



## CIMPA ICPAM

### CENTRE INTERNATIONAL DE MATHÉMATIQUES PURES ET APPLIQUÉES INTERNATIONAL CENTER FOR PURE AND APPLIED MATHEMATICS

[INSPEM, University Putra Malaysia](#),  
March 18, 2014

Michel WALDSCHMIDT, Université Paris 6  
<http://www.math.jussieu.fr/~miw/>  
<http://www.cimpa-icpam.org>



## CIMPA-ICPAM research schools

### Open call every year

- proposals for two weeks schools come from everywhere, some encouraged by CIMPA-ICPAM members
- the Scientific Council analyses, evaluates and makes recommendations
- the Steering Council select about 15 to 20 school projects per year

Schools are organized locally with scientific and administrative help from CIMPA-ICPAM, in a North-South-South format

New initiative: informal agreement with India and Argentina. They will fund their participants to all neighbouring CIMPA-ICPAM school

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## CIMPA-ICPAM's mission

To promote international cooperation for the benefit of developing countries, in higher education and research in Mathematics and their applications, as well as in related subjects

- to this end CIMPA-ICPAM organizes research schools, supports seminars and sustains networks of researchers
- its actions are concentrated at places where there is the will to further develop Mathematics, and where a research project is feasible
- looking for three main equilibria : gender, geographic, and thematic

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## CIMPA-ICPAM research schools

Young participants from neighboring countries are selected by the organizers and CIMPA-ICPAM. They receive full financial support by CIMPA-ICPAM.

Lecturers and speakers are not paid. They obtain their own funding for travel and accommodation. CIMPA-ICPAM provides help in this direction (letters, explanation of the main purpose, contact with Scientific attachés of the local French Embassies)

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## CIMPA Research Schools

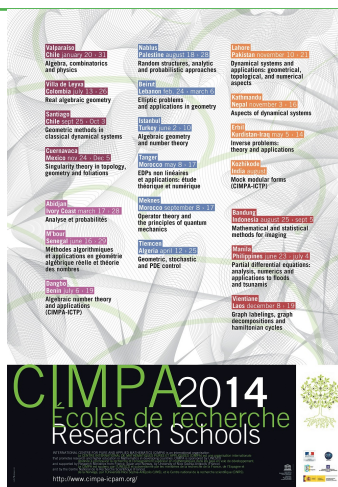


Barranquilla (Colombia) CIMPA Research School 2013

## CIMPA Research Schools

- 30 to 40 K€ = average budget for a RS  
12 K€ = average CIMPA participation  
8 K€ - at least - for young people from neighboring developing countries  
4 K€ - at most - for lecturers, speakers or local expenses
- A four-page Road map helps from the very beginning to have a successful RS
- Each RS has two final complete reports. One from the local organizers, the other from CIMPA representative.

## 2014



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## India and West Asia 2014

### Inverse problems : Theory and applications

CIMPA-KURDISTAN-IRAQ  
Erbil, Kurdistan-Iraq, May 5-14

### Mock Modular Forms

CIMPA-ICTP-INDIA  
Research School co-sponsored with ICTP  
Kozhikode, India, July 28 - August 8

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## India and West Asia 2014 (continued)

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### Aspects of Dynamical Systems

CIMPA-NEPAL

Kathmandu, Nepal, November 3-16

### Dynamical Systems and Applications : Geometrical, Topological, and Numerical Aspects

CIMPA-PAKISTAN

Lahore, Pakistan, November 10-21

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## Some further activities

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### AFRICA:

- UNESCO Chair (Tunisia)
- SARIMA (Mathematics and Computer Science in Africa)
- CARI (Conference on Research in Computer Science)
- WATS (West African Training Schools)

### LATIN AMERICA:

- EMALCAs
- REALMA (European and Latin American network in applied mathematics)

MIDDLE EAST: MA3N (Mathematical Analysis & Application Arab Network)

### SOUTH EAST ASIA:

- Cambodia, Laos, (regional master program)
- IMAMIS

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## South and East Asia (2014)

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### Partial Differential Equations: Analysis, Numerics and Applications to Floods and Tsunamis

CIMPA-PHILIPPINES

Manila, Philippines, June 23 - July 4

### Mathematical and Statistical Methods for Imaging

CIMPA-INDONESIA

Bandung, Indonesia, August 25 - September 5

### Graph labelings, graph decompositions and Hamiltonian cycles

CIMPA-LAOS

Vientiane, Laos, December 8-19

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## Numbers

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260 research schools since 1979

<http://www.cimpa-icpam.org/spip.php?rubrique70>

101 participations in higher level education and research networks  
(seminars, workshops and doctoral courses)

### Countries

- 18 from Africa
- 12 from Asia
- 13 from South America and Caribbean
- 8 from the Middle East
- 4 from Central and Eastern Europe

13000 young mathematicians

2500 speakers, 1100 from Southern countries

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## Budget 2012

### 512 K€

- 68% France
- 12% Switzerland
- 6% Norway
- 4% Spain
- 5% ICTP and others
- 5% Membership dues

### Half of the budget for Africa (Sub-Saharan and Mediterranean)

- paid from budget : one and a half full time secretaries in Nice
- scientific officers, members of councils and lecturers are volunteers
- Not in the budget: salary of the Director, paid by Université Montpellier 2 and support by Université Nice Sophie-Antipolis and CNRS.

## CIMPA-ICPAM organization

CIMPA-ICPAM is a category 2 UNESCO center

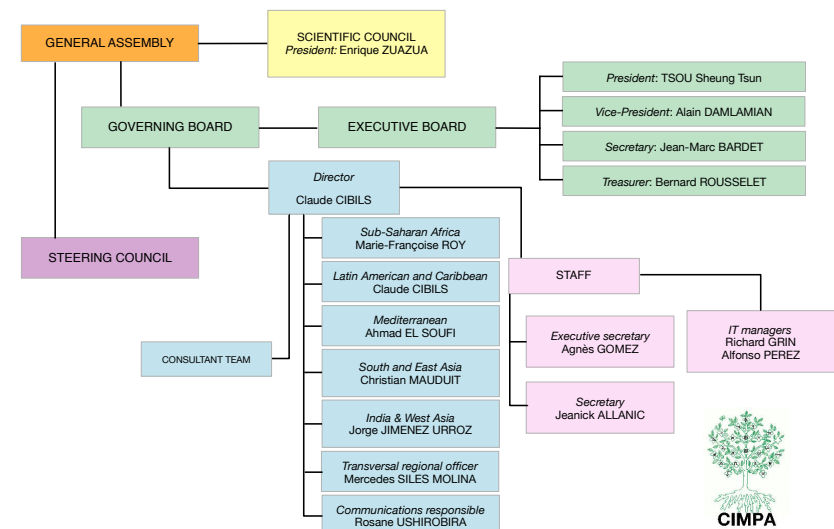
- with a Governing Board involving permanent institutional members (UNESCO, French Ministries, MICINN, Université de Nice)
- with a Executive Board elected for a 4 years term by the General Assembly
- with a Scientific Council and a Steering Council
- with a Management team consisting of a Director, the Regional Scientific Officers and an Officer in charge of communications



## CIMPA-ICPAM's history

CIMPA-ICPAM is:

- a non-profit organization created in 1978 with office at Nice, France
- currently funded by the Ministère de l'enseignement supérieur et de la recherche (France), the University of Nice-Sophia Antipolis (France), the Ministerio de Ciencia e Innovación (Spain) and the Centre national de la recherche scientifique (France)



## Scientific Council

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*Chairman:* Enrique ZUAZUA (Spain) (Applied Maths)

- Jean-Marc AZAÏS (France) (Probability, statistics)
- Viviane BALADI (France) (Dynamical systems)
- Edy Tri BASKORO (Indonesia) (Graph theory)
- Suzanne BRENNER (USA) (Numerical analysis)
- Maria Luiza FERNANDEZ (Spain) (Differential geometry)
- Helena LOPES (Brazil) (PDE, Non linear analysis)
- Youssef OUKNINE (Marocco) (Probability, stochastic equations)
- Carlos DI PRISCO (Venezuela) (Logic)
- Ragni PIENE (Norway) (Algebraic geometry)
- Ramdorai SUJATHA (India) (Number theory, K-Theory)
- Cédric VILLANI (France) (Fields Medal)

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## Management team

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*Director :* Claude CIBILS (Université Montpellier, on leave at Université de Nice)

*Regional scientific officers:*

- *Subsaharian Africa:* Giulia di NUNNO (University Oslo) & Sylvain DUQUESNE (Université de Rennes)
- *Latin America and Caribbean:* Claude CIBILS
- *South-east Asia:* Christian MAUDUIT (Université de Marseille) & Brigitte LUCQUIN (Université Paris 6)
- *India and West Asia:* Jorge Jimenez URROZ (Universita Politècnica Barcelona) & Elisa GLORIA (Université Neuchatel)
- *Mediterranean:* Ahmad EL SOUFI (Université de Tours)
- *Transverse* Mercedes SILES MOLINA (Universidad Malaga)

*Consultant team:* Michel JAMBU (Université de Nice) & Michel WALDSCHMIDT (Université Paris 6)

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## Executive Board

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*President:* TSOU Sheung Tsun

University of Oxford (Mathematical physics)

*Vice-President:* Alain DAMLAMIAN

Université Paris 12 (Nonlinear analysis, nonlinear partial diff. equations)

*Secretary:* Jean-Marc BARDET

Université Paris 1 (Probabillty and statistics)

*Treasurer :* Bernard ROUSSELET

Université de Nice (Nonlinear vibrations, optimisation)

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## Scientific partners

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Université de Nice Sophia-Antipolis (**UNS**), Institut National de Recherche en Informatique et en Automatique (**INRIA**), Centre National de la recherche Scientifique (**CNRS**), Société Mathématique de France (**SMF**), Société de Mathématiques Appliquées et Industrielles (**SMAI**), International Mathematical Union (**IMU**), International Council for Industrial and Applied Mathematics (**ICIAM**), European Mathematical Society (**EMS**), International Centre for Theoretical Physics (**ICTP**), Union Mathématique Africaine (**UMA**), South East Asian Mathematical Society (**SEAMS**), Union Mathématique d'Amérique Latine et Caraïbes (**UMALCA**), Comité National Français des Mathématiciens (**CNFM**), Centro de Modelamiento Matemático (**CMM**), Bordeauxthèque, Institut de Recherche pour le Développement (**IRD**), Comité Español de Matemáticas (**CEMAT**), Real Sociedad Matemática Española (**RSME**), Societat Catalana de Matemàtica (**SCM**), Sociedad Española de Matemática Aplicada (**SEMA**), Sociedad Española de Estadística e Investigación operativa (**SEIO**)

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## International support for CIMPA-ICPAM

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Convention MICINN (Ministerio de Ciencia e Innovación, Spain) – CIMPA, thanks to the former President of CIMPA, Mario Wschebor

- It allows CIMPA-ICPAM to respond to more requests of help from developing countries, much more than we can support at the moment
- It was a first step towards the internationalization of CIMPA-ICPAM

Supports from the governments of Norway and Switzerland

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