SIMION STOILOW INSTITUTE OF MATHEMATICS OF THE ROMANIAN ACADEMY

IMAR Monthly Lecture
Lucian Bădescu Prize Lecture

Surfaces, bundles and knots

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Wednesday, February 7, 2024, 13:00
IMAR, *Miron Nicolescu* amphitheater

Abstract: I will present a framework that compares the Hilbert scheme (an important moduli space on algebraic surfaces) with knot invariants. The construction uses Khovanov's invariants, the enumerative geometry of varieties, and a lot of combinatorics, which are tied together in ways that are still far from being completely understood. The project is joint work with Eugene Gorsky and Jacob Rasmussen.