Faces of convex sets in high dimensions: an overview

Vera Roshchina*

In this talk I will cover some recent results on the facial structure of convex sets in high dimensions, focussing on the significant differences between what we can imagine happens in two- and three-dimensional spaces, and the complexity of facial structure of convex sets in dimensions four and higher, including infinite-dimensional vector spaces.

---

*School of Mathematics and Statistics, UNSW Sydney, Australia, e-mail address: v.roshchina@unsw.edu.au