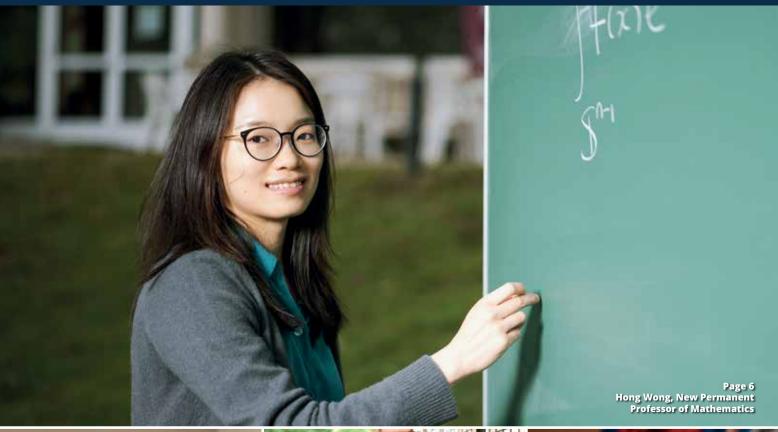
# BOIS-MARIE

IHES ANNUAL NEWSLETTER | ISSUE 21 | 2025











### INSTITUT DES HAUTES ÉTUDES SCIENTIFIQUES

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# Editorial



In 1958, Léon Motchane, the founder of IHES, envisioned bringing together the greatest scientific minds of our time in one place. For over 70 years, the Institute has embodied a powerful idea: that of free and unconstrained research, driven solely by human curiosity.

None of what we now call innovation—drones, artificial intelligence, biotechnology—would be possible without the quiet, profound, persistent and often invisible work carried out, away from the spotlight, and guided by the kinds of questions that only a free mind dares to ask.

By offering total freedom to its scientists, the Institute gives them the opportunity to shape our understanding of the universe. I am convinced that, in today's complex world, freedom of research is more essential than ever to fashion and imagine the future. This freedom, crucial to preserving the independence and objectivity of our scientists, is now increasingly being questioned and challenged, even in countries renowned for the excellence of their education and research.

In this context, I am pleased and proud to chair the 4th IHES Fundraising Campaign, which will be launched at the end of the year in Paris. It represents both a call for engagement and a strong statement of confidence in the future. With this new capital campaign, the Institute hopes to provide its researchers with more space for collaboration and discussion, to develop outreach initiatives, and, above all, to attract scientific talent at the highest level. At IHES, research conditions are truly exceptional and it is our responsibility to preserve and strengthen them.

For this new campaign, we have set a goal of 70 million euros to mark the Institute's 70th anniversary in 2028. Thanks to the generosity of IHES donors, part of this goal has already been reached, but there is still a long way to go: IHES needs the support of its loyal community as well as new ambassadors and friends.

Supporting IHES means giving fundamental research the breathing space it needs to imagine, to doubt and to discover. The future is being shaped now—and it cannot be written without you.



Chair of the 4th IHES Fundraising Campaign

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### Development in France and abroad

### 25th Anniversary of Friends of IHES and Event in California



On October 22, 2024, Friends of IHES celebrated its 25th anniversary with a dinner at the Harvard Club in New York, bringing together donors, academics and key members of the IHES community in the United States. Guests of honor included Cédrik Fouriscot, Consul General of France in New York, Marilyn Simons, Chair of Friends of IHES, Bernard Saint-Donat and Henri Moscovici, co-Founders of Friends of IHES, Yuri Tschinkel, Executive Vice President of the Simons Foundation's Mathematics and Physical Sciences Division, and Pierre Deligne, former Permanent Professor of Mathematics at IHES. The evening featured a lecture by Gérard Ben Arous, Director of the Courant Institute of Mathematical Sciences, and holder of the Alexzandria Figueroa and Robert Penner Chair at IHES, on the connections between

machine learning and probability theory. Attendees also paid tribute to Jim Simons, longtime supporter of IHES, and former co-Chair of Friends of IHES, for his exceptional commitment to the Institute, with the screening of a film by Olivier Peyon, film Director, retracing his journey as a mathematician, investor and philanthropist. The celebration concluded with a toast from Emmanuel Ullmo, Director of IHES, highlighting the importance of supporting fundamental research.

On April 29, 2025, Friends of IHES hosted an event dedicated to artificial intelligence at the Residence of France in San Francisco. Initiated by Eugénie Rives, member of the Board of Directors of Friends of IHES, and IHES supporters Nathalie Bontoux and Cédric Hutchings, the evening gathered more than 70 participants from academia and industry, including representatives from IHES, corporate donors from Agilent Technologies, IBM, and Société Générale. Jennifer Chayes, Dean of the College of Computing, Data Science and Society at the University of California, Berkeley, and a former visitor at IHES, gave a lecture on the impact of artificial intelligence on scientific research, particularly at the interface of mathematics, chemistry and materials, in the presence of Florian Cardinaux, Consul General of France in San Francisco.

### IHES x Leaders in Tech



On March 18, 2025, IHES was hosted by Owkin and its Director of Research and Development, Jean-Philippe Vert, for an evening dedicated to fundamental science, bringing together around thirty French Tech entrepreneurs.

The evening's program featured two lectures: one by Hugo Duminil-Copin, Permanent Professor of Mathematics at IHES and Fields Medalist, on universality phenomena in probability theory, and the other by Julio Parra-Martinez, Permanent Professor of Physics at the Institute, on recent advances in gravitational physics.

In the presence of Emmanuel Ullmo, Director of IHES, and Marwan Lahoud, Chairman of the Board of Directors of IHES, this event—at the initiative of IHES supporter Yann Fleureau highlighted the links between theoretical research and innovation and fostered dialogue between scientists and business leaders. The evening was also an opportunity to raise awareness about the importance of philanthropy in the Institute's funding model.

### Launch Ceremony of IHES Trust UK



On June 12, the Residence of France in London hosted the official launch of IHES Trust UK, a new partner organization of IHES in the United Kingdom. Under the high patronage of the French Ambassador, H.E. Hélène Duchêne, the event brought together around a hundred science enthusiasts.

Francis Brown, Professor of Mathematics at the University of Oxford, and Chair of IHES Trust UK, introduced the members of the new organization and outlined its mission. The evening featured a lecture by Sir Timothy Gowers, Professor of Mathematics at the University of Cambridge and Holder of the Combinatorics Chair at the Collège de France, on the impact of artificial intelligence, followed by fruitful discussions in the gardens of the Residence.

# Junior Professors: Growing as Scientists at IHES

### Congratulations to Clément Delcamp and Yilin Wang on obtaining tenure positions!

Yilin Wang, the first Junior Professor recruited in 2022, becomes an Associate Professor of Mathematics at ETH Zurich.

Coming to IHES marked a turning point in my academic journey. For the first time, I experienced something I had never before: periods of uninterrupted



work, complete intellectual freedom, and an environment that was both stimulating and deeply supportive. I was able to explore areas of mathematics far from my initial training in probability theory—such as Teichmüller theory and hyperbolic geometry—guided solely by my curiosity. At IHES, I never felt the need to define myself or restrict my research to a single area. Such freedom is rare, precious, and profoundly inspiring.

I also had the opportunity to host numerous visitors and collaborators from diverse backgrounds and to engage in lengthy discussions with them. This led me to collaborate with Yuhao Xue, postdoctoral researcher at IHES, with an interest in hyperbolic surfaces. Together, we discovered a surprising identity concerning the length spectra of hyperbolic surfaces, establishing a link with probability theory, particularly stochastic processes. Encounters like this—intellectual synergies and collaborative thinking—are extraordinarily enriching.

Beyond research, the IHES staff provided concrete and invaluable support. While preparing my European Research Council (ERC) application, I benefited from attentive guidance and was freed from all administrative constraints. This climate of trust allowed me to progress, broaden my scientific vision, and undoubtedly played a key role in the opportunities that followed, including the position I currently hold at ETH Zurich.

Yilin Wang



Clément Delcamp, Junior Professor since 2023, becomes a CNRS Research Scientist at IHES.

Being a Junior Professor at IHES means not only gaining access to an exceptional scientific environment but also becoming an integral part of the Institute's

In my role on the Institute's

Scientific Council, I have participated in the recruitment of postdoctoral researchers, the selection of invited scholars, the choice of themes for the Summer Schools, and the organization of various scientific events. These responsibilities have allowed me to contribute directly to shaping the scientific direction of IHES

Since my arrival, three postdoctoral researchers have been recruited in areas closely related to my own, creating a stimulating work dynamic and fostering regular scientific exchanges. This experience has been important for my career, strengthening my collaborations in France and consolidating my place within the international scientific community.

My research lies at the intersection of condensed matter physics and mathematics. I study the role of topology, generalized symmetries, and dualities in novel quantum materials. A central question guiding my work is: Which algebraic structures underlie the physics of quantum lattice

To address this, a significant part of my research draws on abstract mathematical tools, particularly category theory. The close proximity to mathematicians at IHES provides a constant source of inspiration and fosters a truly interdisciplinary approach to science.

I was recently recruited by the CNRS as a Research Scientist and now continue my work at IHES under this new appointment, further developing my collaborations and research directions.

Clément Delcamp

### Welcome to the New Junior Professors!

Semon Rezchikov focuses on symplectic geometry, particularly Floer homology. In his work, he uses techniques from homotopy theory to understand the arithmetic of symplectic invariants. A graduate of the Massachusetts Institute of Technology, he completed his doctoral studies at Columbia University,

New York, followed by a postdoctoral position at Harvard University, and served as a Veblen Instructor

year. This stimulates creativity and is very conducive to research in mathematics. I am already looking forward to interacting with other researchers at IHES, and I also hope to allow my collaborators to benefit from the Institute's exceptional working conditions."

"I know that IHES

constantly welcomes new

visitors and organizes numerous

scientific events throughout the



Sridip Pal works on the conformal bootstrap, a nonperturbative framework for uncovering universal structures in conformal field theory, with applications to quantum gravity, quantum chaos and hyperbolic geometry. Trained at the Indian

Institute of Science Education and Research, Kolkata, he earned his PhD at the University of California, San Diego, before becoming a Founder's Circle Member at the Institute for Advanced Study, Princeton and then a Sherman Fairchild Postdoctoral Scholar Research Associate at Caltech. Sridip has already collaborated with other scientists in the Paris region, including Dalimil Mazáč (CEA Paris-Saclay), Balt van Rees (École Polytechnique) and Slava Rychkov, Permanent Professor of Physics at IHES.

"IHES is internationally renowned for its interdisciplinary approach, particularly at the interface of mathematics and theoretical physics. I discovered the Institute through the work of Slava Rychkov, whose rigorous approach to conformal field theory (CFT) has strongly influenced my own researchespecially my work on applications of Tauberian theorems in CFT."

at Princeton University and the Institute for Advanced Study. At IHES, he aims to further develop his work on cyclotomic structures in symplectic topology and revisit his earlier research on the Fueter equation.



Zhongkai Tao works in analysis, with a particular focus on spectral theory and microlocal analysis. He also works on problems arising from general relativity, especially the Einstein field equations, as well as on condensed matter physics, in connection with the spectral theory of Schrödinger and Dirac operators. In addition, he has explored hyperbolic dynamical systems. After studying at Xi'an Jiaotong University, he earned his PhD at the University of California, Berkeley.

"With its large mathematical community, the Paris region is an ideal place in which to explore new areas of mathematics. I hope to fully benefit from this mathematical ecosystem to advance my research. Paris has also played an important role in the development of one of my research fields, microlocal analysis. It is an honor for me to continue in this tradition."

## A Stepping Stone

FOR YOUNG TALENTS

Created in 2022 with the support of the Simons Foundation, the Junior Professor positions at IHES offer outstanding young scientists a unique opportunity to start their careers under ideal conditions. For five years, they can conduct independent research, explore new ideas, and collaborate with researchers from around the world. Not only does this position enable them to contribute to the scientific life of the Institute, it also benefits from a stimulating environment designed to train the next generation of researchers in mathematics and theoretical physics.

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# Hong Wang New Permanent Professor of Mathematics

### Reminiscences of Hong Wang's Time at Paris-Saclay

I first met Hong Wang in October 2012, when she was a third- Given her interest in spending time in the United States, I year mathematics student at École Polytechnique, where I had just been appointed professor. In addition to a course on partial differential equations, she asked me to supervise her advanced coursework during the first semester, a kind of mini-project conducted alongside her other classes.

by Terence Tao, closely related to my own research stages of this exceptional journey. interests: "Nonlinear Dispersive Equations: Local and Global Analysis." Within a few weeks, she

« I was struck by had read and assimilated several chapters. During our discussions, I was struck by the depth and the depth and speed of her mathematical speed of her thinking, as well as her unwavering mathematical determination—qualities complemented thinking. » by a lively and enthusiastic temperament.

connected her with a colleague at the Massachusetts Institute of Technology, who invited her to join her department for several months at the end of the first year of the Master's degree she completed at Université Paris-Saclay. There, she joined Larry Guth's group, with whom she later completed her PhD.

I suggested that she study a research-level book I am honored to have-modestly-contributed to the early

Yvan Martel, Professor of Mathematics at Université de Versailles Saint-Quentin, Institut Universitaire de France



### The Kakeya Conjecture

Take a large pizza and slice it up into many long thin slices. Then, shift each slice by translation to make the slices overlap, taking care not to rotate any of the slices when doing so. Can one "compress" the pizza into a much smaller region by doing so? It turns out that the answer is yes-but only barely: the amount of possible compression is proportional to the logarithm of the number of slices, using a construction known as a "Perron tree".

Now consider a three-dimensional version of the question. Consider a solid ball, divided into thin cones, and try to compress these cones into a smaller region of space by translating (but not rotating) them until they overlap. Such sets are known as Kakeya sets. Again, it is possible to use Perron trees to achieve a logarithmic amount of compression for such sets, but can one do better? This simple question attracted decades of effort from many prominent mathematicians, and was only resolved this year by Hong Wang and Josh Zahl, who proved that one cannot achieve significantly more logarithmic amount of

compression, using a highly involved argument incorporating cutting edge ideas from harmonic analysis, geometry, and combinatorics.

Why did this problem attract so much interest? Many problems in Fourier analysis, partial differential equations, combinatorics, and number theory turn out to involve the superposition of "wave packets" concentrated in thin tubelike shapes that point in different directions. If Kakeya sets could be highly compressed, this would mean that certain solutions to wave equations, certain types of Fourier expansions, and certain types of oscillating series in number theory would be much worse behaved than mathematicians expected. So the "Kakeya conjecture" was the first obstacle in the way of settling many other problems in these fields. Now that this conjecture has been resolved, the door has been opened to many other interesting problems in these fields, going by such names as the restriction conjecture, the Bochner-Riesz conjecture, or the arithmetic Kakeya conjecture. An exciting time for the field!

### Her Background



Terence Tao, Professor of Mathematics at the University of California, Los Angeles, and Fields Medalist

# A Dynamic Summer at IHES Two Summer Schools for

# Two Summer Schools for Young Talents

This year, IHES exceptionally organized two Summer Schools. One was on physics and the other on mathematics. This initiative reflects IHES's commitment to nurturing and developing new scientific talents at the highest international level.

IHES warmly thanks the Clay Mathematics Institute, Engie, the Jacques Hadamard Mathematical Foundation, Qube Research & Technologies, Société Générale and the U.S. National Science Foundation for their generous support of these events.

### Statistical Aspects of Nonlinear Physics

From June 23 to July 4, 2025, I had the pleasure of co-organizing the Summer School on Statistical Aspects of Nonlinear Physics, held ahead of the international StatPhys29 conference in Florence in July 2025.

Our goal was simple yet ambitious: to give young researchers in statistical physics, coming from diverse backgrounds, the opportunity to meet, exchange ideas, and build a shared scientific culture.

The unique format of the courses—each delivered jointly by a physicist and a mathematician—allowed participants to discover new approaches and broaden their horizons. This Summer School not only fostered the transfer of knowledge, but also showed young scientists that crossing disciplinary boundaries is both possible and profoundly enriching.



I was particularly struck by the participants' curiosity and by their eagerness to continue discussions well beyond the lectures. Some arrived with strong expertise in several topics, while others were encountering most of them for the first time—yet dialogues were spontaneous, stimulating, and often passionate.

With its atmosphere uniquely conducive to interdisciplinary exchange, IHES provided the perfect setting for this experience. I hope this Summer School has sown the seeds of lasting collaborations and instilled in this young generation a genuine taste for intellectual openness.

Thierry Bodineau, co-organizer of the Summer School, CNRS Research Director at IHES

### Discrete Subgroups of Lie Groups

The IHES Summer School on Discrete Subgroups of Lie Groups, held on July 7-18, 2025, brought together young researchers from around the world to discuss recent advances in the study of discrete subgroups of Lie groups. Like the Summer School



in physics, its aim was to provide an in-depth introduction to these topics while fostering exchanges and collaborations in a stimulating scientific environment.

A speaker at this Summer School, Daniel Monclair, Associate Professor at Université Paris-Saclay, shared his impressions: "I value the interactions with young colleagues because their questions push us to revisit fundamental concepts. During this summer school, thanks to the format of five one-hour sessions, I was able to present the story of my work in depth, without just skimming over it, while taking the time for discussions, particularly during the exercise sessions. The work I presented truly reflects my ongoing research: the oldest paper discussed is barely two years old!"





# Conference on the Occasion of Emmanuel Ullmo's 60th Birthday

From September 8 to 12, 2025, IHES hosted *Arithmetic and Diophantine Geometry, via Ergodic Theory and o-minimality*, a conference organized with the support of the Jacques Hadamard Mathematical Foundation, on the occasion of the 60th birthday of Emmanuel

Ullmo, Director of the Institute since 2013.

Organized by Ahmed Abbes (IHES), Jennifer Balakrishnan (Boston University), Ziyang Gao (UCLA), Marc Hindry (Université Paris-Cité), Fanny Kassel (IHES), Bruno Klingler (Humboldt University of Berlin) and Yuri Tschinkel (NYU and Simons Foundation), the event brought together researchers from all over the world, highlighting recent advances in arithmetic geometry, and more specifically in Diophantine geometry, ergodic theory, Hodge theory and arithmetic dynamics.

Gregorio Baldi, former postdoctoral researcher with Emmanuel Ullmo, and Yuri Tschinkel, longtime collaborator, shared insights on Emmanuel's approach to mathematics.

I met Emmanuel for the first time in the spring of 2019, when I was a PhD student in London. I had a vivid memory of my Master's year in Orsay, where I had attended his course at IHES, and I returned with the fairly simple idea of learning something new. Emmanuel immediately suggested a project on functional transcendence for non-arithmetic ball quotients—a topic that was new to both of us. What struck me most was his approach to research: when certain



intermediate steps or arguments turned out to be incorrect, he could instantly reformulate his ideas and restart the discussion.

During a subsequent visit to IHES in the spring of 2020, the pandemic kept me there longer than expected. This period,

although unusual, proved to be extremely productive: freed from many obligations, Emmanuel devoted himself fully to our work. We spoke online every day, made rapid progress and eventually realized that we could solve a conjecture of McMullen and Reid. Beyond the results themselves, the intensity of these exchanges and being "stuck" together at IHES had a lasting impact on me and strengthened our friendship.

With this first paper completed, I returned to IHES as a postdoctoral researcher and enjoyed three years of daily interactions with Emmanuel. Together with Bruno Klingler, we extended our ideas within a much broader Hodge-theoretic framework, clarifying important properties of the Hodge locus and showing how our approach could be generalized far beyond the initial case. Beyond these results, Emmanuel taught me to choose my projects carefully and to persevere. Even today, I often ask myself: What would Emmanuel do here? More often than not, I arrive at a good intuition.

**Gregorio Baldi,** CNRS Researcher, Institut de Mathématiques de Jussieu – Paris Rive Gauche



to contribute to the organization of this conference, I immediately wanted the program to reflect the richness and depth of Emmanuel's scientific trajectory. His fundamental contributions to arithmetic geometry cover a broad spectrum of topics, and we sought to do justice to the diversity of his research.

His influence is not limited to research itself; it is also evident in his relationship with younger generations. Emmanuel has mentored numerous early-career mathematicians, several of whom now hold prominent positions in academia. His impact as a mentor stems from both the rigor of his thinking, the generosity of his commitment and a rare capacity for listening. Beyond knowledge, he conveys a unique approach to problemsolving: how to ask the right questions and open new avenues.

Over the years, I have had the privilege of interacting with him regularly, not only on scientific matters but also in institutional contexts, particularly on the Board of Directors of IHES. These discussions are precious to me: I recognize his discernment, clarity of analysis, and remarkable efficiency. The quality of IHES' recent recruitments is a testament to these qualities. Working with him means benefiting from both an enlightened perspective and unwavering dedication to the service of scientific institutions.

**Yuri Tschinkel,** Professor of Mathematics at New York University and Executive Vice President for Mathematics and Physical Sciences at the Simons Foundation

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## Scientific Activity



### 2025 Hadamard Lectures

As part of the Hadamard Lectures, organized by the Jacques Hadamard Mathematical Foundation (FMJH), Thomas Hutchcroft, Professor of Mathematics at Caltech, delivered a series of six lectures on "Dimension Dependence of Critical Phenomena in Percolation".

As every year, the first two lectures were held at the Institut de Mathématiques d'Orsay, and the remaining four at the Marilyn and James Simons Conference Center at IHES.

These lectures are particularly aimed at PhD students and postdoctoral researchers from Université Paris-Saclay and Institut Polytechnique de Paris. Their goal is to provide an overview of a rapidly developing field and to promote exchanges between early-career researchers.

Recordings of all lectures are available on the Fondation mathématique Jacques Hadamard's YouTube channel and on carmin ty



## Hard Sphere Dynamics in the Low Density Limit

From February 3 to 12, 2025, and as part of the *Cours de l'IHES* series, Laure Saint-Raymond, Permanent Professor of Mathematics at IHES, delved into the microscopic dynamics of gases composed of interacting neutral particles whose behavior cannot be predicted deterministically.

Boltzmann's statistical approach provides a framework to address this

In this series of lectures, Laure Saint-Raymond presented her joint work with Thierry Bodineau, Isabelle Gallagher, and Sergio Simonella on fluctuations of microscopic systems around the Boltzmann equation.

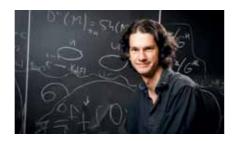
### cormin.tv

### All Lectures are Available Online on carmin.tv

Over 8,400 videos are now available on carmin.tv, including all the lectures delivered at one of the many scientific events at IHES! An audiovisual platform dedicated to mathematics and its interactions with physics, computer science, and biology, carmin.tv enables scientists, students and the general public to explore mathematics online.

### Outreach

### Algebraic K-theory and Chromatic Homotopy Theory



From February 18 to 27, Dustin Clausen, Permanent Professor of Mathematics and holder of the Jean-Pierre Bourguignon Chair at IHES, delivered a series of four lectures as part of the Cours de l'IHES series. His talks focused on recent developments at the intersection of chromatic homotopy theory and algebraic K-theory. In his lectures, Dustin Clausen notably detailed recent calculations by Robert Burklund, Jeremy Hahn, Ishan Levy, and Tomer Schlank, which disproved Ravenel's telescope conjecture. He also presented his own work on the Rognes and Ausoni-Rognes conjectures.



### Fuzzy Sphere Meets Conformal Bootstrap

This workshop, organized as part of the Simons Collaboration on the Nonperturbative Bootstrap, of which Slava Rychkov, Permanent Professor of Physics at IHES, is a member, took place from June 2-6, 2025, at the Marilyn and James Simons Conference Center of the Institute. It brought together scientists working on condensed matter physics and high-energy physics to discuss phase transitions in 2+1D, numerical methods, and conformal theory.



### Alexander Grothendieck: From Mathematical Legend to Literary Inspiration

On the occasion of the tenth anniversary of Alexander Grothendieck's passing, IHES paid tribute to the revolutionary mathematician, who was a Permanent Professor at the Institute from 1958 to 1970 and an early environmental activist, by organizing a literary evening featuring Marie Durrieu, documentary filmmaker and radio producer, Hervé Le Tellier, mathematician, science journalist and writer and Abel Quentin, novelist and lawyer.

During the event, the speakers discussed how scientists, their work, and their commitment can inspire literary creation. They also reflected on the connections between science and literature, and on how Grothendieck's spirit continues to inspire the imagination and craft of writers today.

### Les Amis de l'IHES

Chaired by Jean-Pierre Bourguignon, former Director of IHES and Honorary Professor at the Institute, Les Amis de l'IHES, a public charity, introduces the general public to scientific research through public lectures and cultural events.

In 2024–2025, Les Amis organized four events: a tribute to Maryam Mirzakhani, the first woman to receive the Fields Medal, who passed away prematurely, and three lectures on cuneiform writing, the Chicago Piles, and dental tissues.

The next event, will take place on November 26 at IHES.



### Inauguration of the Garden Pavilion Honoring Yvonne Choquet-Bruhat and Cécile DeWitt-Morette

On April 24, 2025, IHES inaugurated a garden pavilion in the Bois-Marie park in tribute to Yvonne Choquet-Bruhat and Cécile DeWitt-Morette, two major figures in French physics and mathematics who left a profound mark on the Institute. The event brought together numerous renowned scientists, as well as members of their families.

## *"L'École dont nous rêvons"* by Laure Saint-Raymond

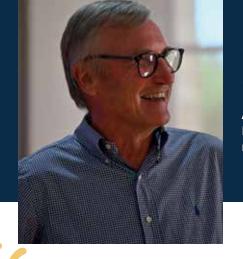


Since spring 2024, Laure Saint-Raymond, Permanent Professor of Mathematics at IHES, has been leading the initiative "L'École dont nous rêvons" (The School We Dream Of) within the Académie des sciences. With the support of IHES, she launched a public consultation aimed at co-developing structural reforms to transform compulsory education and the teaching of science.

An A-to-Z handbook, published by Éditions Nane, invites teachers, parents, and elected officials to share successful local initiatives. A summary of these contributions will help identify transformation scenarios tailored to local needs and challenges.

The ultimate goal is to inform public debate ahead of the 2027 French presidential elections, focusing on four key themes: student pathways, teaching professions, inclusion and gender equality, and the organization and territorial anchoring of schools.

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### **Emmanuel Hermand**

After 26 years as Secretary-General of IHES, Emmanuel Hermand retired in July 2025. He tells us more about his work at the Institute. IHES wishes him a well-deserved retirement!

## How would you describe the role of Secretary-General, a position that often operates discreetly behind the scenes, yet plays an essential part in the life of the Institute?

The Secretary-General acts as an "invisible facilitator": anticipating needs, resolving problems in advance, and ensuring that everyone—researchers, staff and partners—can focus on their mission without facing organizational constraints. Above all, it is about guaranteeing the stability, continuity, and efficiency of the Institute's daily operations. This involves

rigorous management of administrative, financial, legal and logistical aspects, while fostering an environment conducive to top-level research.

### What has been the most rewarding aspect of your role?

Contributing to the prominence of an exceptional center for fundamental research is what I have found most rewarding. IHES is a truly unique place where intellectual freedom, rigor and a sense of timelessness nurture scientific research at the highest level. Serving as Secretary-General in such an environment is both an honor and a privilege, as it supports a mission of public interest and enables some of the brightest minds of our time to think and work freely, without constraints.

The variety of challenges has also been highly stimulating: every day is different—from managing financial and human resources, real estate projects, and international partnerships, to addressing budgetary matters, fundraising and welcoming scientists from around the world. It is a position in which one never gets bored.

### How have you experienced working closely with some of the brightest scientists in the world?

Simply interacting daily—even briefly—with world-renowned researchers, some of whom have revolutionized their fields, is an extraordinarily enriching experience.

I have always been struck that, behind their genius, these

scientists are often remarkably humble. Above all, they expect a smooth working environment, where their work is facilitated without unnecessary complications. In this context, being at their service takes on its full meaning.

### Which project has left the strongest impression on you?

Without a doubt, the renovation and expansion of the IHES campus between 2000 and 2018. This ambitious project involved many stakeholders and required a careful balance

between budgetary discipline, architectural vision, and the continuity of the Institute's daily life.

What motivated me most was that the project perfectly embodied IHES's mission: providing scientists with a serene, functional and inspiring environment.

"I would like to thank the administrators, directors and staff who have supported me throughout my career at IHES, and I wish all the best to Claire Lenz, who is succeeding me as Secretary-General of the Institute."



The renovation of the scientific building, the creation of the Marilyn and James Simons Conference Center, the construction of the Alix and Marwan Lahoud Building and the refurbishment of the residences at Ormaille stand among its major accomplishments. Seeing these projects come to fruition gave me a profound sense of satisfaction.



Read the latest report of the French High Council for the Evaluation of Research and Higher Education (HCERES) on the Alexander Grothendieck Laboratory at IHES (LAG-IHES), released on July 11, 2025.

"The panel commends the excellent management of LAG-IHES, which has successfully created renewed momentum and fostered a dynamic environment that supports the growth and engagement of junior researchers." (Page 7 of the report)

