

Seminario Matematico di Brescia

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Generalising Novák's conjecture

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at 2.30 pm

Aula Seminari
DICATAM – Sezione di Matematica
Università degli Studi di Brescia
Via Valotti 9, Brescia

Online at
meet.google.com/xkq-okmd-cpk

Abstract:

Novák conjectured in 1974 that, for any Steiner triple system of order $n \equiv 1 \pmod{6}$ admitting a cyclic automorphism, it is always possible to choose one block from each block orbit so that the chosen blocks are pairwise disjoint. I will discuss generalising this conjecture to the setting of (n, k, λ) -designs. In particular, I will outline a proof that this generalisation holds when n is prime and $\lambda = 1$ and also when $\lambda \leq (k-1)/2$ and n is sufficiently large compared to k .

This is joint work with Tao Feng and Xiaomiao Wang.

For information
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