



CIMPA

Centre International
de Mathématiques Pures et Appliquées



2022 PROVISIONAL ANNUAL REPORT

www.cimpa.info

CONTENT

FOREWORD	3
----------------	---



WHO WE ARE

ABOUT US	4
CIMPA, SINCE IT WAS FIRST CREATED	5

AN INTERVIEW WITH ANNIE RAOULT, VICE-PRESIDENT OF CIMPA	6
---	---



GOVERNANCE & ADMINISTRATION

GOVERNING BOARD	10
SCIENTIFIC COUNCIL	11
EXECUTIVE TEAM	12
STEERING COUNCIL	13
LIST OF PARTNERS	14



2022 HIGHLIGHTS

HIGHLIGHTS WITH OUR PARTNERS	16
HIGHLIGHTS FROM THE ADMINISTRATION SIDE ..	17
IN MEMORIAM: THE PASSING OF BAS EDIXHOVEN, FRANÇOIS GROS AND JEAN-PIERRE DEMAILLY	19



MAIN ACTIVITIES

CIMPA SCHOOLS	20
CIMPA COURSES	22
CIMPA FELLOWSHIPS	24
RESEARCH IN PAIRS PROGRAMME	27
SCHOOLS IN PARTNERSHIP	29

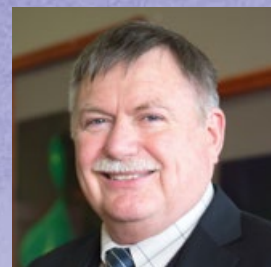


FINANCIAL HIGHLIGHTS

CIMPA SUBSIDIES	32
2022 FINANCIAL STATEMENT	34

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.

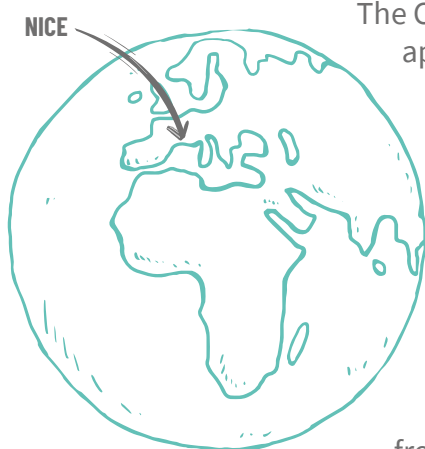
After the quick decisions imposed by the pandemic, this year was also about consolidation. We increased our financial supports to *Schools* and *Schools in Partnerships* and continue to clarify their guidelines. The new *Research in Pairs programme* started last year is now a joint call with ICTP and 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



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



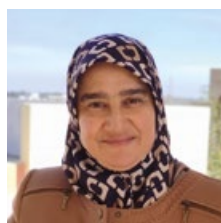
Annie Raoult
VICE-PRESIDENT
Université
Paris-Cité,
FRANCE



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
Norwegian Ministry of Education and Research, NORWAY
Ministerio de Ciencia, Innovación y Universidades, SPAIN
UNESCO
Université Côte d'Azur, FRANCE

SCIENTIFIC COUNCIL

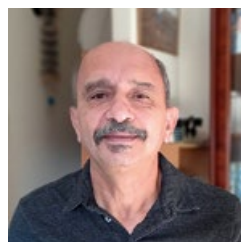
The Scientific Council is comprised of 12 members.
It makes **recommendations** on CIMPA's scientific activities.



Giulia Di Nunno
PRESIDENT
University of Oslo,
NORWAY



Volker Bach
Technische
Universität
Braunschweig,
GERMANY



Mohamed Boucetta
Université
Cadi-Ayad,
MOROCCO



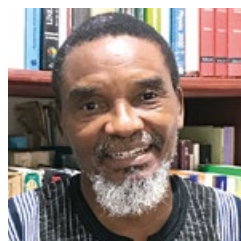
Tien-Cuong Dinh
National University
of Singapore,
SINGAPORE



Laura Geatti
Università di Roma
Tor Vergata,
ITALY



Henar Herrero Sanz
Universidad de
Castilla-La Mancha,
SPAIN



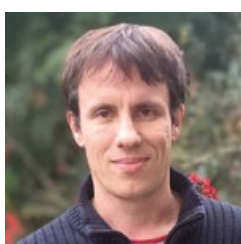
**Mahouton Norbert
Hounkonnou**
Université
d'Abomey-Calavi,
BENIN



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



Teresa Krick
Universidad de
Buenos Aires,
ARGENTINA



Gabriel Peyré
École normale
supérieure de Paris,
FRANCE



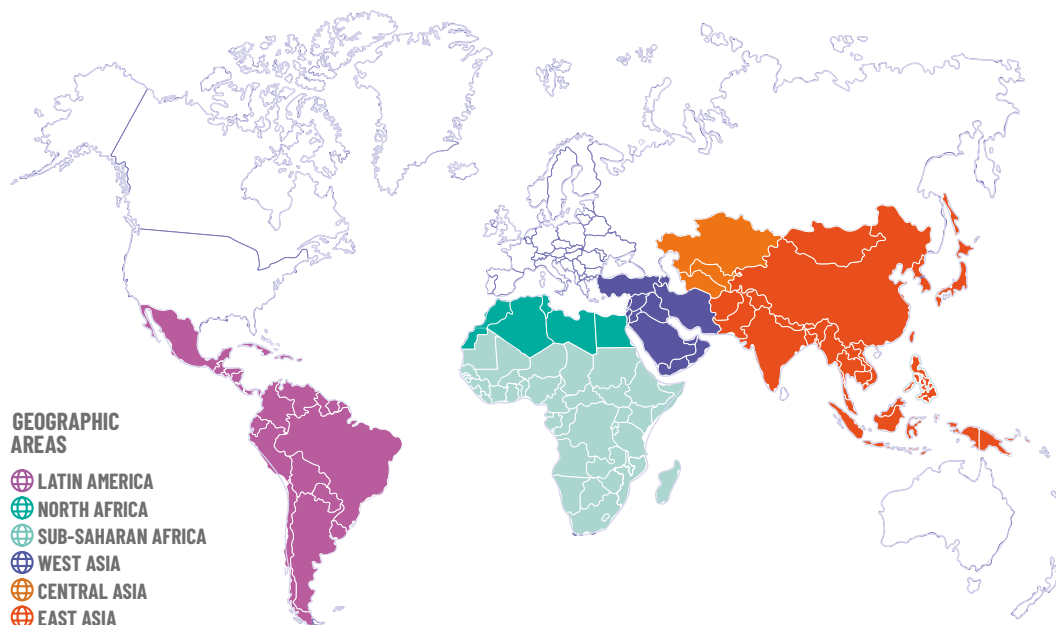
Mythily Ramaswamy
ICTS-TIFR,
INDIA



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



Vlad 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
Université
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



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.

2022 CIMPA-ICTP Research in Pairs

ONLINE COURSES

SPEAKERS

- Carolina Benedetti Velasquez**
Universidad de los Andes (Colombia)
July 4-7
Singularities, Poles and Resonances
- Mahmoud Yousefzadeh**
University of Tehran (Iran)
July 25-29
On representations of affine Lie superalgebras
- Khalid Saifullah**
University of Malakal (South Sudan)
September 2, 5, 6, 7
An introduction to general relativity
- Daouda Niang Diatta**
Université de la Côte d'Ivoire (Côte d'Ivoire)
October 3, 4, 10, 11
Représentations des séries principales des représentations à cuspide de la série principale des courbes elliptiques globales
- Lova Zakariasy**
Université de la Côte d'Ivoire (Côte d'Ivoire)
October 17, 18, 20
Représentations de la série principale des représentations à cuspide de la série principale des courbes elliptiques globales
- Alvaro Ramos**
Universidad de Sevilla (Spain)
October 24-27
Singularities, Poles and Resonances
- Cristian Vay**
Université de la Côte d'Ivoire (Côte d'Ivoire)
November 14-17
Representations Theory of Generalized Small Quantum Groups
- Reihane Zoghifard**
University of Tehran (Iran)
November 21-24
Topological Semantics for Modal Logic
- Ibrahim Adamou**
Université de la Côte d'Ivoire (Côte d'Ivoire)
December 5-8
Introduction à la géométrie algébrique
- Anteh Getachew Gebrie**
Université de la Côte d'Ivoire (Côte d'Ivoire)
December 5-8
Introduction to Noncommutative Optimization and Control Theory
- Oğuz Kızınel**
University of Malakal (South Sudan)
December 12-15
Real and Complex Line Arrangements
- Haniya Azam**
University of Malakal (South Sudan)
December 12-15
A Gentle Introduction to Fukaya Categories

REGISTER NOW
www.cimpa.org

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.

AIMS-CIMPA-EMS SCHOOL AND CONFERENCE

AFRICAN RESEARCH TRAINING SCHOOL
At AIMS Senegal

3 WEEKS
August 29 - September 17, 2022
& mentoring during the PhD thesis

2 TOPICS
Analysis of PDE & Probability and Statistics

2 GROUPS OF PARTICIPANTS
Candidates must be in their last year of Master or in first or second year of their PhD thesis and based in an African country.

FULL FINANCIAL SUPPORT

DEADLINE: MAY 31, 2022
For more information: <https://bit.ly/3uetyG0>



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

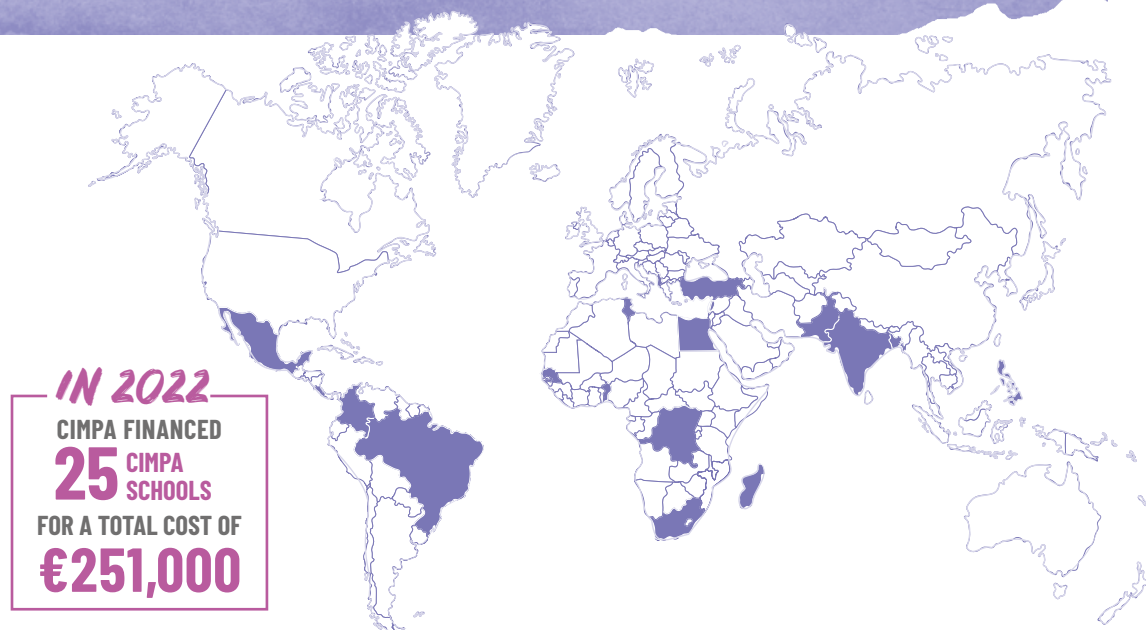
François Gros was a great biologist, co-discoverer of messenger RNA in the 1960s. He had a great interest in developing countries, particularly in Africa. He played a decisive role in the 1990s in the development of CIMPA.

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

↑
CIMPA School,
Florianópolis,
Brazil,
February 2022

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”

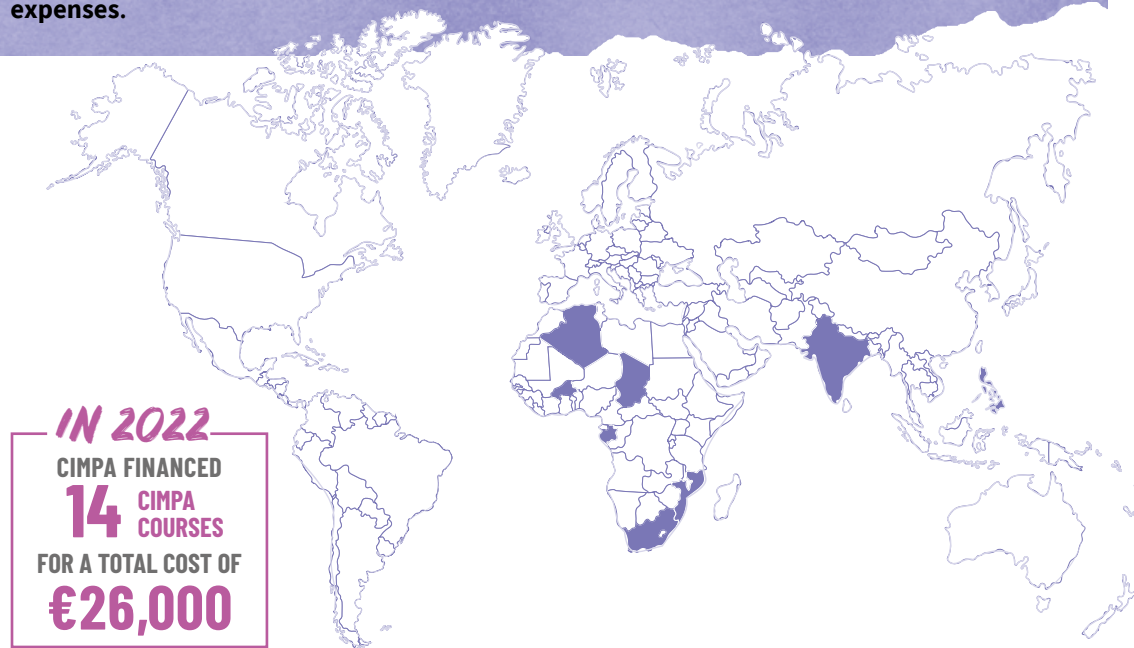
December 12-22

CIMPA School,
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 Cauca

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

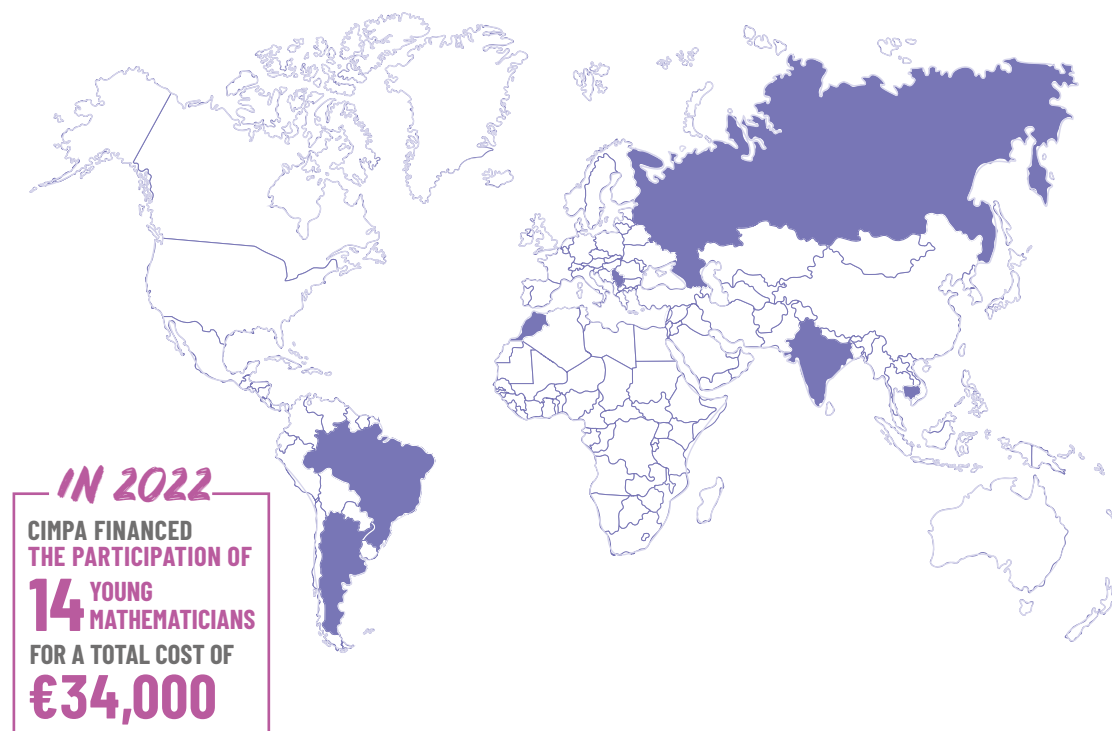


Cécile Armana
and Christian
Maire
in Gabon,
December 2022



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

January 10th to April 1st, 2022

Organizers:
Luis Almeida (CNRS & Sorbonne University)
Vincent Calvez (CNRS & Université Claude Bernard)
Marie Doumic (Inria, Paris)
Benoît Perthame (Sorbonne University)
Patricia Reynaud-Bouret (CNRS & Université Côte d'Azur)

thp Institut
Henri
Poincaré
11 rue Pierre et Marie Curie
75005 Paris cedex 05
France

Mathematical modeling of organization in living matter
Thematic program with short courses, seminars and workshops

Tissue growth and movement
January 10th to 14th, 2022

Mathematical modeling and statistical analysis in neuroscience
January 31st to February 4th, 2022

Mathematical models in ecology and evolution
March 21st to 25th, 2022

CIRM Closing School
March 28th to April 1st, 2022 (Marseille)

Program coordinated by the Centre Emile Borel (CEB) at IHP (Paris) and also accessible online
Participation of postdocs and PhD students is strongly encouraged
Registration is free however mandatory

Scientific program and registration on: <https://indico.math.cnrs.fr/category416/>
Deadline for financial support: June 15th, 2021
Contact: Mathbio2022@ihp.fr

CEB organization assistant: Delphine Lippacher
CEB manager: Sylvie Lhermitte
www.ihp.fr

Also supported by:

Logos of supporting organizations: CNRS, Sorbonne University, Université Claude Bernard, Inria, Institut Henri Poincaré, CIRM, etc.

"MATHEMATICAL MODELING OF ORGANIZATION IN LIVING MATTER"

January 10 - April 1



Mainak Mandal,
Indian Statistical
Institute, INDIA

April 11th to July 8th, 2022

Organizers:
François Duhamel (Université Grenoble Alpes)
Anna Erschler (CNRS, Paris)
Camille Horbez (Université Paris-Saclay)
Dani Wise (MSU, University)

Groups Acting on Fractals, Hyperbolicity and Self-Similarity
Thematic program with short courses, seminars and workshops

CIRM Introductory School
April 11th to 15th, 2022 (Marseille)

Mapping class groups and Out(F)
April 25th to 29th, 2022

Self-similarity of groups, trees and fractals
May 30th to June 3rd, 2022

Hyperbolic groups and their generalisations
June 20th to 24th, 2022

Program coordinated by the Centre Emile Borel (CEB) at IHP (Paris) and also accessible online
Participation of postdocs and PhD students is strongly encouraged
Registration is free however mandatory

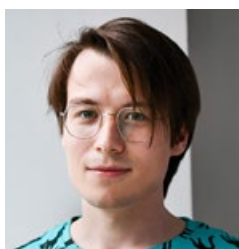
Scientific program and registration on: <https://indico.math.cnrs.fr/category/209>
Deadline for financial support: October 15th 2021
Contact: groups2022@ihp.fr

CIRM organization assistant: Roman De la Harpe
CIRM manager: Spina Chermant
www.ihp.fr




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

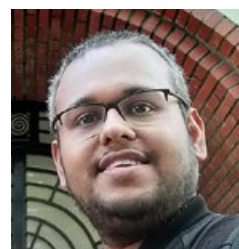
April 11 - July 8



Georgii Veprev,
St Petersburg
University, RUSSIA



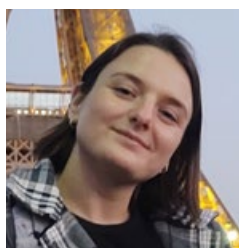
Swathi Krishna,
University of
Mumbai, INDIA



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

September 5th to December 9th, 2022

Organizers:
Sofie Amari (UPM, CNRS), Catherine Azeas (LJMO, Université Clermont Auvergne)
Vahid Chari (LMJ, IMJ), Aurélie Fischer (UPM, Université de Paris)
Marc Hoffmann (CREMAD, Paris Dauphine), Alice Le Brigant (AMM, Paris 7, Fondation Sorbonne)
Sébastien Lévay (UPM, Université de Paris), Bertrand Michel (IMJ, Ecole Centrale Nantes)

Geometry and Statistics in Data Sciences
Thematic program with short courses, seminars and workshops

IESC Introductory School in Corsica
September 5th to 9th, 2022

Non-Linear and High Dimensional Inference
October 3rd to 7th, 2022



Geometry, Topology and Statistics in Data Sciences
October 10th to 14th, 2022

Measure-theoretic Approaches and Optimal Transportation in Statistics
November 21st to 25th, 2022

Program coordinated by the Centre Emile Borel (CEB) at IH-Paris and also accessible online
Participation of postdocs and PhD students is strongly encouraged
Registration is free however mandatory

Scientific program and registration on: <https://indico.math.cnrs.fr/category/208>
Deadline for financial support: March 15th 2022
Contact: gesta2022@ihp.fr

CIRM organization assistant: Delphine Lapeere
CIRM manager: Spina Chermant
www.ihp.fr

CIRM

Thematic Month 2022
Logic and Interactions
24 January - 25 February 2022
CIRM, Campus de Luminy, Marseille

SCHOOL
Logic and Interactions School
École d'été de logique interactive
24 - 28 January 2022

CONFERENCE
Logic of probabilistic programming
Logique de la programmation probabiliste
31 January - 4 February 2022

SCHOOL
Logic and interactions
La Logique et les interactions
7 - 11 February 2022

CONFERENCE
Logic, databases and complexity: new methods and challenges
Logique, bases de données et complexité
14 - 18 February 2022

CONFERENCE
Logic and interactions
Logique et interactions supérieures
21 - 25 February 2022

<https://conferences.cirm-math.fr/2507.html>

International Research Network (IRN) Linear Logic











"LOGIC AND INTERACTIONS"

January 24 - February 25



Gabriel Mauricio Goren,
Universidad de
Buenos Aires
ARGENTINA



Simona Kašterović,
Faculty of Technical
Sciences
SERBIA



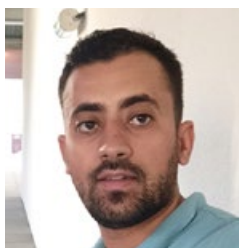
Tamara Stefanović,
Faculty of Technical
Sciences
SERBIA

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

January 24 - February 25



Amal Machtalay,
Mohammed
VI Polytechnic
University
MOROCCO



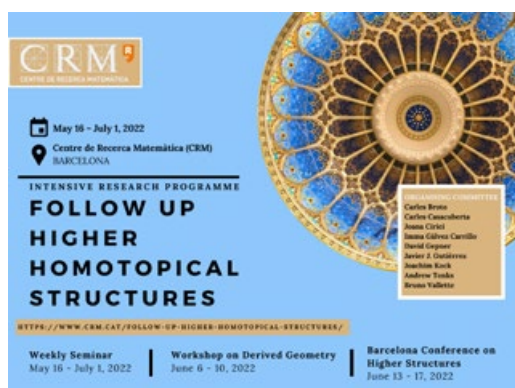
Mohamed Boujoudar,
Mohammed
VI Polytechnic
University
MOROCCO



Group photo -
CEMRACS 2022



CRM



IRP HIGHER HOMOTOPICAL STRUCTURES

May 16 - July 1



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

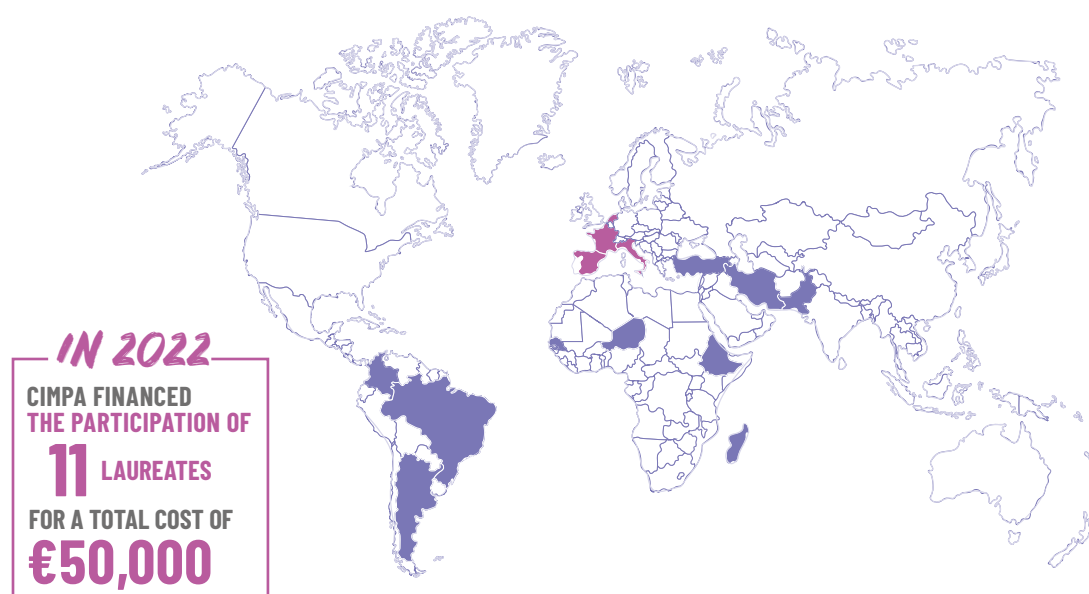


Ripan Saha,
Raiganj University
INDIA

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



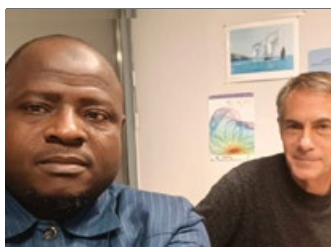
Cristian Vay,
Universidad Nacional
de Córdoba, ARGENTINA
[🔗](#) Université Clermont
Auvergne, FRANCE
September 4 - December 3



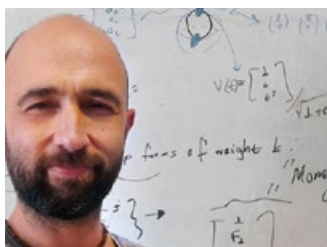
Reihane Zoghifard,
Institute for Research in
Fundamental Sciences, IRAN
[🔗](#) University of Amsterdam,
NETHERLANDS
August 16 - December 9



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.

[▶ CIMA MATH /INTERVIEWS](#)

Watch the mini-courses:

[▶ CIMA MATH /MINI-COURSES](#)

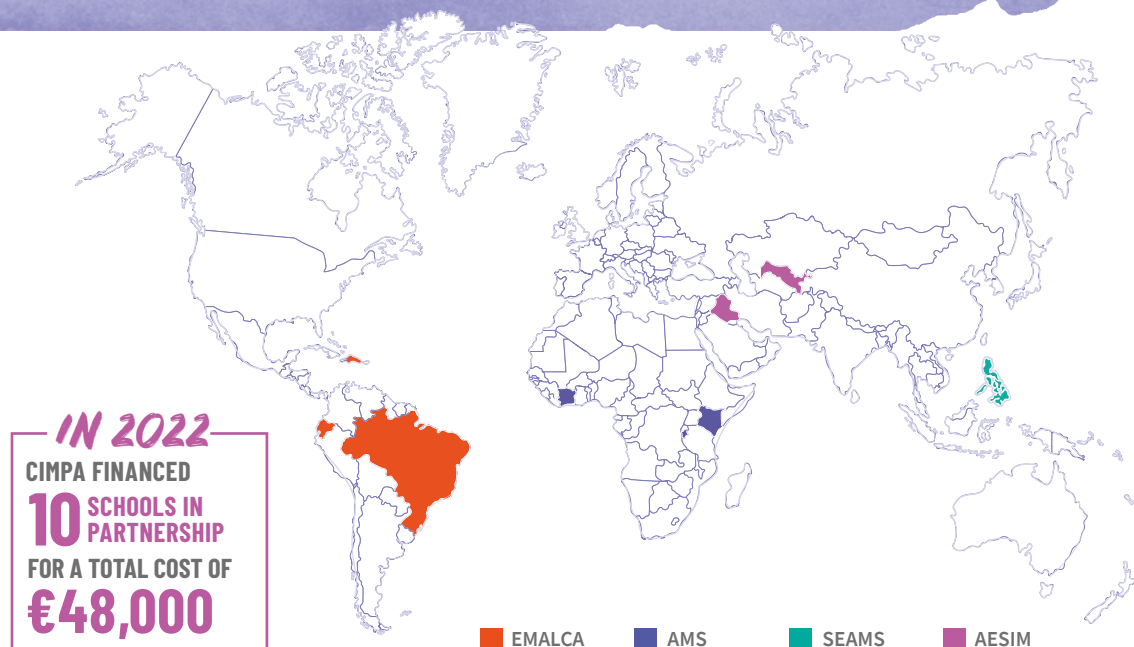
SCHOOLS IN PARTNERSHIP

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



2020 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)



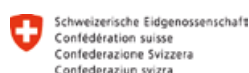
MINISTÈRE DE L'EUROPE
ET DES AFFAIRES
ÉTRANGÈRES
(FRANCE)



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)



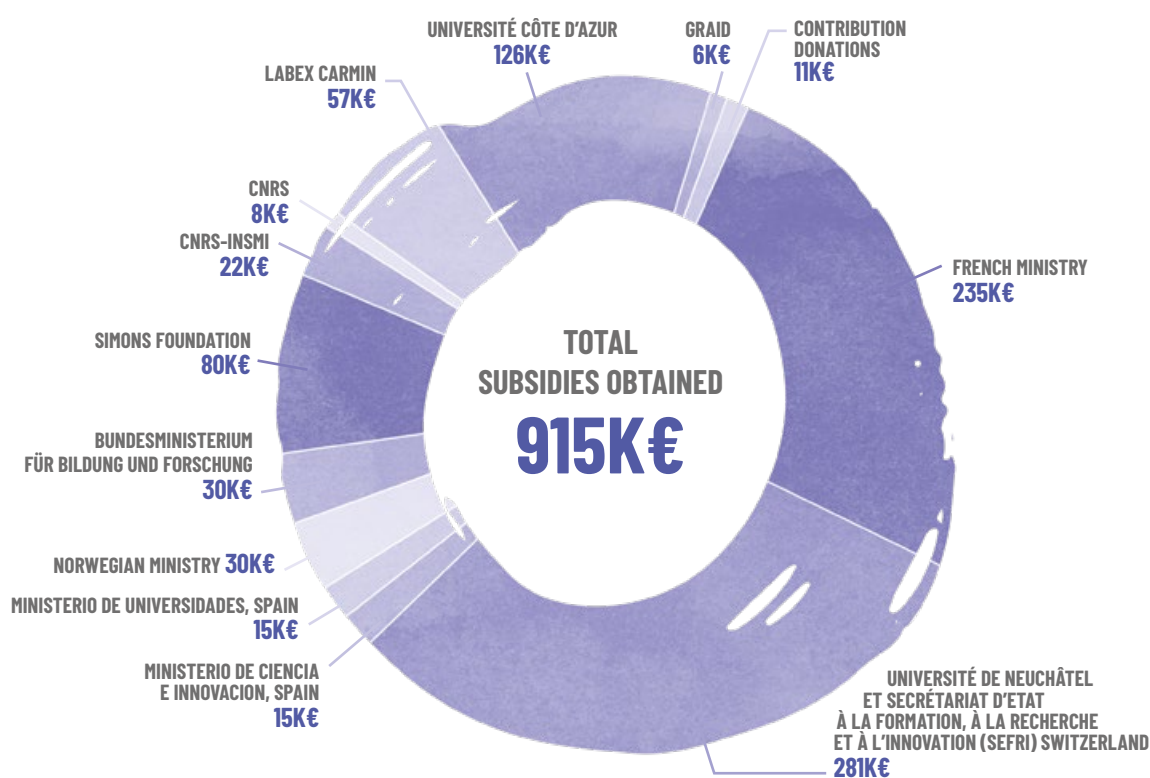
BUNDESMINISTERIUM
FÜR BILDUNG UND
FORSCHUNG (GERMANY)



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)	280 568.07
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	10 726.32
TOTAL INCOME	915 462.79

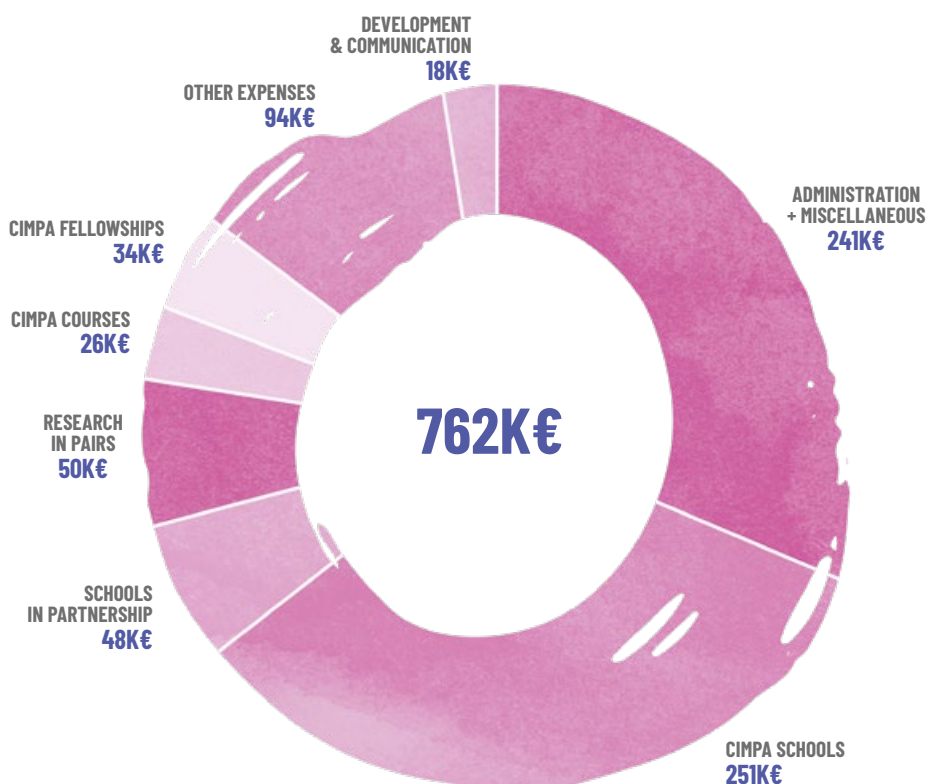


2022 FINANCIAL STATEMENT

2022 EXPENSES (€)

FIXED COSTS	
Bank charges + online payment fees	2 923.18
Office supplies	564.46
UCA occupancy costs	2 460.00
Insurance	426.79
Fees: accountant, auditor	12 222.60
Professional dues	790.00
Corporate tax	150.00
Salaries (including Director's one), social security contributions, occupational health care, share of prof. training	220 978.00
SUBTOTAL FIXED COSTS	240 515.03

DEVELOPMENT & COMMUNICATION	
Computer hardware, software and video room equipment	0.00
Communication	6 159.99
LMS platform + website redesign	12 323.70
SUBTOTAL DEVELOPMENT & COMMUNICATION	18 483.69



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
S/TOTAL 1	41 505.97
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	12 000.00
S/TOTAL 2	77 656.44
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
S/TOTAL 3	131 561.19
SUBTOTAL SCHOOLS (1+2+3)	250 723.60
SCHOOLS IN PARTNERSHIP	
EMA	21 614.00
EMALCA	10 590.35
SEAMS	2 000.00
AESIM (ex WAMS)	14 141.20
SUBTOTAL SCHOOLS IN PARTNERSHIP	48 345.55

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
SUBTOTAL CIMPA FELLOWSHIPS	34 446.03
RESEARCH IN PAIRS (12 LAUREATES)	49 717.09
CIMPA COURSES	
In person	25 727.40
Online	0.00
SUBTOTAL CIMPA COURSES	25 727.40
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
SUBTOTAL OTHER EXPENSES	94 235.18
SUBTOTAL ACTIVITES	503 194.85
TOTAL EXPENSES	762 193.57
SURPLUS/ EQUITY CONTRIBUTION	153 269.22
TOTAL GENERAL	915 462.79



CIMPA

28, avenue de Valrose

Campus Valrose, Bâtiment Dieudonné II

06108 NICE CEDEX 02 - France

☎ +33 4 89 15 04 66 ✉ admin@cimpa.info

www.cimpa.info

