

Andreas Wieser

Einstein Institute of Mathematics
Hebrew University
Homepage: <https://awieser1.github.io/>

andreas.wieser (at) mail.huji.ac.il
or
andreaslwieser (at) gmail.com

EDUCATION

PhD in Mathematics, ETH Zurich 2016 – now
Advisors: Menny Aka, Manfred Einsiedler
Expected to graduate in Summer 2021

MSc in Mathematics, ETH Zurich 2016
Graduated with distinction, GPA 6/6
Thesis: *Linnik's problems: An ergodic theoretic proof of two equidistribution results* supervised by Manfred Einsiedler

BSc in Mathematics, ETH Zurich 2014
GPA: 5.57/6

BSc in Physics, ETH Zurich 2013
GPA: 5.04/6

RESEARCH VISITS

Northwestern University, Evanston Oct. 2020 – March 2021
Visiting Predoctoral Fellow, invited by Ilya Khayutin.

Hausdorff Institute of Mathematics, Bonn Jan. 2020 – March 2020
Attending the program 'Dynamics: Topology and Numbers'.

PAPERS

1. A. Wieser, *Linnik's problems and maximal entropy methods*. Monatsh. Math. 190(1):153-208, 2019. [Link](#).
2. M. Aka, M. Einsiedler, A. Wieser, *Planes in four space and four associated CM points*, to appear in Duke Math. J. [Link](#).
3. M. Aka, M. Luethi, Ph. Michel, A. Wieser, *Simultaneous supersingular reductions of CM elliptic curves*, submitted. arXiv:2005.01537, 2020. [Link](#).
4. M. Aka, A. Musso, A. Wieser, *Equidistribution of rational subspaces and their shapes*, submitted. arXiv:2103.05163, 2021. [Link](#)

AWARDS

- *SNSF mobility fellowship*, Swiss National Science Foundation 2020–2021
- *ETH medal* for outstanding master thesis, ETH Zurich. 2016
- *Willi Studer prize* for best graduate in 2016, ETH Zurich. 2016

REFeree

Commentarii Mathematici Helvetici

TALKS

- *Expanding Dynamics X*, Zoom, 23. March 2021. [Link](#)
- *Zoom Dynamical Systems Seminar*, Penn State, 23. February 2021. [Abstract](#)
- *Midwest Dynamics and Group Actions Seminar*, Zoom, 23. November 2020.
- *Geometry Graduate Colloquium*, Zürich, 08. October, 2020.
- *ICTS conference – Smooth and homogeneous dynamics*, Bangalore, 30. September 2019. [Video](#).
- *Zurich graduate colloquium*, Zürich, 06. November 2018.
- *ETDS morning seminar*, Zürich, 25. October 2018.

ATTENDED CONFERENCES AND WORKSHOPS

- *5th Workshop on Operator Theoretic Aspects of Ergodic Theory*, Tübingen, 17. November 2017.
- *Arithmetic, geometry, and modular forms: a conference in honor of Bill Duke*. ETH Zurich, June 2019.
- *Number Theory and Dynamics*. University of Cambridge, March 2019.
- *Dynamics: Topology and Numbers*. Max Planck Institute for Mathematics (Bonn), July 2018. [Link](#).
- *New Methods for Zimmer's Conjecture*. IPAM (UCLA), January 2018. [Link](#).
- *Ergodic Theory: Numbers, Fractals, and Geometry*. Clay research workshop, Clay Mathematics Institute (Oxford), September 2017. [Link](#).
- *4th Workshop on Operator Theoretic Aspects of Ergodic Theory*. Feldkirch, May 2017.
- *Distinguished Lectures in Dynamics*. Tata Institute of Fundamental Research (Mumbai), April 2017. [Link](#).
- *Applications of Ergodic Theory in Number Theory*. CIRM doctoral school (Luminy), October 2016.

LECTURE NOTES

Analysis I/II with Manfred Einsiedler, in German, available [here](#).
These are extensive lecture notes for the first year course in analysis at ETH Zurich. They were written and used in the academic years 2016-2017 and 2017-2018.

TEACHING

- Organizing student seminars:
 - *Functional Analysis III, Unitary Representations*, with M. Einsiedler, Fall 2019.
 - *Primes of the form $x^2 + ny^2$* , with M. Aka and M. Lüthi, Spring 2019.
 - *Counting problems and homogeneous dynamics*, with M. Einsiedler and M. Lüthi, Spring 2018. [Link](#).
 - The teaching concept for this seminar is described in detail in the article
M. Luethi, A. Wieser, Self-assessment in undergraduate student seminars in mathematics, *ETH Learning and Teaching Journal* 2(1):49-57, 2020. [Link](#).
 - *Arithmetic of quadratic forms*, with M. Aka, Spring 2017. [Link](#).
- Teaching assistant:
 - *Functional Analysis II*, taught by M. Einsiedler, Spring 2019. [Link](#).
 - *Functional Analysis I*, taught by M. Einsiedler, Fall 2018. [Link](#).
- Exercise classes: Commutative Algebra (Fall 2019). As an undergraduate: Complex Analysis, Topology, Linear Algebra II, Methods of Mathematical Physics.

SUPERVISED STUDENTS

Andrea Musso, *Equidistribution of rational subspaces and their shapes*
Master thesis advised jointly with M. Aka 2020

René Pfitscher, *Lattices, quantitative non-divergence, and some finiteness properties of adèle groups*
Bachelor thesis advised jointly with M. Einsiedler 2020

Horace Chaix, *Eskin, Rudnick and Sarnak's proof of Siegel's weight formula*
Master thesis advised jointly with M. Einsiedler 2020

Muriel Egli, *Equidistribution of planes in the matrix algebra*
Master thesis advised jointly with M. Aka

2019

LANGUAGES

German – native speaker
Italian – native speaker
English – fluent
French – intermediate
Chinese – basic communication skills