BI-CO MATHEMATICS COLLOQUIUM

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"Noether-Lefschetz loci and polytopes"

Monday, April 28, 2014

Talk at 4:00 – Park 338
Tea at 3:30 – Park 355, Math Lounge

Abstract:
　　I will talk about algebraic curves and surfaces in the 3-dimensional (projective) space, that is zero loci of homogeneous polynomials. Under good conditions, any curve on a smooth surface in the 3 dimensional space can be obtained by intersecting the surface with another surface. The surfaces in the projective space which do not satisfy these good conditions are in "the Noether-Lefschetz locus", which was characterized about 30 years ago. I will then discuss curves and surfaces in toric 3 dimensional spaces and the relation to the combinatorics of polytopes.

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