



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE  
Geometric Functional Analysis and Probability Seminar

Room 261 ,Ziskind Building  
on Thursday, Mar 10, 2016  
at 11:05

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No-gaps delocalization for general random matrices

Abstract:

Heuristically, delocalization for a random matrix means that its normalized eigenvectors look like the vectors uniformly distributed over the unit sphere. This can be made precise in a number of different ways. We show that with high probability, any sufficiently large set of coordinates of an eigenvector carries a non-negligible portion of its Euclidean norm. Our results pertain to a large class of random matrices including matrices with independent entries, symmetric, skew-symmetric matrices, as well as more general ensembles.

Joint work with Roman Vershynin.