

Maxim Gerspach

Curriculum Vitæ

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Personal details

- *Birth*: December 20th, 1996 in Frankfurt, Germany
- *Address*: Lindstedtsvägen 25, 114 28 Stockholm
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Education

- From 10/2020 on. **KTH Royal Institute of Technology**: Postdoctoral Researcher under the mentorship of Prof. Lilian Matthiesen.
- 05/2020. **ETH Zürich**: PhD Thesis “Pseudomoments of the Riemann zeta function”.
- 09/2017 - 08/2020. **ETH Zürich**: PhD under the supervision of Prof. Emmanuel Kowalski.
- 04/2019 - 08/2019. **University of Warwick**: Research visit to Prof. Adam Harper.
- 09/2015 - 08/2017. **ETH Zürich**: Master of Science in Mathematics. Grade: 6.0, with distinction.
- 01/2017. **ETH Zürich**: Master Thesis “A Survey on Linear Equations in Primes” under supervision of Prof. Emmanuel Kowalski.
- 10/2014 - 08/2015. **Goethe-Universität Frankfurt am Main**: Bachelor of Science in Mathematics, minor in Chemistry. Grade: 1.3, very good.
- 03/2015. **Goethe-Universität Frankfurt am Main**: Bachelor Thesis “Gauss- und Jacobisummen und ihr Zusammenhang mit dem kubischen Reziprozitätsgesetz” (Gauss and Jacobi Sums and their Connection to the Cubic Reciprocity Law) under supervision of Prof. Jürgen Wolfart.
- 10/2011-09/2014. **Goethe-Universität Frankfurt am Main**: High school student Study Programme for a Bachelor of Science in Mathematics.

Awards, Scholarships, Grants, ...

- 01/2021-04/2021. Participant at the Number Theory Program of the Mittag-Leffler Institute.
- 2018 - now. Organizer of the math course at the Hessische Schülerakademie - a yearly summer school for talented high school students in Hesse, Germany.

- 04/2019. **ETH Zürich**: SNF mobility in project grant for a research visit to the University of Warwick (1,600 CHF).
- 05/2018. **ETH Zürich**: Willi-Studer-Preis for the best MSc grade within Mathematics (2,000 CHF).
- 09/2015 - 03/2017. **ETH Zürich**: Excellence Scholarship and Opportunity Award (ESOP), Full Scholarship for the Master degree (33,000 CHF).

Publications

- 05/2020. Pseudomoments of the Riemann zeta function, PhD Thesis.
- 09/2019. Low pseudomoments of the Riemann zeta function and its powers, arXiv:1909.10224, IMRN, to appear.
- 12/2018. Random matrix-valued multiplicative functions and linear recurrences in Hilbert-Schmidt norms of random matrices, arXiv:1812.04437.
- 12/2018. Spectra of random real-valued non-abelian G -circulants.

Seminar and Contributed Talks

- 02/2021. Institut Mittag-Leffler, Short Talk, Zoom.
- 09/2020. Analytic and Probabilistic Number Theory Seminar, Zoom (UFMG).
- 02/2020. Zurich Number Theory Seminar, ETH, Zürich.
- 12/2019. Nancy-Metz Number Theory Seminar, IECL, Nancy.
- 11/2019. Rencontres de théorie analytique et élémentaire des nombres, IHP, Paris.
- 11/2019. 1st Math Young Researchers Meeting, Università degli studi di Genova, Genoa.
- 06/2019. Warwick Number Theory Seminar, University of Warwick, Coventry.

Teaching

- HS 2018: Functional Analysis 1 (exercise class).
- FS 2018: Linear Algebra 2 for mechanical engineers (organization).

- HS 2017: Linear Algebra 1 for mechanical engineers (organization).
- FS 2017: Analysis 2 (exercise class).
- HS 2016: Analysis 1 (exercise class).
- SS 2015: Elementary Number Theory (exercise class).
- WS 2014/15: Measure Theory (exercise class).
- WS 2013/14: Analysis 1 (exercise class).

Language Skills

- German (mother tongue)
- English (C2)
- Spanish (B1)
- Swedish, Russian: Basic knowledge