Contribution ID: **15** Type: **not specified**

Self-orthogonal codes from orbit matrices of strongly regular graphs

In this talk we will show that under certain conditions submatrices of orbit matrices of strongly regular graphs span self-orthogonal codes. We apply this method to construct self-orthogonal binary linear codes from column orbit matrices of the triangular graph $T(2k)$ with at most 120 vertices.
Moreover, we construct linear codes from row orbit matrices of strongly regular graph with parameters (70,27,12,9). Further, we obtain strongly regular graphs and block designs from codewords of the constructed codes.
This is joint work with D. Crnković and S. Rukavina.

Primary author: Dr MAKSIMOVIĆ, Marija (Department of Mathematics University of Rijeka)

Presenter: Dr MAKSIMOVIĆ, Marija (Department of Mathematics University of Rijeka)