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Title: On the geometry of proportional quotients of l_1^m

Abstract: Some recent results concerning the geometry of random n-dimensional quotients of $l_1^{(1+\delta)n}$ will be presented. It turns out that "vast majority" (with respect to the Haar measure on related Grassmann manifold) of such quotients X satisfies the property:
for every sufficiently nontrivial operator $T \in L(X)$ (i.e. for so called $(\kappa n, 1)$-mixing operators) the inequality $\|Tx\|_X \geq c\sqrt{n}$ is satisfied by at least $\delta n/2$ extreme points of the unit ball of X, where $c = c(\kappa, \delta) > 0$ depends on κ and δ only.
In particular, this implies that the basis constant (and some other "geometric constants" as well) of such a quotient is grater than or equal to $c\sqrt{n}$. Joint work with S. Szarek.