Math 196 - Student Colloquium

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How “Random” are Random Matrices?

Abstract:
Random matrices are an incredibly useful tool for modelling noise and understanding the behavior of large, chaotic systems. They can help us understand the “average” complexity of a linear algebra algorithm, model “on the cheap” the behavior of large data sets, serve as benchmarks for clustering algorithms, and so much more. And they can do all of this for a very good reason: random matrices are, well, not so random after all. Their spectral asymptotics are highly structured, and highly concentrated, and that is the source of their usefulness.

This talk will be accessible to an audience familiar with basic linear algebra and probability.

Friday, November 13, 2020
3:00 PM
Contact Glenn Tesler for Zoom link