

Anne PEIN

Technical University of Munich, Department of Mathematics
Room 03-06-059, Boltzmannstr. 3, 85748 Garching, Germany
pein@ma.tum.de
www.annepein.com

RESEARCH INTERESTS

Stochastic Analysis, SPDEs | Probability/Measure Theory | Dynamical Systems, PDEs

EDUCATION

- AUG 2015 M.Sc. in PHYSICS, **Georg-August-Universität**, Göttingen, Germany
Final Grade: 1.1 (with distinction)
Thesis: "Sparsity Constraint for Phase Retrieval in X-Ray Propagation Imaging" | Advisor: Prof. Tim SALDITT
- SEP 2012 B.Sc. in MATHEMATICS, **Westfälische Wilhelms-Universität**, Münster, Germany
Final Grade: 1.3 (with distinction)
Thesis: "Global and local hierarchical model reduction for the Poisson problem" | Advisor: Prof. Mario OHLBERGER
- JUN 2008 Abitur, **Max-Planck-Gymnasium**, Delmenhorst, Germany
Final Grade: 1.1 [best=1.0, worst=6.0]

PRACTICAL EXPERIENCE

- JAN 2017- RESEARCH ASSISTANT
Research Group on Multiscale and Stochastic Dynamics, Technische Universität München, Munich, Germany
PhD student under the supervision of Prof. Christian KUEHN
- JUN-DEC 2016 RESEARCH ASSISTANT
Institute for Applied Functional Analysis, Technische Universität Berlin, Berlin, Germany
- NOV-DEC 2015 VOLUNTARY WORK
Huinay Scientific Field Station, Huinay, Chile
Marine biology research station focusing on marine environment and ecosystem studies of the chilean fjords
- SEP-OCT 2015 RESEARCH ASSISTANT
Institute for X-Ray Physics, Georg-August-Universität, Göttingen, Germany
- JUN-JUL 2015 RESEARCH INTERNSHIP
Institut Langevin, Paris, France
Topic: Compressed Sensing for Ultrasonic Imaging | Advisor: Prof. Laurent DAUDET
- AUG 2013 INTERNSHIP
German Cancer Research Center, Heidelberg, Germany
Topic: Medical Physics in Radiology

CONFERENCES, SCHOOLS & AWARDS

- JUL 2017 **Summer School: Applied Harmonic Analysis** at the University of Genoa, in Genoa, Italy
- DEC 2016 Workshop: **Young Women in Harmonic Analysis and PDE** in Bonn, Germany
- NOV 2016 **Fall School on PDEs and Probability** at the **African Institute for Mathematical Sciences (AIMS)** in Mbour, Senegal; with travel grant from the **German Academic Exchange Service (DAAD)**
- JUL 2016 **Summer School: Mathematical and Numerical Methods in Image Processing** organized by the **Berlin Mathematical School (BMS)** in Berlin, Germany
- DEC 2015 Award from the **Dr. Berliner-Dr. Ungewitter-Foundation** for an outstanding Master's thesis
- MAR 2015 Poster at the **German Physical Society (DPG)** conference in Berlin, Germany; with travel grant from the **Wilhelm and Else Heraeus Foundation**
- 2013 Scholarship from the **Lower Saxony Ministry of Science and Culture**
- JUN 2008 Award from the **German Physical Society (DPG)** for excellent results during the Abitur

PUBLICATIONS

M.V. Gnann, C. Kuehn, and A. Pein, "Towards sample path estimates for fast-slow stochastic partial differential equations," submitted (2018).

F. Voigtlaender and A. Pein, "Analysis vs. synthesis sparsity for α -shearlets," arXiv:1702.03559v1 [math.FA] (2017).

A. Pein, S. Loock, G. Plonka, and T. Salditt, "Using Sparsity Information for Iterative Phase Retrieval in X-Ray Propagation Imaging," Opt. Express 24, 8332-8343 (2016).

TEACHING

- Winter term 2017/18 Teaching assistant for *Introduction to Nonlinear Dynamics*
- Summer term 2017 Teaching assistant for *Dynamical Systems*
- Summer term 2014 *Laboratory course* for first year physics students

LANGUAGES

GERMAN: Native | ENGLISH: Fluent | FRENCH: Intermediate | SPANISH: Intermediate

MEMBERSHIP

European Women in Mathematics

OTHER INTERESTS

Hiking, Travelling, Literature, Languages, Photography, Card & Board Games, Swimming, Bouldering, Nature and Conservation