1035-11-264 **Dragos Ghioca** and **Thomas J. Tucker*** (ttucker@math.rochester.edu), Department of Mathematics, University of Rochester, Rochester, NY 14610, and **Michael E. Zieve**.

Intersections of polynomial orbits, and a dynamical Mordell-Lang conjecture.

We prove that if two nonlinear complex polynomials of the same degree have orbits with infinite intersection, then the polynomials have a common iterate. This naturally gives rise to a special case of a dynamical analogue of the Mordell-Lang conjecture, one that holds for lines in the affine plane A^1xA^1, under the action of polynomials acting on each coordinate. (Received August 27, 2007)