

Radon transforms with small derivatives

Alexander Koldobsky

University of Missouri

We prove a lower estimate for the maximal outer volume ratio distance from a convex body in R^n to the class of k -intersection bodies in R^n , extending a recently established estimate for intersection bodies (where $k = 1$.) We do this by constructing a function with small derivatives of its Radon transform, which generalizes a recent example related to the slicing inequality for functions. Joint work with Julian Haddad.

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