

ROBERT SCHEICHL

University of Heidelberg
Institute for Applied Mathematics
Im Neuenheimer Feld 205
69120 Heidelberg, Germany

DoB: 6th February 1972
+49 - 6221 - 5414110
R.Scheichl@uni-heidelberg.de
<https://ganymed.math.uni-heidelberg.de/~rscheichl/>

EDUCATION

<i>Ph.D. in Mathematics</i> , University of Bath, UK	December 2000
<i>Dipl.-Ing. Technische Mathematik</i> J. K. Universität Linz, Austria	October 1997

PROFESSIONAL EXPERIENCE

<i>Professor of Numerical Analysis</i> , University of Heidelberg, Germany	since 2018
<i>Professor of Scientific Computing</i> , University of Bath, UK	since 2011
<i>Deputy Head of Department</i> , University of Bath, UK	2016–2018
<i>Senior Lecturer in Applied Mathematics</i> , University of Bath, UK	2010–2011
<i>Lecturer in Applied Mathematics</i> , University of Bath, UK	2002–2010
<i>Marie-Curie Postdoctoral Fellow</i> , Institut Français du Pétrole, Paris	2001–2002

as well as visiting positions at *Isaac Newton Institute*, Cambridge, UK (2003, 2012, 2018); *University of Stuttgart* (2007); *Johann Radon Institute*, Linz, Austria (2007, 2011); *University of New South Wales*, Australia (2007, 2009, 2015); *Lawrence Livermore National Laboratory*, USA (2009)

ACADEMIC PRIZES & DISTINCTIONS

<i>SIGEST Prize</i> (Best Paper in <i>SIAM/ASA J. Uncertainty Quant.</i> , Vol. 3-6), SIAM	2019
<i>Distinguished Romberg Guest Professorship</i> , University of Heidelberg	2014–2017
<i>SIAM Student Paper Prize</i> , Society of Industrial and Applied Mathematics	2000

OTHER ACADEMIC ROLES & POSITIONS OF ESTEEM (AMONG OTHERS)

Associate Editor for <i>SIAM J. Numerical Analysis</i>	since 2019
Associate Editor for <i>ESAIM: Mathematical Modelling and Numerical Analysis</i>	since 2018
Associate Editor for <i>SIAM J. Scientific Computing</i>	since 2016
Associate Editor for <i>SIAM/ASA J. Uncertainty Quantification</i>	2015–2017
Member of the <i>SIAM Membership Committee</i>	2014–2019
Scientific Advisory Board Member, <i>Weierstrass Institute (WIAS)</i> , Berlin	2016–2020
Chair of <i>RICAM Special Semester</i> , Johann Radon Institute (ÖAW), Linz, Austria	2011
Co-chair of <i>LMS Durham Research Symposium</i> , Durham, UK	2010
Member of Organising Committee <i>SIAM Conf. Computational Science & Engineering</i>	2019
Academic Lead in numerous Appointment Committees, University of Bath, UK	2016–2018
External Examiner on the <i>MASDOC MSc</i> , University of Warwick	2014–2017
External PhD Examiner at numerous occasions (incl. Oxford, Heidelberg, Leipzig, Heriott-Watt, EPFL Lausanne, Bergen, Uppsala, Münster, Imperial College)	
Review Panel Member on SFB programmes of Austrian FWF (2016) and German DFG (2018)	

PUBLICATION RECORD

54 journal papers (appeared or in press in top journals), **4 books & 22 proceedings papers**
2784 citations & h-index: 26 (Source: *Google Scholar* 11/06/19)

Top 10 Most Influential Publications

[Citations]

- IG GRAHAM, P LECHNER, R SCHEICHL. Domain decomposition for multiscale PDEs, *Numer. Math.* **106**, 2007. [171]
- C PECHSTEIN, R SCHEICHL. Analysis of FETI methods for multiscale PDEs, *Numer. Math.* **111**, 2008. [90]
- KA CLIFFE, M GILES, R SCHEICHL, A TECKENTRUP. Multilevel Monte Carlo methods and applications to elliptic PDEs with random coefficients, *Comput. Visual. Sci.* **14**, 2011. [379]
- I GRAHAM, F KUO, D NUYENS, R SCHEICHL, I SLOAN. Quasi-Monte Carlo methods for elliptic PDEs with random coefficients and applications, *J. Comput. Phys.* **230**, 2011 [140]
- R SCHEICHL, P VASSILEVSKI, L ZIKATANOV. Multilevel methods for elliptic problems with highly varying coefficients on non-aligned coarse grids, *SIAM J. Numer. Anal.* **50**, 2012 [38]
- J CHARRIER, R SCHEICHL, A TECKENTRUP. FE error analysis of elliptic PDEs with random coefficients and its application to MLMC methods, *SIAM J. Numer. Anal.* **51**, 2013 [171]
- N SPILLANE, V DOLEAN, P HAURET, F NATAF, C PECHSTEIN, R SCHEICHL. Abstract robust coarse spaces for systems of PDEs via generalized eigenprob., *Numer. Math.* **126**, 2014 [122]
- E MÜLLER, R SCHEICHL. Massively parallel solvers for elliptic partial differential equations in numerical weather and climate prediction, *Q. J. Royal Meteorol. Soc.* **140**, 2014 [46]
- T DODWELL, C KETELSEN, R SCHEICHL, A TECKENTRUP. A hierarchical multilevel MCMC algorithm w. applic. UQ in subsurface flow, *SIAM/ASA J Uncertain. Quantif.* **3**, 2015 [73]
- R SCHEICHL, A STUART, A TECKENTRUP. QMC and MLMC methods for computing posterior expectations in elliptic inverse problems, *SIAM/ASA J. Uncertain. Quantif.* **5**, 2017 [20]

KEYNOTE LECTURES (SELECTION)

- 90th GAMM Annual Meeting (*Gesellschaft für Angewandte Mathem. & Mechanik*) Vienna, 2019
- 12th European Conference on Numerical Mathematics (*ENUMATH*) Bergen, 2017
- 26th Biennial Conference on Numerical Analysis Glasgow, 2015
- 20th Int. Conference on Computational Methods for Water Resources Stuttgart, 2014
- 20th Int. Conference on Domain Decomposition Methods (*DD20*) San Diego, 2011
- 15th Computational Techniques and Applications Conference (*CTAC2010*) Sydney, 2010

RESEARCH INCOME: ~ €3.8M AS PI (Total: ~ €25M, incl. consortia grants)

Major Grants as PI (Selection):

- EPSRC Collaborative Grant* EP/H051503/1 (under the Energy Mission Programme) with Nottingham, Oxford, NDA, Serco TAS (**Lead-PI**, 2011-14) [£677K]
- NERC Programme Grants* NE/J005576/1 & NE/K006754/1 with Met Office, STFC, Exeter, Reading, Imperial, Leeds, Manchester (**Bath PI**, 2011-16) [Bath share: £455K]
- EPSRC Maths for Manufacturing Grant* EP/K031368/1 with GKN Aerospace (**joint PI** with Butler, Mech. Eng., 2014-17) [£499K]

RESEARCH SUPERVISION

PhD Students (completed): R Norton (2008), S Buckeridge (2010), E Dodgson (2011), A Teckentrup (2013), G Katsiolides (2018), M Parkinson (2018)

Postdocs (completed): J Van lent (2006-08), E Ullmann (2011-14), E Mueller (2011-15), A Ferreiro (2012-13), T Kim (2014-15), V Bayona (2016), A Reinartz (2016-17), S Dolgov (2016-18)

Heidelberg, 11th June 2019.