

Alexander Litvak (University of Alberta, Canada)

Title: Randomized Isomorphic Dvoretzky Theorem

Abstract: Let K be a symmetric convex body in \mathcal{R}^N for which B_2^N is the ellipsoid of minimal volume. We provide estimates for the geometric distance of a “typical” rank n projection of K to B_2^n , for $1 \leq n < N$. Known examples show that the resulting estimates are optimal (up to numerical constants) even for the Banach–Mazur distance. Joint work with P. Mankiewicz and N. Tomczak-Jaegermann.