

ON DUALITY OF DIAMETER 2 PROPERTIES

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We study the octahedrality and roughness of norms on Banach spaces and show that they are the dual notions to diameter 2 properties (see [ALN]).

Octahedral norms were introduced by Godefroy and Maurey [GM] (see also [G]) in order to characterize Banach spaces containing an isomorphic copy of ℓ_1 . The connection of octahedral norms to the subject appears probably first in Deville's paper [D], where it is proven that an (everywhere) octahedral norm is 2-average rough. We consider some stability results for octahedrality and derive the known results for diameter 2 properties more conveniently.

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