

**Abstract**

**On 2-arcs of maximal size in the affine and the  
projective Hjelmslev plane over  $\mathbb{Z}_{25}$**

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It is shown that the maximal size of a 2-arc in the projective Hjelmslev plane over  $\mathbb{Z}_{25}$  is 21, and the  $(21, 2)$ -arc is unique up to isomorphism. Furthermore, the maximal  $(20, 2)$ -arcs in the affine Hjelmslev plane over  $\mathbb{Z}_{25}$  are classified up to isomorphism.

This is joint work with Matthias Koch and Sascha Kurz.