

Cédric Villani joins IHES from September 1st

Cédric Villani, a mathematician specializing in analysis, 2010 laureate of the Fields Medal and former Member of the French Parliament, will join IHES as of September 1, 2022. Also affiliated to Claude Bernard Lyon 1 University, he will hold the IHES-University of Lyon Chair in Analysis and will share his time between the two institutions.

Born in 1973, Cédric Villani attended preparatory classes at Lycée Louis-le-Grand and entered the École normale supérieure in Paris in 1992. After passing the "agrégation" in mathematics, a competitive exam to become a teacher in the French public education system, and obtaining a diploma in numerical analysis from Sorbonne University, he was an "agrégé-préparateur" from 1996 to 2000. He successfully defended his thesis in 1998, at Université Paris-Dauphine, under the supervision of mathematician Pierre-Louis Lions (1994 Fields medalist), studying the Boltzmann and Landau equations in the kinetic theory of gases and plasmas. In 2000, he became a professor at the École normale supérieure of Lyon, then at Claude Bernard Lyon 1 University, where he remained until 2010. He was the director of the Institut Henri Poincaré from 2009 to 2017.

Important recognitions underline the importance of his work. In 2009 he received the Henri Poincaré prize, and in 2010 he was awarded the Fermat prize and the prestigious Fields medal, the highest recognition in mathematics. Since then, he has been strongly committed to the popularization of science through the publication of several books, such as the autobiographical essay "*Birth of a Theorem*".

In 2017, he was elected deputy for the 5th constituency of Essonne, a department in the Paris region of Ile-de-France. As part of his mandate, he participated in the French Committee for Economic Affairs and he chaired the Parliamentary Office for the Evaluation of Scientific and Technological Choices (Office parlementaire d'évaluation des choix scientifiques et technologiques), responsible for informing the French Parliament of the consequences of scientific and technological choices. He also participated in the drafting of a report on the teaching of mathematics in primary and secondary schools.

His research focuses on the study of partial differential equations and their applications to physics, particularly to statistical physics and optimal transport theory.

As a mathematician, Cédric Villani has long been involved in the scientific life of the Institute, where he regularly visited and where he gave lectures and seminars. While he was director of the Institut Henri Poincaré, he also promoted important collaborations between the two institutes, such as the initiatives led by the LabEx CARMIN (Centre d'Accueil et de Rencontres Mathématiques Internationales - which also includes CIMPA and CIRM).

"For me, as for any mathematician, IHES is an essential reference, a hub with some of the leading figures in our discipline. My conversations with Mikhail Gromov, for example, were essential for my work on the Ricci curvature," says Cédric Villani. "I am delighted to be joining this Institute, which is so dear to me."

Emmanuel Ullmo, Director of IHES, commented: "I am delighted that Cédric has accepted the Institute's Scientific Council's proposal to join IHES - his great qualities as a mathematician will allow IHES to further attract top researchers and his presence will be an important asset for the scientific development of the Institute."

Institut des Hautes Études Scientifiques (IHES)

A founding member of Université Paris-Saclay, and a foundation in the public interest, IHES is a private research center in mathematics, theoretical physics and all related disciplines. A private foundation recognized in the public interest, the Institute has a restricted number of permanent professors, mathematicians and theoretical physicists. Each year, it welcomes about 200 visitors from all over the world for research visits. Freedom of research, independence and interdisciplinarity are the values of the 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, 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 programmes and engineering degrees, renowned for their quality thanks to the reputation and commitment of the University's academic staff. Located in the south of Paris on vast sites 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 recognised for its excellent Mathematics and Physics programmes but also for Biological and Medical Sciences, Agriculture, Engineering, and its extensive Humanities and Social Sciences courses. Close to Paris, Université Paris-Saclay is nested in a protected natural area, at the very heart of a dynamic economic hub.