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When is the Haar measure a Pietsch measure for nonlinear mappings? (English)

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Authors' abstract: "We show that, as in the linear case, the normalized Haar measure on a compact topological group G is a Pietsch measure for nonlinear summing mappings on closed translation invariant subspaces of $C(G)$. We also show that our result applies to several well-studied classes of nonlinear summing mappings. In the final section, some problems are proposed."

One of the open problems reads as follows.

Let F be a closed translation invariant subspace of $C(G)$, let X be a metric space and $f : F \to X$ be a translation invariant Lipschitz p-summing mapping. Is the Haar measure a Pietsch measure for f?

Reviewer: Joe Howard (Portales)

MSC:

28C10 Set functions and measures on topological groups or semigroups, Haar measures, invariant measures
47B10 Linear operators belonging to operator ideals (nuclear, p-summing, in the Schatten-von Neumann classes, etc.)

Keywords:

Haar measure; Pietsch measure; nonlinear mapping

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