ON THE ORDER OF THE MAXIMUM OF THE BRANCHING RANDOM WALK

YACINE BARHOUMI-ANDRÉANI

ABSTRACT. The Branching Random Walk (BRW) is a natural model that describes the evolution of a population of particles in the presence of a spatial movement. It was introduced independently in the 30ies by Kolmogorov-Petrovsky-Piskounov and Fisher. Approximate branching structures recently regained a particular interest in the study of the maximum of the characteristic polynomial of a random Haar-distributed unitary matrix and the Riemann Zeta function on the critical line.

This talk aims at explaining the general strategy to obtain the order of the maximum of the Branching Random Walk.

References

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DEPARTMENT OF STATISTICS, UNIVERSITY OF WARWICK, COVENTRY CV4 7AL, U.K. *E-mail address*: y.barhoumi-andreani@warwick.ac.uk

Date: May 14, 2016.