Anne PEIN

PERSONAL DATA

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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

Research Interests

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

Publications

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	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

Interests and Activities

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