

1014-46-1709      **James R Lee\*** ([jrl@cs.berkeley.edu](mailto:jrl@cs.berkeley.edu)). *Gluing functions with random partitions of unity.*

I will talk about the role of random partitions of unity in our recent progress (together with Sanjeev Arora and Assaf Naor) on the following question from the local theory of Banach spaces: Of all  $n$ -point subsets of  $L_1$ , is the  $\log_2 n$ -dimensional discrete cube the further from a Hilbert space in terms of metric distortion? (Received September 28, 2005)