August to 7 September 2013. Keynote speakers and school lecturers: Michel Benaim, Université de Neuchâtel, Switzerland; Jim Cushing, University of Arizona, USA; Joao Lopes Dias, Universidade Técnica de Lisboa, Portugal; Pedro Duarte, Universidade de Lisboa, Portugal; Diogo Gomes, Universidade Técnica de Lisboa, Portugal; Yuming Jiang, City University of New York, USA; Eric Maskin, Institute for Advanced Studies, USA (schedule permitting); Jorge Pacheco, Universidade do Minho, Portugal; David Rand, University of Warwick, UK; Martin Shubik, Yale University, USA (video lecture); Satoru Takahashi, Princeton University, USA; Marcelo Viana, Instituto de Matemática Pura e Aplicada (IMPA), Brazil.

The first two volumes of the CIM Series in Mathematical Sciences published by Springer-Verlag will consist of selected works presented in the conferences Mathematics of Planet Earth (CIM-MPE). The editors of these first two volumes are Jean Pierre Bourguignon, Rolf Jeltsch, Alberto Pinto and Marcelo Viana.

News from the EMS

The EMS (European Mathematical Society) is a learned society representing mathematicians throughout Europe. It promotes the development of all aspects of mathematics in Europe, in particular mathematical research, relations of mathematics to society, relations to European institutions, and mathematical education. The EMS has as its members around 60 national mathematical societies in Europe, 20 mathematical research centres, and 3000 individuals. The President of the EMS is Marta Sanz-Solé, professor at the Universitat de Barcelona.

Apart from the Executive Committee (www.euro-math-soc.eu/comm-executive.html) the EMS has 10 Committees. Of these, the Applied Mathematics Committee (www.euro-math-soc.eu/comm-applied.html) is among the oldest and most active ones.

Here below are a few excerpts from the site News from the EMS at www.euro-math-soc.eu/news.html. Further information on the EMS can be found from its official website www.euro-math-soc.eu.

EMS Code of Practice approved

At its October meeting in Helsinki, the executive committee of the EMS approved the Code of Practice that is the result of year-long efforts of the Ethics Committee of the society. The document lists strong recommendations to authors of mathematical papers, to editors and publishers, to referees and to users of bibliometric data. The EMS Ethics Committee offers its services to investigate cases of claims of unethical behaviour and it describes procedures for verification, for mediation, and for communication of its findings. Information at: www.euro-math-soc.eu/system/files/COP-approved.pdf.

Open Access and Author Page Charges

In summer 2012, the three French Mathematical Societies (SMF, SMAI, SFDS) publicized a declaration on Open Access: A warning on the inherent flaws of the “author pay” model. This topic is of high concern for the future of mathematical publishing, as was stressed during the last EMS Council (Krakow; July 2012), and during the
2011 MSRI workshop on Mathematics Journals. The page [Open Access and Author Page Charges on the SMF server](http://smf.emath.fr/content/open-access-et-systeme-auteur-payeur) contains pointers to recent statements (e.g. British government, EU Commission), many more links, and individual contributions. Personal statements are welcome (to be sent to smfpres@dma.ens.fr).

**1st European-Nordic Congress of Mathematicians**

The 26th Nordic Congress of Mathematicians will be held in Lund from 10 to 13 June 2013. In the tradition of the previous three meetings, the congress will be organised jointly with a partner society. In 2013, the partner will be the European Mathematical Society, thus making the congress the 1st European-Nordic Congress of Mathematicians. Information, including the list of plenary speakers and a call for special sessions (Deadline: December 31, 2012): [www2.maths.lth.se/nordic26](http://www2.maths.lth.se/nordic26).

**The EMS-DMF Joint Mathematical Weekend**

In celebration of the Danish Mathematical Society’s (DMF) 140th anniversary, the DMF jointly with the EMS would like to invite mathematicians from all over Europe to an [EMS-DMF Joint Weekend 5–7 April 2013](http://www.projects.au.dk/emsweekend). The weekend will offer plenary talks and parallel sessions with invited speakers as well as a poster session where we invite all participants (especially junior researchers) to submit a poster for presentation. For more information see [projects.au.dk/emsweekend](http://projects.au.dk/emsweekend). In connection to this event the presidents of the national mathematical societies in Europe have their annual meeting in Aarhus. See: [projects.au.dk/presidents-ems](http://projects.au.dk/presidents-ems).

**Centre Interfacultaire Bernoulli Lausanne: Call for Proposals**

The Bernoulli Centre (CIB), funded jointly by the Swiss National Science Foundation and the Swiss Federal Institute of Technology in Lausanne, launches a call for proposals of four one-semester programs during the period 1 July 2014 – 30 June 2016. A thematic program consists of a six months period (January 1 – June 30 or July 1 – December 31) of concentrated activity in a specific area of current research interest in the mathematical sciences. Those who are interested in organizing a program at the CIB should submit a two page letter of intent by April 1st, 2013. This letter should give the names of the organizers, of the potential visitors, and outline the program. For more details see [cib.epfl.ch](http://cib.epfl.ch).

**EMS Monograph Award**

On the occasion of its 10th anniversary the [EMS Publishing House](http://www.ems-ph.org) is pleased to announce the [EMS Monograph Award](http://www.ems-ph.org/EMS_Monograph_Award.php). The Award is assigned every two years to the author(s) of a monograph in any area of mathematics that is judged by the selection committee to be an outstanding contribution to its field. The prize is endowed with €10,000, and the winning monograph is published by the EMS Publishing House in the series EMS Tracts in Mathematics. More information can be found in [www.ems-ph.org/EMS_Monograph_Award.php](http://www.ems-ph.org/EMS_Monograph_Award.php).

**ESF awards 14th European Latsis Prize to Uffe Haagerup**

The European Science Foundation has awarded this year’s [European Latsis Prize](http://www.projects.au.dk/emsweekend) to Professor Uffe Haagerup, an eminent mathematician at the University of Copenhagen. The theme for this year’s prize was “Mathematics” and Professor Haagerup was awarded the prize for his ground-breaking and important contributions to operator algebra, in addition to other new and challenging areas of mathematics. Funded by the Geneva-based Latsis Foundation, the European Latsis Prize is valued at 100,000 Swiss francs (€83,000).

Franco Brezzi has been professor of Mathematics at the Politecnico di Torino, and at the University of Pavia and is now at the “Istituto Universitario di Studi Superiori (IUISS)”.

He has been Director of the IMATI-CNR, and President of Italian Mathematical Union. Presently he is Vice President of the European Mathematical Society.

He is a member of the Istituto Lombardo, Accademia di Scienze e Lettere (Milano), of the Accademia Nazionale dei Lincei (Roma) and of the European Academy of Sciences. He received the Gauss-Newton Medal from IACM in 2004, and the Von Neumann Award from SIAM in 2009.

His scientific interests are mainly in Scientific Computing, and mostly in Numerical Analysis of PDEs for various applications. Recently he has been working on more methodological aspects, as Discontinuous Galerkin methods, Co-chain discretizations of differential forms and Virtual Element Methods.
ICIAM and ICSU

by Roger Pfister & Barbara Keyfitz

ICIAM is pleased to be a Scientific Associate of ICSU, the International Council for Science. ICSU is involved in many activities, and this newsletter will report on them from time to time. In view of recent discussions of publishing integrity and related topics at ICIAM Board meetings, our members will be interested to know that ICSU has a “Committee on Freedom and Responsibility in the conduct of Science” (CFRS). This policy committee serves as the guardian of the ICSU Principle of Universality (freedom and responsibility) of Science, which is enshrined in Statute 5 and adherence to which is a condition of ICSU Membership. To raise international awareness for this Principle, CFRS organizes and co-sponsors workshops and conferences and issues recommendations with advice to ICSU Members. In a recent letter to the ICSU Membership, two topics of current interest to the CFRS committee were pointed out:

1. ‘Muzzling’ of scientists and scientific institutions. Freedom of expression and communication are fundamental to the furtherance of scientific inquiry for the benefit of society. A number of recent incidents in different countries suggest that both of these ‘rights’ may be at risk. In particular, there have been several cases where public sector scientists have been prevented from talking to the media on topics that fall within their expertise but where their views are not necessarily in accord with Government policies. The CFRS Committee is seriously concerned by this trend of increased pressure on both individual scientists and academic institutions to only say what is politically acceptable.

2. Protection of whistle-blowers. CFRS previously argued that the self-correcting nature of science requires that policies and mechanisms be in place to protect whistle-blowers. Scientists have a duty to expose fraudulent information and/or misconduct, particularly where this concerns health and environmental risks. However, this can only be expected to happen if institutions accept responsibility for protecting whistle-blowers and have procedures for dealing with their allegations. There are indications that this is not always happening and that, whilst scientists are aware of cases of misconduct, including fabrication, falsification and plagiarism from colleagues, they are very reluctant to report them.

More information on CFRS and its activities can be found on the ICSU website at www.icsu.org/about-icsu/structure/committees/freedom-responsibility.

Roger Pfister is a political scientist and international relations scholar; he studied in Switzerland, the UK and South Africa, where he obtained his PhD. He has worked at the ETH Zurich and the University of Fribourg. Roger has been the Executive Secretary for ICSU’s CFRS since October 2010.
The Executive Committee of the European Mathematical Society (EMS) created an Ethics Committee in the Spring of 2010. The first task of the Committee was to prepare a Code of Practice. This task was completed during the Spring of 2012. The Code was approved by the Executive Committee at the end of October and went into effect on 1 November 2012.

The Code of Practice

The Code is available on the EMS web site (see below). It establishes a set of standards to be followed by European mathematicians in their research and professional life, and by editors and publishers of mathematics.

The Code covers the publication and dissemination of mathematical research. The topics covered are:

- Responsibilities of authors;
- Responsibilities of publishers and editors;
- Responsibilities of referees;
- Responsibilities of users of bibliometric data.

The Code describes good practice and ethical behaviour in the publication, dissemination, and assessment of mathematical research, and also describes what is considered to be misconduct or unethical behaviour in these areas.

Concerning authors, it is good practice to give proper credit and to give appropriate bibliographical references to the contributions of others. In recent years plagiarism has become more widespread in the mathematical sciences. Plagiarism is certainly unethical.

Concerning publishers, it is good practice that they establish and conspicuously present their standards for ethical behaviour in publishing, and specify the steps to be taken to investigate and respond to suspicious or accusations of misconduct.

Concerning editors, they should avoid conflicts of interest, for example by handling their own papers, or those of colleagues, students, or acquaintances. If the editors become convinced that parts of a work that they have published have been plagiarised from another source, then they should ask the authors to submit a substantial retraction; if this is not forthcoming, they should themselves publish a statement giving details of the plagiarism involved.

Concerning referees, they should avoid professional or personal conflicts of interest. Any case of a possible conflict of interest should be discussed with the editor and the referee can continue to act only with the agreement of the editor. Referees should not use privileged information obtained from a manuscript under review.

Concerning bibliometric data, the users should be aware of the provenance of the data and should use them with sufficient care, understanding the reliability or lack thereof of such data. Authors, editors, and publishers should not seek to artificially influence the bibliometric data, impact factors, and citation counts that are generated.

Procedures

As part of the Code, procedures have been established for the consideration of individual cases brought to the attention of the Committee.

Cases can be submitted to the Committee by persons involved in claims of unethical behaviour, as described in the Code. The Committee will not consider third party submissions. Before submission the complainant should have sought to address the issues involved, and in the case of published works, should have utilized the procedures established by the publishers for handling unethical behaviour.

Once the Committee has decided to accept a case, it will seek to discover the underlying facts. The Committee will seek to mediate, and if that fails, it may establish a formal finding. This will be communicated to the President of the EMS, who will then decide how to proceed.

Conclusion

Enforcement of the Code can only be through moral power, by discouraging the unethical behaviour.

The above description is of necessity incomplete. If you are interested in learning more about the Code including the Procedures, please consult the document on the EMS web page. This Code is seen as a ‘first attempt’. Revision of the Code will be considered in a few years. Comments on the Code can be sent to the Chairman of the Committee, Professor Arne Jensen.
Reference

Supplementary material
The Ethics Committee
Members (2010–2013)
Chairman: Arne Jensen (Aalborg Universitet, Denmark)
Vice-Chairman: H. Garth Dales (University of Lancaster, UK)
Executive Committee representative: Igor Krichever (Columbia University, New York, USA) (to be replaced by Franco Brezzi, Istituto Universitario di Studi Superiori, Pisa, Italy, on 1 January 2013)
Jean-Paul Allouche (Centre National de la Recherche Scientifique and Université Pierre et Marie Curie, France)
Graziano Gentili (Università di Firenze, Italy)
Radu Gologan (Academia Română de Științe, București, Romania)
Christine Jacob (Institut National de la Recherche Agronomique, Jouy-en-Josas, France)
Adolfo Quirós (Universidad Autónoma de Madrid, Spain)
Tomaž Pisanski (Univerza v Ljubljani, Slovenia)
Tatiana Shaposhnikova (Linköpings Universitet, Sweden)

Arne Jensen (matarn @math.aau.dk) got his PhD from University of Aarhus in 1979. He has been a professor of mathematics at Aalborg University, Denmark, since 1988. He served as acting director of the Mittag-Leffler Institute from 1993 to the beginning of 1995. In 2000–2001 he was visiting professor at the University of Tokyo. His research interests are spectral and scattering theory for Schrödinger operators.

Mathematical Congress of the Americas, 2013

The Mathematical Congress of the Americas (MCA) will be held, for the first time, in Guanajuato, Mexico, on August 5–9, 2013. It is anticipated that the MCA will be a quadrennial event held in different countries of the Americas. Its goals are ambitious: to highlight the excellence of mathematical achievements in the Americas, within the context of the international arena, and to foster the scientific integration of all mathematical communities in the continent. This article contains a brief explanation of how the Congress came to be, and an outline of the preparations to ensure that it will achieve the scientific excellence and the wide participation of mathematicians and students from all over the region that are necessary to attain such goals.

One of the SC’s first tasks was to issue a call for proposals to organize the MCA2013. By the April 7, 2011 deadline, the SC had received two excellent proposals: from the Universidad de los Andes in Bogotá, Colombia; and the Centro de Investigación en Matemáticas (CIMAT) at Guanajuato, Mexico. Both locations were visited by SC representatives, to assess the facilities available for the Congress. After a long discussion, where all aspects were carefully weighed, the SC decided to award the realization of the inaugural MCA to CIMAT, Guanajuato. The SC also deliberated on the structure of the scientific program, which is to include 5 plenary lectures, 20 invited lectures, about 40 special sessions, and a number of additional activities, such as general public lectures.

The SC appointed the Program Committee (PC), whose task is to select the plenary speakers and invited speakers. The PC is chaired, jointly, by Dusa McDuff (Columbia University, US) and Jaime San Martin (CMM, Santiago, Chile). The choice of speakers is based on excellence in research and very good expository skills. Five outstanding mathematicians have been selected as plenary speakers at the MCA2013:

by Susan Friedlander & Marcelo Viana
Start-up of the “Desk for Mathematics in Industry” in Italy

- James Arthur (University of Toronto, Canada)
- Artur Avila (IMPA/Brazil and CNRS/France)
- Manjul Bhargava (Princeton University, US)
- Luis Caffarelli (University of Texas, US)
- Ingrid Daubechies (Duke University, US)

and there will be a public lecture by Persi Diaconis (Stanford, USA). The list of the invited speakers can be found at [www.mca2013.org](http://www.mca2013.org).

The Congress organizers set rules for special sessions: The co-organizers must represent at least two different countries in the region. Preference was given to proposals whose list of suggested speakers represented diversity in various aspects. Among the 42 special sessions, titles that will particularly interest ICIAM members include Advanced Mathematical and Computational Methods for Subsurface Modeling and Visualization, Applied Combinatorics, Applied Topology, Control and Stabilization for Partial Differential Equations, Fluid Mechanics: from Turbulence to Free Boundaries, Graph and Network Analysis in the Geosciences, Mathematical Biology, Mathematics and Modelling in Geophysical Fluid Dynamics, Optimization: Theory, Methods and Applications, PDE and Incompressible Fluid Flow, and Variational Analysis, Control and Optimization.

The SC also established several mathematical awards to acknowledge accomplishments that are of special relevance to the goals of the Congress: The MCA Prizes, The Americas Prize and The Solomon Lefschetz Medal.

The realization of the MCA2013 at CIMAT, Guanajuato is made possible by a grant from the CONACYT, the national research council of Mexico. Other sponsors include the founding societies and such institutes as AIM, CAMS at USC, IMPA and MSRI. The AMS has been providing significant financial support as well as publicity for the MCA2013 through such means as the Notices and the AMS website. The Brazilian Mathematical Society and the Brazilian Society for Applied and Computational Mathematics have committed resources to support the participation of Brazilian mathematicians and students; other societies are expected to give similar support for their communities. The US National Science Foundation has funded travel grants for selected US based participants: for details see [www.ams.org/programs/travel-grants/mca](http://www.ams.org/programs/travel-grants/mca).

We are optimistic that the MCA2013 will be very successful and that such a quadrennial Congress will take place as a regular event in the mathematical calendar.

Susan Friedlander was for many years a professor at the University of Illinois-Chicago. In 2007 she moved to the University of Southern California where she is a professor and the Director of the Center for Applied Mathematical Sciences. She is the Chief Editor of the Bulletin of American Mathematical Society. She is a Fellow of the American Mathematical Society, the Society for Industrial and Applied Mathematics and the American Association for the Advancement of Science. Her research is focused on mathematical fluid dynamics.

Two Items from SEMA

The biannual Sociedad Española de Matemática Aplicada (SEMA) meeting “XXIII meeting Congreso de Ecuaciones Diferenciales y Aplicaciones / XIII Congreso de Matemática Aplicada” will take place at the campus of “Universitat Jaume I” Castellón, Spain, on September 9–13, 2013. More information at the web page [www.fue.uji.es/cedya2013](http://www.fue.uji.es/cedya2013).

The XV Jacques-Louis Lions Spanish-French School on Numerical Simulation in Physics and Engineering took place last September in Torremolinos-Málaga with 81 participants from 11 countries. A special session in memory of Prof. Antonio Valle, who was the first president of the our society, and the awards ceremony formed part of the school activities (see [www.sema.org.es](http://www.sema.org.es)).
Start-up of the “Desk for Mathematics in Industry” in Italy

by Roberto Natalini

The Desk for Mathematics in Industry is a new interface between mathematicians and private companies in Italy. It is located in Rome, at the Istituto per le Applicazioni del Calcolo “Mauro Picone” (IAC) of the Italian National Research Council (CNR). The Desk is funded by the Italian Ministry for Education and Research. It is organized in collaboration with the Italian Society of Applied and Industrial Mathematics (SIMAI) and the Italian Association of Operations Research (AIRO).

A primary task is marketing: the Desk should explain the vast opportunities which modern mathematics offers to industrial applications. It should also foster collaborations of major industries and small and medium enterprises with Italian mathematicians, creating a national network of excellence in industrial mathematics (possibly in an international context). Finally the Desk should foster future recruitment of young mathematicians in Italian industry which, in the long run, will provide a natural network of contacts between advanced academic research in mathematics and industrial research.

Recently (December 2012) the IAC has hired four young scientists which will develop and run a web desk through which industry can apply for consultancies. They will promote industrial research in the field of mathematics, with particular attention to marketing and public relations towards industry. The team will be supervised by Roberto Natalini (Research Director at IAC) and Michiel Bertsch (Director of IAC). An Advisory Board consisting of major experts in applied and industrial mathematics in Italy will assist the team. By the end of January 2013 all further information will be available on the Desk’s web site: sportellomatematico.cnr.it.

Roberto Natalini (roberto.natalini@cnr.it) got his PhD in Mathematics from the University of Bordeaux (France) in 1986. He is research director at Istituto per le Applicazioni del Calcolo “Mauro Picone” of the Italian National Research Council since 1999, after being Associate Professor at University of Rome “La Sapienza” (1998–1999) and researcher in the same institute (1988–1998). His research themes include: fluid dynamics, road traffic, semiconductors, chemical damage of monuments and biomathematics. He is on the Board of the Italian Society of Industrial and Applied Mathematics.

IMA Bulletin

As this is the first ICIAM Newsletter, it seems sensible to give a little background on the Institute of Mathematics and its Applications (IMA), a founder member of ICIAM, before presenting a couple of current news items. Although the IMA, which will celebrate its 50th anniversary in 2014, has a strong core of members from academia around half of the total membership are in industry and the Institute is both a learned and professional society. Some of the learned society activities and much of the interaction with the Government is conducted through the Council for the Mathematical Sciences (CMS) on which body other mathematical organizations such as the London Mathematical Society (LMS), the Royal Statistical Society (RSS), the Edinburgh Mathematical Society (EMS), and the Operations Research Society (ORS) are also represented.

Partly in response to requests from governmental bodies to justify continued funding for mathematics, the IMA has for some time been involved in case studies to reflect the pervasive nature of mathematics and its impact on society. The first phase of “Mathematics Matters” Research Case Studies has been completed and two-page write-ups on twenty cases are available through the IMA web page www.ima.org.uk by clicking on the Mathematics Matters link. These cases include topics as diverse as smart phones, brain scans, formula one racing cars, modelling for epidemic emergencies, coastal erosion, and climate modelling. Eleven of the twelve case studies for phase 2 of the project (supported in part by the UK HE STEM Programme) are already available and include articles on
ICIAM in the News

internet shopping, nuclear fusion, exoplanets, crowd analysis, and diabetes.

The IMA is also involved in the International Project on the Mathematics of Planet Earth (MPE) which has been a topic of discussion at ICIAM Board meetings. The IMA activities for this project can be found through a direct link from the IMA home page and will include talks at branch meetings and a competition for an exhibition of virtual modules. MPE will be the central theme for a special issue of Mathematics Today in February 2013 and for the IMA Mathematics 2013 Conference in March.

At the time of writing this article, the most current news for UK mathematics is the publication of the results of a study undertaken by Deloitte on behalf of EPSRC and the CMS to highlight the impact of mathematical sciences research on the UK economy. The report estimates the contribution of mathematical science research to the UK economy in 2010 to be 2.8 million jobs in employment terms (around 10 per cent of all jobs in the UK) and £208 billion in terms of GVA (around 16 per cent of the total UK GVA). Although this news will not be so current when this ICIAM Newsletter is distributed, the information in this report may still be of interest to readers and can be found via the website: [www.epsrc.ac.uk/ourportfolio/themes/mathematics/publications/Pages/default.aspx](http://www.epsrc.ac.uk/ourportfolio/themes/mathematics/publications/Pages/default.aspx)

Iain S. Duff is an STFC Senior Fellow in the Scientific Computing Department at the STFC Rutherford Appleton Laboratory in Oxfordshire, England. He is also the Scientific Advisor for the Parallel Algorithms Group at CERFACS in Toulouse and is a Visiting Professor of Mathematics at the University of Strathclyde.

He is a life Fellow of the Institute of Mathematics and its Applications, a Fellow of the Royal Society of Edinburgh and a SIAM Fellow.

His current research interests include numerical linear algebra, sparse matrices, parallel computing, scientific computation, and mathematical software.

ICIAM in the News from La Capital, Rosario

_The following is an extract, in translation, of an article published in the newspaper La Capital, Rosario, Argentina, December 18, 2012._

The VII Italian-Latin American Congress of Industrial and Applied Mathematics 2012, began yesterday in Rosario, and will run until Friday. It is organized at the Universidad Austral, marking the first time this event has taken place in Argentina. The meeting brings together over 100 participants, of whom 40 are from abroad. They are researchers, practitioners, and graduate students of mathematics, physics, chemistry, biology and related sciences; economics, finance and engineering and related fields; as well as people interested in applications of mathematics.

The conference is held in conjunction with ASAMACI (Asociación Argentina de Matemática Aplicada Computacional e Industrial); ARSIAM (Argentina Section of the Society for Industrial and Applied Mathematics (USA)) and SIMAI (Società Italiana di Matematica Applicata e Industriale).

Those present at the opening included local authorities and academics: the Undersecretary for Science, Technology and Innovation of Santa Fe, Roberto Aquilano; the chair of the Department of Mathematics of the Universidad Austral, Domingo Tarzia; and the president of ICIAM, the association that gathers all the associations of applied mathematics in the world, Barbara Keyfitz.

—Image used with permission.
Second French Math-Job Forum

The second French Math-Job Forum is to take place in Paris on January 11th. This Forum will bring together mathematics students from universities and engineering schools at various levels (master, doctorate) and a wide range of companies and academic institutions (mainly mathematics departments, engineering schools, etc.).

The objectives of the Forum are to allow companies and private or public research departments to inform about their job opportunities and to identify and get information about the wide range of courses and programs in mathematics proposed by French universities and engineering schools; to facilitate contacts between students, businesses and research organizations; to provide students with a broad overview of the opportunities they have after studying mathematics, especially in the corporate world; to allow businesses and research laboratories to offer internship opportunities and PhD related employment to students present and also to training centres represented in the Forum.

Last year, this event gathered more than 800 people. More than 30 companies and 30 Mathematics departments/research institutions held stands during the whole Forum. The first Forum was such a success that this year it was decided to expand beyond French employers. Hence there will be representatives for European postdoc opportunities, as well as some from SIAM among others.

This event is co-organized by AMIES (the recently created Agency for the relations of Mathematics with companies), the SFdS (French Society for Statistics) and the SMAI (French Society for Applied and Industrial Mathematics).

All information about this event can be found at the address smai.emath.fr/forum-emploi.

Declaration of the Three French Math Societies About Open Access

The three French Math Societies, SFdS, SMAI and SMF, have issued a declaration about Open Access for scientific publications. It can be found at the address: smf.emath.fr/sites/smf.emath.fr/files/open_access_3_soci-trans.pdf.

Maria J. Esteban (esteban@ceremade.dauphine.fr) is research director at CNRS since 1991 and works at University Paris-Dauphine. Her research themes include the study of nonlinear partial differential equations, specially by variational methods; relativistic and nonrelativistic quantum mechanics, with applications to quantum chemistry; fluid-structure interactions, etc. Until recently she was president of SMAI (Société de Mathématiques Appliquées et Industrielles) and currently she is the chair of the Applied Mathematics Committee of the EMS.
ICIAM 2015: Call for Proposals of Thematic and Industrial Minisymposia

by Scientific Program Committee of ICIAM 2015

Dear colleagues:

The Scientific Program Committee (SPC) of ICIAM 2015 is now in the stage of identifying active and important areas in applied, industrial and computational mathematics, and selecting thematic and industrial minisymposia as well as possible candidates of the organizers of the minisymposia.

This is an open call for proposals of thematic and industrial minisymposia (and possible organizers) to be presented at the ICIAM 2015 in Beijing. Please send your proposals to the secretary of the SPC Miss Jie Zhang (jiezhang@math.tsinghua.edu.cn) and carbon copy (cc) to the Chairman of the SPC Prof. Zhi-Ming Ma (mazm@amt.ac.cn) before the end of February 2013.

The SPC will solicit and select thematic and industrial minisymposia from the proposals. The number of selected thematic and industrial minisymposia will depend on the situation (in ICIAM 2011 there were 17 thematic minisymposia and 3 industrial minisymposia).

In the next stage, the Organizing Committee will have a more general open call for proposals of contributed minisymposia. The proposals in this stage which are not in the list of selected ones may be considered as proposals in the next stage.

Call for nominations for ICIAM Prizes for 2015

by ICIAM Prize Committee

The ICIAM Prize Committee for 2015 calls for nominations for the five ICIAM Prizes to be awarded in 2015. Each ICIAM Prize has its own special character, but each one is truly international in character. Nominations are therefore welcomed from every part of the world. A nomination should take into account the specifications for a particular prize (see www.iciam.org/council/PrizeDescriptions.pdf), and should contain the following information:

- Full name and address of person nominated;
- Web home page if any;
- Name of particular ICIAM Prize;
- Proposed citation (concise statement about the outstanding contribution in fewer than 250 words);
- Justification for nomination (cite nominator’s reason for considering candidate to be deserving, including explanations of the scientific and practical influence of the candidate’s work and publications);
- CV of the nominee;
- Name and contact details of the proposer.

The deadline for nominations is 31 October 2013. Nominations should be sent to the President of ICIAM, Barbara Keyfitz, preferably in electronic form. Nominations will be acknowledged.

ICIAM Prize committee:
Committee chair: Barbara Keyfitz; Donatella Marini (chair of Collatz Prize Subcommittee) Felix Otto (chair of Lagrange Prize Subcommittee) Pam Cook (chair of Maxwell Prize Subcommittee) Takashi Kako (chair of Pioneer Prize Subcommittee) Philippe Ciarlet (chair of Su Buchin Prize Subcommittee)

ICIAM, the International Council for Industrial and Applied Mathematics, is the world organization for applied mathematics and computational science. Its members are mathematical sciences societies based in more than 20 countries. For more information, see the Council’s web page at www.iciam.org.

Barbara Lee Keyfitz
President of ICIAM
About ICIAM

The International Council for Industrial and Applied Mathematics (ICIAM) is a worldwide organisation for professional applied mathematics societies. Its members are national and regional societies dedicated to applied and industrial mathematics, and other societies with a significant interest in industrial or applied mathematics.

The Council works
- to promote industrial and applied mathematics globally;
- to promote interactions between member societies;
- to promote the goals of these member societies; and
to coordinate planning for the ICIAM Congresses, held every four years, on industrial and applied mathematics.

ICIAM is governed by a Board comprising representatives of its member societies. Programs run by ICIAM, and the bylaws of the organization, can be found on the ICIAM web page, www.iciam.org.

The Full Members and their representatives

ANZIAM (Australia and New Zealand Industrial and Applied Mathematics): Ian H. Sloan
ASAMACI (Asociación Argentina de Matemática Aplicada Computacional e Industrial): Eduardo Adrián Santillan Marcus
CAIMS-SCMAI (Canadian Applied and Industrial Mathematics Society, Société Canadienne de Mathématiques Appliquées et Industrielles): Ian Frigaard
CSCM (Chinese Society for Computational Mathematics): Zhiming Chen
CSIAM (China Society for Industrial and Applied Mathematics): Li Daqian (Li Ta-tsien) and Ya-xiang Yuan
ECMI (European Consortium for Mathematics in Industry): Michael Günther
ESMTB (European Society for Mathematical and Theoretical Biology): Vincenzo Capasso
IMA (Institute of Mathematics and its Applications): Iain S. Duff and David Abrahams
ISIAM (Indian Society of Industrial and Applied Mathematics): Abul Hasan Siddiqi and Pammy Manchanda
GAMM (Gesellschaft für Angewandte Mathematik und Mechanik): Volker Mehrmann and Stefan Müller
JSIAM (Japan Society for Industrial and Applied Mathematics): Shin’ichi Oishi and Hiroshi Kokubu
KSIAM (Korean Society for Industrial and Applied Mathematics): Chang Ock Lee
MOS (Mathematical Optimization Society (formerly Mathematical Programming Society)): Philippe Toint
NORTIM (Nordiska föreningen för Tillämpad och Industriell Matematik): Helge Holden
ROMAI (Societatea Română de Matematică Aplicată și Industrială): Costica Morosanu
SBMAC (Sociedade Brasileira de Matemática Aplicada e Computacional): Helena J. Nussenzveig Lopes
SEMA (Sociedad Española de Matemática Aplicada): Luis Vega González
SIAM (Society for Industrial and Applied Mathematics): Sven Leyffer and Nick Trefethen
SIMAI (Società Italiana di Matematica Applicata e Industriale): Alessandro Speranza and Nicola Bellomo
SMAI (Société de Mathématiques Appliquées et Industrielles): Maria J. Esteban and Alain Damlamian
SPMAC (Sociedad Peruana de Matemática Aplicada y Computacional): Obidio Rubio Mercedes
VSAM (Vietnamese Society for Applications of Mathematics): Lê Hùng Sön

The Associate Members and their representatives

AMS (American Mathematical Society): Don McClure
AWM (Association for Women in Mathematics): Jill Pipher
ChinaMS (Chinese Mathematical Society): Zhi Ming Ma
CMS-SMC (Canadian Mathematical Society, Société Canadienne de Mathématiques): Elena Braverman
EMS (European Mathematical Society): Franco Brezzi
IMS (Institute of Mathematical Statistics): Hans Rudolf Künsch
IMU (Israel Mathematical Union): Edriss S. Titi
LMS (London Mathematical Society): Stephen Huggett
MSJ (Mathematical Society of Japan): Yoichi Miyaoka
ÖMG (Österreichische Mathematische Gesellschaft): Alexander Ostermann
PTM (Polskie Towarzystwo Matematyczne (Polish Mathematical Society)): Łukasz Stettner
SingMS (Singapore Mathematical Society): Weizhu Bao
SMF (Société Mathématique de France): Bernard Helffer
SMG (Schweizerische Mathematische Gesellschaft - Société Mathématique Suisse - Swiss Mathematical Society): Jean-Paul Berrut

The current officers of ICIAM
President: Barbara Lee Keyfitz, USA
Past-President: Rolf Jeltsch, Switzerland
Secretary: Alistair Fitt, UK
Treasurer: Jose Alberto Cuminato, Brazil
Members-at-Large: Mario Primicerio, Italy and Taketomo (Tom) Mitsui, Japan
The International Congress of Industrial and Applied Mathematics (ICIAM) is the premier international congress in the field of applied mathematics held every four years under the auspices of the International Council for Industrial and Applied Mathematics. From August 10 to 14, 2015, mathematicians from around the world will gather in Beijing, China for the 8th ICIAM to be held at China National Convention Center inside the Beijing Olympic Green.