Probability Seminar

Largest eigenvalues in random matrix beta-ensembles: structure of the limit

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Tuesday, January 26, 2016 2:30-3:30pm, David Rittenhouse Lab 3C8 (Penn)

Despite numerous articles devoted to its study, the universal scaling limit for the largest eigenvalues in general beta log-gases remains a mysterious object. I will present two new approaches to such edge scaling limits. The outcomes include a novel scaling limit for the differences between largest eigenvalues in submatrices and a Feynman-Kac type formula for the semigroup spanned by the Stochastic Airy Operator. (Based on joint work with M. Shkolnikov)