
MAARTEN DE BOECK, UGent

The Erdős-Ko-Rado problem for geometries

An Erdős-Ko-Rado set of a finite geometry is a set of k -dimensional subspaces such that any two subspaces have a non-empty intersection. It is maximal if it is non-extendable regarding this condition. The general Erdős-Ko-Rado problem asks for the size and the classification of the (large) maximal Erdős-Ko-Rado sets. In this talk we will focus on finite projective spaces (finite vector spaces), finite polar spaces and designs. I will present recent results on Erdős-Ko-Rado sets of generators of a polar space, on Erdős-Ko-Rado sets of planes in projective and polar spaces and on Erdős-Ko-Rado sets of blocks in a unital.