

Equivalences of rank distance codes

Valentino Smaldore
Università degli Studi di Padova, Italy

30th Applications of Computer Algebra - ACA 2025

This paper investigates the equivalence issue for rank distance codes in $\mathbb{F}_q^{n \times n}$ of dimension $2n$. The techniques used involve the analysis of the corresponding linearized polynomials. Indeed, under certain assumptions, the right idealizer of the code is isomorphic to the algebra of 2×2 matrices stabilizing the graph of the polynomial in the affine plane $AG(2, q^n)$.