The Hong Kong University of Science and Technology

Department of Mathematics

Seminar on Probability

The Lyons-Peres conjecture
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Abstract
I will explain the Lyons-Peres conjecture in the theory of determinantal point processes (DPP). This conjecture asks certain completeness of a DPP with orthogonal projection correlation kernel. In a particular case, it asks whether almost surely the random set of zeros of the Gaussian random analytic function is the set of uniqueness for Bergman space. Recently, in a joint work with Alexander Bufetov and Alexander Shamov, we solve completely the Lyons-Peres conjecture. Our method is based on proving the existence and a new local property of conditional correlation kernels for conditional DPP.

Date: Thursday, 21 December, 2017
Time: 3:30 p.m.-4:30 p.m.
Venue: Room 4472, Academic Building, (near Lifts 25&26), HKUST

All are welcome!