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**The second largest number of points on plane curves over finite fields.** (English)

Zbl 1411.11059

Finite Fields Appl. 49, 80-93 (2018).

Summary: A basis of the ideal of the complement of a linear subspace in a projective space over a finite field is given. As an application, the second largest number of points of plane curves of degree  $d$  over the finite field of  $q$  elements is also given for  $d \geq q + 1$ .

**MSC:**

- 11G20 Curves over finite and local fields
- 13F20 Polynomial rings and ideals; rings of integer-valued polynomials
- 14G15 Finite ground fields in algebraic geometry
- 14N05 Projective techniques in algebraic geometry

Cited in 1 Document

**Keywords:**

finite field; basis of the ideal; plane curve

**Full Text:** [DOI](#)

**References:**

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