Topological Open Problems in the
Geometry of Banach Spaces

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Abstract: We survey a brief account of topological open problems inside the area of renormings
of Banach spaces. All of them are related with the Stone’s theorem on the paracompactness of metric
spaces since it is our scalpel to find out the rigidity condition for the renorming process. All of them
have been collected in our recent monograph [21] which is the main source for the present survey article.
We also present recent results showing the connection between Stone’s theorem and Deville’s master
lemma for locally uniformly rotund renormings.

Key words: locally uniformly rotund norm, Kadec norm, Fréchet norm, network, measure
of non compactness.


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