



Mar del Plata (Argentina) CIMPA research school 2016



Claude Cibils

Dans cette lettre, nous utilisons les langues de travail de l'UNESCO, l'anglais et le français. Nous avons fait ce choix car nous n'avons simplement pas les moyens d'assurer plusieurs versions.

In this newsletter, we use UNESCO working languages, English and French. We made this choice because we simply cannot afford to provide multiple versions.

Foreword

CIMPA and its management

CIMPA is an unusual organisation, one very different from a research centre. We are catalysts and facilitators; we help to structure mathematics research in developing countries. We are much more than a funding body; this is our strength, and our backers know it. This is why in addition to France, Spain, Switzerland, and Norway have successively

become financial supporters of CIMPA during my tenure. CIMPA is actively expanding because we have remained independent, kept control of our actions, and ensured transparency in our operations.

At the heart of our mission are the young mathematicians who take part in our activities. They must do so under the right conditions. They gain entry to a whole world of mathematics thanks to CIMPA, and this sometimes marks the first time they have travelled outside their hometowns.

For CIMPA, constant availability is crucial. Difficulties may arise at any moment, from the most trivial to the most complex. Entering and spending time in a developing country are sometimes trying. By agreeing to be involved, we put forth great effort and contribute to the formidable cultural melting pot constituted by our Research Schools. The director must then intend to ensure that these actions taken by

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research schools

<p>juin</p> <p>8 - 17 <i>Mathematical modeling in Biology and Medicine,</i> Santiago (Cuba)</p> <p>12 - 24 <i>Equations aux Dérivées Partielles et Calcul Scientifique,</i> Nouakchott (Mauritania)</p> <p>13 - 24 <i>Algebraic, Enumerative, and Geometric Combinatorics,</i> Medellin (Colombia)</p>	<p>july</p> <p>11 - 21 <i>Combinatoire et Algorithmique,</i> Antananarivo (Madagascar)</p> <p>1 - 12 <i>Lattices and applications to cryptography and coding theory - with ICTP,</i> Ho Chi Minh (Vietnam)</p> <p>29 - 9 <i>Modèles mathématiques pour des applications de sécurité,</i> La Havane (Cuba)</p>	<p>october</p> <p>4 - 14 <i>Mathématiques pour la Biologie,</i> Piriápolis (Uruguay)</p> <p>7 - 19 <i>Théorie Spectrale des Graphes et des Variétés,</i> Kairouan (Tunisia)</p> <p>1 - 12 <i>On Geometric Flows,</i> Calcutta (India)</p>
<p>july</p> <p>11 - 20 <i>Rational Homotopy Theory and its Interactions,</i> Rabat (Maroc)</p>	<p>september</p> <p>19 - 30 <i>Modélisation Mathématique et Informatique en Epidémiologie, Ecologie et Agronomie,</i> Yaoundé (Cameroun)</p>	<p>december</p> <p>5 - 16 <i>Mathematical models in biology and medicine,</i> Quatre Bornes (Mauritius)</p>



Guanajuato (Mexico) CIMPA research school 2016

Some activities in 2016

1. EMA, Tunis (Tunisie), Bamenda(Cameroun), Lomé (Togo), Kigali (Rwanda), Omu-Aran (Nigeria), Luanda (Angola), Natitingou (Bénin), N'Djamena (Tchad), Ouagadougou (Burkina Faso), Maradi (Niger)
2. EMALCAs, Comahué (Argentine), Arica (Chili), Oaxaca (Mexique), Santo Domingo (République Dominicaine), Mérida (Venezuela)
3. Ecoles SEAMS, Hanoi (Vietnam), Bandung (Indonesia), Diliman (Philippines), Yogyakarta (Indonesia), Padjadjaran (Indonesia), Hanoi (Vietnam), Laos (Laos)
4. Master au Cambodge
5. WAMS, Lahore (Pakistan), Erbil (Irak)

Interview with CIMPA's next Director



Ludovic Rifford

Question: You will be the next director of CIMPA, can you tell us a few words about you ?

LR: I originate from the Lyon area in France, and I got my PhD in Mathematics from the University of Lyon I in 2000. Because I chose to do my national service within the category of co-operation, I then spent 16 months in the Maths department at Padua University in Italy. When I returned to France in 2001, I was recruited as a Maître de Conférences at the University of Lyon I before transferring to the Orsay University in 2004. I then applied for and gained a position as a professor at the Université Nice Sophia Antipolis in 2006. So, I am now in Nice since ten years, very happy, but I spend a lot of time abroad. I held recently visiting professor positions in Berkeley and Santiago. Concerning my fields of interests, after working on problems of geometric control theory in the preparation of my thesis, I furthered later my research into different areas of mathematics such as sub-Riemannian geometry, partial differential equations, Riemannian geometry, optimal transport theory as well as dynamics.

Question: What is your history with CIMPA ?

LR: Although I was of course aware of the existence of CIMPA before I took a position in Nice in 2006, it is only since that I really got to know more about the organisation and activities of CIMPA. This enlightened me about the unique and invaluable nature of CIMPA in the world of mathematics and convinced me to become more and more involved in it

past research schools

february

22 - 4
Moduli of Curves,
Guanajuato
(Mexico)

march

14 - 25
Géométrie et
Analyse,
Abidjan (Côte
d'Ivoire)

avril

5 - 15
Méthodes statistiques
pour l'évaluation des
risques extrêmes,
Saint-Louis
(Senegal)

may

9 - 21
Modélisation, analyses
mathématique et
numérique pour les
problèmes aux
dérivées partielles,
Nador (Maroc)

march

7 - 18
Homological Methods,
Representation Theory
and Cluster Algebras,
Mar del Plata
(Argentina)

31 - 9

Hyperbolic groups
and their
representations,
Piriápolis
(Uruguay)

may

2 - 15
Analyse
Géométrie des
Formes Optimales,
Dakar (Senegal)

22 - 4
Théorie des nombres
et Applications,
Tipaza (Algérie)

(continuation p. 3 - Interview with Ludovic Rifford)

and more generally in co-operation. I participated in several CIMPA schools as lecturer, organizer or only participant and at a more personal level I got more and more involved in several activities for instance in Maghreb and Middle-East. So, CIMPA who is playing a key role in the development of the mathematical training and research in developing countries is clearly the organisation I will enjoy to work for. Becoming the next director of CIMPA is really a great chance.

Question: How do you approach your work of CIMPA's director ?

LR: As executive director of CIMPA, I will be in charge of the day-to-day running of CIMPA, and together with the Bureau of the implementation of the CIMPA policy according to the decision of the administrative council. My first objective will be to maintain continuity in CIMPA activities and the way it works. I plan to continue the remarkable job done by my predecessors. Since my election as the next director in September 2016, the present director Claude Cibils and myself work very closely in order to have a transition as smooth as possible. By the way, I am very grateful to him for all the time he spends to introduce me to all aspects of CIMPA. I will run the CIMPA day-to-day with the help of the staff Agnès Gomez, Jeanick Allanic and Alfonso Perez. Concerning the activities of CIMPA abroad, on the ground in Africa, America and Asia, like my recent predecessors, I will work in close collaboration with a team of regional scientific officers (RSO) which gathers a dozen of colleagues from France, Norway, Spain and Switzerland who are each of them expert for some specific geographic area. Again, bearing in mind the importance of continuity, most of officers I want to work with are already involved in CIMPA activities as RSO with Claude Cibils. I will also benefit from the experience of all other people, sometimes in the shadow, who are involved in CIMPA activities at different level. So, I am ready

to start in September my term of director to lead the mission of CIMPA in close collaboration with the members of Bureau namely the president Tsou Sheung Tsun, the vice-president Alain Damlamian, the secretary Jean-Marc Bardet and the treasurer Marc Aubry and with the new Bureau in January 2017.

Some activities in 2016 (suite)

6. V CONGRESO LATINOAMERICANO DE MATEMÁTICOS, Bogota (Colombia) 11-15 July
7. ASIAN MATHEMATICAL CONFERENCE, Bali (Indonesia) 25-29 July
8. Conference of the SOUTHERN AFRICA MATHEMATICAL SCIENCES ASSOCIATION, Pretoria (South Africa) 21-24 November



Solis (Uruguay) CIMPA research school 2016

(continuation p. 1- Foreword by Claude Cibils)

are focused in scientifically fertile areas, in which the conditions are present that will allow our energy to have a true catalytic effect.

Directing CIMPA requires delegating responsibilities and managing with diplomacy. CIMPA's director needs to be surrounded by committed mathematicians. The director is the scientific and administrative driver, and the colleagues chosen to represent institutionally her or him need directives. While encouraging their freedom and common sense, the director provides context and directs action. While not defining everything in advance, there is a need to anticipate, defuse misunderstandings or conflicts, and to intervene and make decisions when necessary.

It happens that mathematicians in developing countries may become embittered, with a feel as if their rights have been taken away, in the face of unwittingly condescending attitudes. This negative feeling only intensifies when people tell them what to do, or take the place of local actors. The director's task, then, is to restore trust in our colleagues on site by placing them back at the centre of their responsibilities, so that they can successfully complete their actions in their own country, with the support and suggestions of CIMPA.

It is vital for the director to ensure that the following points, which are sometimes poorly understood but are always surprising, are well-known to all:

- CIMPA is a non-profit organisation to which it costs nothing to belong,
- it finances young people, selected based on application, by refunding them the exact amount of their ticket and covering their accommodation costs,
- speakers are unpaid, and most buy their own tickets in support of CIMPA's mission.

Those who come in contact with CIMPA are surprised; once one of them even exclaimed to me, "Your CIMPA is a UFO!" Though the way CIMPA works is clear to its members, it is nothing of the kind to outside observers.

It is vital to guide a CIMPA that will be fair, equitable, and independent from cronyism. Ethically above all, but also to ensure that CIMPA will endure over the long run. The director must be careful not to finance initiatives on an ad-hoc basis or following urgent requests, or because he or she is convinced of their merit. CIMPA's functioning is well established and smooth; it is an effective organisation without useless bureaucracy. The basement of the quality of our work is given by the separate but connected functioning of our three independent Councils and our General Assembly.

Our dynamic is based on open calls for projects with evaluation, sometimes in close partnership with mathematical unions. CIMPA's actions are sound with respect to these calls. CIMPA's sponsors know this, and are all the more supportive for it. They are our partners, who confirm their financing year after year, in a trust-based relationship which the director must maintain, creating bonds and being directly answerable for actions taken.

Thanks CIMPA!

This is my last task as Officer in charge of communications of CIMPA. It is then time to say thanks to all these wonderful



people I had the opportunity to meet during these last eight years: people working with CIMPA to spread the joy of Mathematics all over the world. In particular, people at the present and previous board, Scientific officers, staff at Nice, and last but not least, our Director, they all do a tremendous work, it was really a pleasure to meet and to collaborate with them.

Best wishes to the future Director and his team!

Rosane Ushirobira
Inria researcher
Officer in charge of
communications of CIMPA

People at CIMPA

Jeanick Allanic, secrétaire, gestion des écoles de recherche
Marc Aubry, bureau, trésorier
Jean-Marc Bardet, bureau, secrétaire général
Claude Cibils, directeur, RS Amérique Latine et Caraïbes
Alain Damlamian, bureau, vice-président
Sylvain Duquesne, RS Afrique Subsaharienne
Ahmad El Soufi, RS Pourtour Méditerranéen
Agnès Gomez, secrétaire de direction et gestion financière
Elisa Gorla, RS Inde et Asie Centrale et de l'Ouest

Jorge Jimenez Urroz, RS Inde et Asie Centrale et de l'Ouest
Brigitte Lucquin, RS Asie du Sud et de l'Est, chargée de mission pour le Cambodge
Christian Mauduit, RS Asie du Sud et de l'Est
Giulia Di Nunno, RS Afrique Subsaharienne
Alfonso Perez, responsable informatique
Mercedes Siles Molina, RS
Tsou Sheung Tsun, bureau, présidente
Rosane Ushirobira, chargée de mission pour la communication

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As a consequence we now have sufficient financial means to make CIMPA a true force. Then it is particularly important to ensure mathematical relevance, suitability, and quality, as well as efficiency in administrative procedures. Combining these aspects of management in a single mathematician is also one of CIMPA's strengths, despite the considerable workload this represents.

The director must be a diplomat and a decision-maker, both of which are actually quite different from the approach of a researcher. He or she must be determined to carry out, with freedom and responsibility, the work of a master craftsman and a pilot. The satisfaction comes when young people gain mathematical maturity and professional success after a CIMPA Research school, or when a mathematical centre or dynamic network are set up and prosper. Note however that personal balance is vital, as it can sometimes be stressful to face the continual emergence of new problems when conducting CIMPA.

Directing CIMPA has been an honour and a pleasure. Once my tenure has ended, I will be happy to provide help or suggestions so that this fantastic organisation can continue to develop in favour and in the service of the global mathematical community.

Claude Cibils

Professor at Université de Montpellier

Director of CIMPA



Prochaines réunions

La prochaine assemblée générale et le prochain conseil d'administration auront lieu à Paris le 03 juin 2016.

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