Fall Colloquium Series

Random Conformal Mappings of the Disk

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Abstract:

Wendelin Werner has proven the existence and essential uniqueness of a conformally invariant family of measures on self-avoiding loops on Riemann surfaces. Motivated by Werner's work, we define a probability space, where the sample space consists of conformal mappings of the unit disk. We then concern ourselves with the following question (similar to the question that plagued Bieberbach): Given such a conformal mapping, what can we say about the size of its coefficients? An abstract "Integration by parts" formula will help provide an answer.

Wednesday, December 2, 1:05 - 1:50pm in 3-2643