

# Large symmetric configurations in translation planes

(Talk)

Vedran Krčadinac

Department of Mathematics, Faculty of Science, University of  
Zagreb

`vedran.krcadinac@math.hr`

(joint work with Andrea Švob, Department of Mathematics, University of  
Rijeka)

We describe a construction of symmetric  $(q^3)_{2q-1}$  configurations embedded in translation planes of order  $q^2$ . The construction utilizes the Bruck-Bose representation of translation planes in  $PG(4, q)$  and is similar to Buekenhout's construction of unitals using ovoidal cones. We use a hyperbolic cone in  $PG(4, q)$  instead.

MSC2010: 51E15, 05B30.

Keywords: symmetric configuration, translation plane.

Section: 14. Combinatorics.