



## The maximum relative diameter for multi-rotationally symmetric planar convex bodies

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In this talk we shall study the maximum relative diameter functional in the class of multi-rotationally symmetric planar convex bodies. A set  $C$  of this class is, by definition,  $k$ -rotationally symmetric for  $k \in \{k_1, \dots, k_n\} \subset \mathbb{N}$ , and so it is natural dividing  $C$  into  $k$  connected subsets, with  $k \in \{k_1, \dots, k_n\}$ , by using the corresponding standard  $k_i$ -partition (which is minimizing for the maximum relative diameter when  $k \geq 3$ , see [1]). We shall compare the different values of the maximum relative diameter for these standard partitions, obtaining the existing general relation and showing when all these values coincide.

### Referencias

- [1] A. Cañete, U. Schnell, S. Segura: Subdivisions of rotationally symmetric planar convex bodies minimizing the maximum relative diameter, preprint 2015.

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