NEW INEQUALITIES FOR PRODUCTS OF CROSS–SECTION MEASURES

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Abstract. The main purpose of this paper is to sharpen some upper and lower bounds on products of cross-section measures of centered convex bodies. The bounds are given in terms of relative inner and outer radii of isoperimetries of normed spaces, and improve previously known results in the symmetric case. Thus, our results mainly refer to the geometry of finite dimensional real Banach spaces.


Keywords and phrases: Affine isoperimetric inequalities, cross-section measures, inner radius, intersection body, isoperimetrix, Minkowski geometry, outer radius, projection body.

REFERENCES