1026-11-97 **Thomas J Tucker*** (`ttucker@math.rochester.edu`), Math Department, Hylan Building, University of Rochester, Rochester, NY 14627, and **Dragos Ghioca** (`dghioca@math.mcmaster.ca`), Department of Mathematics & Statistics, McMaster University, 1280 Main Street West, Hamilton, Ontario L8S 4K1, Canada. *A Dynamic Mordell-Lang Conjecture for Split Polynomial Maps.* Preliminary report.

We will present a conjectured analog of the Mordell-Weil theorem for multiplication maps on abelian varieties. In its simplest form, the conjecture asserts that if P and Q are two nonequivalent polynomial maps on A^1 over a number field K, then for any x in K that is not preperiodic for P or Q, there can be at most finitely many integers n such that $P^n(x) = Q^n(x)$. We are able to obtain partial results using the method of Skolem-Chabauty-Coleman. (Received February 18, 2007)