Mathematics, Statistics, and Computer Science   **@ UIC**

Combinatorics and Probability Seminar

How often is a random symmetric matrix invertible?

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Abstract: Let A_n be chosen uniformly at random from the set of n x n symmetric matrices with entries -1 or 1. How often is A_n invertible? While this is similar to the problem discussed in the previous week, many of the tools used for the asymmetric case (provably) only go so far for the symmetric case. I'll discuss a recent work of mine (joint with Marcelo Campos, Matthew Jenssen, and Julian Sahasrabudhe) that shows the first exponential upper bound on the probability that A_n is singular.

Monday, October 25 at 2:00 PM in 636 SEO