Determinantal point processes and the zeros of analytic functions

Tomoyuki Shirai (Kyushu University) *

Determinantal point processes form a nice class of point processes which describe random point configurations such as random eigenvalues of certain matrix ensembles, the zeros of certain Gaussian analytic functions, and many other interesting objects. After we briefly explain the basics of determinantal point process and the Gaussian analytic functions, we discuss some properties of the zeros of certain random analytic functions.

^{*}RIMS Project Research, The international conference "Functions in Number Theory and Their Probabilistic Aspects", Dec.13–17, 2010 at RIMS, Kyoto University.