Byungchul Cha* (cha@muhlenberg.edu), 2400 Chew Street, Allentown, PA 18104. Chebyshev’s bias in function fields.

We study a function field counterpart of Chebyshev’s bias, a phenomenon observed first by Chebyshev in 1853 that there tend to be more prime numbers that are congruent to 3 modulo 4 than those congruent to 1. We show the similarities and differences between our function field case and the work of Rubinstein and Sarnak in 1994 for the case of the number field. (Received June 30, 2008)