
LUCIA MOURA, University of Ottawa

Ordered Covering Arrays and NRT-metric Covering Codes

Ordered covering arrays generalize both ordered orthogonal arrays and covering arrays, which are well-studied combinatorial designs. Classical codes using the Hamming metric can be generalized to codes with a poset metric. The Niederreiter-Rosenbloom-Tsfasman (NRT) metric corresponds to posets that are the disjoint union of chains of the same size. In this talk, we discuss ordered covering arrays and their use in upper bounds for NRT-metric covering codes. This talk is based on joint work with André Guerino Castoldi, Emerson Luiz do Monte Carmelo, Daniel Panario, and Brett Stevens.