1139-11-234   **Nicole Romain Looper*** (`nlooper@math.northwestern.edu`), Department of Mathematics, Northwestern University, 2033 Sheridan Road, Evanston, IL 60208. *A lower bound on the canonical height for polynomials.*

The canonical height associated to a rational function defined over a number field measures arithmetic information about the forward orbits of points under that function. Silverman conjectured that given any number field K and degree d at least 2, there is a uniform lower bound on the canonical heights associated to degree d rational functions defined over K, evaluated at points of K having infinite forward orbit. I will discuss a proof of such a lower bound across large families of polynomials. (Received February 12, 2018)

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