1026-11-213 Paul Pollack* (paul.pollack@dartmouth.edu), 6188 Kemeny Hall – Math Dept, Dartmouth College, Hanover, NH 03755. Prime Values of Polynomials in Positive Characteristic. Preliminary report.

We survey some results on prime patterns in the ring of univariate polynomials over a finite field, with a particular emphasis on results pertaining to the analogue of Schinzel's Hypothesis H. For example, we discuss the proof that there are infinitely many prime polynomials of the form $f^2 + 1$ over every finite field of size $q \equiv 3 \mod 4$, as well as related developments. (Received February 27, 2007)