Convex holes and almost uniform distribution in the unit cube

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Abstract: For $P \subset \mathbb{R}^d$, a hole is any set of convexly independent points whose convex hull contains no other points. We will discuss constructions of large finite sets that contain no large holes. The key role will be played by subsets of $[0,1]^d$ that contain about the same number of points in every dyadic box of a fixed volume. Based on joint works with Ting-Wei Chao and Ron Holzman.

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