

On \mathcal{F} -convexity and related problems

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Abstract

Let \mathcal{F} be a family of sets in \mathbb{R}^d . A set $M \subset \mathcal{F}$ is called \mathcal{F} -convex if for any pair of distinct points $x, y \in M$, there is a set $F \in \mathcal{F}$ such that $x, y \in F$ and $F \subset M$. In this talk we'll discuss \mathcal{F} -convexity and related problems for some interesting families \mathcal{F} .

Keywords: \mathcal{F} -convex sets; convex bodies; discrete point sets; geometric graphs; generic property.