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A. Fruchard

Université de Haute Alsace, IRIMAS, Mulhouse, France ${\tt augustin.fruchard@uha.fr}$

L. Yuan

School of Mathematical Sciences, Hebei Normal University, Shijiazhuang, P.R.China and: Hebei Int. Research Center, Mathematics and Interdisciplinary Science, Shijiazhuang, P.R.China lpyuan@hebtu.edu.cn

T. Zamfirescu

Fachbereich Mathematik, Universität Dortmund, Germany, Germany and: Romanian Academy, Bucharest, Romania, and: School of Mathematical Sciences, Hebei Normal University, Shijiazhuang, P.R.China tuzamfirescu@gmail.com

Generous Sets

We investigate the notion of generosity, a particular case of non-selfishness. Let \mathcal{F} be a family of sets in \mathbb{R}^k . A set $M \subset \mathbb{R}^k$ is called \mathcal{F} -convex if for any points $x, y \in M$ there is a set $F \in \mathcal{F}$ such that $x, y \in F$ and $F \subset M$. We call a family \mathcal{F} of compact sets complete if \mathcal{F} contains all compact \mathcal{F} -convex sets. A single convex body K will be called generous, if the family of all convex bodies isometric to K is not complete. We investigate here the generosity of convex bodies.

Keywords: F-convex, complete, generous, grateful.

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