Self-orthogonal codes constructed from orbit matrices of block designs

(Talk)

Loredana Simčić
Faculty of Engineering, University of Rijeka
`lsimcic@riteh.hr`

(joint work with Dean Crnković, Department of Mathematics, University of Rijeka)

Harada and Tonchev presented a construction of self-orthogonal codes from orbit matrices of symmetric designs with fixed-point-free automorphisms. We describe a generalization of this result on the construction of self-orthogonal codes from orbit matrices of block designs admitting automorphisms with fixed points and blocks.

MSC2010: 05B05, 94B05.

Keywords: self-orthogonal code, orbit matrix, block design.

Section: 14. Combinatorics.

.