1056-11-1906 **Thai Hoang Le\*** (leth@math.ucla.edu), UCLA Mathematics Department, Box 951555, Los Angeles, CA 90095-1555. *Green-Tao theorem in function fields.* 

We adapt the proof of the Green-Tao theorem on arithmetic progressions in primes to the setting of polynomials over a finite field, to show that for every k, the irreducible polynomials in  $\mathbf{F}_q[t]$  contain configurations of the form  $\{f + Pg : (P) < k\}, g \neq 0$ . (Received September 22, 2009)