

Angelo Abächerli

Education

- 2015–2019 **PhD student at the Department of Mathematics in the Probability Theory and Financial Mathematics Group, ETH Zürich, Switzerland** (successfully defended).
Title of dissertation: *Level-set percolation of the Gaussian free field and the local picture on finite graphs*
Advisor: Prof. Alain-Sol Sznitman
- 2012–2014 **MSc ETH Mathematics, ETH Zürich, Switzerland** (with distinction, average: 5.97 out of 6).
Thesis: *Sandpiles, Spanning Forests and the Looping Constant of \mathbb{Z}^d* (grade: 6 out of 6)
Advisor: Prof. Wendelin Werner
- 2009–2012 **BSc ETH Mathematics, ETH Zürich, Switzerland** (average: 5.36 out of 6).
Thesis: *The Phase Transition of the Erdős-Rényi Graph* (grade: 6 out of 6)
Advisor: Prof. Alain-Sol Sznitman
- 2004–2009 **High School, Gymnasium Kirschgarten Basel, Switzerland, bilingual matura** (german-english).
 - Focus: Biology and Chemistry
 - Basler Maturapreis 2009 (prize awarded by Novartis to at most two graduands per year and per high school in the cantons of Basel-Stadt and Basel-Landschaft after nomination by the school, for outstanding results and social engagement)

Publications

- 2019 **Level-set percolation of the Gaussian free field on regular graphs II: finite expanders** (with J. Černý), Preprint, 42 pages, available at arXiv:1909.01972.
- 2019 **Level-set percolation of the Gaussian free field on regular graphs I: regular trees** (with J. Černý), Preprint, 26 pages, available at arXiv:1909.01973.
- 2019 **Local picture and level-set percolation of the Gaussian free field on a large discrete torus**, Stochastic processes and their Applications, Vol.129, no.9, 3527-3546, 2019.
- 2018 **Level-set percolation for the Gaussian free field on a transient tree** (with A.-S. Sznitman), Annales de l'Institut Henri Poincaré - Probabilité et Statistiques, Vol.54, no.1, 173-201, 2018.

Talks

- 2019 Seminar Groups, Graphs and Probability, *Rényi Institute, Budapest.*
- 2019 Conference ANR/SNSF MALIN in Les Diablerets, *Switzerland.*
- 2016, 2017, 2018 Graduate Seminar in Probability, *ETH Zürich.*

Teaching experience (exercise classes)

- 2017, 2019 Probability Theory for D-MATH, *ETH Zürich.*
- 2018, 2019 Probability and Statistics for D-MATH, *ETH Zürich.*
- 2015–2018 Mathematik I/II for D-BIOL, D-CHAB, D-HEST, *ETH Zürich.*
- 2011–2013 Lineare Algebra I/II for D-MATH, *ETH Zürich.*

Work experience

- 2015–2019 **Scientific assistant, ETH Zürich, Switzerland.**
additional to the research related to the doctorate, this includes:
 - to assist professors in lectures, to organise exercise classes and seminars
 - to prepare, supervise and grade exams
 - to teach exercise classes for students
- 2016–2019 **Seminar organisation, ETH Zürich, Switzerland.**
organiser of the Graduate Seminar in Probability, a joint seminar of the University of Zurich and ETH Zurich.

- 2014–2015 **Civil service** (military/civil duty completely fulfilled).
school assistant at the primary school Bommern in Pfaffhausen, Switzerland; this includes:
- to assist teachers and students in class and in activities related to school
 - to assist the school principal
- March 2011 **Customer care**, *Baselworld*, leading fair for watches and jewellery, Switzerland.

Languages

Mother tongue **German, Italian, Swiss German**

C1 **English**

B2 **French**

A2 **Spanish**

Computer skills

Expert \LaTeX .

Basic C++, Matlab, R.

(I learnt and applied C++ and Matlab each during one semester of my bachelor studies; I have further started to apply R while reading and working through the books "An Introduction to Statistical Learning" by G. James et al. and "The Elements of Statistical Learning" by T. Hastie et al.)

Interests

Piano since 1999 at the Musik-Akademie Basel with recitals on a regular base.

Photography especially analogue black and white photography and darkroom developing.

Lindy Hop dance from the family of swing dances, originating from the 1930's and 1940's.