

Curriculum vitae

Name **Ágnes Backhausz**
Place of birth Budapest, Hungary
Degree PhD (2013)

Employment

- Sept 2010– Department of Probability Theory and Statistics
Institute of Mathematics, Faculty of Science
Eötvös Loránd University, Budapest, Hungary
current position: assistant professor
- Aug 2013 – MTA Alfréd Rényi Institute of Mathematics, Budapest, Hungary
current position: postdoctoral researcher (part-time)

Education

- 2008 – 2013 Eötvös Loránd University, Budapest, Hungary
PhD student in Mathematics
Thesis: Analysis of random graphs with methods
of martingale theory (Supervisor: Tamás F. Móri)
- 2003–2008 Eötvös Loránd University, Budapest, Hungary
MSc in Mathematics

Teaching

- 2014 Markov chains
2011 – stochastic processes, stochastic analysis
2008–2013, 2016– statistics
2007 – probability theory
2005 calculus

Honours

- 2014 Grünwald Géza prize of the János Bolyai Mathematical Society
(Budapest, Hungary)

Publications

Papers

Ágnes Backhausz, Bálint Virág, Spectral measures of factor of i.i.d. processes on vertex-transitive graphs. To appear in *Annales de l'Institut Henri Poincaré (b) Probabilités et Statistiques*. [arXiv:1505.07412]

Ágnes Backhausz, Tamás F. Móri, Further properties of a random graph with duplications and deletions. To appear in: *Stochastic Models*, **32** (1). [arXiv:1409.5279]

Ágnes Backhausz, Tamás F. Móri. Asymptotic properties of a random graph with duplications. *Journal of Applied Probability*, **52**, pp. 375–390, 2015.

Ágnes Backhausz, Balázs Szegedy, Bálint Virág. Ramanujan graphings and correlation decay in local algorithms. *Random Structures and Algorithms*, **47** (3), pp. 424–435, 2015.

Ágnes Backhausz, Tamás F. Móri. Asymptotics of a renewal-like recursion and an integral equation. *Applicable Analysis and Discrete Mathematics*, **8**, pp. 200-223, 2014.

Ágnes Backhausz, Tamás F. Móri. Weights and degrees in a random graph model based on 3-interactions. *Acta Mathematica Hungarica*, **143** (1), pp. 23–43, 2014.

Ágnes Backhausz, Tamás F. Móri. A random model of publication activity. *Discrete Applied Mathematics*, **162**, pp. 78–89, 2014.

Ágnes Backhausz, Tamás F. Móri. Degree distribution in the lower levels of the uniform recursive tree. *Annales Univ. Sci. Budapest., Sect. Comp.*, **36**, pp. 53-62, 2012.

Ágnes Backhausz, Tamás F. Móri. A random graph model based on 3-interactions. *Annales Univ. Sci. Budapest., Sect. Comp.*, **36**, pp. 41-52, 2012.

Ágnes Backhausz, Tamás F. Móri. Local degree distribution in scale free random graphs. *Electronic Journal of Probability*, **16** (54), pp. 1465-1488, 2011.

Ágnes Backhausz. Limit distribution of degrees in random family trees. *Electronic Communications in Probability*, **16**, pp. 27-37, 2011.

Ágnes Backhausz. Local degree distributions: examples and counterexamples. *Periodica Mathematica Hungarica*, **63** (2), pp. 153-171, 2011.

Ágnes M. Backhausz, Vilmos Komornik, Tivadar Szilágyi. A simplified multidimen-

sional integral. *Czechoslovak Mathematical Journal*, **59** (3), pp. 721-739, 2009.

Preprints

Ágnes Backhausz, Balázs Szegedy. On large girth regular graphs and random processes on trees. Preprint. [arXiv:1406.4420]