

Promoting Research in Mathematics
in Developing Countries



CIMPA

Centre International
de Mathématiques Pures et Appliquées

Presentation of CIMPA

Christophe Ritzenthaler

CIMPA Director

CIMPA: International Center of Pure and Applied Mathematics

Mission: promote research in mathematics in developing countries



Founded in
1978



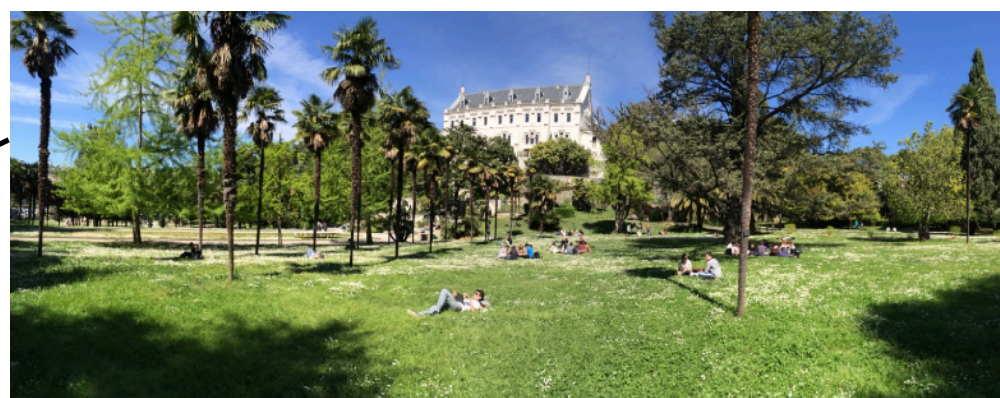
Unesco 2
center



Non profit
French Association



www.cimpa.info



Campus Valrose of Université Côte d'Azur

Employees:

- Executive director
- Executive secretary
- Communication officer

Budget: ~800k€

~140 individual members and 28 institutional members

Financially supported by France, Germany, Norway, Spain, Switzerland



CIMPA activities

Target: students or colleagues based in a developing country according to IMU-CDC classification



- ~400 schools in ~70 countries
- ~10 professors/school
- Local and State member coordinators



- Support ~20 schools/year
- Collaboration with 4 continental organizations




- ~30 courses every year
- 1 professor for ~30 participants




- ~12 grants for advanced researchers for collaboration in Europe
- ~15 grants for young researchers for thematic semesters in Europe

Stay in touch through our networks (newsletter, Facebook CIMPA or CIMPA friends, instagram)



CENTRE INTERNATIONAL DE MATHÉMATIQUES PURES ET APPLIQUÉES

About us CIMPA Schools CIMPA Courses CIMPA Fellowships Schools in Partnership Further Links Log in




The call for proposals for African Mathematical Schools (AMS) 2024 is open

DEADLINE FOR SUBMISSION OF PROPOSALS: OCTOBER 1ST, 2023

Video

CIMPA PRESENTATION 3 CIMPA FELLOWSHIPS Partager




Regarder sur YouTube

Registrations for 2024 CIMPA Schools are open!


Discover the list of schools and apply to one of them by clicking [here](#).

Download the 2024 CIMPA Schools poster

SHORTCUTS



Poster 2024



Sign up for the Newsletter

CIMPA - Centre International de Mathématiques Pures et Appliquées
14 February at 16:00 · 🌐

🌐 Séminaire AFRIMath : Théorie des Nombres & Théorie de l'Information

Nous sommes heureux d'annoncer la reprise du Séminaire AFRIMath, consacré à la Théorie des Nombres et à la Théorie de l'Information. Ce séminaire est coordonné par Moustapha Camara (MCF à l'Université de Ziguinchor, Sénégal) et Annamaria Iezzi (MCF à l'Université Grenoble Alpes, France).

📅 Prochain séminaire - 20 février 2025
🕒 À 15h GMT / 16h Paris
🖥 Sur Zoom : <https://univ-grenoble-alpes-fr.zoom.us/j/94350649168...>
🔗 Page web de l'événement : <https://www.afrimath.math.cnrs.fr/.../une-promenade...>

Lors de ce séminaire, Elena Berardini (CNRS, Institut de Mathématiques de Bordeaux) présentera un exposé intitulé :
"Une promenade à travers les codes géométriques algébriques"

💬 Ce séminaire fait partie d'une série mensuelle d'exposés en ligne ayant pour objectif de rendre la théorie des nombres et la théorie de l'information accessibles à un large public. Les présentations sont conçues pour être introductives et adaptées aux étudiantes et étudiants de niveau master, afin de permettre une compréhension approfondie de ces sujets passionnants.

#CIMPA #AFRIMath #Mathématiques #ThéoriedesNombres #ThéoriedelInformation #Séminaire



Afrique France réseau international de

2025 CIMPA schools





Présentation

Les activités scientifiques prévues sont organisées sous forme de cours, travaux dirigés et travaux pratiques. On prévoit éventuellement des tables rondes (une ou deux) autour de la thématique de l'école le soir. La thématique s'articule autour de quelques outils mathématiques qui interviennent en intelligence artificielle. Il s'agit des statistiques, optimisation linéaire, analyse numérique. On souhaite que les participant.e.s apprécient le rôle de différentes branches de mathématiques en intelligence artificielle, ce qui, en l'espère, leurs ouvrira des portes pour la suite de leurs carrières scientifiques.

Coordinateurs administratifs et scientifiques

Tayeb Bahram (Université de Saida Dr Moulay Tahar , Algérie , cimpa2025@univ-saida.dz)

Hossam Afifi (Institut Mines Télécom/Télécom SudParis, France , hossam.afifi@telecom-sudparis.eu)

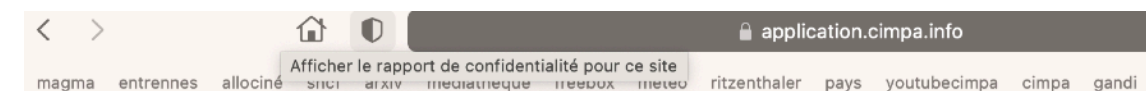
Site internet de l'école

<https://www.univ-saida.dz/cimpa2025/>

Comment participer

Pour s'inscrire et postuler à un financement CIMPA, suivre les instructions données ici <https://www.cimpa.info/fr/node/40>

Date limite d'inscription : novembre 3, 2024



Registration website

Username *

Enter your CIMPA | Application username.

Password *

Enter the password that accompanies your username.

Log in

Create new account

[Forgot your password?](#)

CV

- Up-to-date
- Showing how your academic background is relevant for this school

Motivation letter

- ~~Since I've been a baby, I've always loved maths~~
- ~~Maths is the most important topic in the world~~
- Après avoir suivi l'école à Hammamet, je dois me spécialiser dans les méthodes d'optimisation à base de gradient stochastique. En effet dans ma thèse,...

Recommendation letter(s)

- If you ask CIMPA for money, you need at least one recommendation letter (2 better).
- Write to the Professor first to ask her/his permission.
- Be careful that the request for letter can arrive in the SPAM of the professor.
- Don't do that at the last moment!

If you are selected by the organizers of the school

- You will receive an email from admin@cimpa.info
- your trip will be covered up to 1000 euros (except very exceptional cases), sometimes partially if it is too expensive
- your stay (accommodation, food for the full duration) will be fully covered

CIMPA Fellowships

April 14th to July 11th, 2025

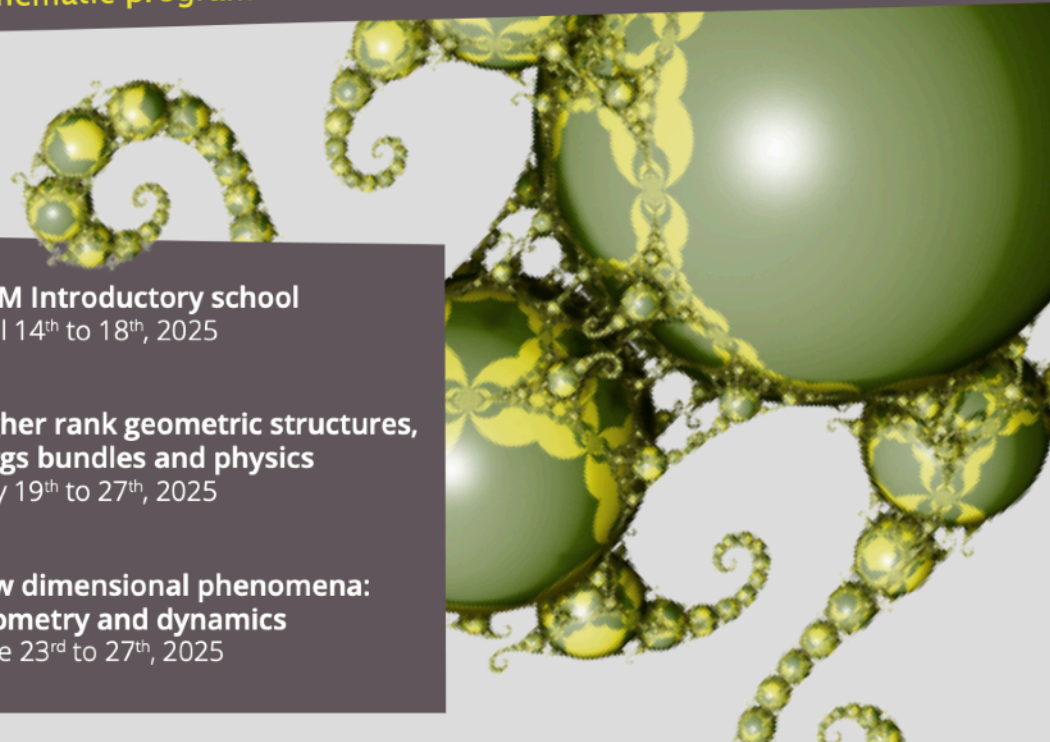
Organisers:

Kenneth Bromberg (University of Utah)
Maria Beatrice Pozzetti (Heidelberg Universität)
Andrés Sambarino (CNRS - Sorbonne Université)
Nicolas Tholozan (CNRS - Ecole Normale Supérieure)



Higher rank geometric structures

Thematic programme with short courses, seminars and workshops



CIRM Introductory school
 April 14th to 18th, 2025

Higher rank geometric structures, Higgs bundles and physics
 May 19th to 27th, 2025

Low dimensional phenomena: geometry and dynamics
 June 23rd to 27th, 2025

but also in Marseille (CIRM), Barcelona (CRM), Tromsø (LSC), Bernoulli Center (Lausanne) and next year in Berlin

- For who? PhD students, post-docs, young professors
- CV, motivation letter, recommendation letter(s)

CIMPA - ICTP Research in Pairs

▶ ONLINE

CIMPA-ICTP COURSES

"Analytical Properties and Applications of Orthogonal Polynomials and Special Functions"

On Zoom

(Paris time zone)



MONDAY, 3 APRIL: 2:00 PM - 4:00 PM

TUESDAY, 4 APRIL: 2:00 PM - 4:00 PM



WEDNESDAY, 5 APRIL: 2:00 PM - 4:00 PM

THURSDAY, 6 APRIL: 2:00 PM - 4:00 PM



SPEAKER

Salameh Sedaghat
 Buin Zahra Technical University (Iran)

- Come for at least 6 weeks to collaborate with a colleague in some countries in Europe
- Record/broadcast a mini-course
- 2025 **edition**: 63/34/12 applications/admissible applications/laureates

2026 call: January - 25 April 2025

- For who? PhD+3 years
- colleagues who have heavy administration / teaching load
- colleagues who didn't get the chance to travel abroad (a lot) during the last 5 years

LES VIDÉOS DE CIMPA

VOIR +

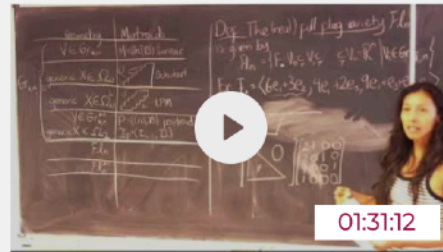


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PUBLIÉE LE 7 JUILLET 2022

Lattice path matroids, polytopes and permutations (4/4)

De Benedetti Velasquez Carolina



01:31:12

PUBLIÉE LE 6 JUILLET 2022

Lattice path matroids, polytopes and permutations (3/4)

De Benedetti Velasquez Carolina



01:42:47

PUBLIÉE LE 5 JUILLET 2022

Lattice path matroids, polytopes and permutations (2/4)

De Benedetti Velasquez Carolina

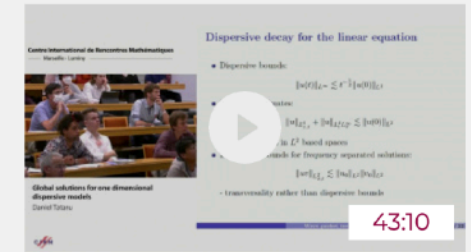


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PUBLIÉE LE 4 JUILLET 2022

Lattice path matroids, polytopes and permutations (1/4)

De Benedetti Velasquez Carolina

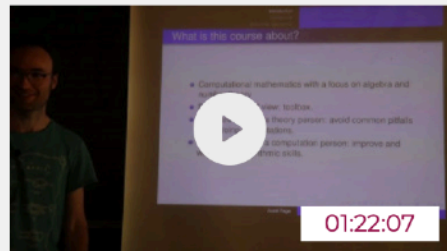


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PUBLIÉE LE 13 JUIN 2022

Global solutions for one dimensional dispersive models

De Daniel Tataru

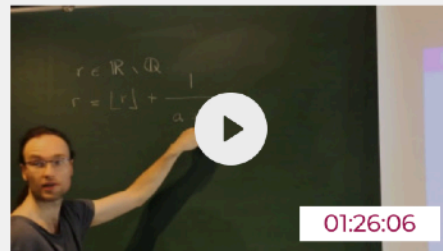


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PUBLIÉE LE 6 JUIN 2022

Introduction, Complexity, Arithmetic Operations (Part 1/4)

De Page Aurel

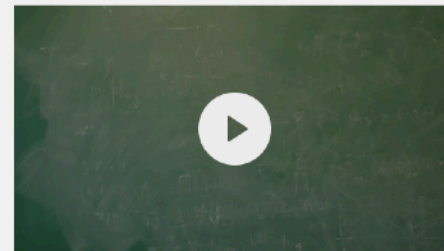


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PUBLIÉE LE 6 JUIN 2022

Introduction, Complexity, Arithmetic Operations (Part 2/4)

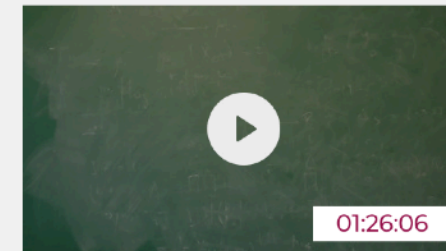
De Page Aurel



PUBLIÉE LE 6 JUIN 2022

Introduction, Complexity, Arithmetic Operations (Part 3/4)

De Page Aurel



01:26:06

PUBLIÉE LE 6 JUIN 2022

Reconstruction, Algebraic Number Theory

De Page Aurel



01:39:28

PUBLIÉE LE 6 JUIN 2022

Introduction, Complexity, Arithmetic Operations (Part 4/4)

De Page Aurel

COLLECTION Diophantine Geometry

In this course we present a short introduction to Diophantine Geometry. The main object of study are heights: we study their properties, their constructions and their applications. We start by introducing absolute values and valuations to define heights on projective spaces and later on on varieties, more precisely on abelian varieties via the Weil heights machinery. We revisit Mordell-Weil theorem on the group of rational points on abelian varieties and Falting's theorem on the finiteness of rational points on curves of genus greater or equal than 2. We finish the course by discussing some open problems on Diophantine Geometry, as the abc conjecture.

TOUTES LES VIDÉOS DE LA COLLECTION (6)



PUBLIÉE LE 12 AVRIL 2021

Absolute Values on Number Fields and the Product Formula (part 1/6)

De Elisa Lorenzo García



PUBLIÉE LE 12 AVRIL 2021

Heights in Projective Spaces (part 2/6)

De Elisa Lorenzo García



PUBLIÉE LE 12 AVRIL 2021

Some Results on the Geometry of Curves and Abelian Varieties (part 3/6)

De Elisa Lorenzo García



PUBLIÉE LE 12 AVRIL 2021

The Néron-Tate height on Abelian Varieties (part 4/6)

De Elisa Lorenzo García



PUBLIÉE LE 12 AVRIL 2021

The (weak) Mordell-Weil Theorem (part 5/6)

De Elisa Lorenzo García



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Introduction to Transcendental Number Theory (part 1/8)

De Michel Waldschmidt

DIOPHANTINE APPROXIMATION

HEIGHT

TRANSCENDENTAL NUMBERS

	CIMPA	ICTP	CIRM	EMS- CDC	IMU- CDC	ISP	LMS ICMS
Long educ. >1m.		<ul style="list-style-type: none"> - International master in mathematics (M) - <i>year at ICTP (M)</i> - <i>PhD grants</i> - Sandwich program (PhD) 		<ul style="list-style-type: none"> - Simons for Africa (PhD) 	<ul style="list-style-type: none"> - GRAID (M, PhD) - Breakout (PhD) 		
Short educ.	<ul style="list-style-type: none"> - <i>school (M, PhD, PD, YR)</i> - <i>course (M, PhD, PD)</i> - <i>Fellowship (PhD, PD, YR)</i> 	<ul style="list-style-type: none"> - <i>School (M, PhD, PD, YR)</i> 		<ul style="list-style-type: none"> - Individual 	<ul style="list-style-type: none"> - volunteer program (M) 		MFH: school (PD, YR)
Long resear. >1m.	<ul style="list-style-type: none"> - <i>CIMPA-ICTP Research in Pairs (AR)</i> 	<ul style="list-style-type: none"> - <i>grants (PD)</i> - <i>Associates (YR, AR)</i> 	<i>Chair South</i>	<ul style="list-style-type: none"> - Simons for Africa (YR, AR) 	<ul style="list-style-type: none"> - Abel (PD) - Simons for Africa (PD) - Individual (PD, YR, AR) 	<ul style="list-style-type: none"> - online research group (PhD, PD, YR, AR) 	MFH: Research in groups, seminar (YR,AR)
Short resear.		<ul style="list-style-type: none"> - <i>Visiting fellowships (AR)</i> 	<ul style="list-style-type: none"> - <i>Visiting research (YR, AR)</i> 	<ul style="list-style-type: none"> - Individual 			
event Institut	<ul style="list-style-type: none"> - school in partnership (M, PhD) 	<ul style="list-style-type: none"> - International Master in Mathematics 		<ul style="list-style-type: none"> - ERCE center - conf./school support 	<ul style="list-style-type: none"> - conf./school support 	<ul style="list-style-type: none"> - PhD - Sandwich PhD (restricted to the networks) - conf., schools arrangements 	MARM: full package support (joint PhD, individual, material, consulting)

Bold: taking place in developing countries Straight: taking place anywhere
 Bold-italic: taking place part of the time in north country, part in south country
 *: call open all year around

M: master level; PhD: PhD level; PD: postdoctoral level; YR: young researcher; AR: advanced researcher

MFH: <https://www.icms.org.uk/funding-opportunities/mathematics-humanity> (ICMS)

MARM: <https://www.lms.ac.uk/grants/marm> (LMS)

ISP (International Science Program); LMS (London Mathematical Society), ICMS (International Center for Mathematical Sciences)

THANKS!

I'd love to hear/read your thoughts, questions and comments.



CIMPA

www.cimpa.info