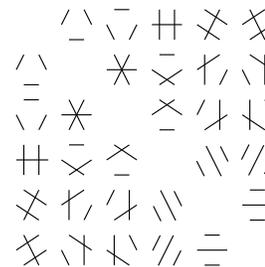


Mathematics Seminar



Rocky Mountain Algebraic Combinatorics Seminar

Plane curves, semigroups and knots

Eugene Gorsky
University of California, Davis

I will review the combinatorics of numerical semigroups corresponding to plane curve singularities. By intersecting a complex plane curve singularity with a small sphere, one obtains a knot or a link, and it turns out that this link and its invariants are determined by the semigroup as well.

Generic curves and non-coprime Catalans

Eugene Gorsky
University of California, Davis

Given a plane curve singularity C , one can define an algebraic variety called the compactified Jacobian of C . We introduce a class of “generic” curves, and describe the homology of the corresponding compactified Jacobians in terms of combinatorics of non-coprime rational q , t -Catalan numbers. All notions will be introduced in the talk, this is a joint work with Mikhail Mazin and Alexei Oblomkov.

Weber 223
4–6 pm, Friday, September 20, 2024
(Refreshments 3:30–4 pm)
Colorado State University
4 pm, Friday, September 20, 2024

This is a joint Denver U / UC Boulder / U of Wyoming / CSU seminar that meets biweekly.
Anyone interested is welcome to join us at a local restaurant for dinner after the talks.



Department of Mathematics
Fort Collins, Colorado 80523