

Adrian Montgomery Ruf

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📄 [adrianmruf.github.io](https://github.com/adrianmruf)

Education/Employment

- 2018 **Guest Researcher**, *ETH Zürich*, Switzerland.
Duration: Three months
Supervisor: Prof. Siddhartha Mishra
- since 2016 **PhD Mathematics**, *University of Oslo*, Norway.
Marie Skłodowska–Curie research position in the ModCompShock network
Supervisor: Prof. Nils Henrik Risebro
- 2016 **MSc Mathematics**, *TU Berlin*, Germany.
Thesis: *A class of nonlinear evolution equations of second order*
Supervisor: Prof. Etienne Emmrich
- 2013 **BSc Mathematik**, *TU Berlin*, Germany.
Thesis: *Operations for nonnegative forms with an application to contents*
Supervisor: Prof. Karl-Heinz Förster

List of Publications

Journal articles

- [1] A. M. Ruf. “Convergence of a full discretization for a second-order nonlinear elastodynamic equation in isotropic and anisotropic Orlicz spaces”. In: *Zeitschrift für angewandte Mathematik und Physik* 68.5 (Sept. 2017), p. 118. ISSN: 1420-9039. DOI: 10.1007/s00033-017-0863-z.
- [2] J. Ridder and A. M. Ruf. “A convergent finite difference scheme for the Ostrovsky–Hunter equation with Dirichlet boundary conditions”. In: *BIT Numerical Mathematics* (Mar. 2019). ISSN: 1572-9125. DOI: 10.1007/s10543-019-00746-7.

Preprints

- [3] A. M. Ruf, E. Sande, and S. Solem. “The optimal convergence rate of monotone schemes for conservation laws in the Wasserstein distance”. Submitted for publication. 2018. URL: <https://arxiv.org/abs/1808.04661>.

Awards and Scholarships

- 2018 **Scholarship for an academic secondment**, *ETH Zürich*, Switzerland.
- 2018 **Scholarship for HYP2018**, *Penn State University*, USA.
XVII International Conference on Hyperbolic Problems: Theory, Numerics, Applications

Contributed talks

2018

- **BIT Circus**, Aalto University, Finland, 22th of September 2018
- **Hyp2018 XVII International Conference on Hyperbolic Problems: Theory, Numerics, Applications**, Penn State University, USA, 28th of June 2018

Academic experience

2018 **Supervision of Bachelor students**, *University of Oslo*.

2010–2016 **Teaching assistant**, *TU Berlin*.

Taught courses in

- Functional analysis
- Calculus
- Calculus for engineers

2015–2016 **Student assistant**, *Matheon Research Center*, Berlin.

- Organization of the Matheon advent calendar for students
- Coordination and revision of the calendar puzzles and solutions
- Donor acquisition

2015 **Coordinating assistant**, *TUBS*, Berlin.

Coordinated the 79th annual meeting of the DPG.

2011–2012 **Student assistant**, *Unitus project*, TU Berlin.

Created and improved activity oriented learning materials used in mathematical courses for engineers, e.g.

- supporting teaching material
- online platform Mumie
- guidelines for teaching assistants
- exam difficulty analyses

2009–2011 **Freelancer**, *Uniseminar Education AG*, Zürich.

Created various mathematical teaching materials for the courses

- Mathematics I & II
- Mathematical economics

Languages

German Mother tongue

English Proficient

Finnish Basic knowledge

Norwegian Basic knowledge