1077-11-2550 **Michael E. Zieve\*** (zieve@umich.edu). Recent results in arithmetic dynamics. Preliminary report.

I will present several recent results in arithmetic dynamics. Topics will include primitive prime divisors in dynamical sequences; the extent to which polynomial maps from a number field to itself can fail to be one-to-one; and the numbers of integral, rational, and complex points in backwards orbits and grand orbits of rational functions. (Received September 22, 2011)