



# CIMPA

Centre International  
de Mathématiques Pures et Appliquées



## 2022 ANNUAL REPORT

[www.cimpa.info](http://www.cimpa.info)

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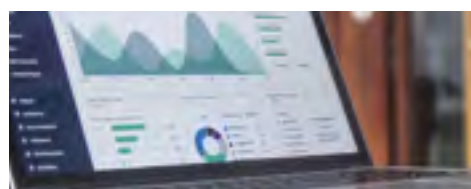
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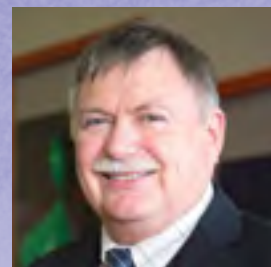
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# FOREWORD

“The year 2022 began with the official entry of Germany as a Member State of CIMPA, which we are all thrilled about. This was celebrated at the July Governing Board and General Assembly Meetings, with contributions by Dr Eckart Lilienthal, representing the German Bundesministerium für Bildung und Forschung, German CIMPA Members present and representatives of the CIMPA Governing Board. Those present onsite enjoyed a glass of Champagne in celebration.



Another important activity in 2022 was the revision of the Statutes of CIMPA, thereby producing an up-to-date clear and precise set of statutes defining CIMPA as a French Association. This was necessary in order that the revised statutes align properly with the rules applied to associations in France, and also as a Category II organisation of UNESCO. The process involved several steps, legal advice, Bureau and Governing Board involvement as well as consultation and discussion with the members of CIMPA. The new Statutes were approved at the Extraordinary General Assembly Meeting, which was held on 17 September 2022.

This year also marked a gradual return to normal for the programmes supported by CIMPA. A number of research schools were held onsite or in hybrid format. The fact that it was again easier to travel, even though significantly more expensive, meant that the *CIMPA Schools*, *CIMPA Courses*, *Schools in Partnership*, as well as the new *CIMPA-ICTP Research in Pairs Programme* all benefitted from onsite involvement and interaction.

I would like to extend a special word of thanks to our Vice-President, Annie Raoult for the many hours of work she gave to CIMPA this year which also included a significant amount of travelling. A special word of thanks to our Executive Director, Christophe Ritzenthaler, for leading CIMPA so well, with new ideas and care, maintaining and improving our activities. It is a pleasure to note the contribution by the many supporters of CIMPA, which have made the year 2022 a success.”

**BARRY GREEN - PRESIDENT**



“We’re back on the field! **CIMPA’s activities never stopped during the pandemic** but we could not go and physically meet our colleagues and students all around the world as we used to. The energy and happiness that we feel during our live events, in particular during our *CIMPA schools*, are of course the fuel of our actions and motivation for more.

Personally, it was also important to confront some ideas I had about our activities with the reality. I observed that some of the changes I had planned during the pandemic required adjustments. But I was also comforted in other recommendations I made:

**promoting more active participation during our events and fostering long term projects** are clearly relevant. The “African Research Training School” at AIMS Senegal organized jointly with EMS and AIMS-Senegal thanks to the generous support of INSMI combined these two aspects and is a wonderful way to extend the benefits for the participants long after the end of the school.

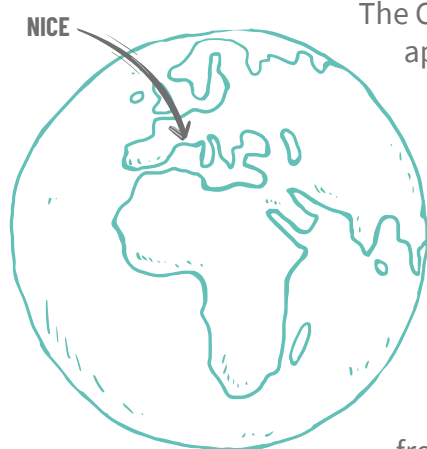
After the quick decisions imposed by the pandemic, this year was also about consolidation. We increased our financial supports to *Schools* and *Schools in Partnerships* and continue to clarify their guidelines. The new *Research in Pairs programme* started last year is now a joint call with ICTP and attracts strong applications. After a long effort of the Spanish mathematical community, the membership of Spain has been regularized. Germany has been member state for the first year and we have already increased our collaborations with the German community. Finally, we adopted all together sounder statutes and by-laws for our association.

We will need to stay vigilant and responsive for the year to come: economically and geopolitically, the world is a more unstable and less accessible place. Adjusting our offers to overcome this statement will be our priority.”

**CHRISTOPHE RITZENTHALER - EXECUTIVE DIRECTOR**

# WHO WE ARE

## ABOUT US



The Centre international de mathématiques pures et appliquées (CIMPA), founded in France in 1978, is a non-profit organisation that promotes international research in mathematics and its interactions in cooperation with developing countries and contributes to the training of mathematicians in developing countries.

It is situated in Nice, is a **UNESCO Category 2 Centre** and is part of the Centre d'accueil et de rencontres mathématiques internationales (**CARMIN laboratory of excellence**). It benefits from the financial support of **France, Germany, Norway, Spain and Switzerland**.

CIMPA co-organises and sponsors numerous activities in **developing countries in all continents**. Each activity is funded through a process of calls for proposals in one of the following categories:



CIMPA SCHOOLS



CIMPA COURSES



CIMPA FELLOWSHIPS



ONLINE  
CIMPA COURSES



RESEARCH  
IN PAIRS PROGRAMME

CIMPA also strongly supports activities developed in close collaboration **with continental mathematical unions**, such as Schools in Partnership, the purpose of which is to introduce undergraduate and master's students to research in mathematics.



# CIMPA, SINCE ITS CREATION

FOUNDED IN **1978**

LOCATED IN **NICE** FRANCE



## ADMINISTRATION

**13**

MEMBERS  
OF THE EXECUTIVE  
TEAM

**14**

A GOVERNING BOARD OF  
7 INDIVIDUAL MEMBERS  
AND 7 INSTITUTIONAL  
MEMBERS

**12**

MEMBERS OF THE  
SCIENTIFIC COUNCIL

**25**

A STEERING COUNCIL OF  
7 INDIVIDUAL MEMBERS  
AND 18 INSTITUTIONAL  
MEMBERS

**2**

EMPLOYEES

**183**

CIMPA MEMBERS

A WORLDWIDE PARTNER  
NETWORK OF ORGANISATIONS  
AND ACADEMIC INSTITUTIONS



## ACTIVITIES

EACH YEAR, MORE THAN  
**1000** PARTICIPANTS ATTEND  
CIMPA SCHOOLS

ACTIVITIES IN MORE THAN  
**100** COUNTRIES  
IN THE WORLD



## COMMUNICATION

PRESENT ON 3 SOCIAL  
NETWORKS



A YOUTUBE CHANNEL  
CIMPA MATH



A WEBSITE  
[WWW.CIMPA.INFO](http://WWW.CIMPA.INFO)



BUDGET ABOUT  
**€700k**  
PER YEAR

# AN INTERVIEW WITH ANNIE RAOULT, VICE-PRESIDENT OF CIMPA

## HOW AND WHEN DID YOU START WITH CIMPA?

I gave a course at a CIMPA school in Aswan in January 1990. It was held in an unheated primary school. It was very beautiful, but very cold. Jean-Michel Lemaire had to buy radiators for the participants' rooms, which were in another unheated building. I have been a CIMPA member since that date.

## WHAT DO YOU LIKE MOST ABOUT BEING VICE-PRESIDENT OF CIMPA? WHAT DOES IT MEAN TO YOU?

In the academic world, we are accustomed to tasks that combine science, administration, relations with government ministries and other organisations, and openness to the world. My CIMPA mission is a perfect example of this. From a scientific point of view, CIMPA's activities cover a very beautiful panorama of mathematical themes, much broader than we are used to in our own research. In practical terms, the exchanges surrounding the entry of new Member States, the consideration of new programmes and the updating of the statutes give rise to numerous stimulating administrative, legal and almost political questions, both expected and unexpected.

While these points are the daily work of the CIMPA team, the main point, however, is that CIMPA is interested in so-called developing countries and strives to provide desired and useful support. This is what prompted me to apply for a position on the CIMPA Governing Board.



## WHAT ACTIONS WOULD YOU LIKE TO SEE COMPLETED BEFORE THE END OF YOUR LAST TERM?

CIMPA has opened new programmes, some more oriented towards individuals than in the past (CIMPA Fellowships for thematic programmes currently taking place in Europe for young scientists and Research in Pairs for more established researchers). It seems to me that we can stabilise these programmes before launching new ones. The last three years have been tough for the organisers of CIMPA schools, who have been subjected to changes of course, sometimes repeatedly, due to



Annie Raoult at the CIMPA school in Thiès, Senegal, June 2022



health restrictions. As a result, fewer school projects were submitted this year. I hope that this number will quickly increase again, and that many colleagues from Africa, Latin America, Asia, or any eligible country, will ask their French, Spanish, Norwegian, Swiss or German counterparts to join in the preparation of a school. We have established some rules for these schools in order to ensure they run properly and to keep costs down. As everyone knows, teachers teach, do not receive any remuneration and in almost all cases pay for their own travel! However, we must not make the task of preparation too cumbersome, we must be flexible about the format and keep in mind that the essential thing is the scientific exchanges during schools, which are essential for continued collaboration. I would like to point out in passing that, from 2024 onwards, subsidies to schools will be significantly increased.

## THE ESSENTIAL THING IS THE SCIENTIFIC EXCHANGES DURING SCHOOLS

### WHAT ARE YOUR BEST MEMORIES?

I was delighted when a student told me, 18 months after a school, that it was thanks to the school, even though it was moved online at the last minute, that he was able to speak with a teacher and that the teacher offered him an internship, which has now been extended into a thesis supervised by a colleague. I am also very pleased when I see that the organisation of a school brings local recognition to its organiser, or even to the organiser's research theme, which until then had not been considered a priority locally. Finally, connections can be forged within the teaching team and can lead to invitations for local teacher-researchers to conferences on other continents, from which they are mostly absent. However, without dedicated financial support from the conference, such proposals may not come to fruition.

Members of  
the Scientific  
Council,  
November 2022



## YOU ARE ALSO ACTIVE IN OTHER ASSOCIATIONS PROMOTING MATHEMATICS IN DEVELOPING COUNTRIES, WHAT ARE THE DIFFICULTIES YOU SEE MOST OFTEN APPEARING? HOW DO YOU SEE THE FUTURE OF COOPERATION WITH DEVELOPING COUNTRIES?

Indeed, I participated in the organisation of the last three Young African Researchers in France meetings, a biennial event of the Association for Scientific Promotion in Africa (APSA), aiming to bring together doctoral and postdoctoral students. APSA supports the Ibni Prize, along with CIMPA, confers the APSA Awards, and carries out several actions in physics in sub-Saharan Africa.

Generally speaking, university structures in developing countries are faced with a massive influx of students and teacher-researchers are very busy. The lack of time to devote to research and the establishment of collaborations is a barrier to their progress. A second obstacle, for a number of them who are in “small” universities, is geographical isolation, which leads to a stagnation in research topics (and, therefore, in the supervision and courses offered). A third constraint is the lack of funds for travel. Finally, it also seems that European teacher-researchers are themselves becoming less and less available.

There are several positive notes, however: research structuring initiatives have been undertaken, no doubt with a substantial investment of time by their creators; the salary of teacher-researchers has significantly increased in several countries; access to scientific documents, which is now electronic, is easier than in the past; videoconferencing equipment – sometimes acquired through cooperation funding – is available; and personal computers and telephones, which most colleagues and doctoral students seem to have at their disposal, are sufficient during scientific events, including for running software.



↑ Interview given at the CIMPA school in Thiès, Senegal, June 2022

**IT IS STRIKING TO SEE HOW EMPLOYMENT CONTINGENCIES CAN MAKE [YOUNG GRADUATES] MOVE FROM ONE COUNTRY TO ANOTHER.**

Students at the end of their master's degree are looking for rare thesis funding and many are teaching in secondary schools, sometimes far from their supervisor. Young graduates, whether locally trained or not, are both eager to enter this system, though it may not offer many positions, and worried about their progression within it.

It is striking to see how employment contingencies can make them move from one country to another. The funding of theses is not within the means of associations, but, in addition to the exchange of knowledge, associations can facilitate meetings and mobility and provide information. It should be noted that the current context penalizes certain countries that have become unsafe, and there is in addition an extremely frustrating reluctance to grant visas and welcome visitors travelling South-North or South-South.



One action that could be taken by local authorities through high-level cooperation – to which associations can contribute – is to highlight the importance of mathematics research, not only for conceptual advancement and to support other hard sciences, but also for the local socio-economic fabric and the improvement of living conditions. For example, simple solutions to public health, weather monitoring, planning, energy supply, and civil or financial security problems, which can be implemented locally, can be developed in conjunction with public institutions or with the support of emerging companies, within a formalised framework of course. Let us insist, however: paperwork should be kept to a minimum!



↑ CIMPA School  
Thies, Senegal,  
June 2022

Cooperation must, first and foremost, satisfy the countries and free them from economic constraints. It must provide sufficient and sustainable funding for both teaching and research programmes. It must also reduce administrative procedures for the mobility of students and researchers to a reasonable level.



↑ CIMPA School  
Kigali, Rwanda, June 2021

# GOVERNANCE & ADMINISTRATION

## GOVERNING BOARD



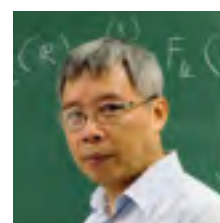
**Barry Green**  
PRESIDENT  
University of  
Stellenbosch,  
SOUTH AFRICA



**Annie Raoult**  
VICE-PRESIDENT  
Université  
Paris-Cité,  
FRANCE



**Joachim Yameogo**  
TREASURER  
Université  
Côte d'Azur,  
FRANCE



**Viet Dung Nguyen**  
SECRETARY  
Vietnam Academy  
of Science and  
Technology,  
VIETNAM



**Fatima Aboud**  
University of  
Diyala, IRAQ



**Servet Martinez**  
Universidad  
de Chile, CHILE



**Mary Teuw Niane**  
Université Gaston  
Berger de Saint-Louis,  
SENEGAL



## INSTITUTIONAL MEMBERS

**Bundesministerium für Bildung und Forschung (BMBF), GERMANY**  
**Délégation aux affaires européennes et internationales (DAEI), FRANCE**  
**Direction générale de la recherche et de l'innovation (DGRI), FRANCE**  
**Ministerio de Ciencia, Innovación y Universidades, SPAIN**  
**Norwegian Ministry of Education and Research, NORWAY**  
**UNESCO**  
**Université Côte d'Azur, FRANCE**



# SCIENTIFIC COUNCIL

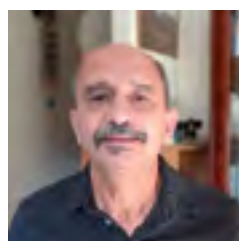
The Scientific Council is comprised of 12 members.  
It makes recommendations on CIMPA's scientific activities.



**Giulia Di Nunno**  
PRESIDENT  
University of Oslo,  
NORWAY



**Volker Bach**  
Technische  
Universität  
Braunschweig,  
GERMANY



**Mohamed Boucetta**  
Université  
Cadi-Ayad,  
MOROCCO



**Tien-Cuong Dinh**  
National University  
of Singapore,  
SINGAPORE



**Laura Geatti**  
Università di Roma  
Tor Vergata,  
ITALY



**Henar Herrero Sanz**  
Universidad de  
Castilla-La Mancha,  
SPAIN



**Mahouton Norbert  
Hounkonnou**  
Université  
d'Abomey-Calavi,  
BENIN



**Yoshiharu  
Kohayakawa**  
Universidade de São  
Paulo,  
BRAZIL



**Teresa Krick**  
Universidad de  
Buenos Aires,  
ARGENTINA



**Gabriel Peyré**  
École normale  
supérieure de Paris,  
FRANCE



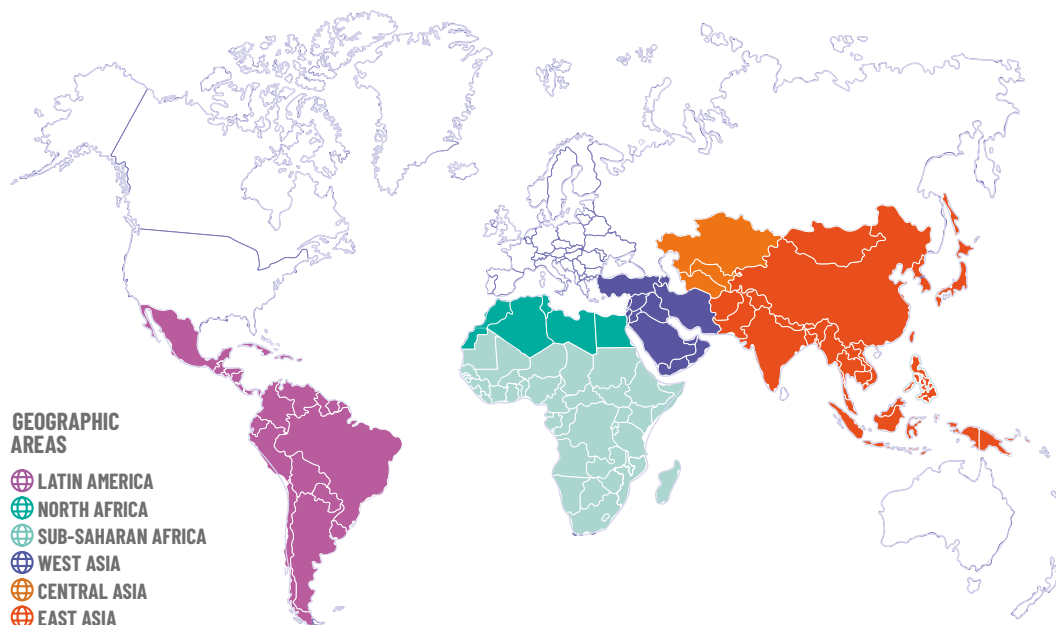
**Mythily Ramaswamy**  
ICTS-TIFR,  
INDIA



**Sara Van de Geer**  
ETH Zurich,  
SWITZERLAND

# EXECUTIVE TEAM

CIMPA's Executive Team consists of an Executive Director, a group of Scientific Officers and Administrative and Communication Staff. The Executive Director, who is responsible for the day-to-day running of CIMPA, benefits from the expertise of the Scientific Officers, who act as **consultants for geographical areas and other important issues.**



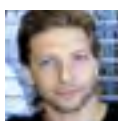
## EXECUTIVE DIRECTOR & SCIENTIFIC OFFICERS



**Christophe Ritzenthaler**  
EXECUTIVE DIRECTOR  
Université Côte d'Azur, FRANCE



**Alp Bassa**  
Boğaziçi üniversitesi,  
TURKEY  
🌐 WEST AND CENTRAL ASIA



**Yacine Chitour**  
Université Paris-Saclay, FRANCE  
🌐 NORTH AFRICA AND WEST ASIA



**Sophie Dabo**  
Université de Lille, FRANCE  
🌐 AFRICA



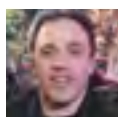
**Lidia Fernandez**  
Universidad de Granada, SPAIN  
🌐 ASIA



**Fabrice Gamboa**  
Université Paul Sabatier, FRANCE  
🌐 WEST ASIA AND LATIN AMERICA



**Joan-C. Lario**  
Universitat Politècnica de Catalunya  
🌐 LATIN AMERICA AND ASIA



**Jorge Mozo Fernandez**  
Universidad de Valladolid, SPAIN  
🌐 WEST ASIA AND LATIN AMERICA



**Stéphanie Nivoche**  
Université Côte d'Azur, FRANCE  
🌐 CENTRAL AND EAST ASIA



**Vladly Ravelomanana**  
Université Paris-Cité, FRANCE  
🌐 AFRICA



**Rosane Ushirobira**  
Inria, FRANCE  
🌐 LATIN AMERICA

## STAFF

**Agnès Gomez**  
EXECUTIVE SECRETARY

**Héla Lamiri**  
COMMUNICATION OFFICER



# STEERING COUNCIL

The Steering Council draws up CIMPA's medium- and long-term scientific strategy.

**It offers policy guidance, suggests priorities and makes recommendations.**

Every year, it designs the programme for the CIMPA Schools and other activities, based on the recommendations of the Scientific Council.



## INDIVIDUAL MEMBERS



**Barry Green**  
PRESIDENT  
University of  
Stellenbosch,  
SOUTH AFRICA

**Annie Raoult**  
VICE-PRESIDENT  
Université Paris-Cité,  
FRANCE

**Fatima Aboud**  
University of Diyala,  
IRAQ

**Joachim Yameogo**  
TREASURER  
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Côte d'Azur,  
FRANCE

**Servet Martinez**  
Universidad  
de Chile, CHILE

**Viet Dung Nguyen**  
SECRETARY  
Vietnam Academy  
of Science and  
Technology, VIETNAM

**Mary Teuw Niane**  
Université Gaston  
Berger de Saint-Louis,  
SENEGAL



## INSTITUTIONAL MEMBERS

**Académie des sciences**  
FRANCE

**Comisión Nacional Española  
de Cooperación con la UNESCO**  
SPAIN

**Comité Español de Matemáticas (CEMAT)**  
SPAIN

**Commission nationale française  
pour l'UNESCO**  
FRANCE

**Deutsche Mathematiker-Vereinigung (DMV)**  
GERMANY

**Deutsches Elektronen-Synchrotron (DESY)**  
GERMANY

**Gesellschaft für Angewandte Mathematik  
und Mechanik (GAMM)**  
GERMANY

**Institut national de recherches en sciences  
& technologies du numérique (INRIA)**  
FRANCE

**Institut national des sciences  
mathématiques et de leurs interactions**  
(INSMI-CNRS)  
FRANCE

**Norwegian Mathematical Society**  
NORWAY

**Real Sociedad Matemática Española (RSME)**  
SPAIN

**Sociedad de Estadística e Investigación  
Operativa (SEIO)**  
SPAIN

**Sociedad Española de Matemática Aplicada**  
(SEMA)  
SPAIN

**Societat Catalana de Matemàtiques (SCM)**  
SPAIN

**Société de mathématiques appliquées  
et industrielles (SMAI)**  
FRANCE

**Société Française de Statistique (SFdS)**  
FRANCE

**Société mathématique de France (SMF)**  
FRANCE

**Swiss Mathematical Society (SMS)**  
SWITZERLAND

# LIST OF PARTNERS

The primary partners of CIMPA are the institutional members of the Steering Council, which develops the strategy and the scientific policy of CIMPA:

**Académie des sciences**, FRANCE  
**Comisión Española de Cooperación con la UNESCO** SPAIN  
**Comité Español de Matemáticas** (CEMAT), SPAIN  
**Commission nationale française pour l'UNESCO**, FRANCE  
**Deutsche Mathematiker-Vereinigung** (DMV), GERMANY  
**Deutsches Elektronen-Synchrotron** (DESY), GERMANY  
**Gesellschaft für Angewandte Mathematik und Mechanik** (GAMM), GERMANY  
**Institut national de recherches en sciences et technologies du numérique** (Inria), FRANCE  
**Institut national des sciences mathématiques et de leurs interactions** (INSMI-CNRS), FRANCE  
**Norwegian Mathematical Society**, NORWAY  
**Real Sociedad Matemática Española** (RSME), SPAIN  
**Sociedad de Estadística e Investigación Operativa** (SEIO), SPAIN  
**Sociedad Española de Matemática Aplicada** (SEMA), SPAIN  
**Societat Catalana de Matemàtiques** (SCM), SPAIN  
**Société de mathématiques appliquées et industrielles** (SMAI), FRANCE  
**Société française de statistique** (SFdS), FRANCE  
**Société mathématique de France** (SMF), FRANCE  
**Swiss Mathematical Society** (SMS), SWITZERLAND

Being part of the French laboratory of excellence CARMIN (Centre d'accueil et de rencontres mathématiques internationales), CIMPA works in close collaboration with the three other CARMIN members:

**Centre international de rencontres mathématiques** (CIRM), FRANCE  
**Institut des hautes études scientifiques** (IHES), FRANCE  
**Institut Henri Poincaré** (IHP), FRANCE

CIMPA has signed agreements of cooperation with several institutions:

**Arba Minch University**, ETHIOPIA  
**Centre de Recerca Matemàtica**, SPAIN  
**Forschungsinstitut für Mathematik**, SWITZERLAND  
**Institut national de recherches en sciences et technologies du numérique** (Inria), FRANCE  
**International Centre for Theoretical Physics** (ICTP)  
**Laboratoire de Modélisation, Mathématiques, Informatique, Applications et Simulation** (L2MIAS), CHAD  
**Mathematisches Forschungsinstitut Oberwolfach**, GERMANY  
**Nesin Mathematics Village**, TURKEY  
**Université Côte d'Azur**, FRANCE

**Most of CIMPA's activities benefit from close ties** established by CIMPA with the following international organizations:

**Agence Universitaire de la Francophonie (AUF)**

**Commission for Developing Countries of the International Mathematical Union (IMU-CDC)**

**Committee for Developing Countries of the European Mathematical Society (EMS-CDC)**

**Close partners of CIMPA also include several continental mathematical unions and committees, for example through the funding of Schools in Partnership:**

**Asian and European Schools in Mathematics (AESIM)** (previously WAMS)

**African Mathematical Union (AMU)**

**South East Asian Mathematical Society (SEAMS)**

**Southern Africa Mathematical Sciences Association (SAMSA)**

**Unión Matemática de América Latina y el Caribe (UMALCA)**

**Other CIMPA partners:**

**African Institute for Mathematical Sciences (AIMS)**

**Association pour la Promotion Scientifique de l'Afrique (APSA)**

**Centro de Modelamiento Matemático (CMM)**

**Colloque Africain sur la Recherche en Informatique**

**et Mathématiques Appliquées (CARI)**

**Comité National Français des Mathématiciens (CNFM)**

**European Mathematical Society (EMS)**

**Institut de recherche pour le développement (IRD)**

**International Mathematical Union (IMU)**

**International Council for Industrial and Applied Mathematics (ICIAM)**

**Mathrice**

**Simons Foundation (USA)**

**Soutien aux Activités de Recherche en Informatique et Mathématique en Afrique (SARIMA)**

**UNESCO**



CIMPA School  
Fianarantsoa,  
Madagascar,  
February 2022





# 2022 HIGHLIGHTS

## HIGHLIGHTS WITH OUR PARTNERS



### NEW PARTNERSHIP FOR THE RESEARCH IN PAIRS PROGRAMME

An agreement was signed between CIMPA and ICTP to organise and fund the Research in Pairs programme.

The CIMPA-ICTP fellowships programme Research in Pairs gives the possibility for researchers in mathematics based in a developing country to come to some European countries to collaborate with a colleague on a well-substantiated research project and to give a short course. These courses are recorded and broadcast at ICTP, CIMPA, or at CIRM (Marseille, France).

During their stay, researchers can also spend a collaboration week at a partner research center: CIRM (Marseille), CRM (Barcelona), FIM (Zurich), ICTP (Trieste) or MFO (Oberwolfach).

Funded research periods must be at least 6 weeks with a maximum funding of €10,000 per laureate.



### AFRICAN RESEARCH TRAINING SCHOOL

From 29 August to 14 September, the first edition of the "African Research Training School" programme, organised by AIMS-Senegal, CIMPA and EMS-CDC, took place at AIMS-Senegal. This new project aimed at launching the future generation of African mathematicians thanks to a three-week school with lectures, tutorials and working groups, and financial support and mentoring for the best participants during their PhD.





## CIMPA PARTICIPATION IN THE INTERNATIONAL CONGRESS OF MATHEMATICIANS (ICM)

On the occasion of the CDC-panel of ICM 2022, which took place virtually on 12 July, Christophe Ritzenthaler was invited to present CIMPA's online activities, to elaborate on the advantages and disadvantages as well as solutions to mitigate them.



Watch the interview  
on our YouTube channel.


 CIMPA MATH




## CIMPA PARTICIPATION IN THE INTERNATIONAL YEAR OF BASIC SCIENCES FOR SUSTAINABLE DEVELOPMENT (IYBSSD)

CIMPA supports and participates in "The International Year of Basic Sciences for Sustainable Development" (IYBSSD).

The main aim of IYBSSD 2022 is to mobilize national, regional, and global scientific institutions to clearly demonstrate to the public and especially to political and business leaders worldwide how basic sciences are helping us to establish an inclusive, balanced, and sustainable development of the planet.

 Christophe Ritzenthaler's speech at the World Conference on Basic Sciences and Sustainable Development, held on September 19–22, 2022 in Belgrade, Serbia.



 Watch the speech

# HIGHLIGHTS FROM THE ADMINISTRATION SIDE



## NEW CIMPA STATUTES

On September 15, an extraordinary General Assembly of CIMPA was held. On this occasion, the members of CIMPA voted electronically to revise the statutes and the by-laws of the association. The new versions prepared by the Executive Committee in collaboration with UNESCO and the Direction générale de la recherche et de l'innovation, was guided by the following principles:

- correcting small inaccuracies,
- answering concerns of the French Ministry or UNESCO about the functioning of the various bodies (exact list of members and quorum),
- reflecting the way CIMPA works in practice nowadays,
- clarifying the roles of individuals and the relations between the bodies.



Read the statutes



## WELCOME TO NEW CIMPA MEMBERS!



**María de los Angeles Chara**  
Universidad Nacional del  
Litoral, ARGENTINA



**Parin Chaipugnya**  
King Mongkut's University  
of Technology Thonburi,  
THAILAND



**El Hadji Samba Diop**  
Université Iba Der Thiam  
de Thiès, SENEGAL



**Solym Manou Abi**  
Université de Mayotte,  
FRANCE



**Özgür Martin**  
Mimar Sinan University,  
TURKEY



**Mohamed Mbehou**  
Université de Yaoundé I,  
CAMEROON



**Somayeh Moradi**  
Ilam University, IRAN



**Andam Mustafa**  
Salahaddin University-  
Erbil, IRAQ



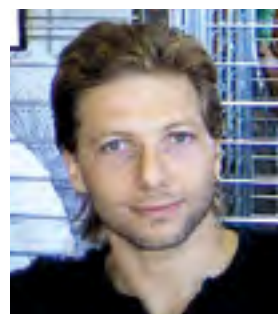
**Calvin Tcheka**  
Université de Dschang,  
CAMEROON



## YACINE CHITOUR: LAUREATES OF THE 2022 MAURICE AUDIN MATHEMATICS PRIZE

The prize was awarded to Yacine Chitour, professor at the Signals and Systems Laboratory of the University of Paris-Saclay at CentraleSupélec, for his work on the stabilisation of controlled systems, among other things. Yacine is scientific officer for CIMPA's North Africa and Middle East zone.

The prize was also awarded to Samir Bedrouni, lecturer at the University of Science and Technology Houari-Boumediene (USTHB) in Algiers, for his work on stratification in complex geometry.





## IN MEMORIUM

We would like to pay tribute to Jean-Pierre Demailly, Bas Edixhoven and François Gros who unfortunately passed away this year. Our thoughts are with their families and many friends.



### JEAN-PIERRE DEMAILLY

Very involved in both research and teaching at Grenoble Alpes University, Jean-Pierre Demailly has been one of the pillars of the Fourier Institute for almost 40 years.

His most important mathematical contributions concern analysis and complex geometry. He has also received many distinctions and prizes during a particularly brilliant international career.

He was a talented mathematician and a generous man, admired by all his students and colleagues. He contributed to the development of mathematics in many developing countries such as Tunisia, India and Chile, notably through the activities of CIMPA.

### BAS EDIXHOVEN

Bas was a professor of geometry at the University of Leiden (The Netherlands). He was a mathematician who found great joy in discussing problems or new mathematical ideas. He was very generous in sharing his knowledge with colleagues and students.

Bas taught in many summer and winter schools in his field, as well as in initiatives such as CIMPA. He had recently worked on bringing the Dutch community closer to CIMPA.



### FRANÇOIS GROS

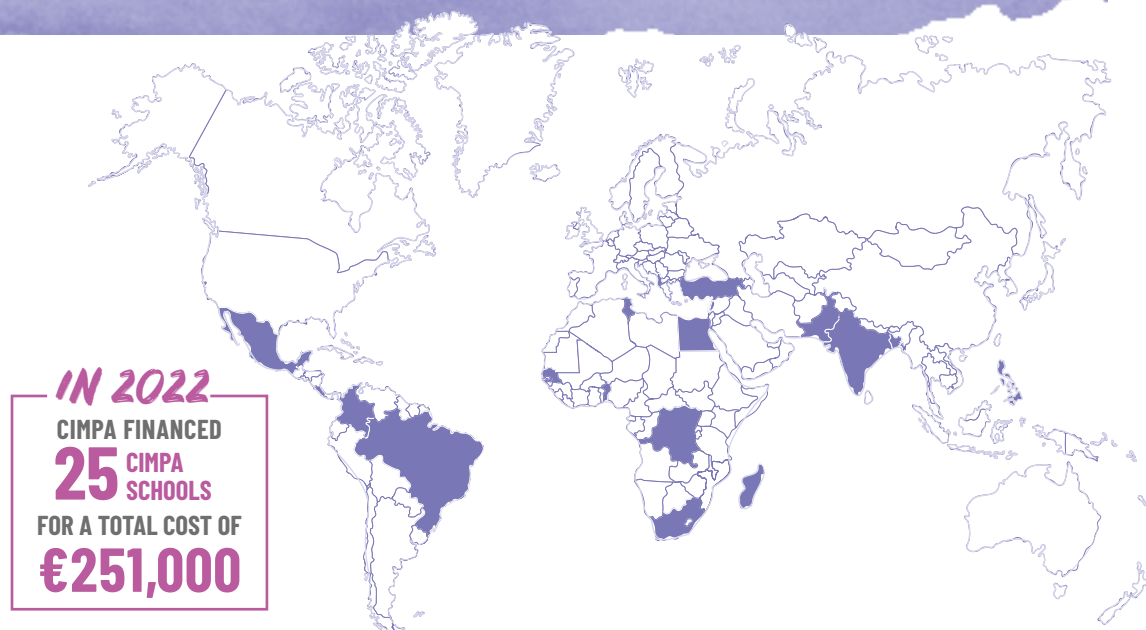
François Gros was a great biologist, co-discoverer of messenger RNA in the 1960s. He had a great interest in developing countries, particularly in Africa. He played a decisive role in the 1990s in the development of CIMPA.

# 2022 MAIN ACTIVITIES

## CIMPA SCHOOLS

Historically, CIMPA's activity focuses on the organisation of CIMPA Schools in developing countries. Each CIMPA School offers a series of research-level courses taught by specialists in a field of mathematics, with a duration of 2 weeks.

CIMPA Schools are aimed at master's or doctoral students and teacher-researchers from developing countries. CIMPA finances part of the cost of organising the School, as well as the travel and living expenses for participants from neighbouring developing countries or their online participation.



### **Kolkata, India**

“Groups and Geometry”  
January 18-29

### **Florianópolis, Brazil**

“From Dynamics to Algebra and Representation Theory and Back”  
February 7-18

### **Fianarantsoa, Madagascar**

“Probabilistic and Statistical Modeling with Applications in Epidemiology and Environment”  
February 22-26

### **Lahore, Pakistan**

“CIMPA School on Algebraic and Combinatorial Methods in Geometry”  
March 1-11

### **Dhaka, Bangladesh**

“CIMPA Summer Research School in Mathematical Epidemiology”  
May 9-20

### **Tunis, Tunisia**

« Science des données et optimisation stochastique »  
May 16-27

**Guanajuato, Mexico**

“p-Adic Numbers, Ultrametric Analysis, and Applications”

May 23-31

**Thies, Senegal**

« Mathématiques en analyse et traitement du signal, des images et des données »

May 30 – June 10

**Izmir, Turkey**

“SuSAAN Summer School of Applied Arithmetic at Nesin”

June 5-17

**Beirut, Lebanon**

“Graph Theory and Interactions”

June 6-15

**San Cristobal de las Casas, Mexico**

“The N-Body Problem, Old and New”

June 8-18

**Dangbo, Benin**

« Algèbre, arithmétique et applications »

June 12-24

**Brazzaville, Congo**

« École de géométrie »

June 13-25

**Bogotá, Colombia**

“Geometric Tools in Combinatorics”

June 14-25

**São Carlos, Brazil**

“Singularities and Applications”

July 11-22

**San Salvador, El Salvador**

“Algebraic Methods in Topology”

July 11-22

**Cape Town, South Africa**

“Mathematical and Statistical Methods for Data Sciences”

July 18-29

**Tirana, Albania**

“Mathematical Methods in Data Analysis”

July 18-29

**M'bour, Senegal**

“Cryptography, Theoretical and Computational Aspects of Number Theory”

August 15-26

**Butuan, Philippines**

“Mathematical Modelling for Ecosystems”

August 22 – September 2

**Dangbo, Benin**

“Partial Differential Equations (PDEs) and Calculus of Variations”

August 29 – September 9

**Tunis, Tunisia**

« Vert Numérique : biologie mathématique et écologie théorique »

September 24 – October 3

**Lahore, Pakistan**

“CIMPA School on Recent Advances in Combinatorics and its Application”

November 1-11

**Cairo, Egypt**

“Rings, Algebras, and Category Towards Coding and Computer Algebras”

December 10-21

**Varanasi, India**

“Geometric Structures on Surfaces, Moduli Spaces and Dynamics”

December 12-22

↑  
CIMPA School,  
Florianópolis,  
Brazil,  
February 2022

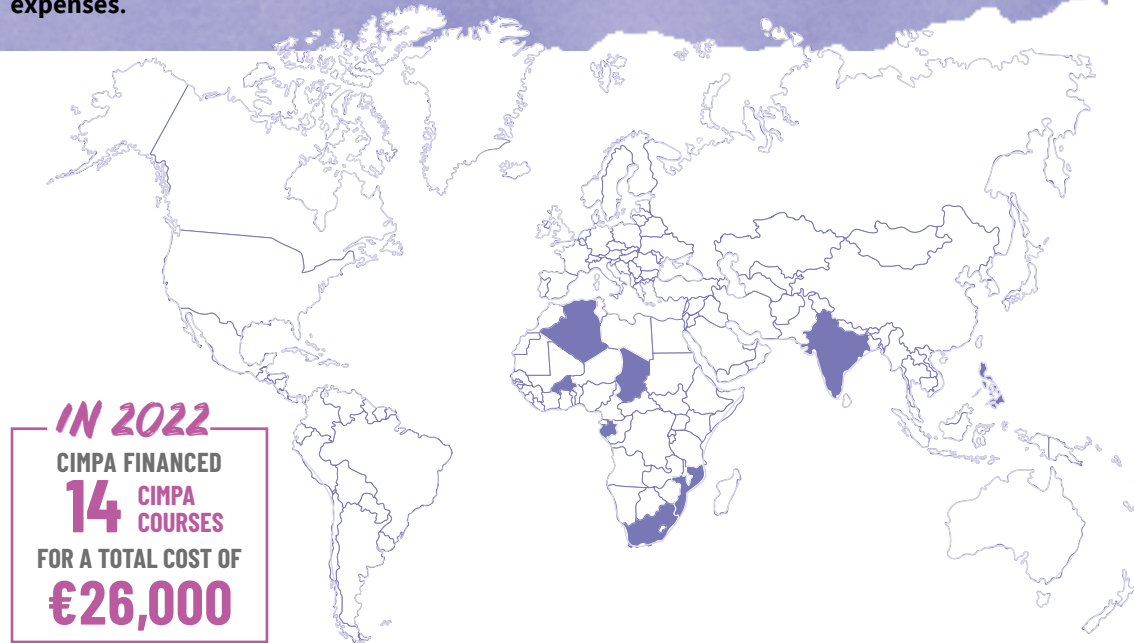
CIMPA School,  
Dangbo, Benin,  
September 2022





# CIMPA COURSES

A CIMPA Course is a master's-level or research-level mathematics course given by visiting professors, with a duration of 1 to 4 weeks. The courses take place in higher education and research institutions in developing countries. CIMPA finances the involvement of the professors by supporting a large part of their travel expenses.



## Université Nazi Boni,

BOBO DIOULASSO, BURKINA FASO

« Automates finis, suites automatiques et théorie des graphes »

by Didier Jean Caucau

UNIVERSITÉ GUSTAVE EIFFEL, FRANCE

January 4-27

## University of N'Djamena

N'DJAMENA, CHAD

« Introduction aux systèmes dynamiques et équations différentielles »

by Patrick Mimphis Tchepmo Djomegni

NORTH WEST UNIVERSITY, SOUTH AFRICA

March 20-27

## Universidade Pedagógica de Maputo

MAPUTO, MOZAMBIQUE

« Simulation and Queuing Theory »

by Begoña Vitoriano Villanueva

UNIVERSIDAD COMPLUTENSE DE MADRID, SPAIN

March 29 - April 18

## North West University

POTCHEFSTROOM, SOUTH AFRICA

« Introduction to Mathematical Epidemiology »

by Julien Arino

UNIVERSITY OF MANITOBA, CANADA

April 3-22

## Banaras Hindu University

VARANASI, INDIA

« Metric Geometry, non-Euclidean Geometry and Teichmüller Spaces »

by Athanase Papadopoulos

CNRS AND UNIVERSITY OF STRASBOURG, FRANCE

April 15-28

## University of N'Djamena

N'DJAMENA, CHAD

« Théorie Classique des EDP »

by Mohamed Mbehou

UNIVERSITY OF YAOUNDE 1, CAMEROON

May 10-25



Patrick Mimphis Tchepmo Djomegni in Chad, December 2022

**University of Béjaia**

BÉJAIA, ALGERIA

“Combinatorics of Words and Rauzy Fractals”

by Tarek Sellami

SFAX UNIVERSITY OF SCIENCES, TUNISIA

June 24 – July 1

**University of N'Djamena,**

N'DJAMENA, CHAD

« EDP d'évolution »

by Patrick Mimphis Tchepmo Djomegni

NORTH WEST UNIVERSITY, SOUTH AFRICA

June 27 – July 8

**Caraga State University**

BUTUAN CITY, PHILIPPINES

“Finite Elements Method and Initiation to Freefem++”

by Marília Pires

ÉVORA UNIVERSITY, PORTUGAL

August 12 – September 3

**École Normale Supérieure**

LIBREVILLE, GABON

“Algebraic Number Theory”

by Cécile Armana

UNIVERSITÉ DE FRANCHE-COMTÉ, FRANCE

December 6-13

**École Normale Supérieure**

LIBREVILLE, GABON

“Algebraic Number Theory II: Local fields and local-global principle”

by Christian Maire

UNIVERSITÉ DE FRANCHE-COMTÉ, FRANCE

December 8-20

**North West University**

POTCHEFSTROOM, SOUTH AFRICA

“Waves in the Atmosphere and Oceans”

by Boualem Khouider

UNIVERSITY OF VICTORIA, CANADA

December 11-18

**University of N'Djamena,**

N'DJAMENA, CHAD

« Méthode des différences finies et programmation Matlab »

by Mohamed Mbehou

UNIVERSITY OF YAOUNDE 1, CAMEROON

December 18, 2022 – January 6, 2023



Tarek Sellami  
in Algeria,  
June 2022

**Universidade Pedagógica de Maputo**

MAPUTO, MOZAMBIQUE

“Statistical Research Methodology”

by Rodríguez González

UNIVERSIDAD COMPLUTENSE DE MADRID, SPAIN

August 24 – September 2



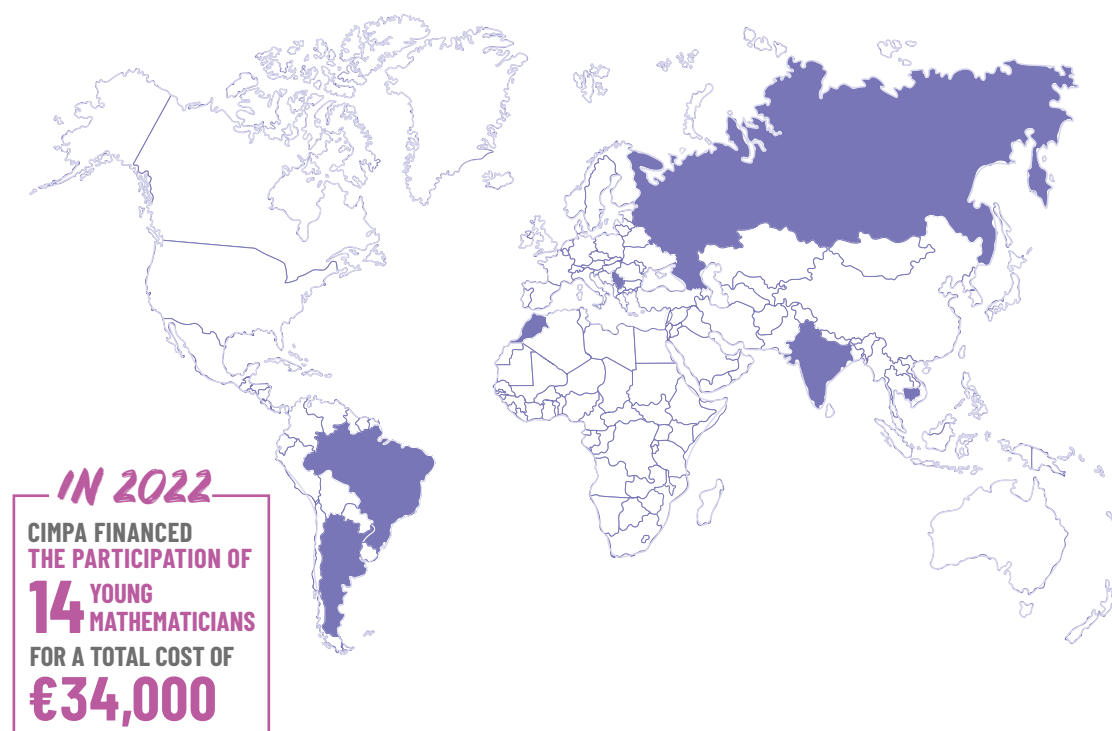
Cécile Armana  
and Christian  
Maire  
in Gabon,  
December 2022



↑  
Didier Jean  
Caucal in  
Burkina Faso,  
January 2022

# CIMPA FELLOWSHIPS

The CIMPA Fellowships offer funding to enable young researchers from developing countries to take part in short thematic programmes in partner research institutes in Europe, for 1 to 3 months. CIMPA, in association with its partners, covers all the participants' costs.

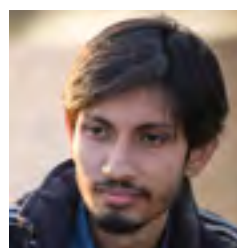


## IHP



### "MATHEMATICAL MODELING OF ORGANIZATION IN LIVING MATTER"

January 10 - April 1



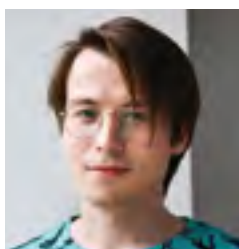
**Mainak Mandal,**  
Indian Statistical  
Institute, INDIA





## "GROUPS ACTING ON FRACTALS, HYPERBOLICITY AND SELF-SIMILARITY"

April 11 - July 8



**Georgii Veprev,**  
St Petersburg  
University, RUSSIA



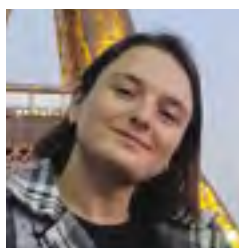
**Swathi Krishna,**  
University of  
Mumbai, INDIA



**Soumya Dey,**  
Chennai  
Mathematical  
Institute, INDIA

## "GEOMETRY AND STATISTICS IN DATA SCIENCES"

September 5 - December 9



**María José Llop,**  
Universidad  
Nacional del Litoral,  
ARGENTINA



**Abdellah Haddad,**  
Faculté des Sciences  
de Rabat, MOROCCO



**Kimsy Tor,** American  
University of Phnom  
Penh, CAMBODIA



## CIRM



## "LOGIC AND INTERACTIONS"

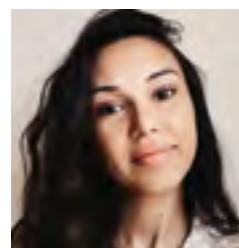
January 24 - February 25



**Gabriel Mauricio  
Goren,**  
Universidad de  
Buenos Aires  
ARGENTINA



**Simona Kašterović,**  
Faculty of Technical  
Sciences  
SERBIA



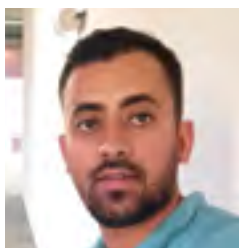
**Tamara Stefanović,**  
Faculty of Technical  
Sciences  
SERBIA

## CEMRACS: "TRANSPORT IN PHYSICS, BIOLOGY AND URBAN TRAFFIC"

January 24 - February 25



**Amal Machtalay,**  
Mohammed  
VI Polytechnic  
University  
MOROCCO



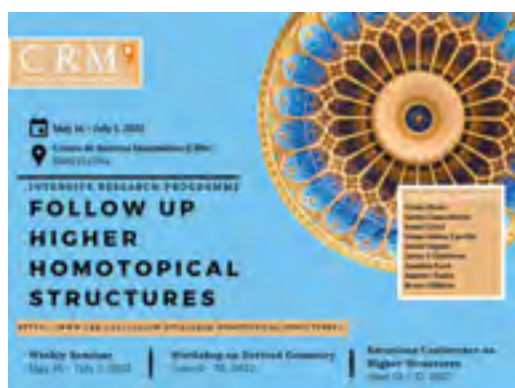
**Mohamed Boujoudar,**  
Mohammed  
VI Polytechnic  
University  
MOROCCO



Group photo -  
CEMRACS 2022

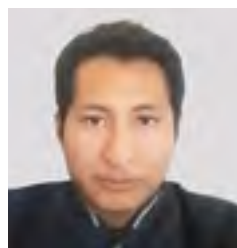


## CRM



## IRP HIGHER HOMOTOPICAL STRUCTURES

May 16 - July 1



**Juan Carlos  
Nuñez Maldonado,**  
Universidade Federal  
de São Carlos  
BRAZIL

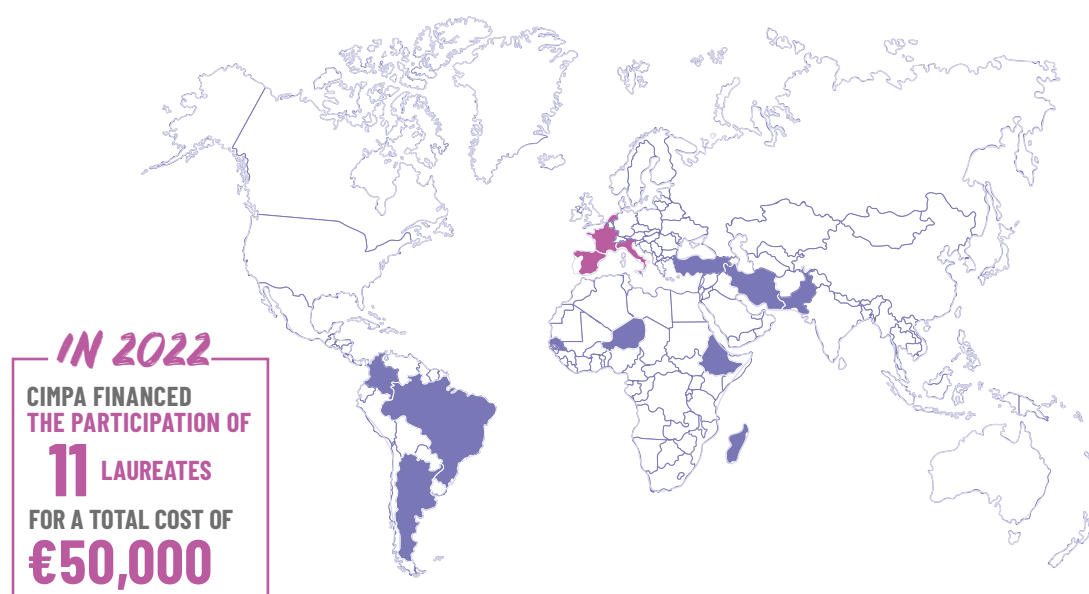


**Ripan Saha,**  
Raiganj University  
INDIA

# RESEARCH IN PAIRS PROGRAMME

The CIMPA-ICTP fellowships programme Research in Pairs gives **mathematics researchers based in developing countries the opportunity to come to a European country to collaborate with a colleague on a well-substantiated research project and to give a short course.** These courses are recorded and broadcast at ICTP, CIMPA, or at CIRM (Marseille, France).

During their stay, they can also spend a collaboration week at a partner research center: CIRM (Marseille), CRM (Barcelona), FIM (Zurich), ICTP (Trieste) or MFO (Oberwolfach).



**Carolina Benedetti Velasquez,**

Universidad de los Andes,  
COLOMBIA

🔗 University of Barcelona,  
SPAIN

June 25 - August 5



**Maliheh Yousefzadeh,**

University of Isfahan, IRAN

🔗 Politecnico di Torino,  
ITALY

June 5 - July 31



**Khalid Saifullah,**

Quaid-i-Azam University,  
PAKISTAN

🔗 Università di Bologna, ITALY

September 1 - October 31





**Lova Zakariasy,**  
Antsiranana Higher Institute  
of Technology, MADAGASCAR  
[🔗](#) Université Gustave Eiffel,  
FRANCE  
September 10 - October 29



**Daouda Niang Diatta,**  
Université Assane Seck  
de Ziguinchor, SENEGAL  
[🔗](#) Université de Rennes I,  
FRANCE  
September 1 - October 30



**Alvaro Kruger Ramos,**  
Universidade Federal do Rio  
Grande do Sul, BRAZIL  
[🔗](#) Université Gustave Eiffel,  
FRANCE  
September 8 - December 12



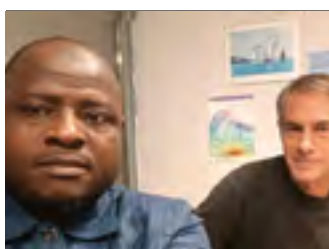
**Cristian Vay,**  
Universidad Nacional  
de Córdoba, ARGENTINA  
[🔗](#) Université Clermont  
Auvergne, FRANCE  
September 4 - December 3



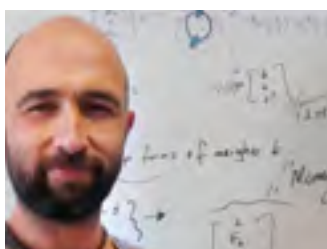
**Reihane Zoghifard,**  
Institute for Research in  
Fundamental Sciences, IRAN  
[🔗](#) University of Amsterdam,  
NETHERLANDS  
August 16 - December 9



**Getachew Gebrie,**  
Mathematics at Debre  
Berhan University, ETHIOPIA  
[🔗](#) ENSTA Paris, FRANCE  
September 22 - December 22



**Ibrahim Adamou,**  
Université Dan Dicko  
DanKoulodo de Maradi, NIGER  
[🔗](#) Université Côte d'Azur,  
FRANCE  
November 1 - December 17



**Özgür Kişisel,**  
Middle East Technical  
University, TURKEY  
[🔗](#) Université Claude Bernard  
Lyon 1, FRANCE  
September 19 - December 23



Watch their interviews on our  
YouTube channel.

[📺 CIMPA MATH /INTERVIEWS](#)

Watch the mini-courses:

[📺 CIMPA MATH /MINI-COURSES](#)

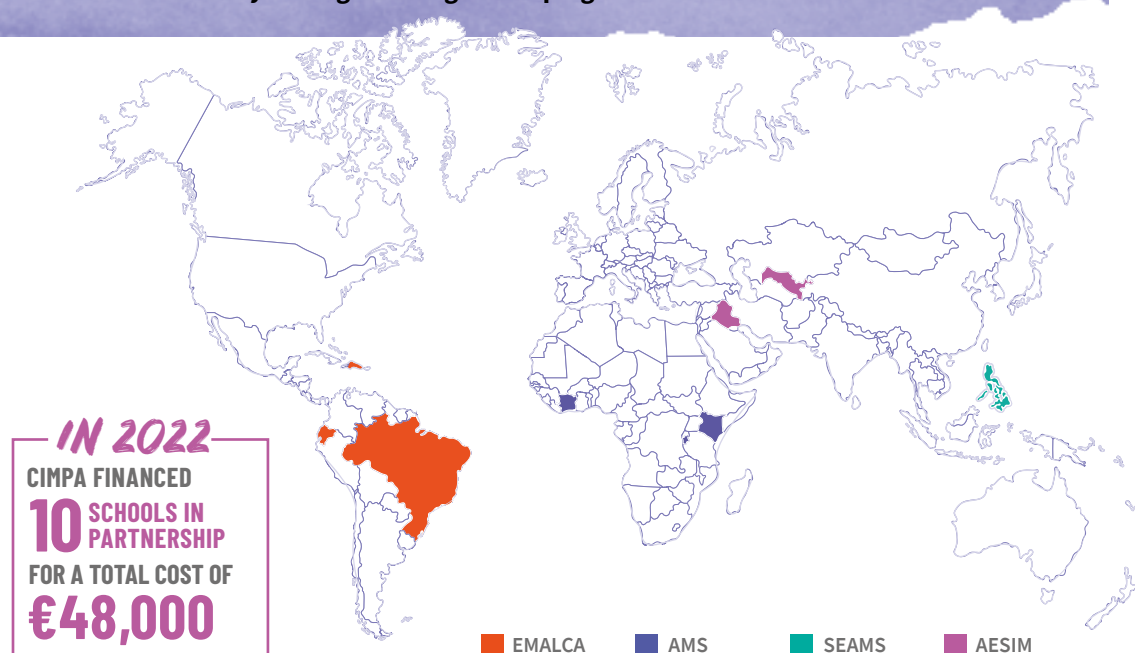
# SCHOOLS IN PARTNERSHIP

CIMPA supports schools of mathematics at master's level or for students at the end of their undergraduate studies, in partnership with continental mathematical societies and committees:

- Escuela de Matemática de América Latina y del Caribe (EMALCA)
- Asian and European Schools in Mathematics (AESIM) (previously WAMS)
- African Mathematical Schools (AMS)
- SEAMS Schools of Mathematics (SEAMS)

The Schools in Partnership take place in higher education and research institutions in all developing countries and have a duration of 1 to 3 weeks.

CIMPA's financial support covers the travel and living expenses for participants affiliated with the host country or neighbouring developing countries.



## ESCUELA DE MATEMÁTICA DE AMÉRICA LATINA Y DEL CARIBE (EMALCA)

**Universidad Autónoma de Santo Domingo,**

DOMINICAN REPUBLIC

“Differential Galois Theory and Mechanics”

May 30 - June 10

**Universidad Técnica Manabí, ECUADOR**

“Sistemas dinámicos”

July 25 - August 5

**Universidade Federal do Amazonas, BRAZIL**

“General Mathematics”

October 4 - 14



EMALCA at Universidad Técnica Manabí,  
Ecuador, July/August 2022



## AFRICAN MATHEMATICAL SCHOOLS (AMS)

### Kenya School of Government and University of Nairobi, KENYA

“ICTP-EAUMP School on Mathematical Programming and Algorithms”  
July 11-29

### Université du Burundi, BURUNDI

“Mathematical Modeling, Applications in Actuarial Sciences and Public Health”  
September 19-30

AMS at  
Université  
du Burundi,  
Burundi,  
September 2022



### University Felix Houphouët Boigny, IVORY COAST

« Epidémies : modèles mathématiques et traitement statistique des données »  
September 19 - October 1

AMS at University  
Felix Houphouët  
Boigny,  
Ivory Coast,  
September 2022



## THE SOUTHEAST ASIAN MATHEMATICAL SOCIETY (SEAMS)

### University of the Philippines Diliman, PHILIPPINES

"Modern Trends in Signal and Data Processing"  
December 5 - 13



SEAMS at the  
University of  
the Philippines,  
Diliman,  
Philippines,  
December 2022



## ASIAN AND EUROPEAN SCHOOLS IN MATHEMATICS (AESIM) (PREVIOUSLY WAMS)



AESIM at the Urgench State University,  
Uzbekistan, June 2022



### Urgench State University, UZBEKISTAN

“Lattices, Diophantine Approximation and Heights”  
June 6 - 10

### Salahaddin University-Erbil, IRAQ

“Topics in Algebraic Number Theory”  
August 23 - 28

### University of Sulaimani, IRAQ

“Topics in Commutative Algebra”  
September 3 - 7





# CIMPA

Centre International de Mathématiques Pures et Appliquées  
PROMOTING RESEARCH IN MATHEMATICS IN DEVELOPING COUNTRIES



## CIMPA SCHOOLS 2023 ÉCOLES CIMPA

**SOUTH AFRICA - Johannesburg**  
02.01 > 13.01

Logic at the Intersection of Algebra,  
Categories and Topology

**CHAD - N'Djamena**

02.01 > 13.01

Mathematical and Statistical  
Modeling of Complex Systems

**NAMIBIA - Windhoek**

16.01 > 27.01

Contemporary Geometry

**DOMINICAN REPUBLIC - Santo Domingo**

12.02 > 25.02

Differential Galois Theory and  
Applications to Mechanics

**ARGENTINA - Puerto Madryn**

13.03 > 26.03

Crossroads of Representation  
Theory, Geometry and Higher  
Structures

**GABON - Libreville**

15.05 > 26.05

Mathématiques et  
développement durable

**NEPAL - Kathmandu**

15.05 > 24.05

Data Visualization, Modeling, and  
Mathematical Tools

**TURKEY - Sirince**

04.06 > 16.06

Graph Structure and Complex  
Network Analysis

**CUBA - La Habana**

04.06 > 17.06

Mathematical Modelling and  
Numerical Simulation in Medicine

**LEBANON - Beirut**

05.06 > 16.06

Complex Analysis and Geometry

**MEXICO - Oaxaca**

12.06 > 23.06

Algebraic and Tropical Methods  
for Solving Differential Equations

**COLOMBIA - Bogotá**

23.07 > 04.08

Geometric, Algebraic and  
Topological Methods in Quantum  
Field Theory

**COLOMBIA - Popayan**

24.07 > 04.08

Isogenies of Elliptic Curves and  
their Applications to  
Cryptography

**MALAWI - Mzuzu**

06.08 > 19.08

Coding Theory and  
its Applications

**MOROCCO - Rabat**

23.10 > 04.11

Aspects mathématiques de la  
cryptographie post-quantique

**INDIA - Sangareddy**

20.11 > 01.12

Finite Geometry and Coding  
Theory

**SOUTH AFRICA**

Cape Town

20.11 > 08.12

Blockchain in Theory and Real  
Applications

**BRAZIL - Vitória**

04.12 > 15.12

Non-Associative Algebras and  
Related Topics

**INDIA - Pondicherry**

10.12 > 21.12

Post-Quantum Cryptography

**LIST OF 2022 SCHOOLS  
POSTPONED TO 2023 ON OUR  
WEBSITE.**

**LISTE DES ÉCOLES 2022  
REPORTÉES EN 2023 SUR NOTRE  
SITE INTERNET.**

[www.cimpa.info](http://www.cimpa.info)



CARMIN



# 2023 FINANCIAL HIGHLIGHTS

## CIMPA SUBSIDIES

CIMPA receives subsidies from various European and international institutions



INSTITUT NATIONAL  
DES SCIENCES  
MATHÉMATIQUES  
ET DE LEURS  
INTERACTIONS  
(FRANCE)



LABORATOIRE  
D'EXCELLENCE CARMIN  
(FRANCE)



MINISTÈRE DE  
L'ENSEIGNEMENT  
SUPÉRIEUR,  
DE LA RECHERCHE  
ET DE L'INNOVATION  
(FRANCE)



MINISTÈRE DE L'EUROPE  
ET DES AFFAIRES  
ÉTRANGÈRES  
(FRANCE)



UNIVERSITÉ CÔTE D'AZUR  
(FRANCE)



MINISTRY OF EDUCATION  
AND RESEARCH  
(NORWAY)



SECRÉTARIAT D'ÉTAT  
À LA FORMATION,  
À LA RECHERCHE  
ET À L'INNOVATION  
(SWITZERLAND)



UNIVERSITÉ  
DE NEUCHÂTEL  
(SWITZERLAND)



MINISTERIO DE CIENCIA  
E INNOVACION (SPAIN)



MINISTERIO DE  
UNIVERSIDADES (SPAIN)



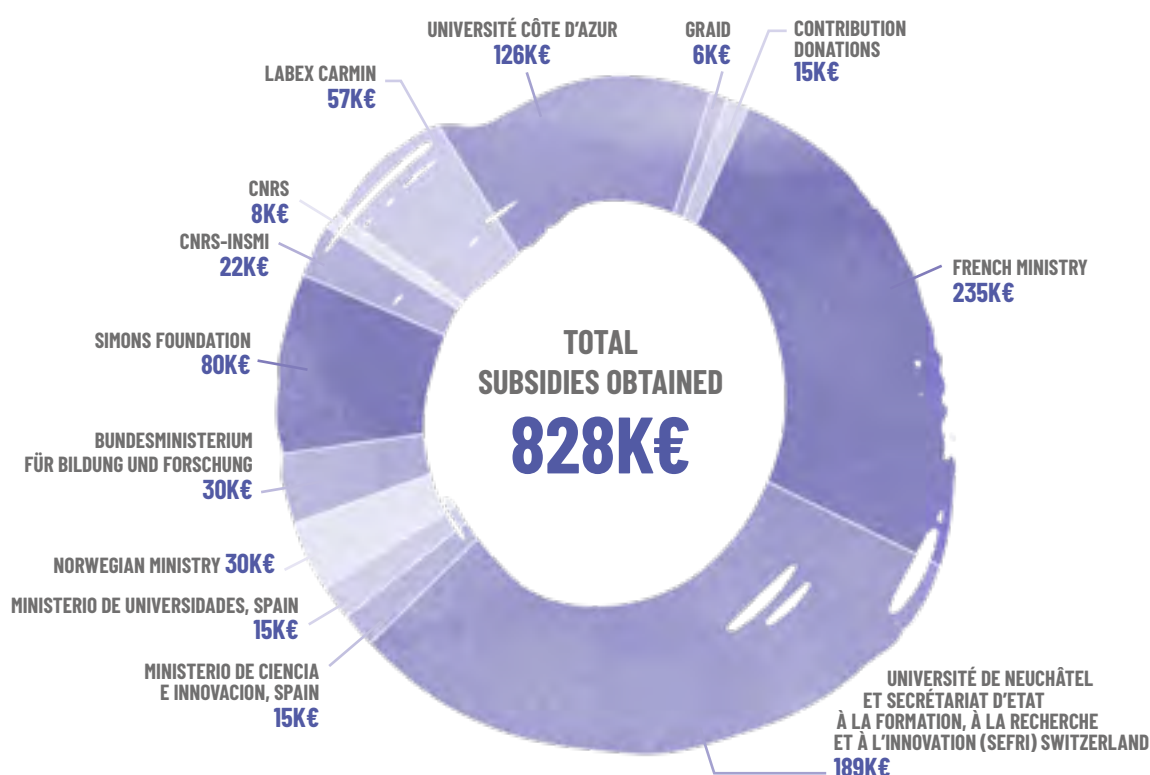
BUNDESMINISTERIUM  
FÜR BILDUNG UND  
FORSCHUNG (GERMANY)



SIMONS FOUNDATION  
(UNITED STATES)

## 2022 SUBSIDIES (€)

Ministère de l'Enseignement supérieur et de la Recherche/Direction générale de la recherche et de l'innovation	235 000.00
Ministerio de Ciencia e Innovación (Spain)	15 000.00
Ministerio de Universidades (Spain)	15 000.00
Université de Neuchâtel et Secrétariat d'Etat à la formation, à la recherche et à l'innovation (SEFRI) (Switzerland) (210KCHF+80KCHF)	188 862.00
Ministry of Education and Research (Norway)	30 000.00
Bundesministerium für Bildung und Forschung	30 000.00
SIMONS Foundation (88400 USD)	80 490.96
CNRS-INSMI	22 000.00
Labex CARMIN	57 409.00
CNRS support for a CIMPA course in Gabon	7 849.00
Université Côte d'Azur, (including Director's salary)	125 879.44
Donations to GRAID (Graduate Research Assistantships in Developing Countries)	5 540.00
Contributions, donations	15 164.77
<b>TOTAL INCOME</b>	<b>828 195.17</b>





# 2022 FINANCIAL STATEMENT

## 2022 EXPENSES (€)

### FIXED COSTS

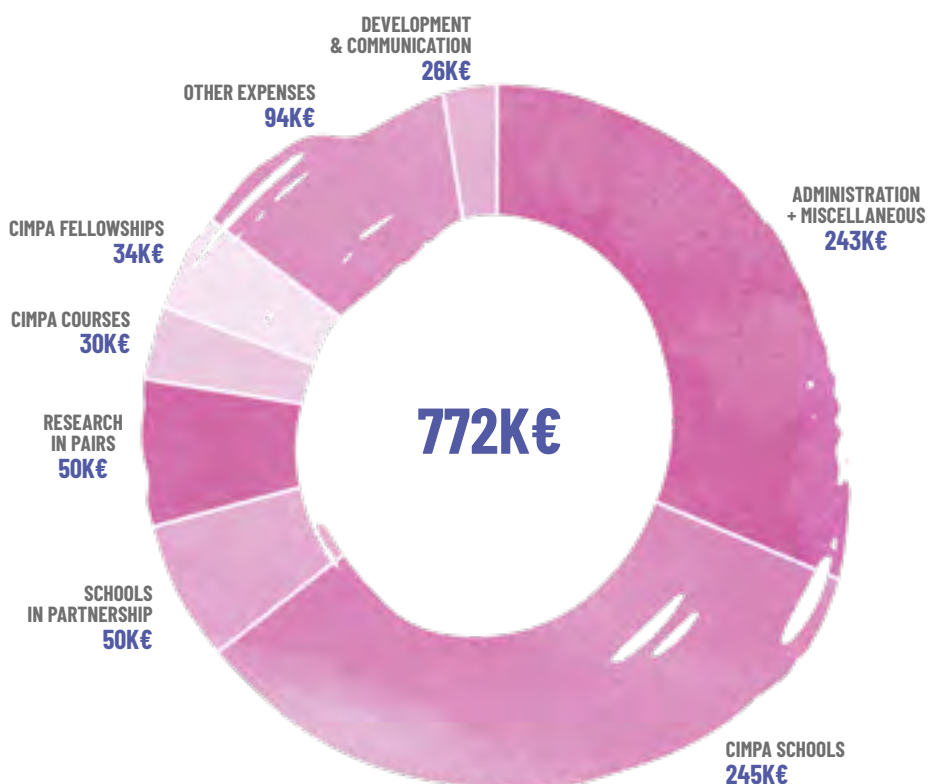
Bank charges + online payment fees	3 126.23
Office supplies	628.80
UCA occupancy costs	2 460.00
Insurance	426.79
Fees: accountant, auditor	12 661.80
Professional dues	790.00
Corporate tax	769.00
Salaries (including Director's one), social security contributions, occupational health care, share of prof. training	221 839.69

**SUBTOTAL FIXED COSTS 242 702.31**

### DEVELOPMENT & COMMUNICATION

Computer hardware, software and video room equipment	0.00
Communication	8 337.87
LMS platform + website redesign	17 264.48

**SUBTOTAL DEVELOPMENT & COMMUNICATION 25 602.35**



ACTIVITIES	
2020 CIMPA SCHOOLS POSTPONED TO 2022	
Congo	12 706.00
Mexico (Guanajuato)	6 015.66
Colombia (Bogota)	6 487.25
El Salvador	10 230.53
Brazil (Sao Carlos)	6 066.53
<b>S/TOTAL 1</b>	<b>41 505.97</b>
2021 CIMPA SCHOOLS POSTPONED TO 2022	
Brazil (Florianopolis)	8 727.33
India	1 657.25
Lebanon	11 764.00
Pakistan, March 1-11	7 495.00
Senegal (M'bour)	12 264.70
Madagascar	6 169.97
South Africa (Cape Town)	6 654.69
Benin	10 923.50
Egypt	5 877.00
<b>S/TOTAL 2</b>	<b>71 533.44</b>
2022 CIMPA SCHOOLS	
Philippines (Manila) - POSTPONED TO 2023	
Bangladesh	11 110.84
Tunisia, May 16-27	12 627.87
Senegal (Thiès)	13 580.31
Turkey	12 188.34
Mexico	14 189.58
Benin	12 420.30
China - CANCELLED	0.00
Albania	12 996.05
Philippines (Butuan)	11 670.87
Tunisia, September 24 – October 3	10 904.03
Pakistan, November 1-11	10 493.00
India	9 380.00
<b>S/TOTAL 3</b>	<b>131 561.19</b>
<b>SUBTOTAL SCHOOLS (1+2+3)</b>	<b>244 600.60</b>
SCHOOLS IN PARTNERSHIP	
EMA	21 614.00
EMALCA	10 590.35
SEAMS	3 709.10
AESIM (ex WAMS)	14 141.20
<b>SUBTOTAL SCHOOLS IN PARTNERSHIP</b>	<b>50 054.65</b>
CIMPA FELLOWSHIPS	
IHP Trimester T1 "Mathematical modeling of organization in living matter" (1 laureate)	1 762.80
IHP Trimester T2 "Groups Acting on Fractals, Hyperbolicity and Self-Similarity" (3 laureates)	8 495.33
IHP Trimester T3 "Geometry and Statistics in Data Sciences" (3 laureates)	14 678.24
IPR CRM Barcelona "Higher Homotopical structures" (2 laureates)	2 895.67
CIRM-SMAI Program - CEMRACS SUMMER SCHOOL (2 laureates)	2 612.99
CIRM Thematic Month "Logique et interactions" (3 laureates)	4 001.00
<b>SUBTOTAL CIMPA FELLOWSHIPS</b>	<b>34 446.03</b>
<b>RESEARCH IN PAIRS (12 LAUREATES)</b>	<b>49 717.09</b>
CIMPA COURSES	
In person	29 796.64
Online	0.00
<b>SUBTOTAL CIMPA COURSES</b>	<b>29 796.64</b>
OTHER EXPENSES	
Support Women in Sage	6645.19
Ad hoc support for research training activities	2317.21
Support for PACOM 2022	6588.90
Support to WATS (ARTS)	27158.83
Support to GRAID (Graduate Research Assistantships in Developing Countries)	5540.00
Management team and board member expenses	32 553.43
Expenses for General Assembly/ Governing Board/Scientific Council/ Steering Committee meetings	13 431.62
<b>SUBTOTAL OTHER EXPENSES</b>	<b>94 235.18</b>
<b>SUBTOTAL ACTIVITES</b>	<b>502 850.19</b>
<b>TOTAL EXPENSES</b>	<b>771 154.85</b>
<b>SURPLUS/ EQUITY CONTRIBUTION</b>	<b>57 040.32</b>
<b>TOTAL GENERAL</b>	<b>828 195.17</b>



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