

Dynamical Systems Working Seminar

The dynamical Mordell-Lang conjecture

John Lesieutre (UIC)

Abstract: Suppose that ϕ is an endomorphism of a smooth complex algebraic variety, p is a point on X , and V is a subvariety of X . The dynamical Mordell-Lang conjecture predicts that the set of n for which $\phi^n(p)$ lands in V is the union of finitely many arithmetic progressions and a finite set. (This is already interesting when ϕ is just a matrix acting on \mathbb{CP}^n !) I'll give a general introduction to the conjecture: where does it come from, what are some interesting cases, and what sorts of techniques come into play?

Tuesday, February 16 at 3:00 PM in SEO 712