

1139-11-237

**Wade Hindes\*** ([whindes@gc.cuny.edu](mailto:whindes@gc.cuny.edu)). *Integral points, primitive primes, and arithmetic distances in characteristic  $p$* . Preliminary report.

Let  $K$  be a global field of positive characteristic. We use Riccati equations to define a Zariski open subset of  $\text{Rat}_d$  on which one can estimate certain arithmetic distance functions for points in orbits. In particular, we use these estimates to prove a version of Silverman's integral point theorem in this setting. Moreover, with some additional information coming from deformation theory, we outline how one might prove a primitive prime divisor theorem for rational functions. (Received February 12, 2018)