

Some recent progresses in renorming theory

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In a recent monograph A.J. Guirao, V. Montesinos, and V. Zizler posed several interesting problems on renorming techniques in Banach spaces. The present talk is dedicated to those problems which have been solved recently, with particular attention to the following one: *does every infinite-dimensional separable Banach space admit a norm that is rotund and Gâteaux smooth but not locally uniformly rotund?*

It turns out that the above question admits a positive answer, as we showed in collaboration with C.A. De Bernardi.