Michigan Math Club

Thursday at 4pm in the Commons
Free Pizza and Pop

A Visual Invitation to Algebraic Geometry

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Abstract for 22 January 2015

A LOT of algebraic geometry comes down to "intersection phenomena," that is, how (or when, or how likely) two or more geometric objects defined via polynomials will intersect. This talk will proceed from first examples of algebraic loci (=common zero sets of systems of polynomial equations) towards discussing how to visualize (low-dimensional) real projective spaces. Tentatively, we'll discuss a few intersection phenomena in the real projective plane, with at least one that seems counter-intuitive (unless you know linear algebra).