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The degree distribution of polynomial divisors over finite fields

We will describe a number of asymptotic estimates related to the degree distribution of polynomial divisors over finite fields, as well as analogous estimates concerning the distribution of integer divisors. Due to a very recent discovery of an explicit formula for the constant factor in these asymptotic estimates, we are now able to give numerical approximations of this factor. For example, the proportion of monic polynomials of degree n over the field with two elements, which have a divisor of every degree up to n , is asymptotic to $3.400335\dots n^{-1}$ as n grows.