129. Zvi Artstein, Convexification estimates for Minkowski averages in infinite dimensions. Pure and Applied Functional Analysis 6 (2021), 709-718.

Abstract. The Minkowski averages of subsets of a finite dimensional vector space posses a convexification property. Estimates for the convexification phenomenon have been derived, employing the Shapley-Folkman lemma. We examine the infinite dimensional case. We show that the convexification property may not hold in infinite dimensions. We identify conditions that guarantee the convexification property, and provide estimates for the Hausdorff distance between the average and its convex hull.

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