1113-46-26 **Alexander Koldobsky*** (koldobskiya@missouri.edu), Department of Mathematics, University of Missouri, Columbia, MO 65211. *Slicing inequalities for subspaces of L_p.*

The slicing problem asks whether there exists an absolute constant c so that every origin-symmetric convex body of volume one in any dimension has a central hyperplane section with $(n-1)$-dimensional volume greater than c. We give an affirmative answer for the case of k-intersection bodies, or the unit balls of normed spaces that embed isometrically in L_{-k}. The result holds in the setting of arbitrary measures in place of volume. Other results of this kind include unconditional convex bodies, bodies whose duals have bonded volume ratio, slicing inequalities for sections of proportional dimensions. The original problem is still open, with best-to-date estimate $c \sim n^{-1/4}$ due to Klartag, who improved an earlier result of Bourgain. (Received June 25, 2015)