FERENC FODOR, University of Szeged, Hungary
Stability of mean width inequalities

It was proved by Barthe, Schechtman and Schmuckenschläger that among origin-symmetric convex bodies, whose John ellipsoid is the unit ball, the cube has maximal mean width, and that the regular cross-polytope minimizes the mean with among origin-symmetric convex bodies whose Löwner ellipsoid is the unit ball. We prove stronger, stability forms of these inequalities that are close to optimal. This is joint work with K.J. Böröczky (Budapest, Hungary) and D. Hug (Karlsruhe, Germany).