SCMS Seminar

TIGHT EMBEDDINGS OF SUBSPACES OF L_p INTO ℓ_p^n

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Time: 3:30-4:30 pm., Tuesday, June 24, 2014

Venue: Room 2201, East Guanghua Tower, Handan Campus

Abstract: Given $k < n$, what are the k dimensional subspaces of ℓ_1^n? Geometrically, what are the k dimensional central sections of the set $\{(x_1, \cdots, x_n); x_i \in \mathbb{R}, \sum |x_i| \leq 1\}$?

This question as well as its analogues for ℓ_p^n for other values of $1 < p < \infty$ has its roots in a 1960 theorem of Dvoretzky on Euclidean sections of convex bodies. I'll describe mostly the long history of the problem and also some recent results.

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