



Frontiers of Mathematics Lecture

Uniformity problems in Diophantine Geometry

Abstract

We will survey recent developments of several uniformity problems in Diophantine Geometry, including uniform Bogomolov (weak and strong), uniform Mordell-Lang, and uniform boundedness of rational torsion points on abelian varieties.

Biography

Gao received his Bachelor degree in mathematics from Peking University in 2010, joint master degree from University of Milan and Paris-Sud University in 2012, and earned his doctorate in 2015 under the supervisions of Emmanuel Ullmo from Paris-Sud University and Bas Edixhoven from Leiden University. From 2015 to 2018, he was a postdoc at the Institute for Advanced Study and Princeton University. From 2015 to 2021, he was a junior permanent researcher at CNRS France. From 2021 to 2024, he was a W3 professor at Leibniz University Hannover. Since October 2024, he has been a professor at University of California, Los Angeles. Gao was awarded the David Goss Prize in Number Theory (together with Vesselin Dimitrov) in 2022. He was awarded the Frontiers of Science Award of the International Congress of Basic Science (ICBS) in 2024. In 2025 he was awarded the Compositio Prize (given once every three years).



Professor Ziyang Gao
University of California, Los Angeles

Date :
September 3, 2026 (Thursday)

Time :
4:30 – 5:30pm

Venue :
P3, Chong Yuet Ming Physics Building,
HKU