

# Andreas Wieser

Einstein Institute of Mathematics  
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**EDUCATION**      **PhD in Mathematics**, ETH Zurich      2016 – 2021  
*Advisors: Menny Aka, Manfred Einsiedler*

**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*

**POSITIONS**      **Postdoctoral Fellow**, Jerusalem      2021–now  
*Einstein Institute of Mathematics, Hebrew University,  
with Elon Lindenstrauss*

**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*, *Duke Math. J.* 171(7) 1469-1529, 2022. [Link](#).
  3. M. Aka, M. Luethi, Ph. Michel, A. Wieser, *Simultaneous supersingular reductions of CM elliptic curves*. *J. Reine Angew. Math* 2022(786) 1-43, 2022. [Link](#).
  4. M. Aka, A. Musso, A. Wieser, *Equidistribution of rational subspaces and their shapes*, submitted. arXiv:2103.05163, 2021. [Link](#)
  5. A. Wieser, P. Yang, *A uniform Linnik basic lemma and entropy bounds*, submitted. arXiv:2201.05380, 2022. [Link](#)
  6. O. Solan, A. Wieser, *Birkhoff genericity for points on curves in expanded horospheres*. In preparation.

- AWARDS**
- *SNSF Doc.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, Journal of the London Mathematical Society, Pure and Applied Mathematics Quarterly, Quarterly Journal of Mathematics

## TALKS

- *Crosscurrents in number theory, analysis and geometry*, Paris 13, 8. December 2022. [Link](#)
- *Ergodic Theory and Dynamical Systems Seminar*, Zurich, 10. October 2022.
- *Dynamics Seminar*, Hebrew University, 22. March 2022.
- *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

- *Dynamics week in Jerusalem*. Hebrew University, July 2022.
- *Ergodic geometry, number theory and Margulis legacy: the next generation*. University of Chicago, June 2022.
- *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,  
A.M. received Willi Studer prize 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