

Primes congruent to 3 modulo 4 tend to be more frequent than those congruent to 1 modulo 4. This phenomenon, later known as Chebyshev's bias, has been extensively studied and generalized by many number theorists. Deligne, P. Ribet, and Sarnak's seminal work in 1994 provided a quantitative measure of the size of this bias. Motivated by this, Mazur and Murty studied the bias for those

primes p dividing the discriminant Δ of a number field K . With the collaboration of a of and Florent Jouve, we study a functional equation analogue of the bias for elliptic curves and prove many results which are new in the number field case. Some of our results are much more unconditional than their counterparts in the number field setting. We specialize in Ulmer's family of elliptic curves and show that the biases in this family behave in a variety