

Timo Sprekeler | Curriculum Vitae

✉ Timo.Sprekeler@maths.ox.ac.uk
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Personal Details

Birth: December 26, 1996 in Dortmund, Germany
Citizenship: German
Address: Keble College, Oxford OX1 3PG, United Kingdom
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Education

University of Oxford, Keble College **Oxford, UK**
DPhil in Mathematics *10/17–Present*
DPhil student in the EPSRC Centre for Doctoral Training in Partial Differential Equations
Research Topic: Finite Element Approximation of Elliptic Homogenization Problems in Non-Divergence Form
Supervisors: Prof. Endre Süli (primary), Prof. Yves Capdeboscq (secondary)

University of Cambridge, Trinity College **Cambridge, UK**
MASt in Mathematics (Part III of the Mathematical Tripos) *10/16–07/17*
Master of Advanced Study in Pure Mathematics, grade: Distinction
Thesis: Deep Variational Models
Thesis Supervisor: Prof. Carola-Bibiane Schönlieb

University of Dortmund **Dortmund, Germany**
B.Sc. in Mathematics *10/13–08/16*
Bachelor of Science in Mathematics with minor subject Physics, grade: 1.0 (First-Class)
Thesis: Non-trivial Solutions of a Semilinear Equation with critical Sobolev-Exponent
Thesis Supervisor: Prof. Ben Schweizer

Research Experience

University of Oxford **Oxford, UK**
PDE CDT Mini-Project 2 *06/18–09/18*
Finite Element Approximation of Non-Divergence Form Elliptic Homogenization Problems
Supervisor: Prof. Endre Süli

University of Oxford **Oxford, UK**
PDE CDT Mini-Project 1 *01/18–04/18*
Regularity of Solutions in Homogenization with regard to the Two-Phase Critical Exponent
Supervisor: Prof. Yves Capdeboscq

Cantab Capital Institute for the Mathematics of Information **Cambridge, UK**
Summer internship *07/17–09/17*
Post Masters Placement (PMP Programme) in the CCIMI and the Cambridge Image Analysis Group
Project: Regularised Optimal Transport for solving Gradient Flows.
Supervisors: Prof. Carola-Bibiane Schönlieb, Prof. José Antonio Carrillo de la Plata

University of Dortmund

Student Research Assistant

Department of Applied Mathematics and Numerical Analysis

Projects: Splitting Methods for the Heat Equation, Pedestrian Flow

Supervisor: Prof. Stefan Turek

Dortmund, Germany

01/16–07/16

Teaching & other Responsibilities

Mathematical Institute, University of Oxford

Oxford, UK

Teaching Assistant.

- CDT: Analysis of PDEs – (Elliptic PDEs) MT 2018
- B6.1: Numerical Solution of Differential Equations I MT 2018
- B6.2: Numerical Solution of Differential Equations II HT 2019
- MMSC: Further Mathematical Methods HT 2019

Keble College, University of Oxford

Oxford, UK

Chaperoning of Admissions Interviews (Dec 2018) and College Tutor.

- ASO: Calculus of Variations TT 2019

Invited Talks

03/09/2018: PDE CDT Summer School, Ripon College Cuddesdon

17/04/2018: PDE CDT Spring Retreat, University of Oxford

08/09/2017: Cambridge Image Analysis Group Seminar, University of Cambridge

17/08/2017: PMP Presentation Day, University of Cambridge

Academic Awards

2017–2021: Clarendon Fund Scholarship and Keble College Sloane Robinson Scholarship

07/2017: Examination Prize and Senior Scholarship, Trinity College Cambridge

11/2016: Best B.Sc. Mathematics overall grade of year group, University of Dortmund

2015–2016: Deutschlandstipendium ('Germany Scholarship')

Publications

- Y. Capdeboscq, T. Sprekeler, and E. Süli. *Finite Element Approximation of Elliptic Homogenization Problems in Nondivergence-Form*, 2019, submitted. <https://arxiv.org/abs/1905.11756>

Languages

German: Native

English: Fluent

French: Intermediate (CEFR B2/C1)

Computer Skills

MS Office, \LaTeX , MATLAB, C++

Additional Qualifications

2006–Present: Member of the European Society for the Promotion of Memory 'MemoryXL'

Participation in several Memory Championships, among others:

- World Memory Championships 2012, 6th in junior ranking, 1st in team ranking
- German Memory Championships 2008, 2nd in age group
- North-German Memory Championships 2008, 1st in age group

2016–Present: Member of the Cambridge (2016/17) and Oxford University Badminton Club

Representing the University in BUCS matches and in the annual varsity match

08/16–09/16: Academic Development & Training for International Students

Academic Skills Training Course, University of Cambridge Language Centre