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**Frank Thorne\*** ([thorne@math.sc.edu](mailto:thorne@math.sc.edu)). *Two statistical theorems in field counting.*

I will discuss two results applying statistics to number theory, where we obtain Gaussian distribution results for certain counting functions related to field extensions.

The first result is joint with Maosheng Xiong; we obtain a Gaussian distribution for the location of the zeroes of zeta functions of trigonal curves over finite fields. The second result is joint with Robert Lemke Oliver; we obtain an Erdős-Kac result for the number of primes ramifying in  $S_n$  number fields of bounded discriminant and degree up to 5. In each case the proof is by the method of moments. (Received July 31, 2014)