

Mathematics Colloquium

Random Variables, Eigenvalues of Matrices, and Derivatives of Polynomials

David Renfrew
Binghamton University

Friday, October 24, 2025
4:10 – 5 pm
Building 38, Room 219

Abstract

I will give an introduction to studying random variables, and then describe how probabilistic thinking about random variables can be used to understand limits of eigenvalues of large matrices and roots of a large number of derivatives of polynomials.

About the speaker: David Renfrew graduated from Cal Poly, San Luis Obispo in 2008, and from UC Davis, with a Ph.D. in applied math in 2012. His Ph.D. advisor was Sasha Soshnikov. He is currently an Associate Prof. at Binghamton University, and is interested in Random Matrix Theory, as well its applications to Free Probability and analytic function theory.