

The estimated number of irreducible binomials

Abstract

Let \mathbb{F}_q be the finite field with q elements, and T a positive integer. In this lecture, we present an asymptotic formula for the total number of monic irreducible binomials in $\mathbb{F}_q[x]$ of degree less or equal to T , when T is large enough. We also show explicit lower and upper bounds for the number of binomials in the case when T is small.

Observação 1 *This is a joint work with Fabio Enrique Brochero Martínez-UFMG.*

References: Brochero Martínez, F. E., *The estimated number of irreducible binomials*, Finite Fields and Their Applications. **66** (2020).