# Anne Pein

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### **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

IAN 2017- RESEARCH ASSISTANT

Research Group on Multiscale and Stochastic Dynamics, Technische Univer-

sität 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

Institute 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

### **ACTIVITIES**

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 / PREPRINTS**

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

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