



Press Release — May 21st, 2025

Arrival of a new Permanent Professor of Mathematics at IHES

The Institut des Hautes Études Scientifiques (IHES) is delighted to announce that Hong Wang will join the Institute as a Permanent Professor of Mathematics, effective September 1, 2025.

Dr. Wang's appointment will be a joint position with the Department of Mathematics at the Courant Institute of Mathematical Sciences at New York University, a longstanding academic partner of IHES, where she will serve as Professor of Mathematics.

Originally from Guangxi, China, Hong Wang earned her undergraduate degree in mathematics from Peking University in 2011. She then moved to France, where she graduated from École Polytechnique (Cycle Ingénieur polytechnicien, X2010) and obtained a master's degree in mathematics at Université Paris-Saclay in 2014. During her PhD at MIT, completed in 2019 under the supervision of Larry Guth, she began working on problems in Fourier analysis. Following a postdoctoral position at the Institute for Advanced Study in Princeton, she became Assistant Professor at UCLA in 2021, before joining the Courant Institute in 2023.

In 2022, Hong Wang was awarded the Maryam Mirzakhani New Frontiers Prize for "advances on the restriction conjecture, the local smoothing conjecture, and related problems." More recently, Dr. Wang and her co-author Joshua Zahl distinguished themselves by announcing the solution to the three-dimensional Kakeya conjecture, a longstanding open problem at the intersection of harmonic analysis and geometry.

At IHES, Hong Wang will carry forward the Institute's tradition of excellence in analysis and geometry, following in the footsteps of former Permanent Professors Jean Bourgain and Mikhail Gromov. In fact, Dr. Wang has used decoupling techniques introduced by Bourgain and Ciprian Demeter in the 2010s in her own research, and has had multiple interactions with Misha Gromov during her time at NYU—where Gromov is also affiliated with the Courant Institute since the 1990's.

Hong Wang comments: *"I have maintained many ties with the French mathematical community since my time as a master's student at Université Paris-Saclay, and it is both a privilege and an honor to join IHES, where so many of my mathematical heroes have worked and proven great theorems."*

Dr. Wang's joint appointment between IHES and NYU also reaffirms the historical academic ties between IHES and the United States, as emphasized by Emmanuel Ullmo, Director of IHES: *"IHES has always maintained a strong relationship with the American scientific community. From our earliest years, many of our Permanent Professors have held joint appointments or collaborations with American institutions. This partnership with NYU is a natural continuation of that history and a testament to our shared commitment to excellence in fundamental research."*

Russel E. Caflisch, Director of the Courant Institute, concludes: *"Hong Wang has established herself as a remarkable mathematician during her career so far, and her recent work solving the Kakeya Conjecture in 3D brought incredible excitement to our academic community. The Courant Institute of Mathematical Sciences, where she is a tenured member of the faculty, is pleased to partner with the Institut des Hautes Études Scientifiques (IHES) on a joint position for Professor Wang. We hope that this international*

collaboration will enable her enormous talents to lead to even more exciting breakthroughs in the future.”

[Institut des Hautes Études Scientifiques \(IHES\)](#)

A founding member of Université Paris-Saclay, IHES is a research center in mathematics, theoretical physics and all related disciplines. A private foundation recognized in the public interest, the Institute has only a restricted number of permanent faculty. Besides, it welcomes about 200 visitors from all over the world for research visits each year. Freedom of research, independence and interdisciplinarity are the values of IHES, which is also committed to promoting the diversity of talent in fundamental research.

[Université Paris-Saclay](#)

Université Paris-Saclay brings together ten constituent faculties and institutes, four Grandes Écoles, the Institut des Hautes Etudes Scientifiques, and two associate institutions and shared laboratories with national research organisations. With 48,000 students, 8,100 lecturers and 8,500 administrative and technical staff members, Université Paris-Saclay offers a comprehensive and varied range of undergraduate to doctorate level programs and engineering degrees, renowned for their quality thanks to the reputation and commitment of its academic staff. Located in the south of Paris on vast campuses that stretch across Paris, Orsay, Évry and Versailles, Université Paris-Saclay benefits from a strategic geographical and socio-economic position that is strengthened by its international visibility. A leading University, Université Paris-Saclay is recognized for its excellent Mathematics and Physics but also for its Life and Medical Sciences, Agriculture, Engineering, and its extensive Humanities and Social Sciences programs. Close to Paris, Université Paris-Saclay is nested in a protected natural area, at the very heart of a dynamic economic hub.