Minerva Lectures

SPRING 2019

Professor Bálint Virág
(University of Toronto)

Friday, **March 29**, 3:15 - 5:00 pm **Rm 407**
Monday, **April 1**, 2:00 - 4:00 pm **Rm 507**
Thursday, **April 4,** 4:10 - 5:40 pm **Rm 507**

Random Interfaces, Geodesics & the Directed Landscape

Coastlines, the edge of burned paper, the boundary of coffee spots, the game of Tetris: random interfaces surround us.

Still, the mathematical theory of one of the the most important cases, the "KPZ universality class", has only been cracked very recently.

This class is related to traffic models, longest increasing subsequences of random permutations, the RSK correspondence, last passage percolation, integrable systems and the stochastic heat equation.

A new random metric in the plane, the "directed landscape" captures the essence of these problems.

Columbia University
Mathematics Hall