Boğaziçi
MATH COLLOQUIUM

Counting Points on Curves and Irreducible Polynomials over Finite Fields

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Abstract: For any integers $n \geq 3$ and $r \geq 1$ we present formulae for the number of irreducible polynomials of degree n over the finite field $\mathbb{F}_{2^r}$ where the coefficients of x^{n-1}, x^{n-2} and x^{n-3} are zero. We will also apply our curved based techniques to some previous results and give them short proofs.

Our proofs involve counting the number of points on certain algebraic curves over finite fields.

Date : Wednesday, May 8, 2019
Time: 13:30
Place: TB 130, Boğaziçi University