

# 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

IMRN, Commentarii Mathematici Helvetici

## TALKS

- *PET Seminar*, Ben-Gurion University, 16. December 2021.
- *Midrasha on Groups*, Weizmann Institute, 13. December 2021.
- *Groups and Dynamics*, Tel Aviv, 18. November 2021.
- *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.
- *5th Workshop on Operator Theoretic Aspects of Ergodic Theory*, Tübingen, 17. November 2017.

## ATTENDED CONFERENCES AND WORKSHOPS

- *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