## Permutation Polynomials over Finite Fields and Factorization

Alev Topuzoğlu\*

\*Sabancı University, Istanbul

Permutation polynomials over finite fields are of wide interest, not only because there are many natural (and still open) problems connected with them, but also because they have vast applications.

Factorization of various types of polynomials is also a classical problem and is crucial for numerous applications, notably in cryptography. This talk is concerned with recent work on the factorization of an interesting class of permutation polynomials over finite fields.