Berlin Mathematics Research Center MATH+

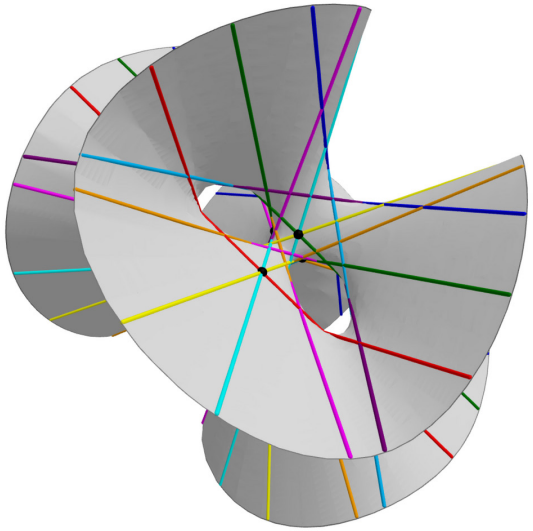
Berlin Mathematical School BMS

MATH+ Friday Colloquium

Friday, 30 January 2026 at 14:15

HU Berlin, Erwin Schrödinger Center, Rudower Chaussee 26, Room 0'119

Tea & Cookies starting at 13:45



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Alexei Skorobogatov

(Imperial College London)

Rational points on surfaces

Rational points are solutions of Diophantine equations in rational numbers and other fields of interest for number theory. The talk will survey the local-to-global principle for rational points, also known as the Hasse principle, with focus on surfaces. The story starts with Legendre who gave a necessary and sufficient condition for solubility of conics in integers, an early precursor of the Hasse-Minkowski theorem.

After describing the state of the art for conic bundle surfaces (families of conics over a curve) and emphasizing the role played by the Brauer group and the Brauer-Manin obstruction, Skorobogatov will talk about more recent results that go beyond conic bundles.

Alexei Skorobogatov is Professor of Pure Mathematics at Imperial College London. He received his PhD in Moscow in 1987 under the supervision of Yuri Manin. He is a recipient of the Whitehead Prize of the London Mathematical Society and a Fellow of the American Mathematical Society. He works in arithmetic geometry, mostly on rational points and Brauer groups.

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