

## RENORMINGS IN BANACH SPACES. CONVEXITY AND FLATNESS

Renorming theory is a branch of functional analysis which investigates problems of the following form: for which Banach spaces  $X$  there exists a norm on  $X$ , equivalent to the given norm, with some good geometrical property of smoothness or strictly convexity? The hope is to give the answer in terms of familiar linear topological properties such as reflexivity, separability, separability of the dual space  $X^*$ , containing subspace isomorphic to  $c_0$  or  $l_1$ , and so on. In two words, we are interested in existence of "isomorphisms that improve the norm". We discuss how much convex can be a Banach space  $X$  having the "diameter-2 property", i.e., every non-empty relatively weakly open subset of  $B_X$  has diameter 2.

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