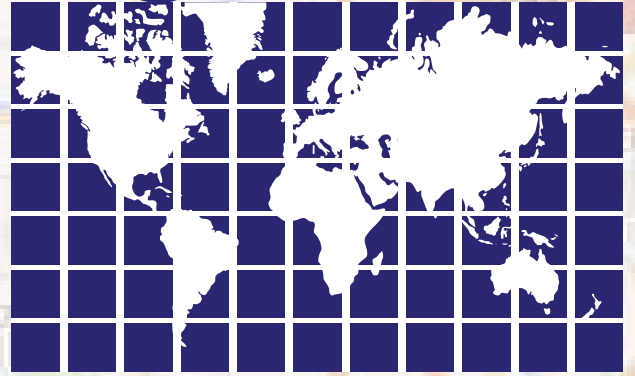


ICIAM



The ICIAM Dianoia Vol. 3, No. 3, July 2015

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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 and letters from members and associations, announcing events, on-site reports from events and industry news. www.iciam.org
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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.

EDITORIAL: Mathematics and Money, PR and Professionalism

by BARBARA LEE KEYFITZ

Training as a research mathematician does not equip us with the best tools for promoting our discipline. Perhaps our students and colleagues who work in industry do better at mastering those “soft skills” that include presenting your results to an audience of non-experts, and explaining the significance of your work without resorting to exaggeration. But many of us have been protected by the shield of an academy that evaluates us according to the quality of our research publications in esteemed scientific journals, and pays little attention to anything else.

And yet the very business of ICIAM moves those who conduct it well outside that shield. ICIAM came into existence to run an enormous Congress, which is about to take place, after an incredible amount of work by a large number of talented research mathematicians who will have needed to develop and use a set of skills quite distinct from, and often orthogonal to, those that formed their research training. If you look at the “Aims of the Council” on our web page, you find three additional aims, beyond planning the ICIAM Congresses, and they all start with the words “to promote ...”. Promotion, whether of applied and industrial mathematics globally, or of the goals of our member societies or of interactions between members, belongs to a facet of our toolkit that was not part of our graduate training. To be effective, ICIAM members must engage with it.

In short, the Council cannot be disentangled from the world of PR — Public Relations. The elements that make up that world include advertising, money, and dealing with people whose world is centered on advertising and money.

Some events leading up to the Congress have caused me to ponder this. We might begin with a question that people often ask about ICIAM’s main product — the Congress: Why do meetings cost so much? About money we are, collectively, perhaps not quite as naive as about PR, but I am a woman born in the first half of the twen-

tieth century, who grew to adulthood at a time when middle-class women in the developed world were not expected to supply their own financial resources, so to me financial naivety is natural. But, as anyone who has organized a meeting knows, space costs money, moving chairs into rooms costs money, monitoring AV equipment, reserving room blocks at hotels, collecting abstracts and registering participants, all costs money. Learning this (and, to be fair, also learning when one is being overcharged) is part of the education that complements the research training that is our credential for entering the profession.

A research conference serves two functions. We attend conferences to talk about our research results, and learn of other people’s results. We hope that other people will learn from our successes — and failures — and we hope that we may attract students, or potential employees, to our company or to our department. As a second function, the conference itself serves to describe our field to outsiders. It exhibits our stars and our rising stars and showcases recent results. It lets the world know that “Applied and Industrial Mathematics” exists. The Congress brands our product. We all know this is necessary. There are parts of the world where mathematics as a whole is underrated, and parts of the world where applied mathematics is felt to be intellectually inferior to “pure” mathematics. And probably there are sad places where both those misperceptions are held at the same time — we may be deemed a second-rate subset of a useless subject. The organizers of ICIAM 2015, like the organizers of previous Congresses, have worked hard to counter these falsehoods, and in doing so they have, undoubtedly, received an education in PR. The rest of us may benefit from it as well.

This brings me to the topic of “ICIAM TV”. Those who attended ICIAM 2011 will remember that the Vancouver Convention Center had a closed-circuit TV set-up which broadcasted a continuous loop of interviews with

ICIAM officers and selected invited speakers, interspersed with short videos featuring individual mathematics departments and programs. The ICIAM 2011 organizers contracted with a media company, WebsEdge, and since every modern convention center has such a TV set-up, there will be a similar program at ICIAM 2015, organized by the same company. Is this sort of exhibit effective enough to justify the cost? Here is one case for it. Like the Congress itself, it gives the attendees information about the fields represented, about people in those fields, and about departments and programs that might be of interest to us. It expands the networking aspects of a congress like ours. Does it add value to the other function of the Congress? Its reach to groups outside the circle of attendees is limited. Most of those who view ICIAM TV are already convinced of the value of applied and industrial mathematics. At best, it might give us a few more examples to use in arguments — and this ammunition is worth having, but a vaguely recollected impression from a video is of limited use. (It is possible that there will be a permanent display on the ICIAM 2015 website, as there is on the ICIAM 2011 website, which will increase the reach of this publicity tool.)

The ICIAM 2011 video comprised two types of presentation. Not only were there interviews with a selected set of speakers and ICIAM officers, there were also pre-recorded five-minute tapes showcasing a number of applied mathematics departments and programs, as well as industrial labs. To obtain these tapes, WebsEdge contacted individuals in a number of such departments to offer, for a fee, to prepare videos for them. And while I do not know the details of their business model, I would guess that this is how they paid their costs, since they did not charge the Congress organizers. Their offer to a department was to produce a professional quality portrait of the enterprise, which they would use for ICIAM TV and which, afterward, would be the property of the department. Their price was well beyond what any individual department might have in their budget for publicity, but possibly in line with what a university might be willing to pay for such a product, if the university did not have the ability to make it in-house. Indeed, a number of entities seized the bait. But in the course of, essentially, cold-calling every department that sent delegates to the Congress, WebsEdge also managed to offend a good number of the people they contacted, who expressed some

dismay — in part because it appeared that the Congress organizers were trying to get rather large fees from mathematics departments (though it should be clear that the Congress organizers were not behind this), in part because it appeared to inject a certain level of commercialism into our scientific conference, and in part because this sort of offer was just not something our community is used to dealing with.

At first exposure, this reaction seems entirely logical. This is not part of the culture for most of us. Most departments don't have a graduate student's annual salary to drop on a five-minute video. And by and large we do not have the experience to inquire whether it might be in our university's interest to make this investment. Recruitment? Potential donors? Nonetheless, this information is not difficult to obtain, and whether we are aware of it or not, our employers are expending considerable resources on productions like this.

Thus, one might see the deal offered by ICIAM TV and similar initiatives as an opportunity, in many ways similar to the opportunity provided by an ICIAM Congress, or by ICIAM prizes, to showcase our research and education opportunities, and to explain the impact of applied and industrial mathematics. But I also see why people might be offended by the way this offer was thrust under their noses by an organization that did not appear to be aware of academic sensibilities. Both sides can learn from this. Advertisers who wish to engage us need to become more knowledgeable about the driving forces in our culture. And we would very likely benefit from a better understanding of how to introduce our community to the larger world.

Barbara Lee Keyfitz 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.





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Abel Prize 2016 Call for Nominations

From the 2016 Abel Prize website

The Norwegian Academy of Science and Letters hereby calls for nominations for the Abel Prize 2016, and invite you (or your society or institution) to nominate candidate(s). Your nomination should be accompanied by a description of the work and impact of the nominee/nominees, together with names of distinguished specialists in the field of the nominee/nominees who can be contacted for an independent opinion.

Nominations: The right to nominate is open to anyone. Nominations are confidential and a nomination should not be made known to the nominee. Self-nominations will not be accepted. The prize can be awarded to a single person or shared for closely related fundamental contributions. Deceased persons cannot be nominated. If an Abel Laureate passes away before receiving the prize, then the prize will be awarded post mortem.

The nomination letter should contain a CV and a description of the candidate's works, together with names of specialists who may be contacted. The letter of nomination should be mailed to:

The Norwegian Academy of Science and Letters
Drammensveien 78
NO-0271 Oslo
Norway

The nomination letter should be postmarked no later than September 15th to be considered for nomination for the Abel Prize the following year.



ABEL
PRISEN

It is also possible to nominate candidates for the Abel Prize using the online nomination form at forum.abelprisen.no/en/_nom.

Report from CAIMS*SCMAI

by RAYMOND SPITERI

The Canadian Applied and Industrial Mathematics Society (CAIMS) * Société Canadienne de Mathématiques Appliquées et Industrielles (SCMAI) is Canada's national organization dedicated to the promotion of applied mathematics and computational science for solving real-world problems. Since its inception in 1979, CAIMS has worked towards increasing public awareness and support for applied and industrial mathematics both nationally and internationally through education and scholarship. More information about CAIMS can be found at www.aims.ca.

The CAIMS Annual Meeting this year was held in conjunction with the The Applied Mathematics, Modelling, and Computational Science (AMMCS) conference series and the 23rd Conference of the CFD Society of Canada from June 7–12, 2015 at Wilfrid Laurier University in Waterloo, Ontario. I would like to extend a special thank you to the local organizing committee at Wilfrid Laurier led

by Roderick Melnik, Roman Makarov, Zilin Wang, and Herb Kunze. The themes of the meeting were Applied Analysis and Dynamical Systems, Industrial Mathematics, Mathematical Biology, and the second instantiation of the Canadian Symposium in Numerical Analysis and Scientific Computing. I was personally impressed with the quality and diversity of the scientific program and plenary speakers of the conference.

One of the highlights of the meeting is the awarding of the Society's prizes recognizing various contributions of Canadian applied and industrial mathematics. The awards are usually made at the conference banquet, which this year featured a performance from a teenage string quartet from Chile and a celebration of our national pastime (ice hockey) complete with a foot-stomping tune from the incoming President and fisticuffs from the outgoing and past Presidents.

In 2015, CAIMS awarded four prizes.

The Cecil Graham Doctoral Dissertation Award recognizes the most outstanding PhD thesis in Applied Mathematics defended at a Canadian University during the calendar year prior to the year of the award. We receive a good number of nominations every year for this award, and the quality of the nominees is extremely high. The 2014 Cecil Graham Doctoral Dissertation Award was awarded to Dr. Diego Ayala of the University of Michigan. His thesis was entitled “Extreme vortex states and singularity formation in incompressible flows” and was completed under the supervision of Professor Bartosz Protas in the Department of Mathematics and Statistics at McMaster University. The dissertation describes some truly novel work that uses optimal control theory and scientific computation to study extreme and singular behavior in the Navier-Stokes equations.

The CAIMS-PIMS Early Career Award is given to a researcher less than ten years past the date of PhD at the time of nomination. The prize recognizes exceptional research in any branch of applied mathematics, interpreted broadly. The nominee’s research should have been conducted primarily in Canada or in affiliation with a Canadian university. The 2015 CAIMS-PIMS Early Career Award in Applied Mathematics was awarded to Prof. Jane Heffernan of York University, where she is an Associate Professor, the Director of the Centre for Disease Modelling, and a Tier II York University Research Chair. Prof. Heffernan was cited for the novelty, depth, and breadth of her research at the interface of immunology and epidemiology and the rare ability to clearly connect mathematics to applicable treatment strategies and public policy.

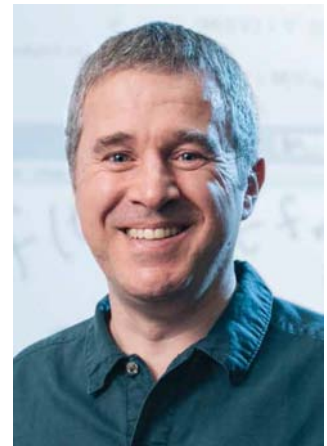
The CAIMS-Fields Industrial Mathematics Prize is awarded to a researcher in recognition of exceptional research in any branch of industrial mathematics, interpreted broadly, and conducted primarily in Canada. The 2015 CAIMS-Fields Industrial Mathematics Prize was awarded to Prof. C. Sean Bohun of the Ontario University Institute of Technology. Prof. Bohun has been cited for his invaluable contributions to the Canadian industrial mathematics community and important insights into

problems ranging from mineral processing to tissue engineering, leading to theoretical developments in thermoelasticity and free boundary problems.

The CAIMS*SCMAI Research award is the society’s preeminent research award, established to recognize innovative and exceptional research contributions in an emerging area of applied or industrial mathematics. The 2015 award was awarded to Prof. Thomas Hillen from the Department of Mathematical and Statistical Sciences of the University of Alberta. Prof. Hillen has been cited for his outstanding contributions in areas of applied mathematics ranging from the mathematical modelling of cell movement and cancer to the qualitative analysis of partial differential equations and chemotaxis.

The 2016 Meeting will be held in conjunction with the Canadian Symposium on Fluid Dynamics from June 26–30 at the University of Alberta in Edmonton, the City of Champions. The scientific themes are Applied Analysis and Dynamical Systems, Mathematical Biology, Financial Mathematics, Scientific and High-Performance Computing, and the Mathematics of the Oil Industry. The local organizers are Peter Mineev, Thomas Hillen, Rouslan Krechetnikov, and Morris Flynn. I look forward to a successful meeting and continued enthusiastic support for applied and industrial mathematics in Canada.

Raymond Spiteri is a professor in the Department of Computer Science at the University of Saskatchewan. He lives the dream of numerically solving differential equations for a living. His specialty is designing efficient methods for the time integration of ordinary and partial differential equations.



Announcement of MCA-2017

Following the very successful inaugural Mathematical Congress of the Americas, MCA-2013 in Guanajuato, the second such Congress, MCA-2017, will take place in Montréal, Canada on July 23–28, 2017. The confirmed plenary speakers at MCA-2017 are

- Shafira Goldwasser (MIT, USA)
- Manuel del Pino (Universidad de Chile)
- Andrew Granville (Université de Montréal, Canada)

- Peter Ozsvath (Princeton University, USA)
- Yuval Peres (Microsoft Research, USA)

The Congress is organized under the auspices of the Mathematical Council of the Americas. For more information: www.mcofamericas.org.

We look forward to seeing mathematicians from throughout the world in Montréal in July, 2017.



INTERNATIONAL CONFERENCE

On

The Occasion of Silver Jubilee of the Indian Society of Industrial and Applied Mathematics (ISIAM)

at

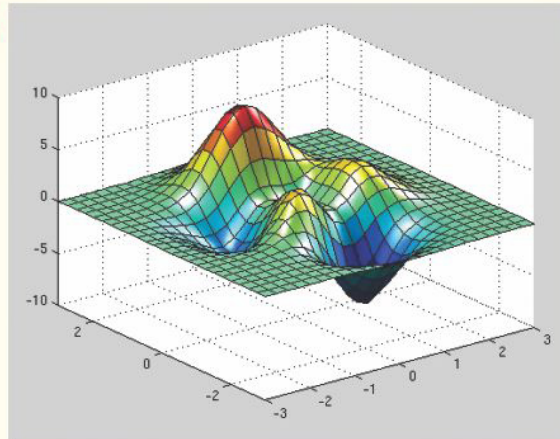
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(Chairman Silver Jubilee Programme Committee of ISIAM)
- Prof. P. Manchanda**
(Joint Coordinator Jubilee Programme Committee)
- Prof. H. P. Dikshit**
(Ex. President ISIAM)
- Prof. A. H. Siddiqi**
(Coordinator Jubilee Programme Committee)
- Prof. N. K. Gupta**
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- Prof. G. D. V. Gowda**
(Dean TIFR CAM Bengaluru)
- Prof. B. Bhattacharya**
(Dean SBSR, Sharda University)

TENTATIVE LIST OF INVITED SPEAKERS INCLUDE

- Prof. Barbara Keyfitz**
President ICIAM
- Prof. Maria J. Esteban**
President elect ICIAM, France
- Prof. A. Fitt**
Secretary ICIAM, UK
- Prof. E. Candes**
Stanford Univ. USA
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A Research School in Morocco

by MOHAMMED RHOUDAF

**Nonlinear EPDs and Applications:
Theoretical and Numerical Studies Faculty of Sciences and Techniques,
Tangier, Morocco, May 5-17, 2014**



المملكة المغربية
جامعة عبد الملك السعدي
كلية العلوم والتقنيات
طنجة

This CIMPA research school and workshop was organized by the Faculty of Sciences and Techniques (FSTT) at Abdelmalek Essaâdi University, represented by the Laboratory of Mathematics and Applications, in collaboration with the International Center for Pure and Applied Mathematics (CIMPA) and the University of Picardie, Amiens. It took place during the period of 5-17 May, 2014. The responsibilities, on behalf of the Moroccan and French Universities, were undertaken by Prof. Mohammed Rhoudaf and Prof. Mohamed Guedda respectively. The organizers were Mohamed Rhoudaf, Mohamed Guedda, and Arhrib Abdesslam.

The organization of the event consisted of two parts. The first was the workshop on nonlinear Partial Differential Equations (PDE/EDP) starting from the fifth and lasting until the seventh of May, 2014 and the second was the CIMPA research school held between May 8 and May 17, 2014. Both events were held at a hotel in the city center, where the majority of the participants were housed.



—Image used with permission.

The two events, the CIMPA research school and workshop, enabled participants to present their research, meet specialists from diverse backgrounds, to become acquainted with open problems in several areas of applied mathematics and to discover the possibilities of their applications to problems of development. It has also created

an enthusiastic environment among students and has introduced them to the possibilities of research. Exchanges with leading researchers has been very beneficial to the participants and especially to the young students from several universities. More than 130 participants, with 80 papers including 16 plenary lectures, two parallel sessions on a numerical analysis of PDEs and others on the theory of PDEs, were brought to the workshop. Alongside the workshop, eminent experts were invited to discuss their research on the topics covered by the school, which ranged from theoretical PDE to their applications. In spite of the limitation of our sponsoring resources, the school received 90 participants from different countries, with 40 female participants. More than 90 per cent of the participants were PhD and Masters students.



—Image used with permission.

Without exception all the participants agreed on the high quality of the presented courses and how well the workshop and school were organized. They also attested that the scientific objective of the event was met. The following list of courses represents the wide range of the topics covered at the research school.

List of Courses:

- Gabriella Bogнар, University of Miskole, Hungary: Analysis of the boundary flow in non-Newtonian fluids.
- Linda El Alaoui, University of Paris 13, France: Eléments Finis Non-conformes.
- Robert Eymard, University of Marne-la-Vallée, France: Finite volume method.
- Zoubida Mghazeli, University Ibn Tofail, Morocco:

Estimations à posteriori d'erreur et applications à l'adaptation de maillage.

- Otared Kavian, University of Versailles, France: Introduction aux problèmes inverses et de détermination de paramètres.
- Alesio Porretta, University of Roma, Italy: Nonlinear elliptic and parabolic equations with first order terms.
- Mohamed Seaid, School of Engineering, Durham University, UK: Relaxation and Kinetic Methods for Nonlinear Hyperbolic PDEs.

At the closing of the school, the Vice Dean of Research of the Faculty of Sciences and Techniques of Tangier distributed training diplomas to the participants as students of Abedmalek Essaâdi University.

Acknowledgments: The local organizing committee would like to thank Professor Alain Damlamian and

Ahmed Sufi from CIMPA and all those who directly or indirectly contributed to the success of these events. Acknowledgment is given to Professor Mohamed Addou, Dean of FSTT, for material support and encouragement throughout the organization and Professor Abderrahmane Sbihi, Director of ENSAT (Ecole Nationale des Sciences Appliquées de Tanger) for material support.

Mohamed Rhoudaf is Professor of Mathematics at the University Molay Ismail in Meknes, Morocco. His research area is PDE and applications, particularly obstacle problems.



Call for Nominations for The Felix Klein Prize

The call of nominations for the Felix Klein Prize of the European Mathematical Society (EMS) is open.

Principal Guidelines

It will be awarded to "to a young scientist or a small group of young scientists (normally under the age of 38) for using sophisticated methods to give an outstanding solution, which meets with the complete satisfaction of industry, to a concrete and difficult industrial problem".

Deadline for Submission

Nominations for the Prize should be addressed to the chairman of the Prize Committee, Professor Mario Primicerio (University of Florence). The nomination letter must reach

the EMS office at the following address, no later than December 31, 2015:

EMS Secretariat
Ms. Elvira Hyvönen
Department of Mathematics & Statistics
P.O.Box 68 (Gustaf Hällströmink. 2b) 00014
University of Helsinki
Finland

The Prize will be presented at the 7th European Congress of Mathematics (Berlin 2016). For more information please see the website www.euro-math-soc.eu/felix-klein-prize

CIMPA, an opportunity for funding and fostering Mathematics and its applications in developing countries

by MARIA J. ESTEBAN

CIMPA is an important non-profit organization whose main goal is to promote education and research in mathematics in developing countries. Its main task is to help organizing mathematical schools in these countries, but it also helps organizing training programmes, like the

Mathematics Master in Cambodia, for instance. CIMPA was created in 1978 as a French organization, with funds from the French Ministry of Higher Education and Research, the University of Nice and the CNRS. From the very beginning, UNESCO has recognized it as a UNESCO

category 2 centre, and even if UNESCO does not fund CIMPA, the UNESCO recognition plays a very important role in the co-funding of events by third parties and facilitates CIMPA's visibility, activities and programmes.

In recent years, CIMPA has become an international organization, with Norway, Spain and Switzerland having joined and began funding it, and there are plans for other European countries to join. Moreover, CIMPA, together with other French mathematical institutions, became part of the Center of excellence, which allowed CIMPA to have access to other means of funding.

Every year CIMPA issues a call for proposals to organize research schools lasting two weeks each in developing countries across all continents. Each research school has an average of 40 participants. Proposals are submitted to CIMPA then assessed by the Scientific Council approximately two years in advance; The Steering Council then selects successful proposals. CIMPA has become renowned in France and worldwide for its research schools and their outcomes. The organizers of the schools do not need to be from the country where the school will take place, but it is generally advisable that some mathematicians from that country are part of the team of organizers. Indeed, when organizing scientific events it is always important to do it in collaboration with the local mathematicians who are aware of the needs and the situation of the possible participants and who will be able to continue working with them after the school is finished. The participants of the schools are not only from the country where the school takes place; in general these schools attract participants, especially young mathematicians and students, from the whole region. And this capacity to attract participants from a number of surrounding countries is an important asset for the acceptance and funding of such a school.

CIMPA does not completely fund its schools, local funding is also used, but its participation in the funding and in the organization of the schools plays a crucial role, acting as an important catalyst. The CIMPA schools have become important events in the mathematical life of countries where they have been hosted. ICIAM, through its scheme to support activities in developing countries, has funded several schools so far, by providing support for individual fellowships to attend such schools.

Other activities include support for theme networks, activities in partnership with other bodies with similar objectives such as the International Centre for Theoretical Physics (ICTP), projects in cooperation with international learned societies such as the International Mathematical Union (IMU), the International Council for Industrial and Applied Mathematics (ICIAM), the European Mathematical Society (EMS), the South-East Asia Mathematical Society (SEAMS), the African Mathematical Union (AMU) and the Unión Matemática de América Latina y el Caribe (UMALCA).

In close cooperation with these last three continen-

tal mathematical unions, CIMPA is developing ambitious programs to support advanced mathematics schools in development, lasting from between 15 and 30 days each. They are Masters level schools and tend to consolidate training in areas where mathematics is starting to become established. They have been running for ten years in Latin America (EMALCAs) with remarkable results and for over two years in Africa (EMAs) and South-East Asia (SEAMS schools).

The main organizations that support CIMPA and have representation on the Board, as well as seven mathematicians including three from developing countries (Argentina, Philippines and Senegal). They are elected for a four year term which can be renewed once.

The activities of CIMPA are not restricted to providing support for the administrative or financial management of projects or programmes. Despite its limited financial resources, CIMPA finds it essential to participate in and contribute to emerging scientific activity and the consolidation of structures for mathematics research in developing countries. CIMPA is an association of mathematicians who work to promote mathematical research.

When looking at the CIMPA schools in the past, it clearly appears that the balance between applied and not applied schools has not been met. CIMPA has been trying to increase the number of schools dealing with applied subjects, but for the moment, this balance has not been met due to lack of strong applications in the applied areas. ICIAM, as a member of CIMPA, helps to publicize the CIMPA schools' scheme and facilitate the emergence of new projects concerning teaching and training, having in mind the applications of mathematics. The societies which are members of ICIAM could also publicize the significant opportunity that CIMPA represents for the dissemination of mathematics in general, and of applied mathematics in particular, in the large parts of the world where mathematics is not very developed yet.

More information about CIMPA and its main activities can be found at www.cimpa-icpam.org

Maria J. Esteban is a research director at CNRS and works at the University Paris-Dauphine. Her research themes include the study of nonlinear partial differential equations, especially by variational methods; relativistic and nonrelativistic quantum mechanics, with applications to quantum chemistry; fluid-structure interactions, etc. Until recently she was the President of SMAI (Société de Mathématiques Appliquées et Industrielles)

and currently is the Chair of the Applied Mathematics Committee of the EMS.



Call for Nominations for ICIAM Officers: Secretary, Treasurer, Officers-at-Large

The ICIAM Board Meeting in Beijing (August, 2015) will include elections to fill all the ICIAM officer positions except President/President-Elect (which was filled in 2013): The ICIAM By-Laws state that elections for Secretary, Treasurer and Officers-at-Large take place on years congruent to 3 mod 4. The terms, which are four years in duration, begin on October 1 of the election year.

The current President is Barbara Keyfitz (USA), and the President-Elect is Maria J. Esteban (France), whose term as President will begin October 1, 2015. The other officers are as follows.

- Alistair Fitt (UK), Secretary, will have served two terms in 2015.
NOT eligible for renewal
- Jose A. Cuminato (Brazil), Treasurer, will have served one term in 2015.
ELIGIBLE for renewal
- Taketomo (Tom) Mitsui (Japan), Officer-at-Large, will have served one term in 2015.
ELIGIBLE for renewal
- Mario Primicerio (Italy), Officer-at-Large, will have served two terms in 2015.
NOT eligible for renewal

The duties of these positions are described in the By-Laws as follows.

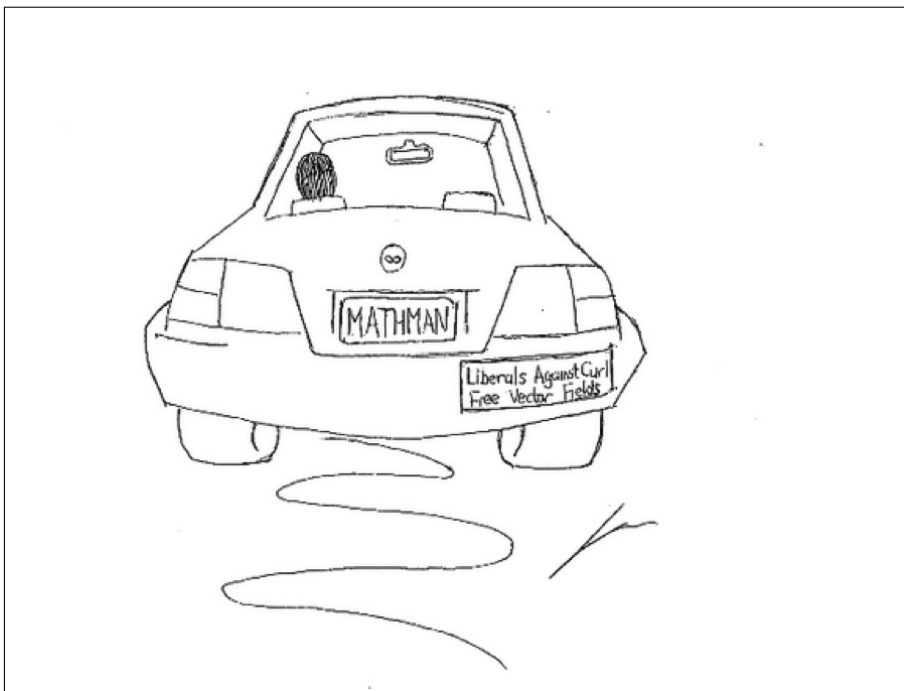
The **Secretary** maintains the records of the organization in cooperation with the President and in accordance with the decisions made by the Board.

The **Treasurer** is responsible for the funds of the organization and annually presents a report on these funds to the Board.

Officers-at-Large do not have specific duties assigned by the By-Laws. At present Mario Primicerio chairs the membership committee and Tom Mitsui chairs the ICSU committee.

Nominations for all of these positions are solicited, and may be sent to any of the current officers, any time before the 2015 Board Meeting, but preferably before July 10, 2015, so that information may be circulated to the Board in advance. ICIAM officers serve without remuneration; however, reasonable officer expenses in carrying out their duties are reimbursed from ICIAM funds.

Anyone with an interest in becoming or nominating an ICIAM officer is invited to discuss the positions with any of the current officers.



Our cartoonist is Jim Talamo, who recently graduated from The Ohio State University with a PhD in mathematics. His research focus is in relativistic hydrodynamics.



The ICIAM Officers Meeting: May 2015

by BARBARA KEYFITZ

The task of the ICIAM officers is to carry out the business of ICIAM, both the day-to-day business of collecting dues, keeping track of changes in representatives, fielding queries about membership from potential members, and the special business of the Council, which includes preparing material so that the Board can determine the site of the next meeting, and setting up the committees that select the winners of ICIAM prizes. Once a year, at the Board meeting, the officers present reports on their activities, but in this issue of DIANOIA I would like to give a more informal view of how we carry out our duties.

During the year, we communicate with each other frequently by e-mail. For the past two years, we've adopted a schedule of a telephone meeting, usually in the late fall or early in the winter, and a face-to-face meeting, which takes place a couple of months before the annual Board meeting. The face-to-face meeting allows us to plan the agenda for the Board meeting.

During the time I've been involved with the administration of ICIAM — since the fall of 2003 — the schedule of our meetings has varied considerably. For a while, the idea was to have a face-to-face meeting in the fall, about half-way between successive Board meetings, and another short meeting just before the Board meeting to prepare the agenda. One year, because we were all very busy and because we were worried about the expense of a face-to-face meeting, we dispensed with a physical gathering altogether and substituted a phone meeting. It was at that point that several of us realized that part of the enjoyment of serving as an officer of ICIAM is precisely the collegiality of getting together, often with family members, to enjoy each other's company as well as getting our business done.



ICIAM officers at the John Henry Brookes Building.

—Image used with permission.

Now that my term as president is almost completed, I want to say that it has been a privilege and very enjoyable to be an officer of ICIAM. It also seems as though the members of ICIAM, who support our meetings with their dues, might be interested in knowing about these meetings.



Punting on the River Cherwell near Magdalen College.

—Image used with permission.

This year's meeting was quite distinctive, because it took place in Oxford, hosted by our Secretary, Alistair Fitt, who has just been appointed Vice-Chancellor of Oxford Brookes University, where he had previously been serving as VP Research. (For those not familiar with the British university system, the 'Vice-Chancellor' would be 'President' in a US university.) So this was an opportunity for Alistair to introduce us to Oxford Brookes, a very attractive campus about a twenty-minute walk from the center of Oxford. Our meeting stretched over two days, and we spent the first afternoon at the Mathematics Institute of the other university in Oxford. The Mathematics Institute is a stunning new building named for Andrew Wiles. For our accommodations, Alistair had arranged the Eastgate Hotel. Like almost everything else in Oxford, the hotel occupied an ornate, classical building (fortunately updated with modern comforts). For meals, we checked out "Bill's", a local establishment located — where else? — in a historic building, formerly a church; and, on the second evening, an Indian restaurant favored by the locals. Both of them had excellent food and drink.

As for the technical content of the meeting, members will learn much of it at the Board meeting in August. We talked about ICSU, and ICIAM finances (which are in good shape), about the newsletter, about issues with

ICIAM 2015 (short item — there does not seem to be any problems), about how to manage the license fee, and what to recommend for dues for 2016 (based on recent exchange rates which put the US dollar higher than it has been, we will recommend no increase). We are planning to write “handbooks” for the officers. Since three officers (Alistair Fitt, Mario Primicerio and myself) will end their terms in a few months, this seems like a good time to make a list of what our duties are. Finally, it is pleasant to report that we are carrying out the mandate of the Board to update the ICIAM Council website. We have contracted with a company that will do the work at a reasonable price, and we consulted about some of the options.

Tom Mitsui also experimented with the time-delay feature of his camera, and we were able to produce a photo of all six of us, taken in the John Henry Brookes Building at Oxford Brookes University. The glittering blue shapes in the background are part of a mobile that hangs from the roof over the central atrium. After the business of the meeting was concluded, Tom, Poti and I experimented with punting on the River Cherwell near Magdalen College. (My disbelieving expression was completely unwar-

ranted — Poti learned to punt on a previous visit to Oxford, and did much better than most of the undergraduates we passed on the stream.)

Altogether, our visit was an occasion that was both productive and enjoyable. We are grateful to our hosts at both universities for providing excellent facilities for our meeting, and for helping us with travel and lodging arrangements.

Barbara Lee Keyfitz 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.



Recent News from the International Council for Science

Excerpts from the June 2015 edition of the ICSU newsletter, with highlights from ICSU’s current activities.

A key event on the road to the Paris climate change negotiations in December is the climate science conference (1) “Our Common Future Under Climate Change” which was held from July 7–10 — over 1800 scientists were expected to attend and discuss the latest state of climate science. ICSU held a side event on 6 July on Science and the Road to Transformation: Opportunities in the post-2015 Global Climate Regime (2). ICSU’s World Data System (WDS) and Future Earth also co-convened a session on “Quality and Availability of Data for Global Sustainability” at the conference, and a WDS side event on Trusted Data Services to Support Climate Change Research was held on the 8th of July.

Negotiations on the Sustainable Development Goals continued in New York and ICSU pushed for a strong role for science on several occasions. During the UN Interactive Dialogue with Major Groups, our statement highlighted the important role of science in setting up an effective review process for the implementation of the SDG’s framework. At informal interactive hearings on the

post-2015 development agenda, we called for an enhanced global partnership between policy-makers, scientists and other sectors of civil society.

At the recent 4th World Conference on Research Integrity, attended by approximately 500 participants from more than 50 countries on five continents, the ICSU Committee on Freedom and Responsibility in the conduct of Science (CFRS) organized a symposium on “Science assessment and research integrity” (3). At its meeting in April, the ICSU Executive Board also approved the new membership of the Committee on Freedom and Responsibility, which will take office on 1 October. The committee will continue to be chaired by Leiv K. Sydnes of the University of Bergen, Norway.

Finally, we were in Italy from May 24-30 for the 3rd ICSU/ISSC/DFG Young Scientists Networking Conference, on the topic of “Future Sustainability-the Role of Science in the SDGs”. There are photos from the event available on our Flickr stream (4).

About ICIAM

The International Council for Industrial and Applied Mathematics (ICIAM) is a worldwide organization 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 By-Laws of the organization, can be found on the ICIAM web page, www.iciam.org.

The Full Members and their representatives (when known)

- ANZIAM** (Australia and New Zealand Industrial and Applied Mathematics): Ian H. Sloan
- ASAMACI** (Asociación Argentina de Matemática Aplicada Computacional e Industrial): Rubén Daniel Spies
- CAIMS-SCMAI** (Canadian Applied and Industrial Mathematics Society, Société Canadienne de Mathématiques Appliquées et Industrielles): Raymond Spiteri
- CSCM** (Chinese Society for Computational Mathematics): Xuejun Xu
- CSIAM** (China Society for Industrial and Applied Mathematics): Pingwen Zhang and Guiying Yan
- ECMI** (European Consortium for Mathematics in Industry): Michael Günther
- ESMTB** (European Society for Mathematical and Theoretical Biology): Roeland Merks
- GAMM** (Gesellschaft für Angewandte Mathematik und Mechanik): Peter Benner and Sergio Conti
- 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
- 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)): William (Bill) Cook
- 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): Tomás Chacón Rebollo
- SIAM** (Society for Industrial and Applied Mathematics): Pam Cook and Cynthia Phillips
- SIMAI** (Società Italiana di Matematica Applicata e Industriale): Alessandro Speranza and Giovanni Russo
- SMAI** (Société de Mathématiques Appliquées et Industrielles): Grégoire Allaire and Alain Damlamian
- SPMAC** (Sociedad Peruana de Matemática Aplicada y Computacional): Obidio Rubio Mercedes
- VSAM** (Vietnamese Society for Applications of Mathematics): Lê Hùng Són

The Associate Members and their representatives

- AIRO** (Associazione Italiana di Ricerca Operativa):
- AMS** (American Mathematical Society): Don McClure
- AWM** (Association for Women in Mathematics): Jill Pipher
- ChinaMS** (Chinese Mathematical Society): Xiaoshan Gao
- CMS-SMC** (Canadian Mathematical Society, Société Canadienne de Mathématiques): Elena Braverman
- DMV** (Deutsche Mathematiker-Vereinigung): Günther Leugering
- EMS** (European Mathematical Society): Franco Brezzi
- IMS** (Institute of Mathematical Statistics):
- 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
- RSME** (Real Sociedad Matemática Española): Antonio Campillo López
- SingMS** (Singapore Mathematical Society): Weizhu Bao
- SMF** (Société Mathématique de France): Bernard Helffer
- SMG-SMS** (Schweizerische Mathematische Gesellschaft - Société Mathématique Suisse - Swiss Mathematical Society): Jean-Paul Berrut
- SMM** (Sociedad Matemática Mexicana): Mayra Nuñez-Lopez
- SPM** (Sociedade Portuguesa de Matemática):
- UMI** (Unione Matematica Italiana): Pierangelo Marcati

The current officers of ICIAM

- President:** Barbara Lee Keyfitz, USA
- President-Elect:** Maria J. Esteban, France
- Secretary:** Alistair Fitt, UK
- Treasurer:** Jose Alberto Cuminato, Brazil
- Members-at-Large:** Mario Primicerio, Italy and Taketomo (Tom) Mitsui, Japan