# On symmetries of sections of convex bodies 

## Dmitry Ryabogin

(1300 Lefton Esplanade, Kent, OH, 44242)
E-mail: ryabogin@math.kent.edu
Abstract: Christos Saroglou and Sergii Myroshnychenko proved [1] that a convex origin-symmetric body in $\mathbb{R}^{n}$, $n \geq 3$, with central sections having symmetries of a cube, must be a Euclidean ball. We will discuss several results on floating bodies related to this problem.

## References

[1] Sergii Myroshnychenko, Dmitry Ryabogin and Christos Saroglou, Star bodies with completely symmetric sections, Int. Math. Res. Not. IMRN 2019, no. 10, 3015-3031.

