

---

**ANDRÉ CASTOLDI**, Universidade Tecnológica Federal do Paraná, Brazil

*Bounds on Covering Codes in Rosenbloom-Tsfasman Spaces using Ordered Covering Arrays*

Let  $K_q^{RT}(m, s, R)$  be the smallest cardinality of a  $q$ -ary code of length  $ms$  and covering radius  $R$  with respect to the Rosenbloom-Tsfasman metric. The case  $s = 1$  corresponds to the classical covering codes in Hamming spaces. The research problem concerning covering codes is to improve lower and upper bounds for  $K_q^{RT}(m, s, R)$ . Ordered covering arrays (OCAs) are a generalization of ordered orthogonal arrays and covering arrays. OCAs have been introduced more recently by Tamar Krikorian. In this talk, I will present results improving the upper bound on covering codes using ordered covering arrays.